



# **INTELLIGENT VEHICLE TESTING SYMPOSIUM**

*Global Policy, Regulation  
and Standards*

**Wednesday, November 1, 2017**

---

**M E D C**

MICHIGAN ECONOMIC  
DEVELOPMENT CORPORATION

---

# INTELLIGENT VEHICLE TESTING SYMPOSIUM

Global Policy, Regulation and Standards

## ITS World Congress

Wednesday, November 1, 2017

Palais des congrès de Montréal, Room 516A

# AGENDA

<b>8 a.m.–8:45 a.m.</b>	<b>REGISTRATION, NETWORKING, AND CONTINENTAL BREAKFAST</b>
<b>8:45 a.m.–8:50 a.m.</b>	<b>WELCOME</b> Kevin T. Kerrigan, <i>Senior Advisor, Automotive Initiatives, State of Michigan</i>
<b>8:50 a.m.–9 a.m.</b>	<b>INTRODUCTION OF GOVERNOR</b> Ray Tanguay, <i>Automotive Advisor to the governments of Ontario and Canada</i>
<b>9 a.m.–9:10 a.m.</b>	<b>GOVERNOR REMARKS</b> Governor Rick Snyder, <i>State of Michigan</i>
<b>9:10 a.m.–10:10 a.m.</b>	<b>EUROPEAN INITIATIVES</b> Moderator: Adela Spulber, <i>Transportation Systems Analyst, Center for Automotive Research</i>  Panelists: Álvaro Arrúe, <i>Project Manager, Connected &amp; Automated Driving, IDIADA Automotive Technology, Spain</i> Peter Janevik, <i>CEO, AstaZero, Sweden</i> Risto Kulmala, <i>Principal Advisor, Liikennevirasto, Finnish Transport Agency, Finland</i> Gwen van Vugt, <i>Director, Mobility Center, TASS International, Netherlands</i>
<b>10:10 a.m.–10:50 a.m.</b>	<b>BREAK</b>
<b>10:50 a.m.–12 p.m.</b>	<b>NORTH AMERICAN INITIATIVES</b> Moderator: Kirk Steudle, <i>Director, Michigan Department of Transportation</i>  Panelists: John Barton, <i>Associate Vice Chancellor of Texas A&amp;M University System and Executive Director of the RELLIS Campus</i> John Maddox, <i>CEO, American Center for Mobility</i> Dan Mathieson, <i>Mayor, Stratford, Ontario, Canada</i> Huei Peng, <i>Director, Mcity</i> Habib Shamskhov, <i>GoMentum Station Program Director, Global ITS/CAV Practice Leader, Stantec Consulting</i>
<b>12 p.m.–12:50 p.m.</b>	<b>LUNCH</b> Speaker: Peter Sweatman, <i>Principal, CAVita, "The World of CAV Evaluation"</i>

# INTELLIGENT VEHICLE TESTING SYMPOSIUM

Global Policy, Regulation and Standards

## ITS World Congress

Wednesday, November 1, 2017

Palais des congrès de Montréal, Room 516A

## AGENDA *continued*

12:50 p.m.–1:50 p.m.

### **FUTURE TECHNOLOGY: WHAT HAPPENS NEXT?**

Moderator: Kevin T. Kerrigan, *Senior Advisor, Automotive Initiatives, State of Michigan*

Panelists: David Atkinson, *Head, Systems & Technology and Chief Research Scientist, Artificial Intelligence, Chassis and Safety Division Continental Automotive Systems*

Pat Bassett, *Vice President, North American Research and Engineering Center, Denso, International America Inc.*

Ryan Eustice, *Vice President, Autonomous Driving, Toyota Research Institute*

1:50 p.m.–2:50 p.m.

### **ASIAN INITIATIVES**

Moderator: Qiang Hong, *Senior Research Scientist, Center for Automotive Research*

Panelists: Charlie Cheng, *North American Representative, A Nice City, China*

Han Geom Ko, *Manager, KATRI, K-City, Korea*

Xia Qin, *CAERI, iVista, China*

Nobuyuki Uchida, *Safety Research Division, Japan Automobile Research Institute, Japan*

2:50 p.m.–3:10 p.m.

### **BREAK**

3:10 p.m.–4:10 p.m.

### **UNITED KINGDOM INITIATIVES**

Moderator: Ella Taylor, *Head of Innovation, CCAV, U.K.*

Panelists: Alex Burns, *President, Millbrook Group*

Tim Edwards, *Principal Engineer, Intelligent Mobility, Horiba, MIRA*

Paul Jennings, *Professor and Lead for Connected and Autonomous Vehicles, WMG, Warwick University*

Peter Vermaat, *Principal ITS Consultant, TRL*

4:10 p.m.–4:20 p.m.

### **WRAP-UP/CONCLUSIONS/NEXT STEPS**

Kevin T. Kerrigan, *Senior Advisor, Automotive Initiatives, State of Michigan*

4:20 p.m.–4:30 p.m.

### **CLOSING REMARKS**

Governor Rick Snyder, *State of Michigan*

4:30 p.m.–6:30 p.m.

### **COCKTAIL/STROLLING DINNER RECEPTION (Room 516B)**

# SPEAKERS

## ÁLVARO ARRÚE

Project manager at the electronics department in Applus IDIADA, Álvaro Arrúe holds an MsC in telecommunications engineering and an MsC in ICT in mobile networks by University of Zaragoza. He is R&D manager of IDIADA's electronics department and responsible of connected and automated driving activities. He is actively involved in several international working groups and task forces such as ERTICO, C2C-CC and is participating in the EC's C-ITS platform. Álvaro is chairman of EARPA's task force on electronics and communications systems and represents the EC in the Road Automation Tri-lateral group EU/U.S./Japan, leading the discussion on road-worthiness testing.

## DAVID ATKINSON

Dr. Atkinson joined Continental Automotive's new Silicon Valley R&D Center in 2017 to lead systems and technology projects for future transportation and mobility systems, with a focus on intelligent driver assistance and autonomous vehicles. Atkinson's career spans basic research in artificial intelligence to senior executive positions in management of research and technology. Before joining Continental, Atkinson worked at the Florida Institute for Human and Machine Cognition (IHMC) where he led research projects in the area of trustworthy autonomous robotic systems.

Previously, Atkinson worked 20 years for NASA's Jet Propulsion Laboratory at Caltech in multiple positions of increasing technical management responsibility. He was a founder of NASA's artificial intelligence program and made significant contributions to spacecraft autonomy, planetary exploration robotics and spacecraft control center automation. In recognition, NASA awarded Dr. Atkinson the Exceptional Service Medal. Atkinson also served at NASA headquarters in Washington, D.C. as an executive with oversight of planning for robotic spacecraft missions to the moon. An entrepreneur in the early 1990s, he was co-founder of a successful start-up that provided Internet-based supply-chain management services to the electronics industry. Atkinson received a Doctor of Technology in computer systems engineering from Chalmers University of Sweden in Göteborg, Sweden; dual Master of Science and Master of Philosophy degrees in computer science/artificial intelligence from Yale University and a Bachelor of Arts in psychology from the University of Michigan.

## JOHN BARTON

John A. Barton, P.E. is a professor of practice for the Zachry Department of Civil Engineering at Texas A&M University, an associate vice chancellor for the Texas A&M University System, and the executive director of the RELLIS Campus. In these roles, John provides direction, guidance and advice for the College of Engineering departments and their faculty to integrate the collective assets of the Texas A&M University System to generate ideas that address critical challenges to the state and nation. He also provides classroom instruction to educate students through lectures and seminars focused on leadership, public administration and emerging transportation technologies. He is responsible for working on a variety of initiatives, including:

- The development and deployment of plans for the redevelopment of the RELLIS campus into a world-class, multi-disciplinary public/private research facility.
- Assist with the development of plans to transform the approach to transportation allowed on the main TAMU campus to make it a greener, more pedestrian and bicycle friendly campus.
- Coordinate the entirety of the TAMUS entities' activities related to autonomous and connected vehicles to elevate the TAMUS to a position of a recognized world leader in these emerging fields.
- Assist in developing strategies and deployment plans to advance the Area 41 research initiative to a higher level of maturity and success.

Mr. Barton recently retired as the deputy executive director of the Texas Department of Transportation (TxDOT) where he provided executive control and oversight of all TxDOT operations and the management and operation of the state's transportation system. Mr. Barton held a variety of positions with TxDOT in two TxDOT districts as well as the agency's central administration during his 30 years of state service including area engineer, director of transportation planning and development, district engineer and assistant executive director for engineering operations.

To mention a few of his most recent accomplishments, in October 2014, he received the Distinguished Graduate Award of the Zachry Department of Civil Engineering from his alma mater; in February 2015, he was honored as the inaugural recipient of the Governor Rick Perry Leadership in Transportation Award; in July 2015, he was presented with the AASHTO President's Special Award of Merit; and in August 2015, he received the FHWA Administrator's Public Service Award.



# SPEAKERS

## PAT BASSETT

Pat Bassett is vice president of Denso's North American Research and Engineering Center located at Denso International America Inc. (DIAM) in Southfield, Michigan. He is responsible for overseeing the company's North American technical planning, engineering planning, intellectual properties, creative design and North American research and development activities with offices in Southfield, Mich., and in Silicon Valley, Calif.

Bassett joined DIAM in 1987 as a design engineer in the thermal department where he worked to develop the company's thermal products business with the Detroit 3 customers. In 1994, Bassett took an assignment a Denso Corporation in Kariya City, Aichi, Japan, to work on thermal system projects for Japanese customers. He later returned to DIAM in 1996, where he was responsible for establishing and expanding the company's thermal system and controls business.

In 2002, Bassett was promoted to director of thermal systems engineering, and in 2007, he assumed the position of vice president of Thermal Systems Engineering, responsible for leading the overall direction of North American heating, ventilation, and air conditioning (HVAC) system design. He also assumed responsibility for research and development, electrical components and control systems for the thermal department. In 2014, Bassett was named vice president of Denso's North American Research and Engineering Center.

Bassett graduated from the University of Michigan in Dearborn, Michigan, with a Bachelor of Science in mechanical engineering in 1986. He is an active member of the Society of Automotive Engineers and the Tau Beta Pi Engineering Honor Society.

## ALEX BURNS

Alex joined Westland Helicopters in 1982 as a sponsored undergraduate and obtained a degree in mechanical engineering from Imperial College, London, in 1987. He worked in quality assurance at Westland for two years and then joined Meggitt PLC in 1989, where he held a number of positions, including engineering director of Meggitt Aerospace.

He was awarded an MBA from Cranfield University School of Management in 2000 and then became managing director of Meggitt Electronic Components, working in the automotive and medical industries.

Alex Joined the Williams F1 team in 2002 as general manager with responsibility for the test facilities, car production and operation and all support services. He was later promoted to chief operating officer and, in 2010, to chief executive officer of Williams Grand Prix Holdings PLC. He established Williams Advanced Engineering to apply F1 technology to hybrid and electric vehicles outside the sport.

In February 2014, Alex took up the post of chief executive officer of Millbrook, shortly after General Motors sold the business. He has led the transformation of Millbrook into an independent automotive test services provider working with customers around the world. Millbrook is now part of the test and measurement business segment of Spectris PLC.

## CHARLIE CHENG

Charlie Cheng has been representing the government of Anting, Jiading District, Shanghai, for four years. His company has represented multiple multinational organizations around the world. This year, Cheng was honored to represent Shanghai International Automobile City Group Co. Ltd. in North America.

Currently, Cheng is president of Shanghai Auto Parts Trading & Collaboration (SAPTC) LLC and helps to bridge new automotive worlds between the U.S. and China. SAPTC is supported by the National Auto and Spare Parts Export Base (Shanghai), a government-mandated program under China's Chamber of Commerce. As the North America window, SAPTC continues to provide cross-cultural communication between U.S. and Chinese tier cities. Company activities and operations include building business, market research, business strategy, sales support, M&A services, government support, and logistics supply chain management. Representation follows the entire automotive industry chain, such as OEMs, the aftermarket industry, manufacturing technology, EVs, connected and intelligent mobility systems, and any new automotive worlds.

Cheng had a more unique educational background being born and raised in Michigan, and then becoming an international student at the Shanghai American School (SAS) in Shanghai, China. Shanghai American School is the first international school established by the U.S. Embassy back in 1912. Cheng studied at SAS for most of his

# SPEAKERS

high school education. The senior year of high school was then spent back in Michigan at the International Academy Central Campus. The international academy is rated one of the best public high schools in the U.S. He graduated with a Bachelor of Economics from Michigan State University.

## **TIM EDWARDS**

Tim Edwards (BEng, MPhil, CEng, MIET) is a senior consultant in connected and automated vehicle technologies at HORIBA MIRA. Tim graduated from the University of Leicester in 2002 with a BEng (Hons) in electronic and software engineering. He then worked within the University Embedded Systems group, in partnership with a Tier 1 company, and was awarded an MPhil for his academic research in the area of “Fault-tolerant software architectures for control applications.”

Tim has been with HORIBA MIRA for more than 10 years where his work has spanned driver assistance systems, automated vehicles, cooperative driving and ITS. Tim was MIRA technical lead for a number of advanced collaboration R&D programs including Safespot, Watchover, and Saferider, and the current U.K. autodrives project. Tim led a range of design and implementation projects for the City Circuit, a unique purpose-built ITS test facility hosted at MIRA, and now advises international customers on CAV test procedure and test facility development.

## **RYAN EUSTICE, Ph.D.**

Dr. Ryan Eustice is the vice president of autonomous driving at the Toyota Research Institute (TRI) and head of the TRI Ann Arbor office. He also serves on Governor Rick Snyder’s “Council on Future Mobility,” a state government regulatory policy advisory board.

Dr. Eustice received a Ph.D. from the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution joint program in ocean engineering in 2005, and was a postdoctoral research scholar at Johns Hopkins University.

He joined the faculty at the University of Michigan in 2006 in the Department of Naval Architecture and Marine Engineering where he additionally holds joint appointments in the Department of Electrical Engineering and Computer Science, and the Department of Mechanical Engineering. He remains the director of the Perceptual Robotics Laboratory (PeRL) at U-M.

Dr. Eustice is perhaps best known for his work in advancing large-scale simultaneous localization and mapping, including visual mapping of the RMS Titanic. He has published over 120 technical papers, is the recipient

of a NSF CAREER award and ONR Young Investigator Award, and has been an associate editor for IEEE Transactions on Robotics, IEEE Robotics and Automation Letters and IEEE Journal of Oceanic Engineering, and is widely cited in the mobile robotics literature.

He was a core member of Team IVS in the 2007 DARPA Urban Challenge (one of 11 finalist teams) and worked collaboratively with Ford Motor Company for over a decade in self-driving vehicle research as a PI at the University of Michigan before joining TRI.

## **QIANG HONG, Ph.D.**

Dr. Qiang Hong’s research focuses on the planning and policy implications of transformative automotive and transportation technologies, including connected and automated vehicles. His research also includes personal mobility trends, automotive industry development, and transportation impacts in China. Qiang served as project panel member and chair of the Transportation Research Board (TRB) and the National Science Foundation (NSF).

Prior to joining CAR, Qiang was employed by Southern California Association of Governments (SCAG) and Southeast Michigan Council of Governments (SEMCOG). His responsibilities included developing regional transportation plans and providing technical support of modeling and policy analysis in both agencies. He was a principal planner at Beijing Municipal Institute of Urban Planning and Design, where he managed a variety of regional growth and transportation development projects.

Qiang received his Ph.D. in urban, technological, and environmental planning from the University of Michigan, Ann Arbor, and his M.Sc. in urban and regional planning and B.E. in architectural engineering from Tsinghua University, China.

## **PETER JANEVIK**

Peter Janevik is the CTO at AstaZero, the world’s first full-scale test environment for tomorrow’s road safety. Before joining AstaZero, Peter held a number of positions in Volvo Cars, chiefly having a vehicle dynamics and active/passive safety focus. Peter Janevik graduated from Chalmers University of Technology with a Master of Science degree.

## **PAUL JENNINGS**

Paul is an Oxford-educated physicist who has been with WMG for over 25 years leading automotive research with industrial and academic partners.

Since 2014, Paul has led WMG’s multidisciplinary intelligent vehicles research activity, which draws in



# SPEAKERS

capability from across the department including complex electrical systems, communications technology, experiential engineering, cybersecurity, modeling and simulation, and new business models.

He has a particular focus on the need for new approaches to test and evaluation for connected and autonomous vehicles, and led the team which created WMG's new 3xD simulator for intelligent vehicles.

## KEVIN T. KERRIGAN

Kevin Kerrigan is the senior vice president, Automotive Office and the senior automotive adviser to the State of Michigan with the Michigan Economic Development Corporation.

In this position, Kevin's primary focus is international business development for the MEDC's Automotive Office. Working with the world's automotive manufacturers he is promoting Michigan's automotive industry, building and maintaining strong international client relationships, nurturing economic development and assisting foreign-based companies who choose Michigan for their future expansion.

Kevin comes to state government with over 35 years of executive experience in the global automotive sector encompassing both technical and executive management in North America, Europe and Asia. Kevin led his own automotive design and engineering company for 20 years and has worked at an executive level for Tier 1 automotive suppliers. As a hands on executive Kevin has a proven track record of developing and growing companies within the automotive industry.

Prior positions Kevin had to joining MEDC include president of Eurotech Design Inc., a Michigan-based full service engineering organization; president of Adaptive Systems, a turnkey robotic integration company; chief engineer at Tata Technologies; and principal engineer for International Automotive Components based at their advanced development center in Troy, Michigan.

Born and educated in the United Kingdom, Kevin has lived and worked in the U.S. since 1983.

Kevin completed a full indentured British mechanical engineering apprenticeship in the U.K.

## HAN GEOM KO, Ph.D.

Dr. Hangeom Ko is a manager at the Automated Vehicle Center in Korea Automobile Testing & Research Institute (KATRI). He earned his B.S. and

M.S. degrees in transportation system engineering at Ajou University in 2006 and 2008, respectively. After, he worked for the Cheil Engineering Corporation for three years. Later, he received the Ph.D. degree in the transportation engineering at Ajou University in 2015. And then, he worked for research professor at Ajou University.

His research interests include traffic operation and management, automobile and transportation safety evaluation, and intelligent transport systems (ITS) and C-ITS. He is currently involved in research on development of assessment safety technologies of autonomous vehicles and management for construction of K-City (autonomous vehicles test-bed). He also supports Korea government policy of autonomous vehicles. These efforts are expected to be of great help in activating the fourth Industrial Revolution.

## RISTO KULMALA

Dr. Risto Kulmala works as principal advisor on ITS at the Finnish Transport Agency. He is and has been a coordinator of several major national and international R&D and deployment programs and projects with more than 300 publications, and a member or chair of various international ITS bodies as well as scientific and technical committees.

## JOHN MADDOX

John Maddox is leading a start-up company effort to create a national-scale automated and connected vehicle test facility in Michigan, the heart of the U.S. auto industry. He is responsible for all aspects of this activity, including serving the U.S. government, industry, and academic interests in advancing the readiness and deployment of CAVs through advanced product development, testing, accelerated standards setting, and ultimately certification.

Mr. Maddox is also responsible for University of Michigan Mobility Transformation Center (MTC) activities including industrial partnerships, government interaction, legal aspects, and strategy for the MTC. He leads the creation and operation of the MTC Southeast Michigan's connected-vehicle deployment.

Mr. Maddox has had a wide variety of experience in the automotive research and safety, including having served as the Associate Administrator for Vehicle Safety Research at the National Highway Traffic Safety Administration (NHTSA). Before working at NHTSA, Mr. Maddox spent over five

# SPEAKERS

years with Volkswagen Group as their compliance officer. Prior to that, he spent 14 years with Ford Motor Company as a senior research engineer

## DAN MATHIESON

Dan Mathieson is in his fourth term as mayor of the city of Stratford and has sat on municipal council since 1995. During his tenure, Dan has been a member on numerous boards and committees in health care, municipal affairs, law enforcement, athletics, not-for-profits, universities and colleges.

He is currently chair of the Ontario Municipal Property Assessment Corporation (MPAC), chair of Kings University College at Western University, chair of the Stratford Police Services Board, a member of the board of directors of Festival Hydro and Rhyzome Networks, and the advisory board of the University of Waterloo-Stratford Campus.

He holds a Bachelor of Arts from the University of Guelph and a Master of Public Administration from the University of Western Ontario.

## HUEI PENG, Ph.D.

Huei Peng received his Ph.D. in mechanical engineering from the University of California, Berkeley in 1992. He is now a professor at the Department of Mechanical Engineering at the University of Michigan. His research interests include adaptive control and optimal control, with emphasis on their applications to vehicular and transportation systems. His current research focuses include design and control of electrified vehicles, and connected/automated vehicles.

In the last 10 years, he was involved in the design of several military and civilian concept vehicles, including FTTS, FMTV, Eaton/Fedex, and Super-HUMMWV—for both electric and hydraulic hybrid concepts. He served as the U.S. director of the DOE sponsored Clean Energy Research Center—Clean Vehicle Consortium, which supports more than 30 research projects related to the development of clean vehicles in U.S. and China.

He currently serves as the director of the University of Michigan Mcity, which studies connected and autonomous vehicle technologies and promotes their deployment. He has served as the PI or co-PI of more than 50 research projects, with a total funding of more than \$45 million. He has more than 250 technical publications, including 110 in referred journals and transactions and four books. His h-index is 63 according to the Google scholar analysis. The total number of citations to his work is more than 15,000. He believes in setting high expectations and helping students to exceed

by selecting forward-looking and high-impact research topics. One of his proudest achievements is that more than half of his Ph.D. students have each published at least one paper cited more than 100 times.

Huei Peng has been an active member of the Society of Automotive Engineers (SAE) and the American Society of Mechanical Engineers (ASME). He is both an SAE fellow and an ASME Fellow. He is a Chang Jiang Scholar at the Tsinghua University of China.

## HABIB SHAMSKHOU

Habib is co-founder and program director of the GoMentum Station program in northern California. GoMentum Station is one of the 10 USDOT-designated autonomous vehicle proving ground and largest connected autonomous vehicle test-bed in the world. He is Global ITS/CAV practice leader at Stantec Consulting and he is based in San Francisco.

Habib is recognized authority on emerging advanced technologies in transportation with expertise in congestion management, safety, advanced mobility and program management. He pioneered several innovative transportation ITS projects in past 25 years in United States. Early in his career, he conducted first precursor system analysis for automated highway system for FHWA and from 1992–1998 he was one of the program manager of Automated Highway System (AHS) program. The National Automated Highway System Consortium was a \$200 million program in partnership with US Department of Transportation led by General Motors that concluded successfully in summer of 1998 by demonstration of first generation of hand-off, feet-off driving on I-15 corridor in San Diego.

## GOVERNOR RICK SNYDER

When Rick Snyder became Michigan's 48th governor in 2011, he pledged a commonsense approach to governing that focused on working together to find solutions for the state's toughest problems.

With the self-proclaimed moniker "one tough nerd," Governor Snyder has focused on making government more efficient and effective for Michigan's citizens. In the past seven years, the state has passed seven balanced budgets, eliminated a \$1.5 billion deficit and reformed burdensome tax and regulatory codes that were stifling business growth and job creation.

Raised in a Battle Creek home known for a strong work ethic and service to others, Governor Snyder's upbringing has aided in leading the state's comeback. A homemaker and a small business owner, his parents demonstrated the value of hard work.





# SPEAKERS

After graduating the University of Michigan, he joined accounting firm PwC (formerly Coopers & Lybrand). There, he met his wife Sue. They are the proud parents of Jeff, Melissa and Kelsey.

Following a successful career as partner at Coopers & Lybrand, Governor Snyder joined Gateway as president and COO. He later returned to Michigan to co-found an Ann Arbor-based venture capital fund.

The governor's background as a successful job creator has helped him better serve Michigan, producing results that earned him "Public Official of the Year" in 2014 from *Governing* magazine.

In the past seven years, Michigan created more than 500,000 new private-sector jobs. In 2017, Michigan's unemployment rate fell to its lowest point in 17 years.

He successfully implemented Healthy Michigan, an innovative and bipartisan plan that has provided affordable and quality health care for more than 600,000 hard-working Michiganders.

Among his greatest achievements, Governor Snyder built a bipartisan coalition of Michiganders to put Detroit back on a path to success.

With the governor's unwavering commitment, Detroit has emerged bankruptcy one of the greatest comeback stories in American history.

The governor's "Relentless Positive Action" has brought solutions to pressing problems and renewed optimism in Michigan's future, setting the state on the best possible path for a future of endless prosperity.

## ELLA TAYLOR

Ella Taylor leads on innovation, connectivity and data for the Centre for Connected and Autonomous Vehicles, a government unit which pulls together the U.K.'s activities and policies on connected and autonomous vehicles. Ella joined the team when it was established in 2015, previously working on connected vehicle policy, looking at issues ranging from connectivity and communication networks, to creating an ecosystem for connected vehicles to be developed. She has worked in the Department for Transport for five years, and originally joined the U.K. Civil Service as a government statistician.

## ADELA SPULBER

Adela Spulber joined CAR in 2015 as a transportation systems analyst within the transportation systems analysis research group. In

this role, she focuses on connected and automated vehicle research, new mobility services, and contributes to efforts in economic development, supply chain and logistics, and other topics.

Prior to working for CAR, Adela worked as a project coordinator at the Cross-border Operational Mission in Paris, a non-profit organization that carries out research and advocacy for cross-border development in Europe and around the world. Her responsibilities included leading research projects on economic development, transportation and public transit systems, as well as other cross-border public policies. Adela was also a consultant at Aramis, a consulting firm based in Paris, where she focused on evaluations and audits of European and French grant programs for economic development and employment.

Adela received a master's degree in regional and urban planning and a bachelor's degree in political sciences and European affairs from Sciences Po Paris in France. She is fluent in numerous languages, including English, French, Italian, and Spanish.

## KIRK T. STEUDLE

Kirk T. Steudle began his career with the Michigan Department of Transportation (MDOT) in 1987. A registered professional engineer, he rose through the ranks of the department to his current position. Gov. Rick Snyder appointed Steudle state transportation director on January 1, 2011. He also served as state transportation director from 2006 to 2010.

Steudle oversees MDOT's more than \$4 billion 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. MDOT currently has 2,500 employees.

Steudle was the 2014 chair of the Transportation Research Board (TRB) Executive Committee and has served on the TRB Executive Committee since 2004. He also chaired the Strategic Highway Research Program (SHRP 2) Oversight Committee for TRB. He was president of the American Association of State Highway and Transportation Officials (AASHTO) from 2011 to 2012 and he has been a member of the AASHTO Board of Directors since 2006.

Steudle is a national leader in the development of connected vehicle technology, which allows vehicles to communicate with the road and other

# SPEAKERS

vehicles to improve safety and mobility. He continues to work with a partnership of governments and auto manufacturers to further high-tech highway operations and, at the same time, improve Michigan's economy. Steudle was the 2014–2015 chair of the Intelligent Transportation Society of America (ITSA) Board of Directors. He is also a member of the Intelligent Transportation Systems (ITS) Program Advisory Committee to the U.S. Department of Transportation. In addition, he serves on the board of the Engineering Society of Detroit, the largest engineering society in the country. He also chairs the Michigan Mobility Transformation Center's (MTC) External Advisory Board (EAB). Steudle serves on the Lawrence Technological University (LTU) College of Engineering Advisory Board, and is a trustee for the Traffic Improvement Association (TIA) of Michigan.

In 2015, Steudle was named one of America's "Top 25 Government Innovators" by Government Technology. He received the Felix A. Anderson Image Award from the American Council of Engineering Companies (ACEC) of Michigan in 2013, and he was one of nine alumni inducted into the inaugural LTU Department of Engineering Alumni Hall of Fame in 2012. Steudle is the recipient of the 2011 P.D. McLean Award from the Road Gang for excellence in highway transportation. In 2010, he received the prestigious Thomas H. MacDonald award from AASHTO, recognizing him nationally for his continuous outstanding service and exceptional contribution to highway engineering.

In the past, Steudle has served as MDOT's chief deputy director, Bay Region engineer, and metro region deputy region engineer. He was also president of the 2009 Mississippi Valley Conference.

Steudle is a graduate of Adrian High School and LTU, where he earned a Bachelor of Science in construction engineering. He also served on the Essexville City Council from 1995 to 1999.

## **PETER SWEATMAN, Ph.D.**

Dr. Peter Sweatman is a co-founding principal of CAVita and has over 30 years of experience in transportation research and innovation, and the application of R&D. That experience encompasses vehicles, drivers, and infrastructure and impinges on technology, policy, and strategic planning. He is a trusted national voice on safety, ITS, transportation research and education, connected and automated vehicles, and freight technology and policy. His professional experience covers private industry, academia, and government. He has worked extensively in Europe and Asia-Pacific as well as the United States.

Dr. Sweatman is the founder and former director of the Michigan Mobility Transformation Center (MTC) (2013–2016), and former director of the University of Michigan Transportation Research Institute (UMTRI) (2004–2015). Under his leadership, MTC was created as an unprecedented \$100 million private/public ITS partnership with more than 50 major companies signed on as financial and R&D partners. Dr. Sweatman was responsible for the launch of the unique test facility Mcity, which was opened on July 20, 2015, and has set the bar for safe, off-roadway testing of automated vehicles. Mcity was called the "world's coolest test facility" by Bloomberg.

Dr. Sweatman is a past chairman of the board of ITS America, and also served as founding chair of the ITS America Leadership Circle. He served on the U.S. Department of Transport's ITS Advisory Committee, as well as a number of roles with the Society of Automotive Engineers. At the Transportation Research Board, he chaired the recent EU/US Symposium Towards Road Transport Automation, and served on the Committee on National Research Frameworks "Application to Transportation." He is currently working with the industrial consortium Together for Safer Roads.

On behalf of the Transportation Research Board (TRB), Dr. Sweatman chaired a joint EU/US Symposium, "Towards Road Transport Automation," in 2014. This select symposium of invited experts created three automated vehicle use cases that were subsequently included in the EC research program for 2016–17. The recently published symposium report is a milestone in advanced transportation technology R&D collaboration between the U.S. and Europe, "TRB Proceedings 52 Towards Road Transport Automation—Opportunities in Public/Private Collaboration."

CAVita LLC is a new partnership founded by Dr. Sweatman and Mr. Abbas Mohaddes. CAVita recently completed its first major assignment for the Transportation Research Board (TRB) and its executive committee. Under the project title, "The design of new TRB approaches, including industry engagement and sponsorship," CAVita reviewed 10 transformational technologies for their impact on transportation and devised new approaches to broad industry engagement, public/private collaboration and accelerated deployment of transformational technologies. The technologies investigated included connected vehicles, automated vehicles, cybersecurity, shared-use services, smart cities, big data, Internet of things, unmanned aerial systems, next gen and 3-D printing. TRB recently released e-Circular 208 authored by Mohaddes and



# SPEAKERS

Sweatman, entitled “Transformational Technologies in Transportation: State of the Activities.”

CAVita has developed an executive interaction series called CAVtalk. CAVtalk gatherings lead and facilitate regional and local conversations regarding connected and automated vehicles, with public/private executive participation and preparation of white papers documenting proceedings.

## **RÉAL “RAY” TANGUAY, C.M.**

On June 9, 2015, Mr. Ray Tanguay was named to the position of Automotive Advisor to the Minister of Innovation, Science and Economic Development Canada and the Ontario Minister of Economic Development and Growth. Mr. Tanguay retired as chairman for Toyota Motor Manufacturing Canada Inc., chairman for Toyota Canada Inc., and president of the Canadian Autoparts Toyota Inc. on March 31, 2015. In addition to his former responsibilities with Toyota in Canada, Mr. Tanguay provided a valuable contribution to the Global Toyota in his role as advisor to the Toyota Motor Corporation in Japan. He has always been a champion for Canada, playing a constructive role while at Toyota.

Mr. Tanguay’s main role as automotive advisor is to provide advice to the governments of Canada and Ontario on strengthening the value proposition for growing the automotive sector and for advancing a strategy to secure further investments in Canada.

In 2012, he was recognized for his achievements with an honorary Doctorate of Laws from Laurier University and an honorary Doctorate of Engineering from the University of Waterloo. His achievements were further recognized in 2017 when Mr. Tanguay was inducted into the Order of Canada, one of Canada’s highest civilian honors for his contributions to strengthening and promoting the automobile manufacturing sector in Canada.

## **DR. NOBUYUKI UCHIDA**

Nobuyuki Uchida has been a researcher at the Japan Automobile Research Institute since 1994. His research interest include the understanding of accident causation mechanisms and simulation of the common accident scenarios, for developing better preventive measures. From 2016, he is the Japanese co-leader of Trilateral (EU/U.S./Japan) Impact Assessment sub-group for Automation in Road Transportation.

## **GWEN VAN VUGT**

Gwen van Vugt has been director of TASS International Mobility Center B.V. since the beginning of 2014 when he joined TASS. Since then, he has focused on rebuilding the facilities that were acquired from the Dutch research organization TNO to a viable knowledge center and test center in the booming business of automated and connected driving. TASS provides tools for automated and connected driving development and has the laboratory facilities (including a fully instrumented public motorway) to validate the real-world performance of automated and connected applications. Gwen is responsible for the global business development and technology projects in this field of expertise.

Gwen fulfilled several positions in engineering, product management, and sales at Philips Electronics before he joined HERE to initiate and grow their traffic business to over 40 countries in the EMEA region.

He holds two master degrees: One in mechanical engineering from the Eindhoven University of Technology, and one in general management from Business University Nyenrode.

## **PETER VERMAAT**

Peter Vermaat is a principal ITS consultant at TRL. He has over 25 years’ experience in the electronics, communications and intelligent transport businesses, including research and development, product development, systems engineering, integration, test and operations. His principal areas of expertise are in the fields of cooperative and automated vehicles (CCAV), road user charging, and more recently in low carbon vehicles. He has been the technical lead in a number of CCAV projects for both the EC and Highways England in the U.K., most recently as TRL’s technical lead in a project investigating the feasibility of providing connectivity on road corridors on the U.K.’s strategic road network.



MICHIGAN ECONOMIC  
DEVELOPMENT CORPORATION

---

Dedicated to shared economic success, the Michigan Economic Development Corporation promotes the state's assets and opportunities that support business investment and community vitality. The MEDC's business assistance programs and services connect companies with people, resources, partners, and access to capital.