FINAL PROGRAM & EXHIBITOR DIRECTORY

ITS AMERICA · ITS · ITS INTERNATIONAL

KEEPING THE ECONOMY MOVING

18TH WORLD CONGRESS ON
INTELLIGENT TRANSPORT SYSTEMS

Featuring ITS America's Annual Meeting & Exposition

18TH ITS World Congress
2011
ORLANDO

October 16-20, 2011

Orange County Convention Center

Orlando, Florida

Diamond Sponsor:

TELVENT

Published by:

ITS INTERNATIONAL

Co-hosted by:

ITS AMERICA   ERTICO ITS EUROPE   ASIA-PACIFIC ITS

TABLE OF CONTENTS

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!

ITS AMERICA

WELCOME

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 spot cities 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
President of ITS Japan, the Secretariat of ITS Asia-Pacific

STATE OF FLORIDA

Office of the Governor

THE CAPITOL
TALLAHASSEE, FLORIDA 32399-0001

www.flgov.com
850-488-7146
850-487-0801 fax

RICK SCOTT
GOVERNOR

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

ORANGE COUNTY MAYOR
TERESA JACOBS

P.O. Box 1393, 201 SOUTH ROSALIND AVENUE, ORLANDO, FL 32802-1393
PHONE: 407-836-7370 • FAX: 407-836-7360 • Mayor@ocfl.net

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

18th World Congress International Program Committee

CHAIR
John Peracchio, Peracchio & Company, LLC

VICE CHAIR
Gerald Conover, PRC Associates

18th ITS World Congress
2011 ORLANDO

AMERICAS

John Augustine, Research and Innovative Technology Administration, U.S. DOT

Hamed Benouar, Sensys Networks Inc.

Robert Bertini, Research and Innovative Technology Administration, U.S. DOT

Armand Ciccarelli, Berkeley Transportation Systems

Stephen Clinger, Federal Highway Administration

Pete Costello, INRIX

Doug Couto, Dell

Richard B. Easley, E-Squared Engineering

John Funny, Grice & Associates, Inc.

Dawn Hardesty, Noblis

John Harding, National Highway Traffic Safety Administration (NHTSA), U.S. DOT

Gloria Jeff, District Department of Transportation (D.C.)

Carl Kuhnke, ITS Canada

Manjunathan Kumar, Nevada Department of Transportation

Jane Lappin, John A. Volpe National Transportation Systems Center, Research and Innovative Technology Administration, U.S. DOT

Harry Lister, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. DOT

Robert Rausch, TransCore

Louis Sanders, American Public Transportation Association (APTA)

Carol Schweiger, TranSystems

Ed Seymour, Texas Transportation Institute (TTI), Texas A&M University

Susan A. Shaheen, University of California, Berkeley

Piyushimita Thakuriah, University of Illinois at Chicago

Anita Vandervalk-Ostrander, Cambridge Systematics, Inc.

Harry Voccola, NAVTEQ

Chelsea White, III, Georgia Institute of Technology

James Wright, American Association of State Highway and Transportation Officials (AASHTO)

Wei-Bin Zhang, University of California, Berkeley, PATH

EUROPE

Vincent Blervaque, ERTICO-ITS Europe

Phil Blythe, University of Newcastle, United Kingdom

Norbert Handke, ITS Network, Germany

Richard Harris, Logica, United Kingdom

Juhani Jääskeläinen, European Commission, DG INFSO

Christer Karlsson, ITS Sweden, Sweden

Friedemann Kirn, Satellic, Belgium

Job Klijnhout, ERTICO-ITS Europe

Meng Lu, Dutch Institute for Advanced Logistics (Dinalog), the Netherlands

Jean-Pierre Médevielle, IFSTTAR, France

Patrick Mercier-Handisyde, European Commission, DG RTD

Gzim Ocakoglu, European Commission, DG MOVE

Roger Pagny, Ministry of Ecology, Sustainable Development, Transports and Housing, France

Reinhard Pfliegl, AustriaTech, Austria

Paul Potters, Connekt/ITS Netherlands, the Netherlands

Mats Rosenquist, Volvo Technology, Sweden

Christian Rousseau, Renault SAS, France

Malika Seddi, ASFA, France

Michael Sena, Michael Sena Consulting AB, Sweden

Kees Wevers, NAVTEQ, the Netherlands

ASIA-PACIFIC

Yousuke Akatsu, Nissan Motor Co., Ltd., Japan

S.K. Jason Chang, National Taiwan University, Chinese-Taipei

Katsushi Ikeuchi, The University of Tokyo, Japan

Weiyun Jiao, China National ITS Center, China

Shunsuke Kamijo, The University of Tokyo, Japan

Jeong-Gyu Kang, Korea Expressway Corporation, Korea

Nobukazu Kanesaki, ITS Japan, Japan

Hiroyuki Kumazawa, Mitsubishi Electric Corporation, Japan

Young-Jun Moon, The Korea Transport Institute, Korea

Brian Negus, RACV, Australia

Takashi Oguchi, The University of Tokyo, Japan

Nobuyuki Ozaki, Toshiba Corporation, Japan

Tongyan Qi, Research Institute of Highway, China

Takaaki Segi, Toyota Motor Corporation, Japan

Seung-Neo Son, ITS Korea, Korea

Stephanie Jin, ITS China, China

Dean Zabrieszach, VicRoads, Australia

Annual Meeting Subcommittee

Elizabeth Birriel, Florida Department of Transportation

Jay H.L. Calhoun, The VANUS Group of Gannett Fleming

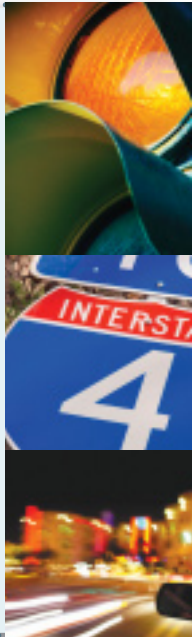**James Bryant**, James R Bryant Associates

Brad Dennard, Atkins

Bruce Eisenhart, Consensus Systems Technologies

Ram Kandarpa, Booz Allen Hamilton

Dan Murray, American Transportation Research Institute

James Misener, Booz Allen Hamilton

Lou Neudorff, CH2M HILL

18th World Congress on ITS Organizing Committee

Special thanks to the members of the Organizing Committee

Chairman
Patrick McGowan, Telvent

Executive Committee
Scott Belcher, ITS America
Michael Noblett, IBM

Operations
Bill Russell, Eberle Design Inc.

Americas Program
John Peracchio, Peracchio & Company
Gerald Conover, PRC Associates

Technology Showcase/ Demonstrations
Ryan Lamm, SwRI
Michael Freitas, Telvent

Government Affairs
Jill Ingrassia, AAA

Marketing & Public Relations
Mary Hamill, Global 5
David Hill, Booz Allen Hamilton

International Relations
Gerald Conover, PRC Associates

Exhibitor Advisory
Persephone Oliver, Econolite
Carl Zabel, Eberle Design

State Chapters
Jay Calhoun, Gannett Fleming
Gupta Borra, Telvent

Local Arrangements
Brian Blanchard, Florida DOT
Elizabeth Birriel, Florida DOT
Charlie Wallace, Telvent

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.*

DIAMOND

TELVENT

GOLD

GM

SILVER

Booz | Allen | Hamilton   **ECONOLITE** Group, Inc.   **IBM**

BRONZE

Alcatel·Lucent   **AVEGO**   **AECOM**   **DAKTRONICS**   **Ford**

ITERIS   **kapsch >>>** always one step ahead   **Raytheon**   **RICARDO**   SwRI   **TRANSCORE**

FRIENDS OF ITS

ACS A xerox Company   **EDI** EBERLE DESIGN, INC.   **FONTINALIS** PARTNERS   **HARRIS**

HNTB   I-95 Corridor Coalition   **KPCB**   **logicTree**   **SONY** make.believe   **TÜVRheinland** Precisely Right.

OFFICIAL MEDIA SPONSOR

ITS INTERNATIONAL

OTHER SPONSORS

AAA   **ATKINS**   **ATX** A Cross Country Automotive Services Company   **Battelle** The Business of Innovation   **CH2MHILL**   **CT** CONTROL TECHNOLOGIES

GEWI   **Texas Transportation Institute** A member of the Texas A&M University System   **TRAFICON** USA   **UMTRI** UNIVERSITY OF MICHIGAN   **VAISALA**   **WAVETRONIX**

*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.

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*.

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.

Register in advance at *https://avego.wufoo.com/forms/free-its-world-congress-shuttle/*

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].*

Speaker Ready Room

The Speaker Ready Room is located in Room S230A. This room is for session moderators and speakers to review and make final changes to their presentations.

SATURDAY	1:00 p.m. – 5:00 p.m.
SUNDAY	8:00 a.m. – 5:00 p.m.
MONDAY	7:00 a.m. – 5:00 p.m.
TUESDAY	7:00 a.m. – 5:30 p.m.
WEDNESDAY	7:00 a.m. – 5:00 p.m.
THURSDAY	7:00 a.m. – 3:00 p.m.

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:

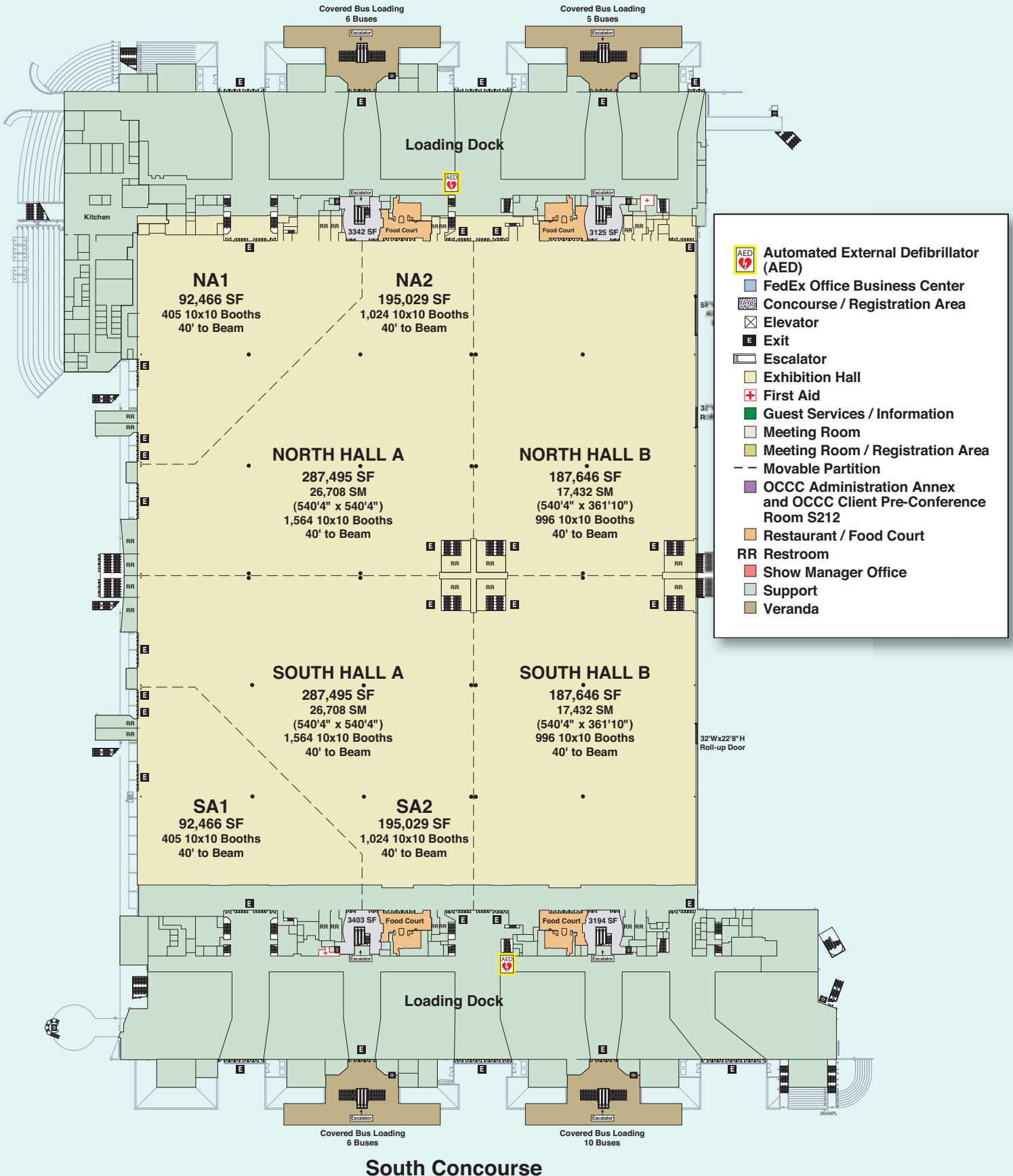|	
SUNDAY	8:00 a.m. – 5:30 p.m.
MONDAY	8:00 a.m. – 5:30 p.m.
TUESDAY	8:00 a.m. – 5:00 p.m.
WEDNESDAY	8:00 a.m. – 5:00 p.m.
THURSDAY	8:00 a.m. – 5:00 p.m.

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.
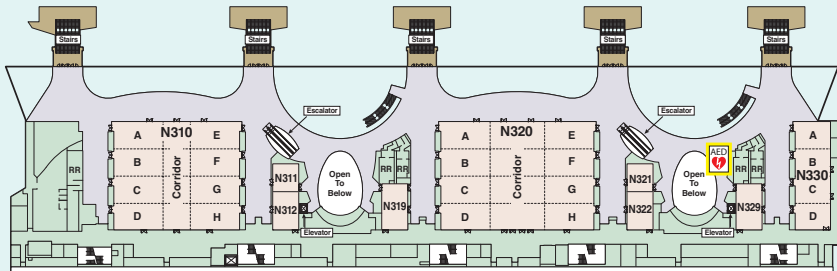
MAP OF ORANGE COUNTY CONVENTION CENTER
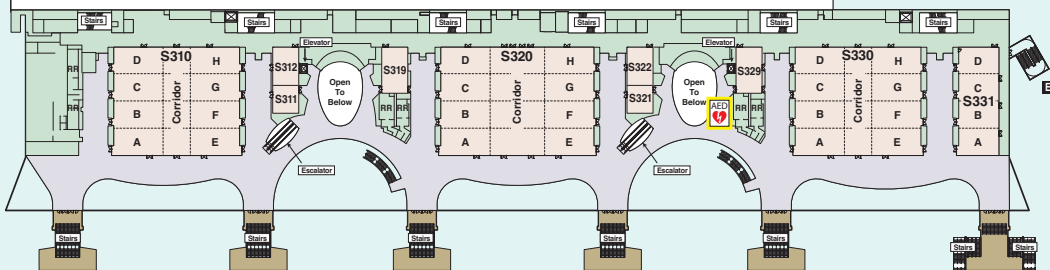
North Exhibit Hall Level 1

North Concourse

Covered Bus Loading
6 Buses

Covered Bus Loading
5 Buses

Escalator

Escalator

Loading Dock

Kitchen

3342 SF | Food Court | Food Court | 3125 SF

NA1
92,466 SF
405 10x10 Booths
40' to Beam

NA2
195,029 SF
1,024 10x10 Booths
40' to Beam

NORTH HALL A
287,495 SF
26,708 SM
(540'4" x 540'4")
1,564 10x10 Booths
40' to Beam

NORTH HALL B
187,646 SF
17,432 SM
(540'4" x 361'10")
996 10x10 Booths
40' to Beam

RR

SOUTH HALL A
287,495 SF
26,708 SM
(540'4" x 540'4")
1,564 10x10 Booths
40' to Beam

SOUTH HALL B
187,646 SF
17,432 SM
(540'4" x 361'10")
996 10x10 Booths
40' to Beam

32'Wx22'8" H
Roll-up Door

SA1
92,466 SF
405 10x10 Booths
40' to Beam

SA2
195,029 SF
1,024 10x10 Booths
40' to Beam

3403 SF | Food Court | Food Court | 3194 SF

Escalator | Escalator

Loading Dock

Escalator | Escalator

Covered Bus Loading
6 Buses

Covered Bus Loading
10 Buses

South Concourse

Legend

AED	**Automated External Defibrillator (AED)**
	FedEx Office Business Center
	Concourse / Registration Area
⊠	**Elevator**
E	**Exit**
	Escalator
	Exhibition Hall
✚	**First Aid**
	Guest Services / Information
	Meeting Room
	Meeting Room / Registration Area
– –	**Movable Partition**
	OCCC Administration Annex and OCCC Client Pre-Conference Room S212
	Restaurant / Food Court
RR	**Restroom**
	Show Manager Office
	Support
	Veranda

05/04FL

North Concourse Level 2

North Concourse

Entrance/Exit

Entrance/Exit

Entrance/Exit

Escalator

Escalator

Stairs

Stairs

Stairs

Stairs

Stairs

To North Concourse Parking →

E

E Stairs

FedEx Office Business Center

AED

A B C D E
N210

N211

AED
RR

A B C D E F G
N220

N221

AED
RR

A B
N230

Walkway to South Building

Elevator

Northside Restaurant

N222

Elevator

N212

Escalator

N228

Stairs

Stairs

Stairs

Stairs

Stairs

REGISTRATION OFFICE RM. N211

SHOW MANAGER OFFICE RM. N212

SHOW MANAGER OFFICE RM. N219

REGISTRATION OFFICE RM. N221

SHOW MANAGER OFFICE RM. N229

SHOW MANAGER OFFICE RM. N228

OPEN TO NORTH
EXHIBIT HALL BELOW

E Stairs

E Stairs

E Stairs

OPEN TO SOUTH
EXHIBIT HALL BELOW

Walkway to North Building

OCCC CLIENT PRE-CONFERENCE RM. S212

SHOW MANAGER OFFICE RM. S213

REGISTRATION OFFICE RM. S211

SHOW MANAGER OFFICE RM. S219

SHOW MANAGER OFFICE RM. S228

SHOW MANAGER OFFICE RM. S229

Stairs

S213

Escalator

OCCC ADMIN. ANNEX RM. S231

Entrance/Exit

Bridge to West Building-Level II

E Stairs

FedEx Office Business Center

AED
RR

A B C D E
S210

S212

S211

Elevator

Southside Restaurant

RR RR

A B C D E F G
S220

S222

S221

Elevator

AED
RR RR

S228

A B C D E F G H
S230

AED

To South Concourse Parking →

E

Stairs

Stairs

Stairs

Stairs

Stairs

Bridge to Hilton Orlando Hotel

Stairs

05/04FL

Escalator

Escalator

Stairs

Entrance/Exit

Entrance/Exit

Entrance/Exit

South Concourse

North Mezzanine Level 3

North Concourse

OPEN TO NORTH
EXHIBIT HALL BELOW

OPEN TO SOUTH
EXHIBIT HALL BELOW

	Automated External Defibrillator (AED)
	FedEx Office Business Center
	Concourse / Registration Area
	Elevator
E	Exit
	Escalator
	Exhibition Hall
+	First Aid
	Guest Services / Information
	Meeting Room
	Meeting Room / Registration Area
– –	Movable Partition
	OCCC Administration Annex and OCCC Client Pre-Conference Room S212
	Restaurant / Food Court
RR	Restroom
	Show Manager Office
	Support
	Veranda

South Concourse

South Mezzanine Level 3
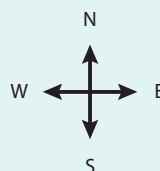
WORLD CONGRESS AGENDA BUILDER

Make the most of your time at the World Congress on ITS. With the World Congress online agenda builder, you can create your own unique World Congress experience. Use the agenda builder to navigate the Congress, view sessions and add the items that are most interest to you. You can view, edit, and print your schedule at any time.

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.

Sponsored by

logicTree

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!

KEYNOTE SPEAKERS

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.

SCHEDULE

KEY:

Plenary Session (PL)	Meetings/Workshops	Technical Tours	
● Executive Sessions (**ES**)	● Technical/Scientific Sessions (**TS**)	● IBEC Session (**IBEC**)	● Annual Meeting Sessions (**AM**)
● Special Interest Sessions (**SS**)	● Interactive Paper Sessions (**IS**)	● PA-ME ITS Initiatives (**PAITS**)	

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: Room: S210A

- **SS02:** Deployment of Vehicle-Infrastructure Cooperation Systems
  Room: 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: S320C

- **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.	**PL03:** ITS America Annual Meeting: Safety and the Aging Population Plenary *Room: Hall SA1*

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 (BiRT) 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*
- **TS13:** Performance Management Databases *Room: S320D*

- **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: S320H*
- **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*

5:00 p.m. - 6:00 p.m.	ITS America Best of ITS Awards *Room: Exhibit Hall Theatre*
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.

- **ES04:** ITS and Private Finance *Room: S310 A/B*
- **ES05:** 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 Assist *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*

TUESDAY, OCTOBER 18, 2011 *CONTINUED*

Time	Session
8:30 a.m. - Noon	University of Central Florida (UCF) Institute for Simulation & Training Lab Tour
8:30 a.m. - 1:00 p.m.	Behind the Scenes at Disney World Tour
10:00 a.m. - 5:30 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)*
10:30 a.m. - Noon	**PL04:** ITS America Annual Meeting: U.S. Department of Transportation Plenary *Room: South Hall A1*

10:30 a.m. - Noon

- **SS21:** Energy ITS
  Room: S210A
- **SS22:** Adaptive Traffic Control Systems: Present and Future
  Room: S210B
- **SS23:** ITS Strategies and How They Enable Deployment
  Room: S210C
- **SS24:** To Realize a Safe Society
  Room: S210D
- **SS25:** ITS and Ecodriving: Creating an International Agenda
  Room: S210E
- **SS26:** The State of Deployment Around the World of the "Connected Vehicle"
  Room: S220A
- **SS27:** Vehicle-IT Convergence for the Fully Networked Car
  Room: S220B
- **SS28** Location-Based Services for Public Transport
  Room: S220C

- **SS29:** ITS in Fast Developing Areas
  Room: S220D
- **SS30:** Universal Design within Next-Generation Traveler Information Systems
  Room: S220E
- **SS31:** Visualizing ITS Data
  Room: S220F
- **SS32:** Stakeholder Views and Examples on Co-Operative Safety Systems with Focus on Rural Roads
  Room: S310 A/B
- **SS33:** Global Research Collaboration Using Online Networks; Recent Experience and New Models
  Room: S320A
- **TS37:** Program Evaluation and Access to Results
  Room: S320B
- **TS38:** User Needs 1: Next Generation Travel Information
  Room: S320C
- **TS39:** Traffic Flow Prediction & Estimation
  Room: S320D

- **TS40:** Truck Parking
  Room: S320E
- **TS41:** Protocols and Evaluations for V2V Communication
  Room: S320F
- **TS42:** Tolling System Design
  Room: S320G
- **IS03:** The Use of Simulation Models, Congestion Management Methods and Communication to Enhance System Operations
  Room: Hall SA/SB Meeting Room 4
- **IS04:** ITS Tools: Leveraging Technology for Advanced Systems Application
  Room: Hall SA/SB Meeting Room 5
- **IS05:** Collision Avoidance Systems
  Room: Hall SA/SB Meeting Room 6
- **IBEC02:** Social Media/ Networking and its Impact on Transportation
  Room: S330B
- **PAITS02:** Americas Projects and Business Opportunities Part I
  Room: S330A

Time	Session
Noon - 1:00 p.m.	Interactive Sessions / Meet the Authors in the Exhibit Hall
Noon - 1:00 p.m.	ITS America Annual Meeting Business Meeting *Room: Exhibit Hall Theatre*
Noon - 1:30 p.m.	Lunch in the Technology Showcase & Exhibit Hall *(Dedicated Exhibit & Showcase Hours)*
1:00 p.m. - 3:00 p.m.	Orlando Amway Center Tour

1:30 p.m. - 3:00 p.m.

- **ES06:** ITS and Economic Growth
  Room: S310 A/B
- **ES07:** Smart/Mega Cities
  Room: S310 E/F
- **SS34:** Adaptation
  Room: S210A
- **SS35:** Drastic Reduction of Traffic Accidents by Image-Recording Type Drive Recorders
  Room: S210B
- **SS36:** National ITS Associations Providing an Essential Service to Policy Makers
  Room: S210C
- **TS43:** Integration and Innovation
  Room: S220A
- **TS45:** Mileage Based Fees 1
  Room: S220C
- **TS46:** User Needs 2: Next Generation Travel Information
  Room: S220D
- **TS47:** Data Collection Systems 1
  Room: S220E
- **TS48:** Traffic Signal System Operations
  Room: S220F

- **TS49:** Assessment of the Field Operational Test
  Room: S320A
- **TS50:** Leveraging New Technologies to Attract and Retain Transit Customers
  Room: S320B
- **TS51:** Goods & Freight—Let's Move
  Room: S320C
- **TS52:** Protocols and Standards for Wireless Technologies in Cooperative Mobility
  Room: S320D
- **TS53:** Driver's Awareness
  Room: S320E
- **IS06:** From the First Mile to Crowd-Sourcing: Capturing Emerging Trends for Transit
  Room: Hall SA/SB Meeting Room 4
- **IS07:** Using Weather Data to Better Manage and Maintain System Operations
  Room: SA/SB Meeting Room 5
- **IS08:** Developments in Active System Management
  Room: SA/SB Meeting Room 6

- **IBEC03:** Managing Traffic with No Money
  Room: S330B
- **PAITS03:** Americas Projects and Business Opportunities Part II
  Room: S330A
- **AM11:** Mitigating Driver Distraction through HMI Design: A Proposed Conceptual Framework for Safely and Effectively Implementing Technology in Vehicles
  Room: S330G
- **AM12:** The Evolution of TMCs
  Room: S331A
- **AM13:** Surface Transportation Reauthorization: A View from the Hill
  Room: S331B
- **AM14:** Using ITS To Enable A More Resilient and Secure Transportation Network: Global Perspectives
  Room: S331C
- **AM15:** Automated Public Transport Vehicles: State of the Art and Recent Deployment
  Room: S331D

Time	Session
1:30 p.m. - 3:00 p.m.	U.S. DOT Connected Vehicle Challenge Winners Session *Room: Exhibit Hall Theatre*
3:00 p.m. - 4:00 p.m.	Interactive Sessions / Meet the Authors in the Exhibit Hall
3:00 p.m. - 4:00 p.m.	Refreshment Break in the Technology Showcase & Exhibit Hall *(Dedicated Exhibit & Showcase Hours)*

Plenary Session (PL)	Meetings/Workshops	Technical Tours	
● Executive Sessions (**ES**)	● Technical/Scientific Sessions (**TS**)	● IBEC Session (**IBEC**)	● Annual Meeting Sessions (**AM**)
● Special Interest Sessions (**SS**)	● Interactive Paper Sessions (**IS**)	● PA-ME ITS Initiatives (**PAITS**)	

TUESDAY, OCTOBER 18, 2011 *CONTINUED*

4:00 p.m. - 5:30 p.m.

● **SS37**: Pedestrian Detection in Various Manners
Room: S210A

● **SS38**: Making Multimodal Transportation Succeed: Technology and Partnerships at Work
Room: S210B

● **SS39**: International Cooperation in Mobility Management to Address Global Sustainability
Room: S210C

● **SS40**: Management of ITS Facilities Based on Priorities
Room: S210D

● **SS41**: Goods Movement and GHGs
Room: S210E

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

● **SS43**: Transit in a Real Time World
Room: S220B

● **SS44**: Vehicle of the Future
Room: S220C

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

● **SS46**: ITS for Freight—Makes Transportation Safer, Faster, Smarter for All Road Users
Room: S220E

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

● **SS48**: Transportation Systems Management and Operations (TSMO)
Room: S310 A/B

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

● **SS50**: Combining Wireless Electric Vehicle Charging with Automation: Opportunities & Challenges
Room: S320A

● **TS54**: Innovation and Cooperation
Room: S320B

● **TS55**: Electronic Toll Systems
Room: S320C

● **TS56**: Putting Transit Signal Priority: From Models to Implementation
Room: S320D

● **TS57**: Port of Entry
Room: S320E

● **TS58**: Vehicle Probe for Travel Time Analysis
Room: S320F

● **TS59**: Advanced Map Development and Applications
Room: S320G

● **PAITS04**: Tunnels and ITS
Room: S330A

● **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 19, 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 *(Invitation Only)* *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

● **SS51**: Carbon Footprinting
Room: S210A

● **SS52**: Solution for Traffic Jam in Highways Using ACC and C2X Communication Technology
Room: S210B

● **SS53**: 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: S320A

● **TS67**: Data Communication/ Management Systems and Plans
Room: S320B

● **TS68**: Practical Study and FiOTs for Cooperative Mobility
Room: S320C

● **TS69**: Low Attention Driving Detection
Room: S320D

● **TS70**: Understanding Environmental Impacts through Modeling, Simulation, and Data Measurement
Room: S320E

● **TS71**: Environmentally Friendly Freight
Room: S320F

● **TS72**: Individualized Route Planning 1: Next Generation Travel Information
Room: S320G

● **TS73**: Mileage Based Fees 2
Room: S320H

● **TS74**: Wireless Technologies for V2V and V2I
Room: S330A

● **TS75**: ITS for Unique Operational Scenarios
Room: S330B

● **AM20**: Public Safety
Room: S331A

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. - Noon	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: S320A* ● **TS76:** Architectures and Their Applications *Room: S320B* ● **TS77:** Individualized Route Planning 2: Next Generation Travel Information *Room: S320C* ● **TS78:** Intersection Control and Optimization *Room: S320D* ● **TS79:** Data Collection Systems 2 *Room: S320E*	● **TS80:** Probe Data Collection Using Bluetooth *Room: S320F* ● **TS81:** Driver's Behavior Utilizing Simulator *Room: S320G* ● **TS82:** Operational Strategies Producing Carbon Footprint Changes Positive *Room: S320H* ● **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 Theater*		
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* ● **TS85:** Individualized Route Planning 3: Next Generation Travel Information *Room: S220B* ● **TS86:** Automated Incident Detection Systems *Room: S220C* ● **TS87:** Advancements in Video Technologies *Room: S220D* ● **TS88:** Using Data to Enhance Transit Performance *Room: S220E*	● **TS89:** Tolling Technology *Room: S220F* ● **TS90:** Probe and Travel Time for Cooperative Mobility *Room: S320A* ● **TS91:** V2i Deployment Initiatives *Room: S320B* ● **TS92:** Various Kinds of Driver Behavior *Room: S320C* ● **TS93:** Using Weather Data for Safer Driving *Room: S320D* ● **TS94:** Training Programs *Room: S320E* ● **TS95:** Adaptive Signal Control I *Room: S320F* ● **TS96:** Regional Deployment Strategies Part 2 *Room: S320G* ● **TS97:** HOT—Lane Operations *Room: S320H*	● **TS98:** 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: S210C* ● **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)*		

THURSDAY, OCTOBER 20, 2011

	STUDENT DAY
8:00 a.m. - Noon	AASHTO Day *(Invitation Only)* Room: Lake Lucerne- Hilton
8:30 a.m. - 11:30 a.m.	I-4 Weigh Station & VACIS Imaging Inspection Tour
8:00 a.m. - 3:30 p.m.	Technology Showcase *(Open to College and High School Students)*
7:30 a.m. - 3:30 p.m.	Delegate Registration Open

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

- **ES12:** Global Safety
  Room: S310A/B
- **ES13:** The Ownership of ITS Data
  Room: S310E/F
- **SS68:** The Latest Trends About Collection of Traffic Information
  Room: S210A
- **SS69:** National ITS Architectures: How Are They Guiding ITS Implementation?
  Room: S210B
- **SS70:** Field Operational Tests: Moving Ahead Towards ITS deployment
  Room: S210C
- **TS99:** Design Build with ITS
  Room: S220A
- **TS100:** Variable Speed Limits
  Room: S220B
- **TS101:** Managed Lanes—Evaluation and Lessons Learned
  Room: S220C
- **TS102:** Traffic Simulation Cases
  Room: S220D

- **TS103:** Using Vehicle Probe Data for Congestion Analysis
  Room: S220E
- **TS104:** Areawide Strategies that Result from Environmental Performance Measures
  Room: S220F
- **TS105:** Eco-Driving
  Room: S320A
- **TS106:** Evaluations of ITS Deployments
  Room: S320B
- **TS107:** Research on Driver Behavior
  Room: S320C
- **TS108:** Educational Outreach
  Room: S320D
- **TS109:** Tolling Systems Architecture
  Room: S320E
- **TS110:** V2i for Intersection
  Room: S320F
- **TS111:** Arterial Traffic Detection
  Room: S320G

- **TS112:** Adaptive Signal Control 2
  Room: S320H
- **TS113:** Organizing and Planning to Maximize Service Provision
  Room: S330A
- **TS114:** Achieving Environmental Improvement Through Transportation System Efficiency
  Room: S210D
- **TS115:** Business Cases for Cooperative Mobility
  Room: S210E
- **AM33:** The Pending Marriage of ITS and Tolls
  Room: S331A
- **AM34:** FMCSA's Expanded CVISN Program: Reports of Results and Advancement Across the U.S.
  Room: S331B
- **AM35:** Minnesota DOT Connected Vehicles for Safety, Mobility, and User Fee Project
  Room: S331C

9:00 a.m. - 1:00 p.m.	ECOSTAND Energy Symposium *Room: Lake Down A-Hilton*
10:00 a.m. - 3:30 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)*

10:30 a.m. - Noon

- **SS71:** Linking Smarter Electric Mobility with the Smarter Grid
  Room: S210A
- **SS72:** Intermodal Public Transport Strategies: Carsharing, Bikesharing, and Ridesharing
  Room: S210B
- **SS73:** The Public Acceptability of Road Pricing
  Room: S210C
- **SS74:** Solution of Transportation Problems in Asia-Pacific Megacities
  Room: S210D
- **SS75:** ITS Education and Training: Successes, Challenges, and Lessons Learned around the World in the Last Decade
  Room: S310E
- **SS76:** Traffic Management to Reduce Fuel Use and CO_2 Emissions—Applications and Insights from Field Experiments
  Room: S220A
- **SS77:** Open Transit Data: Making Public Transport More Accessible
  Room: S220B

- **SS78:** Environmental Charging—Beyond Congestion Pricing
  Room: S220C
- **SS79:** Insurance Telematics as an Early Connected Vehicle Application
  Room: S220D
- **SS80:** Traffic Data Systems for Corridor Performance Management
  Room: S220E
- **SS81:** Distracted Driving
  Room: S220F
- **TS116:** Safety and Traveler Information: Overlapping and Helpful Synthesis
  Room: S320A
- **TS117:** Data Platforms 2: Next Generation Travel Information
  Room: S320B
- **TS118:** Active Traffic Management in Metropolitan Areas
  Room: S320C
- **TS119:** Parking Systems
  Room: S320D
- **TS120:** On-Board Sensing
  Room: S320E

- **TS121:** Improving and Modeling Algorithms for Driver Assistance Systems
  Room: S320F
- **TS122:** Improving Air Quality with ITS Technologies
  Room: S320G
- **IS09:** Security for Cooperative Mobility
  Room: Exhibit Hall Room 4
- **IS10:** ITS: The Environment, Mobility, Vehicle to Infrastructure, and Safety
  Room: Exhibit Hall Room 5
- **IS11:** Transportation Demand Management and Smart Parking
  Room: Exhibit Hall Room 6
- **AM36:** ITS Strategies for Keeping Traffic Flowing During Road Rehabilitation
  Room: S331A
- **AM37:** Using ITS for Freight, Planning and Programs
  Room: S331B
- **AM38:** Surface Transportation Weather Research and Deployment Activities
  Room: S331C

Noon - 1:00 p.m.	Interactive Sessions / Meet the Authors in the Exhibit Hall
Noon - 1:30 p.m.	Lunch in the Technology Showcase & Exhibit Hall *(Dedicated Exhibit & Showcase Hours)*
Noon - 2:00 p.m.	Cyber Security Control Systems Within the Transportation Sector *Room: S330D*

1:30 p.m. - 3:00 p.m.

- **ES14:** ITS Policy Development
  Room: S310 A/B
- **ES15:** Vision of Traffic Management
  Room: S310 E/F
- **SS82:** 19th ITS WC in Vienna 2012
  Room: S210A
- **TS123:** Asset Management, Refurbishment, and Standards
  Room: S220A
- **TS125:** Funding ITS
  Room: S220C
- **TS126:** Innovative Sensing Technologies
  Room: S220D
- **TS127:** Data Platforms 3: Next Generation Travel Information
  Room: S220E
- **TS128:** Infrastructure & Vehicle Signing & Warning: Effect on Traffic Operations
  Room: S220F

- **TS129:** Variable Speed Limits for Efficiency & Safety
  Room: S320A
- **TS130:** Impacts of ETC and Road User Charging
  Room: S320B
- **TS131:** V2i for Intersections and Traffic Signals
  Room: S320C
- **TS132:** Traffic Management Case Studies Using Vehicle Probe Data
  Room: S320D
- **TS133:** Platooning & Autonomous Vehicle
  Room: S320E
- **TS134:** Collision Avoidance System
  Room: S320F
- **TS135:** The Use of Vehicle and Fuel Infrastructure to Enhance Environmental Conditions
  Room: S320G

- **TS136:** Managing TMC Resources
  Room: S320H
- **TS137:** ITS Data Usage
  Room: S330A
- **INT01:** ITS Development in Fast-Growing Economies
  Room: S330B
- **AM39:** Safety Pilot—The World's Most Extensive Real World Deployment of Connected Vehicle Safety
  Room: S331A
- **AM40:** Potential Consequences (Unintended and Intended) of Pricing and Other Incentives
  Room: S331B
- **AM41:** SHRP 2 Reliability Program— Making a Difference by Mainstreaming System Operations Activities
  Room: S331C
- **AM42:** ITS Technologies Improve the Visibility and Efficiency of Worldwide Transportation Logistics
  Room: S331D

1:30 p.m. - 3:30 p.m.	Students and ITS Session / Networking *Room: Exhibit Hall Theater*
3:00 p.m. - 3:30 p.m.	Refreshment Break in the Technology Showcase & Exhibit Hall
3:30 p.m. - 5:00 p.m.	Closing Ceremony *Room: South Hall A1*

FRIDAY, OCTOBER 21, 2011

8:30 a.m. - 9:30 p.m.	Post Congress Southeast Florida ITS Tour
9:00 a.m. - 6:30 p.m.	Post Congress Kennedy Space Center Tour

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	WEDNESDAY, OCTOBER 19
9:30 a.m. – 11:00 a.m.	10:15 a.m. – Noon

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

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

SPECIAL EVENTS

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.

Opening Ceremony Reception

Sponsored by IBM
4:00 p.m. *(Business Attire)*

Room: South Building Main Level

Take some time to relax and network at the Opening Ceremony Reception. Hors d'oeuvres will be served, and there will be wonderful entertainment provided by the a capella vocal group "Mutual Agreement."

Opening Ceremony

Sponsored by GM
5:00 p.m. *(Business Attire)*

Room: South Hall A1

The 18th World Congress will welcome attendees with a high-impact experience showcasing the power of jazz music—an expression that is unequivocally and uniquely American.

In addition, a number of distinguished guests will offer welcome addresses to the several thousand in attendance. Invited speakers will include Patrick McGowan, Chair of the 18th World Congress Organizing Committee; Alan Taub, Vice President, GM Global Research and Development, General Motors Company; Ignacio González-Domínguez, CEO, Telvent; Governor Rick Scott (Florida) (invited); Greg Winfree, Acting Director, Research and Innovative Technology Administration, U.S. Department of Transportation; Zoran Stančič, Deputy Director General, European Commission, DG INFSO; and a Representative from the Ministry of Economy, Trade and Industry, Japan.

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.

Room: S330E

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.

FONTINALIS
P A R T N E R S

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)*

ITS Florida

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.

"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.

Closing Ceremony

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

Ford

Room: South Hall A1

The 18th World Congress Closing Ceremony has special significance this year, high-lighted 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

Saturday, October 15
12:30 p.m. – 4:00 p.m.

Sunday, October 16
8:45 a.m. – 4:00 p.m.

Room: S220D

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

Round tables: 8:00 a.m.
Plenary session: Noon – 4:00 p.m. (lunch included)
Free of charge

Room: Lake Lucerne-Hilton

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

9:00 a.m. – 1:00 p.m.

Room: S330C

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.

IBEC Workshop

10:00 a.m. – Noon

Room: S220A

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.

ITS America's State Chapters Strengthening Workshop

10:00 a.m. – 1:00 p.m. (lunch included)
Registration fee: $50

Room: S330D

ITS America's State Chapters Council will host this workshop to provide members of its state and regional chapters with information and strategies to achieve their maximum potential. The State Chapters Strengthening Workshop will bring together chapter leaders from around the country to share best practices and lessons learned on subjects crucial to state chapters' success.

MODERATOR: Tom West, *Director, California Center for Innovative Transportation*

ITS Standards Workshop

12:30 p.m. – 4:00 p.m.

Room: Lake Highland B-Hilton

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.

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 & CO_2 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.
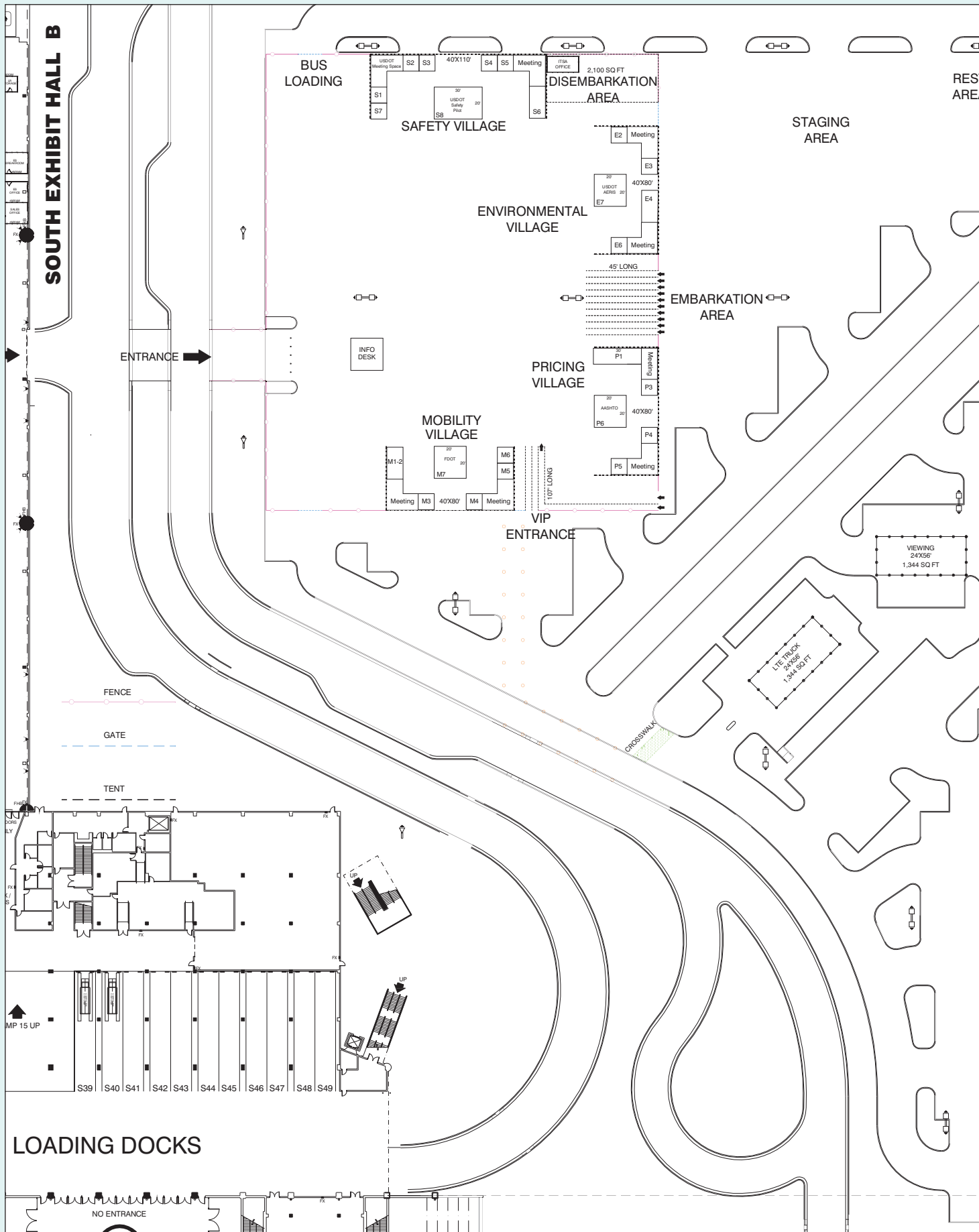
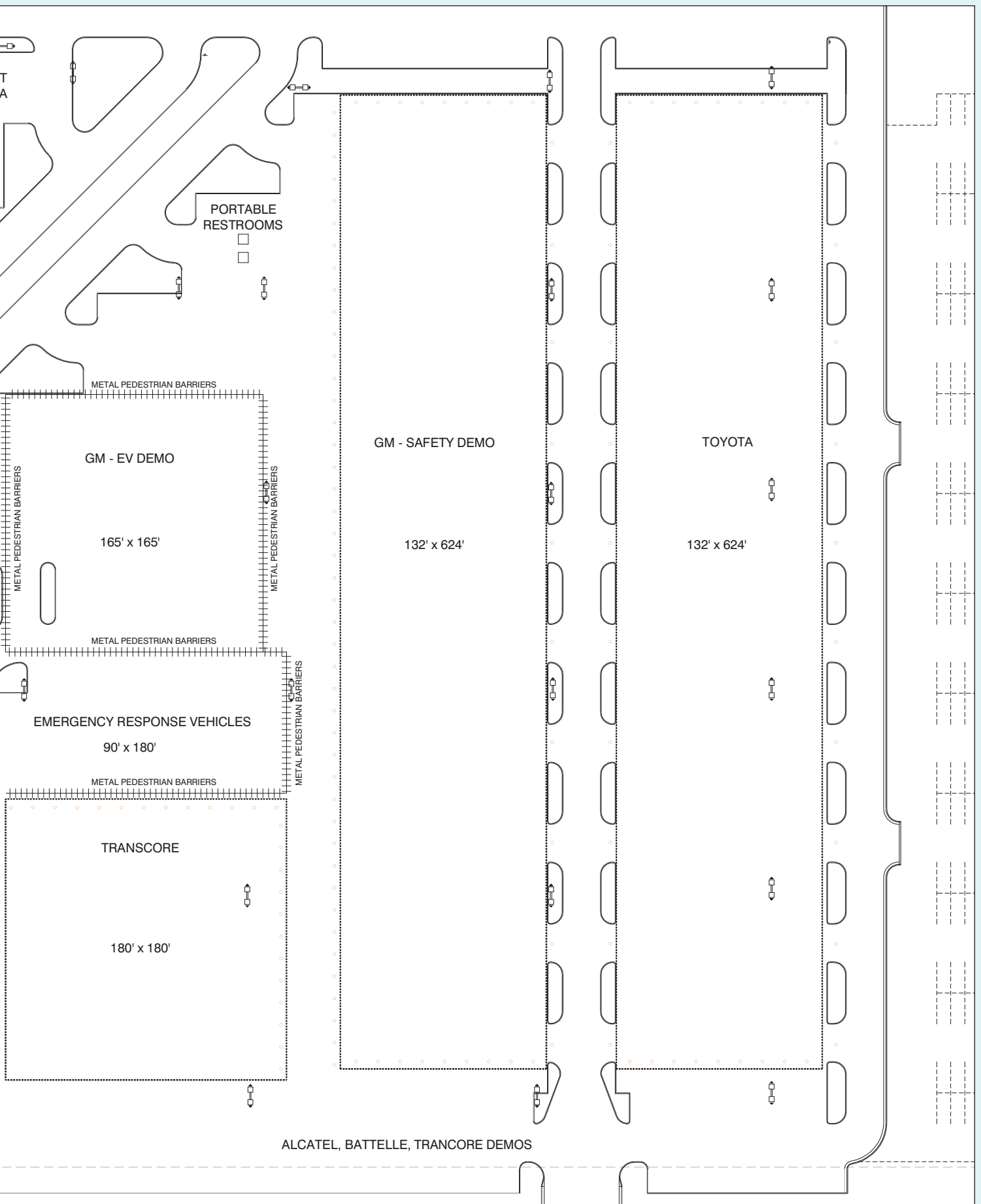### Cyber Security Controls Systems within the Transportation Sector

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.

SOUTH EXHIBIT HALL B

BUS
LOADING

ENTRANCE ▶

FENCE

GATE

TENT

UP

MP 15 UP

S39 | S40 | S41 | S42 | S43 | S44 | S45 | S46 | S47 | S48 | S49

LOADING DOCKS

NO ENTRANCE

USDOT Meeting Space | S2 | S3 | 40'X110' | S4 | S5 | Meeting | ITSA OFFICE | 2,100 SQ FT

S1
S7
S8

30'
USDOT Safety Pilot 20'

S6

SAFETY VILLAGE

DISEMBARKATION AREA

RES AREA

STAGING AREA

E2 | Meeting
E3
USDOT AERIS 20' | 40'X80'
E7 | E4
E6 | Meeting

ENVIRONMENTAL VILLAGE

45' LONG

EMBARKATION AREA

INFO DESK

P1 | Meeting
P3
AASHTO 20' | 40'X80'
P6
P4
P5 | Meeting

PRICING VILLAGE

MOBILITY VILLAGE

M1-2
FDOT 20'
M7 20'

M6
M5

Meeting | M3 | 40'X80' | M4 | Meeting

110' LONG

VIP ENTRANCE

CROSSWALK

VIEWING
24'X56'
1,344 SQ FT

LTE TRUCK
24'X56'
1,344 SQ FT

PORTABLE
RESTROOMS

METAL PEDESTRIAN BARRIERS

GM - EV DEMO

165' x 165'

GM - SAFETY DEMO

132' x 624'

TOYOTA

132' x 624'

METAL PEDESTRIAN BARRIERS

METAL PEDESTRIAN BARRIERS

METAL PEDESTRIAN BARRIERS

EMERGENCY RESPONSE VEHICLES

90' x 180'

METAL PEDESTRIAN BARRIERS

METAL PEDESTRIAN BARRIERS

TRANSCORE

180' x 180'

ALCATEL, BATTELLE, TRANCORE DEMOS

TECHNOLOGY SHOWCASE

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***

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

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

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/I2V) and vehicle to vehicle (V2V) communication including.

Ticketing system available at:
www.itsworldcongress.org/techshowcase_nysdot.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**

Imperial College

Environment Village Booth: **E2**

Mobile Environmental Sensing

- An advanced, multi-species pollution sensor will be mounted on the roof of a demonstration vehicle travelling around the network in the vicinity of the conference site.
- Data will be transferred live via a GSM data connection to a remote database server.
- An internet-connected screen in the demo area displays environmental conditions around the network, historical data, and details of the system and its operation.
- Supporting information on a tabletop display

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: 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*

PRICING VILLAGE

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 Vila 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*

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® 6 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*

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*

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 (FTE), 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*

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*

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 *jim.oneill@gewi.com.*

For additional details: *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*

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 Control 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*

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 backhauled 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*

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*

LYNX

Mobility Village Booth: **M6**

Transit On-board Real-time Traveler Information

This system will provide LYNX transit service information, advertising, and event information to conference attendees at the Convention Center, at the Airport, and on LYNX buses traveling on Link 42 and/or 111 between the airport and International Drive.

Traveler Information System Exhibit

This exhibit will demonstrate the LYNX TCIP Traveler Information Pilot, currently running at the LYNX Central Station on Links 4 and 50. The exhibit will demonstrate Automatic Vehicle Location mapping, and the provision of service information, and advertising at a fixed location.

Florida Department of Transportation

Exhibit Hall Booth: **1525** *and* *Mobility Village Booth:* **M7**

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

U.S. Department of Transportation

Research and Innovative Technology Administration

Connected Vehicle Cooperative Safety Systems use 5.9 GHz Dedicated Short Range Communications (DSRC) to enable vehicle active safety systems that may help drivers avoid crashes. The United States Department of Transportation (U.S. DOT) has partnered with the Crash Avoidance Metrics Partnership (CAMP) Vehicle Safety Communications 3 (VSC3) Consortium to research, develop and test the technologies that form the framework for these systems. The CAMP VSC3 Consortium consists of the Ford Motor Company, General Motors LLC., Honda R&D Americas, Inc., Hyundai-Kia America Technical Center, Inc., Mercedes-Benz Research and Development North America, Inc., Nissan Technical Center North America, Inc., Toyota Motor Engineering & Manufacturing North America, Inc. and Volkswagen Group of America.

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 on 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***.

TECHNICAL TOURS

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.

TUESDAY, OCTOBER 18
1:00 p.m. – 3:00 p.m.

■ Orlando Amway Center Tour

Attendees on this tour will experience the new technologically advanced Amway Center arena in Orlando, home to the NBA's Orlando Magic and Arena Football's Orlando Predators.

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

■ Tampa Bay Area ITS Facilities

FDOT District 7 Tampa Bay SunGuide RTMC

The Tampa Bay SunGuide Center is a state of the art command facility for managing mobility and promoting safety on major roadways throughout the Tampa Bay area.

Tampa's Selmon Expressway Reversible Lanes and Control Center

Attendees will receive a first-hand look at the Tampa Reversible Express Lanes (REL) commuter highway and an overview of the basis for development and operation of the project.

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

i 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.

■ 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.

Kennedy Space Center Visitor Complex
Photos courtesy of Orlando/Orange County Convention & Visitors Bureau, Inc.®

SESSIONS BY TRACK

COOPERATIVE MOBILITY

● **ES03:** Cooperative Mobility Services and the Internet

● **SS02:** Deployment of Vehicle-Infrastructure Cooperation Systems

● **SS03:** COMeSafety2: From the European ITS Communications Architecture to Deployable Standards

● **SS09:** 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

● **SS79:** 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

● **IS09:** Security for Cooperative Mobility

● **AM07:** Technology for a Better Connected Vehicle

● **AM16:** 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

● **SS08:** Probe Data Collection and Distribution

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

● **SS13:** Automating the ITS Data Supply Chain

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

● **SS31:** Visualizing ITS Data

● **SS49:** Geo-Data Services as a Universal Design Transportation Enhancement

● **SS61:** Using Historical GPS Data for Transportation Planning

● **SS69:** National ITS Architectures: How are they Guiding ITS Implementation?

● **SS77:** Open Transit Data: Making Public Transport More Accessible

● **SS80:** 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

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

● **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

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

- **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
- **TS100:** Variable Speed Limits
- **TS101:** 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
- **TS128:** 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

INSTITUTIONAL & POLITICAL ISSUES

- **ES06:** ITS and Economic Growth
- **ES07:** Smart/Mega Cities
- **ES08:** Equity and Social Responsibility
- **ES09:** Trilateral ITS Cooperation
- **ES10:** ITS: Why Governments Need to Work Together
- **ES13:** The Ownership of ITS Data
- **ES14:** ITS Policy Development
- **SS14:** Re-Tooling Public Transit One Agency at a Time

- **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
- **SS29:** 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
- **SS40:** 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)
- **SS70:** 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
- **TS130:** Impacts of ETC and Road User Charging
- **IBEC01:** Is Evaluation Playing Its Proper Role to Promote ITS Deployment?
- **IBEC04:** Enforcement Cameras: To Install or Not To Install—That is the Question?
- **IBEC05:** IBEC 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

MOBILITY & OPERATIONS

- **ES02:** Next Generation Vehicles and Mobility Environments
- **ES11:** Multimodal Mobility
- **SS48:** Transportation Systems Management and Operations (TSMO)
- **SS52:** Solution for Traffic Jam in Highway using ACC and C2X Communication Technology

- **AM02:** Arterial Management Systems—Real Applications on Collecting and Reporting Arterial Travel Time
- **AM17:** Active Transportation and Demand Management Results
- **AM25:** Data Use for Operations Performance and Planning
- **AM27:** Forging Partnerships to Facilitate Adaptive Traffic Signal Control Deployment
- **AM28:** Active Transportation & Demand Management: the Decision Support Toolbox
- **AM36:** ITS Strategies for Keeping Traffic Flowing During Road Rehabilitation
- **PAITS04:** Tunnels and ITS

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
- **IBEC02:** 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
- **TS98:** ITS—What's the Problem, What to Do, Where It's Going
- **TS99:** Design Build with ITS
- **TS113:** Organizing and Planning to Maximize Service Provision
- **TS117:** Safety and Traveler Information: Overlapping and Helpful Synthesis
- **TS123:** 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, Bikesharing, and Ridesharing
- **TS08:** Testing and Deploying Software for Transit Systems
- **TS19:** Coordinating Multi-Modal Travel Options
- **TS30:** Deploying ITS to Optimize Transit Operations and Maintenance
- **TS50:** Leveraging New Technologies to Attract and Retain Transit Customers
- **TS56:** Putting Transit Signal Priority: From Models to Implementation
- **TS88:** Using Data to Enhance Transit Performance
- **IS06:** From the First Mile to Crowd—Sourcing: Capturing Emerging Trends for Transit
- **AM15:** Automated Public Transport Vehicles: State of the Art and Recent Deployment

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
- **AM11:** Mitigating Driver Distraction through HMI Design: A Proposed Conceptual Framework for Safely and Effectively Implementing Technology in Vehicles
- **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
- **AM39:** Safety Pilot—The World's Most Extensive Real World Deployment of Connected Vehicle Safety

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 (BiRT) for Green Transportation
- **SS12:** ADASIS: From Specifications to Implementation
- **SS17:** Performance Measures for Sustainability
- **SS21:** Energy ITS
- **SS25:** ITS and Ecodriving—Creating an International Agenda
- **SS39:** International Cooperation in Mobility Management to Address Global Sustainability
- **SS34:** Adaptation
- **SS45:** Eco-Driving: A Key Enabler for Future Clean and Efficient Mobility Worldwide
- **SS50:** 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

- **SS62:** ITS for Electromobility: Prediction and Connectivity, Key ITS Enablers for the Electrification of Vehicles
- **SS64:** Validation and Impact of ICT Measures for Energy Efficiency & Environment
- **SS71:** Linking Smarter Electric Mobility with the Smarter Grid
- **SS76:** Traffic Management to Reduce Fuel Use and CO_2 Emissions—Applications and Insights from Field Experiments
- **AM03:** Climate Change Legislation and Regulations at the State Level
- **AM04:** Current Work in Automated Electric Transportation Research
- **AM08:** AERIS
- **AM18:** Defining Livability Measures For Sustainable Transportation
- **AM21:** Transit ITS: Developments and Applications
- **AM26:** Closing the ITS and Energy Deployment Gap: A Long-Term Strategy
- **TS70:** Understanding Environmental Impacts through Modeling, Simulation, and Data Measurement
- **TS82:** Operational Strategies Producing Carbon Footprint Changes Positive
- **TS93:** Using Weather Data for Safer Driving
- **TS105:** Eco-Driving
- **TS104:** Areawide Strategies that Result from Environmental Performance Measures
- **TS114:** Achieving Environmental Improvement through Transportation System Efficiency
- **TS122:** Improving Air Quality with ITS Technologies
- **TS135:** The Use of Vehicle and Fuel Infrastructure to Enhance Environmental Conditions
- **IS07:** Using Weather Data to Better Manage and Maintain System Operations
- **IS10:** ITS: The Environment, Mobility, Vehicle to Infrastructure, and Safety

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

TARGETED SECTOR DAYS

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

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.

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

● 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 Lovaas, *Federal Transportation Policy Director, Natural Resources Defense Council, USA*

INVITED SPEAKERS
Larry Yermack, *President, Wendover Consult, USA*

Jianping 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 in to 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 Stančič, *Deputy Director General, European Commission, DG INFSO*

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)*

TUESDAY, OCTOBER 18
8:30 a.m. – 10:00 a.m.

● 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 CO_2 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 of Center 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*

Kian-Keong Chin, *Chief Engineer, Transportation, Land Transport Authority, Singapore*

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-MLIT, Japan*

Juhani Jääskeläinen, *Head of Unit, European Commission, DG INFSO*

WEDNESDAY, OCTOBER 19
3:30 p.m. – 5:00 p.m.

● ES10: ITS: Why Governments Need to Work Together

Room: S310A/B

Given that much ITS research and technological standards development have matured, attention is now turning to the many policy issues surrounding deployment of cooperative transport systems. This session will provide an opportunity to share and explore the emerging strategic imperatives, policy frameworks, governance models, institutional issues, and how these interplay with technology roadmaps, policy action plans, etc. for governments seeking to deploy cooperative systems and more broadly ITS. What has worked, what has not, and what have been the key lessons learned?

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*

● ES11: Multimodal Mobility

Room: S310E/F

National and multi-national ITS action plans are increasingly emphasizing multimodality as a principal objective for achieving the goal of more environmentally sustainable transportation. Multimodality is a reasonable policy objective, but the challenge is that workplaces, schools, shopping facilities and residences are now sprawled over wider regions in which private cars and trucks are often the only practical mode of transport. This session addresses the question of how ITS can help reconcile mobility demand and transportation mode divergence and assist in achieving the objective of multimodality with information before and during travel.

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*

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

● ES12: Global Safety

Room: S310A/B

As national governments practically apply safe-driving policies and support systems using a variety of means, global discourse has focused on concrete factors for implementation such as the leadership of governments, funding, standardization, and international cooperation. This session will further this discussion and survey these factors and activities in various regions, especially with respect to how ITS safety infrastructure should be deployed and how to promote institutional systems and user acceptance.

MODERATOR

Kazumitsu Kushida, *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*

Ryosuke Itazaki, *Director, Road Transport Bureau, Ministry Land, Infrastructure, Transport and Tourism-MLIT, Japan*

Mathias Trautner, *Head of Sales Germany and Austria, Bosch Security Systems GmbH, Germany*

Klaus Kompass, *Vice President Vehicle Safety, BMW Group, Germany*

● ES13: The Ownership of ITS Data

Room: S310E/F

ITS systems and services generate massive quantities of data. Questions continue to be raised about the use of such data for ITS purposes and otherwise. This session will explore traditional privacy concerns along with notions of who owns the data—the gatherer, the user, or the person/entity generating. The concept of "new data freedom" evolved by social networking internet sites will also be explored in the ITS context.

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*

Speaker from Europe

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

● ES14: ITS Policy Development

Room: S310A/B

Public authorities at local, national or international levels have adopted or are planning action plans or strategic deployment strategies for ITS. An effective coordination of those initiatives, aligned with research and development, innovation, funding, and implementation policies is essential to ensure wide-scale deployment of ITS applications and services. This Executive Session will illustrate how coordinated and coherent strategies for ITS deployment are playing a role in supporting transport policy objectives.

MODERATOR

Hermann Meyer, *CEO, ERTICO-ITS Europe*

INVITED SPEAKERS

Kirk Steudle, *Director, Michigan Department of Transportation, USA*

Daisuke Kitabayashi, *Counsellor, Cabinet Secretariat, Japan*

Pawel Stelmaszczyk, *Head of Unit, European Commission, DG MOVE*

Marc Juhel, *Sector Manager Transport, Transport, Water and Information and Communication Technology Department, The World Bank Group*

● ES15: Vision of Traffic Management

Room: S310E/F

New traffic management approaches using innovative ITS technologies such as real-time probe data, advanced radio communication, and more effective public transit systems are being deployed. It will, therefore, become more important to extract and evaluate the huge amount of resulting data. Stakeholders will then be able to use this information and respond to accidents, congestion or other incidents more efficiently and effectively. This session will explore new trends in using future traffic management data which contribute to safety, efficiency, and sustainability.

MODERATOR

Atsushi Yano, *Managing Director, Sumitomo Electric Industries, Ltd., Japan*

INVITED SPEAKERS

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

Morio Fukuda, *Director for ITS, National Police Agency, Japan*

Jan Casteleijn, *Director General, Imtech Infra, the Netherlands*

John Chipperfield, *CTO, SWARCO, United Kingdom*

SPECIAL INTEREST SESSIONS

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.

• 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*

• SS02: Deployment of Vehicle-Infrastructure Cooperation Systems

Room: S210B

Vehicle-infrastructure cooperation systems for traffic safety are being developed in many countries. Promoted by the National Police Agency of Japan, Driving Safety Support Systems ("DSSS") prevents traffic accidents by providing drivers with audio and visual information concerning potential dangers such as pedestrians and vehicles in blind zones. This session will discuss deployment and validation of these systems.

ORGANIZER
Masahide Hatakeyama, *Assistant Director, National Police Agency, Japan / Shigetoshi Tamoto, Universal Traffic Management Society of Japan-UTMS, Japan*

MODERATOR
Takaaki Hasegawa, *Professor, Saitama University, Japan*

INVITED SPEAKERS
Masaaki Oizumi, *Assistant Director, National Police Agency, Japan*

Naotoshi Katahara, *Universal Traffic Management Society (UTMS) of Japan, Japan*

Masatoshi Fukukawa, *Universal Traffic Management Society (UTMS) of Japan, Japan*

Carl K. Andersen, *Roadway Team Leader, Federal Highway Administration, U.S. Department of Transportation, USA*

Tom Alkim, *Senior Advisor and Coordinator Cooperative Systems, Rijkswaterstaat Centre for Transport and Navigation, the Netherlands*

• SS03: COMeSafety2: From the European ITS Communications Architecture to Deployable Standards

Room: S210C

The COMeSafety project led the process that compiled a European ITS Communication Architecture on the basis of the architectures developed in the first wave of cooperative systems research and development projects, which concluded in 2010. That architecture has now been issued as a published ETSI standard and will be the foundation of all future cooperative system development and deployment. The follow-on COMeSafety2 project will over the next three years work to turn the original architecture from a theoretical blueprint for cooperative systems communications into a reference model for the real deployment of cooperative vehicles, infrastructure and services. This session will identify the challenges facing this transition and explore the requirements and key elements for a European cooperative mobility deployment architecture. Topics to be presented include: Background on the architecture and its way to a European Norm; What is the role of the architecture for FOTs? How can FOT results contribute to the architecture?; Can standards be organized around the architecture?; Which interfaces must be defined, and where will they be standardized?; What else is needed for a complete and deployable cooperative ITS system architecture?; Which levels of the architecture must be defined, which subsets of the architecture are possible?; What would a deployment roadmap look like?

ORGANIZER
Paul Kompfner, *Head of Sector Cooperative Mobility, ERTICO-ITS Europe*

MODERATOR
Juhani Jääskeläinen, *Head of Unit, European Commission, DG INFSO, Belgium/EU (TBC)*

INVITED SPEAKERS
Soeren Hess, *Chairman TC ITS, ETSI, France*

Hossein Zakizadeh, *Program Manager ITS, Volvo Technology, Sweden*

Hans-Joachim Schade, *Chairman WG 16, CEN TC 278, Germany*

Teresina Herb, *Federal Highway Research Institute (BASt), Germany*

Paul Kompfner, *Head of Sector Cooperative Mobility, ERTICO-ITS Europe*

• 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 MMPEI, 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-ENTPE, 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: S210D

Intelligent Environmentally Friendly Vehicle integrates three functional components of clean energy power-train, 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 (PNDs, 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 addresses 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 Automobile Engineers Society (FISITA) are working together to help accelerate deployment and to shape the evolution of these systems. A Joint PIARC-FISTA 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 recommending 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 advances in communication technologies have made it possible to deliver more solutions and handle larger share amounts of data 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, challenges, 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 Denero, *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 avid users of technology to manage business processes, agencies are experiencing increasingly large 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/ITS 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 U.S. 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 Roschlau, *President, Canadian Urban Transit Associations, Canada*

INVITED SPEAKERS
Michael Roschlau, *President, Canadian Urban Transit Associations, Canada*

Roger Burlton, *President, Process Renewal Group, USA*

Paula Okunieff, *Principal Investigator, Consensus Systems Technologies Corp., USA*

Emmanuel de Verdalle, *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 Cornélis, *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 transportation 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 Pooran, *Vice President of Engineering, Telvent, USA*

Gerdien 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 transportation 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 spinning-off 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: ParkPGH—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 Steinfeld, *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 navigations 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 Gakstatter, *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
Tsuyoshi Yamashita, *Deputy Director, Ministry of Economy, Trade and Industries, Japan*

MODERATOR
Masao Kuwahara, *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

● SS22: Adaptive Traffic Control Systems: Present and Future
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. While these systems have struggled to increase their presence on U.S. roads for many years, we have recently seen significant increase in their num-

bers. 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 world-wide. 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 Fehon, *Principal, ITS Group, DKS Associates, USA*

Reggie 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
Christer 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, *Director for Advanced Vehicle, Road Transport Bureau, 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 Flake, *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 ("VIT") convergence, which provides all transportation modes and users with vehicle-to-vehicle and vehicle-to-infrastructure communi-

cations. 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 Seekstr. 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 Junaio.

ORGANIZER & MODERATOR
Carol Schweiger, *Vice President, TranSystems 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.

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

MODERATOR
William Sowell, *Executive Vice President, Aldis Corporation; International Road Federation (WPC) Board Member & Chairman- ITS Committee*

INVITED SPEAKERS
Nasser Saif Al Mansoori, *Director General, National Transport Agency, United Arab Emirates*

GBS Bindra, *Global Director Innovation, Logica, India*

Jincai Yang, *President of Intelligent Transport System Association of Shenzhen (SZITS), China*

Juan Othon Moreno Navarrete, *Direccion General de Desarrollo Carretero, SCT, Mexico*

Speaker from the Americas

● SS30: Universal Design within Next-Generation Traveler Information Systems

Room: S220E

Advanced technologies including new advancements in wireless, cloud computing and data are positioned to open new opportunities and worlds for people with disabilities. The hope is that these new advancements will solve some of the challenges that have not been addressed before.

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. Recent work in wireless mobile apps and cloud computing has indicated that the once expensive hard to get software and systems, and the interfaces that go with them, will not only be low cost but can be carried with the individuals to new and different environments and places. The session will also include presentation from Japan will report on the R & D status of solutions to reduce accidents of older drivers.

This session will bring different experts, leaders and perspectives to empower people with disabilities to embracing the new technology paradigm.

ORGANIZER
Katharine Hunter-Zaworski, *Director, National Center for Accessible Transportation, Oregon State University Corvallis, USA* & **Mohammed Yousuf**, *Office of Operations R&D Turner-Fairbank Highway Research Center, Federal Highway Administration, U.S. Department of Transportation*

MODERATOR
Katharine Hunter-Zaworski, *Director, National Center for Accessible Transportation,, Oregon State University Corvallis, USA*

INVITED SPEAKERS
Sean Barbeau, *Research Associate, University of South Florida, USA*

Aaron Steinfeld, *Senior Systems Scientist, Carnegie Mellon University, USA*

Masao Nagai, *Prof. Dr. Eng., Tokyo University of Agriculture and Technology, Japan*

Gérard Uzan, *Research Engineer, THIM laboratory-University of Vincennes Saint-Denis, Paris 8, France*

Mitsuo Yonezawa, *Manager, Japan Automobile Research Institute, Japan*

● SS31: 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*

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

Olle Isaksson, *Director, Ericsson, Sweden*

● SS33: Global Research Collaboration Using Online Networks: Recent Experience & New Models

Room: S320A

Global research collaboration in ITS is lacking. Budgets are stagnant. Young ITS professionals need platforms to become the experts of tomorrow as the current generation retires. Online networks can position them to do just that with industry and government partners. Canada has launched a high capacity online network—ONE-ITS (Online Network Enabled ITS) which has international collaborators. It positions the research and development of ITS technologies to get to the marketplace sooner, key to all of our advocacy efforts. This Special Session brings together Asian, European and North American panelists to discuss more direct program collaboration, including ONE-ITS and other networks around the world

ORGANIZER & MODERATOR
William Johnson, *Transport Research, Education and Development Services, Canada*

INVITED SPEAKERS
Michael Noblett, *Associate Partner, Intelligent Transportation, U.S. Public Sector, Global Business Services, IBM, USA*

Jugdutt (Jack) Singh, *Research Professor and Director, Centre for Technology, La Trobe University, Melbourne, Australia*

Baher Abdulhai, *Professor and Director, The Toronto ITS Centre, University of Toronto, Canada*

Keith Keen, *Independent Consultant, Chair of the IBEC Working Group, United Kingdom*

TUESDAY, OCTOBER 18
1:30 p.m. – 3:00 p.m.

● 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 Brinckerhoff, USA*

Eric Sampson, *Professor, Newcastle University, United Kingdom*

Lou Neudorff, *Principal Technologist, ITS, CH2M HILL, USA*

Vicky Arroyo, *Executive Director, Georgetown Climate Registry, USA*

● **SS35: Drastic Reduction of Traffic Accidents by Image-Recording Type Drive Recorders**

Room: S210B

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.

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

MODERATOR
Sadao Horino, *Associate Professor, Kanagawa University, Japan*

INVITED SPEAKERS
Joseph N. Kanianthra, *President, Active Safety Engineering LLC, USA*

Kim Dong Hyo, *Senior Research Fellow Traffic Science Institute, Road Traffic Authority, Korea*

Hirotoshi Ishikawa, *Executive Board Member, Japan Safe Driving Center (JSDC), Japan*

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

Room: S210C

The ERTICO-hosted Network of National ITS Associations includes 28 national ITS associations, all of which work with the Governments in their respective countries to give technical and institutional guidance on ITS implementations, and promote the take up of ITS technologies. The same is true of other respected ITS national organizations around the World. In this session, staff and board members from the National ITS Associations will give real past examples of how they have worked with the European Commission, with national and regional Governments, and with national and regional highways authorities, to advise about and promote ITS.

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

MODERATOR
Christer Karlsson, *CEO, ITS Sweden, Sweden*

INVITED SPEAKERS
Reinhard Pfliegl, *Vice President Strategy, Austria Tech, Austria*

Richard Harris, *International Director, ITS United Kingdom, United Kingdom*

Vladimir Kryuchkov, *CEO, ITS-Russia, Russia*

Speaker from ITS Korea (TBC)

> **TUESDAY, OCTOBER 18**
> 4:00 p.m. – 5:30 p.m.

● **SS37: Pedestrian Detection in Various Manners**

Room: S210A

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 Kamijo, *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*

● **SS38: 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*

● **SS39: International Cooperation in Mobility Management to Address Global Sustainability**

Room: S210C

Due to fast growing economies, Brazil, China and Russia has been experiencing rapid grows 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 Blervaque, *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 Kumagai, *Professor, Kochi University of Technology, Japan*

MODERATOR
Motohisa Sato, *Director, NEXCO Expressway Research Institute, Japan*

INVITED SPEAKERS
Tsuyoshi Funaki, *Professor, Osaka University, Japan*

Hitoshi Marumo, *Manager, East Nippon Expressway Company Limited, 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 Kompfner, *ERTICO-ITS Europe*

MODERATOR
Juhani Jääskeläinen, *Head of Unit, European Commission, DG INFSO, Belgium/EU (TBC)*

INVITED SPEAKERS
Patrick Gatellier, *Thales, France*

Stéphane Petti, *Head of ITS Development, Orange Group, Belgium*

Paul Kompfner, *Head of Sector Cooperative Mobility, ERTICO-ITS Europe*

Rene Rembarz, *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, TranSystems 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 Chernicoff, *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 CO_2 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-driving 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 INFSO, Belgium/EU*

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*

● 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

Craig Wilson, *Project Manager, Motor Carrier Compliance Office, Florida Department of Transportation, USA*

Michael Onder, *Team Leader, Truck Size & Weight, Freight Technology & Operations, Federal Highway Administration, U.S. Department of Transportation, U.S. Department of Transportation, USA*

Representative from Transport Canada

Representative from Chinese Ministry of Highways

● 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 passen-

ger 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, CO_2 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 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 Karamitsos, *Director, European Commission, DG MOVE, Belgium/EU*

Lena Erixon, *Deputy Director General, Swedish Transport Administration, Sweden*

Olle Isaksson, *Director, Industry Specific Solutions, Ericsson, Sweden*

Kerstin Lindberg Goeransson, *CEO Airport Arlanda International, Swedavia, 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 material is now being embodied in guidance being prepared for the American Association of State Highway and Transportation Officials (AASTHO). Valuable examples exist in recent practice improvements by state DOTs and metropolitan regions. This session will present the background to the AASTHO 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*

● 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 used in conjunction with 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, Delcan, USA*

Martin Engelmann, *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 undertaking 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. 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 the 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
Soeren Hess, *General Manager, CAR 2 CAR Communication Consortium, Denmark*

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

Martin Böhm, *Head of Unit ITS Deployment, AustriaTech, Austria Tech, Austria*

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

Ronald Adams, *Chairman, EasyWay*

WEDNESDAY, OCTOBER 19
1:30 p.m. – 3:00 p.m.

● 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 green house 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.

ORGANIZER & MODERATOR

Gloria Jeff, *Associate Director, District Department of Transportation (D.C.), USA*

INVITED SPEAKERS

Ann Flemer, *Deputy Executive Director, Policy, Metropolitan Transportation Commission, San Francisco, USA*

Evelinde Grassegger, *Head of Unit Mobility and Transport Technology, Ministry for Transport, Innovation and Technology, Vienna, Austria*

Martha Morecock Eddy, *ITS Director, Hyde-Consulting Pty Ltd., Australia*

Marcia Ferranto, *President and CEO, Women's Transportation Seminar, USA*

● 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 recently years. To be able to implementation of 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, *DanielHorch, 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

Weiyun 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, Cartasite, 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 and 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 replicable 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

Gwo-Wei Torng, *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 Eloranta, *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 Ueno, *Road Bureau, Ministry of Land, Infrastructure, Transport, and Tourism, Japan*

MODERATOR

Hironao Kawashima, *Professor, Keio University, Japan*

INVITED SPEAKERS

Takashi Nishio, *Senior Deputy Director, ITS Policy and Program Office, Road Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan*

Toshio Yokoyama, *Senior Chief Engineer, Honda R&D Co., Ltd/ General Manager, Future Transportation Systems Research Labo., Japan*

Speaker from USDOT

Speaker from ERTICO

● SS61: Using Historical GPS Data for Transportation Planning

Room: S220C

Traffic monitoring, planning, management and modelling 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

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

David Sanchez, *Active Safety Manager, CTAG, Spain*

Gzim Ocakoglu, *Head of Section, European Commission, DG MOVE*

Tsutomu Kushima, *Manager of International Operations Planning Division, NEC Corporation, Japan*

Ryan McGee, *Technical Expert-Electrification 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. – IVS, 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 their work on 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

Stefan Trommer, *Project Manager, DLR, Germany*

Gerdien Klunder, *Research Scientist, Business Unit Mobility and Logistics, TNO, The Netherlands*

Martijn de Kievit, *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*

WEDNESDAY, OCTOBER 19
3:30 p.m. – 5:00 p.m.

● SS66: Managing Complex Transportation Networks using State of the Art Decision Support Systems (DSS)

Room: S210A

International discussion of benefits and lessons learned using State of the Art DSS tools to optimize decision making in complex, multimodal transportation systems considering dynamic operational conditions.

ORGANIZER
U.S. Department of Transportation

MODERATOR
Karl Wunderlich, *Fellow, Transportation Analysis, Noblis, USA*

INVITED SPEAKERS
Dan Lukasik, *Division Vice President, Product Development, Delcan Corporation, USA*

Alex Gerodimos, *President, TSS-Transport Simulation Systems, USA*

Thomas Bauer, *COO, Mygistics, USA*

Peter Thompson, *Senior Technology Program Analyst, San Diego Area of Governments, USA*

● 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 Sassi 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*

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

● SS68: 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 Expressway Corporation, 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*

● SS69: 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 used to guide 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 countries' 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 Tierolf, *Dutch Ministry of Infrastructure and the Environment,the Netherlands*

Jeshua Brouwer, *Principal Manager, ITS Strategy Department of Transportation and Main Roads, Queensland, Australia*

DongZhu Wang, *Engineer, China National ITS Center, China*

● SS70: Field Operational Tests: Moving Ahead Towards ITS 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 transport 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

C2XD and FOTsis. 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 Flament, *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, Iridium Concesiones de Infraestructuras S.A., Spain*

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 Waytt, 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 transportation 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 Tøfting, *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 Kee 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

● SS75: ITS Education and Training: Successes, Challenges, and Lessons Learned around the World in the Last Decade
Room: S210E

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,*

Research and Innovative Technology Administration, U.S. Department of Transportation

INVITED SPEAKERS

Emil Simeonov, *Program Coordinator, Intelligent Transport Systems Academic Program, University of Applied Sciences, Austria*

Hironao Kawashima, *Professor of Engineering, Keio University, Japan*

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

Nick Hounsell, *Professor of Transportation Engineering, University of Southampton, United Kingdom*

Reinhard Pfliegl, *Austria Tech- Federal Agency for Technological Measures, Ltd., Austria*

Tomáš Zelinka, *Deputy Head - Department of Informatics and Telecommunications / FTS, Vice-Dean, FTS, Department of Informatics and Telecommunications, Czech Technical University in Prague, Czech Republic*

● SS76: Traffic Management to Reduce Fuel Use and CO$_2$ Emissions—Applications and Insights from Field Experiments

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, Peek Traffic*

MODERATOR

Hesham Rakha, *Virginia Tech Transportation Institute, USA*

INVITED SPEAKERS

Siebe Turksma, *Product Manager Research, Peek, 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*

● SS77: Open Transit Data: Making Public Transport More Accessible

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, TranSystems Corporation, USA*

INVITED SPEAKERS

Timothy Moore, *Website Manager, Bay Area Rapid Transit (BART), USA*

Gzim Ocakoglu, *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*

● SS78: Environmental Charging— Beyond Congestion Pricing

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*

● SS79: Insurance Telematics as an Early Connected Vehicle Application

Room: S220D

In all 3 regions, PAYASYOUDRIVE 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, Applus+ Technologies, USA*

Nino Tarantino, *Chief Executive Officer, Octo Telematics North America, USA*

Geoff Hakel, *Group President – Insurance, TransUnion, USA*

● SS80: Traffic Data Systems for Corridor Performance Management

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

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 ambi-

tious 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 Pfiegl, *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

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 Nagaosa**, *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 (**Mashrur 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 Hoeft**, *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*)

TS08: Testing and Deploying Software for Transit Systems

Room: S320C

MODERATOR
S.K. Jason Chang, *National Taiwan University, Chinese-Taipei*

PAPERS
1029: Centralized Management of Preemption: The Missing Piece to the Traffic Puzzle (**Tim Hall**, *Global Traffic Technologies, USA*)

3206: Analysis of Trial Test for ATP On-Board Equipment (**Jonghyen Baek**, *Korea Railroad Research Institute, Korea*)

3209: Development of Automated Tool & Criteria for Software Test Coverage in Railway System (**Hyun-Jeong Jo**, *Korea Railroad Research Institute* (KRRI), *Korea*)

3241: Recommender Algorithms for On-Demand Bus System (**Takamitsu Sugiura**, *University of Tokyo, Japan*)

3249: Designing the Evaluation Function for On-Demand Bus System (**Ryu Yanagisawa**, *University of Tokyo, Japan*)

TS09: Communication Challenges in Cooperative Mobility

Room: S320D

MODERATOR
Frank Deasy, *Telvent, USA*

PAPERS
1061: Overview of the Minnesota Department of Transportation Connected Vehicle for Safety, Mobility, and User Fee Project (**Cory Johnson**, *Minnesota Department of Transportation, USA*)

1144: Integrated Systems for Corridor Management: Road User Charging, Mobility, Environment and Safety—A Discussion of Integrated Services Through 5.9 (**Steve Sprouffske**, *Kapsch TrafficCom Inc., USA*)

1196: Increasing Efficiencies for Highway Operations USING NEW Technologies Like LTE for V2I Communications (**Padma Kamath**, *Alcatel-Lucent, Canada*)

2084: A Cooperative Road-Vehicle System to Improve Throughput, Functioning and Communication Aspects (**Gerdien Klunder**, *TNO, the Netherlands*)

3020: A Study on Improvement of ETC Microwave Reflection Using a Dielectric Layer (**Yasuyuki Matsuda**, *Nippon Expressway Research Institute Company Limited, Japan*)

TS10: V2V Communication: Evaluation and Assessment

Room: S320E

MODERATOR
Norbert Bissmeyer, *Fraunhofer Institute For Secure Information Technology, Germany*

PAPERS
2091: Starting European Field Tests for CAR-2-X Communication: The DRIVE C2X Framework (**Long Le**, *NEC Laboratories Europe, Germany*)

2244: A Spatio-Temporal Metric for the Evaluation of Cooperative Awareness (**Tim Leinmüller**, *DENSO Automotive Deutschland GmbH, Germany*)

3085: Evaluation of Connectivity Quality for Vehicle to Vehicle Communication System in the Highway Environment (**Yutaka Asano**, *Honda R&D Co., Ltd., Japan*)

3220: Dynamic Transmitting Power Adjustment in Cooperative Vehicular Safety Applications (**Tien-Yuan Hsieh**, *National Chiao Tung University, Chinese-Taipei*)

TS11: Location Based Services

Room: S320F

MODERATOR
Ravi Pavvala, *Savari Networks, USA*

PAPERS
1051: Automotive Lane-Level Positioning: 2010 Status and 2020 Forecast (**Zeljko Popovic**, *Honda R&D Americas, Inc., USA*)

1120: Systematic Development of Positioning Requirements for Vehicle Applications (**Scott Andrews**, *Cogenia Partners, LLC, USA*)

1306: The Interpretation of GPS Positioning Accuracy and Measurement Integrity in a Dynamic Mobile Environment (**Scott Andrews**, *Cogenia Partners, LLC, USA*)

3143: Safety Driving Information System Considering Road-Vehicle Information (**HyunSuk Kim**, *ETRI, Korea*)

TS12: Probe Data Collection Using Smartphone and 700MHz Band

Room: S320G

MODERATOR
Roberto Baldessari, *Intelligent Transport Systems Group, NEC Europe Ltd., Germany*

PAPERS
1127: Smartphone-Integrated Connectivity Applications for Vehicular Ad-Hoc Networks (**Donald Grimm**, *General Motors Research and Development Center, USA*)

2062: Collecting and Processing of Crowd Behaviour Data by the Use of Smartphones (**Sven Vlassenroot**, *TU Delft/Ghent University, Belgium*)

3024: A Study on Service Architecture for Probe Vehicle Information Systems Including Smart-Phone Networks (**Michiko Izumi**, *Nara Institute of Science and Technology, Japan*)

3049: Decentralized Probe Vehicle System Using 700MHZ Band Wireless Communication System (**Keisuke Uehara**, *Keio University, Japan*)

MONDAY, OCTOBER 17
3:30 p.m. — 5:00 p.m.

TS13: Performance Management Databases

Room: S320D

MODERATOR
Paul Potters, *ITS Netherlands, the Netherlands*

PAPERS
1126: Transportation Performance Management—A Total Approach (**Bob McQueen**, *Iteris, Inc., USA*)

1142: The ITS Costs Database Evolution, Enhancements and Features (**James Bunch**, *Noblis, USA*)

2096: ITS Knowledge Base for Decision Makers (**Risto Kulmala**, *VTT-Technical Research Centre of Finland, Finland*)

2121: Merging the Best of Two Worlds—ITS Toolkits: Status Quo and Road Map (**Martin Boehm**, *AustriaTech, Austria*)

TS14: Congestion Charging Around the World

Room: S320E

MODERATOR
Rasmus Lindholm, *ERTICO-ITS Europe*

PAPERS
1039: Charging Performance and VMT Fees (**JD Hassan**, *Skymeter Corporation, Canada*)

2003: Tolling OBU Technology—View to the Future (**Michael Müller**, *Continental Automotive, Germany*)

2090: Congestion Charging in Gothenburg—Political and Design Process (**Björn Öhman**, *WSP Analysis & Strategy, Sweden*)

2106: Congestion Charging in Developing Nations—Technical Specification: Designing for a Weak Institution Environment (**Carl Hamilton**, *CTS, Sweden*)

3119: New Approaches to Measuring the Cost and Performance of Road User Charging Schemes (**Andrew Pickford**, *Transport Technology Consultants, Hong Kong*)

TS15: ITS Deployments

Room: S320F

MODERATOR
Barry Matlack, *Sensys Network, USA*

PAPERS
1141: Implementation of System Wide Maintenance &Technology Upgrade Contracts for San Antonio Transguide (**Brian Fariello**, *Texas Department of Transportation, San Antonio District, USA*)

1151: Procurement of a Design-Build-Operate-Maintain (DBOM) Contractor for the National Intelligent Transport System (ITS) in South Africa (**Pierre Pretorious**, *Kimley-Horn and Associates, Inc., South Africa*)

3122: Planning Installation of Traffic Signals (**Tentsuya Honda**, *Traffic Bureau, Tokyo Metropolitan Police Department, Japan*)

TS16: User Benefits: Next Generation Travel Information

Room: S320G

MODERATOR
Aimee Flannery, *AEM Corp., USA*

PAPERS
1316: Safety Applications of Automatic Vehicle Identification and Real-Time Weather Data on Freeways (**Mohamed Ahmed**, *University of Central Florida, USA*)

1367: Framework for Quantification of Benefits From Real-Time Traffic Information (**Sushant Sharma**, *NEXTRANS Center, Purdue University, USA*)

1368: Online Stochastic Routing Considering Real-Time Information Accuracy (**Sushant Sharma**, *NEXTRANS Center, Purdue University, USA*)

2224: Assessing the Benefits of Intelligent Truck Parking (**Jana Sochor**, *The Royal Institute of Technology, Sweden*)

2252: Roadmap to Reach a GNSS-Enabled Service Converged Market (**Pia Larsson**, *Swerco, Sweden*)

● 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**, *IBI Group, USA*)

1331: Deploying ITS Subarchitectures over IMS (4G NGN) (**Claudio Luiz Marte**, *Polytechnic School—University of São Paulo (USP), Brazil*)

2236: A New Traffic-Mining Approach for Unveiling Typical Global Evolutions of Large-Scale Road Networks (**Fabien Moutarde**, *Mines ParisTech, France*)

3260: 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 (**Yunyun Cao**, *Panasonic Corporation, Japan*)

3128: Purpose of Signal Control Regarding Pedestrian Protection and Study Report (**Hidetsugu Ishikawa**, *The Nippon Signal Co., Ltd., Japan*)

● TS19: Coordinating Multimodal Travel Options

Room: S331A

MODERATOR
Marika Jenstav, *WSP Sverige AB, Sweden*

PAPERS
1086: Enhancing Commuter Travel Choices through a Coordinated Transit, Ridesharing and Traffic Management Strategy (**Robert Arnold**, *FHWA, USA*)

2048: Automated 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 Universitäet 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: With 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
1329: 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 (**Harutoshi Yamada**, *University of Tokyo, Japan*)

3084: Evaluation Method of V2V Communication Community by Mutual Diagnostic Network (**Toshio 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 Amditis**, *National Technical University of Athens, Greece*)

3016: A Study of the Effect Evaluation of Brake Assist System in Emergency Situations Using A Survey Simulator to Evaluate Safety Systems (ASSESS) (**Nobuhisa Tanaka**, *National Traffic Safety and Environment Laboratory, Japan*)

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*)

TUESDAY, OCTOBER 18
8:30 a.m. – 10:00 a.m.

● 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*)

1159: ITS: Post Implementation Strategies for Success (**Jatinder Hayer**, *EPCOR Technologies, Canada*)

1169: Connected Vehicle—Driving for Change in the Way Transportation is Funded and Delivered (**James Barbaresso**, *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
Ryosuke 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 (**Olímpio 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 (**Ismail 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*)

3095: 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 Millsaps**, *Delcan Corporation, USA*)

1075: Strategic Patrol Vehicle Location-Allocation Model for Freeway Incident Responses (**Shanjiang 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) (**Nicolaas Swart**, *Maricopa County DOT, USA*)

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

2052: Developing Gothenbourg as a Livable Region—Using ITS in a 3700M€ "Big Dig" Infrastructure Program (**Lennart Olsson**, *Swedish Transport Administration, Sweden*)

2086: 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 Maezono**, *Tokyo Metro Co., Ltd., Japan*)

3258: Urban Bus Transport Job Scheduler (**Sajjad Salehi**, *Sheykh Bahaee University, Iran*)

● **TS31: Freight Logistics**

Room: S320C

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—ILS (**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
Hanbyeog 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 Cspeinszky, *ERTICO-ITS Europe*

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

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 I2V-Communication (**Philipp Gilka**, *Technische Universitaet Berlin, Germany*)

3001: 250Mb/s Fiber Optic Transmitter and Receiver ICs for Next-Generation Automotive Networks (**Won-Seok Oh**, *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. Fitch**, *Virginia Tech Transportation Institute, USA*)

1362: Comprehension of Advanced Collision Warning System Displays (**Emanuel 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-Minimized 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 Morita**, *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 (**Yuzuru 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 Negus, *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*)

● 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 (**Byungkyu (Brian) Park**, *University of Virginia, USA*)

3217: The Prediction Method of Missed Traffic Volume Using Grey-Based k-NN Approach (**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 Sjöström**, *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*)

TS42: Tolling System Design

Room: S320G

MODERATOR
Norman Pidgeon, *ITS Australia, Australia*

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*)

TUESDAY, OCTOBER 18
1:30 p.m. – 3:00 p.m.

TS43: Integration and Innovation

Room: S220A

MODERATOR
Eric Labrie

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 (TRAFIKVERKET) 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

MODERATOR
Sara Blackmer, *Michigan Defense Center, USA*

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**, *Skymeter 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*)

TS46: User Needs 2: Next Generation Travel Information

Room: S220D

MODERATOR
Shou-Ren Hu, *National Cheng Kung University, Chinese-Taipei*

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

MODERATOR
Frank Ottenhof, *Trinté Automation, the Netherlands*

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**, *Peek 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*)

TS48: Traffic Signal System Operations

Room: S220F

MODERATOR
Peter T. McCombs, *ITS New Zealand, New Zealand*

PAPERS
1035: Traffic Signal Firmware Conversion and Software Integration for an Existing Signal Network in Pasadena, California (**Irina Constantinescu**, *Kimley-Horn and Associates, USA*)

1110: Deployment of Transit Signal Priority—Without the Costly Local Infrastructure (**Robert Rausch**, *TransCore, USA*)

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*)

TS49: Assessment of the Field Operational Test

Room: S320A

MODERATOR
Meng Lu, *Dutch Institute for Advanced Logistics – Dinalog, the Netherlands*

PAPERS
2008: Impact Assessment of Advanced Driver Assistance Systems within the Field Operational Test "EuroFOT" at the German1 Test Site (**Mohamed Benmimoun**, *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*)

2129: Impact Assessment of Active Safety Systems on Safety, Traffic Efficiency and Environment within the Field Operational Test "EuroFOT" (**Adrian Zlocki**, *RWTH Aachen University, Germany*)

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

TS50: Leveraging New Technologies to Attract and Retain Transit Customers

Room: S320B

MODERATOR
Michael De Santis, *Agence Metropolitaine De Transport (AMT), Canada*

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**, *TranSystems 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*)

TS51: 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 (**Cledson 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*)

TS52: Protocols and Standards for Wireless Technologies in Cooperative Mobility

Room: S320D

MODERATOR
Makoto Max Miwa, *Panasonic Corporation, Japan*

PAPERS

2205: 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 IEEEp1609.2 in WAVE (**Hanbyeog Cho**, *ETRI, Korea*)

TS53: 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 (**Quy Hung Nguyen VAN**, *Toyota Motor Corporation, Japan*)

3138: Research on Maintenance of Driver's Arousal Level Using Steady Running Noise (**Wataru Nakai**, *Panasonic Corporation, Japan*)

3150: Single Trial P300 as an Indicator of Drivers' Visual Awareness: Toward an Adaptive Alarming System Based on Brain Science (**Shin Osuga**, *Aisin Seiki Co., Ltd., Japan*)

3225: Incorporating Saliency Map into Prediction of Drivers' Eye Fixations on Traffic Signs (**Xu Zhi**, *Beijing University of Technology, China*)

TUESDAY, OCTOBER 18
4:00 p.m. – 5:30 p.m.

TS54: Innovation and Cooperation

Room: S320B

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

PAPERS

1096: Dissemination of Innovations and New Technologies Using Public Private 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*)

1150: Plan4Safety—New Jersey's Crash Analysis and Decision Support Tool with Case Studies (**Niloufar S. Mirhosseini**, *Center for Advanced Infrastructure and Transportation, USA*)

1187: 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*)

TS55: 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*)

TS56: Putting Transit Signal Priority: From Models to Implementation

Room: S320D

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

PAPERS

1155: 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 Welde**, *Norwegian Public Roads Administration, Norway*)

3065: Development of Fast Emergency Vehicle Preemption Systems (**Masahide Hatakeyama**, *National Police Agency, Japan*)

TS57: 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*)

TS58: 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 Wieck**, *Iteris, 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 Sadrsadat**, *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*)

TS59: 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*)

2215: Despite an Improved Updating Application is Speed Map for Intelligent Speed Adaptation Challenging (**Niels Agerholm**, *Aalborg University, Denmark*)

<div style="background:#5a6b7a; color:white; text-align:center; padding:10px">

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

</div>

● 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 Havinoviski**, *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*)

2169: 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 (**Andre 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
1307: Comparison of Queue Estimation Models at Traffic Signals (**Jingcheng Wu**, *TransCore ITS, LLC, USA*)

2226: Forecast Based Cycle Time Calculation in Sitraffic Motion (**Juergen Mueck**, *Siemens AG, Germany*)

2243: Virtual Loops for Traffic Signal Priority of PT (**Ørjan 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: Weigh-In-Motion and Structural Deflection Based Mechanistic Esal Factors 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 (**Liz Orme**, *Cambridge Consultants Ltd., United Kingdom*)

2119: 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**, *Southwest Research Institute, USA*)

1128: Rural Connected Vehicle in Eastern Idaho (**Robert Koeberlein**, *Idaho Transportation Department, USA*)

1167: Connected Vehicles at 4.9 GHz for Transit 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*)

● TS69: Low Attention Driving Detection

Room: S320D

MODERATOR

Manabu Omae, *Keio University, Japan*

PAPERS

3053: Detecting Driver's Drowsiness Level with Simple Predetermined Initial State (**Yasuhiko 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

Jianping 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 Saltsman**, *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 Tørset**, *SINTEF, Norway*)

2245: Time Savings for Freight Transport in Urban Area (**Thomas Engen**, *SINTEF, Norway*)

3109: Logistics Support Service Using ITS Spot (**Shota 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 Zou**, *STV Incorporated, USA*)

2057: Developing User Friendly Mobile Applications with Real-Time Travel Information: A Case from Norway (**Karianne Ormseth**, *CIBER Norway, Norway*)

2078: Energy Efficient Navigation for Heavy Vehicles (**Per-Olof Svensk**, *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**, *SAIC, 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 Whitelaw 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

1332: Intersection Signal System Capable of Intelligent Non-Motorized Traveler Accommodation (**George (Xiao-Zhao) Lu**, *University of Vermont, USA*)

1340: Real-Time Open Source Traffic Control for the Advanced Traffic Controller (**Justin Key**, *Advanced Technologies Incorporated, USA*)

1366: Field Evaluation of Signal Timings Developed by a Stochastic Signal Optimization Tool (**Aleksandar Stevanovic**, *Florida Atlantic University, USA*)

1139: Leddar™ Technology for Robust Detection of Road Users at Traffic Intersections (**Samuel Gidel**, *LeddarTech, Canada*)

● **TS79: Data Collection Systems 2**

Room: S320E

MODERATOR
Richard Beaubien, *Hubbell, Roth & Clark, USA*

PAPERS

1038: Urban Arterial Performance Measurement—Proof of Concept (**Jingcheng Wu**, *TransCore ITS, LLC, USA*)

1210: Evaluation of Probe Vehicle Re-Identification Data Accuracy and Application (**Steve Remias**, *Purdue University, USA*)

2049: Transport Policy Information System—Results from Pilot Sites Using ITS to Bridge Data Gaps (**Tom Voge**, *Transport & Mobility Leuven, Belgium*)

3160: The Trip Distribution and Travel Time Estimation on Freeway with Electronic Toll Collection System (**Spencer Hsu**, *Far Eastern Electronic Toll Collection Co., Ltd. (FETC), Chinese-Taipei*)

● **TS80: Probe Data Collection Using Bluetooth**

Room: S320F

MODERATOR
Moe Zarean, *Iteris, USA*

PAPERS

1020: Using Bluetooth Technology to Monitor Traffic Patterns Around Urban Centres in Alberta (**Paul Steel**, *EBA, A Tetra Tech Company, Canada*)

1040: Validation of the Historical Vehicle Probe Project Speed by Using Bluetooth Speed as the Ground Truth (**Elham Sharifi**, *University of Maryland, USA*)

1045: Continuing Investigation of Anonymous Wireless Address Matching (AWAM) for Travel Time Data Collection (**Darryl Puckett**, *Texas Transportation Institute, USA*)

1080: Bluetooth BlueTOAD Technology Evaluation in Sarasota County, Florida USA (**Andy Lucyshyn**, *PE, PTOE, Atkins, USA*)

2153: On Measuring Traffic With Wi-Fi and Bluetooth (**Andreas Luber**, *German Aerospace Center, Germany*)

● **TS81: Driver's Behavior Utilizing Simulator**

Room: S320G

MODERATOR
Jianping Wu, *Tsingua 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**, *FORUM8, 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*)

3077: 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-Francois 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 Vlassenroot**, *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*)

● **TS84: Pilots and Field Operational Tests**

CANCELLED

● **TS85: Individualized Route Planning 3: Next Generation Travel Information**

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*)

3013: A Sophisticated Toll & Routes Guidance System (**Naotaka Terayama**, *Highway Toll Systems Co., Ltd., Japan*)

2238: The Experience of Using Modern Information Technologies in E-Services to Citizens (**Dagaeva Maria**, *Traffic Police Department of the Republic of Tatarstan, Russia*)

● **TS86: Automated Incident Detection Systems**

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*)

1370: 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*)

● **TS87: Advancements in Video Technologies**

Room: S220D

MODERATOR
Dr. William Sowell, *Aldis Corporation, USA*

PAPERS

1060: 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*)

2030: Applied Incident Management for Selective Prevention and Release in Safety Critical Situations (**Rudolf Benedik**, *Kapsch TrafficCom, Austria*)

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 Marey Graphs (**Rob Hranac**, *Berkeley Transportation Systems, USA*)

3029: An Analysis of Spatial OD Patterns of Bus Users Using IC Card Data (**Hiroaki Nishiuchi**, *Nihon University, Japan*)

3103: Interval Based Passenger Volume Forecasting Using Residual GM Model with IC Data (**Yuanyuan Liu**, *Shandong University, China*)

3250: Designing Fixed Bus Route Using Log Data of On-Demand Transportation (**Kota Tsubouchi**, *University of Tokyo, Japan*)

● TS89: Tolling Technology

Room: S220F

MODERATOR
Karl-Ernst Ambrosch, *AIT-Austrian Institute of Technology, Austria*

PAPERS
1111: Unplanned AVI/DSRC Interoperability Perfect Storm: 2011–2015 (**Paul Manuel**, *Kapsch TrafficCom IVHS, Canada*)

2100: PLATE Fingerprinting for Enhanced Video Tolling (**Martin Linauer**, *Kapsch TrafficCom, Austria*)

2138: Lane in a Box – A major step forward in lane-side equipment (**Mike Payne**, *Diamond Consulting Services Ltd, United Kingdom*)

2162: The Future Role of Certification in Road Tolling (**Karl-Heinz Stappert**, *TÜV Rheinland, Germany*)

3136: Research on EMV Payment in Vehicle: 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**, *EROAD Limited, New Zealand*)

● TS90: Probe and Travel Time for Cooperative Mobility

Room: S320A

MODERATOR
Paul Kompfner, *ERTICO-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 (**Marcel 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: 320C

MODERATOR
Dean Zabrieszach, *Vicroads, Australia*

PAPERS
2095: Improving Traffic Safety of Novice Drivers by Feedback on Driving Behaviour (**Mikko Taekiainen**, *VTT-Technical Research Centre of Finland, Finland*)

3030: An Analysis on the Influence Factors of Drivers' Route Diversion Behavior (**Seung-Neo Son**, *ITS Korea, Korea*)

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 Ikenishi**, *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**, *Vaisala 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*)

WEDNESDAY, OCTOBER 19
3:30 p.m. – 5:00 p.m.

● 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 (**Jingtao Ma**, *Mygistics, Inc., USA*)

2012: The Road to ITS—ITS Manuals in Sweden, Norway and Denmark (**Lilia Halsen Bidar**, *Sweco, Sweden*)

TS95: Adaptive Signal Control I

Room: S320F

MODERATOR
Steve Shelby, *Econolite Group, USA*

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 SCATSIN Simulation: A Second Iteration (**Christian Chong-White**, *Roads and Traffic Authority of New South Wales, Australia*)

TS96: Regional Deployment Strategies Part II

Room: S320G

MODERATOR
Jürgen Zajicek, *AIT - Austrian Institute Of Technology, Austria*

PAPERS
1152: Linking Corridors: The Crosstown Connector Intelligent Transportation Systems (**Ron Pati**, *Telvent USA Corporation, USA*)

2051: Traffic and Traffic Management, A Key Factor in Public-Private Partnership–Project A12 Lunetten—Veenendaal (**Erik Verschoor**, *ARCADIS Nederland BV, the Netherlands*)

2144: Design of Temporary ITS at Larger Road Works in Denmark (**Thomas Roslyng**, *Danish Road Directorate, Denmark*)

2234: A New Technological Approach Serving City Centers (**Guillaume Grolleau**, *NEAVIA Technologies, France*)

TS97: HOT—Lane Operations

Room: S320H

MODERATOR
Dick Schnacke, *TransCore, USA*

PAPERS
1069: HOT Lanes Demonstration in Los Angeles County (**Jesse Glazer**, *U.S. DOT—FHWA, USA*)

1083: I-95 Express Lanes Software Implementation and Recoverability (**Tucker Brown**, *Southwest Research Institute, USA*)

1103: I-85 HOT Lanes Construction (**Michael Holt**, *World Fiber Technologies, USA*)

1185: Using a Simulation Environment for Dynamic Tolling Analysis—Capital Beltway HOT Lanes (**Robert Kerns**, *Transurban USA, USA*)

TS98: ITS—What's the Problem, What to Do, Where It's Going

Room: S330A

MODERATOR
Shungo Akizuki, *Honda Motor Co., Ltd., Japan*

PAPERS
1001: Return on Investment of Performance Measurement Programs Implemented by Public Sector Transportation Agencies (**Armand Ciccarelli**, *Berkeley Transportation Systems, USA*)

1357: Requirements for Asset Management of Intelligent Transportation Systems (**Mashrur Chowdhury**, *Clemson University, USA*)

3106: Is ITS Worth The Money? A Public Transport Priority and Information System Case Study (**Ghassan Sarjies**, *Priority Pty Ltd., Australia*)

3218: A New Look at the Traffic Management Problem and Where to Start (**Biplav Srivastava**, *IBM Research, India*)

3255: A Flexible Way to Support Mixed Charging Models in Free Flow Tolling (**Miao Guo**, *IBM, China*)

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

TS99: Design Build with ITS

Room: S220A

MODERATOR
TBD

PAPERS
1023: Inclusion ITS Implementations into Highway Concessions (**Agustin Melo**, *Secretary at Communication and Transportation, Mexico*)

1114: Design-Build of Intelligent Transportation Systems for Northern Michigan (**Richard Beaubien**, *Hubbell, Roth & Clark, USA*)

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*)

TS100: Variable Speed Limits

Room: S220B

MODERATOR
Rudi Lagerweij, *Vitalis B.V., the Netherlands*

PAPERS
1165: I-4 Variable Speed Limit Effectiveness Study (**Andy Lucyshyn**, *PE, PTOE, Atlkins, USA*)

2248: Summary Results of Dutch Field Trials with Dynamic Speed Limits (DYNAMAX) (**Henk Stoelhorst**, *Rijkswaterstaat, Centre for Transport and Navigation, the Netherlands*)

3009: A Practical Dynamic Speed Limit Control Method Using Real-Time Traffic Counting Systems (**Hamid Torfehnejad**, *Road Maintenance and Transportation Organization, Iran*)

3059: Development of an Algorithm of Automatically Setting Critical Speeds on Urban Expressways (**Tomoyoshi Shiraishi**, *i-Transport Lab. Co., Ltd., Japan*)

TS101: Managed Lanes—Evaluation and Lessons Learned

Room: S220C

MODERATOR
Jay Calhoun, *Gannett Fleming, USA*

PAPERS
1059: Express Lane Operational Strategies for Managing Demand (**Charles Robbins**, *AECOM Technical Services, Inc., USA*)

1082: Growing Managed Lane Projects into System Networks (**Robert Edelstein**, *AECOM, USA*)

1085: I-595 Reversible Express Lanes Implementation (**Jesus Martinez**, *Southwest Research Institute, USA*)

1162: 95 Express Phase 1 Performance Update (**Gregg Letts**, *AECOM, USA*)

3163: Trial for the Change in Lane Operation in the Section with an Auxiliary-Lane Section (**Masami Ishiguro**, *Central Nippon Expressway Co., Ltd., Japan*)

TS102: Traffic Simulation Cases

Room: S220D

MODERATOR
Peter T McCombs, *ITS New Zealand, New Zealand*

PAPERS
1208: GIS Web Services Based Traffic Simulation and Management System Framework (**Fei Wang**, *University of Maryland, USA*)

3058: Development of a Hybrid Traffic Simulation Framework for Environmental Evaluation for ITS Applications (**Hisatomo Hanabusa**, *i-Transport Lab. Co., Ltd., Japan*)

3171: Wide-Area Microscopic Traffic Simulator Featuring Virtual Driving Experience (**Eiji Kitagawa**, *Fujitsu Laboratories, Ltd., Japan*)

TS103: Using Vehicle Probe Data for Congestion Analysis

Room: S220E

MODERATOR
Hiroyuki Kumazawa, *Automotive Electronics Development Center, Japan*

PAPERS
1346: Arterial Performance Measures in a Connected Vehicle Environment (**Noah Goodall**, *University of Virginia, USA*)

1360: Analysis of Temporal Characteristics of Traffic Congestion on Expressways Using Floating Car Data in Beijing (**Lei Yu,** , *Beijing Jiaotong University, China*)

2001: Traffic Volume Calculation Study Based on Floating Car Data (**Rainhart Kühne**, *German Aerospace Center, Germany*)

3070: Development of Map Matching Technology for Probe Integration Server (**Michiaki Hayami**, *Hitachi, Ltd., Japan*)

TS104: Areawide Strategies that Result from Environmental Performance Measures

Room: S220F

MODERATOR

Jonas Sundberg, *Sweco, Sweden*

PAPERS

2098: Situation Awareness in a City Node (**Peter Lindberg**, *Saab AB, Sweden*)

2149: Integration of Low-Cost Sensors with UTMC for Assessing Environmental Impacts of Traffic in Urban Area (**Fabio Galatioto**, *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: EcoGem: 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**, *Aisin 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*)

1145: Sustained Infrastructure Development for Real Time Benefits at the Local Operations Level—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

1191: An Innovative Approach to Enhancing Driver Performance, Monitoring and Feedback with Cellular and Cloud Based Technologies (**Nadine Levick**, *Objective 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, *Battelle, USA*

PAPERS

1010: A Look at the Importance of Public Awareness for the Intelligent Transportation Systems Industry (**Alicia Torrez**, *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*)

3027: An Adaptive System Architecture for Multi-Lane Free Flow ETC (**Richard Wu**, *Far Eastern Electronic Toll Collection Co., Ltd. (FETC), Chinese-Taipei*)

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 (**Santhanam 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 Hagiara**, *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**, *Peek Traffic, the Netherlands*)

2217: 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**, *Inmind 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**, *Cogenia 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*)

2135: Bringing Research to Deployment: Europe's First Sustainable Implementation of Cooperative Systems (**Klaas Rozema**, *Peek 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 Poi-Destinations in Finland (**Mikko Tarkiainen**, *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 Clelland, *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**, *Toyohashi 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 (**Guohui 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**, *Noblis, USA*)

2202: Next Generation Traffic Control in the Netherlands (**Marcel Valé**, *Trinité Automation, the Netherlands*)

3208: A Study on Congestion Threshold Using Volume-Speed Graph (Break Point) Analysis in Urban Freeway (**Jun-Cheol Lee**, *ITS Korea, Korea*)

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 (**Yasuo 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 Akatsu, *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 Cognitive Connected Vehicle (**Ata Khan**, *Carleton University, Canada*)

2212: Improved Method to Calculate the Time to Collision of Two Vehicles (**Felipe Jimenez**, *Politécnica University of Madrid, Spain*)

3216: Research on the Safety Distance Model Based on Car-Car Communication (**Hua Wang**, *Harbin Institute of Technology, China*)

3256: D-S Theory Data Fusion Based Automatic Incident Detection Algorithm for Expressway (**Jiancheng Weng**, *Beijing University of Technology, China*)

● 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 CO_2 Reduction and Energy Efficient Road Transport (**Robert Denaro**, *NAVTEQ Corp, USA*)

2043: Road User Charging in Green Activity Zones (**Trond Foss**, *SINTEF, Norway*)

2170: Air Quality Management Test Using VMS (**Susanne Planath**, *Swedish Transport Administration, Sweden*)

3101: Instantaneous Vehicle Emission Models for Evaluating Environmental Impacts of ITS (**Dr. Hussein Dia**, *AECOM, Australia*)

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

● TS123: Asset Management, Refurbishment, and Standards

Room: S220A

MODERATOR

Takaaki Sugiura, *Mitsubishi Research Institute, Inc., Japan*

PAPERS

1192: Case Study of Deployed U.S. DOT-Supported Connected Vehicle Research and Standards (**David Miller**, *Siemens ITS, USA*)

3092: Expressway Assets Management Support System Based Onubiquitous Technology (**Yuichi Shinozaki**, *Nexco-East Engineering Co., Ltd., Japan*)

3156: The First Ever Large-Scale Refurbishment of ETC System in Tokyo Metropolitan Area (**Toshifumi Hiraike**, *East Nippon Expressway Co., Ltd., Japan*)

● TS124:

CANCELLED

● TS125: Funding ITS

Room: S220C

MODERATOR

Richard Harris, *ACS-Xerox, United Kingdom*

PAPERS

1188: PennDOT & 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*)

2015: The Public Acceptability of Road Pricing (**John Walker**, *Southampton University, United Kingdom*)

2034: European Approaches to Pre-Commercial Procurement (**Mai Sloth**, *KeyResearch, Denmark*)

2250: Developing a National ITS Strategy in Denmark (**Charlotte Vithen**, *Danish Road Directorate, Denmark*)

3204: City of Tehran ITS Strategic Plan (**Mahmoud Siadat Mousavi**, *Pre-Commercial Procurement, ITS Institute, Iran*)

● TS126: 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*)

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*)

● TS127: Data Platforms 3: Next Generation Travel Information

Room: S220E

MODERATOR

Peter Wessel, *Inmind Scandinavia AB, Sweden*

PAPERS

2142: Collective Data Sourcing in the Netherlands (**Tiffany Vlemmings**, *National Datawarehouse for Traffic and Travel Information, the Netherlands*)

2166: Urban Transport Solution for the WiSafeCar Communication and Service Platform (**Gérald Arnould**, *CRP Henri Tudor, Luxembourg*)

3125: Probelet: Continuous Link Sequence which Describes Collective Intelligence in Route Selection Behavior Analyzed from Probe Car Trajectories (**Masatoshi Kumagai**, *Hitachi, Ltd., Japan*)

3154: The Application of Open Source Cloud Computing Technologies on Floating Car Data Management System—A Case Study on CenNavi Technologies Co., Ltd., Beijing (**Chunbai Deng**, *CenNavi Technologies Co., Ltd., China*)

● TS128: Infrastructure & Vehicle Signing & 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 (**Lily Elefteriadou**, *University of Florida, USA*)

1363: En Route Real-Time Travel Time Information: Experimental Evaluation of Display Characteristics (**Emanuel Robinson**, *Westat, USA*)

1364: Location Data Signing—Protecting the Integrity and Authenticity of Positioning System Data (**Sean Barbeau**, *University of South Florida, USA*)

3239: Research on the Cooperation System of UTCS and UTFGS based on CSCW and Multi-Agent (**Dexin Yu**, *Jilin University, China*)

● TS129: Variable Speed Limits for Efficiency & Safety

Room: S320A

MODERATOR

Praveen Singh, *Arada Systems, Inc., USA*

PAPERS

1323: Queue Warning and Variable Speed Limit Systems for Traffic Operation Efficiency and Safety Improvements (**Guohui 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 Wyoming, USA*)

1373: Development and Field Assessment of Variable Advisory Speed Limit System (**Eil Kwon**, *University of Minnesota Duluth, USA*)

3243: Optimization of Variable Speed Limit Approaching Long Freeway Tunnel (**Tien-Pen Hsu**, *National Taiwan University, Chinese-Taipei*)

● TS130: Impacts of ETC and Road User Charging

Room: S320B

MODERATOR

Tomoaki Abe, *Panasonic Corporation, Japan*

PAPERS

1302: Impacts of Congestion Pricing on the I-95 Express Bus Service In Miami, Florida (**Brian Pessaro**, *Center for Urban Transportation Research, USA*)

1358: The Effects of Technology on the Actual Costs of Tolling Systems (**Arce Richard**, *Kapsch TrafficCom IVHS, USA*)

2251: Tehran Traffic Congestion charging Management: A Success Story (**Amin Safaei**, *Tehran Traffic Control Company, Iran*)

3026: About the Effective Regular Service of The ETC Equipment and Making of ETC Equipment Life Prolongment by Preventive Maintenance (**Kouichi Sakiyama**, *West Nippon Expressway Facilities Company, Ltd., Japan*)

3066: Development of the GNSS/CN-Based Smart Client for Road Charging System (**Yoshihiro Mabuchi**, *Mitsubishi Heavy Industries Ltd., Japan*)

● TS131: V2I for Intersections and Traffic Signals

Room: S320C

MODERATOR
Hayashi Ito, *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 (**Pekka Eloranta**, *Mobisoft Oy, Finland*)

2128: 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
1099: Connected Autonomous Driving: Technology and Features Behind EN-V (**Priyantha Mudalige**, *General Motors, USA*)

2122: SARTRE Cooperative Control of Fully Automated Platoon Vehicles (**Eric Chan**, *Ricardo UK, Ltd., United Kingdom*)

3067: Development of Human Machine Interface for Platoon Systems—Construction and Acceptance of HMI (**Shin Kato**, *National Institute of Advanced Industrial Science and Technology, Japan*)

3149: Simulation Platform for Automatic Platooning Using a Driving Simulator (**Seungyong Lee**, *University of Tokyo, Japan*)

● TS134: Collision Avoidance System

Room: S320F

MODERATOR
Maxime Flament, *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 (**Faroog 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 Carels**, *IBCN-IBBT Ugent, 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*)

3086: 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
1203: 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*)

3152: Study on the Evaluation System for Automatic Vehicle Classification Equipment (**Tae-Hyun Hwang**, *ITS Korea, Korea*)

INTERACTIVE SESSIONS

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.

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

● IS01: Electronic Enforcement Systems

Room: HALL SA/SB MEETING ROOM 4

MODERATOR

Peter T McCombs, *ITS New Zealand, New Zealand*

PAPERS

1015: Innovative, Wireless ICT Technology Applications for Improved Road Traffic Safety and Automatic Traffic Enforcement (**Edmond Chin-Ping**, *EDCPC, Inc., USA*)

2237: The Experience of Using Video Fixation Systems for Detecting Road Traffic Rules Violations in the Republic of Tatarstan (**Rifkat Minnikhanov**, *Traffic Police Department of the Ministry of Interior, Russia*)

2240: The Development of Modern Informational Technologies in Terms of Road Traffic Safety in the Republic of Tatarstan (**Leonid Shigin**, *Traffic Police Department of the Ministry of Interior, Russia*)

3071: A New Image Processing Algorithm for Enforcement System (**Yohei Kojima**, *Mitsubishi Heavy Industries, Ltd., Japan*)

3093: Grid Mapping System for Intelligent Parking Assist System (**Youngil Kim**, *Mando, Korea*)

3159: The Suggestion of the Integrated Operation Method for a WIM and an ETC System (**Eun Joo Hong**, *ITS Korea, Korea*)

3219: Evaluating the Impact of a Speed Enforcement Pilot Project (**Hojjatollah Behrooz**, *IUST, Iran*)

● IS02: TMC Models, Weather Impacts, Congestion Management and System Operations

Room: HALL SA/SB MEETING ROOM 5

MODERATOR

Arnaud de la Fortelle, *Mines ParisTech, France*

PAPERS

1024: A Graphic Analysis of the Relationship Between a Three Lane Arterial Road and the Lane with Best Performance in Volume and Speed (**Olavo Guimarães**, *OdMG Transportation Consultants, Ltd., Brazil*)

1027: A Three State Method for Determining the Speed-Flow-Density Parameters of the Fundamental Diagram (**Olavo Guimarães**, *OdMG Transportation Consultants, Ltd., Brazil*)

2024: Precise and Dynamic Road Mapping Creation (**Jean-Philippe Mechin**, *Geoloc systems, France*)

1227: Benefits of Higher Gas Prices for Transportation Industry (**Srikanth Kidambi**, *Argosy University, USA*)

2061: Operation Reduction Costs (**Pascal Lemonnier**, *CS Communication & Systems, France*)

3017: A Study on Changing of Traffic Factor for Deteriorated Weather Condition (**Hyunsuk Park**, *University of Seoul, Korea*)

3057: Development and Verification of Dynamic Road Signs for Next-Generation ITS (**Byeongsup Moon**, *Korea Institute of Construction and Technology, Korea*)

3164: Upgrading Large Screen Display of MPD Road Traffic Control Center (**Shiro Kawano**, *Tokyo Metropolitan Police Department, Japan*)

TUESDAY, OCTOBER 18
10:30 a.m. – Noon

● IS03: The Use of Simulation Models, Congestion Management Methods and Communication to Enhance System Operations

Room: HALL SA/SB MEETING ROOM 4

MODERATOR

Stacy Kang, *ITS Korea, Korea*

PAPERS

1052: Pinellas County Public Works Emergency Responders Building and Traffic Control Center (**Ken Jacobs**, *Pinellas County Public Works, USA*)

1200: Using Modeling Tools for Highway Control Operations (**Padma Kamath**, *Alcatel-Lucent, Canada*)

2148 Road Infrastructure Health Monitoring: Smartvia® Technology for Sustainable Development (**Betrand Pouteau**, *EUROVIA, France*)

1318: Interfacing Simulation Models and Traffic Management Center Operations (**Mohammed Hadi**, *Florida International University, USA*)

2113: Implementation of CVIS ITS applications in a Driving Simulator Environment (**Kenneth Sørensen**, *SINTEF, Norway*)

3074: Development of the Device to Prevent Wrong-Way Driving (**Yuichi Mizushima**, *NEXCO Engineering Niigata. Co., Ltd., Japan*)

3132: Realization of the AHS Service Based on the Vectol Image Processing Method (**Ryoichi Kurata**, *Toshiba Corporation, Japan*)

3257: Robust Receiver Design for Road-to-Vehicle Communication System Using LED Array and High-Speed Camera (**Yasutake Shiraki**, *Nagoya University, Japan*)

IS04: ITS Tools: Leveraging Technology for Advanced Systems Application

Room: HALL SA/SB MEETING ROOM 5

MODERATOR
Shou-Ren Hu, *National Cheng Kung University, Chinese-Taipei*

PAPERS
1067: Deployment of a Hybrid Regional Traffic Signal and Closed Circuit Television Communication System: The Los Angeles County Experience (**Jane White**, *Los Angeles County Department of Public Works, USA*)

2038: Strategic Traffic Management for Navigation Systems Using TPEG-TEC (**Matthias Mann**, *PTV AG, Germany*)

2115: Deployment of Tire Pressure Monitoring System's for Traffic Monitoring and Safety Purposes (**Jan Schulz**, *German Aerospace Center, Germany*)

2143: A Systematic Review of the ITS Road Transport Literature—What Is Known and Suggestions for Further Research (**Jennie Blomqvist**, *Blekinge Institute of Technology, Sweden*)

3032: An Integrated Information System for Proving Ground Management (**Nan Liu**, *Research Institute of Highway, China*)

3069: Development of Laser Communication System for Railways (**Daisuke Tatsui**, *Railway Technical Research Institute, Japan*)

3117: Momentum Traffic Management—Active Traffic Control; Congestion—Road Damager—Energy (**David Gichangi Axelson**, *Sensing Technologies KK Japan, Japan*)

3235: Studying Relationship of Land Use and Transport with the Data from Mobile Phone Networks—A Case Study in Beijing (**Yanyan Chen**, *Beijing University of Technology, China*)

IS05: Collision Avoidance Systems

Room: HALL SA/SB MEETING ROOM 6

MODERATOR
Yosuke Akatsu, *Nissan Motor Co. Ltd, Japan*

PAPERS
1314: Automated Vehicle-to-Vehicle Collision Avoidance at Intersections (**Mike Hafner**, *Toyota Technical Center, USA*)

1317: Design of Adaptive Longitudinal Control for Cognitive Connected Vehicle (**Ata Khan**, *Carleton University, Canada*)

3008: A Lateral Control Algorithm for Automated Vehicles Based on the Dead Reckoning Function (**Yoshiaki Miwa**, *Meijo University, Japan*)

3096: Image Recognition Algorithm of Front Collision Warning System Using Monocular Camera for CA NCAP (**Tokihiko Akita**, *Aisin Seiki Co., Ltd., Japan*)

3133: Research and Development on Robotic Wheelchair to Follow—Examination of Constructing System and Control Technology (**Yusuke Takahashi**, *Tokyo University of Science, Japan*)

3223: Collision Avoidance at Intersection Using Wireless Sensor (**Shunsuke Kamijo**, *Institute of Industrial Science, University of Tokyo, Japan*)

IS06: From the First Mile to Crowd-Sourcing: Capturing Emerging Trends for Transit

Room: HALL SA/SB MEETING ROOM 4

MODERATOR
TBD

PAPERS
1006: A Brokerage Model for Reducing Costs of ADA / Paratransit Services in Large Metropolitan Areas: A Concept Paper (**Himanshu Bhatnagar**, *HB Software Solutions, Inc., USA*)

1036: Advancing Community Transportation through Coordination Using ITS—Lessons Learned From Paducah (KY) and Aiken (SC) (**Yehuda Gross**, *U.S. Department of Transportation, USA*)

1164: Transit New Payment Ways: Near Field Communications (**Floyd Diaz**, *Telvent USA Corporation, USA*)

1354: GO! SYNC—A Framework to Synchronize Crowd-Sourced Mapping Contributions From Online Communities and Transit Agency Bus Stop Inventories (**Sean Barbeau**, *University of South Florida, USA*)

2089: Putting in Place a New Public Transport System in London. (**Alan Stannard**, *Serco Ltd, United Kingdom*)

2009: New Technologies and Solutions for Flexible Passenger Transport in the Cite of Tampere, Finland (**Pekka Eloranta**, *Mobisoft Oy, Finland*)

IS07: Using Weather Data to Better Manage and Maintain System Operations

Room: HALL SA/SB MEETING ROOM 5

MODERATOR
Scott Nodes, *Arizona Department of Transportation, USA*

PAPERS
1131: Cost Benefits in Deploying a Fully Operational Maintenance Decision Support System (MDSS) (**Anthony McClellan**, *Meridian Environmental Technology, Inc., USA*)

1160: Mobile Road Weather Research & Development—the Vehicle Data Translator (**Sheldon Drobot**, *National Center for Atmospheric Research, USA*)

1170: Latest Technologies in Mobile Data Collection for Winter Road Maintenance (**Michael Howarth**, *Intelligent Devices, Inc., USA*)

1198: Weather Research and Decision Support for Highly Impacted Surface Transportation Users Groups (**Michael Chapman**, *National Center for Atmospheric Research, USA*)

2130: Weather Services in ITS—Concrete Benefits for the Society (**Raine Hautala**, *VTT-Technical Research Centre of Finland, Finland*)

IS08: Developments in Active System Management

Room: HALL SA/SB MEETING ROOM 6

MODERATOR
John Funny, *Grice Consulting Group, USA*

PAPERS
1135: Practical Guidelines for the Use of Changeable/Dynamic Message Signs (CMS/DMS) by DOTs (**Steve Garbe**, *Iteris, Inc, USA*)

1178: A Web-Based GIS System for Ramp Signaling Evaluation (**Xuesong Zhu**, *AECOM Technology Services, Inc., USA*)

1193: Kansas City Scout's Ramp Metering Evaluation (**Ervin Sims**, *KC Scout, Missouri Department of Transportation, USA*)

1304: Use and Content of CMS and VSL Under Low Visibility Conditions (**Mohamed Abdel-Aty**, *University of Central Florida, USA*)

2006: Policy on Variable Message Signs (**Vincent van der Heijden**, *ARCADIS Netherlands BV, the Netherlands*)

2065: Motorway-to-Motorway: A Potential Technological Solution To Motorway Congestion (**Roger Higginson**, *Atkins Limited, United Kingdom*)

2140: Increased Safety in Road Tunnels by Means of Traffic Supervision Independent of Ambient Light Conditions. (**Mikael Seyfarth**, *Saab AB, Sweden*)

2249: Simplified Roadway Tunnel Operationstabasa Tunnels, Barcelona, Spain (**José Carlos Riveira Martinez**, *Telvent, Spain*)

IS09: Security for Cooperative Mobility

Room: HALL SA/SB MEETING ROOM 4

MODERATOR
Toshio Yokoyama, *Honda R&D Co. Ltd, Japan*

PAPERS
1089: V2X Security & Privacy: The Current State and ITS Future (**Andre Weimerskirch**, *ESCRYPT Inc., USA*)

1339: A Generic Public Key Infrastructure for Securing Car-to-X Communication (**Norbert Bissmeyer**, *Fraunhofer Institute for Secure Information Technology, Germany*)

3036: Anonymous Authentication Scheme Considering Privacy for Probe Data Collection (**Masaaki Sato**, *KEIO University, Japan*)

3047: Criteria for Privacy and Integrity Protection in Probe Vehicle Systems (**Masaaki Sato**, *KEIO University, Japan*)

3146: Security Feature for Active-DSRC Based On-Board-Unit (OBU) (**Takeshi Nagata**, *Mitsubishi Heavy Industries, LTD, Japan*)

3210: A Secure Aggregated Message Authentication Scheme for Vehicular Ad Hoc Networks (**Huei-Ru Tseng**, *Industrial Technology Research Institute, Chinese-Taipei*)

• 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 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**, *Q-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*)

PAN-AMERICAN & MIDDLE EAST ITS INITIATIVES

Pan-American ITS (PAITS) was created in 2004 under a Memorandum of Understanding between ITS Argentina, ITS Brazil, ITS Canada, ITS Chile, and ITS America with the objective of promoting research, educational, and commercial cooperation among the ITS organizations of North, Central, and South America. ITS America is hosting the 4th Pan-American ITS Congress in conjunction with this year's World Congress. PAITS is presenting four special sessions that will address specific Latin American topics and issues on ITS. The sessions will be presented in Spanish with simultaneous translation into English.

Middle East ITS Initiatives: This special session presents the latest on what has become a fast growing, ITS friendly region. The ITS World Congress is pleased to highlight these efforts.

TUESDAY, OCTOBER 18
8:30 a.m. – 10:00 a.m.

● 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.

TUESDAY, OCTOBER 18
10:30 a.m. – Noon

● 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.

TUESDAY, OCTOBER 18
1:30 p.m. – 3:00 p.m.

● 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.

TUESDAY, OCTOBER 18
3:30 p.m. – 5:00 p.m.

● 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.

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

● 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*

IBEC SESSIONS

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.

TUESDAY, OCTOBER 18 8:30 a.m. – 10:00 a.m.	TUESDAY, OCTOBER 18 10:30 a.m. – Noon	TUESDAY, OCTOBER 18 1:30 p.m. – 3:00 p.m.

● 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*

● **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*

Mark Milner, *Manager, Road Safety Programs, Insurance Corporation of British Columbia (ICBC), Canada*

John Tipaldo, *NYCDOT Traffic Management, USA*

● **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.

TÜVRheinland®
Precisely Right.

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.

ATKINS

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.

> *i* **TIP**
> *Annual Meeting Events and Sessions are open to all delegates.*

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 Theatre

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 Theatre

ANNUAL MEETING SESSIONS

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.

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

● 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 ITSA's position on Distracted Driving, describe the latest research on the topic, and highlight the impact that Distracted Driving has on our 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 Wetzel, *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 widely 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
Jarice Rodriguez, *Instructor, Florida Atlantic University*

Byungkyu "Brian" Park, *University of Virginia*

Aleksandar Stevanovic, *Assistant Professor, Florida Atlantic University*

Mohammed Hadi, *Florida International University*

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: S330G

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 for 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. For 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.

ORGANIZER
ITS America's Cross-Cutting Issues Forum

MODERATOR
Dave McNamara, *President, McNamara Technology Solutions*

INVITED SPEAKERS
Mike Carroll, *Vice President Sales – Telematics, Danlaw INC*

Eric Berkobin, *Vice President Engineering & General Manger 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 pro-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
Dan Baxter, *Chief Engineer, Transportation Operations, CH2M Hill*

INVITED SPEAKERS
Beverly Kuhn, *Division Head, Texas Transportation Institute (TTI)*

Chris Francis, *ITS Program Development Manager, Virginia Department of Transportation*

Eil Kwon, *Professor, University of Minnesota Duluth*

Les Jacobson, *Senior ITS Manager, Parsons Brinckerhoff*

TUESDAY, OCTOBER 18
1:30 p.m. – 3:00 p.m.

AM11: Mitigating Driver Distraction through HMI Design: A Proposed Conceptual Framework for Safely and Effectively Implementing Technology in Vehicles

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*

Raymod 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 Veoni, *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*

Ananda Palanisamy, *Senior Transportation Management Specialist, Citizant*

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 kaleidescopic 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*

Shoichi 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*

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.

ORGANIZER
ITS America's Personal Mobility Forum

MODERATOR
Steve Kuciemba, *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*

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, Eno Transportation Research*

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

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. An overview of another deployment tracking initiative will be provided on a national geospatial database of ITS assets (including CCTV, RTMS, Dynamic Message Signs, Highway Advisory Radio, Toll Tag Readers, Ramp Meters, Variable Speed Limit, Radar Speed Signs, Signals, Controllers, WIM, etc.). Technology adoption in ITS is influenced by the market economy, the public demands for more efficiency, and the political interest for sustaining other economic sectors involving transportation. Insights will be provided on how past deployment evidence can be used to help predict the future and help shape technology adoption in support of the move to a connected vehicle environment. Also see a presentation on the latest findings from the ITS Benefits,

Costs, Deployment, and Lessons Learned: 2011 Update Report, and listen to a presentation on the factors influencing the adoption of Intelligent Transportation Systems (ITS) technologies in the U.S. amongst state and local transportation agencies. These efforts draw on data from the ITS Deployment Tracking survey.

ORGANIZER
U.S. Department of Transportation

MODERATOR
Marcia Pincus, *Program Manager, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation*

INVITED SPEAKERS
James Pol, *Team Leader, Program Management and Evaluation, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation*

Stephen Gordon, *Research Staff, Oak Ridge National Laboratory*

Mike Schultze, *Research Staff, Oak Ridge National Laboratory*

Cheryl Lowrance, *Principal Transportation Engineer, Noblis*

David Pace, *Economist, John A. Volpe National Transportation Systems Center, Research and Innovative Technology Administration, U.S. Department of Transportation*

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 emergency responder safety are among the public 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.*

Craig Pickering, *Senior Associate, Booz Allen Hamilton*

Theodore A. Smith, *Principal, Noblis*

● AM21: Transit ITS: Developments and Applications

Room: S331B

Transit has a long tradition of using ITS to improve the effectiveness and efficiency of the services it offers its customers. Increased experience with technology as well as new technical developments, however, are expanding the importance of technology for transit planning and operations. This session will discuss some of these emerging innovations such as the use of ITS in multimodal environments, the use of ITS for business intelligence, and new technological approaches for transit operations.

ORGANIZER
ITS America's Personal Mobility Forum

MODERATOR
Greg Cook, *Chair, Passenger Transportation Systems and Services Committee*

INVITED SPEAKERS
Koorosh Olyai, *Assistant Vice President, Dallas Area Rapid Transit*

John Toone, *ITS Program Manager, King County Metro*

Steven Bennett, *Vice President of International Sales, Clever Devices*

● AM22: The Impact of ITS on Your Community—Real Results from Across the U.S.

Room: S331C

As ITS deployment has moved from infancy to its current state of young adulthood there has been a consistent desire to measure our success in making the highway infrastructure a better place to travel—saving lives, time and money has become our mantra. But are we really applying the correct measurements? Some would say the advent of ITS has improved the operation of all municipal services but we do not have the measurements in place to adequately judge this impact. The panel for this round table session consists of state and local government officials, researchers and industry practitioners who have seen, deployed and measured ITS systems and clearly understand their impact on the community at large.

ORGANIZER
ITS America's Cross-Cutting Issues Forum

MODERATOR
Robert "Tip" Franklin, *Director, Business Development, Telvent*

INVITED SPEAKERS
John Corbin, *Director, Bureau of Traffic Operations, Wisconsin Department of Transportation*

Anita Vandervalk, *Principal, Cambridge Systematics*

Bob Williams, *Traffic Signals and Signs, Miami-Dade County*

Walter Kraft, *Principal, Vanasse Hangen Brustlin, Inc*

● AM23: Using ITS Architectures to Plan and Develop ITS Projects

Room: S331D

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*

Sarath Joshua, *ITS & Safety Program Manager, Maricopa Association of Governments*

Tom Bruff, *Manager, Transportation Systems, Southeast Michigan Council of Governments*

WEDNESDAY, OCTOBER 19
1:30 p.m. – 3:00 p.m.

● AM24: Tracking Economic Trends and Activity Using ITS

Room: S331A

The focus of this session is the use of data derived from intelligent transportation systems, particularly data derived from freight operations, to track economic trends and activity. In particular, the speakers will identify data thjat is currently being used for other purposes (performance measurement, safety, etc.) and describe how that data could be or has been packaged to produce meaningful information about the economy and the state of the freight transportation industry.

ORGANIZER
ITS America's Commercial Vehicle and Freight Mobility Forum

MODERATOR
Jeffrey Short, *Sr. Research Associate, American Transportation Research Institute*

INVITED SPEAKERS
Michael Onder, *Team Leader, Federal Highway Administration, U.S. Department of Transportation*

Jeff Loftus, *Technology Division, Federal Motor Carrier Safety Administration, U.S. Department of Transportation*

Carol G. Colman, *Senior Consultant, Trade and Transportation, IHS Global Insight*

● 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, Cogenia Partners*

Matt Barth, *Director, Professor of Electrical Engineering, University of California Riverside*

Scott McCormick, *President, Connected Vehicle Trade Association*

● AM27: Forging Partnerships to Facilitate Adaptive Traffic Signal Control Deployment

Room: S331D

Adaptive control is an integral part of the U.S. Federal Highway Administration's ("FHWA") Every Day Counts program. There are a number of challenges in expanding the appropriate use of adaptive control in the U.S. Historically, agencies have been slow to implement adaptive control systems for various reasons, including a lack of understanding of the necessary agency investments for system installation and maintenance. Agencies are also sometimes reluctant to hand over signal control to systems that are often perceived as "black boxes" whose control methods can be difficult to observe and evaluate. This session will include a diverse cross section of speakers representing FHWA, state agencies, vendors, and academia. The session will define the stakeholders and public expectations, introduce emerging "system in the loop" deployment architectures, detail industry's approach for implementing these new tools, and conclude with a case study showing the application of emerging NCHRP 3-79a performance measure tools to the Morgantown, WV ACS-Lite system.

ORGANIZER
Gary Duncan, *Chief Technology Officer, Econolite*

MODERATOR
Robert Sheehan, *Transportation Specialist, Office of Transportation Management, Federal Highway Administration, U.S. Department of Transportation*

INVITED SPEAKERS
Darcy Bullock, *Professor, School of Civil Engineering, Purdue University*

Andrew Nichols, *Assistant Professor of Engineering, Marshall University*

Eric Raamot, *Vice President, Engineering, Econolite*

Christopher Day, *Research Scientist, Joint Transportation Research Program, Purdue University*

WEDNESDAY, OCTOBER 19
3:30 p.m. – 5:00 p.m.

● AM28: Active Transportation and Demand Management: The Decision Support Toolbox

Room: S210C

The use of dynamic road pricing, vehicle occupancy policies and flow management strategies such as adaptive ramp metering, variable speed limits, rerouting, and shoulder running, now broadly referred to as Active Transportation and Demand Management (ATDM), is intensifying both in the United States and overseas. This session focuses on the decision support tools available to practitioners to design, operate and evaluate ATDM programs. How do planners and system managers settle on the best possible investment mix? How do operators decide in real time what controls to apply and whether or not to implement a detour? Finally, how do traffic engineers use operational feedback to assess and improve upon their strategies? Acknowledging that neither current traffic management systems nor traditional simulation tools can provide all of these functions,

this session explores current practices and emerging software suited for ATDM operations.

ORGANIZER & MODERATOR
JD Margulici, *Novavia Solutions, LLC*

INVITED SPEAKERS
Patty Rubstello, *Director of Toll Systems Development and Engineer, Washington Department of Transportation*

Richard Steeg, *Vice President Program Operations, Telvent*

Vassili Alexiadis, *Executive Vice President, Cambridge Systematics*

Robert Edelstein, *Vice President, AECOM*

Robert Sheehan, *Transportation Specialist, Federal Highways Administration, U.S. Department of Transportation*

● AM29: Public Information and Transportation Technology—How to Tell the ITS Story

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 transportation 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*

INVITED SPEAKERS
Masao Fukushima, *Engineering Director, Nissan Motor Co., Ltd., Japan*

Richard Bishop, *Owner, Bishop Consulting*

Ray Resendes, *Intelligent Technologies Research Division, National Highway Traffic Safety Administration, U.S. Department of Transportation*

Kay Fuerstenberg, *Senior Manager Research Activities, Sick AG*

● AM31: ITS for Truck Parking

Room: S331C

The purpose of this session is to discuss the efforts being carried to deploy or support intelligent transportation systems for truck parking. Finding space available for truck parking is a problem in many jurisdictions. It poses challenges for safety in that commercial drivers need a safe place to rest from fatigue and to comply with hours of service rules. This session will cover progress being made towards providing truck parking information in real time to truckers on the road. Speakers will discuss various technological applications, such as video imaging, magnetometry, combined Doppler-radar-laser scanning, and others.

ORGANIZER
ITS America's Commercial Vehicle and Freight Mobility Forum

MODERATOR
Quon Kwan, *Program Manager, Federal Motor Carrier Safety Administration, U.S. Department of Transportation*

INVITED SPEAKERS
Alan Chachich, *Service and Operations Assessment Division, Volpe Center, Research and Innovative Technology Administration, U.S. Department of Transportation*

Michael Onder, *Team Leader, Federal Highway Administration, U.S. Department of Transportation*

Elliot Martin, *Transportation Research Sustainability Center, University of California at Berkeley*

Marygrace Parker, *Truck Parking Project Manager, I-95 Corridor Coalition*

● AM32: Smart Parking with ITS: Transforming an Industry

Room: S331D

Parking is an estimated $24-25 billion enterprise in the U.S., and there has been a burst of investment to apply technology to improve customer service and streamline operations across the industry. Parking operators are investing in new technology such as park-by-phone payments, reservation systems, and parking guidance. Streamlined operations benefit from automated electronic permitting, revenue control, and parking enforcement across a number of different service models—City Centers, Airports and large business locations such as hospitals, universities, office campuses, shopping centers and hotels, as well as on-street metered parking. This session looks at technology and business models that drive innovation in the field.

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*

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

● 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 shall 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*

Randy Hanson, *Executive Vice President and COO, International Road Dynamics, Inc.*

Enrique Cramer, *Business Development Director, Intelligent Imaging Systems, Inc.*

Paul Clark, *CVO Program Manager, Florida 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*

THURSDAY, OCTOBER 20
10:30 a.m. – Noon

● 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*

Dale McCrossen, *Oakland/ San Francisco Bay Area Lane Closure Manager, Caltrans*

Jason Wasson, *Director, Division of TMCs, Indiana Department of Transportation*

Dave Holstein, *State Traffic Engineer, Ohio Department of Transportation*

● 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/OFCM*

● AM39: Safety Pilot—The World's Most Extensive Real World Deployment of Connected Vehicle Safety

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 (CAMP)*

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., feebates, 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