18TH WORLD CONGRESS ON INTELLIGENT TRANSPORT SYSTEMS
Featuring ITS America’s Annual Meeting & Exposition

October 16-20, 2011
Orange County Convention Center
Orlando, Florida

Diamond Sponsor:
TELVENT

Published by:
Visit the ITS America Booth #2057, close to the Technology Showcase entrance. This is the spot to network with members and potential clients, and meet ITS America’s Board of Directors. In addition, several state chapters will be represented as well as the Pan American ITS delegation. Make sure you stop by to learn about all the exciting benefits of membership in ITS America!
Dear Colleagues:

Building on wonderful experiences in Stockholm and Busan, the World Congress once again returns to the United States at Orlando, a spectacular venue known globally as a premier destination for fun and excitement. I want to personally welcome you to the World Congress in Orlando; it is sure to be an unforgettable combination of tradition and innovation.

The theme for the 18th World Congress on Intelligent Transport Systems is “Keeping the Economy Moving,” and the program reflects a global mix of ITS interests focusing on issues and technologies to promote economic recovery and development. Sessions have been carefully developed by ITS leaders from around the world with this theme in mind for an outstanding professional, technological, and commercial experience. All delegates are especially welcome to attend ITS America’s 2011 Annual Meeting which has been fully integrated with the 18th World Congress to provide special insights into the ITS plans and achievements of public and private sectors in the Americas.

This year, the World Congress features an exciting new approach to the display of technology through the “Technology Showcase” involving four themed villages: safety, mobility, pricing, and the environment in space just outside the Orange County Convention Center and well beyond in a permanent ITS technology corridor created in the surrounding area. There will be interesting technical tours on state-of-the-art approaches to traffic and incident management provided by our hosts at the Florida Department of Transportation as well as Central Florida regional and municipal governments. And, there is the opportunity to break earthly transportation bonds with a trip to the Kennedy Space Center and its air and sea ports. Finally, there will be the largest exhibition space ever at a World Congress displaying the latest technologies and resources.

I thank the many volunteer members of the Organizing Committee of the 18th World Congress, especially our local Florida hosts, and the International Program Committee for their tremendous commitment to this event. I also thank our friends and colleagues at ERTICO-ITS Europe and ITS Asia-Pacific for their support in making this World Congress a success.

Finally, let me extend my warmest welcome and appreciation to you for coming to the 18th World Congress on Intelligent Transport Systems.

Have a wonderful time in Orlando!

Warm regards,

Patrick McGowan
Organizing Committee Chairman
On behalf of the organizers of the 18th World Congress on Intelligent Transport Systems, we welcome you to Orlando. You are among thousands of the world’s leading transportation innovators, business and technology leaders, and government officials at all levels who travel the globe each year to participate in this important gathering.

The theme of this year’s World Congress—“Keeping the Economy Moving”—emphasizes that intelligent transportation systems can assist a global economy that remains challenged for many countries and peoples. ITS technologies enhance safety and sustainability certainly, but they also offer direct support to commercial endeavors by improving mobility of people and goods, most at a modest investment compared to the cost of other aspects of transportation infrastructure. The organizers have developed an outstanding program reflecting this theme featuring several hundred industry experts and other world-renowned speakers who are here to demonstrate, discuss, and promote ITS. By combining ITS America’s 2011 Annual Meeting with the World Congress, you will get to experience many of the familiar features of an Annual Meeting program, which includes sessions focused on the Americas forum showcase, and the Best of ITS Awards program. This is in addition to unparalleled networking events and limitless opportunities to connect with an international audience in one of the most popular destination spots and regions in the United States.

I join our Organizing Committee Chair, Patrick McGowan, in thanking ERTICO-ITS Europe and ITS Asia-Pacific, along with the volunteer members of the World Congress Organizing Committee and International Program Committee, for the dedication and commitment they provided in planning this important event. And, many thanks to you for joining us at the 18th World Congress.

Welcome to Orlando!

Sincerely,

Scott F. Belcher
President and CEO, The Intelligent Transportation Society of America

On behalf of ERTICO-ITS Europe and its national partners, it gives me great pleasure to welcome you to the 18th World Congress on Intelligent Transport Systems in Orlando.

This year’s World Congress will focus on “Keeping the Economy Moving,” promoting cost-effective, accessible, innovative, safe and reliable mobility. The Congress provides an exciting opportunity for the global ITS Community to learn, discuss, challenge and advance ITS at political, technical and strategic level, to exchange ideas and to start and foster connections. The Congress is an opportunity and invitation to make every voice heard and to generate new ideas. Orlando will be another milestone towards a world where ITS becomes a reality in improving the well-being of society.

Given the significance of the development of global Intelligent Transport Systems, their progress, advancement and the achievements of ITS, I am delighted to have the opportunity to meet you at the Congress in Orlando!

Prof. Dr. Gunter Zimmermeyer
Chairman, ERTICO-ITS Europe

On behalf of ITS Asia-Pacific, it’s my great pleasure to welcome you all to the 18th World Congress on Intelligent Transport Systems in Orlando.

As expressed in the congress theme “Keeping the Economy Moving,” building transportation capacity has been one of the most important elements for economic growth and improvement of quality of our life. To move goods and people faster, safer, and more reliably, we have developed, evaluated, and implemented advanced technologies.

Confronting new challenges, such as energy conversion to alternative sources and rapidly changing business environment, ITS technologies should be integrated with vehicles with new energy sources, transportation infrastructure, urban planning, behavioral changes of individuals and enterprises, and necessary legislation under concrete policy decisions.

ITS World Congress in Orlando is where we find the right experts on a variety of issues to listen and talk to find viable directions to go. Policies, technologies, institutional issues, human factors, and international collaboration are all covered with supporting facts and experiences. Please don’t miss this great opportunity to take part in the significant event.

On March 11, a huge earthquake struck the eastern part of Japan followed by devastating a tsunami. A number of ITS colleagues around the world have extended their best wishes to us. On behalf of ITS Japan, I would like to express my heartfelt thanks to all of you. ITS and other technologies functioned for evacuation and relief operation following it. However, we learned that we should have done better. In Orlando, we will discuss on the experience and plans for the future, too.

I’m looking forward to seeing you and sharing ideas and experiences with you in Orlando.

Hajime Amano
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October 16, 2011

Greetings:

Welcome to the 18th World Congress on Intelligent Transport Systems (ITS). We are pleased to have the opportunity to host this year’s conference in the great state of Florida.

With the theme – Keeping the Economy Moving – this event offers participants interactive technology showcases, more than 250 sessions, a 400,000 square-foot exhibit hall, and countless networking events with ITS industry leaders from around the world. Orlando is excited to welcome leading transportation policy makers, as well as technology and business professionals. This city is built on imagination, innovation and creativity, and its hospitality industry is unparalleled.

One of the exciting components of this year’s World Congress is the Technology Showcase, which will highlight the latest in smart technology and position central Florida as a national test bed for connected vehicles, people and infrastructure. These technology installations will be integrated into Florida’s operational Sun Guide™ Advanced Traffic Management System (ATMS), and will remain beyond the World Congress as part of the operational system in Central Florida.

During your stay, I encourage you to experience our first-class accommodations, a variety of sumptuous dining experiences, a host of leisure and recreational choices and an exciting array of attractions.

Best wishes for a successful and productive conference. We look forward to welcoming you back to the Sunshine State in the near future.

Sincerely,

Rick Scott
Governor
October 16, 2011

Dear World Congress attendees:

On behalf of the citizens of Orange County, it is my honor to welcome you to Central Florida and to the Orange County Convention Center for the 18th World Congress on Intelligent Transport Systems (ITS).

This week, civic and industry leaders from around the world come together to view and discuss ITS solutions that will help enhance transportation systems worldwide, ideas that will reduce the impacts of congestion, and applications that will improve mobility as well as ensure the safety of all motorists.

With the return to Florida comes the opportunity to highlight the World Congress theme: Keeping the Economy Moving. This challenge is compelling—to use the advances and advantages of ITS to help us make better governmental decisions, create business priorities, and manage personal choices, all of which will make for a prosperous economy that serves us all well.

The 18th World Congress on ITS could not come at a more pivotal time, and provides an ideal platform to raise the conversation about how valuable ITS can be in advancing the economy and solving our most critical transportation problems.

The stage is set and we are delighted that you are here. I wish you all the best for a most successful event and thank you for choosing Orange County to host this year’s World Congress ITS conference.

Sincerely,

Teresa Jacobs
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Thank You

Whether your organization is a well-known leader in ITS or an emerging one, becoming a sponsor for the 18th World Congress places your company at the forefront of this dynamic industry. The organizing committee thanks the following companies for their generous support in making the 18th World Congress possible.*

*as of September 20, 2011
Special Thank You

The organizers of the 18th World Congress on ITS want to thank the dedicated members of ITS Florida for their assistance and cooperation in the planning, organizing and implementing of this year’s event.

Public Agencies

The organizers wish to also recognize these local agencies for their support and assistance.

- City of Orlando
- Metroplan Orlando
- Orange County Convention Center
- Orange County Government
- The Incident Management & Emergency Response Agencies of Florida and the Southeast U.S.
- Orlando—Orange County Expressway Authority
- Pinellas County
- Florida Department of Transportation
- U.S. Department of Transportation
- Florida Transportation Commission
Hotel Shuttle Information
Shuttle service is available between the Rosen Centre, The Peabody Orlando and the Rosen Inn at Pointe Orlando and the Orange County Convention Center. All hotel shuttles will depart from Hall A Convention Entrance. Shuttles will run every 30 minutes, departing hotels at the top of hour and departing the OCCC at the bottom of the hour.

SUNDAY, OCTOBER 16
8:00 a.m. – 7:30 p.m.
Last shuttle will depart the OCCC at 7:30 p.m.

MONDAY, OCTOBER 17
6:30 a.m. – 7:00 p.m.
Last shuttle will depart the OCCC at 7:00 p.m.

TUESDAY, OCTOBER 18
6:30 a.m. – 6:30 p.m.
Last shuttle will depart the OCCC at 6:30 p.m.

WEDNESDAY, OCTOBER 19
7:30 a.m. – 6:00 p.m.
Last shuttle will depart the OCCC at 6:00 p.m.

THURSDAY, OCTOBER 20
7:30 a.m. – 6:00 p.m.
Last shuttle will depart the OCCC at 6:00 p.m.

Public Transportation
LYNX, the official public transportation provider of the 18th World Congress, is providing complimentary service for World Congress attendees. FlashPass weekly passes were distributed in registration packets. They are also available at the registration desk.

Avego Free Airport Shuttle
Avego, the official transportation partner of 18th World Congress, is offering a free airport shuttle service to all conference attendees. The service will operate between the Orlando International Airport and the Orange County Convention Center, and will make additional stops at the Hilton Orlando, The Peabody and Rosen Centre hotels.


On arrival at the airport, you’ll receive a text message directing you to the Avego shuttle service.

For your return journey, you’ll receive a text directing you to where Avego shuttles are leaving the Convention Center for the airport.

Avego is also providing a free smartphone application that will provide scheduled and real-time information for Avego shuttle and local LYNX bus services, and information on taxis. Everyone who signs up for the service will get a text when the smartphone app is available for download.

Avego will be offering a limited variety of nighttime shuttle services to Walt Disney World, Universal Studios and International Drive as a real-time ridesharing service for World Congress attendees. Use the free smartphone application to book your rides and see the real-time ridesharing activity. Everyone who signs up for the service will get a text when the smartphone app is available for download (if you signed up for the Avego Airport shuttle service, no additional sign-up necessary).

NEW AT THE 18TH WORLD CONGRESS:

PROFESSIONAL DEVELOPMENT HOURS FOR ATTENDEES

Your attendance at the 18th World Congress and ITS America’s Annual Meeting entitles you to earn Professional Development Hours (PDHs). Many licensure and certification agencies around the world require the demonstration of continuing professional competency that is met by the range of technical, scientific, executive, special, concurrent, and plenary sessions you can attend in Orlando.

With over 33 PDHs possible for you to acquire, your World Congress/Annual Meeting attendance easily provides you the opportunity to complete most, if not all of your annual PDH requirements. The Final Program incorporates the form you need to document the PDHs you will be entitled to, based on your session attendance. Additional copies of the form will be available at registration.

Remember that you will need to keep and save your record of attendance and track your hours online at www.itsworldcongress.org. You may print your form online for your records should the licensure or certification agency request information from you. Reporting is done on an honor basis, and members are responsible for maintaining their own records. For more information, contact Thomas Kern at tkern@itsa.org.

Lunch in The Exhibit Hall
Full Conference Attendees will receive a lunch coupon for each day of the conference. Each coupon is valid for the day indicated. Lunch tickets can be exchanged at concessions located on the World Congress Exhibit Floor during the times listed below:

MONDAY 11:30 a.m. – 1:00 p.m.
TUESDAY Noon – 1:30 p.m.
WEDNESDAY Noon – 1:30 p.m.
THURSDAY Noon – 1:30 p.m.

Press Room Hours
The Press Room is located in Room S221 at the Orange County Convention Center. The operating hours are as follows:

SUNDAY 8:00 a.m. – 5:30 p.m.
MONDAY 8:00 a.m. – 5:30 p.m.
TUESDAY 8:00 a.m. – 5:00 p.m.
WEDNESDAY 8:00 a.m. – 5:00 p.m.
THURSDAY 8:00 a.m. – 5:00 p.m.

Luggage Storage
South Concourse Foyer (across from S220)
Luggage storage is available on Wednesday, October 19 from 10:00 a.m. – 6:00 p.m. and Thursday, October 20 from 8:00 a.m. – 6:00 p.m. Drop your luggage off in the South Concourse Foyer near S220 to attend the World Congress hands-free. Your luggage will be available for pick-up during the posted hours. The cost is $3 per bag.
The World Congress and Annual Meeting will provide valuable information for today’s international and domestic leaders and ITS experts in all modes of the transport industry. The sessions are structured to encourage discussion and to advance the exchange of knowledge and best practices.

Keynote Speakers confirmed to present at this year’s World Congress:

Alan Taub  
Vice President, GM Global Research and Development, General Motors Company  
Opening Ceremony  
Sunday, October 16  
5:00 p.m. – 6:30 p.m.

Deborah Hersman  
Chairman, National Transportation Safety Board, USA  
ITS American Annual Meeting: Safety Plenary  
Monday, October 17  
3:30 p.m. – 5:00 p.m.

Ray LaHood  
Secretary, U.S. Department of Transportation, USA  
Plenary II: Ingredients for Implementing ITS Policies to Keep the Economy Moving  
Wednesday, October 19  
10:15 a.m. – Noon

Robert Vrij  
Executive Vice President and President of the Americas, Alcatel-Lucent  
Plenary II: Ingredients for Implementing ITS Policies to Keep the Economy Moving  
Wednesday, October 19  
10:15 a.m. – Noon

William C. Ford, Jr.  
Executive Chairman, Ford Motor Company, USA  
Closing Ceremony  
Thursday, October 20  
3:30 p.m. – 5:00 p.m.

NEW THIS YEAR!

World Congress attendees and exhibitors will have an exciting new tool to assist in planning and managing your World Congress experience! The new smart phone application, sponsored by LogicTree, can be used to select sessions, build your schedule, connect with colleagues and potential clients, check the weather and get connected to local Orlando attractions.

DOWNLOADING THE 2011 ITS WORLD CONGRESS MOBILE APP IS EASY!

For iPhone users (including iPhone, iPod Touch, iPad):  
Search the App Store on your phone for “ITS WC 2011.”

For all other phone users (including Android, Blackberry and all other web browser-enabled smartphones): From your phone, point your mobile phone’s browser to http://m.core-apps.com/ITSWC2011. From there you will be directed to download the proper version of the app for your particular device.

Once the Android version is released the “for all other phones” link will actually work for everyone, including iPhone users. There’s even a tool at the very bottom of that linked webpage enabling PC users to have a text message sent to their phone to download the proper version of the app!
SATURDAY, OCTOBER 15, 2011
8:00 a.m. - 2:00 p.m. Golf Tournament—Disney’s Osprey Ridge Golf Course (Registration Required)
8:00 a.m. - 4:00 p.m. Delegate and Exhibitor Registration Open
12:30 p.m. - 4:00 p.m. IRF Roadside Safety Application Course Room: S220D

SUNDAY, OCTOBER 16, 2011
8:00 a.m. - 6:00 p.m. Delegate and Exhibitor Registration Open
8:45 a.m. - 4:00 p.m. IRF Roadside Safety Application Course Room: S220D
9:00 a.m. - 1:00 p.m. International Workshop on Best and Emerging Practices in Transit ITS Room: S330C
10:00 a.m. - Noon IBEC Workshop Room: S220A
10:00 a.m. - 1:00 p.m. State Chapters Council Meeting and State Chapters Strengthening Workshop Room: S330D
1:00 p.m. - 4:00 p.m. ITS America Annual Meeting Forum Showcase: “The Value of Performance Measures in Managing 21st Century Transportation Systems” Room: S220A
2:00 p.m. - 4:00 p.m. Transportation and the Economy—Views from International Political Leaders Room: S210 A/B
4:00 p.m. - 5:00 p.m. Opening Ceremony Reception (Business Attire) Room: South Building Main Level
5:00 p.m. - 6:30 p.m. Opening Ceremony (Business Attire) Room: South Hall A1

MONDAY, OCTOBER 17, 2011
7:00 a.m. - 6:30 p.m. Delegate and Exhibitor Registration Open
7:30 a.m. - 9:00 a.m. Leaders in Transportation Breakfast (Invitation Only) Room: S330E
8:00 a.m. - 9:30 a.m. ITS National Association Networking Meeting (Invitation Only)
9:30 a.m. - 11:00 a.m. Plenary I: ITS Strategies: Spurring Economic Growth through High-Tech Transportation Solutions Room: South Hall A1
11:30 a.m. - 11:45 a.m. Exhibit Hall Ribbon Cutting Ceremony
11:30 a.m. - 1:00 p.m. Lunch in the Technology Showcase & Exhibit Hall (Dedicated Exhibit & Showcase Hours)
11:30 a.m. - 6:30 p.m. Exhibit Hall Open
Noon - 12:15 p.m. Technology Showcase Ribbon Cutting
Noon - 6:30 p.m. Technology Showcase Opens
1:00 p.m. - 4:00 p.m. Orlando Area Transportation Management & Emergency Operations Center Tour
1:00 p.m. - 2:30 p.m.
- ES01: ITS and Sustainable Transport Room: S310 A/B
- ES02: Next Generation Vehicles and Mobility Environments Room: S310 E/F
- ES03: Cooperative Mobility Services and the Internet Room: S320 A/B
- SS01: High-Speed Rail: Utilizing Technology to Create Clean and Safe Regional Transportation Room: S210A
- SS02: Deployment of Vehicle-Infrastructure Cooperation Systems Room: S210B
- SS03: COMeSafety2: From the European ITS Communications Architecture to Deployable Standards Room: S210C
- TS02: Technology Solutions 1: Next Generation Travel Information Room: S220B
- TS03: Development in Freight Operations Room: S220C
- TS04: Roadway Detectors & Traffic Data for Effective ITS Room: S220D
- TS05: ITS Based Safety Systems Room: S220E
- TS06: Infrastructure Protection Using ITS Room: S220F
- TS07: Advanced Traffic Management Systems Room: S210D
- TS08: Testing and Deploying Software for Transit Systems Room: S230C
- TS09: Communication Challenges in Cooperative Mobility Room: S320D
- TS10: V2V Communication: Evaluation and Assessment Room: S320E
- TS11: Location Based Services Room: S320F
- TS12: Probe Data Collection Using Smartphone and 700MHz Band Room: S320G
- IS01: Electronic Enforcement Systems Room: Exhibit Hall Room 4
- IS02: TMC Models, Weather Impacts, Congestion Management and System Operations Room: Exhibit Hall Room 5
- AM01: Driver Distraction: Fundamentals, Research and Implications Room: S331A
- AM02: Arterial Management Systems—Real Applications on Collecting and Reporting Arterial Travel Time Room: S331B
- AM03: Climate Change Legislation and Regulations at the State Level Room: S331C
- AM04: Current Work in Automated Electric Transportation Research Room: S331D
- AM05: Users’ Perspectives on Calibration and Validation of Traffic Simulation Models Room: S330G
**MONDAY, OCTOBER 17, 2011  CONTINUED**

2:30 p.m. - 3:30 p.m.  Interactive Sessions / Meet the Authors in the Exhibit Hall

2:30 p.m. - 3:30 p.m.  Refreshment Break in the Technology Showcase & Exhibit Hall (Dedicated Exhibit & Showcase Hours)

3:30 p.m. - 5:00 p.m.  PLENARY: ITS America Annual Meeting: Safety and the Aging Population Plenary

**3:30 p.m. - 5:00 p.m.**

- SS04: “Next-Generation Internet ITS” Integrated with “Smartphone World”
  - Room: S210A
- SS05: Global Energy Trends
  - Room: S210B
- SS06: Integration of Traveller Information Services for Intermodal Journeys
  - Room: S210C
- SS07: Intelligent Environmentally Friendly Vehicle
  - Room: S210D
- SS08: Probe Data Collection and Distribution
  - Room: S210E
- SS09: Cooperative Vehicle-Highway Systems: Collaboration Between the Automotive Industry and Road Operators
  - Room: S220A
- SS10: Bike Rapid Transit (BRT) for Green Transportation
  - Room: S220B
- SS11: Using Information Technology to Better Manage ITS Operations and Investments
  - Room: S220C
- SS12: ADASIS: From Specifications to Implementation
  - Room: S220D
- SS13: Automating the ITS Data Supply Chain
  - Room: S220E
- SS14: Re-Tooling Public Transit One Agency at a Time—Towards a Unified Transit Reference Architecture
  - Room: S220F
- SS15: Uptime to Secure Transport Effectiveness in a Connected Traffic Environment
  - Room: S310 A/B
- SS16: Real Time Traffic Information in North-America: From Analogue to Digital Delivery—Challenge and Opportunity
  - Room: S320 A/B
- SS17: Performance Measures for Sustainability
  - Room: S320C
- SS18: Performance Management Databases
  - Room: S320D
- SS19: Pedestrian Safety
  - Room: S330G
- SS20: Technology Solutions 2: Next Generation Travel Information
  - Room: S331A
- SS21: Positioning for Cooperative Mobility
  - Room: S331C
- SS22: Driver Assistance Systems
  - Room: S331D
- SS23: Incident Detection and Management
  - Room: S220A
- SS24: Business Cases
  - Room: S220B
- SS25: Technology Solutions 3: Next Generation Travel Information
  - Room: S220C
- SS26: Intersection Safety: Dilemma Zone & Gap Acceptance
  - Room: S220D
- SS27: Regional Operations Considerations
  - Room: S220E
- SS28: Incident Response Strategies
  - Room: S220F
- SS29: Regional Deployment Strategies
  - Room: S320A
- SS30: Deploying ITS to Optimize Transit Operations and Maintenance
  - Room: S320B
- SS31: Freight Logistics
  - Room: S320C
- SS32: Traffic Surveillance Cellular Phone Network
  - Room: S320D
- SS33: V2i Communication: Evaluation and Assessment
  - Room: S320E
- SS34: Human Factors
  - Room: S320F
- SS35: Advanced Sensor Technology: Next Generation Travel Information
  - Room: S320G
- TS14: Congestion Charging Around the World
  - Room: S320E
- TS15: ITS Deployments
  - Room: S320F
- TS16: User Benefits: Next Generation Travel Information
  - Room: S320G
- TS17: Models and Architecture for Roadway Network Management
  - Room: S331H
- TS18: Pedestrian Safety
  - Room: S330G
- TS19: Coordinating Multimodal Travel Options
  - Room: S331A
- TS20: Technology Solutions 2: Next Generation Travel Information
  - Room: S331B
- TS21: Positioning for Cooperative Mobility
  - Room: S331C
- TS22: Driver Assistance Systems
  - Room: S331D
- TS23: Incident Detection and Management
  - Room: S220A
- TS24: Business Cases
  - Room: S220B
- TS25: Technology Solutions 3: Next Generation Travel Information
  - Room: S220C
- TS26: Intersection Safety: Dilemma Zone & Gap Acceptance
  - Room: S220D
- TS27: Regional Operations Considerations
  - Room: S220E
- TS28: Incident Response Strategies
  - Room: S220F
- TS29: Regional Deployment Strategies
  - Room: S320A
- TS30: Deploying ITS to Optimize Transit Operations and Maintenance
  - Room: S320B
- TS31: Freight Logistics
  - Room: S320C
- TS32: Traffic Surveillance Cellular Phone Network
  - Room: S320D
- TS33: V2i Communication: Evaluation and Assessment
  - Room: S320E
- TS34: Human Factors
  - Room: S320F
- TS35: Advanced Sensor Technology: Next Generation Travel Information
  - Room: S320G
- TS36: Highway Cruise and Lane Changing Assistant
  - Room: S320H
- IBEC01: Is Evaluation Playing Its Proper Role to Promote ITS Deployment?
  - Room: S330B
- PAITS01: ITS and Transport Concessionaires
  - Room: S330A
- AM06: Performance Measurement 101: Strategies for Addressing Increasing Data Collection and Accountability Requirements in an Era of Decreasing Resources
  - Room: S330G
- AM07: Technology for a Better Connected Vehicle
  - Room: S331A
- AM08: AERIS Program Update
  - Room: S331B
- AM09: Insurance Telematics—The Emerging Opportunity
  - Room: S331C
- AM10: Emerging Strategies for Freeway Management and Operations
  - Room: S331D

5:00 p.m. - 6:00 p.m.  ITS America Best of ITS Awards

5:00 p.m. - 6:30 p.m.  Exhibitors Welcome Reception in Exhibit Hall—All Attendees Welcome (Dedicated Exhibit Hall Hours)

7:00 p.m. - 10:00 p.m.  ITS Florida Reception & Dinner—Discovery Cove (Registration Required)  (Casual Attire)

**TUESDAY, OCTOBER 18, 2011**

7:00 a.m. - 5:00 p.m.  Delegate and Exhibitor Registration Open

8:00 a.m. - 5:30 p.m.  Technology Showcase

8:30 a.m. - 10:00 a.m.

- ES05: ITS and Private Finance
  - Room: S310 A/B
- ES06: ITS and Electromobility
  - Room: S310 E/F
- SS18: ITS for Tourism and Parking
  - Room: S210A
- SS19: ITS Deployments Through University, Public and Private Collaboration
  - Room: S210B
- SS20: GNSS Enabled Application on a Global Level
  - Room: S210C
- TS23: Incident Detection and Management
  - Room: S220A
- TS24: Business Cases
  - Room: S220B
- TS25: Technology Solutions 3: Next Generation Travel Information
  - Room: S220C
- TS26: Intersection Safety: Dilemma Zone & Gap Acceptance
  - Room: S220D
- TS27: Regional Operations Considerations
  - Room: S220E
- TS28: Incident Response Strategies
  - Room: S220F
- TS29: Regional Deployment Strategies
  - Room: S320A
- TS30: Deploying ITS to Optimize Transit Operations and Maintenance
  - Room: S320B
- TS31: Freight Logistics
  - Room: S320C
- TS32: Traffic Surveillance Cellular Phone Network
  - Room: S320D
- TS33: V2i Communication: Evaluation and Assessment
  - Room: S320E
- TS34: Human Factors
  - Room: S320F
- TS35: Advanced Sensor Technology: Next Generation Travel Information
  - Room: S320G
- TS36: Highway Cruise and Lane Changing Assistant
  - Room: S320H
- IBC01: Is Evaluation Playing Its Proper Role to Promote ITS Deployment?
  - Room: S330B
- PAITS01: ITS and Transport Concessionaires
  - Room: S330A
- AM06: Performance Measurement 101: Strategies for Addressing Increasing Data Collection and Accountability Requirements in an Era of Decreasing Resources
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  - Room: S331A
- AM08: AERIS Program Update
  - Room: S331B
- AM09: Insurance Telematics—The Emerging Opportunity
  - Room: S331C
- AM10: Emerging Strategies for Freeway Management and Operations
  - Room: S331D
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>8:30 a.m. - Noon</td>
<td>University of Central Florida (UCF) Institute for Simulation &amp; Training Lab Tour</td>
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<tr>
<td>8:30 a.m. - 1:00 p.m.</td>
<td>Behind the Scenes at Disney World Tour</td>
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<tr>
<td>10:00 a.m. - 5:30 p.m.</td>
<td>Exhibit Hall Open</td>
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<tr>
<td>10:00 a.m. - 10:30 a.m.</td>
<td>Refreshment Break in the Technology Showcase &amp; Exhibit Hall</td>
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<tr>
<td>10:30 a.m. - Noon</td>
<td>PL04: ITS America Annual Meeting: U.S. Department of Transportation Plenary</td>
<td>Room: South Hall A1</td>
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<tr>
<td>Noon - 1:00 p.m.</td>
<td>Interactive Sessions / Meet the Authors in the Exhibit Hall</td>
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<tr>
<td>Noon - 1:00 p.m.</td>
<td>ITS America Annual Meeting Business Meeting</td>
<td>Room: Exhibit Hall Theatre</td>
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<tr>
<td>Noon - 1:30 p.m.</td>
<td>Lunch in the Technology Showcase &amp; Exhibit Hall (Dedicated Exhibit &amp; Showcase Hours)</td>
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<tr>
<td>1:00 p.m. - 3:00 p.m.</td>
<td>Orlando Amway Center Tour</td>
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<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>ES06: ITS and Economic Growth</td>
<td>Room: S310 A/B</td>
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<td>ES07: Smart/Mega Cities</td>
<td>Room: S310 E/F</td>
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<td>SS34: Adaptation</td>
<td>Room: S210A</td>
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<td>SS35: Drastic Reduction of Traffic Accidents by Image-Recording Type Drive Recorders</td>
<td>Room: S210B</td>
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<td>SS36: National ITS Associations Providing an Essential Service to Policy Makers</td>
<td>Room: S210C</td>
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<td>TS43: Integration and Innovation</td>
<td>Room: S220A</td>
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<td>TS45: Mileage Based Fees 1</td>
<td>Room: S220C</td>
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<td>TS46: User Needs 2: Next Generation Travel Information</td>
<td>Room: S220D</td>
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<td>TS47: Data Collection Systems 1</td>
<td>Room: S220E</td>
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<td>TS49: Assessment of the Field Operational Test</td>
<td>Room: S320A</td>
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<td>TS50: Leveraging New Technologies to Attract and Retain Transit Customers</td>
<td>Room: S320B</td>
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<td>TS51: Goods &amp; Freight—Let’s Move</td>
<td>Room: S320C</td>
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<td>TS52: Protocols and Standards for Wireless Technologies in Cooperative Mobility</td>
<td>Room: S320D</td>
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<td>TS53: Driver’s Awareness</td>
<td>Room: S320E</td>
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<td>IS06: From the First Mile to Crowd-Sourcing: Capturing Emerging Trends for Transit</td>
<td>Room: Hall SA/ SB Meeting Room 4</td>
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<td>IS07: Using Weather Data to Better Manage and Maintain System Operations</td>
<td>Room: SA/ SB Meeting Room 5</td>
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<td>IS08: Developments in Active System Management</td>
<td>Room: SA/ SB Meeting Room 6</td>
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<td>TS40: Truck Parking</td>
<td>Room: S320E</td>
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<td>TS41: Protocols and Evaluations for V2V Communication</td>
<td>Room: S320F</td>
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<td>TS42: Tolling System Design</td>
<td>Room: S320G</td>
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<td>IS03: The Use of Simulation Models, Congestion Management Methods and Communication to Enhance System Operations</td>
<td>Room: Hall SA/ SB Meeting Room 4</td>
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<td>IS04: ITS Tools: Leveraging Technology for Advanced Systems Application</td>
<td>Room: Hall SA/ SB Meeting Room 5</td>
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<td>IS05: Collision Avoidance Systems</td>
<td>Room: Hall SA/ SB Meeting Room 6</td>
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<td>IBEC02: Social Media/ Networking and its Impact on Transportation</td>
<td>Room: S330B</td>
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<td></td>
<td>PAITS02: Americas Projects and Business Opportunities Part I</td>
<td>Room: S330A</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>U.S. DOT Connected Vehicle Challenge Winners Session</td>
<td>Room: Exhibit Hall Theatre</td>
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<tr>
<td>3:00 p.m. - 4:00 p.m.</td>
<td>Interactive Sessions / Meet the Authors in the Exhibit Hall</td>
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<tr>
<td>3:00 p.m. - 4:00 p.m.</td>
<td>Refreshment Break in the Technology Showcase &amp; Exhibit Hall</td>
<td>(Dedicated Exhibit &amp; Showcase Hours)</td>
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</table>
TS64: ITS for Freight—Makes Transportation Safer, Faster, Smarter for All Road Users
  Room: S220E

TS47: Multimodal Transportation, Economic Growth and Sustainability—The Impact of Cooperation Between Stakeholders
  Room: S220F

TS50: Combining Wireless Electric Vehicle Charging with Automation: Opportunities & Challenges
  Room: S220A

TS54: Innovation and Cooperation
  Room: S220B

TS55: Electronic Toll Systems
  Room: S220C

TS56: Putting Transit Signal Priority: From Models to Implementation
  Room: S220D

TS57: Port of Entry
  Room: S220E

TS58: Vehicle Probe for Travel Time Analysis
  Room: S220F

TS59: Advanced Map Development and Applications
  Room: S220G

PAITS04: Tunnels and ITS
  Room: S320A

AM16: Connected Vehicles in a Connected World for Enhanced Safety and Mobility
  Room: S331A

AM17: Active Transportation and Demand Management Results
  Room: S331B

AM18: Defining Livability Measures for Sustainable Transportation
  Room: S331C

AM19: Latest Evaluation Findings and Factors in ITS Deployment Tracking
  Room: S331D

4:30 p.m. - 6:00 p.m.  IBEC Reception  Room: Canada Booth #2173 registration required

WEDNESDAY, OCTOBER 18, 2011

STUDENT DAY

7:30 a.m. - 9:00 a.m.  IBEC Annual General Meeting  Room: Lake Nona A-Hilton

7:30 a.m. - 9:00 a.m.  Women in ITS Breakfast  Room: S330E

7:30 a.m. - 5:00 p.m.  Delegate and Exhibitor Registration Open

8:00 a.m. - 6:00 p.m.  Subcommittee on Systems Operations and Maintenance (AASHTO)  Room: Lake Nona B-Hilton

8:00 a.m. - 5:00 p.m.  Technology Showcase

8:00 a.m. - 1:00 p.m.  Tampa Bay Area ITS Facilities Tour

8:30 a.m. - 10:00 a.m.

ES08: Equity and Social Responsibility
  Room: S310 A/B

ES09: Trilateral ITS Cooperation
  Room: S310 E/F

SSS1: Carbon Footprinting
  Room: S210A

SSS2: Solution for Traffic Jam in Highways Using ACC and C2X Communication Technology
  Room: S210B

SSS3: Field Operational Tests as Enabler for Cooperative Mobility in Europe?
  Room: S210C

TS60: Roadmaps and Organizational Issues
  Room: S220A

TS61: Systems Engineering and Deployment
  Room: S220B

TS62: Commercial Vehicles
  Room: S220C

TS63: Data Platforms 1: Next Generation Travel Information
  Room: S220D

TS64: Adaptive Traffic Signal Control System Operations
  Room: S220E

TS65: Integrated Corridor Management Systems
  Room: S220F

TS66: WIM/Cross Borders
  Room: S220A

TS67: Data Communication/ Management Systems and Plans
  Room: S220B

TS68: Practical Study and FiOTs for Cooperative Mobility
  Room: S220C

TS69: Low Attention Driving Detection
  Room: S220D

TS70: Understanding Environmental Impacts through Modeling, Simulation, and Data Measurement
  Room: S220E

TS71: Environmentally Friendly Freight
  Room: S220F

TS72: Individualized Route Planning 1: Next Generation Travel Information
  Room: S220G

TS73: Mileage Based Fees 2
  Room: S220H

TS74: Wireless Technologies for V2V and V2I
  Room: S330A

TS75: ITS for Unique Operational Scenarios
  Room: S330B

AM20: Public Safety
  Room: S331A

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**WEDNESDAY, OCTOBER 19, 2011 CONTINUED**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Room</th>
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</thead>
</table>
| 8:30 a.m. - 10:00 a.m. | AM21: Transit ITS: Developments and Applications  
Room: S331B |             |
|      | AM22: The Impact of ITS on Your Community: Real Results from Across the U.S.  
Room: S331C |             |
|      | AM23: Using Architectures to Plan and Develop ITS Projects  
Room: S331D |             |
| 10:00 a.m. - 5:00 p.m. | Exhibit Hall Open |             |
| 10:00 a.m. - 10:30 a.m. | Refreshment Break in the Technology Showcase & Exhibit Hall  
(Dedicated Exhibit & Showcase Hours) |             |
| 10:15 a.m. | Plenary II: "Ingredients for Implementing ITS Policies to Keep the Economy Moving"  
Room: Hall SA1 |             |
| 10:30 a.m. - 5:00 p.m. | INCIDENT MANAGEMENT & EMERGENCY RESPONDER DAY |             |
| 10:30 a.m. - Noon | Incident Management and Emergency Responders Session  
Room: Exhibit Hall Theatre |             |
| Noon - 1:30 p.m. | Lunch in the Technology Showcase & Exhibit Hall  
(Dedicated Exhibit & Showcase Hours) |             |
| 1:30 p.m. - 3:00 p.m. | SS54: New Paradigm for "Cloud Transportation"  
Room: S210A |             |
|      | SS55: Women in ITS  
Room: S210B |             |
|      | SS56: Advanced Technology to Collect Data for Low Carbon Policy and Sustainable Development  
Room: S210C |             |
|      | SS57: Improving Road Safety Through the Applications of ITS  
Room: S210D |             |
|      | SS58: Emerging ITS Strategies for Sustainability  
Room: S210E |             |
|      | SS59: Travel Management Coordination Centers (TMCC) Using ITS: Successful Deployment Practices  
Room: S220A |             |
|      | SS60: International Governmental Cooperation for Deployment of ITS Cooperative System  
Room: S220B |             |
|      | SS61: Using Historical GPS Data for Transportation Planning  
Room: S220C |             |
|      | SS62: ITS for Electromobility: Prediction and Connectivity, Key ITS Enablers for the Electrification of Vehicles  
Room: S220D |             |
|      | SS63: Moving Towards Zero Fatalities Through Connective Vehicle Safety—Fact or Fiction?  
Room: S220E |             |
|      | SS64: Validation and Impact of ICT Measures for Energy Efficiency & Environment  
Room: S220F |             |
|      | SS65: Massive Earthquake: Rescue and Relief Operation with ITS—Lessons learned from the Great East Japan Earthquake  
Room: S230A |             |
|      | TS76: Architectures and Their Applications  
Room: S230A |             |
|      | TS77: Individualized Route Planning 2: Next Generation Travel Information  
Room: S230B |             |
|      | TS78: Intersection Control and Optimization  
Room: S230D |             |
|      | TS79: Data Collection Systems 2  
Room: S230E |             |
|      | TS80: Probe Data Collection Using Bluetooth  
Room: S230F |             |
|      | TS81: Driver’s Behavior Utilizing Simulator  
Room: S230G |             |
|      | TS82: Operational Strategies Producing Carbon Footprint Changes Positive  
Room: S230H |             |
|      | TS83: Data: What Helps, What Sells  
Room: S330A |             |
|      | IBEC04: Enforcement Cameras: To Install or Not To Install—That is the Question?  
Room: S330B |             |
|      | AM24: Tracking Economic Trends and Activity Using ITS  
Room: S331A |             |
|      | AM25: Data Use for Operations Performance and Planning  
Room: S331B |             |
|      | AM26: Closing the ITS and Energy Deployment Gap: A Long-Term Strategy  
Room: S331C |             |
|      | AM27: Forging Partnerships to Facilitate Adaptive Traffic Signal Control Deployment  
Room: S331D |             |
| 1:30 p.m. - 3:00 p.m. | Incident Management and Emergency Responders Session  
Room: Exhibit Hall Theatre |             |
| 2:00 p.m. - 5:00 p.m. | Executive Leadership Team (AASHTO)  
Room: Lake Louise A/B-Hilton |             |
| 3:00 p.m. - 3:30 p.m. | Refreshment Break in the Technology Showcase & Exhibit Hall  
(Dedicated Exhibit & Showcase Hours) |             |
| 4:30 p.m. - 6:00 p.m. | Meeting of the National ITS Associations  
Room: S330H |             |
| 3:30 p.m. - 5:00 p.m. | ES10: ITS: Why Governments Need to Work Together  
Room: S310A/B |             |
|      | ES11: Multimodal Mobility  
Room: S310E/F |             |
|      | SS66: Managing Complex Transportation Networks Using State of the Art Decision Support Systems (DSS)  
Room: S210A |             |
|      | SS67: Demand Models to Meet Transit Needs  
Room: S210B |             |
|      | TS55: Individualized Route Planning 3: Next Generation Travel Information  
Room: S220A |             |
|      | TS56: Automated Incident Detection Systems  
Room: S220B |             |
|      | TS57: Advancements in Video Technologies  
Room: S220C |             |
|      | TS58: Using Data to Enhance Transit Performance  
Room: S220E |             |
|      | TS59: Tolling Technology  
Room: S220F |             |
|      | TS60: Probe and Travel Time for Cooperative Mobility  
Room: S220G |             |
|      | TS61: V2I Deployment Initiatives  
Room: S230A |             |
|      | TS62: Various Kinds of Driver Behavior  
Room: S230B |             |
|      | TS63: Using Weather Data for Safer Driving  
Room: S230C |             |
|      | TS64: Training Programs  
Room: S230D |             |
|      | TS65: Adaptive Signal Control I  
Room: S230E |             |
|      | TS66: Regional Deployment Strategies Part 2  
Room: S230F |             |
|      | TS67: HOT—Lane Operations  
Room: S230G |             |
|      | TS68: ITS—What’s the Problem, What to Do, Where It’s Going  
Room: S330A |             |
|      | IBEC05: ITS Decision Support Resources Around the World  
Room: S330B |             |
|      | AM28: Active Transportation and Demand Management: The Decision Support Toolbox  
Room: S330C |             |
|      | AM29: Public Information and Transportation Technology—How to Tell the ITS Story  
Room: S331A |             |
|      | AM30: Cooperative Systems: Maturing to Reality  
Room: S331B |             |
|      | AM31: ITS for Truck Parking  
Room: S331C |             |
|      | AM32: Smart Parking with ITS: Transforming an Industry  
Room: S331D |             |
| 7:00 p.m. - 10:00 p.m. | Finale Event: "Coast to Coast" in Disney at Disney’s Hollywood Studios  
(Ticket Required)  
(Casual attire, comfortable shoes and lots of walking) |             |
### Key:

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<tr>
<th>Plenary Session (PL)</th>
<th>Meetings/Workshops</th>
<th>Technical Tours</th>
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<td>Executive Sessions (ES)</td>
<td>Technical/Scientific Sessions (TS)</td>
<td>IBEC Session (IBEC)</td>
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<tr>
<td>Special Interest Sessions (SS)</td>
<td>Interactive Paper Sessions (IS)</td>
<td>PA-ME ITS Initiatives (PAITS)</td>
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<tr>
<td>Annual Meeting Sessions (AM)</td>
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### Thursday, October 20, 2011

#### Student Day

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<tr>
<th>Time</th>
<th>Event</th>
<th>Room</th>
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<tbody>
<tr>
<td>8:00 a.m. - Noon</td>
<td>AASHTO Day (Invitation Only)</td>
<td>Room: Lake Lucerne- Hilton</td>
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<tr>
<td>8:30 a.m. - 11:30 a.m.</td>
<td>I-4 Weigh Station &amp; VACIS Imaging Inspection Tour</td>
<td>Room: Exhibit Hall Room 6</td>
</tr>
<tr>
<td>8:00 a.m. - 3:30 p.m.</td>
<td>Technology Showcase (Open to College and High School Students)</td>
<td>Room: Exhibit Hall Room 5</td>
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<tr>
<td>7:30 a.m. - 3:30 p.m.</td>
<td>Delegate Registration Open</td>
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<tr>
<td>8:30 a.m. - 10:00 a.m.</td>
<td>ES12: Global Safety</td>
<td>Room: S310A/B</td>
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<td>ES13: The Ownership of ITS Data</td>
<td>Room: S310E/F</td>
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<td>SS68: The Latest Trends About Collection of Traffic Information</td>
<td>Room: S210A</td>
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<td>SS70: Field Operational Tests: Moving Ahead Towards ITS deployment</td>
<td>Room: S210C</td>
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<td>TS99: Design Build with ITS</td>
<td>Room: S220A</td>
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<td>TS100: Variable Speed Limits</td>
<td>Room: S220B</td>
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<td>TS101: Managed Lanes—Evaluation and Lessons Learned</td>
<td>Room: S220C</td>
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<td>TS102: Traffic Simulation Cases</td>
<td>Room: S220D</td>
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<td>TS103: Using Vehicle Probe Data for Congestion Analysis</td>
<td>Room: S220E</td>
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<td>TS104: Areawide Strategies that Result from Environmental Performance Measures</td>
<td>Room: S220F</td>
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<td>TS105: Eco-Driving</td>
<td>Room: S230A</td>
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<td>TS106: Evaluations of ITS Deployments</td>
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<td>TS107: Research on Driver Behavior</td>
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<td>TS108: Educational Outreach</td>
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<td>TS109: Tolling Systems Architecture</td>
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<td>TS110: V2I for Intersection</td>
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<td>TS111: Arterial Traffic Detection</td>
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<td>TS112: Adaptive Signal Control 2</td>
<td>Room: S320H</td>
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<td>TS113: Organizing and Planning to Maximize Service Provision</td>
<td>Room: S330A</td>
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<td>TS114: Achieving Environmental Improvement Through Transportation System Efficiency</td>
<td>Room: S210D</td>
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<td>TS115: Business Cases for Cooperative Mobility</td>
<td>Room: S210E</td>
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<td>AM33: The Pending Marriage of ITS and Tolls</td>
<td>Room: S331A</td>
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<td>AM34: FMCSA’s Expanded CVISN Program: Reports of Results and Advancement Across the U.S.</td>
<td>Room: S331B</td>
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<td>AM35: Minnesota DOT Connected Vehicles for Safety, Mobility, and User Fee Project</td>
<td>Room: S331C</td>
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#### 9:00 a.m. - 1:00 p.m.

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<tr>
<th>Event</th>
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<tr>
<td>ECOSTAND Energy Symposium</td>
<td>Room: Lake Down A-Hilton</td>
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#### 10:00 a.m. - 10:30 p.m.

<table>
<thead>
<tr>
<th>Event</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refreshment Break in the Technology Showcase &amp; Exhibit Hall</td>
<td>Room: Exhibit Hall Open</td>
</tr>
</tbody>
</table>

#### 10:30 a.m. - Noon

<table>
<thead>
<tr>
<th>Event</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS71: Linking Smarter Electric Mobility with the Smarter Grid</td>
<td>Room: S210A</td>
</tr>
<tr>
<td>SS72: Intermodal Public Transport Strategies: Carsharing, Bikesharing, and Ridesharing</td>
<td>Room: S210B</td>
</tr>
<tr>
<td>SS73: The Public Acceptability of Road Pricing</td>
<td>Room: S210C</td>
</tr>
<tr>
<td>SS74: Solution of Transportation Problems in Asia-Pacific Megacities</td>
<td>Room: S210D</td>
</tr>
<tr>
<td>SS75: ITS Education and Training: Successes, Challenges, and Lessons Learned around the World in the Last Decade</td>
<td>Room: S310E</td>
</tr>
<tr>
<td>SS76: Traffic Management to Reduce Fuel Use and CO2 Emissions—Applications and Insights from Field Experiments</td>
<td>Room: S220A</td>
</tr>
<tr>
<td>SS77: Open Transit Data: Making Public Transport More Accessible</td>
<td>Room: S220B</td>
</tr>
<tr>
<td>SS78: Environmental Charging—Beyond Congestion Pricing</td>
<td>Room: S220C</td>
</tr>
<tr>
<td>SS79: Insurance Telematics as an Early Connected Vehicle Application</td>
<td>Room: S220D</td>
</tr>
<tr>
<td>SS80: Traffic Data Systems for Corridor Performance Management</td>
<td>Room: S220E</td>
</tr>
<tr>
<td>SS81: Distracted Driving</td>
<td>Room: S220F</td>
</tr>
<tr>
<td>TS116: Safety and Traveler Information: Overlapping and Helpful Synthesis</td>
<td>Room: S230A</td>
</tr>
<tr>
<td>TS117: Data Platforms 2: Next Generation Travel Information</td>
<td>Room: S230B</td>
</tr>
<tr>
<td>TS118: Active Traffic Management in Metropolitan Areas</td>
<td>Room: S230C</td>
</tr>
<tr>
<td>TS119: Parking Systems</td>
<td>Room: S230D</td>
</tr>
<tr>
<td>TS120: On-Board Sensing</td>
<td>Room: S230E</td>
</tr>
<tr>
<td>TS121: Improving and Modeling Algorithms for Driver Assistance Systems</td>
<td>Room: S230F</td>
</tr>
<tr>
<td>TS122: Improving Air Quality with ITS Technologies</td>
<td>Room: S230G</td>
</tr>
<tr>
<td>IS09: Security for Cooperative Mobility</td>
<td>Room: Exhibit Hall Room 4</td>
</tr>
<tr>
<td>IS10: ITS: The Environment, Mobility, Vehicle to Infrastructure, and Safety</td>
<td>Room: Exhibit Hall Room 5</td>
</tr>
<tr>
<td>IS11: Transportation Demand Management and Smart Parking</td>
<td>Room: Exhibit Hall Room 6</td>
</tr>
<tr>
<td>AM36: ITS Strategies for Keeping Traffic Flowing During Road Rehabilitation</td>
<td>Room: S331A</td>
</tr>
<tr>
<td>AM37: Using ITS for Freight, Planning and Programs</td>
<td>Room: S331B</td>
</tr>
<tr>
<td>AM38: Surface Transportation Weather Research and Deployment Activities</td>
<td>Room: S331C</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
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<tr>
<td>Noon - 1:00 p.m.</td>
<td>Interactive Sessions / Meet the Authors in the Exhibit Hall</td>
</tr>
<tr>
<td>Noon - 1:30 p.m.</td>
<td>Lunch in the Technology Showcase &amp; Exhibit Hall</td>
</tr>
<tr>
<td>Noon - 2:00 p.m.</td>
<td>Cyber Security Control Systems Within the Transportation Sector</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● ES14: ITS Policy Development</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● ES15: Vision of Traffic Management</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● SS20: 19th ITS WC in Vienna 2012</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS123: Asset Management, Refurbishment, and Standards</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS125: Funding ITS</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS126: Innovative Sensing Technologies</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS127: Data Platforms 3: Next Generation Travel Information</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS128: Infrastructure &amp; Vehicle Signing &amp; Warning: Effect on Traffic Operations</td>
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<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS129: Variable Speed Limits for Efficiency &amp; Safety</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS130: Impacts of ETC and Road User Charging</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS131: V2I for Intersections and Traffic Signals</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS132: Traffic Management Case Studies Using Vehicle Probe Data</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS133: Platooning &amp; Autonomous Vehicle</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS134: Collision Avoidance System</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>● TS135: The Use of Vehicle and Fuel Infrastructure to Enhance Environmental Conditions</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS136: Managing TMC Resources</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● TS137: ITS Data Usage</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● SS14: ITS Development in Fast-Growing Economies</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● AM39: Safety Pilot—The World’s Most Extensive Real World Deployment of Connected Vehicle Safety</td>
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<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● AM40: Potential Consequences (Unintended and Intended) of Pricing and Other Incentives</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● AM41: SHRP 2 Reliability Program—Making a Difference by Mainstreaming System Operations Activities</td>
</tr>
<tr>
<td>1:30 p.m. - 3:00 p.m.</td>
<td>● AM42: ITS Technologies Improve the Visibility and Efficiency of Worldwide Transportation Logistics</td>
</tr>
<tr>
<td>1:30 p.m. - 3:30 p.m.</td>
<td>Students and ITS Session / Networking</td>
</tr>
<tr>
<td>3:00 p.m. - 3:30 p.m.</td>
<td>Refreshment Break in the Technology Showcase &amp; Exhibit Hall</td>
</tr>
<tr>
<td>3:30 p.m. - 5:00 p.m.</td>
<td>Closing Ceremony</td>
</tr>
<tr>
<td>FRIDAY, OCTOBER 21, 2011</td>
<td></td>
</tr>
<tr>
<td>8:30 a.m. - 9:30 p.m.</td>
<td>Post Congress Southeast Florida ITS Tour</td>
</tr>
<tr>
<td>9:00 a.m. - 6:30 p.m.</td>
<td>Post Congress Kennedy Space Center Tour</td>
</tr>
</tbody>
</table>
**WORLD CONGRESS PLENARY SESSIONS**

*Plenary Sessions* prepare you for the important work of the 18th World Congress on ITS. Celebrate the international cooperation and ITS advancement fostered by the World Congress first with your region’s prominent government officials. Learn about the latest challenges and opportunities facing ITS and the policy and strategic implications for ITS deployment. Then, hear from global business leaders on how it is possible now to implement these initiatives. You cannot afford to miss these sessions.

**MONDAY, OCTOBER 17**
9:30 a.m. – 11:00 a.m.

*Plenary I: ITS Strategies: Spurring Economic Growth through High-Tech Transportation Solutions*

**Room: Hall SA1**

Senior political leaders and policymakers from the Americas, Asia-Pacific, and Europe will present their vision of public policies that can accelerate the deployment of intelligent transportation systems (ITS) to promote economic growth and job creation, improve the condition and performance of our existing transportation infrastructure, and make better use of private sector investment and innovation to improve safety, reduce traffic congestion, cut costs, and meet the demands of future generations.

**MODERATOR**
Ananth Prasad  
Secretary, Florida Department of Transportation, USA

**SPEAKERS**
Rep. John Mica (R-FL)  
Chairman, House Transportation and Infrastructure Committee, USA (Invited)

Zhongze Wu  
Chairman, ITS China, China  
Speaker from Asia-Pacific

Fotis Karamitsos  
Director, European Commission, DG MOVE

Catharina Elmsäter-Svärd  
Minister for Infrastructure, Ministry of Enterprise and Energy, Sweden

**WEDNESDAY, OCTOBER 19**
10:15 a.m. – Noon

*Plenary II: Ingredients for Implementing ITS Policies to Keep the Economy Moving*

**Room: Hall SA1**

Private sector leaders from across the globe will discuss their strategies for implementing ITS policies outlined by the political leaders in the first World Congress plenary. What new technologies and business practices are on the horizon that will revolutionize transportation while spurring job creation and economic growth? What more can governments do to encourage private sector innovators to invest in the research, development and deployment of intelligent transportation solutions to solve local, national and global transportation challenges?

**MODERATOR**
Robert L. Darbelnet  
President and CEO, AAA

**SPEAKERS**
Ray LaHood  
Secretary, U.S. Department of Transportation, USA

Robert Vrij  
Executive Vice President and President of the Americas, Alcatel-Lucent

Hiroyuki Watanabe  
Chairman, ITS Japan, Japan

Hauke Jürgensen  
CEO of Intelligent Traffic Systems, Siemens AG, Germany
The 18th World Congress and ITS America’s Annual Meeting & Exposition will feature an exciting schedule of special events and networking opportunities highlighting some of Orlando’s most unique locations, entertainment and dining.

**SATURDAY, OCTOBER 15**

**World Congress Golf Tournament**

*Disney’s Osprey Ridge Golf Course*

*Sponsored by Harris*

8:00 a.m.

Gather a foursome and kick off the conference at the World Congress Golf Tournament. The tropical wilderness of Disney’s Osprey Ridge Golf Course provides scenic surroundings, while challenging all comers with its rolling fairways and large, undulating greens. The cost is $125 per golfer, first come first served. Golfers will be able to register when they register for the conference. Payment must be received at time of reservation to confirm slot.

**SUNDAY, OCTOBER 16**

**Transportation and the Economy—Views from International Political Leaders**

2:00 p.m. – 4:00 p.m.

*Room: S210 A/B*

Investment in and effective operation of transportation infrastructure promotes economic activity and growth. At this roundtable, transportation leaders from around the world discuss how investment in infrastructure and transportation innovation impacts the economy.

Moderated by Gabe Klein, Transportation Commissioner from the City of Chicago, this Roundtable will include transportation ministers from countries as diverse as India, Russia, China, Sweden and Finland.

**MONDAY, OCTOBER 17**

**Leaders in Transportation Breakfast**

*Invitation only*

*Sponsored by Battelle*

7:30 a.m. – 9:00 a.m.

Join former and current national transportation officials for a candid discussion on the evolution of transportation policy, how to get projects moving, and where technology is taking transportation in the future.

**MODERATOR**

David St. Amant, President and COO, Econolite Group, Inc.

**INVITED SPEAKERS**

James Oberstar, Chairman, House Transportation and Infrastructure Committee (2007-2010)

Mary Peters, Secretary, U.S. Department of Transportation (2006-2009)

Congressman Randy Hultgren (R-IL), Member, House Transportation and Infrastructure Committee

Congressman Russ Carnahan, (D-MO), Member, House Transportation and Infrastructure Committee and Co-Chair, ITS Caucus
Exhibitors Welcome Reception
Orange County Convention Center’s Exhibit Hall
5:00 p.m.

Best of ITS Awards
Orange County Convention Center’s Exhibit Hall
Sponsored by Fontinalis Partners, LLC
5:00 p.m.

Room: Exhibit Hall Theatre
ITS America’s “Best of Intelligent Transportation Systems Awards” recognize the best and brightest of the ITS community. Categories include Best New Innovative Product, Service or Application and Best New Innovative Practice. The ITS Hall of Fame inductees, along with the winners of the Outstanding Student Essay Competition, sponsored by Southwest Research Institute, and the Smart Phone Apps Contest, sponsored by Atkins, will be announced during the ceremony as well. Who will get recognized this year? Don’t miss it!

ITS Florida Welcome Reception & Dinner
Discovery Cove®
7:00 p.m. – 10:00 p.m. (Casual attire)

Hosted by ITS Florida, this event will provide wonderful networking opportunities for attendees as they enjoy a Caribbean themed luau buffet with live entertainment at Discovery Cove®. Come join us for this exciting evening of fun and friendship. Ticket required and transportation provided.

WEDNESDAY, OCTOBER 19

“Coast to Coast” Networking Event
Disney’s Hollywood Studios®
7:00 p.m. – 10:00 p.m.
(Casual attire, comfortable shoes and lots of walking)

Take advantage of one last opportunity to network at the “Coast to Coast” Finale Networking Event at Disney’s Hollywood Studios®—open exclusively for World Congress attendees. Get ready for a night to remember starting with a special dinner on the Streets of America complete with a live DJ and street entertainers. Ticket required and transportation provided.

THURSDAY, OCTOBER 20

Closing Ceremony
Sponsored by Ford Motor Company
3:30 p.m. – 5:00 p.m.

Room: South Hall A1
The 18th World Congress Closing Ceremony has special significance this year, highlighted by an important keynote address by Bill Ford, Executive Chairman of Ford Motor Company (confirmed.) Chairman Ford will highlight the important advances in the automotive field and their implications for connectivity in the world of intelligent transport systems. In addition to this keynote and an entertainment interlude, Patrick McGowan, Orlando Organizing Committee Chair and John Peracchio, Program Committee Chair, will bring attention to the significant accomplishments of the World Congress and then “pass the globe” to their colleagues in Europe as all look to next year’s event in Vienna and the 2013 Congress in Tokyo.
**ANCILLARY EVENTS**

Attendees can get more bang for your meeting buck by attending any of several collocated **meetings** and **workshops** hosted by a number of partner organizations. You can also earn valuable Professional Development Hour (PDH) units required for many engineering and related licensure and certifications.

### SATURDAY, OCTOBER 15 & SUNDAY, OCTOBER 16

#### IRF Roadside Safety Application Course

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Room: S220D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, Oct 15</td>
<td>12:30 p.m. – 4:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>Sunday, Oct 16</td>
<td>8:45 a.m. – 4:00 p.m.</td>
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</table>

The International Road Federation Roadside Safety Applications Workshop is tailored for road authorities and consultants to teach them how to turn existing and new roads into “Forgiving Highways” and eliminate needless deaths. The training workshops will teach the attendees the proper steps to follow to make a road safer by eliminating the hazard, moving the hazard, making the hazard less rigid.

### SUNDAY, OCTOBER 16

#### FOT–Net Fourth International Workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Room: Lake Lucerne-Hilton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round tables: 8:00 a.m.</td>
<td>Free of charge</td>
</tr>
<tr>
<td>Plenary session: Noon – 4:00 p.m. (lunch included)</td>
<td></td>
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</tbody>
</table>

FOT-Net has been established by the European Commission to network Field Operational Tests (FOTs) organizers in one strategic networking platform in order to address common issues related to the practical organization, set up and follow-up of FOTs results. With successful events organized at the ITS Congresses in New York, Stockholm and Busan, FOT-Net has established an international network of FOT organizers, aiming to tackle common working issues and foster cross-region cooperation.

#### International Workshop on Best and Emerging Practices in Transit ITS

<table>
<thead>
<tr>
<th>Time</th>
<th>Room: S330C</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 a.m. – 1:00 p.m.</td>
<td>Sponsored by the U.S. DOT Federal Transit Administration. Open to government, academic, and industry leaders in the field of ITS and transit, this workshop will highlight emerging and best practices, including recent initiatives in Europe, Japan, and the United States.</td>
</tr>
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</table>

#### IBEC Workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Room: S220A</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 a.m. – Noon</td>
<td>The International Benefits, Evaluation and Costs (IBEC) Working Group is a cooperative working group set up to coordinate and expand international efforts, to exchange information and techniques, and evaluate benefits and costs of Intelligent Transportation Systems (ITS). Its annual workshop, traditionally held in conjunction with the ITS World Congress, covers a range of important evaluation, cost benefit, and performance management strategies that are designed to encourage and support ITS decision makers to make better informed ITS investments.</td>
</tr>
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### ITS America’s State Chapters Strengthening Workshop

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>10:00 a.m. – 1:00 p.m. (lunch included)</td>
<td>Presented by U.S. DOT. The ITS JPO Professional Capacity Building Program will present a workshop on the ITS Standards Training series currently under development. The workshop will include excerpts from the first three training modules: I101: Using ITS Standards: An Overview, A101: Introduction to Acquiring standards-based ITS Systems, and A102: Introduction to User Needs Identification. Participants will also be exposed to the additional 15 modules that will be available for them to pursue immediately.</td>
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**MODERATOR:** Tom West, Director, California Center for Innovative Transportation

### ITS Standards Workshop

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<tr>
<th>Time</th>
<th>Room: Lake Highland B-Hilton</th>
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<tr>
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<td>Presented by U.S. DOT. The ITS JPO Professional Capacity Building Program will present a workshop on the ITS Standards Training series currently under development. The workshop will include excerpts from the first three training modules: I101: Using ITS Standards: An Overview, A101: Introduction to Acquiring standards-based ITS Systems, and A102: Introduction to User Needs Identification. Participants will also be exposed to the additional 15 modules that will be available for them to pursue immediately.</td>
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**MODERATOR:** Tom West, Director, California Center for Innovative Transportation

[30 18th World Congress on Intelligent Transport Systems | www.itsworldcongress.org]
WEDNESDAY, OCTOBER 19

■ Women in ITS Breakfast (By Invitation Only)
7:30 a.m. – 9:00 a.m.

Room: S330E
Hosted by WTS International (Chair, Terry Gruver, InfrasConsult) and co-sponsored by Techtrans of Fort Lauderdale, Florida and Austria Tech, this breakfast will give attendees opportunities to network and learn more about women in the intelligent transportation systems industry and the important role they can and should play.

THURSDAY, OCTOBER 20

■ American Association of State Highway and Transportation Officials (AASHTO) International Day (Invitation only)
8:00 a.m. – Noon

Room: Lake Lucerne-Hilton
Highway officials from around the world are invited to discuss the latest in system operations and maintenance as well as progress and trends in cooperative systems presented by transportation officials in the Americas, Europe, and the Asia-Pacific region.

■ ECOSTAND Energy Symposium
9:00 a.m. – 1:00 p.m.

Room: Lake Down A-Hilton
ECOSTAND is a European initiative, co-funded by the European Commission under their 7th Research Framework Programme, whose main goal is to develop a roadmap together with Japan and the USA towards a common assessment methodology to assess ITS applications with a focus on energy efficiency & CO2 emissions. During the Congress, ECOSTAND will organize round tables with Japanese and American experts to give input on the different sub-topics that are part of the assessment methodology.

■ Cyber Security Controls Systems within the Transportation Sector
Noon – 2:00 p.m.

Room: S330D
The U.S. DOT Volpe Center has recently conducted a cyber review of transportation systems throughout the DOT modes. Each transportation modes has major control systems at various stages of Systems Development Lifecycle and, and each share unique control system characteristics that carry varying degrees of cyber risk. This open seminar shall present a sample of these systems from each of the modes, and demonstrate their potential cyber impacts on mobile transportation systems as a whole.
PORTABLE RESTROOMS

GM - EV DEMO
165' x 165'

EMERGENCY RESPONSE VEHICLES
90' x 180'

TRANSCOPE
180' x 180'

GM - SAFETY DEMO
132' x 624'

METAL PEDESTRIAN BARRIERS

TOYOTA
132' x 624'

METAL PEDESTRIAN BARRIERS

ALCATEL, BATTELLE, TRANSCORE DEMOS

METAL PEDESTRIAN BARRIERS

METAL PEDESTRIAN BARRIERS

METAL PEDESTRIAN BARRIERS
Cutting edge ITS technology solutions will come to life in real time for 18th World Congress attendees at the Technology Showcase. Set up in the large parking lot adjacent to the convention center, the Technology Showcase consists of live demonstrations by leading transportation agencies, including the U.S. Department of Transportation, and private sector companies. This year, the Technology Showcase is organized by themes or “villages” that highlight a specific use or application. The Village themes are: Safety, Mobility, Environment/Sustainability, and Pricing.

**SAFETY VILLAGE**

**Toyota**

*Exhibit Hall Booth: 1723 and Safety Village Booth: S6*

**Collision-Avoidance Typed PCS**

The Collision-Avoidance Support PCS is an autonomous vehicle system that detects pedestrians using camera and radar sensors. The system will stop the vehicle using automatic braking to avoid collisions with pedestrians. In the future, the use of wireless communication between vehicles and roadside infrastructure could be used to extend the Collision-Avoidance Support PCS system to include cases when the pedestrians are not directly in the field of view of the camera and radar sensor (e.g., pedestrians around the corner of a building, behind a parked vehicle, etc.)

The Collision-Avoidance Support PCS vehicles will be operated by Toyota personnel in the Technology Showcase parking lot. Congress attendees will ride these demonstration vehicles and experience the driver assistance features including automatic braking. Pre-registration at the Toyota booth will be necessary.

Online registration: [https://toyota-pcs.secure.force.com](https://toyota-pcs.secure.force.com)

**GM**

*Exhibit Hall Booth: 1501 and Safety Village Booth: S1*

**V2X Smartphone Integration**

At the 2011 World Congress in Orlando, Florida, General Motors will demonstrate how smartphones can be used to enhance driver awareness of other vehicles, the roadway and pedestrians or bicyclists. GM’s technology solution seamlessly integrates a smartphone into the vehicle to enable a variety of ITS applications that increase driver awareness and convenience. The V2X Smartphone Integration platform uses a lightweight approach that leverages customer smartphones and reduces vehicle deployment costs and complexity. The system uses Dedicated Short Range Communications (DSRC) and Wi-Fi technology to detect the locations and movements of surrounding traffic and to provide drivers with various types of information and entertainment services.

**Electric Network-Vehicle (EN-V)**

EN-V is a promising two-seat electric vehicle concept by General Motors for tomorrow’s drivers. EN-V is designed to provide urban mobility solution to address environmental issues and to alleviate concerns surrounding traffic congestion, parking availability, energy consumption and affordability for tomorrow’s cities. It is propelled by electric motors powered by lithium-ion batteries. EN-V can travel at least 40 kilometers on a single charge and its dynamic stabilization technology empowers a unique ability to carry two passengers and light cargo in a footprint that’s about a third of a traditional vehicle. It can literally “turn on a dime” within its own operating envelope. EN-V is a pure drive-by-wire vehicle that can operate autonomously or under manual control. The GM EN-V demonstration at the 2011 ITS World Congress will showcase autonomous driving capabilities of V2V/V2I connected technology and vehicle-based sensing. EN-V “senses” what’s around it, allowing quickly react to obstacles, pedestrians or changes in driving conditions, while its Wi-Fi-based technologies keep occupants connected to the outside world.

Ticketing is available on a first-come, first-serve basis. [www.itsworldcongress.org/techshowcase_gm1.html](http://www.itsworldcongress.org/techshowcase_gm1.html)

**DENSO/Econolite**

*Exhibit Hall Booth: 1925 or 2149 and Safety Village Booth: S2*

**Intersection Safety and Mobility**

DENSO and Econolite, along with the University of Arizona, will provide a demonstration showing how connected vehicle technology will be used to affect the safe and efficient movement of traffic through a network of signalized intersections. Join us as we see how, in the not-so-distant future, connected vehicle applications could influence the operation of coordinated traffic signals, enhance advanced vehicle communications, and utilize effective crash avoidance systems. Adopted together, these examples of connected vehicle applications and others like them, will ultimately benefit the safety and efficiency of a region’s transportation system, as well as provide valuable decision-making information to drivers.

Ticketing system available at: [www.itsworldcongress.org/techshowcase_denso.html](http://www.itsworldcongress.org/techshowcase_denso.html)

**I-95 Corridor Coalition/NYSDOT**

*Exhibit Hall Booth: 1941 and Safety Village Booth: S4*

**Commercial VII**

The I-95 Corridor Coalition, in partnership with the New York State Department of Transportation (NYSDOT) and Commercial Vehicle Infrastructure Integration (CVII) Project Team Members (Volvo Technology North America, Southwest Research Institute, Kapsch, and Intelligent Imaging Systems) will be demonstrating elements of the CVII Program.

The CVII Program, focuses on developing, testing and deploying 5.9 GHz dedicated short range communications (DSRC) technology for heavy vehicles. The CVII activities exhibited include safety and mobility applications between vehicles and roadside infrastructure (V2I/V2V) and vehicle to vehicle (V2V) communication including.

Ticketing system available at: [www.itsworldcongress.org/techshowcase_nyssdot.html](http://www.itsworldcongress.org/techshowcase_nyssdot.html)
Siemens

**Exhibit Hall Booth:** 1903 and **Safety Village Booth:** S3

**Interoperable Vehicle Priority**

Siemens will showcase its Connected Vehicle technology used to provide First Responders, Transit agencies, Freight operators and Traffic Management staff with an interoperable wireless connection from vehicles to traffic signals. World Congress attendees will take a ride through live signalized intersections while watching a video depicting the challenges public agencies faced during Texas gulf coast hurricanes and how in the aftermath, these challenges are being addressed by Connected Vehicle technology.

Ticketing system available at: www.itsworldcongress.org/techshowcase_siemens.html

USDOT/CAMP

**Exhibit Hall Booth:** 1603 and **Safety Village Booth:** S8

**Connected Vehicle Technology Demonstration**

(see page 36 for complete description)

Raytheon

**Exhibit Hall Booth:** 2335 and **Safety Village Booth:** S5

**Infrastructure BSM Generator for V2V**

Raytheon “Infrastructure BSM Generator” (IBG) equipment is deployed on existing infrastructure (light or utility pole) on International Drive. Raytheon’s IBG will detect unequipped vehicles in normal public traffic and broadcast BSMs for them. Existing RSEs deployed nearby will receive BSMs from equipped and IBG-detected vehicles. Traffic Management Center display will show more dense BSM receipt at the IBG deployment location.

Raytheon is not offering a rider-ticketed vehicle demonstration.

Raytheon Highway Transportation Management Systems (HTMS) will demonstrate its Infrastructure BSM Generator (IBG) at the 18th World Congress on Intelligent Transportation Systems. IBG directly addresses the issues of early adopter and market penetration benefits of Intelligent Transportation Systems by using advanced video analytics-enabled systems to generate Basic Safety Messages (BSM) for unequipped vehicles at safety critical deployment locations. This technology will provide an immediate safety incentive for early-adopters that have embraced ITS Safety by equipping to receive BSMs. The Raytheon IBG effectively increases ITS equipped vehicle penetration rates to stimulate early adoption and wide deployment of BSM-enabled ITS Safety.

For additional details: www.itsworldcongress.org/techshowcase_raytheon.html

SwRI

**Exhibit Hall Booth:** 1349 and **Environment Village Booth:** E4

**CO2 Emissions**

An RSE network is deployed in Orlando, Florida supporting Connected Vehicle demonstrations for the 2011 ITS World Congress. On-board vehicle sensors capture real-time data, including emissions, speed, and location. RPM and other vehicle data and transmits it thru the 5.9 MHz OBE DSRC radio. 25 RSE’s deployed along Orlando’s roadways collect data from OBE equipped vehicles and transmit the data to the regional Traffic Management Center.

For additional details: www.itsworldcongress.org/techshowcase_swri.html

Ricardo

**Exhibit Hall Booth:** 2137 and **Environment Village Booth:** E3

**EcoGreen**

Ricardo Engineering will unveil its fuel-efficient demonstrator at the 2011 ITS World Congress. Using GPS navigation, enhanced map data, and traffic signal phase and timing data, Ricardo’s demonstrator will improve fuel efficiency by up to 25 percent. Ricardo’s fusion of commercial technology and advanced technology could provide fuel savings as much as $1,000 a year per passenger vehicle.

For additional details: www.itsworldcongress.org/techshowcase_ricardo.html

Telvent

**Exhibit Hall Booth:** 2301 and **Environment Village Booth:** E6

**Environmental Demo: Telvent TRACE Air Quality Platform**

This is a demonstration of an integrated platform including environmental and traffic management systems. This system has been designed to improve operation and evaluation of the deployed ITS technologies and strategies. This demo will be achieved through the use of roadside air quality monitoring sensors, local traffic detectors, and...
weather information. Attendees will see real-time air quality data and “hot spots” correlated with traffic congestion from two sites: Orlando area (International Drive/W Sand Lake)—roadside air quality monitoring sensors and traffic detectors deployed along International Drive and West Sand Lake Road
Pinellas County McMullen Booth Corridor—an integrated operational system including MIST traffic management platform, OPAC traffic adaptive control system, roadway traffic sensors, and weather data.

For additional details: www.itsworldcongress.org/techshowcase_telvent.html

**USDOT AERIS**

*Exhibit Hall Booth: 1603 and Environment Village Booth: E7*

**Applications for the Environment: Real-Time Information Synthesis (AERIS) Sponsored by U.S. DOT**

The AERIS booth expects to highlight AERIS research findings to date, including results of State-of-the-Practice reports and the interim results of the seven research awards made from the Broad Agency Announcement in Fall 2010. Researchers will be on hand to discuss their work and answer questions.

For additional details: www.itsworldcongress.org/techshowcase_aeris.html

**MOBILITY VILLAGE**

**Sensys Networks**

*Exhibit Hall Booth: 1436 and Mobility Village Booth: M1-2*

For the 2011 World Congress Sensys Networks presents improvements to its award-winning VDS240 wireless vehicle detection system. Join us for demonstrations of SNAPS and TrafficDOT—our powerful system management and configuration tools, and the latest hardware addition to our integrated suite of wireless vehicle detection components—the Access Point Contact Closure (APCC) card.

Soon to be integrated with Florida’s SunGuide, Sensys Networks will showcase its Arterial Travel Time deployment along Orlando’s busy International Drive. Delegates will view real-time traffic conditions and travel times along I-Drive via SNAPS, now integrated with Google Maps for accurate, and dependable congestion mapping.

Lastly, Sensys Networks introduces the industry’s first five-year hardware warranty for advanced detection products. Our warranty program confirms Sensys Networks’ commitment to providing the most dependable and cost-effective detection solutions on the market.

For additional details: www.itsworldcongress.org/techshowcase_sensys.html

**TransCore**

*Exhibit Hall Booth: 1949 and Pricing Village Booth: P3*

**Coast to Coast Freedom with Toll Interoperability Demonstration**

Interoperability is the future of electronic toll collection (ETC), a solution that helps reduce congestion and is key to increasing driver satisfaction. ITS World Congress attendees visiting the TransCore demonstration located in the pricing village will observe how our multiprotocol technology is making interoperability achievable today.

TransCore will demonstrate how the Encompass® E Multiprotocol Reader is compatible with the millions of ETC tags already in use—regardless of their transportation-related protocol. Additionally, TransCore will be demonstrating how the eZGo Anywhere™ On-Board Unit (OBU) can be read by various U.S. tolling system’s readers, providing a convenience for drivers that travel across state boundaries or live in close proximity to two or more tolling systems. The demo lasts approximately 10 minutes and will run throughout the day. Please visit TransCore to see how we’re making interoperability a reality and ready to implement now.

For additional details: www.itsworldcongress.org/techshowcase_transcore.html

**Kapsch TrafficCom**

*Exhibit Hall Booth: 2347 and Pricing Village Booth: P5*

Kapsch TrafficCom continues its commitment to the development of 5.9 GHz DSRC technology by demonstrating the latest advancements in commercially available components for ITS applications. After showcasing the initial prototypes enabling traveler information and electronic toll collection based on 5.9 GHz DSRC at the 15th ITS World Congress in New York City, Kapsch TrafficCom will demonstrate the latest advancements that have been created for the ITS market. Together with its partner, the Florida’s Turnpike Enterprise (LTE), Kapsch TrafficCom IVHS will demonstrate in-vehicle traveler information, high-speed open road tolling and commercial vehicle electronic screening on State Road 528 during this year’s ITS World Congress in Orlando, Florida.

For additional details: www.itsworldcongress.org/techshowcase_kapsch.html

**ACS/Xerox**

*Exhibit Hall Booth: 2121 and Pricing Village Booth: P4*

**Congestion Management through Pricing and Dynamic Pricing**

Everyone is talking about traffic congestion and how it affects our everyday life. It reduces mobility and increases driver stress, vehicle cost and pollution. Effective congestion management is achievable through strategic use of technology and pricing solutions. Come see us demonstrate road usage pricing using both GPS technology and transactions generated from RSEs. Our Dynamic Pricing solution will be simulated and shown through our Traffic Management and Toll Management system. That is the ACS difference.

For additional details: www.itsworldcongress.org/techshowcase_acs.html

**Minnesota DOT and Battelle**

*Exhibit Hall Booth: 1436 and Pricing Village Booth: P1-2*

**Minnesota Road Fee System**

The Minnesota DOT and Battelle are pleased to provide a demonstration of the Minnesota Road Fee System, which integrates Connected Vehicle applications with a Mileage-Based Fee Collection application onto a commercially available portable computing hardware solution. This system provides benefits to transportation system operators by providing a direct link between transportation roadway usage and fee collection in an environment where fuel tax revenues are declining. The system enables both fixed fee and variable fee assessment based on location, time of day, day of week, type of vehicle, etc. Anonymous location and vehicle telemetry data captured by the on-board device will provide critical roadway usage data to transportation planners for determining bottlenecks and pinch-points.

The demonstration units will demonstrate safety signage at various locations while walking around the Technology Showcase Villa and sample user fees will be assessed for distance traveled. Probe data will be collected from the devices and displayed live within the villa. Integration with the Connected Vehicle program will be demonstrated through receipt and display of roadside equipment (RSE) broadcast traveler information messages.

For additional details: www.itsworldcongress.org/techshowcase_MinnesotaDOT.html
GEWI/BMW

**Exhibit Hall Booth:** 1449 and **Mobility Village Booth:** M3

**Local Hazard Warning**

Visitors to ITS World Congress can register for a ride-along in the GEWI / BMW Local Hazard Warning demonstration several ways. By visiting the GEWI or BMW exhibits, or some walk-up positions may be available on a first-come, first-served basis in the outdoor demonstration areas. Also, users can request a reservation by sending their preferred date/time in e-mail to jin.onelli@gewi.com.

For additional details: [www.itsworldcongress.org/techshowcase_gewi.html](http://www.itsworldcongress.org/techshowcase_gewi.html)

**Iteris**

**Exhibit Hall Booth:** 1933 and **Mobility Village Booth:** M5

**Iteris Bluetooth Travel Time Display**

Iteris, in partnership with Post Oak Traffic Systems, will showcase an innovative arterial travel time measurement system that leverages Bluetooth technology within cell phones and Bluetooth-equipped devices. The demonstration will show current probe-based travel times based on a sampling of traffic flow between the Bluetooth detection points.

Iteris will demonstrate the VantageView™ integrated software platform that enables traffic managers the ability to monitor video feeds and configure detection zones remotely over an IP network connection. Attendees will experience the unique graphical user display and enhanced real-time data collection capability that includes counts, speed, and occupancy.

For additional details: [www.itsworldcongress.org/techshowcase_iteris.html](http://www.itsworldcongress.org/techshowcase_iteris.html)

**Alcatel Lucent**

**Exhibit Hall Booth:** 1915 and **Mobility Village Booth:** M4

**ALU Real-time Incident Monitoring Mobile Video Streaming Over LTE demo**

This Alcatel-Lucent AXIS demonstration showcases real-time high bandwidth fixed and mobile video streaming and monitoring for real time incident detection using LTE technology. Attendees will be able to ride along in a police cruiser mockup and view live video streams in the moving car from other locations as well as view transmission of video streams from the car to the inside and outside booths which is of high importance when first responders deal with incidents on the roadways or when transportation authorities deal with incidents on vehicles. Live demo in progress will be displayed at the booth that will simulate interaction between a Traffic Management Center operator with live video feeds from the field or from moving vehicles. Alcatel-Lucent will provide LTE coverage for the demo with their mobile LTE Rover truck which will be located in the parking lot providing an opportunity for attendees to view the LTE equipment inside.

For additional details: [www.itsworldcongress.org/techshowcase_alcatel1.html](http://www.itsworldcongress.org/techshowcase_alcatel1.html)

**ALU parking lot Intelligent Travel Time System demo**

This Alcatel-Lucent demonstration showcases a parking lot Intelligent Travel Time System (ITTS) demo for real-time travel time using Bluetooth technology. Data collected from the ITTS sensors will be backedhaul to the indoor and outdoor booths using LTE technology. Attendees at the indoor and outdoor booths will be able to interact using an enhanced GUI that will display rich features. Attendees will also be able to participate, via personal Bluetooth mobile devices in a demo car. Alcatel-Lucent will provide LTE coverage for the demo with their mobile LTE Rover truck which will be located in the parking lot providing an opportunity for attendees to view the LTE equipment inside.

For additional details: [www.itsworldcongress.org/techshowcase_alcatel2.html](http://www.itsworldcongress.org/techshowcase_alcatel2.html)

**ALU Roadside Intelligent Travel Time System demo**

This Alcatel-Lucent demonstration showcases a roadside Intelligent Travel Time System (ITTS) demo which provides a Real-time representation of Road Congestion and Travel Time information using Bluetooth technology. Attendees at the indoor and outdoor booths will be able to interact using an enhanced GUI that will display rich features such as Alternative Route selection, prediction of traffic behavior for travel planning and view Traffic Patterns/trends throughout the day in the demo area of the City of Orlando, among many others.

For additional details: [www.itsworldcongress.org/techshowcase_alcatel3.html](http://www.itsworldcongress.org/techshowcase_alcatel3.html)

**FLORIDA DEPARTMENT OF TRANSPORTATION**

**Exhibit Hall Booth:** 125 and **Mobility Village Booth:** M7

**Florida Department of Transportation**

**Transit On-board Real-time Traveler Information**

As part of the 2011 ITS World Congress, the Florida Department of Transportation (FDOT) is supporting the Technology Showcase and Demonstrations. FDOT has deployed roadside equipment (RSE) units in an area around the Orange County Convention Center. These RSEs will interface with demonstrators’ onboard equipment (OBE) and connect to the FDOT District Five SunGuide® advanced transportation management system production software through the District’s fiber optic network. FDOT also coordinated the installation of ITS beacons in volunteered vehicles. These beacons will send basic safety message data back to the SunGuide® software via the RSE units.

Signal phasing and time (SpaT) controllers are planned to be deployed at specific intersections along the World Congress demonstration route. These SpaT controllers will interface with RSEs which will broadcast the SpaT data to the demonstration OBEs. The information received by these units will provide drivers with feedback.

**THANKS TO OUR PARTNERS**

In addition to our demonstrating companies and organizations, the following agencies are recognized for their assistance in the planning, design, and implementation of this year’s Technology Showcase.

- City of Orlando
- Florida Department of Transportation
- Florida Transportation Commission
- Incident Management & Emergency Response Agencies of Florida and the Southeast U.S.
- ITS Florida
- Metroplan Orlando
- Orange County Convention Center
- Orange County Government
- Orlando-Orange County Expressway Authority
- Pinellas County
- U.S. Department of Transportation
Under the Vehicle-to-Vehicle (V2V) Safety System and Vehicle Build for Safety Pilot (V2V-SP) Project, vehicles from each of these manufacturers will support one or more of the following safety applications:

- Emergency Electronic Brake Lights (EEBL)
- Forward Collision Warning (FCW)
- Blind Spot Warning/Lane Change Warning (BSW/LCW)
- Do Not Pass Warning (DNPW)
- Intersection Movement Assist (IMA)
- Left Turn Assist (LTA)

These safety applications will be demonstrated at the Walt Disney World® SPEEDWAY during the 18th Intelligent Transportation Systems World Congress Technology Showcase. Participants will ride in the vehicles and experience the effectiveness of the safety applications in various potential crash scenarios. The vehicles used will be part of the actual test fleet that will participate in the U.S. DOT Safety Pilot program. The objective of the demonstration is to show how V2V interoperability among vehicles from different automotive manufacturers can allow cars to communicate and understand each other. These connected vehicle safety systems may help drivers avoid crashes regardless of vehicle make, model or type.

In addition to the V2V safety applications shown in the CAMP VSC3 vehicles, a stationary and V2V-equipped Class 8 heavy truck will also be part of the demonstration. To participate in this demonstration, attendees should register in advance at www.v2vtechreview-florida.com.
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- Mall at Millennia 
  LYNX ROUTE 24 & 40
- Orange County Convention Center 
  LYNX ROUTE 8, 38, 42, 58 & 111
- Orlando Premium Outlet 
  LYNX ROUTE 8 & 42
- Prime Outlet 
  LYNX ROUTE 8, 24 & 42
- SeaWorld 
  LYNX ROUTE 8, 50 & PickUpLine 641
- Universal Orlando 
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- Walt Disney World Resort 
  LYNX ROUTE 50, 56 & 111

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REFERENCE GOOGLE MAPS FOR MORE INFO
Choose from an array of **technical tours**, which offer attendees a first-hand look at how the state of Florida has emerged as a leader in integrating Intelligent Transport Systems and transportation planning. Attendees can also enhance their World Congress experience with tours of popular local sites like Walt Disney World, the Kennedy Space Center and the Orlando Amway Center.

### MONDAY, OCTOBER 17
1:00 p.m. – 5:00 p.m.

- **Orlando Area Transportation Management & Emergency Operation Centers**
  *Turnpike Turkey Lake RTMC & SunWatch Center*
  The Turnpike Turkey Lake RTMC is the 24/7 central facility for the control, monitoring, operation, and management of Turnpike traffic in the northern portion of the Turnpike Enterprise System.

- **Joint Florida Department of Transportation (FDOT), District 5 Regional Transportation Management Center (RTMC) and Regional Joint Communications**
  The RTMC operates all DOT ITS in the Orlando region, including 515 CCTV cameras which includes Orlando Orange County Expressway Authority (OOCEA) cameras, and 239 Dynamic Message Signs.

- **City of Orlando Traffic Control and Emergency Management Centers**
  The City of Orlando Traffic Control Center manages all city-owned ITS, including traffic signal controllers, traffic surveillance cameras, signs, video detection, and emergency vehicle preemption equipment.

### TUESDAY, OCTOBER 18
8:30 a.m. – Noon

- **Orlando Research Facility**
  *University of Central Florida (UCF) Institute for Simulation and Training Lab*
  IST is an internationally recognized research institute that focuses on advancing modeling and simulation technology and increasing understanding of simulation’s role in training and education. Attendees on this tour will view multiple stations demonstrating modeling and simulation including the Center for Advanced Transportation System Simulation (CATSS) Lab featuring a driving simulator and autonomous vehicles.

### TUESDAY, OCTOBER 18
8:30 a.m. – 1:00 p.m.

- **Behind the Scenes at Disney World**
  Delegates have the unforgettable opportunity to go behind-the-scenes and experience proven Disney innovations and business philosophies first-hand.

  **Participants must be at least 16 years old and carry government issued photo identification (Driver’s License, Passport, etc.). There is walking involved, so comfortable shoes are recommended and attire should be suitable for current weather conditions. Closed toe and closed heel footwear is required to enter Central Shops.**

### WEDNESDAY, OCTOBER 19
8:00 a.m. – 1:00 p.m.

- **SOLD OUT**

### THURSDAY, OCTOBER 20
8:30 a.m. – 11:30 a.m. & 9:30 a.m. – 12:30 a.m.

- **SOLD OUT**

- **I-4 Weigh Station & VACIS Imaging Inspection System**
  The I-4 Weigh Station is a state-of-the-art facility utilizing 3-D laser measurements technology, weigh-in motion scales, electronic pre-clearance with confirmation readers, license plate readers, and in the near future, automated infrared brake testing technology.
**Post Congress Southeast Florida ITS Tour**

**FDOT District 4/PBC TMC (West Palm Beach)**
Co-located with the Palm Beach County Traffic Engineering Division, this TMC manages all interim ITS devices on 45 miles of I-95 in Palm Beach County and the PBCoTED manages 1006 traffic signals in the county.

**FDOT District 4/Broward TMC (Ft. Lauderdale)**
Co-located with Broward County Traffic Engineering Division, this RTMC manages all ITS devices on 72 centerline miles in Broward County (25 on I-95 & 47 on I-75), as well as ITS devices in Martin, Lucie, and Indian River Counties to the north.

**95 Express Lanes & FDOT District 6 RTMC (Miami)**
The 95 Express Lanes in Miami are the first High-Occupancy Toll (HOT) facilities in Florida. Attendees will see the two managed lanes (northbound and southbound) on Interstate 95 from the Golden Glades Interchange to just north of downtown Miami reserved for paying single-occupant vehicles.

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**Post Congress Kennedy Space Center Tour**

World Congress attendees will have a unique opportunity to explore exhibits, participate in the Shuttle Launch Experience, and go deeper into the operations of Kennedy Space Center with a post congress tour. Your exploration of NASA’s launch headquarters traverses an amazing area that includes towering launch pads, huge rockets, history-making technology, and vast stretches of our Florida wildlife preserve.

**TIP**

Transportation for the tours will be provided from the Convention Center. Tour attendees should arrive 15 minutes prior to the start of the tour.
### Sessions by Track

**Cooperative Mobility**
- **ES03:** Cooperative Mobility Services and the Internet
- **SS02:** Deployment of Vehicle-Infrastructure Cooperation Systems
- **SS03:** COnNeetedSafety2: From the European ITS Communications Architecture to Deployable Standards
- **SS08:** Cooperative Vehicle-Highway Systems: Collaboration Between the Automotive Industry and Road Operators
- **SS26:** The State of Deployment Around the World of the “Connected Vehicle”
- **SS53:** Field Operational Tests as Enabler for Cooperative Mobility in Europe?
- **SS60:** International Governmental Cooperation for Deployment of ITS Cooperative System
- **SS75:** Insurance Telematics as an Early Connected Vehicle Application
- **TS09:** Communication Challenges in Cooperative Mobility
- **TS10:** V2V Communication: Evaluation and Assessment
- **TS21:** Positioning for Cooperative Mobility
- **TS33:** V2I Communication: Evaluation and Assessment
- **TS41:** Protocols and Evaluations for V2V Communication
- **TS52:** Protocols and Standards for Wireless Technologies in Cooperative Mobility
- **TS68:** Practical Study and FiOts for Cooperative Mobility
- **TS74:** Wireless Technologies for V2V and V2I
- **TS90:** Probe and Travel Time for Cooperative Mobility
- **TS91:** V2I Deployment Initiatives
- **TS115:** Business Cases for Cooperative Mobility
- **TS110:** V2I for Intersection
- **TS131:** V2I for Intersections and Traffic Signals
- **TS133:** Platooning & Autonomous Vehicle
- **TS90:** Security for Cooperative Mobility
- **AM07:** Technology for a Better Connected Vehicle
- **AM18:** Connected Vehicles in a Connected World for Enhanced Safety and Mobility
- **AM30:** Cooperative Systems: Maturing to Reality
- **AM35:** Minnesota DOT Connected Vehicle for Safety, Mobility, and User Fee Project

**Data Collection & Performance Measurement**
- **TS08:** Probe Data Collection and Distribution
- **TS11:** Using Information Technology to Better Manage ITS Operations and Investments
- **TS13:** Automating the ITS Data Supply Chain
- **TS16:** Real Time Traffic Information in North-America: From Analogue to Digital Delivery—Challenge and Opportunity
- **TS31:** Visualizing ITS Data
- **TS49:** Geo-Data Services as a Universal Design Transportation Enhancement
- **TS61:** Using Historical GPS Data for Transportation Planning
- **TS69:** National ITS Architectures: How are they Guiding ITS Implementation?
- **TS77:** Open Transit Data: Making Public Transport More Accessible
- **TS88:** Traffic Data Systems for Corridor Performance Management
- **AM06:** Performance Measurement 101: Strategies for Addressing Increasing Data Collection and Accountability Requirements in an Era of Decreasing Resources
- **AM19:** Latest Evaluation Findings and Factors in ITS Deployment Tracking
- **AM23:** Using ITS Architecture to Plan and Develop ITS Projects
- **TS12:** Probe Data Collection Using Smartphone and 700MHz Band
- **TS13:** Performance Management Databases
- **TS32:** Traffic Surveillance Cellular Phone Network
- **TS47:** Data Collection Systems 1
- **TS58:** Vehicle Probe for Travel Time Analysis
- **TS79:** Data Collection Systems 2
- **TS132:** Traffic Management Case Studies Using Vehicle Probe Data
- **TS103:** Using Vehicle Probe Data for Congestion Analysis
- **TS80:** Probe Data Collection Using Bluetooth

**Freight & Commercial Vehicles**
- **SS41:** Goods Movement and GHGs
- **SS46:** ITS for Freight—Makes Transportation Safer, Faster, Smarter for All Road Users
- **TS03:** Development in Freight Operations
- **TS31:** Freight Logistics
- **TS40:** Truck Parking
- **TS51:** Goods & Freight—Let’s Move
- **TS57:** Port of Entry
- **TS66:** WIM/Cross Borders
- **TS71:** Environmentally Friendly Freight
- **AM31:** ITS for Truck Parking
- **AM37:** Using ITS for Freight, Planning and Programs

**Infrastructure, Traffic, & Congestion Management**
- **ES15:** Vision of Traffic Management
- **SS22:** Adaptive Traffic Control Systems: Present and Future
- **TS04:** Roadway Detectors & Traffic Data for Effective ITS
- **TS05:** ITS Based Safety Systems
- **TS06:** Infrastructure Protection Using ITS
- **TS07:** Advanced Traffic Management Systems
- **TS15:** ITS Deployments
- **TS17:** Models and Architecture for Roadway Network Management
- **TS18:** Pedestrian Safety
- **TS26:** Intersection Safety: Dilemma Zone & Gap Acceptance
- **TS27:** Regional Operations Considerations

**Financing**
- **ES04:** ITS and Private Finance
- **SS73:** The Public Acceptability of Road Pricing
- **SS78:** Environmental Charging—Beyond Congestion Pricing
- **IBEC03:** Managing Traffic with No Money

**Annual Meeting Sessions (AM)**
- **AM33:** The Pending Marriage of ITS and Tolls
- **AM24:** Tracking Economic Trends and Activity Using ITS
- **TS14:** Congestion Charging Around the World
- **TS42:** Tolling System Design
- **TS45:** Mileage Based Fees 1
- **TS55:** Electronic Toll Systems
- **TS73:** Mileage Based Fees 2
- **TS89:** Tolling Technology
- **TS109:** Tolling Systems Architecture
- **TS125:** Funding ITS

**PA-ME ITS Initiatives (PAITS)**
- **TS119:** PAITS: Economic Trends and Activity Using ITS

**Interactive Paper Sessions (IP)**
- **TS99:** Interactive Paper Sessions

**Technical/Scientific Sessions (TS)**
- **TS55:** Technical/Scientific Sessions

**Executive Sessions (ES)**
- **ES03:** Executive Sessions

**Special Interest Sessions (SS)**
- **SS03:** Special Interest Sessions

**Key:**
- ES: Executive Sessions
- SS: Special Interest Sessions
- TS: Technical/Scientific Sessions
- IBEC: International Business Eco-Conference
- AM: Annual Meeting Sessions
- PAITS: PA-ME ITS Initiatives

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- **TS109:** Tolling Systems Architecture
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**PA-ME ITS Initiatives (PAITS)**

- **TS119:** PAITS: Economic Trends and Activity Using ITS

**Interactive Paper Sessions (IP)**

- **TS99:** Interactive Paper Sessions

**Technical/Scientific Sessions (TS)**

- **TS55:** Technical/Scientific Sessions

**Executive Sessions (ES)**

- **ES03:** Executive Sessions

**Special Interest Sessions (SS)**

- **SS03:** Special Interest Sessions
INSTITUTIONAL & POLITICAL ISSUES

- TS28: Incident Response Strategies
- TS29: Regional Deployment Strategies
- TS39: Traffic Flow Prediction & Estimation
- TS48: Traffic Signal System Operations
- TS64: Adaptive Traffic Signal Control System Operations
- TS65: Integrated Corridor Management Systems
- TS67: Data Communication/Management Systems and Plans
- TS75: ITS for Unique Operational Scenarios
- TS78: Intersection Control and Optimization
- TS86: Automated Incident Detection Systems
- TS87: Advancements in Video Technologies
- TS95: Adaptive Signal Control
- TS96: Regional Deployment Strategies 2
- TS97: HOT—Lane Operations
- TS106: Variable Speed Limits
- TS107: Managed Lanes—Evaluation and Lessons Learned
- TS102: Traffic Simulation Cases
- TS106: Evaluations of ITS Deployments
- TS111: Arterial Traffic Detection
- TS112: Adaptive Signal Control 2
- TS118: Active Traffic Management in Metropolitan Areas
- TS119: Parking Systems
- TS123: Infrastructure & Vehicle Signing & Warning: Effect on Traffic Operations
- TS129: Variable Speed Limits for Efficiency & Safety
- TS136: Managing TMC Resources
- TS137: ITS Data Usage
- IS01: Electronic Enforcement Systems
- IS02: TMC Models, Weather Impacts, Congestion Management and System Operations
- IS03: The Use of Simulation Models, Congestion Management Methods and Communication to Enhance System Operations
- IS04: ITS Tools: Leveraging Technology for Advanced Systems Application
- IS08: Developments in Active System Management
- IS11: Transportation Demand Management & Smart Parking
- AM12: The Evolution of TMCs

MOBILITY & OPERATIONS

- SS15: Uptime to Secure Transport Effectiveness in a Connected Traffic Environment
- SS19: ITS Deployments Through University, Public and Private Collaboration
- SS23: ITS Strategies and How They Enable Deployment
- SS28: ITS in Fast Developing Areas
- SS33: Global Research Collaboration Using Online Networks: Recent Experience & New Models
- SS36: National ITS Associations Providing an Essential Service to Policy Makers
- SS38: Making Multimodal Transportation Succeed: Technology and Partnerships at Work
- SS48: Management of ITS Facilities Based on Priorities
- SS47: Multimodal Transportation, Economic Growth and Sustainability—The Impact of Cooperation Between Stakeholders
- SS55: Women in ITS
- SS59: Challenges in ITS Evaluation and the Need for Effective Recycling of Benefits
- SS66: Managing Complex Transportation Networks using State of the Art Decision Support Systems (DSS)
- SS76: Field Operational Tests: Moving Ahead Towards ITS Deployment
- SS74: Solution of Transportation Problems in Asia-Pacific Megacities
- SS75: ITS Education and Training: Successes, Challenges, and Lessons Learned around the World in the Last Decade
- SS83: 19th ITS WC in Vienna 2012
- TS94: Training Programs
- TS108: Educational Outreach
- TS139: Impacts of ETC and Road User Charging
- IEC01: Is Evaluation Playing its Proper Role to Promote ITS Deployment?
- IEC04: Enforcement Cameras: To Install or Not To Install—That is the Question?
- IEC05: IEC ITS Decision Support Resources Around the World
- PAITS01: ITS and Transport Concessionaires
- PAITS02: Americas Projects and Business Opportunities, Part I
- PAITS03: Americas Projects and Business Opportunities Part II
- AM13: Surface Transportation Reauthorization: A View from the Hill
- AM29: Public Information and Transportation Technology—How to Tell the ITS Success Story

NEXT GENERATION TRAVELER INFORMATION & CONSUMER APPLICATIONS

- SS06: Integration of Traveler Information Services for Intermodal Journeys
- SS28: Location-Based Services for Public Transport
- SS42: Future Internet + Future ITS: Evolution or Revolution?
- SS68: The Latest trends about collection of traffic information
- TS02: Technology Solutions 1: Next Generation Travel Information
- TS16: User Benefits: Next Generation Travel Information
- TS20: Technology Solutions 2: Next Generation Travel Information
- TS25: Technology Solutions 3: Next Generation Travel Information
- TS35: Advanced Sensor Technology: Next Generation Travel Information
- TS38: User Needs 1: Next Generation Travel Information
- TS46: User Needs 2: Next Generation Travel Information
- TS63: Data Platforms 1: Next Generation Travel Information
- TS72: Individualized Route Planning 1: Next Generation Travel Information
- TS77: Individualized Route Planning 2: Next Generation Travel Information
- TS85: Individualized Route Planning 3: Next Generation Travel Information
- TS116: Data Platforms 2: Next Generation Travel Information
- TS127: Data Platforms 3: Next Generation Travel Information
- IEC02: Social Media/Networking and its Impact on Transportation
POLICY & STRATEGY
- TS23: Incident Detection and Management
- TS24: Business Cases
- TS37: Program Evaluation and Access to Results
- TS43: Integration and Innovation
- TS54: Innovation and Cooperation
- TS60: Roadmaps and Organizational Issues
- TS61: Systems Engineering and Deployment
- TS62: Commercial Vehicles
- TS76: Architectures and Their Applications
- TS83: Data: What Helps, What Sells
- TS99: ITS—What’s the Problem, What to Do, Where It’s Going
- TS113: Design Build with ITS
- TS117: Safety and Traveler Information: Overlapping and Helpful Synthesis
- TS119: Asset Management, Refurbishment, and Standards
- TS126: Innovative Sensing Technologies

PUBLIC TRANSPORT
- SS43: Transit in a Real Time World
- SS67: Demand Models to Meet Transit Needs
- SS72: Intermodal Public Transport Strategies: Carsharing, Bike-sharing, and Ridesharing
- TS80: Testing and Deploying Software for Transit Systems
- TS19: Coordinating Multi-Modal Travel Options
- TS30: Deploying ITS to Optimize Transit Operations and Maintenance
- TS58: Leveraging New Technologies to Attract and Retain Transit Customers
- TS66: Putting Transit Signal Priority: From Models to Implementation
- TS88: Using Data to Enhance Transit Performance
- TS67: From the First Mile to Crow—Sourcing: Capturing Emerging Trends for Transit
- AM15: Automated Public Transport Vehicles: State of the Art and Recent Deployment

SUSTAINABILITY
- ES01: ITS and Sustainable Transport
- ES05: ITS and Electromobility
- SS01: High-Speed Rail: Utilizing Technology to Create Clean and Safe Regional Transportation
- SS05: Global Energy Trends
- SS07: Intelligent Environmentally Friendly Vehicle
- SS10: Bike Rapid Transit (BRT) for Green Transportation
- SS12: ADASIS—From Specifications to Implementation
- SS17: Performance Measures for Sustainability
- SS21: Energy ITS
- SS25: ITS and Eco-driving—Creating an International Agenda
- SS38: International Cooperation in Mobility Management to Address Global Sustainability
- SS34: Adaptation
- SS45: Eco-driving: A Key Enabler for Future Clean and Efficient Mobility Worldwide
- SS56: Combining Wireless Electric Vehicle Charging with Automation: Opportunities & Challenges
- SS51: Carbon Footprinting
- SS56: Advanced Technology to Collect Data for Low Carbon Policy and Sustainable Development
- SS58: Emerging ITS Strategies for Sustainability

SAFETY
- ES12: Global Safety
- SS04: “Next-Generation Internet ITS” Integrated with “Smartphone World”
- SS24: To Realize a Safe Society
- SS27: Vehicle-IT Convergence for the Fully Networked Car C
- SS30: Universal Design within Next-generation Traveler Information Systems and Impacts on Older Drivers
- SS32: Stakeholder Views and Examples on Co-operative Safety Systems with Focus on Rural Roads
- SS35: Drastic Reduction of Traffic Accidents by Image-Recording Type Drive Recorders
- SS37: Pedestrian Detection in Various Manners
- SS44: Vehicle of the Future
- SS57: Improving Road Safety Through The Applications of ITS
- SS63: Moving Towards Zero Fatalities Through Connected Vehicle Safety—Fact or Fiction?
- SS65: Massive Earthquake: Rescue and Relief Operation with ITS—Lessons learned from the Great East Japan Earthquake
- SS81: Distracted Driving
- TS134: Collision Avoidance Systems
- AM01: Driver Distraction: Fundamentals, Research and Implications
- AM14: Transportation Security and ITS: A Multimodal Perspective
- AM20: Public Safety
- AM32: Smart Parking with ITS: Transforming an Industry
- AM34: FMCSA’s Expanded CVISN Program: Reports of Results and Advancement Across the U.S.
- AM38: Surface Transportation Weather Research and Deployment Activities

VEHICLE SYSTEMS & ELECTRONICS
- TS11: Location Based Services
- TS22: Driver Assistance Systems
- TS34: Human Factors
- TS36: Highway Cruise and Lane Changing Assist
- TS49: Assessment of the Field Operational Test
- TS53: Driver’s Awareness
- TS59: Advanced Map
- TS69: Low Attention Driving Detection
- TS81: Driver’s Behavior Utilizing Simulator
- TS92: Various Kinds of Driver Behavior
- TS107: Research on Driver Behavior
- TS120: On-Board Sensing
- TS121: Improving and Modeling Algorithms for Driver Assistance Systems
- IS05: Vehicle Based Safety Systems

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<th>TARGETED SECTOR DAYS</th>
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**WEDNESDAY, OCTOBER 19**

**Incident Management and Emergency Responders Day**
10:30 a.m. – 5:00 p.m.

The ITS World Congress will hold its first Incident Management and Emergency Responders Day to emphasize the importance of incident and emergency management in our transportation system. By holding this daylong event, the World Congress hopes to encourage networking and information sharing among incident and emergency responders and transportation professionals to enhance the contributions all make to public safety and congestion management and to highlight the invaluable role that technology plays. With great appreciation, it is noted that the I-95 Corridor Coalition will co-sponsor this event.

**Student Day**

The largest Student Day at the ITS World Congress. At this event, the World Congress hopes to promote the exchange of ideas and the importance of the transportation technology field between transportation professionals from around the world and those who will follow them—our high school, university, and graduate students who have shown an interest in transportation. Planned activities include a U.S. DOT sponsored session and “meet and greet,” an electronic resume bank and access to the exhibition floor and Technology Showcase. Many thanks to our event organizers: University of South Florida, Florida International University, University of Florida and the magnet High Schools of Central Florida. A special thank you to the University of Michigan Transportation Research Institute for sponsoring the lunch and networking event.

**American Automobile Association (AAA) Day**
2:00 p.m. – 5:00 p.m.

The World Congress welcomes members from AAA Auto Club South to come to Orlando to get a glimpse of current and future transportation technologies. Auto Club South Members who have preregistered in response to the World Congress promotion in their member magazine will have with free access to the World Congress expo and demonstrations on Wednesday.
Executive Sessions provide thought-provoking, interactive discussion of key topics in ITS, presented by top-level industry executives, public officials, and user representatives. These 15 sessions are designed to challenge, provoke, and pose the hard questions.

### ES01: ITS and Sustainable Transport
**Room: S310A/B**

“Sustainability” is often perceived differently by different people and agencies. Environmental improvement, conservation of resources and long-term life are all potential ways to explain what is sustainable. The panelists in this session will articulate and defend varying definitions of sustainability and distill these into the context of ITS.

**MODERATOR**
Deron Lovas, Federal Transportation Policy Director, Natural Resources Defense Council, USA

**INVITED SPEAKERS**
- Larry Yermack, President, Wendover Consult, USA
- Jiaping Wu, Professor, School of Civil Engineering, Tsinghua University, Beijing, China
- Jean-François Janin, ITS Task Force Manager, Ministry of Ecology, Sustainable Development, Transports and Housing, France
- Ingolf Schädler, Deputy Director General, Ministry for Transport, Innovation and Technology, Austria

### ES02: Next Generation Vehicles and Mobility Environments
**Room: S310E/F**

Next generation vehicles powered by electricity, hybrid propulsion, etc. are expected to contribute to environmental security and be part of a broader balance of sustainable economic growth and global warming mitigation. ITS has a key role to play in promoting adoption of next generation vehicles and their mobility environment, providing not only electric power supply infrastructure but also critical information exchanges. This session will address strategic collaboration of next generation vehicles and their mobility environments utilizing the ITS technology including governmental policy initiatives.

**MODERATOR**
Yoshihiro Suda, Professor, The University of Tokyo, Japan

**INVITED SPEAKERS**
- Gary Smyth, Executive Director of Global Research & Development at General Motors Company, General Motors Company, USA
- Satoshi Inoue, Director, Ministry of Economy, Trade and Industry, Japan
- Zoran Stanić, Deputy Director General, European Commission, DG INFOSO
- Frank Försterling, Advanced Development and Innovations Infotainment & Connectivity, Continental Automotive GmbH, Germany

### ES03: Cooperative Mobility Services and the Internet
**Room: S320A/B**

The transport and telecom sectors are approaching convergence where future internet technologies will create many opportunities for seamless connectivity: cooperative systems for road transport, mobile telecommunication, cloud computing, shared services, always connected users, and integration of associated devices. This session will address the main trends in terms of technologies, new enabled mobility services, and transport applications and also consider the organizational and institutional challenges that need to be overcome in order to maximize socioeconomic benefits.

**MODERATOR**
Christian Rousseau, Transport Policy Director, Renault, France

**INVITED SPEAKERS**
- Frank Ciccone, Director, Verizon Business, USA (invited)
- Chris Ungjin Na, Director, Ministry of Land, Transport and Maritime Affairs, Korea
- Samuel Loyson, Director Connected Cars, Orange, France
- Douglas Sicker, Chief Technologist, Federal Communications Commission, USA (invited)

### ES04: ITS and Private Finance
**Room: S310A/B**

Private capital is available and investors are interested in public infrastructure investment where ITS products and technologies are deployed. Further, investors are increasingly evaluating and actively making investments in private entities that operate in this field. This session will explore how ITS can attract private investment and what are the enablers required from political leaders to make this happen. In addition, the session will highlight the financial metrics used to analyze potential investment opportunities.

**MODERATOR**
John Peracchio, Managing Director, Peracchio & Company, USA

**INVITED SPEAKERS**
- John Casesa, Senior Managing Director, Guggenheim Partners, USA
- Speaker from Asia-Pacific
- Josef A. Czako, Senior Vice President, International Business Development, Kapsch TrafficCom AG, Austria
- Ryan Popple, Partner, Kleiner Perkins Caufield & Byers, USA

### ES05: ITS and Electromobility
**Room: S310E/F**

To reduce transportation induced CO2 emissions, governments are changing their transport and energy policies. Electric vehicles are increasingly considered as a major way to help achieve environmental benefits. This session combines high level representatives from industry, policy, research, and infrastructure providers, who will share their views and expectations on the role of ITS as an important enabler for sustainable deployment of electromobility and the major opportunity offered by electromobility to accelerate penetration of ITS in the overall transportation system.

**MODERATOR**
Phil Blythe, Professor, University of Newcastle, United Kingdom

**INVITED SPEAKERS**
- Mark Wyatt, Vice President, Smart Grid and Energy, Duke Energy, USA
- Alberto Peña, Research team leader of Electronic Product, Technalia, Spain
- Tsuguo Nobe, Program Director, Program Directors Office, Nissan Motor Corporation, Japan
- Seungwoo Seo, Professor, Seoul National University, Korea
- Veit Steinle, Director General of Environmental Policy and Infrastructure, Federal Ministry for Transport, Building and Urban Development, Germany
**ES06: ITS and Economic Growth**  
**Room: S310A/B**

ITS improves transportation safety, mobility, and sustainability, and in so doing, contributes to economic growth. But not all ITS technologies and services applications are aimed at this goal. This session will explore real-world examples of ITS applications that have led to demonstrable economic improvements and growth. The session participants will also discuss mechanisms to promote economic success using ITS.

**MODERATOR**
TBD

**INVITED SPEAKERS**
- Representative from IHS Global Insight, USA
- Youn-Soo Kang, Director for ITS Research / Senior Research Fellow, The Korea Transport Institute (KOTI), Korea
- Cees de Wijs, Senior Vice-President International Operations, ACS-Xerox, the Netherlands
- Xiaojing Wang, Director, China National ITS Center, China
- Mary Keeling, Manager, Center for Economic Analysis, Institute for Business Value, IBM, USA

**ES07: Smart/Mega Cities**  
**Room: S310E/F**

Much effort has been made to apply innovative ITS technologies as solutions for transportation issues, thereby providing the society with a more convenient and integrated transportation network. On the one hand, however, emerging economies are facing challenges in creating infrastructure and transport policies for new megacities at a very rapid pace. On the other hand, developed economies still struggle to recover from the impact of the recent economic crisis and also face ever increasing transportation challenges of safety, environment and traffic congestion with longer timelines due to financial and other constraints. In this session, practitioners/decision makers in these megacities will share experiences and exchange ideas to develop better solutions to common transport problems using ITS.

**MODERATOR**
Hajime Amano, President, ITS Japan, Japan

**INVITED SPEAKERS**
- Gerard Mooney, General Manager, Fiscal Stimulus and Economic Recovery, Global Government and Education, IBM Corporation, USA
- Vladimir Kryuchkov, CEO, ITS Russia, Russian Federation
- Hermann Meyer, CEO, ERTICO - ITS Europe
- Representative of BRIC
- Bambang Susantono, President of ITS Indonesia / Vice Minister, Ministry of Transportation, Indonesia

**ES08: Equity and Social Responsibility**  
**Room: S310A/B**

ITS products and services offer exciting, new transport capabilities to governments, businesses, and the public. In an ideal world, the benefits of ITS would be available equally to all. Practically, however, the entities and people with greater size and wealth garner a disproportionate share of the benefits of ITS. This session will investigate the sociological and economic elements that could make access to ITS benefits more equitable and fair. Panelists will represent both mature and developing economies.

**MODERATOR**
Julie Cunningham, President & Chief Executive Officer, Conference of Minority Transportation Officials, USA

**INVITED SPEAKERS**
- Linda Watson, President and CEO, Capital Metropolitan Transportation, USA
- Hans Rode, Senior Advisor/Director, Swedish Transport Administration, Sweden
- Kyung-Soo Chon, Professor, Seoul National University

**ES09: Trilateral ITS Cooperation**  
**Room: S310E/F**

Markets are global and so is the ITS sector. Mobility challenges are shared by the different world regions, and ITS solutions can provide answers to these challenges. Drawing on the current trilateral ITS cooperation among the EU, USA and Japan, this session will review the importance and benefits of international governmental cooperation on ITS and the role of different political and economic stakeholders. The session will also explore the advantages in aligning priorities on key policy areas (e.g. standardization, deployment strategies, research agenda, etc.), that in turn, can promote broader deployment of ITS worldwide.

**MODERATOR**
Vincent Blervaque, Director of Development and Deployment, ERTICO-ITS Europe

**INVITED SPEAKERS**
- Shelley Row, Director, ITS Joint Program Office Research & Innovative Technology Administration, U.S. Department of Transportation, USA
- Yasuhiro Okumura, Director, Road Bureau, Ministry Land, Infrastructure, Transport and Tourism-MILT, Japan
- Juhani Jääskeläinen, Head of Unit, European Commission, DG INFSO
EXECUTIVE SESSIONS

**WEDNESDAY, OCTOBER 19**

<table>
<thead>
<tr>
<th>Session</th>
<th>Room</th>
<th>Time</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>ES10: ITS: Why Governments Need to Work Together</td>
<td>S310A/B</td>
<td>3:30 p.m. – 5:00 p.m.</td>
<td>Michael Sutton, General Manager, Land Transport Reform, Department of Infrastructure and Transport, Australia</td>
</tr>
<tr>
<td>ES11: Multimodal Mobility</td>
<td>S310E/F</td>
<td>3:30 p.m. – 5:00 p.m.</td>
<td>Norbert Handke, Managing Director, ITS Network Germany, Germany</td>
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<tr>
<td>ES12: Global Safety</td>
<td>S310A/B</td>
<td>8:30 a.m. – 10:00 a.m.</td>
<td>Kazumitsu Kushiha, Chief Engineer, Corporate Planning Division, Environment &amp; Safety Planning Office, Honda Motor Co., Ltd., Japan</td>
</tr>
<tr>
<td>ES13: The Ownership of ITS Data</td>
<td>S310E/F</td>
<td>1:30 p.m. – 3:00 p.m.</td>
<td>Gerry Conover, Managing Director, PRC Associates, USA</td>
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**THURSDAY, OCTOBER 20**

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<th>Session</th>
<th>Room</th>
<th>Time</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>ES14: ITS Policy Development</td>
<td>S310A/B</td>
<td>3:30 p.m. – 5:00 p.m.</td>
<td>Hermann Meyer, CEO, ERTICO-ITS Europe</td>
</tr>
<tr>
<td>ES15: Vision of Traffic Management</td>
<td>S310E/F</td>
<td>8:30 a.m. – 10:00 a.m.</td>
<td>Atsushi Yano, Managing Director, Sumitomo Electric Industries, Ltd., Japan</td>
</tr>
<tr>
<td>ES16: ITS Implementation Strategies</td>
<td>S310A/B</td>
<td>1:30 p.m. – 3:00 p.m.</td>
<td>Paula Hammond, Secretary, Washington State Department of Transportation, USA</td>
</tr>
</tbody>
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**ROOM: S310A/B**

**MODERATOR**

Michael Sutton, General Manager, Land Transport Reform, Department of Infrastructure and Transport, Australia

**INVITED SPEAKERS**

- Greg Winfree, Acting Director, Research and Innovative Technology Administration, U.S. Department of Transportation
- Philip Blake, Manager Traffic Operations, Metropolitan Region Department for Transport, Energy and Infrastructure Government of South Australia, Australia
- Ronald Adams, Strategic Advisor for Network Management, Rijkswaterstaat, the Netherlands
- Tomoyuki Tanuma, Director, Ministry of Internal Affairs and Communications, Japan

**ROOM: S310E/F**

**MODERATOR**

Norbert Handke, Managing Director, ITS Network Germany, Germany

**INVITED SPEAKERS**

- Evan Lloyd, Executive Director, Council on Environmental Cooperation, Canada
- Young-Jun Moon, Research Fellow, The Korea Transport Institute-KOTI, Korea
- Hans-Georg Frischkorn, Director of Technology and Environment, VDA, Germany
- S.K. Jason Chang, Professor, National Taiwan University/ ITS-Taiwan, Chinese-Taipei

**ROOM: S310A/B**

**MODERATOR**

Kazumitsu Kushiha, Chief Engineer, Corporate Planning Division, Environment & Safety Planning Office, Honda Motor Co., Ltd., Japan

**INVITED SPEAKERS**

- Steve Kenner, Global Manager, Automotive Safety Office, Ford Motor Company
- Ryou Suzuki Itazaki, Director, Road Transport Bureau, Ministry Land, Infrastructure, Transport and Tourism-MUT, Japan
- Mathias Trautner, Head of Sales Germany and Austria, Bosch Security Systems GmbH, Germany
- Klaus Kompass, Vice President Vehicle Safety, BMW Group, Germany

**ROOM: S310E/F**

**MODERATOR**

Gerry Conover, Managing Director, PRC Associates, USA

**INVITED SPEAKERS**

- Kush Parikh, Senior Vice President of Business Development, INRIX, USA
- Adam Game, CEO, Intelematics Australia, Australia
- Michael Ortgiese, Vice President Mobility Systems, PTV, Germany

**ROOM: S310A/B**

**MODERATOR**

Paula Hammond, Secretary, Washington State Department of Transportation, USA

**INVITED SPEAKERS**

- Atsushi Yano, Managing Director, Sumitomo Electric Industries, Ltd., Japan
- Paula Hammond, Secretary, Washington State Department of Transportation, USA
- Jan Castlelein, Director General, Imtech Infra, the Netherlands
- John Chipperfield, CTO, SWARCO, United Kingdom
The three global ITS regions representing the Americas, Europe, and Asia-Pacific will host 84 Special Sessions. These sessions feature high-level experts and decision-makers presenting you with timely information and valuable insight on international best practices.

**MONDAY, OCTOBER 17**

**1:00 p.m. – 2:30 p.m.**

**● SS01: High-Speed Rail: Utilizing Technology to Create Clean and Safe Regional Transportation**

*Room: S210A*

As already deployed in Japan, China, Korea and several locations in Europe, high-speed rail is being considered as a significant alternative to regional transportation in the U.S., particularly in California, Florida and the Midwest. This session will describe the technologies that make high-speed rail successful in the Asia-Pacific and European regions. Further, plans for high-speed rail in the U.S. will be covered with a focus on the technology that is expected to be deployed.

**ORGANIZER & MODERATOR**

Carol Schweiger, Vice President, TranSystems Corporation, USA

**INVITED SPEAKERS**

Carolyn Hayward-Williams, Principal, Booz Allen Hamilton, USA

Atsushi Kawabata, Chief Technical Officer, Hitachi, Japan

Yung-Hsiang Cheng, Associate Professor, Department of Transportation and Communication Management Science, National Cheng Kung University, Chinese-Taipei

**MONDAY, OCTOBER 17**

**3:30 p.m. – 5:00 p.m.**

**● SS04: “Next-Generation Internet ITS” Integrated with “Smartphone World”**

*Room: S210A*

Nowadays, services to vehicle industries using smartphone as a nomadic device are expanding worldwide. In this session, we will define a concept of the next-generation platform of vehicle information which integrates the information society with smartphone and the Internet ITS, and overview the importance and value of utilization of information obtained from a vehicle itself. Furthermore, we will propose the solution to develop the platform from the perspectives of devices and telecommunication technologies.

**ORGANIZER**

Naoki Tokitsu, President, Internet ITS Consortium, Japan

**MODERATOR**

Makoto Maekawa, Executive Expert, Automotive and ITS Business Promotion Office, NEC Corporation, Japan

**INVITED SPEAKERS**

Naoki Tokitsu, President, Internet ITS Consortium, Japan

Satoru Fukui, Senior Director, Service Development Div, Fujitsu, Japan

Robert B. Kelly, Partner, Squire, Sanders & Dempsey (U.S.) LLP, USA

HongWei Liu, Associate Professor, Research Institute of Highway, MOT, China

A Speaker from Ericsson, Sweden
SS05: Global Energy Trends
Room: S210B
This session provides an overview of the relationship between energy and transportation emissions. It includes a discussion of global trends in fuel consumption past, present, and future. It also covers global trends in vehicle fuel efficiency, propulsion systems, and alternative fuels.

ORGANIZER
ITS America’s Sustainable Transportation Working Group

MODERATOR
Keith Jasper, Associate, Delcan, USA

INVITED SPEAKERS
Tim Lipman, Co-Director, Transportation Sustainability Research Center, UC Berkeley, USA
Sonia Hamel, Climate Protection Consultant, USA
Dale Gardner, Associate Lab Director, Renewable Fuels & Vehicle Systems, National Renewable Energy Laboratory (NREL), USA
Susan Zielinski, Managing Director, SMART (Sustainable Mobility & Accessibility Research & Transformation) and M&PEI, Fellow, Transportation Research Institute (UMTRI) & Taubman College of Architecture& Urban Planning, University of Michigan

SS06: Integration of Traveller Information Services for Intermodal Journeys
Room: S210C
A journey—long or short—can involve various transport modes, particularly if a journey is aimed at minimizing environmental impacts, i.e. reducing use of cars. A disruption of one transport mode may affect the entire journey. Today many transport providers develop their own information and booking services (web-based as well as mobile device-based). These systems are widely used by travelers for pre-trip planning and booking. With recent fast development of wireless communication and smart phones, these systems can also be accessed by travelers during their journeys to obtain real-time information and carry out “last minute” booking using mobile devices. However, there is a need for an integrated approach to assemble all the information from different modes and then use the information to provide on-stop solution for planning and support intermodal journeys. Currently, many transport operators, regional and national authorities and ITS information providers cooperate in development and implementation of more integrated intermodal traveler information, taking into account various user needs and requirements for different types of journeys. This session will present state-of-the-art of traveller information services for intermodal journeys and best practices. This session will also discuss technologies and strategies needed towards more integrated intermodal services.

ORGANIZER
Yanying Li, Project Manager, ERTICO-ITS Europe

MODERATOR
Patrick Mercier-Handisyde, Head of the Urban Mobility Sector, European Commission, DG Research & Innovation, Belgium/EU

INVITED SPEAKERS
Axel Burket, Senior Consultant, PTV AG, Germany
Nour-Eddin El Faouzi, Research Director, INRETS-ENITPE, France
Vassilis Spitadakis, R&D manager, Forthnet S.A, Greece
Pengjun Zheng, Head of Faculty of Maritime and Transportation, Ningbo University, China
Stephane Dreher, Business Development Manager, Belgium/USA

SS07: Intelligent Environmentally Friendly Vehicle
Room: S21OD
Intelligent Environmentally Friendly Vehicle integrates three functional components of clean energy powertrain, electronically controlled chassis and advanced driver assistance system. By employing the technologies of structure sharing, sensor fusion and control coordination, it can achieve more comprehensive performances of traffic safety, fuel efficiency and environmental protection.

ORGANIZER
Weiyun Jiao, Engineer, China National ITS Center, China

MODERATOR
Dongzhu Wang, Engineer, China National ITS Center, China

INVITED SPEAKERS
Masami Misaki, Vice President, Nissan (China) Investment Co., LTD, China
Jianqiang Wang, Professor, Tsinghua University, China
Keqiang Li, Professor, Tsinghua University, China
Yang Yun, Vice-Director, China National ITS Center, China
SS08: Probe Data Collection and Distribution

Room: S210E

GPS enabled portable devices (PDAs, cell phones, etc.) are ubiquitous and expected to be 97% of all devices. What functions and services are being provided today; what data is being collected, distributed via these devices? What quality checks are being performed to protect the reliability of the data and the products. What are the privacy issues and how are they addressed today.

ORGANIZER & MODERATOR
Harry Voccola, Senior Vice President, Government and Industry Relations, NAVTEQ, USA

INVITED SPEAKERS
Matthias Defee, Director, Customer Projects, Worldwide, GEWI Europe GmbH & Co. KG, Germany
Mark Johnson, Senior Attorney, Squire, Sanders & Dempsey (U.S.) LLP, USA
Alex Bayen, Associate Professor, University of California at Berkeley, USA
Koichiro Meguro, Senior Project Manager, ITS & Mobility Business Group, Mitsubishi Research Institute, Inc.
Yong Gao, Engineer, Beijing Transportation Research Center, China

SS09: Cooperative Vehicle-Highway Systems: Collaboration Between the Automotive Industry and Road Operators

Room: S220A

Intelligent cooperative systems and Vehicle-Infrastructure Communications promise to improve the performance of transportation systems but there remain many barriers to full acceptance and timely deployment. The World Road Association (PIARC) and the International Federation of Automobilie Engineers Society (FISITA) are working together to help accelerate deployment and to shape the evolution of these systems. A Joint PIARC-FISITA Task Force has been formed from members of the two organizations with the aim of informing road operators and national roads authorities about IntelliDrive and CVHS developments. The JTF is supporting their involvement in IntelliDrive and CVHS and helping to accelerate deployment by recommend- ing good practice. It is also providing guidance to countries in transition. The preliminary results of the JTF will be presented and discussed during this session.

ORGANIZER & MODERATOR
Richard Harris, ACS-Xerox; English Language Secretary, Technical Committee on Network Operations, the World Road Association (PIARC), United Kingdom

INVITED SPEAKERS
Fumihiko Kanazawa, Head, ITS Division, National Institute for Land and Infrastructure Management Ministry of Land, Infrastructure, Transport and Tourism, Japan
Martial Chevreuil, Executive Vice President, Strategic Policy and Development, Egis Mobilité, France and Chairman of the Technical Committee on Network Operations, World Road Association
T Russell Shields, Chair, Ygomi, USA

Masao Fukushima, Engineering Director, Nissan Motor Co, Japan

SS10: Bike Rapid Transit (BIRT) for Green Transportation

Room: S220B

This session will present the preliminary phase of worldwide research and development for the bicycle systems to be one of the major modes in urban transport. “Bike Rapid Transit (BIRT)” projects in Germany, USA, Canada, Korea, and/or other countries will be reviewed. This session will focus on how BIRT could be developed as a significant transport mode and what technology would need to be adopted for improving the conventional bicycle systems and infrastructure worldwide.

ORGANIZER
Heechul Shin, Research Fellow, The Korea Transport Institute (KOTI), Korea

MODERATOR
Sang-Min Lee, Research Fellow, The Korea Transport Institute, Korea

INVITED SPEAKERS
Speaker from Korea
Speaker from USA
Speaker from Germany
Speaker from Canada
Speaker from Japan

SS11: Using Information Technology to Better Manage ITS Operations and Investments

Room: S220C

There is a maturing set of information system technologies being deployed by the public and private sectors to reduce costs, enhance security, and improve operational agility. The recent presence in communication technologies have made it possible to deliver more solutions and handle larger shares of data amounts with mobile workers and customers. ITS managers are faced with the same challenges of other public and private sector managers with demands for new services, reduced budgets, and increasing amounts of data. This session will look at these new technologies and concepts to see what benefits, changes, and lessons learned can be applied to improving ITS operations.

ORGANIZER & MODERATOR
C. Douglass Couto, Virtualization and Enterprise Mobility, Dell, USA

INVITED SPEAKERS
C. Douglass Couto, Virtualization and Enterprise Mobility, Dell, USA
Terry Bills, Transportation Industry Manager, ESRI, USA
Colin Brooks, Research Scientist, Michigan Tech Research Institute, USA

SS12: ADASIS: From Specifications to Implementation

Room: S220D

Following the successful previous editions since 2006 and after having released the ADAS Interface Specifications V2.0, this Special Interest Session will report on new development made by the worldwide automotive industry on the implementation of the ADAS Interface Specifications in the context of safety, fuel economy and energy efficiency, and plans for market introduction of ADASIS compliant applications. The ADASIS Forum is composed of 31 Members from the global automotive industry aiming at developing, maintaining and promoting the deployment of a standardized interface between in-vehicle map data and Advanced Driver Assistance System.

ORGANIZER & MODERATOR
Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO-ITS Europe, on behalf of the ADASIS Forum

INVITED SPEAKERS
Alexander Bracht, ADASIS Chairman, Daimler, Germany
Peter Saeger, Continental, Germany
Bob Donero, Vice President, Advanced Driver Assistance Systems, NAVTEQ, USA
Susan Chen, Staff Engineer, Automotive OEM Engineering, Garmin International, USA
Representative from Honda (Japan)

SS13: Automating the ITS Data Supply Chain

Room: S220E

Transportation agencies have increasing amounts of raw sensor data coming in to their staff, from a variety of sources. However, agencies are struggling to automate this data firehose effectively. This session would focus on agencies that have effectively leveraged ITS data for decision making by automating their data supply chain.

ORGANIZER & MODERATOR
Rob Hranac, Vice President, Berkeley Transportation Systems, USA

INVITED SPEAKERS
Alex Bayen, Associate Professor, Systems Engineering, University of California, Berkeley, USA
Brian Kary, Minnesota Department of Transportation, USA
Brian Hoeft, Project Manager, RTC/FAST, USA
Peter Thompson, IT Manager, San Diego Association of Governments, USA
Alex Estrella, Regional Planner, San Diego Association of Governments, USA
SS14: Re-Tooling Public Transit One Agency at a Time—Towards a Unified Transit Reference Architecture

**Room: S220F**

Public transit agencies are experiencing strong pressure from regulators, customers and stakeholders to be more transparent, accountable and accessible. While traditionally all road users are enabled by ITS, public transit agencies are experiencing increasing volumes of data flowing from their ITS and operational systems. The challenge now is to architect an information management (IM) environment that will enable true strategic-business outcomes and demonstrate improved IM/TTS service value. This session will describe the rationale for Enterprise Architecture planning (EAP) at the agency level and describe the progress being made in the US, and Europe towards developing reference architectures for public transit. Finally, the session will describe how a multi-jurisdictional transit agency is grappling with these issues and ever-expanding customer expectations in a web-enabled world by undertaking a complete re-tooling of their IT infrastructure, business and application environments, customer-facing systems and critical business processes.

**Organizer**
Robert G. Shirra, President, RGS Consulting International Inc., Canada

**Moderator**
Michael Roschlaub, President, Canadian Urban Transit Associations, Canada

**Invited Speakers**
Paula Okunieff, Principal Investigator, Consensus Systems Technologies Corp., USA
Emmanuel de Verdielle, Veolia Project Manager, Veolia Environment Research & Innovation, France
Robert G. Shirra, FCMC on BC Transit’s Enterprise Investment Initiative President, RGS Consulting International Inc. Vancouver, British Columbia, Canada

SS15: Uptime to Secure Transport Effectiveness in a Connected Traffic Environment

**Room: S310A/B**

The need for improved transport effectiveness put new requirements on vehicle availability. Improved vehicle uptime means lower risk for road side breakdowns and thereby the transportation effectiveness can be improved for all road users. An enabler for improved uptime is connected vehicles where information in both directions can be transmitted and software can be downloaded on the vehicles wirelessly. Maintenance management has become a more integrated part of the transportation business model, especially for commercial vehicles and coming autonomous vehicles but also for privately used cars. The interaction between vehicles, infrastructure and to other road users is one of the key challenges to extract relevant information from different sources to learn and interpret the expected uptime of a vehicle. The session will promote discussion and the exchange of ideas on the future of uptime to improve transport effectiveness for all road users and stakeholders.

**Organizer**
Stefan Byttner, Associate Professor, Halmstad University, Sweden

**Moderator**
Magnus Svensson, Research Engineer, Volvo Technology, Sweden

**Invited Speakers**
Krishna Pattipati, Professor, University of Connecticut, USA
Jonas Larsson, Chief Project Manager Research Projects, Volvo Construction Equipment AB, Sweden
Brian Dabell, President HBM - nCode Products

SS16: Real Time Traffic Information in North-America: From Analogue to Digital Delivery—Challenge and Opportunity

**Room: S320A/B**

The availability of digital bearers for Traffic and Traveler Information has opened new doors and eventually offers new opportunities in terms of coverage area and 1-to-1 channels of communication. But as the choice of technologies grows, will it be possible to offer consistent seamless RTTI services across state borders, beyond the metro markets and on a multi-platform basis?

**Organizer & Moderator**
Amaury Cornelis, TISA Coordinator, Traveller Information Services Association (TISA), Belgium

**Invited Speakers**
Teun Hendriks, ClearChannel / TISA Committee Chair, USA
Mark Saunders, Senior Systems Specialist Engineer, NAVTEQ, USA
Robert Cahn, Principal Architect, INRIX, USA
Joseph d’Angelo, Senior Vice President, iBiquity, USA
Jeff Littlejohn, Executive Vice-President, ClearChannel, USA
Paul Brenner, President of the Broadcast Traffic Consortium, USA

SS17: Performance Measures for Sustainability

**Room: S320C**

An increasing emphasis is being placed on transporta-tion policies and investment decisions that are performance-driven—directly linked to a set of clearly articulated goals, and more accountable results. As some have noted: “Sustainability is the next great game in transportation. When you start to keep score, the game gets serious.” This session explores potential performance measures for sustainable transportation, including data requirements, how the data may be collected, models for converting data into sustainability measures, and presentation of this information to decision makers and users of the transportation network.

**Organizer**
ITS America’s Sustainable Transportation Working Group

**Moderator**
Margaret Bell, Professor, Newcastle University, United Kingdom

**Invited Speakers**
Farhad Pooor, Vice President of Engineering, Telvent, USA
Gerddien Klunder, Research Scientist, Business Unit Mobility and Logistics, TNO, The Netherlands
Anil Namdeo, Senior Lecturer, Transport Operations Research Group (TORG) School of Civil Engineering and Geosciences, Newcastle University, United Kingdom

SS18: ITS for Tourism and Parking

**Room: S210A**

Smooth, comfortable, and delightful leisure travel is something to which ITS can contribute. And a parking system enhanced by ITS helps tourists visit more attractions and places of commerce. Parking is also a transfer point between the vehicle and other transport modes, so it plays an important role in public transport for tourism. This session will discuss ITS deployment in parking applications as a means to promote tourism.

**Organizer & Moderator**
Hiroshi Makino, Associate Professor, The University of Tokyo, Japan

**Invited Speakers**
Katsushi Ikeuchi, Professor, The University of Tokyo, Japan
Takahiro Suzuki, Guest Associate Professor / Director General, The University of Tokyo / Nagasaki Prefectural Government, Japan
Richard Joffe, Co-Chief Executive Officer, Park Assist, USA
Eugene Tsyrklevich, Founder and CEO, Parkopedia, Speaker from USA (San Francisco)
Shinji Tanaka, Assistant Professor, The University of Tokyo, Japan

SS19: ITS Deployments through University, Public and Private Collaboration

**Room: S210B**

Since its founding in 1900 by industrialist and philanthropist Andrew Carnegie, Carnegie Mellon University has focused on finding real solutions to the problems facing society. The University specializes in spinoff and partnering with existing companies to transfer technology and research into the field to solve real-world problems. With private foundation encouragement and support Carnegie Mellon University developed the Traffic21 Research Initiative. This initiative (1) reaches out to public transportation agencies to...
identify needs that can be addressed through ITS, (2) matches those needs with researchers and technology solutions, (3) and partners with companies to deploy the ITS. This session will highlight examples of this Research, Development and Deployment, not only from the perspective of university researchers, but also from the public agencies and companies involved in real-world deployment of ITS through these unique university-public-private partnerships. Four examples of ITS projects deployed in conjunction with public and private partners will be discussed: ParkFEG—This application provides real-time parking information for eight parking garages in the City of Pittsburgh’s Cultural District; Tiramisu—An app that utilizes crowd-sourcing to provide bus riders with real-time bus tracking information and a means to instantly report bus fullness to other riders and bus problems to the transit agency; ACCESS Dynamic Scheduling—System for real-time management of operations at ACCESS, Allegheny County’s paratransit shared ride service. General Motors Collaborative Research Lab at Carnegie Mellon University. This lab started its engine in 2000 to speed up research efforts on the next generation of vehicle information technology.

ORGANIZER
Stan Caldwell, Associate Director, Traffic21, Carnegie Mellon University

MODERATOR
Rick Stafford, Distinguished Service Professor / Director, Traffic21, Carnegie Mellon University

INVITED SPEAKERS
Robert Hampshire, Assistant Professor of Operations Research and Public Policy, Carnegie Mellon University; USA
Matthew Pegula, Director Engineering, Deeplocal, USA
Aaron Steinfield, Systems Scientist, Carnegie Mellon University, USA
Jeff Joll, Director Information Services, ACCESS Transportation Systems, USA
Stephen Smith, Research Professor, Carnegie Mellon University, USA
Raj Rajkumar, Co-Director, GM Collaborative Research Lab, USA

● SS20: GNSS Enabled Application on a Global Level

Room: S210C

The principal objective of the Special session is to demonstrate the use of GNSS applications for Road Transport in multiple regions. Today Global satellite navigation systems are either in operation or being deployed, e.g. GPS in the U.S., Galileo in Europe and GLONAS in Russia, together with Regional satellite systems, e.g. EGNOS in Europe. With the launch of the different global satellite navigation systems the future of ITS applications will look different. With the increase in reliability and accuracy the opportunities will evolve together with the Service level for the different applications. However this we can only secure if we continue to work very close together on a global level. The objective with this session is to continue the cooperation between the different global systems in order to maximize the benefits for Road Transport and ITS applications. The international cooperations started a few years ago but really intensified with the Special Session at the ITS World Conference in Busan 2010 and the follow-up at the European ITS Conference in Lyon later this year.

ORGANIZER & MODERATOR
Rasmus Lindholm, Head of Partnership Services, ERTICO-ITS Europe

INVITED SPEAKERS
Fiammetta Diani, Market Development Officer, European Commission, European GNSS Agency—GSA
Vladimir Kryuchkov, CEO, ITS Russia
Josef Czako, Group Director International Business Development, Kapsch TrafficCom & Chair IRF Policy Committee on ITS, Austria
Erik Gaskløft, Contributing Editor, GPS World; Editor, Geospatial Solutions, USA

TUESDAY, OCTOBER 18
10:30 a.m. – Noon

● SS21: Energy ITS

Room: S210A

Energy saving as well as CO2 emission reduction is important and challenging subjects for the road transport sector to achieve sustainable mobility. In 2008, Japanese government kicked off Development of Energy-saving ITS technologies project, in which the reliable international evaluation methods on CO2 reduction volume with ITS applications are to be established by March 2013. And, European Commission started the same approach: ECOSTAND project in 2010. Adding to it, Japan and Europe jointly have been taking an action to expand this framework for U.S. This session will review the interim results of both Japanese and European projects, and share the necessary elements to realize the international evaluation methods from Japanese, European and American viewpoints.

ORGANIZER
Tatsuyoshi Yamashita, Deputy Director, Ministry of Economy, Trade and Industries, Japan

MODERATOR
Masao Kuwashara, Professor, Tohoku University, Japan

INVITED SPEAKERS
Ryota Horiguchi, CEO, i-Transport Lab, Japan
Seiji Hayashi, Senior Researcher, Japan Automobile Research Institute, Japan
Speaker from USA
Speaker from Europe


Room: S210B

Adaptive Traffic Control Systems (ATCSs) represent one of the most efficient ITS tools. These systems have been used for decades to alleviate traffic congestion, improve safety, and reduce carbon footprint on urban streets around the world. The largest barriers subjects have struggled to increase their presence on U.S. roads for many years, we have recently seen significant increase in their numbers. At the times when traffic signal agencies are fighting both with everlasting congestion and safety problems and the economic downturn, the ATCSs have been able to provide affordable and sustainable solutions. This session will serve to present the current state-of-the-practice of ATCS deployments in the U.S. and worldwide. It will also serve to inform audience about new state-of-the-art technologies which are being incorporated (or will be incorporated soon) in the ATCS platforms. For example, wireless communications among vehicles and between vehicles and infrastructure are opening a myriad of opportunities for ATCSs. Programs known as IntelliDrive in the U.S. and PRE-DRIVE C2X in Europe are going to explore use of technologies and methods which can improve existing ATCSs. As a matter of fact, once traffic control applications (which are being developed in IntelliDrive and PRE-DRIVE C2X programs) are matured and implemented in the field, all traffic control systems will be adaptive. However, our state-of-practice needs to go through many transitional phases before reaching that state. It is the time now to see which applications and technologies, from these programs based on wireless communications, are being applied and can be applied in ATCSs.

ORGANIZER & MODERATOR
Aleksandar Stevanovic, Assistant Professor, Florida Atlantic University, USA

INVITED SPEAKERS
Aleksandar Stevanovic, Assistant Professor, Florida Atlantic University, USA
Charles Wetzel, County Traffic Engineer, Seminole County Public Works/Traffic Engineering, USA
Steven Shaw, Manager Client Liaison, Roads and Traffic Authority of New South Wales, Australia
Kevin Fahon, Principal, ITS Group, DKS Associates, USA
Regie Chandra, CEO, Rhythm Engineering, USA
Juergen Mueck, Product Manager, Siemens AG, Germany

● SS23: ITS Strategies and How They Enable Deployment

Room: S210C

The development of ITS has now grown from a number of isolated service offerings to comprehensive suites of applications. Indeed there are numerous attempts to classify and catalogue ITS services to help ease understanding of exactly what is available and on offer. This lack of clarity has not been helpful to the development of ITS strategy plans, action plans and route maps. Finding the way is difficult, and comparing plans once available practically impossible. The nature of the strategy depends on the local conditions, the state of the transport and communications infrastructure, the investment available and the policy outcomes sought. They all have a common objective, what to introduce and in which order to introduce it. The aim is to reduce waste, duplication and soon to be superseded systems. We are moving towards integrated systems where data is collected once but used many times by different applications. No longer can one rely on one super system holding all data once collected. Instead data will be distributed the moment it is available to a multitude of applications each responsible for the further processing and if necessary storage. Thereby often
becoming another data or information source. Each partner will have its own role and own objectives while all become more and more interdependent. Working to a strategy helps ensure the involvement of stakeholders and a return on the investment.

ORGANIZER
Richard Harris, ACS-Xerox, United Kingdom

MODERATOR
TBD

INVITED SPEAKERS
Chistter Karlsson, CEO, ITS Sweden, Sweden
Caroline Visser, Road Finance & ITS Programme Manager, International Road Federation (IRF), Switzerland
Makoto HirotA, Deputy Director, Cabinet Secretariat, Japan
Gethin Perry, Principal Intelligent Transport Systems Engineer, GHD, Australia
Ginny Crowson, Director of the Office of External Partnering, Minnesota Department of Transportation, USA

SS24: To Realize a Safe Society
Room: S210D

Every emerging megacity is facing population explosion and rapid economic development, which, in turn, generate high traffic demands, but social, economic, and political conditions in such cities are often too immature to establish efficient transportation infrastructure. In this situation, traffic accidents remain an enormous challenge. This session invites experts from emerging and developed megacities from the Asia-Pacific region to share their experiences and discuss how ITS technologies mitigate the situation to realize a safe society.

ORGANIZER
Nobukazu Kanesaki, Director, ITS Japan, Japan

MODERATOR
TBD

INVITED SPEAKERS
Elly Sinaga, Director, Ministry of Transportation, Representative of Indonesia
Amitabh Bajpai, President, Association for Intelligent Transport Systems, India
Jisheng Zhang, Associate Professor, China National ITS Center, China
Yoshiaki Matsuo, Project General Manager, Toyota Motor Corporation, Japan
Yoshifumi Nagai, Project Director, Road Transport Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan

SS25: ITS and Ecodriving: Creating an International Agenda
Room: S210E

Ecodriving is the concept of changing driving behavior and vehicle maintenance to impact fuel consumption and emissions, as well as “livability”. This entails in-vehicle technology such as real-time driver feedback (e.g., Toyota Prius in-vehicle navigation screen), education and information (i.e., driving habits and vehicle maintenance), and ITS-supported strategies (e.g., signal systems to support “riding the green wave,” variable speed limits in support of “maintaining an optimum highway speed for good mileage,” and traveler information to support “navigating to reduce carbon dioxide.” This session explores technologies, experience, and perspectives on Ecodriving from around the world; and identifies areas for international collaboration.

ORGANIZER
ITS America’s Sustainable Transportation Working Group

MODERATOR
L. Gordon Fluke, The Maureen and Mike Mansfield Foundation, USA

INVITED SPEAKERS
Susan Shaheen, Co-Director, Transportation Sustainability Research Center (TSRC), University of California, Berkeley, USA
Michael Sivak, Research Professor and Director, Sustainable Worldwide Transportation, University Of Michigan, USA
Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO-ITS Europe
Masayuki Kawamoto, Deputy General Manager, R&D Management Division, Toyota Motor Corporation, Japan

SS26: The State of Deployment Around the World of the “Connected Vehicle”
Room: S220A

Each region has a different priority, strategy and timetable for deployment. What are the first candidate applications for deployment: safety applications, mobility enhancement applications, environmental/sustainability, or commercial (traveler comfort and convenience) applications? What is the source and size of funding for infrastructure; how does the private sector view the investment and the market? What is the role of the public sector (federal, state, local)? Does advertising play any role in the funding scenarios? What is the state of the practice with respect to research and testing?

ORGANIZER & MODERATOR
Harry Voccola, Senior Vice President, NAVTEQ, USA

INVITED SPEAKERS
Jim Wright, Operations, American Association of State Highway & Transportation Officials, USA
Tim McGuckin, Executive Director, OmniAir Consortium, Inc., USA
Scott J. McCormick, President, Connected Vehicle Trade Association, USA
Michael Becker, Senior Director, Global Business Development, ATX Group, Inc., USA

SS27: Vehicle-IT Convergence for the Fully Networked Car
Room: S220B

Korea has adopted a definition of the fully networked car using vehicle-information technology (“VT”) convergence, which provides all transportation modes and users with vehicle-to-vehicle and vehicle-to-infrastructure communications. This session will review service requirements of the fully networked car with respect to communication technologies, infrastructure, and traffic media.

ORGANIZER & MODERATOR
Young-Jun Moon, Research Fellow, The Korea Transport Institute, Korea

INVITED SPEAKERS
Speaker from Japan
Speaker from Germany
Speaker from USA
Speaker from Europe

SS28: Location-Based Services for Public Transport
Room: S220C

Using mobile phone location and social networking is revolutionizing the provision of real-time public transport information on mobile devices. Even though the regulations governing mobile phone location tracking varies among the U.S., Europe, and Japan, the use of mobile device location capability allows the combination of current location with real-time information. For example, location-based services (LBS) or location-aware transit applications are available in the Seattle and Stockholm areas. This session will explore the current application of LBS to public transport. Descriptions of existing applications, such as OneBusAway and Seekst. Further, the session will explore unique applications that combine social networking and location-based services, such as the Bay Area Rapid Transit’s (BART’s) partnerships with the location-based mobile network FourSquare and Juniao.

ORGANIZER
Carol Schweiger, Vice President, TransSystems Corporation, USA

INVITED SPEAKERS
Armi Vilkman, Senior Scientist, Intelligent Transport Systems, VTT Technical Research Centre of Finland, Finland
Michael Sena, Michael L. Sena Consulting AB, Sweden
Kari Edison Watkins, University of Washington, USA
Tommy Dew, CEO, Slicker Interactive, USA

SS29: ITS in Fast Developing Areas
Room: S220D

While much of the world is recovering from economic depression there are still some areas that are trying to cope with the transportation challenges of fast developing areas. These include some of the Gulf States like Abu Dhabi and Qatar, as well as cities in China, India and Mexico. In the USA Las Vegas is growing by 3.45% a year. This rapid growth brings particular challenges and opportunities to these administrations. Sharing information and strategies between administrations is an important area for development. This session will provide a platform for key figures involved in both regeneration and new development to share their experiences and insight.
This session will explore new Intelligent Transportation Systems (ITS) methods and devices that help a person with a sensory, cognitive or learning impairment to navigate the built environment and use public transportation. This session also presents a discussion of gaps in addressing the needs of people with sensory disabilities in transit communications standards, systems, policy and practice. Researchers note that there are few systemic barriers to accessibility within transit communications standards and data formats, which offer text-based, flexible information delivery that can meet the needs of travelers with sensory disabilities.

Organizer & Moderator

Rob Hranac, Vice President, Berkeley Transportation Systems, USA

Invited Speakers

Dinesh Manocha, Professor of Computer Science, University of North Carolina, USA
Tom Roth, HPMS Manager, Federal Highways Administration, U.S. Department of Transportation, USA
Alex Estrella, Regional Planner, San Diego Association of Governments, USA

**SS33: Visualizing ITS Data**

**Room: S220F**

ITS data sets provide major new opportunities for understanding transportation system operations, conditions, and opportunities. However, these data sets cannot be effectively used by transportation agencies unless the data is made comprehensible to staff.

Organizer & Moderator

Rob Hranac, Vice President, Berkeley Transportation Systems, USA

Invited Speakers

Dinesh Manocha, Professor of Computer Science, University of North Carolina, USA
Tom Roth, HPMS Manager, Federal Highways Administration, U.S. Department of Transportation, USA
Alex Estrella, Regional Planner, San Diego Association of Governments, USA

**SS32: Stakeholder Views and Examples on Co-Operative Safety Systems with Focus on Rural Roads**

**Room: S310A/B**

The success of cooperative safety systems will depend strongly on the alignment of interests among multiple stakeholders. The willingness of road authorities and operators to invest in infrastructure, such as short distance systems for vehicle-infrastructure communication, is also closely related to the benefits identified in field operational tests. This session will focus on experimental deployment of these systems and services on rural roads and will present strategic views as well as examples of how cooperative safety systems can contribute to meet societal goals. This session is focusing on rural roads and will present some strategic views as well as good examples of how cooperative systems can contribute to meet societal goals.

Organizer

Masao Fukushima, Engineering Director, Nissan Motor Co., Ltd., Japan

Moderator

Bengt Hallstrom, Analyst and Senior Advisor, Swedish Transport Administration (STA), Sweden

Invited Speakers

Oliver Carsten, Professor, University of Leeds, United Kingdom
Max Donath, Professor, University of Minnesota, USA

**SS34: Adaptation**

**Room: S210A**

Global warming is occurring and climate changes are unlikely to unfold gradually. Climate changes and their impacts—such as an increased number of hot days, rising sea levels, increase in intense precipitation events, and an increase in hurricane intensity—will require significant changes in planning, design, operation, and maintenance of the transportation infrastructure. This session will explore how ITS technologies and operations strategies can contribute to “adaptation”—that is, accommodating climate change impacts that are already occurring and will continue to occur in the foreseeable future. Examples include emergency management and evacuations from affected areas, tools for identifying critical infrastructure, and technologies for automatically identifying infrastructure problems resulting from weather extremes.

Organizer

ITS America’s Sustainable Transportation Working Group
**MODERATOR**
Randell Iwasaki, Executive Director, Contra Costa Transportation Authority, USA

**INVITED SPEAKERS**
Michael Flood, Senior Supervising Planner, Parsons Brinkerhoff, USA
Eric Sampson, Professor, Newcastle University, United Kingdom
Lou Neudorff, Principal Technologist, ITS, CH2M HILL, USA
Vicky Arroyo, Executive Director, Georgetown Climate Registry, USA

**ORGANIZER**
Jennie Martin, Chairman, Network of National ITS Associations (hosted by ERTICO)

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**SS36: National ITS Associations Providing an Essential Service to Policy Makers**
Room: S210C

Building upon the very successful session on “application of an image recording type drive recorder (DR)” for preventive safety in road traffic” at the 2010 World Congress at Busan, this session will discuss how this vehicle-mounted digital technology contributes to the reduction of traffic accidents and will propose a rapid deployment for vehicles around the world. International stakeholders will also review how the next effective deployment of DR applications will be dependent on standardization of both hardware and software.

**MODERATOR**
Koji Ukena, UK-Consultant on ITS, Japan

**INVITED SPEAKERS**
Sadao Horino, Associate Professor, Kanagawa University, Japan

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**SS37: Drastic Reduction of Traffic Accidents by Image-Recording Type Drive Recorders**
Room: S210B

Pedestrian protection is one of the key issues for safety as accidents involving pedestrians are still high in each region. Approach to detect pedestrians varies in several categories. Detecting by image processing, active sensing such as RADAR, and P2V communication with position information are the candidates. It can be done by on board unit or road side unit. Among these options, suitable measurement to detect pedestrian might differ according to situations. During this session, the moderator wants to address advantage of each approach.

**ORGANIZER & MODERATOR**
Nobuyuki Ozaki, Senior Fellow, Toshiba Corporation, Japan

**INVITED SPEAKERS**
Shunsuke Kamiya, Associate Professor, Institute of Industrial Science, The University of Tokyo, Japan
Walton Fehr, Manager, ITS Systems Engineering, USDOT/RITA/ITS Joint Program Office, USA
Ulrich Lages, General Manager, Ibeo Automotive Systems GmbH, Germany
Donald K Grimm, Senior Researcher, General Motors Research & Development Center, USA

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**SS38: Pedestrian Detection in Various Manners**
Room: S210A

Pedestrian detection is an essential function for safety. One of the latest technologies is the image-recording type drive recorder (“DR”) for road traffic surveillance. Detecting by image processing is suitable for traffic accident prevention. The same is true for other ITS national associations. In this session, staff and partners to date will be discussed.

**MODERATOR**
Chistser Karlsson, CEO, ITS, Sweden, Sweden

**INVITED SPEAKERS**
Reinhard Pfrieg, Vice President Strategy, Austria Tech, Austria
Richard Harris, International Director, ITS United Kingdom, United Kingdom
Vladimir Kryuchkov, CEO, ITS-Russia, Russia

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**SS39: Making Multimodal Transportation Succeed: Technology and Partnerships at Work**
Room: S210B

This session will focus on institutional, and political challenges addressed by six Urban Partners to use four complementary and synergistic strategies referred to as the four “Ts” Tolling, Transit, Technology and Telecommuting. By focusing strategies on specific metropolitan corridors significant impacts on congestion are expected. The results achieved by the Urban Partners to date will be discussed.

**ORGANIZER**
U.S. Department of Transportation

**MODERATOR**
Jeff Lindley, Associate Administrator for Operations, Federal Highway Administration, U.S. Department of Transportation, USA

**INVITED SPEAKERS**
Jeff Lindley, Associate Administrator of Operations, Federal Highway Administration, U.S. Department of Transportation, USA
Elizabeth Riklin, Deputy Associate Administrator, Federal Transit Administration, U.S. Department of Transportation, USA
Lee Munnich, Senior Fellow, Director, Humphrey Institute, University of Minnesota, USA
Jane Lappin, Program Manager, John A. Volpe National Transportation Systems Center, Research and Innovative Technology Administration, U.S. Department of Transportation, USA

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**SS38: International Cooperation in Mobility Management to Address Global Sustainability**
Room: S210C

Due to fast growing economies, Brazil, China and Russia has been experiencing rapid growth of car ownership, large urban migration and increase in travel demand. Although these countries have invested heavily into new infrastructure, levels of traffic congestion environmental pollution and level of traffic safety are becoming increasingly unacceptable in many cities in Brazil, China and Russia. It is well recognized that economies cannot function well without adequate provision of transport to serve the needs from both individuals and businesses. The introduction of new infrastructure is important but it is very clear that the construction of new roads can result in the generation of additional traffic, and not lead to sustainable future of transport situations. Therefore, mobility management, i.e. to better manage and use available capacity for all modes of transport, is becoming the most important tool to address the challenges. Technologies, policies and best practices can be shared among Europe, Brazil, China and Russia. International cooperation in mobility management can benefit local and global sustainability. All countries can work together to develop ways to reduce reliance on private cars while maintaining mobility and enhancing accessibility. This session invites speakers from the EU, Brazil, China and Russia to introduce current policies and activities on international cooperation of their organizations. Strategies on future cooperation on mobility management and actions required will be discussed at the session.

**ORGANIZER**
Yanying Li, Project Manager, ERTICO-ITS Europe

**MODERATOR**
Vincent Biervlaere, ITS Vienna 2012 IPC Chairman, Director of Development & Deployment, ERTICO-ITS Europe

**INVITED SPEAKERS**
Patrick Mercier-Handisyde, Head of the Urban Mobility Sector, European Commission, DG Research & Innovation, Belgium/EU
Marcelo Cardinale Branco, Transport Secretary, the City of São Paulo, Brazil
Vladimir Kryuchkov, Chairman, ITS Russia, Russia
Stephanie Jin, Director of International Affairs, ITS China, China
SS40: Management of ITS Facilities Based on Priorities
Room: S210D

More than 10 years have passed since Japan deployed electronic tolling, VICS and similar intelligent transportation systems. It is time to replace these systems with next generation improvements and to consider priorities carefully given severe budgetary restrictions. Because of recent natural disasters, however, those priorities have changed along with new assessments of risk management, and this session will explore next generation ITS deployment in this context.

Organizer: Yasuhiko Kumaogi, Professor, Kochi University of Technology, Japan
Moderator: Motohisa Sato, Director, NEXCO Expressway Research Institute, Japan
Invited Speakers: Tsuyoshi Funaki, Professor, Osaka University, Japan
Hideyuki Tejima, Director, Central Nippon Expressway Company Limited, Japan
Kiminori Wakabayashi, West Nippon Expressway Company Limited, Japan
Kimberly Vasconnez, Team Leader, Emergency Transportation Operations Office, USA

SS41: Goods Movement and GHGs
Room: S210E

One challenge for the freight industry, policy makers, and the public is the lack of easily accessible information about the costs/savings of available technologies that can improve efficiency and reduce GHG emissions from goods movements. This session will explore strategies, such as EcoDriving, smart parking for trucks, truck electrification, automatic tire inflation, and hybrid trucks.

Organizer: ITS America’s Sustainable Transportation Working Group
Moderator: John Woodroofe, Director, Transportation Safety Analysis, University of Michigan Transportation Research Institute, USA
Invited Speakers: Susan Shaheen, Co-Director, Transportation Sustainability Research Center (TSRC), University of California, Berkeley, USA
Keith McCabe, Principal Consultant, Atkins
Elliot Martin, Research Engineer, Transportation Sustainability Research Center, University of California, Berkeley, USA
Fredrick M Warner IV, CEO, ParkingCarma Inc
Benjamin Teitelbaum, Special Assistant, Commission for Environmental Cooperation, USA

SS42: Future Internet + Future ITS: Evolution or Revolution?
Room: S220A

Future Internet technologies hold much promise to transform the way we travel, ship our goods and manage our transport networks. Many early applications of today’s mobile Internet are already in the marketplace (or in one of the many “app-stores”). However, the Internet itself is undergoing a revolution, and its new features and functionalities can bring extra benefits for transport and mobility. In this session industry leaders from the worlds of Internet and mobility will join to explain the new technologies, how they may impact ITS, and discuss issues for deployment. In particular, speakers will: Define “the Future Internet” and its main components (e.g. cloud computing and services, data warehouses, LTE, IPv6 etc.); Explain the main motivators and constraints (e.g. response time, security, QoS etc.); and the relevant standards; Highlight the gaps between ITS standards and technologies and those for Future Internet, through practical focused stories (e.g. LTE vs. 802.11p, interconnectivity for ITS vs. mobile network operator, leveraging existing vs. new infrastructure etc.); Internet-ITS convergence: Deployment that makes business sense.

Organizer: Paul Kompner, ERTICO-ITS Europe
Moderator: Juhani Jääskeläinen, Head of Unit, European Commission, DG INFOS, Belgium/EU (TBC)
Invited Speakers: Patrick Gatelier, Thales, France
Stéphane Petli, Head of ITS Development, Orange Group, Belgium
Paul Kompner, Head of Sector Cooperative Mobility, ERTICO-ITS Europe
Rene Rempzar, Senior Research Engineer, Ericsson Eurolab, Germany

SS43: Transit in a Real Time World
Room: S220B

Building on the highly successful session at the 2010 World Congress on this topic, this session will provide an update on the current status of how transit agencies can use technologies, such as social platforms (e.g., Facebook, Twitter, YouTube) and Google Transit to provide critical information to riders and encourage non-riders to become public transport users. Google representatives will discuss some of the new features available on Google Maps and share insights on how users can benefit from them. Further, assessments of the effect of social networking on transport ridership will be explored.

Organizer: Carol Schweiger, Vice President, TransSystems Corporation, USA
Moderator: TBD
Invited Speakers: Martha Welsh, Strategic Partner Development Manager, Google, USA

Thijs van As, Associate Product Manager, Google, USA
Susan Bregman, Principal, Oak Square Resources, USA
Richard Harris, ACS-Xerox, United Kingdom

SS44: Vehicle of the Future
Room: S220C

This session explores the vehicle of the future, its elements, and supporting infrastructure. Key topics include Intellidrive and AERIS and their international counterparts, propulsion systems, energy infrastructure, and operation/management of the supporting infrastructure (e.g., smart grid).

Organizer: ITS America's Sustainable Transportation Working Group
Moderator: William Chemicoff, Manager—Energy & Environmental Research, Toyota Motor North America Inc., USA
Invited Speakers: Steve Novosad, ITS Software and Systems Manager, Atkins, USA
Robin North, Imperial College, London, United Kingdom
Partha Roop, Professor, the University of Auckland, New Zealand
James Sayer, Program Manager, Safety Pilot Test Conductor and Associate Research Scientist, University of Michigan Transportation Research Institute, USA
Jeffrey Spencer, ITS Team Leader, Federal Transit Administration, U.S. Department of Transportation

SS45: Eco-Driving: A Key Enabler for Future Clean and Efficient Mobility Worldwide
Room: S220D

The evolution of ITS technologies is enabling new types of mobility application that will help vehicle drivers to drive more economically. Navigation systems that provide eco-routing, eco-driver coaching, urban traffic network support for eco-driving are only some of the innovative applications to be presented and discussed in this Session. The reduction of CO2 emissions is a top priority in the policy agenda of the European Union, as well as in the USA and Japan. Many initiatives investigating new technologies for and the benefit of eco-riding and eco-routing strategies are co-funded in these regions including R&D projects and already some pilot projects. They are all aiming at creating a framework for achieving clean and efficient mobility in the near future. In this Session, the actual work and early results of activities in these different regions will be presented. Different approaches will be shared and discussed as well as the outlook for their long-range impacts on sustainable mobility.

Organizer: Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO-ITS Europe
Moderator: Juhani Jääskeläinen, Head of Unit, European Commission, DG INFOS, Belgium/EU
SS46: ITS for Freight—Makes Transportation Safer, Faster, Smarter for All Road Users
Room: S220E

This session looks at various ITS technologies emerging to minimize/reduce freight related impacts to the transportation infrastructure. Transportation management systems often overlook the freight related ITS tools in use to regulate commerce, increase safety, preserve the infrastructure and facilitate freight flow. Session will explore 3-Dimensional Imaging, License Plate Readers, Virtual Weigh Sites, Amber Alerts, Out of Service violators, Freight Theft Measures, etc.

Organizer & Moderator
Richard Easley, President, E-Squared Engineering, USA

Invited Speakers
Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO-ITS Europe
Gary Bridgeman, Project Manager, IRU, Belgium
Matthew Barth, Director, University of California – CERT, USA
Bob Denaro, Vice President, Advanced Driver Assistance Systems, NAVTEQ, USA
Ryota Horiguchi, CEO, i-Transport Lab. Co. Ltd., Japan

SS47: Multimodal Transportation, Economic Growth and Sustainability—The Impact of Cooperation Between Stakeholders
Room: S220F

Efficient and robust transport systems are a prerequisite for welfare and continued growth. But at the same time, the transport system accounts for a significant and growing proportion of the greenhouse gas emissions. The emissions from urban traffic also involve hygienic risks. Parts of the transport system also suffer congestion and capacity problems. Access to the transport system varies for different groups and in different parts of the country. Accidents and incidents still occur far too often. Forming tomorrow’s transport systems and combining the needs for mobility with demands for a good environment, safety and security are therefore the major challenges we face. A number of different measures are needed, both nationally and internationally, in order to arrive at an efficient and more climate-friendly, safe and secure transport system. It involves, not least, better utilization of the existing resources and capacity in the transport system, offering new and attractive solutions for both passenger and goods transport, and employing a variety of regulatory measures and incentives. ITS—Intelligent Transport Systems and Services—will play a much greater role in this context than it does today. According to estimates made for road transport in Europe, CO2 emissions could be reduced by 10 – 20%, accidents and incidents by 5 – 15% and congestion by 5 – 15% by employing different ITS solutions. In parallel to this, cities are recognized in a larger extent than before as crucial hubs, around which the climate work will revolve. Harbors, airports, terminals and crowds—anywhere where special attention is needed for the safe flow of goods, travelers and different kinds of transactions/information must be ensured. This is especially valid to achieve efficient traveling with regard to the climate, efficiency and safety, thus maintaining the cities attraction. In this session we will explore how the Swedish model of cooperation between private and public sectors for future multi modal transportation could contribute to fulfill the climate, safety, mobility, growth and sustainability goals set by governments and politicians all over the world. Our distinguished speakers have experience from different areas such as the public and private transport policies, urban mobility, land use and urban planning etc. Some of them have been awarded for their efforts—so let us listen and be inspired by their knowledge and experience.

Organizer
 Alf Peterson, Senior ITS Advisor, ITS Office, Swedish Transport Administration, Sweden

Moderator
Hans Rode, Chairman ITS Council, Swedish Government, Sweden

Invited Speakers
Fotis Karamitros, Director, European Commission, DG MOVE, Belgium/EU
Lena Ericson, Deputy Director General, Swedish Transport Administration, Sweden
Olle Isaksson, Director, Industry Specific Solutions, Ericsson, Sweden
Kerstin Lindberg Goermann, CEO Airport Arlanda International, Sweden, Sweden
Eva Molnar, Division of Transport, United Nations Economic Commission for Europe (UNECE)

SS48: Transportation Systems Management and Operations (TSMO)
Room: S310A/B

In much of the world, current financial pressures have reduced the ability to add new capacity in the face of increasing congestion. In this context, getting the maximum service from the existing roadway network takes on increasing significance. Many transportation agencies have long been applying ITS technology in support of improved “transportation systems management and operations” (TSMO) such as incident management, road weather management, traveler information, etc. However there is a wide variation in the degree of agency focus and a substantial gap between best practice and average practice. Recent research in the U.S. has identified the key factors that appear to be essential to improving the effectiveness of TSMO—particularly the special business and technical processes related organizational, staffing and institutional relations. Experience suggests there are proven strategies for improving TSMO program effectiveness thru incremental adjustments in processes and institutional configurations. This session was embodied in guidance being prepared for the American Association of State Highway and Transportation Officials (AASHTO). Valuable examples exist in recent practice improvements by state DOTs and metropolitan regions. This session will present the background to the AASHTO guidance and the examples of improvement approaches taken by transportation agencies.

Organizer
Stephen Lockwood, Sr. Vice President, Parsons Brinckerhoff, USA

Moderator
TBD

Invited Speakers
TBD

SS49: Geo-Data Services as a Universal Design Transportation Enhancement
Room: S310 E/F

Recent work has identified the need to promote and advance the broad availability of disability-specific Geo-Data useful to enable accessible travel, transportation and tourism information services and mobility applications. The availability of new, open data sets allows new and interesting location-aware innovations. For example, the Tiramisu system in Pittsburgh, PA allows riders to crowd-source vehicle location and fullness as well as document positive and negative experiences while using local transit. Likewise, the IBM “Accessibility City Tag” (ACT) project in Italy provides real-time accessibility information about local points of interest via a smartphone application. These systems use location-aware technology to support transportation users with disabilities, but also provide value to users without disabilities. The merging of Geo-Data with open databases, universal design, and mobile technology offers exciting opportunities for increased mobility. This special session will convene representatives from the United States, Europe, and Asia to describe work in the area of Geo-Data for improved mobility by all. The session will include findings from a working group on the topic, examples of transformative applications, and suggested next steps that the public and private sector can take.

Organizer & Moderator
Aaron Steinfeld, Systems Scientist, Robotics Institute, Rehabilitation Engineering Research Center on Accessible Public Transportation, Carnegie Mellon University, USA

Invited Speakers
Mohammed Yousuf, Office and Operations R&D, Turner - Fairbank Highway Research Center, Federal Highway Administration, U.S. DOT, USA
Bill Curtis-Davidson, Business Development and Solutions Leader, IBM Research: Human Ability and Accessibility Center, USA
Nicole Palmarini, Director/Manager, IBM Human Centric Solutions Centre, USA
In this session, the speakers will provide their views and answers to these questions and oppose their views and approaches to each other. They thereby discussing the different areas of focus for the respective organization, as well as their expectations of C2X deployment. Representing OEMs, road operators, and supporting initiatives, the speakers will shed light on their efforts deploying C2X technologies. Additionally, as one of the leading EU projects to put C2X on the road, DRIVE C2X will share its view of possible business models and use cases.

**INVITED SPEAKERS**

Soeren Hess, General Manager, CAR 2 CAR Communication Consortium, Denmark

Matthias Schulze, Senior Manager Driver Support and Warning, Daimler AG

Martin Söhn, Head of Unit ITS Deployment, AustriaTech, Austria, Austria

Massimiliano Lenardi, R&D Lab. Manager Senior Research Engineer, HITACHI Europe, France

Ronald Adams, Chairman, EasyWay

**ROOM**: S210A

**SPECIAL INTEREST SESSIONS**

**SS50: Combining Wireless Electric Vehicle Charging with Automation: Opportunities & Challenges**

*Room: S320A*

Interest in electric vehicles has been increasing in recent years as a result of dependency on foreign fuels, reduction in greenhouse gas emissions, and improved vehicle fuel efficiencies. Many and varied forms of charging have been conceptualized from battery swapping to charging stations, to wireless power transfer (WPT). WPT has significant advantages over other charging concepts. It can significantly reduce the weight of a vehicle because fuel does not have to be transported, does not require charging times, and uses conjunctural dedicated lanes, could offer opportunities for high speed and efficient automated control.

**ORGANIZER & MODERATOR**

Kevin Heaslip, Assistant Professor, Utah State University

**INVITED SPEAKERS**

John Boys, Professor of Electrical and Computer Engineering, University of Auckland, New Zealand

Hunter Wu, Researcher, Energy Dynamics Laboratory, Utah State University Research Foundation

In-Soo Suh, Professor, Korean Advanced Institute for Science and Technology

Florian Risch, Professor of Mechanical Engineering, University of Erlangen, Germany

**WEDNESDAY, OCTOBER 19**

**8:30 a.m. – 10:00 a.m.**

**SS51: Carbon Footprinting**

*Room: S210A*

Traveler information services in Europe, America, and Asia are increasingly providing estimates on how trip modes contribute to carbon emissions (also known as “carbon footprinting”). A carbon footprint measures the impact that human activity has on the environment, particularly climate change. Transportation agencies are also becoming more interested in the carbon footprint resulting from their operations and maintenance activities. In light of new laws/regulations, increased public awareness, and unstable fuel prices, there is growing public and policy interest in carbon footprinting. This session explores carbon calculators, mobile apps, incentives, and other tools related to managing a carbon footprint.

**ORGANIZER**

ITS America’s Sustainable Transportation Working Group

**MODERATOR**

Keith McCabe, Principal Consultant, Atkins Global, USA

**INVITED SPEAKERS**

Margaret Bell, Professor, Newcastle University, United Kingdom

Keith Jasper, Senior Associate, Jelcom, USA

Martin Engellmann, Deputy Executive Director, Planning, Contra Costa Transportation Authority, USA

Kazuya Tamura, Honda Motor Co., Ltd., Japan

**SS52: Solution for Traffic Jam in Highways Using ACC and C2X Communication Technology**

*Room: S210B*

Accidents and traffic jams on expressway are the issues to be urgently solved. In Japan, since the end of 2009, some Japanese car manufacturers have studied the smooth traffic flows by utilizing ACC to realize “Zero traffic jam” and “Zero accident” in Highway. Their first target is to solve the traffic jam at a sag point on expressway with C2X communication technologies. In this session, we expect to have the presentations about R&D activities by Japanese car manufacturers, and also share the experience in the European region.

**ORGANIZER**

Takaaki Segi, ITS Japan, Japan

**MODERATOR**

Masayuki Kawamoto, Deputy General Manager, R&D Management Div. Toyota Motor Corporation, Japan

**INVITED SPEAKERS**

Kenichi Kitahama, Project Manager, R&D Management Div. Toyota Motor Corporation, Japan

Takashi Oguchi, Professor, Advanced Mobility Research Center, The University of Tokyo, Japan

Koichi Sakai, Senior Researcher, ITS Division, National Institute for Land and Infrastructure Management, Japan

Bart D. Netten, Scientific Researcher, Intelligent Imaging, TNO, the Netherlands

**SS53: Field Operational Tests as Enabler for Cooperative Mobility in Europe?**

*Room: S210C*

This session will address various approaches and aspects deploying C2X technologies in Europe. For a large-scale deployment of cooperative systems, multiple challenges have to be overcome. Especially, the large-scale aspect, the heterogeneous environment and the necessary involvement of all the actors make this under-taking so delicate. Various strategies and stakeholder interests were discussed in the past and field operational tests yielded valuable results. But now scenarios for market introduction of C2X need to be agreed on and a solid level of commitment from the relevant stakeholders needs to be achieved. On the one hand, there are technical issues to deal with and on the other hand, there are challenges in business and acceptance aspects. The technical side poses questions like:

- What standards and technologies are available and relevant?
- How can interoperability be achieved in such a heterogeneous environment?
- What lessons can be drawn from field operation tests to improve standards and technologies?

On the business side, the following questions are key:

- What are the strategies and use cases to motivate financing organizations?
- Who are the customers and what are they willing to pay for?
- How can users be made aware and how can cost versus benefit be assessed?

In this session, the speakers will provide their views and answers to these questions and oppose their views and approaches to each other. They thereby discussing the different areas of focus for the respective organization, as well as their expectations of C2X deployment. Representing OEMS, road operators, and supporting initiatives, the speakers will shed light on their efforts deploying C2X technologies. Additionally, as one of the leading EU projects to put C2X on the road, DRIVE C2X will share its view of possible business models and use cases.

**ORGANIZER & MODERATOR**

Tanja Kessel, Managing Director, EICT GmbH, Germany

**INVITED SPEAKERS**

Ronald Adams, Chairman, EasyWay

**ROOM**: S210A

**SS54: New Paradigm for “Cloud Transportation”**

*Room: S210A*

Korea has demonstrated a concept of “Cloud Transportation” that would facilitate implementation of dynamic policies on reducing the greenhouse gas emissions in transportation, (e.g. vehicle access control in CBD, road congestion pricing, electronic car sharing, integrated public transit charging, etc.). This session proposes addressing the crisis of global warming through a paradigm shift in traffic demand management policy using the concept of “own less, share more”.

**ORGANIZER & MODERATOR**

Jae-Hak Oh, Senior Research Fellow, The Korea Transport Institute, Korea

**INVITED SPEAKERS**

TBD

**SS55: Women in ITS**

*Room: S210B*

Women are under-represented as employees in the ITS sector in almost every country in the world. This mirrors a general under-representation of women in all engineering disciplines. ITS is an exciting and interesting discipline where professionals can make a real difference to people’s daily lives, to the health and wealth of the nation, and to securing a more environmentally friendly transport future. How can the attractions of working in ITS best be communicated to potential women entrants to the profession? An international panel of successful women ITS experts will contribute their ideas and experiences to this session, and lead an informed debate.

**INVITED SPEAKERS**

Estela de Carvalho, ITS Brazil, Brazil

Yasmin H. Abdel-Magid, Professor, Virginia Tech, USA

Suzie Hysnul Islam, Assistant Professor, Canada Research Chair, Electrical and Computer Engineering, Memorial University of Newfoundland, Canada

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SS56: Advanced Technology to Collect Data for Low Carbon Policy and Sustainable Development
Room: S210C

Low carbon policy and sustainable development are important topics in recent years. To be able to implement low carbon policy and manage carbon footprint of road transport, huge amounts of information about usage of the network, individual travel behavior, performance of various transport modes are required. Advanced ITS technology can contribute to collection of such information. At this session, a number of cases of using ITS technology to collect data to support low carbon personal travel, sustainable planning and efficient traffic management in China, Europe and U.S. will be presented. For example, mobile environmental sensors have been installed on buses to collect air pollution and emission data along the bus route. Such data is analysed with traffic flow and speed together in order to understand impacts of road traffic on air pollution and emission, thus developing traffic environmental models for transport planning and appraise of transport policy. Another example is using floating vehicle data to identify congestion and provide real-time information for motorists and traffic operators. Floating vehicle data is also used to assess emissions of individual vehicles. Such data can be used for carbon emission trading which can be a new source of funding for sustainable transport projects.

Organizer
Ralf Willenbrock, T-Systems International GmbH, Germany/China
Moderator
Yanying Li, Project Manager, ERTICO-ITS Europe

INVITED SPEAKERS
Jifu Guo, Director, Beijing Transportation Research Centre (BTRC), China
Martin Ruhe, Program Manager, German Space Centre (DLR), Germany
Ralf Willenbrock, Business Development Manager, T-Systems International GmbH, Germany/China
Daniel Bongardt, Daniel Horch, Program Manager, GIZ, Germany

SS57: Improving Road Safety Through The Applications of ITS
Room: S210D

With the rash increasing of the vehicle numbers, especially in some developing counties, road safety is facing more serious challenge. Some governments are trying to introduce cost-efficient ITS technologies to make the road less traffic mortality and injuries.

Organizer & Moderator
Weiyn Jiao, Engineer, China National ITS Center, China

INVITED SPEAKERS
Ronald Adams, Chairman, EasyWay2011 / Ministry for Infrastructure and Environment-Rijkswaterstaat, the Netherlands
Shoichi Suzuki, Senior Researcher, ITS Division, National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism, Japan
David Armitage, Founder and CEO, Cartalsite, USA
Colonel Mark Trostel, National Driving Safety Advisor, Encana Natural Gas, USA
Jisheng Zhang, Associate Professor Research Institute of Highway, Ministry of Transport, China

SS58: Emerging ITS Strategies for Sustainability
Room: S210E

The challenge of reducing energy use and emissions is reaching a critical stage in light of global warming. Several recent ITS strategies—such as Integrated Corridor Management (ICM) and Active Transportation Demand Management (ATDM)—provide dynamic management of recurrent and non-recurrent congestion through the use of integrated systems with new technology and automation. This session explores how these emerging ITS strategies can also help reduce the levels of transport-related energy consumption and greenhouse gas emissions, in addition to providing mobility and safety benefits.

Organizer
ITS America’s Sustainable Transportation Working Group
Moderator
Lou Neudorff, Principal Technologist, ITS, CH2M HILL, USA

INVITED SPEAKERS
Keith McCabe, Principal Consultant, Atkins, USA
Steven Cyra, Associate Vice President, HNTB Corporation, USA
Bernie Arseneau, Deputy Commissioner and Chief Engineer, Minnesota Department of Transportation, USA
Stephanie Wiggins, Executive Officer – Congestion Reduction Initiative, Los Angeles County Metropolitan Transportation Authority, USA
Cheol Oh, Professor, Dept. of Transportation Systems Engineering Hanyang University at Ansan, Korea

SS59: Travel Management Coordination Centers (TMCC) using ITS: Successful Deployment Practices
Room: S220 A

The U.S. Department of Transportation (USDOT) Mobility Services for All Americans initiative is an effort to create a coordinated approach to the application of technological solutions to the barriers to accessibility and mobility for all Americans. Ultimately, MSAA is establishing replaceable and scalable models of travel management coordination centers (TMCCs) that provide simplified customer-based travel information and trip planning services, and support coordinated human services transportation operations. All across the world, TMCCs are combining many available technologies to help overcome the barriers and gaps facing all travelers, and transportation service providers. This session will bring together examples of TMCCs from the Americas, Europe and the Asia-Pacific region. Technical and planning challenges will be covered in this session, as well as the implementation of different configurations of TMCCs to best meet the needs of the stakeholders in a region.

Organizer & Moderator
Guo-Wei Tornq, Principal, Noblis Inc., USA

INVITED SPEAKERS
Douglas Jamison, Senior ITS Developer, LYNX-Central Florida Transportation Authority, USA
Carol Schweiger, Vice President, TranSystems Corporation, USA
Pekka Elianto, EU Programme Manager, MobiSoft Oy, Finland

SS60: International Governmental Cooperation for Deployment of ITS Cooperative System
Room: S220B

R&D of ITS cooperative systems have been promoted by both the public and private sectors in various regions of the world. ITS cooperative systems will move from the R&D stage to the deployment stage to provide a variety of services in the future. In the deployment stage, the various road traffic data, including probe data are expected to be publicized and shared openly by the both public and private sector services related to road transportation. In this session, speakers invited from government organizations and private sectors in Japan, the U.S. and Europe will exchange opinions about governmental level international cooperation in the future deployment of ITS cooperative systems, mainly about the current situations on the collection of road traffic data and policies related to its application by both public services and private businesses. They will also discuss about the potential of sharing those data among these parties, and the challenges to overcome.

Organizer
Takahiro Uno, Road Bureau, Ministry of Land, Infrastructure, Transport, and Tourism, Japan
Moderator
Hironao Kawashima, Professor, Keio University, Japan
SS61: Using Historical GPS Data for Transportation Planning
Room: S220C
Traffic monitoring, planning, management and modeling all require information about traffic speeds, travel times and volumes. In the last few years new types of data have become available to replace traditional data such as inductive loop and camera measurements. One such data type is GPS (global positioning system) measurements from, for example, consumer navigation devices or fleet management systems. To what extent does (historical) GPS data provide a cost-effective alternative to more traditional sources? Is it an alternative or purely a complementary data source? For what kinds of traffic management applications can it be used? What are the current limitations of GPS data and what will the future bring? This session will focus on specific, recent use of GPS data for traffic management purposes to answer these questions.

Organizer & Moderator
Nick Cohn, Business Development Manager, TomTom, USA

Invited Speakers
Jens Mogensen, Secretariat Leader, City of Aalborg, Denmark
Richard Mudge, Vice President, Delcan Corporation, USA
Goran Nikolic, Engineer, Ministry of Transport Ontario, Canada

SS62: ITS for Electromobility: Prediction and Connectivity, Key ITS Enablers for the Electrification of Vehicles
Room: S220D
Considering the number of initiatives taken worldwide by Governments, EC, vehicle manufacturers and suppliers, Energy Suppliers, etc, and the challenges ahead for a successful electrification of vehicles in the transportation system, the aim of this special session is to present a synthetic view about the potential of current and future ITS technologies and services to enable and support the introduction of Fully Electric Vehicles (FEV). Innovative ITS systems and services are needed to ease FEV integration, deployment and exploitation. Keyword are prediction and connectivity, ITS is bringing data and information among the different components of the transport systems and services. Furthermore, the optimisation of the whole transport system and mobility services with FEV can only succeed with the use of innovative ITS technology.

Organizer
Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO-ITS Europe

Moderator
Thomas Kuhn, Senior Manager Advanced Technologies Infotainment and Connectivity, Continental Automotive GmbH, Germany

Invited Speakers
David Sanchez, Active Safety Manager, CTAG, Spain
Tsutomu Kushima, Manager of International Operations Planning Division, NEC Corporation, Japan
Ryan McGee, Technical Expert-Electricitisation Research and Advanced Engineering, Ford Motor Company, USA

SS63: Moving Towards Zero Fatalities Through Connective Vehicle Safety—Fact or Fiction?
Room: S220E
This session will be a discussion among speakers on efforts towards significantly reducing the loss of life from vehicle related crashes using connected vehicle technology. Speakers will discuss current research, technology innovations, policies, early adopters, and deployment initiatives that move the industry towards a safer surface transportation system.

Organizer
U.S. Department of Transportation

Moderator
Mike Schagrin, Program Manager, ITS Safety, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation, USA

Invited Speakers
Ray Resendes, Intelligent Technologies Research Division, National Highway Traffic Safety Administration, U.S. Department of Transportation, USA
Anthony Kane, Directory Engineering and Technical Services, American Association of State Highway and Transportation Officials
Matthias Schulze, Senior Manager, Driver Support and Warning, Daimler AG
Juhani Jaaskelainen, Head of Unit, ICT for Transport, at the European Commission, Directorate-General Information Society
Hideki Hada, Engineering & Manufacturing North America General Manager, Integrated Vehicle System Dept. – JS, Toyota Motor Company, Japan

SS64: Validation and Impact of ICT Measures for Energy Efficiency & Environment
Room: S220F
Information and Communication Technologies (ICT) promise an important contribution to making transportation more environmentally friendly. Several applications of “eco-ICT” are already on the market while numerous services are currently being prepared for future market introduction through research and pre-deployment projects. In order to evaluate and prioritize their investment in eco-ICT services, stakeholders need to understand the expected impacts on environmental criteria, in this context international cooperation is necessary to share and agree on a global approach. In this session, EU, U.S. and Japanese initiatives will report on work in validating impacts of eco-ICT. Where possible, preliminary results will be presented. In particular, the following initiatives are considered to share different experiences in the assessment of ITS measures contributing to the reduction of CO2 emission: EU co-funded projects: eCoMove(R&D) developing a combination of cooperative applications for eco-driving and for eco-traffic management; COSMO aiming at demonstrating different eco-ICT applications at a number of test sites to address deployment barriers prior to future market introduction; finally ECO-STAND supporting an EU-USA-Japan Joint Task Force setting a common research agenda for assessing impact of ITS on energy efficiency. U.S. IntelliDrive program, major initiative of the Intelligent Transportation Systems (ITS) Joint Programs Office (JPO) at DOT’s Research and Innovative Technology Administration (RITA). Japan initiative Energy ITS, a five-year project started in 2008 with the aim to establish an internationally standardized assessment methodology for measuring the effects of ITS.

Organizer & Moderator
Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO-ITS Europe

Invited Speakers
Martin Kühler, Project Manager, DLR, Germany
Gerard Klunder, Research Scientist, Business Unit Mobility and Logistics, TNO, The Netherlands
Martin de Kieft, Advisor Mobility and Logistics, Applied Scientific Research Organisation - TNO, the Netherlands
James Misener, Executive Advisor, Booz-Allen Hamilton, USA
Shinji Tanaka, Institute of Industrial Science, The University of Tokyo, Japan

SS65: Massive Earthquake: Rescue and Relief Operation with ITS—Lessons learned from the Great East Japan Earthquake
Room: S320A
On March 11, massive earthquake and tsunami hit the 500km stretch of the northeast coast of Japan, which caused loss of 20,000 lives. ITS technologies significantly contributed to rescue and relief operations, collecting and disseminating traffic information. Still they could have done better, and they are further exploring how resilient mobility, information network and energy supply should be integrated in the design of communities being rebuilt. The United States also has wide experiences dealing with disasters such as hurricanes and earthquakes and various units of government in cooperation with the private sector have implemented extensive plans to handle transportation and other matters during disasters. In this
session, experiences and findings will be discussed by the experts who have led those actions.

ORGANIZER & MODERATOR
Hajime Amano, President, ITS Japan, Japan

INVITED SPEAKERS
Haruo Hayashi, Professor, Research Center for Disaster Reduction Systems, Kyoto University, Japan
Takahiro Hosono, Executive Director, Japan Trucking Association, Japan
Janet Banner, 511 Project Coordinator, Metropolitan Transportation Commission, USA
Makoto Otsuki, Senior Vice President, ITS Japan, Japan
Tadashi Yoshida, President, Smart Infrastructure Research & Development Institute Co., Ltd., Japan

THURSDAY, OCTOBER 20
8:30 a.m. – 10:00 a.m.

● SS66: The Latest Trends About Collection of Traffic Information
Room: S210A

There are some countries that are working on the trials for building an efficient platform with lower cost to support the comprehensive mobility including people and goods as well as vehicles in the urban area. One of them is to identify the position in chronological order with the probe technology, and feedback the results to the end users. This session will explain and discuss the cutting-edge technologies for vehicle information sharing and focus on the latest inviting the experts from the Asian countries.

ORGANIZER
Makoto Otsuki, Market—Promotion Group, ITS Japan, Japan

MODERATOR
Satoru Nakajo, Senior Consultant, ITS & Mobility Business Group, Mitsubishi Research Institute, Inc., Japan

INVITED SPEAKERS
Jisheng Zhang, Associate Professor, China National ITS Center, China
Seong J. Namkoong, Director, Center for Operations Analysis and Supportive Information System (OASIS), Expressway & Transportation Research Institute, Korea
Sarawit Narupti, Associate Professor, Chulalongkorn University/President, ITS Thailand, Thailand
Takahiro Ueno, Chief ITS Policy and Program Office, Road Traffic Control Division, Road Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan

● SS67: National ITS Architectures: How Are They Guiding ITS Implementation?
Room: S210B

ITS Architectures have been developed in many countries, regions and localities to guide ITS implementation. Each of these environments poses different financial, regulatory, and institutional structures within which ITS is defined, developed and deployed. Where National ITS Architectures have been developed, they primarily present a functional view of ITS that supports multiple approaches or implementations of technology. The National ITS Architectures are developed to provide ITS implementation, to leverage integration opportunities, and promote the sharing of information across transportation systems, thus realizing operational improvements and transportation system efficiencies. There are valuable insights from each of these National ITS Architectures that can make a difference to a country developing a new National ITS Architecture or to a country where the National ITS Architecture has been in existence but new ideas may make it a more valuable tool. With the varied environments within which each National ITS Architecture is developed, three questions arise:

● How are the architectures making a difference?
● How are they used to guide ITS implementations?
● How are they accommodating new initiatives such as connected vehicle or cooperative systems?

This session will bring together speakers representing National ITS Architectures in the United States, Canada, Europe, and Asia to discuss how their country’s National ITS Architectures are guiding ITS implementation and the institutional environments within which they operate.

ORGANIZER
U.S. Department of Transportation

MODERATOR
Mac Lister, Program Manager Knowledge and Technology Transfer, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation

INVITED SPEAKERS
Mac Lister, Program Manager Knowledge and Technology Transfer, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Susan Spencer, Director, Intelligent Transportation Systems Policy, Transport Canada
Jan Willem Tielrooij, Dutch Ministry of Infrastructure and the Environment, the Netherlands
Joshua Brouwer, Principal Manager, ITS Strategy Department of Transportation and Main Roads, Queensland, Australia
DongZhu Wang, Engineer, China National ITS Center, China

● SS67: Demand Models to Meet Transit Needs
Room: S210B

The key to making public transit work in mature countries is in increasing ridership, and the key to increasing ridership lies in understanding demand from both current users and current non-users and then optimizing the transit system to attract current non-users. In emerging countries the key is to make transit responsive to the overwhelming demand and use it to counter the pace of car ownership increase that threatens to outpace infrastructure development. This session will explore the issues of near real-time data collection and the aggregation and analysis of huge volumes of people movement data calibrated against surveys and other data sources and converted into demand models that can be used for optimizing transit and offering new services such as on-demand transit.

ORGANIZER & MODERATOR
Anand Paul, Global Government Industry Research Relationship Manager, IBM Research, USA

INVITED SPEAKERS
Dario Sassli Thober, Director, Von Braun Center for Advanced Research, Brazil
Balaji Prabhakar, Associate Professor Electrical Engineering and Computer Science, Stanford University, USA
Milind Naphade, Program Director, Smarter City Services and Solutions, IBM Research, USA

● SS68: The Latest Trends About Deployment
Room: S210C

Field Operational Tests (FOTs) are large-scale testing programs aiming at a comprehensive assessment of the efficiency, quality, robustness and acceptance of ICT solutions used for smarter, safer, cleaner, and more comfortable transportation solutions, such as navigation and traffic information, and advanced driver assistance. The last few years Europe has greatly invested in assessment with several pan-European FOTs being currently conducted involving public and private stakeholders from several European states. This session will bring together four pan-European FOTs funded by the European Commission: euroFOT, TeleFOT and DRIVE...
C2X2 and FOTs. The aim is to present their status and achievements as well as their underlying deployment and exploitation plans. FOT-Net, which has been in place since 2008 providing a strategic networking platform for European and international stakeholders will address its new activities namely the revision of the common FOT methodology, based on recent FOT experiences, and the set-up of new expert working groups to clarify critical topics related to the execution of an FOT.

**ORGANIZER**
Irina Silva, Project Manager, ERTICO ITS-Europe

**MODERATOR**
Maxime Flamant, Head of Sector SafeMobility, ERTICO-ITS Europe

**INVITED SPEAKERS**
Aria Etemad, Senior Research Coordinator, Ford Research & Advanced Engineering Europe, Germany
Petri Mononen, Senior Research Scientist, Technical Research Centre - VTT, Finland
Irina Silva, Project Manager, ERTICO-ITS Europe
Matthias Schulze, Senior Manager Driver Support and Warning, Daimler AG, Germany
Miguel Seisdedos, Technical Director, Inidrid Concesiones de Infraestructuras S.A., Spain

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**THURSDAY, OCTOBER 20**

10:30 a.m. – Noon

#### SS71: Linking Smarter Electric Mobility with the Smarter Grid

**Room: S210A**

This session explores the potential linkage among ITS, vehicles, and alternative fuels. Concerns regarding energy consumption and climate change are driving the development of new vehicle technologies and fuels. Electric drive vehicles of all types can be enhanced through linkages to ITS, exemplified by navigation systems that optimize routes and provide the location of nearby electric charging stations and hydrogen fueling facilities. In addition, ITS may be used in future “smart grids” to link vehicles and electricity infrastructure for storing and selling energy.

**ORGANIZER & MODERATOR**
Andreas Mai, Director Automotive North America Internet Business Solutions Group, Cisco Systems, USA

**INVITED SPEAKERS**
Mark Wayt, Vice President, Smart Grid and Energy, Duke Energy, USA
Masayuki Kawamoto, Deputy General Manager, R&D Management Division, Toyota Motor Corporation, Japan
Phil Blythe, Professor, Newcastle University, United Kingdom

#### SS72: Intermodal Public Transport Strategies: Carsharing, Bikesharing, and Ridesharing

**Room: S210B**

This session provides an international overview of intermodal public transport activities with an emphasis on carsharing, bikesharing, and ridesharing as personal mobility strategies with a low carbon footprint. Strategies and technologies such as transit signal priority and integrated Corridor Management may also be addressed. Such modes can help to connect people with public transit and encourage greater public transport use. Growth in these modes is predicted given greater emphasis on climate mitigation strategies, livability, and health.

**ORGANIZER**
ITS America’s Sustainable Transportation Working Group

**MODERATOR**
Jane White, ITS Program Manager, Los Angeles County Department of Public Works, USA

**INVITED SPEAKERS**
Susan Shaheen, Honda Distinguished Scholar in Transportation, ITS-Davis & Co-Director, Transportation Sustainability Research Center (TSRC) University of California, Berkeley, USA
Svend Tefting, Project Manager, North Denmark Region, Denmark
Sean O’Sullivan, Managing Director, Avego, USA
Alan Stannard, Business Development Director Strategic Projects, Serco, United Kingdom

#### SS73: The Public Acceptability of Road Pricing

**Room: S210C**

The proposal is for a session on The Public Acceptability of Road Pricing. This would cover research from a number of sources world-wide demonstrating that, contrary to popular opinion (and even to opinion in the ITS industry), road pricing is indeed acceptable to the majority of the public, provided certain conditions are met, including: revenue neutrality, or alternatively, that revenues are invested in transport; knowledge and experience of road pricing; low overheads/running costs

**ORGANIZER**
Jennie Martin, Secretary General, ITS UK, United Kingdom

**MODERATOR**
John Walker, Honorary Secretary, ITS United Kingdom Road User Charging Interest Group, United Kingdom

**INVITED SPEAKERS**
Carl Hamilton, Royal Institute of Technology, Stockholm, Sweden
Bruce Schaller, Deputy Commissioner for Planning & Sustainability, New York City Department of Transportation, USA
Eddie Lim, Singapore Land Transport Authority, Singapore
Johanna Zmud, NuStats, LLC, Austin, Texas, USA

#### SS74: Solution of Transportation Problems in Asia-Pacific Megacities

**Room: S210D**

It is necessary for transportation system in the sustainable society to meet safety, environment, efficient and user friendly. To realize the system, it is important to develop and deploy integrated systems include public transportation system and traffic management system with easy accessibility of traffic information for users. In this session, policy makers from ITS advanced or advancing countries/areas share their experiences about success and challenging examples, and discuss to solve the transportation problems in Asia-Pacific Megacities.

**ORGANIZER**
Nobukazu Kanesaki, Director, ITS Japan, Japan

**MODERATOR**
Mong Koe Sing, President, ITS Singapore, Singapore

**INVITED SPEAKERS**
Norm Pidgeon, Principal, Nous Group, President, ITS Australia, Australia
Mohammed Hikmet, Managing Director, HMI Technologies Limited, New Zealand (Invited)
S.K. Jason Chang, Professor, National Taiwan University, Vice-President, ITS Taiwan, Chinese-Taipei
Sam Pang, President, ITS Hong Kong, Hong Kong (Invited)
A Speaker from Korea

**ROOM: S2100E**

Central to the transportation workforce development issue is the need to educate and train transportation professionals and paraprofessionals for the 21st century. ITS experience to date has shown that individuals working in the ITS area must deal with the transportation system as a whole and must acknowledge broader technological, economic, environmental, and societal goals. Moreover, ITS deployment must consider the need of skilled workers who are able to understand the merits, challenges, and institutional concerns associated with ITS deployment. Questions of interest are: What have we learned around the World in the last 10 years about the core competencies and skills required of professionals and paraprofessionals involved in planning, developing, implementing and maintaining ITS initiatives? What education and training activities have been employed to prepare these members of the transportation workforce and what have been the successes, challenges, and lessons learned in Europe, the Asia Pacific and the Americas. This session will include a panel discussion focusing on these and other questions related to ITS education and training and their importance in addressing transportation workforce development issues. The panel will include an international group of educators who have been instrumental in the development and evaluation of ITS education, training and other learning activities in all three Regions.

**ORGANIZER**
John Collura, Center Director and Professor of Civil and Environmental Engineering, University of Massachusetts Transportation Center, USA

**MODERATOR**
Mac Lister, Program Manager Knowledge and Technology Transfer, ITS Joint Program Office,
ROOM: S220A
Traffic management and control measures as a means to cut down fuel consumption and emissions in road traffic have been widely acknowledged, especially in combination with vehicle-to-infrastructure interaction. So far, only few of the many promising ideas have been realized in real-life, while road operators have not been actively involved yet. The aim of this session is to present which applications, systems and services are already available today or are currently under development and will be available in near future. A number of European institutes have taken the lead in this domain by preparing field trials, which allow to extend the discussion quantitatively by means of realistic figures. Similar initiatives exist in the USA and in Japan. This session will bring together: experts form the different region, as well as stakeholders from industry, government/local authorities and knowledge institutes allowing them to share and express their vision in order to set the research agenda for ongoing and future activities in a global perspective.

ORGANIZER
Jaap Vreeswijk, Traffic Engineering Researcher, Sub-Project Leader in eCoMove for ecoTraffic Management and Control, Pekk Traffic

MODERATOR
Hesham Rakha, Virginia Tech Transportation Institute, USA

INVITED SPEAKERS
Siebe Turkmia, Product Manager Research, Pekk, the Netherlands
Robert Ferlis, U.S. Department of Transportation, (Connected Vehicle-AERIS), USA
David Rylander, Project Manager, Volvo Technology, Sweden
Takashi Oguchi, Professor, Tokyo University, Japan

ROOM: S220B
One of most significant developments in the public transport industry is in the area of “open data.” The availability of open data is revolutionizing the way that riders can access information regarding public transport services. While the number of U.S. agencies with open data has increased markedly over the past two years, other agencies worldwide have embraced opening their data for the development of real-time and other transit applications. For example, in 2010, Transport for London began to provide free access to data which was either unavailable to the public or its use was restricted. This session will explore the open data approach by which individual mobile and Internet application developers can use transit agency data to develop applications. Further, the session will describe the use of open data both from the perspective of the resources required by an agency to participate in an open data program and the benefits to customers while saving the costs that would be necessary for the agency to develop information applications in-house.

ORGANIZER & MODERATOR
Carol Schweiger, Vice President, TransSystems Corporation, USA

INVITED SPEAKERS
Timothy Moore, Website Manager, Bay Area Rapid Transit (BART), USA
Gzim Oçakoglu, Head of Section, Unit C3 “Intelligent Transport Systems,” Directorate-General for Mobility and Transport (DG MOVE), European Commission
J.J. Hong, Managing Director, The Third Approach Management Consultants Taipei, Chinese-Taipei

ROOM: S220C
Cities around the world are facing the challenges created by increasing harmful emissions from transport and the adverse effect that this can have, not only on public health but on ensuring sustained foreign investment in competition with cities that have stronger green environmental agendas. As we emerge from economic recession and traffic volumes creep up inexorably this session will focus on the demonstrated effectiveness and potential of pricing of road space based on the emissions class of vehicles to incentivize the use of lower emission vehicles. Case studies and research from practitioners and experts from cities across Europe (London and Amsterdam), South America (Santiago de Chile) and SE Asia (Singapore and Seoul) will be presented to show the different facets of this profound and far-reaching evolution of road user charging—an attractive new emerging policy that addresses vehicle emissions that can deliver demonstrable health benefits and that is publicly and politically acceptable. The session will explore examples of this policy in different transportation contexts, focusing on different target vehicle categories and operational feasibility and clearly emphasizing the relative success of each implementation, its transferability to other regions globally and contributions to reduction in harmful emissions.

ORGANIZER
Jennie Martin, Road User Charging Interest Group, ITS United Kingdom

MODERATOR
Andrew Pickford, Founder and Immediate Past Chairman of the ITS United Kingdom Road User Charging Interest Group and Director of Transport Technology Consultants, United Kingdom

INVITED SPEAKERS
Margaret Bell, Science City Professor of Transport and the Environment, Newcastle University and chair of ITS (UK) Smart Environment Interest Group, United Kingdom
Marcia Pincus, Program Manager, Environment (AERIS) and ITS Evaluation, U.S. Department of Transportation, USA
Pablo Alard, Director Ejecutivo, Observatorio de Ciudades UC, Facultad de Arquitectura, Universidad Católica de Chile, Santiago de Chile, Chile
Germa Bakker, Senior Policy Advisor, Infrastructure, Traffic & Transport, City of Amsterdam, the Netherlands
Seung-Hwan Lee, Honorary Professor, Ajou University, Korea
Eddie Lim, Land Transport Authority, Singapore

ROOM: S220D
In all 3 regions, PAVASYOURDRIVE insurance is growing as a strategy for insurance suppliers to bill based on actual usage. This special session will present the state of acceptance by consumers in the different regions and will include regulatory requirements. The technologies for collecting and transmitting mileage and related user travel data utilized by each company will be discussed. Mileage based insurance as a congestion mitigation strategy will be considered.

ORGANIZER
Harry Voccola, Senior Vice President, Government & Industry Affairs, NAVTEQ, USA

MODERATOR
Scott J. McCormick, President Connected Vehicle Trade Association, USA

INVITED SPEAKERS
Steven Craig, Assistant President, Verisk Analytics, USA
Jack Pierce, Business Development Director, Applsys Technologies, USA
Nino Tarantino, Chief Executive Officer, Octo Telematics North America, USA
Geoff Hakel, Group President – Insurance, TransUnion, USA

ROOM: S220E
The Session will explore existing traffic data sources and agency data quality and real-time update requirements to meet the needs of system performance management, emergency/incident response and travel time...
SPECIAL INTEREST SESSIONS

information. Multi-jurisdictional data sharing and join data system funding for integrated corridor management will be discussed.

ORGANIZER & MODERATOR
Hamed Benouar, Vice President of Sales and Business Development, Sensys Networks, USA

INVITED SPEAKERS
Koorosh Olyai, Assistant Vice President, Mobility Programs Development, Dallas Area Rapid Transit, USA
Jiasheng Ye, Vice President, Anhui Keli Information Industry Co., Ltd., China
Amaury Cornélis, TISA Coordinator, Traveller Information Services Association (TISA), Belgium
Phillip Walsh, Director Australasia, Singapore and Malaysia, Sensys Networks, Australia

SS81: Distracted Driving
Room: S220F

Distracted driving is a “hot” issue in the U.S. and Europe, resulting in the establishment of the Human Factors Working Group under the U.S.-E.U Bilateral Agreement on ITS. This Working Group is dedicated to addressing key issues surrounding driver distraction. In 2010, the Working Group convened a Focus Group consisting of members from the U.S. and Europe to develop a consensus definition for driver distraction and establish top research needs. However, distraction can be viewed as a subset of inattention that relates to a wider range of factors including, daydreaming, the “looked-but-failed-to-see” phenomenon, fatigue/drowsiness, alcohol and drug impairment. Recent research in naturalistic driving studies and in-depth crash analysis has identified driver inattention as one of the leading causes of road crashes (the U.S. reports 5,474 people were killed due to distracted driving in 2009). This Special session will provide an update on this research as well as the progress made by the Human Factors Working Group under the U.S.-E.U Bilateral Agreement on ITS with specific attention to the development of a common taxonomy of inattention and driver distraction.

ORGANIZER
U.S. Department of Transportation

MODERATOR
Chris Monk, Lead Research Psychologist, Federal Highway Administration, U.S. Department of Transportation, USA

INVITED SPEAKERS
Richard Hanowski, Center Director, Virginia Tech Transportation Institute, USA
Alan Stevens, Transport Research Laboratory, United Kingdom
Trent Victor, Volvo Technology, Sweden
Naohisa Hashimoto, Researcher, National Institute of Advanced Industrial Science and Technology (AIST), Japan

THURSDAY, OCTOBER 20
1:30 p.m. – 3:00 p.m.

SS82: 19th ITS WC in Vienna 2012
Room: S210A

The 19th ITS World Congress 2012 in Vienna with its theme of “Smarter on the Way” will go beyond exhibitions to offer extended demonstrations of intelligent transportation applications. These demonstrations will not only show technological progress but also an ambitious future where ‘customers’ will have a hands-on feeling and experience with the new ITS functions and performance. This World Congress will concentrate specifically on the interoperability of different applications and building connectivity and networked applications in order to enhance value for users of vehicles and services and the efficiency and safety of the transportation network. There will be a focus on being certain that all stakeholders in the transport system can use these applications in a comfortable and efficient manner. Also, this World Congress will target the younger generation as many ITS applications under development will take some years to deploy, and it is necessary, therefore, to stimulate the interest of future users of the transport systems and foster demand for these applications.

ORGANIZER & MODERATOR
Reinhard Pflieg, Chair of Host Organizing Committee ITS Vienna 2012, AustriaTech, Austria

INVITED SPEAKERS
Patrick Mercier-Handisyde, Head of the Urban Mobility Sector, European Commission, DG Research & Innovation (invited)
Vincent Blervaque, ITS Vienna 2012 IPC Chairman, Director of Development and Deployment, ERTICO-ITS Europe, Belgium
Ingolf Schädler, Host of ITS Vienna 2012, Austrian Federal Ministry of Transport, Innovation & Technology, Austria
Alexander Frötscher, Demonstration Programme Coordinator ITS Vienna 2012, AustriaTech, Austria,
Josef Czako, Group Director International Business Development, Kapsch TrafficCom & Chair IRF Policy Committee on ITS, Austria
John Chipperfield, CTO Traffic Management, SWARCO, United Kingdom
Technical / Scientific Sessions are paper sessions targeted at ITS professionals and scholars to learn more from the authors about the technical details of the latest transportation technologies, as well as progress and results of vital research programs, field tests, and other initiatives worldwide. Nearly 140 technical and scientific sessions will be offered addressing an extensive portfolio of ITS topics.

MONDAY, OCTOBER 17
1:00 p.m. – 2:30 p.m.

● TS01: Return on Investment
CANCELLED

● TS02: Technology Solutions 1: Next Generation Travel Information
Room: S220B
MODERATOR
Keecho Choi, Ajou University, Korea

PAPERS
3014: A Study of Applying an Information Filtering Scheme to the Positioning System Using Address Information on Web and Spot Information in Cityscape (Tomotaka Nagasao, Kanto Gakuin University, Japan)
3048: Dead-Reckoning Method Using the Spring Model (Yuichi Hanada, Fujitsu Laboratories, Ltd., Japan)
3082: Estimation of Urban Arterial Real-Time Travel Speed Based on Multi-Source Data Fusion (Weili Zhang, NEC Labs, China)

● TS03: Development in Freight Operations
Room: S220C
MODERATOR
TBD

PAPERS
1223: Transition from Voluntary to Compulsory Use of Electronic on Board Recorders for Enforcement of Hours of Service (Alex Capelle, Continental Automotive, USA)
1348: Information Technology in Transportation of Cargo: The Spread of the Internet (Maria Dolores Villegas Ruiz, UFRJ, Brazil)
2002: Open in Vehicle Platform—From ETC to EOBR to Remote Diagnosis (Michael Müller, Continental Automotive-GmbH, Germany)

● TS04: Roadway Detectors & Traffic Data for Effective ITS
Room: S220D
MODERATOR
Jian Xing, Express Highway Research Foundation of Japan, Japan

PAPERS
1333: Car Following Models—Review and Future Potentials (Yiming He, Clemson University, USA)
1361: Network Topology Based Vehicle Sensor Location for Dynamic Traffic Networks (Sushant Sharma, NEXTRANS Center, Purdue University, USA)
3253: A Tentative Check on Detector Error Based on Flow Rate Difference (Tien-Pen Hsu, National Taiwan University, Chinese-Taipei)
3259: A Study on the Application of the Traffic Flow Model Using the Road Detector Data (Tsutomu Kato, University of Tsukuba, Japan)

● TS05: ITS Based Safety Systems
Room: S220E
MODERATOR
Yoshikazu Noguchi, President, AW Software Co., Ltd., Japan

PAPERS
1146: Wrong-Way Vehicular Detection Proof of Concept (Damien Rose, Gannett Fleming, Inc., USA)
2137: Innovative Use of the CUG Monitoring and Dashboard Reporting on Nigerian Roads for Road Safety (Osita Chidoka, Federal Road Safety Corps, Nigeria)
3139: Research on Mechanisms to Provide Attention-attracting Information Effective in Preventing Rear-End Collisions (Yosuke Kawasaki, Oriental Consultants Co.C Ltd., Japan)

● TS06: Infrastructure Protection Using ITS
Room: S220F
MODERATOR
Bennett Pierce, Battelle, USA

PAPERS
1149: Role of Broadband Communication in Management and Efficient Analysis of Acoustic Emission Data from Transportation Infrastructure Assets (Devendra Parmar, Hampton University, USA)
1218: Continuous Road Damage Detection Using Regular Service Vehicles (Christoph Mertz, Carnegie Mellon University, USA)
1324: Identification of Causal Factors of Bridge Failure through Fault-Tree Analysis and Intelligent Sensor Solutions (Caitlyn Davis-McDaniel, Clemson University, USA)
1350: Wire Based Detection of Corrosive Salts in Concrete (Tyler Ley, Oklahoma State University, USA)
1372: Bridge and Pavement Deterioration Due to Repeated Overweight Truck—A Framework for Technology and Policy Solutions (Mashur Chowdhury, Clemson University, USA)

● TS07: Advanced Traffic Management Systems
Room: S210D
MODERATOR
John Hibbard, Atkins, USA

PAPERS
1022: Evaluating an Urban Freeway Corridor for Advanced Traffic Management (ATM) Application Feasibility (Brian Hoef, RTC/FAST, USA)
1034: Transportation System Management and Operation (TSM&O): Laying the Groundwork for Active Arterial Management in Southeast Florida (Melissa Ackert, Florida Department of Transportation, USA)
1056: How to Design an Active Traffic Management System (Terry Haukom, Mn/DOT, USA)
1184: Active Traffic Management for Urban and Rural Corridor Applications in Virginia (Constance Sorrell, Virginia Department of Transportation, USA)
2145: TraffiX, the Interface Standard for Traffic Management Systems (Jos Vrancken, TU Delft, the Netherlands)
TECHNICAL / SCIENTIFIC SESSIONS

**TS17: Models and Architecture for Roadway Network Management**

**Room: S320H**

**MODERATOR**
Craig Pickering, Booz Allen Hamilton, USA

**PAPERS**
1312: Impact of User Diversion Behavior on Work Zone Operation Optimization (Ning Yang, IBM Group, USA)
1313: Deploying IST Subarchitectures over IMS (4G NGN) (Claudio Luiz Marte, Polytechnic School—University of São Paulo (USP), Brazil)
2256: A New Traffic-Mining Approach for Unveiling Typical Global Evolutions of Large-Scale Road Networks (Fabien Moutarde, Mines ParisTech, France)
3266: A Computing Model for Real-Time Traffic Data Processing (Lei Zhang, IBM, China)

**TS18: Pedestrian Safety**

**Room: S330G**

**MODERATOR**
Sadayuki Tsugawa, Meijo University, Japan

**PAPERS**
2165: Active Pedestrian Protection by Surround Sensor Technologies (Ruediger Walter Henn, Robert Bosch GmbH, Germany)
3054: Detecting Pedestrians Using an Advanced Local Binary Pattern Histogram (Yunxion Cao, Panasonic Corporation, Japan)

**TS19: Coordinating Multimodal Travel Options**

**Room: S331A**

**MODERATOR**
Marika Jenstav, WSF Sverige AB, Sweden

**PAPERS**
1086: Enhancing Commuter Travel Choices through a Coordinated Transit, Ridesharing and Traffic Management Strategy (Robert Arnold, FHWA, USA)
2048: Automating Urban Transport Systems—Overview of Current Developments and Future Outlook (Tom Voge, Dornier Consulting, Belgium)
2150: Challenges for Stockholm-Arlanda as Future Airport—Enabling Intermodal Passenger-Centred Digital Solutions for a Sustainable Door-to-Door Travel (Mikael Lind, Viktoria Institute, Sweden)
2168: Promoting Public Transport through ITS Towards Sustainable Multimodal Transports in Greater Gothenburg Region (Susanne Planath, Swedish Transport Administration, Sweden)
2204: Transport Management in Emerging Cities—The Integration of ITS in Public Transport (Thomas Richter, Technische Universität Berlin, Germany)

**TS20: Technology Solutions 2: Next Generation Travel Information**

**Room: S331B**

**MODERATOR**
Katja Schechtner, AIT-Austrian Institute of Technology, Austria

**PAPERS**
1033: Intelligent Cell Phone Restriction Based on Driver Identification Profiles (Donald Grimm, General Motors Research and Development Center, USA)
1343: Real-Time Short-Term Travel Time Prediction: A Case Study Based on Bluetooth Data (Wenxin Qiao, University of Maryland, USA)
2041: A Full-Scale Perspective on Co-Modal Travel Services, Route by Route (Peter Wessel, InmIND Scandinavia AB, Sweden)
2073: Multipath Mitigation with Elevation-Enhanced Maps (Carolina Piñana-Diaz, University of Murcia, Spain)
2155: An Optimized Grid-Based Geocasting Method for Cellular Mobile Networks (Gordian Jodlauk, Ericsson Research, Germany)

**TS21: Positioning for Cooperative Mobility**

**Room: S331C**

**MODERATOR**
Jens Peder Kristensen, KeyResearch, Denmark

**PAPERS**
129: Relative Positioning for Vehicle-to-Vehicle Communications-Enabled Vehicle Safety Applications (Chaminda Basnayake, General Motors Global Research and Development, USA)
2103: GNSS-Based Relative Localization for Urban Transport Applications within the Covel Project (Marcus Obst, Chemnitz University of Technology, Germany)
2164: Relative Positioning of Vehicles Using High Sensitivity GPS Receivers: On Accuracy Study (Jan Schulz, German Aerospace Center-DLR, Germany)
3045: Characteristics of Passive RFID Tags Put Underground in a Road Pavement (Naoruishi Yamada, University of Tokyo, Japan)
3084: Evaluation Method of V2V Communication Community by Mutual Diagnostic Network (Toshiro Ito, Daihatsu Motor Co., Ltd., Japan)

**TS22: Driver Assistance Systems**

**Room: S331D**

**MODERATOR**
Kyung-Soo Chon, Seoul National University, Korea

**PAPERS**
2053: Enhanced Perception Shared by Automotive Safety Applications Supporting Active Intervention—The Interactive System Overview (Angelos Amidis, National Technical University of Athens, Greece)
3040: Attention-Attracting Facilities Utilizing Phototaxis (Perception of Self-Motion Induced by Visual Sensation) (Kouji Yamamoto, Central Nippon Expressway Co., Ltd., Japan)
3051: Design and Evaluation of Transitional Process of Platooning of Heavy-Duty Vehicles (Takeki Ogitsu, Keio University, Japan)

**TS23: Incident Detection and Management**

**Room: S220A**

**MODERATOR**
Joseph Lam, Delcan International Corporation, Canada

**PAPERS**
1025: An Interactive, Web-based, Mobility Performance Measures Application Utilizing Probe Data (Michael Pack, Center for Advanced Transportation Technology Laboratory, USA)
1136: Development of Incident Management Performance Measures for the Illinois State Toll Highway Authority (Jeff Hochmuth, Wilbur Smith Associates, USA)
3003: A Study on the Consistent Methods & Field Conditions for Performance Evaluation to Vehicle Detecting System (Yoon-Mi Shin, ITS Korea, Korea)
3262: Study on the Policy Requirements for Deploying Co-operative Systems in Korea (Sanghyun Lee, Research, Strategy & Planning Department, ITS Korea, Korea)

**TS24: Business Cases**

**Room: S220B**

**MODERATOR**
Carl Kuhnke, ITS Canada, Canada

**PAPERS**
1065: The Impact of a Non-Violation Business Model on a Greenfield All Electronic Toll (AET) Operations (Matthew Russell, Transroute, Canada)
1148: The Future of 511: Revenue Generation (Matt Hamill, Global-5 Communications, USA)

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*Tuesday, October 18*

8:30 a.m. – 10:00 a.m.
1159: ITS: Post Implementation Strategies for Success (Jatinder Hayner, EPCOR Technologies, Canada)
1168: Connected Vehicle—Driving for Change in the Way Transportation is Funded and Delivered (James Barbaresco, HNTB, USA)
1048: Connecting Freight and Transit to the Connected Vehicle (James Misener, Booz Allen Hamilton, USA)

**TS25: Technology Solutions 3: Next Generation Travel Information**

*Room: S220C*

**MODERATOR**
Ryoosuke Ando, Toyota Transportation Research Institute, Japan

**PAPERS**

1019: Internet Access for Travelers and Emergency Management (Brian Kopp, The Semaphore Group, USA)

1050: Overcoming the Limitations of Real Time Video Distribution (Ranzy Whiticker, Gresham Smith and Partners, USA)

1123: The Use of Messages of Text in the Operation of the Traffic in São Paulo (Olimpio Barros, CET, Brazil)

3124: Prediction of Travel Time Trend on Urban Expressway Using Vehicle Occupancy (Ryo Hibino, Meijo University, Japan)

**TS26: Intersection Safety: Dilemma Zone & Gap Acceptance**

*Room: S220D*

**MODERATOR**
Robert Rausch, Transcore, USA

**PAPERS**

1313: A Stochastic Dilemma Zone Protection Algorithm Based on the Vehicles’ Trajectories (Pengfei Li, Kentucky Transportation Center, USA)

1344: Reactive-Driving Agent Based Approach for Modeling Gap Acceptance Behavior (Asma Zohdy, Virginia Tech Transportation Institute, USA)

1371: Automated Road Safety Analysis Using Computer Vision Techniques (Tarek Sayed, University of British Columbia, Canada)

1374: Wide Area Detection for Reducing Dilemma Zone Incursions at Isolated High Speed Intersections: Opportunities and Challenges (Anuj Sharma, University of Nebraska Lincoln, USA)

3098: HMI Concerning Vehicle Infrastructure Cooperative Systems (Yuki Yamada, Toyota Motor Corporation, Japan)

**TS27: Regional Operations Considerations**

*Room: S220E*

**MODERATOR**
Gregg Letts, AECOM, USA

**PAPERS**

1032: Traffic Incident Management—A Gateway to Regional Transportation Operations (Richard Beaubien, Hubbell, Roth & Clark, USA)

1157: The Traffic Incident Management Enhancement (TIME) Program—A Foundation for Managing Transportation System Emergencies in Wisconsin (Steven Cyra, HNTB Corporation, USA)

1217: Applications of Social Network Analysis in Regional ITS Developments (Xi Zou, STV Incorporated, USA)

1219: Adaptive Intelligent Transportation System for Metropolitan Areas (Amrinder Arora, NTELX, USA)

2083: A Distributed Systems Architecture Integrating Multiple Traffic Management Centres in Sweden (Andrew Green, Nicander Limited, United Kingdom)

**TS28: Incident Response Strategies**

*Room: S220F*

**MODERATOR**
Charles Wallace, Telvent, USA

**PAPERS**

1005: The Georgia Towing and Recovery Incentive Program (TRIP) (Gary Millisaps, Delcan Corporation, USA)

1075: Strategic Patrol Vehicle Location-Allocation Model for Freeway Incident Responses (Shanjian Zhu, University of Maryland, USA)

1087: Smartphone Application for Road Rangers (Robert Heller, Southwest Research Institute, USA)

1172: Using Workflow Management Techniques to Manage Service Patrol Contracts (Rossi Gaudio, AECOM Technical Services, Inc., USA)

1189: Evaluation of the Towing and Recovery Incentive Program (TRIP) (John Hibbard, Atkins, USA)

**TS29: Regional Deployment Strategies**

*Room: S320A*

**MODERATOR**
Tom Alkim, Rijkswaterstaat, Centre for Transport and Navigation, the Netherlands

**PAPERS**

1121: Regional Operations: Arizona Operations Action Plan (Phoenix Metropolitan Region) (Nicolaoa Swart, Maricopa County DOT, USA)

2013: Harnessing Apartment Sales Portals to Mobility Management (Heidi Saarinen, Strafica, Finland)

2052: Developing Gothenburg as a Livable Region—Using ITS in a 5700-M6 “Big Dig” Infrastructure Program (Lennart Olsson, Swedish Transport Administration, Sweden)

2066: Towards Network Operations in the Tampere Region (Mika Kulmala, City of Tampere, Finland)

**TS30: Deploying ITS to Optimize Transit Operations and Maintenance**

*Room: S320B*

**MODERATOR**
Motohiro Fujita, Nagoya Institute of Technology, Japan

**PAPERS**

3033: An Intelligent Patrol Management System for Public Transport (Yubing Wu, Information Center of Jinan Public Transit Group, China)

3052: Design of Computer Network Based Intelligent Bus Maintenance System (Shuliang Pan, Shandong University, China)

3083: Evaluating the Use of Graphical Displays for Train Operation Information in the Tokyo Subway (Satoru Mazzono, Tokyo Metro Co., Ltd., Japan)

3258: Urban Bus Transport Job Scheduler (Sajjad Salehi, Sheyk Bahae University, Iran)

**TS31: Freight Logistics**

*Room: S320D*

**MODERATOR**
Michael Sutton, Department of Infrastructure and Transport, Australia

**PAPERS**

1008: Developing and Information Broker System for Coordinating an Oversize Transportation Information Network (Lawrence Henesey, Blekinge Institute of Technology, Sweden)

1375: Intelligent Logistics Systems—IILS (Gunnar Stefansson, University of Iceland, Iceland)

2151: Some Regulatory Issues of Heavy Vehicles Control (Roza Akhmadieva, Scientific Center of Children Personal and Social Safety, Russia)

2232: The Potential Effects of Freight Intelligent Transportation Systems on Transport Operations (Gunnar Stefansson, University of Iceland, Iceland)

**TUESDAY, OCTOBER 18**

8:30 a.m. – 10:00 a.m.

**TS32: Traffic Surveillance Cellular Phone Network**

*Room: S320D*

**MODERATOR**
Hanbyoeg Cho, ETRI, Korea

**PAPERS**

1301: Deriving Cross-Region Commuting Traffic and Potential Transit Demand Using Cellular Phone Position Data (Steve Schrock, University of Kansas, USA)

1349: Deriving Transportation Mode Shares on Urban Freeways Based on Mobile Phone Data (Yi Zhang, University of Wisconsin—Madison, USA)

3240: Cell-ID Based Route Estimation Method for Long Term Travel Behavior Survey (Koichi Yagi, Traffic Hazard Technology, Japan)

**TS33: V2I Communication: Evaluation and Assessment**

*Room: S320E*

**MODERATOR**
Andras Csapeiszky, ERTICO-ITS Europe

**PAPERS**

2018: Post-Processing Software for Large-Scale Field Operational Test Data (Sami Koskinen, VTT-Technical Research Centre of Finland, Finland)
TECHNICAL / SCIENTIFIC SESSIONS

2068: Infrastructure-Assisted Communication for Car-to-X Communication (Long Le, NEC Laboratories Europe, Germany)

2203: Result Assessment for User Acceptance and Safety Evaluation on Motorways with IV Communication (Philipp Glika, Technische Universität Berlin, Germany)

3001: 250Mb/s Fiber Optic Transmitter and Receiver ICs for Next-Generation Automotive Networks (Won-Sook Oth, Korea Electronics Technology Institute, Korea)

3005: A Comprehensive Evaluation Process of V2X Applications Using Real and Virtual Environments (Takahisa Yamashiro, DENSO Corporation, Japan)

● TS34: Human Factors
  Room: S320F
  MODERATOR
  Jianqiang Wang, Tsinghua University, China
  PAPERS
  1355: Human Factors and Systems Engineering of a Camera/Video Imaging System (Gregory M. Fish, Virginia Tech Transportation Institute, USA)
  1362: Comprehension of Advanced Collision Warning System Displays (Emmanuel Robinson, Westat, USA)
  3228: Evaluation of Haptic Velocity Guidance Assistance System (Feilong Yin, Tokyo University of Agriculture and Technology, Japan)
  3230: Evaluation of Driving Behavior at Remote Control of Vehicle at Low Speed (Manabu Omae, Keio University, Japan)
  3237: Verification of Driving Workload Using Vehicle Signal Data for Distraction-Mimized Systems on ITS (Shinichiro Sega, DENSO IT Laboratory, Inc., Japan)

● TS35: Advanced Sensor Technology: Next Generation Travel Information
  Room: S320G
  MODERATOR
  Jean-Michel Henchoz, Denso Automotive Deutschland GmbH, Germany
  PAPERS
  1341: Analysis of Vehicle Detection Rate for Bluetooth Traffic Sensors: A Case Study in Maryland and Delaware (Elham Sharifi, University of Maryland, USA)
  3214: Traffic Condition Forecasting System by Floating Car Data with Data Mining Method (Tetsuo Yamamoto, Sumitomo Electric Industries, Ltd., Japan)
  3229: Lane Marking Recognition for Constructing a Multi-Information Map (Yuki Kemuriyama, Hirosaki University, Japan)

● TS36: Highway Cruise and Lane Changing Assist
  Room: S320H
  MODERATOR
  Kazumitsu Kushida, Honda Motor Co. Ltd., Japan
  PAPERS
  1081: Highway Capacity Increases from Cooperative Adaptive Cruise Control (Steven Shladover, University of California, Berkeley, USA)
  3041: Botts’ Dots Marker Detection Method Using Cumulative Hough Transform (Kosuke Yoshimi, NEC Corporation, Japan)
  3060: Development of Blind-Spot Monitoring and Assist Technology for Lane Changes Using All-Around Monitoring System (Tetsuo Yamamoto, Fujitsu Ten Limited, Japan)
  3073: Development of Quantitative Evaluation Index for Lane Change Behavior Based on Omnidirectional Risk Detection (Yuuru Yamakage, Fujitsu Laboratories, Ltd., Japan)
  3203: Study on Longitudinal Control and Guidance System for Lane Change Assistance in Highway Using Driving Simulator (Liming Wan, Tokyo University of Agriculture and Technology, Japan)

TUESDAY, OCTOBER 18
10:30 a.m. – Noon

● TS37: Program Evaluation and Access to Results
  Room: S320B
  MODERATOR
  Marshall Elizer, Gresham, Smith and Partners, USA
  PAPERS
  1091: Evaluation of Rural Safety Innovation Program ITS Grants—Preliminary Results (Alan Pate, Battelle, USA)
  1115: Report on the U.S. Department of Transportation Workshop on the Evaluation of Intelligent Transportation Systems (Kathryn Wochinger, Noblis, USA)
  1133: Offering Users an Innovative Home Page to Access ITS Information, Including New Mapping and Tag Cloud Functionality (Elizabeth Greer, Noblis, USA)

● TS38: User Needs 1: Next Generation Travel Information
  Room: S320C
  MODERATOR
  Brian Nugus, Royal Automobile Club of Victoria (RACV), Australia
  PAPERS
  2033: Requirements and User Needs for an Open Travel Information Platform in Cities in Europe, China, and Brazil (Thomas Whitelaw Christensen, KeyResearch, Denmark)
  3165: User Survey of Effectiveness of Road Traffic Information for Drivers (Satoru Nakamura, National Institute for Land and Infrastructure Management, ITS Division, Japan)
  3166: Users Interests Analysis for Personalized Traffic Information Service (Yuhe Zhang, Hitachi Research & Development Corporation, China)

TUESDAY, OCTOBER 18
10:30 a.m. – Noon

● TS39: Traffic Flow Prediction & Estimation
  Room: S320D
  MODERATOR
  Nan Zou, Shandong University, China
  PAPERS
  2210: Adaptive Prediction of Traffic Flow into a Motorway Network (Marcel Valé, Trinité Automation, the Netherlands)
  3207: Incorporating Inclement Weather Impacts on Traffic Estimation and Prediction (Hyung Jun So, Korea Road Traffic Authority, Korea)

● TS40: Truck Parking
  Room: S320E
  MODERATOR
  Michael Müller, Continental Automotive, Germany
  PAPERS
  1066: FMCSA’s Research & Development in Truck Parking (Quon Kwan, Federal Motor Carrier Safety Administration, USA)
  1221: Smart Park: Truck Parking Field Operation Test Results (Alan Chachich, Breakthrough NPD, USA)
  2134: Introduction of Intelligent Truck Parking—Some Aspects from a National Perspective (Thomas Sjöstrom, Swedish Transport Administration, Sweden)
  2141: System for Managing Truck Driver’s Work and Rest Schedules (Madis Sassiad, FocusIT, Estonia)

TUESDAY, OCTOBER 18
10:30 a.m. – Noon

● TS41: Protocols and Evaluations for V2V Communication
  Room: S320F
  MODERATOR
  Masashi Satomura, Honda R&D Co. Ltd, Japan
  PAPERS
  1171: An Adaptive DSRC Message Transmission Rate Control Algorithm (Aaron Weinfield, DENSO International America, Inc., USA)
  1325: Performance Analysis of Vehicular Ad hoc Networks in Taxi Systems (Wei Lu, University of Tennessee, USA)
  3004: A Back-Off Technique for Packet Collision Avoidance in Vehicular Communication Systems (Rinara Woo, Kyungpook National University, Korea)
  3010: A Propagation Path Loss Model for NLOS Vehicle to Vehicle Communications at an Intersection—An Improvement of Empirical Path Loss Model Based on Theoretical Analysis (Ippei Sugae, Aisin Seiki Co., Ltd., Japan)
  3121: Performance Evaluation of DS/SS Inter Vehicle Communication System (Hiroaki Sato, Tokyo University of Science, Japan)
A Study of Defining Functional Requirements of The Radio Reflection Countermeasure for ETC

A Study on the Development of the Portable Malfunction Sniffing—A New Approach for On-Development of Car Navigation System Based on Limited, Japan)

Kuthy Region Council of Governments, USA)

Nakagawa Expressway Company Ltd, Japan)

Structure Concept (TRAFIKVERKET) ITS Action Plan for the Rail Sector Deployment, Operations and Maintenance (Projects (Mid Region Council of Governments (Transportation Planning Process at the Mid Region

Hassan Michigan Defense Center, USA

Sara Blackmer, Michigan Defense Center, USA

MODERATOR

Norman Pidgeon, ITS Australia, Australia

Robert Rausch, National Center for Accessible Transportation, USA

Irina Constantinescu, ITS New Zealand, New Zealand

Eric Labrie MODERATOR

TS42: Tolling System Design
Room: S320G

PAPERS

3015: A Study of Defining Functional Requirements of Maintenance System for the SMART Tolling (Yu Kyung Park, ITS Korea, Korea)

3072: Development of Optimal Toll Plaza Design based on ETCS Utilization (Eun Joo Hong, ITS Korea, Korea)

3104: Introduction of Automatic Toll Payment System and Remote-Control Monitoring Board (Tomoyuki Nakagawa, West Nippon Expressway Company Limited, Japan)

3157: The Radio Reflection Countermeasure for ETC System (Akifumi Shintaku, Central Nippon Expressway Company Ltd, Japan)

TS43: Integration and Innovation
Room: S220A

PAPERS

1003: Successful Integration of ITS in the Regional Transportation Planning Process at the Mid Region Council of Governments (Nathan Paul Masek, Mid Region Council of Governments, USA)

1058: ITS Delivery in Large Design-Build Transportation Projects (Joey Yang, HDR Engineering, Inc., USA)

1063: I-595 Express a Public-Private Partnering for ITS Deployment, Operations and Maintenance (Juan Kuthy, I-595 Express, LLC, USA)

2017: The Swedish Transport Administration (TRAFFIKVERKET) ITS Action Plan for the Rail Sector (Mats Lindqvist, Triona AB, Sweden)

TS44: Traffic Management and Information CANCELLED

TS45: Mileage Based Fees 1
Room: S220C

PAPERS

1053: Driver Acceptance Related to Using Integrated In-Vehicle Technology to Assess Mileage-Based User Fees (Christopher Armstrong, SAIC, USA)

1104: VMT Charging and 21st Century Logistics (JD Hassan, Skymirror Corporation, Canada)

1181: Connected Vehicle for Safety, Mobility and User Fee Implementation Mileage Based User Fee Rate Structure Concept (Daryl Taavola, URS Corporation, USA)

2167: Cutting Edge Satellite-Based Tolling Technology for Slovakia—Concept and First Results (Christoph Wondracek, Siemens AG, Austria)

3105: Introduction of the Profile Control System by the Autonomy Dispersion Method Into Traffic Signal Controllers in an Existing Central Control Area (Matsumura Naoki, Shizuoka Prefectural Police, Japan)

3118: Multi-Objective Optimization for Robust Signal Timing Control (Zhou Li, Shandong University, China)

TS46: User Needs 2: Next Generation Travel Information
Room: S220D

PAPERS

2222: TeleFOT: First Achievements and Results from FOTs on Aftermarket and Nomadic Devices in Vehicles (Stig Franzén, Chalmers University of Technology, Sweden)

3061: Development of Car Navigation System Based on Combination Between In-Vehicle Device and Smartphone (Hiroshi Kuwahara, Denso Corporation, Japan)

3126: Promotion of the Mobility Support (Yuichiro Sumikura, Ministry of Land, Infrastructure, Transport and Tourism, Japan)

3137: Research on Jam Level Variability Utilizing the Location Information of Traffic Lights (Lan Li, Hitachi R&D Corp, China)

3141: Research on Traffic Image Network (Bo Liu, Hitachi R&D Corp., China)

TS47: Data Collection Systems 1 Room: S220E

PAPERS

2102: Malfunction Sniffing—A New Approach for On-Site Quality Evaluations of Traffic Data Acquisition Infrastructure (Toni Weisheit, University of Kassel, Germany)

2125: Vehicle Inductive Profile for Incident Detection (Robbin Blokpoel, Pekk Traffic, the Netherlands)

3025: A Study on the Development of the Portable Vehicle Detector System Using the Doppler Effect (Yoshiyasu Murashige, Expressway Research Institute, Japan)


PAPERS

2166: Field Operational Test “EuroFOT” at the German Test Site (Matsumura Naoki, HITACHIKU, Japan)

2169: Impact Assessment of Advanced Safety Systems on Safety, Traffic Efficiency and Environment within the Field Operational Test “EuroFOT” (Adrian Zloch, RWTH Aachen University, Germany)

2177: Impact Assessment of Active Safety Systems on Traffic, Safety, Efficiency and Environment within the Field Operational Test “EuroFOT” (Guoqiang Yang, Chalmers University of Technology, Sweden)

3115: Model Predictive Control of Two-Wheeled Vehicle on the Basis of Branch-and-Bound Graph Search (Daicke Toishi, Meijo University, Japan)

TS49: Assessment of the Field Operational Test Room: S320A

PAPERS

2008: Impact Assessment of Advanced Driver Assistance Systems within the Field Operational Test “EuroFOT” at the German Test Site (Mohamed Bennimoun, RWTH Aachen University, Germany)

2054: Performance Testing of Active Safety in Road Vehicles (Micha Lesemann, RWTH Aachen University, Germany)

2099: Operational Results and Conclusions of the FOT Execution Phase of EuroFOT European Large Scale Field Operational Test (Andras Csepinszky, ERTICO-ITS Europe)

TS50: Leveraging New Technologies to Attract and Retain Transit Customers Room: S320B

PAPERS

1031: What’s the Worst That Can Happen? How to Stop Worrying and Love Social Media (Susan Bregman, Oak Square Resources, LLC, USA)

1108: Mobile Device Technology for Real-Time Transit Information: Use and Deployment (Carol Schweiger, TransSystems Corporation, USA)

1118: Communicating Transit Information to People with Sensory Disabilities (Katharine Hunter-Zaworski, National Center for Accessible Transportation, USA)

1175: Virginia Transit Real-Time Traveler Information Standards Working Group (Michael Harris, VA DRPT, USA)
**TSS5: Goods & Freight—Let’s Move**

**Room: S320C**

**MODERATOR**
TBD

**PAPERS**
1330: Methodology of Architectural Project Applied in Systems for Supervision Operation of Highways (André Luiz da Silva, Polytechnic School—University of São Paulo, Brazil)

1336: Technological Model for Application of Internet of Things to Monitor Pharmaceutical Goods Transportation (Cleodson Sakurai, University of São Paulo, Brazil)

1337: Proposal of Integrated System for Vehicle Monitoring with Emphasis on Goods Operations (Eduardo Dias, University of São Paulo, Brazil)

2055: Electronic Freight Management: U.S. vs EU (Jan Tore Pedersen, Marlo a.s., Norway)

**TSS2: Protocols and Standards for Wireless Technologies in Cooperative Mobility**

**Room: S320D**

**MODERATOR**
Makoto Max Miwa, Panasonic Corporation, Japan

**PAPERS**
2206: Adaptive Wireless Multipath Access Solution for ITS (Tomas Zelinka, Czech Technical University of Prague, Czech Republic)

3012: A Seamless Handover Scheme for WAVE Systems (Hanbyeog Cho, ETRI, Korea)

3151: Software Implementation of IEEE1609.2 in WAVE (Hanbyeog Cho, ETRI, Korea)

**TSS5: Driver’s Awareness**

**Room: S320E**

**MODERATOR**
Koji Oguri, Aichi Prefectural University, Japan

**PAPERS**
2107: Older Drivers at the Wheel—How Do They Feel Under Difficult Driving Circumstances? (Phil Blythe, Newcastle University, United Kingdom)

3023: A Study on Relation Between Steering Timing and Braking Timing Based on Longitudinal Collision Risk Perception (Guy Hung Nguyen VAN, Toyota Motor Corporation, Japan)

3136: Research on Maintenance of Driver’s Arousal Level Using Steady Running Noise (Wataru Nakai, Panasonic Corporation, Japan)

3150: Single Trial F300 as an Indicator of Drivers’ Visual Awareness: Toward an Adaptive Alarming System Based on Brain Science (Shin Osuga, Asin Seiki Co., Ltd., Japan)

3226: Incorporating Saliency Map into Prediction of Drivers’ Eye Fixations on Traffic Signs (Xu Zhi, Beijing University of Technology, China)

**TSS4: Innovation and Cooperation**

**Room: S320B**

**MODERATOR**
Eric Rensel, Gannett Fleming, Inc., USA

**PAPERS**
1096: Dissemination of Innovations and New Technologies Using Private Public Partnerships Model-Model Solutions for the Public Sector (Osama Elhamshary, California Department of Transportation, USA)

1125: The Merging of ITS and IT—Why Can’t We All Just Get Along? (Mark Dunzo, Kimley-Horn and Associates, Inc., USA)

1130: Pione4Safety, New Jersey’s Crash Analysis and Decision Support Tool with Case Studies (Nifoletur S. Mirhoseini, Center for Advanced Infrastructure and Transportation, USA)

1167: Intelligent Transport Systems, the Keys to Improve the Quality of Life of the Citizens (Daniel Russomanno, Ministry of Federal Planning, Argentina)

2070: Services in Road Traffic Management Systems (Marcel Valé, Trinité Automation, the Netherlands)

**TSS5: Electronic Toll Systems**

**Room: S320C**

**MODERATOR**
John Walker, Southampton University, United Kingdom

**PAPERS**
2023: Certification of European Electronic Toll Systems (Duncan Matheson, PA Consulting Group, United Kingdom)

2026: Data Privacy and the European Electronic Toll Service (Duncan Matheson, PA Consulting Group, United Kingdom)

2050: Deploying National ETC Schemes in Europe—Is There a Cookbook? (Michael Bibaritsch, Prime Consulting Services, Austria)

3050: Defining Applicability of International Standards for Intelligent Transport Systems (ITS) in Australia (Philip Blake, South Australian Government, Australia)

**TSS6: Putting Transit Signal Priority: From Models to implementation**

**Room: S320D**

**MODERATOR**
Masafumi Kobayashi, Sumitomo Electric Industries Ltd., Japan

**PAPERS**
1195: HART’s Transit Signal Priority Pilot Project (Tampa, FL) (Cade Braud, Kittelson & Associates, Inc., USA)

1212: Optimize Signal Priority Strategy to Improve Transit Mobility (Tony Qiu, University of Alberta, Canada)

2040: Evaluating the Impacts of Real Time Passenger Information and Bus Signal Priority in Trondheim (Morten Weide, Norwegian Public Roads Administration, Norway)


**TSS7: Port of Entry**

**Room: S320E**

**MODERATOR**
Jan Hellaker, Volvo Technology North America, USA

**PAPERS**
1016: China New Green Port & Energy Efficient, Intelligent Technology Development (Edmond Chang, EDCPC, Inc., USA)

1100: Real Time Control Center for Commercial Vehicles (Pedro Mastrangelo, CIEMSA, Uruguay)

1180: New Mexico DPS MTPD Smart Roadside™ Program (Brian Heath, Intelligent Imaging Systems, Canada)

**TSS8: Vehicle Probe for Travel Time Analysis**

**Room: S320F**

**MODERATOR**
Roy Sumner, Freeahead Inc., USA

**PAPERS**
1041: Analysis of Level of Confidence Score within the I-95 Vehicle Probe Project (Stanley Young, University of Maryland, USA)

1098: Use of Bluetooth Based Travel Time Information for Traffic Operations (Michael Wiekc, Irits, Inc., USA)

1207: Design Considerations for a Real-Time Arterial Performance Measurement System Using Bus Transit Probes (David Zavattero, Chicago Department of Transportation, USA)

1215: Probability of Real-Time Data as a Function of Hourly Volume, Assessment of the I-95 Vehicle Probe Project Data (Hadi Sadrzadat, University of Maryland, USA)

2228: An ITS Success Story: Review of Application of GPS Equipped Floating Vehicles in the Last Decade (Yanying Li, ERTICO-ITS Europe)

**TSS9: Advanced Map Development and Applications**

**Room: S320G**

**MODERATOR**
Michael L. Sena, Michael L. Sena Consulting AB, Sweden

**PAPERS**
1327: Errors and Solutions In Whole Number Stair Step Readouts for Green-Phase-Scheduling (Jake Free, Free Enterprises, USA)

2082: Vehicle Localization in Urban Areas Using Aerial Images (Norman Mattern, Chemnitz University of Technology, Germany)
Despite an Improved Updating Application is Speed Map for Intelligent Speed Adaptation Challenging (Niels Agerholm, Aalborg University, Denmark)

WEDNESDAY, OCTOBER 19
8:30 a.m. – 10:00 a.m.

● TS60: Roadmaps and Organizational issues
Room: S220A
MODERATOR
Paul Vorster, ITS South Africa, South Africa

PAPERS
1046: Development of Mexico’s National Intelligent Transportation Systems (ITS) Strategic Plan (Jose Lobaco, Secretariat of Communications and Transportation (SCT), Mexico)
1174: Integrated Active Transportation Systems: A Roadmap for Developing Intelligent Transportation Systems in the 21st Century (Susan Shaheen, University of California, Berkeley, USA)
1176: Next Steps in Deploying Intelligent Transportation Systems (ITS) For Abu Dhabi (Glenn Havinoivoski, Iteris, Inc., USA)
2069: Organizing to Maximize the Benefits of ITS (Richard Harris, ACS-Xerox, United Kingdom)

● TS61: Systems Engineering and Deployment
Room: S220B
MODERATOR
Mike Kumala, City of Tampere, France

PAPERS
1084: Modernization of the New York City Intelligent Transportation Systems (ITS) Infrastructure (Mohamad Talas, New York City Department of Transportation, USA)
2039: ITS and Telematic Services—Different Implementation Aspects (Thomas Sjöström, Sweco, Sweden)
2168: Urban Transportation—A Complex Sociotechnical System (Stig Franzén, Chalmers University of Technology, Sweden)

● TS62: Commercial Vehicles
Room: S220C
MODERATOR
Eric Sampson, Newcastle University, United Kingdom

PAPERS
1011: Truck VMT Fees: A Practical Way to Generate Money for Transportation and Improve Freight Mobility (Richard Mudge, Delcan, USA)
1138: Environmental and Economic Impacts of 5.9 E-Screening: New York State Energy Research and Development Authority Commercial Vehicle On-Board Unit (Steve Sprouffske, Kapsch TrafficCom Inc., USA)
2131: How to Charge and Enforce Charging of Foreign Trucks in a Road Charging System? (Eva Schelin, Vinnova, Sweden)

● TS63: Data Platforms 1: Next Generation Travel Information
Room: S220D
MODERATOR
Nikola Ivanov, University of Maryland, USA

PAPERS
1026: Developing and Supporting High-Usage Traffic Information Apps (André Gueziec, Beat the Traffic, USA)
1044: Real Time Data Dissemination in a Regional Multimodal Trip Planner—The Bay Area Experience (Giedrius Praspaliauskas, SAIC, USA)
2127: The Future of Commercial Location-based Services in ITS—On-Line on the Move (Eetu Pilli-Sihvola, VTT-Technical Research Centre of Finland, Finland)
3135: Research of Evaluation Method for Nomadic Device Application at Intermodal Connectivity and Transfer Service Center (Part 2) (Jung-Seok Bae, ITS Korea, Korea)

● TS64: Adaptive Traffic Signal Control System Operations
Room: S220E
MODERATOR
Robbin Blokpoel, Peek Traffic, the Netherlands

PAPERS
1087: Comparison of Queue Estimation Models at Traffic Signals (Jingcheng Wu, TransCore ITS, LLC, USA)
2226: Forecast Based Cycle Time Calculation in Sitrack Motion (Juergen Mueck, Siemens AG, Germany)
2243: Virtual Loops for Traffic Signal Priority of PT (Brian Tveit, Norwegian Public Roads Administration, Norway)

● TS65: Integrated Corridor Management Systems
Room: S220F
MODERATOR
Susan Spencer, Transport Canada, Canada

PAPERS
1094: Integration of ICM and ATM (Joel Marcuson, Jacobs Engineering, USA)
1105: Promoting Modal Shift Through Integrated Corridor Management (ICM) (Jorgen Pedersen, Telvent USA, USA)
1214: Incident Fingerprints for Integrated Corridor Management (Rob Hranac, Berkeley Transportation Systems, USA)

● TS66: WIM/Cross Borders
Room: S320A
MODERATOR
Christopher Flores, Sensys Networks Inc., USA

PAPERS
1095: Weight-In-Motion and Structural Deflection Based Mechanistic-Early Factor for Urban Pavement Asset Management (Selma Yousif, International Road Dynamics Inc., Canada)
1140: Virtual Weigh Station Technology Best Practices (Randy Hanson, International Road Dynamics Inc., Canada)
1177: Weigh-In-Motion on the Illinois Tollway in 2011 (Jim Powell, Wilbur Smith Associates, USA)
2005: Smartphones as Low Cost Development and Deployment Platform for Freight Intelligent Transport Systems (Joseph Muna, Avanti Communications, United Kingdom)
3116: Momentum Quantifier—Dynamic Axis Scale; Determine vehicle Mass and Speed (David Gichangi Axelson, Sensing Technologies KK, Japan)

● TS67: Data Communication/Management Systems and Plans
Room: S320B
MODERATOR
Phil Blythe, Newcastle University, United Kingdom

PAPERS
1129: Using Geospatial Tools for State-Wide Communications Network (Brian Scott, SRF Consulting Group, Inc., USA)
2066: Provision of Better Traffic Data (Li Orme, Cambridge Consultants Ltd., United Kingdom)
2118: Monitoring and Maintenance Management for ASFINAG’s Traffic Telematic Systems—Requirement Analysis and System Design (Martin Nemec, ASFINAG Maut Service GmbH, Austria)
3155: The Construction Program of Highway IOT Based on the Collaborative Sensing Technology (Liehong Dong, National Road Network Center, China)

● TS68: Practical Study and FiOts for Cooperative Mobility
Room: S320C
MODERATOR
TBD

PAPERS
1042: Deploying Connected Vehicles Using the FDOT Sunguide® Software (Steven Dellenback, ACS-Xerox, United Kingdom)
1128: Rural Connected Vehicle in Eastern Idaho (Robert Koeberlein, Idaho Transportation Department, USA)
1167: Connected Vehicles at 4.9 GHz for TransTel ITS Unified Communication Architecture for an ITS Enterprise (Bryan Nace, DKS Associates, USA)
1320: Field Recalibration of Intelligent Traffic Detection System in ATMS Networking (Yuqing Ding, Parsons, USA)
TECHNICAL / SCIENTIFIC SESSIONS

● **TS69: Low Attention Driving Detection**

**Room: S320D**

**MODERATOR**
Manabu Omoe, Keio University, Japan

**PAPERS**

3053: Detecting Driver's Drowsiness Level with Simple Predetermined Initial State (Yasuhiro Nakano, Fujitsu Laboratories, Ltd., Japan)

3078: Effect of Respiratory Interval on Driver's Drowsiness: A Preliminary Study (Jun Ito, Aichi Prefectural University, Japan)

3110: Low Attention Driving Detection Methodology for Adaptation of Driver Assistance Systems (Shintaro Saigo, Tokyo University of Agriculture and Technology, Japan)

3130: Quantitative Estimation of Driver's Mental Workload Using Heart Rate Variability (Toshiyuki Yokoi, Aichi Prefectural University, Japan)

● **TS70: Understanding Environmental Impacts through Modeling, Simulation, and Data Measurement**

**Room: S320E**

**MODERATOR**
Jiaping Wu, Tsinghua University, China

**PAPERS**

2242: Using an Integrated Data Platform to Evaluate the Environmental Impact of Events and ITS Interventions (Margaret Bell, Newcastle University, United Kingdom)

3201: Can Eco-Drive Techniques Make Driving More Economically and Ecologically? (Ryosuke Ando, Toyota Transportation Research Institute, Japan)

3248: Aerodynamic Drag Reduction in Vehicle Platooning, Effect on Lateral Position of Following Vehicle (Kenji Tadakuma, Toyota Motor Corporation, Japan)

3242: Driving Control Algorithm for Efficiency Driving of 4WD Electric Vehicle (Juyong Kang, Seoul National University, Korea)

● **TS71: Environmentally Friendly Freight**

**Room: S320F**

**MODERATOR**
Michael Sena, Michael Sena Consulting AB, Sweden

**PAPERS**

1153: Intelligent Driver Assistance Systems toward Greener and More Efficient Commercial Vehicles (Benjamin Saltzman, Eaton Corporation, USA)

2112: Evaluation of ITS Time Savings for Freight Transport in Urban Area (Thomas Engen, SINTEF, Norway)

2218: Can a Speed Prediction Model Provide a Better Basis for Route Choice and Travel Time Prediction in Navigation Equipment? (Trude Terset, SINTEF, Norway)

2245: Time Savings for Freight Transport in Urban Area (Thomas Engen, SINTEF, Norway)

3108: Logistics Support Service Using ITS Spot (Shotion Motomizu, National Institute for Land and Infrastructure Management, Japan)

● **TS72: Individualized Route Planning 1: Next Generation Travel Information**

**Room: S320G**

**MODERATOR**
Yanying Li, ERTICO - ITS Europe

**PAPERS**

1079: Adaptive Information System for Facility Pedestrian Planning (Xi Zhou, STV Incorporated, USA)

2057: Developing User Friendly Mobile Applications with Real-Time Travel Information: A Case from Norway (KariAnne Ormseth, Cluber, Norway, Norway)

2078: Energy Efficient Navigation for Heavy Vehicles (Per-Olof Svens, Triona AB, Sweden)

● **TS73: Mileage Based Fees 2**

**Room: S320H**

**MODERATOR**
Paul Manuel, Kapsch TrafficCom IVHS, Canada

**PAPERS**

1017: A System Design for Implementing Mileage-Based User Fees (Matt Burns, Battelle, USA)

1054: Using Technology to Maximize Equity in Mileage-Based User Fees: Benefits and Risks (Mark Carter, SNC, USA)

1074: Implementation Pathway for VMT Charges (John Opiola, D'Artagnan Consulting, USA)

1224: A Review of Commercial Off-the-Shelf Personal Navigation Devices for Mileage Based User Fees (Rob Zimmer, Battelle, USA)

● **TS74: Wireless Technologies for V2V and V2I**

**Room: S330A**

**MODERATOR**
Long Le, Nec Laboratories Europe, Germany

**PAPERS**

2161: A Capacity Analysis for the Transmission of Event and Cooperative Awareness Messages in LTE Networks (Rene Rembarz, Ericsson Research, Germany)

3112: Method for Close Installation of 700MHz Band V2X Antenna and Cellular Phone Antenna (Yuji Sugimoto, Nippon Soken Inc., Japan)

3120: Onboard Antenna for 700MHz Band V2X Communication (Tadao Suzuki, DENSO Corporation, Japan)

● **TS75: ITS for Unique Operational Scenarios**

**Room: S330B**

**MODERATOR**
TBD

**PAPERS**

1209: MOT + Visual: An ITS Solution to Managing Construction and Community Event Impacts on Traffic (Mike Wacht, Global-5 Communications, USA)

2147: Smart Transport Applications Designed for Large Events with Impacts on Urban Mobility: the Stadium Project Demonstration in Cape Town (Neil Frost, SAHA International, South Africa)

3131: Real-time Passenger Information Collection & Analysis System in 2010 Shanghai World Expo (Yu Lin, Shanghai SEARI Intelligent System Company, Ltd., China)

WEDNESDAY, OCTOBER 19
1:30 p.m. – 3:00 p.m.

- **TS76: Architectures and Their Applications**
  **Room: S320B**
  **MODERATOR**
  Duncan Matheson, PA Consulting Group, United Kingdom

**PAPERS**

1078: Open System Architecture Model (John Opiola, D’Artagnan Consulting, USA)

1190: Virginia ITS Architecture Use in Planning ITS Projects (Christopher Francis, Virginia Department of Transportation, USA)

2117: Rear Collision Avoidance Using Only Small Baseline Wide Angle Stereo Camera (Remy Bendahan, IMRA Europe SAS, France)

2233: A High-Level Functional Architecture for GNSS-Based Road Charging Systems (Martina Zabic, Technical University of Denmark, Denmark)

- **TS77: Individualized Route Planning 2: Next Generation Travel Information**
  **Room: S320C**
  **MODERATOR**
  Irina Silva, ERTICO-ITS Europe

**PAPERS**

2027: Bicycle Route Planners Promoting Sustainable Commuting (Thomas White Law, Christensen, KeyResearch, Denmark)

2093: Will Personalised Intermodal Traveller Information on Mobile Devices Reduce Energy Consumption? (Martin Boehm, AustriaTech, Austria)

2220: How Sustainable is Route Navigation? A Comparison between Commercial Route Planners and the Policy Principles of Road Categorization (Koen De Baets, Ghent University, Belgium)

3123: Planning Route Based on Experienced Routes (Man Li, Hitachi Research & Development Corporation, China)

3162: Travel Planning System Based on Cost Estimation (Wenjia Wang, Hitachi Research & Development Corporation, China)

- **TS78: Intersection Control and Optimization**
  **Room: S320D**
  **MODERATOR**
  Scott Stewart, ITS Canada, Canada
## PAPERS

### Wednesday, October 19

**TS81: Driver’s Behavior Utilizing Simulator**

**Room: S320G**

**Moderator:** Jinping Wu, Tsinghua University, China

**Papers:**
- 2014: The Development of a High Fidelity 3D Visual Interactive Simulation Environment to Enable Highly Realistic Driver Research Based on a Newly Developed and Unique Multi-Degree Drive Simulator (Brendan Hafferty, FORUM, United Kingdom)
- 3018: A Study on Designing a Human Machine Interface System to Induce Careful Driving At Intersections (Fumiya Okajima, Shibaura Institute of Technology, Japan)
- 3017: Driver’s Behaviors of Emergency Avoidance During Automatic Platooning by Using a Driving Simulator (Rencheng Zheng, University of Tokyo, Japan)

**TS82: Operational Strategies Producing Carbon Footprint Changes Positive**

**Room: S320H**

**Moderator:** Jean-François Janin, Ministry of Ecology, Sustainable Development Transport and Housing, France

**Papers:**
- 1090: Leveraging ITS for Environmental Gains (Josh Johnson, Southwest Research Institute, USA)
- 2007: Stimulate Low Carbon Mobility by Web-Miles and Corporate Social Responsibility (Ralf Willenbrock, T-Systems International, Germany)
- 2123: ECOFLEX: Improving Air Quality With Green Dynamic Traffic Management Based on Real Time Air Quality Measurements (Siebe Turksma, PEEK Traffic, the Netherlands)

**TS83: Data: What Helps, What Sells**

**Room: S330A**

**Moderator:** Gabriel Westrell, Logica, United Kingdom

**Papers:**
- 1359: An Evaluation of Automated Electric Transportation Deployment Strategies: Discreet vs. Organic (James Fishelson, Utah State University, USA)
- 2209: Public Support of Intelligent Speed Assistance: Which Factors Will Determine the Acceptability? (Sven Vlaasenroot, TU Delft/ Ghent University, Belgium)
- 2216: Inferring ITS Impacts in Different User Cases (Merja Penttinen, VTT-Technical Research Centre of Finland, Finland)
- 3261: A Data Warehouse and Analysis Toolkit for Transportation System (Yan Jun Mo, IBM, China)

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**WEDNESDAY, OCTOBER 19**

**3:30 p.m. – 5:00 p.m.**

**TS84: Pilots and Field Operational Tests**

**Room: S220B**

**Moderator:** Martin Boehm, AustriaTech, Austria

**Papers:**
- 1226: Mobile Accessible Pedestrian Signals (MAPS) for People Who Are Blind (Chen-Fu Liao, University of Minnesota, USA)
- 2087: Pedestrian Routing (Ari Virtanen, VTT-Technical Research Centre of Finland, Finland)
- 2238: The Experience of Using Modern Information Technologies in E-Services to Citizens (Gagava Maria, Traffic Police Department of the Republic of Tatarstan, Russia)

**TS85: Individualized Route Planning 3: Next Generation Travel Information**

**Room: S220C**

**Moderator:** Katsushi Ikeuchi, University of Tokyo, Japan

**Papers:**
- 1338: Urban Expressway Automatic Incident Detection Based on Traffic Flow Density (Yang Cheng, University of Wisconsin-Madison, USA)
- 1730: Queuing Delays Associated with Secondary Incidents (Asad Khattak, Old Dominion University, USA)
- 3202: Analytical Method to Observe Accident Duration Using Archived ITS Speed Profile and ITS Statistical Analysis (Younshik Chung, The Korea Transport Institute, Korea)
- 3238: A Study on Traffic Incident Detection Using Sensing Information from Roadside Infrastructure (Koichi Emura, Panasonic Corporation, Japan)

**TS86: Advanced Incident Detection Systems**

**Room: S220D**

**Moderator:** Dr. William Sowell, Adis Corporation, USA

**Papers:**
- 1206: Guidelines for the Installation of Video Imaging Detection System (VIDS) at Signalized Intersections for Pavement Resurfacing Projects (Nelson Castillo, Gannett Fleming, Inc., USA)
- 1101: Video Sensors—Traffic Detection and Beyond (Bob McQueen, Iteris, Inc., USA)
1143: Smart Intersections for Green Cities: A Case Study in Paris, France (Bruce Winner, Citilog, USA)
3002: Evaluation of Tunnel Incident Detection System Based on CCTV (Dong Seob Oh, ITS Korea, Korea)

**TS88: Using Data to Enhance Transit Performance**

**Room: S220E**

**MODERATOR**

TBD

**PAPERS**

1071: Visualizing Bus Schedule Adherence and Passenger Load Through Marvey Graphs (Rob Irnan, Berkeley Transportation Systems, USA)
3029: An Analysis of Spatial OD Patterns of Bus Users Using IC Card Data (Hiroaki Nishuchi, Nihon University, Japan)
3103: Interval Based Passaged Volume Forecasting Using Residual GM Model with IC Data (Yuning Liu, Shandong University, China)
3250: Designing Fixed Bus Route Using Log Data of On-Demand Transportation (Kota Tsumbuchi, University of Tokyo, Japan)

**TS89: Tolling Technology**

**Room: S220F**

**MODERATOR**

Karl-Ernst Ambrosch, AIT-Austrian Institute of Technology, Austria

**PAPERS**

2100: PLATE Fingerprinting for Enhanced Video Tolling (Martin Linauer, Kapcsch TrafficCom, Austria)
2138: Lane in a Box – A major step forward in lane-side equipment (Mike Payne, Diamond Consulting Services Ltd, United Kingdom)
2182: The Future Role of Certification in Road Tolling (Karl-Heinz Stappert, TÜV Rheinland, Germany)
3136: Research on EMV Payment in Vehicles: A New Cashless Payment System Using ITS Spot (Takeyori Maeda, National Institute for Land and Infrastructure Management, Japan)
3111: Market Modal to Implement GNSS HGV Tolling (Brian Michie, ERAD Limited, New Zealand)

**TS90: Probe and Travel Time for Cooperative Mobility**

**Room: S320A**

**MODERATOR**

Paul Kompfner, ERTCITO-ITS Europe

**PAPERS**

1308: Neighbor Links Travel Time Estimation Using Probe Vehicles and Buses Data (Tarek Sayed, University of British Columbia, Canada)
1319: Testing Accuracy and Reliability of MAC Readers to Measure Arterial Travel Times (Aleksandar Stevanovic, Florida Atlantic University, USA)
2201: Measure Travel Time by Using Bluetooth Detectors on Freeway (Marc Valé, Trinité Automation, the Netherlands)
3081: Estimating Path Travel Time by Aggregating Link Travel Times Obtained through Dedicated Short Range Communication Probe Data (Keechoo Choi, Ajou University, Korea)
3140: Research on Probe-Based Traffic Information (Tetsuo Hideshima, Highway Industry Development Organization, Japan)

**TS91: V2I Deployment Initiatives**

**Room: S320B**

**MODERATOR**

Aleksandar Stevanovic, Florida Atlantic University, USA

**PAPERS**

1322: Integrating Connected Vehicle and Active Traffic Management Strategy: State of the Art and the Practice (Guohui Zhang, University of Texas at Austin, USA)
1369: Use of Connected Vehicle DSRC Acquisition Distance in Actuated Signal Control (David Miller, Siemens ITS, USA)
2139: V2I Implementation for Early Deployment of Cooperative Systems (Eric Koenders, Peek Traffic, the Netherlands)
3134: Research for Practical Use of Smartway and Deployment of ITS Spot Services (Masahiro Takashima, National Institute for Land and Infrastructure Management, Japan)
3158: The Second Step SMART Highway Services in Korea, Use Wave and SNS (Jin Ki Lee, ITS Korea, Korea)

**TS92: Various Kinds of Driver Behavior**

**Room: S320C**

**MODERATOR**

Dean Zarbieszach, Vicroads, Australia

**PAPERS**

2095: Improving Traffic Safety of Novice Drivers by Feedback on Driving Behaviour (Mikko Taekainen, VTT-Technical Research Centre of Finland, Finland)
3044: Characteristics Extraction of Highly-Skilled Drivers' Driving by Using an AdaBoost Classifier on Driver's Operations (Shuguang Li, Graduate School of Interdisciplinary Information Studies, University of Tokyo, Japan)
3055: Detection of Steering Direction From Parallel Factor Analysis of Driver's EEG in Lane Change Maneuver (Toshihito Ikemishi, Tokyo University of Agriculture and Technology, Japan)

**TS93: Using Weather Data for Safer Driving**

**Room: S320D**

**MODERATOR**

Ram Kandarpa, Booz Allen Hamilton, USA

**PAPERS**

1021: Space-Based Bridge Wind Speed Monitoring for Public Safety Use (Brian Kopp, The Semaphore Group, USA)
1072: Weather & the Connected Vehicle (Ray Murphy, U.S. DOT/FHWA, USA)
1109: Weather Based Adaptive Signal Control Systems (Antony Coventry, Faisala Inc., USA)
2044: ITS in a Changing Climate—A Savior Tool or Another Vulnerable System? (Pekka Leviakangas, VTT-Technical Research Centre of Finland, Finland)
2063: Heterogeneous Wireless Traffic Safety Network Applied to a Road Weather Forecasting Environment (Timo Sukuvaara, Finnish Meteorological Institute, Finland)

**TS94: Training Programs**

**Room: S320E**

**MODERATOR**

Steve Underwood, University of Michigan – Dearborn, USA

**PAPERS**

1132: Educating Tomorrow’s Transport Professionals—ITS Standards (Mac Lister, ITS Joint Program Office, Research and Innovative Technology Administration, United States Department of Transportation, USA)
1134: ITS PCB Core Competency and Base Curriculum Development (Mac Lister, ITS Joint Program Office, Research and Innovative Technology Administration, United States Department of Transportation, USA)
1213: Multiplying ITS Educational Outreach Budgets Through Strategic Partnerships (Vicky Mixson, Global-5 Communications, USA)
1345: Development of an Interactive Traffic Operations Center Staff Training Simulator for Real-time Traffic Management: A Showcase from Salt Lake City, Utah (Jintao Ma, Mygistics, Inc., USA)
1812: The Road to ITS—ITS Manuals in Sweden, Norway and Denmark (Lifa Halsen Bidar, Sweco, Sweden)
| Session | Title | Room | Moderator/Author(s) | PAPERS
|---|---|---|---|---|
| TS95: Adaptive Signal Control I | InSync: The Optimization Techniques and Real Validating The Realism and Representation of SCOOT MMX (SCOOT Multi Modal 2010) (95 Express Phase 1 Performance Update (Chandra World Fiber Technologies, USA) and Recoverability (Stevens Corporation, USA) ) | S320F | Steve Shelby, Econonite Group, USA | 1154: True Adaptive Control Algorithms—A Comparison of Alternatives (Cary Vick, Telvent USA Corporation, USA)  
1194: InSync: The Optimization Techniques and Real World Results Behind the Fastest Growing Adaptive Traffic Control System in U.S. History (Reggie Chandra, Rhythm Engineering, USA)  
2118: SCOOT MMX (SCOOT Multi Modal 2010) (Alan Stevens, TRL, United Kingdom)  
3168: Validating The Realism and Representation of SCATS When Operating within Simulation (Christian Chong-White, Roads and Traffic Authority of New South Wales, Australia)  
3090: Experimental Design When Operating SCATSIM Simulation: A Second Iteration (Christian Chong-White, Roads and Traffic Authority of New South Wales, Australia) |
| TS96: Regional Deployment Strategies Part II | Room: S320G | Jürgen Zajicek, AIT - Austrian Institute Of Technology, Austria | Jürgen Zajicek, AIT - Austrian Institute Of Technology, Austria |
| TS97: HOT—Lane Operations | Room: S320H | Dick Schnacke, TransCore, USA | Dick Schnacke, TransCore, USA |
| TS99: Design Build with ITS | Room: S220A | Peter T McCombs, ITS New Zealand, New Zealand | Peter T McCombs, ITS New Zealand, New Zealand |
| TS100: Variable Speed Limits | Room: S220B | Rudi Lagerweij, Vitalis B.V., the Netherlands | Rudi Lagerweij, Vitalis B.V., the Netherlands |
| TS101: Managed Lanes—Evaluation and Lessons Learned | Room: S220C | Jay Calhoun, Gannett Fleming, USA | Jay Calhoun, Gannett Fleming, USA |
| TS102: Traffic Simulation Cases | Room: S220D | Peter T McCombs, ITS New Zealand, New Zealand | Peter T McCombs, ITS New Zealand, New Zealand |
| TS103: Using Vehicle Probe Data for Congestion Analysis | Room: S220E | Hiroyuki Kumazawa, Automotive Electronics Development Center, Japan | Hiroyuki Kumazawa, Automotive Electronics Development Center, Japan |

**THURSDAY, OCTOBER 20**
8:30 a.m. – 10:00 a.m.

3059: Development of an Algorithm of Automatically Setting Critical Speeds on Urban Expressways (Tomoyoshi Shiraishi, i-Transport Lab. Co., Ltd., Japan)

**Notes:**
- TS95: Adaptive Signal Control I
- TS96: Regional Deployment Strategies Part II
- TS97: HOT—Lane Operations
- TS98: ITS—What’s the Problem, What to Do, Where It’s Going
- TS99: Design Build with ITS
- TS100: Variable Speed Limits
- TS101: Managed Lanes—Evaluation and Lessons Learned
- TS102: Traffic Simulation Cases
- TS103: Using Vehicle Probe Data for Congestion Analysis

**PAPERS:**
1154: True Adaptive Control Algorithms—A Comparison of Alternatives (Cary Vick, Telvent USA Corporation, USA)  
1194: InSync: The Optimization Techniques and Real World Results Behind the Fastest Growing Adaptive Traffic Control System in U.S. History (Reggie Chandra, Rhythm Engineering, USA)  
2118: SCOOT MMX (SCOOT Multi Modal 2010) (Alan Stevens, TRL, United Kingdom)  
3168: Validating The Realism and Representation of SCATS When Operating within Simulation (Christian Chong-White, Roads and Traffic Authority of New South Wales, Australia)  
3090: Experimental Design When Operating SCATSIM Simulation: A Second Iteration (Christian Chong-White, Roads and Traffic Authority of New South Wales, Australia)  
1124: Design Build ITS Deployed During a Time of Great Change (Meryl Ann Mandell, Massachusetts Department of Transportation—Highway Division, USA)  
1216: The Benefits of an Owner’s Engineer in ITS Design/Build Projects (Matthew Letourneau, URS Corporation, USA)  
1360: I-595 Reversible Express Lanes Implementation (Jesus Martinez, Southwest Research Institute, USA)  
1346: Arterial Performance Measures in a Connected Vehicle Environment (Noah Goodall, University of Virginia, USA)  
2001: Traffic Volume Calculation Study Based on Floating Car Data (Rainhart Kühne, German Aerospace Center, Germany)  
3070: Development of Map Matching Technology for Vehicle Counting System (Kei Kitagawa, Fujitsu Laboratories, Ltd., Japan)
TECHNICAL / SCIENTIFIC SESSIONS

**TS104: Areawide Strategies that Result from Environmental Performance Measures**

*Room: S220F*

**MODERATOR**
Jonas Sundberg, Sweco, Sweden

**PAPERS**

- 2008: Situation Awareness in a City Node (Peter Lindberg, Saab AB, Sweden)
- 2148: Integration of Low-Cost Sensors with UTMC for Assessing Environmental Impacts of Traffic in Urban Area (Fabio Galatoto, Newcastle University, United Kingdom)
- 2163: Green Corridors in Sweden—A Governmental Commission Steers the Second Phase (Eva Schelin, Vinnova, Sweden)
- 3144: Scats and the Environment Study: An Introduction (Christian Chong-White, Roads and Traffic Authority of New South Wales, Australia)

**TS105: Eco-Driving**

*Room: S320A*

**MODERATOR**
Masahiko Ikawa, Mitsubishi Electric Corp., Japan

**PAPERS**

- 2077: Ecostm: An Intelligent Advanced Driver Assistance System for Fully Electric Vehicles (Stephane Dreher, Navteq, Belgium)
- 2211: Speed Recommendation for Fuel Savings Using Action Rules Provided by Dynamic Programming (Felipe Jimenez, Polytechnical University of Madrid, Spain)
- 3064: Development of Eco-Driving Support Function Naoki Miura, Asin Aw Co., Ltd., Japan
- 3076: Driver-Assistance System to Encourage Spontaneous Eco-Driving Behavior (Toshihiro Hiraoka, Kyoto University, Japan)

**TS106: Evaluations of ITS Deployments**

*Room: S320B*

**MODERATOR**
Stig Franzen, Chalmers University of Technology, Sweden

**PAPERS**

- 1113: Minnesota Urban Partnership Agreement National Evaluation (Katherine Turnbull, Texas Transportation Institute, USA)
- 1146: Sustained Infrastructure Development for Real Time Benefits at the Local Operations—The Santa Clara County Model (Dan Collen, County of Santa Clara, Roads and Airports Department, USA)
- 2016: Citymobil, Advanced Road Transport for the Urban Environment, Final Results (Jan van Dijke, TNO, the Netherlands)
- 3153: Study on the Reference Instrument for ITS Performance Evaluation (Tae-Hyun Hwang, ITS Korea, Korea)

**TS107: Research on Driver Behavior**

*Room: S320C*

**MODERATOR**
Jean-Philippe Mechin, Ministry of Ecology, Sustainable Development, Transport and Housing, France

**PAPERS**

- 1011: An Innovative Approach to Enhancing Driver Performance, Monitoring and Feedback with Cellular and Cloud Based Technologies (Nadine Levick, Optive Safety, USA)
- 1365: Human Factors and Safety Challenges in Transitioning to an Automated Electric Transportation System (Derek Freckleton, Utah State University, USA)
- 2214: Use and Potential Safety Effects of In-Vehicle-Technologies (Merja Penttinen, VTT-Technical Research Centre of Finland, Finland)
- 2231: Trust-Networks for Changing Drivers’ Behavior During Severe Weather (Katarina Elevant, KTH Royal Institute of Technology, Sweden)
- 2246: Using Driver Assistance Systems: A Study of End-User Experiences (Niklas Strand, Swedish National Road and Transport Research Institute, Sweden)

**TS108: Educational Outreach**

*Room: S320D*

**MODERATOR**
Carol Zimmerman, Battlelle, USA

**PAPERS**

- 1010: A Look at the Importance of Public Awareness for the Intelligent Transportation Systems Industry (Alícia Torres, Media Relations Group, LLC, USA)
- 1147: Development of an E-Magazine to Attract Teens to Transportation (Shauna Hallmark, Institute of Transportation, USA)
- 2058: Moving Smarter: Attracting Future Generations of ITS Experts (Petra Wagner-Luptacik, AIT Austrian Institute of Technology, Austria)

**TS109: Tolling Systems Architecture**

*Room: S320E*

**MODERATOR**
Pascal Lemonnier, CS Communication & Systems, France

**PAPERS**

- 2060: Tolling in an Urban Scenario (Pascal Lemonnier, CS Communication & Systems, France)
- 2133: Congestion Charging in Gothenburg—Model Development and Model Results (Tobias Thorsson, WSP Analysis & Strategy, Sweden)
- 3107: IV&V Conception and Implement for the Multi-Lane Free-Flow of Taiwan ETC System (Yuan-Jui Chang, Far Eastern Electronic Toll Collection Co., Ltd., Chinese-Taipei)
- 3079: Electronic Toll Collection—A Need for Indian Scenario (Santhanan Noodhidasa, Indira Institute of Engineering & Technology, India)

**TS110: V2I for Intersection**

*Room: S320F*

**MODERATOR**
Shigetoshi Tamoto, Sumitomo Electric Industries, Ltd., Japan

**PAPERS**

- 1009: Adapt, Evolve, Innovate—The Key to ITS Success (J.R. Richardson, Raytheon Co., USA)
- 3062: Development of Driving Safety Support Systems Using DSRC—A Specific Active Safety Measure for Preventing Accidents in Right/Left Turns at Intersections (Noriyuki Tsukada, Nissan Motor Co., Ltd., Japan)
- 3063: Development of DSSS Left-Turn Collision Prevention Support System (Tomoyuki Fukumaru, Honda R&D Co., Ltd., Japan)
- 3089: Expanding Fast Emergency Vehicle Preemption System in Tokyo (Jirou Kotani, Tokyo Metropolitan Police Department, Japan)
- 3246: Data Transmission Performance of DSRC (5.8GHz) Typed Pedestrian-Vehicle Communication to Avoid Conflict between Right-turn Vehicles and Pedestrians, Part 2 (Toru Hagiya, Hokkaido University, Japan)

**TS111: Arterial Traffic Detection**

*Room: S320G*

**MODERATOR**
Persephone Oliver, Econolite, USA

**PAPERS**

- 1102: SMART-Signal Deployment in Pasadena, CA—Travel Time Information and Arterial Performance Measures (Michael Wieck, Iteris, Inc., USA)
- 1206: Optimally Measuring and Reporting Arterial Performance Using Different Detection Networks (Rob Hranac, Berkeley Transportation Systems, Inc., USA)
- 2020: A Large Scale Quality Assessment Approach of ITS Data Supported by Airborne Sensing (Juergen Zajicek, AIT – Austrian Institute of Technology, Austria)

**TS112: Adaptive Signal Control Part II**

*Room: S320H*

**MODERATOR**
Marika Jenstav, WSP Sverige AB, Sweden

**PAPERS**

- 1037: RT-Tracs Adaptive Signal Improvements and Cost Savings Measures (Adam Moser, Pinellas County Public Works, USA)
- 1055: Evaluation of an Enhanced Traffic Adaptive Control System (Joseph Lam, Delcan International Corporation, Canada)
- 2136: The Benefits of Signal Group Oriented Control (Robbin Blokpoel, Peak Traffic, the Netherlands)
- 2017: Real Time Signal Control Using Artificial Neural Network for Developing Megacities (Fatih Gundogan, Graz University of Technology, Austria)
**TS113: Organizing and Planning to Maximize Service Provision**

**Room: S330A**

**MODERATOR**

Reinhard Pfliegl, AustriaTech, Austria

**PAPERS**

1073: Moving Toward Implementation of Reliability-Focused Strategies in Nevada (Denise Inda, Nevada Department of Transportation, USA)

1116: N11 3-Digit Caller Reach and Response for Governments and Agencies (Steve Chirokas, VoltDelta, USA)

2064: Introduction of a New XML-Based ITS-Protocol for the Swedish Road Administration (David Otterdahl, RinnMind Scandinavia AB, Sweden)

2071: Digitized Corridor China-France for Freight (Eric Louette, Ministry of Ecology, Sustainable Development, Transport and Housing, France)

**TS114: Achieving Environmental Improvement through Transportation System Efficiency**

**Room: S210D**

**MODERATOR**

Margaret Bell, Newcastle University, United Kingdom

**PAPERS**

1064: Saving Lives, Time, Money... and Oil—A New Imperative for ITS (Keith Jasper, Delcan, USA)

2032: The Alpcheck2 Project—Development of a Transport Decision Support System Using a Common Anchor Network (Peter Pollesch, Bavarian Road Administration, Germany)

2074: More Environmentally Efficient Transportation—A Multimodal Challenge (Richard Harris, ACS-Xerox, United Kingdom)

3046: CO2 Emission Test Based OBD-II Vehicle Data Analysis for Driver Guidance AS Probe (JeongAh Jang, ETRI, Korea)

**TS115: Business Cases for Cooperative Mobility**

**Room: S210E**

**MODERATOR**

Paul Kompfner, ERTICO-ITS Europe

**PAPERS**

1047: The Business Case for Collecting Vehicle Operating Data From Connected Vehicles (Matthew Dorfman, Booz Allen Hamilton, USA)

1122: Exploring Critical Roadway Relationships in Advanced Vehicle Systems (Scott Andrews, Cogentia Partners, LLC, USA)

2042: Cooperative ITS: The Best Things in Life Come in Threes (Thomas Kuhn, Continental Automotive GmbH, Germany)

2047: Mobile Probe Data and its Processing in a Real Time System (Matthias Mann, PTV AG, Germany)

2136: Bringing Research to Deployment: Europe’s First Sustainable Implementation of Cooperative Systems (Klaas Rozema, Peak Traffic, the Netherlands)

**TS116: Data Platforms 2: Next Generation Travel Information**

**Room: S320A**

**MODERATOR**

Norbert Handke, ITS Network Germany, Germany

**PAPERS**

1043: Advanced Traveler Information Systems in the Mobile Age: Where are We and Where are We Going? (Gary Carlin, SAIC, USA)

2031: Crowdsourcing Accessibility Related Information from Pol-Destinations in Finland (Mikko Tarkkainen, VTT-Technical Research Centre of Finland, Finland)

2035: Probe Speeds for National Planning (Jens Peder Kristensen, KeyResearch, Denmark)

3042: Build an Intelligent Transport System Based on IBM Smarter Traveler Solution (Jia Tan, IBM, China)

**TS117: Safety and Traveler Information: Overlapping and Helpful Synthesis**

**Room: S320B**

**MODERATOR**

Alan Cletlind, Iteris, USA

**PAPERS**

1076: Congestion Management Technology—Time for a Change (John Opiola, D’Artagnan Consulting, USA)

1201: ITS Applications to Support the Collection, Communication, and Use of Real-Time Traveler Information: Lessons Learned From the National Evaluation of the SAFETRIP-21 Initiative (Christopher Armstrong, SAIC, USA)

1352: 5.9 GHz Tolling as an Enabler of Commercially Available Safety and Mobility (Justin McNew, Kapsch TrafficCom U.S. Corp., USA)

3227: Estimating the Burdens of Drivers Due to Mandatory ISA on Residential Roads Based on a Speed Selection Model (Kojiro Matsuo, Toyoohashi University of Technology, Japan)

**TS118: Active Traffic Management in Metropolitan Areas**

**Room: S320C**

**MODERATOR**

James Edward Clark, NNTB Corporation, USA

**PAPERS**

1321: Active Traffic Management for Facilitating Traffic Operations in Metropolitan Freeway Network: A Comprehensive Review and Comparative Analysis (Guohua Zhang, University of Texas at Austin, USA)

1326: Context-Aware Computing Applicable to Brazilian Nationwide Automatic Vehicle Identification (AVI) (Alexandre Rojas, Federal University of Rio de Janeiro, Brazil)

1334: Integrated Corridor Management (ICM) Program: Calculating Multimodal Corridor Performance Measures from Simulation Outputs (Karl Wunderlich, Nobilis, USA)

**TS119: Parking Systems**

**Room: S320D**

**MODERATOR**

Hiroshi Makino, University of Tokyo, Japan

**PAPERS**

1112: VoltDelta Enables Pay by Phone Eparking for Parkmobile & Grand Rapids Michigan Case Study (Dan Zucchi, VoltDelta, USA)

3019: A Study on Efficient Parking Guide System Using ZigBee Wireless Network (Hiroyasu Nagata, Tokyo University of Science, Japan)

3100: Improving Parking Condition of Service Area with Dynamic Parking Lots Guide Service (Hideki Takahashi, Central Nippon Expressway Company Limited, Japan)

**TS120: On-Board Sensing**

**Room: S320E**

**MODERATOR**

Nobuyuki Ozaki, Toshiba Corporation, Japan

**PAPERS**

1186: Evaluation of Camera Based System to Reduce Bus Side Collisions: Driver Survey (Achilleas Kourtellis, Center for Urban Transportation Research, USA)

2223: Integrated Perception in Automated Vehicles (Angelos Amditis, National Technical University of Athens, Greece)

3142: Robust and Precise Measurement Method of Vehicles and Motorcycles for Cooperative Driving Safety Support System with Combination of HOG-SVM Detection and Discriminative Pixel-Pair Tracking (Yasu Ogiuchi, Sumitomo Electric Industries, Ltd., Japan)

3226: Pedestrian Tracking by On-Board Wideview Monocular Camera (Shunsuke Kamijo, University of Tokyo, Japan)

**TS121: Improving and Modeling Algorithms for Driver Assistance Systems**

**Room: S320F**

**MODERATOR**

Yosuke Akatsuka, Nissan Motor Co., Ltd., Japan

**PAPERS**

1303: Field Evaluation of an Enhanced Rear Signaling System for Heavy Trucks (William Schaudt, Virginia Tech Transportation Institute, USA)

1315: Bayesian-Monte Carlo Model for Collision Avoidance System Design of Cognitively Connected Vehicle (Afa Khan, Carleton University, Canada)

2212: Improved Method to Calculate the Time to Collision of Two Vehicles (Felipe Jimenez, Politécnica University of Madrid, Spain)
### TECHNICAL / SCIENTIFIC SESSIONS

#### TS122: Improving Air Quality with ITS Technologies

**Room:** S320G

**MODERATOR:** Anil Namdeo, Newcastle University, United Kingdom

**PAPERS**

- **1182:** Benefits of In-Vehicle Map-Based Applications for CO2 Reduction and Energy Efficient Road Transport (Rajat Verma, NICTA, Australia; Jin Zhang, University of New South Wales, Australia; Martin Kotsali, University of Sydney, Australia; Yiying Pei, China)

- **2043:** Road User Changing in Green Activity Zones (Trond Foss, SINTEF, Norway)

- **2170:** Air Quality Management Test Using VMS (Suzanne Planath, Swedish Transport Administration, Sweden)

- **3101:** Instantaneous Vehicle Emission Models for Evaluating Environmental Impacts of ITS (Dr. Hussein Dia, AECOM, Australia)

#### TS126: Innovative Sensing Technologies

**Room:** S220D

**MODERATOR:** Gino Dompietro, ITS Australia, Australia

**PAPERS**

- **2247:** Video, and Sound Parameter Based Detection of Oposing Traffic in Floating Car Observer Applications (Toni Weisheit, University of Kassel, Germany)

- **3094:** High-Resolution 79 GHz Millimeter-Wave Radar (Kazuaki Hamada, Fujitsu Limited, Japan)

- **3170:** Vehicle Detection System Using Magnetic Sensor Networks (JaeJun Yoo, ETRI, Korea)

- **3252:** Automatic License Plate Recognition (ALPR) with Multiple OCR engines (Quan Lun Wang, IBM, China)

#### TS128: Infrastructure & Vehicle Signaling & Warning: Effect on Traffic Operations

**Room:** S220F

**MODERATOR:** Richard Beaubien, Hubbell, Roth & Clark, USA

**PAPERS**

- **1351:** An Investigation of the Impact of Advanced Vehicle Technologies on Traffic Operations (Li Lily Elefteriadou, University of Florida, USA)

### PAPERS

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<th>Paper ID</th>
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<td>Research on the Safety Distance Model Based on Car-Car Communication (Hua Wang, Harbin Institute of Technology, China)</td>
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<td>3256</td>
<td>D-S Theory Data Fusion Based Automatic Incident Detection Algorithm for Expressway (Jiancheng Weng, Beijing University of Technology, China)</td>
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<td>820</td>
<td>Link of the Traffic and Incident Management System Recovery and Reinvestment Act to Complete a Vital PAPERS</td>
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<td>1188: PennDOT &amp; FHWA Leverage the American Recovery and Reinvestment Act to Complete a Vital Link of the Traffic and Incident Management System Along I-95 (Stanley Niemczak, Jacobs, USA)</td>
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<td>2015: The Public Acceptability of Road Pricing (John Walker, Southampton University, United Kingdom)</td>
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<td>2034: European Approaches to Pre-Commercial Procurement (Mai Sloth, KeyResearch, Denmark)</td>
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<td>2250: Developing a National ITS Strategy in Denmark (Charlotte Vithen, Danish Road Directorate, Denmark)</td>
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<td>3204: City of Tehran ITS Strategic Plan (Mahmoud Siadat Mousavi, Pre-Commercial Procurement, ITS Institute, Iran)</td>
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<td>3252: Automatic License Plate Recognition (ALPR) with Multiple OCR engines (Quan Lun Wang, IBM, China)</td>
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#### TS129: Innovative Sensing Technologies

**Room:** S220D

**MODERATOR:** Gino Dompietro, ITS Australia, Australia

**PAPERS**

- **2247:** Video, and Sound Parameter Based Detection of Opposing Traffic in Floating Car Observer Applications (Toni Weisheit, University of Kassel, Germany)

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- **3170:** Vehicle Detection System Using Magnetic Sensor Networks (JaeJun Yoo, ETRI, Korea)

- **3252:** Automatic License Plate Recognition (ALPR) with Multiple OCR engines (Quan Lun Wang, IBM, China)

### TS129: Variable Speed Limits for Efficiency & Safety

**Room:** S320A

**MODERATOR:** Praveen Singh, Arada Systems, Inc., USA

**PAPERS**

- **1323:** Queue Warming and Variable Speed Limit Systems for Traffic Operation Efficiency and Safety Improvements (Quohui Zhang, University of Texas at Austin, USA)

- **1335:** Evaluation of Speed Harmonization in Managed Use Lanes on a Stretch of Long Island Expressway (Zifeng Jiang, Parsons Transportation Group, USA)

- **1356:** Effects on Speeds of A Rural Variable Speed Limit System (Emily Layton, University of Minnesota Duluth, USA)

- **2423:** Optimization of Variable Speed Limit Approaching Long Freeway Tunnel (Tien-Pen Hsu, National Taiwan University, Chinese-Taipei)
Towards a Shared Digital Communication Platform

**Deployment of a National Traffic Management**

- **Motors, USA**
- **Management, Japan**
- **Kingdom**

Using a Driving Simulator (Yuta Wakui, Tokyo University of Science, Japan)

3148: Simulation of the Speed Recommendation System for Green Signal Passage (Shigeru Inoue, Honda R&D Co., Ltd., Japan)

**TS131: V2I for Intersections and Traffic Signals**

**Room: S320C**

**MODERATOR**
Hayashi Itso, Panasonic Corporation, Japan

**PAPERS**
- 1119: Connected Vehicle: A Local and Regional Perspective (Faisal Saleem, Maricopa County, USA)
- 3022: A Study on Reducing Traffic Congestion at Intersections Using Inter-Vehicle and Road-Vehicle Communications (Yuta Wakui, Tokyo University of Science, Japan)
- 3148: Simulation of the Speed Recommendation System for Green Signal Passage (Shigeru Inoue, Honda R&D Co., Ltd., Japan)

**TS132: Traffic Management Case Studies Using Vehicle Probe Data**

**Room: S320D**

**MODERATOR**
Amaury Cornelis, ERTICO-ITS Europe

**PAPERS**
- 1161: Challenges to Effective Arterial Traffic Monitoring: Lessons from the I-95 Corridor Coalition’s Vehicle Probe Project (Stanley Young, University of Maryland, USA)
- 2010: Increasing Traffic Safety with Real Time Road Weather, Incident and Accident Data to Vehicles—Finnish Experiences (Peetu Eloranta, Mobisoft Oy, Finland)
- 2126: The Information Broker—From “Guess-Timated” Estimated Time of Arrival to On-Time Delivery (Jonas Sundberg, Sweco, Sweden)
- 3037: Applicability of a Probe Data Collection System to Road Traffic Management (Takeshi Wakatsuki, ITS Division, National Institute for Land and Infrastructure Management, Japan)
- 3167: Utilization of Probe Data for Traffic Flow Control (Masafumi Kobayashi, Sumitomo Electric Industries, Ltd., Japan)

**TS133: Platooning & Autonomous Vehicle**

**Room: S320E**

**MODERATOR**
Hidehiko Akatsuka, ITS Japan, Japan

**PAPERS**
- 1098: Connected Autonomous Driving: Technology and Features Behind EN-V (Priyantara Mudalige, General Motors, USA)
- 2122: SARTRE Cooperative Control of Fully Automated Platooned Vehicles (Eric Chan, Ricardo UK Ltd., United Kingdom)
- 3099: Incentive-Based Performance Management of ITS Operations (Andrew Pickford, Transport Technology Consultants, Hong Kong)

**TS134: Collision Avoidance System**

**Room: S320F**

**MODERATOR**
Maxime Flamant, ERTICO-ITS Europe

**PAPERS**
- 1002: Bosch Motorcycle ABS: Safety for All (Alexander Mueller, Robert Bosch LLC, USA)
- 1004: A Highly Integrated Multi-Feature Vision System for Active Safety Applications (Farooq Ibrahim, Takata Electronics, USA)
- 2126: Towards a Shared Digital Communication Platform for Vehicles (Jan Holle, University of Siegen, Germany)
- 2132: Architecture for Vulnerable Road User Collision Prevention System (VRU-CPS), Based on Local Communication (David Cares, IUCN-IBBT Agent, Belgium)
- 3102: Intersection Crash Prevention System by Automatic Vehicle Guidance (JeongAh Jang, ETRI, Korea)

**TS135: The Use of Vehicle and Fuel Infrastructure to Enhance Environmental Conditions**

**Room: S320G**

**MODERATOR**
Hiroyuki Kumazawa, Mitsubishi Electric Corporation, Japan

**PAPERS**
- 2045: ITS Services Enhancing Private Electromobility; Norway as a Testing Ground (Tom E. Nørbech, Transnova, Norway)
- 3068: Development of ITS Information System for EV (Electric Vehicle) (Tomokazu Shimoda, Mitsubishi Heavy Industries, Ltd., Japan)
- 3088: Evaluation of Influence on Traffic Flow by Eco Driving Vehicles by Using Road Traffic Simulation (Yuko Ohta, Mitsubishi Electric Corp., Japan)
- 3127: Proof of Concept Test for EV Recharge Management System (Tetsuya Adachi, Mitsubishi Heavy Industries, Ltd., Japan)

**TS136: Managing TMC Resources**

**Room: S320H**

**MODERATOR**
Stephen Bahler, HNTB Corporation, USA

**PAPERS**
- 1263: Empowering Operators through the TMC Academy (Daniel Smith, Florida Department of Transportation, USA)
- 2085: Deployment of a National Traffic Management System (Tomas Julner, Swedish Transport Administration, Sweden)
- 2146: LED-Lit Projection Modules for Large-Screen Visualization in Traffic Management Centers (Frederic Devisch, Barco, Belgium)
- 3099: Incentive-Based Performance Management of ITS Operations (Andrew Pickford, Transport Technology Consultants, Hong Kong)

**TS137: ITS Data Usage**

**Room: S330A**

**MODERATOR**
Terry Bills, ESRI, USA

**PAPERS**
- 1049: Data Uses In Transportation Management Centers (Joseph Snyder, AECOM, USA)
- 1062: Real-Time Analytics for the Next Generation of ITS Solutions (Damian Black, SQLstream, USA)
- 1211: Design of an Enhanced Real-Time Traffic Statistics Reporting System (Charles Lattimer, Program Manager, Atkins, USA)
- 3162: Study on the Evaluation System for Automatic Vehicle Classification Equipment (Tae-Hyun Hwang, ITS Korea, Korea)
To facilitate information exchange, the Interactive Sessions will provide a two-stage presentation opportunity to ensure that authors/presenters achieve the profile and audience of interested delegates that their work deserves.

The first portion will include a 90-minute panel with up to eight technical/scientific paper presentations that will help promote discussion. The second element is a one hour “meet the author” session immediately following the panel session where all authors will assemble in the Exhibit Hall with their poster/virtual presentations to allow attendees one-on-one discussions with the authors.
INTERACTIVE SESSIONS

**IS10: ITS: The Environment, Mobility, Vehicle to Infrastructure, and Safety**

**Room**: HALL SA/SB MEETING ROOM 5

**MODERATOR**
Takaaki Segi, Toyota Motor Corporation, Japan

**INVITED SPEAKERS**

1018: Thick or Thin, Maximizing Data While Protecting Privacy of Participants: The Minnesota Solution
(Bennett Pierce, Battelle, USA)

1070: Vermont RWIS/VMS Automation (Robert White, Vermont Agency of Transportation, USA)

1077: Benefit Estimation Analysis for Traffic Incident Management Patrol Expansion (Yu-Hsin Ko, University of Maryland, USA)

3028: An Analysis of Multi-Hop Tests Using VMC Systems (Hanbyeog Cho, ETRI, Korea)

3038: Application and Test of FM-VMS Using Watermarking Method (Bumjin Park, Korea Institute of Construction and Technology, Korea)

3039: Applying Vehicle-Infrastructure Communication and Adaptive Cruise Control to Mitigate Traffic Congestion at Sag Sections on Expressway (Ken Iwasaki, National Institute for Land and Infrastructure Management, Japan)

3091: Experimental Research on an Idling Stop Support System Based on Infrastructure—Vehicle Cooperation (Noriyuki Tsukada, Nissan Motor Co., Ltd., Japan)

3129: Quantitative Analysis of Safety Improvement on Smart Roads (Sungho Oh, Korea Research Institute for Human Settlement, Korea)

3169: Vehicle Carbon Dioxide Emissions Based on Probe Data Collected via Infrared Beacons (Koichiro Iwaoka, Panasonic System Solutions Infrastructure Co., Ltd., Japan)

**IS11: Transportation Demand Management & Smart Parking**

**Room**: HALL SA/SB MEETING ROOM 6

**MODERATOR**
TBD

**PAPERS**

1222: Intelligent Parking Management for Los Angeles (Amir Sedadi, Los Angeles Department of Transportation, USA)

1342: Case Study in Real-Time Ridesharing: SR 520 Carpooling Pilot Project, Seattle, WA (Sean O’Sullivan, Avego, Ireland)

1347: A Predictive Model and Evaluation Framework for Smart Parking: The Case of ParkPGH (Robert Hampshire, Carnegie Mellon University, USA)

2200: Cruising for Parking in Lisbon and an Online Reservations System to Fight It (Diana Carvalho e Ferreira, CESUR-IST-UTL, Portugal)

2235: A Game Theoretic Approach to Enforcement in Electronic Toll Collection (Per Furnes, O-Free ASA, Norway)

3088: Evolution of ETC Setup System in Japan (Tohru Kimura, Organization for Road System Enhancement (ORSE), Japan)

3231: Simulation Analysis on Parking Measures for Loading Vehicles in Considering Parking Choice Behavior (Kinichiro Kamei, Nagoya Institute of Technology, Japan)

3251: Evaluation of Pre-Registration and Incentive Grant Scheme Applied for Mitigation of Expressway Traffic Congestion (Jian Xing, Expressway Highway Research Foundation of Japan, Japan)
PAITS01: ITS and Transport Concessionaires
Room: S330A
The field of transportation continues to see a significant number of “concessions,” situations where the government retains ultimate ownership of either the physical assets or the right to supply transport services, but grants exploitation rights to a concessionaire. The concessionaire takes a large part of the commercial risk during the period of the concession. Attend this session to learn the latest in areas like tolling, free flow traffic, and, management and coordination with public sector.

PAITS02: Americas Projects and Business Opportunities, Part I
Room: S330A
The Americas are seeing more and more ITS initiatives taking place as nations plan and develop their ITS architecture and strategic investments. Nations whose work will be highlighted include: Argentina, Brazil, Canada, and Chile.

PAITS03: Americas Projects and Business Opportunities, Part II
Room: S330A
The Americas are seeing more and more ITS initiatives taking place as nations plan and develop their ITS architecture and strategic investments. Nations whose work will be highlighted include: Argentina, Brazil, Canada, and Chile.

PAITS04: Tunnels and ITS
Room: S330A
The geography of transportation in the more mountainous nations of North and South America dictate significant investments in tunnelling to support the safe and expeditious movement of people and goods. This poses both policy and technical challenges if tunnels and their integral role in the transport system are to be effectively managed, border crossings kept safe and secure, and the infrastructure maintained. Experts throughout the Americas will tackle this important topic.

INT01: ITS Development in Fast-Growing Economies
Room: S330B
The ITS effort in the Middle East has progressed significantly in a short period of time. The Transport Authorities in the Middle East have realized the importance of ITS in enhancing the quality of life by significantly improving road network safety, security and efficiency. Some countries in the region are becoming leaders in ITS Strategy development and deployments but recognize that more efforts are required on ITS standards and open ITS architecture developments. This session will discuss ITS strategies, plans, implementation experiences and lessons learned from selected countries in the Middle East.

Organizer
ITS Arab
Moderator
Zeina Nazer, Secretary General, ITS-Arab
Invited Speakers:
William Sowell, Executive Vice President, Aldis Corporation; International Road Federation (WPC) Board Member & Chairman-ITS Committee
Mr. Kenan Bozgeyik, Head of Strategy Development, Turkish Ministry of Transport, Turkey
Eng. Huda Fakhroo, Director Road Planning & Design, Ministry of Works in Bahrain
Eng. Khaled Hachem, Director of Land Transport, Abu Dhabi Department of Transport, UAE
Eng. Jamal Sharida Al Kaabi, Manager of Infrastructure at Department of Transport “Ashghal”, Qatar
The International Benefits, Evaluation, and Costs (IBEC) Working Group was created to provide an international forum for information exchange on ITS Evaluation techniques, best practices, and results. In 2011, IBEC welcomes you to sessions featuring presenters from all over the world discussing road pricing, freight transportation, climate change, and special events focusing on evaluation perspectives and project updates.

**IBEC01: Is Evaluation Playing its Proper Role to Promote ITS Deployment?**  
*Room: S330B*

**Organizer**  
Caroline Visser, IRF

Having had the initial wave of first generation ITS strategies in the 1990’s, a number of countries are strategically reviewing and planning second generation ITS strategies and deployment plans. This IBEC session will look into the effectiveness of the early ITS strategies; to what extent and how have they contributed to ITS deployment?

**Invited Moderator**  
Keith Keen, Chair IBEC—International Benefits, Evaluation & Costs Working Group

**Invited Panelists**  
Risto Kulmala, VTT, Finland  
Gethin Perry, GHD, Australia  
Jose Lobaco Amaya, Planeación, Transporte y Logística, Mexico  
S. L. Dhingra, IIT, India  
Representative Canada

**IBEC02: Social Media/Networking and its Impact on Transportation**  
*Room: S330B*

**Organizers**  
Richard Harris, Logica & Tom Kern, ITS America

Twitter and Facebook are no longer just trends; authorities everywhere are embracing social networking as a means of communication. Expert speakers will discuss the issues surrounding social networking and how transport apps will impact transportation.

**Invited Moderator**  
Todd Solomon, U.S. DOT or Kendra Levine, Berkeley

**Invited Panelists**  
Larry Ehl, WSDOT  
Susan Grant Muller, University of Leeds  
Andy Palanisamy, Citizant  
GBS Bindra, Director of Innovation, Logica

**IBEC03: Managing Traffic With No Money!**  
*Room: S330B*

**Organizer**  
Alan Stevens, IBEC Management Committee

Much of the developed world is only just recovering from the economic crises. This timely session will ask some stark questions and discuss some radical solutions as road operators take a fundamental look at what they do and how they do it.

**Invited Moderator**  
Keith Keen, Chair IBEC, United Kingdom

**Invited Panelists**  
Jeff Lindley, Associate Administrator for Operations, Federal Highway Administration, U.S. Department of Transportation  
Tom Mathew, Associate Professor, Institute of Technology, Bombay, India  
Richard Mudge, Vice President, Delcan, USA  
Gethin Perry, Principal ITS Engineer, GHD, Australia
WEDNESDAY, OCTOBER 19
1:30 p.m. – 3:00 p.m.

**IBEC04: Enforcement Cameras: To Install or Not to Install—That is the Question?**

**Room: S330B**

**ORGANIZER**
Barry Pekilis, Transport Canada

In the United Kingdom, local authorities are switching off their existing cameras, illustrating the ongoing argument surrounding the effectiveness of cameras for enforcement. This session will present evaluations and performance metrics about the effectiveness of enforcement cameras and explore what makes this ITS technology so appealing in some jurisdictions yet no longer useful in others.

**INVITED MODERATOR**
Paul Vorster, ITS South Africa, South Africa

**INVITED PANELISTS**
Mark Bonnormoris, Business Development Manager, Road Safety Systems, Siemens PLC, Europe
Trevor Hall, Managing Director, Road Safety Support, Office to ACPO Road Policing Enforcement Technology Committee, United Kingdom
John Tipaldo, NYCDOT Traffic Management, USA

Mark Milner, Manager, Road Safety Programs, Insurance Corporation of British Columbia (ICBC), Canada

WEDNESDAY, OCTOBER 19
3:30 p.m. – 5:00 p.m.

**IBEC05: ITS Decision Support Resources Around The World**

**Room: S330B**

**ORGANIZERS**
James Bunch, Noblis & Greg Hatcher, Noblis

When ITS was an emerging concept, a number of resources were established around the world to introduce applications and technologies to professionals and help practitioners incorporate ITS into their plans and systems. This session will provide an update on the resources that are available and new capabilities/enhancements that they may be providing.

**INVITED MODERATOR**
James Pol, P.E., PMP, Team Lead, Program Management and Evaluation, ITS JPO, U.S. Department of Transportation

**INVITED PANELISTS**
Marcia Pincus, Program Manager, ITS Evaluation, ITS JPO, U.S. Department of Transportation
Martin Böhm, 2DECIDE Project Leader, Austriatech
Risto Kulmala, Research Professor, VTT Technical Research Centre
Arun Krishnamurthy, P.E., ITS Software, Standards and Architecture Coordinator, Florida Department of Transportation
Mohammed Hadi, Ph.D., P.E., Associate Professor, Florida International University
Doug Sallman, Project manager, Cambridge Systematics Inc.
ITS AMERICA ANNUAL MEETING HIGHLIGHTS

ITS America’s Annual Meeting is the premier gathering of transportation and technology industry practitioners and professionals in North America. Combined with the World Congress, attendees will have the opportunity to participate in one of the largest global events.

Forum Showcase
The Value of Performance Measures in Managing 21st Century Transportation Systems
Sponsored by TÜV Rheinland
Sunday, October 16
1:00 p.m. – 4:00 p.m.

Room: S220A
ITS America’s technical forums invite you to take a closer look at the critical role intelligent transportation systems play in measuring the performance of our transportation network. This special showcase session will feature:

- An overview of the emergence of performance measures by Emil Frankel, Director for Transportation Policy at the Bipartisan Policy Center;
- An update on federal reporting requirements and the U.S. Department of Transportation’s vision by Jeff Lindley, Associate Administrator for Operations, Federal Highway Administration;
- Advice for the transportation industry by FedEx Ground’s Vice President for Technology Operations Robert Pudlo;
- Presentations by directors of leading state agencies, experts in commercial trucking, highway safety, environmental issues and transit, as well as a scan of the top international systems and processes; and
- An insider’s guide to the World Congress program that will highlight over 40 related sessions.

Awards Program
Sponsored by Atkins and Southwest Research Institute
Monday, October 17
5:00 p.m. – 6:00 p.m.

Room: Exhibit Hall Theater
Join friends and colleagues at the “Best of ITS Awards,” a special time set aside during the Annual Meeting to honor the best and the brightest in the ITS community. All finalists will be recognized during a special video presentation and awards will be given to winners in the “Best New Innovative Product, Service or Application” and “Best New Innovative Practice” categories.

The winners of the Outstanding State Chapter and Membership Growth awards, along with the winners of the Outstanding Student Essay Competition, sponsored by Southwest Research Institute, and the Smart Phone ITS Apps Contest, sponsored by Atkins, will be announced as well. The ITS Hall of Fame inductees will also be honored during the ceremony.

ITS America Annual Meeting: Safety and the Aging Population Plenary
Monday, October 17
3:30 p.m. – 5:00 p.m.

Room: Hall SA1
Central to ITS America’s Annual Meeting is its Safety Plenary, anchored by several distinguished national speakers whose leadership in the safety arena focuses on how transportation is evolving to address the needs of our aging demographic.

MODERATOR
Kathleen Marvaso, Vice President for Public Affairs, AAA

INVITED SPEAKERS
Deborah Hersman, Chairman, National Transportation Safety Board
David Strickland, Administrator, National Highway and Traffic Safety Administration (Invited)
Joseph Coughlin, Director, AgeLab, Massachusetts Institute of Technology
Jonathan Bennett, Executive Vice President, Digital Commerce & Customer Analytics, Hartford Financial Services Group, Inc.

ITS America Annual Meeting: U.S. Department of Transportation Plenary
Tuesday, October 18
10:30 a.m. – Noon

Room: Hall SA1
At the U.S. Department of Transportation, Connected Vehicle research is not just focused on cars; it is a multimodal initiative that includes nearly every agency within the department. That is why Acting RITA Administrator Greg Winfree has been invited to recreate one of the most popular sessions from the 2010 ITS America Annual Meeting by bringing together leaders from the Federal Highway Administration, Federal Transit Administration, Federal Motor Carrier Safety Administration, Maritime Administration, Federal Railroad Administration and National Highway Traffic Safety Administration to discuss the future of ITS technology in the U.S. This will be a rare opportunity to hear from America’s top transportation policy leaders on the same stage.

ITS America Annual Meeting Business Meeting
Tuesday, October 18
Noon – 1:00 p.m.

Room: Exhibit Hall Theater
The Annual Meeting Business Meeting will feature a presentation by Bob Denaro, Vice President, Advanced Driver Assistance Systems, NAVTEQ.

U.S. DOT Connected Vehicle Challenge Winners Session
Tuesday, October 18
1:30 p.m. – 3:00 p.m.

Room: Exhibit Hall Theater

TIP
Annual Meeting Events and Sessions are open to all delegates.
Intelligent Transportation Society of America

22nd ANNUAL MEETING & EXPOSITION

May 21 – 23, 2012

SMART TRANSPORTATION
A Future We Can Afford

Gaylord National Resort & Convention Center
National Harbor, MD
(Outside Washington, D.C.)

www.itsa.org
ITS America’s Annual Meeting will offer 42 educational sessions fully integrated into the World Congress program focused on the public and private sector efforts in The Americas. ITS America will host specially invited professionals in ITS from both public and private sectors, from the U.S. and abroad, to highlight partnerships, technologies, initiatives, and policies.

**AM01: Driver Distraction: Fundamentals, Research and Implications**

*Room: S331A*

As Webster’s New World College Dictionary “word of the year” for 2009, Distracted Driving is a hot topic for researchers, legislators, the motoring public and society in general. Though we each have an idea of what the term means, there is no common definition within the research community. Additionally, there are many studies that have investigated the topic, but with varying results. What are we to make of these discrepancies? Panelists will outline ITS America’s position on Distracted Driving, describe the latest research on the topic, and highlight the impact that Distracted Driving has on behind-the-wheel behavior.

**ORGANIZER**

ITS America’s Safety Forum

**MODERATOR**

Richard Hanowski, Director, Center for Truck and Bus Safety, Virginia Tech Transportation Institute

**INVITED SPEAKERS**

Jeffrey Hickman, Group Leader, Behavioral Analysis and Applications Virginia Tech Transportation Institute

James Sayer, University of Michigan Transportation Research Institute

Chris Monk, Lead Research Psychologist, Federal Highway Administration, U.S. Department of Transportation

Amy Schick, Program Manager, Officer of Impaired Driving and Occupant Protection, National Highway Traffic Safety Administration, U.S. Department of Transportation

**AM02: Arterial Management Systems—Real Applications on Collecting and Reporting Arterial Travel Time**

*Room: S331B*

While reporting of travel times has been around for years on freeway management systems, arterial roadway travel times have been difficult to predict and report due to the variability of events that affect arterial roadways. These variables may include signal systems, the ingress and egress of vehicles on the roadway from multiple access points or businesses, bus and train vehicle queuing, pedestrian and school crossings, and many other factors that may affect arterial roadway vehicle flow. This topic will present and discuss real, deployed methods for collecting travel time data on arterial roadways and the various ways of disseminating that data out to the traveling public. We will discuss the systems currently in use, how the data is disseminated to the driver, cross jurisdictional (freeway to arterial) coordination of travel time between State and Local agencies, and evaluations from currently deployed systems.

**ORGANIZER**

ITS America’s Personal Mobility Forum

**MODERATOR**

Adam Moser, Senior Engineer, Pinellas County Public Works

**INVITED SPEAKERS**

Bill Skillas, Vice President, TransCore

Charlie Wetzol, County Traffic Engineer, Seminole County Public Works

Doug Terry, Chief Operating Officer, Aegis ITS

Damian Black, CEO, SQLstream

**AM03: Climate Change Legislation and Regulations at the State Level**

*Room: S331C*

While meaningful climate change legislation at the Federal level is not expected anytime in the near future, several individual states are taking their own steps to cut greenhouse gas emissions. This session will look at some of these regulations and the associated state legislation, and their potential impacts on transportation planning, design and construction activities.

**ORGANIZER**

ITS America’s Sustainable Transportation Working Group

**MODERATOR**

Larry Yermack, President, Wendover Consult

**INVITED SPEAKERS**

Jackie Glassman, Partner, Hogan Lovells

Tom Richichi, Principal, Beveridge & Diamond PC

**AM04: Current Work in Automated Electric Transportation Research**

*Room: S331D*

This session will discuss work being conducted in the United States to support Automated Electric Transportation, a concept that combines wireless power transfer and automation of the driving process. The panelists will focus on the aspects of work being conducted today to advance the state of the knowledge in this area.

**ORGANIZER**

ITS America’s Cross-Cutting Issues Forum

**MODERATOR**

Kevin Heaslip, Assistant Professor, Utah State University

**INVITED SPEAKERS**

James Fishelson, Utah State University

Derek Freckleton, Lab Manager, Utah State University

Hunter Wu, Researcher, Energy Dynamics Laboratory, Utah State University Research Foundation

Craig Stephan, Energy Systems Scientist, Argonne National Laboratory

**AM05: User’s Perspectives on Calibration and Validation of Traffic Simulation Models**

*Room: S330G*

Increasing reliability and validity of traffic simulation results is a challenging issue. Traffic simulation models are wildly used by governmental agencies and private consultants to analyze complex traffic conditions and to assess mobility impacts of new operational scenarios such as HOT (“High Occupancy Travel”) lanes or variable speed limits. The need for using traffic simulation models will further increase as the profession requires more reliable and accurate analytical tools rather than what current deterministic traffic analysis tools (e.g., the HCM) offer. Still, a significant portion of traffic professionals are skeptical of simulation results, feel uncomfortable utilizing them, do not have adequate guideline to calibrate simulation models for their conditions, or do not know how to verify the simulation results. This session will present users’ perspectives and best practices on how to calibrate and validate simulation models accurately and efficiently based on the real-world traffic data. Selected users of microscopic simulation models will present their challenges,
problems, and lessons learned from calibrating and validating their models. The presentations may also include successful calibration and validation case studies, recommended best practices, and new developments and procedures in calibration and validation of microscopic traffic simulation models.

ORGANIZER
Sponsored by the Transportation Research Board of the National Academies

MODERATOR
Aleksandar Stevanovic, Assistant Professor, Florida Atlantic University

INVITED SPEAKERS
Armand Ciccarelli, ITS America’s Personal Mobility Forum
Mohammed Hadi, Florida International University
Byungkyu “Brian” Park, University of Virginia
Lily Elefteriadou, Kisinger Campo Professor of Civil Engineering, Director of the Transportation Research Center, University of Florida

TUESDAY, OCTOBER 18
8:30 a.m. – 10:00 a.m.

● AM06: Performance Measurement
101: Strategies for Addressing Increasing Data Collection and Accountability Requirements in an Era of Decreasing Resources
Room: S330Q
Recent legislation (e.g., Section 1201) and language anticipated to be included as part of the draft U.S. National Surface Transportation Act make it clear that public agencies will face increasing data collection, performance reporting, and accountability requirements over the next several years. This session will assist attendees in better understanding the range of requirements they are likely to face, as well as present possible options for addressing these obligations in an environment of increasingly limited resources.

ORGANIZER
ITS America’s Personal Mobility Forum

MODERATOR
Armand Ciccarelli, Senior Consultant, Berkeley Transportation Systems

INVITED SPEAKERS
Jeff Lindley, Associate Administrator for Operations, Federal Highway Administration, U.S. Department of Transportation
Constance Sorrell, Chief of System Operations, Virginia Department of Transportation
Karl Petty, President, Berkeley Transportation Systems
Rick Schuman, Vice President—Public Sector, INRIX

● AM07: Technology for a Better Connected Vehicle
Room: S331A
Industry and government perspectives on the technology mix for successfully deploying Connected Vehicles applications.

ORGANIZER
U.S. Department of Transportation

MODERATOR
Mike Schagrin, Program Manager, ITS Safety, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation

INVITED SPEAKERS
Brian Cronin, Team Leader, ITS Research and Demonstration, ITS Joint Program Office, RITA, U.S. Department of Transportation
Justin McNew, Vice President, ITS Strategy & Commercialization, Kapsch
Tao Zhang, Chief Scientist, Telcordia Technologies
Jim Misener, Executive Advisor, Booz Allen Hamilton
Leo McCloskey, Vice President, Marketing, Airbiquity

● AM08: AERIS Program Update
Room: S331B
The goal of the AERIS (Applications for the Environment: Real-time Information Synthesis) program—part of the overall Connected Vehicle research effort sponsored by the U.S. DOT Intelligent Transportation Systems (ITS) Joint Program Office (JPO)—is to transform environmental management of the transportation system by facilitating green choices by transportation system users and operators. The focus of AERIS is the generation, capture, standardization, and use of real-time data from connected travelers (e.g., pedestrians, bicyclists, transit passengers), vehicles (light vehicles, transit, freight) and infrastructure. This session provides an overview of the AERIS program and the progress made to date in terms of research activities and international coordination.

ORGANIZER
ITS America’s Sustainable Transportation Working Group

MODERATOR
Marcia Pincus, Program Manager, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation

INVITED SPEAKERS
Robert Ferlis, Technical Director, Federal Highway Administration, U.S. Department of Transportation
JD Schneeberger, Noblis
Quon Kwan, Program Manager, Federal Motor Carrier Safety Administration, U.S. Department of Transportation
William Wiggins, Federal Transit Administration, U.S. Department of Transportation

● AM09: Insurance Telematics—The Emerging Opportunity
Room: S331C
Telematics providers have been collecting behavioral data for commercial vehicle fleets for a number of years, offering carriers new insights into safety and risk. For example, carriers interested in reducing risk exposure and improving their reputation for safety have created applications to enforce company policies, such as bans on the use of cell phones while operating. For consumers, insurance companies have experimented in the 1990’s first with evaluating risks with credit reporting, and in 2000’s using Usage-Based Insurance technology to evaluate driving habits and analyze risks, offering discounts for safer drivers. Cars are getting smarter, monitoring driver behavior in real-time and providing feedback. Such feedback systems that coach drivers have been seen for teen drivers and drivers of electric vehicles that employ “eco-driving” feedback to increase range. These systems to work, a number of institutional issues, such as regulation and education must be addressed, as must drivers’ acceptance and privacy. This session looks beyond the issue of driver distraction and focuses on how feedback and insurance incentives may encourage and improve safe driving behaviors.

MODERATOR
Sponsored by the Transportation Research Board of the National Academies

MODERATOR
Dave McNamara, President, McNamara Technology Solutions

INVITED SPEAKERS
Mike Carroll, Vice President Sales – Telematics, Danlaw INC
Eric Berkobin, Vice President Engineering & General Manager In-Drive, Hughes Telematics
Nino Tarantino, CEO, Octo Telematics USA
Dave Huber, Independent Consultant

● AM10: Emerging Strategies for Freeway Management and Operations
Room: S331D
Freeway management strategies and concepts—such as ramp metering and incident management—were initially developed to counter congestion. That is still a major goal, along with enhanced safety. But over the past several years, freeway practitioners have begun to view themselves as good stewards and responsible managers; managing not only the traffic flow on the freeway network, but also the being more proactive in addressing potential problems, rather than merely reactive. This has led to the recent development and deployment of “Active Traffic Management” (e.g., variable speed displays and dynamic lane assignment), Managed Lane concepts (e.g., High Occupancy Toll and Express lanes), and other pre-active strategies in a growing number of regions in the United States and in Europe. This session will provide an overview of these various strategies and examples of their implementation and operation, including the associated benefits.

ORGANIZER
Sponsored by the Transportation Research Board of the National Academies

MODERATOR
Dave Huber, Independent Consultant

INVITED SPEAKERS
Nino Tarantino, Octo Telematics USA, Chief Executive Officer
Mike Carroll, Danlaw INC, Vice President, Sales – Telematics
Eric Berkobin, Hughes Telematics, Vice President Engineering & General Manager In-Drive
Mark Ferreira, Airbiquity, Executive Advisor
Robert Ferlis, Federal Highway Administration, Technical Director
JD Schneeberger, Noblis, Executive Advisor
Bill Wiggins, Federal Transit Administration, Mission Assurance Division
TUESDAY, OCTOBER 18
1:30 p.m. – 3:00 p.m.


Room: S330G

Technology stands to benefit the surface transportation system by making it safer, more efficient, and environmentally sustainable. However, any technology introduced to drivers inside a vehicle can be a source of distraction and can potentially elevate crash risk. This panel will discuss research that has set out to determine how to incorporate technology effectively into the surface transportation system without reducing overall system reliability. Panelists will discuss driver-optimized interfaces, workload management systems, driver assistance systems, and potential outcomes of combining all three together.

ORGANIZER
ITS America’s Safety Forum

MODERATOR
Gregory M. Fitch, Senior Research Associate, Virginia Tech Transportation Institute

INVITED SPEAKERS
Linda Angell, Research Scientist, Center for Automotive Safety Research, Virginia Tech Transportation Institute

Tim Johnson, Director, Office of Human-Vehicle Performance, National Highway Traffic Safety Administration, U.S. Department of Transportation

Raymond Kiefer, Technical Fellow, GM Global Active Safety, Electronics & Innovation, General Motors Company

Thomas Schalk, Vice President, Speech Technologies, ATX Technologies

● AM12: The Evolution of TMCs

Room: S331A

An overview of the evolution of TMCs, with emphasis on what the future holds. ITS America did a tremendous job of coming up with a vision for the future of TMCs at the 2008 World Congress in New York. This session will feature a high level conversation of concepts and next steps to make the vision for 2020 TMCs and traffic management a reality.

ORGANIZER
ITS America’s Personal Mobility Forum

MODERATOR
Robert Edelstein, Vice President, AECOM

INVITED SPEAKERS
Terry Haukom, TMS Design and Integration Supervisor, Minnesota Department of Transportation

James Cheeks, Traffic Services Field Operations Manager, District Department of Transportation

Vinodh Swaminathan, Director, Intelligent Transportation Systems, IBM Sales & Distribution – Government Industry

● AM13: Surface Transportation Reauthorization: A View from the Hill

Room: S331B

The current surface transportation authorization bill, SAFETEA-LU, expired more than two years ago on September 30, 2009. Since that time the federal transportation program has been operating on a series of short-term extensions, the latest of which will expire again early next year. While there is broad agreement on the need for additional transportation investment, policymakers have struggled to find politically viable financing mechanisms, or to reach consensus on the proper role of the federal government given the constrained budget environment. At the same time, rapid advancements in technology are providing solutions that did not exist during the last reauthorization, particularly in areas such as transportation financing, performance measurement, congestion management, tolling, and highway and vehicle safety. Other areas of discussion include opportunities to leverage resources including private sector investment, and ways to expedite the project delivery process as public agencies work to do “more with less.” Congressional officials and policy leaders will discuss these issues and more with a view toward making the next reauthorization count.

ORGANIZER & MODERATOR
Paul Feenstra, Vice President, Government and Public Affairs, The Intelligent Transportation Society of America

INVITED SPEAKERS
Jim Kolb, Minority Staff Director, House Transportation and Infrastructure Committee

Dan Vooni, Professional Staff, House Transportation and Infrastructure Committee

● AM14: Using ITS To Enable A More Resilient and Secure Transportation Network: Global Perspectives

Room: S331C

The National Transportation Security Center of Excellence (NTSCOE) is a component of the Department of Homeland Security’s Science and Technology Directorate. The affiliate universities are engaged in active research to reduce the nation’s vulnerabilities and facilitate more rapid response in the event of a terrorist act. This session will highlight research advances in process at NTSCOE institutions.

ORGANIZER
U.S. Department of Homeland Security, National Transportation Security Center of Excellence—Petrochemical Transportation Security

MODERATOR
John Peracchio, Managing Member, Peracchio & Company, LLC

INVITED SPEAKERS
Carol A Lewis, Principal Investigator, NTSCOE-P, Texas Southern University

Matthias Defee, Director Customer Projects, Worldwide, GEWI Europe

Dan Collins, Senior Solutions Executive, IBM

● AM15: Automated Public Transport Vehicles: State of the Art and Recent Deployment

Room: S331D

This session focuses on recent developments that have seen automated public service vehicles entering full-time service in locations throughout the world. The focus here is on specific deployments in the USA (Minnesota and California) and Europe (La Rochelle). As well as describing the current status of these automated vehicles and the challenges faced, discussion will focus on feasible next steps towards large-scale deployment.

ORGANIZER
Sponsored by the Transportation Research Board of the National Academies

Tim Gordon, Research Professor, Department of Mechanical Engineering, University of Michigan Transportation Research Institute

Andana Palanisamy, Senior Transportation Management Specialist, Citizan

INVITED SPEAKERS
Michel Parent, INRIA, France

Craig Shankwitz, Director of the Intelligent Vehicles Laboratory, University of Minnesota

Wei-Bin Zhang, Research Engineer, California PATH, University of California, Berkeley
**AM16: Connected Vehicles in a Connected World for Enhanced Safety and Mobility**

*Room: S331A*

Wireless communication technologies have enabled a kaleidoscopic array of “connectivity” applications that revolutionize many aspects of commercial and public services. Quietly, but not entirely inconspicuously, the very revolution that redefines the landscape of user experience and business models is propagating into the next frontier—automobiles and roadways. Research activities around the globe are continuing to explore the feasibility and benefits of providing safety, mobility, efficiency, and environment-friendly services to users based on the concept of connected vehicles. This session is organized to bring up-to-date information on developments across the globe in the development and utilization of vehicle and roadside communication, with a special focus on safety.

**Organizer**

ITS America’s Safety Forum

**Moderator**

Ching-Yao Chan, Transportation Safety Research, California PATH UC Berkeley

**Invited Speakers**

Luca Delgrossi, Director, Driver Assistance & Chassis Systems U.S., Mercedes-Benz Research & Development North America, USA

Shiichi Suzuki, Senior Researcher, ITS Division National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism, Japan

Juhani Jääskeläinen, Head of Unit, European Commission, DG INFSO

Alberto Leon-Garcia, Department of Electrical and Computer Engineering, University of Toronto, Canada

Andreas Mai, Director Automotive North America, Internet Business Solutions, Cisco

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**TUESDAY, OCTOBER 18**

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**AM17: Active Transportation and Demand Management Results**

*Room: S331B*

As Active Transportation & Demand Management strategies begin to mature in the U.S., come hear from state agencies that have already logged real-world results, and FHWA representatives on future plans. Accident reductions in Seattle, improved travel times in Minnesota, corridor & demand management in San Diego; these are just a few of the examples and measurable results we’ll discuss in this session dedicated to ATDM strategies such as speed harmonization, hard shoulder running, interchange lane control, and dynamic re-routing. We’ll also feature an update from FHWA representatives on a brand new chapter being prepared for the Highway Capacity Manual dedicated to ATDM strategies, and an update on where the federal program is headed over the next year.

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**AM18: Defining Livability Measures for Sustainable Transportation**

*Room: S331C*

U.S. DOT has stressed livability and quality of life, but no one has really defined how to measure them. This session will explore performance measures for livability and key environmental and energy saving best practices for transportation and transit authorities to demonstrate how using ITS can produce more efficient operations and reduce greenhouse gases.

**Organizer**

ITS America’s Sustainable Transportation Working Group

**Moderator**

Josh Peterman, Associate, Fehr & Peers

**Invited Speakers**

Mike McGurrin, Senior Fellow, Transportation Systems, ITS Director, Noblis

Joshua Schank, President and CEO, En Transportation Research

Deron Lovaas, Federal Transportation Policy Director, Natural Resources Defense Council, USA

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**AM19: Latest Evaluation Findings and Factors in ITS Deployment Tracking**

*Room: S331D*

This session unveils the latest findings from the ITS Evaluation Program, featuring the national statistics and trends derived from the 2010 deployment survey. Results come from 1,600 surveys that were distributed to a wide variety of state and local transportation agencies. These efforts draw on data from the ITS Deployment Tracking survey.

**Organizer**

ITS America’s Personal Mobility Forum

**Moderator**

Steve Kuciamba, Vice President, Parsons Brinckerhoff

**Invited Speakers**

Les Jacobson, Senior ITS Manager, Parsons Brinckerhoff

Nick Thompson, Division Director, Policy Safety and Strategic Initiatives, Minnesota Department of Transportation

Alex Estrella, Senior Transportation Planner, San Diego Association of Governments (SANDAG)

Robert Sheehan, Office of Transportation Management, Federal Highway Administration, U.S. Department of Transportation

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**AM20: Public Safety**

*Room: S331A*

Too often the ‘public safety’ lexicon fails to consider or address its emergency responder and emergency vehicle components. The Transportation Safety Advancement Group (“TSAG”), an assembly of transportation and public safety professionals, addresses the broader range of public safety to include emergency services. Through its strategy for promoting technology for public safety, TSAG extends ITS public safety focus to emergency services and emergency responder needs. Referenced by TSAG as the ‘forgotten mode’, the group notes that emergency services begin with incident detection through operations based surveillance systems or 9-1-1 calls, after which emergency responders come to action. Emergency vehicle and responder safety are among the public safety safety elements of the TSAG mission. This session will address technology challenges to serving emergency responder needs such as the response phase resource needs, scene management needs, interoperable communications, and victim evacuation support, including safe and efficient routing.

**Organizer**

ITS America’s Safety Forum

**Moderator**

James Misener, Executive Advisor, Booz Allen Hamilton

**Invited Speakers**

Eric E. Rensel, TIM Network Liaison, Gannett Fleming, Inc.
In the United States, ITS architectures have been developed at the federal, state and regional levels to guide ITS planning and development. Planning ITS has many phases from defining a project to getting that project into the transportation plan. This session will bring together speakers from the U.S. Department of Transportation, and states and regions who have used their ITS architectures to plan ITS projects. These presenters will discuss:
- How they have used their ITS architectures
- What challenges they have met
- What benefits they have realized from the use of their ITS architectures in the planning environment.

**ORGANIZER**
U.S. Department of Transportation

**MODERATOR**
Clifford Heise, Vice President, Federal and Research, Iteris, Inc.

**INVITED SPEAKERS**
- Chris Francis, ITS Program Development Manager, Virginia Department of Transportation
- Sarah Joshua, ITS & Safety Program Manager, Maricopa Association of Governments
- Tom Bruff, Manager, Transportation Systems, Southeast Michigan Council of Governments

**AM25: Data Use for Operations Performance and Planning**

**Room: S331B**

Presentations from the I-95 Corridor Coalition on their work on the Vehicle Probe Project and from the U.S. Department of Transportation’s Integrated Corridor Management Demonstration Sites on their planned activities.

**ORGANIZER**
U.S. Department of Transportation

**MODERATOR**
Brian Cronin, Team Leader, ITS Research and Demonstration, ITS Joint Program Office, RITA, U.S. Department of Transportation

**INVITED SPEAKERS**
- Alex Estrella, Regional Planner, San Diego Association of Governments
- Koorosh Olyai, Assistant Vice President, Dallas Area Rapid Transit
- George Schoener, Executive Director, I-95 Corridor Coalition
- Michael Pack, Director, Center for Advanced Transportation Technology Laboratory
- Andrew Meese, Principal Transportation Planner, Metropolitan Washington Council of Governments

**AM26: Closing the ITS and Energy Deployment Gap: A Long-Term Strategy**

**Room: S331C**

This session is focused on closing the ITS and energy deployment gap by re-envisioning intelligent transportation systems and energy systems over the long term. Speakers will address a range of technologies and social factors, which could dramatically increase safety, mobility, livability, and efficiency—building upon current applications, breakthrough technologies, and social trends that can strategically advance the future. The session recognizes that future generations face many hurdles and opportunities, such as climate change, energy security, economic recession, and technological advancement.

**ORGANIZER**
Kunik Lee, Chief Safety Scientist, Federal Highway Administration, U.S. Department of Transportation

**MODERATOR**
Jane Lappin, Economic and Industry Analysis Division, Volpe Center, Research and Innovative Technology Administration, U.S. Department of Transportation

**INVITED SPEAKERS**
- Susan Shaheen, Honda Distinguished Scholar in Transportation, ITS-Davis & Co-Director, Transportation Sustainability Research Center (TSRC) University of California, Berkeley
- Scott Andrews, Technical Partner, Cogentia Partners
- Matt Barth, Director, Professor of Electrical Engineering, University of California Riverside
- Scott McCormick, President, Connected Vehicle Trade Association
neither current traffic management systems nor tradi-
and improve upon their strategies? Acknowledging that
traffic engineers use operational feedback to assess
whether or not to implement a detour? Finally, how do

Room: S331A

Federal spending on broad initiatives is shrinking, but
the urgency of improving our current infrastructure
with limited resources should force Intelligent
Transportation Systems onto center stage in the trans-
portation reauthorization debate in Washington. Those
in the industry know that smarter technology can save
lives and improve transportation efficiency across all
modes. But how do we make ITS part of mainstream
conversation, particularly among decision makers and
the media? Join us to hear experts in public affairs
share their experience in telling the ITS success story.

ORGANIZER
ITS America’s Cross-Cutting Issues Forum

MODERATOR
Lisa Thompson, Director of Communications,
Southeast Division, HNTB

INVITED SPEAKERS
Brian Sowa, President, Keystone Public Affairs, LLC
Karlene Barron, Communications Director, Georgia
Department of Transportation

Colleen Gants, Public Involvement Director, PBR
La Detra White, President, Noble Insight, Inc.

● AM30: Cooperative Systems: Maturing to Reality

Room: S331B

Cooperative systems are getting a significant amount
of attention for their potential to increase safety and
improve mobility. This session will review and highlight
these potential benefits and provide information on
current and planned R&D activities.

ORGANIZER
ITS America’s Safety Forum

MODERATOR
Ryan Lamm, Manager R&D, Intelligent Vehicle
Systems, SWRI
**AM33: The Pending Marriage of ITS and Tolls**  
*Room: S331A*

Over the past few years tolls and ITS have been growing together. There has been a rapid expansion of High Occupancy Vehicle (“HOT”) lanes, and various congestion pricing/time of day/VMT (“Vehicle per Mile Tolled”) scenarios advanced along with agencies’ combining ITS and tolling systems maintenance. Panelists in this session will explain where the future is taking us and how elements in ITS and tolling within this new transportation trend can take advantage of the technologies.

**ORGANIZER & MODERATOR**  
JJ Eden, Vice President—Director of Tolling, AECOM

**INVITED SPEAKERS**  
James Trogdon, Chief Operating Officer, North Carolina Department of Transportation  
Ken Philmus, Senior Vice President, ACS  
Richard Nelson, Director, Toll Operations Florida Turnpike

**AM34: FMCSA's Expanded CVISN Program: Reports of Results and Advancement Across the U.S.**  
*Room: S331B*

Panelists will highlight the great progress of this FMCSA's CVISN program throughout the United States, including programs such as groundbreaking mainline license plate connected vehicle prescreening, virtual weigh stations, and efforts to tie CVISN activities to the Connected Vehicle Deployment Program (formally known as “IntelliDrive”).

**ORGANIZER**  
ITS America's Commercial Vehicle and Freight Mobility Forum

**MODERATOR**  
Jose M. Rodriguez, CVISN Program Manager, Federal Motor Carrier Safety Administration, U.S. Department of Transportation

**INVITED SPEAKERS**  
Richard McDonough, CVISN Project Manager, New York State Department of Transportation

**AM35: Minnesota DOT Connected Vehicles for Safety, Mobility, and User Fee Project**  
*Room: S331C*

This session will describe and discuss the Minnesota Department of Transportation's efforts to develop and deploy a practical demonstration of connected vehicle technologies in its IntelliDrive for Safety, Mobility, and User Fee (ISMUF) Program. Topics to be addressed in the session are the initiation, objectives and management of an “IntelliDrive” project; the technical opportunities and challenges; impact of policies; and evaluation of the system and its operations. We anticipate a lively and informative discussion following the formal presentations.

**ORGANIZER**  
Kyle Garrett, Sr. Systems Engineer, Mixon Hill, Inc.

**MODERATOR**  
Christopher Hill, Principal, Mixon Hill, Inc.

**INVITED SPEAKERS**  
Cory Johnson, Project Manager, Minnesota Department of Transportation  
Sheryl Miller, Senior Research Psychologist, SAIC  
Rob Zimmer, Senior Research Scientist, Battelle  
Matt Burns, Senior Project Director, Battelle  
Bennett Pierce, Researcher, Battelle  
Mark Carter, Vice President, SAIC

**AM36: ITS Strategies for Keeping Traffic Flowing During Road Rehabilitation**  
*Room: S331A*

Work zones are estimated to cause nearly 25% of non-recurring congestion on U.S. roads, and about 10% of overall congestion. While roads are being rehabilitated, traffic flow cannot be significantly impeded or the economy will suffer. Having an effective transportation management plan for traffic flow is vital, and using ITS for traffic management, traveler information, and performance monitoring can be a key component of the plan.

**ORGANIZER**  
Sponsored by the Transportation Research Board of the National Academies

**MODERATOR**  
Tracy Scriba, Program Manager, Federal Highway Administration, U.S. Department of Transportation

**INVITED SPEAKERS**  
Ross Scheckler, Managing Partner, Calmar Research Corporation

**AM37: Using ITS for Freight, Planning and Programs**  
*Room: S331B*

Join leaders in the industry to take a look at programs in the United States that have successfully implemented intelligent transportation systems into major freight operations.

**ORGANIZER**  
ITS America's Commercial Vehicle and Freight Mobility Forum

**MODERATOR**  
Dan Murray, Vice President, Research, American Transportation Research Institute

**INVITED SPEAKERS**  
Vidya Mysore, Manager, System Traffic Modeling, Florida Department of Transportation  
Mary Lou Rajchel, President & CEO, Florida Trucking Association

**AM38: Surface Transportation Weather Research and Deployment Activities**  
*Room: S331C*

This Session will provide the latest updates on surface transportation weather research, applications deployment, and evaluation activities.

**ORGANIZER**  
ITS America's Cross-Cutting Issues Forum

**MODERATOR**  
Arthur Handman, The H Group, Inc.

**INVITED SPEAKERS**  
Gabe Guevara, Transportation Specialist, Federal Highway Administration, U.S. Department of Transportation  
William Mahoney, III, Project Director, National Center for Atmospheric Research  
Sheldon Drobot, Scientific Program Manager, Weather Systems and Assessment Program (WSAP), National Center for Atmospheric Research  
Samuel Williamson, Federal Coordinator for Meteorology, DOC/NOAA/OFCC

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**ORGANIZER**  
Fontinalis Partners

**MODERATOR**  
Steve Bayless, Director of Telecommunications and Telematics, ITS America

**INVITED SPEAKERS**  
Zia Yusuf, President & CEO, Streetline  
Albert Bogaard, President & CEO, Parkmobile International  
Sam Friedman, CEO, Parking In Motion  
Richard Joffe, President & CEO, Park Assist

Room: S331A
A discussion of the recently launched Safety Pilot program to include a detailed discussion of the model deployment test site.

Organizer
U.S. Department of Transportation

Moderator
Ray Resendes, Chief, Intelligent Technologies Research Division, National Highway Transportation Safety Administration, U.S. Department of Transportation

Invited Speakers
Mike Schagrin, Program Manager, ITS Safety, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Jim Sayer, Program Manager, Safety Pilot Test Conductor & Associate Research Scientist, University of Michigan Transportation Research Institute
Mike Shulman, Program Manager, Crash Avoidance Metrics Partnership (CAM)
Emily Nodine, Mechanical Engineer, Advanced Transportation Technologies Center of Innovation, John A. Volpe National Transportation Systems Center, Research and Innovative Technology Administration, U.S. Department of Transportation

AM40: Potential Consequences (Unintended and Intended) of Pricing and Other Incentives

Room: S331B
Pricing—be it based on carbon consumption, miles driven, or congestion—is widely seen as a very effective approach for reducing transportation-related greenhouse gas (GHG) emissions. This session is focused on examining the intended and unintended consequences of pricing (including cordon, HOT lanes, parking) and alternative fuel vehicle incentives (e.g., fee rebates, HOV lane access) on surface transportation. The session primarily examines the energy and environmental impacts of these strategies, as well as the potential social consequences.

Organizer
ITS America’s Sustainable Transportation Working Group

Moderator
Dan Baxter, Chief Engineer Transportation Operations, CH2M Hill

Invited Speakers
Jack Opiola, Senior Partner, D’Artagnan Consulting LLC
Alan Clelland, Senior Vice President, Iteris
Michaela Harrich, Partner and Project Development Manager, Kapsch TrafficCom AG, Austria
Eric-Mark Huitema, Mobility Solution Executive, IBM, the Netherlands

AM41: SHRP 2 Reliability Program—Making a Difference by Mainstreaming System Operations Activities

Room: S331C
A key issue facing Transportation Agencies is the ongoing challenge of mainstreaming transportation Systems Operations activities. Systems operations strategies, especially in combination, can often be implemented more quickly and economically than new construction projects and achieve similar outcomes in terms of reduced congestion, particularly non-recurring (unexpected delays due to events such as incidents, work zones, weather) congestion. Understanding the source of any congestion condition is necessary to select the appropriate capacity and/or operational countermeasure treatment. Additionally, institutional barriers can either thwart or considerably slow mainstreaming of Systems. Overcoming these barriers is key to effective system operations. The SHRP 2 Reliability research program seeks to address and mitigate non-recurring congestion and improve the reliability of highway travel times by reducing the impacts of incidents and events that cause travel times to vary from day to day. At this session, the panel will discuss several ongoing SHRP2 Reliability research and implementation efforts, reliability products and provide a status update of these elements at a programmatic level and the need for stakeholder involvement including FHWA, AASHTO and State and MPO and other local agencies will be stressed for making this effort successful.

Organizer
Sponsored by the Transportation Research Board of the National Academies

Moderator
R Scott Rawlins, Deputy Director, Nevada Department of Transportation

Invited Speakers
Jeff Lindley, Associate Administrator for Operations, Federal Highway Administration, U.S. Department of Transportation
Rick Nelson, Assistant Director of Operations, Nevada Department of Transportation
Mark Muriello, Assistant Director, NYNJ Port Authority
John Wolf, Assistant Division Chief, Caltrans
John Corbin, Director, Bureau of Traffic Operations, Wisconsin Department of Transportation

AM42: ITS Technologies Improve the Visibility and Efficiency of Worldwide Transportation Logistics

Room: S331D
An integrated system can transform market opportunities for businesses of all sizes, but particularly small businesses, by providing them with the means to track cargo shipments in near real-time, connect with new shipping partners, and expedite the paperwork process. An integrated system can also improve the accuracy, efficiency, reliability, and costs associated with global and domestic shipping, and thus help the economies of trading countries expand.

Organizer
Michael Onder, Team Leader, Truck Size & Weight, Freight Technology & Operations, Federal Highway Administration, U.S. Department of Transportation, USA

Moderator
Richard Easley, President, E-Squared Engineering, USA

Invited Speakers
Jan Tore Pedersen, Managing Director, Marlo Enterprises, Norway
Eric Louette, Officer, Ministry of Ecology, Sustainable Development, Transport and Housing, France
Susan Spencer, Director, Intelligent Transportation Systems, Transport Canada
Speaker from Japan