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Hours

ITE’s Registration Desk is located on the hotel’s Lower Concourse level, just in front of the Sheraton and Osgoode exhibit hall.

Registration Hours
Saturday, July 29 | 2:00–5:00 p.m.
Sunday, July 30 | 7:30 a.m.–7:30 p.m.
Monday, July 31 | 7:00 a.m.–5:00 p.m.
Tuesday, August 1 | 7:00 a.m.–5:30 p.m.
Wednesday, August 2 | 7:30–10:00 a.m.

Exhibit Hall Hours
Sunday, July 30
7:30 a.m.–4:30 p.m.
Exhibit Hall Set Up (Exhibitors Only)
6:00–7:30 p.m.
Welcome to Toronto Opening Reception in Exhibit Hall

Monday, July 31
10:00 a.m.–5:00 p.m.
Exhibit Hall Open
10:00–11:00 a.m.
Beverage Break in Exhibit Hall
3:30–4:30 p.m.
Beverage Break in Exhibit Hall

Tuesday, August 1
9:00 a.m.–4:30 p.m.
Exhibit Hall Open
9:30–10:30 a.m.
Beverage Break in Exhibit Hall
3:15–4:15 p.m.
Beverage Break in Exhibit Hall
Welcome to Toronto!

On behalf of the Institute of Transportation Engineers (ITE), we welcome you to the Joint ITE/CITE 2017 Annual Meeting and Exhibit in Toronto, ON, Canada. We are excited for you to experience this new model of a jointly hosted International/District Annual Meeting. The meeting combines elements from both ITE International and the Canadian ITE (CITE) District, bringing ITE members together from across the globe to engage in international policy discussions and hands-on practice. For our Canadian members, the meeting brings hundreds of experts to Toronto to share new ideas and experiences. For members outside of Canada, this is a great opportunity to learn and network in the warm, embracing Canadian culture.

The theme of the Joint ITE/CITE 2017 Annual Meeting and Exhibit is “Transportation for All: Putting New Ideas into Practice.” The program focuses on leading-edge issues that affect our members, such as Vision Zero, Smart Communities, Transportation and Health, and Automated and Connected Vehicles, as well as staples to our profession such as Trip Generation, Transit, Traffic Signals, and Transportation Systems Management and Operations. New this year we have created “pathways” to guide your learning through sessions, workshops, and technical tours. These pathways are complemented by a diverse set of podium and poster sessions designed to help you stay current on the latest developments in your field.

Our plenary sessions and Tuesday Power Lunch will be led by a diverse group of thought leaders who offer perspectives from the public, private, and academic sectors. They will speak to the key topics and trends explored throughout the meeting’s pathways. You will have the opportunity for professional development and career growth through interactive sessions designed to help you stay current on the latest developments in your field, as well as further develop your communication and leadership skills. The Exhibit Hall will introduce you to cutting-edge industry products.

The Joint ITE/CITE 2017 Annual Meeting and Exhibit combines the best of CITE’s local traditions and events with those of the International ITE Annual Meeting and Exhibit. We invite you to have fun and interact with your peers during events such as the Welcome Reception, Traffic Bowl Grand Championship, Hockey Night in Canada Reception, the MiteY Race International Edition, and a Street Hockey Game (a longstanding CITE Meeting tradition). In addition to these family-friendly events, ITE’s new Family Program Subcommittee has planned family tours and activities.

This meeting is your time to take advantage of everything ITE has to offer—learning from industry leaders, networking with peers, seeing innovations in the Exhibit Hall, touring local projects, and enjoying comradery within ITE’s community of transportation professionals. You will have the opportunity to learn about and celebrate the achievements of your peers at the ITE and CITE Awards Lunch and Leadership Awards Lunch. We look forward to learning, engaging, and celebrating with you.

Shawn J. Leight, P.E., PTOE, PTP (F)
President
Institute of Transportation Engineers

Jeffrey F. Paniati, P.E. (F)
Executive Director and CEO
Institute of Transportation Engineers
On behalf of the Canadian District and the Local Arrangements Committee, it is my pleasure to welcome you to the Joint ITE/Canadian ITE (CITE) 2017 Annual Meeting and Exhibit in beautiful Toronto. Over the coming days, you will find unparalleled opportunities to enhance your professional knowledge and expand your network of colleagues, all while enjoying Toronto’s cosmopolitan flair and big city charm! We have planned an exciting program for you, featuring the conference elements Canadian members have come to expect, such as our annual Student Mixer and Street Hockey Challenge.

I would like to thank the Local Arrangements Committee members for their assistance and enthusiasm in preparing for the meeting. The committee has helped develop an exemplary program of local events that I am sure all attendees will enjoy. I would also like to thank ITE Executive Director and CEO Jeff Paniati and Headquarters staff, who perform the lion’s share of the work in organizing and marketing this great event. As the first truly integrated International and District Annual Meeting in some time, their support and willingness to cooperate with “the locals” in planning the conference was genuine and truly appreciated. And who could forget our number one supporter, ITE International President Shawn Leight, whose likeness has travelled across North America over the past year inviting one and all to join us in Toronto. Welcome to Canada, Shawn, where hockey was invented!

Thank you all for attending the Joint ITE/CITE 2017 Annual Meeting and Exhibit in Toronto and for your continued support of our organization. ITE is truly a community of transportation professionals, and your source for expertise, knowledge and ideas. We hope your annual meeting experience is informative, memorable, fun and full of opportunities to visit and connect with colleagues and peers from all over the world. I also encourage you to get out and see all that our wonderful city has to offer. Enjoy Toronto!
Acknowledgements

ITE would like to acknowledge the generous support of the following organizations.
Acknowledgements

ITE would also like to thank the following individuals for devoting their time and energy to help plan this conference:

**Technical Program Committee**
- **Russell Brownlee**, 30- Forensic Engineering (Local Arrangements Committee)
- **Kevin Chang**, University of Idaho (Transportation Education Council)
- **Rich Cockley**, CH2M (Transportation Safety Council)
- **Ron Eck**, Consulting Engineer (Transportation Forensics and Risk Management Council)
- **Jim Gough**, WSP (Local Arrangements Committee)
- **David Hale**, Leidos (Transportation Engineering Council)
- **Dan Hardy**, Renaissance Planning (Transportation Planning Council)
- **Joanna Kervin**, Toronto Transit Commission (Local Arrangements Committee)
- **Ken King**, Virginia Department of Transportation (Traffic Engineering Council)
- **Beverly Kuhn**, Texas A&M Transportation Institute (Coordinating Council)
- **John Lower**, Iteris (Transportation System Management & Operations Council)
- **Larry Marcus**, Wallace Montgomery & Associates, LLP (Transportation Planning Council)
- **Ryan Martinson**, Stantec (Sustainability Standing Committee)
- **Bob Murphy**, RPM Transportation Consultants, LLC (Pedestrian and Bicycle Standing Committee)
- **Brent Ogden**, Kimley-Horn and Associates, (Railroad Grade Crossing Standing Committee)
- **Eric Rensel**, Gannett Fleming (Transportation Systems Management & Operations Council)
- **Amir Rizavi**, VHB (Transportation Consultants Council)

**CITE Executive Committee:**
- **President-Jen Malzer**, City of Calgary
- **Vice-President-Edward Soldo**, City of London
- **Secretary-Treasurer-Julia Salvini**, Salvini Consulting
- **Past President-Peter Truch**, Stantec
- **Director-Gene Chartier**, Paradigm Transportation Solutions Limited
- **District Administrator-Steven Garner**
- **Communications Coordinator-Evonne Donaher**

**Family Program Subcommittee**
- **Chair - Alison Catarella Michel**, Urban Systems Ltd
- **Karen Aspelin**, MaxGreen Transportation Engineers, LLC
- **Richard Day**, Stantec Consulting
- **Kate D'Ambrosio**, Georgia DOT
- **Meredith Emory**, Kimley-Horn and Associates
- **Jenny Grote**

**Joint ITE/CITE 2017 Annual Meeting and Exhibit Local Arrangements Committee**
- **Chair-Gene Chartier**, Paradigm Transportation Solutions Limited
- **Vice-Chair-Jim Gough**, WSP
- **Technical Program-Jim Gough**, WSP and Joanna Kervin, Toronto Transit Commission
- **Technical Tours-Amy Jiang**, BA Group
- **Social Program-Angela Gibson**, Regional Municipality of Durham
- **Volunteers-Matt Davis**, City of Toronto
- **District Events-Kelsey Waugh**, LEA Consulting
- **Finance and Administration-Farah Shahla**, City of Mississauga
- **Communications-Russell Brownlee**, 30- Forensic Engineering

**Phil Rust**, City of San Diego (Roundabouts Standing Committee)
- **Jeff Smithline**, Sam Schwartz Transportation Consultants (Complete Streets Council)
- **Todd Szymkowski**, Gannett Fleming (Ethics Standing Committee)
- **Steven Tupper**, Cape Cod Commission (Public Agency Council)
- **Brian Welch**, Regional Transportation District (Transit Standing Committee)
- **Jeff Young**, McHenry County Division of Transportation (Public Agency Council)

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**Program Notes**

**Annual Meeting Mobile App**
ITE, in conjunction with Expo Pass, is excited to provide a streamlined, easy to use, event app to access from your electronic device. With the app, you can view speakers and sessions, plan your event schedule, evaluate sessions, and access essential event details along with any last minute changes.

To download the app:
- Go to expopass.com/ios or expopass/android or search for “Expo Pass”
- Use the email associated with your ITE account. Once created you will receive an email with a 4-digit code to verify your account

To successfully earn PDH/CM credit from sessions and/or tours which you have attended, you must complete an evaluation either through the mobile app or using the online survey. See Earning PDHs on page 9.

If you have difficulties accessing the mobile app, please see Zach Pleasant at the ITE Booth (Booth #209) in the exhibit hall.

**Accessing the Internet**
To access the Internet while attending the educational content at the Sheraton Centre, find SSID Sheraton Meetings and enter the password ite2017.

The Internet is provided courtesy of AECOM.

**Capture all Annual Meeting Content in Toronto**
This year ITE will make Content Capture services available for the conference to its members. This means that all sessions will be recorded and the speaker presentations will be synced with the audio and “captured” in a format that can then be viewed following the Annual Meeting.

Content is available to both attendees and non-attendees. Purchases can be made in the ITE Booth (Booth #209) at the Expo or at the Registration area. The content will be accessible on ITE’s Learning Hub within one week following the Annual Meeting via ITE’s Marketplace. Please note: only the individual purchaser will be able to receive PDH credits.

**Pricing (US Dollars):**
- Fully registered Annual Meeting attendees can receive ALL content for $99.* Price increases to $129 on August 11, 2017.
- Full Package for non-attendees/other registration categories: $399 ITE Member/ $499 Non-Member.

*Non-members who are fully registered for the Annual Meeting will automatically become members of ITE.

**Ticket Refund Policy**
Tickets for individual events are sold on a space-available basis and may be purchased at the ITE Registration Desk. No refunds are issued for unused tickets, whether purchased as part of a registration package or separately.

**Payment Information**
On-site registration and event fees may be paid by cash, (US Dollars only) check (for the exact amount only), or credit card (American Express, MasterCard, or Visa). Make checks payable to the Institute of Transportation Engineers. ITE does not accept Discover.

**Cell Phones**
Please be courteous to fellow meeting attendees: set your cell phones to vibrate before entering sessions. If you need to make or take a call, please step out of a session. If you need assistance with using your phone in Canada, visit http://bit.ly/2uew2Qn.

**Attire**
Participants are encouraged to wear business casual attire during the meeting's technical program events. Come to the Sunday Welcome to Toronto Reception in casual Canadian or Caribbean-themed attire. Feel free to dress down and come to the CITE District Traffic Bowl and the ITE Traffic Bowl Competition in jeans and the Hockey Night in Canada Reception in your favorite team’s attire.

**Videotaping and Audio Recording**
Videotaping and audio recording of sessions or technical exhibits as well as the unauthorized use of ITE-copyrighted material is prohibited.

**Consent to Use of Photographic Images**
Registration and attendance at, or participation in, ITE meetings or other activities constitutes an agreement by the registrant to ITE’s use and distribution of the registrant or attendee’s image or voice in photographs, videotapes, electronic reproduction, and audiotapes of such events and activities.

**Event Tickets**
Attendees with a green badge, will be required to hand-in a ticket for some events and all technical tours will require a ticket. Tickets are distributed with your badge. Spouse tickets are distributed with the registered attendee’s badge. Please make sure to check for your tickets when you pick up your badge. If your tickets are missing or incorrect, please notify one of our registration staff.

**Badges**
Registration name badges must be worn while attending all technical sessions, social functions, and while in the exhibit hall.

**Parking**
Valet parking services are available at the Sheraton Centre for $50 CAD per day. There is no self-park option for hotel parking. There is an underground municipal lot at 110 Queen Street West (across from the hotel) that is self-park.
Disclaimer

Individuals involved in developing, administering, and delivering learning events demonstrate high standards of professional conduct and do not discriminate against learners on the basis of gender, age socioeconomic or ethnic background, religion, sexual orientation, or disability.

The following program includes individuals confirmed at the time of publication. Information is subject to change. The views and opinions expressed by meeting participants are those of the participants and do not reflect official ITE Policy unless so stated.

Earning PDHs (Professional Development Hours) and CM (Certification Maintenance) Credits

The technical content of this meeting meets most state and provincial registration board requirements for P.E./P.Eng. Licensure, Professional Traffic Operation Engineers® (PTOE), Professional Transportation Planners® (PTP), American Institute of Certified Planners (AICP), Traffic Signal Operations Specialists® (TSOS), and Florida Board of Professional Engineers (EXP0003871).

To successfully earn PDH/CM credit for sessions and/or tours that you have attended, you must complete an evaluation. This can be done either through the mobile app or through an online survey. Via the mobile app: Use the instructions on page 8 to download the app. Select the session you are attending from the schedule and you will be able to complete an evaluation once the session ends. Via the online survey: go to http://bit.ly/ITEToronto2017. Sessions and/or tours eligible for PDH/CM credit towards PTOE, PTP, and/or AICP certification renewal(s) have been identified in this program.

As an additional service, ITE hosts the Professional Competency Record Keeping System on its website at www.ite.org/pdrks. The transcript confirms the guideline set forth by NCEES. This service will aid in the record keeping of all your professional development activities.

Please contact Courtney Day at 202-785-0060 ext. 140 or cday@ite.org if you have questions about this process.

Family Welcome Center

On Sunday, July 30 from 12:00–6:00 p.m. and on Monday, July 31 from 8:00 a.m.–12:00 p.m., ITE attendees and family members can meet in the Family Welcome Center (VIP room on the Concourse Level at the Sheraton Centre). Come and get information and share thoughts about how to explore the great city of Toronto and the beautiful Canadian surroundings. For a list of family activities taking place during the conference, please go to page 38.

We would like to thank Morrison Hershfield for sponsoring the Family Welcome Center.

Child Care

For those bringing children to the 2017 Joint ITE/CITE Annual Meeting and Exhibit, child care can be arranged through Improv Care. This local company will provide a babysitter for your hotel room or other space on an individual basis. To make arrangements or to find out more information, please visit the Improv Care website at http://improvcare.ca/. If you would like to speak with someone directly regarding child care, please call Improv Care’s main office at 647-287-5433. Please note that while ITE does not endorse any specific company, we are providing this resource as an available option for families.

Bringing communities together

AECOM is proud to sponsor the Joint ITE/CITE 2017 Annual Meeting and Exhibit.

aecom.ca
Schedule at a Glance

Saturday, July 29

7:30–8:30 a.m.
Joint LeadershipITE/International Board of Direction Breakfast
Linden

8:30–10:00 a.m.
International Board of Direction Meeting*
Wentworth

8:30 a.m.–5:00 p.m.
LeadershipITE Meeting
Huron

9:00 a.m.–5:00 p.m.
CITE Executive Committee Meeting*
Dufferin

9:00 a.m.–4:00 p.m.
CITE Technical Liaison Committee Meeting
Simcoe

1:00–5:00 p.m.
CITE EXCITE Committee Meeting*
Kenora

2:00–5:00 p.m.
Registration Open
Lower Concourse

4:00–5:30 p.m.
CITE Traffic Engineering Committee Meeting
Simcoe

Sunday, July 30

7:30 a.m.–7:30 p.m.
Registration Open
Lower Concourse

7:30 a.m.–4:30 p.m.
Exhibit Hall Set Up
Osgoode and Sheraton Ballrooms

8:00–11:00 a.m.
Coordinating Council Meeting
Wentworth

8:00 a.m.–12:00 p.m.
CITE Board of Directors Meeting*
Kenora

8:30 a.m.–3:00 p.m.
TransportationCamp
Grand East
Sponsored by LEA Consulting

9:00 a.m.–5:00 p.m.
LeadershipITE Meeting
Huron

11:00 a.m.–12:30 p.m.
Traffic Engineering Council Meeting
Elgin

11:30 a.m.–1:00 p.m.
Transportation Education Council Meeting
Wentworth

12:00–1:30 p.m.
Toronto Overview by Tourism Toronto
VIP Room

12:00–6:00 p.m.
Family Welcome Center Open
VIP Room
Sponsored by Morrison Hershfield

12:30–2:00 p.m.
Transportation Forensics and Risk Management Council Meeting
Elgin

1:00–3:00 p.m.
CITE Training Committee Meeting*
Kenora

1:30–4:00 p.m.
Recreational Cycling Meetup
Meet in VIP Room 15 minutes prior to departure

2:00–4:00 p.m.
Toronto on Foot–A Downtown Primer
Meet in VIP Room 15 minutes prior to departure

2:30–4:30 p.m.
Transportation Consultants Council/Public Agency Council/Transportation Education Council Meeting
Elgin

3:00–4:30 p.m.
Sustainability Standing Committee Meeting
Wentworth

4:00–6:00 p.m.
CITE Traffic Bowl
Grand East

4:30–6:00 p.m.
Paint and Plastic: Quick Build Options for Active Transportation Roundtable by the Complete Streets Council
Wentworth

5:00–6:00 p.m.
First Timer/Global Member Attendee Reception
Waterfall Gardens
Sponsored by Neel-Schaffer

6:00–7:30 p.m.
Welcome to Toronto Opening Reception in Exhibit Hall (Exhibit Hall Open)
Osgoode and Sheraton Ballrooms

* By invitation only ** Separate fee required
### Monday, July 31

**7:00 a.m.–5:00 p.m.**  
Registration Open  
Lower Concourse

**8:00–10:00 a.m.**  
ITE Opening Business Plenary Session—Smart Communities  
Grand West and Centre

**8:00 a.m.–12:00 p.m.**  
Family Welcome Center Open  
VIP Room

**10:00 a.m.–5:00 p.m.**  
Exhibit Hall Open  
Osgoode and Sheraton Ballrooms

**10:00–11:00 a.m.**  
Beverage Break in Exhibit Hall  
Osgoode and Sheraton Ballrooms  
Sponsored by AECOM

**10:30 a.m.–12:00 p.m.**  
ITE CV/AV Steering Committee Meeting  
Kenora

**11:00 a.m.–12:00 p.m.**  
Technical Sessions  
- Transportation for All: Canadian Perspectives  
  Dominion North  
  Sponsored by WSP
- ITE and Grassroots Advocacy  
  Dominion South
- New Directions in Trip Generation: Moving Forward  
  Civic South  
  Sponsored by VHB
- How to Improve Your Productivity: A Case Study in Staff Improvement  
  City Hall
- Countdown to Zero  
  Grand East

**TRB TSSC Traffic Signals Systems Technology and Standards Subcommittee Meeting**  
Civic North

**TRB TSSC Multimodal Traffic Signal Systems Subcommittee Meeting**  
Simcoe

**12:00–2:00 p.m.**  
ITE and CITE Awards Lunch with LeadershipITE Graduation  
Grand West and Centre

**1:00–2:00 p.m.**  
TRB TSSC Traffic Signal Timing Subcommittee Meeting  
Civic North

**2:00–3:00 p.m.**  
TRB TSSC Research Subcommittee Meeting  
Simcoe

**TRB TSSC Simulation of Traffic Signal Systems Subcommittee Meeting**  
Civic North

**2:00–3:30 p.m.**  
Technical Sessions  
- We are the Champions: Roundabouts of the Future  
  Dominion North  
  Sponsored by MTJ Roundabout Engineering
- Trial of the Century!!!  
  Dominion South
- Building Smart Communities  
  Civic South  
  Sponsored by VHB
- ITE Town Hall Business Meeting (Constitutional Amendments will be addressed here)  
  City Hall

**Vision Zero Steering Committee Meeting***  
Kenora

**3:00–4:00 p.m.**  
TRB TSSC Business Meeting  
Civic North

**3:30–4:30 p.m**  
Beverage Break in Exhibit Hall  
Osgoode and Sheraton Ballrooms  
Sponsored by ISL Engineering

**Poster Presentations: Complete Streets**  
Osgoode and Sheraton Ballrooms

**Nominating Committee Meeting and International Vice President Candidate Information Session**  
Huron

**4:30–6:30 p.m.**  
Traffic Bowl Grand Championship  
Grand East and Foyer

**7:30–10:30 p.m.**  
CITE Student Mixer*  
Sponsored by Paradigm Transportation Solutions, Ltd.  
The Ballroom, Sports, Bowl and Rock’n’Roll  
145 John St, Toronto

*By invitation only  ** Separate fee required

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**Smart Communities SC**  
**Trip Generation TG**  
**Transit TR**  
**Traffic Signals TS**  
**Transportation Systems Management & Operations TS**  
**Vision Zero VZ**
Tuesday, August 1

7:00 a.m.–5:30 p.m.
Registration Open
Lower Concourse

8:00–9:30 a.m.
Technical Sessions
- Implementing Vision Zero Best Practices
  Dominion North
  Sponsored by CBB Transportation Engineers
- Let’s Be Smart About Growth: Applications of Trip Data
  Dominon South
  Sponsored by VHB
  Civic North
  Sponsored by Iteris
- Planning for the Arrival of Automated Vehicles
  Civic South
  Sponsored by Morrison Hershfield
- It Doesn’t Just Sit There: Operating the System
  Grand East
  Sponsored by VHB

Student Forum
Simcoe and Dufferin

8:00–10:00 a.m.
ITE Past Presidents’ Breakfast*
Churchill

CITE Annual General Meeting
Provincial Ballroom

8:00 a.m.–12:00 p.m.
Toronto-York Spadina Subway Extension (Line 1)
(Technical Tour)**
Meet in hotel lobby 15 minutes prior to departure

Family Welcome Center Open
VIP Room

9:00 a.m.–4:30 p.m.
Exhibit Hall Open
Osgoode and Sheraton Ballrooms

9:30–10:30 a.m.
Beverage Break in Exhibit Hall
Osgoode and Sheraton Ballrooms

Osgoode and Sheraton Ballrooms

9:30–11:45 a.m.
Walking Tour: Complete Streets in Downtown Toronto
(Technical Tour)**
Meet in hotel lobby 15 minutes prior to departure

10:00–11:00 a.m.
Strategic Initiative Committee Meeting*
Kent

10:30 a.m.–12:00 p.m.
Technical Sessions
- Bringing Connected Vehicles to a City near You
  Dominion North
  Sponsored by WSP
- The Radicalism of “Vision Zero” Traffic Safety
  Dominion South
- Get With the Program: Managing Traffic Signals
  City Hall
  Sponsored by SIDRA Solutions
- Mobility Hubs: Creating Connectivity and Prosperity
  Civic South
  Sponsored by Bunt & Associates
- Freight Impacts on Downtown Streets: New Tools to Last Mile Solutions
  City Hall
- All for One and One for All: Complete Streets Implementation
  Grand East
  Sponsored by VHB

District/Section/Chapter Leadership Forum
Simcoe/Dufferin
Advocacy Committee Meeting
Huron
Planning for Multimodal Transportation Impact Assessment
Recommended Practice Meeting
Elgin

* By invitation only  ** Separate fee required

Are You Ready for the Connected Vehicle Future?

Econolite has the products and services you’ll need to connect the dots and build a platform for the future. Real life, real solutions. You’re closer than you think.

Visit Booth #107 to learn more.
### Tuesday, August 1

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<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tr>
<td>12:15–1:45 p.m.</td>
<td>Power Lunch with Dr. John Leonard</td>
<td>Grand Ballroom</td>
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<td>Sponsored by Stantec</td>
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<td>2:00–2:30 p.m.</td>
<td>Transportation Professional Certification Board (TPCB) Annual Meeting</td>
<td>Huron</td>
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<td>2:00–3:15 p.m.</td>
<td>Technical Sessions</td>
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<td></td>
<td>• Hey Wait a Second, There’s No Driver: What Does the Future Hold</td>
<td>Dominion North</td>
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<td>When Vehicles Are Automated</td>
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<td>• Separated Bikeways: Improving Safety and Operation through Design</td>
<td>Dominion South</td>
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<td>• Latest from the Transportation Research Board on Traffic Signal</td>
<td>Civic North</td>
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<td>Systems</td>
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<td>• Transit Mobility: Improving the System</td>
<td>Civic South</td>
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<td>• Your Career: Making All the Right Moves</td>
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<td>• Developing a Blueprint for Shared Mobility</td>
<td>Grand East</td>
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<td>• Developing a Blueprint for Shared Mobility</td>
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<td>2:45–4:00 p.m.</td>
<td>TPCB Board Meeting*</td>
<td>Huron</td>
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<td>3:00–6:00 p.m.</td>
<td>Connected Vehicle Task Force Meeting</td>
<td>Elgin</td>
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<td>3:15–4:15 p.m.</td>
<td>Beverage Break in Exhibit Hall</td>
<td>Osgoode and Sheraton Ballrooms</td>
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<td>Poster Presentations: Traffic Signals and Transit</td>
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<td>4:15–5:30 p.m.</td>
<td>Plenary Session: The Link Between Transportation and Health</td>
<td>Grand West and Centre</td>
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<td>4:30–5:30 p.m.</td>
<td>MiteY Race Team Instructions</td>
<td>Churchill</td>
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<td>5:30–7:00 p.m.</td>
<td>Hockey Night in Canada Reception</td>
<td>Grand Foyer</td>
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<td>On Thin Ice: The MiteY Race International Edition</td>
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<td>7:00–8:30 p.m.</td>
<td>Street Hockey Game</td>
<td>Alexandra Park Outdoor Rink</td>
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<td>Sponsored by Stantec</td>
<td>275 Bathurst Street</td>
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<td>* By invitation only ** Separate fee required</td>
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*CV* Stantec  
*AV* Dominion North  
*CS* Dominion South  
*TS* LEA Consulting  
*TR* AECOM  
*CA* Bunt & Associates  
*SC* VHB  

*SC* Smart Communities  
*TG* Trip Generation  
*TR* Transit  
*TS* Traffic Signals  
*MS* Transportation Systems Management & Operations  
*VZ* Vision Zero
Schedule at a Glance

Wednesday, August 2

7:30–10:00 a.m.
Registration Open
Lower Concourse

8:00–10:00 a.m.
CITE Annual General Meeting
Provincial Ballroom

8:00–10:30 a.m.
Tour of City of Toronto Operations Centre**
(TRB Technical Tour)
Meet in hotel lobby 15 minutes prior to departure

8:30–10:00 a.m.
Technical Sessions
• How Transportation Can Help Create Healthy, Vibrant Communities
  Dominion North
  Sponsored by Sanderson Stewart

• Come Back With a Warrant: Traffic Control and Evidence Based Safety for Bicycles
  Dominion South
  Sponsored by Bunt & Associates

• What To Fix Next: Getting to the Goal of Vision Zero
  Civic North

• Camels, Rats, Twinkies, and Silly Putty: What We Can Learn about Making the Transportation System Resilient
  Civic South

• Towards Vision Zero at Railroad Grade Crossings
  City Hall
  Sponsored by Rail Pros

• Managing Urban Curbspace: Death by 1,000 Cuts or the Lifeline among Modes?
  Grand East

8:30 a.m.–1:30 p.m.
Connected Vehicle Task Force Meeting
Elgin

10:00–11:00 a.m.
Beverage Break
Grand Foyer

11:00 a.m.–12:00 p.m.
Closing Plenary with Brent Toderian: What a True Multimodal City Does (and Doesn’t) Look Like
Grand West and Centre

1:00–4:00 p.m.
Toronto by Bike–Toronto’s Downtown Bicycle Facilities**
(Technical Tour)
Meet in Hotel Lobby 15 minutes prior to departure

1:00–5:00 p.m.
Workshops**
  Dominion South

• Allocating Curbspace in a Complete Streets Environment
  City Hall

• Pedestrian and Bicycle Counting
  Civic South

* By invitation only ** Separate fee required
Plenary Sessions
All plenary sessions take place in the Grand Ballroom

Opening Business Plenary Session: Smart Communities
Monday, July 31, 8:00–10:00 a.m.
Professional Development Credits: 1.0 PDH (PTOE/PTP)/1.0 CM (AICP)
The opening session's panel discusses Smart Communities through the lens of mobility, safety, and technology.
Moderator:
Jeff Lindley, Associate Executive Director and Chief Technical Officer, Institute of Transportation Engineers

Speakers:
Leah Shahum, Founder & Executive Director, Vision Zero Network
Tony Dutzik, Senior Policy Analyst, Frontier Group
Austin Ashe, General Manager, Intelligent Cities, Current powered by GE

The Link between Transportation and Health
Tuesday, August 1, 4:15–5:30 p.m.
Sponsored by Alta Planning + Design
Professional Development Credits: 1.0 PDH (PTOE/PTP)/1.0 CM (AICP)
Transportation plays a vital and critical role in the development of livable- and by extension–healthy communities. One of ITE's initiatives is to explore the link between transportation and public health–link to transportation and health statement. This plenary session brings leading experts in transportation and public health from the U.S., Canada, and the U.K. for an in-depth and interactive discussion on the intersection between these two topics.
Moderator:
Paula Flores, Immediate Past President, ITE International Board of Direction; Chair, ITE Transportation and Health Task Force; and Principal Alta Planning Design

Presenters:
Leslie Meehan, AICP, MPA, Director, Office of Primary Prevention, Tennessee Department of Health
Dr. Eileen de Villa, Medical Officer of Health, Toronto Public Health
Dr. David Mowat, MBChB, MPH, FRCP, Senior Scientific Lead, Population Health, Canadian Partnership Against Cancer
Sue Perry, Chief Executive, Chartered Institute of Highways and Transportation

Power Lunch
Tuesday, August 1, 12:15–1:45 p.m.
Sponsored by Stantec
Professional Development Credits: 1.0 PDH (PTOE/PTP)/1.0 CM (AICP)
Our Power Lunch speaker is John Leonard, Ph.D. who is a Professor of Mechanical and Ocean Engineering in the Department of Mechanical Engineering at MIT and Vice President for Autonomous Driving Research with the Toyota Research Institute. His talk focuses on the current state of play with autonomous vehicles, the challenges that are ahead of us, and what role transportation professionals at the state and local level can play in advancing their adoption.

Presenter:
John Leonard, Ph.D., Professor of Mechanical and Ocean Engineering in the Department of Mechanical Engineering at MIT and Vice President for Autonomous Driving Research with the Toyota Research Institute

Closing Plenary Session: What a True Multimodal City Does (and Doesn’t) Look Like
August 2, 11:00 a.m.–12:00 p.m.
Professional Development Credits: 1.5 PDH (PTOE/PTP)/1.0 CM (AICP)
Don’t leave early! Our closing plenary session speaker offers a thought-provoking and provocative capstone to the conference. Using a TED-talk format, Brent Toderian provides his views on what a true multimodal city for people looks like and what it doesn’t. This not-to-be-missed session will leave attendees buzzing long after they return home.

Presenter:
Brent Toderian, Founder, TODERIAN Urbanworks
Technical Session Descriptions

Monday, July 31
11:00 a.m.–12:00 p.m.

Transportation for All: Canadian Perspectives
Dominion North

Professional Development Credits: 1.0 PDH (PTOE/PTP) • CM | 1 (AICP)
Sponsored by WSP
Developed by the Local Arrangements Committee

This session provides a forum for leaders from Canadian agencies to discuss with an international audience of leading transportation professionals their vision for the future of transportation to meet the needs of all. They share their vision for the near and long term future of their agencies’ programs, the successes, challenges, and opportunities for putting new ideas into practice, and discuss the implications of innovation and new technologies to their services, programs, and policies.

Learning Objectives:
• Identify near and long term vision for agency programs.
• Discuss successes, challenges, and opportunities of new ideas.
• Describe future implications of innovation and technology on agencies.

Facilitator:
Gene Chartier, Vice President, Paradigm Transportation Solutions Limited, Waterloo, ON

Speakers:
Barbara Gray, General Manager, Department of Transportation, City of Toronto, ON
Kevin Bentley, Executive Director, Asset Management, Ontario Ministry of Transportation, St. Catharines, ON
Gerry Chaput, Chief Capital Officer, Metrolinx, Toronto, ON

ITE and Grassroots Advocacy
Dominion South

Professional Development Credits: 1.0 PDH (PTF) • CM | 1 (AICP)
Developed by the Advocacy Committee

Grassroots advocates raise the level of awareness regarding a variety of transportation-related issues at the local, state, or federal level, and can influence public perception, regulations, or public policy. Unlike direct lobbying, grassroots advocacy relies on the general public and not professional lobbyists. The presentations in this session help members learn how they can best advocate for issues of importance to ITE.

Learning Objectives:
• Understand methods to communicate information on complex subjects to the public and decision-makers.
• Identify advocacy examples to address core goals of the transportation profession.
• Discuss advocacy topics important to the profession and ITE members and their broader meaning.

Facilitator:
Karen Aspelin, Principal, MaxGreen Transportation Engineers, LLC, Colorado Springs, CO
Speakers:
Xavier Falconi, City Transportation Engineer, City of Delray Beach, FL
Jason DeGray, New England Regional Engineering Director, Toole Design Group, Boston, MA
Lisa Martellaro-Palmer, Transportation Engineering Associate, City of Los Angeles Department of Transportation, CA

New Directions in Trip Generation: Moving Forward
Civic South

Professional Development Credits: 1.0 PDH (PTOE/PTP) • CM | 1 (AICP)
Sponsored by VHB
Developed by the Transportation Planning Council

This year ITE will release resources with new approaches to trip generation. In addition, during 2017 updates to existing recommended practices on trip generation will be available and their application to transportation impact assessment will begin to be updated. This session presents information on the new editions of the Trip Generation Manual and Trip Generation Handbook, the Transit and Traffic Impact Studies informational report and the planned multimodal update to the Transportation Impact Assessment for Site Development recommended practice.

Learning Objectives:
• Experience one module of the program that results in improved workplace dynamics.
• Distinguish key factors that lead to productivity improvement.
• Describe process steps to improve teamwork and collaboration.
• Understand productivity improvements that are achievable from staff development.

Facilitator(s):
Karen Aspelin, Principal, MaxGreen Transportation Engineers, LLC, Colorado Springs, CO
Speakers:
Xavier Falconi, City Transportation Engineer, City of Delray Beach, FL
Jason DeGray, New England Regional Engineering Director, Toole Design Group, Boston, MA
Lisa Martellaro-Palmer, Transportation Engineering Associate, City of Los Angeles Department of Transportation, CA

How to Improve Your Productivity: A Case Study in Staff Improvement
City Hall

Professional Development Credits: 1.0 PDH

All organizations have people dynamics that create challenges. Take a moment to consider the organization you work in. Do people have varying management styles or strong personality traits? Are some people loaded with talent but difficult to work with? Are there people with differing styles who can’t see eye-to-eye? Do personality conflicts result in small upheavals in the office? These challenges can result in plummeting productivity. While you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people, you may think that you can’t change people.

Using a structured, repeatable approach, they reduced time wasted in meetings, improved teamwork and collaboration, reduced reactivity between staff, and increased productivity. Learn their process, the results, and the keys to their success. It’s not rocket science but it is neuroscience.

Learning Objectives:
• Describe process steps to improve teamwork and collaboration.
• Understand productivity improvements that are achievable from staff development.
• Distinguish key factors that lead to productivity improvement.
• Experience one module of the program that results in improved workplace dynamics.

Facilitator(s):
Karen Aspelin, Principal, MaxGreen Transportation Engineers, LLC, Colorado Springs, CO
Countdown to Zero
Grand East

Professional Development Credits: 1.0 PDH (PTOE/PTP) • CM | 1 (AICP)

Developed by the Complete Streets and Transportation Safety Councils

As the transportation industry strives to achieve zero fatalities or serious injuries related to traffic crashes, agencies and practitioners are looking for ways to develop prioritized transportation plans to more effectively address bicycle and pedestrian safety. Typical components of these plans include: 1) identifying realistic goals to achieve Vision Zero, 2) coordinating inter-department/interagency communication to facilitate stakeholder buy-in, and 3) building off the plan to develop actionable items (bike/pedestrian safety action plan, project identification, etc.). This session includes discussion of the FHWA-sponsored Vision Zero Peer Exchange held in March 2017, the upcoming FHWA update to the Pedestrian Safety Action Plan, and the work of ITE's Vision Zero Task Force will be included, as well as highlights from the United States and Canada on success stories related to Vision Zero.

Learning Objectives:
- Understand ITE's role in Vision Zero, including current and future work of ITE's Vision Zero Task Force.
- Describe methods to develop a bicycle and pedestrian safety action plan with Vision Zero as a focus.
- Understand how to select and prioritize safety improvement projects.
- Identify realistic, implementable goals to achieve Vision Zero.

Facilitator:
Richard Retting, Director of Safety/Research, Sam Schwartz Transportation Consultants, Washington, DC

Speakers:
FHWA Update to the Pedestrian Safety Action Plan
Dan Gelinne, Research Associate, Pedestrian and Bicycle Information Center, Chapel Hill, NC
Elissa Goughnour, Transportation Engineer, VHB, Tysons, VA
City of Vancouver's Vision Zero Plan
Liliana Quintero, Transportation Engineer, City of Vancouver, BC
DC Moves & Vision Zero Plan Implementation
Ryan Westrom, Senior Transportation Planner, District Department of Transportation, Washington, DC

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Technical Session Descriptions

Monday, July 31
2:00 p.m.– 3:30 p.m.

**We are the Champions: Roundabouts of the Future**
Dominion North

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by MTJ Engineering
Developed by the Roundabouts Standing Committee

Corridors of roundabouts are becoming more commonplace, but communities of roundabouts are still rare. This is a showcase to inspire a vision of what can be. Size and cost are becoming frequent sticking points for building roundabouts. Shrinking the center island or metering an approach can reduce the impact of potential roundabouts and may make all the difference in the budget and adjacent property owner support. Roundabouts are currently in the early adopter phase for most agencies. Champions have the potential to get agencies and communities past this tipping point.

Learning Objectives:

• Understand how roundabouts can transform the safety, health, and economic vitality of a community.
• Explain potential success of candidate locations for a roundabout diet
• Identify the benefits a roundabout champion brings to the table and to build value to the profession by becoming a champion that changes the game

Facilitator:
Phil Weber, Senior Project Manager, CIMA, Mississauga, ON

Speakers:
Steve Van De Keere, Director of Transportation, Region of Waterloo, Kitchener, ON
Michael McBride, Vice President, American Structurepoint, Inc., Indianapolis, IN
Jeremy Kashman, City Engineer, City of Carmel, IN
Brian Walsh, State Traffic Design and Operations Engineer, Washington State DOT, Olympia, WA
Andy O’Brien, O’Brien Traffic, Victoria, Australia

**Trial of the Century!!!**
Dominion South

Professional Development Credits: 1.5 PDH (PTOE)

Developed by the Transportation Forensics and Risk Management Council in association with the Ontario Trial Lawyers and the Advocates Society/Canadian Defence Lawyers

This session demonstrates the courtroom events and the various facets of the testimony process that public agency, transportation consultants, and expert witnesses may experience. Attendees will observe the qualifications process, evidence in chief, cross-examination, and counsel challenges. The case study is a motor vehicle collision wherein there are allegations that poor road design and inadequate traffic control devices are alleged. Specific aspects and examples of risk management will be incorporated into the trial script. At the conclusion of the demonstration attendees will be given the opportunity to comment and ask questions of the mock trial participants.

Learning Objectives:

• To recognize and appreciate the exposure the transportation agencies and their consultants may have in tort liability.
• To prepare for and work within the courtroom setting.
• Understand the current state-of-the-practice in forensic investigations and how road agency liability is gauged, established, and assessed.
• Identify opportunities to enhance policies and practices to improve their risk management related to transportation facilities.

Participating:
Russell Brownlee, Principal, Road Safety, -30- Forensic Engineering, Toronto, ON
Gary Thomas, Principal Engineer, Kittelson LLC, College Station, TX
Brian Malone, Vice President, Transportation, CIMA+, Burlington, ON
Troy Lehman, Partner, Oatley Vigmond, Barrie, ON
Lara Fitzgerald-Husek, Lawyer, Oatley Vigmond, Barrie, ON
David Campbell, Associate, Rogers Partners LLP, Toronto, ON
**Building Smart Communities**

**Civic South**

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by VHB

Developed by the Transportation Systems Management & Operations Council

The vision of a smart community is a holistic, integrated approach to improving surface transportation performance within a city and integrating this approach with other smart city domains such as public safety, public services, and energy. Core elements of smart community strategy are data, demand, customer focus, and equity.

Learning Objectives:
- Identify overarching vision and characteristics of smart communities.
- Understand how the vision for a smart community can be built into a community of any size.
- Discuss core elements that are transferable between different size communities.

Facilitator:
**Kris Milster**, Director of Government Accounts, Traffic Technology Services, Inc., Tampa, FL

Speakers:
**Bernie Arseneau**, Vice President–Highways and Local Roads Market Sector Director, HDR, Minneapolis, MN

**Celeste Chavis**, Assistant Professor, Morgan State University, Baltimore, MD

**Nate Vogt**, TIP and Funding Manager, Mid-Ohio Regional Planning Commission, Columbus, OH

**Yang Tao**, Assistant City Traffic Engineer, City of Madison, WI

**ITE Town Hall Business Meeting**

City Hall

This session provides an open opportunity for discussion and feedback on the future direction of ITE using information from the ITE transportation professionals survey and strategic initiatives underway at ITE. In addition, the proposed changes to the ITE Constitution will be presented and discussed. Members of the ITE International Board of Direction will be in attendance.

Presiding Officer:
**Shawn Leight**, President, ITE International Board of Direction and Vice President/Chief Operating Officer, CBB Engineering

Facilitator:
**Jeffrey Paniati**, Executive Director and CEO, Institute of Transportation Engineers, Washington, DC
Technical Session Descriptions

Tuesday, August 1
8:00–9:30 a.m.

Implementing Vision Zero Best Practices
Dominion North

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by
CBB Transportation Engineering

Developed by the Transportation Safety Council

This session showcases North American communities that have adopted Vision Zero plans with goals to eliminate fatal and serious traffic crashes and agencies who have been proactive and successfully developed/adopted programs to implement Vision Zero best practices. Representatives of cities or other agencies with examples to apply in practice today will share their latest successes. This session draws from the lessons learned in North Vancouver, BC; Austin, TX; Fort Lauderdale, FL; and Puerto Rico, and discusses important aspects of implementing safety best practices as well as successful strategies that have been applied.

Learning Objectives:
• Describe the state of the practice in reducing traffic deaths and severe injuries through Vision Zero’s multi-disciplinary approach.
• Understand best practices as applied in real world situations in traffic safety research, crash analysis, and cost effective multimodal safety countermeasures.
• Understand how to successfully partner with multiple agencies in response to a policy directive.

Facilitator:
Jeff Michael, Associate Administrator for Research and Program Development, National Highway Traffic Safety Administration, Washington, DC

Speakers:
City of North Vancouver Vision Zero Network Screening
Borg Chan, Manager, Traffic Engineering and Road Safety, ISL Engineering and Land Services, Langley, BC
Dragana Mitic, Manager, Transportation, Engineering, Parks & Environment, City of North Vancouver, North Vancouver, BC
Road User Awareness Campaigns and Strategic Highway Safety Plan: Success Stories in Putting Safety First Toward Zero Deaths
Benjamin Colucci Rios, Professor, University of Puerto Rico-Mayaguez, Mayaguez, PR
Paradigm Shift in Transportation Engineering: Vision Zero in Austin, Texas
Upal Barua, Supervising Engineer/Senior Traffic Engineer, Transportation Department, City of Austin, Austin, TX
Working Together toward Vision Zero
Diana Alarcon, Director, City of Fort Lauderdale, Fort Lauderdale, FL
Let’s Be Smart About Growth: Applications of Trip Data
Dominion South

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Sponsored by VHB
Developed by the Transportation Planning Council

In response to the emphasis on building dense and diverse mixed-used communities, traffic engineers and transportation planners need new tools to accurately estimate smart growth trip generation. Several tools have been developed, including the Environment Protection Agency’s MXD trip generation tool. However, few cities have adopted its use. In part, there is a need for a more transparent method for determining just how “smart” the smart growth development is. Currently, this is determined using judgment. This session explores different approaches to quantify trip making characteristics, so transportation professionals can present realistic, but robust information to decision-makers.

Learning Objectives:
- Discuss methods to address travel modes that venues/organizations are not currently addressing or could address better.
- Provide background for agencies and consultants regarding processes, methodologies, criteria for impacts and mitigation, etc.
- Provide initiative for agencies that may not have up-to-date guidelines to now update them as transportation needs evolve.
- Share a different, more quantifiable method to evaluate trip generation for smart growth.

Facilitator:
Jennifer Pangborn, Senior Planning Manager, WSP, St. Louis, MO

Speakers:
The New York City Traffic Impact Study Process–Its Origin and Evolution
Martin Taub, Principal, VHB, New York, NY
Using Big Data to Understand External Trips: A County-by-County Analysis in the U.S.
Laura Schewel, CEO, StreetLight Data, San Francisco, CA
Quantifying Smart Growth Trip Generation
Seth Torma, Senior Planning Manager, WSP, San Diego, CA
TripChain: A Peer-to-Peer Trip Generation Database
Jon Kostyniuk, Transportation Engineer, TripChain.Org, London, ON

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- Traffic Engineering
- Parking Planning
- Active Transportation and Travel Demand Management

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Technical Session Descriptions

Tuesday, August 1
8:00–9:30 a.m.

Professional Development Credits: 1.5 PDH (PTOE)
Sponsored by Iteris
Developed in Collaboration with the Transportation Research Board Traffic Signal Systems Committee
Developed by the Traffic Engineering Council in collaboration with the TRB Traffic Signal Systems Committee
The measurement of performance and effectiveness of infrastructure meeting stated goals and objectives is a foundational element of an organization’s performance management program. This session provides attendees with example approaches implemented in practice to measure performance of traffic signal systems and to incorporate constructive feedback from the measures back into the program and associated assets.
Learning Objectives:
• Understand analytically-based traffic signal performance measures and the basic approach to initiating a program.
• Describe customer-based measures of signal performance.
• Identify how traffic signal performance measures can affirmatively support state, regional and local government response to national performance goals.
Facilitator:
Martin Knopp, Associate Administrator, Office of Operations, Federal Highway Administration, Washington, DC
Speakers:
Public Feedback - Another Measure of Effectiveness for Signal Optimisation Studies?
Rajnath Bissessar, Manager, ITS Operations, City of Toronto, Toronto, ON
Leveraging Automated Signal Performance Measures
Darcy Bullock, Professor, Department of Civil Engineering, Purdue University, West Lafayette, IN
Alison Tanaka, Senior Engineer, Kittelson & Associates, Inc., Portland, OR
Perspectives on Adaptive Signal Control Technologies
Alexander Stevanovic, Associate Professor, Department of Civil, Environmental and Geomatics Engineering, Florida Atlantic University, Boca Raton, FL
Planning for the Arrival of Automated Vehicles Civic South
Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Developed by the Transportation Systems Management & Operations Council
If the advocates are to be believed, there will be an automated vehicle available for every household within five years. More realistically, over the next 20 years automated vehicles will become part of the transportation marking. There remain many questions, but some planning now can allow public agencies and the supporting vendor and consultants to be prepared in a robust manner for multiple variations that the future may bring. This session encompasses speakers who are knowledgeable about the relevant technical aspects of automated vehicles, but more important the state of activity positioning organizations for the future.
Learning Objectives:
• Identify risks and challenges to implementation of automated vehicles.
• Describe societal impact of automated technology in transportation.
• Understand potential impacts to the planning, design, operation, and maintenance of transportation infrastructure.
Facilitator:
Abbas Mohaddas, President and COO, Econolite Group, San Francisco, CA
Speakers:
Impacts of CV and AV on State and Local Transportation Agencies
Ray Derr, Project Manager, Transportation Research Board, Washington, DC
The Case for Agency Self-Assessment and Objectives-Based Planning for Automated Vehicle Systems
Douglas Getzman, Director, Kimley-Horn and Associates, Phoenix, AZ
Transformative Technologies, Transformative Plans: Reimagining Regional Transportation Plans in a New Mobility Era
Jason Neudorf, Transportation Planner, WSP, Thornhill, ON
Getting Proactive Rather Than Reactive in AV Infrastructure Planning
Scott Wilkenson, Technical Director Transport Modelling, Jacobs Group (Australia) Pty. Ltd., Sidney, Australia

CA Tools for the Next Generation of Leaders City Hall
Professional Development Credits: 1.5 PDH
Sponsored by Morrison Hershfield
Developed by the Transportation Consultants Council
This session gives you tips to lead in the areas of ethics, organizational development, visual communication, and managing in our ever changing profession. As new information, approaches, and technology come into the transportation engineering and planning profession, the challenge is more than applying it to the next project, it is how you engage with it in your own career and organization.
Learning Objectives:
• Understand methods to communicate information about complex projects to the public and decision-makers.
• Explain the application of the capability maturity model to organizations
• Describe the balance of choices in making ethical decisions.
Facilitator:
Amir Rizavi, Director of Transportation Systems, VHB, New York, NY
Speakers:
Engage Your Audience through Gamification & Visualization
Tra Vu, Technical Director, Greenman-Pedersen, Inc., New York, NY
Agency Capability Maturity Frameworks
Beverly Kuhn, Senior Research Engineer/Division Head, Texas A&M Transportation Institute, College Station, TX
The Transportation Engineering Profession Is Changing - How Do Managers Keep Up?
Mark Spencer, Principal, W-Trans, Oakland, CA
Transparency and Integrity in Lobbying
Cristina De Caprio, Lobbyist Registrar, City of Toronto, Toronto, ON
It Doesn’t Just Sit There: Operating the System

Grand East

Professional Development Credits: 1.5 PDH (PTOE)

Developed by the Transportation Systems Management & Operations Council

There are many facets to the operation of the transportation system from the traffic incident response team to traveler information and integrated corridor management all supported by an agency organized for operations. This session explores concepts and implementation examples of managing the transportation system from an operations perspective.

Learning Objectives:

• Identify the success components and supporting organization to actively operate the transportation system.
• Describe the state of the practice to improve performance of the system and the organization to deliver the services.

Facilitator:

Eric Rensel, Vice President, Gannett Fleming, Inc., Harrisburg, PA

Speakers:

City of Toronto Transportation Operations Centre Concept of Operations
Alvaro Alamilla, Senior Engineer, City of Toronto, Toronto, ON
Evaluation of the Active Traffic Management Systems on I-66 in Virginia
Nancy Dutta, Graduate Research Assistant, University of Virginia, Charlottesville, VA
Preparing for Predictive Operations–Precursors to Decision Support Systems
Brad Freeze, Traffic Operations Director, Tennessee Department of Transportation, Nashville, TN
Data Driven Approach to TSMO Implementation
Scott Marler, State Operations Engineer, Iowa Department of Transportation, Des Moines, IA

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Technical Session Descriptions

Tuesday, August 1
10:30 a.m.–12:00 p.m.

**Bringing Connected Vehicles to a City near You**
Dominion North

Professional Development Credits: 1.5 PDH (PTOE/PTP)
Sponsored by WSP
Developed by the Transportation Systems Management and Operations Council in collaboration with the USDOT ITS Joint Program Office

Connected vehicle implementation is being driven from both the private sector and the USDOT. There have recently been a number of full scale test implementations of vehicle to infrastructure with traffic signal infrastructure in cities around the U.S., most recently in Las Vegas with the Consumer Electronics Show. In addition, the US DOT Intelligent Transportation Systems Joint Program Office continues to foster implementation at three connected vehicle pilot deployment sites. These sites are well into deployment with the use of multiple safety and mobility applications on and in proximity to reversible freeway lanes in Tampa, Florida; exploiting vehicle-to-vehicle (V2V) and intersection communications to improve vehicle flow and pedestrian safety in high-priority corridors in New York City; and using connected vehicle technologies to improve safe and efficient truck movement along I-80 in southern Wyoming. This session presents current information from these four implementations of connected technology.

Learning Objectives:
- Describe the program and objectives of the connected vehicle application locations.
- Identify the site specific needs of the initial connected vehicle sites.
- Understand the applications and their use to achieve desired outcomes of each connected vehicle site.

Facilitator:
Steve Kuciemba, National ITS & System Operations Manager, WSP, Baltimore, MD

Speakers:
**New York City’s Connected Vehicle Pilot Deployment Program**
John Tipaldo, Assistant Commissioner, Systems Engineering, New York City Department of Transportation, NY

**Las Vegas Traffic Signals and Audi: Why it Worked and How the Transportation Community Benefits**

**Tampa Hillsborough Expressway Authority Connected Vehicle Pilot**
Bob Frey, Planning Director, Tampa Hillsborough Expressway Authority, Tampa, FL

**Wyoming DOT Connected Vehicle Pilot**
Shane Zumpf, Application Development Lead, Trihydron Corporation, Laramie, WY

**The Radicalism of “Vision Zero” Traffic Safety (VZ)**
Dominion South

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Developed by the Transportation Planning and Transportation Safety Councils

This panel discussion will address the need for a fundamental shift in the planning and design of transportation networks. Each month, the U.S. experiences the equivalent of a 9/11 attack in the form of traffic deaths. Efforts to curb traffic deaths have continued for decades, with little change. Local and state governments have been adopting Vision Zero policies with the dramatic goal of reaching *zero* traffic deaths. As Sweden discovered in the 1990s, prioritizing human life leads to a radical departure from “standard practices” in travel forecasting, traffic engineering, and geometric design. In short, our entire industry needs a philosophical shift or we’ll never reduce traffic deaths more than a few percentage points.

Learning Objectives:
- Understand the moral and ethical expectations of professionals who have sworn to uphold codes of ethics.
- Illustrate how Vision Zero principles contrast with common transportation engineering methods.
- Describe recommendations for how to educate and persuade stakeholders about Vision Zero tactics.
- Identify and correct different safety myths with respect to Vision Zero as well as the answers to recurring FAQs.

Facilitator:
Andy Boenau, Associate, Alta Planning + Design, Richmond, VA

Speakers:
**Michael Griffith**, Director, Office of Safety Technologies, FHWA, Washington, DC

**Paula Flores**, Principal, Alta Planning + Design, Durham, NC

**Graham Larkin**, Executive Director, Vision Zero Canada, Ottawa, ON

**C.Y. David Yang**, Executive Director, AAA Foundation for Traffic Safety, Washington, DC

**Mobility Hubs: Creating Connectivity and Prosperity**
Civic South

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Sponsored by Bunt
Developed by the Sustainability and Transit Standing Committees

As practitioners, we are often faced with questions of how to contribute to successful high-density developments which are centered on transit infrastructure or intermodal nodes. This session will explore key elements of mobility hubs and hub networks, from planning to case studies of the resulting benefits spanning the what, how, and why of mobility hub planning. Mobility hubs are far more than just a place where transportation modes intersect - they are places of exchange, and places of intensified development oriented to travel by sustainable modes. Overarchingly, they combine to provide a network that enables smart and sustainable, multi-modal door-to-door transportation focused on people. This session will explore elements of mobility hub network planning, extending from the global to the local, highlighting recent experience in the Toronto area.

Learning Objectives:
- Understand the planning requirements.
- Describe the benefits of mobility hub networks.

Facilitator:
**Roxane MacInnis**, Senior Project Planner, Integrated Mobility, WSP, Ottawa, ON

Speakers:
**Susan Zielinski**, Managing Director, SMART, University of Michigan Transportation Research Institute, Ann Arbor, MI

**Glen Massarano**, Senior System Engineer, Siemens Berkeley, CA

**Brent Lacy**, Transportation Lead, VHB, Tampa, FL

**Gregg Strakaluse**, Director–Streets and Stormwater Department, City of Naples, Naples, FL

**Marcus Bowman**, Transportation Planner, WSP, Toronto, ON
**Freight Impacts on Downtown Streets: New Tools to Create Last Mile Solutions**

City Hall

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Developed by the Urban Goods Movement Standing Committee

As people return to live and work in cities there is an increasing need to accommodate the needs of commercial activities to support the urban areas. This session explores examples of planning and design to improve delivery services from an infrastructure operations perspective. Additionally, the latest planning tools from the research community ready for practical application will be presented, such as the Initiative Selector Tool for Improving Freight System Performance and Freight Trip Generation Software.

**Learning Objectives:**
- Understand lessons learned from application freight planning and design approaches in urban areas.
- Describe the available resources to support solutions to last mile delivery challenges.
- Identify different sets of planning and design initiatives that may improve freight delivery performance.

**Facilitator:**

Asheque Rahman, Program Manager-Efficient Deliveries, Office of Freight Mobility, NYC Department of Transportation, New York, NY

**Speakers:**

Tom Visée, Freight Planner, HDR, New York, NY

Tom Madrecki, Strategic Communications, United Parcel Service, Washington, DC

Jeffrey Wojtowicz, Senior Research Engineer, Center for Infrastructure, Transportation, and the Environment, Rensselaer Polytechnic Institute, Troy, NY

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**All for One and One for All: Complete Streets Implementation**

Grand East

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by VHB

Developed by the Complete Streets Council

By putting people back into streets, communities create opportunities for the use of all transportation modes. Learn from experiences, new resources, and assessment tools how to integrate people and places into the planning, design, operation, and maintenance of multimodal transportation networks.

**Learning Objectives:**
- Describe effective means through examples of practice to successfully implement complete streets in communities.
- Discover information in the upcoming Context Sensitive Solutions: Practitioner’s Resource and other assessment methods.
- Identify key aspects of complete street implementation specific to community context.

**Facilitator:**

Emiko Atherton, Director, National Complete Streets Coalition, Washington, DC

**Speakers:**

Context Sensitive Solutions: A Practitioner’s Guide

Paul Moore, Principal, Nelson\Nygaard, Los Angeles, CA

Wayfinding Signs in Australia

David Nash, Principal, Traffinity, Melbourne, VIC, Australia

Assessing the Potential of Streets to be Redesigned as Complete Streets: A Multi-Criteria Approach

Francis Marleau Donais, Ph.D. Student, Université Laval, Québec, QC

A Review of Accessibility Experiences in Canada

Alexandre Nolet, Senior Associate, -30- Forensic Engineering, Toronto, ON

Christina Klein, Head of Traffic, Eastern Region, Ontario Ministry of Transportation, Kingston, ON

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**Get with the Program: Managing Traffic Signals**

Civic North

Professional Development Credits: 1.5 PDH (PTOE)

Sponsored by Sidra Solutions

Developed in Collaboration with the Transportation Research Board Traffic Signal Systems Committee

Developed by the Traffic Engineering Council in collaboration with the TRB Traffic Signal Systems Committee

Learn about the latest approaches to the management of traffic signal programs with experience from different communities. This session explores cooperative efforts to manage and coordinate traffic signal timing, operations, and maintenance. Further, the session examines how these programs connect to agency goals and objectives.

**Learning Objectives:**
- Understand the connection between community and agency goals and objectives.
- Describe approaches and methods to create collaborative traffic signal operations programs.

**Facilitator:**

Bob Henderson, Manager, Transportation Engineering, Regional Municipality of Waterloo, Waterloo, ON

**Speakers:**

State of the Art Traffic Signal Program Management Plans for NITTEC Buffalo-Niagara Region

Kevin Lee, Associate Engineer, Kittelson & Associates, Inc., Baltimore, MD

Gateway Green Light and Interagency Cooperation

Amanda Brauer, Manager of Roads and Traffic, St. Charles County, St. Charles, MO

The Future of Georgia DOT's Regional Transportation Operations Program

Alan Davis, State Signal Engineer, Georgia Department of Transportation, Atlanta, GA

Toward Continuous, 24/7 Traffic Operations Improvement

Steven Latoski, Public Works Director, Mohave County, Kingman, AZ
Hey Wait a Second, There’s No Driver: What Does the Future Hold When Vehicles Are Automated

Dominion North

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Sponsored by Bunt
Developed by the Transportation Planning and Transportation Systems Management & Operations Councils

What is the role of automated vehicles in advancing sustainable transportation goals at the municipal level? Can we move past the debate about automated vehicle technology timelines and capabilities? This discussion will be about work being done across North America to plan for this disruptive technology to achieve positive public benefits consistent with city policies. Within the last two years, city councils in various cities have requested reports from their administrations related to planning for automated vehicles. Canadian cities created an informal working group in 2016 acknowledging that there is much to gain from working together on municipal-level planning and policy around this emerging transportation technology. Cities ultimately striving to achieve sustainable mobility for all citizens, find it is important to leverage automated vehicles to this end, rather than react to the technology as it becomes available.

Learning Objectives:
• Identify risks and challenges of automated vehicles in urban socio-political and infrastructure environments.
• Describe elected officials and decision-makers interest in the societal impact of automated technology in transportation.
• Understand potential impacts to the planning, design, operation, and maintenance of transportation infrastructure.

Facilitator:
Randy Iwasaki, Executive Director, Contra Costa Transportation Authority, Walnut Creek, CA

Speakers:
Erin Toop, Senior Engineer, City of Edmonton, Edmonton, AB
Ryan Lanyon, Chair, Automated Vehicles Working Group, City of Toronto, Toronto, ON
Ed Seymour, Senior Research Fellow and Executive Associate Director, Texas A&M Transportation Institute, Dallas, TX
TBD

Separated Bikeways: Improving Safety and Operation through Design

Dominion South

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Sponsored by Lea Consulting Developed by the Complete Streets Council

There are numerous design guides that have been produced in the past decade for the design of bicycle infrastructure. These facilities, also referred to as separated bike lanes and cycle tracks, have been shown to improve safety, user comfort, operations, equity, and mode share. With the additional guidance and approvals from authorizing agencies, growth in protected bike lane miles/kilometres has been significant. However, questions about the specific design and operational details that many of the guides do not address requires additional design guidance and research before these designs are widely adopted. The ITE Protected Bike Lane Practitioners Guide & Lecture Series will address these gaps related to five priority areas: safety performance, mid-block design and operation, intersection design and operation, and maintenance implementation.

Learning Objectives:
• Describe questions and uncertainties that practitioners have about the existing design and operational guidance for protected bike lanes.
• Share relevant research and guidance on design and operational practices of protected bike lanes as it relates to the work that ITE professionals regularly undertake.
• Identify examples of successful and relevant implementation of protected bike lanes to help describe principles of design and operational considerations.
• Provide a basis for the design and operational aspects of protected bike lanes and highlight relevant resources available to practitioners.

Facilitators:
Tyler Golly, Associate, Stantec, Edmonton, AB

Latest from the Transportation Research Board on Traffic Signal Systems

Civic North

Professional Development Credits: 1.5 PDH (PTOE)
Sponsored by Dominion Group
Developed in collaboration with the TRB Traffic Signal Systems Committee

In an effort to operate the transportation system more effectively, traffic signal practitioners have often looked to research to improve the way we are timing traffic signals. In this session, you will be exposed to the latest research that is changing practices and operations procedures. The efforts of research have been put into practice for automating traffic signal performance measures. This session focuses on the emerging measures with an emphasis on looking to the future technology applications that might further enhance our industry’s response to our multimodal transportation system.

Learning Objectives:
• Identify research trends in traffic signals including connected vehicle infrastructure, signal timing, and automated traffic signal performance measures.
• Recognize that emerging technology may change traffic signal equipment standards.
• Determine how local agencies can implement research to improve practice.

Facilitator
Peter Koonce, Division Manager, Signals, Street Lighting, and ITS, Portland Bureau of Transportation, Portland, OR

Speakers:
Jamie Mackey, Statewide Signal Engineer, Utah Department of Transportation, Salt Lake City, UT
Kevin Balke, Research Lead, Texas A&M Transportation Institute, College Station, Texas
Ed Smaglik, Associate Professor, Northern Arizona University, Flagstaff, AZ
Christopher Day, Senior Research Scientist, Purdue University, West Lafayette, IN
Transit Mobility: Improving the System

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by AECOM

Developed by the Transit Standing Committee

Create mobility solutions that improve transit service for your organization. This session presents perspectives, tools, and techniques that have led to successful multimodal projects around North America through example projects in New York, NY, Comox Valley, BC, Jacksonville, FL, and Seattle, WA.

Learning Objectives:
- Describe issues and strategies that lead to successful transit projects.
- Identify strengths and weaknesses of multimodal project delivery.

Facilitator:
John Lower, Associate Vice President, Iteris, Santa Ana, CA

Speakers:
- Overcoming Technical and Administrative Challenges to Successfully Implement Transit Signal Priority
  Mark Yedlin, Director of Simulation Modeling Services, Greenman-Pedersen, Inc., New York, NY

- Achieving 2 Million Annual Transit Trips by 2038: Moving Toward Frequent Transit in the Comox Valley, BC
  Tim Shah, Transportation Planner, Watt Consulting Group, Victoria, BC

- JTA’s Mobility Corridors—Improving System Performance through Enhanced Connectivity and Urban Design
  Frederick Jones, Senior Project Manager, Community and Mobility Planning, Michael Baker International, Jacksonville, FL

- Innovative Transit Spot Improvements in Downtown Seattle
  Carter Danne, Traffic Operations Engineer, City of Seattle Department of Transportation, Seattle, WA

  Richard Hutchinson, Principal, DKS Associates, Seattle, WA
Technical Session Descriptions

Tuesday, August 1
2:00 p.m.–3:15 p.m.

**CA**

**Your Career: Making All the Right Moves**
City Hall
Professional Development Credits: 1.5 PDH (PTOE/PTP)
Sponsored by Bunt

Women are seen in more boardrooms and in more meaningful positions in the engineering and planning profession than a decade ago but remain underrepresented. Building on the success of the session held in 2016 in Anaheim, this inclusive conversation circle session is an open discussion of issues women have identified as challenges in the workplace. The intent of this session is to both listen and share to gain understanding of gender differences in the workplace and in the industry as well as a discussion of techniques to navigate a successful path. Are you prepared to navigate a career path that opens the doors through which you want to walk? Do you have questions about a challenge you face?

Learning Objectives:
- Learn how to enhance your support network.
- Gain insights into the gaps that hold women back.
- Describe techniques to successfully navigate workplace environments.

Facilitator:
Marsha Anderson Bomar, Executive Director, Gwinnett Village Community Improvement District, Norcross, GA

Speakers:
Rebecca Peterniak, Transportation Infrastructure Specialist, Fireseeds North Infrastructure, Winnipeg, MB
Carrie Falkenrath, Principal, Tsquared Traffic & Transportation, St. Louis, MO
Joanna Kervin, Director, Third Party, Planning and Property, Toronto Transportation Commission, ON
Cathy Leong, Senior Project Manager, Wilson Okamoto Corporation, Honolulu, HI

**SC**

**Developing a Blueprint for Shared Mobility**
Grand East
Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Sponsored by VHB

Developed by the Transportation Planning Council

Shared Mobility, which lies at the intersection between the sharing economy and integrated mobility, is providing new transportation options for travelers and creating challenges for policy makers in jurisdictions across North America. Some shared mobility models, such as car share and bike share, have been around for some time. However, on-demand or data-enabled models such as ridesourcing and microtransit have surfaced tensions between the roles of the public and private sectors, with shared mobility often viewed in contrast, rather than in alignment, with incumbent public services such as transit. At the same time, shared mobility services present an opportunity to address strategic challenges with regard to sustainable travel choices. Shared mobility is often focused on user-centered, attractive customer experiences, and making more efficient use of underutilized resources and could play an important role in the first and last mile of a transit journey, and serving isolated or specialized markets. This panel discussion focuses on responding to shared and on-demand mobility, and reviews how the public sector (transit authorities, regional planning agencies, state/provincial and local officials) are responding. How can private shared mobility service providers be steered into directions that support broader policy objectives or livable metro regions, travel options, and sustainable choices? How can the public interest be protected while leaving room for innovation and new approaches? What tools are available to begin planning for shared and on-demand mobility?

Learning Objectives:
- Describe the various business models present in the mobility space as well as the overarching challenges and opportunities they present.
- Examine potential starting points in terms of beginning a dialogue on shared mobility in different regions.
- Identify next steps in terms of tools and policy responses.
- Discuss longer-term future including convergence of technologies and mobility providers, and mobility-as-a-service.

Facilitator:
Sasha Suds, Senior Program Manager, Transportation and Energy, MaRS Solutions Lab, Toronto, ON

Speakers:
Daniel Haufschild, VP Urban Mobility, WSP, Toronto, ON
Michael Crawford, Urban Policy Associate, Mowat Centre, School of Public Policy and Governance, University of Toronto, Toronto, ON
Aaron Baxter, Planner, WSP, Toronto, ON
Vi Bui, Program Manager, Transportation Planning, Regional Municipality of York, Newmarket, ON

**New Mobility Background Paper**

**Sharing the Road: The Promise and Perils of Shared Mobility**

**Feasibility Study for the Expansion of Bike Share Toronto**

**York Region Transportation Mobility Plan Guidelines for Development Applications**

Make sure to download our mobile app! See page 8 for information and for how to access the internet.
Wednesday August 2
8:30–10:00 a.m.

**How Transportation Can Help Create Healthy, Vibrant Communities**
Dominion North

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by Sanderson Stewart

Developed by the Complete Streets, Transportation Planning, and Traffic Engineering Councils

The intersection of transportation and healthy living is coming to the forefront in many communities. The connection between active movement to improved health outcomes is becoming increasingly apparent and has a strong connection to the availability of public infrastructure to support every day activities. There are different and unique approaches to completing streets for municipalities of varying sizes and development patterns to support vibrant communities. Through examples of partnerships with non-traditional stakeholders and the community, learn about multi-disciplinary approaches to complete streets, based on health and engineering. Leave inspired to create new transportation plans and policies for development in areas and corridors incorporating all modes.

Learning Objectives:
- Explain examples of non-traditional partnerships to promote healthy communities.
- Differentiate between multi-disciplinary approaches to advance active transportation.

Facilitator: 
Michael Sanderson, President and CEO, Sanderson Stewart, Billings, MT

Speakers:
Samuel Schwartz, President and CEO, Sam Schwartz Engineering, New York, NY
Danny Pleasant, Transportation Director, Charlotte Department of Transportation, Charlotte, NC
Lauren Blackburn, Senior Project Manager, VHB, Raleigh, NC
Dan Mitchell, Assistant General Manager, Los Angeles Department of Transportation, Los Angeles, CA

**Come Back With a Warrant: Traffic Control and Evidence-Based Safety for Bicycles**
Dominion South

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Sponsored by Bunt

Developed by the Pedestrian and Bicycle Standing Committee

Current industry guidance provides alternative methods, and sometimes conflicting direction, for determining when bike control is required. The National Committee on Uniform Traffic Control Devices focuses on development of standards, guidelines, and practices to regulate, warn, and guide traffic on streets and highways. The cities of Los Angeles, CA, Boise, ID, and Vancouver, BC have been at the forefront in the area of alternative transportation and traffic control for bicycle facilities. In addition, new on-line data resources for benchmarking bicycle activity and safety will be soon available through a project jointly developed by ITE and the American Public Health Association.

Learning Objectives:
- Develop knowledge of best practices in determining the need for bike signals and exclusive bike phasing at signals to improve safety and reduce conflicts.
- Understand critical components of signal design for bike facilities.
- Identify site constraints for successful signal installation.
- Describe tools and resources available through the Bicycle and Pedestrian Benchmarking Website.

Facilitator:
Kate Whitfield, Office Manager/Associate Engineer, Alta Planning + Design Inc., Ottawa, ON

Speakers:
Traffic Control for Bicycle Facilities - A User's Guide
Joshua Saak, Traffic Design Engineer, Ada County Highway District, Boise, ID
Katherine Robb, Policy Analyst, American Public Health Association, Washington, DC
Bicycle Detection and Differentiation Using Inductive Loop Technology
Matt Zinn, Sales Manager, Reno A&E, Reno, NV
Evaluating a Pilot Separated Bike Lane Project on One of Toronto's Main Streets
Jason Neudorf, Transportation Planner, WSP, Thornhill, ON
Jacquelyn Hayward Gulati, Acting Director, Transportation Infrastructure Management, Toronto, ON
What to Fix Next: Getting to the Goal of Vision Zero
Civic North

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Developed by the Transportation Safety Council

What is the best process, and what are the best techniques to identify where safety improvement funds should be allocated? Are spot improvements more effective than corridor wide improvements? How should we screen high crash locations or corridors to determine the optimal improvements? Prioritizing safety improvements is an ongoing challenge for departments of transportation and jurisdictions of all sizes. This session examines different applications and resources to make informed decisions.

Learning Objectives:
• Understand the influence and impact of the organization processes, policy, and program on transportation safety.
• Describe examples of safety resources and application examples.
• Identify different practices to improve transportation safety.

Facilitator:
Bruce Hamilton, Director of Safety and Research Programs, Roadway Safety Foundation, Washington, DC

Speakers:
Challenges and Solutions in Prioritizing Safety Improvements
David Metcalf, Vice President Virginia, PRIME AE Group, Fairfax, VA
Ken Schuenemeyer, Traffic Engineer, ATCS, Herndon, VA

Rural Transition Zones to Town Centers
Neal Hawkins, Associate Director, Institute for Transportation, Iowa State University, Ames, IA

Zero Fatalities: Applying the Roadway Safety Analysis Methodology in Utah
Grant Schultz, Professor, Brigham Young University, Provo, UT

The Three "E"s of Safety—Are the Three "E"s Equal?
Peter Yauch, Program Manager-TSM&O, Albeck Gerken, Inc., Tampa, FL

Camels, Rats, Twinkies, and Silly Putty: What Can We Learn About Making the Transportation System Resilient
Civic South

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)

Developed by the Transportation System Management & Operations Council in collaboration with the AASHTO Special Committee on Transportation Security and Emergency Management

Urban areas and societies are built upon the interconnected nature of transportation systems and land use. This session explores the challenges to and capacity of transportation systems to function as well as recover in the face of external shocks and directed change.

Learning Objectives:
• Describe the nature of external drivers that affect the resiliency of the transportation system from both a physical and cyber/technology perspective.
• Understand there a number of equivalent stable states of operation and adaption for any multimodal transportation system
• Identify tools and resources to improve the resiliency of the system of transportation resources.

Facilitator:
King Gee, Director of Engineering and Technical Services, American Association of State Highway and Transportation Officials, Washington, DC

Speakers:
Ryan Martinson, Associate - Sustainable Transportation Specialist, Stantec, Calgary, AB
Ed Fok, Transportation Technologies Specialist, Federal Highway Administration, San Francisco, CA
Chris Schmidt, Chief, Division of Transportation Planning, California Department of Transportation, Sacramento, CA
Ken Fletcher, Principal, Kestrel Hawk Consulting, Gaithersburg, MD
Towards Vision Zero at Railroad Grade Crossings
City Hall

Professional Development Credits: 1.5 PDH (PTOE)
Sponsored by Rail Pros
Developed by the Railroad Grade Crossing Standing Committee
The Road to Zero must address at-grade rail crossings. Since collisions between trains and motor vehicles typically result in severe damage and fatalities, it is important that designers and legislators/public officials are focused on improving safety of at-grade rail crossings. This session highlights the most recent “best practices” for treatments at highway-rail grade crossings from an international perspective. The session also showcases emerging new guidance for implementation of traffic signal preemption at locations where the traffic signals are interconnected with the railroad active warning devices (flashing lights, bells, and crossing gates). The session provides updates on both the USDOT Grade Crossing Handbook/Preemption Guide as well as Transport Canada’s updated grade crossing requirements manual.

Learning Objectives:
• Understand the content of the upcoming ITE Recommended Practice for Preemption of Traffic Signals Near Grade Crossings.
• Explain the use of updated Preemption Timing Worksheets recently developed by Texas A&M Transportation Institute for TXDOT.
• Discuss key new content which will be available in the upcoming update to the USDOT Grade Crossing Handbook.
• Describe the similarities and differences between Canadian and U.S. requirements for grade crossings.

Facilitator:
Brent Ogden, Regional Vice President, Kimley-Horn and Associates Inc., Oakland, CA
Speakers:
Karen Hankinson, Vice President, Rail Pros, Irvine, CA
Kevin Balke, Senior Research Engineer, Texas A&M Transportation Institute, College Station, TX
Jay Reiger, Chief Engineer, Railway Safety Operations, Transport Canada, Ottawa, ON
Amiy Varma, Associate Professor, Department of Civil and Environmental Engineering, North Dakota State University, Fargo, ND

Managing Urban Curbspace: Death by 1000 Cuts or the Lifeline among Modes?
Grand East

Professional Development Credits: 1.5 PDH (PTOE/PTP) • CM | 1.5 (AICP)
Developed by the Complete Streets Council
As urban activity centers evolve, new challenges have emerged in prioritizing valuable curb space. Carsharing, bikesharing, transit transfers, taxi service, commercial loading, and even vending trucks compete. Stakeholders extend well beyond the agency’s parking teams: police, traffic operations, transit authorities, businesses, signing and markings, pedestrian/bicycle safety, and others. These stakeholders’ success will greatly depend on the prioritization/location decisions made in curbside management. How do transportation decision-makers find the right balance to optimize individual success, synergy among modes, and fairness to each stakeholder? This conversation discusses successes and challenges in this area, including the need to proactively address curbside management in planning, as well as reactively in transportation operations.

Learning Objectives:
• Discuss methods to improve communication between internal government stakeholders, as well as gain input from external stakeholders.
• Explain how to optimize multimodal curb space of a complete street, via planning and engineering techniques.
• Describe approaches to convey operational priorities into a functional complete street network, including removing parking for protected bike lanes, parklets, and transit.

Facilitator:
Larry Marcus, Virginia Office Manager, Wallace Montgomery, Tysons, VA
Speakers:
Paul Sabo, Senior Engineer, City of Toronto, Toronto, ON
Matthew Roe, Director, Designing Cities Initiative, National Association of City Transportation Officials, New York, NY
Nadine King, Senior Transportation Engineer, Watt Consulting Ltd, Victoria, BC
Jane Farquharson, Principal, Bunt & Associates, Vancouver, BC
Kathy Ho, Senior Transportation Planning Engineer, City of Coquitlam, Coquitlam, BC
Poster Sessions

On Monday, July 31 and Tuesday, August 1, poster presentations take place in the Exhibit Hall (Osgoode and Sheraton Ballrooms) in conjunction with the beverage breaks.

Monday, July 31
10:00 a.m.–11:00 a.m.

Smart Communities
Transport Smart in Congested Networks with Uncertainties
William H.K. Lam, Chair Professor and Head of Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University, Hong Kong
Making the Right Multimodal Connections to a Regional Transit Center
Donald Samdahl, Principal, Fehr & Peers, Seattle, WA
North American Collaboration: How Transportation Analytics Teams Can Build Capacity with Open-Source Projects
Raphael Dumas, Research Analyst, City of Toronto, Toronto, ON
Edmonton Carsharing Strategy
Jeremy Finkleman, Transportation Planner, Urban Systems Ltd., Vancouver, BC

Trip Generation
Urban Person Trip Generation Since the 1970s - Data and Use Case in NYC
Lee-Jung Kim, Technical Director, AKRF, Inc., New York, NY
Using GPS-Derived Origin-Destination Data to Improve Traffic Studies
Michael Wahlstedt, TranSystems, Kansas City, MO
Does Traffic Management Really Reduce Emissions and Improve Air Quality?
Omar El Masri, Graduate Research Assistant, University of British Columbia, Vancouver, BC

Monday, July 31
3:30–4:30 p.m.

Complete Streets
Emerging Policy for Site Roadways Open to Public Travel
Randy McCourt, President, DKS Associates, Portland, OR
Separated Bike Lanes Design Concept Completes Main Street
Yung Koprowski, Project Manager, Lee Engineering, LLC, Phoenix, AZ
How Do You Solve the Unsolvable Problem? Innovative Designs in Urban Areas
Christa Greene, Senior Traffic Engineer, Stantec, Raleigh, NC

Making the Comprehensive Planning Process Work
Alyssa Rodriguez, City Traffic Engineer, City of Henderson, Henderson, NV

More Science or Art—Transportation Accuracies for Data Tools Processes and Uses?
Bhanu Kala, Civil Engineer, CDM Smith, San Francisco, CA

Keeping People Moving during Transformative Change
Paul Sharman, Transportation Data Analyst, TranspoGroup, Kirkland, WA

How We Can Use Big Data to Improve the Reliability of People Movement
Aakash Harpalani, Research Analyst, City of Toronto, Toronto, ON

Zero-emission transport for the ‘Coolest Little Capital’ - How Transport in Wellington, New Zealand can change to meet the Paris Climate Agreement
Rehan Shaikh, Victoria University Wellington, Wellington City, New Zealand

Poster Sessions
On Monday, July 31 and Tuesday, August 1, poster presentations take place in the Exhibit Hall (Osgoode and Sheraton Ballrooms) in conjunction with the beverage breaks.
When Adding a Lane Just Isn’t Enough...Alternative Design Solutions Along the NC 150 Corridor
Kellie Reep, Transportation Engineer, Stantec, Charlotte, NC

Valuing Place: Use of Accessibility in Virginia’s Smart Scale Prioritization System
Dan Hardy, Principal, Renaissance Planning Group, Arlington, VA

Active Transportation Culture Shift through a “Slow Ride” Bicycle Group
Adam Lynch, Traffic Engineer/Planner, HDR, Cincinnati, OH

Dealing with Emotion and Outrage to Build Complete Streets
Erin Russell, Partner, Russell Public Relations Inc., Calgary, AB

Connecting Three Communities with One Great Street: Lakeshore Connecting Communities
Tara Erwin, Senior Project Manager, HDR Inc., Richmond Hill, ON

Susan Tanabe, Manager, Transportation Planning, City of Mississauga, Mississauga, ON

Mark VanderSluis, Project Leader, Transportation Planning, City of Mississauga, Mississauga, ON

Designing Great Streets-York Region’s Approach for Building Roads that Build Community
Tamas Hertel, Senior Transportation Specialist, The Regional Municipality of York, East Gwillimbury, ON

STEP FORWARD: A Strategic Plan for Improving Walking in Calgary
Ryan Vanderputten, Director, Transportation Planning, City of Calgary, Calgary, AB

Imagine Jasper Avenue - Edmonton’s Main Street
Rosie Jaswal, Project Engineer, City of Edmonton, Edmonton, AB

Evaluation of the Benefits of Rural Bicycle Climbing Lanes
Jeremy Chapman, Senior Traffic Engineer, American Structurepoint, Inc., Indianapolis IN

Exploring Transit Origin-Destination Using Bluetooth Data Collection: A Case Study in San Luis Obispo, California
Ashley Kim, Student, Cal Poly San Luis Obispo, San Luis Obispo, CA

FHWA’s Small Town and Rural Multimodal Networks Guide
Andrea Clinkscales, Senior Planner, Alta Planning + Design, Seattle, WA

Kitchener’s Vision for a More Sustainable Integrated and Friendly Transportation System
Barry Cronkite, Manager of Transportation Planning, City of Kitchener, Kitchener, ON

Danny Pimentel, Active Transportation Planning Project Manager, City of Kitchener, Kitchener, ON

Zebras and Elephant Feet-Oh my! Where Multi-Use Pathways Cross Roadways
Kate Whitfield, Senior Project Manager, Parsons Inc., Ottawa, ON

Roundabouts, Bicycles, and Pedestrians - A Pairing on Par with Fries, Cheese Cuds, and Gravy?
Alek Pochowski, Senior Engineer/Planner, Kittelson & Associates, Inc., Washington, DC

Roundabout Design for Pedestrians and Cyclists
Phil Weber, Senior Project Manager, CIMA+, Mississauga, ON

Roundabout Design including Rail in the USA
Bill Baranowski, Traffic Engineer, RoundaboutsUSA, Holladay, UT
Monday, July 31
3:30–4:30 p.m.

Complete Streets
Roundabout Connected Roadway Networks: How 100+ Roundabouts Are Benefitting the Community of Carmel, Indiana
Michael McBride, Vice President, American Structurepoint, Inc., Indianapolis, IN
Assessing Roundabout, Traditional Diamond and Diverging Diamond Freeway Interchange Operations
Mark Besley, Director, Sidra Solutions, Greythorn, Victoria, Australia
Solving Complex Issues with Innovative Roundabout Applications
Mark Johnson, Principal Engineer, MTJ Roundabout Engineering, Madison, WI
How to Speak Roundabout
Joe Gustafson, Traffic Engineer, Washington County, Stillwater, MN
A Unique Application of Railroad Preemption with Queue Mitigation at a Roundabout Interchange
Hardik Shah, Director of Development, American Structurepoint, Inc., Indianapolis, IN

Tuesday, August 1
9:30–10:30 a.m.

Career Advancement
Developing Your Professional Artistry
Richard Beaubien, Managing Director, Beaubien Engineering, Troy, MI

Connected and Automated Vehicles
Opportunities and Challenges in Traffic Signal Operations and Infrastructure Deployment in the Era of Connected and Automated Vehicles
Husain M Abdul Aziz, Research Scientist, Oak Ridge National Laboratory, Oak Ridge, TN
Hong Wang, Laboratory Fellow, Pacific Northwest National Laboratory, Richland, WA
Stanley Young, Research Scientist, National Renewable Energy Laboratory, Golden, CO
Joshua Sperling, Urban Futures and Energy-X Nexus Engineer, National Renewable Energy Laboratory, Golden, CO
Budhendra Bhduri, Corporate Fellow, Oak Ridge National Laboratory, Oak Ridge, TN
Travel Smart–Adapting to New Mobility Options in a Regional Context
Sabeen Makki, Senior Transportation Policy and Planning Specialist, The Regional Municipality of York, Newmarket, ON
From Smart Cities to Wise Cities: Powering Models with Big Data
Shaleen Srivastava, Vice President (Traffic) North America, PTV Group, Arlington, VA
Helping Public Agencies Reach Their Goals through Research
Katherine Kortum, Senior Program Officer, Transportation Research Board, Washington, DC
Level 2 Automated Truck Platooning in Texas
Kevin Balke, Senior Research Engineer, Texas A&M Transportation Institute, College Station, TX
Leveraging mature and emerging mobility solutions to plan for multi-modal station access for Rapid Transit
Naren Garg, Advisor, Planning and Policy - Regional Express Rail Project Planning, Metrolinx, Toronto, ON

What Is Possible With Real-Time Traffic Light Data?
Martin Drohmann, Senior Software Engineer, Connected Signals, Eugene, OR
Ambiguous Infrastructure: When Signs and Markings Don’t Make Sense to People or Machines
Scott Kuznicki, President, Modern Traffic Consultants, Mercer Island, WA

Transportation Systems Management and Operations
Put an Optimization Idea into Actions to Improve Freeway Patrol Operations
Pei-Sung Lin, Program Director, Center for Urban Transportation Research, University of South Florida, Tampa, Florida
Bringing Adaptive Ramp Metering to the San Francisco Bay Area: User Satisfaction and Operational Perspective
Travis Low, Graduate Student, California Polytechnic Institute, San Luis Obispo, San Luis Obispo, CA
Using Mobile LiDAR to Manage Roadway Assets
Mark Day, Director of Application Development, GPI, Toronto, ON
Innovative Municipal Funding in Canada and the U.S.
Bosco Tong, Senior Transportation Engineer, Strathcona County, Sherwood Park, AB
LED Street Lighting Planning–Best Practices
Dhruva Lahon, Project Manager, Kimley-Horn and Associates Inc., Dallas, TX

Vision Zero
2015-2016 Knox County, Tennessee Strategic Safety Plan
W. Hollis Loveday, Principal, CDM Smith, Knoxville, TN
Developing Macro-Level Collision Prediction Models to Evaluate Bicycle Safety in the City of Vancouver
Bianca Popescu, Assistant Transportation Engineer, DKS Associates, Seattle, WA
Statewide Horizontal Curve Safety Project
Mir Wahed, Vice President, Johnson, Mirmiran & Thompson, Inc., Newark, DE
Using Video Data to Evaluate Pedestrian, Bicycle, and Vehicle Conflicts
Nancy Hui, MaSc candidate, University of Toronto, Toronto, ON
The Impact of Marijuana Legalization on Traffic Safety in the United States
Jaeyoung Lee, Safety Program Director/Assistant Professor, University of Central Florida, Orlando, FL
Challenges in Constructing Safe Routes to School in a Dense Urban Environment–The San Francisco Chinatown Safe Routes To School Project
Philip Louie, Associate Engineer, San Francisco Municipal Transportation Agency, San Francisco, CA
Iowa DOT Traffic Critical Project; Intelligent Work Zone Management
Neal Hawkins, Associate Director, Institute for Transportation, Iowa State University, Ames, IA
Use of a Comparative Travel Time System as a New Work Zone Intelligent Transportation System Solution
John Habermann, Research Engineer, Texas A&M Transportation Institute, Waco, TX
Examining Driver Behavior in the Vicinity of Pedestrians Using Onboard and Smartphone Video Log Images
Mohammad Jalayer, Research Associate, Center for Advanced Infrastructure and Transportation (CAIT), Rutgers University, Piscataway, NJ
Tuesday, August 1
3:15–4:15 p.m.

Traffic Signals

Multimodal Traffic Signal Warrants and Signal Timings
Peter Martin, Multimodal Transportation Specialist, CDM Smith, San Francisco, CA

Planning Toronto’s Future through Simulation
Matthew Davis, Senior Transportation Planner, City of Toronto, Toronto, ON

Zipper Merge Signage, Markings, and Geometric Design for Permanent Applications
Clayton Rudy, Transportation Engineer, Stantec Consulting Ltd., Toronto, ON

Mercer Street Advanced Traffic Management System
Band Sittikariya, Senior ITS Engineer, Seattle Department of Transportation, Seattle, WA

Placing the Pedestrian and the Bicyclist at the Forefront of Traffic Signal Operations
Christopher Puglisi, Traffic Engineer, Jacobs, Atlanta, GA

Stop Widening Roadways. Think Capacity Expansion Instead
Wes Guckert, President and CEO, The Traffic Group, Inc, Baltimore, MD

Freight

Roundabout Truck Trial: Seeing is Believing
Marc Frutiger, Senior Project Engineer, R&M Consultants, Anchorage, AK

Pennsylvania’s Automated Permit Routing Analysis System (APRAS)
Robert Pento, Manager, Traffic Engineering & Permits Section, PA Department of Transportation, Harrisburg, PA

Vehicle Access Control System
Cory Edgar, Principal, PBX Engineering Ltd., Victoria, BC

Balancing Goods Movement and Livability with Roadway Design
Dan Hardy, Principal, Renaissance Planning, Arlington, VA

Transit

Balancing Multimodal Transportation Network Performance - A Case Study of VISSIM Modelling for the Edmonton Valley Line LRT
Rishi Lukka, Transportation Engineer, Arup, Toronto, ON

Wendy Qin, Transportation Consultant, Arup, Toronto, ON

Marc-Paul Gauthier, Senior Transportation Technologist, Arup, Toronto, ON

Los Angeles’ Free Bus Transfer Experiment: An Evaluation
Nora Chin, Transportation Planning Associate II, City of Los Angeles Department of Transportation, Los Angeles, CA

A Pipeline for Project Readiness: The Metrolinx Project Development Process
Devin Horne, Senior Advisor, Planning and Policy, Metrolinx, Toronto, ON

Kristin Demasi, Senior Planning Officer, Planning and Policy, Metrolinx, Toronto, ON

UBC Point-Grey Campus Bus Terminal and Covered Layover Facilities: Connecting Transit Users to the Heart of the Campus
Christephen Cheng, Senior Transportation Engineer, Bunt & Associates Engineering Ltd., Vancouver, BC

Metrolinx Transit Accessibility/Connectivity Toolkit
Christopher Livett, Transportation Planning Analyst, Metrolinx, Toronto, ON

Green Line LRT Connecting Visions: Multiple Account Evaluation in the Beltline Community
Dena Abakumov, Transportation Engineer, Stantec, Calgary, AB

From Commuters to Communities: Integrating Service Planning and Station Planning for a Regional Rail Network
Hank Wang, Senior Planning Officer - Rail Network Planning, Metrolinx, Toronto, ON

Richard Borbridge, Senior Advisor, Hub and Station Planning, Metrolinx, Toronto, ON

Lessons Learned in Preparing a Downtown Area for a New Regional Commuter Rail System
Matt Wages, Civil Engineer, Kimley-Horn and Associates Inc., Oakland, CA

Eglinton Crosstown LRT - Managing the Disruption...
Jonathan Mang, Traffic and Transportation Lead-Field Services, 4Transit, Toronto, ON

Tommy Wong, Traffic Control Coordinator, 4Transit, Toronto, ON

Jeff Walker, Traffic Control Coordinator, 4Transit, Toronto, ON

Using Big Data to Analyze Bike/Pedestrian Activity: Learning from Sacramento Transit Station-Area Analysis
Eric Sundquist, Managing Director, State Smart Transportation Initiative, University of Wisconsin, Madison, WI

Laura Schewel, CEO, StreetLight Data, San Francisco, CA
Technical Tours

These tours require a separate fee. Tickets can be purchased at the ITE Registration Desk on a first-come, first-served basis on tours where space is still available. We will be unable to maintain waiting lists for sold-out tours. Tour participants should meet in the hotel lobby 15 minutes prior to the scheduled time for departure.

**Toronto-York Spadina Subway Extension (Line 1),**  
**Tuesday, August 1, 8:00 a.m.–12:00 p.m.**  
Fee: USD$25

Professional Development Credits: 2.0 PDH

Tour a brand-new transit facility in the Greater Toronto Area (GTA). The GTA is the most populous metropolitan area in Canada, with a population of approximately 6.5 million people. Serving this population are 9 regional and municipal public transit operators. On this tour we will get a behind-the-scenes look at a new transit facility in the GTA. Participants should wear long pants and shirts with sleeves (no sleeveless tops.

**Walking Tour – Complete Streets in Downtown Toronto**  
**Tuesday, August 1, 9:30–11:45 a.m.**  
Fee: USD$25

Professional Development Credits: 1.5 PDH

Although the City of Toronto only released the Toronto Complete Streets Guidelines in December 2016, it has been implementing Complete Streets elements through its capital construction projects and other operational and policy actions for a number of years now. This walking tour will provide participants the opportunity to learn about the Complete Streets features the City has introduced on several projects in Downtown Toronto and speak with staff involved in both policy and implementation on the following initiatives:

- Toronto 360, the City’s new wayfinding program
- The recently launched Yonge Street Revitalization Project, focused on Toronto’s most iconic street from Queen Street to Gerrard Street
- New lanewidths and geometric intersection guidelines to reconfigure the existing road allowance to improve walking and cycling, and road safety
- Union Station redevelopment, including new material standards and traffic operations considerations
- Tactile warning strips and the City’s approach to accessibility
- The City’s coordinated street furniture program, which currently includes 17,000 items
- The Yonge-Dundas Pedestrian Priority (Scramble) Crossing
- The Gould Street Pedestrian Zone at Ryerson University
- The Richmond Street/Adelaide Street Cycle Tracks
- The Pilirigatigingnit Mural Project + Outside the Box on traffic signal boxes
- Forthcoming café guidelines and their impact on city streets (including parklets)
- Berczy Park and Scott Street revitalization involving significant road alterations
- Market Street, Toronto’s first flexible street

Please wear comfortable shoes and make sure to bring water and sun protection. The tour will be on flat city pavements and cover between 5-6 km (3.1-3.7 mi) on foot.

**Tour of the City of Toronto Operations Centre,**  
**Wednesday, August 2, 8:00–10:30 a.m.**  
Fee: USD$25

Professional Development Credits: 1.5 PDH (PTOE/PTP)

The City’s Traffic Management Centre (TMC) is responsible for managing traffic on Toronto's road network that consists of 40 km (25 mi) of expressways and more than 5,600 km (3,480 mi) of roads. The TMC is also responsible for managing approximately 2,300 traffic signals on the road network.

To mitigate traffic congestion on the transportation network, the TMC conducts the following functions: maintenance of traffic signals, provides traveler information, and manages the Transportation Operations Centre (TOC). Tour participants will be treated to a behind-the-scenes tour of this facility and hear the history of its evolution, overview of the funding mechanisms, and future plans.

Please plan on bringing a transit fare card or funds to purchase one. The Centre is a 45 minute subway/bus ride from the hotel.

**Toronto by Bike—Toronto’s Downtown Bicycle Facilities,**  
**Wednesday, August 2, 1:00–4:00 p.m.**  
Fee: USD$60.00

Please plan on bringing a transit fare card or funds to purchase one. The Centre is a 45 minute subway/bus ride from the hotel.

Professional Development Credits: 2.0 PDH

Take a 20-km (12.4 mi) city adventure on Toronto’s evolving downtown bicycle network!

Starting at the conference hotel, tour members will ride together to explore a range of Toronto's established and new bicycle facilities, including on-street bicycle lanes, boulevard cycle tracks, and multi-use trails. We will tour the newest pilot and cycle track projects, including the new Bloor Street bike lane pilot project, the Sherbourne Street cycle tracks, the Queens Quay complete streets and multi-use recreational trail, and the Richmond-Adelaide cycle track. We will also ride some of downtown’s established and popular bicycle facilities, including the Beverley/ST. George Street bicycle lanes and the Harbour Street bicycle lanes. The tour will take us past some of downtown Toronto’s iconic districts, including the entertainment district, the waterfront, the University of Toronto, and the Annex.

The route is flat and will mostly take us on dedicated bicycle lanes. Downtown Toronto streets are busy, however, so comfort with urban bicycle riding is recommended. Helmets will be provided. Please make sure to bring extra water and sun protection.

Dominion South

Professional Development Credits: 3.5 PDH (PTOE)

Developed in collaboration with the TRB Traffic Signal Systems Committee and the Traffic Engineering Council

There is a strong interest in transportation system performance measures in the United States. This workshop focuses on tactical performance measures that can be used to identify opportunities for 1) improving arterial progression and 2) improving split (green time) allocation. These tactical performance measures can be derived from high-resolution controller data. The workshop discusses what high resolution controller data is how these data can be used to develop tactical performance measures, and outcome oriented probe data based performance measures for validating that implemented timing changes are working.

Learning Objectives:
- Understand the use of high resolution traffic signal controller data to improve traffic signal operation.
- Identify and explain outcomes of implementation of automated signal performance measures.
- Describe tactical actions to improve traffic signal performance in arterial signal systems.
- Discuss the use of probe data to validate signal timing changes.

Facilitator:
Darcy Bullock, Professor, Purdue University, West Lafayette, IN

SPEAKERS:
Peter Koonce, Division Manager, Signals, Street Lighting, & ITS, Portland Bureau of Transportation, Portland, OR
Christopher Day, Senior Research Scientist, Purdue University, West Lafayette, IN
Eddie Curtis, Traffic Management Specialist, Office of Operations, FHWA, Atlanta, GA
Steven Lavrenz, Technical Program Specialist, Institute of Transportation Engineers, Washington, DC

Allocating Curb space in a Complete Streets Environment

City Hall

Professional Development Credits: 3.5 PDH (PTOE/PTP) • CM | 3.5 (AICP)

Developed in collaboration with NACTO and ITE’s Transportation Planning and Complete Streets Councils

With the dramatic change in urban street design initiated by ITE’s recommended practice Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, NACTO’s Urban Street Design Guide, and Transit Street Design Guide as well as enhanced travel options such as TNCs, carsharing, and bikesharing, ITE and the National Association of City Transportation Officials (NACTO) are partnering to develop a resource on the use of curbspace in a complete streets environment. The workshop will focus on developing methods to 1) prioritize curbspace use via key performance measures; 2) review curbspace use as part of a new transportation project or the site plan review process; and 3) assess safety/minimize conflicts when implementing innovative street treatments.

The workshop will identify necessary baseline curbspace components including sight distance, emergency access, and special needs, as well as core functions such as commercial and passenger loading, transit transfers, taxi service, and vehicular parking as each relates to land use, street functional classification, and proximity to a mobility hub. Participants will contribute to developing the guidance in each of the areas outlined above.

This is an interactive workshop, and participants will be invited to submit a short 2-3 min PowerPoint for a rapid-fire IMPACT presentation at the start of the session. Come prepared to share your stories and ask your burning questions.

Learning Objectives:
- Understand the core principles of organizing curb space for short –term and long-term uses.
- Identify workable design solutions to improve safety and minimize conflict points.
- Discuss the use and prioritization of curb space to meet community goals and objectives.

Facilitators:
Larry Marcus, Virginia Office Manager, Wallace Montgomery, Tysons, VA
Matthew Roe, Director, Designing Cities Initiative, National Association of City Transportation Officials, New York, NY
Dan Nabors, Design Engineer Team Supervisor, Transportation Engineering and Operations, Department of Environmental Services, Arlington County, Arlington, VA
Meghan Mitman, Principal, Fehr & Peers, San Francisco, CA

Pedestrian and Bicycle Counting

Civic South

Professional Development Credits: 3.5 PDH (PTOE/PTP) • CM | 3.5 (AICP)

Developed in collaboration with the Highway Safety Research Center, University of North Carolina

The needs of pedestrians and bicyclists are often neglected when timing signals and designing roadways in part due to the lack of pedestrian and bicycle count data. Thanks to recent interest in the subject and technology development, many jurisdictions are now filling this data gap. This training discusses how to including pedestrian and bicycle volume counts as part of a comprehensive traffic counting program as well as examples of how to use these data.

Learning Objectives:
- Demonstrate effective pedestrian and bicycle count technologies and where to install them.
- Learn how to design a bicycle and pedestrian count program that makes the most of limited resources.
- Identify count data validation strategies.
- Learn how to estimate annual average daily pedestrian and bicycle traffic at short duration count locations.

Facilitators:
Krista Nordback, Senior Research Associate, Highway Safety Research Center, University of North Carolina, Chapel Hill, NC
Sirisha Kothuri, Postdoctoral Research Associate, Transportation Research and Education Center, Portland State University, Portland, OR
Meeting Highlights & Family Activities

Traffic Bowl x 2! Two Days, Two Competitions...Twice the Excitement!

CITE Traffic Bowl, Sunday, July 30, 4:00–6:00 p.m.
ITE Traffic Bowl Grand Championship, Monday, July 31, 4:30–6:30 p.m.
The ITE Collegiate Traffic Bowl is an annual, Jeopardy-style competition among ITE student chapter teams using transportation planning and engineering topics for the categories, questions, and answers.
Attendees will be treated to two Traffic Bowl competitions! On Sunday, July 30 the best student chapter teams from the Canadian District compete for an opportunity to take on the winning student chapter teams from other ITE Districts during the ITE Traffic Bowl Grand Championship held the following day! Come cheer the students to victory!

First Timer/Global Member Reception
Sunday, July 30, 5:00–6:00 p.m.
Sponsored by Neel-Schaffer
If this is your first time attending an ITE or CITE meeting, the prospect of mingling with more than 1,000 other transportation professionals is daunting for even the most socially outgoing among us! This reception is the perfect opportunity for first-time attendees to network in a small group setting, meeting other first-time attendees and key people in the organization. Come meet some new people, create new relationships, and on Monday ensure that you won’t be walking into a session full of strangers.

Welcome to Toronto Opening Reception,
Sunday, July 30, 6:00–7:30 p.m.
Make new friends, reconnect with former colleagues and others, and make new and lasting memories. Our welcome reception features a Caribana Toronto-inspired fun and festive atmosphere. Add Caribbean flair to your outfit and enjoy tasty fare representing the best of Toronto’s multicultural diversity and refreshing beverages while networking with exhibitors. Additional tickets for guests are available for purchase.

ITE and CITE Awards Lunch with Leadership/ITE Graduation,
Monday, July 31, 12:00–2:00 p.m.
Celebrate the best of the transportation profession and recognize tomorrow’s transportation leaders! This event is highly anticipated within the transportation industry as an opportunity to hear about the achievements of our colleagues and friends.

ITE Town Hall Business Meeting,
Monday, July 31, 2:00–3:30 p.m.
This session provides an open opportunity for discussion and feedback on the future direction of ITE using information from the ITE transportation professionals survey and strategic initiatives underway at ITE. In addition, the proposed changes to the ITE Constitution will be presented and discussed. Members of the ITE International Board of Direction will also be in attendance.

CITE Student Mixer*,
Monday, July 31, 7:30 p.m.
Sponsored by Paradigm Transportation Solutions Ltd.
An annual CITE event open to all students to network and enjoy a casual evening with their peers.

Hockey Night in Canada Reception,
Tuesday, August 1, 5:30–7:00 p.m.
It would not be a Canadian event without a tribute to its national winter sport—hockey!
Come wearing your favorite sports jerseys (hockey team or other sport) and share stories of great moments in sports’ history while enjoying sports pub food and refreshments. Additional tickets for guests are available for purchase.

On Thin Ice: The MiteY Race International Edition,
Tuesday, August 1, 5:30–7:00 p.m.
The theme of the second edition of the MiteY Race International Edition is themed “On Thin Ice.” Teams will race through a number of “pit stops” located around the Sheraton Centre Toronto Hotel with the first team to cross the finish line declared the winner. The Western District is proud to share one of the events that has become a tradition for us and hope you find it as fun and exciting as we have! Register at http://westermite.org/endowment-fund/mitey-race-2017-international-edition/.

Street Hockey Game,
Tuesday, August 1, 7:00–8:30 p.m.
Following the Hockey Night in Canada Reception, head out to play street hockey. It’s a great way to get your competitive spirit flowing! Everyone is welcome to join regardless of hockey knowledge. We’re sure our Canadian hosts will be happy to provide pointers.

Toronto Overview by Tourism Toronto,
Sunday, July 30, 12:00–1:30 p.m.
Make the most of your trip to Toronto! A representative from Tourism Toronto will be on hand in our Family Welcome Center to share tips on what to see and do in Toronto. Open to everyone!

Recreational Cycling Meet Up,
Sunday, July 30, 1:30–4:00 p.m.
Toronto is a great city for bicycling! Toronto has convenient bike share stations around downtown. Stop by and pick up a self-guided cycling tour map so you can discover downtown. Informal groups may get together to explore the sites.

Toronto on Foot—A Downtown Primer
Sunday, July 30, 2:00–4:00 p.m.
Please bring a transit token, a loaded Presto pass, or CAD$3.25 in exact change (per person) for the return trip.
Toronto is a great city for walking! This primer to downtown Toronto takes in some key sights and streets of Toronto. Starting at the conference venue opposite City Hall and Nathan Philips Square, our walking tour will take us past the Eaton Centre, Yonge-Dundas Square, Yonge Street, the Hockey Hall of Fame, the Financial District, Union Station, the CN Tower and Ripley’s Aquarium, Roundhouse Park, and a newly revitalized waterfront. We will return to the conference venue via streetcar or subway. Please wear comfortable shoes and make sure to bring water and sun protection. The tour will be on flat city pavements, and we will cover between 5-6 km (3.1-3.7 miles) on foot.*By Invitation Only

Welcome Center to share tips on what to see and do in Toronto. Open to everyone!
### Committee Meetings

**ITE Council and Committee Meetings**

**Sunday, July 30**
- 8:00–11:00 a.m.: Coordinating Council Meeting
  - Wentworth
- 11:00 a.m.–12:30 p.m.: Traffic Engineering Council Meeting
  - Elgin
- 11:30 a.m.–1:00 p.m.: Transportation Education Council Meeting
  - Wentworth
- 12:00–2:00 p.m.: Transportation Forensics and Risk Management Council Meeting
  - Elgin
- 1:00–3:00 p.m.: TSM&O Council Meeting
  - Wentworth
- 2:30–4:30 p.m.: Transportation Consultants Council/Public Agency Council/Transportation Education Council Meeting
  - Elgin
- 3:00–4:30 p.m.: Sustainability Standing Committee Meeting
  - Wentworth
- 4:30–6:00 p.m.: Paint and Plastic: Quick Build Options for Active Transportation Roundtable by the Complete Streets Council
  - Wentworth
- 6:00 p.m.: Transportation Planning Council Meeting
  - Elgin

**Monday, July 31**
- 10:30 a.m.–12:00 p.m.: CV/AV Steering Committee Meeting
  - Kenora
- 10:30 a.m.–12:00 p.m.: Transportation Safety Council Meeting
  - Huron
- 2:00–3:30 p.m.: Vision Zero Steering Committee Meeting (invitation only)
  - Kenora
- 3:30–4:30 p.m.: Nominating Committee Meeting and International Vice President Candidate Information Session
  - Huron

**Tuesday, August 1**
- 10:00–11:00 a.m.: Strategic Initiatives Committee Meeting (by invitation only)
  - Kent
- 10:30 a.m.–12:00 p.m.: Planning for Multimodal Transportation Impact Assessment Recommended Practice Meeting
  - Elgin
- 1:00–3:00 p.m.: Advocacy Committee Meeting
  - Huron

**Wednesday, August 2**
- 8:30 a.m.–1:30 p.m.: Connected Vehicle Task Force Meeting
  - Elgin

**CITE Council and Committee Meetings**

**Saturday, July 29**
- 9:00 a.m.–4:00 p.m.: Technical Liaison Committee Meeting
  - Simcoe
- 9:00 a.m.–5:00 p.m.: Executive Committee Meeting
  - Dufferin
- 1:00–5:00 p.m.: CITE EXCITE Meeting
  - Kenora

**Sunday, July 30**
- 8:00 a.m.–12:00 p.m.: CITE Board of Directors Meeting
  - Kenora
- 1:00–3:00 p.m.: CITE Training Committee Meeting
  - Kenora

**Transportation Research Board Traffic Signal Systems Committee**

**Monday, July 31**
- 10:00–11:00 a.m.: Asset Management Subcommittee
  - Civic North
- 11:00 a.m.–12:00 p.m.: Technology and Standards Subcommittee
  - Civic North
- 11:00 a.m.–12:00 p.m.: Traffic Signal Systems Education Subcommittee
  - Simcoe
- 11:00 a.m.–12:00 p.m.: Multimodal Traffic Signal Systems Subcommittee
  - Simcoe
- 1:00–2:00 p.m.: Traffic Signal Timing Subcommittee
  - Civic North
- 2:00–3:00 p.m.: Subcommittee
  - Simcoe
- 3:00–4:00 p.m.: Business meeting of the Transportation Research Board Traffic Signal Systems Committee
  - Civic North
Exhibitor Descriptions

AAA Foundation for Traffic Safety (Booth #504)
David Yang
dyang@aaafoundation.org
aafoundation.org/
AAA Foundation for Traffic Safety is a 501(c)(3) not-for-profit, publically supported charitable research and education organization. The organization was founded in 1947 by American Automobile Association to conduct research to address growing traffic safety issues. The organization’s mission is to identify traffic safety problems, foster research that seeks solutions and disseminate information and educational materials. AAA Foundation funding comes from voluntary, tax-deductible contributions from motor clubs associated with the American Automobile Association and the Canadian Automobile Association, individual AAA club members, insurance companies, and other individuals or groups.

All Traffic Solutions (Booth #102)
Sales Department
sales@alltraffic solutions.com
alltraffic solutions.com
All Traffic Solutions delivers cloud-based traffic management solutions including radar speed and variable message displays, imaging products and intelligent transportation systems for law enforcement, transportation and smart cities. Our innovative TrafficCloud™ traffic management ecosystem is changing the way smarter cities solve their most complex traffic, transportation and parking challenges by allowing them to manage all their traffic equipment remotely, as well as leverage data to increase traffic safety, streamline their operations and achieve lasting results.

Applied Information (Booth #502)
Peter Ashley
pashley@appinfoinc.com
appinfoinc.com
The Applied Information Glance Smart City Supervisory System connects your intersections, school beacons, and emergency vehicles to form a cohesive, connected system. AI specializes in cellular connected vehicle technology. AI will also be showcasing the new Glance TravelSafely smartphone application that uses cutting edge technology to make the promise of connected vehicles a reality. Harness the power of connected vehicle technology to make your city smarter, and your citizens safer.

American Traffic Safety Services Association (ATSSA) (Booth #513)
Jess Howes
jess.howes@atssa.com
atssa.com
ATSSA's core purpose is to advance roadway safety. ATSSA represents the roadway safety industry with effective legislative advocacy, traffic control safety training, and a far-reaching member partnership. ATSSA members accomplish the advancement of roadway safety through the design, manufacture, and installation of road safety and traffic control devices. As a trusted partner, the FHWA has awarded ATSSA 2016 grant funding to offer high-quality Work Zone Safety Grant training.

Black & McDonald Limited (Booth #607)
ashokraei@blackandmcdonald.com
blackandmcdonald.com
At Black & McDonald, our utility personnel are highly experienced in addressing the challenges of working in both urban and remote areas. They are exceptionally well-trained and skilled to deal with the issues of traffic congestion and pedestrian safety, minimizing disruptions along roadways, and ensuring that the safety of all concerned remains top of mind. We are specialized in ITS turnkey projects including but not limited to Real-time traffic adaptive system and radar detection solution.

Caliper Corporation (Booth #612)
Paul Ricotta
paul@caliper.com
caliper.com
Caliper Corporation is the developer of TransCAD, the predominant and premier software package for travel demand modeling in North America. Caliper is also the developer of TransModeler, a micro-simulation software package that provides unprecedented capability, usability, and capacity for microscopic traffic modeling and dynamic traffic assignment. Both applications are extensible and fully-integrated with Caliper’s full-featured and user-friendly geographic information and often deployed in tandem for a complete integration of macroscopic and microscopic modeling techniques.

Campbell Company (Booth #615)
Tony Wheeler
tonyw@pedsafety.com

campbellcompany.com
Campbell Company is an ISO 9001:2008 certified company that designs, engineers, and manufactures pedestrian accessibility products that focus on the traffic industry–specifically the intersection crosswalk. Campbell Company’s innovative solutions include Accessible Pedestrian Signals, Push Buttons, Pedestrian Stations, Signs and Hardware.

Carmanah Traffic (Booth #203)
Aaron Lockwood
traffic@carmanah.com

carmanah.com/traffic
Carmanah helps municipalities improve safety for multimodal networks and this allows users to connect with and between neighborhoods, no matter which type of transportation they choose. Since 1996, we have designed, manufactured, and distributed solar- and AC-powered LED flashing beacons across North America for this purpose. Our goal is to increase safety, improve walkability, and get drivers’ attention in a flash. Our products include rectangular rapid flashing beacons (RRFBs) to get drivers to yield at crosswalks, school zone beacons to alert drivers to posted speed limits, and 24-hour flashers to help drivers focus on signs.

Connected Signals, Inc. (Booth #200)
Lindsey Steele
lindsey@connectedsignals.com
connectedsignals.com
Connected Signals is a connected car data analytics company that provides vehicles with predictive, real-time, traffic signal information using existing infrastructure. This data, derived using sophisticated proprietary models, supports applications that improve safety, increase fuel efficiency, reduce carbon emissions, and improve traffic flow.

CountingCars.com (Booth #602)
Nancy Crowe
ncrowe@countingcars.com
CountingCars.com
CountingCars.com is the trusted source of traffic data collection equipment. We offer a variety of video-based products and services, road tube counters, and radar equipment designed by traffic engineers for traffic engineers. More than 2,000 customers in over 45 countries around the world trust CountingCars.com for their traffic counting needs.

Daktronics (Booth #100)
daktronics.com
A world-wide reputation for quality and reliability, an extensive line of DMS products and over 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.

Eberle Design, Inc. and Reno A&E (Booth #302)
Birgit Olson
bolson@editraffic.com
editraffic.com
Eberle Design, Inc. is a leading manufacturer of mission critical safety monitoring and vehicle detection products for the traffic, parking/access and rail industries. The company’s product suite allows transportation professionals to integrate, automate and manage intersections, roads and access points efficiently & safely. The company designs, manufactures and sells under Eberle Design, Inc. and Reno A&E brands. With two billion error-free detection and intersection monitoring transactions performed every 24 hours, the more than four million EDI devices operational globally are essential to motorist and pedestrian safety. Visit Eberle Design, Inc. at editraffic.com; and Reno A&E at renoae.com.
Transportation Systems Management & Operations

Eco-Counter
(Booth #511)
Marian Mithani
marian.mithani@eco-counter.com
eco-counter.com

Eco-Counter is the world leader of monitoring systems for pedestrians and cyclists. Our automated counting technologies are used globally to track and classify pedestrian and cyclist activity. Eco-Counter provides a wide range of options that work in urban, suburban, rural and natural areas, for both permanent and temporary locations. Along sidewalks and trails, bike lanes and cycle tracks, and in mixed traffic, there are more than 14,000 Eco-Counters around the world including in 42 US states and 8 Canadian provinces.

Econolite Group, Inc.
(Booth #107)
Jenni Edgar
jedgar@econolite.com
econolite.com

Since 1933, Econolite continues to be a leading provider of comprehensive Intelligent Transportation System solutions and engineering services. Econolite is the umbrella organization to a group of privately held companies—Econolite Canada, Safetran Traffic Systems, Inc. (Safetran), CAVita, and Aegis ITS. Committed to the advancement of connected and automated vehicle technologies, Econolite’s solutions ease traffic congestion, enhance transit operations, provide safer mobility, and improve quality of life. For more information: econolite.com.

Electromega Ltd.
(Booth #205)
Tina O’Connor
toconnor@electromega.com
electromega.com

Electromega is a Canadian leader with over 40 years experience in innovative and high-performance technological solutions for the transportation sector as well as in the traffic, parking and intelligent transportation systems industry. WE OFFER... SOLUTIONS. Leading-edge professional services and control systems, as well as innovative applied management and mobility technologies, we can design systems to support all your transportation needs. We work with local authorities to deliver the finest integrated solutions for traffic management. Electromega's wealth of experience and access to the latest lines of technological products ensures we are always moving you forward with the most advanced solutions.

EtherWAN Systems, Inc.
(Booth #619)
John Marchiando
marketing@etherwan.com
etherwan.com

EtherWAN Systems is a leading manufacturer of Hardened Ethernet, POE, and Fiber connectivity products specifically designed for the most demanding environments. Our Ethernet Switches, Media Converters, Ethernet Extenders and Power over Ethernet products ensure reliable communications for ITS, Transit, Security, Datacom, and Railway applications. EtherWAN - When Connectivity is Crucial.

Gannett Fleming
(Booth #311)
Eric Rensel
erense@gfnet.com
gannettfleming.com

For more than 100 years, Gannett Fleming been a driving force in shaping infrastructure and improving communities in more than 65 countries. Having completed more than 400 diverse assignments across the globe, we are a recognized leader in the continually evolving transportation operations and engineering arena. We provide a wide range of transportation operations services, from developing the initial concepts to planning, design, systems integration, construction, construction management, and operations and maintenance (O&M) support. Our team’s software experience spans the entire lifecycle of transportation-based software applications, from system requirements definition through hosting and maintenance.

GHD
(Booth #508)
Brian Ruck
brian.ruck@ghd.com
ghd.com

GHD is one of the world’s leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. Committed to creating lasting community benefit, our connected global network of 8500 people delivers engineering, environmental, and construction services to public and private sector clients across five continents—Asia, Australia, Europe, North and South America—and the Pacific region. ghd.com

Houston Radar LLC
(Booth #505)
Stephanie Hilton
stephanie@houston-radar.com
houston-radar.com/

Houston Radar is a leading supplier of Doppler and FMCW radars for the traffic industry. With an OEM portfolio of over 6 different speed and presence detection radars, we cater to a wide range of requirements. Our Armadillo Tracker, Armadillo Crossfire, and SpeedLane traffic collection products have set a new benchmark in ease of use for non-intrusive traffic data collection devices.

Image Sensing Systems, Inc.
(Booth #611)
Mike Ouellette
info@imagesensing.com
imagesensing.com

Image Sensing Systems, Inc. is a global company dedicated to helping improve safety and efficiency for cities and highways by developing and delivering above-ground detection technology, applications and solutions. We give Intelligent Transportation Systems (ITS) professionals more precise and accurate information—including real-time reaction capabilities and in-depth analytics—to make more confident and proactive decisions. We are headquartered in St. Paul, Minnesota. Visit us on the web at imagesensing.com.

Innovative Traffic Solutions Inc.
(Booth #506)
Rocco Rao
info@its-traffic.com
its-traffic.com

Innovative Traffic Solutions Inc. (ITS) is a fully integrated distributor of traffic control products and experienced source for traffic control solutions. Since 1999 we have been providing Intelligent transportation systems and solutions from coast to coast across Canada. Our strength is our collective knowledge, dynamic thinking, industry experience and product portfolio. We are proud of our roots and adhere to our principle of providing our customers with reliable solutions and exceptional service. ITS is not just about technology, we’re about partnerships that deliver solutions.

INRO
(Booth #604)
Sarah Lamarche
sarah@inrosoftware.com
inrosoftware.com

INRO develops, markets and supports transport forecasting software to help make your city a model city. Emme transportation forecasting, Dynagem multiscale traffic simulation and CityPhi visualization and analytics software are collectively used in over 1000 organizations in more than 80 countries, including half of the world’s largest cities.

ITE
(Booth #209)
Colleen Agan
cagan@ite.org
ite.org

The Institute of Transportation Engineers (ITE) is a community of transportation professionals dedicated to advancing the transportation profession through the sharing of knowledge and best practices for the benefit of society. Through its products and services, ITE promotes the professional development of its member, supports and motivates education, encourages research, develops public awareness programs, and serves as a conduit for the exchange of information.
Exhibitor Descriptions

Iteris, Inc.
(Booth #109)
Adam Lyons
am@iteris.com
iteris.com
Iteris provides municipalities and government agencies around the world with the necessary design, real-time analytics and actionable information to improve mobility throughout our communities and ready our roadways for connected/autonomous vehicles and smart cities. We make communities more walkable, transit and bicycle friendly, and we move people and goods across cities and states more safely and efficiently. Come to our booth to see the platform the City of Toronto uses to monitor and manage its roadways, performance, and VantageLive!, the latest service for better insights to intersection analytics.

JSF Technologies
Booth #201
Val Foster
vfoster@jsftech.com
jsftech.com
We are a North American manufacturer of solar-powered LED beacon solutions for pedestrian, school, highway, and construction traffic use. Our beacons come in a wide range of configurations and functionalities to suit most any application. We design, manufacture and assemble all of our equipment in-house, and are able to provide custom products and firmware to meet unique industry requirements. Our beacon equipment is all built and designed with the highest level of quality and efficiency in mind, and is backed by an industry-leading, 5-year manufacturer’s warranty.

Kimley-Horn
(Booth #207)
Erin Henderson
erin.henderson@kimley-horn.com
kimley-horn.com
For nearly 50 years, Kimley-Horn has been committed to the transportation profession, and we continue to be a proud member, sponsor, and exhibitor of the Institute of Transportation Engineers. With more than 80 offices across the nation, our multi-disciplinary team of engineers, planners, and technicians develops practical solutions for all of your transportation projects.

LaneLight ITEM Ltd.
(Booth #601)
Dale Stewart
dale.stewart@lanelight.com
lanelight.com
Combining Safety and Innovation, since 2000 ITEM Ltd. has been saving lives with their LED enhanced LaneLight warning systems that target the tunnel vision of distracted driver’s. Their warning systems are built tough, ship with a 5 Year Warranty, and are engineered for 10 to 15 years of trouble free operation. Dramatically improve visibility and safety at your crosswalks, bike lanes, stoplights, grade rail crossings, and wrong way warning systems with a LaneLight inbound warning system, RRFB crosswalk system, or one of their many LED enhanced accessories.

LeadershipITE
(Booth #616)
Kathy Driggs
kdriggs@ite.org
www.ite.org/leadership/
Are you prepared to be a strong leader in this dynamic environment? The pace of transformation in transportation, technology and the world at large is accelerating. The challenges and opportunities created by these changes continue to impact society and people’s quality of life in ways hardly predictable. However, we do know there is a greater need for skills beyond technical competencies. Transportation leaders navigating this evolution must be able to communicate, collaborate and advocate with diverse professions, disciplines and communities to reach common goals for safer, livable, more vibrant communities.

It is clear that engineers, planners, and technologists, the core of the Institute of Transportation Engineers’ (ITE) membership, must be a part of these conversations. Our community must have the skills to not only engage but to lead. Developing the next generation of leaders is one of our key objectives.

To this end, ITE has established LeadershipITE. It is a program to identify, develop, and engage leaders to ensure that ITE and its members are positioned to participate and shape the future of transportation.

McTrans - University of Florida
(Booth #110)
Vishal Khanapure
kvishal@ufl.edu
mctrans.ce.ufl.edu
As the largest transportation software dissemination center in the world, the McTrans Center develops, distributes and supports software for traffic engineering and transportation planning applications. McTrans is a self-supporting center within the Engineering School of Sustainable Infrastructure & Environment (ESSIE) and is part of the University of Florida Transportation Portion Institute (UFTI).

MetroCount
(Booth #614)
Sean Heaney
sheaney@metrocount.com
metrocount.com
MetroCount is the world leader in traffic monitoring equipment and software. With thousands of units supplied to over 110 countries, MetroCount’s very popular digital tolling company’s image for Windows, revolutionizes traffic data gathering and reporting.

Miovision
(Booth #210)
Caitlin Feehan
cfeehan@miovision.com
miovision.com
Miovision’s mission is to provide the foundation for tomorrow’s smart cities by reinventing the way traffic networks are managed today. Backed by the world’s most advanced traffic AI, Miovision’s innovations in traffic signal planning and operations have made it possible for cities to improve the transportation experience for drivers, cyclists and pedestrians since 2005. With offices in Kitchener, Canada and Cologne, Germany, Miovision serves over 17,000 municipalities worldwide. For more information, visit miovision.com.

North Dakota State University
(Booth #617)
Makenzie Schmidt
makenzie.lee.schmidt@ndsu.edu
ugpti.org
North Dakota State University is a leader in academic excellence and competitive research. Students have access to state-of-the-art, technologically advanced research facilities, internationally renowned faculty, and numerous public-private partnerships. Graduate assistantships provide financial support and contribute to professional development. The Graduate School at NDSU offers 51 doctoral degrees, 83 master’s degrees, and 13 certificate programs, providing numerous opportunities for individuals to gain the knowledge and experience necessary to become leaders in their fields.
Post your comments, photos, and join the conversation online using hashtag #ITEToronto2017.

**1. Pedestrian and Bicycle Information Center (PBIC)**

**Booth #613**

**Dan Gelinne**

gelinne@hsr.unc.edu
pedbikeinfo.org

The Pedestrian and Bicycle Information Center (PBIC) develops research, training and tools to support communities seeking to improve safety and expand transportation options.

**2. Pelco Products, Inc.**

**Booth #108**

**Paul Koenig**

Paul.Koenig@pelcoinc.com
pelcoinc.com

Pelco Products, Inc. is an Oklahoma based, family-owned business specializing in designing, engineering, manufacturing and distributing the finest traffic signal hardware, utility products and decorative outdoor lighting. Founded in 1985 with five employees, Pelco has grown to more than 300 team members in 315,000 square feet of manufacturing space. Pelco is dedicated to serving its two primary markets, Traffic and Utility, globally through Innovative Solutions, Quality Products & Unparalleled Customer Service.

**3. Polara Enterprises, LLC**

**Booth #208**

**Matthew Baker**

mbaker@polaraent.com
polara.com

Polara, an ISO 9001:2015 registered company, is the leading manufacturer of Accessible Pedestrian Signals (APS) and ADA push buttons. Our products meet or exceed rugged specs certified by an independent lab. The newly introduced iNavigator (intelligence-added) is a full-featured system that can be communicated with, and programmed wirelessly through Bluetooth technology. It has both audible and vibro-tactile features that give the pedestrian information at every phase of the walk cycle, allowing agencies the flexibility they need to meet the needs of their citizens. Come see the iNavigator at Booth 208!

**4. PTV Group**

**Booth #111**

**Bill Cisco**

bill.cisco@ptvgroup.com
ptvgroup.com/en/

PTV Group plans and optimizes everything that moves people and goods worldwide—whether it’s transport routes, distribution structures, or private and public transport—all integrated, and in real-time. PTV America, Inc. is the North American subsidiary of PTV Group. We help cities, companies, and people, save both time and money. We’re leaders in delivering and supporting innovative transportation and logistics solutions, and for the application of our state-of-the-art transportation software. Our main focus is to provide expertise in transportation planning, traffic operations, traffic engineering, routing, mapping and optimization for our customers.

**5. QWICK KURB®, INC.**

**Booth #512**

**Matthew Schindler**

matthew@qwickkurb.com
qwickkurb.com

Manufacturer of high performance Category A Traffic Separator exceeding 3500 PSI Compression Standard, necessary for high ADT installations and Work Zone applications.

**6. Rodel Roundabout Analysis Software**

**Booth #202**

**Kathy Mathes**

kathy@rodel-interactive.com
rodel-interactive.com

Rodel is a robust, accurate roundabout-specific analysis program that incorporates the U.K. geometric capacity model, the HCM 2010 capacity model, and HCM 2016 update. Rodel is fully compliant with HCM/North American procedures and practices for roundabout analysis. Rodel extends the application of the empirically derived geometric capacity model to lane-based U.S./North American analysis and design practices, and has been field-verified on FHWA capacity data. Rodel incorporates High Definition Queuing Theory equations, allowing for accurate and stable predictions for Queue and Delay at high v/c ratios. We offer Online Training Modules with case studies to accelerate the user’s proficiency.

**North Line Canada Ltd.**

**Booth #507**

**Bernard Timothy**

Bernie@northlinecanada.com
northlinecanada.com

North Line Canada Ltd. is a National distributor, integrator and an OEM. We have supplied and integrated vehicle detection technologies into our client systems across Canada for over 30 years. As the exclusive distributor for several World Class ITS technologies, North Line Canada Ltd. offers one of the most unique and complete portfolios for highways detection products in Canada.

**Orange Traffic**

**Booth #509**

**Alan MacKenzie**

alan.mackenzie@orangetraffic.com
orangetraffic.com/en

Orange Traffic specializes in the manufacturing and distribution of an array of high-quality and ISO 9001 certified devices for the traffic signage and signal industry. Our goal is to optimize the fluidity and safety on the road in an innovative way. Orange Traffic’s entire philosophy is based on three fundamental aspects; The strength of an experienced team whose primary concern is people’s safety, innovation to encourage increasingly efficient traffic synchronization and fluidity, and priority attention given to our clients’ needs and requirements.

**Polara Enterprises, LLC**

**Booth #208**

**Matthew Baker**

mbaker@polaraent.com
polara.com

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**PTV Group**

**Booth #111**

**Bill Cisco**

bill.cisco@ptvgroup.com
ptvgroup.com/en/

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**Booth #512**

**Matthew Schindler**

matthew@qwickkurb.com
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**Booth #202**

**Kathy Mathes**

kathy@rodel-interactive.com
rodel-interactive.com

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Exhibitor Descriptions

Sensys Networks
(Booth #204)
Vince Ferrinio
marketing@sensysnetworks.com
sensysnetworks.com
As an innovative wireless technology company, Sensys Networks improves the way people travel through cities through accurate detection and actionable data. For traffic visionaries and implementers, Sensys Networks provides a comprehensive detection and data platform for virtually all traffic management needs. Together with our world class integration partners we enable data driven decisions to manage roadways, increase safety and optimize traffic signals. To learn more, travel to booth #204.

SES America
(Booth #510)
Carla Suarez
csuarez@sesamerica.com
sesamerica.com
Founded in 1986 in Rhode Island, SES America provides project-driven solutions to the Intelligent Transportation Systems (ITS) market in North America. Our product offering varies from small embedded dynamic message signs to large full color / full matrix overhead signs that can be solar or grid powered. We also provide intelligent software platforms to monitor these signs and for ease of maintenance. All our signs are proudly manufactured in the United States in accordance with our ISO-9001 certified process. We are fully equipped to meet our clients’ unique needs; accomplishing our core goal of delivering quality, innovative ITS products and customized solutions.

SIDRA SOLUTIONS
(Booth #610)
sidasolutions.com
Stinson Owl-Lite
(Booth #503)
Michael McGuire
Michaelm@stinson.ca
stinson.ca
Founded in 1961, Stinson Owl-Lite is not only Ontario’s largest traffic sign supplier but now a leader in the development and deployment of ITS solutions for the Canadian Traffic Management Industry. From automated queue warning and travel time systems to non-intrusive sensors and intelligent signs, we combine state of the art technologies with top notch project management to ensure we deliver on the promise of data driven smart infrastructure.

Tacel Ltd
(Booth #605)
TOMAR Electronics
(Booth #106)
Michelle Robb
michelle.robb@tomar.com
tomar.com

Traffic Logix
(Booth #515)
Ivette Rodriguez@logixworks.com
mxtrafficlogix.com
Traffic Logix offers a complete range of ITS and traffic calming solutions, designed to slow cars and improve safety. We offer a wide array of speed trailers and driver feedback signs as well as recycled rubber speed humps and cushions.

Traffic Technology Services, Inc.
(Booth #101)
Kiel Ova
kiel.ova@traffictechservices.com
traffictechservices.com
Traffic Technology Services (TTS) is a technology company and information provider for connected vehicle applications. TTS utilizes existing public infrastructure to communicate to traffic signals and predict signal switch times. Our cloud based solution, industry standard product, and nationwide deployment allows for immediate vehicle-to-infrastructure integration and applications. We predict traffic control.

Trafficware Group Inc
(Booth #103)
Barbara Catlin
trafficware.com
Trafficware specializes in research, design, and development of electronic equipment and software for the transportation industry. Trafficware’s expertise includes solving traffic management challenges around the world, earning the company a reputation for unmatched quality. The company’s Synchro® traffic simulation and analysis product alone is used by engineers in more than 90 countries around the world. The company also manufactures a full line of traffic equipment at its 100,000 square-foot technology center.

Transoft Solutions Inc.
(Booth #623)
Noel Dolotallas
nd@transoftsolutions.com
transoftsolutions.com
Transoft Solutions develops state-of-the-art technologies for AEC design professionals. Whether you are designing a new road or highway corridor, mixed-use facility, intersection, site plan, or retrofitting an existing parking lot, our software can help you complete it confidently and efficiently. As a testament to its industry leading status, many government departments and AEC firms worldwide have made Transoft’s products their de facto standard on all their civil, transportation, and site development projects - a level of success that clearly makes us a worldwide leader in our field.

Transportation Professional Certification Board
(Booth #621)
Ann O’Neill
aoneill@ite.org
www.tcpb.org
Recognizing the certification and professional development needs of the transportation profession, the Transportation Professional Certification Board Inc. (TPCB), an autonomous certification body affiliated with the Institute of Transportation Engineers, offers the following certification programs: Professional Traffic Operations Engineer® (PTOE) and Professional Transportation Planner® (PTP). These certifications do not substitute for appropriate professional licenses when they are required for specific responsibilities or jurisdictions.

TSS-Transport Simulation Systems, Inc
(Booth #304)
Alex Gerodimos
events@aimsun.com
aimsun.com
TSS-Transport Simulation Systems (TSS) has a single focus on algorithms, software and operational know-how for mobility applications in strategic transport planning, traffic engineering and mobility management. TSS develops and markets two products: The Aimsun traffic modelling software environment, which integrates travel demand modelling, macroscopic functionalities and the mesoscopic microscopic hybrid simulator—all in a single software application. The Aimsun Online real-time decision support system for traffic management. Its dynamic, high-speed simulation of large areas allows traffic operators to accurately forecast the future network flow patterns that will result from a particular traffic management or information provision strategy.

University of Maryland - A. James Clark School of Engineering
(Booth #500)
Anna Damm
adamm1@umd.edu
advancedengineering.umd.edu
In response to the increasing demand for transportation engineers, and with support from the National Transportation Center at Maryland, the A James Clark School of Engineering has launched an online master’s degree program in Transportation Systems. Modeled after the Department of Civil and Environmental Engineering’s nationally acclaimed master’s degree in Transportation Engineering and Planning, students in this online program will develop robust knowledge of transportation planning, travel behavior, traffic operations, safety, and design, and tackle critical topics including system optimization, transportation economics and policy, infrastructure vulnerability and protection, emissions estimation, and sustainability analysis.

Wavetronix
(Booth #309)
Spencer Banta
spencer.banta@wavetronix.com
wavetronix.com/en
Wavetronix creates tools for intelligent transportation systems (ITS), including advanced radar sensors, power and communication solutions and data management appliances. Our innovative products and unmatched performance are changing the ITS industry and raising expectations for vehicle detection and safety, at the intersection, midblock and freeway.
Save the Date!

Joint ITE/Midwestern and Great Lakes District 2018 Annual Meeting and Exhibit
August 20-23, 2018
Hilton Minneapolis
Minneapolis, MN, USA

Make sure to circle or enter August 20-23, 2018 on your calendars now! ITE will be partnering with the Midwestern and Great Lakes District on the Joint ITE/Midwestern and Great Lakes District 2018 Annual Meeting and Exhibit in beautiful Minneapolis, MN.

Join over 1,000 transportation professionals from across the United States and around the world for important conversations about the challenges our industry faces today, tomorrow, and in the future. Our program will feature top level programming for transportation professionals at all stages of their career, will provide perspectives on key trends and topics, and will engage attendees through a variety of learning formats.

We look forward to seeing you in Minneapolis in next summer!
How do your signals measure up?

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Signal Performance Measures
in the Trafficware Cloud

Efficient traffic flow has a tremendous impact on a community’s quality of life and economic growth. That’s why transportation professionals choose Trafficware. Whether it’s our Synchro® Studio, the world-leading traffic simulation and optimization software, or the fastest growing adaptive system - SynchroGreen®, or now the latest in Signal Performance Measures, Trafficware technology delivers. Learn more, call 281-269-6512 or visit www.Trafficware.com.
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