Reinventing Transportation in our Connected World

September 7-11, 2014 | Cobo Center | Detroit, Michigan, USA

Hosted by:
ITS AMERICA

Co-hosts:
ITS
ERTICO ITS EUROPE

Sponsors:

www.itsworldcongress.org | #ITSWC14
Follow the Signs: Econolite Group is committed to employing advanced technologies that reduce traveler time, ease congestion, enhance transit operations, provide safer mobility, and improve quality of life.

To learn more, join us at Booth #1614, at the Technology Showcase on Belle Isle, or visit econolitegroup.com!
Follow the Signs:
Econolite Group is committed to employing advanced technologies that reduce traveler time, ease congestion, enhance transit operations, provide safer mobility, and improve quality of life.
To learn more, join us at Booth #1614, at the Technology Showcase on Belle Isle, or visit econolitegroup.com!
On behalf of the 2014 ITS World Congress Organizing Committee, I invite you to Detroit on September 7-11, 2014. Our theme is “Reinventing Transportation in our Connected World.” We have a great story to tell — a story of reinvention of our vehicles and infrastructure, but also of our iconic city — the Motor City — and its core industry.

We will tell our story in a very compelling way — through a dynamic, interactive program, exciting exhibits, and the largest set of technology demonstrations in the 21 year history of the World Congress. Our goal is to immerse attendees in the future of transportation technology at the newly renovated Cobo Center, on the streets of Detroit, and on beautiful Belle Isle.

Our technical program includes more than 250 sessions, with an all-star line-up of keynote speakers, a Chief Technology Officer Summit, and a High-Level Policy Roundtable. Cobo Center will feature more than 300,000 square feet of exhibits, including our Youth Connections Pavilion and indoor track for youth challenges, the Entrepreneurial Village, and a next-generation Transportation Operations Center. Of course, no World Congress would be complete without social events and activities, and we offer plenty of opportunities to network with your colleagues, make new business acquaintances, and have some fun.

While Detroit is most often associated with cars and the auto industry, it is also a city with a unique history of culture, music, and sports. We offer world-class museums, performing arts, and some of the best professional sports teams on the globe. The region is home to hundreds of beautiful golf courses, wonderful parks, and, of course, the Great Lakes. If sailing, fishing, boating, or golf are your passion, then Detroit is your place.

Detroit is in a unique position to be hosting the World Congress at such an important time in the transportation industry, but also in the City’s rebirth. We are on the cusp of a transformation, where technology offers realistic solutions to our global mobility, safety, and environmental challenges. Detroit is at the heart of this transformation. The Motor City is made of both grit and silicon, where industry and technology are coming together to forge the next generation of transportation systems.

I invite you to participate in the “reinvention” and look forward to seeing you in Detroit in September!

James Barbaresso
2014 Organizing Committee Chair
Vice President, Intelligent Transportation Systems
HNTB Corporation

ITS America is thrilled to host the 2014 ITS World Congress in America’s original Motor City and to welcome thousands of the world’s leading transportation technology leaders to Detroit, Michigan.

We live in an increasingly connected world, with technology changing not only the way we live, work, and travel but also how businesses compete in the global economy. From connected and autonomous vehicles to advanced traffic management systems and real-time traffic, transit, and parking apps, this year’s World Congress will showcase technologies that are reinventing mobility, fueling smarter cities, and redefining the Intelligent Transportation ecosystem to transform the way we move.

ITS America’s Annual Meeting & Exposition will take place in conjunction with the ITS World Congress and provide a distinct series of events for the Society’s members that focus on exploring solutions for easing traffic congestion, financing and improving the nation’s transportation system, advancing life-saving vehicle technologies, and much more. The Annual Meeting track also features a host of committee forum meetings, a Leadership Circle dinner and the Best of ITS Awards, State Chapter Awards, and Student Essay Competition winners.

Have a great week, and thank you for attending the 2014 ITS World Congress.

Scott Belcher
President and CEO, ITS America
On behalf of ERTICO-ITS Europe and its Partners, I am delighted to welcome you to the 21rst ITS World Congress in Detroit.

Detroit is well known as the Motor City and therefore the perfect place to host this ITS World Congress. The hosts promise a fantastic exhibition at the famous Cobo Center, many ground-breaking interactive demonstrations, an outstanding programme, as well as numerous networking events, with an expected 10,000 transport and technology leaders from around the world.

Today's challenge is to deploy ITS solutions effectively in a coordinated and harmonised manner. To do so we need optimal interaction between people and technologies, bringing synergy between modes of transport to offer mobility in a way that is environmentally friendly, safe and efficient.

Detroit is not only a technological capital and a great location for the Congress, but it is also recognised for its excellent hospitality and its outstanding entertainment facilities. Europe is most excited about the prospect of this excellent ITS World Congress.

I look forward to meeting you in Detroit, and to participating together in the wide range of events planned during the Congress.

Dr. Hermann Meyer
CEO, ERTICO – ITS Europe

On behalf of ITS Asia-Pacific, I would like to welcome you all to the 21st ITS World Congress in Detroit.

Fast, safe, reliable and efficient transportation has been one of the most important elements of the society for economic growth and enhanced quality of life. We are now at the outset of an endeavor with a new set of technologies which will change the way we observe phenomena in transportation and act on it.

Penetration of information and communication technologies to our daily life has given significant impact on our society. Highly automated cars will be put into the market within a decade, which will dramatically reduce traffic accidents and congestion and also enable aged or challenged people to go out on their own.

However, technologies alone won’t bring about solutions. We need to take an integrated approach, combining state of the art technologies with social innovations.

The ITS World Congress in Detroit is exactly where you find the right experts from industries, academic societies and government agencies. Policies, technologies, institutional issues and human factors will all be covered with supporting facts and experiences.

I hope the ITS World Congress will trigger a massive process of Reinventing Transportation in our Connected World.

Hajime Amano
Secretary General, ITS Asia-Pacific
# International Program Committee

Thanks to the dedication and hard work of the 2014 International Program Committee, those attending the 21st World Congress on ITS will experience a robust and exiting program that spans a variety of topics and timely issues affecting the ITS industry worldwide.

## Americas

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Company, Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan Bi</td>
<td>Honda R&amp;D, USA</td>
</tr>
<tr>
<td>Hamed Benour</td>
<td>Sensys Networks Inc., USA</td>
</tr>
<tr>
<td>Robert Bertini</td>
<td>Portland State University, USA</td>
</tr>
<tr>
<td>Richard Bishop</td>
<td>Bishop Consulting, USA</td>
</tr>
<tr>
<td>Armand Ciccarelli</td>
<td>Appian Strategic Advisors, USA</td>
</tr>
<tr>
<td>Stan Caldwell</td>
<td>Carnegie Mellon University, H. John Heinz III College, USA</td>
</tr>
<tr>
<td>Pete Costello</td>
<td>INRIX, USA</td>
</tr>
<tr>
<td>C. Douglass Couto</td>
<td>Public Sector Consultant, USA</td>
</tr>
<tr>
<td>Steven W. Dellenback</td>
<td>Southwest Research Institute, USA</td>
</tr>
<tr>
<td>Richard B. Easley</td>
<td>E-Squared Engineering, USA</td>
</tr>
<tr>
<td>John J. Funky</td>
<td>Grice &amp; Associates, Inc., USA</td>
</tr>
<tr>
<td>Edward R. Griffir</td>
<td>Chrysler Group, LLC, USA</td>
</tr>
<tr>
<td>Dawn Hardesty</td>
<td>Nobis, USA</td>
</tr>
<tr>
<td>Jim Keller</td>
<td>Honda, USA</td>
</tr>
<tr>
<td>Manjunathan Kumar</td>
<td>California Center for Innovative Transportation (CDTI)/ University of California, Berkeley, USA</td>
</tr>
<tr>
<td>Jane Lappin</td>
<td>John A. Vopf National Transportation Systems Center, Research and Innovative Technology Administration, U.S. DOT, USA</td>
</tr>
<tr>
<td>Harry Lister</td>
<td>ITS Joint Program Office, Research and Innovative Technology Administration, U.S. DOT, USA</td>
</tr>
<tr>
<td>Bob McQueen</td>
<td>The O Cash Company, USA</td>
</tr>
<tr>
<td>Robert Rausch, P.E.</td>
<td>TransCore Holdings, Inc., USA</td>
</tr>
</tbody>
</table>

## Europe

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Company, Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelley Row</td>
<td>Shelley Row &amp; Associates, LLC, USA</td>
</tr>
<tr>
<td>Louis F. Sanders</td>
<td>American Public Transportation Association (APTA), USA</td>
</tr>
<tr>
<td>Carol L. Schweiger</td>
<td>TransSystems, USA</td>
</tr>
<tr>
<td>Ed Seymour</td>
<td>Texas Transportation Institute (TTI), Texas A&amp;M University, USA</td>
</tr>
<tr>
<td>Susan A. Shaheen</td>
<td>University of California, Berkeley, USA</td>
</tr>
<tr>
<td>Susan Spencer</td>
<td>Consultant, Canada</td>
</tr>
<tr>
<td>James Wright</td>
<td>American Association of State Highway and Transportation Officials (AASHTO), USA</td>
</tr>
<tr>
<td>Wei-Bin Zhang</td>
<td>University of California, Berkeley, PATH, USA</td>
</tr>
</tbody>
</table>

## Asia-Pacific

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Company, Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yousuke Akatsu</td>
<td>Nissan Motor Co., Ltd., Japan</td>
</tr>
<tr>
<td>Shinya Omi</td>
<td>ITS Japan, Japan</td>
</tr>
<tr>
<td>S.K. Jason Chang</td>
<td>National Taiwan University, Chinese-Taipei</td>
</tr>
<tr>
<td>Edward Chung</td>
<td>Queensland University of Technology, Australia</td>
</tr>
<tr>
<td>Susan Harris</td>
<td>ITS Australia, Australia</td>
</tr>
<tr>
<td>Mohammed Hikmet</td>
<td>HMI Technologies Limited, New Zealand</td>
</tr>
<tr>
<td>Katsushi Ikeuchi</td>
<td>The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Weiyun Jiao</td>
<td>China National ITS Center, China</td>
</tr>
<tr>
<td>Shunsuke Kamio</td>
<td>The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Jeong-Gyu Kang</td>
<td>Korea Expressway Corporation, Korea</td>
</tr>
<tr>
<td>Hiroyuki Kumazawa</td>
<td>Osaka Sangyo University, Japan</td>
</tr>
<tr>
<td>Der Hong Lee</td>
<td>National University of Singapore, Singapore</td>
</tr>
<tr>
<td>Siew Mun Leong</td>
<td>ITS Malaysia, Malaysia</td>
</tr>
<tr>
<td>Young-Jun Moon</td>
<td>The Korea Transport Institute, Korea</td>
</tr>
<tr>
<td>Brian Negus</td>
<td>RACV, Australia</td>
</tr>
<tr>
<td>Takashi Oguchi</td>
<td>The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Nobuyuki Ozaki</td>
<td>Toshiba Corporation, Japan</td>
</tr>
<tr>
<td>Tongyan Qi</td>
<td>Chinese Science Center of International Eurasian Academy of Sciences, China</td>
</tr>
<tr>
<td>Takakii Segi</td>
<td>ITS Japan, Japan</td>
</tr>
<tr>
<td>Seung-Neo Son</td>
<td>ITS Korea, Korea</td>
</tr>
<tr>
<td>Shigetoshi Tamofo</td>
<td>Sumitomo Electric Industries, Japan</td>
</tr>
<tr>
<td>Dean Zabrieszach</td>
<td>VicRoads, Australia</td>
</tr>
</tbody>
</table>

## Americas

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Company, Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Rousseau</td>
<td>CGI, UK</td>
</tr>
<tr>
<td>Mika Rytkönen</td>
<td>HERE, Finland</td>
</tr>
<tr>
<td>Erk Sampson</td>
<td>ERTICO - ITS Europe</td>
</tr>
<tr>
<td>Malika Seddi</td>
<td>ASFA, France</td>
</tr>
<tr>
<td>Michael Sena</td>
<td>Michael Sena Consulting AB, Sweden</td>
</tr>
<tr>
<td>Delphine Soubies</td>
<td>ERTICO - ITS Europe</td>
</tr>
<tr>
<td>Pamela Valente</td>
<td>ERTICO - ITS Europe</td>
</tr>
<tr>
<td>Paul Vorster</td>
<td>ITS South Africa, South Africa</td>
</tr>
<tr>
<td>Jaap Vreeswijk</td>
<td>Imtech, The Netherlands</td>
</tr>
<tr>
<td>Kees Wovers</td>
<td>Brightangel, The Netherlands</td>
</tr>
<tr>
<td>Mihaela Williams</td>
<td>European Commission, DG MOVE</td>
</tr>
</tbody>
</table>

## Europe

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Company, Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil Blythe</td>
<td>Newcastle University, UK</td>
</tr>
<tr>
<td>Marije de Vreeze</td>
<td>Connekt/ITS Netherlands, Netherlands</td>
</tr>
<tr>
<td>Fiammetta Dani</td>
<td>European GNSS Agency - GSA, Germany</td>
</tr>
<tr>
<td>Alexander Frötscher</td>
<td>AustriaTech, Austria</td>
</tr>
<tr>
<td>Didier GorteMan</td>
<td>ERTICO - ITS Europe, Chair, Belgium</td>
</tr>
<tr>
<td>Norbert Handke</td>
<td>ITS Network Germany, Germany</td>
</tr>
<tr>
<td>Richard Harris</td>
<td>Xerox Services, UK</td>
</tr>
<tr>
<td>Jean-Michel Henchoz</td>
<td>DENSO INTERNATIONAL EUROPE, Belgium</td>
</tr>
<tr>
<td>Sampo Hietanen</td>
<td>ITS-Finland, Finland</td>
</tr>
<tr>
<td>David Hytch</td>
<td>Worldline, UK</td>
</tr>
</tbody>
</table>

## Asia-Pacific

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Company, Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yousuke Akatsu</td>
<td>Nissan Motor Co., Ltd., Japan</td>
</tr>
<tr>
<td>Shinya Omi</td>
<td>ITS Japan, Japan</td>
</tr>
<tr>
<td>S.K. Jason Chang</td>
<td>National Taiwan University, Chinese-Taipei</td>
</tr>
<tr>
<td>Edward Chung</td>
<td>Queensland University of Technology, Australia</td>
</tr>
<tr>
<td>Susan Harris</td>
<td>ITS Australia, Australia</td>
</tr>
<tr>
<td>Mohammed Hikmet</td>
<td>HMI Technologies Limited, New Zealand</td>
</tr>
<tr>
<td>Katsushi Ikeuchi</td>
<td>The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Weiyun Jiao</td>
<td>China National ITS Center, China</td>
</tr>
<tr>
<td>Shunsuke Kamio</td>
<td>The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Jeong-Gyu Kang</td>
<td>Korea Expressway Corporation, Korea</td>
</tr>
<tr>
<td>Hiroyuki Kumazawa</td>
<td>Osaka Sangyo University, Japan</td>
</tr>
<tr>
<td>Der Hong Lee</td>
<td>National University of Singapore, Singapore</td>
</tr>
<tr>
<td>Siew Mun Leong</td>
<td>ITS Malaysia, Malaysia</td>
</tr>
<tr>
<td>Young-Jun Moon</td>
<td>The Korea Transport Institute, Korea</td>
</tr>
<tr>
<td>Brian Negus</td>
<td>RACV, Australia</td>
</tr>
<tr>
<td>Takashi Oguchi</td>
<td>The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Nobuyuki Ozaki</td>
<td>Toshiba Corporation, Japan</td>
</tr>
<tr>
<td>Tongyan Qi</td>
<td>Chinese Science Center of International Eurasian Academy of Sciences, China</td>
</tr>
<tr>
<td>Takakii Segi</td>
<td>ITS Japan, Japan</td>
</tr>
<tr>
<td>Seung-Neo Son</td>
<td>ITS Korea, Korea</td>
</tr>
<tr>
<td>Shigetoshi Tamofo</td>
<td>Sumitomo Electric Industries, Japan</td>
</tr>
<tr>
<td>Dean Zabrieszach</td>
<td>VicRoads, Australia</td>
</tr>
</tbody>
</table>
Organizing Committee

We greatly appreciate the many hours each member of our Organizing Committee puts into making the 2014 ITS World Congress a success.

Detroit Organizing Committee Chairman
James Barbaresso, Vice President, Intelligent Transportation Systems, HNTB Corporation

America's International Program Committee Chair
Dr. Peter Sweatman, Director, University of Michigan Transportation Research Institute

Honorary Committee Vice Chair
Kirk Steudle, Director, Michigan DOT

Exhibitor Advisory Subcommittee Co-Chair
William Sowell, Vice President, Sales & Marketing, Iteris, Inc.

Finance Subcommittee Chair
Gerry Conover, Managing Director, PRC Associates

Operations Subcommittee Chair
Bill Russell, President and CEO, Eberle Design, Inc.

Strategic Partnerships Subcommittee Chair
Richard Wallace, Director, Transportation Systems Analysis, Center for Automotive Research

Communications and Outreach Subcommittee Chair
Lisa Thompson, National Director of Toll Client Development, HNTB Corporation

International Relations Subcommittee Chair
Susan Spencer, President, Susan Spencer & Associates

Government Relations Subcommittee Co-Chairs
Shane Karr, Vice President of Federal Government Affairs, Alliance of Automobile Manufacturers
Gary Poltrowicz, Deputy Managing Director, Road Commission for Oakland County

Technology Demonstrations Subcommittee Chair
Michelle Mueller, Senior Project Manager, Michigan DOT

Technology Demonstrations Subcommittee Vice Chair
Steve Kuciemba, Vice President, National ITS/Operations Manager, Parsons Brinckerhoff

State Chapter Subcommittee Co-Chair
Mel Evans, IT Manager, Smart Bus

State Chapter Subcommittee Co-Chair
Durga Panda, Chief Operating Officer, Image Sensing Systems, Inc.

Local Arrangements Subcommittee Chair
Dick Beaubien, Professional Traffic Operations Engineer and Managing Director, Beaubien Engineering

Board of Directors

Americas

James Barbaresso
2014 Organizing Committee Chairman, HNTB Corporation, USA

Scott Belcher
Intelligent Transportation Society of America, USA

Dr. Andrew Brown
Delphi, USA

Gerald Conover
PRC Associates, USA

Maurice Ferre
Florida Transportation Commission, USA

Michael A. Finney
Michigan Economic Development Corporation, USA

Randy Iwasaki
Contra Costa Transportation Authority, USA

Ken Philmus
Xerox, USA

Russell Shields
Ygomi LLC, USA

Kirk Steudle
Michigan DOT, USA

Michael De Santos
Chair, ITS Canada, Canada

Dr. Peter Sweatman
University of Michigan Transportation Research Institute, USA

Harry Voccola
HERE, USA

Greg Winfree
U.S. DOT, USA

Bud Wright
AASHTO, USA

Asia-Pacific

Hajime Amano
ITS Japan, Secretary-General

Atsushi Yano
Sumitomo Electric Industries, Ltd., 2013 World Congress Board of Directors Chair

Susan Harris
ITS Australia, 2016 World Congress Board of Directors Chair

Brian Negus
ITS Australia, Australia

Xiaojing Wang
China National ITS Center, China

S.K. Jason Chang
ITS Taiwan, Chinese-Taipei

Shinya Omi
ITS Japan, Japan

Kichil Kwon
ITS Korea, Korea

Sam Pang
ITS Hong Kong, Hong Kong

Elly Sinaga
ITS Indonesia, Indonesia

Siew Mun Leong
ITS Malaysia, Malaysia

Mohammed Hikmet
ITS New Zealand, New Zealand

Mong Kee Sing
ITS Singapore, Singapore

Passakon Prathombutr
ITS Thailand, Thailand

Europe

Josef A. Czako
Kapsch TrafficCom AG, Austria

Claire Dépré
European Commission, DG MOVE

Joseph Fiala
ASFINAG Service GmbH, Austria

Frank Foersterling
Continental Automotive GmbH, Germany

Evelinde Grassegger
Ministry of Transport, Innovation and Technology, Austria

Richard Harris
Xerox Services, UK

Christie Carlsson
ITS Sweden, Sweden

Risto Kulumala
Finland Transport Agency, Finland

Samuel Loyson
Orange Smart Cities, France

Patrick Maléjacq
IFFSTAR, France

Hermann Meyer
ERTICO - ITS Europe, Belgium

André Reix
Topos Aquitaine, France

Klaas Rozema
Intech Traffic & Infra, The Netherlands

Christian Rousseau
Renault SAS, France

Robert Sykora
Siemens AG, Germany

www.itsworldcongress.org | #ITSWC14
Sponsors

Each and every year, our sponsors gratify the work of ITS America and our affiliates by choosing again to lend us their support. We would like to thank all of them for their continued contribution and dedication to the transportation and mobility sector, and for this year helping us Reinvent Transportation in our Connected World.
Intelligent Solutions for Traffic Surveillance

- **PoliScan**
  - **Speed**: Fixed and mobile LIDAR speed enforcement capturing up to 3 times as many incidents as conventional systems
  - **Seco**: Next generation average speed enforcement
  - **Redlight**: Red light enforcement without in-road equipment such as loops and sensors, can also be combined with speed enforcement

- **PoliScan**
  - **Surveillance**: Automatic license plate recognition with highest capture rates

- **TollChecker**
  - **Freeflow**: World’s first nationwide single gantry solution for multi-lane free-flow tolling – now in the fourth generation

[www.vitronic.com](http://www.vitronic.com)
Transportation Information

Getting Around Detroit
Attendees coming to the 21st World Congress on Intelligent Transport Systems featuring ITS America’s Annual Meeting and Exposition will find traveling throughout the southeast Michigan area convenient for travelers from around the world.

Travel by Air
Attendees will be able to print return boarding passes on site Wednesday and Thursday at Cobo in the registration area during registration hours.

Travel by Taxi
Detroit Metropolitan Airport’s official luxury sedan and taxi cab providers, MetroCars and MetroCabs, offer convenient, on-demand transportation from the airport to points throughout the region. Cost of cab fare into the city may vary from $45.00 - $70.00 USD. We recommend that you carry cash on your person for shorter cab rides once within the city.

Contact MetroCars at +1 (800) 456-1701 and MetroCabs at +1 (734) 997-6500 for more information.

Travel by Uber
Uber, the official transportation sponsor of the ITS World Congress, is offering attendees a free ride for up to a $30 value. New users can download the app, enter the promo code ITSWC14, and a car will be curbside within minutes. The app is available in both the Apple Store and Google Play.

Travel by Transit
Metro Detroit Area Transit (SMART) Suburban Mobility Authority for Regional Transportation (SMART) provides public bus service to and from DTW Airport to points throughout Southeast Michigan. SMART currently serves the North Terminal with Routes 125 and 280, and the McNamara Terminal with Route 125.

Public bus service connects DTW Airport with the surrounding southeast Michigan region from stops located at each airport terminal:
- North Terminal: Ground Transportation Center
- McNamara Terminal: International arrivals level curb (lowest level) just outside and to the right of the terminal building exit

For more information regarding SMART Bus service, visit www.smartbus.org.

Travel by Rail
The Detroit People Mover
The Detroit People Mover is an automated people mover system serving the city of Detroit. There is a station inside the Cobo Center. For more information, visit www.thepeoplemover.com.

The People Mover hours of operation are as follows:
- Monday through Thursday, 6:30 a.m. to midnight
- Friday, 6:30 a.m. to 2:00 a.m.
- Saturday, 9:00 a.m. to 2:00 a.m.
- Sunday, noon to midnight

The fare is $0.75 per ride and can be paid in cash or by tokens available in or near stations. Monthly, Annual and Convention/Special Event passes are available online or by calling +1 (313) 224-2160.

Amtrak
Amtrak is a national high-speed rail operator that connects travelers to more than 500 destinations throughout the U.S. including the city of Detroit. The station is located in the New Center area of the city at 11 West Baltimore Avenue, Detroit, MI 48202. The station provides an enclosed waiting area and ticket office, and is handicap accessible. For Amtrak ticket purchases, schedules and service updates, visit their website at www.amtrak.com.

Detroit Marriott at the Renaissance Center
Renaissance Center
400 Renaissance Drive
Detroit, Michigan 48243 USA

Westin Book Cadillac Detroit
1114 Washington Blvd.
Detroit, Michigan 48226 USA

Courtyard Detroit Downtown
333 East Jefferson Ave
Detroit, Michigan 48226 USA

Holiday Inn Express Hotel & Suites Detroit Downtown
1020 Washington Boulevard
Detroit, Michigan 48226 USA

Cobo Center
1 Washington Blvd
Detroit, MI 48226

People Mover Stations
- Financial District
- Millender Center
- Renaissance Center
- Bricktown
- Greektown
- Cadillac Center
- Broadway

The People Mover’s 13 stations include direct access to Cobo Center, Joe Louis Arena and Greektown Casino. Trains arrive every four minutes.

Accommodations
General Information

Exhibition Opening Dates and Times

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exhibitor Move-in</strong></td>
<td>Friday, September 5 – 12:00 p.m. – 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Saturday, September 6 – 8:00 a.m. – 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Sunday, September 7 – 10:30 a.m. – 6:30 p.m.</td>
</tr>
<tr>
<td><strong>Exhibit Hall Ribbon Cutting</strong></td>
<td>Monday, September 8 – 10:15 a.m. – 10:30 p.m.</td>
</tr>
<tr>
<td><strong>Exhibit Hall Open</strong></td>
<td>Monday, September 8 – 10:30 a.m. – 6:30 p.m.</td>
</tr>
<tr>
<td></td>
<td>Tuesday, September 9 – 9:00 a.m. – 4:30 p.m.</td>
</tr>
<tr>
<td></td>
<td>Wednesday, September 10 – 9:00 a.m. – 4:30 p.m.</td>
</tr>
<tr>
<td></td>
<td>Thursday, September 11 – 9:00 a.m. – 12:00 p.m.</td>
</tr>
<tr>
<td><strong>Exhibitor Move-out</strong></td>
<td>Thursday, September 11 – 12:00 p.m. – 6:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Friday, September 12 – 8:00 a.m. – 12:00 p.m.</td>
</tr>
</tbody>
</table>

Registration Hours

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, September 6</td>
<td>7:30 a.m. – 12:00 p.m.</td>
</tr>
<tr>
<td>Sunday, September 7</td>
<td>7:30 a.m. – 6:00 p.m.</td>
</tr>
<tr>
<td>Monday, September 8</td>
<td>7:00 a.m. – 5:00 p.m.</td>
</tr>
<tr>
<td>Tuesday, September 9</td>
<td>7:00 a.m. – 4:30 p.m.</td>
</tr>
<tr>
<td>Wednesday, September 10</td>
<td>7:00 a.m. – 5:00 p.m.</td>
</tr>
<tr>
<td>Thursday, September 11</td>
<td>7:00 a.m. – 3:30 p.m.</td>
</tr>
</tbody>
</table>

Time

Detroit, Michigan is in the Eastern Time zone, five hours behind GMT (Greenwich Mean Time).

Currency

The U.S. Dollar is the currency of the United States. Units are dollars and cents (100 per dollar). Current exchange rates can be obtained from your bank or online. Most credit cards are accepted in the United States, including American Express, Discover, MasterCard, and Visa. In general, the use of credit cards and automated teller machines will provide a far more favorable exchange rate than exchanging currency or traveler’s checks at banks or hotels.

Gratuity

In Detroit, as in the rest of the United States, service personnel rely on tips for a substantial part of their income. For waiters, bartenders, taxi drivers, or similar, a 15-20% tip is standard. Baggage handlers at hotels and airports should be given $1.00 – $2.00 per bag. A hotel housekeeper should be left $2.00 – $5.00 per night at the end of your stay. Tipping is not expected in fast food restaurants, theaters, or cinemas.

Electricity

The electrical supply in the United States is 110V 60HZ in frequency. While hotels may provide their guests with plug adapters upon request, supplies are limited.

Internet Access

Most U.S. hotels offer wired or wireless high-speed Internet connections in their guest rooms. Most hotels also have a Business Center with available computers and printers for their guests use. The Cobo Center offers facility-wide, free, ultra high speed WiFi coverage.

Language

The official language of the ITS World Congress is English.

Insurance

The Americas Organizing Committee of ITS World Congress Detroit 2014 can accept no responsibility for accidents or damage to the private property of participants. Please make your own arrangements for health insurance and any other necessary insurance. Children under 18 years are not allowed at the Congress.

Climate

Southeast Michigan in September welcomes the end of summer. The average high is 76° F (24° C), and the average low is 59° F (15° C).

Smoking

There is no smoking indoors in the United States. There are designated smoking locations outside most public facilities, clearly marked by signs.

Water

Water throughout the country is potable and safe for drinking. Bottled water is available at hotels, restaurants, supermarkets, etc.

Speaker Ready Room

Speakers may utilize the Speaker Ready Room onsite if they are unable to upload their presentation prior to September 7th or have any last minute changes to their presentations. Please have your presentation on CD-ROM or saved on a USB key. Presentation review is an important part of the process because you may experience compatibility issues when moving your presentation onto our machines. Uploaded presentations will be forwarded to the correct session room.

The Speaker Ready Room will not have internet connection.

The Speaker Ready Room will be available throughout the Congress. Speakers in the early morning sessions (8:30 a.m. – 10:00 a.m.) must upload their presentations the day before their session.

Please note that there may be a queue at peak hours and plan accordingly.

**Speaker Ready Room Hours of Operation: Room: 338**

- **Sunday:** 11:00 a.m. – 6:30 p.m.
- **Monday:** 7:30 a.m. – 5:00 p.m.
- **Tuesday:** 7:30 a.m. – 5:00 p.m.
- **Wednesday:** 7:30 a.m. – 1:30 p.m.
- **Thursday:** 7:30 a.m. – 5:00 p.m.

Conference Proceedings

We have moved our 2014 ITS World Congress Proceedings online! All 21st ITS World Congress attendees will have access to the full list of technical and scientific papers after the World Congress. You will be sent your username and password after the end of the World Congress. When you receive your login information, please visit [www.itsworld congress.conferencespot.org](http://www.itsworldcongress.conferencespot.org) to view the full conference proceedings!

Professional Development Hours

Attendance at ITS America’s 2014 Annual Meeting and the ITS World Congress entitles you to earn up to 23 professional development hours (PDH). Many engineering and related 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, and plenary sessions you can attend at this Congress. With over 23 possible units for you to acquire, your World Congress attendance easily provides you the opportunity to complete most, if not all, of your annual PDH requirement.
Social Media

Join the Conversation!

#ITSWC14 is taking to the social networks to continue discussions about all of the innovative technologies, groundbreaking research, and exciting events that we’ll experience throughout the week. Make sure you’re a part of our online communities and use #ITSWC14 to connect with other attendees.

@ITS_America | @AllyAuto
facebook.com/ITSofAmerica
@itswc14 | #AllyAuto
ITS America
youtube.com/ITS World Congress

The 2014 ITS World Congress Mobile App

Get the ITSWC14 program in the palm of your hand!
+ Get all the details on our 275 sessions
+ Read up on our exhibitors
+ Explore the show highlights
+ Plan your evenings with our social events and tours
+ Save your itinerary

Available on:
- [App Store](https://apps.apple.com)
- [Google Play](https://play.google.com)

Sponsored by:
- Schneider Electric
- Eberle Design Inc.

The app and website for the ITS World Congress have been designed by Optimus Consulting. [www.Optimus.com](http://www.Optimus.com)
Congress Format

Opening and Closing Ceremonies
The Opening Ceremony will be held Sunday at the Cobo Center Grand Riverview Ballroom. General Motors CEO Mary Barra will provide the opening keynote speech and address the changing transportation environment around the world as well as the rapidly evolving technology of connected, autonomous, and electric vehicles. The event will also feature exciting special entertainment and several awards.

The Closing Ceremony, to be held Thursday afternoon at the Cobo Center and sponsored by Toyota, will provide a summary of the Congress and future perspectives. There will be several awards and the “Passing of the Globe” ceremony. See page 128.

Featured Events

- **High Level Policy Roundtable**
  This roundtable will bring together international ministerial level officials and transportation secretaries from around the U.S. to discuss 21st century transportation challenges facing their agencies, including what they are doing to prepare for connected and autonomous vehicles and how technology is helping to serve their constituents. See page 37

- **CTO Summit**
  This year, the World Congress introduces a series of sessions that will host Chief Technology Officers from around the world. Speakers will focus on visions of ITS in the future, connectivity and automation, new mobility, and institutional issues. See page 40

Sessions
The following sessions are to be held at the Cobo Center:

- **Plenary Sessions**
  Top level transport officials and leading industry representatives from numerous countries will present insightful speeches on ITS policies, initiatives, and international development trends. See page 39

- **Executive Sessions**
  High-level industry executives, public officials, and academics from around the world will share their expert global and strategic views on ITS achievements, issues, and challenges. See page 42

- **Town Hall Sessions**
  These sessions will function as an open forum, providing a panel of experts and attendees with a highly interactive meeting that will host higher profile topics affecting the transportation industry. See page 38

- **Special Interest Sessions**
  Coordinated at the request of organizations or individuals involved in developing and deploying ITS, these sessions are designed as open fora and workshop for experts from government, industry, and academia to hold discussions and debates on specific topics. See page 46

- **Technical/Scientific Sessions**
  These sessions will be composed of presentations by international experts on various ITS-related topics encompassing all technical, economic, organized, and societal aspects of ITS. See page 76

- **Interactive Sessions**
  Authors will present their technical papers on the World Congress Exhibit floor through dynamic presentations. These sessions will provide a space for interactive discussion between authors and their audience. See page 110

Exhibition
The Exhibition, to be held at Cobo Center, will create an international meeting point for industries and agencies involved in ITS. This will be a wonderful opportunity to promote your organization’s technologies to the world amongst our 300,000 sq. ft. of exhibit space. See page 140

Technical Tours
Various field trips and tours will be conducted to explore the greater Detroit area and its grand position as the birthplace of the automotive industry and the leading center of future transportation research and deployment. See page 136

Guest Tours
Attractive guest tours in and around Detroit are planned specifically for delegates and accompanying persons. See page 134

Social Events
A series of social events have been organized to provide attendees unforgettable networking opportunities. See page 128
Traffic Incident Management — Putting Practice Into Play

ER02 – Emergency Response Day Special Session: Resilient ITS to Support Emergencies and Major Events

This year's ITS World Congress will provide a unique look at what emergency responders do on the scene of an accident and how the developments in transportation technology help make things run smoother, faster, and safer. On Tuesday, September 9, attendees will be able to watch a mock version of a traffic incident involving an overturned tanker truck. Attendees will watch as first responders arrive, assess, respond, and clear the scene, utilizing the latest ITS technologies. Representatives from various first responder communities will be available for questions and to provide real-time narration of the events as they unfold. Responders will also be treated with a special tour of the exhibit floor and technical sessions focused on the latest technologies in their field. Emergency responders who attend Tuesday's events in uniform will receive free admission to the mock incident and exhibit floor.

Related Events:

- TS41 – Tools for Providing Statewide and Metropolitan Area Enforcement Incident and Emergency Management | Tuesday, September 9, 1:00 – 2:30 p.m.
Youth Connections Showcase

ITS America is proud to spotlight the next generation of ITS talent developing in Michigan and the career opportunities in the intelligent transportation arena at this year’s World Congress. The Youth Connections Showcase will expose more than 1,000 high school and college students to the ITS industry by arranging guided tours of the exhibit halls, and by hosting a variety of competitions, breakout sessions, and demonstrations to highlight the young talent in the state.

Competitions

Square One will challenge teams of high school students in exciting on-site electric vehicle build competitions, and MDOT TRAC will conduct a model bridge building competition. Additionally, there will be student demonstrations throughout the event. Square One’s high school students will showcase their projects with Wireless Hands-on Applied Mechatronics (WHAM), a community outreach project utilizing radio controlled vehicles. College teams from around the area will demonstrate a variety of Intelligent Ground Vehicle autonomous robots. **Demonstrations and competitions will begin daily at 11:00 a.m.**

YC01 – Youth Connections Showcase Special Session: Education and Training Needs for Emerging ITS Technologies

<table>
<thead>
<tr>
<th>Wednesday, September 10, 10:30 a.m. – 12:00 p.m.</th>
<th>Cobo 142 A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizer &amp; Moderator</strong></td>
<td>Karl Klimek, Executive Director, Square One Education Network, USA</td>
</tr>
<tr>
<td><strong>Speakers</strong></td>
<td>Doug Patton, Executive Vice President, DENSO International America, Inc., USA</td>
</tr>
<tr>
<td></td>
<td>Nigel Francis, Senior Automotive Adviser to the State of Michigan, Senior Vice President, Automotive Industry Office, Michigan Economic Development Corporation, USA</td>
</tr>
<tr>
<td></td>
<td>Kristin Dziczek, Director, Industry and Labor Group, Center for Automotive Research, USA</td>
</tr>
<tr>
<td></td>
<td>Chad Segrist, Science Teacher and STEAM Coordinator, Detroit Institute of Technology, Cody High School, Detroit Public Schools, USA</td>
</tr>
<tr>
<td></td>
<td>Sean Kelley, Senior Vice President/Principal, Mannik Smith Group, USA</td>
</tr>
<tr>
<td></td>
<td>Maram Mohammed, Junior, Connected Vehicle/Denso School Team Leader and Future Computer Science Major, Michael Berry Career Technical High School, Dearborn, MI, USA</td>
</tr>
<tr>
<td></td>
<td>Davaughn Humphries, Innovative Vehicle Design Team Leader and Future Automotive Engineer, Detroit Institute of Technology, Cody High School, Detroit Public Schools, USA</td>
</tr>
<tr>
<td></td>
<td>Katelyn Drake, Research Assistant, Center for Automotive Research, University of Michigan, USA</td>
</tr>
</tbody>
</table>

In an increasingly complex age of connectivity and automation, worker skills in technical fields, as well as policy, legal, and business arenas must quickly evolve. This session will address the education needs in our connected world, starting with youth programs at an elementary level and extending into advanced education requirements at the collegiate level. The session will focus on technical training in science, technology, engineering, and math (STEM), but will also provide insights regarding evolving legal, business, and institutional knowledge needs. The evolution of education policy and use of technology in the classroom will also be elements of this session.

Special Features continues on next page >
Transportation for Tomorrow: Inventors and Investors

Transportation for Tomorrow is a revolutionary two-part program comprised of our inaugural Entrepreneurial Village and the second annual ITS America Investor Matching Event. For the first time ever, the World Congress exhibit floor will feature an Entrepreneurial Village where emerging companies will have a dedicated space for promoting their most innovative ideas and technologies that are fundamentally changing the way we move. For the first time ever, the exhibit floor will feature an Entrepreneurial Village, sponsored by Quicken Loans, where emerging companies will have a dedicated space for promoting their most innovative ideas and technologies. Partnering with Fontinalis Partners LLC, Econolite Group, and Raymond James, ITS America will provide competitive young innovators and entrepreneurs with the best cutting-edge ideas, technologies, and business plans with the opportunity.

Learn more: www.itsworldcongress.org/investormatching

Traffic Management Center

The TMC Showcase will feature live workstations from the Michigan DOT, Local County and City transportation departments, Michigan State Police, the Ministry of Transportation Ontario and Amtrak. Attendees will be able to monitor video walls showing inter-departmental collaboration and look into the future with next-generation technology.

In addition, the TMC will allow World Congress participants to become immersed in incident response and congestion management through interactive kiosks. Hear real time communications between different agencies as they respond to incidents on Michigan roadways. Watch how technology and transportation combine to provide information to users of all modes of transportation.

Additionally, ITS America will be hosting an Investor Matching Event as a part of its Annual Meeting. ITS America will provide competitive young innovators and entrepreneurs with the best cutting-edge ideas, technologies, and business plans with the opportunity to pitch their ideas for funding.

FREE SUBSCRIPTION

Guarantee your copy of ITS International by registering today...

A subscription to ITS International gives you:

- 12 months supply of ITS International magazine (6 issues per year) in print
- The ITS International eNewsletter – emailed twice a month to over 26,000 industry professionals
- Unlimited access to www.itsinternational.com
- Specialist supplements that focus on specific areas

Register for FREE online @ www.roplreg.com
Intelligent travel made real...

Come see NextCity at stand 2826, Cubic’s world-class integrated payment processing, customer service and financial management platforms for urban mobility.

Choose the specialist. Choose Cubic. cts.cubic.com
Session Tracks

Many, but not all, of the ITS World Congress sessions can be found in the following session tracks.

### Automated Transportation
- **SIS20**: Is There Vehicle Automation without Accurate Maps?
- **SIS25**: Vehicle Detection and Location by Video, Sensors, and Probes
- **SIS26**: Technical Challenges for Adoption of Automated Vehicles
- **SIS30**: Towards Automation: Research and Deployment Challenges
- **SIS59**: Paving the Way for Self-Driving Cars: Legislative and Legal Issues on the Horizon for Autonomous Vehicles

### Big Data and Open Data
- **ES06**: Big Data and Open Data — The Big Issues
- **SIS08**: Data Driven Traffic Modeling and Analysis
- **SIS09**: Big Data And The Connected Vehicle — When We Build It, The Data Will Come
- **SIS17**: Japan-U.S.-European Joint Research on the Use of Probe Data
- **SIS32**: ITS Infrastructure Initiative by Circulating Traffic Big Data — From Autonomous Driving to Elderly Driving Support
- **SIS36**: Revolutionizing Performance Assessment of the Roadway Network Through Data and Analytics
- **SIS64**: Data, Directives and Regulations: How Crowd Sourced Data is Helping Agencies Meet New Rules

### Connected Vehicles & Cooperative Systems
- **ES03**: Worldwide Deployment of Cooperative Systems
- **SIS06**: Cooperative ITS for Now and the Next (Round 3)
- **SIS10**: How Vehicle System Design Can Help with Automated Driving
- **SIS11**: Connected Vehicle Liability Issues
- **SIS12**: The Impacts of Connected Vehicle Technology on Transportation Agency Operations
- **SIS13**: Modeling Connected Vehicle Applications and Dynamic Management Strategies: Issues and Challenges
- **SIS14**: Adaptive Signal Control Technologies in the World of Connected and Automated Vehicles
- **SIS15**: The Connected Car Becomes the Ultimate Mobile Device

### Driver Behavior and Support
- **SIS18**: Driving Behavior by Aged People and its Countermeasure using KUSANONE ITS
- **TS12**: Implications of Driver Behaviour on ITS System Performance
- **TS22**: Driver Support Systems on Personal Devices
- **TS23**: Driver Assist Systems

### Session Tracks

**21st World Congress on Intelligent Transport Systems**

**Sponsored by:**

- **ES03**: Worldwide Deployment of Cooperative Systems
- **SIS06**: Cooperative ITS for Now and the Next (Round 3)
- **SIS10**: How Vehicle System Design Can Help with Automated Driving
- **SIS11**: Connected Vehicle Liability Issues
- **SIS12**: The Impacts of Connected Vehicle Technology on Transportation Agency Operations
- **SIS13**: Modeling Connected Vehicle Applications and Dynamic Management Strategies: Issues and Challenges
- **SIS14**: Adaptive Signal Control Technologies in the World of Connected and Automated Vehicles
- **SIS15**: The Connected Car Becomes the Ultimate Mobile Device

**SIS20**: Is There Vehicle Automation without Accurate Maps?

**SIS25**: Vehicle Detection and Location by Video, Sensors, and Probes

**SIS26**: Technical Challenges for Adoption of Automated Vehicles

**SIS30**: Towards Automation: Research and Deployment Challenges

**SIS59**: Paving the Way for Self-Driving Cars: Legislative and Legal Issues on the Horizon for Autonomous Vehicles

**SIS72**: Automated Driving Technology Research in Japan — Strategic Innovation Promotion Program

**SIS74**: Evaluation and Requirements for Automated Vehicles Road Testing towards Deployment

**AM12**: Future of Fleet Automation

**AM14**: Autonomous Vehicles: Savior of the Western World or an Over-Hyped Version of new Cars?

**TS08**: Implications and Assessment of Automated Driving

**TS105**: New Trends In Detection

**TS111**: Future Directions In Automated Driving

**TS119**: Autonomous Driving Systems

**SIS71**: Application of Big Data to Transportation Operations & Planning

**SIS07**: From Vertical to Horizontal to Connected Clouds

**AM11**: Private Consumer Applications and the Growing Request to Interface to Public Traffic Systems

**TS11**: Recent Developments in Data Collection

**TS13**: Big Data Management and Analysis

**TS25**: Data Sharing and Open Source Data

**TS31**: Innovative Traffic Data Collection and Analysis Strategies

**TS82**: Innovations in Traffic Data Collection and Analysis

**TS93**: Data Management Strategies

**TS112**: Challenges in Big Data Management

**SIS71**: Automated Driving Technology Research in Japan — Strategic Innovation Promotion Program

**SIS74**: Evaluation and Requirements for Automated Vehicles Road Testing towards Deployment

**AM12**: Future of Fleet Automation

**AM14**: Autonomous Vehicles: Savior of the Western World or an Over-Hyped Version of new Cars?

**TS08**: Implications and Assessment of Automated Driving

**TS105**: New Trends In Detection

**TS111**: Future Directions In Automated Driving

**TS119**: Autonomous Driving Systems

**SIS71**: Application of Big Data to Transportation Operations & Planning

**SIS07**: From Vertical to Horizontal to Connected Clouds

**AM11**: Private Consumer Applications and the Growing Request to Interface to Public Traffic Systems

**TS11**: Recent Developments in Data Collection

**TS13**: Big Data Management and Analysis

**TS25**: Data Sharing and Open Source Data

**TS31**: Innovative Traffic Data Collection and Analysis Strategies

**TS82**: Innovations in Traffic Data Collection and Analysis

**TS93**: Data Management Strategies

**TS112**: Challenges in Big Data Management

**IBEC1**: Will There be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

**IBEC3**: Evaluation of Connected Vehicles

**IBEC5**: Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)

**TS03**: Connected Vehicle Deployment and Field Tests

**TS04**: V2X Technology Evaluations

**TS34**: Cooperative Systems Research and Development

**TS44**: Connected Vehicle Applications

**TS47**: Cooperative Vehicle Field Test Programs

**TS54**: Vehicle Detection and Location by Video, Sensors, and Probes

**TS62**: Cooperative Systems

**TS64**: Developments in Connected and Autonomous Vehicle Systems

**TS68**: New Uses for Roadside Equipment

**TS77**: Sensing the Vehicle Environment

**TS79**: Multi Object Collision Avoidance

**TS88**: Collision Avoidance Systems

**TS104**: Collision Warning Systems

**IBEC1**: Will There be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

**IBEC3**: Evaluation of Connected Vehicles

**IBEC5**: Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)

**TS03**: Connected Vehicle Deployment and Field Tests

**TS04**: V2X Technology Evaluations

**TS34**: Cooperative Systems Research and Development

**TS44**: Connected Vehicle Applications

**TS47**: Cooperative Vehicle Field Test Programs

**TS54**: Vehicle Detection and Location by Video, Sensors, and Probes

**TS62**: Cooperative Systems

**TS64**: Developments in Connected and Autonomous Vehicle Systems

**TS68**: New Uses for Roadside Equipment

**TS77**: Sensing the Vehicle Environment

**TS79**: Multi Object Collision Avoidance

**TS88**: Collision Avoidance Systems

**TS104**: Collision Warning Systems

**IBEC1**: Will There be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

**IBEC3**: Evaluation of Connected Vehicles

**IBEC5**: Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)

**TS03**: Connected Vehicle Deployment and Field Tests

**TS04**: V2X Technology Evaluations

**TS34**: Cooperative Systems Research and Development

**TS44**: Connected Vehicle Applications

**TS47**: Cooperative Vehicle Field Test Programs

**TS54**: Vehicle Detection and Location by Video, Sensors, and Probes

**TS62**: Cooperative Systems

**TS64**: Developments in Connected and Autonomous Vehicle Systems

**TS68**: New Uses for Roadside Equipment

**TS77**: Sensing the Vehicle Environment

**TS79**: Multi Object Collision Avoidance

**TS88**: Collision Avoidance Systems

**TS104**: Collision Warning Systems

**IBEC1**: Will There be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

**IBEC3**: Evaluation of Connected Vehicles

**IBEC5**: Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)

**TS03**: Connected Vehicle Deployment and Field Tests

**TS04**: V2X Technology Evaluations

**TS34**: Cooperative Systems Research and Development

**TS44**: Connected Vehicle Applications

**TS47**: Cooperative Vehicle Field Test Programs

**TS54**: Vehicle Detection and Location by Video, Sensors, and Probes

**TS62**: Cooperative Systems

**TS64**: Developments in Connected and Autonomous Vehicle Systems

**TS68**: New Uses for Roadside Equipment

**TS77**: Sensing the Vehicle Environment

**TS79**: Multi Object Collision Avoidance

**TS88**: Collision Avoidance Systems

**TS104**: Collision Warning Systems

**IBEC1**: Will There be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

**IBEC3**: Evaluation of Connected Vehicles

**IBEC5**: Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)

**TS03**: Connected Vehicle Deployment and Field Tests

**TS04**: V2X Technology Evaluations

**TS34**: Cooperative Systems Research and Development

**TS44**: Connected Vehicle Applications

**TS47**: Cooperative Vehicle Field Test Programs

**TS54**: Vehicle Detection and Location by Video, Sensors, and Probes

**TS62**: Cooperative Systems

**TS64**: Developments in Connected and Autonomous Vehicle Systems

**TS68**: New Uses for Roadside Equipment

**TS77**: Sensing the Vehicle Environment

**TS79**: Multi Object Collision Avoidance

**TS88**: Collision Avoidance Systems

**TS104**: Collision Warning Systems
**Economic Growth**
- ES11: ITS and Economic Growth
- SIS11: The Economics and Partnerships Driving Connected Cars
- SIS22: Establishment of a Results Driven Investment Program for Intelligent Transportation Systems
- TS20: Road User Charging 1

**Freight**
- ES09: Driving Freight Efficiency with ITS
- SIS12: ITS Applications in Truck Parking Availability
- SIS37: State of the Art and Benefits of Real Time Information for Commercial Vehicles
- SIS66: How Can We Design A More Efficient and Reliable Freight Transport System Through the Use of ITS Solutions?

**International Cooperation to Expand ITS**
- ES02: International Cooperation to Spread and Expand ITS
- SIS07: Deployment of Cooperative ITS Services: A Global Affair
- SIS23: Accelerating Service Deployment --- Strategy View from the Traffic and Transport Industry
- SIS41: ITS for Global Mega Events
- SIS63: Government Initiatives in Vehicle Automation

**ITS Rules and Standards**
- ES12: Global Harmonization of ITS Rules and Standards
- SIS05: International Standard Issues for Green ITS (G-ITS)
- SIS21: International Harmonization of Cooperative ITS Security Policy
- SIS34: Minimum Quality Requirements for Driving Event Video Recorder to Secure Safe Driving Management
- SIS54: International Harmonization of the Interoperability Assessment Processes
- TS05: Cooperative ITS System Standards
- TS116: Standardization

**New Mobility**
- ES05: ITS and the New Mobility
- SIS02: Apps, Innovation, and Regulation: Protecting the Public Interest in the Midst of Disruptive Competition
- SIS28: Meet The New Mobility Industry Vanguard: A View from the Trenches
- SIS47: National ITS Associations --- Driving Mobility Deployment
- SIS65: Can we Take Traveler Information to the Next Level to Improve Mobility?
- SIS73: Future Mobility Beyond 202X
- AM16: The Sharing Economy and Shared Mobility
- AM20: New Urban Mobility: Is This the Death of Public Transit as we Know It?
- TS39: Management of Shared and Electric Vehicles
- TS49: Multimodal Signal Priority Management
- TS67: Application of SmartPhone Technology to Improve Mobility

**Public Transit**
- SIS16: Open Data in Public Transport: Challenges and Opportunities
- SIS27: Visualizing an Integrated Transport System — A Multi-modal Approach Enhanced by Automated Transit Networks
- SIS33: Big Data in Transit: Are Our Heads in the Clouds?
- SIS51: Public Transport in Mega Cities
- TS15: Innovations in Bus Vehicle Systems
- TS30: Public Transportation Modeling
- TS37: Aspects of Multimodal Public Transportation
- TS71: Transit Signal Priority
- TS81: Academic Issues on Public Transportation
- TS113: Tools to Improve Transit Services

**Smart Cities**
- ES08: Innovation for Mobility in Smart Cities
- SIS15: Lean Demand Management for Smart Parking
- SIS25: Mega City ITS Programs, New York City’s Approach
- SIS40: Leveraging ITS and the Internet of Things to Enable Complete Streets
- SIS44: Seamless Mobility — ITS in Smart Cities, an Asia Pacific perspective
- SIS48: Smart Parking: The Foundation and Accelerator for the Smart City and Connected Car
<table>
<thead>
<tr>
<th>Sustainability</th>
<th>Traffic Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ ES07: ITS: Essential for Sustainability</td>
<td>□ AM01: Sustainable Transportation Performance Measurements: Best Practices</td>
</tr>
<tr>
<td>■ SIS04: EU-US Task force — Collaborative Efforts in Sustainability Applications</td>
<td>□ TS17: ITS, Sustainability and Business Cases</td>
</tr>
<tr>
<td>■ SIS30: Evaluation Methodology of the Effects of ITS on CO₂ Emissions and its Application</td>
<td>□ TS51: Eco-Drive Management Systems</td>
</tr>
<tr>
<td>■ SIS49: Global Perspectives: Cooperative Energy Efficient Applications</td>
<td></td>
</tr>
<tr>
<td>■ SIS10: Ways to Achieve Smoother Traffic</td>
<td>□ SIS75: Traffic Sensing by Various Manners</td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td>□ SIS79: SMART Tolling for Achieving Future Green Road</td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td>□ AM05: Transportation Management Centers — Past, Present, and Future</td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td>□ TS01: Using Simulation for Traffic Management Applications</td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td>□ TS69: Advanced Traffic Management 1</td>
</tr>
<tr>
<td>■ SIS75: Traffic Sensing by Various Manners</td>
<td></td>
</tr>
<tr>
<td>■ SIS79: SMART Tolling for Achieving Future Green Road</td>
<td></td>
</tr>
<tr>
<td>■ AM05: Transportation Management Centers — Past, Present, and Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS19: Wireless Power: Transforming Transportation</td>
<td></td>
</tr>
<tr>
<td>■ SIS30: Evaluation Methodology of the Effects of ITS on CO₂ Emissions and its Application</td>
<td></td>
</tr>
<tr>
<td>■ SIS49: Global Perspectives: Cooperative Energy Efficient Applications</td>
<td></td>
</tr>
<tr>
<td>■ SIS10: Ways to Achieve Smoother Traffic</td>
<td></td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td></td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td></td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td></td>
</tr>
<tr>
<td>■ SIS43: What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?</td>
<td></td>
</tr>
<tr>
<td>■ SIS46: Applying Intelligent Transportation Systems to Cross Border Issues</td>
<td></td>
</tr>
<tr>
<td>■ SIS75: Traffic Sensing by Various Manners</td>
<td></td>
</tr>
<tr>
<td>■ SIS79: SMART Tolling for Achieving Future Green Road</td>
<td></td>
</tr>
<tr>
<td>■ AM05: Transportation Management Centers — Past, Present, and Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td></td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td></td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td></td>
</tr>
<tr>
<td>■ SIS43: What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?</td>
<td></td>
</tr>
<tr>
<td>■ SIS46: Applying Intelligent Transportation Systems to Cross Border Issues</td>
<td></td>
</tr>
<tr>
<td>■ SIS75: Traffic Sensing by Various Manners</td>
<td></td>
</tr>
<tr>
<td>■ SIS79: SMART Tolling for Achieving Future Green Road</td>
<td></td>
</tr>
<tr>
<td>■ AM05: Transportation Management Centers — Past, Present, and Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td></td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td></td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td></td>
</tr>
<tr>
<td>■ SIS43: What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?</td>
<td></td>
</tr>
<tr>
<td>■ SIS46: Applying Intelligent Transportation Systems to Cross Border Issues</td>
<td></td>
</tr>
<tr>
<td>■ SIS75: Traffic Sensing by Various Manners</td>
<td></td>
</tr>
<tr>
<td>■ SIS79: SMART Tolling for Achieving Future Green Road</td>
<td></td>
</tr>
<tr>
<td>■ AM05: Transportation Management Centers — Past, Present, and Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td></td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td></td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td></td>
</tr>
<tr>
<td>■ SIS43: What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?</td>
<td></td>
</tr>
<tr>
<td>■ SIS46: Applying Intelligent Transportation Systems to Cross Border Issues</td>
<td></td>
</tr>
<tr>
<td>■ SIS75: Traffic Sensing by Various Manners</td>
<td></td>
</tr>
<tr>
<td>■ SIS79: SMART Tolling for Achieving Future Green Road</td>
<td></td>
</tr>
<tr>
<td>■ AM05: Transportation Management Centers — Past, Present, and Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td></td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td></td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td></td>
</tr>
<tr>
<td>■ SIS43: What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?</td>
<td></td>
</tr>
<tr>
<td>■ SIS46: Applying Intelligent Transportation Systems to Cross Border Issues</td>
<td></td>
</tr>
<tr>
<td>■ SIS75: Traffic Sensing by Various Manners</td>
<td></td>
</tr>
<tr>
<td>■ SIS79: SMART Tolling for Achieving Future Green Road</td>
<td></td>
</tr>
<tr>
<td>■ AM05: Transportation Management Centers — Past, Present, and Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS03: Sharing of Road and Traffic Information</td>
<td></td>
</tr>
<tr>
<td>■ SIS14: Integrated Corridor Management — The Next Step</td>
<td></td>
</tr>
<tr>
<td>■ SIS29: Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future</td>
<td></td>
</tr>
<tr>
<td>■ SIS38: TPEG Traffic Services Worldwide</td>
<td></td>
</tr>
<tr>
<td>■ SIS43: What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?</td>
<td></td>
</tr>
<tr>
<td>■ SIS46: Applying Intelligent Transportation Systems to Cross Border Issues</td>
<td></td>
</tr>
</tbody>
</table>

**Bridges to Innovation**

25th Annual Meeting & Exposition

June 1-3, 2015 // Pittsburgh, Pennsylvania

David L. Lawrence Convention Center

Join more than 2,000 of the nation’s top transportation and technology policymakers, business leaders, innovators, investors and engineers to discuss high tech solutions to national and regional infrastructure challenges and experience technologies that are reinventing mobility, fueling smarter cities and redefining the Intelligent Transportation ecosystem to transform the way we move.

Learn more at www.ITSA.org/2015AnnualMeeting // #ITS2015
Want to Move Faster? Accelerate in Texas.

Introducing the Accelerate Texas initiative, an integrated technology center and network of research, design and testing facilities. Accelerate Texas was created to fast track the commercialization of automated and connected vehicle technologies, and educate the public on the benefits of those technologies. Join a consortium of independent experts working to define the future of transportation. Become a Founding Member of Accelerate Texas.

MEMBER BENEFITS

• Access to a world-renowned, certified research proving ground and a variety of urban test beds.
• Experts in V2V, V2I, transportation policy, intelligent transportation systems, human factors and more.
• Access to thought leaders in TTI’s Transportation Policy Center.
• Open road and closed course testing.
• Intellectual property experts who can help accelerate commercialization of your products.
• Enhanced public communications to support adoption of automated vehicle technologies.

Our facilities are located in Texas, where you’ll find a strong economy, an available work force and a dynamic business environment.
Keynote Speakers

Our program would not be complete without our impressive and knowledgeable keynote speakers from across the industry.

Mary Barra, General Motors CEO
Opening Ceremony
Sunday, September 7, 5:00 p.m. – 6:30 p.m. | Cobo Grand Ballroom

Mary Barra was named Chief Executive Officer of General Motors effective January 15, 2014. Under her leadership, GM is driving to become the global industry leader in automotive design and technology, product quality and safety, customer care and business results. She is also a member of the GM Board of Directors. Prior to her current position, Barra served as Executive Vice President, Global Product Development, Purchasing & Supply Chain since August 2013, and as Senior Vice President, Global Product Development since February 2011. In these roles, she was responsible for the design, engineering, program management and quality of GM vehicles around the world.

Michael A. Finney, Michigan Economic Development Corporation (MEDC)
Opening Ceremony
Sunday, September 7, 5:00 p.m. – 6:30 p.m. | Cobo Grand Ballroom

Michael A. Finney is President and CEO of the Michigan Economic Development Corporation (MEDC), a public-private partnership serving as the state’s lead agency for business and job growth, talent enhancement, tourism marketing, arts and cultural grants, and overall economic growth. His responsibilities at MEDC also include serving as Governor Rick Snyder’s Economic Growth Group Executive and as President and Chairman of the Michigan Strategic Fund. Under Mike’s leadership, the MEDC developed Pure Michigan Business Connect (PMBC), one of the most innovative economic development programs in the country. PMBC provides comprehensive business development, capital access, talent enhancement and marketing assistance to Michigan based companies.

Bill Ford, Ford Motor Company Executive Chairman
Reinventing Policy to Support the New ITS (Plenary Session)
Monday, September 8, 8:30 a.m. – 10:00 a.m. | Cobo Grand Ballroom A

Bill Ford is leading the company that put the world on wheels into the 21st century. He joined Ford Motor Company in 1979 as a product planning analyst and went on to hold a variety of assignments in manufacturing, marketing, product development and finance, and was CEO from 2001 to 2006. A board member since 1988, he became chairman in 1999. He also serves on the board’s Finance and Sustainability Committees. A lifelong environmentalist, Mr. Ford is committed to increasing shareholder value by developing products that please customers and benefit society.

Lowell C. McAdam, Verizon Communications Chairman and CEO
Reinventing Business Models for the New ITS (Plenary Session)
Tuesday, September 9, 8:30 a.m. – 10:00 a.m. | Cobo Grand Ballroom A

Lowell McAdam is chairman and chief executive officer of Verizon Communications, one of the industry’s leading providers of wireless, fiber-optic and high-speed global Internet networks. Prior to being named CEO in 2011, McAdam was the company’s president and chief operating officer and previously had been president and CEO of Verizon Wireless, which runs the nation’s largest and most reliable wireless network. McAdam is a director of the National Academy Foundation, a partnership between business leaders and educators that helps high schools across the country establish technical and service academies to prepare students for college and careers. He also co-chairs the CEO Council on Health and Innovation, which encourages the adoption of innovative strategies to improve employee health and deliver higher-quality, more cost-effective healthcare. In addition, he is a member of the Cornell University Board of Trustees.

Robert Slimp, CEO of HNTB Infrastructure
High Level Policy Roundtable
Sunday, September 7, 2:30 p.m. – 4:00 p.m. | Cobo 310 A/B

Under Slimp’s leadership, HNTB is committed to helping states design and build programs successfully within a challenging economic and legislative climate. With some of the firm’s largest and longest-standing clients, and significant opportunities in the toll and rail markets, Slimp also is championing the firm’s future growth strategy and commemoration of its centennial this year. Leading a multi-discipline staff in more than 60 U.S. offices and field offices, he directs the firm’s delivery of the nation’s most complex transportation infrastructure projects and programs. Slimp has held a variety of leadership roles since joining HNTB in 2005, including service as president of the Northeast and Southeast divisions of HNTB, as well as district leader for HNTB’s Texas, Louisiana, and Mississippi practices. He has two decades of experience in the planning, preliminary, and final design of large-scale infrastructure projects.
Kirk T. Steudle, ITS America Chair, Michigan DOT State Transportation Director
High Level Policy Roundtable
Sunday, September 7, 2:30 p.m. – 4:00 p.m. | Cobo 310 A/B

Kirk T. Steudle oversees MDOT’s more than three billion dollar budget and is responsible for the construction, maintenance and operation of nearly 10,000 miles of state highways and more than 4,000 state highway bridges. He also oversees administration of a wide range of multi-modal transportation programs statewide. Steudle began his career with the Michigan DOT (MDOT) in 1987 as an engineer trainee. A registered professional engineer, he rose through the ranks of the department to his current position. He was appointed State Transportation Director by Governor Rick Snyder on Jan. 1, 2011.

Rodney O’Neal, Delphi CEO & President
CTO Plenary – Visions of ITS in 2025: Panel 1
Monday, September 8, 12:00 p.m. – 1:00 p.m. | Cobo Grand Ballroom A

Rodney O’Neal is chief executive officer and president of Delphi. As the head of Delphi, he leads more the 180,000 people and oversees 125 manufacturing sites and 15 technical centers in 32 countries. Mr. O’Neal’s automotive industry experience began as a student in 1971 at General Motors Institute (now Kettering University). He later worked for GM, holding a number of engineering, production and manufacturing supervisory positions over the years in locations throughout the United States, Portugal, and Canada.

Honorary Committee

Mr. Rick Snyder
Governor (Chair Honorary Committee)
Mr. Kirk T. Steudle
Director (Vice Chair Honorary Committee) Michigan DOT

Mr. Michael A. Finney
President & CEO Michigan Economic Development Corporation
Ms. Debbie Stabenow
Senator U.S. Senate
Mr. Carl Levin
Senator U.S. Senate
Mr. Kerry Bentivolio
Congressman 11th Congressional District
Mr. Mike Rogers
Congressman 8th Congressional District
Mr. John Dingell
Congressman 12th Congressional District
Mr. Sander Levin
Congressman 8th Congressional District
Mr. John Conyers, Jr.
Congressman 13th Congressional District

Mr. Gary Peters
Congressman 14th Congressional District
Mr. Fred Upton
Congressman 6th Congressional District
Mr. Tim Walberg
Congressman 7th Congressional District
Mr. Dave Camp
Congressman 4th Congressional District
Mrs. Candice S. Miller
Congresswoman 10th Congressional District
Mr. Robert Ficano
Wayne County Executive
Mr. Mark Hackel
Macomb County Executive
Mr. L. Brooks Patterson
Oakland County Executive
Mr. Eddie Francis
Mayor City of Windsor, Ontario
Mr. Matt Marchand
President & CEO Windsor-Essex Reg. Chamber of Comm.
Mr. Paul Hillegonds
Chair, Governing Board Regional Transit Authority of SE Michigan

Mr. Sandy Baruah
President & CEO Detroit Regional Chamber
Mr. Ken Rogers
Executive Director Automation Alley
Mr. John A. James
Chairman & CEO James Group International
Mr. Rodney O’Neal
CEO & President Delphi Automotive
Ms. Françoise Colpron
President Valeo North America
Mr. Hikaru “Howard” Sugi
President & CEO Denso International America, Inc.
Mr. William C. Ford, Jr.
Executive Chairman Ford Motor Company
Mr. Sergio Marchionne
Chairman & CEO Chrysler Group, LLC
Ms. Mary Barra
Chair & CEO General Motors Company
Mr. Seiya Nakao
President Toyota Technical Center., Toyota Eng. & Mfg. N.A., Inc.

Mr. Erik Berkman
President Honda R & D Americas, Inc.
Dr. Sung Hwan Cho
President Hyundai America Technical Center, Inc.
Ms. Danielle Russell
Industry Director, Automotive Google
Dr. Mary Sue Coleman
President University of Michigan
Mr. Dan Gilbert
Chairman Quicken Loans, Inc.
Mr. Timothy Leuliette
President and CEO Visteon Corporation
Mr. Robert Paul
President and CEO Compuware
Mr. Roger S. Penske
Chairman Penske Corporation
Mr. Robert J. Slimp
CEO, HNTB Infrastructure HNTB
Mr. Michael E. Duggan
Mayor City of Detroit

www.itsworldcongress.org | #ITSWC14
Tuesday, September 9 (continued)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 PM</td>
<td>Future Mobility Cobo 142 A</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Cobo Atrium</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Cobo Grand Ballroom A</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Cobo 410 B</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Cobo 110 B</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Cobo 142 C</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>Cobo 413 A</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Cobo 110 A</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Cobo 414 B</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Cobo 116 B</td>
</tr>
<tr>
<td>10:00 PM</td>
<td>Cobo 359</td>
</tr>
</tbody>
</table>

Wednesday, September 10

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Cobo Atrium</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Cobo Grand Ballroom A</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Cobo 410 B</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Cobo 110 B</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Cobo 142 C</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Cobo 413 A</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Cobo 110 A</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Cobo 414 B</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Cobo 116 B</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Cobo 359</td>
</tr>
</tbody>
</table>

Thursday, September 11, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Cobo Atrium</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Cobo Grand Ballroom A</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Cobo 410 B</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Cobo 110 B</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Cobo 142 C</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Cobo 413 A</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Cobo 110 A</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Cobo 414 B</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Cobo 116 B</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Cobo 359</td>
</tr>
</tbody>
</table>

21st World Congress on Intelligent Transport Systems
**Transportation Challenges in Management for Emerging Metropolitan Areas**

- **TS01**: Automated Transportation
- **TS02**: Big Data and Open Data
- **TS03**: Connected Vehicles & Cooperative Systems
- **TS04**: Driver Behavior and Support
- **TS05**: Economic Growth
- **TS06**: ITS Rules and Standards
- **TS07**: Freight
- **TS08**: New Mobility
- **TS09**: Public Transit
- **TS10**: Smart Cities
- **TS11**: Traffic Safety
- **TS12**: Sustainability

---

**Example Session:**

**Session Description:**

- **Title:** Transportation System Management & Operations
  - **Cobo:** 116 B

**Talks Include:**

- **TS05:** Emission Impacts of ITS
  - **Cobo:** 111 A
- **TS06:** Advanced Vehicle Systems
  - **Cobo:** 353
- **TS07:** Cooperative Systems Research & Development
  - **Cobo:** 353
- **TS08:** Real Time Information for Multimodal ITS Applications
  - **Cobo:** 354
- **TS09:** Policy & Strategy Benefits & Lessons Learned in ITS
  - **Cobo:** 355
- **TS10:** Commercial Vehicle Enforcement Strategies
  - **Cobo:** 356
- **TS11:** Management of Shared & Electric Vehicles
  - **Cobo:** 358
- **TS12:** Human-Machine Interface Evaluation
  - **Cobo:** 359
- **TS13:** Tools for Providing Statewide & Metropolitan Enforcement Incident & Emergency Management
  - **Cobo:** 411 A
- **TS14:** Planning & Deployment
  - **Cobo:** 412 A
- **TS15:** Connected Vehicle Applications
  - **Cobo:** 412 B

---

**Interactive Session:**

**Title:** ITS Workforce Development & Deployment

- **Cobo:** 354

**Talks Include:**

- **TS06:** Developing an ITS Workforce
  - **Cobo:** 412 A
- **TS07:** ITS: Road User Charging
  - **Cobo:** 412 A
- **TS08:** ITS: Applications to Improve Traffic Flow
  - **Cobo:** 412 B
- **TS09:** ITS: Improving Intersection Safety with ITS
  - **Cobo:** 412 B
- **TS10:** ITS: Advanced Traffic Control
  - **Cobo:** 412 A
- **TS11:** ITS: Strategic Issues in ITS Development
  - **Cobo:** 353
- **TS12:** ITS: Transit Signal Priority
  - **Cobo:** 354
- **TS13:** ITS: Vehicle & Driver Communication Systems
  - **Cobo:** 356
- **TS14:** ITS: Innovations in Rural ITS
  - **Cobo:** 358
- **TS15:** ITS: Developments in Connected & Autonomous Vehicle Systems
  - **Cobo:** 359
- **TS16:** ITS: Driver Assistance Systems
  - **Cobo:** 411 A
- **TS17:** ITS: New ITS Concepts & Equipment
  - **Cobo:** 411 B

---

**Interactive Session:**

**Title:** ITS Applications & Challenges for New Mobility

- **Cobo:** 359

**Talks Include:**

- **TS06:** ITS: Collision Avoidance
  - **Cobo:** 412 B
- **TS07:** ITS: Developing an ITS Workforce
  - **Cobo:** 412 A
- **TS08:** ITS: Innovative Traffic Management Concepts & Strategies
  - **Cobo:** 412 B
- **TS09:** ITS: Innovative Traffic Management Concepts & Strategies
  - **Cobo:** 412 B
- **TS10:** ITS: Video Detection & Processing
  - **Cobo:** 353
- **TS11:** ITS: Regional Issues on Public Transportation
  - **Cobo:** 354
- **TS12:** ITS: Public Transportation
  - **Cobo:** 354
- **TS13:** ITS: Development of ITS Systems
  - **Cobo:** 356
- **TS14:** ITS: Traveler Information Challenges
  - **Cobo:** 357
- **TS15:** ITS: Driver Behavior & Cognition
  - **Cobo:** 359
- **TS16:** ITS: Implications & Assessment of Automated Driving
  - **Cobo:** 411 A

---

**Interactive Session:**

**Title:** ITS Applications & Challenges for New Mobility

- **Cobo:** 359

**Talks Include:**

- **TS06:** ITS: Collision Avoidance
  - **Cobo:** 412 B
- **TS07:** ITS: Developing an ITS Workforce
  - **Cobo:** 412 A
- **TS08:** ITS: Innovative Traffic Management Concepts & Strategies
  - **Cobo:** 412 B
- **TS09:** ITS: Innovative Traffic Management Concepts & Strategies
  - **Cobo:** 412 B
- **TS10:** ITS: Video Detection & Processing
  - **Cobo:** 353
- **TS11:** ITS: Regional Issues on Public Transportation
  - **Cobo:** 354
- **TS12:** ITS: Public Transportation
  - **Cobo:** 354
- **TS13:** ITS: Development of ITS Systems
  - **Cobo:** 356
- **TS14:** ITS: Traveler Information Challenges
  - **Cobo:** 357
- **TS15:** ITS: Driver Behavior & Cognition
  - **Cobo:** 359
- **TS16:** ITS: Implications & Assessment of Automated Driving
  - **Cobo:** 411 A
The ITS America Leadership Circle brings together transportation and technology visionaries from the public, private, and academic sectors as thought leaders on behalf of ITS America and the broader transportation community. Together, the Leadership Circle develops strategic approaches to improve the nation’s transportation systems through innovative ITS solutions. The Leadership Circle will play an active role at the ITS World Congress, participating in meetings throughout the week and sponsoring the Freight Track. The Leadership Circle will meet over a closed dinner on Sunday, September 7th.

To learn more about the ITS America Leadership Circle visit itsa.org/leadershipcircle or contact Sabrina Sussman, ITS America’s Vice President for Membership and Development, at ssussman@itsa.org.
International Road Dynamics Inc. (IRD) is a multi-disciplinary technology company with the expertise to integrate complementary Intelligent Transportation System technologies into systems designed to solve unique and challenging transportation problems. IRD’s systems detect vehicles, measure characteristics, and analyze traffic data – providing input that helps agencies protect infrastructure, enhance safety, and optimize highway design. Worldwide, concessionaires and road transportation agencies benefit from IRD’s multi-system, one-source ITS solutions.

IRD’s solutions include commercial vehicle enforcement, toll systems, traffic data collection, fleet management, bridge monitoring, traffic safety, security and access control, and maintenance services.

For 35 years, IRD has been a recognized leader in the design, development and deployment of customized solutions in the ITS industry.
Commercial Vehicle Enforcement

**DETECT.**

Weigh Station & Virtual Bypass Systems
- High and slow speed Weigh-In-Motion (WIM) complemented with Vehicle Information In Motion (VIIM™)
- Machine vision cameras
- Automatic Vehicle Identification (AVI)
- Automated traffic data logging
- Single or multi-site network
- Single, super single, dual, and tire footprint
- Static scale integration

**MEASURE.**

Screening
- Vehicle weight and dimensions
- Notification, tracking and compliance
- Credential screening (e-screening)
- Safety screening
- Custom reports
- Flexible database interface
- Autocalibration with automated hold-and-release
- Tire pressure, vehicle footprint, and lane discipline

**ANALYZE.**

Reports and Analysis
- Select vehicles for inspection
- Protect infrastructure
- Assign resources efficiently
- Data for highway planning and design
- Detect traffic and vehicle trends
- Operations metrics
- Design and operate customized programs

IRD_8pg_ITS_International_rev10_1408.indd   2
8/11/2014   5:18:04 PM

IRD_8pg_ITS_International_rev10_1408.indd   3
8/11/2014   5:18:42 PM
DETECT.

Manual, Automatic & Shadow Toll Systems
- VectorSense™ sensor suite, DYNAX® treadles, in-road and non-intrusive sensors
- Machine vision cameras
- Automatic Vehicle Identification (AVI)
- Bidirectional/reversible lanes
- Electronic Toll Collection (ETC)
- Single, super single, dual, and tire footprint
- All vehicle classes including motorcycles, three-wheelers, and bicycles

MEASURE.

Classification & WIM@Toll®
- Pre and post classification
- Classification and toll by weight
- Screen for overweight and unclassified vehicles
- Tire pressure, vehicle footprint, and lane discipline
- Independent audit

ANALYZE.

iToll®
- Centralized auditing and monitoring
- Video incident detection
- Automatic Traffic Count & Classification Systems (ATCC)
- Infrastructure protection
- Data for highway planning and design
DETECT.

Sensors & Systems
- Portable, permanent, and non-intrusive sensors
- Weather and ice detection
- Low-power, industrial-grade electronics
- Machine vision
- Flexible input and output interface
- Single, super single, dual, and tire footprint

MEASURE.

Vehicle Data
- Volume, Occupancy, and Speed (VOS)
- Weight and classification
- Real-time monitoring
- Tire pressure, vehicle footprint, and lane discipline

ANALYZE.

Enterprise Software & Data Services
- Enhanced decision making
- Multiple user remote access
- Real-time vehicle reports
- Custom and user-defined reports
- Local or cloud hosting
- High quality traffic data and WIM analysis
- Traffic Monitoring Guide (TMG) reporting

V²M² Data Collection with VectorSense™ Sensor Suite
Tomorrow’s Sensor Technology Today

Data Collection

V²M² Data Collection with VectorSense™ Sensor Suite
Tomorrow’s Sensor Technology Today

 DETECT.  
Sensors & Systems  
- Portable, permanent, and non-intrusive sensors  
- Weather and ice detection  
- Low-power, industrial-grade electronics  
- Machine vision  
- Flexible input and output interface  
- Single, super single, dual, and tire footprint  

MEASURE.  
Vehicle Data  
- Volume, Occupancy, and Speed (VOS)  
- Weight and classification  
- Real-time monitoring  
- Tire pressure, vehicle footprint, and lane discipline  

ANALYZE.  
Enterprise Software & Data Services  
- Enhanced decision making  
- Multiple user remote access  
- Real-time vehicle reports  
- Custom and user-defined reports  
- Local or cloud hosting  
- High quality traffic data and WIM analysis  
- Traffic Monitoring Guide (TMG) reporting  

V²M² Data Collection with VectorSense™ Sensor Suite  
Tomorrow’s Sensor Technology Today
Fleet Management

FLEETSPHERE™ Software
A Powerful Tool for Fleet Management

**DETECT.**

Internet Based Asset Tracking
- Unauthorized vehicle use
- Schedule and route violations
- Unsafe driving behavior
- Emergency in vehicle
- Unplanned/unauthorized stops

**MEASURE.**

Vehicle Monitoring
- Fuel consumption
- Time at stops
- Revenue miles
- Working hours
- Response time

**ANALYZE.**

Extensive Reporting Module
- Route performance
- Job productivity
- Vehicle utilization
- Maintenance costs
- Overtime expenses

Detect. Sensors & Systems
- Portable, permanent, and non-intrusive sensors
- Weather and ice detection
- Low-power, industrial-grade electronics
- Machine vision
- Flexible input and output interface
  - Single, super single, dual, and tire footprint

Measure. Vehicle Data
- Volume, Occupancy, and Speed (VOS)
- Weight and classification
- Real-time monitoring
- Tire pressure, vehicle footprint, and lane discipline

Analyze. Enterprise Software & Data Services
- Enhanced decision making
- Multiple user remote access
- Real-time vehicle reports
- Custom and user-defined reports
- Local or cloud hosting
- High quality traffic data and WIM analysis
- Traffic Monitoring Guide (TMG) reporting

Data Collection with VectorSense™ Sensor Suite
Tomorrow’s Sensor Technology Today
- Tire pressure, vehicle footprint, and lane discipline

irdinc.com
DETECT.
Real-time Screening
- Weigh-In-Motion (WIM), dimensioning, speed and classification
- Real-time screening and tracking
- Machine vision and image capture
- Identify vehicles from hot lists
- Statistical traffic data
- Single, super single, dual, and tire footprint

MEASURE.
Vehicle Weight/Bridge Protection
- Identify over-weight, over-height, and over-dimension vehicles approaching bridges
- Automated diversion and image capture of non-compliant vehicles

ANALYZE.
Loading Assessment/Asset Management
- Output data for further analysis
- Monitor changes in traffic over time, including class and weight
- Temporary studies (portable/temporary systems)
- Live load monitoring
- Multiple presence statistics
- Data for bridge design and maintenance
Security & Access Control

**DETECT.**

**Authorized Vehicles**
- Machine vision
- Automated Vehicle Identification (AVI)
- License Plate Reader (LPR)
- Under-Vehicle Surveillance System (UVSS)
- Weigh-In-Motion (WIM)
- Static and portable weighing
- Vehicle dimensioning and over-height detection
- Vehicle identification and tracking

**MEASURE.**

**Scanning and Dimensioning**
- Reduce idle time
- Automate screening and sorting
- Improve efficiency and customer service
- Vehicle footprint

**ANALYZE.**

**Optimize Security Operations**
- Increase efficiency
- Expedite compliant and authorized users
- Integrate complementary operations

*TOMORROW’S SENSOR TECHNOLOGY TODAY*
Maintenance & Service

DETECT.
Operations Management
• On-site and remote diagnostics
• Scheduled preventative maintenance
• Site assessment and design recommendations
• Self-diagnostics and notification
• Maintenance On-line Management System (MOMS)

MEASURE.
Monitoring and Autocalibration
• Remote monitoring
• 24/7 continuous operations
• Sensor and system health

ANALYZE.
Data Services
• Verification and validation
• Application Service Provider (ASP)
• Reliability, performance analysis and reporting
• Customer support and training

Intelligent Transportation Systems with Environmental Benefits
IRD’s ITS technologies reduce fuel consumption and emissions, and increase mobility and safety.
By keeping vehicles moving smoothly and efficiently, IRD’s Intelligent Transportation Systems (ITS) contribute to significant greenhouse gas emission reductions and system improvements.

Head Office
702 43rd Street East
Saskatoon, SK
Canada S7K 3T9
Tel: +1 (306) 653-6600

IRD International Offices
United States
International Road Dynamics Corp.
Tel: +1 (815) 675-1430

South Asia
IRD South Asia Pvt. Ltd.
Tel: +91 129 257 7900

Latin America
PAT Traffic Ltda.
Tel: +56 2 223 9713

Mexico
PAT Traffic Mexico, S.A. de C.V.
Tel: +52 55 27895442

China
Xuzhou PAT Control Technologies Co., Ltd.
Tel: +86 516-87737997 / 7986

Brazil
PAT Traffic Sistemas de Transportes Inteligentes Ltda.
Tel: +55 11 3807 2297

IRD, PAT TRAFFIC, DETECT, MEASURE, ANALYZE, VECTORSENSE, VIM, VEHICLE INFORMATION IN MOTION, DYNAX, WIM@TOLL, ITOLL and, CUSTOMER DRIVEN, are trademarks of International Road Dynamics Inc. FLEETSPHERE is a trademark of Technologies CDWare Inc.

Publicly Traded on the TSX (Symbol IRD)
Find out more about IRD on our web site: www.irdinc.com email: info@irdinc.com
High Level Policy Roundtable

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday, September 7, 2:00 p.m. – 2:30 p.m.</td>
<td>Reception</td>
<td>Cob 311 B reception</td>
</tr>
<tr>
<td>Sunday, September 7, 2:30 p.m. – 4:00 p.m.</td>
<td>Roundtable</td>
<td>Cob 310 A/B</td>
</tr>
</tbody>
</table>

The High Level Policy Roundtable brings together policy leaders from around the world to discuss global and local transportation issues. At the Roundtable, policy leaders will discuss their thoughts, ideas and plans for making use of ITS-enabled solutions with regard to current technologies and economic conditions with other transportation ministers. Now a regular feature of the ITS World Congress, the Roundtable offers policymakers an important opportunity to advance the deployment of Intelligent Transportation Systems through international coordination and knowledge transfer among transportation leaders. Viewing of the Roundtable discussion is open to World Congress attendees.

Sponsored by

HNTB

Keynote Speaker
Robert Slimp, CEO, HNTB Corporation

Moderator
Bud Wright, Executive Director, AASHTO, USA
Kirk Steudle, Director, Michigan DOT, USA
TH01 – Prime Time for Big Data

Wednesday, September 10, 12:30 p.m. – 1:30 p.m.

Sponsored by URBAN INSIGHTS

Nearly every element of the transportation system produces voluminous quantities of data. Vehicle telematics systems generate data on vehicle operation, condition, incidents, and often location. Public transit systems generate data on scheduling, routes, and location of transit vehicles. Traffic control systems produce data on traffic speeds and volumes, system performance, and incidents. Freight vehicles create data on pick-up, trip, delivery status and route and tolling systems produce volume and speed data, while smart parking applications monitor parking availability and pricing. Even VMT pricing schemes are interested in miles traveled by zone, road class and perhaps time of day.

These data are controlled by a range of private and public entities whose policies for access, and business models, vary. In a limited number of cases, open data policies are followed. In many cases, data are being monetized and form the basis of new transportation enterprises. Generally speaking, the use of such data is in its infancy.

This Town Hall will present the case that we are rapidly approaching prime time for big data in transportation. Big data represents a new, differentiated set of transportation values for individual travelers as well as businesses across the industrial spectrum. Big data also represents a common set of values — safety, traffic efficiency, energy, environmental sustainability, and economic development — in a way that has not been possible prior to the current technological age.

Who will represent the individual, as well as the collective, interests in the roll-out of big data in transportation? How will value be created, and will we have sufficiently stable business models? How will we deal with the risks inherent in creating reliable information from multiple data streams? And what milestones do we envisage in deploying big data?

TH02 – How Automated Driving Will Shape the Future of Our Transportation System

Thursday, September 11, 12:30 p.m. – 1:30 p.m.

Sponsored by Texas Instruments

Advances in autonomous vehicle technology have captured the imagination of the public, however, the creation of a fully-functioning autonomous transportation system is more difficult to envision. Challenges to the successful deployment of automation include realizing the types of technologies and services that users will respond to in the marketplace, collaborating the work of the private sector, road managers, and cities, liability and privacy issues, implementing standards and regulations, determining the need for global standards, and integrating automation with mixed traffic.

From advances around sensors and connectivity in vehicles, automation-friendly infrastructure, and smart parking, to data-driven management of roadway systems, payment for mobility services, the seamless connection of transportation modes, and the immediate satisfaction of delivery on demand — the ITS community has a critical role to play in constructing the underlying “system” aspect of automated transportation.

This Town Hall will examine how ITS will serve to create the path from today’s legacy transportation system to a highly automated system. What new ITS functions may be required to support increasing levels of automation and how can the ITS industry help accelerate the deployment of automation?
## Plenary Sessions

### PL1 – Reinventing Policy to Support the New ITS

**Monday, September 8, 8:30 a.m. – 10:00 a.m.**

**Cobo Grand Ballroom A**

**Sponsored by**

As more vehicles hit the road and more people flock to cities, how will personal mobility evolve? Join us for a special keynote conversation with Bill Ford, Executive Chairman of Ford Motor Company and Robert Safian, Editor-in-Chief of *Fast Company* magazine. How will auto manufacturing, vehicle ownership and even driving itself adapt to the profound challenges ahead? Where will manufacturers and stakeholders throughout the transportation ecosystem work together? What are some of the policy issues? Henry Ford saw the car as a means to enable freedom: how will that vision endure?

Following, senior officials from the Americas, Asia-Pacific, and Europe will present their visions of policy initiatives to accelerate the deployment of intelligent transportation systems to promote economic growth and improve the performance of existing transport infrastructure. They will also explore ways, to make better use of private sector investment and innovation to meet the needs of future generations.

After the panel discussion, several awards will be issued including the prestigious Hall of Fame award and a MobiPrize. See page 138 for more.

**Keynote Speakers**
- Mr. Bill Ford, Executive Chairman, Ford Motor Company, USA
- Mr. Robert Safian, Editor-in-Chief, *Fast Company* magazine, USA

**Moderator**
- Dr. Peter Sweatman, Director, University of Michigan Transportation Research Institute, USA

**Speakers**
- Dr. Bambang Susantono, Vice Minister, Ministry of Transport, Indonesia
- Mr. Fotis Karamitsos, Deputy Director General, DG MOVE, European Commission, Belgium
- Dr. Klaus Schierhackl, Board of Directors, ASFINAG, Austria
- Mr. Ananth Prasad, Secretary, Florida DOT, USA
- Mr. Keith Parker, General Manager/CEO, Metropolitan Atlanta Rapid Transit Authority, USA

### PL2 – Reinventing Business Models for the New ITS

**Tuesday, September 9, 8:30 a.m. – 10:00 a.m.**

**Cobo Grand Ballroom AA**

**Sponsored by**

Lowell McAdam, Chairman and CEO of Verizon Communications, will keynote the opening session, discussing how the convergence between digital technology and the physical world is creating a platform for innovation that will make transportation systems smarter, safer, and greener.

Following the keynote, leaders from around the world will discuss strategies for implementing ITS policies. They will consider new technologies and business practices that could revolutionize transport while spurring job creation and global economic growth. Government initiatives 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 will also be discussed.

At the conclusion of the panel discussion, the World Congress will issue its prestigious Industry Hall of Fame award and the Michigan MobiPrize. See page 138 for more.

**Keynote Speaker**
- Mr. Lowell C. McAdam, Chairman and CEO, Verizon Communications, USA

**Moderator**
- Mr. Dana Christensen, Deputy Laboratory Director, Science and Technology, National Renewable Energy Laboratory, USA

**Speakers**
- Mr. John Sun, President, ITS Taiwan, Chinese-Taipei
- Mr. Xiaojing Wang, Chair, China ITS Alliance, China
- Mr. Leon Daniels, Managing Director, Surface Transport, Transport for London, UK
- Mr. Michel Labardin, Vice-President in charge of Transport, Bordeaux Urban Community, France
- Mr. Ogi Redzic, Vice President, Connected Driving, HERE, USA
- Mr. Timothy Leuliette, President and CEO, Visteon, USA

### PL3 – U.S. DOT Plenary: Building the Foundation for our Connected Society

**Tuesday, September 10, 3:00 a.m. – 4:30 p.m.**

**Cobo Grand Ballroom A**

U.S. DOT Modal Administrators and key officials will discuss the Department’s accomplishments over the past year, preview their top priorities and opportunities for the coming year, and talk about the role of ITS in helping meet their agency missions today and in the future.

**Moderator**
- Mr. Gregory D. Winfree, Assistant Secretary for Research and Technology, Office of the Secretary, U.S. DOT, USA

**Speakers**
- Mr. David J. Friedman, Acting Administrator, National Highway Traffic Safety Administration, U.S. DOT, USA
- Mr. Gregory G. Nadeau, Deputy Administrator, Federal Highway Administration, U.S. DOT, USA
- Ms. Therese W. McMillan, Deputy Administrator, Federal Transit Administration, U.S. DOT, USA
CTO Summit Sessions

CTO Plenary – Visions of ITS in 2025

Monday, September 8, 12:00 p.m. – 2:30 p.m.
Sponsored by DELOPHI

- What will the ITS world look like in 2025?
- How could ITS affect future urban mobility?
- Will ITS transform the business model for automakers or suppliers?
- What will be governments’ roles in the future of ITS?
- Will standards and regulations lead or follow market implementation?
- What would be your “big wish” for ITS in 2025?

Keynote Speaker
Rodney O’Neal, CEO, Delphi Automotive, USA

Moderator
Jeffrey Owens, CTO, Delphi Automotive, USA

Speakers
James A. Buczkowski, Director, Global Electrical/Electronic Systems Engineering, Ford Motor Company, USA
Kristen Tabar, VP, Toyota Technical Center, USA
Ahmad Bahai, CTO, Texas Instruments, USA
Jon Lauckner, CTO, General Motors Co., USA
Tim Yerdon, Global Director of Innovation, Visteon Corporation, USA
Ralf Lenninger, Senior Vice President, Interior Electronic Solutions, Continental Automotive, Germany
Frank Paluch, President, Honda R&D Americas, Inc., USA

CTO2 – Connectivity and Automation

Monday, September 8, 3:00 p.m. – 4:30 p.m.
Sponsor: University of Michigan Mobility Transformation Center

- How does connectivity advance the deployment of automation?
- Managing risk in the deployment of driverless vehicles
- What technological challenges remain?
- How does the technology create compelling value for the consumer/user?
- What kind of cross-sectoral partnerships will be needed?
- What role needs to be played by state and federal governments?
- If not the driver, who is in the “driver’s seat”? Who leads?
  — The business case? — The supporting infrastructure?
- What will it take to move from a generally-agreed tipping point to a massively-deployed new mobility system?

Moderator
Peter Sweatman, Director, UMTRI, USA

Speakers
Jean-Francois Tarabbia, Senior VP R&D, Valeo, France
Danny Shapiro, Sr. Director, Automotive, NVIDIA, USA
Kenneth Mihalyov, Chief Innovation Officer, Government and Transportation Sector (GTS) Xerox Services, USA
Hiroyuki Watanabe, Project Director, Government of Japan, Japan
Doug Patton, Senior Vice President, Engineering, DENSO, USA
CTO3 – Future Mobility

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Sponsored by TransCore

- What choices will consumers have with regarding their personal mobility? Will they be able to afford them? Will new mobility strategies, e.g., Zip Cars, thrive?

- Are there Future Mobility differences among light, medium and heavy duty vehicles? How will the movement of goods and services change? How will intermodal transportation develop in Future Mobility scenarios? How quickly?

- What are the key drivers and success determinants? What factors need to be addressed for the consumer to embrace Future Mobility?

- What advantages and disadvantages does the “Internet of Things” create?

CTO4 – Government and Policy

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.

- What policies, guidelines and mandates need to be put in place for this sector to be successful?

- The issues related to liability and driver responsibility are formidable. What is needed to address them? Who should take the lead?

- Is harmonization across the regions, OEMs and suppliers really needed? If so, how can it best be achieved?

- How is cybersecurity best addressed in order to protect safety critical systems?

CTO Summit 41
Executive Sessions

ES01 – Roadmap to Automated Transportation

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Automated Transportation

Automated Transportation has been drawing a lot of attention recently as a key discussion topic. While the private sector has engaged in fierce competition in R&D, it is quite important to work with a certain consensus across the sectors and regions towards an efficient and promising deployment of these technologies.

This session will address the major issues such as social impacts, liability, standards, technology integration, and deployment scenarios in order to envision a roadmap to automated transport.

**Moderator**
Masao Nagai, President, Japan Automobile Research Institute, Japan

**Speakers**
Dominique Doucet, Product Marketing and External Communication Director, Valeo, France
Tagui Ichikawa, Counsellor, Cabinet Secretariat, Japan
Malcolm Dougherty, Director, California DOT, USA
Angelos Amditis, Research Director, Institute of Communication and Computer Systems (ICCS), Greece

ES02 – International Cooperation to Spread and Expand ITS

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** International Cooperation to Expand ITS

In recent years, numerous initiatives to develop cooperative systems have been undertaken by many countries, and international cooperation is growing in importance as a way to achieve the future spread and expansion of ITS. Trilateral cooperation between Europe, the U.S., and Japan has, in the past, consisted of mutually linked activities intended to deal with the challenges of R&D, standardization, etc. of ITS.

At this session, speakers will introduce the newest initiatives and policy trends concerning ITS in each country, at the same time as they discuss the present state of such initiatives, and responses necessary to accelerate future research and development and actual deployment of ITS under public-private collaboration.

**Moderator**
Greg Winfree, Assistant Secretary for Research and Technology, U.S. DOT, USA

**Speakers**
Takumi Yamamoto, Director, Road Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan
Reuben Sarkar, Deputy Assistant Secretary for Transportation, Department of Energy, USA
Speaker from EU - European Commission
Russell T. Shields, Chair, Ygomi LLC, USA

ES03 – Worldwide Deployment of Cooperative Systems

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

How can global deployment of cooperative mobility be achieved on a massive scale? Over the last decade, government funded research, carried out in conjunction with automakers, suppliers and the traffic industry, has successfully knit together technological, policy, economic and consumer considerations. Panelists in this session discuss how to achieve practical wide-spread deployment using harmonized standards and a coordinated regulatory environment. This harmonization would help realize cooperative technology’s potential to completely recast vehicles, drivers and infrastructure into an integrated system capable of achieving important outcomes — safety, traffic efficiency, emissions and energy consumption.

**Moderator**
Jim Keller, Principal Engineer/Manager, Honda R&D Americas, Inc., USA

**Speakers**
Fotis Karamitsos, Acting Deputy Director-General, DG MOVE, European Commission, Belgium
John Capp, Director, Electrical & Controls Systems Research & Active Safety Technology Strategy, General Motors Research & Development, USA
Klaas Rozema, Chief Technology Officer, Imtech Traffic & Infra, The Netherlands
Seung-Hwan Lee, Head, Planning & Strategies Bureau, ITS Korea, Korea
ES04 – Traffic Safety through ITS

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Session Track:** Traffic Safety

With improved vehicle safety and road design, the number of casualties has fallen for vehicle occupants, but the reduction has been smaller for pedestrians, cyclists, and other vulnerable users. Contributions of ITS technologies, such as automated vehicles and advanced driver assistance systems, as well as cooperative driving systems, are still very important for working towards the goal of zero fatalities. Speakers will discuss how ITS safety technologies could be deployed, developing the institutional systems and promoting user acceptance, software security, and system reliability. How to transfer these technologies to emerging countries and areas will also be considered.

**Moderator**
Mohammed Hikmet, Vice President ITS New Zealand, Head of New Zealand, Division ISO TC 204, Managing Director HMI Technologies Ltd., New Zealand

**Speakers**
Masanobu Taniguchi, Special Assistant for the Director, Road Transport Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan
Gerry Conover, Managing Director, PRC Associates, USA
Christian Schumacher, Head of ADAS, expert in ADAS and Automated Driving, Continental, Germany
Drue Freeman, Sr. Vice-President Marketing & Sales Automotive, NXP Semiconductors, USA

ES05 – ITS and the New Mobility

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** New Mobility

Technology is fundamentally changing the way people experience and use transportation. New transport elements such as cooperative driving, vehicle automation, car sharing, tailored vehicle designs, individual transporters, heavy vehicle platoons and information technology could change the definition of transportation. Connected users accessing connected vehicles enable the transition from an automotive economy to an economy of mobility services. Panelists consider how this shift impacts land use, city planning, and the auto industry, and how it may create a new transportation economy.

**Moderator**
Joseph Kopser, Co-Founder, CEO, RideScout, USA

**Speakers**
Kian Keong Chin, Director, Land Transport Authority, Singapore
Kaye Ceille, President, Zipcar, USA
Steve CH Lin, Chief Business Officer, Int’l Center, ITRI, Chinese-Taipei
Cees de Wijs, CEO, SWARCO, Austria

ES06 – Big Data and Open Data — the Big Issues

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Big Data and Open Data

ITS applications based around Big Data can help the movement of people and goods through real-time awareness of flows, transport service timetables and the performance of traffic systems. They may also eliminate vehicle breakdowns by delivering preventive maintenance warnings and reduce unnecessary journeys by delivering up-to-the-minute logistics information. Successfully harnessing Big Data will maximize the availability of transport assets, enhance services to increase revenue and manage capacity, and improve the end-to-end customer experience. But to turn promise into successful delivery, key issues such as personal privacy, data ownership, access to data, and revenue sharing must be considered by policy makers and implemented by suppliers.

**Moderator**
Claire Depré, Head of Unit Intelligent Transport Systems, DG MOVE, European Commission, Belgium

**Speakers**
Kenichiro Yoshida, Director, Electric Vehicle and Advanced Technology Office, Ministry of Economy, Trade and Industries, Japan
Abbas Mohaddes, President & CEO, Iteris, Inc., USA
Dirk Wolfschläger, General Manager Global Automotive Industry, IBM, Germany
Ralf Lenniger, Senior Vice President Interior Electronics Solutions, Continental Automotive GmbH, Germany
Matthew Cole, Executive Vice President and Deputy for Strategy, Business Development & Diversification, Cubic Transportation Systems, USA
ES07 – ITS: Essential for Sustainability

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Sustainability

The potential consequences of climate change for natural, social, health, and economic environments are key issues in setting policies to sustain future growth. ITS have proven successes as part of a move toward a more sustainable lifestyle, but the transport system is currently a significant contributor to greenhouse gases, noise, and air pollution. Panelists in this session will address issues such as reducing the environmental impact of transport, climate change resilience, defining the ITS value proposition, and changing consumer/end user behavior.

Moderator
Richard Harris, Solution Director, Xerox, UK

Speakers
Rob Fitzpatrick, Director, Infrastructure, Transport & Logistics, NICTA, Australia
Susan Shaheen, Research Director, Innovative Mobility, University of California, Berkeley, USA
Speaker from Europe
Xiaojing Wang, Chief Engineer, Research Institute of Highway, MOT, China

ES08 – Innovation for Mobility in Smart Cities

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.

Session Track: ■ Smart Cities

The sustainable development of cities to match the global trend to urbanization requires seamless connectivity built on the integration of policies for water, energy, transport, waste management, and information and communication technologies. This session will address the concept of smart cities with views from the three regions on how to create and support large scale roll-out of innovative transport solutions and new mobility services. The session will look at passenger mobility; supply chains and flows of goods; coordination of passenger, freight and traffic flows; urban planning, policy and technology development; and financial, legal, and institutional issues.

Moderator
Hermann Meyer, CEO, ERTICO - ITS Europe, Belgium

Speakers
Nobuyuki Ozaki, Senior Fellow, Railway & Automotive Systems Division, Social Infrastructure Systems Company, TOSHIBA Corporation
Eric-Mark Huitema, Smarter Transportation Leader Europe, IBM Corporation, Netherlands
Dirk John, CEO Business Unit Road and City Mobility, Siemens, Germany
Anup Sable, Sr. VP & Head, Automotive & Engineering Business, KPIT Technologies Ltd., India

ES09 – Driving Freight Efficiency with ITS

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

Session Track: ■ Freight

The movement of goods matters greatly to economies, and ITS can make a substantial difference in freight and logistics. Freight vehicles could be the early adopters of cooperative driving technology that spurs the connection of all transport nodes. This session examines high-level business and policy considerations of intermodal transport, IT innovations that could benefit logistics, the impact of vehicle automation on freight movement, measures of effectiveness, and how ITS can transform the “last mile” of freight movement to increase overall productivity.

Moderator
Jon Morrison, President & General Manager, Meritor WABCO, USA

Speakers
C. Randal Mullett, Vice President, Government Relations and Public Affairs, Con-way, USA
Jan Hellaker, Vice President, Transport Solutions & Services, Volvo Group Trucks Technology, Sweden
Per-Henrik (PELLE) Nielsen, Vice President & Global Head of Sales & Commercial Management Industry & Society, Ericsson, Denmark
Chris Koniditsiotis, Chief Executive Officer, Transport Certification Australia, Australia
ES10 – Ways to Achieve Smoother Traffic

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Traffic Management

Traffic management in urban areas and the information services supporting mobility of persons and goods is being reinvented with the Information Society, expanding public and private information networks, growing demands for personalized services, and greater connectivity among people, vehicles, and infrastructures.

This session will address not only the possible innovation in traffic management but also the necessity for cooperation among political leaders and the transport industry to achieve smoother traffic and more optimized use of infrastructure.

**Cobo 410 B**

**Moderator**
Takashi Oguchi, Professor, Institute of Industrial Sciences, University of Tokyo, Japan

**Speakers**
- Nick Cohn, Head of Business Development, TomTom, Netherlands
- David St. Amant, President/COO, Econolite, USA
- Kazuki Yamamoto, Director for ITS, National Police Agency, Japan
- George Gillespie, Assistant Director of Land and Environmental Services, Glasgow City Council, UK

ES11 – ITS and Economic Growth

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Economic Growth

ITS deployment is vital for improved transport efficiency, safety, sustainability, mobility, accessibility, and environmental performance. With resources continuing to be limited, a central issue is linking investment with performance. Understanding the contribution that ITS makes to society and to economic recovery and growth is key to obtaining continued investment. Attracting investment means developing new strategies and funding regimes. We also need to train and develop people to give them the skills needed to secure the benefits of ITS. Panelists will consider current funding and the contribution of ITS to economic growth, and review the criteria for further ITS investment.

**Cobo 410 B**

**Moderator**
Eric Sampson, Senior Program Adviser, ERTICO - ITS Europe, Belgium

**Speakers**
- Elly Sinaga, Director General, Ministry of Transportation, Indonesia
- John Casesa, Senior Managing Director, Investment, Guggenheim Securities, LLC, USA
- Josef Czako, Vice President, Kapsch, TrafficCom, Austria
- John Barton, Deputy Executive Director, Texas DOT, USA

ES12 – Global Harmonization of ITS Rules and Standards

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**

**Session Track:** ITS Rules and Standards

Countries across the globe are developing cooperative ITS systems. With global industries and linked economies, international cooperation is of growing importance for ITS expansion. Harmonization of ITS standards already benefits from trilateral cooperation among Europe, the United States, and Japan. Harmonization of vehicle and communications regulations is a logical next step. In this session, panelists discuss policy trends, accelerate future R&D, deployment of ITS, and share the present state of international partnerships.

**Cobo 410 B**

**Moderator**
Dick Schnacke, Vice President, Industry Relations, TransCore, USA

**Speakers**
- Shin Morishita, Director, Ministry of Internal Affairs and Communications, Japan
- Kenneth Leonard, Director, ITS Joint Program Office, U.S. DOT, USA
- Björn Bunte, Director of Business Development, CETECOM, Germany
- Hwa-seung Yang, Deputy Director, Ministry of Land, Infrastructure and Transport, Korea
- Zoran Stančić, Deputy Director General, DG Connect, European Commission, Belgium
Special Interest Sessions

SIS02 – Apps, Innovation, and Regulation: Protecting the Public Interest in the Midst of Disruptive Competition

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: ■ New Mobility

Smartphone-enabled applications have catalyzed significant change in the transportation ecosystems in more than 100 cities around the world. How these apps should or should not be regulated is one of the most pressing questions of the day. Competition in the for-hire transportation space has historically been anemic, and policymakers the world over have struggled with how to improve delivery of services to consumers and encourage economic opportunity for drivers, all while protecting the riding public. With the advent of apps like Uber, should policymakers lower barriers to entry, set regulatory floors to protect consumers, protect existing operators from disruptive competition, or some combination? This panel draws on decades of experience from leading policymakers from around the world, as well as leading app companies.

Organizer
Ashwini Chhabra, Head of Policy Development & Community Engagement, Uber Technologies, USA

Speakers
Prof. Allan Fels, Former Chairman, Victoria (AUS) Taxi Inquiry, Australia
Phil Evans, Deputy Chairman, UK Competition and Markets Authority, UK
Karen Cameron, Principal Consultant, An Tua Nua Consulting Inc., Canada
Ashwini Chhabra, Head of Policy Development & Community Engagement, Uber Technologies, USA

SIS03 – Sharing of Road and Traffic Information

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Traffic Management

Road and traffic information in ITS field covers the much particular information beyond road and traffic information themselves, such as the detailed shape of the road, the pertaining data, the possible events related to the road and the traffic, and so on.

These information are expected to play much more important roles especially in the new service field of autonomous car, disaster support, and multi-modal support. And by using these information in an effectively way, the environment-friendly and safe trip services are expected to be developed to the society. However, many road and traffic information are generally collected by road administrators and traffic operators and private companies.

For enabling more advanced and suitable services, such road pertinent information is expected to be open and enable for secondary use. In this session, we would like to discuss about the framework activity towards these information-sharing for encouraging the practical implementation of the new services.

Organizer
Makoto Otsuki, Senior Vice President, ITS Japan, Japan

Moderator
Satoru Nakajo, Principal Consultant, ITS Business Group, Mitsubishi Research Institute, Inc., Japan

Speakers
Runar Soeraasen, Business Development Manager, ITS Norway, Norway
Christian Kotscher, CEO, MetroTech Net, Inc., USA
Sorawit Narupiti, Associate Professor, Chulalongkorn University, Thailand
Kazuhiko Akahori, Staff, Transportation Infrastructure Department, Shizuoka Prefecture, Japan

SIS04 – EU-US Task force — Collaborative Efforts in Sustainability Applications

Monday, September 8, 3:00 p.m. – 4:30 p.m.

Session Track: ■ Sustainability

Around the globe many programs acknowledge the potential of cooperative technology to cut down fuel consumption and emission. The EU-US task force on ITS cooperation — Working Group for Sustainability Applications focuses on energy efficient traffic signal operations. The aim of the working group is to research the operational scenarios and assess commonalities and differences in message sets, data transmission techniques, and system algorithms. This research includes evaluation of simulation and field study experiments, eventually leading to a joint demonstration at the ITS World Congress in Bordeaux in 2015. The session is arranged according to the white papers that have been published by the working group. Each presenter will highlight the main findings from one of these white papers.

Organizer
Jaap Vreeswijk, Product Manager Research, Imtech Traffic & Infra, Netherlands

Moderator
Marcia Pincus, Program Manager, ITS Joint Program Office, U.S. DOT, USA

Speakers
Steven Shladover, Research Engineer, California PATH, ITS Berkeley, University of California, USA
Balaji Yelchuru, Lead Associate, Booz Allen Hamilton, USA
Thomas Benz, Director ITS Research, PTV GROUP, Germany
James Misener, Independent Consultant, USA
Matthew Barth, Professor of Engineering, University of California - Riverside, USA
André Perpey, Manager, Geoloc Systems, France
SIS05 – International Standard Issues for Green ITS (G-ITS)

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: □ ITS Rules and Standards

This session will present the international standards and/or harmonization issues for development and deployment of Green ITS (G-ITS) utilizing sustainable transport modes, infrastructure, transport facilities, and users. In developing G-ITS technologies for the future worldwide, emphasis should be placed on the requirements which include CO2 emissions-free green transport systems ensuring efficient multi-modal connectivity. A concept to build a green transport system which is called G-ITS has been under discussion in Korea utilizing ITS technology for operation and management of the system and also in ISO/TC204 discussing what issues to be harmonized in order to being international standards. This special interest session will be continued with the same title as it was organized in the 20th ITS World Congress in Tokyo, 2013.

Organizer & Moderator
Young-Jun Moon, Director The Korea Transport Institute, Korea

Speakers
Andrew Mehaffey, Manager, Roads and Maritime Services, Australia
Young-Jun Moon, Director, The Korea Transport Institute, Korea
Koorosh Olyai, Senior Principal, Stantec, USA

SIS06 – Cooperative ITS for Now and the Next (Round 3)

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: □ Connected Vehicles & Cooperative Systems

This session is organized as a round 3 session after Vienna 2012, SIS 83, Tokyo 2013 HIS18. As in the session in 2013, speakers will discuss the experiences of Cooperative ITS systems from real world and field operational testing, and how these ITS systems contribute to society from traffic safety or the other point of view. The other discussion point is performance studies like real performances of cooperative ITS systems vs. expected performance. Progress in each region after the World Congress in Tokyo and potentials and advantages for automated vehicle deployment. As the summary of the session, the attendees will discuss the subjects to be resolved for further Cooperative ITS system Deployment and Connected Automated Vehicles development.

Organizer & Moderator
Takahiko Uchimura, Vice President ITS Japan, Japan

Speakers
Toshio Yokoyama, Senior Chief Engineer, Technology Development Division 12, Honda R&D Co., Ltd., Japan
Michael Shulman, Technical Leader, Ford Active Safety Research, Ford Motor Company, USA
Teresina Herb, BAST: Federal Highway Research Institute, Germany
Jaap Rozema, CTO, Imtech Traffic & Infra, The Netherlands
Kunio Segawa, Chairperson, ITS Green Safety Implementation and Promotion Subcommittee, ITS Japan, Staff Manager, Technical Research Dept. Mazda Motor Corporation, Japan

SIS07 – Deployment of Cooperative ITS Services: A Global Affair

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: □ International Cooperation to Expand ITS

The deployment of Cooperative ITS services is still at its infancy and limited by barriers such as high prices, user acceptance and, uncertain business models. Despite the current availability of products in the market and the, clear demand of services by the users (especially fleet operators), the penetration of C-ITS is not sufficient and not yet fully interoperable, across different regions. These challenges cannot be effectively undertaken at a regional level, but require a coordinated approach across the globe. Cooperation agreements are already in place at political levels and major players, are targeting global markets. However, numerous issues remain pending and necessitate a resolute approach. This session is in the format of a panel with active involvement of the audience, and will look into current implementation initiatives and, mass-deployment perspective across the globe, with high level representatives from USA, Japan, and Europe. Expert speakers will present concrete examples from current deployment programs and debate on the most viable solutions to, overcome barriers such as involvement of users, financial viability and interoperability.

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

Speakers
André Perpey, Manager, Geoloc Systems, France
Brian Cronin, Team Leader, ITS Research and Demonstration, ITS Joint Program Office, U.S. DOT, USA
Evangelos Mitakis, Associate Researcher, Centre for Research and Technology Hellas - Hellenic Institute of Transport, Greece
James Sayer, Program Manager, Safety Pilot Test Conductor & Associate Research Scientist, University of Michigan Transportation Research Institute, USA
Hideyuki Kanoshima, Senior Researcher, ITS Division, National Institute for Land and Infrastructure Management, Japan
SIS08 – Data Driven Traffic Modeling and Analysis

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Big Data and Open Data

Traffic networks are complicated and dynamic systems. Every day traffic delay affects the lives of millions of people all over the world. Not only do these issues impact individuals they also have a detrimental effect on the economy; amounting to somewhere between 1% and 2% of GDP in developed countries. Clearly something needs to be done.

In many jurisdictions surface streets and motorways are heavily instrumented in order to provide data for automated traffic management systems. However, these systems tend to act tactically and respond to sensor inputs that occur ‘now’. They rarely look ahead to try and predict how traffic patterns will evolve into the future. In this session we will examine traffic models that are built directly from observed traffic data. Such Data Driven models naturally tend to focus on ‘interesting’ events but not necessarily those to which a human observer may be drawn. They also provide straightforward methods for predicting future traffic states. Ultimately, these predictions may be used to inform tactical traffic management systems of potential issues before they become visible to the road user or traffic manager and thus help to keep traffic flowing in an ever more crowded world.

**Organizer & Moderator**
Glenn Geers, Technology Director NICTA, Australia

**Speakers**
- Chen Cai, Researcher, NICTA, Australia
- Andrew Mehaffey, Principal Manager Intelligent Transport Systems, NSW Roads and Maritime Services, Australia
- James Sayer, Research Scientist, University of Michigan Transportation Research Institute, USA
- Balaji Prabhakar, Professor, Stanford University, USA
- Karen Davis, General Manager, Urban Engines, USA

---

SIS09 – Big Data And The Connected Vehicle — When We Build It, The Data Will Come

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** Big Data and Open Data

The advances of adaptive driver assistance systems, autonomous vehicle systems alone may be enough to propel the ITS community into the ever changing and fast-paced world of big data. When we build it, the data will come...are we ready?! Recent forecasts by industry leading analysts suggest that there will be more than 150 million actively connected, vehicles on roads (globally) by 2020, generating over 11 petabytes of data on an annual basis, or about 30 terabytes a day! The IT industry, has coined the “V’s” of big data in an effort to classify the challenges that managing and consuming big data represent — Volume, Velocity, Variety, Veracity, Validity, Volatility, and most importantly Value. Depending on how you “fit” in the connected vehicle construct, you may value & prioritize the “V’s” differently than others. Which ones are most important to you?

**Organizer & Moderator**
Jason JonMichael, National Technology Leader HNTB Corporation, USA

**Speakers**
- Dave Miller, Chief Security Officer, Covisint, USA
- Lee Stogner, PMP, Chair, IEEE Transportation Electrification Initiative, USA
- Christopher K. Wilson, CEO, Vehicle Data Science, USA
- Collin Castle, PE, Connected Vehicle Technical Manager, Michigan DOT, USA
- C. Douglass Couto, Principal, Aquila Group, USA
- Monali Shah, Innovation & Strategy, Connected Driving, HERE, USA

---

SIS10 – Connected/Automated Vehicles — The Safety Case

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** Traffic Safety

The upcoming implementation of V2X communication together with the developments of advanced ADAS in next generation vehicles finally will, enable automatic driving to have the potential to avoid almost 100% of fatalities as well as any other crashes between vehicles, vehicles and, vulnerable persons or with fixed infrastructure installations. This will save hundreds of billions USD (maybe up to 2 Trillion USD) annually! At this very moment, all technological developments are being pushed by the vehicle industry as a matter of customer relationship strategy and, competition between automotive industry. Isn’t safety not also the core responsibility of governments of all states? Why do they not push the, mandatory safety functionality as a matter of certification of vehicles? The session shall discuss the role of vehicle manufacturer versus mandatory, safety functions defined by public bodies to ensure zero fatalities as soon as possible in a coordinated way.

**Organizer & Moderator**
Reinhard Pflliegl, CEO A3PS, Austria

**Speakers**
- Glenn Geers, Technology Director, NICTA, Australia
- Derek Caveney, Manager, Toyota Motor Engineering & Manufacturing North America, Inc., USA
- Eva Molnar, Director, Division of Transport, United Nations Economic Commission for Europe - UNECE, Switzerland
- Tim Johnson, Director, Division of Transport, United Nations Economic Commission for Europe - UNECE, Switzerland
- Edward Griffor, Chrysler Technical Fellow, Chrysler Group, LLC, USA
SIS11 – The Economics and Partnerships Driving Connected Cars

Monday, September 8, 3:00 p.m. – 4:30 p.m.

Session Track: Economic Growth

The Internet of Everything will expand markets and will spawn businesses valued at U.S. $14 trillion. One of the key areas of innovation will be in the automotive industry. Studies show that each connected vehicle can create $1,400 in benefits each year. Key stakeholders like automotive manufacturers and suppliers, mobile, telematics and infotainment service providers, and insurance companies and governments recognize the benefits of connecting vehicles, and are designing new business and technology architectures to get a piece of the big connected vehicle pie. This panel will discuss potential win-win business and technology architectures that could help accelerate the broad deployment of vehicle connectivity through cross-industry partnerships.

Organizer & Moderator
Andreas Mai, Director, API Platform Cisco, USA

Speakers
Chris Borroni-Bird, VP Strategic Development, Qualcomm Technologies Inc, USA
James Buczkowski, Henry Ford Technical Fellow & Director Electrical & Electronics Systems Research & Advanced Engineering, Ford Motor Company, USA
Tim Yerdon, V.P. Design, Marketing and Connected Services, Visteon, USA
Dan Kraft, Connected Car Innovation Lead, Allstate Insurance
Kevin Link, GM China, Verizon Telematics, USA

SIS12 – ITS Applications in Truck Parking Availability

Monday, September 8, 3:00 p.m. – 4:30 p.m.

Session Track: Freight

Truck parking availability has been a major concern of the goods movement industry for many years. Safe, secure, and legal parking is needed for truckers to be sufficiently rested for their demanding job over our nation’s highways, while at the same time, meeting the federally mandated hours of service (HOS) requirements. The broadcast of truck parking availability information to the public and the provision of parking reservations have been advanced as potential solutions addressing concerns related to finding legal and available truck parking. To address these issues, the FHWA and FMCSA have sponsored a series of research and deployment projects across the country to advance the development of the sensing and information delivery systems needed to provide truck drivers with dynamic information on parking availability. This session presents the latest results of research, application, and deployment from high profile projects that have been under active development in several states.

Organizer
Elliot Martin, Ph.D., Assistant Research Engineer Transportation Sustainability Research Center, University of California, Berkeley, USA

Moderator
Robert Arnold, Director, Transportation Management, Office of Operations Federal Highway Administration, U.S. DOT, USA

Speakers
Quon Kwan, Program Manager, Federal Motor Carrier Safety Administration, U.S. DOT, USA
Elliot Martin, Assistant Research Engineer, Transportation Sustainability Research Center, University of California, Berkeley, USA
John Tompkins, Minnesota DOT, USA
Eric Morris, Associate Vice President, HNTB Corporation, USA
Von Lopez-Jacobs, ITS/Traffic Engineer, Gannett Fleming, USA

SIS13 – State-of-the-Art in Self-Driving Vehicles

Monday, September 8, 3:00 p.m. – 4:30 p.m.

Session Track: Automated Transportation

Presentations on the current state-of-the-art vehicles that are under test at various venues. Speakers will talk about their own test vehicles and, focusing on the technology, will answer the question “We would all be operating self-driving cars today in mixed traffic on highways and in cities except for...”

Organizers
Steven Dellenback, Director R&D Southwest Research Institute, USA
Jane Lappin, Program Manager John A. Volpe National Transportation Systems Center, U.S. DOT, USA

Moderator
John Maddox, Associate Administrator for Vehicle Safety Research National Highway Traffic Safety Administration

Speakers
John Capp, Director, Electrical & Controls Systems Research & Active Safety Technology Strategy, General Motors Research & Development, USA
Maarten Sierhuis, Research Director, Nissan Research, USA
Jan Becker, Senior Manager, Engineering Automated Driving, Robert Bosch LLC, USA
Steven Dellenback, Director R&D, Southwest Research Institute, USA
Robert Denaro, Vice President, ADAS, Nokia Corp, USA
SIS14 – Integrated Corridor Management — The Next Step

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** Traffic Management

As demands on our existing transportation system increase, owners/operators are looking for new tools to improve mobility of people and goods. One such tool is Integrated Corridor Management Systems. Transportation corridors often contain unused capacity in the form of parallel routes, non-peak direction on freeways and arterials, single-occupant vehicles, and transit. Unfortunately, today many of these systems are operated independently from one another. For instance, it is common practice to operate a freeway system independently from an arterial system. Integrated Corridor Management brings all of the partners and assets together to manage them as a system instead of as individual assets. This approach will improve travel time reliability, help manage congestion, and improve information dissemination to motorists. ICM programs will be presented, and the future of ICM will be discussed, as connected vehicle technology changes how our transportation systems are managed.

**Organizer:**
James Barbaresso, Vice President, Intelligent Transportation Systems HNTB Corporation, USA

**Moderator:**
Patrick Johnson, Systems Engineering Manager HNTB Corporation, USA

**Speakers:**
- Ushio Komoda, Manager of IT & ITS Planning Division, Toyota Motor Corporation, Japan
- Koorosh Olyai, Senior Principal, Stantec, USA
- Jeffrey Chernick, Chief Executive Officer, RideAmigos, USA
- Robert Sheehan, Program Manager, ITS Joint Program Office, U.S. DOT, USA
- Wei-Bin Zhang, Research Engineer, California PATH, University of California - Berkeley, USA

SIS15 – Lean Demand Management for Smart Parking

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

“Smart Parking” technologies and systems are proving capable of significantly reducing traffic congestion, improving driving safety, and reducing the carbon footprint associated with motor vehicles. Parking guidance and dynamic pricing are keys to achieving these important public policy objectives. And yet, deploying a sensor in every parking space can be expensive. This session will explore how lean demand management techniques are used to leverage smart parking systems in order to achieve policy objectives at a reduced cost. The panelists will identify an actual application being deployed in Berkeley, California and a next phase of LA Express Park in Los Angeles California as well as examples in Europe and Asia/Pacific, using a combination of data analytics, new technologies, and more advanced sensors.

**Organizer & Moderator:**
John Peracchio, Managing Director Peracchio & Company, USA

**Speakers:**
- Omno Zoeter, Senior Research Scientist, Xerox Research Center Europe, France
- Peer Ghent, Senior Management Analyst, Los Angeles DOT, USA
- Eugene Tsyrklevich, CEO, Parkopedia, USA
- James Albertine, Vice President, Equity Research - Automotive, Stifel Nicolaus, USA

SIS16 – Open Data in Public Transport: Challenges and Opportunities

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** Public Transit

Within the past five years, more and more transit agencies are making schedule and real-time operational data available to the public. This “open data” provides opportunities for agencies to inform the public in a variety of ways about a transit agency’s services. For example, there is significant value to having web-based and mobile applications that are developed by people outside the transit agency — these applications allow riders to more easily navigate public transit systems. In this example, the agency does not bear the costs associated with the application development and encourages innovation in terms of how to present transit information to the public. Open data are being used to create enterprise-facing decision-support tools that can help to optimize operations in real time, improve maintenance and inform capital programs/planning. This session explores the opportunities and challenges associated with using open data to improve transit agency operations and other business functions, and customer information.

**Organizer & Moderator:**
Carol Schweiger, Vice President TranSystems Corporation, USA

**Speakers:**
- Chen Cai, Researcher, NICTA, Australia
- Marije de Vreeze, Manager ITS Netherlands, Connekt/ITS Netherlands, Netherlands
- Sean Barbeau, Principal Mobile Software Architect for R&D, University of South Florida, USA
- Dag Gogue, Chief Executive Officer, TransitLabs, USA
SIS17 – Japan-US-European Collaborative Research on the Use of Probe Data

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Big Data and Open Data

Probe data, which is one type of big data collected in the transportation field, has, against the background of the improvement of ICT, attracted growing attention in recent years as a tool to achieve smoother, safer, and more secure road traffic. And as part of this process, Europe, the U.S., and Japan have conducted joint research on probe data.

At this session, information about each country’s most advanced initiatives using probe data will be provided at the same time as the contents, state of progress, and future research plans related to the collaborative research conducted cooperatively by Europe, the U.S., and Japan will be introduced. Speakers will discuss appropriate future directions and international cooperation in the use of probe data.

Organizer
Keiji Hattori, Road Bureau Ministry of Land, Infrastructure, Transport and Tourism, Japan

Moderator
Hironao Kawashima, Emeritus Professor Keio University, Japan, Japan

Speakers
Dale Thompson, Program Manager, ITS Joint Program Office, U.S. DOT, USA
Masahiro Nishikawa, Senior Deputy Director, Road Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan
Colette Maloney, Head of Unit “Smart Cities and Sustainability”, DG-CONNECT, European Commission
Hideyuki Kanoshima, Senior Researcher, ITS Division, National Institute for Land and Infrastructure Management, Japan

SIS18 – Driving Behavior by Aged People and Its Countermeasure using KUSANONE ITS

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Driver Behavior and Support

Needless to say, traffic accidents relating to aged drivers or pedestrians are not only big problems in Japan that need to be urgently solved, but are also common concerns around the world. We have discussed the significant association between MRI data and traffic accidents before. Meanwhile, we also proposed countermeasures to prevent accidents through KUSANONE ITS (Regional ITS). We will expect an interesting discussion exploited by the combination of aged driver’s performances and KUSANOME ITS.

Organizer
Yasuhiko Kumagai, Professor Kochi University of Technology, Japan

Moderator
Kaechang Park, Visiting Professor Kochi University of Technology, Japan

Speakers
Naoyuki Tamura, Staff, Kochi Prefecture, Japan
Hiroki Asao, Engineer, Sumitomo Electric Industries, Ltd., Japan
Yasuhiko Kumagai, Professor, Kochi University of Technology, Japan
Brian Negus, General Manager, Public Policy, Royal Automobile Club of Victoria (RACV), Australia
Le Hung Lan, Vice President, National Center for Technological Progress (NACENTECH), Ministry of Science and Technology, Vietnam

SIS19 – Wireless Power: Transforming Transportation

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Sustainability

Considerable progress has been made towards the documentation of the costs and benefits of ITS. The ITS Joint Program Office, the European Union, and other aligned entities (e.g., the Transportation Research Board), have amassed significant amounts of data concerning the impact of different types of ITS deployments. To build on this progress we need further data and the development of tools to enable us to develop results-driven approaches for ITS investment programs. A promising approach would be to develop a clear understanding of the effects of ITS applications and then develop a plan for the evolution of ITS services over a region, over time, location and increasing level of service. This session provides an opportunity to discuss the process for identification and definition of the data, analytic tools, process and decision-making structures needed to support the development and application of a results-driven investment program for ITS within a region.

Organizers
Kevin Heaslip, Assistant Professor Utah State University, USA
Zach Kahn, Director of Business Development WAVE, USA

Moderator
Kevin Heaslip, Assistant Professor Utah State University, USA

Speakers
Vincent Valdes, Associate Administrator Office of Research, Demonstration and Innovation (TRI), Federal Transit Administration, USA
Wesley Smith, Chief Development Officer, WAVE, USA
Rene Zorge, CEO, Proov, Netherlands
SIS20 – Is There Vehicle Automation without Accurate Maps?

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: Automated Transportation

Non-withstanding the investment needed on the roads, a shift towards a digital "road infrastructure" is needed including strong cooperation between the vehicles and the infrastructure to collect, update and correct changes to the physical reality. Some countries have already shifted to a completely digital infrastructure for some road attributes like Sweden, where speed limits are not legal if not in the road database. This implies that the digital infrastructure must be reliable and accurate. Even more for automated driving, any future changes in the infrastructure can have a disastrous impact and will need to be carefully planned by the Authorities and make its way to the digital databases in time for the vehicles to see it. The update mechanism will most likely strongly rely on input from the vehicle sensors. Data acquired by the vehicles will need to be communicated to the data aggregators in a harmonized way. The panelists will share their thoughts about the relevance of the “Digital Infrastructure” for the future of vehicle automation.

SIS21 – International Harmonization of Cooperative ITS Security Policy

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: ITS Rules and Standards

The purpose of this special session will be to provide stakeholders with the current status of Cooperative ITS security policy harmonization efforts and solicit feedback on the results-to-date. The session will highlight the process, the progress, and the task group’s roadmap for deliverables and presentation to policy makers and C-ITS implementers/operators. Presentations will also highlight the benefits of C-ITS security policy harmonization for a range of audiences.

The session will include government and industry experts from a diverse set of fields: communications security, policy, cryptography, vehicle and infrastructure device experts, and operating agencies. The session will be conducted in the form of brief presentations followed by an interactive discussion between invited experts and the audience.

SIS22 – Establishment of a Results Driven Investment Program for ITS

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: Economic Growth

Considerable progress has been made towards the documentation of the costs and benefits of ITS. The ITS Joint Program Office, the European Union, and other aligned entities (e.g., the Transportation Research Board), have amassed significant amounts of data concerning the impact of different types of ITS deployments. To build on this progress we need further data and the development of tools to enable us to develop results-driven approaches for ITS investment programs. A promising approach would be to develop a clear understanding of the effects of ITS applications and then develop a plan for the evolution of ITS services over a region, over time, location and increasing level of service. This session provides an opportunity to discuss the process for identification and definition of the data, analytic tools, process and decision-making structures needed to support the development and application of a results-driven investment program for ITS within a region. The topics to be addressed will include the evaluation of ITS effects, linking regional ITS Architectures to investment plans, data needs and characteristics of the specialized tools required to support results driven investment for ITS.
SIS23 – Accelerating Service Deployment — Strategy View from the Traffic and Transport Industry

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

**Session Track:** ▪ Economic Growth

This session considers how best to accelerate ITS deployment. The eminent panel of speakers will share their perspectives and insight into future mobility. In particular it will address how recent developments and new thinking can help to overcome barriers to deployment. It also considers the importance and the role of political leadership and how industry can best cooperate with the authorities to ensure sustained operational acceleration. Topics covered will include open data, transport revenue, integrated systems and services and unlocking the potential of the always-connected society.

It includes high-level representatives from Government and key industry members of the ERTICO Traffic and Transport Industry sector platform. The ERTICO Sector Platforms have been established to initiate new activities, develop priorities, technical positions, road maps and project ideas. The Traffic and Transport Industry sector platform comprises fifteen leading organizations that influence the development and deployment of ITS enabled services. The views of these industry experts and Government representatives will provide a stimulating, informative view of the current situation and challenge us all to make a difference in the near future.

**Organizer**
Richard Harris, Solution Director, International Transportation and Government Xerox Services, UK

**Moderator**
Rasmus Lindholm, Director, Partnership Services & Communications ERTICO-ITS Europe, Belgium

**Speakers**
Grace Ong, Director, Transportation Technology, Land Transport Authority, Singapore
Joseph Averkamp, Senior Director, Technology, Policy, and Technical, Xerox, USA
John Chipperfield, CTO, SWARCO, Austria
Josef Czako, Vice President, International Business Development, Kapsch TrafficCom, Austria
Robert Sykora, Director Strategy, Mobility and Logistics Division, Siemens AG, Germany

---

SIS24 – Predictive Map-Based Applications Reaching the Market and Perspectives Towards Automated Driving

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

New generation driver assistance systems use more and more predictive data based on vehicle position and map data. This session will report on new developments by the automotive industry on the implementation of ADAS specifications and plans for further market introduction of ADASIS compliant applications.

This enabling technology linking map, position and ADAS was developed by the ADASIS Forum, created in 2002, in the form of ADAS Interface Specifications released in April 2010, which are used in today's new Driver Assistance systems. This session will present the possible future development of this de facto industry standard as an enabling technology for Automated Driving.

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

**Speakers**
Ulrich Lages, CEO, IBEO Automotive Systems GmbH, Germany
Detlef Kuck, Technical Expert Infotainment Strategies, Ford, Germany
Todd Kovach, OEM Key Accountant Executive, Garmin, USA
Nhai Cao, Product Line Manager, TomTom, USA

---

SIS25 – Mega City ITS Programs, New York City’s Approach

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

Mega Cities such as New York with its 12,600 intersections, 5 million daily commuters, a complex — large scale transportation network of, highway, local roads, bridges and tunnels, with central business BD short block spacing, and varied street network presents unique challenges, to the implementation of ITS technologies. New York City was one of the first cities to deploy a central computer control system for its, electromechanical controllers in the late 1960’s, and this original system survived for over 25 years. Starting in 2002, the city began a program to, deploy ITS technologies and has had to overcome significant challenges because of the overall size of the systems, budget limitations, and the, reliability needed for systems of its size. Today, the city has become a leader in the deployment of advanced ITS technology with its unique, form of adaptive control, advanced traffic controllers, transit signal priority, wireless network, video monitoring and distribution, and regional, operation.

**Organizer**
Mohamad Talas, Deputy Director New York City DOT, USA

**Moderator**
Robert Rausch, Vice President TransCore, USA

**Speakers**
John Tipaldo, Director of Systems Engineering, New York City DOT, USA
Mohamad Talas, Deputy Director, New York City DOT, USA
Satya Muthuswamy, President, KLD Engineering, P .C., USA
Stacey Hodge, Administrative Transportation Coordinator Freight Technology, New York City DOT, USA
SIS26 – Technical Challenges for Adoption of Self-Driving Vehicles

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: ■ Automated Transportation

A discussion among technologists about the technical challenges and limitations of creating vehicle platforms that will be able to operate on, highways alongside traditionally driven vehicles.

Cobo 140 E

Organizers
Steven Dellenback, Director R&D Southwest Research Institute, USA
Jane Lappin, Program Manager John A. Volpe National Transportation Systems Center, U.S. DOT, USA

Moderator
Steven Dellenback, Director R&D Southwest Research Institute, USA

Speakers
Raj Rajkumar, Co-Director GM Collaborative Research Lab, Carnegie Mellon University, USA
Michael Wagner, Senior Commercialization Specialist, Carnegie Mellon University, USA
Patt Basset, Vice President, DENSO International America, Inc., USA
Ryan Lamm, Assistant Director R&D, SWRI
Steven Shladover, Research Engineer/Program Manager, California PATH, ITS Berkeley, University of California, USA

SIS27 – Visualizing an Integrated Transport System — A Multi-modal Approach Enhanced by Automated Transit Networks

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: ■ Public Transit

A well-integrated transportation system which incorporates appropriate technology, planning, and policy for travelers with all abilities will redefine the urban landscape, shape the dynamics between people and places, affect land use patterns, and could ultimately result in more desirable social, economic, environmental, and cultural impacts on a community. The session will highlight recent research and development and provide a U.S. DOT vision for an integrated transport system based on ITS technologies and automation. The speakers will also navigate through several planning and deployment projects around the world by both public and private sectors related to ATNs, discuss their impacts and lesson learned, and identify areas for future research and international collaboration.

Cobo 140 F

Organizer & Moderator
Gwo-Wei Torng, Principal Noblis Inc., USA

Speakers
Matthew Lesh, Transportation Specialist, U.S. DOT, USA
Adriano Alessandrini, Researcher, Centre for Transport and Logistics of the University of Rome La Sapienza, Italy
Robert Sheehan, Program Manager, ITS Joint Program Office, U.S. DOT, USA
Ryan Chin, Research Scientist, MIT Media Lab, USA

SIS28 – Meet The New Mobility Industry Vanguard: A View From the Trenches

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: ■ New Mobility

New Mobility is an “industry of industries” already representing a multi-billion dollar global market and growing fast. Setting it apart from its transportation forebears, New Mobility is striking because of its breadth and interconnectedness, enabled by Intelligent Transportation Systems (ITS) and inclusive of sectors as wide ranging as: consumer electronics, telematics, logistics & supply chain, public transit, energy, real estate, finance, and more. This interconnectedness between sectors is enabling new product design and manufacturing opportunities, richly knitted together via software, service, and shared use models.

Even more compelling is New Mobility’s direct and sophisticated response to (and capitalization on) recent demographic, environmental, economic, and cultural shifts and accelerating urbanization, globalization, and connectivity. The combination of which speak to both pressing needs and new preferences for flexibility and choice. Recognizing New Mobility as a system of systems, this is an opportunity to hear from successful game changers about what works, what’s not yet working, and how to scale up New Mobility solutions.

Cobo 141

Organizer
Susan Zielinski, Managing Director, SMART and MMPEI, Fellow, Transportation Research Institute (UMTRI) & Taubman College of Architecture & Urban Planning, University of Michigan, USA

Speakers
Prof. Amit Kapoor, Chairman, Institute for Competitiveness, India
Richard Harris, Solution Director, International Transportation and Government, Xerox Services, UK
Jan Black, Manager of Information Technology, TheRide/Ann Arbor Area Transportation Authority, USA
Shounak Athavale, Research Lead, Ford Motor Company, USA
Susan Zielinski, Managing Director, SMART and MMPEI, Fellow, Transportation Research Institute (UMTRI) & Taubman College of Architecture & Urban Planning, University of Michigan, USA
SIS29 – Smart Intelligent Traffic Intersections for the Connected Vehicle of the Future

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: ♦ Traffic Management

The session will describe a futuristic scenario that connected cars and autonomous cars may bring to our lives within the next decade, if not, the next five years, as driverless cars from various manufacturers start driving on the roads. The intelligent intersections may automatically ‘like’, a vehicle passing the intersection at desirable speeds. Will the traffic signals that we have been seeing for the last several decades undergo, such change dynamics? Will we start seeing such smart intelligent traffic signals, even connecting to the internet of things, as smart cars start, coming into our lives! The panel will discuss technology and engineering issues along with market drivers for such scenarios.

Organizer & Moderator
Harsh Verma, Vice-President R Systems, USA

Speakers
Harsh Verma, Vice-President, R Systems, USA
John Kenney, Principal Researcher, TOYOTA Info Technology Center, USA, USA
Thomas Timcho, Senior Research Scientist, Battelle Memorial Institute, USA
David Miller, Principal Systems Engineer, Siemens Road and City Mobility, USA
Eric Raamot, Vice President, Engineering, Econolite, USA
Reggie Chandra, CEO, Rhythm Engineering, USA
Barry Einsig, Director, Cisco Systems, USA

SIS30 – Evaluation Methodology of the Effects of ITS on CO2 Emissions and its Application

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: ♦ Sustainability

Some Intelligent Transport Systems (ITS) are expected to effectively reduce energy consumption and CO2 emissions from vehicular highway traffic. To enhance the introduction of ITS applications, it is important to evaluate the energy saving effects quantitatively and to open the results. It will help people who make an introduction plan of ITS applications to select appropriate ITS applications and to realize proper operation of the ITS applications and will make the effects more understandable to citizens. A methodology to evaluate the CO2 reduction effect by ITS applications was established and an international joint report named “Guidelines for Assessing the Effects of ITS on CO2 Emissions” was published in March 2013 by collaborative project between Europe, U.S. and Japan.

To disseminate the methodology, one of the most effective ways would be to demonstrate impact assessments of ITS on CO2 emissions by the methodology in various cities. An idea of “The Best Practice Showcase” is proposed for this purpose and rules to compare the assessment results for the showcase were created by the project member. This session introduces the methodology to evaluate the effects of ITS on CO2 emissions and the activity to enhance its application to various cities around the world.

Organizer
Hajime Amano, President and CEO ITS Japan, Japan

Moderator
Prof. Takashi Oguchi, Professor Institute of Industrial Sciences, The University of Tokyo, Japan

Speakers
Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO, Belgium
Evangelos Mitsakis, Centre for Research & Technology Hellas, Greece
Takashi Oguchi, Professor, The University of Tokyo, Japan
Speaker from Japan
Speaker from USA

SIS31 – Liability Issues for the Connected and Autonomous Vehicle

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: ♦ Connected Vehicles & Cooperative Systems

Product and infrastructure-related liability has been cited among the major concerns for deployment of both connected and autonomous vehicles. This session will address these concerns for both the private and public sector from the perspective of automotive-related liability precedents as well as potentially analogous examples from other transportation sectors. The discussion will include analysis of how current and potential government regulation may affect liability concerns for the connected and autonomous vehicle and supporting infrastructure so that both regulatory and product liability factors may be viewed in an integrated risk assessment context.

Organizer
Paul Laurenza, Member Dykema Gossett PLLC, USA

Moderator
Scott McCormick, President Connected Vehicle Trade Association, USA

Speakers
Kazuo Katou, Project Assistant Manager, DENSO Corporation, Japan
Maxime Flament, Head of Sector SafeMobility, ERTICO-ITS Europe, Belgium
Thomas Bamonte, General Counsel, North Texas Tollway Authority (NTTA), USA
Paul Laurenza, Member, Dykema Gossett PLLC, USA
SIS32 – Creation of Next Generation Mobility Society by Circulating ITS Big Data: From Autonomous Driving to Elderly Driving Support

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: Big Data and Open Data

With advocating the new businesses like “Mobility Data Bank” and the new ITS infrastructure concepts of “automobile cloud,” IIC is also working for the various activities for creating a new society with ITS with the target of Tokyo 2020 Summer Olympic Games. The new society will realize the networked mobility including automobiles, and create “ITS complex” with the huge traffic-related information from the integrated data.

In this session, IIC will propose a new model for ITS infrastructure for distributing the traffic Big Data, which will also extend the discussion to the current security issues about the risk of being the target of cyber-terrorism.

Organizer
Naoki Tokitsu, President Internet ITS Consortium, Japan

Moderator
Makoto Maekawa, Executive Expert NEC Corporation, Japan

Speakers
Makoto Maekawa, Executive Expert, NEC Corporation, Japan
Kazuya Takeda, Professor, Nagoya University, Japan
Andreas Mai, Director, API Platform, Cisco, USA
Eric Sampson, Professor, Newcastle University, UK

SIS33 – Big Data in Transit: Are Our Heads in the Clouds?

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: Public Transit

As discussed during the 2013 ITS World Congress in Tokyo, there are several examples of using big data in public transport. However, given the trends in big data, can public transport make the most of it given significant resource constraints, the availability of cloud-based services and the expectations of senior management? This session will explore the use of analytics, the availability of cloud-based tools, and the impact on operations. For example, Melbourne, Australia’s Yarra Trams used big data, the cloud, mobile, and analytics to transform its services. Further, in dealing with the flood of 2013, Calgary used big data to back up in operation. Also, this session will explore lessons learned in the use of analytical tools in public transport — particularly those tools that no longer require special skills to use.

Organizer
Carol Schweiger, Vice President TranSystems Corporation, USA

Moderator
C. Douglass Couto, Principal Aquila Group, USA

Speakers
Dean Economou, Technology Strategist, NICTA, Australia
Richard Harris, Solution Director, International Transportation and Government, Xerox Services, UK
Baruch Feigenbaum, Assistant Director of Transportation Policy, Reason Foundation, USA
Gord Elenko, Traffic Division Manager, City of Calgary, Canada
Dag Gogue, Chief Executive Officer, TransitLabs, USA

SIS34 – Minimum Quality Requirements for Driving Event Video Recorder to Secure Safe Driving Management

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: ITS Rules and Standards

In the last four World Congresses, this SIS has proved international context as to how effectively and greatly “driving event video recorder”, (DR) technologies contributed to the reduction of traffic accidents, combined with well-considered software application. DR users, either, professional or non-professional drivers, are apparently confused nowadays and expect to choose the appropriate DR device to achieve, their initial purpose, since diversified types of DR with wide range of price/quality are introduced on the market and subsequently the, effective/efficient use of them became very ambiguous. It is good time to discuss essential minimum requirements for DR technologies to achieve, our initial objectives, namely accident analysis and safety improvement in road traffic. Although some new technical trends have observed that, smart phone and/or EDR will unify DR technology eventually, we wish to discuss what specifications should be necessary for true DR technology, with high quality including high usability.

Each speaker will talk on minimum requirements to meet the goal as well, as additional requirements for qualified safety management. Thus, this SIS aims to indicate common minimum international requirements for, sound utility of DR for true and practical traffic safety management.

Organizer
Koji Ukena, CEO UK-Consultant on ITS, Japan

Moderator
Sadao Horino, Associate Professor Kanagawa University, Japan

Speakers
Joseph N. Kaniathantra, President, Active Safety Engineering LLC, Former Associate Administrator for Vehicle Safety Research, NHTSA (Retired), USA
Koji Ukena, CEO, UK-Consultant on ITS, Japan
Engstrom Johan, Senior Specialist, Volvo, Sweden
Kimio Kikuchi, Senior Director, Fujitsu Co., Ltd., Japan
 Ryuichi Ogishima, Group Manager, Panasonic Automotive & Industrial Systems Co. Limited, Japan
SIS35 – Human Factor Challenges of Vehicle Automation

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: Automated Transportation

The session will report on the achievements of the above initiatives, with particular emphasis on the discussions around the human factor challenges of automated vehicles. It will also report on the latest status of a document being prepared for the Tri Lateral Working Group on Automation in Road Transportation, which aims to “Identify, research, quantify, and evaluate applications that would improve the operation of Connected Road Vehicle Automation.” The aim of the Tri Lateral group is also to Co-ordinate research between U.S., EU and Japan on “the development of Connected Road Vehicle Automation technologies and concepts that facilitate deployment and market uptake.” The session will also disseminate results from a number of recently completed projects in EU, U.S. and Japan, on human factors of automated driving, as outlined below.

Organizer
Natasha Merat, Associate Professor University of Leeds, UK

Moderators
Alan Stevens with Nick Reed, Principal Human Factors Researcher, Transport Research Laboratory, UK
Natasha Merat, Associate Professor, University of Leeds, UK

Speakers
Erwin Boer, Director, Steering Entropy Ltd., USA
James Foley, Senior Principal Human Factors Engineer, Toyota Collaborative Safety Research Centre, USA
Janet Creaser, Researcher, University of Minnesota
Toshitake Kawai, Chief Engineer, Honda, Japan
Natasha Merat, Associate Professor, University of Leeds, UK
Alan Stevens with Nick Reed, Principal Human Factors Researcher, Transport Research Laboratory, UK

SIS36 – Revolutionizing Performance Assessment of the Roadway Network Through Data and Analytics

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: Big Data and Open Data

MAP-21 has put an emphasis on performance measures and operations strategies rely on a true assessment of how the transportation system is functioning. Identifying mobility issues in a state or metropolitan area leads to an “if we can measure it, we can manage it” ethos. Find out how agencies with limited resources are using data about how traffic is behaving in real-time and historically, plus analytics tools to assess congestion, prioritize projects and inform capital programs.

Organizer
Pete Costello, Director Business Development, Public Sector INRIX, USA

Moderator
Justin Graham, Head of Product Management - Analytics INRIX, USA

Speakers
Stephen Remias, Transportation Research Engineer, Purdue University, USA
John MacAdam, Transportation Engineer, Ohio DOT, USA
Justin Graham, Head of Product Management - Analytics, INRIX, USA
Michael Finn, Head of Go to Market Americas Connected Driving, HERE, USA

SIS37 – State of the Art and Benefits of Real Time Information for Commercial Vehicles

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: Freight

Freight movement is critical to the economies of all nations. The number of commercial vehicles is expected to grow by more than 10 percent over the next few years. The growing interest in moving goods was reflected in MAP-21 and will certainly carry forward in future transportation policy directives. With this growing interest and an expected agency decision in 2014 regarding connected vehicle safety for heavy vehicles, we are at a tipping point regarding the integration of ITS technology into our freight management systems. ITS technologies and systems can deliver improved mobility and efficiencies to all partners in the industry: the trucking companies, the drivers, and the road managers (government agencies). Technologies and services could address fuel efficiency, commercial vehicle routing, improved parking availability, cargo security, safety, and alternate fuels.

Organizer
Fredrick M Warner IV, CEO TSPS, Inc, USA

Moderator
Harry Voccola, Executive Advisor, HERE, USA

Speakers
John Woodroffe, Director, Transportation Safety Analysis, University of Michigan Transportation Research Institute (UMTRI), USA
Collin Castle, Connected Vehicle Technical Manager, Michigan DOT, USA
Eric Morris, Associate Vice President, HNTB Corporation, USA
SIS38 – TPEG Traffic Services Worldwide

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Traffic Management

TPEG is a versatile, content-rich protocol suite for the distribution of traffic and traveler information services. This special session will introduce TPEG services that are currently operated worldwide, as well as ongoing development work. For participants that consider the implementation and rollout of TPEG services and products, this session will provide an excellent overview of TPEG applications already standardized, as well as detailed information of how to engage in currently ongoing development and standardization work within the Traveler Information Services Association (TISA).

**Organizer**
Stephanie Chaufton, TISA Coordinator, TISA, Belgium

**Moderator**
Matthias Unbehaun, Executive Director, TISA, Belgium

**Speakers**
- Matthias Unbehaun, Executive Director, TISA, Belgium
- Derek Rohloff, Vice President, Automotive Strategic Partnerships, Clearchannel, USA
- Saurav Bhattacharyya, CEO, Quantum Inventions, Singapore
- Ralf-Peter Schäfer, Vice President Traffic and Travel Information, TomTom, Germany
- Jim O’Neill, CEO North America, GEWI, USA
- Scott Sedlik, VP of Product & Market Development, INRIX, USA

---

SIS39 – Saving Lives with Photo Enforcement

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Traffic Safety

The challenge of improving road safety is just as important now as it was when the United Nations launched its Decade of Action for Road Safety. However as budget restraints impact network operations and even basic road maintenance budgets are cut, we have to be smarter, about how we try to improve safety.

A key benefit of ITS deployment is improved information, management, and incident awareness response and road safety.

This session will focus on the safety contribution of ITS, look at examples, of real benefits, consider public perception of safety cameras and discuss how to ensure that road safety is considered as a primary objective of, utilizing new technology for our transport systems.

**Organizer**
Robert De Beukelaer, Solution Delivery Director EMEA, Xerox Services, Netherlands

**Moderator**
Susan Spencer, Partner, Susan Spencer & Associates, Canada

**Speakers**
- Eva Lundberg, Project Leader Traffic Safety Cameras, Swedish Transport Administration, Sweden
- Paul Vorster, CEO, ITS South Africa, South Africa
- Eva Molnar, Director, Division of Transport, United Nations Economic Commission for Europe - UNECE, Switzerland
- Robert De Beukelaer, Solution Delivery Director EMEA, Xerox Services, Netherlands
- James Cheeks, Chief, Traffic Signals, Safety, Standards and ITS, District DOT, USA

---

SIS40 – Leveraging ITS and the Internet of Things to Enable Complete Streets

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Smart Cities

Complete Streets policies are being adopted around the world to improve public infrastructure and livability. With over 550 policies in place in the United States alone, up from just 219 in 2010, this trend has gained significant momentum in recent years. Meanwhile Intelligent Transportation Systems and the Internet of Things with all the buzz at this year’s Consumer Electronics Show, is quickly evolving the world around, us to enable unprecedented amounts of data collection and intelligent automation.

Communities can leverage ITS and the Internet of Things to make Complete Streets policies a reality. Environmental components that have, historically been difficult to measure with statistical significance can now be measured such as detailed vehicular traffic patterns, public transit, efficiency, bicycle ridership, and pedestrian volume. While many cities today already have disparate technologies for some of these applications, now all modes of travel can be analyzed to allow city planners to design and realize the goal of truly Complete Streets.

**Organizer & Moderator**
Hamed Benouar, Vice President, Business Development and Government Relations, Sensys Networks, USA

**Speakers**
- Theo Quick, Director - Global Transport, Post & Logistics Industry, CGI, UK
- Pamela Nesbitt, Distinguished Engineer and CTO, Smart Cities, IBM, USA
- Glenn Geers, Technology Director, NICTA, Australia
- Steve Heminger, Executive Director, Metropolitan Transportation Commission (MTC), USA
- Andrew Fremier, Deputy Executive Director, Operations, San Francisco MTC
SIS41 – ITS for Global Mega Events

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: ■ International Cooperation to Expand ITS

This session will present how ITS takes the global mega events (e.g. World Cup Soccer, Olympic Games, etc.) which generate additional travel demands and have significant impacts on transport systems in the host cities and regions. Managing transport systems before and during a global mega event obviously is a big challenge in ITS area. Speakers from around the world who are operators of public transport, provider of ITS services with traveler information, or transport planners for mega events will introduce their experiences with transport services for the Olympic Games 2014 in Sochi, 2016 Rio de Janeiro, 2018 PyeongChang, and 2020 Tokyo. This special interest session is to be proposed again with the same title as it was planned in the 20th ITS World Congress in Tokyo, 2013.

Organizer & Moderator
Young-Jun Moon, Director The Korea Transport Institute, Korea

Speakers
Wim Ferreira, ITS Transportation Specialist, Tescho, South Africa
Vladimir Kruchkov, Director, INGOS, Russia
Young-Jun Moon, Director, The Korea Transport Institute, Korea
Hajime Amano, President and CEO, ITS Japan, Japan

SIS42 – Impacts and Opportunities for Self-Driving Vehicles

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Automated Transportation

Embracing a future with self-driving vehicles, what can we expect? Speakers will present what we know and we can anticipate in the areas of: (1) Energy and the Environment; (2) Infrastructure and Operations; (3) Institutional, and Legal Issues; (4) Human Factors.

Organizers
Steven Dellenback, Director R&D Southwest Research Institute, USA
Jane Lappin, Program Manager John A. Volpe National Transportation Systems Center, U.S. DOT, USA
Moderator
Jane Lappin, Program Manager John A. Volpe National Transportation Systems Center, U.S. DOT, USA

Speakers
Ginger Goodin, Senior Research Engineer, Texas A&M Transportation Institute, USA
Natasha Merat, Associate Professor, University of Leeds, UK
Matthew Barth, Professor of Electrical Engineering, Director of CE-CERT, University of California - Riverside, USA
John Woodroffe, Director, Transportation Safety Analysis, University of Michigan Transportation Research Institute (UMTRI), USA
Paul Carlson, Senior Research Engineer, Texas A&M Transportation Institute, USA

SIS43 – What is the Most Important Point in ITS Deployment in Mega-Cities of Asia-Pacific?

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Traffic Management

In emerging countries/areas of Asia-Pacific, ITS has already been recognized and introduced as a vital tool to solve the various traffic problems efficiently, but it’s not always successful. This session focuses on the traffic information system as one of the most important, fundamental systems of ITS and various traffic management systems based on this system, such as traffic signal control system, BRT, ERP, etc and so on. Speakers from ITS Asia Pacific and the Asian Civil Engineering Coordinating Council (ACECC) will introduce their experiences about, these systems and discuss their effects and challenges of maintenance & operations and so on forwards the further development and deployment, of ITS.

Organizer
Takaaki Segi, Director ITS Japan, Japan
Moderator
S.K. Jason Chang, Professor National Taiwan University, Chinese-Taipei

Speakers
Shunsuke Kamijo, Associate Professor, Institute of Industrial Science, The University of Tokyo, Japan
Narupiti Sorawit, Thai ITS Association (ITS Thailand), President, Thailand
Le Hung Lan, Professor, National Center for Technological Progress, Vietnam
Kian Keong Chin, Chief Transportation Engineer & Group Director, Land Transport Authority, Singapore
**SIS44 – Seamless Mobility — ITS in Smart Cities, an Asia Pacific Perspective**

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Smart Cities

By 2050, the human population will reach 9 billion people, with 75% of the world’s inhabitants living in cities. Smart technologies can help address some of the challenges of rapid urbanization by improving services and managing their efficiency.

A smart city uses intelligent technology to enhance our quality of life in urban environments. Urban mobility and transport is vital for the functioning of smart cities. As cities grow and the urban sprawl gives birth to the megacities, the challenge within cities will be to integrate the different modes of transport by using the vast amounts of data more effectively. An estimated $117 billion will be invested worldwide over the next 20 years on smart city infrastructures, including $31.2 billion in digital systems and infrastructure for smart transport solutions. A sustainable, safe and seamless co-modal mobility system will be fundamental for growth and ‘Seamless Mobility’ will be one pillar for achieving this success.

This Special Interest Session will explore the concepts of Seamless Mobility and how ITS systems will support and connect services across its entire transportation network, including subways, trams, buses, vehicular and bicycle traffic, and more.

**Organizer & Moderator**
Mark Byrne, Vice President Sales Xerox Business Services (Australia) Pty Ltd., Australia

**Speakers**
Iain McGlinchy, Principal Adviser, Ministry of Transport, New Zealand
Dean Economou, Technology Strategist, NICTA, Australia
Agachai Sumalee, University of Thailand, Thailand
Ke Zhang, Vice Director, TOCC, Beijing Municipal Commission of Transport, China
Mong Kee Sing, President, ITS Singapore, Singapore
A Speaker from Japan

**SIS45 – Cooperative ITS Vehicle Architecture and Applications**

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

With Vehicle-2-X communication deployment well under way, cooperative ITS will also be enhanced with hybrid infrastructure-based communication, systems like 4G/LTE. This introduces number of additional stakeholders and actor roles to ensure proper traffic and safety related information, exchange on technical and administrative levels. Therefore, a converged architecture model — currently initiated not only in Europe but all regions, — can provides the means for discrimination free access for various information providers and consumers to participate in the market of, cooperative ITS. This session will present the related activities from Europe, USA, and Japan. Additionally, the panel will discuss respective, harmonization opportunities.

**Organizer**
Ilja Radusch, Head of Department Automotive Services and Communication Technologies Daimler Center for Automotive IT Innovations, Germany

**Moderator**
Luisa Andreone, R&D EMEA Product Development, Strategic Research & Collaboration Centro Ricerche Fiat S.C.p.A. (CRF), Italy

**Speakers**
Prof. Horst Wieker, Professor for Communication Technologies, htw saar, Germany
Sam Oyama, Senior Researcher, Association of Radio Industries and Businesses (ARIB), Japan
Steve Sill, Program Manager, Vehicle Safety Technology, ITS Architecture and Standards, ITS Joint Program Office, Research and Innovative Technology Administration, United State DOT, USA
Ilja Radusch, Head of Department Automotive Services and Communication Technologies, Daimler Center for Automotive IT Innovations, Germany

**SIS46 – Applying Intelligent Transportation Systems to Cross Border Issues**

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Traffic Management

Intelligent Transportation Systems can facilitate the movement of people and goods across international borders. Examples of the application of these technologies can be found at the Detroit-Windsor border and the Port Huron-Sarnia border between Canada and the United States. The Detroit-Windsor crossing is particularly important for freight movement in North America. Approximately 7400 commercial vehicles per day make this crossing. This session is intended to address cross-border traffic management and cross-border supply chains.

**Organizer & Moderator**
Richard Beaubien, Managing Director Beaubien Engineering, USA

**Speakers**
Bill Anderson, Ontario Research Chair in Cross Border Studies, University of Windsor, Canada
Neal Belitsky, President, Detroit Windsor Tunnel, USA
Stephen Erwin, Head, Intelligent Transportation Systems Program, Ontario Ministry of Transportation, Canada
### SIS47 – National ITS Associations — Driving Mobility Deployment

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Session Track:** New Mobility

National ITS Associations are leading the debate on the future of our transportation services. From organizing events and conferences through spreading knowledge and understanding and providing advice and advocacy to government, the influence and part they play in shaping policy and deployment is considerable. Increased cooperation between the national associations promises to help really accelerate ITS deployment. This session will provide insight into how ITS Associations are helping to accelerate ITS deployment.

**Organizer**
Richard Harris, Solution Director, International Transportation and Government Xerox Services, UK

**Moderator**
Eric Sampson, Professor Newcastle University, UK

**Speakers**
- Christer Karlsson, CEO, ITS Sweden, Sweden
- Shinya Omi, Senior Vice President, ITS Japan, Japan
- Speaker from ITS Australia
- Michael De Santis, Chairman and CEO, ITS Canada, Canada
- Marije de Vreeze, Manager ITS Netherlands, Connekt/ITS Netherlands, Netherlands
- Thomas Kern, Executive Vice President, ITS America, USA

### SIS48 – Smart Parking: The Foundation and Accelerator for the Smart City and Connected Car

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Smart Cities

Parking has an undeniable impact on local traffic, economies, and sustainability. New intelligent parking technology helps motorists find open spaces in real time. But how can cities use this technology to coordinate resources for more effective transportation, policy, and business? And how do smart parking systems further the development and success of the Connected Car? Many smart city and technology industry leaders are calling parking the “killer app” for developing the Internet of Things (IoT), and smart cities themselves, as well as being a crucial element to the advancement of the Connected Car.

Experts from the technology sector, municipalities, and automobile industries discuss examples and their vision for the future of intelligent cities and the Connected Car, and what it means for businesses, governments, and economic growth.

**Organizer**
Justin Bean, Sr. Marketing Manager Streetline Inc.

**Moderator**
Praveen Narayan, Research Manager Frost and Sullivan, USA

**Speakers**
- Kurt Buecheler, SVP Business Development and Channel Partners, Streetline, Inc., USA
- Hardik Bhatt, Director, Global Market Development, Internet of Everything for Cities, Cisco, USA
- Bob Tiderington, Senior Manager, New Business Development, General Motors, USA
- Mike Tinskey, Director of Vehicle Electrification and Infrastructure, Ford Motor Company, USA
- Joachim Hauser, Director BMW iMobility Services - Parking, BMW, Germany

### SIS49 – Global Perspectives: Cooperative Energy Efficient Applications

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

**Session Track:** Sustainability

Around the globe there are many programs that aim to cut down fuel consumption and emission by developing in-vehicle and traffic management applications. Cooperative technology — vehicle-to-vehicle and vehicle-to-infrastructure communication — is the vocal point of many of these applications. This session offers an overview of current activities and recent results from the European Union, United States and Japan. Presentations will focus on recent lessons learned from pilots and validation, evaluation and application impact, as well as successful application design and deployment aspects. Regional programs have converged through collaboration efforts such as an International Joint Report on assessment methodology and a working group on sustainability applications as part of the EU-US ITS cooperation. This year’s session aims to update the state of play and set the research agenda.

**Organizer**
Jaap Vreeswijk, Product Manager Research Imtech Traffic & Infra, Netherlands

**Moderator**
Marcia Pincus, Program Manager ITS Joint Program Office, U.S. DOT, USA

**Speakers**
- Detlef Kuck, Technical Expert Infotainment Strategies, Ford, Germany
- Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO ITS Europe, Belgium
- Hesham Rakha, Professor of Civil and Environmental Engineering and Director Centre for Sustainable Mobility, Virginia Tech, USA
- Matthew Barth, Professor of Engineering, University of California - Riverside, USA
- Masao Fukushima, Technical Consultant (ITS), Nissan Motor Co., Ltd., Japan
SIS50 – Towards Automation Deployment

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

**Session Track:** Automated Transportation

The goal of this special session is to discuss the strategic issue of automation research challenges and deployment and to open the debate between a Full Automation scenario and a scenario where automation will be introduced gradually and step by step leading consequently to mixed traffic scenarios where possibly all modes of automation will be present. The session will also examine the new research activities in the area and especially the Adaptive IP evolutions. Attendees will have the opportunity to learn more about the new and integrated automated functions that will be developed in the framework of the project and also discuss the still remaining research challenges that need to be addressed to enable deployment.

**Organizer & Moderator**
Angelos Amditis, Research Director Institute of Communication and Computer Systems, Greece

**Speakers**
- Angelos Amditis, Research Director, Institute of Communication and Computer Systems, Greece
- Luisa Andreone, Project Manager European Network, Centro Ricerche Fiat, Italy
- Aria Etemad, Senior Project Manager, Volkswagen AG, Germany
- Adriano Alessandrinii, Researcher, Centre for Transport and Logistics of the University of Rome La Sapienza, Italy
- Steven Shladover, Research Engineer/Program Manager, California PATH, ITS Berkeley, University of California, USA
- Masao Fukushima, Technical Consultant (ITS), Nissan Motor Co., Ltd., Japan

Cobo 141

---

SIS51 – Public Transport in Mega Cities

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

**Session Track:** Public Transit

Due to the increasing population and vehicles, the traffic jam and Eco problems in mega cities/regions are becoming serious. Convenient, efficient public transport service will contribute more to solve the jam and Eco problems in mega cities/regions, also to support the economic development. It will be discussed in this session how to improve the public transport services through useful ITS technologies.

**Organizer**
Weiyun Jiao, Department Manager China National ITS Center, China

**Moderator**
Ke Zhang, Vice Director, TOCC Beijing Municipal Commission of Transport, China

**Speakers**
- Jiaqi Zhai, Researcher, TOCC, Beijing, China
- Jean-Charles Caulier, Vice President, International Transportation and Government, Xerox, France
- Koorosh Olyai, Senior Principal, Stantec, USA
- Rohit Natekar, Business Leader - ITS Program & Head of Sales, Automotive IBU, India/MEA/SEA, KPIT Technologies Ltd., India

Cobo 142 C

---

SIS52 – Road Authorities’ Strategies for Moving from Co-operative Systems to Automation

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

Cooperative systems in the field of road vehicles have been a subject for research and development for many years. In parallel, the development towards more automated traffic system has been evolving. The autonomous vehicle is the most central part in this development and is driven by the vehicle-OEMs. The autonomous vehicle will primarily address the shortcomings of the human being, first and most to support traffic safety, but will also address comfort and efficiency.

This session will give some national road authorities views of cooperative systems, as a paradigm itself but also as a technology to support automation. The session will also highlight steps to be taken to support the development and deployment and to assess the need for further research and for field operational tests, but also the need for policy development and strategic statements from the side of national road authorities.

**Organizer**
Bengt Hallström, Analyst and Senior Advisor Swedish Transport Administration, Sweden

**Moderator**
Jan Bergstrand, Head of Section Sweden Transport Administration, Sweden

**Speakers**
- Merja Penttinen, Senior Scientist, Finnish Transport Agency, Finland
- Bengt Hallström, Analyst and Senior Advisor, Swedish Transport Administration, Sweden
- Anders Godal Holt, Head of Section ITS, Norwegian Public Roads Administration, Norway
- Eva Schelin, Program Director FFI, Vinnova, Sweden

Cobo 110 A
SIS53 – Evaluation of Costs and Benefits of Cooperative Systems and Automation Applications

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.

Session Track: ■ Connected Vehicles & Cooperative Systems

As Connected Vehicle technology and programs mature and move from prototyping to pilot implementation phases, evaluating the costs and benefits and sharing the successes and lessons learned from these implementations becomes increasingly important to help promote wide scale, deployment. This session will share findings from the ongoing U.S. DOT ITS JPO Connected Vehicle-related program evaluations and, benefit-cost assessments, and from similar efforts being conducted by our EU and Japanese counterparts, as well as joint international efforts. Specific topics will include various evaluation types, approaches to estimating costs and benefits, challenges involved in estimation along, with mitigation strategies, methods for evaluation of effectiveness, and tools to harmonize costs and benefits from different implementations. This panel will be of particular value to public and private sector decision-makers. Information on approaches to evaluation of costs and benefits, will help public sector decision-makers develop plans for deployment and identify.

Organizer & Moderator
Dale Thompson, Program Manager, ITS Joint Program Office U.S. DOT, USA

Speakers
Takahiro Tsukiji, Researcher, National Institute for Land and Infrastructure Management, MLIT, Japan
Dominie Garcia, Associate, Booz Allen Hamilton
Dale Thompson, Program Manager, ITS Joint Program Office, U.S. DOT, USA
Maxime Flament, Head of Sector SafeMobility, ERTICO-ITS Europe, Belgium
Emily Nodine, Mechanical Engineer, Advanced Transportation Technologies Center of Innovation, John A. Volpe National Transportation Systems Center, Research and Innovative Technology Administration, Volpe National Transportation Systems Center, U.S. DOT, USA
Alexander Jendzejec, Booz Allen Hamilton Inc., USA

SIS54 – International Harmonization of the Interoperability Assessment Processes

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.

Session Track: ■ ITS Rules and Standards

Interoperability defines the ability of devices to communicate together in order to provide connected services. Interoperability is granted by implementing technical specification based on standards and ensuring that these implementations are compliant to the standards as well as, minimum performance requirement. Different continents are likely to apply for different schemes of standards. Furthermore, the compliance, assessment applicable to product and services may differ as well. These differences are creating additional constraints to suppliers aiming, at delivering similar products for a global market. Also, significant differences in quality criteria may create a lack of trust from the users. Harmonizing Interoperability assessment method is therefore critical to allow global markets and keep the user confident in ITS services.

Organizer & Moderator
Francois Fischer, Senior Project Manager ERTICO – ITS Europe, Belgium

Speakers
Jörn Edlich, Senior Business Development Manager, CETECOM, Germany
Christian Rousseau, Strategic Expertise Leader for Mobility and Transport Systems, Renault SAS, France
Hans-Jürgen Mäurer, Head of Development Engineering, DEKRA, Germany
Jean-Michel Henchoz, Senior Technical Engineer, DENSO INTERNATIONAL EUROPE, Belgium
Walton Fehr, Manager, ITS Systems Engineering, ITS Joint Program Office, U.S. DOT, USA

SIS55 – Implications of SHRP 2 Reliability Research for ITS

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.

Road users understand travel time reliability, at least intuitively. Often they build in extra travel time to be on time to compensate for unexpected events. Travel time reliability has just taken on more importance because Congress recently passed MAP-21. As a result, all states and MPOs must adopt performance-based planning and programming and address travel time reliability, among other goals. SHRP 2 developed significant research products relevant to ITS that can help achieve the reliability goal. Examples include the next generation of traffic monitoring systems; integrating reliability into simulation models; and ideas for communicating reliability traveler information.

Organizer
William Hyman, Senior Program Officer Transportation Research Board, USA

Moderator
Carlos Braceras, Executive Director Utah DOT, USA

Speakers
Robert Skinner, Jr., Executive Director, Transportation Research Board, USA
George List, Professor, Department of Civil, Construction, and Environmental Engineering, Institute for Transportation Research and Education, North Carolina State University
Zongwei Tao, President, Weris, Inc., USA
SIS56 – Using Information and Telecommunication Technologies for Improving ITS Operations

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.

Creative uses of information and telecommunication technologies in both the private and public sectors provide opportunities for better operations of ITS systems, improved communications with system users (travelers), and enhanced planning for future transportation needs. This session will look at technologies for better decision making, more efficient operations, and better customer communications. Special attention will be given to adopting cloud solutions, use of geospatial decision tools, virtualization, mobility, social networks and security.

Organizer & Moderator
C. Douglass Couto, Principal Aquila Group, USA

Speakers
C. Douglass Couto, Principal, Aquila Group, USA
Adam Feng, Department Manager, Industrial Technology Research Institute (ITRI), Chinese-Taipei
Terry Bills, Transportation Industry Manager, ESRI, USA
Dan Scali, Manager - Industrial Control Systems Security Consulting, Mandiant, a FireEye company, USA

SIS57 – Telematics Services and Dynamic Re-charging Solutions for Market Integration of Electric Vehicles

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

This session presents the latest developments in the area of Electromobility and especially solutions that may alleviate the drawbacks of existing on-board battery packs, namely on-road charging and ITS providing dynamic and real time information on vehicle range and on charging possibility. In more detail, a proposal for a general architecture will be presented, which will allow the integration of electric vehicles into the different infrastructure systems cooperating with each other, so as to offer precise telematics services and charging management services to users based on real time information. The different available inductive charging technologies will be also presented as well as a methodology so as to identify the benefits and costs from the wide implementation of such technologies, so that the investments required in the coming years for widespread implementation and exploitation of electric vehicles can be fully defined and quantified. Examples of implementation of ITS technologies and inductive charging technologies, conceived to enable full integration in the grid and road infrastructure within urban- and extra-urban environments for a wide range of future electric vehicles, will be also presented.

Organizer & Moderator
Angelos Amditis, Research Director Institute of Communication and Computer Systems, Greece

Speakers
John Inglish, Board of Directors member, WAVE (Wireless advanced Vehicle electrification) Company, USA
Sebastiaan Meijer, Associate Professor, Head of GaPSlabs, KTH Royal Institute of Technology, Sweden
Denis Naberezhnykh, Head of Low Carbon Vehicle and ITS Technology, TRL LIMITED, UK
Angelos Amditis, Research Director, Institute of Communication and Computer Systems, Greece
Lan Lin, Senior Researcher, Hitachi Europe Limited, France
Chris Borroni-Bird, VP Strategic Development, Qualcomm Technologies Inc, USA

SIS58 – The Importance of the Back-office — Addressing the Payment Processing and Reconciliation Challenge

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

Transportation infrastructure operators are increasingly looking at how their back-office systems support them in achieving operating efficiencies, through back-office consolidation and account operability while at the same time addressing the ever increasing demand for strict accountability, for funds, payment data security and personal data security. This session explores current back-office challenges and solutions being deployed to, address these challenges.

Organizer & Moderator
Phil Silver, Director, Business Development Urban Insights Associates, USA

Speakers
Gregory Le Frois, Vice Chairman, Toll Services, HNTB Corporation, USA
Ernesto Natera, Account Executive, Aptean, USA
Conrad Sheehan, General Manager, C-SAM, Inc., a MasterCard company, USA
Lawrence Yermack, Strategic Advisor, Cubic Transportation Systems, USA
Martin Röhrlief, Head of Staff Division “Combined Mobility”, uestr aG, Germany
SIS59 – Paving the Way for Self-Driving Cars: Legislative and Legal Issues on the Horizon for Autonomous Vehicles

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

Session Track: Automated Transportation

Automated vehicle (“AV”) technology is advancing toward implementation, but critical public policy and legal issues must be addressed to allow for widespread use of these vehicles, including:

- Achieving the economic and political will to fund the infrastructure necessary to make AVs an everyday reality.
- Defining governmental roles in funding and regulating AV technology, and achieving uniformity in regulations.
- Amending existing laws, including state motor vehicle, penal, and insurance codes to permit the use of AV technology.
- Delineating liability for accidents, misuse, and other problems that could be emerge from widespread use of AV technology.
- Addressing the legal risks for vehicle manufacturers and technology suppliers.
- Protecting data used in AV technology.

This session will be conducted in a panel format that allows for discussion of these issues and possible solutions. Experts from fields such as government/regulatory, technical/engineering, legal, lobbying, insurance, and academia will offer diverse perspectives on these key public policy and legal issues.

Organizer
Thomas Manganello, Warner Norcross & Judd LLP

Speakers
James Anderson, Senior Behavioral Scientist, RAND Corporation, USA
Kirk Steudle, Director of the Michigan DOT (MDOT), Michigan DOT, USA
Bryant Walker Smith, Assistant Professor, University of South Carolina School of Law and (by courtesy) School of Engineering, University of South Carolina, USA
Homayune Ghaussi, Partner, Warner Norcross & Judd LLP, USA
Thomas Manganello, Warner Norcross & Judd LLP, USA

SIS60 – Radiocommunication Technologies for Advanced ITS

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

In this session, the speakers invited from Europe, the United States, Japan, and the automaker will report the current status of their ITS radiocommunication policies, standards, and technologies.

The session will focus on the issue of 700 MHz band that Vehicle to Vehicle (V2V) Communication and Vehicle to Infrastructure (V2I) Communication is going to be in operation within a few years in Japan. On the other hand, the 5.9 GHz Wireless Access in Vehicular Environments (WAVE) standards are almost finalized and ready to be deployed in Europe and North America. We will figure out and dissect current issues regarding our international harmonization of ITS radiocommunication standards and related projects, and then discuss solutions to each.

Organizer
Kenta Mizui, Chief Ministry of Internal Affairs and Communications, Japan

Moderator
Sam Oyama, Senior Researcher Association of Radio Industries and Businesses (ARIB), Japan

Speakers
Kenta Mizui, Chief Ministry of Internal Affairs and Communications, Japan
Masashi Yamamoto, MAZDA Motor Corporation, Japan
John Kenney, Principal Researcher, TOYOTA Info Technology Center, USA
Niels Peter Skov Andersen, Chairman, TC ITS, European Telecommunications Standards Institute (ETSI), Denmark

SIS61 – Vehicle to Infrastructure Considerations for Transportation Agencies

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

Unlike “traditional” road and transportation projects, “Vehicle-to-Infrastructure” solutions require the seamless integration of three, previous independent entities: roadside infrastructure, the vehicle, and a functioning application in order to be feasible. In this session, we will hear from experts with experience in deploying advanced transportation technology on what to expect with initial vehicle-to-infrastructure, deployments, challenges faced during the adoption and deployment of this new technology (some of which may have “tried and true” solutions, and others which may have never before been faced many transportation agencies), and what the technology means to the future of surface transportation.

Organizer & Moderator
Matthew Smith, ITS Program Manager Michigan DOT, USA

Speakers
Collin Castle, PE, Connected Vehicle Technical Manager, Michigan DOT, USA
John Corbin, PE, PTOE, Director of Traffic Operations, Iowa DOT, USA
Faisal Saleem, ITS Branch Manager & MCDOT SMARTDrive Program Manager, Maricopa County DOT, USA

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

**Session Track:** Connected Vehicles & Cooperative Systems

It is important for all countries to protect road traffic users from traffic accidents, especially the critical ones. These negative impacts in motorized societies are created by human errors. We think if a driver could recognize the approach of dangers in advance with ITS, it can save him/her from committing these errors, and prevent many traffic accidents before they occur. We believe that V-I systems for traffic accident avoidance are indispensable technologies as autonomous vehicle technologies rapidly grow around the world. This session aims to introduce the verification of our driving safety support systems demonstrated at the ITS World Congress Tokyo showcase and to discuss the technological and institutional subjects of V-I Cooperative systems for traffic accident avoidance, including the roadmap of driving support systems advancing in Japan, EU and the United States.

**Organizers**
Takashi Kimura, leader of International Cooperation Subcommittee UTMS Society of Japan, Japan
Yashushi Domae, Vice Principal, National Police, Japan

**Moderator**
Prof. Takashi Oguchi, Institute of Industrial Sciences, The University of Tokyo, Japan

**Speakers**
Nobuyasu Kitayama, Assistant Director, National Police Agency, Japan
Shigeru Inoue, Senior Member, UTMS Society of Japan, Japan
Masao Fukushima, Senior Member, UTMS Society of Japan, Japan
Carl K. Anderson, Connected Vehicle Program Manager, Federal Highway Administration, U.S. DOT, USA
Frans op de Beek, Principal Advisor for Traffic Management, Dutch Ministry of Infrastructure and the Environment-Rijkswaterstaat, Netherlands

SIS63 – Government Initiatives in Vehicle Automation

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

**Session Track:** International Cooperation to Expand ITS

This session will provide a high level view on the policy and research approaches in Europe, Japan, and the U.S. in the area of vehicle automation, in both the near term and long term. Speakers will be asked to focus on discrete levels of automation, as well as setting (highway, urban), and the role of the government in making automated driving a reality.

**Organizer & Moderator**
Richard Bishop, Principal Bishop Consulting, USA

**Speakers**
Hideyuki Kanoshima, Senior Researcher, ITS Division, National Institute for Land and Infrastructure Management, Japan
Kevin Dopart, Program Manager, Connected Vehicle Safety & Automation, Joint Program Office, U.S. DOT, USA

SIS64 – Data, Directives and Regulations: How Crowd Sourced Data is Helping Agencies Meet New Rules

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

**Session Track:** Big Data and Open Data

Both the U.S. and the EU have taken steps in recent years to promote the availability of real-time traffic information on major highways. The U.S. Federal Highway Administration has established by Rule the Real-Time System Management Information Program (RTSMIP) with initial requirements becoming active November 2014. The European Union has established the ITS Directive as a legal framework to accelerate the deployment of innovative transport technologies, including specifications for EU-wide real-time traffic information services, with a subset of free minimum services. This session will review the status of these regulatory actions and provide real-world examples of how agencies are utilizing the latest technologies and business models to meet and exceed these regulations.

**Organizer**
Pete Costello, Director Business Development, Public Sector INRIX, USA

**Moderator**
Rick Schuman, Vice President and General Manager, Public Sector INRIX, USA

**Speakers**
Robert Arnold, Director, Transportation Management, Office of Operations, Federal Highway Administration, U.S. DOT, USA
George Schoener, Executive Director, I-95 Corridor Coalition, USA
Claire Dépré, Head of Unit Intelligent Transport Systems, DG MOVE, European Commission, Belgium
Graham Hanson, Head of Policy, Traffic Signs, Department for Transport, UK
Thomas Kusche, Traffic Telematics Coordinator, ARD & President, TISA, Germany
SIS65 – Can we Take Traveler Information to the Next Level to Improve Mobility?

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: ■  New Mobility

Technology deployment has been critical in improving mobility from the view of state, regional, and local transportation agencies, travelers, and Federal governments. This session will explore answers to the following critical questions: (1) Do we know enough, about customer values and quality requirements to develop high value services that will result in an improvement in mobility? (2) How, would network performance change if more private travelers made more economical trip choices? (3) What is the threshold level of inconvenience or cost that motivates travelers to change their travel patterns and modes? (4) What if network managers could predict, the impact of real-time information on travelers’ trip choices, and use that information to improve network conditions?

Organizer & Moderator
Carol Schweiger, Vice President TranSystems Corporation, USA

Speakers
Melanie Crotty, Director, Operations, Metropolitan Transportation Commission, USA
Martin Böhm, Head of Unit ITS Deployment, AustriaTech GmbH, Austria
Tetsuo Ishizuka, Director of Frontier Service Development Laboratory, East Japan Railway Company
Filip Kjellgren, Program Manager, VINNOVA - Swedish Governmental Agency for Innovation Systems, Sweden

SIS66 – How Can We Design Better Freight Transport ITS Solutions?

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: ■  Freight

How do we handle a growing transport demand when we cannot curb mobility? We are facing an increased capacity strain, especially in the, urban environment and the interface to long distance transport. The transport system becomes increasingly incident sensitive. Reliability, cannot be taken for granted. With limited possibilities of expanding capacity we will have to use existing infrastructure as efficiently as possible. ITS freight services have the potential to make a difference by promoting, a more reliable freight transport flow through transport corridors and urban transport networks. By informing and managing traffic with the help from freight related data, various information services, access services, priority services, booking services, intelligent truck parking, etc., rolling stock can make a better use of the existing infrastructure. Cooperative systems will increase the potential of ITS services.

Organizer & Moderator
Arne Lindeberg, Project Manager Swedish Transport Administration, Sweden

Speakers
Fotis Karamitsos, Deputy Director General, European Commission, DG MOVE, Belgium
Michael Nielsen, General Delegate, IRU, Belgium
Nils Heine, Managing Partner, CPL Competence in Ports and Logistics, Germany
Arne Lindeberg, Project Manager, Swedish Transport Administration, Sweden
Suzanne Hoadley, Traffic Efficiency & Mobility Coordinator, Polis, Belgium
Richard Biter, Assistant Secretary, Intermodal Systems Development, Florida DOT, USA

SIS67 – Updates of Connected Vehicle in China

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: ■  Connected Vehicles & Cooperative Systems

The deployment of the technology of connected vehicles is extending worldwide nowadays. This concept is also a popular topic both in the academics and the industries in China. In this session, China’s experts both from the academics and the industries will share the updates of connected vehicles with the peers from other countries and try to find a reasonable way to accelerate the deployment of connected vehicles in China.

Organizer
Weiyun Jiao, Department Manager China National ITS Center, China

Moderator
Jianqiang Wang, Professor Tsinghua University, China

Speakers
Jinling Hu, Fellow Research, China Academy of Telecommunication Technology, China
Zhenning Dong, Vice-President, Autonavi, China
Fan Ren, Research, Institute of Changan Automobile, China
Xiaolong Guo, Researcher, Huawei, China
SIS68 – Cooperative Driving Technology and Standardization

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: Connected Vehicles & Cooperative Systems

Vehicle IT convergence is steadily stimulating technical innovation in the autonomous vehicle and intelligent road infrastructure fields. Cooperative, driving technologies such as Cooperative Adaptive Cruise Control (CACC) and vehicle platooning is practically proven and applicable, on highway in the near future. Also road infrastructure will provide situation related information and traffic signal information to vehicle side. Cooperative driving technologies are based on V2X communication to share information between vehicle and road infrastructure. Thus it has, communication standard issues in V2X communication protocol and message format. We present the current cooperative driving technology development and standardization activities from USA, Europe and Asia.

Organizer & Moderator
Hyun Seo Oh, Principal Researcher ETRI, Korea

Speakers
Umit Ozguner, Professor, The Ohio State University, USA
Takeshi Yamamoto, Senior Manager, NEC, Japan
Bart Netten, Project Manager of CACC, TNO, Netherlands
Hanbyeo Cho, Principal Researcher, ETRI, Korea
Corey Clothier, CEO, Comet and Business Development Strategist, Induct Technology, USA

SIS69 – Ecall Advancement to Deployment — Global Perspective

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

ECall deployments are poised to take effect across the America’s, Pacific Rim, Europe, and Russia. ECall systems in Europe and Russia have the, potential to positively influence casualties. This session will discuss the deployment of ECall from the perspective of the four geographic areas. What is different across the continents? Will the mandated deployment of ECall in Russia and Europe alter the view points from continents where, ECall is not currently deployed? What can be learned from each sector regarding:

• Policy and Strategy
• Services and Functions
• Governance, Cooperation and Organizational structure

With understanding could a common approach to ECall benefit the wider, society?

Organizer & Moderator
Andy Rooke, Senior Project Manager ERTICO ITS-Europe, Belgium

Speakers
Gary Turner, Managing Director, Active-PCB Solutions Ltd., UK
Catherine Bishop, Global Emergency and Strategy Outreach Manager OnStar/Global Connected Consumer GM Public Policy, GM/OnStar, USA
Francois Fischer, Senior Project Manager, ERTICO ITS-Europe, Belgium
Yoshi Shiraishi, Executive Chief Engineer, Fujitsu Ten, Japan

SIS70 – Advanced Connected Vehicle Technology — Security and Certification

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Connected vehicles are being deployed. On the verge of a major breakthrough in capacity for life saving and mobility advancements, our connected vehicles need to be secure and interoperable. This session will highlight solutions which ensure the deployment of secure, certified vehicles.

Organizers
Leland Key, Senior Director, Automotive Marketing & Sales
NXP Semiconductors
Suzanne Murtha, Senior Program Manager ATKINS, USA

Moderator
Ted Mawhinney, Network Architect, Application Performance Monitoring, Modeling and Simulation Engineer CTC, USA

Speakers
Dave Kristick, Deputy Executive Director and Director of Operations, E-470 Public Highway Authority, USA
Ted Mawhinney, Network Architect, Application Performance Monitoring, Modeling and Simulation Engineer, CTC, USA
Tejas Desai, Head of Interior Electronics Solutions, North America, Continental Automotive Systems, USA
Donald Grimm, Staff Researcher, General Motors Research and Development Center, USA
Kees Moerman, Senior Scientist, NXP Semiconductors, Netherlands
Brian Daugherty, Associate Director, Advanced Development & IP, Visteon Corporation, USA
SIS71 – Application of Big Data to Transportation Operations & Planning

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: Big Data and Open Data

Big Data is a popular term used to describe the near exponential growth and availability of data, both structured and unstructured; and Big Data may be as important to business — and society — as the Internet has become. Why? More data may lead to more accurate analyses. More accurate analyses may lead to improved decision-making. And better decisions can mean greater operational efficiencies, cost reductions, and reduced risk. With respect to transportation, one can already see the emergence of Big Data sets in applications such as the connected vehicle, electronic ticketing for transit, electronic toll collection and congestion pricing, traveler information systems, and advanced traffic management systems. There is also an increased possibility of regional coordination of transportation operations by merging these data sets, analyzing the underlying patterns and trends, and using the results to support enhancements in planning and programming. This session will address some of the overarching questions associated with Big Data and its relevance to transportation planning and operations, discuss what “Big Data” means to different entities in the public and private sectors, and identify the technological, organizational, and commercial issues that need to be addressed in order to leverage the concept successfully.

Organizer
Armand Ciccarelli, Principal Appian Strategic Advisors, USA

Moderator
Bob McQueen, Vice President, International Business Development, Roadway Sensors Iteris Inc., USA

Speakers
David Wiggin, Director of Industry Marketing, Teradata, USA
Eric Hill, Director of System Management & Operations, MetroPlan Orlando, USA
Armand Ciccarelli, Principal, Appian Strategic Advisors, USA
Daniel Brudnicki, Director of Transportation Systems, Noblis, USA
Mark Pendergrast, Director of Product Management, INRIX, USA

SIS72 – Automated Driving Technology Research in Japan: Strategic Innovation Promotion Program

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: Automated Transportation

Built-in driver assistance features will be integrated with connected vehicle technologies for safety and efficiency. Evolutionary process will continue toward higher level of automated driving. Japanese government initiated a research project on automated driving systems under Cross-Ministerial Strategic Innovation Promotion Program (SIP). Scope of the project includes
1) development and verification of automated driving technologies,
2) development of evaluation models and simulation technologies on vehicle behavior and collision to effectively reduce traffic fatalities and congestion,
3) international cooperation, and
4) deployment for next generation urban transportation services.

Program Director and other members of the project will present objectives, goals and technologies and discuss social implications.

Organizer & Moderator
Hajime Amano, President and CEO, ITS Japan

Speakers
Hiroyuki Watanabe, Program Director, Council for Science, Technology and Innovation, Cabinet Office, Government of Japan
Tomoyuki Tanuma, Council for Science, Technology and Innovation, Cabinet Office, Government of Japan
Seigo Kuzumaki, Assistant Program Director, Council for Science, Technology and Innovation, Cabinet Office, Government of Japan
Masayuki Kawamoto, Project General Manager, R&D Management Div., TOYOTA MOTOR CORPORATION
Kunio Segawa, Staff Manager, Technical Research Dept., R&D Technical Administration Div., Mazda Motor Corporation
Mamoru Sekiguchi, Senior Manager, Electronic Product Design Department, SUBARU Engineering Div., FUJI HEAVY INDUSTRIES Ltd.
Masao Fukushima, Technical Consultant, R&D Engineering Management Division, NISSAN MOTOR Co., Ltd.
Toshio Yokoyama, Senior Chief Engineer, Technology Development Division 12, Honda R&D Co., Ltd.
SIS73 – Future Mobility Beyond 202X
Thursday, September 11, 10:30 a.m. – 12:00 p.m.

Session Track: ■ New Mobility

Speakers will discuss the future mobility beyond 202X following Tokyo 2013. In conjunction with ITS, the new mobilities with different energy sources will provide additional values for people in many different scenarios. In this session, expect speakers from all over the world to bring future visions of transportation in various circumstances and share the new value for many different transportation users. Expected outcomes from this session are to share the bright future with new mobilities and figure the task to be resolved.

Organizer & Moderator
Takahiko Uchimura, Vice President ITS Japan, Japan

Speakers
Stan Caldwell, Executive Director, Traffic21 Institute, Carnegie Mellon University, USA
John Maddox, Texas A&M Transportation Institute, USA
Kimihiko Nakano, Associate Professor, Advanced Mobility Center Institute of Industrial Science, the University of Tokyo
Erik Grab, Vice President Strategic Anticipation, Innovation & Sustainable Development, Michelin
Naotoshi Katahara, Chairperson, ITS GREEN SAFETY Committee Future System Subcommittee, ITS Japan, Senior Expert, Marketing Transformation Project Office, Fujitsu Limited, Japan

SIS74 – Towards Deployment of Automated Vehicles – Requirements for Road Testing
Thursday, September 11, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Automated Transportation

Automated vehicles are promising development lines for the automotive industry with several manufacturers designing for mass market introduction. Different automation levels have been defined linked with several time-to-market estimations. The industry needs to test prototypes to validate technology while authorities need to resolve how to test on public roads to assess benefits and evaluate the technology while maintaining safety. A common approach to testing automated vehicles on public roads is necessary in order to minimize risks for road users while not damaging the technology acceptance.

This Special Interest Session will summarize the different initiatives and viewpoints of the main stakeholders regarding the evaluation and assessment of the technology, the mandatory or voluntary regulations to be applied along the technology lifecycle, and the different approaches to public road testing while emphasizing the need for a common, public-private, international approach.

Organizer & Moderator
Álvaro Arrúe, Project Manager IDIADA Automotive Technology, Spain

Speakers
Barbara Wendling, Safety Affairs & Vehicle Testing, Volkswagen Group of America, USA
Felix Fahrenkrog, Manager Active Safety ADAS, IKA, Germany
Tomas Gea i Calza, Innovation Manager, Barcelona Municipality, Spain
Richard Bishop, Principal, Bishop Consulting, USA
Akio Hosaka Sr., Senior Researcher, HIDO, Japan

SIS75 – Traffic Sensing by Various Manners
Thursday, September 11, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Traffic Management

Traffic sensing is the key for traffic demand management. Traditionally, sensing devices, such as loop counter and ultrasonic detector, are embedded into the road infrastructure. As all of you may know, thanks to the ICT technology, data created from probe cars or smartphone applications become one of the promising sources for providing mobility services and the traffic management. Or it may collect from advanced sensing technology such as image processing and active sensing. However, data from different sources have different characteristics. This session will try to bring various approaches in one session and discuss in wide range their advantages and disadvantages from various applications point of views.

Organizer & Moderator
Nobuyuki Ozaki, Senior Fellow Toshiba Corporation, Japan

Speakers
Arch Owen, Program Development Director, OptaSense, USA
Mariko Okude, Senior researcher, Hitachi Research Laboratory, Hitachi Ltd., Japan
Hajime Sakakibara, Senior Assistant General Manager, Sumitomo Electric System Solutions, Co., Ltd., Japan
**SIS76 – The Impacts of Connected Vehicle Technology on Transportation Agency Operations**

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

This session will summarize connected vehicle deployment considerations from a practitioner’s perspective, applying lessons learned, from the Safety Pilot and other connected vehicle test bed programs around the country. The session will also review the lessons learned, from various test bed programs and provide a forum for discussion on technical and institutional problems shared among the test beds. It, will offer realistic guidance to practitioners in light of the 2014 NHTSA decision. Infrastructure considerations related to roadside equipment, communications, head-end hardware, and software will be emphasized. Policy and other institutional considerations will also be addressed. The discussion of V2I deployment needs will focus on applications that support state and local agency operational objectives related to, safety, mobility, traffic operations, multi-modal integration, and asset management.

**Organizer**
James Barbaresso, Vice President, Intelligent Transportation Systems HNTB Corporation, USA

**Moderator**
Matthew Smith, ITS Program Manager Michigan DOT, USA

**Speakers**
Gary Piotrowicz, Deputy Managing Director/County Highway Engineer, Road Commission for Oakland County, USA  
Scott Shogan, Parsons Brinckerhoff  
Matthew Smith, ITS Program Manager, Michigan DOT, USA

---

**SIS77 – Modeling Connected Vehicle Applications and Dynamic Management Strategies: Issues and Challenges**

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

The Analysis, Modeling, and Simulation (AMS) of Active Transportation Demand Management (ATDM) and Dynamic Mobility Applications (DMA) requires a partnership of many different disciplines ranging from traditional transportation modeling to wireless communication and system management decision making. As part of better understanding the future applications of DMA and ATDM strategies, the U.S. DOT (U.S. DOT) is sponsoring a project for the development of AMS Testbeds for the, purpose of evaluating different ATDM strategies and DMA applications in various combinations. AMS Testbeds will serve as virtual computer based, environments in a laboratory setting to facilitate detailed modeling and analysis. This panel brings together experts who have evaluated many, applications related to advanced and dynamic mobility strategies using AMS techniques.

**Organizer**
James Colyar, Transportation Specialist USDOT – Federal Highway Administration, USA

**Moderator**
Karl Wunderlich, Corporate Fellow, Transportation Analysis Noblis, USA

**Speakers**
Balaji Yelchuru, Lead Associate, Booz Allen Hamilton, USA  
Ismail Zohdy, Associate, Booz Allen Hamilton, USA  
Prof. Ram Pendyala, Professor, Georgia Institute of Technology, USA  
Thomas Bauer, CEO, Traffic Technology Solutions, USA  
Alex Gerodimos, President, TSS-Transport Simulation Systems, Inc, USA

---

**SIS78 – Collision of the Physical & Cybersecurity in an ITS World**

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

Panel session discussing the collision of the physical and cyber worlds that brings new challenges to securing the transportation sector including, the customer experience, passenger journey, and treatment of our freight in every mode. These require greater consideration as to the impact of, threats on infrastructure and processes calling for deeper attention on the means of attack, their consequences, requiring a visionary thinking to, risk mitigation, its impacts, and organizational development. The greatest risk that transportation organizations are bracing themselves for is the, combination of both physical and cyber-attacks on their infrastructure; this is the highest risk factor that many are working to control within, corporate risk registers. The explosion of social media applications, online technologies and self-service user terminals provide an avenue for, increased risk. In this panel debate, hear from senior security staff from an infrastructure operator (Heathrow Airport), a Semiconductors manufacturer (NXP) and a service provider (CGI) as to the main challenges and how the industry is looking to overcome them.

**Organizer & Moderator**
Theo Quick, Director - Global Transport, Post & Logistics Industry CGI, UK

**Speakers**
Timo van Roermund, Senior Research Scientist, NXP, Netherlands  
Mark Jones, Heathrow Airport, UK  
Cheryl Martin, Global Cyber Security Director, Shell and Commercial Business, CGI, UK
SIS79 – SMART Tolling for Achieving Future Green Road

Thursday, September 11, 10:30 a.m. – 12:00 p.m.

Session Track: Traffic Management

This session will focus on smart tolling systems for smart highways. In smart highways, operators and drivers will be able to see real-time traffic information. The smart highway is a next generation road aiming to be congestion-free, stop-free, and accident-free through traffic information services. Smart tolling systems support toll collection, enforcement for overloaded vehicles, speed violation and others based on wireless communication systems. This session will introduce development of a smart tolling system as a multi-lane free-flow road charging system. Further, it will provide an opportunity to share best practices in the world.

Cobo 140 E

Organizer
Ki Han Lee, Professor, Seoul Women's University, Korea

Moderator
Joseph Averkamp, TUV Rheinland

Speakers
Trond Foss, Senior Advisor, SINTEF Technology and Society, Norway
Ki Han Lee, Professor, Seoul Women's University, Korea
Zoltan Varga, Managing Director, Toll Service PLC, Hungary
YC Chang, Managing Director, Far Eastern Electronic Toll Collection Co., Ltd. (FETC), Chinese-Taipei
Fah Siang Ho, General Manager, YDT Technology International Ltd., Chinese-Taipei
Robert W. Karr, Managing Director, Star Systems International Ltd., Hong Kong

SIS80 – Security for Connected Vehicles

Thursday, September 11, 10:30 a.m. – 12:00 p.m.

A Connected Transportation environment will need to include a Security Certificate Management System (SCMS) that will facilitate confidence that received messages were sent from certified devices and that the message was not altered between transmission and reception. Both the U.S. and Europe are developing PKI systems to achieve this, and are planning to attach certificates and cryptographically sign messages to achieve these goals. A major technical goal for these systems is to balance privacy with the ability to identify and revoke devices from the system which are, out of compliance. When fully deployed, these will become the largest PKI systems in the world. This session will focus on the status and plans for the security systems being developed in the U.S. and Europe.

Cobo 110 A

Organizer
Michael Shulman, Technical Leader, Ford Active Safety Research Ford Motor Company, USA

Speakers
Andre Weimerskirch, Associate Research Scientist, University of Michigan Transportation Research Institute (UMTRI), USA
Thorsten Hehn, Senior Communications and Security Engineer, Volkswagen Group of America, USA
Henrick Broberg, Systems Engineer, Volvo Car Corporation, USA
Tigran Khatchatrian, Vehicle Safety & Electronics Engineer, Volkswagen Group of America
Mike Lukuc, Vehicle Safety Communications Program Manager, National Highway Traffic Safety Administration, U.S. DOT, USA
SIS82 – Maritime Informatics — How ITS is Transforming the Shipping Industry

Thursday, September 11, 1:30 p.m. – 3:00 p.m.

The shipping-sector is a vast part of the global transport system. However, it is underrepresented when it comes to attention and dissemination in the area of ITS and ICT for transport. In many ways the shipping-sector has not utilized the potentials of ICT much depended on expensive, on board equipment, and current, environmental challenges requires a much higher degree of safety and communication, segmented business structure and in many cases — old habits. However, shipping is on the same hand far ahead of the land transports, when it comes to implementation of ITS infrastructure. Almost all sea-going vessels are equipped with real-time positioning, access control, and IT-based security systems. All mandated by IMO from safety and security point of view, but not utilized by the industry for the benefits, of process-enhancement and the development of new business-models in the way IT affects other segments of the transport system. There are signs that the shipping industry is slowly starting to adapt to the digital age. More and more vessels now have internet-connection, onboard, and there are interesting projects launched in the area of Sea Traffic Management (STM) where ITS is playing a vital part and current, environmental challenges requires a much higher degree of integration and transparency in order to affect the transport system in a more, sustainable direction. ITS will also be an important tool in enabling shipping to be a fully integrated part of the multi-modal chain.

SIS83 – Adaptive Signal Control Technologies in the World of Connected and Automated Vehicles

Thursday, September 11, 1:30 p.m. – 3:00 p.m.

Session Track: ■ Connected Vehicles & Cooperative Systems

Adaptive Signal Control Technologies (ASCT) represent one of the most efficient ITS applications. These technologies 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 deployments. However, our transportation paradigm is about to change significantly with more automation and connectivity being added in every aspect of our transportation system. Programs such as Connected Vehicle Technology and Automated Vehicles require that we reinvestigate roles of each of the, transportation system's components. This session will address purpose, significance, and future needs of ASCT in the new world of connected, and automated transportation. The session will bring together the leading experts from the ASCT industry from vendor, public agency, and, academic sides.

SIS84 – The Internet of the Auto: Clouds, Crowds & Traffic

Thursday, September 11, 1:30 p.m. – 3:00 p.m.

The Internet of the Automobile defines how disruptive technologies are connecting the driver, the car, and the road network, devices, apps, and, data all through inter-connected networks. Using real-world examples of "Clouds, Crowds, and Traffic," this session will explore the benefits of Big Data in delivering intelligent driving services such as traffic, parking, fuel, EV services, and road weather to help automakers improve the driving, experience for consumers and to reduce the individual, economic, and environmental toll of global traffic congestion. The session will explore the future of connected navigation, based upon revolutionary approaches of vehicle OEMs and infotainment providers, in integrating smartphone connectivity, apps, and cloud services into the car while integrating vehicle probe data and mobile crowdsourcing, to deliver better navigation experiences. Additionally, attendees will learn how emerging AI techniques such as predictive analytics, pattern, recognition and machine learning are the catalyst for a new generation of services.

Special Interest Sessions
SIS85 – Accessibility 360 — ITS-enhanced Accessible Transportation Services

Thursday, September 11, 1:30 p.m. – 3:00 p.m.

According to the World Report on Disability (2011) published by the World Health Organization and World Bank, “...more than one billion people in the world live with some form of disability. In the years ahead, disability will be an even greater concern, because its prevalence is on the rise.” The report further noted, “lack of access to transportation” as a barrier for people with disabilities obtaining employment, training, healthcare, and participation in community life. In 2013, the U.S. DOT launched the Accessible Transportation Technologies Research Initiative (ATTRI) that, seeks to enhance mobility choices and quality of life for travelers with disabilities. Recent ITS research in connected vehicle and automation, along with other technological innovations, such as assistive robots and crowdsourcing, could lead to many possibilities and help create seamless, transportation environments for all citizens. ATTRI seeks to leverage these technologies to empower travelers of all abilities to reliably, safely, and independently plan and execute travel.

SIS87 – From Vertical to Horizontal to Connected Clouds

Session Track: ■ Big Data and Open Data

Intelligent Transportation System solutions are increasingly faced with a demand for flexibility, short time-to-market and the ability to react to rapidly evolving customer expectations and business environments. Corresponding solutions therefore have to work across service providers, platform providers and businesses. Vertical service and horizontal system designs are loosely coupled concepts, with cloud ready deployments and international operations, are paving the way forward for flexible and, cost efficient service provisioning within ITS businesses. This session will touch base on what has been achieved by the presenting industry, leaders, what this could mean for pay-as-you-grow business models and for software-as-a-service deployments. An outlook to the next steps in, the ITS systems transformation will be given. Challenges like interacting clouds and research ideas for linking ITS business domains will be, discussed.

SIS88 – The Connected Car Becomes the Ultimate Mobile Device

Session Track: ■ Connected Vehicles & Cooperative Systems

We’re on the cusp of a technology revolution that will fundamentally change the way we interact with cars as well as how we build and manage, our future highways. Drivers around the world waste the equivalent of one week’s vacation idle in traffic, robbing our economies of billions, of dollars and polluting the planet. But connected cars and vehicle communications could hold the key to improving urban mobility. We’re just beginning to tap the potential of Big Data, V2V and V2I communications. With data collected from connected cars set to, proliferate, the road ahead is paved with the insights we need to understand the individual, economic and environmental toll of congestion, in ways that makes our roads smarter and traffic-powered navigation systems in our vehicles indispensable to the world’s one billion drivers. For example, vehicles that know the safest routes through storms based on road conditions, sharing insight with other vehicles as well as, transportation agencies, helping them dispatch snow and ice removal vehicles to impacted locations more quickly. In this session, executives from INRIX and leading global automakers will discuss how Big Data is feeding both city planning and automotive, design to deliver on this vision for future mobility.
Get street smart in Detroit.

New sensing technology that will change your world — and your city.

BOOTH #2423
www.gtt.com
## Technical/Scientific Sessions

### TS01 – Using Simulation for Traffic Management Applications

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**  
**Cobo 353**

**Session Track:** Traffic Management  
**Moderator:** Marije de Vreeze, Manager, ITS Netherlands, Netherlands

- **13139** Matlab-Vissim Interface for Online Optimization of Green Time Splits  
  Prateek Bansal, Graduate Research Assistant, The University of Texas at Austin, USA

- **13658** Validation and Quality Management of the San Diego I-15 ICM Aimsun Online Real-time Simulation Model  
  Matthew Juckes, Senior Project Manager, Transport Simulation Systems, USA

- **13708** A Web Application of Flexible Open-structure Traffic Simulation  
  Xuan Shi, Research Assistant, University of Wisconsin - Madison, USA

---

### TS02 – Local Based Travel Information

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**  
**Cobo 354**

**Moderator:** Itti Rittaporn, General Manager, Content and EV Department Toyota Tsusho Electronics, Thailand

- **12111** Development of Integrated System for Real-time Traffic Information on Social Network Services  
  Hyokyoung Eo, Researcher, Korea Institute of Construction Technology, Korea

- **12346** Traffic Information Service By Data Fusion Apps and BIS  
  Bumjin Park, Senior Researcher, Korea Institute of Civil Engineering and Building Technology, Korea

- **13007** The Current Situation and Prospect of the Travel Information Service in Megacities of China  
  Jian Gao, Engineer, National ITS Research Center, Research Institute of Highway Ministry of Transport, China

---

### TS03 – Connected Vehicle Deployment and Field Tests

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**  
**Cobo 355**

**Session Track:** Connected Vehicles & Cooperative Systems  
**Moderator:** Matthew Smith, ITS Program Manager Michigan DOT, USA

- **13434** IEEE 1609 Protocol Conformance Test Tool  
  Chia-Chang Hsu, Engineer, Industrial Technology Research Institute, Chinese-Taipei

- **12075** Bringing Connectivity to Automation — A Vehicle-based Researcher Platform to Field Test Operational Concepts  
  Christopher Armstrong, Transportation Engineer, Leidos, USA

- **13237** Maricopa County DOT SMARTDrive Program: Connected Vehicle Applications in Arterial Environment  
  Faisal Saleem, Branch Manager & MCDOT SMARTDrive Program Manager, Maricopa County DOT, USA

- **13253** Preparing a Possible Oregon Road Map for Connected Vehicle/Cooperative Systems Deployment Scenarios  
  Robert Bertini, Professor, Portland State University Department of Civil and Environmental Engineering, USA

- **13263** High Level Deployment Concepts for Connected Vehicles  
  Brian Burkhard, ITS Manager of Projects, Jacobs, USA

- **13673** Early Deployment of V2I Technology on a “Smart Corridor”  
  Darryl Dawson, ITS Deployment Engineer, Illinois State Toll Highway Authority, USA

---

### TS04 – V2X Technology Evaluations

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**  
**Cobo 356**

**Session Track:** Connected Vehicles & Cooperative Systems  
**Moderator:** Maxime Flament, Head of Sector SafeMobility, ERTICO – ITS Europe, Belgium

- **12305** V2V Prototype System Construction and Analysis in Campus Environment  
  Luoyi Huang, Engineer, DENSO (CHINA) INVESTIMENT Co., Ltd., China

- **13271** Enrique Cramer, Business Development Director, Drivewyze, Canada  
  Enrique Cramer, Business Development Director, Drivewyze, Canada

- **13279** V2V 5.9 GHz RF Channel Models  
  Paul Alexander, CTO, Cohda Wireless, Australia

- **13311** Decentralized Congestion Control for DSRC Systems: A Comparison  
  Paul Alexander, CTO, Cohda Wireless, Australia
TS05 – Cooperative ITS System Standards

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: ■ ITS Rules and Standards

Moderator: Ken Nakaoka, Senior Engineer Panasonic Corporation, Japan

12034 Investigation of ITS Coexistence on the Physical Layer
Liesbeth Gommé, NXP Semiconductors, Belgium

12804 Major European C-ITS Corridor Project Defines V2I Functions & Interfaces Subtitle: “Traffic Management in a C-ITS Environment”
Anto Komarica, Solution Manager, Kapsch TrafficCom AG, Austria

13459 SCORE@F Project: Cooperative ITS and DATEX II at the Service of Roads Operators and Roads Users
Ludovic Simon, Head of Unit, CEREMA / DTerIDF, France

13484 Session-Based Communication over IEEE 802.11p for Novel Complex Cooperative Driver Assistance Functions
Oliver Sawade, Senior Researcher, Fraunhofer FOKUS, Germany

13548 Connected Vehicle Integration Research and Design Guidelines Development: Formative Expert Interviews
Tammy Trimble, Research Associate, Virginia Tech Transportation Institute, USA

TS06 – Policy Changes to Connected and Autonomous Vehicles

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: ■ International Cooperation to Expand ITS

Moderator: C. Michael Walton, Professor University of Texas at Austin, USA

12136 ITS Horizon Scan 2.0: Examining the Larger Trends that will Impact Transportation
Michael McGurrin, Senior Fellow, Transportation Systems, Noblis, USA

12644 A Review and Analysis of State Regulatory Approaches to Automated Vehicles
Eric Paul Dennis, Transportation Systems Analyst, Center for Automotive Research, USA

12645 A Review and Analysis of the National Highway Traffic Safety Administration Preliminary Statement of Policy Concerning Automated Vehicles
Eric Paul Dennis, Transportation Systems Analyst, Center for Automotive Research, USA

12753 Barriers to Successful Implementation of a National DSRC Connected Vehicle Network
Eric Paul Dennis, Transportation Systems Analyst, Center for Automotive Research, USA

TS07 – Routing Strategies for Improved Eco-Driving

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Moderator: Rasmus Lindholm, Partnership Services and Communications Director, ERTICO – ITS Europe, Belgium

12481 Connectivity-Enhanced Route Selection and Adaptive Control for the Chevrolet Volt
Jeffrey Gonder, Senior Engineer/Section Supervisor, National Renewable Energy Laboratory, USA

12563 Eco-navigation Route Choice Evaluations With a Simplified, Macro-model for Fuel Consumption and Emissions Estimation
Yunjie Zhao, Senior Researcher, Here, USA

13012 A Methodology for Eco-Routing Based on Vehicle Fuel Consumption and Emissions
WeiXia Li, Student, Tsinghua University, China

13660 Trip Prediction Using GIS for Vehicle Energy Efficiency
Dominik Kambowski, Principal Research Engineer, Argonne National Laboratory, USA

13687 A Connected Vehicle Supported Routing Strategy for Electric Vehicles
Kakan Dey, Postdoctoral Fellow, Clemson University, USA
TS08 – Smart Parking 1

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Moderator: Rob Fitzpatrick, NICTA, Australia

12418 Payment Platform Model for Parking — Parking Operator Approach
Tami Koivuniemi, Chief Operating Officer, Finnpark Ltd., Finland

12584 Parking Data Broker — Flexible Parking Data Management Across Enterprise and Beyond
Ali Lattunen, Technology Specialist, Finnpark Ltd., Finland

13006 Implementation of an Autonomous Parking System in a Parking Lot
Po-Kai Tseng, Automotive Research & Testing Center, Chinese-Taipei

13407 I-94 Truck Parking Information and Management System — Providing Value Through Success Management
Collin Castle, Connected Vehicle Technical Manager, Michigan DOT, USA

13551 Evaluation of Dynamic Parking Lot Vacancy Information Board at the Rest Area Entrance
Tadahisa Muramatsu, Central Nippon Expressway Company Limited, Japan

TS09 – New Frontiers for ITS

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Moderator: Mark Dunzo, Senior Vice President Kimley-Horn and Associates, Inc, USA

12385 Traffic Signal Control Using Cellular Communications
Robert Blount, Communications Manager, Broward County Traffic Engineering Division, USA

13273 MnPass Easy; Keeping the H.O.T. Lane Hot
Brian Scott, Principal, SRF Consulting Group, Inc., USA

13716 Integrating Roadway Tunnels Into the Regional Traffic Network
David Markt, Transportation Solution Architect, Schneider Electric, USA

13726 Innovations in Automated Airport Ground Transportation Management Systems
Forrest Swonsen, Director, Airport Systems & Services, TransCore

13783 Latest Achievements in the Operation of an Innovative AID System for Road Tunnels
Peter Böhnke, Managing Director, ave GmbH, Germany

TS10 – Safety Based Sensor Systems

Monday, September 8, 10:30 a.m. – 12:00 p.m.

Session Track: Traffic Safety

Moderator: Bengt Hallstrom, Analyst and Senior Advisor, Swedish Transport Administration, Sweden

12251 Improving Performance of DS/SS IVC Scheme Based on Location Oriented PN Code Allocation by Restricting Communication Distance
Reiki Kusakari, Student, Tokyo University of Science, Japan

12450 Elements to Consider for Parking Automation
Yu Hiei, Inventor, Toyota Motor Corporation, Japan

13146 Implementation of a Computer Vision Based Advanced Driver Assistance System in Tizen IVI
Gorka Velez, Researcher, Vicomtech-IK4, Spain

13595 Driving with Multi-dimensional Multi-view
Anne Schmiedeberg, President, Car Buddy Corporation, USA
TS11 – Recent Developments in Data Collection

Monday, September 8, 10:30 a.m. – 12:00 p.m.  
Cobo 412 B

Session Track: Big Data and Open Data
Moderator: K. K. Saxena, Senior Vice President Kimley-Horn and Associates, Inc., USA

12394 A Train Speed Measure and Arrival Time Prediction System for Highway-Rail Grade Crossings  
Laurence Rilett, Professor, University of Nebraska-Lincoln

13621 License Plate Recognition as a Tool for Fiscal Inspection  
Cledson Sakurai, Professor, Universidade Federal de São Paulo, Brazil

12192 Towards Risk Prediction Considering People Flow  
Mikio Sasaki, Project Manager, DENSO Corporation, Japan

12315 Performance Evaluation of Transit Data Formats on a Mobile Device  
Sean Barbeau, Principal Mobile Software Architect for R&D, University of South Florida, USA

12846 Gait Based Pedestrian Identification with Reducing Dependency of Accelerometer Position  
Takeshi Sawada, TOKAI RIKA Co., Ltd., Japan

TS12 – Implications of Driver Behavior on ITS System Performance

Monday, September 8, 3:00 p.m. – 4:30 p.m.  
Cobo 353

Session Track: Driver Behavior and Support
Moderator: Yasuhiko Nakano, Researcher Manager Fujitsu Laboratories Ltd., Japan

12630 Assessing the Implications of Age on Applying Visual-manual Distraction Guidelines to Portable Telematics Interactions  
Yu Zhang, Senior Design Engineer, DENSO International American, Inc., USA

12789 Driver Vehicle Interaction and the Impact of Interruption Type on Task Completion and Driving Performance of a Connected Vehicle System  
LaTanya Holmes, Research Associate, Virginia Tech Transportation Institute, USA

13096 Prediction of the Meta-stability Phase Through Analysis of Driving Behavior  
Toshio Ito, Professor, Shibaura Institute of Technology, Japan

13103 Effects of Auditory and Visual Secondary Tasks on Drivers’ Vision: An Ergonomics Research for IVIS  
Tong Zhu, Associate Professor, Chang’an University, China

TS13 – Big Data Management and Analysis

Monday, September 8, 3:00 p.m. – 4:30 p.m.  
Cobo 354

Session Track: Big Data and Open Data
Moderator: Josh Johnson, SwRI, USA

12889 Performance Metrics Trend Analysis of Features Present in Transportation Systems  
Alvaro Gil, Senior Research Scientist, Xerox Innovation Group, USA

13020 A*DAx for Transport Data Management, Sharing and Analytics  
Wee Siong Ng, ed., Data Management Lab and Co-Director, I2R-LTA Joint Lab, Institute for Infocomm Research, Singapore

13238 Management Procedures for Data Collected via Intelligent Transportation Systems  
Qiang Hong, Senior Research Scientist, Center for Automotive Research, USA

13308 Big Trucks; Big Data: Opportunities for Improvements in Carrier Performance and Profitability  
Dan Filby, President, Transportation Services, First Advantage, USA

TS14 – Evaluating Deployments

Monday, September 8, 3:00 p.m. – 4:30 p.m.  
Cobo 355

Moderator: Richard Harris, Solution Director, International Transportation and Government Xerox Services, UK

12896 A Review of International ITS Procurement Methods and Recommendations on how to Improve ITS Procurement in Australia  
Clarissa Han, Senior Research Scientist, ARRB Group Ltd., Australia

13038 Post-hoc Data Analyses of Four Regional ITS Deployments  
Vaishali Shah, Manager, Transportation Systems, Noblis, USA

13111 Traveler’s Motives for Adopting a New, Innovative Travel Service: Insights from the UbiGo Field Operational Test in Gothenburg, Sweden  
Jana Sochor, Researcher, Chalmers University of Technology, Sweden

13367 Deploying ITS Services: Case Finland-Russia Smart Transport Corridor  
Karri Rantasila, Key Account Manager, VTT – Technical Research Centre of Finland, Finland
### TS15 – Innovations in Bus Vehicle Systems

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 356**

**Session Track:** Public Transit

**Moderator:** Tomoaki Abe, General Manager Panasonic Corporation, Japan

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving the Quality of Public Transport Wireless LAN Based on Backhaul Performance</td>
<td>Tsuyoshi Takahashi, Iwate Prefectural University, Japan</td>
</tr>
<tr>
<td>Bus Fleet Speed Guidance Strategy in VII Environment</td>
<td>Tianzi Chen, Tongji University, China</td>
</tr>
<tr>
<td>Transit ITS Research: Dynamic Bus Operations</td>
<td>Tim Witten, ITS/Special Projects Manager, Blacksburg Transit, USA</td>
</tr>
</tbody>
</table>

### TS16 – Signal and Arterial Applications

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 357**

**Moderator:** Tim Brandstetter, ITS Engineer Kimley-Horn, USA

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle and Pedestrian Signal Optimization at Intersection Utilizing Intelligent Vision Sensors</td>
<td>Shunsuke Kamijo, Associate Professor, Institute of Industrial Science, The University of Tokyo, Japan</td>
</tr>
<tr>
<td>Does Adaptive Signal Control Work? Evaluating Oregon's Five Corridors with High-Resolution Performance Data</td>
<td>Shaun Quayle, Senior Engineer, Kittelson &amp; Associates, Inc., USA</td>
</tr>
<tr>
<td>Galen McGill, ITS Manager, Oregon DOT, USA</td>
<td></td>
</tr>
<tr>
<td>Individual Vehicle Level Evaluation of Loop, Video Image, and Microwave Detector</td>
<td>Jinhwan Jang, Research Specialist, Korea Institute of Construction Technology, Korea</td>
</tr>
</tbody>
</table>

### TS17 – ITS, Sustainability and Business Cases

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 358**

**Session Track:** Sustainability

**Moderator:** Martin Russ, Managing Director, AustriaTech, Austria

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITS for Sustainable Mobility on Trans-European Networks — Example of Pan-European Corridor II</td>
<td>Roman Himmler, Manager Business Development, Kapsch TrafficCom AG, Austria</td>
</tr>
<tr>
<td>The Economic Case for Connected Vehicle Infrastructure</td>
<td>David Miller, Principal Systems Engineer, Siemens Road and City Mobility, USA</td>
</tr>
<tr>
<td>Towards Self-Sustaining 511 Systems</td>
<td>Alan Clelland, Sr. Vice President, Iteris, USA</td>
</tr>
<tr>
<td>ITS Factory — Intelligence to Boost Smart Cities</td>
<td>Aki Lumiaho, Head of Mobility and Innovation, RAMBOLL, Finland</td>
</tr>
</tbody>
</table>

### TS18 – Challenges for Smart Cities

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 359**

**Moderator:** Nobuyuki Ozaki, Senior Fellow Toshiba Corporation, Japan

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITS Innovation Stockholm Kista — New Innovative ITS Solutions to Help Stockholm Commuters</td>
<td>Jens Lütgten, Project Manager, Sweco, Sweden</td>
</tr>
<tr>
<td>Stepwise Approach to Technical Operations</td>
<td>Konrad Weichmann, Senior Service Manager, Siemens AG, Germany</td>
</tr>
<tr>
<td>Adapting Municipal Service Delivery to the Digital Age — The Washington, D.C. Approach</td>
<td>Soumya Dey, Director of Research &amp; Technology Transfer, District DOT, USA</td>
</tr>
<tr>
<td>CIMU - Integrated Center for Urban Mobility — São Paulo, Brazil</td>
<td>Olímpio Mendes de Barros, Engeneer, CET, Brazil</td>
</tr>
</tbody>
</table>
## TS19 – Route Guidance Systems

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 411 A**

**Moderator:** Michael Harris, Kimley-Horn, USA

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street Scanner Geo Location</strong></td>
<td>J.R. Richardson, Sr. Principal Systems Engineer, Raytheon, USA</td>
</tr>
<tr>
<td><strong>A New Option for ATIS: Hands-Free, Eyes-Free, Highway Advisory Smart Phone Application</strong></td>
<td>David Jones, Regional Manager ITS and Toll Technologies, HNTB Corporation, USA</td>
</tr>
<tr>
<td><strong>Engineering a Statewide Travel Time Engine for Virginia</strong></td>
<td>David Robison, Principal Systems Engineer, Open Roads Consulting, USA</td>
</tr>
<tr>
<td><strong>The Development of Traffic Estimation System in Distributed Stream Processing Architecture</strong></td>
<td>Wern-Sheng Shieh, Chunghwa Telecom Co., Ltd., Chinese-Taipei</td>
</tr>
<tr>
<td><strong>A Distributed Approach for Harnessing Regional Knowledge in Transregional Vehicle Routing</strong></td>
<td>Tobias Kraus, Traffic Information Management and Route Optimization, BMW Group, Germany</td>
</tr>
</tbody>
</table>

## TS20 – Road User Charging 1

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 411 B**

**Session Track:** Economic Growth

**Moderator:** Sampo Hietanen, ITS Finland, Finland

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open Payment Systems for Transport and ITS Services</strong></td>
<td>Trond Foss, Senior Advisor, SINTEF Technology and Society, Norway</td>
</tr>
<tr>
<td><strong>No GPS Required: Road Usage Charging and the Future of Transportation Finance</strong></td>
<td>Matthew Dorfman, Partner, D’Artagnan Consulting LLP, USA</td>
</tr>
<tr>
<td><strong>The Convergence of ITS and Tolling</strong></td>
<td>Christopher Body, Vice President, Business Development, Kapsch TrafficCom North America, USA</td>
</tr>
</tbody>
</table>

## TS21 – Traffic Safety Applications

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 412 A**

**Session Track:** Traffic Safety

**Moderator:** Masao Fukushima, Technical Consultant R&D Engineering Management Division, Nissan Motor Co., Ltd., Japan

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lessons Learned from Evaluation of the Interactive Project and Next Steps Towards Evaluation of Automated Driving</strong></td>
<td>Felix Fahrenkrog, Manager Active Safety ADAS, Institut fuer Kraftfahrzeuge, RWTH Aachen University, Germany</td>
</tr>
<tr>
<td><strong>A Trial of Real-time Server-based Cooperative System for Safety Use Case</strong></td>
<td>Yutaka Kamata, Assistant Chief Engineer, Honda R&amp;D Co., Ltd., Japan</td>
</tr>
<tr>
<td><strong>An Evaluation of Intelligent Roundabouts Under V2V and V2I</strong></td>
<td>Jeong-Eun Eom, Pukyong National University, Korea</td>
</tr>
<tr>
<td><strong>Intelligent Turn Signals: A Vital Link to an Intelligent Transportation Future</strong></td>
<td>Richard Ponziani, President, RLP Engineering, USA</td>
</tr>
</tbody>
</table>

## TS22 – Driver Support Systems on Personal Devices

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**  
**Cobo 412 B**

**Session Track:** Driver Behavior and Support

**Moderator:** Roy Jose, Principal Architect Savari Networks, USA

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Dynamic Route Selection Methodology for Progressive Vehicle Navigation Applications</strong></td>
<td>Mohammad Abdul-Hak, Engineering Manager, Mercedes Benz Research and Development, USA</td>
</tr>
<tr>
<td><strong>Investigation of the Efficacy of Information Provision Services through Cooperative ITS</strong></td>
<td>Daisuke Watanabe, researcher, National Institute for Land and Infrastructure Management, Japan</td>
</tr>
<tr>
<td><strong>Vehicle Telematics: A Key Element to an Ecodriving Strategy in Commercial Vehicle Fleets</strong></td>
<td>Benoit Vincent, Senior researcher, FPIInnovations, PIT, Canada</td>
</tr>
<tr>
<td><strong>Counteracting Traffic Congestion Using Intelligent Feedback</strong></td>
<td>David Drum, Research Manager, University of Missouri, USA</td>
</tr>
<tr>
<td><strong>White Labeling of Mobile Traffic Apps - A Practitioner Guide for Highway Authorities and Private Companies</strong></td>
<td>David Karmitzer, Director, IBI Group, Canada, Matt Man, CEO, GreenOw Mobile, Canada</td>
</tr>
</tbody>
</table>
## TS23 – Driver Assist Systems

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

<table>
<thead>
<tr>
<th>Session Track:</th>
<th>Driver Behavior and Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderator:</strong></td>
<td>Natasha Merat, Associate Professor, University of Leeds, UK</td>
</tr>
<tr>
<td><strong>12468</strong></td>
<td>Providing Real-time Driving Volatility Information</td>
</tr>
<tr>
<td><strong>12863</strong></td>
<td>Map Based Intersection Collision Avoidance</td>
</tr>
<tr>
<td><strong>13220</strong></td>
<td>A Vehicle Behavior Analysis: When the Merging Support Information is Provided in Urban Highway Using a Driving Simulator</td>
</tr>
<tr>
<td><strong>13065</strong></td>
<td>Quick Response Code as an Alternative Solution to Classical V2I Communication System</td>
</tr>
<tr>
<td><strong>13604</strong></td>
<td>Development of an Advisory Response Model for a Connected Vehicle Enabled Freeway Merge Assistance System: Interim Status</td>
</tr>
</tbody>
</table>

### Session Track: ■ Driver Behavior and Support

- **Natasha Merat**, Associate Professor, University of Leeds, UK

#### Abstracts

- **12468** Providing Real-time Driving Volatility Information
  - Jun Liu, Research Assistant, The University of Tennessee, Knoxville, USA

- **12863** Map Based Intersection Collision Avoidance
  - Erdem Ergen, Analysis and Design Leader, KocSistem, Turkey

- **13220** A Vehicle Behavior Analysis: When the Merging Support Information is Provided in Urban Highway Using a Driving Simulator
  - Toshiyuki Nakamura, Assistant Professor, Department of Urban Management Graduate School of Engineering, Kyoto University, Japan

- **13065** Quick Response Code as an Alternative Solution to Classical V2I Communication System
  - Jitendra Shah, Research Engineer, Ford Research Center Aachen GmbH, Germany

- **13604** Development of an Advisory Response Model for a Connected Vehicle Enabled Freeway Merge Assistance System: Interim Status
  - Tanveer Hayat, Graduate Research Assistant, Center for Transportation Studies, USA

## TS24 – Road User Charging 2

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

<table>
<thead>
<tr>
<th>Session Track:</th>
<th>Economic Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderator:</strong></td>
<td>Takakazu Tsuji, Executive Manager Mitsubishi Heavy Industries, Ltd., Japan</td>
</tr>
<tr>
<td><strong>12914</strong></td>
<td>Congestion Charging: Influence of Public Consciousness on Acceptability in Jakarta Metropolitan Area</td>
</tr>
<tr>
<td><strong>12027</strong></td>
<td>European Nationwide ETC Systems — Retire or Refurbish?</td>
</tr>
<tr>
<td><strong>12444</strong></td>
<td>New Functions of the Electric Toll Collection System</td>
</tr>
<tr>
<td><strong>13383</strong></td>
<td>Innovative Enforcement Systems for Road Tolls</td>
</tr>
<tr>
<td><strong>13545</strong></td>
<td>Integrated System Delivery of a Tolling and Traffic Management System for the Capital Beltway I-495 Express Lanes Design BuildProject in Virginia</td>
</tr>
</tbody>
</table>

### Session Track: ■ Economic Growth

- **Takakazu Tsuji**, Executive Manager Mitsubishi Heavy Industries, Ltd., Japan

#### Abstracts

- **12914** Congestion Charging: Influence of Public Consciousness on Acceptability in Jakarta Metropolitan Area
  - Sugiarito -, Doctoral Student, Department of Civil Engineering, Nagoya University, Japan

- **12027** European Nationwide ETC Systems — Retire or Refurbish?
  - Michael Bibartisch, CEO & Senior Consultant, Prime Consulting Services, Austria

- **12444** New Functions of the Electric Toll Collection System
  - Yotaro Nagai, West Nippon Expressway Company Limited, Japan

- **13383** Innovative Enforcement Systems for Road Tolls
  - Per Ola Cledmtson, project manager, NetPort Science Park, Sweden

- **13545** Integrated System Delivery of a Tolling and Traffic Management System for the Capital Beltway I-495 Express Lanes Design BuildProject in Virginia
  - Olu Adeyinka, Electronic Tolling & Traffic Management Systems Manager, Transurban, USA

## TS25 – Data Sharing and Open Source Data

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

<table>
<thead>
<tr>
<th>Session Track:</th>
<th>Big Data and Open Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderator:</strong></td>
<td>Amit Jain, Director Corporate Strategy &amp; Business Development, Verizon, USA</td>
</tr>
<tr>
<td><strong>12414</strong></td>
<td>Open Data: Challenges and Opportunities for Transit Agencies</td>
</tr>
<tr>
<td><strong>13186</strong></td>
<td>Open Source Development Model for Transportation Industry: Case Study District DOT</td>
</tr>
<tr>
<td><strong>13214</strong></td>
<td>The TMDD Standard — Data Aggregator for the Infrastructure</td>
</tr>
<tr>
<td><strong>13494</strong></td>
<td>Implementing the IDTO Bundle: Leveraging Today’s Emerging Technology to Benefit the Traveling Public</td>
</tr>
</tbody>
</table>

### Session Track: ■ Big Data and Open Data

- **Amit Jain**, Director Corporate Strategy & Business Development, Verizon, USA

#### Abstracts

- **12414** Open Data: Challenges and Opportunities for Transit Agencies
  - Carol Schweiger, Vice President, TranSystems Corporation, USA

- **13186** Open Source Development Model for Transportation Industry: Case Study District DOT
  - Rakesh Nune, Systems Engineer, District DOT, USA

- **13214** The TMDD Standard — Data Aggregator for the Infrastructure
  - Patrick Chan, Senior Technical Staff, Consensus Systems Technologies, USA

- **13494** Implementing the IDTO Bundle: Leveraging Today’s Emerging Technology to Benefit the Traveling Public
  - Thomas Timcho, Senior Research Scientist, Battelle Memorial Institute, USA
TS26 – Driving Safety

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: Traffic Safety

Moderator: Luisa Andreone, Program Manager, Centro Ricerche Fiat (CRF), Italy

13174 Acoustic Segmentation, Identification and Localization of Emergency Vehicles for Safer and Comfortable Driving
Sacha Vrazic, Head of German Research Office, IMRA EUROPE S.A.S., Germany

13296 Characteristics Between Driving Operation and Brain Activity in Curve Sections
Shuguang Li, Ph.D. Candidate, Graduate School of Engineering, The University of Tokyo, Japan

13435 Influence of the Driving Context in the Controllability Assessment
Andreas Puetz, Scientific Assistant, Institut für Kraftfahrzeuge (ika), RWTH Aachen University, Germany

13785 Rider and Powered Two-wheeler Mobility Through Industry and User Communities Cooperation
Aki Lumiaho, Head of Mobility and Innovation, RAMBOLL, Finland

TS27 – Congestion and Demand Management

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Moderator: Kian Keong Chin, Chief Transportation Engineer & Group Director Land Transport Authority, Singapore

12743 The Tel Aviv Fast Lane — HOT Lane Management in Israel
Andy Gill, Business Development Manager, Siemens plc, UK

13189 Demand Management to Solve Congestion and Air Quality Issues
Andy Gill, Business Development Manager, Siemens plc, UK

13703 On the Brink of Change; A Look at the Evolution of a Managed Lanes Project in South Florida
Alicia Torrez, Sr. Public Information Officer, Media Relations Group

TS28 – ITS Weather Systems 1

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Moderator: Ram Kandarpa, Lead Associate Booz Allen Hamilton, USA

12887 Evaluation of Weather Responsive Variable Advisory Speed System in Portland, Oregon
Matthew Downey, Graduate Research Assistant, Portland State University Department of Civil and Environmental Engineering, USA

13043 Road Weather Applications and End-user Services of FOTsis
Pertti Nurmi, Head of Meteorological Research Applications, Finnish Meteorological Institute, Finland

13124 ITS Technology for Winter Road Management
Kinta Hoshi, Construction Consultant, NEXCO Engineering Niigata Co., Ltd., Japan

13241 Development and Deployment of Innovative Weather Responsive Traffic Management Strategies
Deepak Gopalakrishna, Program Manager, Critical Infrastructure Transportation Operations (CITO), Battelle, USA

13480 An All-Weather Above-Ground Traffic Sensor
Saad Bedros, Technical Research Manager, Image Sensing Systems, USA

TS29 – Developments in Probe Data Collection

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Moderator: Yvonne Barnard, Project Manager, ERTICO – ITS Europe, Belgium

12648 Innovative Evaluation of Third Party Probe Vehicle Data
Charles Lattimer, Sr. Project Manager, Atkins, USA

12783 Assessing Network Changes Attributed to Opening a New 67 Mile Segment of I-69 Using Field Data from Bluetooth Probe Vehicles
Stephen Remias, Transportation Research Engineer, Purdue University, USA

13299 Cellular Probe Technologies Moving Forward: The Current Trends and Perspectives on 3G, 4G, and Smartphone Applications
Meredith Cebelak, Graduate Research Assistant, University of Texas at Austin, USA

13370 Examples of Utilization Systems for Probe Information Obtained from ITS Spots
Hidetaka Saji, Guest Researcher, National Institute for Land and Infrastructure Management (NILIM), Japan
### TS30 – Public Transportation Modeling

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

**Cobo 411 A**

**Session Track:** Public Transit

**Moderator:** Phillip Kilby, Principal Researcher NICTA and ANU, Australia

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13269</td>
<td>Improvement of Bus Arrival Time Estimation Model by Weighted Moving</td>
<td>Jisoo Kim, Korea Institute of Civil Engineering and Building Technology, Korea</td>
</tr>
<tr>
<td></td>
<td>Average Method</td>
<td></td>
</tr>
<tr>
<td>13188</td>
<td>Near-side Bus Stop with Queue Jumper Lane Under Connected Vehicles</td>
<td>Jia Hu, University of Virginia, USA</td>
</tr>
<tr>
<td>13597</td>
<td>Investigation of the Impact of Bus Blockage on Performance of</td>
<td>Metin Mutlu Aydin, Akdeniz University, Turkey</td>
</tr>
<tr>
<td></td>
<td>Signalized Intersections by Using the Cell Transmission Model</td>
<td></td>
</tr>
</tbody>
</table>

### TS31 – Innovative Traffic Data Collection and Analysis Strategies

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

**Cobo 411 B**

**Session Track:** Big Data and Open Data

**Moderator:** Paul Avery, Manager, Cooperative Systems R&D SwRI, USA

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12633</td>
<td>GNSS Pseudorange Evaluation Using 3-dimensional Map</td>
<td>Shunsuke Kamijo, The University of Tokyo, Japan</td>
</tr>
<tr>
<td>12089</td>
<td>Polycentricity of the Urban Structure: Spatial Movements Analysis in</td>
<td>Wei Feng Li, Key Laboratory of Road and Traffic Engineering, Tongji University, China</td>
</tr>
<tr>
<td></td>
<td>Shanghai with Smart Card Data</td>
<td></td>
</tr>
<tr>
<td>12673</td>
<td>An Approach for Rail Transit Ridership Analysis Based on Large-scale</td>
<td>Wei Feng Li, Key Laboratory of Road and Traffic Engineering, Tongji University, China</td>
</tr>
<tr>
<td></td>
<td>Mobile Phone Data</td>
<td></td>
</tr>
<tr>
<td>13070</td>
<td>Forecasting Changes of Traffic Flow Caused by Road Incidents</td>
<td>Wei Liu, National ICT Australia, Australia</td>
</tr>
<tr>
<td>13179</td>
<td>An Approach for Home-Workplace Spatial Organization Analysis Based on</td>
<td>Xiaoyun Cheng, Key Laboratory of Road and Traffic Engineering, Tongji University, China</td>
</tr>
<tr>
<td></td>
<td>Large-Scale Mobile Phone Data</td>
<td></td>
</tr>
</tbody>
</table>

### TS32 – Innovations in Video and Aerial Sensing

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

**Cobo 412 A**

**Moderator:** Chris Bax, Managing Director, Cubic ITMS Ltd., UK

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12096</td>
<td>Exemplar-based Object Detection using Car-mounted Fisheye Cameras for</td>
<td>Chikao Tsuchiya, Nissan Motor Co., Ltd., Japan</td>
</tr>
<tr>
<td></td>
<td>360-degree Object Detection</td>
<td></td>
</tr>
<tr>
<td>12946</td>
<td>Using Unmanned Aerial Vehicles for Traffic and Road Management</td>
<td>Erwin Vermassen, Managing Director, Nimera BVBA, Belgium</td>
</tr>
<tr>
<td>13373</td>
<td>The First Step Approach for Neuro-ITS — An Investigation on Multi-</td>
<td>Mikio Sasaki, DENSO Corporation, Japan</td>
</tr>
<tr>
<td></td>
<td>view Scenes</td>
<td></td>
</tr>
<tr>
<td>13608</td>
<td>Evaluating the Use of Unmanned Aerial Vehicles for Transportation</td>
<td>Colin Brooks, Michigan Tech Research Institute (MTRI), USA</td>
</tr>
<tr>
<td></td>
<td>Purposes: A Michigan Demonstration</td>
<td></td>
</tr>
</tbody>
</table>

### TS33 – National Efforts to Plan and Deploy ITS Systems

**Tuesday, September 9, 10:30 a.m. – 12:00 p.m.**

**Cobo 412 B**

**Session Track:** International Cooperation to Expand ITS

**Moderator:** Rob Fitzpatrick, NICTA, Australia

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12301</td>
<td>Johannesburg (Economic Hub of South Africa): A Smart, Sustainable</td>
<td>Darryll Thomas, Johannesburg Roads Agency, South Africa</td>
</tr>
<tr>
<td></td>
<td>City Through ITS</td>
<td></td>
</tr>
<tr>
<td>12382</td>
<td>National Transport Management in Sweden</td>
<td>Stefan Janson, Conako, Sweden</td>
</tr>
<tr>
<td>12471</td>
<td>ITS Deployment in Africa</td>
<td>Abiyu Berlie, MTA Bridges &amp; Tunnels, USA</td>
</tr>
<tr>
<td>13547</td>
<td>ITS Development in the Arab Middle East: Planning and Design</td>
<td>James Powell, CDM Smith Inc., USA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12589</td>
<td>Abu Dhabi Multimodal ITS Strategy &amp; Action Plan (Business Opportunities in the UAE)</td>
<td>Salah Al-Marzoqi, Integrated ITS Division, Abu Dhabi Department of Transport, United Arab Emirates</td>
</tr>
</tbody>
</table>
### TS34 – Cooperative Systems Research and Development

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Cobo 353**

**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Louis Sanders, Director, Technical Services America Public Transportation Association, USA

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12194</td>
<td>The Estimated Truth Will Evolve on Neuro-ITS</td>
<td>Mikio Sasaki, Project Manager, DENSO Corporation, Japan</td>
</tr>
<tr>
<td>13513</td>
<td>Intelligent Network Flow Optimization (INFLO) Prototype Development and Testing — An Overview and Status</td>
<td>Theodore Smith, Regional Manager, Battelle, USA</td>
</tr>
<tr>
<td>13616</td>
<td>Taxi Hailing System Using Connected Vehicle Technology</td>
<td>Mohammad Hoque, Assistant Professor, East Tennessee State University, USA</td>
</tr>
<tr>
<td>13684</td>
<td>Extending Connected Vehicle and Cooperative System Concepts to Non-motorized and Vulnerable Transportation System Users</td>
<td>Robert Bertini, Professor, Portland State University, USA</td>
</tr>
</tbody>
</table>

### TS35 – Real Time Information for Multimodal ITS Applications

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Cobo 354**

**Moderator:** Patrick Malléjacq, Director of European and International Affairs, IFSTTAR, France

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12757</td>
<td>Web-based Dynamic Routing and Scheduling System for Smes: Concept and Perspective</td>
<td>Tomio Miwa, Associate Professor, Nagoya University, Japan</td>
</tr>
<tr>
<td>13003</td>
<td>A Study on the Real-time Scheduling and Routing for the Major Online Supermarket</td>
<td>Seunghyun Kim, Pukyung national university, Korea</td>
</tr>
<tr>
<td>13125</td>
<td>Real-time Travel Information Using Bus AVL Data</td>
<td>Yingying Chen, Associate Professor, SUPCON I.T., China</td>
</tr>
<tr>
<td>13257</td>
<td>Co-modal Adaption Between Modes of Transport — River Information Services for River Göta Älv</td>
<td>Mathiaa Karlsson, Researcher, Sustainable Transports, Viktoria Swedish ICT, Sweden</td>
</tr>
<tr>
<td>13659</td>
<td>Potentials of ITS-Applications and Traffic Information for Consignors, Consignees and Logistics Service Providers</td>
<td>Andreas Pell, Research Associate, University of Applied Sciences Upper Austria, Austria</td>
</tr>
</tbody>
</table>

### TS36 – Policy and Strategy Benefits and Lessons Learned in ITS

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Cobo 355**

**Session Track:** International Cooperation to Expand ITS

**Moderator:** Sing Mong Kee, President ITS Singapore, Singapore

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12593</td>
<td>Unlocking the Benefits of ITS</td>
<td>Mark Byrne, Vice President Sales, Xerox Business Services (Australia) Pty Ltd., USA</td>
</tr>
<tr>
<td>12867</td>
<td>Safety and Road Closure Benefits of Rural Interstate Variable Speed Limit System</td>
<td>Rhonda Young, Associate Professor, University of Wyoming, USA</td>
</tr>
<tr>
<td>13212</td>
<td>FAST-TRAC — 20 Years of Innovation-Benefits and Lessons Learned</td>
<td>Ahmad Jawad, ITS Manager/ Signal Systems Engineer, Road Commission for Oakland County, USA</td>
</tr>
<tr>
<td>13712</td>
<td>The Benefits of Transportation Management Center Performance Measure Reporting</td>
<td>Oladayo Akinyemi, Manager, SEMTOC, Michigan DOT, USA</td>
</tr>
</tbody>
</table>
TS37 – Aspects of Multimodal Public Transportation

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: Public Transit

Moderator: Brendon Hemily, Public Transportation Consultant ITS America, Canada

12115 Results and Public Opinion on a Full-scale Implementation of Co-modal Travel Services, Including Park and Ride, in Gothenburg Sweden
Peter Wessel, Senior Consultant ITS, Itero AB, Sweden

12837 Development of a Multi-Modal Transportation Framework in Hangzhou
Yingying Chen, SUPCON Information Technology Co. Ltd., China

13454 Development of An Integrated Public Transportation System Based in a Train Station
Yousuke Hidaka, Researcher, East Japan Railway Company, Japan

13737 APIs and French Journey Planners Interoperability
Jean Seng, Multimodal information policy officer, French Ministry of Transport, France

13753 Reorganization of the Mobility Service Provision — Public Governance as a Contributor
Sonja Heikkilä, Transportation Engineer, Helsinki City Planning Department, Finland

TS38 – Commercial Vehicle Enforcement Strategies

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: Freight

Moderator: Eric Louette, Officer, Ministry of Ecology, Sustainable Development and Energy, France

13032 High Accuracy Weight in Motion Enforcement System Implementation and Testing
Michal Karkowski, Telematic Team Manager, Road and Bridge Research Institute, Poland

12754 Using On-Board Electronic Logbook Data to Analyze Truck Driver Schedules and the Hours-of-Service Rules
Jeffrey Short, Sr. Research Associate, American Transportation Research Institute, USA

13745 Use the Toll System in the Detection of Overweight Cargo Vehicles & Use of Traffic Management Data in the Modernization of a Key Highway
Karel Feix, Managing Director, Kapsch Telematic Services, Czech Republic

12524 Dynamic Force Sensing — Dynamic Axis Scale with High Speed and Heavy Running Vehicle
Eiichi Tada, CEO, Sensing Technologies KK Japan, Japan

TS39 – Management of Shared and Electric Vehicles

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: New Mobility

Moderator: Makoto Miwa, Technical Advisor Ricoh Company Ltd., Japan

12397 Development of Personal Mobility Sharing System — Use of Segway as Personal Mobility —
Naohisa Hashimoto, AIST, Japan

12742 Competence Area of Electric Vehicles and Relevance of An ITS Support for Transport and Parking Issues
Marco Bottero, Researcher and Project Manager, SWARCO, Italy

13543 Multiple Station Shared Vehicle Systems Design and Operations Modeling Framework
Akhtar Hossain, Course Developer, Algonquin College, Canada
### TS40 – Human-Machine Interface Evaluation

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Session Track:** Driver Behavior and Support

**Moderator:** Richard Hanowski, Director, Center for Truck & Bus Safety VTTI, USA

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12587</td>
<td>Eye Glance Time Reduction Using AR Lane Guidance</td>
<td>Yoshito Kondo, Engineer, AISIN AW Co., Ltd., Japan</td>
<td></td>
</tr>
<tr>
<td>12996</td>
<td>Evaluation of Navigation Displays by Analysis of Gaze Direction in a Driving Simulator</td>
<td>Kimihiro Nakano, Associate Professor, The University of Tokyo, Japan</td>
<td></td>
</tr>
<tr>
<td>13176</td>
<td>Fundamental Study of In-vehicle Information Provision Based on Cognitive Workload of Elderly Drivers When Approaching an Intersection</td>
<td>Toshiki Nakamura, Keio University, Japan</td>
<td></td>
</tr>
<tr>
<td>13772</td>
<td>Passenger Presence Effect on Elderly Drivers Evaluated by a Driving Simulator</td>
<td>Kaechang Park, Visiting Professor, Kochi University of Technology, Japan</td>
<td></td>
</tr>
<tr>
<td>13773</td>
<td>A New Driving Ability Test to Predict Risks of Traffic Accident Types According to Ages and Leukoaraiosis</td>
<td>Kaechang Park, Visiting Professor, Kochi University of Technology, Japan</td>
<td></td>
</tr>
</tbody>
</table>

### TS41 – Tools for Providing Statewide and Metropolitan Area Enforcement Incident and Emergency Management

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Moderator:** Andy Rooke, Senior Project Manager, ERTICO – ITS Europe, Belgium

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>13180</td>
<td>Critical Infrastructure Protection System: 3rd Street, NW Tunnel – Washington, D.C.</td>
<td>Rakesh Nune, Systems Engineer, District DOT, USA</td>
<td></td>
</tr>
<tr>
<td>12988</td>
<td>Research for Highway Network Management and Emergency Management Platform of Guangdong</td>
<td>Ling Sun, National ITS Research Center, Research Institute of Highway Ministry of Transport, China</td>
<td></td>
</tr>
<tr>
<td>13281</td>
<td>Effectively Managing and Sharing Statewide Video and Data</td>
<td>James Knowlton, Director of Operations, Open Roads Consulting, USA</td>
<td></td>
</tr>
</tbody>
</table>

### TS42 – Road User Charging 3

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Session Track:** Economic Growth

**Moderator:** Brian Negus, General Manager, Public Policy Royal Automobile Club of Victoria (RACV), Australia

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12005</td>
<td>Examination on Cooperation of ETC and Axle Load Scale</td>
<td>Ken Chikamatsu, Facilities Research Department, ETC Division, Nippon Expressway Research Institute Company Limited, Japan</td>
<td></td>
</tr>
<tr>
<td>12080</td>
<td>GNSS Road User Charging in America</td>
<td>Brian Michie, Founder/Senior Vice President, EROAD Inc, USA</td>
<td></td>
</tr>
<tr>
<td>12361</td>
<td>Present Situation and Future Prospect of ETC Services in Japan</td>
<td>Yuji Tamura, Senior Associate Manager, Organization for Road System Enhancement, Japan</td>
<td></td>
</tr>
</tbody>
</table>

### TS43 – Planning and Deployment

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Moderator:** Ron Patti, Director of Engineering Schneider Electric, USA

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12505</td>
<td>Planning Needs &amp; Gap Analysis for Safety Pilot Connected Vehicle Infrastructure Deployment</td>
<td>Brian Reed, Manager Geospatial &amp; Applied Technologies, Parsons, Brinckerhoff, USA</td>
<td></td>
</tr>
<tr>
<td>12865</td>
<td>Deployment Strategies for Safety Pilot Connected Vehicle Infrastructure</td>
<td>Brian Reed, Manager Geospatial &amp; Applied Technologies, Parsons, Brinckerhoff, USA</td>
<td></td>
</tr>
<tr>
<td>13392</td>
<td>NorSIKT - Nordic System for Intelligent Vehicle Classification</td>
<td>Torbjorn Haugen, Associate Professor, NTNU - Norwegian University of Science and Technology, Norway</td>
<td></td>
</tr>
<tr>
<td>13522</td>
<td>West Michigan ITS Network Upgrade, An Integrated Approach</td>
<td>Suzette Peplinski, Traffic Safety &amp; Operations Engineer, Michigan Dept. of Transportation, USA</td>
<td></td>
</tr>
<tr>
<td>13681</td>
<td>Pilot Program for the Implementation of Information Exchange Processes and Interoperability Protocols Between Control and Operation Centers on toll and Free Roads, in the National Roads Network of Mexico</td>
<td>Antonio Gallotero, Project Manager, Senermex, S.Á. de C.V., Mexico</td>
<td></td>
</tr>
</tbody>
</table>
TS44 – Connected Vehicle Applications

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Session Track: Connected Vehicles & Cooperative Systems

Moderator: Frank Försterling, Head, Advanced Development and Innovations Infotainment & Connectivity, Continental Automotive GmbH, Germany

13540 Driver-assistive Truck Platooning and Highway Safety: Features for Drivers, Fleet Managers and Highway Officials
Joshua Switkes, CEO, Peloton Technology, USA

13336 Design, Implementation and Field Trial of DSRC-based Transit Signal Priority System
Andy An-Kai Jeng, Industrial Technology Research Institute (ITRI), Chinese-Taipei

13381 Potential Safety Benefits of Automatic Collision Notification — A Case by Case Analysis
Maria Ohlin, Project Engineer, Chalmers University of Technology, Sweden

13729 A Methodology to Deal with Priority for Intelligent Vehicles in a Segment of a Single Lane Highway
Ricardo Reghelin, Professor, Federal Institute of Science and Technology, Brazil

13786 Deployment Challenges for Truck Platooning
Wei-Bin Zhang, Research Engineer, California PATH, University of California - Berkeley, USA

TS45 – Energy and Emission Impacts of ITS

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: Sustainability

Moderator: Masahiko Ikawa, Head Researcher Mitsubishi Electric Corp., Japan

12806 Combining Speed and Dwell Time Advisories for Improving Bus Ride Comfort
Marcin Seredyński, Senior Researcher, Public Research Centre Henri Tudor, Luxembourg

12856 Public Transport Priority: An Energy Saving ITS Measure
Marco Bottero, Researcher and Project Manager, SWARCO, Italy

13439 Analysis of Fuel Economy Improvement in the Eco-driving Pilot Program with ITS
Hideki Kato, Toyota Transportation Research Institute, Japan

13569 Optimal Design of Energy Harvesting Vehicle Suspension Systems
Bo Huang, Ph.D. Student, Simon Fraser University, Canada

13622 Connected, Automated, Zero-Emission Cars are Essential for Improving Livable, Sustainable Communities
John Niles, Research Director, Center for Advanced Transportation and Energy Solutions — CATES, USA

13686 Assessing Energy Impact of Traffic Management and ITS Technologies
Vadim Sokolov, Engineer, Argonne National Laboratory, USA

TS46 – Advanced Vehicle Systems

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Session Track: Advanced Vehicle Systems

Moderator: Myra Blanco, Director, Center for Automated Vehicle Systems Virginia Tech Transportation Institute, USA

12180 A Novel Channel Scheduling in IEEE 1609 Vehicular Networks
Tien-Yuan Hsieh, Engineer, Industrial Technology Research Institute, Chinese-Taipei

12432 The Development of Remote Diagnostic System for Internet-connected Vehicles
Chu-yuan Hsu, Automotive Research & Testing Center, Chinese-Taipei

12527 Calibrating Relative Pose of Non-Overlapping In-Vehicle Cameras with Laser Pointer
Shigang Li, Faculty of Engineering, Tottori University, Japan

13242 The Application of the Human-in-the-Loop Warning Messages Notification Model in the Design of Vehicle-to-Infrastructure (V2I) Communication Systems
Yiqi Zhang, Assistant Professor, New Jersey Institute of Technology, USA

13344 Mobility Impacts of Cooperative Adaptive Cruise Control (CACC) Under Mixed Traffic Conditions
Joyoung Lee, Research Director, Center for Advanced Transportation and Energy Solutions — CATES, USA
**TS47 – Cooperative Vehicle Field Test Programs**

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Jean-Charles Pandazis, Head of Sector EcoMobility, ERTICO - ITS Europe, Belgium

- **12625** Asset, Configuration & Maintenance Management for Safety Pilot  
  Anthony Gasiorowski, Sr. Systems Engineer, Parsons, Brinckerhoff, USA

- **12628** Network Architecture & Network Monitoring for Safety Pilot Connected Vehicle Infrastructure  
  Anthony Gasiorowski, Sr. Systems Engineer, Parsons, Brinckerhoff, USA

- **13394** Lessons Learned: Security and Privacy in Safety Pilot Model Deployment  
  Andre Weimerskirch, Associate Research Scientist, University of Michigan Transportation Research Institute (UMTRI), USA

- **13549** Detroit Builds First Urban Canyon Connected Vehicle Test Bed  
  Colleen Hill-Stramsak, Transportation Department Manager, Hubbell, Roth & Clark, Inc., USA

- **13624** Automating the Analysis of Field Operational Test Data for the Evaluation of Cooperative Systems  
  Bart D. Netten, Senior Scientific Researcher, TNO, Netherlands

**TS48 – ITS Weather Systems 2**

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:**  
- [ ] Connected Vehicles & Cooperative Systems

**Moderator:** Makoto Itami, Professor Tokyo University of Science, Japan

- **12231** Improving the Efficiency of Road Weather Data Collection  
  Rose Mooney, Applications Manager, Vaisala Inc., USA

- **12717** Winter Maintenance Quality Monitoring and Stopping Distance Evaluation  
  Jukka Pahkala, Technical Support Engineer, Noptel Oy, Finland

- **13057** Framework for a Comparison and Demonstration of Seasonal Weight Restriction Models Using RWIS Data  
  Dawn Gustafson, Michigan DOT, USA

- **13177** AVL/GPS Use for Winter Maintenance  
  Timothy Croze, Region Support Engineer, Michigan DOT, USA

- **13542** Michigan DOT Road Weather Decision Support System  
  Elise Kapphahn, ITS Engineer, Michigan DOT, USA

**TS49 – Multimodal Signal Priority Management**

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** New Mobility

**Moderator:** Bruce Eisenhart, Vice President, Operations Consensus Systems Technologies, USA

- **12629** Traffic Signal Priority, Business Architectures and Available Solutions - Challenges and Opportunities  
  Andrew Somers, Specialist Consultant - Network Operations and ITS, Transoptum Consulting, Australia

- **12884** Enhancing System Operations Through Improved Reliability & Resiliency of Traffic Signals in an Urban Environment  
  Soumya Dey, Director of Research & Technology Transfer, District DOT, USA

- **12702** Concept for Commuter Express Lanes on an Urban Arterial through Signal Priority  
  Melissa Ackert, ATMS/TSM&O Program Engineer, Florida DOT, USA

- **12971** Leveraging Existing Priority Control and Vehicle Detection Equipment to Create a Multi-modal Priority Control System with DSRC  
  Kevin Eichhorst, System Architect, Global Traffic Technologies, USA

**TS50 – Development in Road Pricing and Parking Management**

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:**  
- [ ] Connected Vehicles & Cooperative Systems

**Moderator:** Debo Shopade, Managing Consultant, ITS Nigeria/Genyz Transport Solutions, UK

- **12497** iPark Video-based System to Identify Available Parking Locations Over Large Areas  
  Seri Park, Assistant Professor, Villanova University, USA

- **13016** Value Added services of the GNSS CN based Road Pricing System  
  Tetsuya Adachi, Mitsubishi Heavy Industries, Ltd., Japan

- **13787** Impacts of Differentiated Road Charges — A Proposed Model  
  Gideon Mbiydzenyuy, Researcher, Blekinge Institute of Technology, Sweden
TS51 – Eco-Drive Management Systems

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.  
Cobo 358

Session Track: ■ Sustainability
Moderator: Yuji Nakajima, Senior Engineer, Nissan Motor Co., Ltd., Japan

13794 Study of Eco-Driving Support System for Hybrid Vehicle Considering Traffic Flow  
Katsuya Taguchi, Toyota Motor Corporation, Japan

12799 Impact Assessment for Cooperative Urban Traffic Management Based on Microscopic Traffic Flow Simulation  
Klaas Rozema, CTO, Imtech Traffic & Infra, Netherlands

13095 Installation of Environment Protection Management System (EPMS) to the Traffic Control Systems in Tokyo  
Aki Kabasawa, Traffic Regulation Division, Traffic Bureau, Metropolitan Police Department, Japan

TS52 – Corridor Based Travel Information

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.  
Cobo 359

Moderator: Moe Zarean, Vice President, Transportation Systems, Iteris, USA

12570 Study on Airport Access Behavior Modification by Providing Predictive Travel Time Information in Cases of Sudden Incident  
Stan Young, Director, Center for Advanced Transportation Technology, Works Division, University of Maryland, USA

13285 Multi-dimensional Geofencing  
Gregory Yova, President, Qvision Technology, USA

13588 Examination of the Methods and Costs of Providing Traveler Information  
Gregory Yova, President, Qvision Technology, USA

13807 Comparison of National Performance Measure Data Set (NPMRDS) with Bluetooth Traffic Monitoring (BTM) Data and I-95 Corridor Coalition Vehicle Probe Project (VPP) Data  
Kartik Kaushik, Research Assistant, University of Maryland, USA

TS53 – Safety System Sensors

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.  
Cobo 411 A

Session Track: ■ Traffic Safety
Moderator: Francois Fischer, Senior Project Manager, ERTICO – ITS Europe, Belgium

12451 Suppression of Interference Wave by Employing Staggered PRI on Two Frequency Interrupted CW Radar  
Takayuki Inaba, Professor, The University of Electro Communications, Japan

12956 Measuring the Performance of Active Safety Algorithms and Systems  
Tony Gioutsos, Director Sales and Marketing, Tass International, USA

13399 A Reliable Lane Detection Using Steerable and Average Filters  
Seunghwa Hyun, Master Student, Kyungpook National University, Korea

13455 Integrated Approach to Enable Real World Testing in Public Traffic by Complex Scenario Interpretation  
Daniel Jones, Software Developer, Ibeo Automotive Systems GmbH, Germany

TS54 – Vehicle Detection and Location by Video, Sensors, and Probes

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.  
Cobo 411 B

Session Track: ■ Connected Vehicles & Cooperative Systems
Moderator: Jean Michel Henchoz, Technical Manager, Denso Corporation, Belgium

13239 Strain Gauge Strip Sensor for Precision Weigh-in-motion System  
Kai Kroll, Research Consultant, Intercomp Co., USA

13310 Road Intersection Monitoring from Video with Large Perspective Deformation  
Takashi Furuya, Graduate Student, University of Pennsylvania, USA

13337 BlueEye: A Bluetooth-Based Vehicle Location Identification System for Queue Length Estimation at Signalized Intersections  
Mecit Cetin, Associate Professor, Old Dominion University, USA

13676 Variability in Travel Time Measurement Studies by the Degree of Data Aggregation  
Aleksandar Stevanovic, Assistant Professor, Florida Atlantic University, USA
### TS55 – Development of New ITS Algorithms

**Wednesday, September 10, 9:30 a.m. – 10:00 a.m.**

**Cobo 412 A**

**Moderator:** Robert Rausch, Vice President TransCore, USA

<table>
<thead>
<tr>
<th>Session Track</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>12307</strong> Random Forest Travel Time Prediction Algorithm Using Spatiotemporal Speed Measurements</td>
<td>Hesham Rakha, Professor of Civil and Environmental Engineering and Director Centre for Sustainable Mobility, Virginia Tech, USA</td>
</tr>
<tr>
<td></td>
<td><strong>12310</strong> Congestion Prediction Using Adaptive Boosting Machine Learning Classifiers</td>
<td>Hesham Rakha, Professor of Civil and Environmental Engineering and Director Centre for Sustainable Mobility, Virginia Tech, USA</td>
</tr>
<tr>
<td></td>
<td><strong>12612</strong> Cloned Vehicle Detection Approach Based on the Shortest Paths and License Plate Recognition Algorithms</td>
<td>Feng Wang, associate professor, Henan University of Technology, China</td>
</tr>
<tr>
<td></td>
<td><strong>13740</strong> An Automatic Calculation Method of Identifying the Hysteresis Loop Characteristics in Macroscopic Fundamental Diagram</td>
<td>Zhe Xu, Graduate Student, University of Wisconsin at Madison, USA</td>
</tr>
</tbody>
</table>

### TS56 – Road User Charging 4

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Cobo 412 A**

**Session Track:** Economic Growth

**Moderator:** Trevor Platt, Sales and Marketing Manager, Nicander Ltd., UK

<table>
<thead>
<tr>
<th>Session Track</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>12249</strong> Vehicle Axle Counting Using Two LIDARs for Toll Collection Systems</td>
<td>Toshio Sato, Chief Scientist, Toshiba Corporation, Japan</td>
</tr>
<tr>
<td></td>
<td><strong>13084</strong> Multi-Lane-Free-Flow Charging System Based on ID tag</td>
<td>Ieuji Saku, Mitsubishi Heavy Industries, Ltd., Japan</td>
</tr>
<tr>
<td></td>
<td><strong>13302</strong> SMART Tolling System Based on Multi-Lane Free-Flow</td>
<td>Ryena Woo, Master’s course, Seoul Women’s University, Korea</td>
</tr>
<tr>
<td></td>
<td><strong>13402</strong> The ‘F’ Factor — Not Only Smart but Flexible Synergies of Traffic Control and Management Systems</td>
<td>Daniel Scholz, Executive Sales Director, VITRONIC Machine Vision, Germany</td>
</tr>
</tbody>
</table>

### TS57 – ITS Applications to Improve Traffic Flow

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Cobo 412 B**

**Moderator:** Masao Fukushima, Technical Consultant R&D Engineering Management Division, Nissan Motor Co., Ltd., Japan

<table>
<thead>
<tr>
<th>Session Track</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>11933</strong> Strategy of Practical Implementation of Signal Information Drive Systems</td>
<td>Yasushi Domae, Senior Superintendent, National Police Agency, Japan, Japan</td>
</tr>
<tr>
<td></td>
<td><strong>12298</strong> Performance Analysis of a Crossing Collision Prevention System Using Microscopic Traffic Simulator</td>
<td>Yusuke Takatori, Assistant Professor, Kanagawa Institute of Technology, Japan</td>
</tr>
<tr>
<td></td>
<td><strong>12812</strong> Traffic Light Assistant</td>
<td>Michael Schuch, Vice President / Systems &amp; Technology, SWARCO AG, Austria</td>
</tr>
<tr>
<td></td>
<td><strong>12957</strong> Support Vector Machines — A Suitable Approach for a Prediction of Switching Times of Traffic Actuated Signal Controls</td>
<td>Michael Schäfer, Promotional student, University of Kassel, Institute of Traffic Engineering and Logistics, Germany</td>
</tr>
<tr>
<td></td>
<td><strong>13514</strong> Signal Phase and Timing for Connected Vehicles: A Discussion on ITS’ Implementation and Challenges</td>
<td>Thomas Timcho, Senior Research Scientist, Battelle Memorial Institute, USA</td>
</tr>
</tbody>
</table>

### TS58 – Improving Intersection Safety with ITS

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Cobo 353**

**Session Track:** Traffic Safety

**Moderator:** John Funny, Principal-in-Charge Grice Consulting Group, USA

<table>
<thead>
<tr>
<th>Session Track</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>12661</strong> Probabilistic Pedestrian Safety Modeling in Intersections Using a Surrogate Safety Measure</td>
<td>Kaveh Gharieh, Ph.D. Student, Department of Civil and Environmental Engineering, Rutgers University, USA</td>
</tr>
<tr>
<td></td>
<td><strong>11990</strong> Development and Operation of the New Push-button Signal Control System</td>
<td>Akiyoshi Yamazaki, Traffic Regulation Division of Traffic Department of Saitama Prefectural Police, Japan</td>
</tr>
<tr>
<td></td>
<td><strong>12332</strong> Improved Bike Safety at Traffic Signals via Better Detection</td>
<td>Dan Nall, District Sales Manager, Roadway Sensors, Iteris, Inc., USA</td>
</tr>
<tr>
<td></td>
<td><strong>12627</strong> Intersection Safety and Mobility System (SAMS)</td>
<td>Christopher Flores, Director, Product Management, Sensys Networks Inc., USA</td>
</tr>
<tr>
<td></td>
<td><strong>12938</strong> Priority of PT in Trondheim by Adaptive Signaling</td>
<td>Kristin Kraskenes, Senior Engineer, NPRA, Norway</td>
</tr>
</tbody>
</table>
### TS59 – Advanced Traffic Control Strategies

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Cobo 354**

**Moderator:** Jean-François Janin, Head of Mission, Ministry of Ecology, Sustainable Development, Transports and Housing, France

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>12140</td>
<td>RoadRunner: Infrastructure-less Vehicular Congestion Control</td>
<td>10:30 a.m.</td>
<td>Cobo 354</td>
</tr>
<tr>
<td>12535</td>
<td>Reproducibility Enhancements of Traffic Simulator and ITS Performance Evaluation</td>
<td>11:00 a.m.</td>
<td>Cobo 354</td>
</tr>
<tr>
<td>12580</td>
<td>Sophistication of MPD Traffic Control System</td>
<td>11:30 a.m.</td>
<td>Cobo 354</td>
</tr>
<tr>
<td>12823</td>
<td>Exploring the Use of Advanced Traffic Management Systems (ATMS) to Mitigate Atypical Bottlenecks</td>
<td>12:00 p.m.</td>
<td>Cobo 354</td>
</tr>
</tbody>
</table>

### TS60 – Commercial Vehicle Operators

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Cobo 355**

**Session Track:** Street Freight

**Moderator:** Der-Horng Lee, Professor National University of Singapore, Singapore

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>12665</td>
<td>Innovative Solutions for Sustainable Urban Freight Transport</td>
<td>10:30 a.m.</td>
<td>Cobo 355</td>
</tr>
<tr>
<td>12880</td>
<td>Container Number Database</td>
<td>11:00 a.m.</td>
<td>Cobo 355</td>
</tr>
<tr>
<td>13048</td>
<td>Empowering the Commercial Vehicle Fleet with V2X</td>
<td>11:30 a.m.</td>
<td>Cobo 355</td>
</tr>
<tr>
<td>13398</td>
<td>Analyzing Defined Tracking and Tracing Solutions for Intermodal International Transport of Dangerous Goods</td>
<td>12:00 p.m.</td>
<td>Cobo 355</td>
</tr>
<tr>
<td>13782</td>
<td>Grade Adaptation for Improving Commercial Vehicle Fuel Economy — Experimental Results</td>
<td>12:30 p.m.</td>
<td>Cobo 355</td>
</tr>
</tbody>
</table>

### TS61 – Vehicle and Driver Communication Systems

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

**Cobo 356**

**Moderator:** James Misener, Independent Consultant, USA

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>12291</td>
<td>Modernizing Hours-of-Service Compliance: Electronic Logbook</td>
<td>10:30 a.m.</td>
<td>Cobo 356</td>
</tr>
<tr>
<td>13014</td>
<td>Study About the Small Diversity Antenna for 5.9 GHz Band V2X Communication</td>
<td>11:00 a.m.</td>
<td>Cobo 356</td>
</tr>
<tr>
<td>13133</td>
<td>A Priority Based Transmission Scheme for Extended Channel Access in Vehicular Networks</td>
<td>11:30 a.m.</td>
<td>Cobo 356</td>
</tr>
<tr>
<td>13224</td>
<td>5.9 GHz V2X Modem Performance Challenges with Vehicle Integration</td>
<td>12:00 p.m.</td>
<td>Cobo 356</td>
</tr>
<tr>
<td>13736</td>
<td>Measuring Integrity of Navigation in Real-time</td>
<td>12:30 p.m.</td>
<td>Cobo 356</td>
</tr>
</tbody>
</table>
TS62 – Cooperative Systems

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: Connected Vehicles & Cooperative Systems

Moderator: Giacomo Somma, Project Manager, ERTICO - ITS Europe, Belgium

13387 13387 13387 Compass 4D: Method to Implement Road Side Units
Guilhem Autret, Technical Studies and Research Engineer, CEREMA, France

13426 13426 13426 Successful Management of a Connected Vehicle and Infrastructure Model Deployment
Debby Bezzina, Associate Research Scientist, UMTRI, USA

13061 13061 13061 International Survey of Best Practices in Connected and Automated Vehicle Technology Research and Deployment
Joshua Cregger, Industry Analyst, Center for Automotive Research, USA

13400 13400 13400 SCORE@F : French Field Operational Test for Cooperative Systems
Guilhem Autret, Technical Studies and Research Engineer, CEREMA, France

13675 13675 13675 Connected and Automated Vehicle Testbeds in Michigan
Matthew Smith, ITS Program Manager, Michigan DOT, USA

TS63 – Innovations in Rural ITS

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Moderator: Hideki Kato, Toyota Transportation Research Institute, Japan

12280 12280 12280 Multi-Rural State ITS Data Sharing and Collaboration
Robert White, Senior Manager III, Vermont Agency of Transportation, USA

12842 12842 12842 Movable ITS for Intensive and Cost-Effective Traffic Management for a Large-scaled and Short-time-period Event Area
Jin-Tae Kim, Professor, Korea National University of Transportation, Korea

Kyle Holgate, Technical Service and Test Engineer, Global Traffic Technologies, LLC, USA

13268 13268 13268 Rural Intersection Conflict Warning Systems — A Minnesota Statewide Effort to Reduce Fatalities
Ken Hansen, ITS Project Manager, Minnesota DOT, USA

TS64 – Developments in Connected and Autonomous Vehicle Systems

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: Connected Vehicles & Cooperative Systems

Moderator: Mark Norman, Director, Technical Activities Division Transportation Research Board, USA

14272 14272 14272 Outlook for Connected/Automated Vehicles: Points and Counterpoints
Mark Norman, Director, Technical Activities Division, Transportation Research Board, USA

12041 12041 12041 Black Box Design Approach for Optimal Stand-alone V2X and Integrated Active Safety Applications Implementation
Faroog Ibrahim, Executive Director, Savari Networks, USA

13340 13340 13340 Testing Impacts of Work Zone X2V Communication System on Safety and Air Quality in Driving Simulator
Fengxiang Qiao, Associate Professor and Co-director, Texas Southern University, USA

13403 13403 13403 Network of Automated Vehicles: the Autonet2030 Vision
Arnaud de La Fortelle, Director of the Center for Robotics, Mines ParisTech, France

TS65 – Driver Assistance Systems

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: Driver Behavior and Support

Moderator: Vincent Blervaque, Director, ITS got Solutions, Belgium

12758 12758 12758 Development of the Device to Prevent Wrong-way Driving
Yuichi Mizushima, Manager of Planning Section, Planning Department, NEXCO Engineering Niigata Co., Ltd., Japan

13041 13041 13041 Designing of Active Front Steering Using Dynamic Inversion
Inseok Yang, Post-Doctoral Researcher, Center for IT & Automobile Convergence, Korea

13457 13457 13457 Human-Machine Cooperation in Highly Automated Driving
Martin Krähling, Engineer, Ibeo Automotive Systems GmbH, Germany

13529 13529 13529 Evaluation and Testing of Driver Assistive Truck Platooning for Near Term Deployment
Richard Bishop, Principal, Bishop Consulting, USA
### Technical/Scientific Sessions

**TS66 – Advanced Corridor Management 1**

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.** | **Cobo 411 B**
--- | ---
**Moderator:** Sorawit Narupiti, Associate Professor Chulalongkorn University, Thailand

13109 **Data Management and Integration of a Multi-Modal and Multi-Agency Integrated Corridor Management System**
Fariel Bouattoura, New York Area Manager, Smart Infrastructure, Schneider Electric, USA

13062 **MDOT Metro Region Integrated Corridor Management Projects**
Michael Scheuer, Supervising Traffic Engineer, Parsons Brinckerhoff, USA

13246 **AZTech: An Approach for a Low Cost ICM Program**
Nicolaas Swart, Division Manager, Maricopa County DOT, USA

13460 **Dynamic Corridor Congestion Management in the Los Angeles South Bay**
Allen Chen, ITS Project Manager, Caltrans, USA

13508 **Multi-Agency Fast-Tracked ITS Deployment - I-90/39/88 Problem Solving**
Scott Lee, Delcan, USA

**TS67 – Application of SmartPhone Technology to Improve Mobility**

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.** | **Cobo 411 A**
--- | ---
**Session Track:** New Mobility

**Moderator:** Jeffery Dale, Senior ITS Engineer Kimley-Horn, USA

12541 **Connected Car: The Story of a 21st Century Driver**
Eugene Tsyrklevich, Founder and CEO, Parkopedia

12761 **Creating Big Data for Pavement Maintenance Management of Unsprung Movement Information from Sprung Acceleration**
Koichi Yagi, CEO, BumpRecorder Co., Ltd., Japan

12952 **Impact Evaluation Methodology for Collaborative Transport Applications**
Merja Penttinen, Senior Scientist, Finnish Transport Agency, Finland

13132 **Changing Travel Behavior Through Incentives Using a Smartphone Application with Automatic Travel Behaviour Detection — Results from Gothenburg**
Anders Hjalmarsson, senior researcher, Viktoria Swedish ICT, Sweden

13323 **Enhancing Mode Choice via Crowdsourcing and Decentralization of Routing and Scheduling**
Santosh Mishra, Senior Transportation Planner, TranSystems Corporation, USA

**TS68 – New Uses for Roadside Equipment**

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.** | **Cobo 411 B**
--- | ---
**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Martin Böhm, Head of Unit ITS Deployment AustriaTech GmbH, Austria

12947 **Modeling and Characteristics of Traffic State Generation from Loop Detector Based on Vehicular Trajectory Data**
Han Yang, Ph.D., Key Laboratory of Road Traffic Engineering of the Ministry of Education, Tongji University, China

13204 **Characteristics and Performance Level of the USN-based Portable Reference Equipment Developed to Overcome the Shortcomings of the Laser Sensor-based PORE for ITS Systems Performance Evaluation**
Sang Hyup Lee, Korea Institute of Construction Technology, Korea

13322 **Approach on the License Plate Recognition System Performance Improvement**
Yusuke Yasuhara, Sumitomo Electric System Solutions Co., Ltd., Japan
Technical/Scientific Sessions

TS69 – Advanced Traffic Management 1

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  
**Session Track:** Traffic Management

**Moderator:** Shigetoshi Tamoto, General Manager, Global ITS Business Dept., Systems & Electronics Div. Sumitomo Electric Industries, Ltd., Japan

- **13379** Co-operative Road Weather Information - Slipperiness Detection  
Pasi Pyyninen, Research Scientist, VTT Technical Research Centre of Finland, Finland
- **13546** I-80 Integrated Corridor Mobility Project  
Derek Pines, Senior Project Manager, Parsons, USA
- **12292** Advanced Corridor Traffic Management Based on Infrastructure and Probe Data Fusion  
Toshihiko Oda, General Manager, Vehicle Information and Communication System Center, Japan
- **12878** Video on Desktop  
Clay Packard, Software Integration Manager, Florida DOT, USA
- **13452** Success Factors for Tendering Advanced Traffic Management Systems  
Sebastian Althen, Head of Integrated Solutions, Siemens AG, Germany
- **13517** Operational Benefits of ATMS Deployment to Miami-Dade County  
K. K. Saxena, Senior Vice President, Kimley-Horn and Associates, Inc., USA

TS70 – Strategic Issues in ITS Development

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  
**Session Track:** International Cooperation to Expand ITS

**Moderator:** Stan Caldwell, Associate Director Carnegie Mellon University, USA

- **12725** Cooperation, A Prerequisite for Result  
Annica Roos, Senior Analyst ITS, Swedish Transport Administration, Sweden
- **12325** Smarter Transportation Management through ITS  
Robert Edelstein, Vice President of ITS in North America, AECOM, USA
- **12594** Trends in Transportation and Mobility  
Richard Harris, Solution Director, International Transportation and Government, Xerox Services, UK
- **12979** Reliability is the Key to Sustainability in Transportation  
Cary Vick, Director of SmartMobility, Schneider Electric, USA

TS71 – Transit Signal Priority

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  
**Session Track:** Public Transit

**Moderator:** Reinhard Pfiegl, AustriaTech

- **13265** NYC Manhattan Transit Signal Priority System Evaluation  
Lihua Zhang, Transportation Engineer, TransCore, USA
- **13438** Taichung City BRT Priority Signal System Design  
Chao-Fu Yeh, Senior Specialist, Transportation Bureau of Taichung City Government, Chinese-Taipei
- **13492** Regional Transit Signal Priority Interoperability  
Daryl Taavola, Vice President, URS Corporation, USA
- **13567** DSRC for Transit Vehicles in the Bay Area  
Paul Gray, CEO, Cohda Wireless, Australia

TS72 – Driver Simulation

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  
**Session Track:** Driver Behavior and Support

**Moderator:** Ronnie Taib, Senior Research Engineer National ICT Australia, Australia

- **12666** Extractioning of the Driving Features of the Elderly Drivers with Pre-dementia Drivers from Driving Simulator Test  
Chisa Takahashi, Aichi Prefectural University, Japan
- **13347** Driver Behaviour Impacts of Cooperative In-vehicle Signage  
Satu Innamaa, Senior Scientist, VTT Technical Research Centre of Finland, Finland
- **13590** A 3-D VR Model for Optimal Alignment Search System of Highway Design (OHPASS) using ASTER GDEM  
Motoya Yamasaki, Professor, Tokyo University of Agriculture, Japan

www.itsworldcongress.org | @ITSWC14
TS73 – Probe Data Applications and Evaluations

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  Cobo 356

Moderator: Alan Toppen, Associate Kimley-Horn and Associates, Inc., USA

13458 Improving Operations on MDOT’s Freeways Using Probe Vehicle Data  
Jason Firman, Michigan DOT, USA

12383 Field Evaluations of an Adaptive Traffic Signal Control System Using Private Sector Probe Data  
Jia Hu, Research Assistant, University of Virginia, USA

12476 Probe-Based Travel Time Decomposition Using Speed-time-distance Approximation Technique  
Sorawit Narupiti, Associate Professor, Chulalongkorn University, Thailand

13063 Analysis of Emergency Vehicle Travel Time Variance Using GPS and GIS Data, Speaker 5

13605 Detecting Vehicle Stops from Smartphone Accelerometer Data  
Mecit Cetin, Associate Professor, Old Dominion University, USA

TS74 – Navigation System Travel Information

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  Cobo 357

Moderator: Alexander Froetscher, Head of Unit, ITS Development, AustriaTech, Austria

12572 A Study of NMEA Format (GPS) Utilizing Short Range Data for Mobile Phone and Applied Map Deliver System  
Yuichi Takayamagi, Chief Engineer, Panasonic System Networks Co., Ltd., Japan

12585 Microscopic Simulation Testbed Based on ITS Environments  
Taehyeong Kim, Senior Researcher, Korea Institute of Civil Engineering and Building Technology, Korea

13191 Improvement of Global Map Matching Algorithm Based on Frechet Distance  
Kai Zhang, Associate Professor, Tsinghua University, China

13225 Ideal Addressing for Automotive  
Kamron Clifford, Senior Product Line Manager, North American Map Content, TomTom, USA

13476 Difference Between Estimated Travel Time By Car Navigation System and Real Travel Time By Probe Vehicle Test in Urban Area  
Heejin Jung, Researcher, Institute of Spatial Information, Korea

TS75 – Innovative Approaches for ATIS

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  Cobo 358

Moderator: Nobuhiro Uno, Associate Professor Graduate School of Management & Department of Urban Management Graduate School of Engineering, Kyoto University, Japan

13477 Predicting Corridor Travel Time Reliability in Real-time Using Bluetooth Data  
Laurence Rilett, University of Nebraska-Lincoln, USA

12800 An Automated System for City-scale Travel Time Calculation  
Vinoth Biljani, Solution Architect, IBM Intelligent Transportation, IBM, India

13075 Utilizing the Systems Engineering Process in Support of Building a Construction Traveler Information for I-35 Widening in Central Texas  
Robert Brydia, Research Scientist, Texas A&M Transportation Institute, USA

13142 A Hybrid Approach for Feature Selection and Freeway Travel Time Prediction Using Biogeography-based Optimization and Support Vector Regression  
Prateek Bansal, Graduate Research Assistant, The University of Texas at Austin, USA

TS76 – Innovations in Network Management

Wednesday, September 10, 1:30 p.m. – 3:00 p.m.  Cobo 359

Moderator: Frank Deasy, Sr. Project Manager Schneider Electric, USA

12735 Improved Incident Management through Anomaly Detection in Historical Records  
Ronnie Taib, Senior Research Engineer, National ICT Australia, Australia

12901 Real-time Traffic Queue Length Estimation at the Freeway Off-ramp Using Dual-zone Detectors  
Yao Cheng, Research Assistant, University of Maryland, USA

12969 Alternative Performance Measures and Weighting for Quantifying Spatial and Temporal Congestion Using Probe Data  
Thomas Brennan Jr., Assistant Professor, The College of New Jersey, USA

13013 A Study of Traffic Volume Fluctuation Considering Traffic Incidents in Hanshin Expressway Network  
Akito Higatani, Engineer, Hanshin Expressway Co., Ltd., Japan
### TS77 – Sensing the Vehicle Environment

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Jean-Marc Blosseville, Managing Director, IFSTTAR, France

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11962</td>
<td>A Novel Controller Design for Collision Avoidance Systems Using Sensor Fusion Method</td>
<td>Ming Hung Li, Automotive Research &amp; Testing Center, Chinese-Taipei</td>
</tr>
<tr>
<td>13366</td>
<td>Optimization of Computer Vision Algorithms in Codesign Methodologies</td>
<td>Marcos Nieto, Researcher, ViconTech-IK4, Spain</td>
</tr>
<tr>
<td>13391</td>
<td>Forward-Backward Object Tracking for Generation of Reference Scenarios Based on Laser Scan Data</td>
<td>Martin Spencer, System Developer, Ibeo Automotive Systems GmbH, Germany</td>
</tr>
<tr>
<td>13598</td>
<td>Stereo Vision Approach for Night Time Pedestrian Detection and Protection</td>
<td>Mario Haddad, TK Holdings, Inc., USA</td>
</tr>
</tbody>
</table>

### TS78 – Measuring Performance

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Moderator:** Brian Gallagher, RF Hardware Staff Engineer DENSO International America, Inc., USA

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12965</td>
<td>Comparison of Travel Times Displayed on Dynamic Message Signs with Bluetooth Traffic Monitoring (BTM) Travel Time Data in Pittsburgh, PA</td>
<td>Stan Young, Director, Center for Advanced Transportation Technology, Works Division, University of Maryland, USA</td>
</tr>
<tr>
<td>13561</td>
<td>Safety and Operational Performance Measures from Radar-based Vehicle Detection Systems</td>
<td>Peter Rafferty, ITS Program Manager, UW-Madison, USA</td>
</tr>
<tr>
<td>13693</td>
<td>Measuring Performance on Interrupted Flow Facilities with GPS Probe and Bluetooth Traffic Monitoring Data</td>
<td>Rueben Juster, Faculty Research Assistant, Center for Advanced Transportation Technology, University of Maryland College Park</td>
</tr>
</tbody>
</table>

### TS79 – Multi Object Collision Avoidance

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Jeff Pierson, Senior Consultant Verizon Corp Rscs Group LLC, USA

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12200</td>
<td>Effect and Acceptance of V2I Cooperative Crossing Collision Prevention System at Non-Signalized Intersections</td>
<td>Atsushi Furuta, Toyota Motor Corporation, Japan</td>
</tr>
<tr>
<td>13185</td>
<td>Real-time Multiple Object Recognition for Collision Avoidance Using Wide Angle Stereo Camera</td>
<td>Dzmitry Tsishkou, Senior research engineer, IMRA Europe S.A.S., France</td>
</tr>
<tr>
<td>13277</td>
<td>Vehicle-to-Pedestrian Cooperative Safety Application</td>
<td>Radovan Munic, Research Engineer, Honda R&amp;D, USA</td>
</tr>
<tr>
<td>12273</td>
<td>Methodology for Designing Intersection Collision Avoidance Systems based on Multi-objective Criteria</td>
<td>Kazutoshi Nobukawa, Postdoctoral Research Fellow, University of Michigan Transportation Research Institute, USA</td>
</tr>
<tr>
<td>13171</td>
<td>Visual Recognition of Pedestrians with Deep Neural Networks</td>
<td>Ikuro Sato, senior engineer, DENSO IT Laboratory, Inc., Japan</td>
</tr>
</tbody>
</table>
TS80 – Traffic Control

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.
Cobo 353

Moderator: Bengt Hallström, Analyst and Senior Advisor, Swedish Transport Administration, Sweden

12399 Yellow Light and Yellow Light Dilemma — An Independent Scrutinization from the View of Logic
Aiken, Jiantong Nl, AEIOsoft Mobility & Road Safety Laboratory, China

12419 An Evaluation of Adaptive Traffic Control System in Istanbul, Turkey
Nihat Kocyigit, R&D Engineer, ISBAK INC., Turkey

13472 A Rationale for Incorporating ITS Applications’ Effect into the HCM Signalized Facilities Analysis Procedure
Jia Hu, Research Assistant, University of Virginia, USA

13495 Real-time Traffic Control for Urban Environments: Expanding the Surtrac Testbed Network
Gregory Barlow, Project Scientist, Carnegie Mellon University, USA

13509 Variable Speed Limit Analysis on the Highway Istanbul
Fatih Gündoğan, ISBAK Inc., Turkey

TS81 – Academic Issues on Public Transportation

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.
Cobo 354

Session Track: ■ Public Transit

Moderator: Makoto Itami, Professor Tokyo University of Science, Japan

12888 Selection Guidelines and Anomaly Detection of Performance Metrics in Transportation Systems
Alvaro Gil, Senior Research Scientist, Xerox Innovation Group, USA

13196 A Web Platform for User-Oriented Reliability Diagnosis in Bus Transit Services
Benedetto Barabino, Technomobility, Italy

13216 Using Archived Bus Health Data to Inform the Design of a Transit Signal Priority Project in New York City
Shu-Yuan Wu, Graduate Center, City University of New York, USA

TS82 – Innovations in Traffic Data Collection and Analysis

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.
Cobo 355

Session Track: ■ Big Data and Open Data

Moderator: Alan Clelland, Sr. Vice President Iteris, USA

12322 Using Mobile Data for Weather Response Traffic Management
Steven J. Cook, P.E., Engineer of Systems Operations and Maintenance, Michigan DOT, USA

12647 Operation and Use of an Enhanced Real-Time Traffic Statistics Reporting System
Charles Lattimer, Sr. Project Manager, Atkins, USA

13044 Use of Traffic and Citizen Tweets for Incident Management for District DOT
Rakesh Nune, Systems Engineer, District DOT, USA

13436 A Study on Automated Data Collection and Deduction of Road Updates Using Public Tender Notices
Satoru Nakajo, Principal Consultant, ITS Business Group, Mitsubishi Research Institute, Inc., Japan

13017 Learning Mobility User Choice and Demand Models from Public Transport Fare Collection Data
Frederic Roulland, Xerox Research Centre Europe, France

TS83 – Crash Data Analysis

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.
Cobo 356

Moderator: Sami Mynttinen, Research Director, Finnish Transport Safety Agency, Finland

11948 Pattern Matching Longitudinal Acceleration Time Series Data to Identify Crashes in Naturalistic Driving Data
Robert Kluger, Graduate Research Assistant, University of Virginia, USA

12678 Characteristics and Contributing Factors of Serious Single Passenger-vehicle Collisions in Beijing from 2009 to 2013
Quan Yuan, Research Scholar, University of Washington, USA

12972 A Model-Based Crash Prediction Technique for Chinese Roadway Segments
Kaveh Gharieh, Ph.D. Student, Department of Civil and Environmental Engineering, Rutgers University, USA
TS84 – Security Challenges for ITS Systems

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Moderator:** Dean Economou, Technology Strategist, NICTA, Australia

- **12097** Guidelines for Vehicle Cybersecurity
  Hirofumi Onishi, Specialist, Alpine Electronics, USA

- **12270** A Case Study on Information Security and Cyber Risks Implementation on an IP/MPLS Network
  Gabriel Ozigue, Senior Fellow, Fluor Corporation, UK

- **12611** An Efficient Prototype Implementation for Message Security in V2X Communication
  Kees Moorman, Senior Scientist, NXP Semiconductors, Netherlands

- **13502** Over the Air Software Updates in a Secure Automotive Environment
  Dan Presidio, Director of Engineering, Movimento, Inc., USA

TS85 – New Developments in Probe and Floating Car Data Processing

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Moderator:** Pete Costello, Director Business Development, Public Sector INRIX, USA

- **12670** Real Time Visualization of Probe Information Using Web Based Technologies
  Hiroyuki Kumazawa, Professor, Osaka Sangyo University, Japan

- **12945** Developing an Objective Measure of Urban Congestion across the Globe: the TomTom Traffic Index
  Nick Cohn, Head of Business Development, TomTom, Netherlands

- **13134** Design of System Configuration for Floating Car Traffic Information Provision Service on Cloud Computing Environments
  Takuya Sue, FUJITSU LIMITED, Japan

- **13375** A Proactive Route Search Method for an Efficient City Surveillance
  Osamu Masutani, Chief Engineer, Denso IT Laboratory, Inc., Japan

- **13665** Transportation Database Development Using Floating Car Data
  Evan Burton, Database Engineer, National Renewable Energy Laboratory, USA

TS86 – Communication Platforms for Vehicles and Drivers

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Moderator:** Francois Fischer, Senior Project Manager, ERTICO – ITS Europe, Belgium

- **12350** Development, Piloting and Deployment of Co-operative Mobility Services of the Future — Experiences of the CoMoSeF Project
  Pekka Eloranta, Director EU Projects, Mobisoft Oy, Finland

- **12894** Achieving Interoperability Between the Emerging C-ITS platform and Existing ITS Infrastructure in Australia
  David Green, Senior Engineer, ARRB Group, Australia

- **13011** Study on Interference Signal Cancellation In-vehicle Communication Systems
  Ippei Sugae, AISIN SEIKI Co., Ltd., Japan

- **13446** V2I After the V2V Mandate: Safety, Semi-Autonomous Vehicles, and the Case for Connected Vehicle Roadside Infrastructure
  Matthew Dorfman, Partner, D’Artagnan Consulting LLP, USA

- **13792** Proposal of Feasible ASV Services Using V2V Communications Based on FOT in Hiroshima
  Sho Watanabe, The University of Tokyo, Japan

TS87 – Intelligent Work Zones

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Moderator:** Shinya Omi, Senior Vice President ITS Japan, Japan

- **13600** Analysis of the Impacts of Freeway Work Zones and Incidents Using Bluetooth Data
  Geza Pestl, Texas A&M Transportation Institute, USA

- **13248** Intelligent Work Zone Data Collection and Evaluation
  Rashmi Brewer, Minnesota DOT

- **13503** Data, Models, and Construction Permits
  Michael Marsico, Assistant Commissioner, New York City DOT, USA

- **13656** Smart Work Zone — Fully Integrated Operations and Management
  Bini William, ITS Project Manager, Delcan, USA
### TS88 – Collision Avoidance Systems

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Richard Bishop, Principal Bishop Consulting, USA

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12463</td>
<td>Definition of a Microscopic Traffic Simulations Driver Model for Inter-urban Intersections</td>
<td>Jens Klimek, Research Assistant, Institut für Kraftfahrzeuge, RWTH Aachen University, Germany</td>
</tr>
<tr>
<td>13081</td>
<td>Collision Avoidance System Based on Adaptable Speed</td>
<td>Inseok Yang, Post-Doctoral Researcher, Center for IT &amp; Automobile Convergence, Korea</td>
</tr>
<tr>
<td>13453</td>
<td>Cooperative Collision Warning Application for High Speed Track Safety Management</td>
<td>Álvaro Arrúe, Project Manager, IDIADA Automotive Technology, Spain</td>
</tr>
<tr>
<td>13690</td>
<td>Evaluating the Performance of Intersection Collision Warning Systems Over Vehicular Networks</td>
<td>Mohammad Horani, System Engineer, P3 Group, USA</td>
</tr>
</tbody>
</table>

### TS89 – Developing an ITS Workforce

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Economic Growth

**Moderator:** Jean-Philippe Méchin, Deputy Head of Intelligent Transport Group, CEREMA, France

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12455</td>
<td>Virtual ITS training — A Reality!</td>
<td>Peter von Heidenstam, Transport Planner, Swedish Transport Administration, Sweden</td>
</tr>
<tr>
<td>12781</td>
<td>Strengthening University ITS Teaching for the Workforce</td>
<td>Mac Lister, ITS PCB Program Manager, ITS Joint Program Office, U.S. DOT, USA</td>
</tr>
<tr>
<td>12782</td>
<td>Building the Future Transportation Workforce: ITS Skills and Competencies</td>
<td>Elizabeth Greer, Lead ITS Analyst, Noblis, USA</td>
</tr>
<tr>
<td>13636</td>
<td>Reinventing Traffic Operations Center Resource Management.</td>
<td>Joanna Scott, Technical Director, TMC Operations, Atkins, USA</td>
</tr>
</tbody>
</table>

### TS90 – Innovative Traffic Management Concepts and Systems

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Session Track:** Traffic Management

**Moderator:** Takaaki Sugiura, Principal Researcher, ITS planning Group Mitsubishi Research Institute, Inc., Japan

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12532</td>
<td>Traffic Facilitation Field Operation Tests in Expressway Sag Sections Based on Adaptive Cruise Control</td>
<td>Fumihiko Kanazawa, Head, ITS Division, National Institute for Land and Infrastructure Management, Japan</td>
</tr>
<tr>
<td>12937</td>
<td>Intelligent Condition-based Mega-city Traffic Management System: A Novel Comprehensive ‘Holographic’ Information Approach</td>
<td>Zhi Han, Chief Scientist, China Merchants Chongqing Communications Research &amp; Design Institute Co., Ltd., China</td>
</tr>
<tr>
<td>13035</td>
<td>Effective Traffic Management Practice Needed to Combat the Growing Traffic Congestion in Many Developing Countries</td>
<td>Edmond Chang, President, CEO, EDCPC, Inc., USA</td>
</tr>
<tr>
<td>13378</td>
<td>Evaluation Method for Analysis of Congestion Reduction Effect of VICS Information Service Using Traffic Simulation</td>
<td>Toshihiko Oda, General Manager, Vehicle Information and Communication System Center, Japan</td>
</tr>
<tr>
<td>13564</td>
<td>An Overview of the Analysis, Modeling, and Simulation (AMS) Testbed to Support Dynamic Mobility Applications (DMA) and Active Transportation and Demand Management (ATDM) Programs</td>
<td>Balaji Yelchuru, Lead Associate, Booz Allen Hamilton, USA</td>
</tr>
</tbody>
</table>

### TS91 – Video Detection & Processing

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Moderator:** Adam Lyons, Director of Marketing Iteris, Inc, USA

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12158</td>
<td>Registration of Aerial Images Using Pseudo-Orthogonal Space</td>
<td>Koji Iigura, Lecturer, Shizuoka Institute of Science and Technology, Japan</td>
</tr>
<tr>
<td>12333</td>
<td>VectorSense™ Technology for Enhanced Traffic Information, Safety and Corridor Management</td>
<td>Randy Hanson, Executive Vice President and COO, International Road Dynamics Inc., Canada</td>
</tr>
<tr>
<td>12601</td>
<td>Enhanced Image Processing — Why the Tolling Industry Should Apply a Holistic Approach to Image Handling</td>
<td>Frank Kjelsh, Vice President Managed Services, Q-Free ASA, Norway</td>
</tr>
<tr>
<td>13203</td>
<td>Understanding the Potential Benefits of Video Analytics to Support Traffic Data Collection, Incident Detection, and Animal Detection</td>
<td>Mike Barnet, Ministry of Transportation of Ontario, Canada</td>
</tr>
</tbody>
</table>
## TS92 – Regional and Statewide Integrated ITS Deployments

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

### Cobo 354

**Session Track:** International Cooperation to Expand ITS

**Moderator:** Reinhard Pfiegl, CEO, A3PS, Austria

<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Presentation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>12517</td>
<td>A New Central System with Disaster Recovery Functions — For Business Continuity of Road Traffic Control</td>
<td>Atsushi Edahiro, Assistant, West Nippon Expressway Company Limited, Japan</td>
</tr>
<tr>
<td>13483</td>
<td>NC Operations Business Maturity: Preparing for a New ATMS</td>
<td>Jennifer Portanova, State Traffic Operations Engineer, North Carolina DOT, USA</td>
</tr>
<tr>
<td>12719</td>
<td>Multi-Model Transportation Operations, SFMTA, a Project Update</td>
<td>Clifford Conklin, ITS Project Manager, HNTB Corp, USA</td>
</tr>
<tr>
<td>13706</td>
<td>Operating a Transportation Management Center</td>
<td>Matthew Lee, Michigan DOT, USA</td>
</tr>
</tbody>
</table>

## TS93 – Data Management Strategies

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

### Cobo 355

**Session Track:** Big Data and Open Data

**Moderator:** Fang Chen, Research Team Leader National ICT Australia, Australia

<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Presentation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>12135</td>
<td>Generating Summaries from Field Operational Test Data</td>
<td>Sami Koskinen, VTT Technical Research Centre of Finland, Finland</td>
</tr>
<tr>
<td>12679</td>
<td>Design and Implementation of Location-Aware Contents Distribution Platform Utilizing Precise Probe Vehicle Data</td>
<td>Yasuhito Tsukahara, Student, Keio University, Japan</td>
</tr>
<tr>
<td>13182</td>
<td>A Platform for Sharing Data from Field Operational Tests</td>
<td>Yvonne Barnard, ERTICO - ITS Europe, Belgium</td>
</tr>
<tr>
<td>13614</td>
<td>Analyzing Data from the Safety Pilot Infrastructure: Influencing Future Deployments</td>
<td>Lee Mixon, President, Mixon Hill, Inc., USA</td>
</tr>
</tbody>
</table>

## TS94 – Integrated Corridor Operations

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

### Cobo 356

**Moderator:** Amanda Good, ITS Planner Kimley-Horn, USA

<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Presentation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>12470</td>
<td>Amalgamating UDOT ITS Databases to Evaluate Corridor Strategies and Projects</td>
<td>Grant Farnsworth, HNTB, USA</td>
</tr>
<tr>
<td>13497</td>
<td>Zoo Interchange: Integrated Corridors as a Construction Management Tool</td>
<td>Jason Stribiak, ITS Planner/Project Manager, HNTB Corporation, USA</td>
</tr>
<tr>
<td>13651</td>
<td>Evaluating Integrated Corridor Management Response Plans in the San Diego Region</td>
<td>Michael Washkowiak, Project Manager, Kimley-Horn and Associates, Inc., USA</td>
</tr>
<tr>
<td>13671</td>
<td>Deploying a “Smart Corridor” Today, for Tomorrow’s Needs: ATM and Connected Vehicles</td>
<td>Darryl Dawson, ITS Deployment Engineer, Illinois State Toll Highway Authority, USA</td>
</tr>
<tr>
<td>13779</td>
<td>Connected Mobility Services in an Integrated City</td>
<td>Jaap Vreeswijk, Product Manager Research, Imtech Traffic &amp; Infra, Netherlands</td>
</tr>
</tbody>
</table>

## TS95 – Traveler Information Challenges

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

### Cobo 357

**Moderator:** Stéphanie Chaurton, Project Manager, ERTICO - ITS Europe, Belgium

<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Presentation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>12416</td>
<td>Evaluation of a Driving Route Display System for Heavy Vehicles</td>
<td>Takahiro Tsukiji, Researcher, National Institute for Land and Infrastructure Management, MLIT, Japan</td>
</tr>
<tr>
<td>13377</td>
<td>The Digital Road Authority: Creating Synergy Between the Information and Intentions of Public Parties, Private Parties and Traveler</td>
<td>Daphne van Leeuwen, Trinite, Netherlands</td>
</tr>
<tr>
<td>13718</td>
<td>A Traveler Information Platform for Modern Smart Cities</td>
<td>Saurav Bhattacharya, CEO, Quantum Inventions, Singapore</td>
</tr>
<tr>
<td>12084</td>
<td>Ottawa Nav — A Context Awareness Traveler Information Platform</td>
<td>Philippe Landry, Manager, Traffic Services, City of Ottawa, Canada</td>
</tr>
<tr>
<td>13009</td>
<td>Traffic Data Quality Assurance Program for a Consistent and Reliable Accurate Data Collection and Information Dissemination</td>
<td>James Zhou, Senior Engineer, Intelligent Transport System Development, Land Transport Authority of Singapore, Singapore</td>
</tr>
</tbody>
</table>
### TS96 – Driver Behavior and Cognition of Signage and Markings

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Cobo 358**

**Session Track:** Driver Behavior and Support

**Moderator:** Ronnie Taib, Senior Research Engineer, National ICT Australia, Australia

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>12577</td>
<td>A Development of Road Surface Temperature Prediction System by Using Vehicle Ambient Temperature of Can Data</td>
<td>Youngkyun Kang, Chief Research Engineer, Hyundai Engineering &amp; Construction, Korea</td>
</tr>
<tr>
<td>13087</td>
<td>Investigation of Graphic Symbols Displayed on Expressway Information Board</td>
<td>Hideki Takahashi, Senior Expert, Central Nippon Expressway Company Limited, Japan</td>
</tr>
<tr>
<td>13330</td>
<td>Large-Scale Image Registration for Road Markings Deterioration Management from in-Vehicle Camera Images and Logged Can Data</td>
<td>Sakiko Nishino, Aichi Prefectural University, Japan</td>
</tr>
<tr>
<td>13386</td>
<td>Evaluation of Effects of Traffic Sign and Signal by Using Driving</td>
<td>Toshiyuki Sugimachi, Project researcher, The University of Tokyo, Japan</td>
</tr>
<tr>
<td>13485</td>
<td>Validation Study on Evaluation of Traffic Safety Installations Using fNIRS</td>
<td>Kouji Yamamoto, Director, Central Nippon Expressway Co., Ltd., Japan</td>
</tr>
</tbody>
</table>

### TS97 – New Techniques to Analyze, Predict, and Mitigate Traffic Safety

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Cobo 359**

**Session Track:** Traffic Safety

**Moderator:** Farhad Pooran, Vice President of Engineering, Schneider Electric, USA

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>12467</td>
<td>P4S China Architecture</td>
<td>Mohsen A. Jafari, Professor, Center for Advanced Infrastructure and Transportation, USA</td>
</tr>
<tr>
<td>12581</td>
<td>Control Techniques for Traffic Accident Deterrence - Effects of Traffic Sign Control for Speeding Prevention</td>
<td>Nobuyuki Kimura, Traffic Facilities and Control Division, Tokyo Metropolitan Police Department, Japan</td>
</tr>
<tr>
<td>12851</td>
<td>Practical Use of the Real Time Traffic Hazard Prediction on Hanshin Expressway</td>
<td>Takashi Kodama, Hanshin Expressway Company Limited, Japan</td>
</tr>
<tr>
<td>13218</td>
<td>Improving Traffic Safety with ITS: Results from a Trial Installation</td>
<td>Raza Muhammed, Project Manager, The Danish Road Directorate, Denmark</td>
</tr>
</tbody>
</table>

### TS98 – Implications and Assessment of Automated Driving

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

**Cobo 411 A**

**Session Track:** Automated Transportation

**Moderator:** Maxime Flament, Head of Sector SafeMobility, ERTICO - ITS Europe, Belgium

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>12443</td>
<td>Multi-class Driverless Vehicle Cooperation for Mobility-on-Demand</td>
<td>Scott Pendleton, PhD Candidate, National University of Singapore, Singapore</td>
</tr>
<tr>
<td>12649</td>
<td>Automated Vehicle Technology Survey of Industry Stakeholders</td>
<td>Eric Paul Dennis, Transportation Systems Analyst, Center for Automotive Research, USA</td>
</tr>
<tr>
<td>12864</td>
<td>The Implications of Fully Automated Driving for the Automotive Industry</td>
<td>Ian Riches, Director - Global Automotive Practice, Strategy Analytics, Ltd., UK</td>
</tr>
<tr>
<td>12886</td>
<td>Autonomous Vehicle Technology: How to Best Realize ITS Social Benefits</td>
<td>James Anderson, Senior Behavioral Scientist, RAND Corporation, USA</td>
</tr>
<tr>
<td>13258</td>
<td>Technical Challenges for Fully Automated Driving Systems</td>
<td>Steven Shladover, Research Engineer/Program Manager, California PATH, ITS Berkeley, University of California, USA</td>
</tr>
<tr>
<td>13734</td>
<td>Towards Holistic Assessment of Automated Driving</td>
<td>Merja Penttinen, Senior Scientist, Finnish Transport Agency, Finland</td>
</tr>
</tbody>
</table>
TS99 – Advanced Traffic Management 2

Thursday, September 11, 10:30 a.m. – 12:00 p.m.  
Cobo 411 A

Session Track: Traffic Management

Moderator: Shunsuke Kamijo, Associate Professor Institute of Industrial Science, The University of Tokyo, Japan

13512 Unified Evaluation Method for Traffic Control Logarithms  
Klaas Rozema, CTO, Imtech Traffic & Infra, Netherlands

12502 Analysis of Areas of Vegetation Using Satellite Images and Three-Dimensional Map  
Tomoya Hasegawa, Shizuoka University, Japan

12652 Testing Non-Intrusive Sensors to Replace Loop Systems: A Case Study from the UK’s Highways Agency  
Bryan Jarrett, Wavetronix, USA

12740 Proposal of a Cooperative Infrastructure-Vehicle System for Traffic Signal Control  
Noriyuki Tsukada, Nissan Motor Co., Ltd., Japan

13026 Strategy management toward smart city  
Marco Bottero, Researcher and Project Manager, SWARCO, Italy

TS100 – Incident Management in Large Metropolitan Areas

Thursday, September 11, 10:30 a.m. – 12:00 p.m.  
Cobo 411 B

Moderator: Tien-Pen Hsu, Associate Professor National Taiwan University, Chinese-Taipei

13657 Event-Driven Incident Management in the District of Columbia with the Capital Traffic Operations Platform  
Xianding Tao, Senior ITS Engineer, District DOT, USA

12074 Managing Metro Detroit Traffic Incidents Through Partnerships  
Richard Beaubien, Managing Director, Beaubien Engineering, USA

13256 San Mateo County Smart Corridor Project — Providing Alternate Routes During Incidents  
Scott Carlson, Vice President – Western Regional Manager, Iteris, Inc., USA

13601 Florida DOT District Six Evolution of Incident Management Program  
Jeff Hochmuth, Senior ITS Engineer, CDM Smith, USA

13650 The Use of ITS in Incident Management for the Illinois State Toll Highway Authority  
Olímpio Mendes de Barros, Engineer, CET, Brazil

TS101 – Smart Parking 2

Thursday, September 11, 10:30 a.m. – 12:00 p.m.  
Cobo 412 A

Moderator: Cole Dagerhardt, Engineer Kimley-Horn and Associates, Inc., USA

12423 Smart Parking Solution Assessment for Reduce Urban Traffic Jams  
Eric Klein, Head traffic metrology team, Cerema, France

13259 LA Express Park™ - Curbing Downtown Congestion Through Intelligent Parking Management  
Peer Ghert, Senior Management Analyst, Los Angeles DOT, USA

13306 Vehicle Coordinates Sensing for C-AVP Using Surveillance Cameras  
Toru Saito, Chief Engineer, Honda R&D Co., Ltd., Automobile R&D Center, Japan

13738 Parking Developing ITS Own Space  
Robert De Beukelaer, Solution Delivery Director EMEA, Xerox Services, Netherlands
### TS102 – Innovative Uses of Probe Data

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Moderator:** Yvonne Barnard, Project Manager, ERTICO – ITS Europe, Belgium

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12530</td>
<td>Detecting Abnormal Traffic Using Traffic Data</td>
<td>Shotaro Ohira, Assistant Manager, Sumitomo Electric System Solutions Co., Ltd., Japan</td>
<td></td>
</tr>
<tr>
<td>12598</td>
<td>Estimating Time-Varying O/D Information on the Base of Detector Pulse Data and FCD Measurements</td>
<td>Thomas Riedel, Managing Director, Adaptive Traffic Control AG, Switzerland</td>
<td></td>
</tr>
<tr>
<td>13341</td>
<td>Estimation of Real-time Origin-destination Flow Using Mobile Sensor Network</td>
<td>Joyoung Lee, Assistant Professor, New Jersey Institute of Technology, USA</td>
<td></td>
</tr>
<tr>
<td>13368</td>
<td>Application of Probe Data in Estimating Volume, Average Travel Time and Delay in an Intersection</td>
<td>Sandy Mae Gaspay, Ph.D. Student, University of Tokyo, Japan</td>
<td></td>
</tr>
</tbody>
</table>

### TS103 – Reduction of Fuel Consumption

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Moderator:** Hiroyuki Kumazawa, Professor Osaka Sangyo University, Japan

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12496</td>
<td>Traffic Jam Reduction with Cooperative Cruise Control</td>
<td>Tomoyuki Doi, Assistant Manager, Toyota Motor Corporation, Japan</td>
<td></td>
</tr>
<tr>
<td>13001</td>
<td>Development of an Algorithm for the Dynamic Curve Speed Warning System</td>
<td>Ji-Eun Choi, Pukyong National University, Korea</td>
<td></td>
</tr>
<tr>
<td>13615</td>
<td>Comparative Evaluation of Fuel Consumption Estimation Models</td>
<td>Byungkyu (Brian) Park, Associate Professor, University of Virginia, USA</td>
<td></td>
</tr>
<tr>
<td>13714</td>
<td>Context-sensitive Eco-driving Scores</td>
<td>Matthew Barth, Professor, University of California, USA</td>
<td></td>
</tr>
<tr>
<td>13759</td>
<td>Fuel Economy Improvement Potential of a Heavy Duty Truck using V2x Communication</td>
<td>Rajeev Verma, Eaton Corp, USA</td>
<td></td>
</tr>
</tbody>
</table>

### TS104 – Collision Warning Systems

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

**Moderator:** Faroog Ibrahim, Executive Director Savari Networks, USA

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12861</td>
<td>Speed Management at Bends Using LDM</td>
<td>Cigdem Cavdaroglu, Analysis and Design Leader, KocSistem Bilgi ve Iletisim Hizmetleri, Turkey</td>
<td></td>
</tr>
<tr>
<td>12835</td>
<td>Vehicle Collision Warning System Based on Fuzzy Inference</td>
<td>Yong-Yao Yang, Chief Scientist, SUPCON Information Technology Co. Ltd., China</td>
<td></td>
</tr>
<tr>
<td>13008</td>
<td>Methodology for Evaluating Effectiveness of In-vehicle Pedestrian Warning Systems Using Driving Simulator</td>
<td>Cheol Oh, Associate Professor, HanYang University at Ansan, Korea</td>
<td></td>
</tr>
<tr>
<td>13114</td>
<td>FCW Algorithm Adaptive to Driver Behavior Change: Conceptual Framework and Experimental Validation</td>
<td>Jianqiang Wang, Professor, Tsinghua University, China</td>
<td></td>
</tr>
<tr>
<td>13274</td>
<td>The Effects of Lead Time of Verbal Collision Warning Messages on Driving Performance</td>
<td>Changxu Wu, University at Buffalo, USA</td>
<td></td>
</tr>
</tbody>
</table>
### TS105 – New Trends in Detection

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Cobo 355**

**Session Track:** Automated Transportation

**Moderator:** Alexander Froetscher, Head of Unit, ITS Development, AustriaTech, Austria

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12282</td>
<td>Length-Based Vehicle Reidentification for Travel Time Measurement</td>
<td>Rob Hranac, Vice President, Iteris, Inc., USA</td>
<td>USA</td>
</tr>
<tr>
<td>12330</td>
<td>New Detection Technology Eliminates Dilemma Zones</td>
<td>Nader Ayoub, Associate Vice President, Roadway Sensors, Iteris, Inc., USA</td>
<td>USA</td>
</tr>
<tr>
<td>13292</td>
<td>Millimeter-wave Radar in 65-nm CMOS Technology</td>
<td>Kiyokazu Sugai, FUJITSU TEN LIMITED, Japan</td>
<td>Japan</td>
</tr>
<tr>
<td>13724</td>
<td>Is Ramp Metering Coming to NC?</td>
<td>Alf Badgett, Senior ITS Engineer, ITS Division, ATKINS, USA</td>
<td>USA</td>
</tr>
<tr>
<td>13780</td>
<td>The Accuracy Levels of Vehicle Detectors Commonly Used in Korea Based on the Results of Quality Certification Test</td>
<td>Sang Hyup Lee, Research Fellow, Korea Institute of Construction Technology, Korea</td>
<td>Korea</td>
</tr>
</tbody>
</table>

### TS106 – Developments in ITS Based Safety Systems

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Cobo 356**

**Session Track:** Traffic Safety

**Moderator:** Koji Oguri, Director / Professor Aichi Prefectural University, Japan

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12100</td>
<td>Older Driver Crash Trend Evaluation Relating to Societal Change and Intelligent Transportation Systems</td>
<td>Seri Park, Assistant Professor, Villanova University, USA</td>
<td>USA</td>
</tr>
<tr>
<td>12160</td>
<td>A Study to Consider the Most Appropriate Alert Point to Assist Pedestrians Crossing at Intersection</td>
<td>Hidekatsu Hamaoka, Akita University, Japan</td>
<td>Japan</td>
</tr>
<tr>
<td>12316</td>
<td>Safety Assessment and Spatial Exploration of Automated Red-light Running Enforcement Cameras</td>
<td>Mohamed Ahmed, Assistant Professor, University of Wyoming, USA</td>
<td>USA</td>
</tr>
<tr>
<td>12803</td>
<td>A GPS-enabled Smart Phone App with Simplified Diagnosis Functions of Driving Safety and Warning Information Provision</td>
<td>Junyi Zhang, Professor, Graduate School for International Development and Cooperation, Hiroshima University, Japan</td>
<td>Japan</td>
</tr>
<tr>
<td>13700</td>
<td>Increased Persistence of Wi-Fi Direct Adhoc Networks for Smartphone-based Collision Avoidance</td>
<td>Clark Hochgraf, Associate Professor, Rochester Institute of Technology, USA</td>
<td>USA</td>
</tr>
</tbody>
</table>

### TS107 – Vehicle and Driver Models and Algorithms

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

**Cobo 357**

**Moderator:** Ray Resendes, Executive Director, NCR VTTI, USA

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12510</td>
<td>Development of Control Algorithm for Safety Systems Using Fusion of V2X and Environmental Sensors</td>
<td>Manbok Park, Senior Researcher, MANDO Corporation, Korea</td>
<td>Korea</td>
</tr>
<tr>
<td>12654</td>
<td>Virtual Driving Scenarios from Real-world Test Drive Data for Automated Evaluation of ADAS Applications</td>
<td>Martijn Tideman, TASS International, Netherlands</td>
<td>Netherlands</td>
</tr>
<tr>
<td>13130</td>
<td>Discriminating Relationship of Different Driver States and Driving Based on Gaussian Mixture Model</td>
<td>Yuto Hayata, Student, Aichi Prefectural University, Japan</td>
<td>Japan</td>
</tr>
<tr>
<td>13429</td>
<td>Retrofitting of Adas in Personal Vehicles</td>
<td>Erik Andersson, Traffic planner, SWECO TransportSystem AB, Sweden</td>
<td>Sweden</td>
</tr>
</tbody>
</table>
### TS108 – Advanced Corridor Management 2

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**  
**Cobo 358**

**Moderator:** Rasmus Lindholm, Partnership Services and Communications Director, ERTICO – ITS Europe, Belgium

- **13107** Application of Real-time Transit Data for Integrated Corridor Management  
  Kevin Miller, Sr. Program Manager, Schneider Electric, USA
- **12960** Smart Mobility for Arterial ITS  
  Farhad Pooran, Vice President of Engineering, Schneider Electric, USA
- **13088** Planning an Active Arterial Management Program  
  Melissa Ackert, ATMS/TSM&O Program Engineer, Florida DOT, USA
- **13325** Traffic Performance of Integrated Arterial and Motorway Traffic Management Policies Using SCATS  
  Steven Shaw, Traffic Systems Application Manager, Roads and Maritime Services, Australia

### TS109 – User Behavior

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**  
**Cobo 359**

**Session Track:**  
- Driver Behavior and Support

**Moderator:** Takashi Bannai, Chief Engineer Honda Motor Co., Ltd., Japan

- **12031** Characterizing Cell Phone Use at Signalized Intersections  
  Thomas Brennan Jr., Assistant Professor, The College of New Jersey, USA
- **12653** The Future of Driver Assistance: Driver Mental State Monitoring  
  Ronnie Taib, Senior Research Engineer, National ICT Australia, Australia
- **12655** Development of a Risk Assessment Tool Based on Driver Behavior and Environment  
  Farbod Farzan, Ph.D. Candidate, Rutgers University, USA
- **12843** Driver Visual Distraction Analysis Using Percent Area of Interest Method  
  Asako Yumoto, Fujitsu Laboratories Ltd., Japan
- **12908** Survey of User Attitudes to Traffic Smoother Services  
  Koichi Iwatake, Guest Research Engineer, ITS Division, National Institute Land, Infrastructure and Management, Japan
- **13764** ViFa 65plus — Visual Driver Assistance Systems for Elderly Drivers  
  Arne Glaser, Chemnitz University of Technology, Germany

### TS110 – ITS Developments in Evolving Markets

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**  
**Cobo 358**

**Session Track:**  
- Economic Growth

**Moderator:** Patrick Malléjacq, Director of European and International Affairs, IFSTTAR, France

- **13275** National ITS Architecture for Mexico V.2  
  Miguel Lopez, General Directorate, TEKIA INGENIEROS DE MÉXICO, SA de CV., Mexico
- **12300** Sustainable Strategy for Cost-effective ITS Deployment in Nigeria: Lessons from the Korea City-by-city Model  
  Joshua Adetunji Odelaye, Assistant Director, Nigerian Institute of Transport Technology, Nigeria
- **12776** Providing Big Picture of Evolving ITS Market in Iran, Using Pest Analysis  
  Hamid Mahyad, Iran Telecommunications Research Center, Iran
- **13575** Accelerating the Adoption of Intelligent Transport Systems in Low-income Countries  
  Marty Makinen, Principal and Managing Director, Results for Development Institute, USA
- **13701** Potentials for Intelligent Transportation Systems Deployment in Developing Countries — A Case Study  
  Sakib Mahmud Khan, Graduate Research Assistant, Clemson University, USA

### TS111 – Future Directions in Automated Driving

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**  
**Cobo 359**

**Session Track:**  
- Automated Transportation

**Moderator:** Glenn Geers, Technology Director NICTA, Australia

- **12134** The Interrelationships Between Connected and Automated Vehicle Technologies  
  Michael McGurrin, Senior Fellow, Transportation Systems, Noblis, USA
- **12917** Industry-government Joint Research of Preparation Method of Road Structure Data for Automated Driving  
  Atsushi Kimura, National Institute for Land and Infrastructure Management Ministry of Land, Japan
- **13683** Implications of Connected Automation  
  Sudharson Sundararajan, Senior Consultant, Booz Allen Hamilton, USA
TS112 – Challenges in Big Data Management

Thursday, September 11, 1:30 p.m. – 3:00 p.m. | Cobo 411 A

Session Track: Big Data and Open Data

Moderator: Ken Philmus, Senior Vice President Transportation, Central & Local Government Xerox State & Local Solutions, USA

12478 Crafting Measures from the National Performance Management Research Data Set
Peter Rafferty, ITS Program Manager, UW-Madison, USA

13192 Lead, Data Management Lab and Co-Director, I2R-LTA Joint Lab, Institute for Infocomm Research, Singapore
Wee Siong Ng, ead, Data Management Lab and Co-Director, I2R-LTA Joint Lab, Institute for Infocomm Research, Singapore

13585 Real-time Big Data for Improved Traffic Management and Congestion Reduction
Ronnie Boggs, Product Management, SQLstream, USA

13607 Development and Implementation of a Real-time Big Data Management Architecture for Effective Adaptive Traffic Signal Control
Wuping Xin, Chief Technology Officer, KLD Engineering, P.C., USA

TS113 – Tools to Improve Transit Services

Thursday, September 11, 1:30 p.m. – 3:00 p.m. | Cobo 411 B

Session Track: Public Transit

Moderator: Francois Fischer, Senior Project Manager, ERTICO – ITS Europe, Belgium

13627 Implementation of Open Source TSP
David Phillips, Senior Transportation Planner, TranSystems, USA

13320 Augmenting the Transit Operations Management Tools with Emerging Technologies
Santosh Mishra, Senior Transportation Planner, TranSystems Corporation, USA

13324 Advances for An Advanced Public Transport System “APTS” At West Central Metropolitan Area Colombia
Natalia Giraldo, Development Coordinator, INTEGRA S.A., Colombia

13447 Transit Light Rail Incident Response Before and After ICM Deployment: Strategies and Constraints
Lee Biernbaum, Economist, Volpe Center, U.S. DOT, USA

12989 Real-Time Bus Scheduling via Proactive Bus Demand Estimation
Yangrok Jeong, Researcher, Pukyong National University, Korea

TS114 – Regional Examples of ITS Deployments

Thursday, September 11, 1:30 p.m. – 3:00 p.m. | Cobo 412 A

Moderator: Takaaki Segi, Director ITS Japan, Japan

13031 Traffic/Travel Information Integration Service Through User-Based, Open-Architecture, Public-Domain, Cloud-Computing
Edmond Chang, President, CEO, EDCPC, Inc., USA

13424 MDOT DUAP Project — The Agency of the Future
Collin Castle, Connected Vehicle Technical Manager, Michigan DOT, USA

13467 Strategic Assessment on Emerging Innovative Transportation Technologies for Future Transportation in Texas
C. Michael Walton, Professor, University of Texas at Austin, USA

13501 Mainstreaming ITS in the IT Environment: Illinois Tollway Traffic and Incident Management System (TIMS)
John Benda, General Manager of Maintenance and Traffic, Illinois State Toll Highway Authority, USA

13668 Intelligence in Urban Mobility for World Cup 2014: A Case Study of the Sao Paulo Arena
Alessandro Santiago Santos, Research, Institute for Technological Research (IPT), Brazil
TS115 – Development of Cooperative ITS Architecture

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**

**Session Track:** International Cooperation to Expand ITS

**Moderator:** Christopher Francis, Senior Transportation Specialist, Florida DOT, USA

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13520 Best Practices in Implementing ITS Architectures</td>
<td>John Baker, Technical Staff, ConSysTec, USA</td>
</tr>
<tr>
<td>12741 Advancing the Cooperative ITS Architecture: Data Collection and Business Projection</td>
<td>Federico García-Linares, OHL Concesiones, Spain</td>
</tr>
<tr>
<td>12745 CAR2X Systems Network Architecture and Possible Application</td>
<td>Kurt Eckert, Project Manager, Robert Bosch GmbH, Germany</td>
</tr>
<tr>
<td>13707 Connected Vehicle Reference Implementation Architecture: Common Language and Application Tools</td>
<td>Clifford Heise, Vice President, Federal and Research, Iteris, Inc., USA</td>
</tr>
<tr>
<td>13711 Evolving the National ITS Architecture to Support Connected Vehicle</td>
<td>Clifford Heise, Vice President, Federal and Research, Iteris, Inc., USA</td>
</tr>
</tbody>
</table>

TS116 – Standardization

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**

**Session Track:** ITS Rules and Standards

**Moderator:** Yu Yuan, Board Member, IEEE Standards Association Standards Board, China

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12326 Australian Cooperative ITS Platform — Prepared to Adopt and Adapt</td>
<td>Freek Faber, Engineer Network Operations Congestion, ARRB GROUP, Australia</td>
</tr>
<tr>
<td>12438 Standardization of Variable Message Signs in Korea</td>
<td>Weoneui Kang, Senior Researcher Fellow, Korea Institute of Civil Engineering and Building Technology, Korea</td>
</tr>
<tr>
<td>13178 Advanced Transportation Management Systems Based on International Standards</td>
<td>Knut Evensen, Chief Technologist, Q-Free ASA, Norway</td>
</tr>
<tr>
<td>13404 Converge — Future IRS-infrastructures as Open Service Networks</td>
<td>Horst Wieker, Professor for Communication Technologies, htw saar, Germany</td>
</tr>
</tbody>
</table>

TS117 – Innovative Modeling Techniques

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**

**Moderator:** Chen Cai, Researcher, NICTA, Australia

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13587 Approach for Freeway Work Zone Capacity Estimation Incorporating Probe Vehicle Data</td>
<td>Joyoung Lee, Assistant Professor, New Jersey Institute of Technology, USA</td>
</tr>
<tr>
<td>12024 Traffic Signal Control Based on Particle Swarm Optimization</td>
<td>Kuen-Rong Lo, Managing Director of IOT Laboratory, Telecommunication Laboratories, Chunghwa Telecom Co., Ltd., Chinese-Taipei</td>
</tr>
<tr>
<td>12696 When Gap Acceptance Does Not Apply — A New Approach</td>
<td>Erlend Aakre, NTNU Traffic Engineering Research Centre, Norway</td>
</tr>
<tr>
<td>12850 A Practical Simple Technique to Detect Abnormal Traffic Flow in Freeway</td>
<td>Hamid Torfehnejad, ITS Group Manager, Road Maintenance and Transportation Organization, Iran</td>
</tr>
</tbody>
</table>
TS118 – Radio Communications for ITS

Thursday, September 11, 1:30 p.m. – 3:00 p.m.  
Cobo 356

Moderator: Roy Jose, Principal Architect Savari Networks, USA

<table>
<thead>
<tr>
<th>Session Track</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DSRC Performance Assessment under Critical Radio Environment</td>
<td>Fumio Watanabe, Alps North America Inc., USA</td>
</tr>
<tr>
<td></td>
<td>An Examination of the Applicability of a Film Antenna for 700 MHz Band ITS</td>
<td>Atsuo Iwase, Panasonic Corporation, Japan</td>
</tr>
<tr>
<td></td>
<td>A Novel Traffic Micro Radio Station Implemented via DSRC Network Technology</td>
<td>Yong-Yao Yang, Chief Scientist, SUPCON Information Technology Co. Ltd., China</td>
</tr>
<tr>
<td></td>
<td>Improved Resource Utilization and Transmission Quality for V2X Communication</td>
<td>R. Tugrul Güner, V2X Program Manager, Kapsch TrafficCom AG, Austria</td>
</tr>
<tr>
<td></td>
<td>Wireless Vehicular Safety Systems: DSRC Radio In-Vehicle Evaluator (Drive)</td>
<td>Brian Gallagher, RF Hardware Staff Engineer, DENSO International America, Inc., USA</td>
</tr>
</tbody>
</table>

TS119 – Autonomous Driving Systems

Thursday, September 11, 1:30 p.m. – 3:00 p.m.  
Cobo 357

Session Track: Automated Transportation

Moderator: Vincent Blervaque, Director, ITS got Solutions, Belgium

<table>
<thead>
<tr>
<th>Session Track</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Future of Mobility is Now</td>
<td>Guy Fraker, Chief Knowledge Officer, AutonomouStuff LLC., USA</td>
</tr>
<tr>
<td></td>
<td>The Effect of Autonomous Speed Control System: An Investigation on Minimum Headway and Driver's Acceptance</td>
<td>Changxu Wu, Associate Professor, University at Buffalo, USA</td>
</tr>
<tr>
<td></td>
<td>From Driving Assistance Systems to Automated Driving: A Robust Approach based on the Subsumption Architecture</td>
<td>Luisa Andreone, Program Manager, Centro Ricerche FIAT, Italy</td>
</tr>
<tr>
<td></td>
<td>Intersection Management of Autonomous Vehicles Using an Agent-based Passenger Priority Framework</td>
<td>Hesham Rakha, Professor of Civil and Environmental Engineering and Director Centre for Sustainable Mobility, Virginia Tech, USA</td>
</tr>
<tr>
<td></td>
<td>Vehicle Automation and the Duty to Act</td>
<td>Noah Goodall, Research Scientist, Virginia DOT, USA</td>
</tr>
</tbody>
</table>
Interactive Sessions

IS01 – Interactive 1
Monday, September 8, 10:30 a.m. – 12:00 p.m.  Cobo, Wayne and Oakland Halls

- 14383 A Dynamic Routing Strategy in a Cooperative Vehicle Environment
  Mizanur Rahman, Student Essay Winner, Glenn Department of Civil Engineering, Clemson University, USA

- 12133 Information About CO² Emissions from Transport Services — The French Experience
  Eric Louette, Officer, Ministry of Ecology, Sustainable Development and Energy, France

- 12755 Operational Benefits of InSync Adaptive Signal Control for Nonrecurring Traffic Conditions
  Aleksandar Stevanovic, Assistant Professor, Florida Atlantic University, USA

- 13034 From Intelligent Transport System (ITS) Integration to Effective Smart City (SC) Implementation
  Edmond Chang, President, CEO, EDCPC, Inc., USA

- 13206 A Study of Optimal DSRC Antenna for Multi-lane Free Flow
  Kenta Kakizaki, Department of Electrical Engineering and Electronics, College of Science and Engineering, Aoyama Gakuin University, Japan

IS02 – Interactive 2
Monday, September 8, 3:00 p.m. – 4:30 p.m.  Cobo, Wayne and Oakland Halls

- 14384 Sustaining V2V with Software Defined Radio & Modular Computing Architecture
  Billy Kihei, Student Essay Winner, Georgia Institute of Technology, USA

- 13300 Predicting Taxi Pickups Using Spatial Partitioning
  Wei Wu, Scientist, Institute for Infocomm Research, Singapore

- 13437 Multi-Level Evaluation of the Benefits of Intelligent Transportation Systems
  Mohammed Hadi, Florida International University, USA

- 13506 Scaling Up Penetration Rates in Field Tests by Emulating V2X Communication
  Bart D. Netten, Senior Scientific Researcher, TNO, Netherlands

IS03 – Interactive 3
Tuesday, September 9, 10:30 a.m. – 12:00 p.m.  Cobo, Wayne and Oakland Halls

- 14385 Attitudes and the American Way: Barriers to Fully Automated Vehicles
  Lacy Kaare, Student Essay Winner, Michigan Technological University, USA

- 13556 Cost-Effective Monitoring and Evaluation of the M2M Pilot Project
  Jill Hayden, Professional Head of ITS Strategic Advice, Atkins, UK

- 13642 Infrastructure-based Sensors Augmenting Efficient Autonomous Vehicle Operations
  Myungsoo Jun, National Renewable Energy Laboratory, USA

- 12849 Navigation System Using Zigbee in Shopping Mall
  Yuuya Takahashi, Student, Tokyo University of Science, Japan

- 12905 Modeling and Characteristics of the Fundamental Diagram for Lagrangian-Space Kinematic Wave Model
  Han Yang, Ph.D., Key Laboratory of Road Traffic Engineering of the Ministry of Education, Tongji University, China

IS04 – Interactive 4
Tuesday, September 9, 1:00 p.m. – 2:30 p.m.  Cobo, Wayne and Oakland Halls

- 13064 State-of-the-Art Yard Management
  Ian Harriman, ITS Consultant, BLIC North America, Inc., USA

- 13089 Development of Trajectory Analysis Function By Analyzing Location Information
  Tatsuya Terada, Fujitsu Limited, Japan

- 13195 City-wide Road Distress Monitoring with Smartphones
  Christoph Mertz, Principle Project Scientist, Carnegie Mellon University, USA

- 13401 Wireless Zigbee Sensor Applied to Temperature Measurement
  Marcelo Bender Perotoni, professor, UFABC, British Virgin Islands
### Interactive Sessions 111

#### IS05 – Interactive 5

**Wednesday, September 10, 10:30 a.m. – 12:00 p.m.**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Speaker</th>
<th>Organization/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>13793</td>
<td>Dangerous Goods Compliance on Australian Roads</td>
<td>Soren Tellegen, Kapsch TrafficCom Australia Pty Ltd., Australia</td>
<td></td>
</tr>
<tr>
<td>13316</td>
<td>The Smooth Operation At ETC Lane in the Event of Large-scale System Failure</td>
<td>Takeshi Wada, Maintenance, Construction and Management, Highway Toll Systems Co., Ltd., Japan</td>
<td></td>
</tr>
<tr>
<td>13553</td>
<td>A Simulation Test-bed for Evaluating Active Traffic Network Management Systems</td>
<td>Hossein Hashemi, Graduate Research Assistant, Southern Methodist University, USA</td>
<td></td>
</tr>
<tr>
<td>12623</td>
<td>Cloud Impacts on Pavement Temperature in Energy Balance Models</td>
<td>Curtis Walker, Graduate Research Assistant, University of Nebraska-Lincoln, USA</td>
<td></td>
</tr>
<tr>
<td>13519</td>
<td>Loss Aversion, Goal Framing and the Design of An Information Strategy for Roadside DRIPs</td>
<td>Klaas Rozema, CTO, Imtech Traffic &amp; Infra, Netherlands</td>
<td></td>
</tr>
</tbody>
</table>

#### IS06 – Innovative ITS Based Safety Systems Interactive Session

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Speaker</th>
<th>Organization/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12845</td>
<td>Field Trials of a WAVE/DSRC-based Weigh-In-Motion (WIM) System in Taiwan</td>
<td>Chia-Chang Hsu, Engineer, Industrial Technology Research Institute, Chinese-Taipei</td>
<td></td>
</tr>
<tr>
<td>12092</td>
<td>Effect Evaluation of Vehicle-Infrastructure Cooperative Right Turn Collision Prevention System.</td>
<td>Nakamura Shunsuke, UTMS Society of Japan, Japan</td>
<td></td>
</tr>
<tr>
<td>12646</td>
<td>Wrong-Way Driving Detection and Prevention System: A Pilot Deployment</td>
<td>Charles Lattimer, Sr. Project Manager, Atkins, USA</td>
<td></td>
</tr>
</tbody>
</table>

#### IS07 – Advanced Traffic Management Interactive Session

**Thursday, September 11, 10:30 a.m. – 12:00 p.m.**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Speaker</th>
<th>Organization/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>13533</td>
<td>Calibration of Smart Motorways and Comparison of Two Schemes</td>
<td>Jill Hayden, Professional Head of ITS Strategic Advice, Atkins, UK</td>
<td></td>
</tr>
<tr>
<td>12879</td>
<td>Planning for Active Traffic Management in Southeast Michigan</td>
<td>Stephanie Palmer, Region Traffic Safety and Operations Engineer, Michigan DOT, USA</td>
<td></td>
</tr>
<tr>
<td>13304</td>
<td>Context and Business Rules Driven Active Traffic Management System</td>
<td>Keeranoor Kumar, Product Manager, IBM, USA</td>
<td></td>
</tr>
<tr>
<td>13305</td>
<td>Development of a Comprehensive Control Strategies to Mitigate Congestion on Freeway with Long Tunnel</td>
<td>Tien-Pen Hsu, Associate Professor, National Taiwan University, Chinese-Taipei</td>
<td></td>
</tr>
<tr>
<td>13371</td>
<td>An Analysis of Effect of Increase in Routes Covered by Information Service upon Driver’s Route Choice Behavior</td>
<td>Nobuhiro Uno, Associate Professor, Graduate School of Management &amp; Department of Urban Management Graduate School of Engineering, Kyoto University, Japan</td>
<td></td>
</tr>
</tbody>
</table>
IBEC1 – Will There be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

**Wednesday, September 10, 8:30 a.m. – 10:00 a.m.**

**Session Track:** ■ Connected Vehicles & Cooperative Systems

The still increasing number of fatalities and injuries in road transportation create a dramatic burden on the states social budget, daily traffic jams, over hours and miles reduce the national GDP significantly. Studies in recent years in Europe and U.S. have verified these figures and, consequently created big concern on both a policy and industry level. Technology developments in the last 10 years around the globe like, ‘vehicle automation’ and ‘connected vehicles’ promise a bright future but will require quite a significant investment on the vehicle side as well as on, the infrastructure side. Above that legal regulations as well as optimized utilization of infrastructure capacity (traffic management) needs to be, revised fundamental.


The session will discuss these topics with respect to the technical, aspect, the financial aspect, emotional aspect (driver), legal aspect (mandatory equipment), organizational aspect (traffic management) and, the operational aspect with respect to the transition phase from ‘zero’ penetration rate to 100%.

**Cobo 110 B**

**Organizer**
Reinhard Pflliegl, CEO A3PS, Austria

**Speakers**
Kevin Dopart, Program Manager, Connected Vehicle Safety & Automation, Joint Program Office, U.S. DOT, USA
Prof. Horst Wlieker, Professor, HTW Saarland, Germany
R. Tugrul Güner, V2X Program Manager, KAPSCCH TrafficCom AG, Austria
Hans Hendrik Puvogel, General Manager Automotive, ICT Automatisering, Germany
Xiaojing Wang, Chief Engineer, Research Institute of Highway, Chinese Ministry of Transport, China
Glenn Geers, Technology Director, NICTA, Eveleigh, Australia

IBEC2 – Evaluation and the Technology Showcase

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

The Technology Showcase has become an integral element of World Congresses. Detroit is no different, with as many as 20 or more demonstration projects in the works for the September World Congress. IBEC has invited several partners involved in the Showcase to present their thinking on the technologies they are testing and introducing in the marketplace and with a particular emphasis on the evaluation protocols they applied to support their decision process. Effectively done, this ensures each technology application generates a sufficient return on investment to merit its organization’s commitment.

**Cobo 110 B**

**Organizer & Moderator**
Thomas Kern, Executive Vice President ITS America, USA

**Speakers**
Ray Resendes, Executive Director, NCR, VTTI, USA
Scott Brosi, Area Vice President, TransCore, USA
Paul Avery, Manager, Cooperative Systems R&D, SwRI, USA

IBEC3 – Evaluation of Connected Vehicles

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Session Track:** ■ Connected Vehicles & Cooperative Systems

The connected world of vehicles and infrastructure promises to revolutionize mobility services. From vehicles that will not crash into each other to unprecedented information derived from increased data quality and volume — the connected world provides intriguing opportunities to save lives, increase efficiency, and to secure community-wide benefits of ITS.

Understanding the potential of these innovations and how they would operate in a real-world environment is critical for policy development, investment strategies, network operations and management, driver education, and legal and regulatory aspects.

**Cobo 110 B**

**Organizer**
Richard Harris, Solution Director, International Transportation and Government Xerox Services, UK

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

**Speakers**
Evangelos Mitsakis, Associate Researcher, Centre for Research and Technology Hellas - Hellenic Institute of Transport, Greece
Richard Harris, Solution Director, International Transportation and Government, Xerox Services, UK
Martin Böhm, Head of Unit Mobility Systems & ITS Deployment, AustriaTech, Austria
Marcia Pincus, Program Manager, ITS Joint Program Office, U.S. DOT, USA
Jan Willem Tierolf, Duth Ministry of Infrastructure and the Environment, Netherlands
**IBEC4 – Evaluation of Highly Automated Driving and Truck Platooning**

**Thursday, September 11, 8:30 a.m. – 10:00 a.m.**

The expected deployment of highly or fully automated road transport for both individual passenger cars and for trucks increasingly raise questions about how these new ITS-based systems can and will be evaluated in terms of their benefits and costs. These systems promise to: (i) improve traffic safety by reducing driver workload and minimizing human errors due to driver distraction or reduced vigilance; (ii) increase mobility through a reduction of congestion in urban areas and on motorways by increasing vehicle density and minimizing speed variations; (iii) reduce vehicle emissions and fuel consumption; and (iv) provide important individuals, organizational and commercial productivity improvements (e.g. through road-trains for freight distribution). However, to what extent, if any, are these benefits actually likely to be realized? Can we model the future? How will drivers actually behave and react? What happens when there is a crash — are occasional tragedies something we can factor in to the benefits and costs calculations? What new metrics and performance measures do we need to consider in planning field operational tests? The session will focus on the challenge of evaluating these potential benefits and costs, and feature illustrative evaluation studies on such automated transport.

**Organizer**
Alan Stevens, Chief Research Scientist, Transport Research Laboratory, UK

**Moderator**
Nick Reed, Principal Human Factors Researcher, TRL, UK

**Speakers**
Hiroano Kawashima, Emeritus Professor, KEIO University, Japan
Joshua Switkes, CEO, Peloton Technology, USA
Richard Bishop, Principal, Bishop Consulting, USA
Maarten Oonk, Principal Researcher, TNO, Netherlands
Myra Blanco, Director, Center for Automated Vehicle Systems, Virginia Tech Transportation Institute, USA

---

**IBEC5 – Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)**

**Thursday, September 11, 1:30 p.m. – 3:00 p.m.**

**Session Track:** Connected Vehicles & Cooperative Systems

Cooperative ITS (also called C-ITS and connected vehicle) provides services that involve communicating information between vehicles (V2V) and/or between vehicles and the road infrastructure (V2I). Services include short latency safety messages (e.g. pre-collision preparation), collection of “probe vehicle” travel times, and provision of dynamic congestion and routing information. As well as cellular communications some countries have established dedicated beacon infrastructures for V2I services or are trialing a beacon-based architecture for some applications. With such a wide range of services and options, pre-deployment assessment and during deployment evaluation are both challenging and important.

This session will discuss methods of evaluating the incremental benefits of C-ITS beyond non-cooperative systems and provide examples of ongoing deployment practice.

**Organizer**
Richard Harris, Solution Director, International Transportation and Government, Xerox Services, UK

**Moderator**
Richard Harris, Solution Director, International Transportation and Government, Xerox Services, UK

**Speakers**
Ken Leonard, Director of the Intelligent Transportation Systems, ITS Joint Programs Office, U.S. DOT, USA
James Sayer, Program Manager, Safety Pilot Test Conductor & Associate Research Scientist, University of Michigan Transportation Research Institute
Zachary Doerzaph, Director, Center for Advanced Automotive Safety, Virginia Tech Transportation Institute, USA
Nick Reed, Principal Human Factors Researcher, TRL, UK
S.K. Jason Chang, Professor, National Taiwan University, Chinese-Taipei
Integrated Networking and Communications for Intelligent Transportation

IP-Based Communication over Wireless, Fiber, Copper, DSL, and More

In intelligent transportation projects all over the world, Moxa hardware is connecting traffic devices and cameras to control centers over wireless, fiber, DSL, copper, and more. Thanks to our experience with hardened fanless design, wide temperature outdoor operation, and high-performance redundant topologies, city and state governments count on Moxa for highly reliable networks and maximum uptime. Contact a Moxa rep or distributor to learn more.

Visit us at Booth #2810
INT01 – Arabian Gulf Region Showcase

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

The Gulf Cooperating Council (GCC) consists of UAE, Saudi Arabia, Qatar, Kuwait, Bahrain and Qatar — by far the richest and most dynamic economies in the Arabian Gulf region. In 2012, the region had a fast-growing population estimated at 42,100,000, a nominal GDP of $2.1 trillion USD, and per capita GDP of $33,005.

A number of important ITS projects will be presented in this session, ranging from major ITS standards projects in the United Arab Emirates, to traffic violation enforcement in Saudi Arabia, to state-of-the-art intelligent transport projects in Qatar. The speakers are drawn primarily from the public sector agencies that are managing and funding the projects, with assistance from some of their main international consultants.

INT02 – Africa - A New Growth Area for ITS

Thursday, September 11, 10:30 a.m. – 12:00 p.m.

Developed as a problem-solving approach, Intelligent Transport Systems grew from its initial humble beginnings, to flavor-of-the-month, to value adding, deployment, to “you want MORE funding!” and to maturity. Hence, a “deployment ceiling” in many of the traditional and subsequent, ITS markets. To sustain its growth, the ITS industry needs to offer new solutions to new markets. Africa is one such new growth area, with, GDP growth for Africa as a whole at 6.6% in 2013 (AIDB Statistics Department). With the Continent experiencing increased political and, economic stability, there is strong positive support from international funders and donor organizations. Linked to massive emerging consumer, and commuter markets, Africa offers new opportunities for those that have the stamina to enter this exciting, yet challenging, environment. ITS, Ethiopia, ITS Nigeria, and ITS South Africa are the founding members in the establishment of ITS Africa that will play a facilitating role for this, new phase in ITS deployment on the continent. The format will be a brief introduction, four short presentations, and then an interactive discussion.
### AM01 – Sustainable Transportation Performance Measures: Best Practices

**Monday, September 8, 10:30 a.m. – 12:00 p.m.**

**Session Track:** Sustainability

This session will present examples of best practices and deployed ITS technologies on the use of performance measures associated with sustainable transportation. The presentations will cover various topics on mobility, safety, and system reliability performance measures as well as environmental and social sustainability.

**Organizer & Moderator**
Farhad Pooran, Vice President of Engineering, Schneider Electric, USA

**Speakers**
Adam Moser, Senior Engineer, Gresham, Smith and Partners, USA
Ramin Massoumi, Vice President, Iteris, Inc., USA
Mohammed Hadi, Florida International University, USA
Hamed Benouar, Vice President, Business Development and Government Relations, Sensys Networks, USA

### AM02 – 5.9 GHz Dedicated Short Range Communications: Will there be Available Spectrum Resources at 5.9 GHz to Support DSRC Deployment?

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** Freight

DSRC is the principal enabling technology for U.S. DOT’s multi-year Connected Vehicle research program, which envisions reducing or eliminating vehicle crashes through a fully connected transportation system unifying drivers, vehicles, wireless devices and the road infrastructure. A Connected Vehicle future envisions that transportation data will be exchanged instantaneously among vehicles in proximity to one another (“vehicle-to-vehicle” or “V2V” wireless communications) as well as with the road infrastructure (“vehicle-to-roadside infrastructure” or “V2I” wireless communications) to enhance mobility and improve safety. The key enabler for DSRC is 75 MHz of wireless spectrum allocated by the Federal Communications Commission (FCC) at 5850-5925 MHz (5.9 GHz Band). A current proceeding before the FCC is proposing to permit unlicensed devices (i.e. Wi-Fi) to share the 5.9 GHz Band. This session will explore the implications of any such sharing for DSRC. Speakers representing device makers, vehicle OEMs, cable industry, among others, will discuss the on-going proceeding and how DSRC and unlicensed operations may, or may not, share the 5.9 GHz Band.

**Sponsor**
SQUIRE PATTON BOGGS

**Organizers**
Mark D. Johnson, Senior Attorney, Squire Patton Boggs (US) LLP, USA
Robert B. Kelly, Partner, Squire Patton Boggs (US) LLP, USA

**Moderator**
Robert B. Kelly, Partner, Squire Patton Boggs (US) LLP, USA

**Speakers**
Mary Brown, Director, Government Affairs, Cisco Systems, Inc., USA
Mark Settle, Chief, Policy and Rules Division, Office of Engineering & Technology, Federal Communications Commission, USA
Mitch Bainwol, President and CEO, Alliance of Automobile Manufacturers, USA
Jim Lansford, Fellow, Global Standards, CSR Technology, USA

### AM03 – Commercial Vehicle and Freight Movement Technologies for Safety, Efficiency, Mobility, and Enforcement

**Monday, September 8, 3:00 p.m. – 4:30 p.m.**

**Session Track:** Freight

This session will survey leading and innovative technology projects in the commercial vehicle and freight movement areas of transportation. The session will focus on four different technology applications: road weather/maintenance operations, crash avoidance systems and return on investment, traveler information for freight movement, and roadside screening.

**Organizer**
Richard McDonough, Director of the Planning and Development Bureau, Office of Modal Safety and Security, New York State DOT

**Moderator**
Peter Appel, Director, AlixPartners, USA

**Speakers**
Randy Mullett, Vice President, Government Relations and Public Affairs, Conway
Brian Heath, President, Intelligent Imaging Systems & I-95 Corridor Coalition
Richard Bishop, Principal, Bishop Consulting, USA
AM04 – Integrated Corridor Management

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Multimodal Solutions, early lessons learned from the first 6 months of operations of the Dallas and San Diego Integrated Corridor Management Demonstrations. Description of the opportunities by the next wave of deployers.

Organizer & Moderator
Brian Cronin, Team Leader, ITS Research and Demonstration ITS Joint Program Office, U.S. DOT

Speakers
Steve Mortensen, Senior ITS Engineer, Federal Transit Administration, USA
J. Alex Estrella, Senior Regional Planner, San Diego Association of Governments, USA
Todd Plesko, Vice President of Planning and Development, Dallas Area Rapid Transit, USA
Deepak Gopalakrishna, Program Manager, Critical Infrastructure Transportation Operations (CITO), Battelle, USA

AM05 – Transportation Management Centers — Past, Present, and Future

Tuesday, September 9, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Traffic Management

This session will investigate the past, present, and future of TMCs, with one panelist discussing each. Some of the questions to be addressed by the panel include: What is the current state of TMCs across the country? What will TMCs of the future look like and be capable of? What do DOTs need to do to get this point? This last question is the most pertinent, as the organizer of the session would like to come up with concrete suggestions on how to do this. During the “TMC of the future” portion of the session, which will come last, the session will relocate to the exhibition hall so that the panelist can demonstrate to the session audience the planned mock TMC.

Organizer & Moderator
Robert Edelstein, Vice President of ITS in North America AECOM, USA

Speakers
Dean Gustafson, State Operations Engineer, Virginia DOT, USA
Steve Kuciemba, Vice President & National ITS/Operations Director, Parsons Brinckerhoff, USA
Steve Corbin, Director of Operations, State Road and Tollway Authority, USA

AM06 – V2X and Automated Vehicles: the Upcoming Intersection

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

Technology is clearly going to reshape the motor vehicle landscape in the coming years. Two major innovations — V2X connectivity and fully autonomous driving — are quickly emerging as the two technologies that will potentially have the most profound effect on the industry in the past half century. While some characterize the two as competing technologies, it makes more sense to view them as complementary — each providing unique strengths that will advance roadway safety. Panelists will address how the two different approaches and they will complement each other. What are the primary interoperability challenges between the two approaches? How can the different technologies leverage data from their respective sources to improve vehicle safety? How can we reduce the lengthy lead times to getting these vehicles on the roadways? What are the major hurdles for widespread adoption?

Moderator
David Strickland, Administrator National Highway Safety Administration, USA

Speakers
Farid Zaid, Ford Motor Company, USA
Ron Medford, Director of Safety, Google Self-Driving Car, Google, USA
Bryant Walker Smith, Stanford University, USA
John Maddox, Director of Collaborative Program Strategies, University of Michigan Transportation Research Institute (UMTRI), USA

AM07 – U.S. DOT ITS Strategic Plan

Tuesday, September 9, 1:00 p.m. – 2:30 p.m.

ITS Joint Program Office will summarize key theme areas and programs planned for the 2015 to 2019 ITS Strategic Plan.

Organizer & Moderator
Ken Leonard, Director of the Intelligent Transportation Systems ITS Joint Programs Office, U.S. DOT, USA

Speakers
Kate Hartman, ITS Joint Program Office, U.S. DOT
Dale Thompson, Program Manager, ITS Joint Program Office, U.S. DOT, USA
Walton Fehr, Manager, ITS Systems Engineering, ITS Joint Program Office, U.S. DOT, USA
Kevin Dopart, Program Manager, Connected Vehicle Safety & Automation, Joint Program Office, U.S. DOT, USA
AM08 – Transportation System Management and Operations

Wednesday, September 10, 8:30 a.m. – 10:00 a.m.

Cobo 116 B

TSM&O is a growing trend in transportation that emphasizes the need to improve the efficiency of the existing transportation system as an alternative to building expensive new facilities, as has been done in the past, in order to handle growing demand. Strategies to be considered for improving efficiency include Integrated Corridor Management and Active Traffic Management, as well as widespread implementation of connected and automated vehicle technologies.

Specifically, the session(s) will cover the following topics:

- TSM&O Program Plans [NCHRP Project 20-7(345)]
- Next Generation TSM&O Strategic Research Framework [NCHRP Project 20-7(359)]
- AASHTO Connected/Automated Vehicle Research Roadmap (NCHRP Project 20-24)
- Federal/State Perspectives for Linking Research to Planning and Operations

AM10 – Organizational Success at Local Chapters

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

This session will be a roundtable discussion covering all categories of annual State Chapter Awards winners with an open conversation of their award applications and elaborations in each category that highlight best practices and successes from each chapter. Local chapters will have the opportunity to share ideas and see items they may wish to emulate to make their own chapters stronger.

AM11 – Private Consumer Applications and the Growing Request to Interface to Public Traffic Systems

Wednesday, September 10, 10:30 a.m. – 12:00 p.m.

Session Track: Big Data and Open Data

Developers of traffic information systems and third-party smartphone and automotive applications have started to request interfaces with, public traffic data and software systems — for example, a smartphone application that predicts a driver's wait time at a red light. The intent of this session is to bring together private sector app developers with public sector officials to discuss some of the issues regarding the use of public data for this purpose. Some of the questions to be addressed by the panel include: What is the protocol for allowing app developers to access, use, and share data? How should issues such as security, liability, and data quality control be handled?

Organizer
Durga Panda, ITS Minnesota, USA
Melvin Evans, IT Manager SMART, USA
Moderator
Koreen Bjorklund, Regional Sales Manager, New England/Mid-Atlantic Regions Daktronics, USA
### AM12 – Future of Fleet Automation

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

**Session Track:** Automated Transportation

Highly automated trucks will use advanced sensing and computing technologies to provide improvements over human performance. Applied in carefully selected operating environments and with appropriate fault-handling features, fleet automation will result in significant decreases in the frequency and severity of highway crashes. This has been recognized in major truck automation development projects in Japan, Germany, and Sweden. This session will focus on existing and future planned developments in fleet automation around the world including the North America, Asia, and Europe.

**Organizer & Moderator**
Steven Underwood, Director Institute for Advanced Vehicle Systems, University of Michigan - Dearborn, USA

**Speakers**
- Mohammad Poorsartep, Project Manager, Connected Transportation Initiative, Texas A&M Transportation Institute, USA
- Osman Altan, Federal Highway Administration
- Daniel Bartz, TARDEC, USA
- Richard Bishop, Principal, Bishop Consulting, USA

### AM13 – FHWA Infrastructure Deployment Guidance

**Wednesday, September 10, 1:30 p.m. – 3:00 p.m.**

FHWA will discuss areas of analysis for the 2015 Initial Infrastructure Guidance.

**Organizer & Moderator**
Jeffrey Lindley, Associate Administrator of Operations, Federal Highway Administration, U.S. DOT

**Speakers**
- Robert Arnold, Director, Transportation Management, Office of Operations, Federal Highway Administration, U.S. DOT, USA
- Ben McKeever, Team Leader, Transportation Operations Applications, Federal Highway Administration, USA
- Bud Wright, Executive Director, American Association of State Highway and Transportation Officials, USA
- Blaine Leonard, ITS Program Manager, Utah DOT, USA

### AM14 – Autonomous Vehicles: Savior of the Western World or an Over-Hyped Version of New Cars?

**Wednesday, September 10, 3:30 p.m. – 5:00 p.m.**

**Session Track:** Automated Transportation

This session will present a range of views regarding the development of autonomous vehicles. These range from true believers who see driverless, vehicles being sold within the next few years and generating a new way of transportation with significant implications for everything from urban, form to traffic congestion. Others see this as a modestly paced natural development of technical improvements.

**Organizer & Moderator**
Richard Mudge, President Compass Transportation and Technology, USA

**Speakers**
- Steven Shladover, Research Engineer/Program Manager, California PATH, ITS Berkeley, University of California, USA
- Stephen Lockwood, Senior Vice President, Parsons Brinckerhoff, USA
- Joseph Peters, Director, Office of Operations Research and Development, Federal Highway Administration, USA
- John Niles, Research Director, Center for Advanced Transportation and Energy Solutions – CATES, USA
- Scott McCormick, President, Connected Vehicle Trade Association, USA
- James Misener, Independent Consultant, USA
- Andrew Cunningham, Volkswagen, USA
- Ken Laberteaux, Senior Research Scientist, Future Mobility Research Department, Toyota Research Institute of America
AM15 – Finding Alpha in Smart Technologies: Investor Perspectives on the Connected Vehicle and Intelligent Transportation Sector

Wednesday, September 10, 3:30 p.m. – 5:00 p.m.

Intelligent transportation systems such as vehicle-to-vehicle and vehicle-to-infrastructure communications have caught the attention of investors in light of the National Highway Traffic Safety Administration’s announced mandate. Representatives of investor groups and financial institutions on this panel will provide their perspectives on companies impacted by this development, including automotive manufacturers and their suppliers, telecommunication businesses, and others.

Organizer
John Peracchio, Managing Director Peracchio & Company, USA

Moderator
James Albertine, Vice President, Equity Research - Automotive Stifel Nicolaus, USA

Speakers
David Markowitz, Founder, Oskie Capital, USA
John Peracchio, Managing Director, Peracchio & Company, USA
Annie Rosen, Research Analyst, Fidelity Management & Research Co., USA

AM16 – The Sharing Economy and Shared Mobility

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: ■ New Mobility

While sharing resources is not a fundamentally new model of social interaction, the presence of a “sharing economy” is a rapidly growing, innovative concept. The sharing economy is an economic model based on “sharing” rather than “owning” assets, and is hailed by many as an opportunity to enhance the sustainability of the current economy while simultaneously yielding various additional co-benefits. High levels of online connectivity, “living local” community-oriented awareness, and heightened consciousness of costs and environmental issues have caused the sharing economy to flourish across the United States. The sharing economy allows for the sharing of numerous forms of property, such as home-sharing, ridesharing, bikesharing, carsharing, and more. Carsharing, bikesharing, ridesharing, and transportation networking companies are among the most popular subsets of the sharing economy, and they operate within a number of different frameworks. This session provides an introduction to the sharing economy and its various transportation services.

Organizer & Moderator
Susan Shaheen, Ph.D., Adjunct Professor and Co-Director, Transportation Sustainability Research Center University of California, Berkeley, USA

Speakers
Kaye Ceille, President, Zipcar, USA
Sharon Feigon, Executive Director, Shared-Use Mobility Center, USA
Joseph Kopser, Co-Founder, CEO, RideScout, USA
Sean O’Sullivan, CEO, Carma, Ireland

AM17 – ITS Improvements that Lead to Safety: The State Perspective

Thursday, September 11, 8:30 a.m. – 10:00 a.m.

Session Track: ■ Traffic Safety

As we move through the 21st century, Intelligent Transportation Systems (ITS) are beginning to take a substantial foothold in current and future deployment plans. Although ITS solutions offer improvements across all areas of transportation, it is the potential for dramatic safety improvements that has the attention of many transportation officials. During this session speakers from State DOTs will share their perspectives on ITS through showcasing their current and future planned ITS deployments for the next 5, 10, and 20 years. Learn how ITS has demonstrated lifesaving outcomes and what benefits are anticipated for the next generation of deployments.

Organizer
Zachary Doerzaph, Director, Center for Advanced Automotive Safety Virginia Tech Transportation Institute, USA

Moderator
Catherine McGhee, Associate Director for Safety, Operations and Traffic Engineering VDOT/VCTIR, USA

Speakers
Ray Starr, Asst State Traffic Engineer-ITS, Minnesota DOT, USA
Dean Gustafson, State Operations Engineer, Virginia DOT, USA
Matthew Smith, ITS Program Manager, Michigan DOT, USA
Bill Legg, State ITS Operations Engineer, Washington State DOT, USA
AM18 – Human Factors Leading to Safe and Connected Automation

Thursday, September 11, 10:30 a.m. – 12:00 p.m.

Session Track: ■ Traffic Safety

Driver distraction plays a predominant role in traffic crashes. The connected/automated vehicle stands to significantly improve transportation safety by reducing, and possibly eliminating, crashes that arise from driver inattention. However, the pathway to connected automation faces many human factor challenges. First, information services, rather than safety, may be the driving force behind the demand for connected vehicle technology. Managing the amount of information delivered to drivers so that drivers do not become overloaded is a considerable concern. Secondly, such information services stand to greatly draw drivers’ attention away from the road once the vehicle’s operation becomes partially automated. As such, it is imperative that connected/automated vehicles be designed to convey their capabilities, deter over-reliance, and safely transfer control back to drivers when they fail. This panel will discuss how connected/automated vehicles can be designed to address these human factor issues by following an iterative user-centered design process throughout the design cycle.

Organizer
Gregory M. Fitch, Research Scientist, User Experience Group Leader Center for Automated Vehicle Systems, Virginia Tech Transportation Institute, USA

Moderator
James Misener, Independent Consultant, USA

Speakers
Adrian Zlocki, Senior Manager Driver Assistance, fka - Forschungsgesellschaft Kraftfahrwesen mbH Aachen, Germany
Christian Gold, Research Associate, Technische Universität München – Institute of Ergonomics, Germany
Charles (Chuck) Green, Global Lead, Driver Performance/Research, General Motors Safety Electronics, USA
Tim Johnson, Director, Crash Avoidance and Electronic Controls Research, National Highway Traffic Safety Administration, U.S. DOT, USA

AM19 – DSRC Spectrum Sharing

Thursday, September 11, 10:30 a.m. – 12:00 p.m.

The panel will discuss aspects of the President’s Broadband Initiative as well as the current status of spectrum sharing proposals in the 5.9 GHz band, and results of testing on whether unlicensed users can coexist with V2V and V2I safety applications without causing interference and/or denial of service.

Organizer & Moderator
John Augustine, Managing Director ITS Joint Program Office, U.S. DOT, USA

AM20 – New Urban Mobility: Is This the Death of Public Transit as we Know it?

Thursday, September 11, 1:30 p.m. – 3:00 p.m.

Session Track: ■ New Mobility

The combination of technology and new institutions has generated new ways to achieve urban mobility. These range from shared cars and shared bicycles to autonomous vehicles to telecommuting; to jitneys and on-call cars. Do these compete with traditional transit, picking off customers or can they help transit by providing “last mile” access? What alternative strategies are possible?

Organizer
Richard Mudge, President Compass Transportation and Technology, USA

AM21 – Deployment Incentives Report

Thursday, September 11, 1:30 p.m. – 3:00 p.m.

MAP-21 Required USDOT to prepare a report on ITS deployment incentives. Come hear about the report and deployment opportunities.

Organizer
Robert Sheehan, Program Manager, ITS Joint Program Office, U.S. DOT, USA

Moderator
Robert Sheehan, Program Manager, ITS Joint Program Office U.S. DOT, USA

Speakers
Robert Arnold, Director, Transportation Management, Office of Operations, Federal Highway Administration, U.S. DOT, USA
Steve Mortensen, Senior ITS Engineer, Federal Transit Administration, USA and
John M. Corbin, Director of Traffic Operations, Iowa DOT, USA
Technology Showcases

The 2014 ITS World Congress Technology Showcase will provide attendees a hands-on experience across more than 30 demos, more than any World Congress to date. A wide range of technologies will be on display, including connected and autonomous vehicles, electric vehicles, robotics, sensor technology, real-time weather and road conditions data analysis, and many others.

Important Information

You can sign up for a technology showcase demonstration either online through your registration portal or at the back of the exhibit hall at the demo launch area. All of the demonstrations in the Technology Showcase will run daily with select hours, and transportation will be provided to and from Belle Isle, Atwater Parking Lot, and Next Energy. Food trucks will be available on Belle Isle for attendees who plan to visit during either breakfast, lunch, or during the Michigan Festival Tuesday evening. All attendees must be registered and have picked up their registration badge at Cobo Center before proceeding to any demonstrations at Belle Isle, the Atwater Parking Lot, or NextEnergy. For all demonstrations, please arrive at the shuttle launch area at the back of the exhibit floor at least 30 minutes before your demonstration time to allow for transportation.
Integrated Mobile Observations (IMO)
U.S. DOT ITS Joint Program Office / FHWA Road Weather Program

Participants will sit in a specially instrumented demo van, which will do a short loop on Belle Isle. As the van moves, participants will observe road weather connected vehicle data being generated by the demo van. After driving a little further, participants will see advisory warnings, based on road weather conditions artificially generated on-site. The van will proceed further and participants will observe the road weather connected vehicle data captured by the Weather Data Environment. A complementary demo inside the exhibit hall will show how road weather connected vehicle data and applications will help improve transportation operations in the future. This demo will run for 10-15 minutes.

V2X Enabled Automated Driving
DENSO Corp.

DENSO’s live demonstration shows how automated driving is accomplished using the same device that enables communications. DENSO equipped a “lead” and “follow” vehicle with dedicated short-range communications (DSRC) devices to demonstrate automated driving. The “follow” vehicle receives driving data from the “lead” vehicle, including position, steering and acceleration through V2V communication. DENSO’s live demonstration shows how automated driving can be realized without special sensors.

Peterbilt Autonomous Assisted Driving Demonstration
Peterbilt Motors

Heavy Duty Trucks are ideal candidates for autonomous assisted driving, because they travel a majority of their miles on improved highways, at constant speed, and for long durations of time. Autonomous Assisted Driving increases safety through continuous situational awareness (sensor fusion / lane keeping), reduced driver fatigue, and increased driving accuracy. It offers improved fleet efficiency through fuel savings, smart cruise / creep control, and vehicle platooning.

The Peterbilt Autonomous Assist Demonstrator seeks to define additional benefits and efficiency gains leveraging GPS Navigation, Last Mile Routing, and Parking Assist.

Car Sharing
Verizon

- Provide a real time demonstration showing the capability for rental companies to automate or enhance current rental transactions, enabled by Verizon.
- Digital signage that provides technology that provides the latest up to date information needed to enhance all levels of car rental information and management.

Advanced Perception and Localization Technology that Enables Connected Automation
SwRI

SwRI will demonstrate various technology enablers for Connected Automation. Using multiple highly automated vehicles, SwRI will show how advanced low-cost perception and localization technology has matured to the point where transportation solutions can be augmented with this technology to solve today’s transportation problems.

Connected Automated Valet Parking
Valeo

Connected Automated Valet Parking enables the driver to leave the car at the parking lot entrance. After launching the parking maneuver using the feature’s Smartphone App, the car exchanges with the parking infrastructure to be assigned a vacant space and provide information enabling the car to calculate the best way to get there. The car then starts off in fully autonomous mode, finding the space and parking itself. The Smartphone App also is used to recall the car to the entrance. In addition to the communication module, this solution uses 12 ultrasonic sensors, four cameras and a unique laser scanner.

Highly Automated Driving
IAV Automotive Engineering

IAV is aiming to move people with driving demonstrations of its Highly-Automated Driving (HAD) vehicle. Attendees will have the chance to test drive IAV’s vehicle — a 2015 Volkswagen Golf 7. The production vehicle was converted to an automated platform by IAV to showcase the company’s depth of experience and expertise with HAD. IAV is thrilled to show off the vehicle’s capabilities at the upcoming event. The Golf 7 will highlight functional safety, automotive control strategies, system architecture, sensor competencies and more.

The automated vehicle is equipped with:
- Adaptive cruise control
- Blind spot detection
- Lane-change assistance
- Parking assistance
- Emergency Braking Systems and more

V2V Technology Driving Demonstration
Visteon Corporation

This is a ride-n-drive demonstration where a total of three occupants in one vehicle can experience a fully integrated cockpit HMI demonstrating three vehicle-to-vehicle use cases: obstructed stopped vehicle ahead warning, emergency electronic brake light warning, and slippery road condition ahead warning.

Showcases continues on next page >
Xerox Vehicle Passenger Detection System

**Xerox Corporation**

Xerox will demonstrate a technology that will enable an agency or law enforcement to monitor and/or enforce use of HOV/HOT lanes. Participants will be able to observe the Xerox Vehicle Passenger Detection System in operation. Drivers will be provided. Vehicles will have differing number of occupants. Vehicles will make a short loop along a roadway. The system will automatically determine the vehicle occupancy in real time and a display will indicate the occupancy state. Participants will be able to see the output from the Xerox Vehicle Passenger Detection System including the images of passengers in the vehicle, and the passenger count as determined by the Xerox system.

Driver State Sensor

**Delphi**

Delphi’s MyFi® infotainment systems help keep users connected to their personal information and entertainment content in a convenient, user-friendly way while mitigating driver distraction and maximizing safety. Delphi proprietary workload manager software, along with the driver state sensor, monitors the driver’s attention and intelligently minimizes activities when too distracted. Our latest generation software has the capability to seamlessly function even if the driver is wearing sunglasses.

Driving Automated & Connected Technologies

**General Motors R&D, OnStar**

Participants can get a sense of an evolutionary path towards a connected autonomous vehicle by experiencing a series of automated driving and safety features, utilizing both on-board sensors and V2X technology.

Experience some of GM’s first 2015 model year vehicles equipped with OnStar 4G LTE in a short demonstration. Key features include: built-in Wi-Fi hotspot, ability to connect multiple mobile devices at once, more powerful connection than a smart phone or mobile hotspots and ability to connect to vehicle remotely. Participants will learn about OnStar’s 18 years of leadership in telematics and its growing suite of multi-dimensional service offerings.

Nationwide Tolling Interoperability

**TransCore**

TransCore will demonstrate nationwide tolling interoperability solution on a live test track. The GoAnywhere Pass™, a multi-protocol tag will be tested in a low-speed loop using an RF reader. An on-site computer will simulate a tolling environment, demonstrating interoperability scenarios across multiple protocols. The GoAnywhere Pass™ can support both commercial trucks and private vehicles, by offering one tag, one account functionality.

Nokia Autonomous Shuttle

**Induct Technology**

Nokia is the only 100% electric, driverless shuttle that needs no special infrastructure such as rails, or a designated path so it can work on any kind of site.

Induct has been running pilot projects with several customers, who so far are using the shuttles in pedestrian-heavy or industrial sites, such as college campuses, in Europe and Asia.

By utilizing advanced robotics, laser mapping technology and sensors that detect the vehicle’s acceleration and rotation, Nokia instantly calculates its position, nearby obstacles, route and distance traveled in real time, enabling it to carry up to eight passengers quickly, safely and efficiently.

Applications of Unmanned Aerial Vehicles for Transportation Agencies

**Michigan Tech Research Institute (MTRI), a research center of Michigan Technological University**

Our combined Michigan Tech/Michigan DOT team will be demonstrating applications of unmanned aerial vehicles (known as a UAV) for transportation agencies. These rapidly advancing imaging platforms can help achieve efficiencies in operations, maintenance, and asset management. The team is planning demonstrations of confined space inspection, a tethered blimp for traffic monitoring, and indoor UAV flights at Cobo Hall; UAV flights at Belle Isle are possible. Attendees will the ability to see different sensors collecting data that can be used for evaluation of bridge elements, other transportation infrastructure, and emergency response scenarios.

Multi-standard V2X Demonstration powered by RoadLINK from NXP

**NXP Semiconductors**

NXP Semiconductors will showcase our innovative RoadLINK technology by providing demonstrations of several safety critical vehicle-to-vehicle and vehicle-to-infrastructure use cases. In addition, we will demonstrate the ability of our solution to support multiple standards on the same hardware platform. During our demo rides, participants will see the real-time DSRC messaging between multiple vehicles and several infrastructure placements. As an added attraction, the award winning ‘Stella’ solar powered vehicle will be a part of our demonstration set up.
PolySync™, The Autonomy Operating System
AutonomouStuff

AutonomouStuff, the world’s leader in supplying products and services that enable autonomy, will provide an interactive vehicle demonstration presenting HARBRICK’S PolySync™, The Autonomy Operating System. PolySync enables the next generation of rapid autonomous system development and low-cost mass production deployment. Similar to mobile platforms, it turns robot development into app development. PolySync is purpose-built to parse, synchronize, log, fuse and visualize data from varying sources (radar, LiDAR, GPS, IMU, video) and make it available in a consistent, user-friendly, open format. The data provided is the enabler of the future of automated driving. The future is now, just ahead of schedule. We’re happy to have you along for the ride.

Traffic Jam Assist with 360° Surround View
Robert Bosch LLC

By coupling radar and video technology, the partially-automated driver assist function controls longitudinal and lateral movements of the vehicle in congested traffic at speeds below 35 mph. If necessary to change lanes or if obstacles are detected, the system returns control to the driver.

To achieve a 360° view, 4 near-range cameras transmit vehicle surroundings and transfer the images to an ECU for processing. The combined image is shown on the vehicle’s display unit which aids the driver by providing a view of the vehicle’s immediate surroundings.

Connected Vehicle Safety Technology Demonstration
U.S. DOT and the Crash Avoidance Metrics Partnership (CAMP)

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) to research, develop and test the technologies that form the framework for these systems. Demonstration participants will ride in vehicles from various OEMs and experience the effectiveness of the safety applications in staged potential crash scenarios.

HERE Connected Driving Technology Showcase
HERE

HERE is shaping the future of the next generation of connected transportation. From continued innovation in map collection and creation, to development of smart and contextual experiences, HERE is the location cloud powering intelligent transportation services of the future. HERE has also partnered with innovative companies to showcase how together, we are working to bring the vision of smart cities and intelligent services to life. Join us on Belle Isle to experience connected navigation & infotainment solutions, predictive traffic services, the communication of V2X safety messages with lane-level hazard detection, the latest in RSU-based sub-meter localization technologies and much more.

Omni-Directional Safety System: V2X & Automated Driving to Protect a Variety of Road Users
Honda Belle Isle demo

Honda will demonstrate the remarkable potential of a vehicle built to make full use of DSRC-LTE multi-modal wireless communication. A series of scenarios will demonstrate what is possible when V2X communications are intelligently engineered together with advanced automatic controls to protect a variety of road users such as pedestrian, motorcyclists, and drivers with emergency needs. Participants can experience these technologies in a variety of real-world driving scenarios on a closed course on Detroit’s historic Belle Isle.

The VTTI Connected and Automated Vehicle Experience
Virginia Tech Transportation Institute

VTTI’s research has great impact on public policies for driver, passenger, and pedestrian safety and is advancing the design of vehicles and infrastructure to increase safety, mobility, and protect the environment. To accomplish its groundbreaking research, VTTI uses a range of tools, including the Virginia Smart Road, the creation of compelling realistic surprise driving scenarios, and data acquisition systems. In the VTTI demonstration, the participants will drive or ride in a cutting edge vehicle in order to experience the evolution of vehicles to include Connected and Automated capabilities and our innovative approach to evaluating both driver and vehicle performance.

For all demonstrations, please arrive at the shuttle launch area at the back of the exhibit floor at least 30 minutes before your demonstration time to allow for transportation.
Human-Friendly Mobility
Supporting Child Safety
AISIN SEIKI Co., Ltd. AISIN AW Co., Ltd.
ADVICS Co., Ltd.

To support the safety of children in crosswalks and parking lots of shopping malls and around the home.
1. Automatically starting and stopping the demo car when it detects a child moving behind the vehicle.
2. Automatically stopping the demo car when it detects children trying to cross a street in the crosswalk, when the driver is not paying attention.
3. Automatically parking the demo car in a difficult parking.

Interactive Travel-Time and Detection Demonstration
Kimley-Horn and Associates, Inc.

Kimley-Horn will be hosting a demonstration of our travel-time application. Participants will use the app to track velocity and travel time while riding a bike on a set course. A leaderboard will display real-time results of the participants.

Advanced HMI Management with Connectivity
DENSO Corp.

With the onset of the connected vehicle, DENSO will be showcasing how two vehicles can seamlessly communicate using dedicated short-range communications (DSRC), as well as 4G LTE communications. DENSO’s advanced Human Machine Interface (HMI) cockpit system will then determine how, when and where to safely display this information to the driver.

MMITSS (Multi-Modal Intelligent Traffic Signal System) Demonstration
Econolite Group, Inc., University of Arizona, Savari Networks, and Arizona’s Maricopa County DOT SMARTDrive Program

Econolite Group, Inc., University of Arizona, Savari Networks, and Arizona’s Maricopa County DOT SMARTDrive Program are proud to demonstrate the MMITSS, a multi-modal priority signal control system in which several priority requests from varying modes of transportation (e.g., emergency vehicles, public transit and pedestrians) can be safely accommodated simultaneously.
- Board the “Transit” demo vehicle
- See multiple priority vehicles approach the intersection simultaneously
- MMITSS safely prioritizes vehicle requests using Connected Vehicle applications

Participants disembark at the demo intersection to cross the street with the assistance of SmartCross — a smartphone-activated pedestrian walk request app.

Demonstration Schedule & Duration: Once an hour, for 20 minutes
Automated Highway Driving Assist

**Toyota Motor Corporation**

Participants will experience a new highway driving support system that intelligently perceives the highway environment and appropriately balances driver and support system control.

This in-car experience will be shown on public highways where participants can feel the performance and also monitor the system using in-car displays. This will be a 30 minute in-car experience on public roads.

A limited number of on-site registration slots are available. Please visit Toyota’s kiosk in the Cobo Center Technical Showcase Demonstration Launch area to check availability.

Automated Highway Driving System

**Honda Atwater Demo**

Honda will showcase an automated research vehicle capable of performing complex maneuvers on the public highways near the COBO conference center. Participants are invited to experience the future and feel the ease of automated driving.

VMS2Dash — Bringing Variable Message Signs to Your Dashboard

**GEWI and BMW**

VMS Data from Michigan DOT is collected by GEWI and delivered to the BMW Navigation system in real-time to alert drivers of conditions that may impact travel on the road ahead. The demonstration relies on deployed technologies and showcases a pragmatic approach to realize V2I applications already today.

Highway Truck Platooning for Safety and Efficiency

**Peloton Technology, DENSO, Meritor WABCO**

A pair of tractor-trailers equipped with Peloton truck platooning systems, DENSO DSRC radios and Meritor WABCO safety systems will travel in tandem on I-75, showcasing an emerging ITS solution for trucks operating on appropriate multi-lane divided highways. Peloton Driver-Assistive Truck Platooning (DATP) systems integrate active safety systems, wireless communications and cloud-based monitoring to make trucks safer, enhance telematics, and enable pairs of trucks to form aerodynamic platoons—yielding robust fuel, maintenance and management savings. Ride-along demonstrations of this Cooperative Adaptive Cruise Control system will begin at the Atwater Lot. Video at Demo tent will display truck data and other highlights.

**For all demonstrations, please arrive at the shuttle launch area at the back of the exhibit floor at least 30 minutes before your demonstration time to allow for transportation.**
Social Events

Opening Ceremony

**Sunday, September 7, 5:00 p.m. – 6:30 p.m.**

*Cobo Grand Ballroom*

**Keynote Speaker**
Ms. Mary Barra, CEO, General Motors Co., USA

**Invited Speakers:**
- Mr. James Barbaresso, Chairman, Detroit Organizing Committee, USA
- Mr. Mike Finney, President and CEO, Michigan Economic Development Corporation (MEDC), USA
- Mr. Michael Duggan, Mayor, City of Detroit, USA
- Mr. Eddie Francis, Mayor, City of Windsor, Canada
- Mr. Carl Levin, United States Senator, Michigan, USA
- Mr. Anthony Foxx, Secretery, U.S. DOT, USA (Invited)
- Mr. Jean Mesqui, Chairman, ERTICO Supervisory Board, ERTICO-ITS Europe, Belgium
- Representative from Ministry of Internal Affairs and Communications, Japan
- Mr. Kirk Steudle, Director, Michigan DOT, USA
- Mr. Scott Belcher, President and CEO, ITS America, USA

The Opening Ceremony will be held Sunday at the Cobo Center Grand Riverview Ballroom. General Motors CEO Mary Barra will provide the opening keynote speech and address the changing transportation environment around the world as well as the rapidly evolving technology of connected, autonomous, and electric vehicles. The event will also feature exciting special entertainment and several awards.

Closing Ceremony

**Thursday, September 11, 3:30 p.m. – 5:00 p.m.**

*Cobo Grand Ballroom*

**Keynote Speaker**
To be Announced

**Invited Speakers:**
- Mr. Kirk Steudle, Director, Michigan DOT, USA
- Mr. Jim Barbaresso, Chairman, Detroit Organizing Committee, USA
- Mr. Scott Belcher, President and CEO, ITS America, USA
- Dr. Peter Sweatman, Chairman, International Program Committee, USA
- Mr. Michel Labardin, Vice-President in charge of Transport, Urban Community of Bordeaux, France
- Mr. Mathieu Hazouard, Regional Advisor, in charge of research, innovation, and competitive clusters, Aquitaine Regional Council, France
- Mr. Zoran Stančić, Deputy Director General, DG CONNECT, European Commission, Belgium
- Ms. Florence Ghiron, President of TOPOS Aquitaine and President of the Bordeaux Organizing Committee, TOPOS Aquitaine, France
- Brian Negus, Chair of the 2016 WC Melbourne Organizing Committee and President of ITS Australia, Australia
- Ambassador Caroline Millar, Deputy Head of Mission, Australian Embassy, Australia
- Mr. Michael De Santis, Chairman, ITS Canada, Canada
- Mr. Claude Carette, Director, Infrastructure, Roads and Transportation Services, City of Montreal, Canada
- Mr. Hermann Meyer, CEO, ERTICO-ITS Europe, Belgium
- Mr. Hajime Amano, President and CEO, ITS Japan, Japan

The Closing Ceremony will attract attendees by taking a look back over the unforgettable 5 days, focusing the most important events and congratulating the winners of Best Papers Awards, and looking on the future World Congresses events with “Passing the Globe” ceremony. The Grand Mobi award, for the business venture that has the greatest impact on improving quality of life, addressing human rights, improving safety and revitalizing the environment and economy of communities and regions through sustainable transportation/New Mobility will also be presented at the Closing Ceremony.

**Grand Mobi.** This award is for the business venture that has the greatest impact on improving quality of life, addressing human rights, improving safety and revitalizing the environment and economy of communities and regions through sustainable transportation/New Mobility.

Best Paper Awards will be presented at the Closing Ceremony.
Opening Reception

Sunday, September 7, 4:00 p.m. – 5:00 p.m.

Enjoy a networking opportunity prior to the Opening Ceremony. Hors d’oeuvres will be served.

Sponsored by TOYOTA

Price: Included as part of the World Congress Registration.

ITS America Leadership Circle Dinner

Sunday, September 7, 7:00 p.m. – 9:00 p.m.

The ITS America Leadership Circle will convene for a closed reception and dinner at the ITS World Congress. For more information about this invitation only event taking place at the Detroit Athletic Club, please contact Caroline Kotila at cktila@itsa.org.

Hosted by ITS AMERICA LEADERSHIP CIRCLE

Price: Included as part of the World Congress Registration.

Exhibitors Welcome & Regional Receptions

Monday, September 8, 4:30 p.m. – 6:00 p.m.

This important networking opportunity takes place in the Cobo Center’s Exhibit Hall where international exhibitors, the regional and national ITS associations, and Michigan host community will welcome attendees and offer them an opportunity to visit, network, and engage one another as part of the global ITS stakeholder community.

Cobo Exhibit Hall

Price: Included as part of the World Congress Registration.

Motown Dinner Cruise

Monday, September 8, Board Time: 6:30 p.m., Cruise Time: 7:00 p.m. – 10:00 p.m.

Join us for an unforgettable evening of networking and fun. You will board the Infinity, a 138’ yacht, at the Detroit Port Authority. Our three-hour journey includes a sumptuous dinner, open bar, live Motown band and fabulous views of the Detroit and Windsor Skylines.

Hosted by Macomb County

Price: $125.00

Meal(s) Provided: Dinner

Participant Requirements: 300 maximum

“Michigan Festival,” presented by ITS Michigan

Tuesday, September 9, 4:00 p.m.

The Flavor of Michigan Networking event is an opportunity for World Congress attendees to witness firsthand what this great state has to offer. The event is centered around Michigan Wine, Michigan Beer, Michigan Food, and Michigan music located on beautiful Belle Isle at the historic Belle Isle Casino facility. Take the time to network with other attendees and friends while enjoying Michigan’s finest, all in one spot.

Belle Isle

Hosted by ITS-Michigan

Price: Included as part of the World Congress Registration.

Meal(s) Provided: Food and drink

Investor Matching Reception

Wednesday, September 10, 5:00 p.m. – 6:30 p.m.

Taking place on the top floor of the Crowne Plaza® Detroit Downtown Riverfront Hotel, the Investor Matching Reception is an invitation only event where entrepreneurs and emerging young companies will be able to connect and network with the industry’s leading stakeholders and premier financial and strategic investment firms.

Crowne Plaza® Detroit Downtown Riverfront Hotel

Hosted by

Price: Invitation Only

Detroit Gala

Wednesday, September 10, 6:00 p.m.

A longstanding tradition from prior World Congresses, the Detroit Gala will showcase the recently renovated Cobo Center and its dramatic view of the Detroit River and the Windsor skyline. The gala will incorporate as its central theme the internationally known music and entertainment of Detroit. Hors d’oeuvres will be served.

Cobo Grand Ballroom

Price: $100 for students, accompanying persons, and press registrants. Otherwise, included as part of World Congress Registration.

Meal(s) Provided: Hors d’oeuvres
Ancillary Events

11th AASHTO International Day

Sunday September 7, 8:00 a.m. – 12:00 p.m.  
Cobo 140 F

The American Association of State Highway and Transportation Officials will host the 11th AASHTO International Day in conjunction with the 21st ITS World Congress on September 7th, 2014. This year’s Day will focus attention on implementation and include the private sector advancements in vehicles, communications and autonomous vehicles.

FOT-Net Data Workshop on Data Sharing — Organized in Collaboration with the U.S. DOT

Sunday, September 7, 9:00 a.m. – 3:30 p.m.  
Cobo 140 A

Workshop
This workshop aims to exchange information on FOTs and data sharing between the three regions (Europe, Asia-Pacific and North America), discuss problems and solutions for data sharing and provide recommendations for a global data sharing framework.

In this workshop we will have discussions in small groups, addressing either more technical questions or more organizational questions. This workshop is meant for everyone interested in data sharing, people working in FOTs, decision makers in private and public organizations, data experts and transport researchers.

Background
FOT-Net Data is a Support Action funded by the European Commission, networking Field Operational Tests (FOT). FOT-Net Data develops and promotes a framework for sharing data, a framework to describe available datasets, recommendations for data protection, strategies to facilitate data sharing and awareness about the value of data sharing.

Questions to be addressed:
- What are the solutions to the main privacy and data protection issues?
- What are good practices in storage of data and content in project documents, so that data can be shared?
- What are good examples of research questions re-using FOT and probe data?
- Under what conditions can data be re-used and what are possible business models?

Meal(s) Provided: Breakfast to be served at 8:30 a.m.

For more details and the agenda go to www.fot-net.eu

For more information please contact: Yvonne Barnard, ERTICO – ITS Europe, Tel: +32 2 400 07 12, E-mail: info@fot-net.eu

Connected Vehicle Program 101

Sunday, September 7, 9:00 a.m. – 1:00 p.m.  
Cobo 142 A/B

First launched in 2013, the U.S. DOT’s Joint Program Office Professional Capacity Building Program is offering an updated workshop on connected vehicles. In this three hour program, instructors will describe the connected vehicle concept, provide the latest on connected vehicle research, report on the model deployment in Ann Arbor, and offer insights on the National Highway Traffic Safety Administration (NHTSA) initiative to begin a V2V rulemaking process and ultimately plans to require the life-saving technology to be installed in all new cars and light trucks. Registration is required.

Price: $40.00

IBEC Workshop: Evaluation of Connected (Vehicles and Infrastructure) and Autonomous Vehicles

Sunday, September 7, 9:30 a.m. – 1:00 p.m.  
Cobo 142C

The connected world of vehicles and infrastructure promises to revolutionize mobility services. Understanding the potential of these innovations and how they would operate in a real-world environment is critical for policy development, investment strategies, network operations and management, driver education and legal and regulatory aspects. The purpose of this workshop is to explore and understand the essential evaluation aspects of connected and autonomous vehicles. Speakers from around the world will share their insights and ample time will be allowed for discussion.
ITS America Forum Showcase — Performance Measures

**Sunday, September 7, 12:30 p.m. – 2:30 p.m.**  
Cobo 320

**Sponsored by:** ITS America Coordinating Council

The Forum Showcase is an opportunity for the ITS America Forums to share information regarding activities on a crosscutting area. One of the most important crosscutting areas at the moment is performance management. Performance management has become a central theme of federal legislation and a vital element in local transportation programs. This event will provide an opportunity to understand the state of the practice with respect to performance management at state, local and federal levels. Prominent speakers from federal, state and metropolitan planning organizations, with experience and expertise in the area will present their perspectives on performance measurement and performance management.

A key theme for the event will be the migration from simply measuring performance to taking action based on performance information. As management experts say "If you can’t measure it you can’t manage it" and in transportation performance management we could also add "if you’re only measuring it you’re still not managing it". The forum will also feature a keynote speaker from Teradata, a major supplier of big data solutions. This speaker will bring the perspective from beyond transportation with respect to the application of big data in other business sectors and how value is extracted from performance data. This will be a lively, high-energy event delivering a rich stream of information on current best practices and performance management. This will invoke an interesting discussion on where we are and where we need to be with respect to results driven investment programs for Intelligent Transportation Systems.

Legislative Breakfast

**Monday, September 8, 7:30 a.m. – 8:30 a.m.**  
Cobo 140 A

**Sponsored by:** QUALCOMM

The current surface transportation bill, MAP-21, expires on September 30, 2014, challenging Congress and the Obama Administration to come up with a long-term sustainable funding source for the nation’s transportation system. In addition, policymakers are continuing to examine ways to strengthen federal transportation programs to improve safety, mobility, efficiency and a state of good repair. The Legislative Breakfast will provide World Congress attendees with the opportunity to hear from Members of Congress with jurisdiction over transportation and technology issues who will discuss their views on the most effective solutions for financing transportation and advancing the research and deployment of ITS technologies to create a safer, smarter, more efficient and sustainable transportation future.

*(Invitation Only)*

State Chapters Strengthening Workshop

**Monday, September 8, 9:30 a.m. – 1:30 p.m.**  
Cobo 111 A/B

The 27 state and regional chapters of ITS America meet every year at ITS America hosted Annual Meetings and World Congresses to conduct their annual business meeting and hold a strengthening workshop that features the latest on federal and state transportation programs and best practices on non-profit management. Participants include a mix of public and private sector ITS professionals actively engaged in chapter activities. Lunch will be provided at the workshop. Registration is required. The first attendee from a chapter is free; additional attendees from a chapter are asked to pay the $25.00 fee.

**Price:** $25.00 after first attendee per chapter

Transportation Management Forum

**Monday, September 8, 4:30 p.m. – 5:30 p.m.**  
Cobo 111 A/B

**Sponsored by:** ITS America Coordinating Council

ITS America’s Transportation Management Forum will address the challenges of deploying, operating and maintaining transportation systems focused on the movement of people in both urban and rural applications of transportation systems. This will include attention to the lessons learned between implementing agencies and industry that will help all stakeholders identify ways of employing new technologies to improve the efficiency of transportation management systems, increase system reliability, and reduce the overall cost of operations and management.

**Chair:** Barry Einsig, Cisco  
**Vice-Chair:** Elizabeth Birriel, Florida DOT

**Related Events:**
- **AM05 – Transportation Management Centers — Past, Present, and Future** | Tuesday, September 9, 10:30 a.m. – 12:00 p.m.
- **AM11 – Private Consumer Applications and the Growing Request to Interface to Public Traffic Systems** | Wednesday, September 10, 10:30 a.m. – 12:00 p.m.
Safety Forum

Monday, September 8, 6:00 p.m. – 7:00 p.m.

The ITS America Safety Forum promotes the research and deployment of safety-related Intelligent Transportation Systems applications and provides stakeholder guidance on the development of national policies and safety standards.

Chair: Myra Blanco, Virginia Tech Transportation Institute  Vice-Chair: Paul Avery, Southwest Research Institute

Related Events:
- AM17 – ITS Improvements that Lead to Safety: The State Perspective | Thursday, September 11, 8:30 – 10:00 a.m.
- AM18 – Human Factors Leading to Safe and Connected Automation | Thursday, September 11, 10:30 a.m. – 12:00 p.m.

ITS America Business Meeting and Awards Breakfast

Tuesday, September 9, 7:30 a.m. – 8:30 a.m.

ITS America will offer its annual remarks on the state of Intelligent Transport Systems and on current matters of interest at ITS America. Also on the program will be presentation of ITS America's ITS Hall of Fame Awards, the Best of ITS Awards, the winner of the Student Essay competition sponsored by the Southwest Research Institute, and the Outstanding ITS America State Chapter Awards. All are welcome to attend this continental breakfast to celebrate the latest happenings in the field of ITS and those who are helping to lead the way.

Talent Networking Event

Tuesday, September 9, 2:00 p.m. – 5:00 p.m.

Sponsored by

DENSO

DENS O, the Michigan Department of Transportation (MDOT), the Michigan Economic Development Corporation (MEDC), Square One Education Network, and ITS America are partnering up to provide young professionals, graduate, and undergraduate students with a night of networking. Bring your resume and join us for the chance to rub elbows with some of the companies represented by staff at all levels of their organization at the forefront of innovation in transportation. The event will be held at the epicenter of the state-of-the-art demonstrations taking place on Belle Isle as part of the Technology Showcase for the Intelligent Transportation System World Congress. Shuttle service will be provided from Cobo Center to Belle Isle. Free food, drinks, and admission.

Commercial Vehicle & Freight Mobility Forum

Tuesday, September 9, 4:30 p.m. – 5:30 p.m.

Sponsored by: ITS America Coordinating Council

The mission of the Commercial Vehicle and Freight Mobility Forum is to provide the transportation community with a forum that champions safety, commerce, security, and policy for commercial vehicles and freight movement through the advancement of Intelligent Transportation Systems.

Chair: Rick McDonough, New York State DOT  Vice-Chair: John Woodroffe, University of Michigan Transportation Research Institute

Related Events:
- AM03 – Commercial Vehicle and Freight Movement Technologies for Safety, Efficiency, Mobility, and Enforcement | Monday, September 8, 3:00 – 4:30 p.m.
- AM12 – Future of Fleet Automation | Wednesday, September 10, 1:30 – 3:00 p.m.

Cross-Cutting Issues Forum

Sponsored by: ITS America Coordinating Council

The Cross-Cutting Issues Forum initiates, executes, and promotes member-driven projects associated with the broad scope of ITS that crosses two or more of ITS America’s “outcome” focused Forums. Interest areas include, Systems Engineering, Training and Education, Research, Benefits, Evaluation and Costs, Surface Transportation Weather, Data Management, and Electronic Payment

Chair: Bruce Eisenhart, Consensus Systems Technologies  Vice-Chair: Bob McQueen, The OCash Company

Related Events:
- AM14 – Autonomous Vehicles: Savior of the Western World or an Over-Hyped Version of new Cars? | Wednesday, September 10, 3:30 – 5:00 p.m.
- AM20 – New Urban Mobility: Is This the Death of Public Transit as we Know it? | Thursday, September 11, 1:30 – 3:00 p.m.
Sustainability Forum

Tuesday, September 9, 4:30 p.m. – 5:30 p.m.  
Cobo 111 A/B

Sponsored by: ITS America Coordinating Council

The Sustainable Transportation Working Group collects and evaluates data to better understand the relationships between transportation systems, traveler behavior, and climate change; supports research and the identification of existing and emerging technologies to address the relationship between transportation and climate change; and informs the public, policymakers and lawmakers about the capability of transportation technologies, operational strategies, funding mechanisms, and integrated traffic management systems to affect traveler behavior and/or reduce fuel consumption.

Chair: Lou Neudorff, CH2M Hill  
Co-Chair: John Lower, ITERIS

Related Events:
- AM01 – Sustainable Transportation Performance Measures: Best Practices  
  Monday, September 8, 10:30 a.m. – 12:00 p.m.
- AM16 – The Sharing Economy and Shared Mobility  
  Thursday, September 11, 8:30 – 10:00 a.m.

“Ask NHTSA” Breakfast

Wednesday, September 10, 7:30 a.m. – 8:30 a.m.  
Cobo 140 A

National Highway Traffic Safety Administration (NHTSA) Acting Administrator David J. Friedman and other senior NHTSA officials will participate in a unique “Ask NHTSA” breakfast session to discuss the agency’s top research and policy priorities for advancing innovative technologies to reduce highway fatalities and injuries, from vehicle automation and vehicle-to-vehicle (V2V) communications to distracted driving and agency enforcement activities. NHTSA officials will also take questions from World Congress attendees about these and other topics of interest, such as V2V and the 5.9 GHz band and opportunities to advance vehicle and highway safety in the surface transportation reauthorization bill.

Moderator: T. Russell Shields, Chair, Ygomi, LLC, USA

Speakers:
- NHTSA Deputy Administrator David J. Friedman
- Daniel Smith, Senior Associate Administrator, Vehicle Safety, NHTSA
- Nathaniel Beuse, Associate Administrator, Vehicle Safety Research, NHTSA
- Tim Johnson, Director, Crash Avoidance and Electronic Controls Research, NHTSA

Lunch and Panel Discussion: Building the Future of Transportation through the Global Advancement of Women

Wednesday, September 10, 12:00 p.m. – 1:30 p.m.  
Cobo 140 A

WTS International connects the industry with the highest levels of women leaders in transportation. WTS delivers inclusive opportunities for a broad mix of professionals and thought leaders, including mid-to-executive level professionals, top government officials, policy drivers, and the next generation of innovators — students, to network at the highest levels of the transportation industry and acquire knowledge that will transform the industry through policy and innovation at all levels of both the public and private sectors. ITS World Congress attendees are invited to join WTS International at this special lunch and panel discussion presentation that will provide a forum for exploration of top industry issues, highlighting the advancement of women in the transportation, ITS, and technology industries. The panel will be comprised of five of the most senior-level women of both the public and private sectors, including Anne Ferro, President and CEO, American Association of Motor Vehicle Administrators; Polly Trottenberg, New York City DOT Commissioner; Paula Hammond, Senior Vice President at Parsons Brinckerhoff and former Secretary of Transportation for the State of Washington; Beverly Scott, Ph.D., CEO, Rail & Transit Administrator, MBTA; and Theresa Vevea, Director of Customer Service, American Airlines.

Hosted by WTS International

Price: $40.00

Innovation Breakfast: It’s An App World

Thursday, September 11, 7:30 a.m. – 8:30 a.m.  
Cobo 140 A

Chris Thomas, Partner in the Venture Capital Firm, Fontinalis has been asked to moderate a group of successful start-up company CEOs that will discuss how they got started, where they have gotten their funds, how they have attracted attention in the crowded transportation space. Panelists will have ten minutes each for their presentations. Eric-Mark Huitema, Global Manager Smarter Transportation, IBM, the Netherlands, will give a short opening statement at the beginning of the breakfast.

(Invitation Only)
Guest Tours

Shopping at Somerset

**Tuesday, September 9, 10:00 a.m. – 4:00 p.m.**

The Somerset Collection is the Detroit area’s premier shopping experience. An upscale, luxury shopping mall located in Troy, Michigan, Fodor’s travel guide describes the Somerset Collection as one of the top shopping experiences in the United States. The tour will conclude with a 3:00 p.m. departure from the Somerset Collection, returning to the Detroit Marriott at the Renaissance Center by bus around 4:00 p.m.

Price: $25.00
Transportation: Provided
Participant Requirements: 50 minimum

Please go to [www.thesomersetcollection.com](http://www.thesomersetcollection.com) for more information on the Somerset Collection.

Detroit Institute of Arts

The Detroit Institute of Arts, located in Midtown Detroit, Michigan, has one of the largest, most significant art collections in the United States. In 2003, the DIA ranked as the second largest municipally owned museum in the United States, with an art collection valued at more than one billion dollars. With over 100 galleries, it covers 658,000 square feet; a major renovation and expansion project completed in 2007 added 58,000 square feet. The museum building is highly regarded by architects. The original building, designed by Paul Philippe Cret, is flanked by north and south wings with the white marble as the main exterior material for the entire structure. It is part of the city’s Cultural Center Historic District listed in the National Register of Historic Places.

Please go to [www.dia.org](http://www.dia.org) for more information on the Detroit Institute of Arts.

Henry Ford Museum

The Henry Ford is a large indoor and outdoor history museum complex and a National Historic Landmark in the Metro Detroit suburb of Dearborn, Michigan, USA. Named for its founder, the noted automobile industrialist Henry Ford, and based on his desire to preserve items of historical significance and portray the Industrial Revolution, the property houses a vast array of famous homes, machinery, exhibits, and Americana. The collection contains many rare exhibits including John F. Kennedy’s presidential limousine, Abraham Lincoln’s chair from Ford’s Theatre, Thomas Edison’s laboratory, the Wright Brothers’ bicycle shop, and the Rosa Parks bus.

Please go to [www.thehenryford.org](http://www.thehenryford.org) for more information on the Henry Ford Museum.
There are only a few places that haven’t heard of Eberle Design and Reno A&E

- Trusted for more than 50 years
- Global leader in detection and intersection safety monitoring devices
- More than 3 Million devices operational in traffic cabinets worldwide
- Equipment performs more than 2 Billion error-free detection transactions worldwide every 24 hours
- When detection accuracy is mission critical - you can count on us!

Please visit us at
Stand #1121
Technical Tours

Buses will depart from COBO Center Atwater atrium entrance. Please arrive at the bus 15 minutes prior to departure.

Monroe, Michigan PrePass Operations

**Tuesday, September 9, 10:00 a.m. – 2:00 p.m. and 11:00 a.m. – 3:00 p.m.**

PrePass is a national deployment of ITS technology that allows safe and qualified commercial vehicles to bypass state weigh stations or inspection facilities. These carriers are prescreened and receive bypass or pull in signals via a transponder located in the cab of the truck. The Michigan State Police deployed PrePass at its Monroe, Michigan northbound I-75 truck inspection station in January 2010. The technology, funded by HELP Incorporated, the non-profit public/private partnership, includes both weigh-in-motion (WIM) integration with an IRD WIM system and compliance readers to ensure proper bypass compliance. To date, trucks that have been e-cleared and pre-qualified for PrePass have completed 915,734 safe bypasses at Monroe, saving motor carriers more than $7.9M. Also on display at Monroe will be the 360SmartView electronic screening system. 360SmartView provides officers with additional tools to make informed, data-driven inspection selection decisions. Utilizing license plate and DOT readers, officers can screen all commercial vehicles on over 20 safety and compliance factors. Michigan plans to expand its PrePass operations at Monroe with renovations to the southbound facility expected to begin in summer 2014. HELP Inc.’s PrePass service is North America’s largest vehicle-to-infrastructure program, with over 470,000 trucks qualified to bypass 304 operational sites in 31 states.

Safety Pilot Model Deployment (SPMD)

**Wednesday, September 10, 8:00 a.m. – 12:00 p.m.**

Participants will be given an exclusive “back lot” tour of the largest connected vehicle test bed in the world at UMTRI in Ann Arbor. While on the bus, participants will learn about SPMD — everything from the vehicle and infrastructure technology utilized in the pilot, to discussion about participants’ experience. Upon arrival, participants will be given a sneak-peek of the test facility, and learn about exciting “next steps,” including the Ann Arbor Connected and Automated Vehicle Network, a custom-designed integrated network of 2,000 connected, coordinated, automated, and shared vehicles.

Southeast Michigan Transportation Operations Center (SEMTOC) Tour

**Wednesday, September 10, 9:00 – 11:30 a.m.**

SEMTOC is the hub of ITS technology applications at the Michigan DOT. It is a world-class traffic management center where staff oversees a traffic monitoring system composed of 400 freeway miles instrumented with more than:

- 270 Closed Circuit TV Cameras
- 95 Dynamic Message Signs
- 200 Microwave Vehicle Detection Sensors in conjunction with Probe Traffic Detectors.

SEMTOC uses an integrated software system that includes device control, incident management functions, ATIS capabilities, and a complex hybrid communications system. SEMTOC facilitates area-wide management of traffic through shared connections with The Road Commission for Oakland County Traffic Operations Center and local media partners.
City of Windsor Traffic Operations Centre

**Wednesday, September 10, 9:00 a.m. – 12:00 p.m.**

The Traffic Operations Centre houses the Advanced Traffic Management System (ATMS) and the Signals Division. The City is currently converting the entire communications system to high-speed IP communications and deploying hundreds of new VIVDS to facilitate next-generation traffic control and management applications including adaptive control, incident management, and arterial performance reporting. The new ITS technologies will facilitate smooth traffic flows between the U.S. and Canada, ensuring economic prosperity at the most utilized border crossing. Functionalities of the Centre and the ATMS also include Congestion Management at the tunnel border crossing caused by border delays.

Price
$50.00

Hosted by
City of Windsor

Transportation
Provided

Participant Requirements
25 maximum

Macomb County Communications and Technology Center (COMTEC)

**Tuesday, September 9, 1:00 p.m. – 2:30 p.m.**

**Wednesday, September 10, 11:00 a.m. – 2:00 p.m.**

The Macomb County Communications and Technology Center is a brand new, $11 million, state-of-the-art operations and communications center that is the first of its kind in Michigan. The 25,000 square-foot center combines communication between several Macomb County departments such as the Sheriff’s Office dispatch, the Roads Department Traffic Operations Center, the Information Technology Data Center and the Emergency Management & Communications Department.

Price
$65.00

Hosted by
Macomb County

Meal(s) Provided
Yes

Transportation
Provided

Participant Requirements
25 maximum

OnStar Command Center

**Monday, September 8, 10:00 a.m. – 11:30 a.m. and 2:30 p.m. – 4:00 p.m.**

**Tuesday, September 9, 10:00 a.m. – 11:30 a.m.**

**Wednesday September 10, 9:30 a.m. – 11:00 a.m. and 2:30 p.m. – 4:00 p.m.**

**Thursday, September 11, 9:30 a.m. – 11:00 a.m.**

The OnStar Command Center, located inside the General Motors World Headquarters at the Renaissance Center, is a 24/7, state-of-the-art operations hub where staff members coordinate the delivery of OnStar services to our nearly 7 million subscribers. The Command Center team uses crucial business planning tools to ensure OnStar call centers are properly staffed and maintained, calls are routed properly, and business metrics are met. Staffers also monitor real-time weather conditions, current events and crisis situations that could impact subscribers across the United States, Canada and Mexico.

Price
$20.00

Hosted by
GM

Transportation
Within walking distance

Participant Requirements
50 maximum each tour
Awards

For detailed information on all of the 2014 ITS World Congress and ITS America awards, please visit www.itsworldcongress.org/awards

World Congress Hall of Fame Awards
The World Congress Hall of Fame awards recognize the highest standards in achievement from the Americas, Europe and Asia-Pacific in the high-tech transportation community across the categories of Industry, Local Government and personal Lifetime Achievement. Recipients are selected annually from each region based on their leadership and performance in the transportation technology arena.

The Lifetime Achievement Award will be presented at the Opening Ceremony.
The Government Award will be presented at the Plenary 1.
The Industry Award will be presented at the Plenary 2.

Best of ITS Awards
ITS America’s “Best of Intelligent Transportation Systems (ITS) Awards,” annually recognizes the best and brightest of the high-tech transportation community. This is a unique opportunity to be recognized at the premier ITS event of the year in the Americas amongst thousands of public sector and transportation industry professionals, policymakers, and press.

This highly competitive program aims to distinguish organizations whose projects have demonstrated specific and measurable outcomes and exemplified innovation by establishing a “new dimension” of performance.

Award categories for 2014 include:
- Best New Innovative Product, Service or Application
- Best New Innovative Practice, and
- Best New Innovative Startup Company.

The Best of ITS Awards will be presented at the ITS America Award Breakfast/Business Meeting.

ITS America Hall of Fame Awards
Ann Flemer
Ann has worked in transportation planning, operations, policy and finance at the Metropolitan Transportation Commission, the metropolitan planning organization for the San Francisco Bay Area, beginning as a college intern in 1982 and retiring as Deputy Executive Director, Policy in 2014. Key ITS projects under her direction included the design, deployment, operation and maintenance of TransLink (now Clipper) the single smart card-based fare collection system for the Bay Area’s seven major transit systems, the 511 traveler information system covering the nine Bay Area counties, the Take Transit regional online transit trip planning system, and the regional rideshare program.

Larry Yermack
Larry’s most significant professional accomplishment is conceiving and creating the E-ZPass electronic toll collection system. In 1991 as tag technology was just appearing, he had the idea that if toll agencies could interoperate, using one common device, the value to the end user would be huge. The challenge was to get independent agencies to work together. His professional resume includes public sector positions such as First Deputy NYC DOT Commissioner working for Ed Koch, CFO of the Triborough Bridge and Tunnel Authority and private sector ones including President of PB Farradyne, a pioneering ITS company.

James Costantino, Ph.D., P.E.
James Costantino’s career in government, the private sector, and academia has been focused on coordinating and accelerating research and technology in the transportation sector. In addition to being the initial President and CEO at ITS America, Dr. Costantino held several senior positions at the DOT, overseeing multi-million dollar transportation and technology programs and thousands of employees. Dr. Costantino also served as on active and reserve duty with the U.S. Navy Intelligence Service.

The ITS America Hall of Fame Award will be presented at the ITS America Award Breakfast & Business Meeting.
Student Essay Competition

ITS America Business Meeting

Sponsored by the Southwest Research Institute (SwRI), the Student Essay Competition is designed to encourage student interest and future participation in the development of ITS solutions. The objective of the essay competition is to provide an opportunity for today’s transportation and engineering students to apply their knowledge in a thought-provoking and enjoyable competition and to build awareness of ITS as a career path with unlimited potential.

1ST PLACE
Mizanur Rahman
School: Clemson University
Paper Title: A Dynamic Routing Strategy in a Cooperative Vehicle Environment

2ND PLACE
Billy Kihei
School: Georgia Institute of Technology
Paper Title: Sustaining V2V with Software Defined Radio & Modular Computing Architecture

3RD PLACE
Lacey Kaare
School: Michigan Technological University
Paper Title: Attitudes and the American Way: Barriers to Fully Automated Vehicles

The Student Essay Awards will be presented at the Interactive Session 01 – Monday, September 8, 10:30 a.m. – 12:00 p.m. – Wayne and Oakland Hall and also at the ITS America Business meeting.

2014 ITS America State Chapter Awards

The ITS America State Chapter Awards are given annually to the State Chapters that have demonstrated a superb level of programming, fostered the highest qualities of leadership amongst members, advocated for ITS solutions at the state and regional levels, and provided outstanding value overall to their membership. ITS America’s Board of Directors and State Chapters Council recognizes the Best Outstanding Chapter and the chapter with the greatest growth in its membership each year during a special ceremony at the ITS America Annual Meeting & Exhibition.

The State Chapters Awards will be presented at the ITS America Award Breakfast/Business Meeting.

MobiPrize

Monday Plenary
Mobi City Enterprising City/State Award
This award is designed to recognize City/State governments (also regional/provincial) and government owned agency/public enterprise that have demonstrated active efforts to build a culture of innovation and encourage entrepreneurship in sustainable transportation.

Tuesday Plenary
Michigan Mobi: MobiPrize for Michigan Entrepreneurs
This award is for Michigan-based entrepreneurs who, through their innovative New Mobility technology, service, product and/or infrastructure are contributing to the Michigan region and economy.

Closing Ceremony
Grand Mobi
This award is for the business venture that has the greatest impact on improving quality of life, addressing human rights, improving safety and revitalizing the environment and economy of communities and regions through sustainable transportation/New Mobility.
## A-Z Listing

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>23rd ITS World Congress 2016 Melbourne</td>
<td>1728</td>
</tr>
<tr>
<td>Actelis Networks, Inc.</td>
<td>1624</td>
</tr>
<tr>
<td>Adaptive Micro Systems Inc.</td>
<td>3020</td>
</tr>
<tr>
<td>Advantech</td>
<td>1021</td>
</tr>
<tr>
<td>ADVICS</td>
<td>1724</td>
</tr>
<tr>
<td>AECOM</td>
<td>2628</td>
</tr>
<tr>
<td>Agent Video Intelligence (Agent VI)</td>
<td>2626</td>
</tr>
<tr>
<td>Asian AI Co. Ltd.</td>
<td>1724</td>
</tr>
<tr>
<td>ASIN SEIKI</td>
<td>1724</td>
</tr>
<tr>
<td>Alets Corporation</td>
<td>1413</td>
</tr>
<tr>
<td>All Traffic Solutions</td>
<td>824</td>
</tr>
<tr>
<td>Alpha Technologies Ltd.</td>
<td>2621</td>
</tr>
<tr>
<td>American Signal Company</td>
<td>3021</td>
</tr>
<tr>
<td>Applied Information Inc.</td>
<td>826</td>
</tr>
<tr>
<td>Applus IDIADA</td>
<td>2407</td>
</tr>
<tr>
<td>Arada Systems Inc</td>
<td>2911</td>
</tr>
<tr>
<td>Aranea National Laboratory - TRACC</td>
<td>429</td>
</tr>
<tr>
<td>ARH</td>
<td>1123</td>
</tr>
<tr>
<td>ASTI Transportation Systems Inc.</td>
<td>510</td>
</tr>
<tr>
<td>Atkins</td>
<td>1622</td>
</tr>
<tr>
<td>Automotive Safety Council</td>
<td>325</td>
</tr>
<tr>
<td>Autotakls</td>
<td>2905</td>
</tr>
<tr>
<td>Axiontek</td>
<td>823</td>
</tr>
<tr>
<td>Axis Communications Inc.</td>
<td>2626</td>
</tr>
<tr>
<td>Battelle</td>
<td>621</td>
</tr>
<tr>
<td>BGI - Bordeaux Invest</td>
<td>2015</td>
</tr>
<tr>
<td>BLP Systems</td>
<td>705</td>
</tr>
<tr>
<td>Bosch Service Solutions</td>
<td>1024</td>
</tr>
<tr>
<td>Campbell Scientific Inc</td>
<td>413</td>
</tr>
<tr>
<td>Carrier &amp; Gable</td>
<td>3011</td>
</tr>
<tr>
<td>CASE Systems Inc</td>
<td>1027</td>
</tr>
<tr>
<td>Cetecom</td>
<td>2015</td>
</tr>
<tr>
<td>Cisco</td>
<td>1608</td>
</tr>
<tr>
<td>CITEL</td>
<td>2726</td>
</tr>
<tr>
<td>Ciblog</td>
<td>2924</td>
</tr>
<tr>
<td>CLARY Corporation</td>
<td>411</td>
</tr>
<tr>
<td>CloudParc</td>
<td>728</td>
</tr>
<tr>
<td>Cohda Wireless</td>
<td>1728</td>
</tr>
<tr>
<td>Command Control</td>
<td>422</td>
</tr>
<tr>
<td>Consensus Systems Technologies Corp.</td>
<td>1222</td>
</tr>
<tr>
<td>Continental Automotive</td>
<td>1001</td>
</tr>
<tr>
<td>Core Tec Communications LLC</td>
<td>608</td>
</tr>
<tr>
<td>Cubic Transportation Systems</td>
<td>2826</td>
</tr>
<tr>
<td>Daktronics, Inc.</td>
<td>1218</td>
</tr>
<tr>
<td>Delcan Technologies Inc.</td>
<td>2823</td>
</tr>
<tr>
<td>Delphi</td>
<td>2401</td>
</tr>
<tr>
<td>DENSIO Corporation</td>
<td>2801</td>
</tr>
<tr>
<td>Digital Traffic Systems Inc.</td>
<td>821</td>
</tr>
<tr>
<td>Driveyze</td>
<td>829</td>
</tr>
<tr>
<td>Driving Management Systems</td>
<td>3007</td>
</tr>
<tr>
<td>Eberle Design Inc.</td>
<td>1121</td>
</tr>
<tr>
<td>Econolite Group Inc.</td>
<td>1614</td>
</tr>
<tr>
<td>ekin Teknoloji San. ve Tic As</td>
<td>3013</td>
</tr>
<tr>
<td>Electro-Matic Products Inc.</td>
<td>305</td>
</tr>
<tr>
<td>Emerson Network Power</td>
<td>323</td>
</tr>
<tr>
<td>Ericsson</td>
<td>1005</td>
</tr>
<tr>
<td>EROAD</td>
<td>1728</td>
</tr>
<tr>
<td>ENTICO - ITS Europe - European Pavilion</td>
<td>2015</td>
</tr>
<tr>
<td>Esi</td>
<td>818</td>
</tr>
<tr>
<td>EtherWAN Systems Inc.</td>
<td>408</td>
</tr>
<tr>
<td>eTrans2020</td>
<td>826</td>
</tr>
<tr>
<td>FLIR Systems Inc</td>
<td>2618</td>
</tr>
<tr>
<td>Florida Department of Transportation</td>
<td>423</td>
</tr>
<tr>
<td>Ford Motor Company</td>
<td>425</td>
</tr>
<tr>
<td>Forum® Co. Ltd.</td>
<td>811</td>
</tr>
<tr>
<td>Fujitsu Group</td>
<td>1601</td>
</tr>
<tr>
<td>GIS Technology</td>
<td>414</td>
</tr>
<tr>
<td>General Motors</td>
<td>2007</td>
</tr>
<tr>
<td>GENI</td>
<td>2805</td>
</tr>
<tr>
<td>Global Traffic Technologies</td>
<td>2423</td>
</tr>
<tr>
<td>Go-Light</td>
<td>2913</td>
</tr>
<tr>
<td>Heusch/Boeselfeldt GmbH</td>
<td>3023</td>
</tr>
<tr>
<td>HNTB</td>
<td>2724</td>
</tr>
<tr>
<td>Honda Motor Co. Ltd.</td>
<td>1426</td>
</tr>
<tr>
<td>IAV Automotive Engineering Inc.</td>
<td>611</td>
</tr>
<tr>
<td>Ibee Automotive Systems GmbH</td>
<td>2608</td>
</tr>
<tr>
<td>IBM</td>
<td>2023</td>
</tr>
<tr>
<td>Image Sensing Systems</td>
<td>307</td>
</tr>
<tr>
<td>IMSA International Municipal</td>
<td>2729</td>
</tr>
<tr>
<td>Information Display Co</td>
<td>528</td>
</tr>
<tr>
<td>Information Logistics Inc.</td>
<td>728</td>
</tr>
<tr>
<td>Inrix</td>
<td>601</td>
</tr>
<tr>
<td>Integral Blue LLC</td>
<td>3012</td>
</tr>
<tr>
<td>Intelematics</td>
<td>1728</td>
</tr>
<tr>
<td>Intelligate Inc</td>
<td>3018</td>
</tr>
<tr>
<td>Intellipower Inc.</td>
<td>1326</td>
</tr>
<tr>
<td>Intercomp</td>
<td>415</td>
</tr>
<tr>
<td>International Road Dynamics Inc.</td>
<td>1322</td>
</tr>
<tr>
<td>International Transport Forum, OECD</td>
<td>522</td>
</tr>
<tr>
<td>IP Sens, LLC</td>
<td>2812</td>
</tr>
<tr>
<td>Iteris Inc.</td>
<td>2223</td>
</tr>
<tr>
<td>ITS America - ITS America Pavilion</td>
<td>1718</td>
</tr>
<tr>
<td>ITS Asia-Pacific</td>
<td>2413</td>
</tr>
<tr>
<td>ITS Australia</td>
<td>1728</td>
</tr>
<tr>
<td>ITS Canada</td>
<td>1206</td>
</tr>
<tr>
<td>ITS Finland</td>
<td>2015</td>
</tr>
<tr>
<td>ITS France</td>
<td>2015</td>
</tr>
<tr>
<td>ITS International</td>
<td>628</td>
</tr>
<tr>
<td>ITS Japan</td>
<td>1601</td>
</tr>
<tr>
<td>ITS Minnesota</td>
<td>529</td>
</tr>
<tr>
<td>ITS Netherlands</td>
<td>2015</td>
</tr>
<tr>
<td>ITS Singapore</td>
<td>2613</td>
</tr>
<tr>
<td>ITS Sweden</td>
<td>2015</td>
</tr>
<tr>
<td>ITS Taiwan</td>
<td>2601</td>
</tr>
<tr>
<td>ITS World Congress</td>
<td>2015</td>
</tr>
<tr>
<td>Kapoor TrafficCom AG</td>
<td>1418</td>
</tr>
<tr>
<td>Kimley-Horn and Associates Inc.</td>
<td>2624</td>
</tr>
<tr>
<td>Kitster Instrument Corporation</td>
<td>428</td>
</tr>
<tr>
<td>KOMOTI Enterprise Co. Ltd.</td>
<td>521</td>
</tr>
<tr>
<td>Korea Pavilion</td>
<td>1011</td>
</tr>
<tr>
<td>Korea Road Traffic Authority</td>
<td>2910</td>
</tr>
<tr>
<td>Lanner Electronics</td>
<td>2721</td>
</tr>
<tr>
<td>Laser Technology</td>
<td>2623</td>
</tr>
<tr>
<td>Luft USA Inc.</td>
<td>321</td>
</tr>
<tr>
<td>M.H. Corbin, Inc.</td>
<td>320</td>
</tr>
<tr>
<td>Magna Electronics</td>
<td>623</td>
</tr>
<tr>
<td>Marben Products</td>
<td>2908</td>
</tr>
<tr>
<td>Mechanical Simulation</td>
<td>708</td>
</tr>
<tr>
<td>MG Squared Lowering Systems</td>
<td>3016</td>
</tr>
<tr>
<td>Michigan Lighting - Michigan Economic Development Corporation</td>
<td>2032</td>
</tr>
<tr>
<td>Millen Corporation</td>
<td>2015</td>
</tr>
<tr>
<td>Ministry of Internal Affairs and Communications</td>
<td>1601</td>
</tr>
<tr>
<td>Ministry of Land Infrastructure Transport and Tourism</td>
<td>1601</td>
</tr>
<tr>
<td>Movision Technologies Inc</td>
<td>1228</td>
</tr>
<tr>
<td>Mitsubishi Electric Corporation (Japan)</td>
<td>1601</td>
</tr>
<tr>
<td>Mitsubishi Electric</td>
<td>405</td>
</tr>
<tr>
<td>Mitsubishi Heavy Industries Ltd.</td>
<td>618</td>
</tr>
<tr>
<td>Mobile Mark Inc.</td>
<td>1323</td>
</tr>
<tr>
<td>Moxa Americas, Inc.</td>
<td>2810</td>
</tr>
<tr>
<td>MS2</td>
<td>609</td>
</tr>
<tr>
<td>MULTILINK</td>
<td>1129</td>
</tr>
<tr>
<td>NEC Corporation</td>
<td>1601</td>
</tr>
<tr>
<td>Nedap Identification Systems</td>
<td>2813</td>
</tr>
<tr>
<td>Neurosoft</td>
<td>326</td>
</tr>
<tr>
<td>NEXCOM</td>
<td>309</td>
</tr>
<tr>
<td>NICTA – National ICT Australia</td>
<td>1728</td>
</tr>
<tr>
<td>Nobetel Oy</td>
<td>2921</td>
</tr>
<tr>
<td>NSF-Camera Lowering Systems</td>
<td>2728</td>
</tr>
<tr>
<td>NXP Semiconductors</td>
<td>2818</td>
</tr>
<tr>
<td>Open Roads Consulting Inc.</td>
<td>2521</td>
</tr>
<tr>
<td>Opti-Com Manufacturing Network LLC</td>
<td>509</td>
</tr>
<tr>
<td>P3 Group</td>
<td>1324</td>
</tr>
<tr>
<td>Panasonic Corporation</td>
<td>1213</td>
</tr>
<tr>
<td>Parkmobile USA Inc.</td>
<td>302</td>
</tr>
<tr>
<td>Peak Traffic Corporation</td>
<td>1014</td>
</tr>
<tr>
<td>Phoenix Contact</td>
<td>523</td>
</tr>
<tr>
<td>Proxim Wireless</td>
<td>3015</td>
</tr>
<tr>
<td>PTU AG</td>
<td>2523</td>
</tr>
<tr>
<td>Q-Free ASA</td>
<td>614</td>
</tr>
<tr>
<td>Quanergy Systems Inc.</td>
<td>626</td>
</tr>
<tr>
<td>Quantum Inventions</td>
<td>729</td>
</tr>
<tr>
<td>Qvision Technology</td>
<td>1029</td>
</tr>
<tr>
<td>RACER Trust</td>
<td>2909</td>
</tr>
<tr>
<td>Realtime Technologies</td>
<td>627</td>
</tr>
<tr>
<td>Red Lion Controls</td>
<td>923</td>
</tr>
<tr>
<td>Renishaw Inc.</td>
<td>508</td>
</tr>
<tr>
<td>RideScout</td>
<td>1026</td>
</tr>
<tr>
<td>Rohde &amp; Schwarz</td>
<td>2907</td>
</tr>
<tr>
<td>SAE International</td>
<td>410</td>
</tr>
<tr>
<td>Savari Inc</td>
<td>1424</td>
</tr>
<tr>
<td>Schneider Electric</td>
<td>1407</td>
</tr>
<tr>
<td>Sensys Networks Inc.</td>
<td>1210</td>
</tr>
<tr>
<td>Sensys Traffic</td>
<td>2015</td>
</tr>
<tr>
<td>SES America Inc.</td>
<td>721</td>
</tr>
<tr>
<td>SICE</td>
<td>310</td>
</tr>
<tr>
<td>Siemens</td>
<td>2001</td>
</tr>
<tr>
<td>Siemens Canada Limited</td>
<td>2605</td>
</tr>
<tr>
<td>SIMREX Corporation</td>
<td>629</td>
</tr>
<tr>
<td>Skyline Products, Inc.</td>
<td>2418</td>
</tr>
<tr>
<td>Skyline Technology Solutions</td>
<td>1226</td>
</tr>
<tr>
<td>Smart Microwave Sensors</td>
<td>1223</td>
</tr>
<tr>
<td>Southwest Research Institute</td>
<td>1410</td>
</tr>
<tr>
<td>SpeedInfo Inc</td>
<td>922</td>
</tr>
<tr>
<td>Sprent</td>
<td>318</td>
</tr>
<tr>
<td>STEGO, Inc.</td>
<td>2915</td>
</tr>
<tr>
<td>Sumitomo Electric Industries Ltd.</td>
<td>1601</td>
</tr>
<tr>
<td>Swacor AG</td>
<td>2410</td>
</tr>
<tr>
<td>Swedish Transport Administration</td>
<td>2015</td>
</tr>
<tr>
<td>TAKATA</td>
<td>808</td>
</tr>
<tr>
<td>TASS International</td>
<td>421</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>723</td>
</tr>
<tr>
<td>Thinking Highways</td>
<td>3019</td>
</tr>
<tr>
<td>TKH Security Solutions – USA</td>
<td>2807</td>
</tr>
<tr>
<td>Tokyo Metropolitan Government</td>
<td>1601</td>
</tr>
<tr>
<td>Tom Tom</td>
<td>418</td>
</tr>
<tr>
<td>Topos Aquatilne</td>
<td>2015</td>
</tr>
<tr>
<td>Toshiba Corporation</td>
<td>1601</td>
</tr>
<tr>
<td>Toyota Motor Corporation</td>
<td>2018</td>
</tr>
<tr>
<td>Traffic Technologies</td>
<td>1728</td>
</tr>
<tr>
<td>Traffic Technology International</td>
<td>822</td>
</tr>
<tr>
<td>TrafficCast International Inc.</td>
<td>1126</td>
</tr>
<tr>
<td>TrafficVision™</td>
<td>1422</td>
</tr>
<tr>
<td>Trafficware Ltd.</td>
<td>605</td>
</tr>
<tr>
<td>TransCore</td>
<td>2421</td>
</tr>
<tr>
<td>Trapeze Group</td>
<td>3009</td>
</tr>
<tr>
<td>Transportation Management &amp; Engineering</td>
<td>2722</td>
</tr>
<tr>
<td>Traveller Information Services Association (TISA) ASBL</td>
<td>2015</td>
</tr>
<tr>
<td>TSS - Transport Simulation Systems Inc.</td>
<td>921</td>
</tr>
<tr>
<td>U.S. Department of Transportation (USDOT)</td>
<td>1201</td>
</tr>
<tr>
<td>Ultimaco Inc.</td>
<td>1023</td>
</tr>
<tr>
<td>UTMS Society of Japan</td>
<td>1601</td>
</tr>
<tr>
<td>Vaisala</td>
<td>2808</td>
</tr>
<tr>
<td>VALEO</td>
<td>2608</td>
</tr>
<tr>
<td>Vector CANtech Inc.</td>
<td>327</td>
</tr>
<tr>
<td>Vehicle Information and Communication System Center</td>
<td>1601</td>
</tr>
<tr>
<td>Vendeka Information Technologies</td>
<td>313</td>
</tr>
<tr>
<td>Verizon</td>
<td>814</td>
</tr>
<tr>
<td>Ver-Mac</td>
<td>306</td>
</tr>
<tr>
<td>Versalis Inc</td>
<td>2723</td>
</tr>
<tr>
<td>Vcomtech - IK4</td>
<td>3008</td>
</tr>
<tr>
<td>Virginia Tech Transportation Institute (VTI)</td>
<td>1328</td>
</tr>
<tr>
<td>Vitec Corporation</td>
<td>801</td>
</tr>
<tr>
<td>VITRONIC Machine Vision</td>
<td>607</td>
</tr>
<tr>
<td>VIGOTEK</td>
<td>322</td>
</tr>
<tr>
<td>Vizzion</td>
<td>924</td>
</tr>
<tr>
<td>Wavepoint LLC</td>
<td>113</td>
</tr>
<tr>
<td>Wireless Technology / WTI</td>
<td>2922</td>
</tr>
<tr>
<td>Xerox</td>
<td>402</td>
</tr>
<tr>
<td>Yaham Optoelectronics Co., Ltd</td>
<td>2914</td>
</tr>
</tbody>
</table>
THINKING ABOUT SUSTAINABLE TRAFFIC MANAGEMENT AND ROAD SAFETY SOLUTIONS?

TALK TO US FIRST …

… if you need a competent partner for environmentally sound products, systems and solutions to keep traffic in motion in a connected transport world.

TRUST IN SWARCO …

■ with its almost five decades of experience in the industry;
■ with its worldwide production sites and sales network;
■ with its competence centres for I.T.S., software development, and road marking technology;
■ with its energy-saving LED-based products and systems in signalling and lighting;
■ with its friendly and service-minded staff.

SWARCO I First in Traffic Solutions.

SWARCO AG, Blattenwaldweg 8, A-6112 Wattens, Austria, T. +43-5224-58770, F. +43-5224-56070, E. office.ag@swarco.com, www.swarco.com
## Exhibitor Category

### Advanced Traffic Management Systems
- Adaptive Micro Systems Inc.  
- Advantech  
- AECOM  
- Aldis Corporation  
- ARH  
- Atkins  
- Axiomtek  
- BLIP Systems  
- Carrier & Gable  
- CloudParc  
- Cubic Transportation Systems  
- Delcan Technologies, Inc.  
- Econolite Group, Inc.  
- ekin Teknoloji San. ve Tic. As  
- Florida Department of Transportation  
- GEWI  
- Go-Light  
- Heusch/Boesefeldt GmbH  
- HNTB  
- IBM  
- Image Sensing Systems  
- Information Display Co  
- Inrix  
- Intellihub Inc  
- Intec  
- International Road Dynamics, Inc.  
- Kimley-Horn and Associates, Inc.  
- KOMOTO Enterprise Co., Ltd.  
- Korea Pavilion  
- Laser Technology, Inc.  
- MG Squared Lowering Systems  
- Ministry of Land, Infrastructure, Transport and Tourism  
- Miovision Technologies Inc  
- NEC Corporation  
- Neurosoft  
- Open Roads Consulting, Inc.  
- Peek Traffic Corporation  
- Proxim Wireless  
- PTV AG  
- Q-Free ASA  
- Schneider Electric  
- Sensoe Networks, Inc.  
- SICE  
- Siemens  
- Siemens Canada Limited  
- Skyline Products, Inc.  
- Smart Microwave Sensors  
- Southwest Research Institute  
- Swarco AG  

### Advanced Vehicle Control/Safety Systems
- ADVICS  
- Applus IDIADA  
- Cetecom  
- Honda Motor Co., Ltd.  
- IAV Automotive Engineering, Inc.  
- Ibee Automotive Systems GmbH  
- Kapsch TrafficCom AG  
- KOMOTO Enterprise Co., Ltd.  
- Lanner Electronics  
- Magna Electronics  
- Marben Products  
- Mechanical Simulation  
- Ministry of Internal Affairs and Communications  
- NEC Corporation  
- Phoenix Contact  
- Quanergy Systems, Inc.  
- Tokyo Metropolitan Government  

### Architecture
- Consensus Systems Technologies Corp.  
- Forum8 Co., Ltd.  
- ITS Japan  
- Utimaco Inc.  

### Association
- 23rd ITS World Congress 2016 Melbourne  
- Automotive Safety Council  
- BGI - Bordeaux Invest  
- ERTICO - ITS Europe - European Pavilion  
- IMSA International Municipal Signal Association  
- ITS America - ITS America Pavilion  
- ITS Australia  
- ITS Canada  
- ITS Finland  
- ITS France  
- ITS Japan  
- RACER Trust  
- Topos Aquitaine  

### Commercial Vehicle Safety, Security and Payment Systems
- Continental Automotive  
- Quanergy Systems, Inc.  
- Utimaco Inc.  

### Consumer Electronics
- GAAD  

### Driver Assistance Systems
- AISIN SEIKI  
- Autotalks  
- CASE Systems Inc.  
- Continental Automotive  

---

**www.itsworldcongress.org** |  #ITSWC14
### Exhibitor Category

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibeo Automotive Systems GmbH</td>
<td>2608</td>
</tr>
<tr>
<td>Magna Electronics</td>
<td>623</td>
</tr>
<tr>
<td>Mechanical Simulation</td>
<td>708</td>
</tr>
<tr>
<td>Ministry of Land, Infrastructure, Transport and Tourism</td>
<td>1601</td>
</tr>
<tr>
<td>NICTA – National ICT Australia</td>
<td>1728</td>
</tr>
<tr>
<td>Quanergy Systems, Inc.</td>
<td>626</td>
</tr>
<tr>
<td>Savari Inc</td>
<td>1424</td>
</tr>
<tr>
<td>TASS International</td>
<td>421</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>723</td>
</tr>
<tr>
<td>Toshiba Corporation</td>
<td>1601</td>
</tr>
<tr>
<td>VALEO</td>
<td>2608</td>
</tr>
<tr>
<td>Vicomtech-IK4</td>
<td>3008</td>
</tr>
</tbody>
</table>

### GPS & GIS Technology Applications

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Information, Inc.</td>
<td></td>
</tr>
<tr>
<td>Drivewyze</td>
<td>826</td>
</tr>
<tr>
<td>Esri</td>
<td>3029</td>
</tr>
<tr>
<td>ERoad</td>
<td>818</td>
</tr>
<tr>
<td>Microsoft</td>
<td>1728</td>
</tr>
<tr>
<td>Mobile Mark, Inc.</td>
<td>609</td>
</tr>
<tr>
<td>Proxim Wireless</td>
<td>618</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>1323</td>
</tr>
<tr>
<td>Vaisala</td>
<td>3015</td>
</tr>
</tbody>
</table>

### Integrated Vehicle Control and Safety Systems

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVICS</td>
<td>1724</td>
</tr>
<tr>
<td>Aisin AW Co., Ltd.</td>
<td>1724</td>
</tr>
<tr>
<td>DENSO Corporation</td>
<td>2801</td>
</tr>
<tr>
<td>FJIR Systems Inc</td>
<td>2618</td>
</tr>
<tr>
<td>Magna Electronics</td>
<td>623</td>
</tr>
<tr>
<td>Marben Products</td>
<td>2908</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>723</td>
</tr>
</tbody>
</table>

### Intermodal Systems Integration

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heusen/Bossefeldt GmbH</td>
<td>3023</td>
</tr>
<tr>
<td>Kistler Instrument Corporation</td>
<td>428</td>
</tr>
<tr>
<td>RideScout</td>
<td>1026</td>
</tr>
</tbody>
</table>

### Internet-Based Applications

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CloudParc</td>
<td>726</td>
</tr>
<tr>
<td>Drivewyze</td>
<td>3029</td>
</tr>
<tr>
<td>Esri</td>
<td>818</td>
</tr>
<tr>
<td>eTrans2020</td>
<td>826</td>
</tr>
<tr>
<td>Intelight Inc</td>
<td>3018</td>
</tr>
<tr>
<td>Intercomp</td>
<td>415</td>
</tr>
<tr>
<td>Millen Corporation</td>
<td>2015</td>
</tr>
<tr>
<td>MS2</td>
<td>609</td>
</tr>
<tr>
<td>Red Lion Controls</td>
<td>923</td>
</tr>
<tr>
<td>RideScout</td>
<td>1026</td>
</tr>
<tr>
<td>Speedinfo, Inc</td>
<td>1029</td>
</tr>
<tr>
<td>TrafficCast International, Inc.</td>
<td>922</td>
</tr>
<tr>
<td>Vaisala</td>
<td>1126</td>
</tr>
</tbody>
</table>

### Fleet Management Systems

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantech</td>
<td>1021</td>
</tr>
<tr>
<td>Battelle</td>
<td>621</td>
</tr>
<tr>
<td>Eberle Design Inc.</td>
<td>1121</td>
</tr>
<tr>
<td>IAV Automotive Engineering, Inc.</td>
<td>611</td>
</tr>
<tr>
<td>Lanner Electronics</td>
<td>2721</td>
</tr>
<tr>
<td>Mobile Mark, Inc.</td>
<td>1323</td>
</tr>
<tr>
<td>Panasonic Corporation</td>
<td>1213</td>
</tr>
<tr>
<td>Verizon</td>
<td>814</td>
</tr>
<tr>
<td>Ver-Mac</td>
<td>306</td>
</tr>
</tbody>
</table>

### Location-Based Technology & Services

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco</td>
<td>1608</td>
</tr>
<tr>
<td>Fujitsu Group</td>
<td>1601</td>
</tr>
<tr>
<td>Information Logistics Inc.</td>
<td>728</td>
</tr>
<tr>
<td>Inrix</td>
<td>601</td>
</tr>
<tr>
<td>Spirent</td>
<td>318</td>
</tr>
<tr>
<td>Tom Tom</td>
<td>418</td>
</tr>
</tbody>
</table>

### Mobile Applications for Personal & Automotive Devices

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Logistics Inc.</td>
<td>728</td>
</tr>
<tr>
<td>Intelesmatics</td>
<td>1728</td>
</tr>
<tr>
<td>Parkmobile USA, Inc.</td>
<td>302</td>
</tr>
<tr>
<td>RideScout</td>
<td>1026</td>
</tr>
<tr>
<td>TrafficCast International, Inc.</td>
<td>1126</td>
</tr>
<tr>
<td>Vaisala</td>
<td>2808</td>
</tr>
</tbody>
</table>

### Modeling & Simulation Tools

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argonne National Laboratory - TRACC</td>
<td>429</td>
</tr>
<tr>
<td>eTrans2020</td>
<td>826</td>
</tr>
<tr>
<td>Esri</td>
<td>818</td>
</tr>
<tr>
<td>Forum8 Co., Ltd.</td>
<td>811</td>
</tr>
<tr>
<td>Ibeo Automotive Systems GmbH</td>
<td>2608</td>
</tr>
<tr>
<td>Mechanical Simulation</td>
<td>708</td>
</tr>
<tr>
<td>NICTA – National ICT Australia</td>
<td>1728</td>
</tr>
<tr>
<td>PTV AG</td>
<td>2523</td>
</tr>
<tr>
<td>Realtime Technologies</td>
<td>627</td>
</tr>
<tr>
<td>Spirent</td>
<td>318</td>
</tr>
<tr>
<td>TASS International</td>
<td>421</td>
</tr>
<tr>
<td>TSS - Transport Simulation Systems, Inc.</td>
<td>921</td>
</tr>
<tr>
<td>Vector CANtech, Inc.</td>
<td>327</td>
</tr>
</tbody>
</table>

### Obstacle Warning Systems

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>AISIN SEIKI</td>
<td>1724</td>
</tr>
<tr>
<td>Renishaw, Inc.</td>
<td>508</td>
</tr>
</tbody>
</table>

### Parking Management Systems

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>AISIN SEIKI</td>
<td>1724</td>
</tr>
<tr>
<td>Applied Information, Inc.</td>
<td>826</td>
</tr>
<tr>
<td>ARH</td>
<td>1123</td>
</tr>
<tr>
<td>CloudParc</td>
<td>726</td>
</tr>
<tr>
<td>Neurosoft</td>
<td>326</td>
</tr>
<tr>
<td>O-Free ASA</td>
<td>614</td>
</tr>
<tr>
<td>Swarco AG</td>
<td>2410</td>
</tr>
<tr>
<td>Vaisala</td>
<td>1018</td>
</tr>
<tr>
<td>Xerox</td>
<td>402</td>
</tr>
</tbody>
</table>
Daktronics designs DMS to:
› Provide instantly recognizable images
› Display sharp, crystal clear text for the best legibility
› Instantly inform your motorists with crisp, dynamic content that you control

DON’T TAKE CHANCES.
CHOOSE THE LEADER FOR YOUR NEXT DMS PROJECT.
800-833-3157  DAKTRONICS.COM/DMS
## Exhibitor Category

<table>
<thead>
<tr>
<th>EXHIBITOR</th>
<th>BOOTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td>Argonne National Laboratory - TRACC</td>
<td>429</td>
</tr>
<tr>
<td>ITS Japan</td>
<td>1601</td>
</tr>
<tr>
<td>ITS Minnesota</td>
<td>529</td>
</tr>
<tr>
<td>Kimley-Horn and Associates, Inc.</td>
<td>2624</td>
</tr>
<tr>
<td>Ministry of Land, Infrastructure, Transport and Tourism</td>
<td>1601</td>
</tr>
<tr>
<td>Publishing / Media</td>
<td></td>
</tr>
<tr>
<td>ITS International</td>
<td>628</td>
</tr>
<tr>
<td>Thinking Highways</td>
<td>3019</td>
</tr>
<tr>
<td>Traffic Technology International</td>
<td>822</td>
</tr>
<tr>
<td>Transportation Management &amp; Engineering</td>
<td>2722</td>
</tr>
<tr>
<td>Real-Time Travel Information Technology</td>
<td></td>
</tr>
<tr>
<td>Adaptive Micro Systems Inc.</td>
<td>3020</td>
</tr>
<tr>
<td>Alis Corporation</td>
<td>1413</td>
</tr>
<tr>
<td>All Traffic Solutions</td>
<td>824</td>
</tr>
<tr>
<td>ASTI Transportation Systems Inc.</td>
<td>510</td>
</tr>
<tr>
<td>BLIP Systems</td>
<td>705</td>
</tr>
<tr>
<td>CASE Systems Inc.</td>
<td>1027</td>
</tr>
<tr>
<td>Cubic Transportation Systems</td>
<td>2826</td>
</tr>
<tr>
<td>GEWI</td>
<td>2805</td>
</tr>
<tr>
<td>Imix</td>
<td>601</td>
</tr>
<tr>
<td>Intelematics</td>
<td>1728</td>
</tr>
<tr>
<td>International Road Dynamics, Inc.</td>
<td>1322</td>
</tr>
<tr>
<td>Iteris, Inc.</td>
<td>2223</td>
</tr>
<tr>
<td>Neurosoft</td>
<td>326</td>
</tr>
<tr>
<td>NEXCOM</td>
<td>309</td>
</tr>
<tr>
<td>Noptel Oy</td>
<td>2921</td>
</tr>
<tr>
<td>NSL-Camera Lowering Systems</td>
<td>2728</td>
</tr>
<tr>
<td>Open Roads Consulting, Inc.</td>
<td>2521</td>
</tr>
<tr>
<td>Quantum Inventions</td>
<td>729</td>
</tr>
<tr>
<td>RideScout</td>
<td>1026</td>
</tr>
<tr>
<td>Schneider Electric</td>
<td>1407</td>
</tr>
<tr>
<td>Sensys Networks, Inc.</td>
<td>1210</td>
</tr>
<tr>
<td>Siemens</td>
<td>2001</td>
</tr>
<tr>
<td>Skyline Technology Solutions</td>
<td>1226</td>
</tr>
<tr>
<td>QvisionTechnology</td>
<td>1029</td>
</tr>
<tr>
<td>Speedinfo, Inc.</td>
<td>922</td>
</tr>
<tr>
<td>TomTom</td>
<td>418</td>
</tr>
<tr>
<td>TrafficCast International, Inc.</td>
<td>1126</td>
</tr>
<tr>
<td>Trafficvision™</td>
<td>1422</td>
</tr>
<tr>
<td>Traveller Information Services Association (TISA) ASBL</td>
<td>2015</td>
</tr>
<tr>
<td>TSS - Transport Simulation Systems, Inc.</td>
<td>921</td>
</tr>
<tr>
<td>Valsala</td>
<td>2808</td>
</tr>
<tr>
<td>Ver-Mac</td>
<td>306</td>
</tr>
<tr>
<td>Vizion</td>
<td>924</td>
</tr>
<tr>
<td>Waveotronix, LLC</td>
<td>513</td>
</tr>
<tr>
<td>Road Markings</td>
<td></td>
</tr>
<tr>
<td>Yaham Optoelectronics Co., Ltd.</td>
<td>2914</td>
</tr>
<tr>
<td>Signaling &amp; Control Systems</td>
<td></td>
</tr>
<tr>
<td>Applied Information, Inc.</td>
<td>826</td>
</tr>
<tr>
<td>CITEL</td>
<td>2726</td>
</tr>
<tr>
<td>Control Corp</td>
<td>422</td>
</tr>
<tr>
<td>Eberie Design Inc.</td>
<td>1121</td>
</tr>
<tr>
<td>Econotile Group, Inc.</td>
<td>1614</td>
</tr>
<tr>
<td>Emerson Network Power</td>
<td>323</td>
</tr>
<tr>
<td>Global Traffic Technologies</td>
<td>2423</td>
</tr>
<tr>
<td>Go-Light</td>
<td>2913</td>
</tr>
<tr>
<td>Millen Corporation</td>
<td>2015</td>
</tr>
<tr>
<td>Peak Traffic Corporation</td>
<td>1014</td>
</tr>
<tr>
<td>Phoenix Contact</td>
<td>523</td>
</tr>
<tr>
<td>SIMREX Corporation</td>
<td>629</td>
</tr>
<tr>
<td>STEG0, Inc.</td>
<td>2915</td>
</tr>
<tr>
<td>Swarco AG</td>
<td>2410</td>
</tr>
<tr>
<td>Traffic Technologies</td>
<td>1728</td>
</tr>
<tr>
<td>Trafficware, Ltd.</td>
<td>605</td>
</tr>
<tr>
<td>Yaham Optoelectronics Co., Ltd.</td>
<td>2914</td>
</tr>
<tr>
<td>Standards</td>
<td></td>
</tr>
<tr>
<td>Delcan Technologies, Inc.</td>
<td>2823</td>
</tr>
<tr>
<td>ITS America Pavilion</td>
<td>1718</td>
</tr>
<tr>
<td>UTMS Society of Japan</td>
<td>1601</td>
</tr>
<tr>
<td>Surveillance Technology</td>
<td></td>
</tr>
<tr>
<td>Agent Video Intelligence (Agent VI)</td>
<td>2626</td>
</tr>
<tr>
<td>ASTI Transportation Systems Inc.</td>
<td>510</td>
</tr>
<tr>
<td>Axis Communications Inc.</td>
<td>2626</td>
</tr>
<tr>
<td>Cisco</td>
<td>1608</td>
</tr>
<tr>
<td>Core Tec Communications LLC</td>
<td>608</td>
</tr>
<tr>
<td>Digital Traffic Systems, Inc.</td>
<td>821</td>
</tr>
<tr>
<td>ekin Teknoloji San. ve Tic As</td>
<td>3013</td>
</tr>
<tr>
<td>EtherWAN Systems, Inc.</td>
<td>408</td>
</tr>
<tr>
<td>iGAS Technology</td>
<td>414</td>
</tr>
<tr>
<td>Integral Blue, LLC</td>
<td>3012</td>
</tr>
<tr>
<td>Lanner Electronics</td>
<td>3012</td>
</tr>
<tr>
<td>M.G. Squared Lowering Systems</td>
<td>2721</td>
</tr>
<tr>
<td>NEXCOM</td>
<td>3016</td>
</tr>
<tr>
<td>NSL-Camera Lowering Systems</td>
<td>309</td>
</tr>
<tr>
<td>Open Roads Consulting, Inc.</td>
<td>2728</td>
</tr>
<tr>
<td>Proxim Wireless</td>
<td>3015</td>
</tr>
<tr>
<td>TKH Security Solutions - USA</td>
<td>2807</td>
</tr>
<tr>
<td>TrafficVision™</td>
<td>1422</td>
</tr>
<tr>
<td>VITRONIC Machine Vision</td>
<td>607</td>
</tr>
<tr>
<td>VINOTEX</td>
<td>322</td>
</tr>
<tr>
<td>Wanco Inc.</td>
<td>3026</td>
</tr>
<tr>
<td>Vicomtech-K4</td>
<td>3008</td>
</tr>
<tr>
<td>Wireless Technology / WTI</td>
<td>2922</td>
</tr>
<tr>
<td>Systems Engineering</td>
<td></td>
</tr>
<tr>
<td>AECOM</td>
<td>2628</td>
</tr>
<tr>
<td>Alpha Technologies Ltd.</td>
<td>2621</td>
</tr>
<tr>
<td>Argonne National Laboratory - TRACC</td>
<td>429</td>
</tr>
<tr>
<td>Axiomtek</td>
<td>823</td>
</tr>
<tr>
<td>Consensus Systems Technologies Corp.</td>
<td>1222</td>
</tr>
<tr>
<td>Digital Traffic Systems, Inc.</td>
<td>821</td>
</tr>
<tr>
<td>EtherWAN Systems, Inc.</td>
<td>408</td>
</tr>
<tr>
<td>Integral Blue, LLC</td>
<td>3012</td>
</tr>
<tr>
<td>Iteris, Inc.</td>
<td>2223</td>
</tr>
<tr>
<td>ITS Minnesota</td>
<td>529</td>
</tr>
<tr>
<td>Kimley-Horn and Associates, Inc.</td>
<td>2624</td>
</tr>
<tr>
<td>P3 North America</td>
<td>1324</td>
</tr>
<tr>
<td>Traffic Technologies</td>
<td>1728</td>
</tr>
<tr>
<td>Vector CANtech, Inc.</td>
<td>327</td>
</tr>
<tr>
<td>Telecommunications</td>
<td></td>
</tr>
<tr>
<td>CASE Systems Inc.</td>
<td>1027</td>
</tr>
<tr>
<td>Core Tec Communications LLC</td>
<td>608</td>
</tr>
<tr>
<td>Ericsson</td>
<td>1005</td>
</tr>
<tr>
<td>EtherWAN Systems, Inc.</td>
<td>408</td>
</tr>
<tr>
<td>G4S Technology</td>
<td>414</td>
</tr>
<tr>
<td>Integral Blue, LLC</td>
<td>3012</td>
</tr>
<tr>
<td>M.H. Corbin, Inc.</td>
<td>320</td>
</tr>
<tr>
<td>MULTILINK</td>
<td>1129</td>
</tr>
<tr>
<td>Opti-Com Manufacturing Network, LLC</td>
<td>509</td>
</tr>
<tr>
<td>Red Lion Controls</td>
<td>923</td>
</tr>
<tr>
<td>Siemens Canada Limited</td>
<td>2605</td>
</tr>
<tr>
<td>Verizon</td>
<td>814</td>
</tr>
<tr>
<td>Telematics</td>
<td></td>
</tr>
<tr>
<td>Aisin AW Co., Ltd.</td>
<td>1724</td>
</tr>
<tr>
<td>Arada Systems, Inc.</td>
<td>2911</td>
</tr>
<tr>
<td>Battelle</td>
<td>621</td>
</tr>
<tr>
<td>Bosch Service Solutions</td>
<td>1024</td>
</tr>
<tr>
<td>Delcan Technologies, Inc.</td>
<td>2823</td>
</tr>
<tr>
<td>Driving Management Systems</td>
<td>3007</td>
</tr>
<tr>
<td>EROAD</td>
<td>1728</td>
</tr>
<tr>
<td>Fujitsu Group</td>
<td>1601</td>
</tr>
<tr>
<td>Go-Light</td>
<td>2913</td>
</tr>
<tr>
<td>Honda Motor Co., Ltd.</td>
<td>1426</td>
</tr>
<tr>
<td>Intele communications</td>
<td>1728</td>
</tr>
<tr>
<td>ITS Taiwan</td>
<td>2601</td>
</tr>
<tr>
<td>NEXCOM</td>
<td>309</td>
</tr>
<tr>
<td>P3 North America</td>
<td>1324</td>
</tr>
<tr>
<td>PTV AG</td>
<td>2523</td>
</tr>
<tr>
<td>Quantum Inventions</td>
<td>729</td>
</tr>
<tr>
<td>Realtime Technologies</td>
<td>627</td>
</tr>
<tr>
<td>Sumitomo Electric Industries, Ltd.</td>
<td>1601</td>
</tr>
<tr>
<td>Vehicle Information and Communication System Center</td>
<td>1601</td>
</tr>
<tr>
<td>Verizon</td>
<td>814</td>
</tr>
<tr>
<td>Visteon Corporation</td>
<td>801</td>
</tr>
</tbody>
</table>
### Exhibitor Category

#### Ticketing and Smart Cards
- **Cetecom**: 2015
- **STE&GO, Inc.**: 2915

#### Traffic Control Equipment
- **Aldis Corporation**: 1413
- **All Traffic Solutions**: 824
- **Alpha Technologies Ltd.**: 2621
- **American Signal Company**: 3021
- **Area Wide Protective**: 2923
- **Axiontek**: 823
- **Carrier & Gable**: 3011
- **CITEL**: 2726
- **CitiLog**: 2924
- **CLARY Corporation**: 1121
- **Eberle Design Inc.**: 1121
- **Econolite Group, Inc.**: 1614
- **ekin Teknoloji San. ve Tic. A.Ş**: 3013
- **Emerson Network Power**: 323
- **FLIR Systems Inc**: 2618
- **Information Display Co**: 528
- **Intelight Inc**: 3018
- **Intercomp**: 415
- **International Road Dynamics, Inc.**: 1322
- **Itere, Inc.**: 2223
- **Kistler Instrument Corporation**: 428
- **Korea Pavilion**: 1011
- **Laser Technology, Inc.**: 2623
- **MG Squared Lowering Systems**: 3016
- **Mollen Corporation**: 2015
- **Movision Technologies Inc**: 1228
- **Mitsubishi Electric**: 405
- **Moxa Americas, Inc.**: 2810
- **Noptel Oy**: 2921
- **NSL-Camera Lowering Systems**: 2728
- **Peek Traffic Corporation**: 1014
- **Renishaw, Inc.**: 508
- **Sensys Networks, Inc.**: 1210
- **SIMREX Corporation**: 629
- **Smart Microwave Sensors**: 1223
- **STE&GO, Inc.**: 2915
- **Sumitomo Electric Industries, Ltd.**: 1601
- **TKH Security Solutions - USA**: 2807
- **Tokyo Metropolitan Government**: 1601
- **Traffic Technologies**: 1728
- **Versalis Inc**: 2723
- **VITRONIC Machine Vision**: 607
- **Wanco Inc**: 3026
- **Wavetronix, LLC**: 513

#### Transit Systems
- **Alpha Technologies Ltd.**: 2621
- **Carrier & Gable**: 3011
- **Consensus Systems Technologies Corp.**: 1222

#### Traveler Information Systems
- **ASTI Transportation Systems Inc.**: 510
- **Atkins**: 1622
- **CitiLog**: 2924
- **Florida Department of Transportation**: 423
- **GEWI**: 2805
- **Information Logistics Inc.**: 728
- **ITS Taiwan**: 2601
- **M.H. Corbin, Inc.**: 320
- **Open Roads Consulting, Inc.**: 2521
- **SIMREX Corporation**: 629
- **VisionTechnology**: 1029
- **SpeedInfo, Inc.**: 922
- **TransCore**: 2421
- **Ver-Mac**: 306

#### Tunnel Maintenance and Management
- **CitiLog**: 2924
- **SICE**: 310

#### Variable Message Signs
- **Adaptive Micro Systems Inc.**: 3020
- **All Traffic Solutions**: 824
- **American Signal Company**: 3021
- **Area Wide Protective**: 2923
- **Electro-Matic Products, Inc.**: 305
- **Emerson Network Power**: 323
- **GAS Technology**: 414
- **Information Display Co**: 528
- **SES America, Inc.**: 721
- **Skyline Products, Inc.**: 2418
- **Versalis Inc**: 2723
- **Wanco Inc**: 3026
- **Yaham Optoelectronics Co., Ltd.**: 2914

#### Vehicle Safety Systems
- **ADVICS**: 1724
- **Applus IDIADA**: 2407
- **Arada Systems, Inc.**: 2911
- **Autotalks**: 1622
- **Battelle**: 2905
- **Bosch Service Solutions**: 621
- **Honda Motor Co., Ltd.**: 1024
- **Kapsch TrafficCom AG**: 1418
- **Marben Products**: 2908
- **Ministry of Internal Affairs and Communications**: 1601
- **Mitsubishi Electric Corporation (Japan)**: 1601
- **Mitsubishi Heavy Industries, Ltd.**: 618
- **Mobile Mark, Inc.**: 1323
- **Moxa Americas, Inc.**: 2810
- **NICTA – National ICT Australia**: 1728
- **NXP Semiconductors**: 2818
- **P3 North America**: 1324
- **Panasonic Corporation**: 1213
- **Red Lion Controls**: 923
- **Rhode & Schwarz**: 2907
- **Savari Inc**: 1424
- **Siemens Canada Limited**: 2605
- **Smart Microwave Sensors**: 1223
- **Southwest Research Institute**: 1410
- **Spirent**: 318
- **Sumitomo Electric Industries, Ltd.**: 1601
- **TASS International**: 421
- **U.S. Department of Transportation (USDOT)**: 1201
- **VALEO**: 2608
- **Vector CANtech, Inc.**: 327
- **Virginia Tech Transportation Institute (VTTI)**: 1328
- **Visteon Corporation**: 801

#### Vehicle-to-Vehicle and Vehicle-to-Infrastructure Communications Systems
- **Applus IDIADA**: 2407
- **Arada Systems, Inc.**: 2911
- **Autotalks**: 1622
- **Battelle**: 2905
- **Bosch Service Solutions**: 621
- **Honda Motor Co., Ltd.**: 1024
- **Kapsch TrafficCom AG**: 1418
- **Marben Products**: 2908
- **Ministry of Internal Affairs and Communications**: 1601
- **Mitsubishi Electric Corporation (Japan)**: 1601
- **Mitsubishi Heavy Industries, Ltd.**: 618
- **Mobile Mark, Inc.**: 1323
- **Moxa Americas, Inc.**: 2810
- **NICTA – National ICT Australia**: 1728
- **NXP Semiconductors**: 2818
- **P3 North America**: 1324
- **Panasonic Corporation**: 1213
- **Red Lion Controls**: 923
- **Rhode & Schwarz**: 2907
- **Savari Inc**: 1424
- **Siemens Canada Limited**: 2605
- **Smart Microwave Sensors**: 1223
- **Southwest Research Institute**: 1410
- **Spirent**: 318
- **Sumitomo Electric Industries, Ltd.**: 1601
- **TASS International**: 421
- **U.S. Department of Transportation (USDOT)**: 1201
- **VALEO**: 2608
- **Vector CANtech, Inc.**: 327
- **Virginia Tech Transportation Institute (VTTI)**: 1328
- **Visteon Corporation**: 801

#### Weather Systems
- **Campbell Scientific, Inc.**: 413
- **Digital Traffic Systems, Inc.**: 821
- **Lufthansa USA, Inc.**: 321
- **M.H. Corbin, Inc.**: 320
- **Vaisala**: 2808
23rd ITS World Congress 2016 Melbourne

**Booth: 1728**
Suite 23, 574 Plummer Street, Melbourne VIC, 3000, Australia
Phone: +61-3-9646-6466
Email: janette.sofronidis@its-australia.com.au www.itsworldcongress2016.com

ITS Australia will host the 23rd ITS World Congress in Melbourne from 10 – 14 Oct 2016. Program themes have been designed to showcase contribution of ITS to the delivery of liveable cities and communities. Melbourne is the perfect place to deliver the Congress having been named the World’s Most Liveable City five times in the last decade! Save the date in your diary now.

**Actelis Networks, Inc.**

**Booth: 1624**
6150 Stevenson Blvd, Fremont CA, 94538, United States
Phone: +1-510-545-1045
Fax: +1-510-545-1075
Email: ddunphy@actelis.com www.actelis.com

For over a decade now, Adaptive Micro Systems has provided the Transportation industry with LED based Dynamic Message Signs. Adaptive's broad DMS product series range covers virtually every Amber and Full Color messaging application from roadside (Intelligent Transportation Systems), to roadside (Intelligent Transportation Systems), traffic incident management and smart card systems. Please stop by Adaptive's booth to see the AX2020 DMS.

**Advanetech**

**Booth: 1021**
13 Whatney, Irvine CA, 92618, United States
Phone: +1-949-420-2500
Fax: +1-949-420-2501
Email: sean.park@advantech.com www.advantech.com

Advantech is a leader in providing innovative solutions that enable an intelligent city. With decades of successful experience, Advanetech products offer reliable platform solutions for safer communities, security, and transportation systems in cities all over the world. There is certainly no limit to the application and innovations Advantech's products make possible.

**ADVICS**

**Booth: 1724**
2-1, Showa-cho, Kariya Aichi, Kariya Aichi, 448-8688, Japan
Email: yuko_hanaki@nts.advics.co.jp

The ADVICS Group is exhibiting hands-on demonstrations, focusing on our customers' inspiration through visual and tangible experiences following the concept of "Human-Friendly Mobility".

**AECOM**

**Booth: 2628**
2960 Palm Beach Lakes Blvd., Suite 600 West Palm Beach FL, 33409, United States
Phone: +1-561-515-3922
Fax: +1-561-689-8531
Email: robert.murphy2@aecom.com www.aecom.com

AECOM is a global leader in transportation technologies with services encompassing research, planning, design, software development, system integration, operations, maintenance, and asset management. Our areas of expertise include: ITS, transportation management centers, managed lanes, electronic toll systems, traffic incident management and smart card systems.

**Agent Video Intelligence (Agent Vi)**

**Booth: 2626**
13 Hamelachtach St, Afek Industrial Park Rosh Ha‘ayin, 4809129, Israel
Email: sales@agentvi.com www.agentvi.com

Agent Video Intelligence (Agent Vi™) is the leading global provider of open architecture, video analytics software. The comprehensive video analytics solutions offered by Agent Vi extend from real-time video analysis and alerts to video search and business intelligence applications, and are fully integrated with a range of cameras, encoders and video management systems.

**Aisin AW Co., Ltd.**

**Booth: 1724**
10, Takane, Fuji-cho, Anjo AICHI, 444-1192, Japan
Phone: +81-566-73-1111
Email: i17889_michiwaki@aisin-aw.co.jp www.aisin-aw.co.jp

The AISIN Group is exhibiting hands-on demonstrations, focusing on our customers' inspiration through visual and tangible experiences following the concept of "Human-Friendly Mobility".

**AISIN SEIKI**

**Booth: 1724**
2-1 Ashihimachi, Kariya AICHI, 448-8650, Japan
Phone: +81-566-24-8210
Email: okmt@rd.aisin.co.jp www.aisin.com

The AISIN Group is exhibiting hands-on demonstrations, focusing on our customers' inspiration through visual and tangible experiences following the concept of "Human-Friendly Mobility".

**Aldis Corporation**

**Booth: 1413**
10545 Hardin Valley Rd, Knoxville TN, 37932, United States
Phone: +1-865-622-9217
Email: bill@aldiscorp.com www.aldiscorp.com

GridSmart (GS) is designed on 3 core principles: 1 Simplicity-GS is ITS' only single camera, object tracking tool for intersection actuation & data collection A 3 hour install with an always in focus camera 2 Transparency-Only GS comes with a built in DVR, validating accuracy 3 Flexibility-Buy what you need with software modules when you need them. See More. Spend Less

**All Traffic Solutions**

**Booth: 824**
3100 Research Drive, State College PA, 16801, United States
Phone: +1-814-237-9005
Fax: +1-814-237-9006
Email: sales@alltrafficsolutions.com www.alltrafficsolutions.com

We are the only manufacturer in the industry to offer 100% integrated cloud-based technology into our entire line of traffic calming signs and solutions that allow users to remotely manage their equipment from anywhere there is an internet connection.
Alpha Technologies Ltd.

**Booth: 2621**  
7700 Riverfront Gate,  
Burnaby BC, V5J 5M4, Canada  
Phone: +1-604-436-5900  
Email: rosalyrne.regan@alpha.ca  
www.alpha.ca/traffic

Alpha is an the established leader in the development of ruggedized, outdoor UPS and backup power solutions for the Traffic and ITS industries. Our products include UPS, transfer switches, enclosures, batteries, and generators that are designed for the harsh environments encountered in traffic and ITS applications.

American Signal Company

**Booth: 3021**  
2755 Bankers Industrial Drive,  
Atlanta GA, 30360, United States  
Phone: +1-770-448-6650  
Email: info@amsig.com  
www.amsig.com

American Signal Company (AMSIG) is a manufacturer of a comprehensive line of programmable changeable message sign, camera and sensor products suited to a variety of informational and traffic control applications. AMSIG’s portable products share a common background with respect to parts, programming protocol and operational features. All AMSIG signs are ISO compliant.

Applied Information, Inc.

**Booth: 826**  
4411 Suwanee Dam Rd - Ste 510,  
Suwanee GA, 30024, United States  
Phone: +1-678-830-2170  
Fax: +1-678-669-1686  
Email: bmulligan@appinfoinc.com  
http://appinfoinc.com

Applied Information, Inc. is developing regional transportation simulation tools (Polaris, MetroView, TransimsStudio) as open source projects. The software allows for the dynamic modeling of ITS components, and the newest projects integrate the software with detailed fuel consumption models based on Autonomic.

Arada Systems, Inc.

**Booth: 2911**  
830 Stewart Drive,  
Sunnyvale CA, 94085, United States  
Phone: +1-408-773-9298  
Fax: +1-408-716-9298  
Email: vtthadani@aradasystems.com  
www.aradasystems.com

Arada Systems was originally founded in Silicon Valley as a Qualcomm-Atheros spin-off. The company develops DSRC (dedicated short-range communications) devices for Intelligent Transportation Systems (ITS). Arada Systems provides both hardware and software for DSRC Road Side Equipment and On Board Equipment. It has also created the world’s first mobile DSRC device for V2X.

Area Wide Protective

**Booth: 2923**  
826 Overhoft Rd,  
Kent OH, 44240, United States  
Phone: +1-800-343-2650  
Email: kalboreo@awptraffic.com  
www.awptraffic.com

Area Wide Protective (AWP) is America’s Traffic Control Leader, providing safe, professional, and comprehensive traffic management to a diversified client base throughout the Eastern United States. We specialize in temporary traffic control and provide everything from planning and design to equipment, implementation, and labor.

Argonne National Laboratory

**Booth: 429**  
9700 S. Cass Ave,  
Argonne IL, 60439, United States  
Phone: +1-630-252-5200  
Email: transims@anl.gov  
www.trac.anl.gov

The Transportation Research and Analysis Computing Center at Argonne National Laboratory is developing regional transportation simulation tools (Polaris, MetroView, TransimsStudio) as open source projects. The software allows for the dynamic modeling of ITS components, and the newest projects integrate the software with detailed fuel consumption models based on Autonomic.

Aransas National Laboratory

**Booth: 2407**  
L’Albornor - PO Box 20,  
Santa Oliva Tarragona, E-43710, Spain  
Phone: +34-977-166000  
Email: idiada@idiada.com  
www.applusidiada.com/en

Applus IDIADA is an engineering partner to the automotive industry providing design, engineering, testing and homologation services for product development projects worldwide. Our success is built on the combination of highly-experienced and motivated engineers and best-in-class test and development facilities, client focus and the constant drive towards innovation.

ARH Inc.

**Booth: 1123**  
41 Alkotás Rd,  
Budapest, 1123, Hungary  
Email: requestinfo@arh.hu  
www.arh.hu

ARH produces OCR software and devices for traffic management and access control. Its latest integrated traffic solution, GLOBESSEY®, Data Server, is designed for ITS of any size. The company’s TrafficSpot® single-gantry, no-loop endpoint; CARMEN®, the world’s #1 ALPR software; USDOT and ACCR OCR engines and purpose-made cameras are already well-known in the market.

ASTI Transportation Systems Inc.

**Booth: 510**  
18 Blevins Dr, New Castle DE,  
19720-4152, United States  
Phone: +1-302-328-3220  
Email: todd@asti-trans.com  
www.asti-trans.com

ASTI Transportation Systems is the leading provider of temporary Intelligent Transportation Systems within the United States. Through the use of our patented software package, Computerized Highway Information Processing System, ASTI is able collect and process data in the most efficient means to ensure appropriate dissemination of information to the traveling public.

Atkins

**Booth: 1622**  
402 BNA Dr - Ste 350,  
Nashville TN, 37217, United States  
Phone: +1-615-399-0298  
Email: brad.dennard@atkinsglobal.com  
www.atkinsglobal.com

Evaluating emerging technologies to managing traffic operation centers, Atkins provides ITS innovations to help clients achieve their safety, security, performance, and efficiency goals. We are engaged in international efforts to shape new solutions and create the transportation solutions of tomorrow. Learn more about Atkins at: www.atkinsglobal.com/northamerica
Exhibitor Profile

**Automotive Safety Council**

**Booth: 325**  
5572 Arbor Bay CT,  
Brighton MI, 48116, United States  
Phone: +1-586-201-8653  
Email: dcampbell@automotivesafetycouncil.org  
www.automotivesafetycouncil.org

The ASC is a non-profit trade association whose members are the leading automotive safety suppliers in the world. We provide data to public agencies, schools and the press about auto safety. Our fifty years in automotive safety has made the ASC the acknowledged industry leader in auto safety information. ASC can be found at www.automotivesafetycouncil.org

**Autotalks**

**Booth: 2905**  
PO Box 1765,  
Clarson MI, 48347-1765, United States  
Phone: +1-248-766-8247  
Email: info-us@auto-talks.com  
www.auto-talks.com

Autotalks enables the Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communication revolution by providing automotive-qualified V2X chipsets, ready for vehicles series-production from 2015 on. The unique technology of Autotalks addresses V2X challenges: communication reliability and security, positioning accuracy, software maturness and vehicle installation.

**Axiomtek**

**Booth: 823**  
18138 Rowland St, City of Industry CA,  
91748, United States  
Phone: +1-626-581-3232  
Fax: +1-626-581-3552  
Email: info@axiomtek.com  
www.axiomtek.com

Axiomtek designs, manufactures, and support versatile and modular designed SBCs, Applied Computing Platforms and Touch Panel Computers. Our creative concept of intergrading services of embedded computing assures trusted delivery and valuable system integration from board-level design to system-level design for vertical domains of Transportation and more!

**Axis Communications Inc.**

**Booth: 2626**  
300 Apollo Dr, Chelmsford MA,  
01824-3696, United States  
Phone: +1-978-614-2004  
Email: na-events@axis.com

As the market leader in network video, Axis is leading the way to a smarter, safer, more secure world - driving the shift from analog to digital video surveillance. Offering network video solutions for professional installations, Axis’ products and solutions are based on an innovative, open technology platform.

**Battelle**

**Booth: 621**  
505 King Ave., Columbus OH,  
43201, United States  
Phone: +1-800-201-2011  
Email: solutions@battelle.org  
www.battelle.org

Every day, Battelle solves what matters most. At major technology centers and national labs, Battelle conducts R&D, designs and manufactures products, and delivers critical services. Our deep experience in connected vehicles and cyber-security draws on longstanding relationships with auto manufacturers and the U.S. DOT. For more information, visit www.battelle.org.

**BGI - Bordeaux Invest**

**Booth: 2015**  
15 Quai Louis XVIII,  
Bordeaux, 33000, France  
Phone: +33-557-140-639  
Email: metcheverry@bordeaux-invest.fr  
www.invest-in-bordeaux.com

Bordeaux Aquitaine will host the 22nd ITS World Congress in October 2015. An opportunity to discover the main skills and projects developed particularly in: - Road navigation & LBS - Traffic signs, surveillance & safety - Next generation transport system Visit us on booth 2015 to discover Bordeaux assets and get practical information on the 2015 ITS World Congress.

**BLIP Systems**

**Booth: 705**

Haekken 2, Vester Hassing,  
Vodskov, 9310, Denmark  
Phone: +45-511-68586  
Fax: +45-982-58300  
Email: christian.carstens@blipsystems.com  
www.blipsystems.com/traffic

BlipTrack is a high-quality enterprise suite and hardware solution that is able to gather, process and evaluate large amounts of data collected from BlipTrack Bluetooth and Wi-Fi sensors as well as other third-party sensors. The ability to provide the complete overview of flows, gives authorities new possibilities to optimize transportation hubs and infrastructures.

**Bosch Service Solutions**

**Booth: 1024**  
Lahnstraße 34-40,  
Frankfurt, 60486, Germany  
Phone: +49-69-7562-1732  
Email: Claudia.Nowak@de.bosch.com  
www.boschservicesolutions.com

Bosch Service Solutions ranks among the leading suppliers of Business Process Outsourcing solutions, offering complex, technology-driven services in over 30 languages. We develop, implement and operate new and innovative business models with our clients. We are consistently expanding our IT and consulting expertise to offer integral service solutions from a single source.

**Campbell Scientific, Inc.**

**Booth: 413**  
815 W 1800 N,  
Logan UT, 84321-1784, United States  
Phone: +1-435-227-9000  
Email: kruiz@campbellsci.com  
www.campbellsci.com

Campbell Scientific has built research-quality dataloggers and sensors for 40 years. Our standalone measurement-and-control systems operate even in harsh, remote environments. Our gear is NTCIP compliant and features an open architecture for adaptability. Campbell dataloggers are being used in thousands of applications with hundreds of different sensors.

**Carrier & Gable**

**Booth: 3011**  
24110 Research Dr,  
Farmington Hills MI, 48335, United States  
Phone: +1-248-477-8700  
Email: dancarrier@carriergable.com  
carriergable.com

Carrier & Gable supplies and supports traffic control / ITS equipment in Michigan and Indiana. With 27 trained support staff in Michigan alone, C&G can provide solutions and immediate support for advanced traffic control and communications. Our principles have remained the same since 1945.
ONE SOURCE
TWO ESTABLISHED NAMES
THREE AREAS OF EXPERTISE

Open Road Consulting and Q-Free have joined forces. The result is a single entity with global reach, local knowledge and class-leading capabilities in ITS.

URBAN TRAFFIC MANAGEMENT

TOLLING

PARKING MANAGEMENT

LEADING THE WAY

For more information visit us at:
www.q-free.com
www.openroadsconsulting.com
CASE Systems Inc.

Booth: 1027
5 Goddard,
Irvine CA, 92618, United States
Phone: +1-949-988-7500
casesystemsinc.com

CASE Systems develops and maintains innovative reliable wireless technologies for transportation and parking industries. The CASE Systems solar-powered roadside call box has endured the elements for over 20 years. Using the same design concept and low-cost, reliable technology, CASE Parking delivers real-time occupancy for managing your parking facilities.

CETECON

Booth: 2015
Im Teelbruch 116,
Essen, 45219, Germany
Phone: +49-2054-95190
Fax: +49-2054-9519967
Email: info@cettecom.com
www.cettecom.com

CETECON (www.cettecom.com) is renowned as neutral, experienced partner of the telecommunications and information technology industries and offers a unique service portfolio which covers the entire life cycle of a mobile communications product, contributes to the smooth running of products and applications and ensures that they meet international standards.

Cisco

Booth: 1608
855 Hard Rd,
Webster NY, 14580, United States
Phone: +1-885-232-4020
Email: meosburn@cisco.com
www.cisco.com

Cisco is the worldwide leader in networking solutions that help companies connect the unconnected, from the cloud to end devices. Intelligent networks from Cisco ensure safe passage of people and goods by allowing air, road, rail, and sea transport operations to deliver up-to-date information to travelers, improve emergency response, and enable planning.

CLARY Corporation

Booth: 411
150 E Huntington Dr,
Monrovia CA, 91016, United States
Phone: 626-359-4486
Email: c.novits@clary.com
www.clary.com

CLARY Corporation engineers, manufactures, and services On-line, power conditioning UPS systems for traffic control and IT applications. Our systems are designed for ease of maintenance and reliability. Please stop by our booth, 411 to view our New Technology products.

CloudParc

Booth: 726
1601 Broadway, 12th Fl
New York NY, 10019, United States
Phone: +1-917-769-8010
www.cloud-parc.com

CloudParc is a patented next-generation optics based solution for municipal on-street parking systems. Our groundbreaking and scalable technology automates the vehicle identification, parking violation and enforcement process.

Cohda Wireless

Booth: 1728
82 – 84 Melbourne Street,
North Adelaide, 5006 SA, Australia
Phone: +61-1976-18-10-00-64
Email: bernd.luebben@cohdawireless.com
www.cohdawireless.com

Cohda Wireless is the world’s leading equipment and technology vendor in the V2X market. We have deployed thousands of on-board units and roadside units around the globe with over a 50% share of the market. Cohda also offers mature software solutions including network, facilities and application layers that have been proven in key trials in the US and Europe.

Consensus Systems Technologies Corp.

Booth: 1222
17 Miller Ave, PO Box 517
Shenerock NY, 10587-0517, United States
Phone: +1-914-248-8466
Fax: +1-914-248-5040
Email: rsj@consystec.com
www.consystec.com

ConSysTec is an ITS Systems Engineering consultancy specializing in ITS Architectures, ITS Strategic Plans, ITS Standards development and specification, Program Management and Systems Engineering for ITS infrastructure, and Public Transportation Enterprise Modeling and Transit Project systems engineering. We also provide training and workshops in the above areas.

Continental Automotive

Booth: 1001
One Continental Drive,
Auburn Hills MI, 48326, United States
Phone: +1-496-9760-32022
Email: eva.appold@continental-corporation.com
www.continental-its.com/www/its_de_EN

Continental, an international automotive supplier, delivers core ITS products and services aimed at creating safer, more efficient and convenient driving solutions. With innovative technologies for fleet management, vehicle maintenance, traffic payment, and safety & security, Continental supports the ever changing mobility needs of society by shaping the automotive future.
Improve 24/7 Traffic Control Under the Darkest and Brightest Conditions with FLIR Thermal Imaging

Sun glare, shadows, darkness, and wet streets often pose problems for standard video cameras, confusing software that controls traffic lights. FLIR high-performance thermal cameras help overcome those challenges, providing more reliable detection of vehicles, cyclists, and pedestrians for smoother flow and greater safety day and night.

- Sees in total darkness and bright daylight in practically any weather
- Serves as a simple plug-and-play replacement for visible cameras
- Extremely affordable and easy to use

See how thermal imaging keeps traffic flowing at www.flir.com/its-final
Exhibitor Profile

Core Tec Communications LLC

**Booth:** 608  
2950 Lake Emma Rd - Ste 1030, Lake Mary FL, 32746, United States  
Phone: +1-407-331-0547  
Email: hani.daryadel@coretec.com  
www.coretec.com

Core Tec Communications was established early in 1997 bringing the latest in digital video communications technology to the transportation, security and military markets. Products designed by Core Tec are highly robust and deliver superb performance in tough environments. They feature expanded temperature operating ranges, rugged packaging, and advanced electronic design.

Cubic Transportation Systems

**Booth:** 2826  
5650 Kearny Mesa Rd, San Diego CA, 92111, United States  
Phone: +1-858-627-4587  
Email: kim.gregory@cubic.com  
cts@cubic.com

Cubic Transportation Systems integrates payment and information technology and services for intelligent travel. Cubic delivers integrated systems for transportation/traffic management, and tools for travelers to choose the smartest way to travel and pay for journeys, enabling transportation authorities and agencies to manage demand across the transportation network.

Daktronics, Inc.

**Booth:** 1218  
117 Prince Dr, PO Box 5120, Brookings SD, 57006, United States  
Phone: +1-605-692-0200  
Email: Jody.Huntimer@daktronics.com  
www.daktronics.com

A world-wide reputation for quality and reliability, an extensive line of DMS products and 25 years of transportation industry experience give Daktronics its strong lead in the ITS display market. Daktronics has installed more than 4,000 Vanguard® DMS in North America, guiding millions of motorists every day. Learn more at Daktronics.com/ITS.

Delcan Technologies, Inc.

**Booth:** 2823  
2055 Sugar Loaf Circle - Ste 500, Duluth GA, 30097, United States  
Phone: +1-770-831-3370  
Fax: +1-770-831-3533  
Email: sean.mulligan@parsons.com  
www.delcantech.com

Delcan Technologies was founded in 1953 and provides solutions and services that enable state-of-the-art, cost-effective transportation systems and infrastructure to manage demand across the transportation network.

DTI offers a proven industry leading mobile data collection and vehicle tracking solution for use by public works and municipal service departments. Our Intelligent Snow Plow system provides drivers weather information and recommended roadway treatments while collecting and storing sensor data, resulting in informed decision making and reduced winter road management costs.

Delphi

**Booth:** 2401  
5725 Delphi Drive, Troy MI, 48098, United States  
Phone: +1-248-813-2000  
Fax: +1-248-813-2673  
Email: contact.delphi@delphi.com  
www.delphi.com

Delphi is a global supplier of electronics and technologies for automotive, commercial vehicles and other markets. With technical, manufacturing and customer support sites in 30 countries, Delphi delivers real-world innovations that make products smarter, safer, powerful and efficient. Visit the Delphi booth #2401 to see ‘What Matters’.

DENSO Corporation

**Booth:** 2801  
1-1 Showa-cho, Kariya-shi, Aichi-ken, Japan  
Phone: +81-566-25-5511  
Email: kenichi_mori@denso.co.jp  
www.globaldenso.com/en

DENSO is a leading global automotive supplier of advanced technology, systems and components in the areas of thermal, powertrain control, electronics and information and safety. It has subsidiaries and affiliates in 38 countries and regions and employs nearly 140,000 people. Consolidated global sales for the fiscal year ending March 31, 2014, totaled US$39.8 billion.

Driving Management Systems

**Booth:** 3007  
982 Junipero Serra Blvd, San Francisco CA, 94112, United States  
Phone: +1-415-286-3028  
Email: marwan@dms-inc.net  
www.dms-inc.net

We have developed the DMS Platform, a patented technology to automatically prevent drivers from using mobile devices while driving and drunk drivers from starting the ignition of their vehicle. The “NoComm” and “Sober” systems do not require the driver to “Opt In.” The DMS Platform isolates and disables only the driver’s mobile device. Passengers are unaffected.

Eberle Design Inc.

**Booth:** 1121  
3819 E LaSalle St, Phoenix AZ, 85040, United States  
Phone: +1-480-968-6407  
Email: czabel@eitral.com

A leading manufacturer of electronic monitoring and detection products for the traffic, access and rail industries. The company’s broad array of products allows transportation and access control professionals to integrate, automate and manage intersections, roads & access points efficiently & safely. The company manufactures & sells under the EDI and Reno A&E brand names.

Drivewyze

**Booth:** 3029  
398 Primrose Road, Suite 202, Burlingame CA, 94010, United States  
Phone: +1-780-461-3355  
Fax: +1-780-461-3039  
Email: jraychoudhury@drivewyze.com  
www.drivewyze.com

On a mission to revolutionize the delivery of highway safety and transportation management, Drivewyze serves commercial drivers and fleets with innovative trucking solutions such as Drivewyze ProClear, a weight station bypass solution integrated into in-cab equipment by fleet mobility technology leaders PeopleNet, Zonar and Rand McNally, as well as iOS and Android devices.

Digital Traffic Systems, Inc.

**Booth:** 821  
11056 Air Park Road, Ashland VA, 23005, United States  
Phone: +1-804-381-5300  
Email: kevin.barron@dtsits.com  
www.dtsits.com

Digital Traffic Systems, Inc. is an ITS technology solutions and services provider. Our goal is to provide the right technical service to improve technology and equipment reliability and performance. We focus on lifecycle performance, quality of service, and responsiveness that enables customers to maximize the value of their investment in transportation technology.
Econolite Group, Inc.

**Booth:** 1614  
3360 E La Palma Ave,  
Anaheim CA, 92806, United States  
Phone: +1-714-630-3700  
Email: poliver@econolite.com  
www.econolitegroup.com

Econolite is a full systems integrator; able to manage entire ITS projects from design-build to implementation. When you need to provide consistent and reliable mobility to your roadway users, Econolite has the solutions and expertise to ensure a successful ITS deployment.

**Electro-Matic Products, Inc.**  
**Booth:** 305  
23409 Industrial Park Ct,  
Farmington Hills MI, 48335, United States  
Phone: +1-248-478-1182  
Email: ammartinez@electro-matic.com  
www.empldedlighting.com

Electro-Matic Products established in 1972 is a distributor and manufacturer of LED based solutions for roadway and intelligent transportation systems. We produce LED based variable message signs, traffic control displays and LED roadway lighting. Based in Farmington Hills, MI, Electro-Matic Products is ISO-9001 certified and is a 100% employee-owned company.

**Emerson Network Power**  
**Booth:** 323  
100 Emerson Pkwy,  
Binghamton NY, 13905, United States  
Phone: +1-607-721-8840  
Fax: +1-607-724-0153  
Email: denise.getchell@emerson.com  
www.emersonnetworkpower.com/surge

Today’s advanced Fire and Burglar Alarm systems are more sophisticated than ever before. Transients can disrupt, disable and ruin mission-critical Communications equipment, CCTVs and Access Controls. It’s why companies turn to Emerson Network Power Surge Protection to protect sensitive equipment from excessive maintenance costs, damage and costly downtime.

**Entrepreneurial Village**  
**Booth:** 826  
1100 New Jersey Ave SE - Ste 850  
Washington DC, 20003, United States  
Phone: +1-202-484-8487  
Email: TransportationforTomorrow@itsa.org  
www.itsa.org

In its inaugural debut, the Entrepreneurial Village will feature startups focused on changing the way America moves.

Sponsored by:  
[Quicken Loans](https://www.quicken.com)

**Ericsson**  
**Booth:** 1005  
6300 Legacy Dr,  
Plano TX, 75024, United States  
Phone: +1-732-699-4446  
Email: natalya.lopoukhine@ericsson.com  
www.ericsson.com

Ericsson’s in depth experience in smart communication has enabled intelligent transport systems for Public Transport, Transport Infrastructure Management, Automotive and Shipping businesses. Ericsson can support, enable and provide solutions for co-modal, safe, efficient and sustainable transport systems that have a positive impact on society, businesses and individuals.

**EROAD**  
**Booth:** 1728  
PO Box 68999,  
Portland OR, 97268, United States  
Phone: +1-855-503-7623  
Email: soona.lee@eroad.com  
www.eroad.com

ERoad is a fully integrated technology, tolling and services provider. We were the first company in the world to implement a GPS/cellular based road charging platform across an entire country. Our advanced technology provides road charging, compliance and commercial services with the same platform to lower overall client and delivery costs.

**ERTICO - ITS Europe**  
**Booth:** European Pavilion  
**2015**  
Blue Tower - 2nd Floor, Avenue Louise 326  
1050 Brussels, Belgium  
Phone: +32-2-400-0700  
Email: d.gorteman@mail.ertico.com  
www.ertico.com/ertico-its-europe

With more than 100 partners across the five ITS sectors (public authorities, industry, infrastructure operators, users, and others), ERTICO - ITS Europe brings all key players to one table. ERTICO - ITS Europe achieves vital synergies and builds the strategic strength required to move ITS from the development stage through implementation and into the market.

**Esri**  
**Booth:** 818  
380 New York St,  
Redlands CA, 92373-8100, United States  
Phone: +1-909-793-2853  
Email: mkralik@esri.com  
www.esri.com/transportation

Esri’s GIS software platform allows organizations to take database, spreadsheet, sensor and other information to the next level – visualization. Those that see and interact with information are able to more effectively analyze and make critical choices in less time. Visit us at booth #818 and see how you will benefit from Esri technology.

**EtherWAN Systems, Inc.**  
**Booth:** 408  
4570 E Eisenhower Circle,  
Anaheim CA, 92807-1823, United States  
Phone: +1-714-779-3800  
Fax: +1-714-779-3806  
Email: marketing@etherwan.com  
www.etherwan.com

EtherWAN manufacturers Industrial and Hardened Ethernet connectivity solutions for the harshest most demanding environments. We offer an extensive line of products including: Managed Ethernet and PoE Switches, Media Converters, Ethernet Extenders and Serial Servers. EtherWAN products are used worldwide in ITS, Security, Water Processing, and Industrial applications.

**eTrans2020**  
**Booth:** 826  
12210 FairFax Town Ctr - Ste 936  
Fairfax VA, 22033, United States  
Phone: +1-703-496-5300  
Email: jestrada@etrans2020.com  
www.etrans2020.com

eTrans2020 provides cyber & software testing solutions for the transportation industry. Our TestManager2020 & V2xTest platforms are the foundation for successful, comprehensive automated system & security testing. We are members of the DOT's Connected Vehicle Safety Pilot program, the OmniAir Consortium & have >20 years experience in cybersecurity & software dev & testing.
Green light for clean air

Germany’s first environment-oriented traffic control system meters vehicle access and creates coordinated green phases

Now the traffic control system in Potsdam does not only take the traffic volume at the traffic signal into account, but also factors in the current nitrogen dioxide levels. Whenever the NO₂ load is too high at any point in the city, selected “gatekeeper” traffic signals respond with extended red phases, slowing down vehicle access to critical areas. In combination with other environment-sensitive control measures, this improves overall traffic flow and air quality. In addition, message signs inform drivers about increased pollution levels and the resulting changes in traffic control routines. As soon as the NO₂ level drops below the threshold again, the red phases at the gatekeeper traffic signals return to normal. This innovative control mechanism makes Potsdam one of the pioneers of environment-sensitive traffic control. For the city, the new traffic system management center (VSMZ) with Sitrack® Scala is a key tool for the implementation of its clean air plan.

Answers for infrastructure and cities.
**Exhibitor Profile**

**FLIR Systems Inc.**
**Booth: 2618**
27700 SW Parkway Ave, Wilsonville OR, 97070, United States
Phone: +1-503-498-3547
Email: sonya.roberts@flir.com
www.flir.com

FLIR ITS is revolutionizing how traffic flows smoothly and safely throughout the world. Our suite of products includes thermal, intelligent video analytics, and responsive command and control software. It is a system that detects incidents on roadways, collects ongoing traffic data, and controls signals for vehicles, pedestrians, and cyclists.

**Florida Department of Transportation**
**Booth: 423**
605 Suwanee St - MS 90, Tallahassee FL, 32399-0450, United States
Phone: +1-850-410-5600
Fax: +1-850-410-5502
Email: gene.glotzbach@dot.state.fl.us
www.dot.state.fl.us

FDOT’s ITS Program endeavors to provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity, and preserves the quality of our environment and communities. This is accomplished through coordination and promotion of the deployment of ITS throughout Florida.

**Ford Motor Company**
**Booth: 425**
1 American Rd, Dearborn MI, 48124, United States
www.ford.com

**Forum8 Co., Ltd.**
**Booth: 811**
Shinagawa Intercity A-21F, 2-15-1 Konan Minato-ku Tokyo, 108-6021, Japan
Phone: +81-3-6894-1888
Fax: +81-03-6894-3888
Email: nitta@forum8.co.jp
www.forum8.co.jp/english/index.html

We will showcase our products with a focus on the interactive 3D VR simulation and modeling software UC-win/Road that enables the creation of large scale 3D spaces for all sorts of projects and VR-Cloud® which is a consensus building solution which uses 3D and VR on a cloud server. Furthermore the visitors can experience various kinds of showcased Driving Simulators.

**Fujitsu Group**
**Booth: 1601**
Shiodome City Center, 1-5-2 Higashi-Shimbashi, Minato-ku
Tokyo, 105-7123, Japan
Phone: +81-3-4341-7700
Email: info@usa.fujitsu.com
www.fujitsu.com

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Approximately 162,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers.

**G4S Technology**
**Booth: 414**
1200 Landmark Center, Suite 1300, Onaha NE, 68102, United States
Phone: +1-402-233-7700
Email: info@usa.g4s.com
www.g4stechnology.com

G4S Technology is a systems integrator that brings innovative, flexible and cost-efficient thinking to the design, construction and maintenance of communication networks and electronic security systems.

**General Motors**
**Booth: 2007**
30500 Mound Rd, M/C 480-106-RE2 Warren MI, 48090-9055, United States
Phone: +1-248-318-4042
Fax: +1-586-986-1647
Email: bakhtiar.litkouhi@gm.com
www.gm.com

GM, which sells Chevrolet, Cadillac, Baojun, Buick, GMC, Holden, Jiefang, Opel, Vauxhall and Wuling vehicle brands around the world, is a global leader in the research, development and deployment of intelligent transportation technologies. For more information on the company, including OnStar, a leader in vehicle safety, security and information services, go to www.gm.com.

**GEWI**
**Booth: 2805**
19901 Southwest Freeway, Sugar Land TX, 77479, United States
Phone: +1-281-207-5454
Email: jim.onelli@gewi.com
www.gewi.com

Founded in 1992, GEWI is the developer of TIC, a commercial off-the-shelf (COTS) software platform for information services, proven since 1997 in commercial and government projects operating worldwide. TIC Connects Systems – Vehicles – Travelers and is a cost-effective, robust, and scalable alternative compared to build-your-own systems.

**Global Traffic Technologies**
**Booth: 2423**
7800 Third St N - Bldg 100, St Paul MN, 55128-5441, United States
Phone: +1-651-789-7329
Fax: +1-651-789-7334
Email: trish.logue@gtt.com
www.gtt.com

Global Traffic Technologies, LLC (GTT), formed in 2007 from 3M’s pioneering Intelligent Transportation Systems business, is the manufacturer of Opticom™ priority control systems and Canoga™ traffic sensing systems. These systems have provided safe and reliable traffic solutions to communities for over 40 years.

**Go-Light**
**Booth: 2913**
23913 Eastgate Av, Elkhart IN, 46516, United States
Phone: +1-574-361-3796
Email: jfreeent@aol.com

Offering a universal-direction (i.e. both/all directions at the same time) always-green network of one or more smart signals, we create more mobility, and drastically reduce localized emissions as a function of the infrastructure.
HERE Connected Driving

We make driving smarter, safer and more enjoyable

*We enable* the automotive industry to create intelligent and context aware connected-cars across all vehicle classes.  

*We do* this by providing differentiated infotainment experiences and the world’s only pure automotive grade Location Cloud.

Maps for Life

here
Exhibitor Profile

Heusch/Boesefeldt GmbH
Booth: 3023
Ziegelergstr 12,
Aachen, 52078, Germany
Phone: +49 241-9669-213
Fax: +49-241-9669-177
Email: claudia.kelmes@heuboe.de
www.heuboe.de

Heusch/Boesefeldt presents its GeoDyn2 product, an off-the-shelf control software for freeway ATM strategies as well as its PLATO software offering local adaptive control capability for existing signal controllers. The firm’s affiliate TTS presents its CV/C2X Personal Signal Assistant service bringing predicted signal information directly into a vehicle’s dashboard.

HNTB Corporation
Booth: 2724
333 Albert Ave - Ste 333,
East Lansing MI, 48823, United States
Phone: +1-517-333-3330
Fax: +1-517-333-9393
Email: ksteffen@HNTB.com
www.hntb.com

For a century, HNTB professionals have delivered a full range of infrastructure-related services. The firm’s ITS capabilities include the development of advanced and active traffic management systems; design and operation of transportation, toll and emergency management centers; and the latest advancements in connected and automated transportation technologies.

Honda Motor Co., Ltd.
Booth: 1426
2-1-1 Minami-Aoyama, Minato-ku,
Tokyo, 107-8556, Japan
Email: Hideki.Kaseyama@hm.honda.co.jp
world.honda.com

Since its establishment in 1948, Honda has remained on the leading edge by creating new value and providing products of the highest quality at a reasonable price, for worldwide customer satisfaction. The Company has grown to become the world’s largest motorcycle manufacturer and one of the leading automakers.

IAV Automotive Engineering
Booth: 611
15620 Technology Drive,
Northville MI, 48168, United States
Phone: +1-734-233-3300
Fax: +1-734-233-3320
Email: whitney.lichtig@iauv-usa.com
www.iauv.com/us

IAV is one of the leading development partners to the auto industry, IAV offers over 30 years of experience with more than 5,500 engineers worldwide. IAV works with clients from initial ideas to mass production. Focusing on powertrain, electrification, active and functional safety, infotainment, fleet development, and more, IAV is the single source for OEM and supplier needs.

Ibeo Automotive Systems GmbH
Booth: 2608
Merkurring 60-62,
Hamburg, 22143, Germany
Phone: +49-40-298-676-120
Email: kimberly.woigt@valeo.com
www.ibeo-as.com

Ibeo is market leader for developing laser scanners used for environmental detection in the automotive industry. We use our expertise to develop algorithms to process the raw data generated by the scanner to provide an object-based interface. The representation of the environment allows the implementation of different advanced driver assistance and active safety systems.

IBM
Booth: 2023
1 New Orchard Road,
Armonk NY, 10504-1722, United States
Phone: +1-720-395-8158
Email: agstenard@us.ibm.com
www.ibm.com/smartercities/transportation

Essential to economic growth, transport authorities are reinventing themselves - collaborating with new partners to decrease congestion, improve safety and optimize travel experiences. Combining world-class business, industry and technology expertise, IBM provides the integrated solutions that help visionary leaders achieve their objectives.

Image Sensing Systems
Booth: 307
1600 University Ave W - Ste 500,
St Paul MN, 55104, United States
Phone: +1-651-603-7700
Fax: +1-651-305-6402
Email: lchubb@imagesensing.com
www.imagesensing.com

ISS is a global company dedicated to helping improve safety and efficiency for cities and highways by developing and delivering above-ground detection technology and solutions. We give Intelligent Transportation Systems (ITS), security, police and parking professionals more precise information – including real-time reaction capabilities and in-depth analytics.

IMSA International Municipal Signal Association
Booth: 2729
597 Haverty Ct - Ste 100,
Rockledge FL, 32955, United States
Phone: +1-321-392-0500
Fax: +1-321-806-1400
Email: info@imsasafety.org
www.imsasafety.org

IMSA, Your Partner in Public Safety, facilitates quality certification programs for the safe installation, operation & maintenance of public safety systems. We deliver member value by providing the latest information, education and certification in fire alarm, roadway lighting, sign & pavement marking, telecom, traffic signals, work zone temporary traffic control.

Information Display Company
Booth: 528
16650 SW 5th Ave - Ste 330,
Beaverton OR, 97005, United States
Phone: +1-800-421-8325
Fax: +1-856-626-3417
Email: sales@infologisticscorp.com
www.infologisticscorp.com

Leading manufacturer of intelligent LED traffic displays with CentralOffice™ two-way wireless remote communication via radio networking, OnSite™ local BlueTooth communication, OfficeAlert™ failure alerts via text/email, VariableSpeed Limit™ signs, hybrid guide signs, SpeedCheck™ radar speed signs, flashing products, TrafficAnalyzer™ traffic data software.

Information Logistics Inc.
Booth: 728
7805 Browning Rd - Ste 100,
Pennsauken NJ, 08109, United States
Phone: +1-856-324-1600
Fax: +1-856-324-1699
Email: mfarrell@infologisticscorp.com
www.infologisticscorp.com

Information Logistics offers a location-specific Traveler Information & Agency Management Saas system based on its GeoTalker platform. GeoTalker seamlessly integrates information from agency feeds/ITS devices/other sources and distributes it through IVR, web site, email, hands & eyes-free mobile app, Internet radio & other IP channels using its cost-effective 511-in-a-box.
There is radar...and then there is WAVETRONIX RADAR.

The only radar capable of true presence detection at the stop bar. SmartSensor Matrix

Contact your dealer to request a DEMO
www.wavetronix.com/its1402

Advertisers INDEX

<table>
<thead>
<tr>
<th>ADVERTISER</th>
<th>PAGE</th>
<th>WEBSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cubic</td>
<td>p17</td>
<td><a href="http://cts.cubic.com">http://cts.cubic.com</a></td>
</tr>
<tr>
<td>Daktronics</td>
<td>p145</td>
<td><a href="http://www.daktronics.com/dms">www.daktronics.com/dms</a></td>
</tr>
<tr>
<td>Eberle Design Inc</td>
<td>p135</td>
<td><a href="http://www.editraffic.com">www.editraffic.com</a></td>
</tr>
<tr>
<td>Econolite</td>
<td>IFC</td>
<td><a href="http://www.econolitegroup.com">www.econolitegroup.com</a></td>
</tr>
<tr>
<td>FLIR</td>
<td>p154</td>
<td><a href="http://www.flir.com/its-final">www.flir.com/its-final</a></td>
</tr>
<tr>
<td>Global Traffic Technologies</td>
<td>p75</td>
<td><a href="http://www.gtt.com">www.gtt.com</a></td>
</tr>
<tr>
<td>HERE</td>
<td>p159</td>
<td><a href="http://360.here.com">http://360.here.com</a></td>
</tr>
<tr>
<td>IRD</td>
<td>p29-p36</td>
<td><a href="http://www.irdinc.com">www.irdinc.com</a></td>
</tr>
<tr>
<td>Iteris</td>
<td>IBC</td>
<td><a href="http://www.iteris.com">www.iteris.com</a></td>
</tr>
<tr>
<td>ITS World Congress 2015</td>
<td>p175</td>
<td><a href="http://www.itsworldcongress.com">www.itsworldcongress.com</a></td>
</tr>
<tr>
<td>Kapsch</td>
<td>OBC</td>
<td><a href="http://www.kapsch.net">www.kapsch.net</a></td>
</tr>
<tr>
<td>Luftt</td>
<td>p163</td>
<td><a href="http://www.luftt.com">www.luftt.com</a></td>
</tr>
<tr>
<td>Moxa</td>
<td>p114</td>
<td><a href="http://www.moxa.com">www.moxa.com</a></td>
</tr>
<tr>
<td>Q-Free</td>
<td>p152</td>
<td><a href="http://www.q-free.com">www.q-free.com</a></td>
</tr>
<tr>
<td>Siemens</td>
<td>p157</td>
<td><a href="http://www.siemens.com/mobility">www.siemens.com/mobility</a></td>
</tr>
<tr>
<td>Swarco</td>
<td>p142</td>
<td><a href="http://www.swarco.com">www.swarco.com</a></td>
</tr>
<tr>
<td>Texas Transportation Institute</td>
<td>p21</td>
<td><a href="http://www.tti.tamu.edu">www.tti.tamu.edu</a></td>
</tr>
<tr>
<td>Vitronic</td>
<td>p9</td>
<td><a href="http://www.vitronic.com">www.vitronic.com</a></td>
</tr>
<tr>
<td>Wavetronix</td>
<td>p161</td>
<td><a href="http://www.wavetronix.com/its1402">www.wavetronix.com/its1402</a></td>
</tr>
</tbody>
</table>
INRIX
Booth: 601
10210 NE Points Dr - Ste 400,
Kirkland WA, 98033, United States
Phone: +1-425-284-3800
Email: info@inrix.com
www.inrix.com

INRIX® is a leading traffic intelligence platform delivering smart data and advanced analytics to solve transportation issues worldwide. INRIX crowd sources real-time data from nearly 100 million vehicles to deliver traffic and driving-related insight, as well as sophisticated analytical tools across 6 industries in 40 countries.

Integral Blue, LLC
Booth: 3012
25181 Dequindre Rd.,
Madison Heights MI, 48071, United States
Phone: +1-586-381-2556
Email: steveverkest@integral-blue.com
www.integral-blue.com

Integral Blue (IB) is an Intelligent Transportation Systems (ITS) integrator that provides professional and technical services in all aspects of ITS, from system design to comprehensive maintenance services.

Intelemetrics
Booth: 1728
250 Swan Street,
Richmond VIC, 3121, Australia
Phone: +61-3-8415-9000
Fax: +61-3-8415-9001
Email: adam.temple@intelemetrics.com
www.intelemetrics.com

Intelemetrics is a leading provider of connected mobility services. Our capabilities include motoring content, vehicle telematics services, smartphone, web and in-dash application development and design, and management of connected vehicle ecosystems. Intelemetrics was founded with a simple goal of providing motorists with a convenient and safe motoring experience.

Intellipower Inc.
Booth: 1326
1746 N Saint Thomas Circle,
Orange CA, 92865, United States
Phone: +1-714-921-1580
Fax: +1-714-921-4023
Email: info@intellipower.com
www.intellipower.com

Intellipower offers the latest in Weigh-in-Motion products for ITS & Law Enforcement, available for high and low speed applications, both fixed and portable, with the ability to integrate software, cameras and traffic control accessories. Intellipower provides the accuracy & functionality to protect your roads and infrastructure, and maintain safe highways.

Intercomp
Booth: 415
3639 County Rd 116,
Medina MN, 55340, United States
Phone: +1-763-476-2531
Fax: +1-763-476-2613
Email: info@intercompcompany.com
www.intercompcompany.com

Intercomp offers the latest in Weigh-in-Motion products for ITS & Law Enforcement, available for high and low speed applications, both fixed and portable, with the ability to integrate software, cameras and traffic control accessories. Intercomp provides the accuracy & functionality to protect your roads and infrastructure, and maintain safe highways.

International Road Dynamics, Inc.
Booth: 1322
702 - 43rd St E,
Saskatoon SK, S7K 3T9, Canada
Phone: +1-306-653-6600
Email: randy.hanson@irdinc.com
www.irdinc.com

International Road Dynamics (IRD) Inc. is a highway systems technology company producing a variety of integrated solutions to better manage the operations and improve the safety of highway facilities. These Intelligent Transportation Systems (ITS) are used worldwide by highway operators and highway users.

International Transport Forum, OECD
Booth: 522
2 rue André Pascal,
Paris Cedex 16, 75775, France
Phone: +33-1-45249710
Email: itt.contact@oecd.org
www.internationaltransportforum.org

The ITF is an intergovernmental organisation with 54 member countries. It acts as a strategic think tank for transport policy. Our goal is to help shape transport policy on a global level, and ensure that it contributes to economic growth, environmental protection, social inclusion and the preservation of human life.

Iteris, Inc.
Booth: 2223
1700 Carnegie Ave - Ste 100,
Santa Ana CA, 92705, United States
Phone: +1-949-270-9684
Email: gmt2@iteris.com
www.iteris.com

Iteris, Inc. is a leader in providing intelligent information solutions to the traffic management market. By combining its unique IP, products, decades of expertise in traffic management, hyper-local weather solutions and information technologies, Iteris offers a broad range of Intelligent Transportation System (ITS) solutions to customers worldwide. Visit www.iteris.com.

ITS America
Booth: 1718
1100 New Jersey Ave SE, Suite 850
Washington DC, 20003, United States
Phone: +1-202-484-4847
Fax: +1-202-484-3483
Email: info@itsa.org
www.itsa.org

The Intelligent Transportation Society of America (ITS America) is dedicated to advancing the research, development and deployment of Intelligent Transportation Systems (ITS) to improve the nation’s surface transportation system. Founded in 1991, ITS America’s members include more than 450 public agencies, private sector companies, and academic and research institutions.

The 2014 ITS America Pavilion will feature ITS America’s State and Regional Chapters, representatives from our partners at SmartBrief, AutoHarvest, The Transportation Safety Advancement Group (TSAG), and GOVERNING.

Stop by to meet the team at ITS America and to learn more about what membership with ITS America can do for you.
You waste too much.

MARWIS.
www.lufft.com/wondermadeingermany

Visit MARWIS at Stand 321
Exhibitor Profile

**ITS Asia-Pacific**

**Booth: 2413**

Nihon Joshi Kaikan Bldg, 2-6-8 Shibakouen, Minato-ku
Tokyo, 105-0011, Japan
Phone: +81-3-5777-1013
Fax: +81-3-3434-1755
Email: h-shishikura@its-jp.org

**ITS Australia**

**Booth: 1728**

23/574 Plummer St,
Port Melbourne VICTORIA, 3207, Australia
Phone: +61-3-9946-6466
Email: admin@its-australia.com.au
www.its-australia.com.au

ITS Australia is the nation’s principal organisation focused on facilitating the development and deployment of advanced technologies across all modes of transport - air, sea, road & rail. It is an incorporated, non-for-profit organisation representing government, industry and research organisations. ITS Australia will host the 23rd ITS World Congress in Melbourne in 2016.

**ITS Canada**

**Booth: 1206**

6975 Meadowvale Town Centre Circle #400,
Mississauga ON, L5N 2V7, Canada
Phone: +1-905-593-0947
Fax: +1-905-593-0949
Email: janneke@itscanada.ca
www.itscanada.ca

**ITS Canada** is an independent, non-for-profit organisation representing government, industry and research organisations. ITS Canada will host the 23rd ITS World Congress in Melbourne in 2016.

**ITS Finland**

**Booth: 2015**

Bulevardi 7,
Helsinki, 00120, Finland
Phone: +358-40-565-7688
Email: sampo.hietanen@its-finland.finnish

ITS Finland, the national ITS organisation in Finland, promotes development, deployment and achievements of ITS services and products in Finland. Information and Finnish expert meetings on highlighted daily topics like smart cities and corridors, national strategy update etc.

**ITS France**

**Booth: 2015**

38 Bis Ave René Coty,
Paris, 75014, France
Phone: +33-1-45-24-09-09
Fax: +33-1-45-24-09-94
Email: jean.bergounioux@atec-itsfrance.net

ITS France is a non-for-profit organisation bringing together all stakeholders within ITS in France. ITS France promotes the development and deployment of advanced technologies to deliver safer, more efficient and environmentally sustainable of the surface transportation system. ITS France is the contact point for French expertise on ITS.

**ITS International**

**Booth: 628**

Horizon House, Azalea Drive, Swanley,
Kent, BR8 6JR, United Kingdom
Phone: +44-1322-612055
Fax: +44-161-609-0891
Email: office@itsinternational.com
www.itsinternational.com

ITS International is the widest circulating, best read and most requested industry magazine. Additionally we are the official media partner for the ITSWC, producing the Daily News and the FP&ED. ITS International’s website, www.itsinternational.com also provides daily additions of industry news.

**ITS Japan**

**Booth: 1601**

Nihon-Joshi Kaikan Bldg, 2-6-8, Shiba-kouen, Minato-ku
Tokyo, 105-0011, Japan
Phone: +81-3-5777-1013
Fax: +81-3-3434-1755
Email: info@its-jp.org
www.its-jp.org/english

ITS Japan promotes practical use of ITS technologies and strengthens the collaboration among all the parties. (Roles of ITS Japan) - Promoting ITS R&D and deployment - ITS World Congress Asia-Pacific area contact - Asia-Pacific ITS Forum Secretariat - Liaison among ITS-related public and private organizations and academia - Supporting ITS-related standardization activities

**ITS Minnesota**

**Booth: 529**

PO Box 131174,
Roseville MN, 55113, United States
Phone: +1-612-373-6334
Email: dan.nelson@urs.com
www.itsmn.org

ITS Minnesota’s mission is to foster broader grassroots participation and public/private partnerships in ITS, which generates interest, excitement, cooperation and progress focused on implementation results. ITS Minnesota’s vision is to strive to keep transportation stakeholders current and up-to-date on the status, plan, and future of ITS technology and projects.

**ITS Netherlands**

**Booth: 2015**

Ezelsveldlaan 59, 2611 RV
Delft, Netherlands
Phone: +31-15 251-65 65
Fax: +31-6-514-008-19
Email: info@connekt.nl
www.connekt.nl

Connekt/ITS Netherlands is an independent network of companies and authorities that links up parties to improve mobility in the Netherlands in a sustainable manner. Sharing knowledge, know-how and initiatives and connecting members is our main goal, for themes such as ITS, logistics and public transport.

**ITS Singapore**

**Booth: 2613**

Mail Box #883160, Mail Box #883160
Singapore, 919191, Singapore
Phone: +65986391
Email: hin_phung_CHAN@LTA.GOV.SG
www.its.singapore.org.sg

Singapore is a vibrant city with a modern and efficient land transport system. Given the land scarcity and growing vehicle population, Singapore has implemented many innovative ITS solutions to manage and optimise our road usage. The Singapore Pavilion showcases our ITS journey over the years and innovative technologies to tackle transportation challenges that lies ahead.

**ITS Sweden**

**Booth: 2015**

Borgånsvägen 42,
784 33 Borlänge, Sweden
Phone: +46-243-618-02
Email: maria.simmins@its-sweden.se
www.its-sweden.se

ITS Sweden is an independent, non profit national ITS Organisation. We organize national platforms for all actors to ensure the establishment of an efficient transport system. We are a link between the national work/focus areas and the international aspects.
Exhibitor Profile

ITS Taiwan
Booth: 2601
10F-1, No. 95, Sec. 3, Roosevelt Rd.,
Taipei, 10646, Taiwan
Email: frank@thi.com.tw
www.its-taiwan.org.tw

Intelligent Transportation Society of Taiwan (ITS Taiwan) was established in 1996. We are a Non-profit Organization (NPO) and as a bridge of communication between the industry and the government in Taiwan.

ITS World Congress
Bordeaux 2015
Booth: 2015
Avenue Louise 326, B-1050
Brussels, 1050, Belgium
Phone: +32-2-400-07-86
Fax: +32-2-400-07-01
Email: b.sugarde@mail.ertico.com
www.itsworldcongress.com

For the 2015 edition of the ITS World congress in Europe, the congress theme that has been chosen is : ‘TOWARDS INTELLIGENT MOBILITY – Better use of space’. We expect each of you to Bordeaux from 5th to 9th october 2015 ! Please feel free to visit us at Booth 2015 for any sponsoring or exhibition opportunity.

Kapsch TrafficCom AG
Booth: 1418
Am Europplatz 2,
Vienna, 1120, Austria
Phone: +43-50811-0
Fax: +43-50-811-2109
Email: ktc.office@kapsch.net
www.kapsch.net

Kapsch TrafficCom is a provider of intelligent transportation systems (ITS) in road user charging, urban access and parking, road safety enforcement, commercial vehicle operations, electronic vehicle registration, traffic management and V2X cooperative systems. We cover the entire value chain of our customers from components and subsystems to integration and operation.

Kimley-Horn and Associates, Inc.
Booth: 2624
3001 Weston Pkwy,
Cary NC, 27513, United States
Phone: +1-919-677-2000
Email: kk.saxena@kimley-horn.com
www.kimley-horn.com/its

As a leading ITS firm, Kimley-Horn's intelligent transportation systems are implemented coast to coast. Whether you’re looking for feasibility & planning studies, system plans, specifications & estimates, system integration, construction & operational support, or system management, we have the expertise you need for the most intelligent transportation system.

Kistler Instrument Corporation
Booth: 428
30280 Hudson Drive,
Novi MI, 48377, United States
Phone: +1-248-668-6900
Fax: +1-248-669-5733
Email: christina.clark@kistler.com
www.kistler.com

Kistler’s Linear® Quartz Weigh-in-Motion sensor; cost-effective and easy to install, while delivering consistently reliable results for pre-screening weight enforcement used extensively around the world. Available with charge or voltage output, the Linear® sensor and the new Kistler Data Logger provide the highest quality vehicle data. Visit booth 428 to learn more.

KOMOTO Enterprise Co., Ltd.
Booth: 521
No. 3 Lane 53 Hui-Min St Yuan-lin,
Chang-Hua, 51046, Taiwan
Phone: +88-64-83-38-089
Fax: +88-64-83-41-491
Email: service@komoto.com
www.komoto.com

KOMOTO established in year 1989 and specialized in research and development of IR Strobe, has been dedicated in providing solutions of ANPR equipment. Energy Saving IR Strobe: Able to combining with most cameras. Suitable for the application of highway, parking lots, over speed catching in the night time, clear number plate can be recorded (The target speed up to 200 km/hr.)

Korea Pavilion
Booth: 1011
#604, DaerungTechnowon 15, 224-5,
Gweanyang-2 dong, Dongan-gu
Anyang-city Gyeonggi-do, 431-062, Korea (South)
Phone: +82-31-478-0440
Fax: +82-31-478-0490
Email: advanced@itskorea.kr
www.itskorea.kr/eng/eng/01_about.jsp

Korea Pavilion is a joint exhibition stand of ITS Korea, KEC(Korean Express Corporation), KAIA(Korea Agency for Infrastructure Technology Advancement) and SK C&C. The current status, new technology and equipment of Korean ITS will be introduced at Korea Pavilion.

Korea Road Traffic Authority
Booth: 2910
190 Wangsimni-gil, Junggu
Seoul, 100-789, Korea (South)
www.KoRoad.or.kr

Lanner Electronics
Booth: 2721
6461 Northam Drive,
Mississauga ON, L4V 1J2, Canada
Phone: +1-905-362-2364
Email: sales_canada@lannerinc.com
www.lannerinc.com

Lanner is a technology design and manufacturing leader for intelligent transportation applications. Our server and gateways systems enable innovative complete solutions for roadside, invehicle and station traffic management, control and communications devices. Work with Lanner to reduce development, integration and support costs.

Laser Technology, Inc.
Booth: 2623
6912 S. Quentin St.,
Centennial CO, 80112, United States
Phone: +1-303-649-1000
Fax: +1-303-649-9710
Email: sbevins@lasertech.com
www.lasertech.com

Laser Technology Inc. (LTI) provides a variety of sensing capabilities across a number of different traffic applications that allow for profiling, measuring, detecting, classifying, triggering or counting. Whether you’re a traffic engineer or system integrator, we have a sensor for you. Come by our booth (#2623) and see why we are Measurably Superior.

Lufft USA, Inc.
Booth: 321
820 E Mason St, Unit A
Santa Barbara CA, 93103, United States
Phone: +1-805-335-8500
Fax: +1-805-845-4275
Email: erik.wright@lufftusainc.com
www.lufft.com

Lufft USA, Inc. has been involved in the production of climate measurement equipment since the company was founded. Lufft USA, Inc. products can be found wherever there is a need to measure or record atmospheric pressure, temperature, relative humidity, and other environmental variables.
### M.H. Corbin, Inc.

**Booth:** 320  
8355 Rausch Drive,  
Plain City OH, 43064, United States  
Phone: +1-614-873-5216  
Email: mack@mhcornin.com  
www.mhcornin.com

M.H. Corbin began in 1986 representing just two highway safety companies for Ohio. Since then we have grown to be a leader in ITS products for our multiple state distribution area, currently representing over twenty different quality companies. M.H. Corbin is proud to announce our recent acquisition of HIS Highway Advisory Radio and Nu-Metrics Traffic Counting Products.

### Magna Electronics

**Booth:** 623  
2050 Auburn Road,  
Auburn Hills MI, 48326, United States  
Phone: +1-248-696-6400  
Fax: +1-248-680-4900  
Email: rachel.deaurier@magnapowertrain.com  
www.magnaelectronics.com

Magna Electronics, an operating unit of Magna International, provides innovative electronic systems through manufacturing facilities and engineering divisions located globally. With its individual core products, the group focuses on: Driver assistance and safety, body systems, intelligent power systems, and liquid-level sensors as well as industrial products.

### Marben Products

**Booth:** 2908  
139 rue Vendome,  
Lyon, 69006, France  
Phone: +33-42-78-26-060  
Email: philippe.cuer@marben-products.com  
www.marben-products.com

Marben is an editor of embedded software since 1986 and leader of ASN.1 tools market. Marben V2X is a complete ready-to-use software solution for rapid development of V2X equipment (OBU and RSU) integrating road safety applications and new-in-vehicle mobility services. Our product is compliant both with US and European standards.

### Mechanical Simulation

**Booth:** 708  
755 Phoenix Dr,  
Ann Arbor MI, 48108, United States  
Phone: +1-734-668-2930  
Fax: +1-734-668-2877  
Email: dorin@carsim.com  
www.carsim.com

We provide CarSim, TruckSim and BikeSim software validated by over 55 OEMs, 85 Suppliers and 200 Universities worldwide. ADAS systems can be simulated and tested for vehicle dynamics control in any scenario. Our software contains example vehicles, roads and test procedures ready for immediate use. 1,250 driving simulators use CarSim or TruckSim for engineering/training.

### MG Squared Lowering Systems

**Booth:** 3016  
3301 Oak Hill Dr,  
Birmingham AL, 35216, United States  
Phone: +1-205-823-6688  
Email: martin@mgsquared.com  
https://twitter.com/LoweringSystems

MG Squared is the world leading provider of lowering systems for use on ITS and Homeland Security projects. MG Squared lowering systems are utilized across the U.S, Australia, New Zealand, Europe, Africa, Canada, and the Middle East. The system allows a camera (or other device) to be lowered to ground level for safe, simple and fast maintenance. Retrofit devices are available.

### Michigan Spotlight - Michigan Economic Development Corporation

**Booth:** 2032  
300 N Washington Sq, Lansing, MI, 48913, United States  
Phone: +1-517-373-7834  
Email: thompsonsm@michigan.org  
www.michiganadvantage.org

Featuring Ann Arbor Spark, Automation Alley, Center for Automotive Research, Connect Michigan, Department of Technology Management & Budget (DTMB), Detroit Chamber / MICAuto, Detroit Economic Growth Corporation / Detroit Future City, Detroit Metro Convention & Visitors Bureau, Detroit People Mover, ITS Michigan, Lansing Economic Area Partnership, Lawrence Tech University, Macomb County, MDOIT Aeronautics, Michigan Department of Transportation - State Transportation Building, Michigan Manufacturing Technology Center (MMTC), Michigan Economic Development Corporation, Michigan State Police, Michigan State University, Michigan Tech University: Mobile Tech Lab, Mobility Transformation Center -- UMTRI (U of M), Next Energy, Oakland County, SEMCOG, TARDEC, The Right Place, University Research Corridor, Wayne County, and Wayne State University: Tech Town.

### Millen Corporation

**Booth:** 2015  
21 Sunnymead, Tyler Hill  
Canterbury Kent, CTZ 9NN, United Kingdom  
Phone: +44-1227-787454  
Email: info@millencorporation.com  
www.millencorporation.com

The Company provides unique solutions using M2M / Internet of Things Technology in Remote Monitoring Applications. Namely, the TrCAMS™ product provides Public Bodies to connect to their Traffic Signal Controller Installations for Remote Monitoring, Test (Checksum), Fault Identification, Analysis and Fault Notification.

### Ministry of Internal Affairs and Communications (MIC)

**Booth:** 1601  
2-1-2, Kasumigaseki, Chiyoda-ku Tokyo,100-8926, Japan  
Phone: -1026  
Email: itsradio@mi.soumu.go.jp  
www.soumu.go.jp/english

MIC is promoting Intelligent Transport Systems (ITS) with consideration of relevant aspects including the allocation of radio frequencies, research and development of wireless communication technology, establishment of technical standards, and international standardization. MIC is working for ITS in cooperation with relevant ministries.

### Ministry of Land, Infrastructure, Transport and Tourism

**Booth:** 1601  
2-1-3 Kasumigaseki, Chiyoda-ku Tokyo,100-8918, Japan  
Phone: -13659  
Email: nakamura-m2v@mil.mlit.go.jp  

The Ministry of Land, Infrastructure, Transport and Tourism is expanding the use of ITS in order to resolve traffic problems such as accidents and adverse environmental effects, as we aim to create the safest, smartest, and most efficient road network in the world.
Exhibitor Profile

Miovision Technologies Inc.

Booth: 1228
146 Manitou Dr, Kitchener ON, N2C 1L3, Canada
Phone: +1-519-513-2407
Email: cdavies@miovision.com
miovision.com

Miovision Technologies creates intelligent solutions to address the challenges facing global transportation networks. As a leader in traffic data collection and now in the adaptive control market, these solutions directly and indirectly reduce traffic congestion, optimize traffic flow and queues, minimize environmental impacts and improve the overall safety of roads.

Mitsubishi Electric

Booth: 405
5900-A Katella Ave, Cypress CA, 90630, United States
Phone: +1-714-252-7826
Fax: +1-714-644-9482
Email: gerald.ganguzza@meus.mea.com
www.mitsubishi-megaview.com

Mitsubishi Electric was the first manufacturer to introduce DLP technology in applications for critical environments that operate 24/7. We incorporate cutting-edge technology that offers a higher yield, higher quality, lower price and lower cost of ownership (100,000 hours without maintenance). See our full line of rear projection and Super Narrow Bezel monitors in booth #405.

Mitsubishi Electric Corporation

Booth: 1601
2-7-3, Marunouchi Chiyoda-ku, Tokyo, 100-8310, Japan
Phone: +81-(3)-3218-2111
Email: ogura.yasushi@bc.mitsubishielectric.co.jp
www.mitsubishielectric.com

At the Mitsubishi Electric booth, we’ll be introducing advanced driver assistance systems and automatic driving systems based on infrastructure cooperation utilizing ITS spot services in Japan. Other products featured will be a car navigation system supporting ITS spot services and DSRC on-board equipment.

Mitsubishi Heavy Industries, Ltd.

Booth: 618
1-1, Wadasaki-cho 1-chrome, Hyogo-ku
Kobe, 652-8585, Japan
Phone: +81-78-672-2039
Fax: +81-78-672-2900
Email: takakazu_tsujii@mhi.co.jp
www.mhi-global.com/index.html

Mitsubishi Heavy Industries Ltd.(MHI) has founded in 1884 and in the field of ITS, MHI has been the world leading system integrator since 1964. MHI can provide reliable machine and system integration of ITS and Toll Collection Facilities. Furthermore MHI are recently expanding our business domain using ICT solutions, such as system integration of smart community/mobility.

Mobile Mark, Inc.

Booth: 1323
1140 W. Thorndale Ave.,
Itasca IL, 60143, United States
Phone: +1-847-671-6690
Email: esylvan@mobilemark.com
www.mobilemark.com

Mobile Mark designed and manufactures rugged, efficient antenna solutions for 137 MHz – 6.0 GHz. We offer an extensive line of ITS/DSRC 5.9 GHz antennas for Smart Highways, Collision Avoidance, and Tolling including embedded and externally mounted antennas for vehicle-to-vehicle (V2V) and omni-directional or directional network antennas.

Moxa Americas, Inc.

Booth: 2810
601 Valencia Avenue, Suite #100
Brea CA, 92821, United States
Phone: +1-714-528-6777
Fax: +1-714-528-6777
Email: toni.cook@moxa.com
www.moxa.com

Your Trusted Partner in Automation - Moxa is a leading manufacturer of industrial networking, computing, and automation solutions. With over 25 years of industry experience, Moxa has connected more than 30 million devices worldwide and reaches customers in over 70 countries. Moxa delivers value with reliable networks and sincere service for automation systems. www.moxa.com

MS2

Booth: 609
3815 Plaza Dr, Ann Arbor MI, 48108, United States
Phone: +1-734-904-0868
Email: cw@ms2soft.com
www.ms2soft.com

MS2 is expert in the design and hosting of cloud-based transportation data management software.

MULTILINK

Booth: 1129
580 TERNES LANE, ELYRIA OH, 44035, United States
Phone: +1-440-366-6966
Email: mternes@gomultilink.com
www.gomultilink.com

Multilink is an industry leading designer, and manufacturer of products for voice, data, video, ITS/DOt, and FTTX applications. Multilink manufactures a full line of fiber optic products including pre-connectorized housings and cable assemblies, splice closures, slack storage devices, cable markers and tags, fiber-node cabinets, and environmentally controlled enclosures.

NEC Corporation

Booth: 1601
7-1, 5 Cho-me Shiba, Minato-ku
Tokyo, 108-8001, Japan
Phone: +81-33798-2722
Email: a-satou@cw.jp.nec.com
www.nec.co.jp

NEC Corporation, kindly welcome all of you related to ITS business to our booth in ITS Japan Pavilion.In our booth, we will introduce with the newest products and technologies based on NEC’s image recognition technology.Please allow your time to visit our NEC booth in ITS Japan Pavilion and experience our state-of-the-art ITS.

Nedap Identification Systems

Booth: 2813
500 W Main - Ste 301, Branson MO, 65616, United States
Phone: +1-417-339-7368
Fax: +1-417-337-8889
Email: info-us@nedap.com

Nedap Identification Systems is the leading specialist in systems for long-range identification, wireless vehicle detection and city access control. Our readers, sensors and controllers optimize, monitor and control the movement of vehicles and people. Safe, secure and efficient. Technology that can easily be applied to security, traffic and parking applications.
Exhibitor Profile

Parkmobile USA, Inc.
**Booth:** 302  
3200 Cobb Galleria Pkwy SE - Ste 100, Atlanta GA, 30339, United States  
Phone: +1-770-818-9036  
Fax: +1-770-818-9039  
Email: tina.dyer@parkmobileglobal.com  
www.parkmobile.com

Peek Traffic Corporation
**Booth:** 1014  
2906 Corporate Way, Palmetto FL, 34221, United States  
Phone: +1-941-945-1252  
Email: violet.szaikai@peektraffic.com  
www.peektraffic.com

Phoenix Contact
**Booth:** 523  
586 Fulling Mill Rd, Middletown PA, 17057, United States  
Phone: +1-717-944-1300  
Fax: +1-717-948-1625  
Email: info@phoenixcontact.com  
www.phoenixcontact.com

Proxim Wireless
**Booth:** 3015  
1561 Buckeye Dr, Milpitas CA, 95035, United States  
Phone: +1-408-383-7600  
Fax: +1-408-383-7680  
Email: hkaur@proxim.com  
www.proxim.com

PTV AG
**Booth:** 2523  
Stumpstor 1, 76131 Karlsruhe, Germany  
Phone: +49-721-9651-0  
Email: markus.falk@ptv.de  
vision_traffic.ptvgroup.com

PTV Group provides software and consulting for traffic, transport logistics and geomarketing. We plan and optimise everything which moves people and goods worldwide. Our range of products & services includes Concepts & Solutions, Software & Services, Data & Content. PTV Visum and PTV Vissim are our market-leading products for traffic & transport planning and traffic simulation.

Q-Free ASA
**Booth:** 614  
P.O. Box 3974 Leangen, Strindfjordveien 1  
Trondheim, Norway  
Phone: +47-736-26500  
Fax: +47-736-26501  
Email: marketing@q-free.com  
www.q-free.com

Q-Free is a leading global supplier of products and solutions within ITS (Intelligent Transport Systems) for Road User Charging and Advanced Transportation Management. With references in every main application area, including highway tolling, truck tolling, congestion charging and parking systems.

Quanergy Systems, Inc.
**Booth:** 626  
265 Sobrante Way, Ste M, Sunnyvale CA, 94086, United States  
Phone: +1-512-965-6151  
Email: louay.eldada@quanergy.com  
www.quanergy.com

Quanergy Systems is a Silicon Valley technology company developing smart sensing solutions for real-time 3D mapping and object detection, tracking and classification. The solutions are applicable in numerous sectors including automotive, mapping, military, security, aeronautics, robotics, and industrial automation for improved safety, efficiency and performance.

Quantum Inventions
**Booth:** 729  
Blk 71 Ayer Rajah Crescent - #03-23, Singapore, 139951, Singapore  
Phone: 67942591  
Fax: 67945984  
Email: saurav@qi.sg

Quantum Inventions provides mobility intelligence to consumers, automotive corporations, enterprise & government customers, leveraging on its integrated suite of connected navigation and enterprise logistics applications, with real-time intelligence being provided by information and ITS analytic platforms.

QvisionTechnology
**Booth:** 1029  
591 Telegraph Canyon Rd #449, Chula Vista CA, 91910, United States  
Phone: +1-800-900-8180  
Fax: +1-800-900-8180  
Email: margaret@solutionxyz.com  
www.QvisionTechnology.com

Qvision software is a revolutionary way to transmit video over the Internet at savings of up to 80%. It creates and manages traveler video updates that are formatted to work on virtually any computer or mobile device, allows easy camera management, & secure sharing of live video with partner organizations - all without the headaches and cost of streaming!

Realtime Technologies
**Booth:** 627  
332 E. Lincoln Ave, Royal Oak MI, 48067, United States  
Phone: +1-801-647-4672  
Fax: +1-801-254-5007  
Email: cwoodbury@simcreator.com  
www.simcreator.com

Realtime Technologies (RTI) specializes in real time multibody vehicle dynamics, and graphical simulation and modeling. RTI offers simulation software applications, consulting, custom engineering, software, and hardware development. RTI's customer base includes university researchers throughout the U.S. and Canada, international, government and private entities.
Exhibitor Profile

Red Lion Controls
Booth: 923
20 Willow Springs Circle,
York PA, 17406, United States
Phone: +1-717-767-6511
Fax: +1-717-764-0839
Email: jennifer.bentzel@redlion.net
www.redlion.net

As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions to customers for over forty years. Our award-winning technology enables companies in a variety of industries to gain real-time data visibility that drives productivity. Product brands include Red Lion, Sixnet and N-Tron.

Renishaw, Inc.
Booth: 508
5277 Trillium Blvd,
Hoffman Estates IL, 60192, United States
Phone: +1-847-286-9953
Fax: +1-847-286-9974
Email: annette.tures@renishaw.com
www.renishaw.com

Renishaw is a global company with core skills in measurement, motion control, spectroscopy and precision machining. We develop innovative products that significantly advance operational performance including machine tool automation, co-ordinate measurement, additive manufacturing, gauging, machine calibration, position feedback, shape memory alloys. Visit us at booth #508.

RideScout
Booth: 1026
1133 15th NW,
Washington DC, 20005, United States
Phone: +1-845-325-2232
Email: john@ridescoutapp.com
www.ridescoutapp.com

RideScout is a mobile transportation platform that helps you get from point A to point B faster and smarter. Available for iOS and Android, RideScout shows you real-time information about transportation options that are available right now. Download RideScout and get all transit, bus, bike, taxi, car share, rideshare, parking and walking directions in one view.

Rohde & Schwarz
Booth: 2907
6821 Benjamin Franklin Drive,
Columbia MD, 21046, United States
Phone: +1-410-910-7800
Fax: +1-410-910-7801
Email: customer.service@rsa.rohde-schwarz.com
www.rohde-schwarz.com

Rohde & Schwarz is a global manufacturer of Wireless T&M equipment and EMC solutions. As your partner, we provide the tools you need to efficiently develop and test electronic systems including navigation systems, wireless communications, audio / video, automotive radar, eCall, vehicle-to-vehicle communications, in-vehicle networks or EMI / EMS compliance.

SAE International
Booth: 410
735 W. Big Beaver, Suite 1600,
Troy MI, 48084, United States
Phone: +1-248-273-2474
Email: vredickk@sae.org
www.sae.org

SAE International is a global association committed to being the ultimate knowledge source for the engineering profession. By uniting over 145,000 engineers and technical experts, we drive knowledge and expertise across a broad spectrum of industries. Encouraging a lifetime of learning for mobility engineering professionals and setting standards for industry engineering.

SAVARI
Booth: 1424
2005 De La Cruz Blvd Suite 131,
Santa Clara CA, 95050, United States
Phone: +1-408-859-7284
Fax: +1-408-583-4061
Email: ravi@savarinetworks.com
www.savarinetworks.com

Savari provides solutions in the connected vehicle market to help improve mobility and safety. Our products are certified by USDOT. Our solutions are being adopted by Tier-1 suppliers for V2X based ADAS systems. Savari is leading the world’s first commercial deployment of DSRC by the San Francisco airport in California.

Schneider Electric
Booth: 1407
1390 Piccard Drive,
Rockville MD, 20850, United States
Phone: +1-301-548-4620
Fax: +1-301-548-8284
Email: customer.service@schneider-electric.com
www.schneider-electric.com

As a global specialist in energy management, Schneider Electric is making energy safe, reliable, efficient, productive and green, the Group’s 150,000 plus employees achieved sales of 31 billion US dollars in 2013, through an active commitment to help individuals and organizations make the most of their energy.

Sensys Networks, Inc.
Booth: 1210
1608 4th Street, Suite 200,
Berkeley CA, 94710, United States
Phone: +1-510-548-4620
Fax: +1-510-548-8264
Email: info@sensysnetworks.com
sensysnetworks.com

Sensys Networks is the leading provider of wireless traffic detection and data collection systems. Customers are choosing our wireless solutions for traffic signal control because they need to save time, they have to save money, and they can’t take any chances. As a result, we’ve saved hundreds of cities millions of dollars. Visit our booth to see how much we can save you.

Sensys Traffic AB
Booth: 2015
Stottsgatan 14,
SE-553 22 Jönköping, Sweden
Phone: +46-(0)-36-442-02-10
Email: ulrica.n.bertilsson@sensys.se
www.sensys.se

Sensys Traffic AB, the leading provider of road safety system solutions SENSYS® Traffic AB offers smart solutions for traffic safety and traffic informatics. Our systems for speed and redlight enforcement are used by the world’s most demanding Customers.

SES America, Inc.
Booth: 721
410 Harris Rd,
Smithfield RI, 02917, United States
Phone: +1-401-232-3370
Fax: +1-401-232-7130
www.sesamerica.com
Exhibitor Profile

SESA is a DMS manufacturer and ITS solutions provider of cutting-edge innovation and industry-leading energy efficiency. Our clients form the core of whom we are. Communication, Commitment, and Personalization drive our approach to customer service. Custom solutions, Retrofit, Task-Specific, and Full Solar DMS, fitted to the needs of diversified client base.

SICE
Booth: 310
C/ Señorveda, 6 Pol. Ind. Alcobendas, Alcobendas Madrid, 28108, Spain
Phone: +34-916-232-200
Email: bacedego@sice.com
www.sice.com

SICE is a services provider Company integrator of advanced technologies in the field of Intelligent Transport Systems (ITS). Administration of binomial space-time for road traffic, lighting and road safety, road infra-structures, optimization of public transport, rationalization in the use of urban space, environmental protection, are common needs in a developing world.

Siemens
Booth: 2001
IC MOL RCM ITS, 8004 Cameron Road
Austin TX, 78752, United States
Phone: +1-512-837-8310
Email: franziska.wagner@siemens.com
www.siemens.com

Siemens as an innovative leader in traffic solutions has reliable hardware and the most modern detection technologies and software are combined to optimization. We show energy efficient LED signals to scalable traffic computers, ultra modern traffic centers and satellite based toll systems for intercity traffic as well as essential solutions for intermodal end-to-end mobility.

Siemens Canada Limited
Booth: 2605
300 Applewood Crescent,
Concord ON, L4K 5C7, Canada
Phone: +1-905-856-5288
Fax: +1-905-856-1995
Email: ronald.wolcott@siemens.com
www.siemens.com/ruggedcom

Siemens RUGGEDCOM intelligent communication technology includes long-haul optics for maximum interurban connectivity; Ethernet over VDSL for reusing existing copper infrastructure; layer 3 switching in the field with 10GigE uplinks for large amounts of video traffic; secure WiFi, WiMAX, and cellular technologies for enhancing and extending network coverage.

SIMREX Corporation
Booth: 629
1223 William St.
Buffalo NY, 14206, United States
Phone: +1-716-206-0174
Fax: +1-716-852-1223
Email: gtc@simrex.com
www.simrex.com

Simrex Wireless Corporation, a wireless engineering and manufacturing firm, has been providing customized, critical based solutions for a variety of industries, including Traffic, ITS, Transit, Railway, Government, Avionics, Tracking, and Military. We provide both off-the-shelf and custom engineered solutions for a variety of applications and industries worldwide.

Skyline Products, Inc.
Booth: 2418
2903 Delta Dr - Bldg E,
Colorado Springs CO, 80910-1012, United States
Phone: +1-719-392-9046
Email: ciannareider@skylineproducts.com
www.skylineproducts.com

Skyline has been manufacturing ITS-Grade® DMS since 1971 and ITS-Grade® LED DMS signs since 1994. Skyline is an industry leader and considered to produce the most legible and reliable LED DMS in the industry. For more information about Skyline Products please visit www.skylineproducts.com.

Skyline Technology Solutions
Booth: 1226
508 C McCormick Dr,
Glen Burnie MD, 21061, United States
Phone: +1-410-795-2700
Email: sales@skylinenet.net
www.skylinenet.net/videosharing

Skyline Technology Solutions provides interoperable video sharing solutions for agencies to share live streaming video with partners, emergency responders, media and the public on a local, statewide and regional basis. Live video from any camera on any network can be sent securely to any device or application. Stop by our booth and see a live demonstration.

Smart Microwave Sensors GmbH
Booth: 1223
In den Waaschinen 1,
Braunschweig, Niedersachsen, D-38108, Germany
Email: buddy.cruz@smartmicro.de
www.smartmicro.de

Smartmicro manufactures the UMRR object tracking traffic radar used for ITS, intersection control, & enforcement applications. It can simultaneously monitor individual location & speeds of up to 32 vehicles. Traffic data gathering, triggering based on events, virtual loop placements, red light running, and speed monitoring are just some of the many applications possible.

Southwest Research Institute
Booth: 1410
6220 Culebra Rd,
San Antonio TX, 78238-5166, United States
Phone: +1-210-522-3914
Email: barbara.bowen@swri.org
www.swri.org/4org/d10/CompSys/isd/home.htm

SwRI® is an applied R&D organization with 26+ yrs experience in the development of traffic management systems, connected vehicles and autonomous vehicles. SwRI developed the FDOT SunGuide® and TXDOT Lonestar® ATMS. SwRI has developed 8 fully autonomous vehicles for the Army, Marines and Navy as well as multiple active safety systems for OEMs in the U.S., Europe and Japan.

SpeedInfo, Inc
Booth: 922
100 W San Fernando St., Suite 590,
San Jose CA, 95113, United States
Phone: +1-408-333-9960
Fax: +1-408-289-9171
Email: carmiger@speedinfo.com
www.speedinfo.com

Our sensor technology and data service provides highly reliable, accurate and flexible vehicle lane traffic count, flow, travel times and road surface temperature data to regional authorities responsible for traffic data collection, use and dissemination. The versatile SpeedInfo solution makes low cost and fast coverage possible to improve safety, mobility and operations.

Spirent
Booth: 318
Northwood Park, Gatwick Road
Crawley, RH10 9XN, United Kingdom
Phone: +44-1293-767608
Email: automotive@spirent.com
www.spirent.com/automotive

Spirent is the partner of choice for testing the Connected Car. The World’s leading automotive brands rely upon Spirent to test satellite positioning systems and in-vehicle, vehicle to infrastructure and vehicle to vehicle communication systems from initial design through to manufacturing.
Exhibitor Profile

STEGO, Inc.
**Booth: 2915**
1395 S. Marietta Pkwy Bldg 800, Marietta GA, 30067, United States
Phone: +1-770-984-0858
Email: sgarraway@stegousa.com
www.stegousa.com

STEGO manufactures innovative products that heat, cool, ventilate, illuminate and control temperature and humidity of enclosed electrical and electronic control systems. These products are renowned for reliability, longevity, simplicity of use, and high quality. STEGO strives to solve electrical and electronic control packaging problems for our valued customers.

Sumitomo Electric Industries, Ltd.
**Booth: 1601**
1-1-3, Shimaya, Osaka Konohana-ku
Osaka, 554-0024, Japan
Email: fujita-kimiy@sei.co.jp
www.sei.co.jp/indexja.html

Sumitomo Electric Group has been contributing to a safe, comfortable and environmentally-friendly society by providing ITS infrastructural systems and solutions, for example, traffic control systems and cooperative systems. In addition, we are providing excellent products which secretly support modern intelligent vehicles, such as PHEV, EV and Autonomous Vehicles.

Swarco AG
**Booth: 2410**
Blattenwaldweg 8,
A-6112 Wattens, Austria
Phone: +43-5224-5877-0
Email: richard.neumann@swarco.com
www.swarco.com

SWARCO – the Austrian-headquartered traffic technology corporation of Tyrolean entrepreneur Manfred Swarovski – supports society’s mobility with turnkey systems and solutions in road marking, urban and interurban traffic control, parking, public transport, detection, infomobility and energy-efficient, LED-based signaling and lighting technology.

Swedish Transport Administration
**Booth: 2015**
Box 851, 833 26 Strömsund
Strömsund., Sweden
Phone: +46-705-094970
Email: annica.roos@trafikverket.se
www.trafikverket.se/Om-Trafikverket/Andra-sprak/English-Engelska/About-the-Swedish-Transport-Administration-Trafikverket

The Swedish Transport Administration (Trafikverket) is the Government agency responsible for the long-term planning of the transport system. Trafikverket is also in charge of the state road network and national railway network.

TAKATA
**Booth: 808**
2500 Takata Drive,
Auburn Hills MI, 48326, United States
Phone: +1-248-475-6731
Email: brian.tieberman@takata.com
www.takata.com

Takata Corporation is one of the world’s leading automotive safety systems companies, supplying nearly all the world’s major automakers with a product range that includes seat belts, airbag systems, steering wheels, child seats, vision systems and other electronic devices. Takata is also one of the most vertically integrated manufacturers in the automotive safety industry.

TASS International
**Booth: 421**
Steenovendweg 1a,
Helmond, 5708HN, Netherlands
Phone: +31-866-8401
Email: alissa.rutten@tassinternational.com
www.tassinternational.com

TASS International provides development methodologies and engineering tools to the transportation industry to develop solutions for safe, clean and smart mobility. TASS International has acquired state of the art test facilities for cooperative mobility and automated driving. This includes the instrumented Dutch A270 highway, control room and instrumented test fleet.

Texas Instruments
**Booth: 723**
12500 TI Blvd,
Dallas TX, 75243, United States
Phone: +1-972-995-2011
www.ti.com

TI’s brings semiconductor products to manufacturers and system suppliers. TI’s extensive automotive portfolio includes analog power management, interface and signal chain solutions, along with DLP® displays, ADAS and infotainment processors, safety microcontrollers and wireless connectivity solutions.

The RACER Trust
**Booth: 2909**
500 Woodward Avenue, Suite 1510,
Detroit MI, 48826, United States
Phone: +1-313-486-2908
Email: info@racertrust.org
www.racertrust.org

RACER Trust is one of the largest holders of industrial property in the United States and is the largest environmental response and remediation trust in U.S. history. RACER’s holdings, principally in the Midwest and Northeast, are perfectly positioned to support a variety of sectors including automotive and high-tech. to learn more visit: www.racertrust.org.

Thinking Highways
**Booth: 3019**
15 Onslow Gardens,
Wallington Surrey, SM6 9QL, United Kingdom
Phone: +44-203-463-9480
Fax: +44-208-647-8725
Email: kevin@thinkhighways.com
thinkinghighways.com

Thinking Highways is in its ninth year of publication and is firmly established as the thought leader in the ITS and advanced traffic management media sector and the recent addition of Jason Barnes to its editorial team has further strengthened its position. In March 2014 H3B Media launched Thinking Cities, a project focusing on smart transportation for cities and regions.

TKH Security Solutions - USA
**Booth: 2807**
12920 Cloverleaf Center Dr,
Germantown MD, 20874, United States
Phone: +1-301-444-2200
Email: sales.us@tkhsecurity.com
www.tkhsecurity-usa.com

TKH Security Solutions is a global supplier of advanced video surveillance solutions, including IP cameras, video servers/codecs, network video recorders, fiber transmission equipment, video management and video analytics software. TKH Security Solutions markets its solutions under the Siqura, Optelecom and Diva brand names.

Tokyo Metropolitan Government
**Booth: 1601**
8-1 Nishishinjyuku 2-Chome, Shinjyuku-ku
Tokyo, 163-8001, Japan
Phone: +81-(0)3-5321-1111
Fax: +81-(0)3-5388-1217
Email: Tadao_kudou@member.metro.tokyo.jp
www.metro.tokyo.jp/ENGLISH/index.htm

21st World Congress on Intelligent Transport Systems
Tokyo, which has received the honor to host the 2020 Olympic and Paralympic Games, is not only the capital of Japan but also the world’s largest megalopolis. You can see our efforts on developing traffic management and countermeasures against earthquake disasters using ITS.

**Tom Tom**

*Booth: 418*

26261 Evergreen - Ste 425, Southfield MI, 48076, United States

Phone: +1-248-213-3847

Fax: +1-248-213-4815

Email: lisa.sotir@tomtom.com

tottom.com

TomTom empowers movement. Every day millions of people around the world depend on TomTom to make smarter decisions. We design and develop innovative products that make it easy for people to keep moving towards their goals. Headquartered in Amsterdam, we have 3,600 employees worldwide with business units: Consumer, Automotive, Licensing and Business Solutions.

**Topos Aquitaine**

*Booth: 2015*

25 rue Marcel Issartier, BP 20005

Mérignac, 33702, France

Phone: +33-635-266-112

Email: roxanne.villet@topos-aquitaine.org

www.topos-aquitaine.org

TOPOS Aquitaine was created in 2006 at the initiative of the Aquitaine Regional Council. TOPOS now boasts more than forty active initiatives of the Aquitaine Regional Council. TOPOS Aquitaine brings to Bordeaux the 2015 edition of the World Congress on Intelligent Transport Systems.

**Toshiba Corporation**

*Booth: 1601*

72-34, Horikawa-cho, Saiwai-ku Kawasaki, 212-8585, Japan

Phone: +81-4433-11359

Email: kengo.kondo@toshiba.co.jp

www.toshiba.co.jp/worldwide/index.html

Based on the concept “Enabling efficient and optimal traffic and energy flow”, wide range of business and technology related to mobility are shown. Especially three major solutions: urban transport solutions utilizing battery-driven LRT or electric bus, highway solutions and transport-related energy solutions are highlighted.

**Toyota Motor Corporation**

*Booth: 2018*

4-18, Koraku 1-chome, Bunkyo-ku, Tokyo, 112-8701, Japan

Phone: +81-3-3817-9891

Fax: +81-3-3817-9045

Email: aq44@mail.toyota.co.jp

www.toyota-global.com

Toyota today manufactures a diverse line-up of vehicles all over the globe, and Housing, IT, Marine Business. As an innovative leader, Toyota is well-known for its management philosophy and the world’s first mass-market hybrids. We will lead the way to the future of mobility, enriching lives around the world with the safest and most responsible ways moving people.

**Traffic Technologies Ltd**

*Booth: 1728*

31 Brisbane Street,
Ehtham, 3093 VIC, Australia

Phone: +61-3-9430-0222

Email: con.locatost@traffictd.com.au

www.traffictd.com.au

Traffic Technologies Ltd is Australia’s premier traffic company in providing innovative and cost effective solutions to the traffic industry. Established in 2004 and listed on the Australian Stock Exchange, Traffic Technologies has gained a strong reputation in a demanding industry through its Technical Products Division, Traffic Controller Operations and Signage Division.

**Traffic Technology International**

*Booth: 822*

Abinger House, Church St,
Dorking Surrey, RH4 1DE United Kingdom

Phone: +44-130-674-3744

Fax: +44-130-674-2525

Email: mike.robinson@ukjone.com

www.traffictechnologytoday.com


**TrafficCast International, Inc.**

*Booth: 1126*

2801 Coho Street, Suite 100
Madison WI, 53703, United States

Phone: +1-608-268-3927

Fax: +1-608-204-0114

Email: nkiernan@trafficcast.com

www.trafficcast.com

TrafficCast provides advanced traffic data services, including BlueTOAD: the leading Bluetooth detection technology. With thousands of road tested deployments across the country and throughout the Americas, BlueTOAD delivers real-time speeds and powerful online diagnostics for travel trends, O/D studies and signal timings, plus integration with traffic operations systems.

**TrafficVision™**

*Booth: 1422*

81 Technology Drive, C200
Anderson SC, 29625, United States

Phone: +1-864-985-2887

Email: raykeys@trafficvision.com

www.trafficvision.com

TrafficVision software is designed specifically for analyzing existing and new traffic cameras by seamlessly integrating into existing infrastructure, providing real time incident detection and highly accurate data. Efficiently leverage the overwhelming number of cameras and improve your ITS effectiveness with TrafficVision.

**Trafficware Group, Inc.**

*Booth: 605*

522 Gillingham,
Sugar Land TX, 77478, United States

Phone: +1-281-240-7233

Email: AddyBabalola@trafficware.com

trafficware.com

Trafficware leads the traffic industry, building management infrastructure for the next generation of smart cities. The Trafficware 360° Solution provides: Software tools needed to simulate and optimize traffic before deployment Hardware to control traffic on the street The central management system to collect data and manage agency-wide operations.

**TransCore**

*Booth: 2421*

150 4th Ave North, Suite 1200,
Nashville TN, 37219, United States

Phone: +1-615-988-9973

Email: marc.raymer@transcore.com

www.transcore.com

TransCore develops innovative transportation solutions for customers worldwide. We specialize in Electronic Toll Collection Systems and Traffic Management Systems. A pioneer in Open Road Tolling, we design, build and maintain complete toll systems and have designed and deployed traffic management systems for agencies across North America. www.transcore.com. Booth #2421
Exhibitor Profile

Transportation Management & Engineering
Booth: 2722
3030 W. Salt Creek Ln., Ste. 201,
Arlington Heights IL, 60005, United States
Phone: 847-391-1000
Email: rhanson@sgcmail.com
www.roadsbridges.com/traffic-management

TM&E provides 21,000 traffic- and transit-system designers, engineers and management with information on technology, systems and products they can incorporate to improve their operations and safety.

Trapeze Group
Booth: 3009
5800 Explorer Drive,
Mississauga ON, L4W 5K9, Canada
Phone: +1-905-629-8727
www.trapezegroup.com

Trapeze Group delivers solutions that consider the full 360 degrees of passenger transport. Hundreds of government and commercial organizations across Europe, North America and Asia Pacific have turned to Trapeze to realize efficiencies, enhance the quality and scope of their services, and safely transport more people with less cost.

Traveller Information Services Association (TISA) ASBL
Booth: 2015
c/o ERTICO, Avenue Louise 326
Brussels, 1050, Belgium
Phone: +32-2-400-07-28
Email: s.chaufton@tisa.org
www.tisa.org

TISA (Traveller Information Services Association) is a market-driven membership organization with worldwide scope, established as a not-for-profit company focused on proactive implementation of traffic and travel information services and products based on existing standards, including primarily RDS-TMC and TPEG technologies. TISA membership consists of 104 members.

TSS - Transport Simulation Systems, Inc.
Booth: 921
20 W 22nd St - Ste 612,
New York NY, 10010, United States
Phone: +1-917-267-8534
Email: sydnie.white@aimsun.com
www.aimsun.com

TSS-Transport Simulation Systems develops, markets and supports Aimsun traffic modeling software: microscopic, mesoscopic and hybrid modeling plus travel demand modeling and macroscopic functionalities, all within a single application. Aimsun Online is the market’s only simulation-based decision support system for real-time traffic management.

U.S. Department of Transportation (USDOT)
Booth: 1201
1200 New Jersey Ave SE,
Washington DC, 20590, United States
Phone: +1-202-366-3700
Email: michael.pina@dot.gov
www.its.dot.gov

The U.S. Department of Transportation’s (USDOT) ITS research program focuses on intelligent vehicles, intelligent infrastructure and the creation of an intelligent transportation system. USDOT’s Connected Vehicle research it involves wireless communication between vehicles, infrastructure and personal devices for safety, mobility and environmental benefits.

Utimaco Inc.
Booth: 1023
3790 El Camino Real, Palo Alto, CA, 94306
United States
Phone: +1-650-485-4920
Email: hsm@utimaco.com
https://hsm.utimaco.com

Utimaco is a leading manufacturer of hardware based security solutions providing the root of trust to keep cryptographic keys safe, secure critical infrastructures and protect high value data. Only Utimaco delivers a general-purpose HSM as a customizable platform to easily integrate into existing software solutions, embed business logic and build secure applications.

UTMS Society of Japan
Booth: 1601
#6 Ichigaya-Tamachi2, Chrome Airman’s Bldg - 7th Fl
Shinjuku-Ku Tokyo, 162-0843, Japan
Phone: +81-3-3235-6520
Fax: +81-3-3235-6522
Email: contact@utms.or.jp
www.utms.or.jp

The UTMS (Universal Traffic Management Systems) are the systems that realize safe, comfortable, and environmentally-friendly traffic society through the applications of constantly-evolving technology such as information communication technologies. The UTMS Society of Japan investigates, researches and develops the UTMS and disseminates the results to the public.

Vaisala
Booth: 2808
194 S Taylor Ave,
Louisville CO, 80227, United States
Phone: +1-303-497-1701
Email: jon.tarleton@vaisala.com
www.vaisala.com/roads

Vaisala is a global weather solutions provider with nearly 40 years of experience in providing the highest quality road weather sensors available. Vaisala is a true innovator of road weather technology, from our non-intrusive pavement sensors, pioneering mobile technology, to our unmatched experience – Vaisala is your road weather partner.

VALEO
Booth: 2608
43, rue Bayen,
Paris, 75017, France
Phone: +33-(0)1-40-55-20-20
www Valeo.com

Valeo is an automotive supplier, partner to all automakers worldwide. Valeo is a technology company providing innovative products and systems contributing to CO2 emission reduction and intuitive driving advancements. Valeo has 124 production sites, 16 Research centers, 35 Development centers and 12 distribution platforms and employs 74,800 people in 29 countries.

Vector CANtech, Inc.
Booth: 327
39500 Orchard Hill Place, Suite 400
Novi MI, 48375, United States
Phone: +1-248-449-9290
Fax: +1-248-449-9704
Email: sales@us.vector.com
www.vector.com

Vector is the global leader of CAN software tools and AUTOSAR embedded software components for automotive OEMs and their electronic parts suppliers. Vector also offers tools for Ethernet, LIN, FlexRay and MOST. For over 25-years, Vector has equipped engineers with the finest capabilities for design, diagnostics, calibration and testing of electronic networking systems.
TOWARDS INTELLIGENT MOBILITY
Better use of space

SAVE THE DATE!

22nd ITS World Congress
Bordeaux, France - 5 to 9 October

OPEN NOW!
Exhibition & Sponsorship Opportunities
+32 400 0786 - sponsor@itsineurope.com

www.itsworldcongress.com
Vehicle Information and Communication System Center (VICS Center)

**Booth: 1601**
Nittochi Koyobashi Building, 2-5-7, Kyobashi, Chuo-ku
Tokyo, 104-0031, Japan
Email: okochi@vics.or.jp
www.vics.or.jp/english/vics

Vehicle Information and Communication System Center (VICS Center) provides traffic information for the car navigation system. VICS center also processes and edits the traffic information like congestion or regulation which is collected through prefectural police headquarters and road administrators to change into the text information or graphic form or map overlay.

**Vendeka Information Technologies**

**Booth: 313**
Cevizlidere Mah. 5.Cadde 1243,Sokak No.4/11
Pamukko Is Merkezi
Ankara, 06520, Turkey
Phone: +90 (312) 472 88 80
Fax: +90 (312) 472 06 25
Email: ibrahim.senel@vendeka.com.tr
www.vendeka.com.tr

Vendeka is an ETC system integrator experienced on RFID and DSRC toll collection systems. Vendeka supplies also other ITS solutions. Vendeka has completed world’s biggest RFID toll collection project in Turkey. There are worldwide projects still ongoing.

**Ver-Mac**

**Booth: 306**
2650 Minnesota Ave - Ste 500
Minneapolis MN, 55406, United States
Phone: +1-612-521-2122
Email: todd.foster@ver-mac.com
www.ver-mac.com

Ver-Mac is a leader in “Managing Traffic & Moving People”. Our turn-key approach of provide the best hardware and software possible for the portable ITS market allows every customer to obtain the solution that is sized right for them. Our expect team of engineers, sales representatives and distributors can get you the most cost-effective solutions in the shortest time.

**Versilis Inc**

**Booth: 2723**
4295 St-Elzear West,
Laval QC, H7P 4J3, Canada
Phone: +1-450-978-1818
Email: info@versilis.com
www versilis.com

Versilis is dedicated to the development of innovative traffic control solutions designed to increase highway safety and efficiency while reducing traffic control costs. Their Automated Warning Sign (SwiftSign) and Automated Gate (SwiftGate) are being used for work zones, HOV access point control, on-ramp and off-ramp control as well as many other applications.

**Vicomtech – IK4**

**Booth: 3008**
Mikeletegi Pasealekua 57
Donostia-San Sebastian, Gipuzkoa, 20009, Spain
Phone: +34 943 309 230
Fax: +34 943 309 393
Email: itb@vicomtech.org
www.vicomtech.org

Vicomtech-IK4 is an Application-Oriented research organization. We are focused on the development of advanced computer vision based ITS tailored solutions for the industry: ADAS, SLAM, Automatic Traffic Control, 3D simulation and semantics. Our role in the market is to supply society with technology by transfer of primary research to industry.

**Virginia Tech Transportation Institute (VTTI)**

**Booth: 1328**
3500 Transportation Research Plaza (0536), Blacksburg VA, 24061, United States
Phone: +1-540-231-1500
Email: ceciliae@vt.edu
www.vtti.vt.edu

Instrumented testbeds, connected motorcycles and vehicle automation featured. The Virginia Tech Transportation Institute and the Connected Vehicle/Infrastructure University Transportation Center will showcase developments in ITS technology. Demonstrations including a connected motorcycle and level 2-3 automation will be held nearby and led by Zac Doerrzaph and Myra Blanco.

**Visteon Corporation**

**Booth: 801**
One Village Center Drive,
Van Buren Township MI, 48111, United States
Phone: +1-734-710-7352
Email: mmuir2@visteon.com
www.visteon.com

Visteon Electronics, a division of Visteon Corporation, is a leading supplier of automotive cockpit electronics that delivers innovative in-vehicle user experiences through solutions in user interfaces, connectivity and open architectures. Visteon Electronics is supported by a global network of 16 manufacturing facilities, four technical centers and 11 customer centers.

**VITRONIC Machine Vision**

**Booth: 607**
Hasengartenstr. 14,
Wiesbaden, 65189, Germany
Phone: +49-611-7152 0
Email: laura.schreckenbach@vitronic.com
www.vitronic.com

VITRONIC’s core competency is the monitoring of vehicles in moving traffic. With our PoliScan family of products, we offer national agencies and private service providers systems for speed enforcement, red light enforcement and license plate reading. Toll system operators use TollChecker to automate toll collection and enforcement. Visit VITRONIC at www.vitronic.com
Exhibitor Profile

VIVOTEK
Booth: 322
2050 Ringwood Ave,
San Jose CA, 95131, United States
Phone: +1-408-773-8686
Email: elaine.kuo@vivotek.com
www.vivotek.com

VIVOTEK, established in 2000, has quickly taken its place as a leading brand in the security industry. Known for delivering world-class IP surveillance solutions, VIVOTEK specializes in system applications and integration. VIVOTEK provides a wide range of products, including network cameras, video servers, video receivers and central management systems.

Vizzion
Booth: 924
321 Sasamat Lane,
North Vancouver BC, V7G 2S4, Canada
Phone: +1-604-985-9399
Email: info@vizzion.com
www.vizzion.com

Vizzion is the largest aggregator of traffic camera data and imagery with over 30,000 cameras in 25 countries. Visit our booth to learn about our popular and cost effective XML web service and our new command center application that allows operators to quickly view and organize traffic camera images and video sourced from over 150 government and private transport agencies.

Vzglyad LLC
Booth: 1018
Demonstratsii str., 38,
Tula, 300034, Russian Federation
Phone: +7-920-783-3220
Fax: +7-4872-31-52 96 x1
vzglyad.biz

“VZGLYAD” is an integrated multifunctional technical RFID-based platform for intellectual transport systems (ITS). Such platform fulfills the following functions automatically: traffic control optimization traffic regulation parking control weight-in-motion control of vehicles traffic fees, taxes and fines collection data updates on traffic situation navigation services

Wanco Inc
Booth: 3026
5870 Tennyson St,
Arvada CO, 80003, United States
Phone: +1-303-427-5700
Fax: +1-303-427-5725
Email: info@wanco.com
www.wanco.com

Wanco has been the industry leader in portable traffic control devices for 30 years. PDP Associates has been providing high-quality ITS integrations for automated, Smart Work Zone Systems (SWZS) for 20 years. Now in partnership for the first time, PDP integrates Wanco equipment and ITS solutions for implementing, managing, and operating 21st-century transportation systems.

Wireless Technology / WTI
Booth: 2922
2064 Eastman Ave - Ste 113,
Ventura CA, 93003, United States
Phone: +1-805-339-9696
Fax: +1-805-320-3330
www.wirelesstech.com

WTI has over a 30 year history of providing innovative solutions, exceptional customer service and is respected worldwide as a Video Surveillance Systems innovator and quality manufacturer. We manufacture Video Surveillance products dedicated to the Transportation, Broadcast, CCTV, Global Security Markets!

Xerox
Booth: 402
12410 Milestone Center Drive,
Germantown MD, 20876, United States
Phone: +1-562-941-0101
Email: ellen.bell@xerox.com
www.xerox.com/transportation

Xerox, a Fortune 200 company, supports clients worldwide. Our partnerships with federal, state, regional & local governments provide intelligent transportation solutions that keep people and cargo moving. Our technology reduces road congestion, enhances the environment, improves productivity, while simplifying today’s transportation challenges with a vision for the future.
THE INDUSTRY’S LEADING WEBSITE

UPDATED CONTENT EVERY WORKING DAY

www.itsinternational.com