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March 12 2019 Intelligent Transportation Systems (ITS) Prairies Workshop

"The Significance of Intelligent Transportation Systems (ITS) in Urban and Rural Settings"

Radisson Hotel, Winnipeg Downtown 288 Portage Avenue, Winnipeg, MB R3C 0B8 Ambassador H Room

Time	"The Significance ITS in Urban and Rural Settings"
7:30 am – 8:30 am	Exhibitor Set-up
8:30 am – 9:00 am	Registration and networking with exhibitors
9:00 am – 9:05 am	Welcome – ITS Canada Mr. Chris Philp, CEO & Chairman
9:05 am – 9:10 am	Welcome – Manitoba Minister of Infrastructure, the Honourable Ron R. Schuler
9:10 am – 10.15 am	 Current and Future ITS Policies & Planning in Urban & Rural Settings Moderator Garreth Rempel, TRAINFO ITS Architecture and costs/benefits to infrastructure operators and the public- Geoff Knapp, Senior Project Manager, ITS Planning, WSP Canada Weigh to go (BC/AB) - Cory Edgar, PBX Engineering on behalf of Pamela McDermid, BC MoTI presented Autonomous vehicles planning in MB - Erica Vido, Director of Transportation Systems and Planning and Development
	Manitoba Infrastructure
10:15 am – 10:30 am	Health break and networking with exhibitors
10:30 am to noon	 Deployment of ITS Technologies and Opportunities in Urban & Rural Settings Moderator Erica Vido, Manitoba Infrastructure Weather / 511 – Ray Senez, Telenium Traffic Management Centre (TMC) – Jonathan Foord, A/Traffic Signal Branch Head, City of Winnipeg Connected technology (i.e. V2V, V2I, V2X) and ITS – Garreth Rempel, CEO and Co-Founder TRAINFO Corp.



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Noon – 12:45 pm	Lunch sponsored by Tacel Ltd.
	Keynote speaker Garreth Rempel
12:45 pm – 1:45 pm	Role of ITS in Movement of Goods
	Moderator: Jeannette Montufar, Morr Transportation Consulting
	• CVO – Terry Shaw, Executive Director Manitoba Trucking Association
	 Use of Data – Jonathan Regehr, Professor, University of Manitoba
	• Border- Neil Ternowetsky, CTO and Product Manager, TRAINFO
1:45 pm – 2:45 pm	Role of ITS in Multi-Modal Transportation in Urban & Rural Settings
	Moderator: Jonathan Foord, City of Winnipeg
	 King Street Pilot – Jesse Coleman, Big Data Innovation Team Lead, City of Toronto
	 Pedestrians/bikes – Jeannette Montufar, Founding Partner & CEO
	MORR Transportation Consulting
2:45 pm – 3:00 pm	Health break and networking with exhibitors
2.10 pm 0.00 pm	
3:00 pm – 3:50 pm	Panel Discussion "Growing Business Models through ITS"
	Moderator: Chris Philp, CEO ITS Canada
	Panelists:
	Shawn Schaerer, Northstar Robotics
	Craig Milligan, CEO MicroTraffic
	Jon Wescott, TappCar Inc.
3:50 pm – 4:00 pm	Summary and Conclusion
4:00 pm – 4.30 pm	Networking with exhibitors

Exhibitors: Electromega Ltd and Tacel Ltd.

Organizing Committee: Jonathan Foord, City of Winnipeg, Garreth Rempel, TRAINFO, Ray Senez, Telenium, Kyle Sabourin, Telenium, Erica Vido, Manitoba Infrastructure & Janneke van der Zee, ITS Canada





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Biographies:



Chris Philp is the Chairman and CEO of ITS Canada since September 1, 2016. Chris, a senior executive with CIMA+, has been involved in ITS and with ITS Canada for many years. He has served on the Board of Directors for 3 terms and served on the Board Executive as Treasurer. Recently Chris led a Task Force charged with identifying and pursuing new opportunities for ITS Canada. Chris is a graduate from McMaster University with a Bachelor of Engineering. ITS Canada is the national organization recognized as the thought-leader in transportation innovation, as well as being an important contributor to the discussion of transportation issues in Canada.

Ron R. Schuler was elected as the MLA for St. Paul in 1999 and re-elected in 2003, 2007, 2011 and 2016. Schuler is a graduate of the University of Manitoba with a degree in international relations and has served as a trustee with the River East School Division. An entrepreneur, former small-business owner and community volunteer, he has devoted his time to organizations like Big Brothers, Citizens on Patrol, Max Reinhardt Theatre Canada and the Manitoba Inter-cultural Council. He has three children and lives in St. Paul. In May 2016 Ron R. Schuler was appointed as Minister of Crowns



Services and August 2017 was appointed as the Minister of Infrastructure and minister responsible for Emergency Management and Public Safety.



Geoff Knapp, is a practicing Professional Engineer licensed in the Provinces of Ontario and British Columbia. He has more than 20 years of experience in transportation engineering consulting, with a focus on Intelligent Transportation Systems (ITS) and ITS Architectures. Geoff has been involved in the strategic planning, feasibility analysis, specification, design and deployment of ITS systems and software applications in North America, Europe, Africa, Australia, and Asia. Geoff is the leading expert for the ITS Architecture for Canada having been

directly and personally involved in all aspects of its development and maintenance since the original development in 1999. Currently, Geoff is working with ITS Canada to lead the latest update of the ITS Architecture for Canada. Geoff is also working with BC MoTI providing input for their effort to develop a Reference Framework for ITS.

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Cory Edgar is a Professional Electrical Engineer and Managing Principal with PBX Engineering Ltd. and acts as a Project Manager and Senior Design Engineer on both rural and urban transportation and ITS projects. He has over 15 years of experience with project management and design of electrical infrastructure for small to large scale ITS and multidisciplinary projects. He has worked on a number of award winning ITS projects. His project experience includes advanced traveller information, variable speed limits, wildlife detection and warning, rail crossing information, counter-flow lane control, emergency closure systems, and many more.



Cory is the recipient of ITS Canada's - 2016 Young ITS Canada Leadership Award.



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Erica Vido's career in the Province of Manitoba has spanned 15 years, during which time she has held increasingly more senior, leadership roles. In her current role as Director, Transportation Systems Planning and Development at Manitoba Infrastructure, she leads an inter-disciplinary team to plan and develop Manitoba's transportation system, delivering results for government and the economy in a complex, high-pressure environment. Erica is a proven leader in policy development and planning, bringing a big picture, strategic lens to often highly technical transportation situations. She applies multi-disciplinary,

collaborative approaches to transportation development, providing total community and business solutions for public investment priorities.

Jonathan Foord is the City of Winnipeg's Acting Traffic Signal and TMC Branch Head, where he has additional roles as the Transportation Division Asset Management Lead, and Public Works Department Innovation Lead. Jonathan also co-chairs the Canadian Intelligent Transportation Systems (ITS) technical committee on Advanced Traffic Management Systems. Self-described as an intrapreneur and data evangelist, he has been responsible for the design and implementation of Winnipeg's first Transportation Management Centre (TMC). Having built a foundation for innovation,



collaboration, and data driven decision making with Winnipeg's TMC and traffic signals; Jonathan is continuing to develop this system, a growing asset management foundation, and other digitaltwin initiatives, to further leverage cutting edge technology, partnerships, data, and cross-silo information sharing to do things, better, faster, and more efficiently. Jonathan holds a Bachelor's degree in Civil Engineering and a Master's Degree in Transportation Engineering from the University of Manitoba. In 2017, he was selected as one of Manitoba's Future 40 Under 40, and in 2018 was recognized with ITS Canada's Young Leader Award.



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Garreth Rempel is a Co-Founder and CEO of TRAINFO. He began his professional engineering career in 2006, working in the public sector, in academia, and as a consultant. In 2011 he earned a Ph.D. in Civil Engineering and in 2016 became an Adjunct Professor at the University of Manitoba. His areas of expertise in transportation engineering include intelligent transportation systems, road safety, and goods movement and he has co-authored four national engineering guidelines on these topics. Garreth has served on numerous committees with ITS Canada, the Transportation Research Board, Transportation

Association of Canada (TAC), and Canadian Institute of Transportation Engineers. He's currently a Board Member of TAC and serves as the Chair of the Connected and Automated Vehicle Task Force.

Terry Shaw oversees the planning and priorities of the Manitoba Trucking Association. Terry is the lead for political liaison, and relations with all levels of government, in both administrative and legislative functions. He is also the lead on media relations and, along with members of the Executive, acts as a spokesperson for the industry. Terry works with a variety of MTA committees, including as staff liaison for the Executive and Board of Directors. Nationally he is a regional Vice-President of the CTA and holds a CTA Board and Executive seat. Provincially he also represents the MTA with his involvement as part of a



variety of local committees including the Manitoba Employers Council, and the Winnipeg and Manitoba Chambers of Commerce.



Dr. Jonathan Regehr, P.Eng. is an Associate Professor of Civil Engineering at the University of Manitoba and also works as a private transportation consultant. His research and consulting experience involves transportation information systems and analysis, freight transportation, railway engineering, traffic engineering, and road safety. Dr. Regehr is the current Director of the Manitoba Highway Traffic Information System, a partnership between Manitoba Infrastructure and the University of Manitoba. Dr. Regehr currently serves as Chair of the Transportation Research Board's (TRB) committee on Highway Traffic Monitoring. He is also Vice President (North America) of the International Forum for Road Transport Technology and a

Board Member for the International Society for Weigh-in-Motion.

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Mr. Neil Ternowetsky is the CTO and a Co-Founder of TRAINFO. Neil studied Applied Mathematics at The University of Manitoba, and Data Science at Johns Hopkins University. Mr. Ternowetsky's 12 years of professional experience span various industries including transportation, insurance, and freight logistics. He has worked to develop and manage Big Data systems for balancing freight networks across North America; for running enterprise infrastructure platforms serving tens-of-thousands of users across North America; and machine learning systems that are collecting, storing, and dynamically forecasting the network impacts of delays at rail crossings. He is a member of the Society of Automotive Engineers DSRC Committee and V2I Task Force, and serves as an advisor to the FRA, Transport Canada and Canada's National Research Council on connected and autonomous vehicles.

Dr. Jeannette Montufar is a successful entrepreneur who is wellrecognized internationally as a trailblazer in transportation engineering. For nearly fifteen years she was a professor in civil engineering at the University of Manitoba, during which time she published over 200 technical papers and reports on various topics associated with transportation engineering and planning. As an entrepreneur, Dr. Montufar is founding partner and CEO of MORR Transportation Consulting Ltd., a highly-specialized transportation engineering firm located in Winnipeg.



She is also co-founder of TRAINFO Corp., a Winnipeg-based transportation technology firm. Dr. Montufar has been an active member of various professional organizations for over 20 years including the Transportation Association of Canada, the Institute of Transportation Engineers, ITS Canada, the Transportation Research Board, and others. Dr. Montufar has received over 15 local, national, and international awards for her contributions to transportation engineering, as well as for her community service. In 2016 Dr. Montufar was inducted as Fellow of the Canadian Academy of Engineering for her contributions to the engineering profession, and in 2018 she was made Fellow of Engineers Canada.



Shawn Schaerer M.Sc. CEO, Is the founder of Northstar Robotics Inc. He has over 18 years experience developing robotic systems and has held senior management and CTO positions for surgical robotics, medical imaging and robotics companies. Shawn has been involved in several successful early stage technology companies and was co-founder of Lumoplay Inc and Cogmation Robotics Inc. He also led the development of IMRIS Inc's neurosurgical robotics system, SYMBIS. Shawn has considerable

experience in the development of systems and software for Surgical and Industrial Robots, Medical Devices and Image Guidance Systems.

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Craig Milligan is a consulting road safety, asset management, and ITS engineer at Fireseeds North Infrastructure. He recently helped Yukon update their ITS strategy, architecture, and subsystem plans, and he developed their successful application for more than \$10M in federal assistance to execute these plans through the National Trade Corridor Fund. Craig is also helping cities and highway departments to leverage their ITS assets for road safety through the startup MicroTraffic, which he co-founded. MicroTraffic uses AI to intelligently analyze risks in overhead traffic video. MicroTraffic has been



deployed in 5 states and 5 provinces at 150 intersections, and risk metrics from MicroTraffic have led to more than \$20 million in road safety improvement projects. Craig is the chair of the TAC Road Safety Standing Committee and a member of the U.S. Transportation Research Board's Strategic Management Committee. Craig worked for the World Bank and for Manitoba Infrastructure before venturing into consulting in 2014.



Jon Wescott is the current majority owner and Board Chair of TappCar Inc. and Senior Partner at the Alberta Counsel Lobby and Law Firm. Jon studied at the University of Lethbridge and received two undergraduate degrees in business management and Arts. After university, Jon completed the courses needed to become a Microsoft certified solutions expert and used his knowledge to become a small business owner in the electronics field dealing with audiovisual sales and installation. After success in business, Jon became interested in the law and politics and

subsequently graduated from the U of A law school in 2007 and began a legal career in Edmonton. Acting as both a litigator and as a business advisor, Jon used his knack for simplifying complex technical issues with industrious solutions to add value to his legal clients. This business experience and technological knowledge ultimately led to the creation of TappCar which is a Canadian based ridesharing company that operates within the new gig economy. TappCar matches passengers to full time and casual drivers and operates in Edmonton, Winnipeg and Grande Prairie with more Canadian locations to come this year. Jon is married with two young children and keeps in shape by acting as a certified Kansas city BBQ society judge.