OTC
Traffic Engineering Symposium

Thursday, 27 October 2022

Nottawasaga Inn Resort and
Conference Centre
6015 Highway 89, Alliston

Register online at:
https://apps.otc.org/Events/

Ontario Traffic Council
www.otc.org

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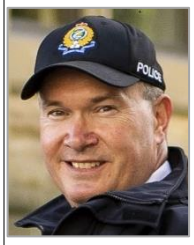
SYMPOSIUM MC		**Deanna Green, MSc., P.Eng.** Senior Transportation Engineer *BA Consulting Group Ltd.*

SYMPOSIUM PROGRAM

7:55–8:00 AM	Welcome/Opening Remarks
8:00–8:45 AM	**What has changed, 2022 Ontario Traffic Manual (OTM) Book 7, Temporary Conditions**  **Derek O'Brien** Business Development Manager *Direct Traffic*  **Kelly Schmid, LEL, CET** Head, Traffic Operations & Engineering Section, Traffic Office *MTO* *This short presentation will cover what is new in the 2022 OTM Book 7, what has been updated in the book and some specific recommendations for the use of Automated Flagger Assistance Devices, AFADs.*

8:45–9:30 AM	**Panel Session:** Innovation and Technology-New Innovative Transportation Sensors in Action  **Willem Van de Mierop** Co-founder *AYES* **City 2.0: Accessible Streets in a Scalable Way** *AYES is a European based company developing the accessible city of tomorrow. They have developed a 100% stand-alone solution that amongst other things recognises the pedestrian traffic light state and helps you get on the right bus with the use of the smartphone. A lot of cities currently face difficulties with making their city accessible. Cities and governments can use our technology to make their streets accessible in a scalable, more affordable way, enabling visually impaired and blind people safe and equal access.*  **Gabe Ochoa** Head of Engineering *Numina* **(Re)Measuring Multi-year Mobility Data** *Traffic patterns and the usage of public infrastructure can change greatly over seasons and year over year. At Numina, we gather privacy first data to help understand how public infrastructure is used. We'll look at specific examples of how we can ask new questions using previously collected data.*

9:30–10:15 AM	 **Toronto Transportation Collaboration with Toronto Hydro for Climate Action** **Roger Browne, M.A. Sc., P. Eng.** Director, Traffic Management *City of Toronto* *Learn about how the City of Toronto Transportation Services Division is working in collaboration with Toronto Hydro to help meet the City's climate action objectives through the conversion of legacy street light technology to LED lighting. More importantly, the plan includes the leveraging of that technology to better control the usage of the street lights and to build a sensor network that includes emissions, noise, traffic speed and traffic cameras off the tops of the LED lights themselves. Data from this network will ultimately feed an emissions and noise model that will serve as the baseline for comparison for all climate action initiatives going forward within the City.*
10:15–10:30 AM	Break
10:30–11:15 AM	 **Organized Vehicle Takeovers: Collaborative Solutions Within Engineering & Enforcement** **Staff Sergeant Ryan Snow** *Halton Regional Police Service* *Following the pandemic, 'takeover' style events have become a trend that continues to test local law enforcement & roads authorities in terms of road safety. Utilizing the 3 E's approach (Education, Engineering & Enforcement) attendees will be guided through a case study of a planned takeover event in Oakville, ON & a multi-faceted response orchestrated by Halton Police. Lessons learned and a commentary on next steps and recommendations will also be provided. Attendees will also have the opportunity to ask questions and gain a police perspective related to this continued trend.*

11:15AM –12:00 PM	**Panel Session:** Emerging Technologies & Use of Big Data  **Reza Omrani** Senior Project Manager *CIMA+* **Application of Big Data in Transportation: A Case Study to Evaluate the Impact of Covid-19** *The Covid-19 Pandemic made an unprecedented change in travel behaviour in terms of both traffic volume and travel time across Ontario's roadway network. This presentation is aiming to create a better understanding on application of Big Data in traffic engineering studies, and to establish the mobility, reliability, and operating conditions of highways, expressways, and municipal arterial roads in the GTHA. A before-and-after analysis was conducted as part of the study to evaluate the impact of the Pandemic on travel times across Ontario.*  **Greg Kent, P. Eng.** Traffic Engineering Manager *EXP* **Big Data – Is Its Speed Data Ready for Innovative Applications** *Big Data solutions for traffic and transportation engineering have grown significantly over the past five to ten years. Processing power, ease and simplicity of data collection and AI development make is a desired approach to addressing issues in innovative ways. As this area further develops its application and strength grows. Is it time to expand its abilities into applications requiring speed data, and if so how far can it go. This presentation will look into the innovation desires of one municipality and the ability of Big Data to support it.*

12:00–1:00 PM	Lunch
1:00–1:45 PM	**Mississauga's Neighbourhood Area Speed Limit Project** **Colin Patterson, C.E.T., RSP1** Manager, Traffic Services & Road Safety *City of Mississauga* *The City of Mississauga began a city-wide speed limit change in 2020, reducing the speed limit on all residential roadways from 50 km/h to 40 km/h. This project also included the establishment of neighbourhood 30 km/h school zones speed limits and school area Community Safety Zones. The presentation will discuss the project scope, implementation plan, challenges, and preliminary results.*
1:45–2:30 PM	 **Multi Use Paths and Offset Gates – The Controversy Continues** **Amanda Gebhardt, BLA, OALA, CLSA** Manager, Landscape Architecture *WSP* *Barrier controls at trail entrances, such as offset gates and bollards, are a widely implemented standard practice to control access and user behaviors. Although implemented with good intent, these features can create barriers for trail users and in some cases impact user safety. When designing trails, we need to pause and question the purpose of various types of access controls and their effectiveness as a solution. WSP will discuss the application of barrier controls such as offset gates and bollards and alternative design tools to achieve the desired outcomes.*
2:30–2:45 PM	Break

2:45–3:30 PM	 **Mitigating Hostile Vehicle Acts When Planning Special Events** **Jeffrey Suggett, M. Sc.** Senior Project Manager, Transportation *CIMA+* *CIMA+ was retained by Ontario Traffic Council to develop guidelines that will provide event organizers with direction when planning a special event and mitigating risks associated with drivers committing a hostile act resulting in injuries to pedestrians or cyclists or resulting in damage to infrastructure. These guidelines include a discussion on typical roles and responsibilities, a risk assessment tool, a review of current devices available in Ontario, how to set up a safe perimeter around your special event and case studies on recent planned special events that utilized hostile vehicle mitigation measures.*
3:30–4:15 PM	 **Congestion Management and Vision Zero - Achieving A Balance** **Rajnath Bissessar** Manager - Traffic Systems Operations *City of Toronto* *The Traffic Systems Operations (TSO) is responsible for the day-to-day operations of the City of Toronto's 2,400 traffic control signals on three traffic control systems – SCATS, SCOOT and TransSuite. TSO is often faced with competing (and sometimes contradictory) requests from its own staff and from staff in other units. Even though the goal of the City's traffic signal operations policies is to balance the needs of all road users, historically there was an emphasis on movement of vehicles. The City's rollout of the Vision Zero program has resulted in a distinct shift in our operational policies with more emphasis being placed on the safety and movement of the more vulnerable road users. This presentation will discuss these shifts and the resulting impact on the road network.*