

CITE FINANCIALS &  
ELECTION RESULTS

TAC TIDBITS  
FROM OTTAWA

STUDENT LEADERSHIP  
SUMMIT



# transportation TALK

Quarterly Newsletter of the CANADIAN INSTITUTE OF TRANSPORTATION ENGINEERS  
INSTITUT CANADIEN DES INGÉNIEURS EN TRANSPORTS  
(a Canadian Non-Profit Corporation)

**OTTAWA**  
**2019**   
June 2-5 

## CITE ANNUAL CONFERENCE

Preview the 2019 Annual Conference with details on what you can expect in Ottawa, registration and accommodations details, plus a full schedule!

### Preparing for E-Scooters in Canada

Lessons from other jurisdictions inform draft policy recommendations for Ontario

### Multi-Modal Transit on Vancouver's B-Line

### London's Blackfriars Bridge Ready for Future Generations

VOLUME 41 : NUMBER 1 | SPRING 2019



CREATIVE  
TRANSPORTATION  
SOLUTIONS LTD.

*Innovative Traffic Engineering since 1993*



Traffic Engineering  
Transportation Surveys  
Transport Planning

cts-bc.com  
info@cts-bc.com  
604.936.6190



islengineering.com

Integrated Expertise. Locally Delivered.



### The Right Team for Your Project

Our diverse group of professionals share an enthusiasm for community infrastructure. From planning through to design and construction management, we create nimble teams to tackle the unique requirements of every project.

This integrated service offering gives you the experts you need, when you need them.

EDMONTON | CALGARY | CANMORE | LETHBRIDGE | GRANDE PRAIRIE | HINTON  
LANGLEY | BURNABY | SQUAMISH | WEST KOOTENAY | EAST KOOTENAY | KAMLOOPS  
VANCOUVER ISLAND | SASKATOON



**By 2060  
there will be 3.78 million  
more commuters  
expecting to  
get home on time  
in Toronto, Montreal  
and Vancouver**

**We see the future more  
clearly and design for it today.**

Canadians who live and work in major city centres depend on forward-thinking, proactive transportation solutions. That's why we work with public and private sector organizations to provide safe, diverse and innovative travel options to ensure commuters stay on track and on time.

WSP—big, bold, ambitious thinking that inspires and influences, whatever tomorrow brings.



wsp.com

**features**

**14 2019 Student Leadership Summit**

*CITE's Second SLS will be hosted by Carleton University & excite in Ottawa, June 1-2*

**15 CITE 2019 Annual Conference Preview**

*Get all the details on what's waiting for you in Ottawa this June*

15 Registration & Hotel

16 Technical Program & Special Events

17 Schedule at a Glance

19 Sponsors & Exhibitors

20 Bicycle Facilities Design Workshop

**21 My Favourite... Bold Transportation Solution in Ottawa**

*Ottawa LAC members offer some highlights for you to check out in Ottawa*

**23 Preparing for E-Scooters in Canada**

*Jamie Stuckless & David McLaughlin present the opportunities, challenges, and lessons from other jurisdictions plus policy recommendations for Ontario*

**28 Project Profile: Multi-modal Transit on Vancouver's B-Line**

*Brian Phillips & Mars Otten-Andrew show how Translink's B-Line project in Vancouver offers a true multi-modal solution*

**31 Project Profile: London's Blackfriars Bridge**

*Doug MacRae & Chris Haines give an overview of this historic bridge rehabilitation*

**35 TAC Tidbits**

*Our TAC Appointees share updates from their committees' Spring Technical Meetings*

**41 Member Highlight: Steven Kemp**

*Meet CITE's Appointee to the TAC Connected/Autonomous Vehicles (CAV) Task Force*

**CITE news & business**

3 CITE 2018 Financial Statement

8 Executive Election Results

11 Training Committee EOI + Opportunities

13 TLC Update

43 Section News

49 Student Chapter News

59 Welcome New Members

**regular columns**

1 President's Ponderings

2 From the District Director

62 Advertising Directory

63 CITE Contacts

# president's ponderings



**EDWARD SOLDO, P.Eng., FITE**  
Canadian District President  
[president@cite7.org](mailto:president@cite7.org)

Where has the time gone? The last two years have been busy and as my term as President ends, I would like to acknowledge and thank all the members who have contributed to moving our District forward and helping achieve many of the goals we set out to accomplish.

In June, I will be passing the reins of this organization over to incoming CITE President, Julia Salvini. The organization will be in good hands as I know that she has the enthusiasm, tenacity, and vision required to keep CITE moving forward and evolving to meet the needs of our membership. Just a reminder, Julia: no meeting should ever be more than one hour and the best decisions are the difficult ones.

Special thanks to my fellow Executive Committee members for championing the changes to our organization and our Board of Directors for embracing the vision.

Winter is over and spring is in the air, which means that the CITE Annual Conference is just around the corner—starting on June 2 at the downtown Westin Ottawa Hotel. [Conference registration](#) is open and we have a full slate of technical sessions, tours, social events and training available for our membership to participate in.

Ottawa is our nation's capital and there are plenty of things to see and do there. Parliament Hill, with its grand Victorian architecture, and museums such as the National Gallery of Canada, Canadian Museum of Nature, Canadian Museum of History, Canada Aviation and Space Museum, the Canada Science and Technology Museum, are all great places to visit and learn. The park-lined Rideau Canal and the Ottawa River are just waiting for you. Go for a walk or take a cycling tour and explore the city.

There are many great shopping and market areas in Ottawa. If you arrive on the weekend, spend some time browsing Sparks Street Mall, the Glebe neighbourhood or, my favorite, Byward Market where you can find lots of interesting shops, restaurants, bars and—of course, for those of you that know me—bakeries.

Just a reminder, Austin, Texas will be the place to be for the Joint ITE International and Texas District Annual Meeting from July 21–24. This year, the meeting will also integrate the National Rural ITS Annual Conference into the program.

As I transition to the role of Past President after the conference, I look forward to working with members of the national Executive Committee and Board of Directors in order to continue the advancement of CITE and our industry. I would encourage all members to take an active role in our organization, whether it is at the section level, district level, through Leadership ITE, or one of many volunteer opportunities offered through the District or ITE International. I am sure you will find it a rewarding experience as much as I have.

Look forward to seeing everyone in Ottawa. Wish you all a great summer and if there is anything you want to share about CITE or have any questions that I can help out with, please feel free to drop me an email [esoldo@cite7.org](mailto:esoldo@cite7.org).

*Edward Soldo*

**Edward Soldo, P.Eng. FITE**  
Canadian District President

# from the district director

Dear Members and welcome to spring!

These past couple of months, aside from having been cold, have also been busy at ITE with many new products becoming available as well as new opportunities to engage and develop your career.

In February, ITE Journal announced the release of the [Parking Generation Manual, 5th Edition](#). This announcement was supported by exciting and provocative articles including discussions of how the parking industry is changing and a call for an end to parking minimums. There are certainly significant changes in the provision and planning around parking and the new guide will help support this latest thinking with a digital interface and larger urban data examples.

In February, registration also opened for this year's **ITE Annual Meeting and Exhibit** in Austin, Texas. The draft program is now available [online](#) and I encourage you to be tempted by the technical, tour and social programs.

Thank you to those who voted in the **ITE International election**. Our two candidates both had a very long volunteer history and Alyssa Rodriguez is ITE's new Vice President elect. Closer to home, it was my pleasure to oversee our CITE election in my role as Past President. All of the three open Executive positions are acclaimed to committed and talented candidates: Julia Salvini, Ryan Vanderputten, and Pedram Izadpanah. Please [read more](#) about their experience in transportation and serving ITE in this edition of Transportation Talk.

I'm now looking forward to my next set of ITE meetings in New Haven in May. At my orientation, we were encouraged to lean in and really capitalize on the opportunity of spending three years with the IBOD. In these first couple of months, I've continued to co-chair the **Women of ITE Sub-Committee** that aims to make it easier to share research and talk about gender in industry. Our [information crusade](#), which shares leading resources on an important topic each month, is now in full swing. I was asked to write a [blog post](#) in honour of **International Women's Day** on why I chose, and stayed, in engineering. For me, it was important to reflect on the partnerships that have made my career really rewarding. I am also a member of the **Diversity and Inclusion Committee** and encourage you to participate in our upcoming survey.

I encourage all CITE members to do the same. Take advantage of the many opportunities to grow your careers with ITE. A few opportunities are immediately available, including signing up as a mentee or mentor when registering for the [CITE Annual Conference](#) in Ottawa or with ITE's [Matson and Hammond Mentoring Program](#). There are professional development opportunities of all kinds and I encourage you to develop your soft and technical skills.

I look forward to catching up with you in June in Ottawa. Please take a moment to chat with me about your thoughts on ITE.

Best,



**Jen Malzer, M.Sc., P.Eng.**  
Canadian District Director



**JEN MALZER, M.Sc., P.Eng.**  
Canadian District Director  
[director@cite7.org](mailto:director@cite7.org)



April 2019

Dear CITE Members,

As you may recall, CITE became an Incorporated Not For Profit at the end of 2017. As such, the 2018 Financial Statements are the first as an Incorporated entity. 2018 was a learning year for both the Executive Committee and your CITE Board of Directors (CITE Board). There were a number of new processes to be learned, including new rules related to the review and approval of financial statements. I am pleased to share with you our final 2018 Financial Statement, which has been reviewed by the CITE Executive Committee and Board of Directors and will be brought forward to the membership for approval at the Annual General Meeting (AGM) in Ottawa in June.

CITE had another very successful year in 2018. We maintained a strong financial position, allowing us to reinvest in our membership through a variety of initiatives. 2018 saw the development of a new training program, offering in-person sessions across the country on a variety of technical topics. Our continued partnership with the Transportation Association of Canada (TAC) has led to joint technical projects, including the recently completed Second Edition of the *Canadian Guide to Traffic Calming*.

We continue to invest in our students through membership support and a broad scholarship program. In 2018, these efforts enabled student leaders to participate in many CITE events across Canada including the inaugural Student Leadership Summit and 10 student chapters participating in the 2018 Traffic Bowl in Edmonton.

The CITE Board again approved the appointment of Wilkinson Rogers as the CITE Public Accountant for the 2018 Financial Year. They have reviewed our financial statements and provided the following statement:

*"Based on our review, nothing has come to our attention that causes us to believe that the financial statements do not present fairly, in all material respects, the financial position of Canadian Institute of Transportation Engineers as at December 31, 2018, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for Not-for-Profit organizations."*

There are a number of items to highlight as part of the 2018 Financial Statement:

- **Membership Dues** – ITE International now distributes section dues directly to the various sections. Historically, section dues were paid to the District and then distributed by CITE to the sections. As such, the Membership Dues income in 2018 was lower than budgeted. The Section Dues Distribution expense incurred in 2018 was the distribution of 2017 dues.
- **Product Sales** – Through our agreement with the Transportation Association of Canada (TAC), net revenue from the sale of the *Canadian Guide to Traffic Calming* (Second Edition) publication is shared 50/50 with CITE.
- **Section Revenue** – CITE now facilitates event registration for a number of sections. This can reduce the third-party transaction costs incurred by sections. This revenue is offset by Section Payments under expenses.
- **Training Revenue** – Revenue generated by the CITE Training Program is offset by Hosted Training. The net Training Revenue for 2018 was approximately \$1,200. This was due to higher travel costs for the training providers for sessions in Western and Atlantic Canada.
- Increased reliance on the District Administrator and Communications Coordinator roles will be reflected in the revised 2019 budget.
- Bank Charges have increased due to the increased number of online transactions related to training, the Annual Conference, and section events.
- Legal costs were related to the Incorporation of CITE.

A motion will be put forward at the AGM to transfer the net revenue from 2018 into our reserve fund. This will further support the long term financial sustainability of CITE.

The CITE Board also approved a revised 2019 Budget to reflect a number of changes since the budget was originally approved back in 2017, including many of the items highlighted in the 2018 Financial Statement.

One of the significant 'behind the scenes' changes in 2018 was the shift to an online financial management system. This has streamlined a number of financial processes and coincided with the incorporation of CITE. We have also updated a number of our financial policies in 2018 to ensure the long term sustainability of our organization. If you have any questions related to anything related to the CITE financials, please feel free to contact me and I would be pleased to provide further detail.

Sincerely,



**Ryan Vanderputten, M.Eng., P.Eng.**

Secretary-Treasurer, Canadian Institute of Transportation Engineers

[treasurer@cite7.org](mailto:treasurer@cite7.org)

# INCOME STATEMENT

|                          | 2016 ACTUAL                           | 2017 ACTUAL           | 2018 BUDGET          | 2018 ACTUAL          |            |
|--------------------------|---------------------------------------|-----------------------|----------------------|----------------------|------------|
| <b>INCOME</b>            | Advertising Revenue                   | 92,625.00             | 77,700.00            | 83,000.00            | 89,612.39  |
|                          | Award/Scholarship Donations           | 5,500.00              | 5,500.00             | 5,500.00             | 5,500.00   |
|                          | Conference                            | 232,247.13            | -                    | 200,000.00           | 307,710.00 |
|                          | Currency Exchange                     | 22,801.66             | 20,428.28            | 10,000.00            | 15,594.80  |
|                          | Interest Income                       | 1,989.70              | 1,797.91             | 3,000.00             | 5,157.41   |
|                          | John Vardon Scholarship Income        | 236.83                | 390.00               | 3,000.00             | 1,337.29   |
|                          | Membership Dues                       | 72,050.90             | 72,164.38            | 82,000.00            | 58,751.46  |
|                          | Product Sales                         | -                     | -                    | -                    | 10,971.85  |
|                          | Section Revenue                       | -                     | -                    | -                    | 22,240.00  |
|                          | Training Revenue                      | -                     | -                    | -                    | 68,729.00  |
| Transfer from Reserves   | -                                     | -                     | 12,100.00            | -                    |            |
| <b>TOTAL INCOME</b>      | <b>\$ 427,451.22</b>                  | <b>\$ 177,980.57</b>  | <b>\$ 398,600.00</b> | <b>\$ 585,604.20</b> |            |
| <b>EXPENSES</b>          | Administrator                         | 16,498.58             | 23,308.56            | 20,000.00            | 31,109.40  |
|                          | Awards – Awards/Scholarships          | 6,128.63              | 6,027.15             | 6,000.00             | 8,948.75   |
|                          | Awards – Travel                       | 6,306.01              | 5,884.52             | 7,000.00             | 8,995.57   |
|                          | Bank Charges                          | 3,533.15              | 2,458.56             | 4,000.00             | 7,395.58   |
|                          | Bookkeeping                           | 2,320.74              | 7,446.25             | 2,500.00             | 6,347.50   |
|                          | CITE Elections                        | -                     | -                    | 100.00               | -          |
|                          | Committee – CITE Appointees           | 4,104.49              | 6,450.78             | 7,000.00             | 7,764.57   |
|                          | Committee – <i>excite</i>             | -                     | 972.91               | 10,000.00            | -          |
|                          | Committee – TLC                       | 5,071.15              | 4,053.14             | 10,000.00            | 4,973.36   |
|                          | Committee – Training                  | -                     | -                    | 6,000.00             | 3,342.29   |
|                          | Communications Coordinator            | 3,539.78              | 3,726.84             | 10,000.00            | 13,202.37  |
|                          | Conference Expenses                   | 206,032.77            | 6,541.62             | 185,000.00           | 206,877.01 |
|                          | Director Expenses                     | 12,007.40             | 6,378.51             | 16,000.00            | 15,612.64  |
|                          | Executive Expenses                    | 14,594.34             | 31,257.70            | 24,000.00            | 24,249.51  |
|                          | Hosted Training                       | -                     | -                    | -                    | 67,475.42  |
|                          | Insurance                             | 5,157.24              | 5,942.36             | 5,500.00             | 4,384.80   |
|                          | IT/Telecommunications                 | 1,094.02              | 900.82               | 2,000.00             | 4,424.01   |
|                          | John Vardon Scholarship               | 3,000.00              | 3,000.00             | 3,000.00             | -          |
|                          | LeadershipITE                         | 4,141.64              | 3,856.28             | 4,000.00             | 3,816.75   |
|                          | Legal Fees                            | -                     | -                    | -                    | 11,629.65  |
|                          | Membership Support Programs           | 7,812.52              | 3,511.87             | 3,500.00             | 3,966.98   |
|                          | Miscellaneous                         | -                     | -                    | 250.00               | -          |
|                          | Postage/Mailing Service               | 724.66                | 851.89               | 750.00               | 388.49     |
|                          | Printing and Stationary               | -                     | -                    | -                    | 189.55     |
|                          | Revenue Canada Penalties and Interest | 101.53                | -                    | -                    | -          |
|                          | Section Dues Distribution             | -                     | 5,387.84             | 12,000.00            | 5,887.34   |
|                          | Section Payments                      | -                     | -                    | -                    | 21,720.00  |
|                          | Sponsored Events                      | -                     | 5,000.00             | -                    | 14,642.13  |
|                          | Student Chapter Rebates               | 5,000.00              | 5,750.00             | 4,000.00             | 2,500.00   |
|                          | Student Presentation Competition      | 1,600.00              | 1,600.00             | 3,500.00             | 2,000.00   |
|                          | Technical Projects                    | 10,000.00             | -                    | 10,000.00            | 10,000.00  |
|                          | Traffic Bowl                          | 7,859.65              | 10,000.00            | 10,000.00            | 10,508.34  |
| Transportation Talk      | 6,062.50                              | 6,750.00              | 6,500.00             | -                    |            |
| Website                  | 5,396.44                              | 3,938.44              | 6,000.00             | -                    |            |
| Youth Summit             | -                                     | 30,513.27             | -                    | -                    |            |
| <b>TOTAL EXPENSES</b>    | <b>\$ 338,087.24</b>                  | <b>\$ 191,509.31</b>  | <b>\$ 398,600.00</b> | <b>\$ 502,352.01</b> |            |
| <b>NET INCOME (LOSS)</b> | <b>\$ 89,363.98</b>                   | <b>\$ (13,528.74)</b> | <b>-</b>             | <b>\$ 83,252.19</b>  |            |



# BALANCE SHEET

|                                       | December 31<br>2016  | December 31<br>2017  | December 31<br>2018  |
|---------------------------------------|----------------------|----------------------|----------------------|
| <b>ASSETS</b>                         |                      |                      |                      |
| <b>CURRENT ASSETS</b>                 |                      |                      |                      |
| Cash                                  | 235,419.03           | 211,333.35           | 163,773.82           |
| Accounts Receivable                   | 3,432.21             | -                    | 19,511.85            |
| Other Current Assets                  | -                    | 10,000.00            | 16,000.00            |
| <b>TOTAL CURRENT ASSETS</b>           | <b>\$ 238,851.24</b> | <b>\$ 221,333.35</b> | <b>\$ 199,285.67</b> |
| <b>INVESTMENTS</b>                    |                      |                      |                      |
| John Vardon Scholarship               | 57,765.42            | 57,785.17            | 58,627.13            |
| Reserve Fund                          | 124,258.59           | 126,036.75           | 243,833.42           |
| <b>TOTAL INVESTMENTS</b>              | <b>\$ 182,024.01</b> | <b>\$ 183,821.92</b> | <b>\$ 302,460.87</b> |
| <b>TOTAL ASSETS</b>                   | <b>\$ 420,875.25</b> | <b>\$ 405,155.27</b> | <b>\$ 501,746.54</b> |
| <b>LIABILITIES &amp; EQUITY</b>       |                      |                      |                      |
| <b>CURRENT LIABILITIES</b>            |                      |                      |                      |
| Accounts Payable                      | 157.74               | 47.55                | 21,611.88            |
| GST/HST Payable                       | -                    | (2,004.08)           | (1,071.72)           |
| Other Liabilities                     | -                    | (76.97)              | 272.09               |
| <b>TOTAL LIABILITIES</b>              | <b>\$ 157.74</b>     | <b>\$ (2,033.50)</b> | <b>\$ 20,812.25</b>  |
| <b>EQUITY</b>                         |                      |                      |                      |
| Contributed Surplus                   | 331,353.53           | 420,717.51           | 397,682.10           |
| Current Year Earnings                 | 89,363.98            | (13,528.74)          | 83,252.19            |
| <b>TOTAL EQUITY</b>                   | <b>\$ 420,717.51</b> | <b>\$ 407,188.77</b> | <b>\$ 480,934.29</b> |
| <b>TOTAL LIABILITIES &amp; EQUITY</b> | <b>\$ 420,875.25</b> | <b>\$ 405,155.27</b> | <b>\$ 501,746.54</b> |
| <b>GST REBATE/OWED</b>                | <b>-</b>             | <b>\$ 2,004.08</b>   | <b>\$ 1,071.72</b>   |

# REVISED 2019 BUDGET

|                 | 2018 ACTUAL                      | 2019 BUDGET          |                      |
|-----------------|----------------------------------|----------------------|----------------------|
| <b>INCOME</b>   | Advertising Revenue              | 89,612.39            | 75,000.00            |
|                 | Award/Scholarship Donations      | 5,500.00             | 5,500.00             |
|                 | Conference                       | 307,710.00           | 333,000.00           |
|                 | Currency Exchange                | 15,594.80            | 16,000.00            |
|                 | Interest Income                  | 5,157.41             | 3,000.00             |
|                 | John Vardon Scholarship Income   | 1,337.29             | -                    |
|                 | Membership Dues                  | 58,751.46            | 65,000.00            |
|                 | Product Sales                    | 10,971.85            | -                    |
|                 | Section Revenue                  | 22,240.00            | 25,000.00            |
|                 | Training Revenue                 | 68,729.00            | 30,000.00            |
|                 | <b>TOTAL INCOME</b>              | <b>\$ 585,604.20</b> | <b>\$ 552,500.00</b> |
| <b>EXPENSES</b> | Administrator                    | 31,109.40            | 40,000.00            |
|                 | Awards – Awards/Scholarships     | 8,948.75             | 9,000.00             |
|                 | Awards – Travel                  | 8,995.57             | 7,000.00             |
|                 | Bank Charges                     | 7,395.58             | 8,000.00             |
|                 | Bookkeeping                      | 6,347.50             | 6,500.00             |
|                 | Committee – CITE Appointees      | 7,764.57             | 8,000.00             |
|                 | Committee – <i>excite</i>        | -                    | 3,000.00             |
|                 | Committee – TLC                  | 4,973.36             | 8,500.00             |
|                 | Committee – Training             | 3,342.29             | 6,000.00             |
|                 | Communications Coordinator       | 13,202.37            | 18,000.00            |
|                 | Conference Expenses              | 206,877.01           | 305,000.00           |
|                 | Director Expenses                | 15,612.64            | 16,000.00            |
|                 | Executive Expenses               | 24,249.51            | 20,000.00            |
|                 | Hosted Training                  | 67,475.42            | 27,000.00            |
|                 | Insurance                        | 4,384.80             | 6,000.00             |
|                 | IT/Telecommunications            | 4,424.01             | 5,000.00             |
|                 | Leadership/TE                    | 3,816.75             | 4,000.00             |
|                 | Legal Fees                       | 11,629.65            | -                    |
|                 | Membership Support Programs      | 3,966.98             | 3,500.00             |
|                 | Miscellaneous                    | -                    | 250.00               |
|                 | Postage/Mailing Service          | 388.49               | 750.00               |
|                 | Printing and Stationary          | 189.55               | -                    |
|                 | Section Dues Distribution        | 5,887.34             | -                    |
|                 | Section Payments                 | 21,720.00            | 25,000.00            |
|                 | Sponsored Events                 | 14,642.13            | -                    |
|                 | Student Chapter Rebates          | 2,500.00             | 4,000.00             |
|                 | Student Presentation Competition | 2,000.00             | 2,000.00             |
|                 | Technical Projects               | 10,000.00            | 10,000.00            |
|                 | Traffic Bowl                     | 10,508.34            | 10,000.00            |
|                 | <b>TOTAL EXPENSES</b>            | <b>\$ 502,352.01</b> | <b>\$552,500.00</b>  |
|                 | <b>NET INCOME (LOSS)</b>         | <b>\$ 83,252.19</b>  | <b>-</b>             |



## 2019-2021 District Executive Committee Election Results

The Call for Nominations for the 2019-2021 Canadian Institute of Transportation Engineers (CITE) Executive Committee has officially closed. All positions have been acclaimed and will be ratified at the next Annual General Meeting. The 2019-2021 Executive Committee will also include Edward Soldo, Past President and Jen Malzer, District Director (elected in 2018 for a three year term).

### PRESIDENT (ACCLAIMED)

#### Julia Salvini, P.Eng.

President, Salvini Consulting, Kitchener, ON  
Vice President, 2017-2019 CITE Executive  
*Southwestern Ontario Section*

#### Professional Background

I am a long-standing member of the Institute of Transportation Engineers and have spent my career working predominantly in the consulting side of the business, but also a few years in the public sector in Ontario. I've served in many capacities with ITE including Past President of the Toronto Section (2002 to 2010), the Transportation Planning Council Executive (2010 to 2015) and most recently with the District Executive as Secretary Treasurer and as Vice President since 2015. I am an active volunteer in my community.

#### Goals and Objectives as President

Since joining ITE as a new graduate, I have found the organization to be my first choice for technical resources and for networking both locally and more broadly. I have fond memories of workshops, AGMs and my first ITE Annual Meeting in Las Vegas. There was always so much good information to take in and discussion to participate in. I still find myself relying on ITE manuals and reaching out to ITE contacts in my daily work and, of course, looking forward to our annual CITE conference in Ottawa.

CITE remains a relevant part of my daily work and I hope to continue the good efforts of those who have gone before me in ensuring that our organization continues to be relevant to you and your work. Our Training Committee continues to explore opportunities to provide access to good practices across the country. Our Technical Liaison Committee is now even more focused on coordinating our technical efforts with other organizations like the Transportation Association of Canada and ITE International. *excite* is supporting our emerging professionals and our student chapters are growing and doing amazing things as they prepare themselves to enter the work force.



In the fall, we plan to gather our Board of Directors to revisit our Strategic Plan and set the direction for the organization for the coming years. Please reach out to your representatives on the Board and the incoming District Executive to talk to us about what CITE means for you and where our priorities should be.

As I help lead the organization over the next two years, I hope to hear from you about what transportation means to you so that we may together advance the good work of our profession and continue to be relevant. You can reach me with your ideas at [jsalvini@cite7.org](mailto:jsalvini@cite7.org). Thank you for your support.

## VICE PRESIDENT (ACCLAIMED)

### Ryan Vanderputten, M.Eng., P.Eng.

Director, Transportation Planning, The City of Calgary  
Secretary-Treasurer, 2017-2019 CITE Executive  
Southern Alberta Section



I have been a member of ITE since 1999, and have been an active participant in four sections (Toronto, Southern Ontario, Southern Alberta and BC Interior) over my career. It is through ITE that I have had the opportunity to meet so many people that are part of our Community of Transportation Professionals. I served on the BC Interior Chapter Executive from 1999-2001 as Secretary-Treasurer, and the Southern Alberta Section Executive from 2002-2010 serving all positions including Publicity Coordinator, Secretary, Vice-President, President, and Past-President. I am currently serving as the Secretary-Treasurer of the Canadian District of ITE.

One of the best parts of this Community is the opportunity to get involved in a variety of ITE committees and councils, sharing my knowledge and expertise, while learning from others around the world. I currently sit on the Public Agency Council Executive and the LeadershipITE Executive for 2019. I am a graduate of the LeadershipITE program, Class of 2017, which gave me the opportunity to further develop my leadership skills, while meeting fellow leaders from across the organization.

Throughout my career I have progressively advanced through private and public sector organizations. I moved through The City of Calgary from entry level positions and into management positions in Transportation Solutions, Transportation Optimization, Transportation Development Services, and Growth Management before moving to the Ministry of Transportation in Ontario. When my family and I decided to return to Calgary, I rejoined The City as Director of Transportation Planning. In my current role, I oversee the development of plans and recommended actions to best serve the city's transportation needs. As a

leader, I am passionate about delivering transportation systems that are customer focused, aligned with smart growth principles and supportive of all modes of travel.

I completed my Bachelor of Applied Science (Civil Engineering) at the University of Waterloo (1999), my Master of Transportation Engineering from the University of Calgary (2008) as well as my Masters Certificate in Municipal Leadership from York University (2011). In my spare time, I enjoy spending time with my wife, Sarah, and my two kids, Michael (12) and Alanna (9). When I'm not cheering on the Calgary Flames, I enjoy a good game of pickleball and working with youth through Forest City Robotics, a LEGO robotics club which I founded in 2015.

For this upcoming term as Vice President, I look forward to continuing to serve the growing number of CITE members in alignment with many of the initiatives currently under development by ITE International. We have valuable industry partners in the Transportation Association of Canada (TAC) and the Canadian Urban Transit Association (CUTA). We are in a strong financial position, which will allow us to invest in our members through technical projects and training programs. We are continuing to grow as an organization, learning what it means to be an Incorporated Not for Profit organization in Canada. I look forward to these next two years, serving you as your Vice President. Please feel free to reach out to me directly at [rvanderputten@cite7.org](mailto:rvanderputten@cite7.org).

Ryan

## SECRETARY-TREASURER (ACCLAIMED)

### Pedram Izadpanah, Ph.D., P.Eng.

Partner & Vice President, TES Information Technology  
Hamilton Section



My involvement with CITE began at the University of Waterloo ITE Student Chapter. While serving as the President of the student chapter, I attended the CITE Conference in Victoria where John McGill tapped on my shoulder and that is how I served at the CITE Technical Liaison Committee (TLC) for almost 10 years. This opportunity allowed me to learn tremendously from the giants of CITE and build great friendships in the CITE community. During close to 10 years of service at the TLC, I interacted with section executives, student chapters, and the general membership to identify the technical needs of our members. Additionally, I have been able to serve our CITE community in the following capacities:

- ✓ Vice Chair of the TLC;
- ✓ TLC representative on the ITE Coordinating Council;
- ✓ Member of the ITE Safety Council; and
- ✓ CITE appointee to the TAC Road Safety Standing Committee.

By profession, I am a partner and Vice President with TES Information Technology in Burlington, Ontario where I practice road safety, traffic engineering, and big data. My philosophy is to utilize technology to collect, compile, and analyze transportation related data to assist road authorities in making better decisions.

At home, I am a husband and father to our 7-year-old son, Ryan. I enjoy trying new restaurants, socializing with friends and family, reading history and leadership books, and listening to podcasts.

I have had a fun ride in my career so far, and I owe a debt to those who came before me in our industry—particularly CITE—and I would like to give back to our CITE family.

As Secretary-Treasurer, I will work closely with the Executive Committee to achieve the goals set forth in the CITE strategic plan. It is a sensible plan and if implemented effectively with a few tweaks, the CITE members will benefit tremendously. My priorities during my tenure include:

- ✓ Develop technical briefs: Develop a mechanism to provide the membership with up to date information on the hot topics of our industry such as Vision Zero, Smart Communities, Transportation and Health, and Connected and Autonomous Vehicles.
- ✓ Train the workforce of future: Our industry is going through phenomenal changes with the advancement in technology. It is our responsibility as an organization to provide the required training to our membership to ensure that they are equipped with the tools and knowledge to be successful in this profession. My history with academia, consulting engineering, and professional organization has shown me that there is a lot of demand and few quality training programs available.

# training committee update



## CITE Training Expression of Interest

The Canadian Institute of Transportation Engineers (CITE) Training Committee invites individuals or firms (“Trainer”) to express their interest in providing training opportunities to members of CITE. The selected trainers shall be responsible for:

- Producing training materials
- Managing training materials to ensure consistency between courses
- Attending meetings by teleconference with the CITE Training Committee

The CITE Training Committee will assist with securing training locations or connectivity platforms, marketing and advertising training courses and registration of participants. It is expected that the training is provided at a reasonable cost to the members. A target cost is estimated at \$350 for a full day training.

CITE is interested in supporting training in various topics. Training topics that CITE would be interested in supporting may include, but are not limited to, the following:

- Vision Zero plans: How to develop and measure success?
- Speed management
- Multimodal Level of Service
- Protected intersection design

Training opportunities should present specific technical aspects of topics of interest and provide opportunities to learn innovative approaches to design and planning.

The delivery of training using non-traditional methods would be welcome as would in-person training or webinars. Example of non-traditional training could be video-conferencing or multiple trainers in different offices in different cities. It is important that the training be nationally available and be nationally relevant, though the use of local examples is encouraged.

To respond to this Expression of Interest (EOI), [submit a proposal here](#). This not intended to be labour-intensive at this time, rather gather interest and work with selected applicants on details of a program. Should your submission be selected, it is expected that a formal proposal will be prepared that will include a detailed budget, scheduling and learning outcomes.

If you intend to respond, please do so by **May 22, 2019**.



## CITE's Training Committee Seeks New Members

The CITE Training Committee's goal is to increase the awareness and availability of training opportunities for Canadian transportation professionals by overseeing the development and delivery of training initiatives. The Training Committee is comprised of CITE members who are responsible for prioritizing, selecting, and organizing training opportunities for transportation professionals across Canada. Since the Training Committee is primarily a coordinating body tasked with providing opportunities for training to CITE members, it typically does not get involved with the development of specific training materials or delivery of the actual training sessions.

In 2018, we offered training sessions on four different topics in ten different cities: Complete Streets, Traffic Calming, Bicycle Facilities Design, and the Canadian Capacity Guide. We anticipate a similar program in 2019.

The term for committee members is a maximum of four years that begins/ends at the CITE Annual General Meeting. Individual members of the Training Committee can be involved in the preparation of materials and delivery of the training sessions as appropriate.

We have team members from Ontario, Newfoundland, and Alberta but are looking for committee members from other areas in Canada to help bring a national perspective to the team. If you are interested in joining our committee, please send a letter of interest, a resume, and a letter indicating support from your employer to [training@cite7.org](mailto:training@cite7.org).

More information, including the Committee's terms of reference, is available at [cite7.org/training](http://cite7.org/training).

## CITE Training Opportunities

Traffic  
Calming

April 23  
Hamilton, ON

Complete  
Streets

May 9  
Halifax, NS

Design Speed  
& Posted Limits

May  
Canada-wide webinar

Bicycle  
Facilities

June 5  
Ottawa, ON  
with CITE 2019 Annual  
Conference

More info & registration at [cite7.org/training](http://cite7.org/training)

Have your say

What training topics are of interest to you?  
Tell what you want to see in 2019 at [training@cite7.org](mailto:training@cite7.org).



## Mobility as a Service Technical Session at CITE 2019

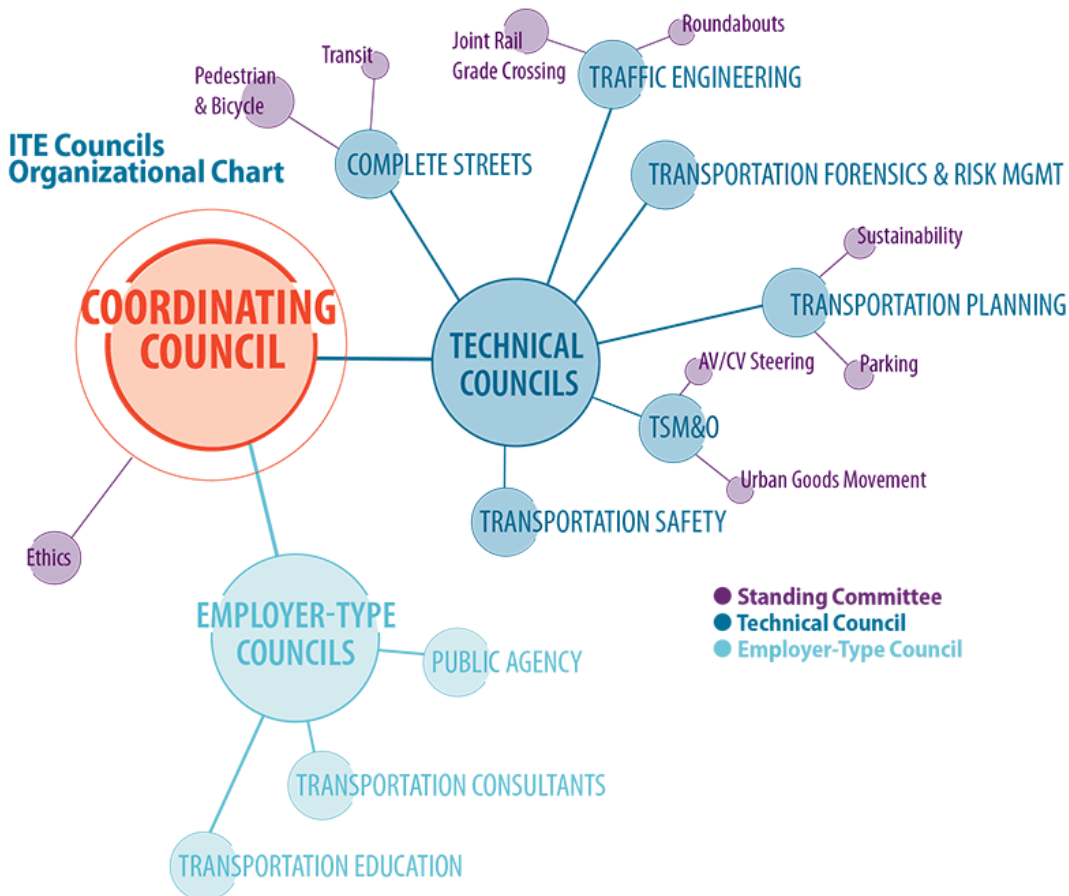
The TLC will be holding a session during the CITE conference and presenting on one of ITE's new initiatives: Mobility as a Service (MaaS). MaaS is about a shift away from personally-owned modes of transportation and towards mobility solutions that are consumed as a service by offering travelers mobility solutions based on their travel needs. There's a new task force being established for MaaS and could involve several ITE technical councils. We'll be looking for feedback on MaaS and what ITE should be doing about it.

### DID YOU KNOW?

ITE has nice councils (6 technical and 3 employer-type councils) that are available to members to subscribe to and participate in via the ITE Community Website. The six technical councils develop technical products and actively contribute to the body of knowledge in a discipline.

The three employer type councils serve as a forum to discuss and support programs and projects that advance council members and the transportation profession.

For more information please visit [ite.org/technical-resources/councils](http://ite.org/technical-resources/councils)





The Carleton University Student Chapter of ITE, in conjunction with *excite*, are thrilled to be hosting the **Second Annual Canadian ITE Student Leadership Summit (SLS)** in Ottawa.

The cost to attend is only \$25, which includes breakfast, lunch and snacks on Sunday, June 2, as well as public transportation to the CITE Annual Conference Welcome Reception at the Westin Hotel in downtown Ottawa.



## WHO IS THIS FOR?

The Summit is organized by and for students with support from *excite*, CITE's emerging members. We are building on last year's success and expecting over 50 attendees from across Canada.

## WHAT IS A STUDENT LEADERSHIP SUMMIT?

Student Leadership Summits provide students interested in the transportation profession valuable skills and resources for success in their future career.

## WHERE IS IT HAPPENING?

Carleton University campus in Ottawa, Ontario

## WHY SHOULD I ATTEND?

The Summit gives you the opportunity to build and develop leadership skills that will help you stand out in the workplace. An added benefit is networking with other students and professionals in the transportation profession.

## WHEN IS IT HAPPENING?

Saturday, June 1 to Sunday, June 2, immediately preceding the 2019 CITE Annual Conference in Ottawa

Registration info will be emailed to all student members of CITE, posted on [cite7.org](http://cite7.org), and provided to CITE Student Chapters as soon as it is available.

**REGISTRATION DEADLINE: MAY 25**

# OTTAWA

## 2019

June 2-5



## bold & transformative solutions

CITE ANNUAL CONFERENCE  
THE WESTIN HOTEL ▶ 2-5 JUNE 2019

CITE and the National Capital Section are thrilled to welcome you to attend the 2019 CITE Annual Conference to be held in Ottawa, Ontario from June 2 to June 5, 2019! The National Capital Region is home to over a million people. With a mix of urban centres, natural areas, pathways, and unique neighbourhoods, Ottawa has all the amenities of a large city and the welcoming feel of a small town. Look forward to an exciting technical program, quality technical tours, and a range of social activities and special events at CITE 2019—a conference not to be missed!

### ▶ registration & hotel

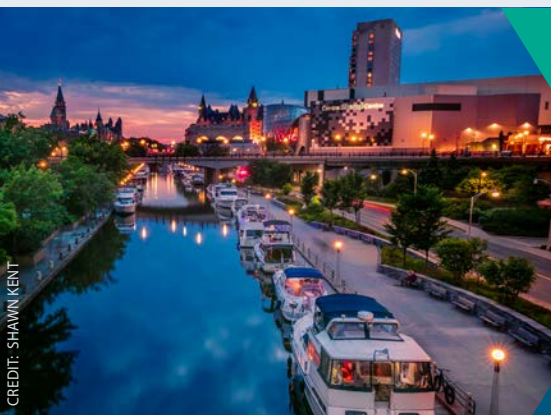
Registration is open and the **early bird deadline is April 30!** Getting approval to attend is easy with key conference details at your fingertips on the [registration page](#) and a [summary](#) of what you'll gain from attending. Register now at [conference.cite7.org](#) to secure discounted registration rates.

Early Bird Deadline is April 30  
Hotel rooms guaranteed until May 1  
Register at [conference.cite7.org](#)

Our conference venue and hotel, the Westin Ottawa, is located in the heart of downtown, steps from Parliament Hill, the ByWard Market, the UNESCO World Heritage site Rideau Canal, and many of Ottawa's finest attractions.

**Book your room at The Westin by May 1, 2019, 5 p.m. Eastern Time** to receive our special conference rate of \$259/night with high speed internet included. Rooms are not guaranteed after this date.

To book a guest room, please visit the hotel website [here](#) or call 1-613-560-7000 and tell them you are booking for the "CITE Conference" to secure this rate for your stay. Payment is not required at the time of booking and you can cancel your reservation free of charge up to 6 p.m. 48 hours prior to your arrival date.



CREDIT: JESSICA SWAN

CREDIT: SHAWN KENT



Find the full schedule, tour descriptions & event details at [conference.cite7.org](https://conference.cite7.org)

## ► technical program

Our program theme encapsulates **bold & transformative solutions** addressing the interconnectivity of various modes of travel, reinventing design toolboxes to adapt to these modes. The quality **technical program** includes over 100 presentations and posters on a diverse group of topics. The program covers a wide range of pertinent topics including complete streets, Vision Zero, automated vehicles, and more.

Not to be outdone, there are nine walking, cycling, and bus **technical tours** for an on-the-ground look at applied solutions like Ottawa's cycling facilities, ITS control centre and AV test track, new LRT, downtown Complete Streets and "Main Street" transformations, and bridge projects in the Capital Region.

We have a stimulating lineup of **keynote and guest speakers**:

- **Dr. Mariana Brussoni** from the University of British Columbia on the important link between the built environment and child development.
- **Willa Ng** of Alphabet's Sidewalk Labs on cutting edge waterfront developments and broader scale impacts on urban mobility.
- **John Manconi**, City of Ottawa's General Manager of Transportation Services
- **Bruce Belmore**, President of ITE International
- **Scott Streiner**, CEO of the Canadian Transportation Agency (CTA)

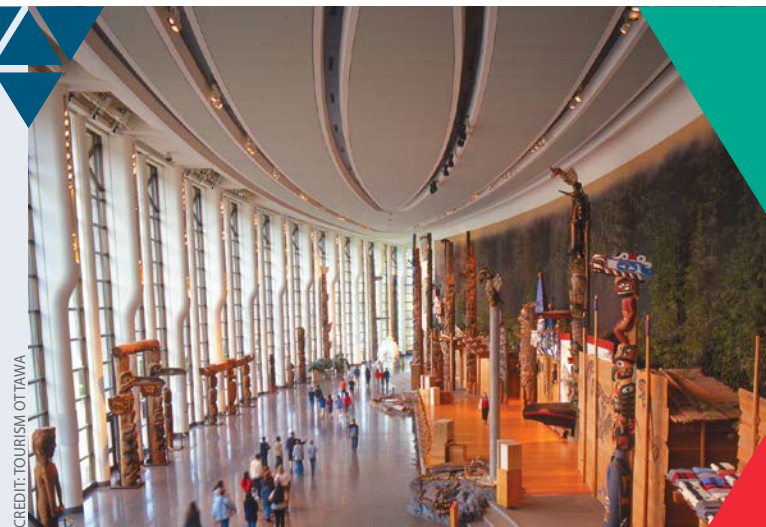
Learn more in the [keynote speaker announcement](#) and dive into the [detailed technical program](#) online.

## ► special & social events

Returning and new attendees alike will look forward to the events that make our conference one to remember.

Enjoy some friendly competition at the **Traffic Bowl**—featuring eight teams from student chapters across Canada—and **Street Hockey Challenge**.

Mingle with friends and new connections at the **Welcome Reception** on Sunday and **Student Mixer** on Monday. On Tuesday, enjoy our **Annual Banquet** cocktail reception and dinner at the Canadian Museum of History, one of our country's most renowned cultural institutions with unique architecture and stunning views. Get all the details on our [website](#).



CREDIT: TOURISM OTTAWA

## SUNDAY, JUNE 2

Special thanks to our top supporters

Partner



Platinum Sponsor



▶ Want to see your logo here? Put your company in the picture with a conference sponsorship. Details at [conference.cite7.org](http://conference.cite7.org).

▶ Please note this is a preview and all details are subject to change

Version: 16 April 2019

REGISTRATION & INFO DESK OPEN

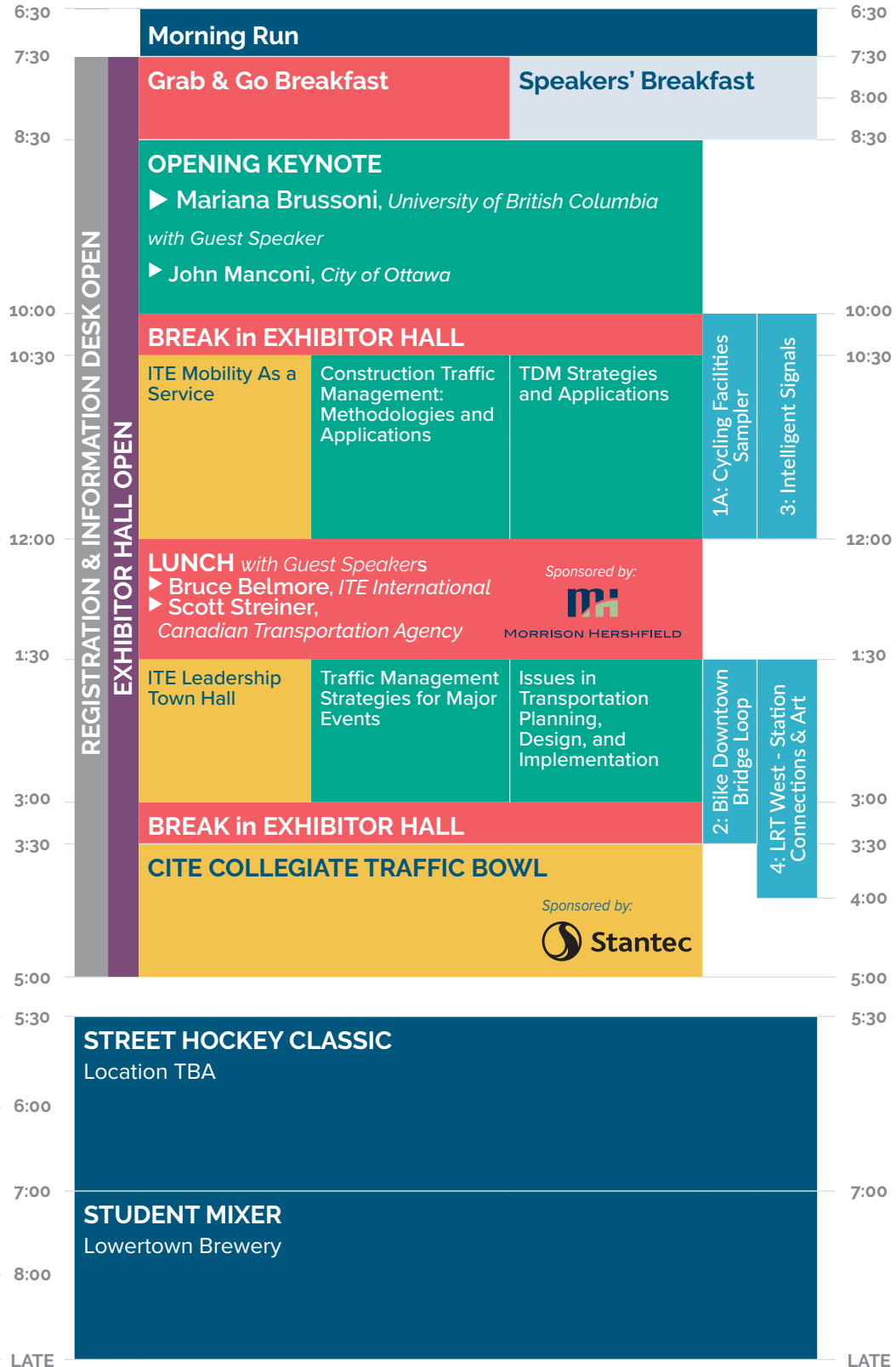
CITE ANNUAL GENERAL MEETING

EXHIBITOR HALL OPEN

WELCOME RECEPTION  
Exhibitor Hall

Leadership/ITE Canadian Alumni Reception

## MONDAY, JUNE 3



## TUESDAY, JUNE 4

REGISTRATION & INFO DESK OPEN

EXHIBITOR HALL OPEN

# SCHEDULE AT A GLANCE

2019 Annual Conference ▶ **bold & transformative solutions** ▶ #2019CITE ▶ [conference.cite7.org](http://conference.cite7.org)

## THURSDAY, JUNE 4

|  |   |   |  |  |
|--|---|---|--|--|
| <b>Morning Run</b>                               |   |   |  | TECHNICAL POSTER SESSION<br>Presenters in attendance during breaks |
| <b>Grab &amp; Go Breakfast</b>                   |   | <b>Speakers' Breakfast</b>                                |  |  |
| Transit: LRT Projects                            | Filling the Data Gap - Innovations in Data Collection & Analysis I  | Autonomous and Connected Vehicles                         | 1B: Cycling Facilities Sample                    |  |
| <b>BREAK in EXHIBITOR HALL</b>                   |   |   | 6: Downtown Moves - Complete Streets Talk & Walk |  |
| Transit: BRT Projects                            | Filling the Data Gap - Innovations in Data Collection & Analysis II | Emerging Technologies: EV, E-Bike and Integrated Mobility |  |  |
| <b>LUNCH</b><br>▶ Willa Ng, <i>Sidewalk Labs</i> |   |   |  |  |
| Data Collection for Cycling                      | Pedestrian-focused Infrastructure                                   | Complete Streets  | 5: LRT East - Rail Connections & Simulator       |  |
| <b>BREAK in EXHIBITOR HALL</b>                   |   |   | 7: Capital Region Bridge Tour by Bus             |  |
| Case Studies in Cycling Design                   | Understanding & Predicting Travel Behaviour: Data + Models          | Safety: Vision Zero and Traffic Calming                   |  |  |

|   |  |   |
|---|--|---|
| <b>ANNUAL BANQUET</b><br>Canadian Museum of History<br>Gatineau, Quebec |  | Sponsored by:<br><b>SIDRA SOLUTIONS</b> |
|---|--|---|

LATE

## WEDNESDAY, JUNE 5

|  |                            |   |                               |                |
|--|----------------------------|---|-------------------------------|----------------|
| <b>Morning Run</b>   |                            |   |                               | INFO DESK OPEN |
| <b>Grab &amp; Go Breakfast</b>   |                            | <b>Speakers' Breakfast</b>                                    |                               |                |
| Cycling Network Planning Tools   | Transit: General           | Thinking Outside of the Box: Alternative Approaches to Design | 8: Transformative Corridors   |                |
| <b>BREAK</b>   |                            |   |                               |                |
| Cycling Design Elements  | Emerging Technologies: ITS | Transportation Planning - Building Strong Communities         | 9: Cycling Facilities by Foot |                |
| <b>LUNCH</b><br>▶ CITE 2019 Excellence in Transportation Awards  |                            |   |                               |                |
| <b>BICYCLE FACILITIES DESIGN WORKSHOP</b><br><a href="http://cite7.org/event/bike-facility-design-workshop-ottawa/">cite7.org/event/bike-facility-design-workshop-ottawa/</a><br>• Separate registration is required and limited in number<br>• This training workshop will begin following the conference closing Awards Luncheon |                            |   |                               |                |
| <b>Legend</b>  |                            |   |                               |                |
| REGISTRATION & INFORMATION   |                            |   |                               |                |
| EXHIBITOR HALL   |                            |   |                               |                |
| CITE/ITE International EVENT or SESSION  |                            |   |                               |                |
| SPECIAL EVENT  |                            |   |                               |                |
| MEALS & BREAKS   |                            |   |                               |                |
| TECHNICAL SESSIONS   |                            |   |                               |                |
| TECHNICAL TOUR   |                            |   |                               |                |
| BY INVITATION ONLY   |                            |   |                               |                |

### Legend

REGISTRATION & INFORMATION

EXHIBITOR HALL

CITE/ITE International EVENT or SESSION

SPECIAL EVENT

MEALS & BREAKS

TECHNICAL SESSIONS

TECHNICAL TOUR

BY INVITATION ONLY

# thank you to our bold & transformative sponsors & exhibitors

## partner



## platinum



## gold



## silver



McINTOSH PERRY



## bronze



► put your company in the picture

OPPORTUNITIES STILL AVAILABLE. BECOME A SPONSOR OR EXHIBITOR HERE.

## exhibitors

Be sure to visit these companies in the Exhibitor Hall. Exclusive trade show hours during the Welcome Reception on Sunday evening and all breakfast and networking breaks offer you a chance to connect and learn more about their products and services.



## Bicycle Facilities Workshop

**Date:** Wed, June 5 following CITE 2019 Annual Conference

**Time:** 1:30–5:00 p.m.

**Location:** The Westin Ottawa, 11 Colonel By Dr, Ottawa

**Cost:** \$200 for CITE members, \$250 for non-members

This session is designed to:

- provide attendees an understanding of the latest national and international trends, best practices, and design guidance in the rapidly evolving field of bicycle facility design.
- equip attendees with the design skills needed to deal with diverse, complex issues that arise around the selection, design, and implementation of cycling infrastructure including winter cycling considerations.

Register at [cite7.org/events](http://cite7.org/events)



# my favourite...

In this feature, fellow CITE members share favourite transportation tidbits from across Canada. For this Ottawa 2019 Annual Conference preview edition, three members of the Local Arrangements Committee tell us about their favourite...

## ...bold transportation solution in Ottawa

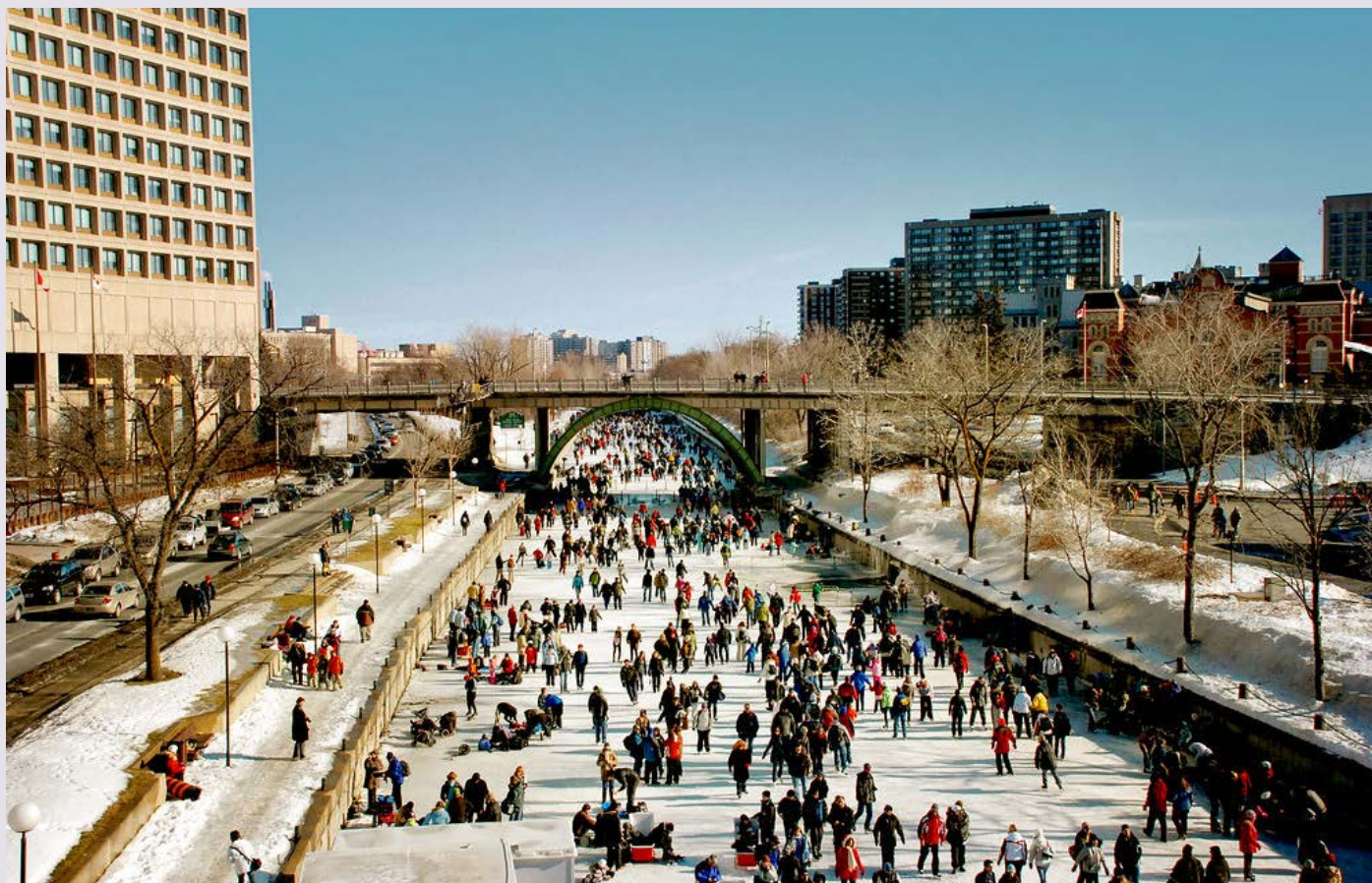


### Andrew Harte, P.Eng.

Senior Transportation Engineer, CGH Transportation Inc.  
Ottawa 2019 Annual Conference Local Arrangements Committee Co-Chair

### Rideau Canal Skateway

I will attempt to make a crossover here, but I would list the Rideau Canal Skateway as a very bold and transformative transportation idea. Back in the late 1960s, there was a push to pave the canal into downtown to serve as another car-centric transportation corridor. The NCC took a different approach and designated the Canal as a recreational corridor including a winter skateway. A humble opening in 1971 with staff using shovels and brooms, the Canal has expanded to become the World's Largest Skating Rink and sees over a million visitors a year. When I was a kid, I remember my dad packing his skates for his business trips to Ottawa. When I asked why, he explained that because the hotel and office were close to the Canal, he could skate to and from work. Now taken for granted in Ottawa, this facility provides both a leisure activity and an opportunity to commute with a fun twist through the heart of Ottawa.



CREDIT: VINCE ALONGI

Have a topic idea? Want to be featured in a future edition? Contact us at [communications@cite7.org](mailto:communications@cite7.org)!



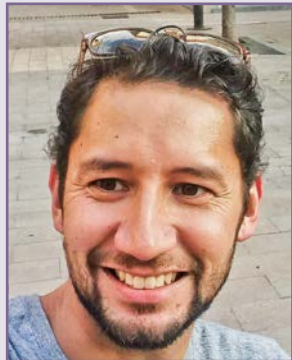


## Adam Howell, P.Eng.

Project Manager - Transportation Planning, WSP Canada Inc.  
*Ottawa 2019 Annual Conference Local Arrangements Committee Technical Chair*

### Ottawa Cycling Plan

Like many municipalities, Ottawa has embraced the importance of cycling and is rapidly increasing the number of dedicated cycling facilities in the city. The City's 2013 cycling plan provides the groundwork for a fully connected cycling network across the city, including crosstown bikeways and neighbourhood connections to allow cyclists to travel on dedicated right from their neighbourhoods to their desired destination and back. The planned network will play a key role in making cycling more of an attractive and viable mode of transportation in the City, and I look forward to the ever-increasing number of destinations in the City that I can access by bicycle as the proposed network continues to develop.



## Justin Swan, P.Eng.

Senior Project Engineer - Transportation Planning, City of Ottawa  
*Ottawa 2019 Annual Conference Local Arrangements Committee Social Chair*

### Somerset Cross-Town Bikeway (East)

Years ago, biking into downtown was fraught with danger. We had physically protected bike lanes once you arrived but nothing safe connecting to them. Now we do. Only a couple of years in, the numbers keep growing. In 2018, 1,300 cycled this route daily and 5,000 to 10,000 crossed the flanking active transportation bridges by foot or bike. Spotting young children using this 2 km bikeway is not uncommon. The bikeway includes multi-use pathways, 30 km/h speeds, dedicated bike lanes, and Canada's first Advisory Bike Lanes. It's continuous for people walking or biking but not for car traffic, and it connects to busier cycling routes and an LRT station. It is a small but important snapshot of the strides we're making for people who can't or choose not to drive. I bike this route daily to drop my son off at daycare, something no parent would have dreamed of before the bikeway.



CREDIT: JUSTIN SWAN



CREDIT: ARAH PETERSON/PORTLAND BUREAU OF TRANSPORTATION

# PREPARING FOR E-SCOOTERS IN CANADA

How should Ontario & other provinces govern emerging micro-mobility services?

BY JAMIE STUCKLESS, SHARE THE ROAD & DAVID MCLAUGHLIN, WSP CANADA

Dockless e-scooter systems (e-scooters) have been launched in more than 100 cities across the United States. Are they coming to Ontario and the rest of Canada? The kick-style type e-scooters are **currently not permitted to operate within public road rights-of-ways in Ontario**. Although we haven't seen the launch of a full fledged e-scooter system yet in Ontario, there is a [pilot currently underway in the City of Waterloo](#) and this new form of micro-mobility is generating a great deal of interest.

Jurisdictions across the United States have frequently found themselves in the position of having to retroactively develop e-scooter policies after the systems have been launched in their community. In Ontario, we have a short window of opportunity to pro-actively develop a policy framework to govern the arrival of e-scooters in the province. Many other provinces across

Canada will also have to decide soon whether they plan to embrace or reject this new form of micro-mobility.

## THE OPPORTUNITY

E-scooters represent a new way for residents (and visitors) to get around their communities. They have been lauded as providing first and last mile connections to transit, particularly in areas where the trip is too long to walk. If residents choose to replace car trips with e-scooters, they also represent an opportunity to reduce traffic congestion. Preliminary [evidence from the e-scooter pilot in Portland, Oregon](#) suggests that e-scooter riders are using them to replace car trips (34%) and that the e-scooters are popular among residents, with 85% of those surveyed indicating that they would recommend e-scooters to a friend.

## CANADIAN JURISDICTIONS PREPARING FOR E-SCOOTERS

**Waterloo:** Canada's first e-scooter pilot project completed its first phase in Oct–Nov 2018. It was deemed a success, with more than 6,000 riders completing over 18,000 trips on the Lime scooters. The pilot continues with phase two running Apr–Sept 2019.

**Montreal:** The Quebec Transport Ministry and City of Montreal have modified regulations and bylaws to allow dockless e-scooter services to rollout in the city in 2019.

**Edmonton:** City Council recently voted to move forward with bike and scooter sharing recommendations which would see companies set up their own programs as soon as June 2019.



CREDIT: ELVERT BARNES PHOTOGRAPHY

## THE CHALLENGE

E-scooters are a relatively new technology and mode of transportation. As a result, there are few studies about their safety, market resilience, and ability to operate through the winter. While the Portland pilot results indicate that people are using e-scooters for trips that otherwise may have been made by car, it is important to note that Portland is recognized as a Platinum Bicycle Friendly Community and has invested more than most in providing safe & convenient space for people to cycle. This bicycle infrastructure is also now being used by people riding e-scooters, and is preferred among riders who were surveyed. Most communities do not have the same infrastructure available for bicycling or for e-scooter riders as Portland does and the availability of safe spaces to ride should be a key concern.

Medical professionals have raised concerns about increased emergency room visits due to the proliferation of e-scooters, with many sources pointing to one Salt Lake City hospital that reported a 161% increase in emergency room visits related to e-scooters (from 8 patients to 21). Another recent study of medical records from two UCLA hospitals in Los Angeles and Santa Monica indicate that e-scooters have been associated with 249 emergency room visits between September 2017 and August 2018. As of September 2018, the death rate among e-scooter riders across the United States

was reported to be 1 per 10.75 million trips, compared to 1 per 61.5 million trips for bike share. In December 2018, the Centre for Disease Control announced that it would be conducting its first study of the health risks of dockless scooters in Austin, Texas.

There have also been collisions between e-scooter riders and pedestrians on the sidewalk and concerns about sidewalks being obstructed by poorly parked e-scooters, and the serious impact this has on the mobility of elderly and visually impaired residents, including those using mobility devices.

## E-SCOOTERS AND ONTARIO LAW

At present, e-scooters can only be operated where the Ontario Highway Traffic Act (HTA) does not apply, such as on private property if permitted by the owners. This is the case during the ongoing pilot conducted by Lime in Waterloo, ON, where the scooters are permitted only on private trails, a technology park and university campus.

The Waterloo pilot is being run in two phases under current Ontario laws, with a maximum of 100 e-scooters in Fall 2018 and a maximum of 150 e-scooters in spring/summer 2019. The maximum speed of e-scooters during the pilot is 24 km/h. The pilot identifies the specific "pilot routes" on which the e-scooters can be operated. It also

*Continued on page 25...*

specifies hours of operation for e-scooters between 7am to 9pm. The operator (Lime) is responsible for removing all e-scooters from operation after 9pm and for collecting all e-scooters on public and private property (except those in designated recharge havens). E-scooter riders must be 18 years of age and upload a driver's license as proof of age. Riders are not required to wear a helmet.

## LEARNING FROM OTHER JURISDICTIONS

While there is no clear-cut guidance for this new technology, several jurisdictions have enacted policies to govern the use of e-scooters and to address key issues around the devices:

### Speed

- Most e-scooters in the United States appear to be capped at a maximum speed of 15 miles per hour (24 km/h). A 2018 effort in California—reportedly

led by e-scooter company Bird—aimed to increase the maximum speed to 20 mph (32 km/h) and allow sidewalk riding, but failed to pass.

### Where e-scooters can be operated

- While some jurisdictions (e.g., Denver) allow the use of e-scooters on the sidewalks, many jurisdictions have banned e-scooters from the sidewalks and require riders to use the road and bicycle lanes.
- Some jurisdictions, like Miami and Nashville, have banned the use of e-scooters all-together, while others like San Francisco require prospective companies to apply for a limited number of operating permits. Some municipalities have set geographic limits on where e-scooters can be operated (e.g., [Santa Monica banned them](#) along the beach path and [Portland has banned them](#) in Waterfront Park).

## RESOURCES & OPPORTUNITIES

### NACTO Guidelines for the Regulation and Management of Shared Active Transportation

<https://nacto.org/home/shared-active-transportation-guidelines/>  
<http://betterbikeshare.org/2018/07/13/nacto-releases-guidelines-on-dockless-bikes-and-scooters/>

Report strategies and standards for communication between city, company, and rider; permitting; data sharing; privacy; equipment safety standards; and dockless bike and scooter parking.

### ITE Mobility as a Service (MaaS) Initiative

<https://www.ite.org/pub/?id=F3EC1FCA-AC58-9151-7BF8-094EE7C801DF>

In late 2018, ITE International launched a MaaS initiative to help transportation professionals integrate MaaS in the planning, design, and operation of transportation systems. Learn more at the [MaaS technical session](#) being held on June 3 at the CITE Annual Conference in Ottawa.

### T4America's Shared Micromobility Playbook

<https://playbook.t4america.org/equity/>

*"This playbook is intended to be a... continuously updated site that explores the core components of a comprehensive shared micromobility policy for local governments to consider."*

The playbook covers a depth of policy issues including Parking & Street Design, Equity, and more, highlighting options available, pros and cons, and case studies.



## Use of public space & parking

- In [Santa Monica](#), city council recently approved a “use of public space fee” for the use of public property for private commercial purposes. The recommended fee is \$0.98/scooter per day.
- As part of their pilot project, Santa Monica is also [repurposing street space](#) to create shared mobility device zones to help prevent sidewalk blockage by e-scooters. Over 60 zones have been installed in the first few months.
- Regulations [currently being considered in Washington, DC](#) would require companies to provide a toll-free phone number for people to report badly parked vehicles. They also require companies to provide a \$10,000 security deposit, which the city can keep if companies fail to remove badly parked e-scooters.

## Equity & access

- In Washington, DC e-scooter systems [must offer a cash payment option](#) and the ability to unlock scooters without a smart phone to ensure that residents can access the e-scooters without a smartphone or a bank account.
- To ensure that these services are available to residents and communities that could benefit most, Portland, Oregon [requires that e-scooter operators deploy](#) a minimum of 100 e-scooters or 20% of their fleet (whichever is less) each day in the historically underserved East Neighbourhoods.

## Safety & equipment

- [California recently passed legislation](#) allowing people 18 years of age and older to operate e-scooters without a helmet. This same legislation stipulates that e-scooter riders cannot carry passengers or any packages that prevent them from keeping at least one hand on the handlebars. California also prohibits riders from leaving motorized scooters lying on their side on any sidewalk, or from parking e-scooters on sidewalks in a manner that does not provide an adequate path for pedestrian traffic.

E-scooter companies themselves also have campaigns and technology aimed at enhancing the e-scooter experience. This includes requiring users to take photos of their parked e-scooters to encourage good parking

behaviour, and allowing users to report poorly parked e-scooters through the app. To keep sidewalks clear, [Bird has committed](#) to re-organizing and re-balancing their systems at the end of every day.

Companies require users to participate in an online safety tutorial the first time they use the app and many distribute free helmets to users who request them. Bird requires users to upload a driver's license as proof of being at least 18 years old. In San Francisco, Skip has established a community advisory council to oversee operations. [Lime has indicated](#) that they can provide incentives as well as fines to users through their app if required by local government. In terms of ensuring that e-scooter users have safe spaces to ride, in some cities Bird provides \$1 per scooter per day to municipalities to [help build protected cycling infrastructure](#).

## DRAFT POLICY RECOMMENDATIONS FOR ONTARIO

Introducing a new mode of transportation is not a decision that should be made lightly, which is why we would like to see e-scooters permitted in Ontario as part of a **2-year pilot program**. Many municipalities in the US have adopted e-scooters under a pilot framework as it allows for a better understanding of the opportunities and challenges presented by e-scooters. Ontario should do the same.

Share the Road recommends that the Province of Ontario permit the riding of e-scooters on roads and in bicycle lanes, but not on sidewalks. Like e-bicycles, we recommend that e-scooters be permitted anywhere that conventional bicycles can operate, unless restricted by a municipal by-law. The regulation of e-scooters for private use should be consistent with how e-bicycles are governed, including the use of lights and a bell. We also recommend several additional specifications, including:

- Limit the speed of e-scooters to 24 km/h and require an emergency power shut off switch;
- Specify that e-scooter riders are prohibited from carrying passengers of any age;
- Prohibit e-scooter riders from carrying any packages that prevent them from keeping two hands on the handlebars;
- Specifically prohibit e-scooter riders from leaving e-scooters lying on their sides or parking in a way

*Continued on page 27...*

that does not allow adequate space for pedestrian traffic, and;

- Allow municipalities to set geographic limits in which e-scooters can/cannot operate.

There are extra steps that dockless e-scooter companies should be required to take to ensure the safety of their users during the pilot project. Based on experience from other jurisdictions, this should include:

- Require that all first-time users participate in an online training tutorial via the operator's app, developed by the operator and approved by the province and respective local municipality;
- Require that e-scooter companies provide a toll-free number for residents to report poor parking of e-scooters, in addition to any in-app reporting that can be done by users.

Finally, if the proposed e-scooter pilot is deemed successful following its evaluation and consultation with users and these micro-mobility devices are recommended for approval use in Ontario, what next? It should be recognized that this new mode of transportation requires an investment in both education and building safer spaces for people to ride. This should be addressed by:

- Allowing municipalities the option of charging a "use of public space fee" to e-scooter companies;
- Establishing clear regulations by which e-scooters may be used in Ontario on public property, including road rights-of-way;
- Updating the Driver Training Handbook to provide information about e-scooters and requiring operators of shared systems to provide mandatory education / training to new users;
- Requiring operators of shared systems to collect and track user trip and demographic data and share this information at no charge to municipalities annually, and;
- Recommending that a portion of both municipal and provincial transportation funding be allocated to build safe and separate spaces for both bicycles, including e-bicycles, and e-scooters in municipalities.

E-scooters, like e-bicycles, could very well have a transformative impact on how people choose to travel in Ontario and across Canada. Although exciting as a new way to get around, consideration for the safety of both e-scooter users as well as all road users must be evaluated along with impacts to the design and enjoyment of our built environment. If it is to be, let's get it right.



Workers create a dockless shared mobility parking zone for e-scooters and bikes in Austin, Texas.



**Jamie Stuckless, MA** is the Executive Director of the Share the Road Cycling Coalition, a provincial cycling advocacy organization in Ontario. Ms. Stuckless is a policy professional with over a decade of experience in the active transportation field. She is a graduate of the Maytree Policy School and holds a Master's of Geography at McMaster University.



**Dave McLaughlin, BA, MES, MCIP, RPP** is WSP Canada's Active Transportation Practice Manager with over 25 years of experience. He is a multi-modal transportation planner working in Active Transportation network planning and facility design, transportation master plans, cycling and trail system network strategies and design guidelines, as well as transit and TDM planning and policy development. Dave is one of WSP's leading national urban mobility and complete streets specialists.



## MULTI-MODAL TRANSIT ON VANCOUVER'S B-LINE

BY BRIAN PHILLIPS, TRANSLINK & MARIYA (MARS) OTTEN-ANDREW, WSP CANADA

*"Get ready for shorter travel times, shorter wait times, and less crowding! Three new rapid-service B-Line routes are launching in Metro Vancouver in 2019 as part of Phase 1 of the Mayors' Council 10-Year Vision."*

### RAPID RIDERSHIP GROWTH IN METRO VANCOUVER

TransLink delivers a public transit service area spanning more than 1,800 square kilometres to provide for the transportation needs of Metro Vancouver residents and businesses. These include an extensive bus system throughout the region, SkyTrain rapid transit, SeaBus passenger ferries, West Coast Express commuter rail, and HandyDART for passengers who are unable to use conventional transit. In partnership with local municipalities, TransLink also funds the Major Road Network and has recently announced funding for a complementary Major Bikeway Network, linking the region across all modes.

Metro Vancouver, with 2.4 million residents, is currently experiencing record-breaking ridership growth. October 2018 saw TransLink's highest ridership ever, surpassing those seen during the 2010 Olympics. Specifically, the system experienced a 6.1% year over year increase, following a 6.2% increase in the previous year. Growth in 2018 was led by bus ridership, which grew an astounding 10.5% year over year.

This explosive growth is spurred on by recent investments in transit, a strong regional economy, and high gas prices. This strong growth is both an achievement and a challenge. High ridership has led to crowding on many routes throughout the system; mounting congestion threatens to erode journey times. Thus, there is an

*Continued on page 29...*

evident need for fast, reliable, high capacity transit improvements that can be delivered in a short time frame.

## WHAT IS THE B-LINE PROGRAM?

In 2014, the Mayors' Council developed the 10-Year Vision for Metro Vancouver Transit and Transportation, which set out an ambitious program of investment in regional transportation infrastructure and service across all modes. The 10-Year Vision included funding for 12 new B-Lines, to be delivered in three phases. Funding for Phase 1 was approved in 2016 and TransLink is scheduled to deliver the Phase 1 B-Lines—three new B-Lines for the fall of 2019.

B-Lines are a light form of Bus Rapid Transit (BRT), designed to provide fast, frequent, reliable, and comfortable service. B-Lines are high capacity articulated buses that run every day from 6 am to midnight, at minimum frequencies of 15 minutes, increasing to every 6 – 10 minutes during peaks. Understanding that the ability to influence mode shift goes beyond the transit service, B-Line stops have distinct branding and a high level of amenity including benches, shelters, real time passenger information displays, and route information.

The three Phase 1 B-Lines will provide access to fast reliable transit for communities in the North Shore, the

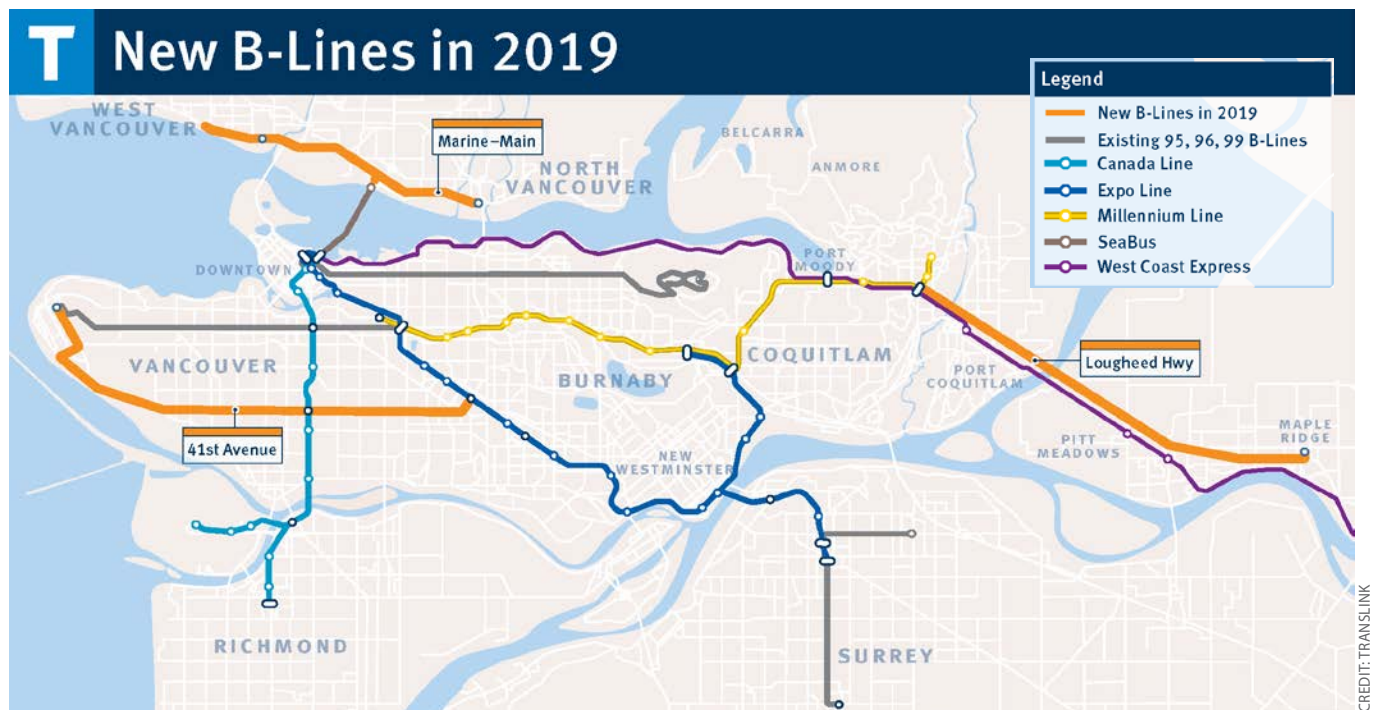
North-East, and Vancouver-UBC areas of Metro Vancouver:

- **Marine-Main** service that connects West Vancouver and North Vancouver
- **Lougheed Highway** service that extends from Coquitlam Central to Maple Ridge
- **41st Avenue** service connects UBC with Vancouver

These new express bus routes have been designed to maximize multi-modal options for travellers, connecting with all three SkyTrain lines, SeaBus passenger ferries at Lonsdale Quay, and West Coast Express commuter rail. All B-Line buses, as with all of TransLink's buses include bike racks to provide the option of cycling that 'first and last mile'.

## EXPEDITED DELIVERY

In 2018, TransLink teamed up with WSP with the ambitious goal of planning, designing, and delivering the first phase of B-Lines in late 2019. To make the project a success, the team needed to develop transit priority measures that are deliverable in the short term, within the existing road right-of-way. TransLink developed and continuously applied a multi-criteria decision-making framework to ensure that transit priority investments yielded results for customers. (See sidebar.) The project involves the creation and implementation of various on-street measures to





improve speed and reliability of buses such as: transit only lanes, HOV lanes, queue jumps, transit signal priority and signal optimization.

TransLink worked closely with 10 different road authorities to develop transit priority options—8 municipalities, plus BC MOTI and UBC—to develop transit priority projects that fit the local context and address known issues. While TransLink funds the Major Road Network, it does not have direct jurisdiction over roads in Metro Vancouver. BC MOTI, UBC, and the local municipalities own and operate the roadways on all B-Line corridors.

The road authorities provided crucial insight into the operation and future of their streets. Each design accounts for local conditions, municipalities' future transportation goals and plans, and future development. Detailed traffic operational analysis was carried out to assess how best to incorporate transit priority within the network, with numerous scenarios being investigated to identify feasible, cost-effective changes to the network that will result in reduced transit person-delay.

The guiding principles for this project have been to generally prioritize transit over other motor vehicles, so as to reduce transit person-delay in the short term, which will support mode shift leading to long-term reduction of person-delays across all modes. At the same time, all road changes need to consider the local community context, and respect the needs of all road users. In many projects, smarter road design has led to improved function for buses, pedestrians, cyclists, and general traffic. For example, on-site observations of traffic operations through a congested section of the network revealed that a lot of green time was not being used due to the intersection being blocked from the previous phase not clearing. Optimizing signal timings for current volumes and incorporating queue jumps for buses provided better network operations for all road users, reducing travel times all around and providing significant travel time savings for transit users. The success of this project can be attributed in part to the extensive engagement TransLink has led with stakeholders from the very start.

## ONGOING IMPROVEMENT

The current Phase 1 B-Lines are in development now and are slated to launch later this year with more B-Lines being rolled out in Phase 2 and 3 of the 10-Year Vision. Launch day is not the end of the project, however. TransLink is embarking on a path of continual improvement, working closely with their municipal partners to identify and fund additional opportunities along the B-Line corridors to support faster and more reliable service.

## SELECTING TRANSIT PRIORITY MEASURES

The goal of the B-Line project is to produce quick, attainable transit improvement on important regional corridors. In the planning stages, a large list of transit priority measures was developed. Measures that passed basic acceptability criteria were then evaluated for effectiveness. A multi-criteria decision tool was developed to assess potential improvements to ensure that transit priority measures provide good value and align with the program objectives.

**The primary value-for-money measurement was the amount of person-time saved per dollar spent.**

This included the person-time saved on local buses on the corridor, as they would also benefit from transit priority. However, the assessment also considered the impact or benefit to other road users and regional balance; it is important that each corridor has enough travel time savings to justify the B-Line brand. Improvements were ranked by their benefit-cost ratio, with lower-value measures being deferred to direct funding towards more effective projects.

Due to the fast-moving nature of the project, design and analysis often took place in parallel, meaning projects needed to be evaluated repeatedly throughout the project as estimated costs and impacts were refined. At key stages in the design, the cost of all proposed transit priority was checked against the project budget, and a decision made to either proceed with or defer each measure.



**Brian Elyer Phillips** is a Senior Planner with Translink, Metro Vancouver's regional transportation agency. Brian has a background in civil engineering, facilities planning, and traffic analysis. He combines the disciplines of engineering and planning to lead the development of transit priority measures for the B-Line program.



**Mariya (Mars) Otten-Andrew, P.Eng., PTOE** is a Professional Engineer and Professional Traffic Operations Engineer with over 20 years of experience, spanning Australia, the UK, Ireland and Canada. She leads the Alberta Transportation Planning practice for WSP and is Vice Chair of the CITE Technical Liaison Committee. Mars is passionate about sustainable transportation and shaping the way we move now and in the future.



# READY FOR FUTURE GENERATIONS

## London's Blackfriars Bridge gets a new lease on life

BY DOUG MACRAE, CITY OF LONDON & CHRIS HAINES, DILLON CONSULTING LTD

London, Ontario is home to a cherished part of Canada's history. Just north of Harris Park, Blackfriars Bridge spans the Thames River, connecting the Petersville neighbourhood to Downtown London. Originally constructed in 1875, the bridge provided a way for people living in Petersville and the surrounding areas on the west side of the river to do business at London's Covent Garden Market, Middlesex County Court House, and City Hall.

Blackfriars Bridge is a wrought iron bowstring arch-truss bridge. The bridge represents an era of bridge building that improved upon the previously common timber bridges and prior to the widespread emergence of structural steel and angular trusses. Blackfriars is the oldest wrought iron bridge in Ontario.

Two previous timber bridges at this Thames River crossing failed due to flooding. Lessons were learned and the current bridge was constructed with taller abutments and a single span to survive the annual river water level fluctuations. The bridge was fabricated by

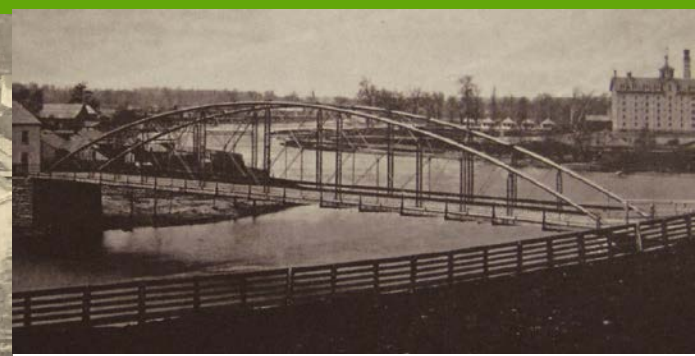
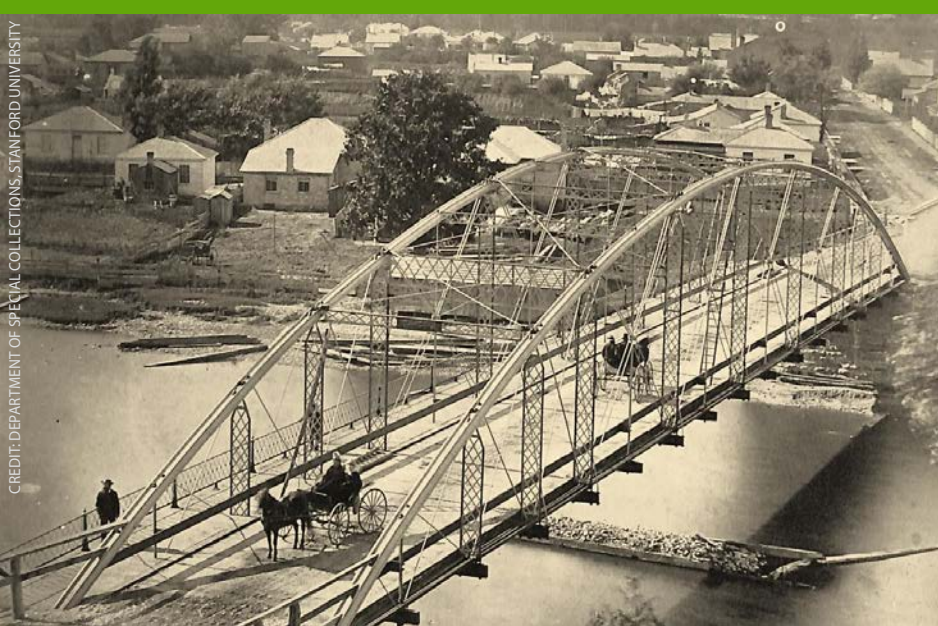
the Wrought Iron Bridge Company of Canton, Ohio and constructed on site by renowned local bridge builder Isaac Crouse. The bridge span of 66.7 m was one of the longest produced and the bridge design was the subject of several patent applications representing contemporary truss design advancements. So confident of its integrity, one of the bridge's chief engineers, Sir Casimir Gzowski, stood beneath the bridge while an entire regiment galloped across the bridge at its opening on September 27, 1875.

The bridge is the oldest metal bridge on the Ontario Heritage Bridge List. It has been designated under the Ontario Heritage Act and is identified as a key feature in the two heritage conservation districts it connects. The bridge is included on the Canadian Register of Historic Places and is also recognized by the Canadian Society of Civil Engineering as a National Historic Civil Engineering Site.

The City of London Environmental and Engineering Services Department takes pride and great care with

# London's Blackfriars Bridge

CREDIT: DEPARTMENT OF SPECIAL COLLECTIONS, STANFORD UNIVERSITY



**Above:** View of original iron bridge structure, with Carling Brewery in distance.

**Left:** Pedestrians and horse and carriage cross Blackfriars Bridge in this historical snapshot of multi-modal transportation.

**Below:** Access to the bridge was temporarily reduced to a pedestrian-only path in 2014.

## PROJECT AT A GLANCE

**Location:** London, Ontario

**Type:** Bridge Rehabilitation

**Cost:** \$7.9 million rehabilitation contract

**Completion:** 2018

**Accolades:** 2019 London Heritage Award for Conservation and Reuse

**More information:** [blackfriarsbridge.ca](http://blackfriarsbridge.ca)



CREDIT: WAYNERAY.LCC BY-SA 4.01

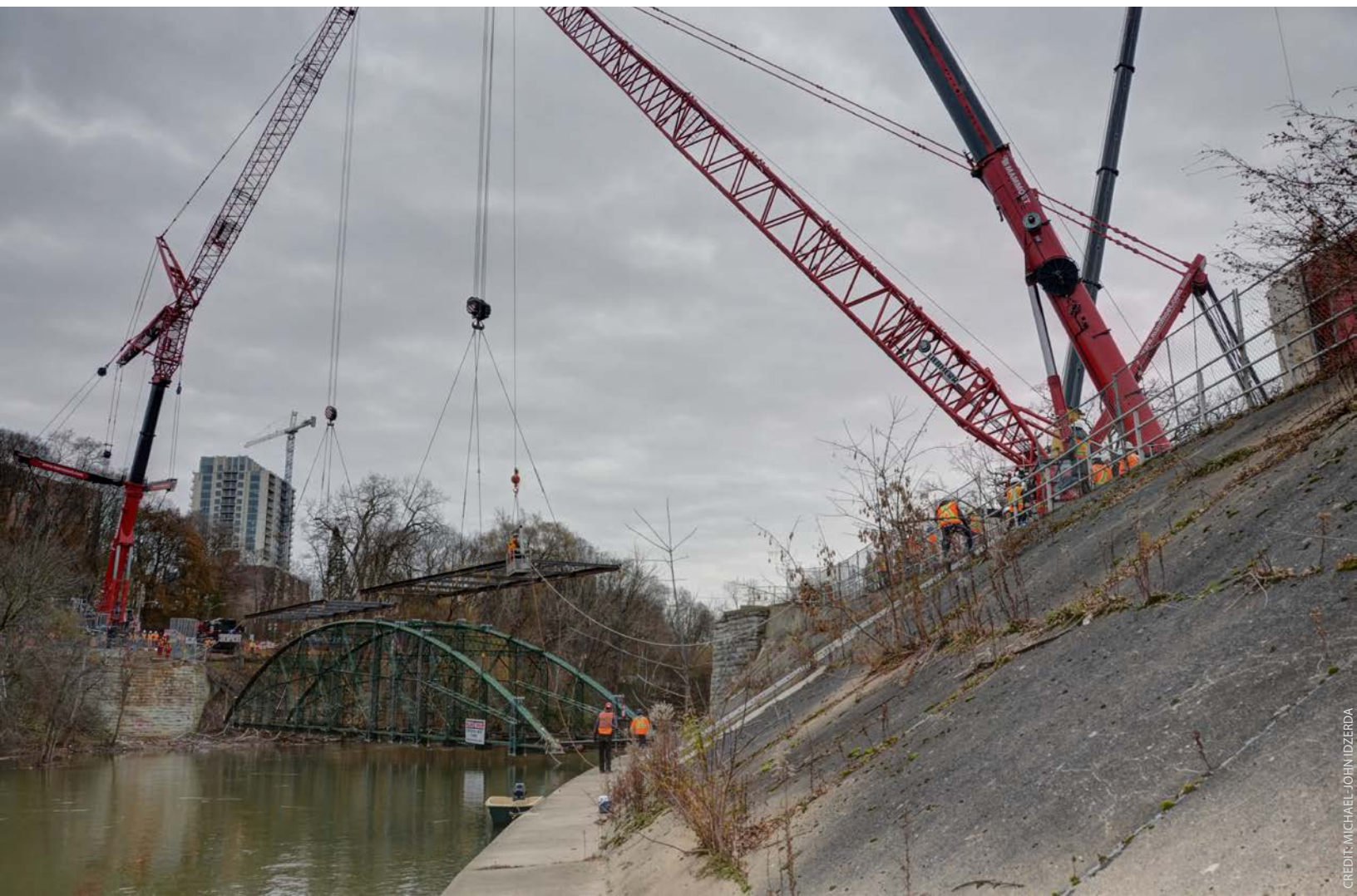
this treasured asset. A site-specific risk assessment workshop was conducted in 2010 to characterize the unique challenges with such an aging and iconic structure. The risk assessment was led by Dillon Consulting Limited, who would go on to lead the subsequent consultation and engineering phases of the project. The City initiated a detailed structural inspection of the bridge in 2013 to supplement the regular inspections that occur at least every two years. The inspection required temporary suspended scaffolding to provide arm's-length access to bridge components not easily observed by other means. The inspection discovered advanced corrosion including complete disconnection of some vertical hangers that connect the bowstring arch-truss to the bridge deck. The result was an unanticipated bridge closure followed by temporary

short-term repairs to reopen only a narrow path in the centre of the bridge for pedestrians.

Longer-term plans for the bridge were subsequently developed following an environmental assessment (EA) process that began in 2014. The process was rich with public engagement. The results reaffirmed Londoners' fondness for the landmark and confirmed that the bridge should be rehabilitated to extend its service. The EA included a debate about the future use of the narrow 4.8 m wide bridge deck. Upon consideration of several alternatives, it was determined that the future configuration of the bridge would be reduced to one-way travel for motor vehicles. This allowed for two-way travel for active modes of transportation using a contraflow bike lane and reinstatement of the historic wood sidewalk.

*Continued on page 34...*

# project profile



CREDIT: MICHAEL-JOHN DZERDA

CREDIT: MICHAEL-JOHN DZERDA

# London's Blackfriars Bridge

The design team took a responsible and thoughtful approach to bring this iconic heritage structure into compliance with the current Canadian Highway Bridge Design Code while recognizing and retaining as much of the heritage attributes of Blackfriars Bridge as possible. While several components required replacement, the resilience of the 1870s wrought iron enabled reuse of many of the unique and attractive components including much of the bowstring arch, vertical lattice hangers, upper lattice hangers, and the pedestrian railing. Many new elements incorporated sympathetic design features such as pins and unusual cruciform-shaped hangers made by machining to resemble the original wrought-iron form.

The rehabilitation contract was awarded to McLean Taylor Construction Limited in September 2017 at a value of \$7.9 million. The rehabilitation construction started with a nerve-racking crane lift of the fragile structure off its abutments. The bridge was then dismantled and individual components rehabilitated in an off-site controlled environment. The construction methods of the time had been researched and were mimicked where possible. Hot-riveting, a technique that was largely replaced by bolts by the middle of the 20th century, was used in the reassembly process. The bridge was reassembled on site in the second half of 2018 and lifted back onto rehabilitated abutments as winter approached. Construction progress updates were shared with the community on [blackfriarsbridge.ca](http://blackfriarsbridge.ca).

The return of Blackfriars Bridge was recently celebrated with a neighbourhood parade lead by the primary

transportation mode of the 1800s – horse and carriage. The ceremony included many dignitaries including great grandchildren of Isaac Crouse, the bridge's original constructor. More recently, the Architectural Conservancy Ontario–London Region and Heritage London Foundation awarded the project the 2019 London Heritage Award for Conservation and Reuse.

The Blackfriars Bridge Rehabilitation was a unique opportunity to create value with a project that combined cultural heritage and transportation engineering. The complex project benefited from close collaboration between the City of London, industry, and the local community. The investment has ensured that Blackfriars Bridge will continue to be an important link in London's transportation system and a symbol of Canada's history for generations to come.



**Doug MacRae, MPA, P.Eng.** is Director of Roads & Transportation at the City of London. Doug is currently serving as the President of the CITE's Southwestern Ontario Section. Doug's bike commute to work takes him past Blackfriars Bridge every day.



**Chris Haines, MBA, P.Eng., CRM** is an Associate at Dillon Consulting Limited. He has been Dillon's project manager for the Blackfriars Bridge project since 2010, and has crawled around the bridge extensively. Chris has over 25 years' experience in bridge engineering and is Chair of the Transportation Association of Canada's Structures Standing Committee.



CREDIT: MICHAEL JOHN DZERDA

CREDIT: MICHAEL JOHN DZERDA

CITE has a strong partnership with the Transportation Association of Canada (TAC). One of our key contributions to TAC's technical projects is participation on a number of TAC councils and committees through CITE appointees. In this TAC Tidbits, our appointees share updates about their committees from the Spring 2019 TAC Technical Meetings in Ottawa.

## Chief Engineers Council



### JULIA SALVINI FOR EDWARD SOLDO

CITE Vice President & President, Salvini Consulting Inc.

The Chief Engineers' Council (CEC) met on Saturday and Sunday to share hot topics focused on resilience and climate change, to hear updates from the related Committees, and to make some key decisions about projects within the organization.

Presentations to the group included:

- Vision Zero: A Canadian Overview by Craig Milligan, Fireseeds North
- Mitigation strategies for hostile vehicles by Ashley Curtis, City of Toronto
- Best Practices for Pothole Repairs in Canada by Dave Hein, Applied Research Associates
- Special Roads Chapter for the Geometric Design Guide by Henning Buch
- Strategic Opportunities for Integrating Health and Transportation by Jim Chapman, Urban Design 4 Health

In Council business, the CEC, in addition to all of the other Councils and Committees, was asked to provide feedback on TAC's proposal to change the structure of the Councils and Committees. Under the new structure, the CEC would become a Chief Engineers' Panel maintaining its role of approving technical products, but would not have any Councils reporting directly to the group; rather, the six new Councils would report to the board and members of the Panel would be encouraged to sit on one or two Councils.

After hearing the updates and requests from the related Committees, the CEC approved two key projects that CITE has been actively involved in developing: the Road Safety Webinar Series and the project around Decorative Crosswalks.

## Urban Transportation Council



### KATE WHITFIELD

Senior Associate Engineer/Planner, Alta Planning + Design - Canada, Inc.

The Urban Transportation Council meeting started with a presentation by Louis-Paul Tardiff from Transport Canada on Urban Mobility Measurement. I acknowledge my own bias to certain topics but when Transport Canada started speaking about cargo bikes as a competitiveness issue for our country, my ears perked up. That, and a federal/provincial/territorial task force who developed a model for biking to and from work known as the Utilization Bikeability Diagnostic tool. Of course, other Transport Canada work of note is covered by the five theme areas: Canadian Centre on Transportation Data Quarterly Report; the Urban Mobility Scorecard; Service Area Analytics; O-D routing analytics; and Targeted Analysis (i.e., the National Trade Corridors Fund).

In other news, two TAC projects were presented for final approval: *Strategic Opportunities for Integrating Transportation and Health* and *Understanding Goods Movement*. Watch for updates to the TAC library as these documents roll out. Looking to the future, TAC is revising the pool-funded project development process and its council and committee structure.

## Education and Human Resources Development Council



### MAUREEN VAN RAVENS

Manager of Transportation, Town of Halton Hills, Ontario

The EHRDC 2019 spring meeting focussed on a variety of presentations. These included skill sets required for our changing technology, diversity and inclusion in the workplace and a Young Professional perspective and expectations in today's workplace. A presentation on "Developing a Cyber Talent for Canadian Road Authorities" focussed on identifying the cyber security-related skills needed by Canadian road authorities to deploy, maintain, and protect road infrastructure systems.

Presentations were given on Diversity and Women in the workplace which concluded that women in engineering and in management roles are still the minority in today's work force.

The EHRDC approved a project proposal on Developing Highly Qualified Personnel for Road Authorities: A Gap and Solutions Analysis in the era of Connected and Automated Vehicles. This project will be taken to the TAC Board for approval to move forward.

The EHRDC activities for the 2019 Fall conference are as follows:

- 3 Panel Sessions which include a discussion on "Young Professionals workforce expectations", "Women in Engineering: Yesterday's Challenges & Tomorrow's Opportunities" and "Impact of Technology in the Workplace, The Good and The Bad".
- Post-Secondary Student Outreach. TAC will host participating post-secondary schools with a complimentary lunch and to attend various sessions at the conference to broaden their knowledge in the Transportation Industry.
- 2 educational Workshops titled "Communicating Effectively: A Soft Skills Development" and "A Global Laboratory to Experiment Emerging Technologies for Transportation"

## Connected and Automated Vehicles (CAV) Task Force



### STEVEN KEMP

Manager of Traffic Engineering and Operations, Regional Municipality of Durham

Approximately 50 attendees from coast to coast representing municipalities, provinces, the federal government, academia, the private sector, and technical associations participated in the inaugural meeting of the Connected and Automated Vehicles (CAV) Task Force at the TAC Spring Meetings in Ottawa. This new TAC Task Force reports directly to the Board and is chaired by Garreth Rempel (TRAINFO) with vice-chair Kenedee Ludwar (British Columbia Ministry of Transportation and Infrastructure).

Mike Corby from IBI Group presented on their work to develop a Connected and Automated Vehicle Discussion Paper for TAC. The Task Force also received a presentation from Paul Carlson (representing the US National Committee on Uniform Traffic Control Devices CAV Task Force) on their experience with engaging the auto sector to discuss infrastructure issues that may impact CAV deployment.

Like most other transportation associations, ITE has been very active on the CAV file. In December of 2018, ITE released a Statement on Connected and Automated Vehicles available [here](#). To stay up to date on the CAV front, I'd recommend attending the CITE Conference in Ottawa this coming June as well as the joint TAC-ITS Canada Conference in Halifax this fall for informative updates on CAV developments. Hope to see you there.

## Traffic Operations and Management Standing Committee (TOMSC)



**JAMES DONNELLY**

Transportation Engineer / Principal,  
Urban Systems



**LUIS ESCOBAR**

Senior Associate & Discipline Lead,  
Stantec



**JIM MALLET**

President & CEO, Paradigm  
Transportation Solutions Limited



**JEANNETTE MONTUFAR**

Founding Partner & CEO,  
MORR Transportation Consulting



**GREG O'BRIEN**

Atlantic Practice Manager, Traffic Engineering and  
Transportation Planning, WSP Canada Inc.

The Traffic Operations and Management Standing Committee (TOMSC) is responsible promoting uniformity for the development and application of traffic control devices and practices in Canada. At the 2019 Spring Meeting, representatives from provincial and municipal jurisdictions, industry, academia, and CITE met to discuss hot topics and trends about traffic control and operations across Canada. The meeting also includes updates on progress of technical projects and presentation of final projects that committee sub groups are working on. CITE representatives are included on most of the active technical projects of TOMSC.

A highlight of some of the hot topics and trends discussed from across Canada include:

- Use of lower speed limits in urban areas, Vancouver considering gateway speed limit signage, others reviewing policies for implementation
- Use of U-Turn signals at nine locations in Calgary
- Consideration of 'Idaho stops' in Calgary where cyclists would be permitted to complete rolling stops at Stop Signs.
- Saskatchewan is investing \$20M on safety related initiatives on rural intersections
- Waterloo – Lime scooter and other dock less scooter rentals becoming more common
- Quebec - Orange pavement markings in work zones – no visible improvement on speed compliance
- PEI has implemented new penalties for failing to stop for a school bus



The committee reviewed the final report on use of fluorescent yellow-green (FYG) crosswalk signs (project 339). Background research was conducted at the project onset and found studies in the US but only one completed in Canada on the use of the alternate colour for ground mounted crosswalk signs. With the limited available research into the sign colours conducted in Canada the project team conducted research at 29 crosswalk locations in Canada. The research completed as part of this project determined that there was not a significant impact on driver behavior and the use of the FYG for crosswalk signs is not recommended. The committee voted and approved the technical project.

The second project that was brought forward for final report was the use of Decorative Crosswalk Pavement Markings (project 351). The final report was presented to the Committee. Many concerns have been expressed regarding the inconsistent use of markings, use of colours approved for use for other specific purposes, distracting drivers by shifting attention to the pavement rather than focus on pedestrians, and impact on recognition by visually impaired users. While the purpose of the project is to provide more clarity of use of decorative markings in crosswalks, the project team found there had been very little research into the impact on safety with use of decorative markings in crosswalks. The project was endorsed to proceed as a funded project to complete research into the safety implications so that additional guidance can be added to the Manual of Uniform Traffic Control Devices for Canada (MUTCDC).

The Committee endorsed three new technical projects during the meetings including project 356, Cross Rides at Channelized Right Turns, project 357, Active Modes Signs Symbols, and project 358, Signal Timing to Accommodate Active Modes. These projects include representation from CITE appointees.

TAC is working to develop a new organizational reporting structure for the TAC Committees. The next meeting of TOMSC will occur on September 2019.

## Road Safety Standing Committee



### PEDRAM IZADPANAH

Partner & Vice President, TES

Vision Zero is increasingly the focus of the discussions during the Road Safety Standing Committee (RSSC) meetings, paper sessions, and panel discussions. At the 2019 RSSC Spring Meeting, the City of Toronto Director of Transportation Project Design & Management, Jacquelyn Hayward presented on Toronto Vision Zero progress.

During the 2018 Fall TAC Meetings, the RSSC approved the updated strategic plan for the next three years with four directions:

- Vision Zero and Safe Systems
- Stronger Profession
- Timely Research
- Member Value

During the 2019 Spring Meetings, the RSSC members broke out into 4 rotating groups to brainstorm actions they can develop under each of the above noted directions.

One of the interesting discussions at the RSSC meeting was the changes in legislations across various Canadian jurisdictions targeting distracted driving, impaired driving, and aggressive driving. The attendees further discussed the implications and challenges that these changes might have in their jurisdictions.

The RSSC approved a proposal from the Road Safety Workforce subcommittee to develop a National Webinar Series in Road Safety as a pool funded project. The proposal was also approved by Chief Engineers' Council. Municipalities will have an opportunity to fund this important project in the near future.

## Geometric Design Standing Committee



### MARCIA ENG

Senior Transportation Engineer, Urban Systems Ltd.

- Geometric Design Standing Committee has ongoing working groups for the Interchanges, Access Management and Cross Section chapters of the design guide. Working groups were also developed for Climate Change and Over-dimensional/Special Vehicles. A draft update to the Interchange chapter is anticipated for review for the Standing Committee at the Fall meetings.
- Roundtable discussions on what is happening or of concern across jurisdictions include:
  - › Cycling and Complete Streets policy and design guide development, important to promote consistency and standards across jurisdictions and to help designers.
  - › Accessible design standards: discussion on tactile warning surface indicators (TWSI) and the different types and use across jurisdictions, challenges incorporating accessibility into design with differing opinions on approach, and challenges in designing for something that is not universally accessible.
  - › Pilot cycling and pedestrian facilities implementation and use of green paint, general discussion on maintenance budget and safety benefits.
  - › Concerns that TAC design guidelines are not applicable for urban centres.
- Green infrastructure with increase infiltration to decrease the demand for larger storm infrastructure.
- Review of speed limit changes for residential and collector roadways.
- Concerns raised regarding P3 projects and the risks to the consulting industry associated with time spent/capacity, shifting liability, longer bid phases, changing standards, etc.
- Revisions and Additions subcommittee presented on 30 comments received regarding the design guide, of which 22 are errata. Requested that comments be submitted to TAC, until an online system is in place for tracking.
- Presentation by Paul Storer regarding newly implemented protected intersections for bicyclists in Vancouver, and by Jack Mason on the Crowsnest Pass highway twinning functional study.
- 2019 TAC Conference will be a joint conference with ITS Canada in Halifax, Nova Scotia. Partnership will be good for promoting how technology can help increase awareness and will be important to the future of design.
- Special Roads Chapter 11 was approved by the committee to move forward to Chief Engineer Council for approval.

## Sustainable Transportation Standing Committee



### JUSTIN BAK

Project Manager, City of Toronto

The primary objectives of the Sustainable Transportation Standing Committee (STSC), which sits under the Urban Transportation Council (UTC), are to promote research, analysis, development, and application of sustainable transportation strategies, policies, tools, and practices for urban areas.

The joint project with the Transportation Planning and Research Standing Committee (TPRSC) on Strategic Opportunities is in the final draft stage and was presented to UTC. The survey for the project titled 'Compendium of Provincial Legal and Regulatory Approaches Supporting Bikeway Geometric Design and Traffic Control Practices' was distributed to representatives from each of the provinces and major cities. The purpose of the project is to document legal and regulatory differences across jurisdictions that may be a barrier to implementing newer cycling infrastructure treatments such as crossrides, contraflow bike lanes, protected intersections, and various cyclist turning treatments. The committee considered supporting a project proposal under development by TPRSC on best practices in mobility pricing.

NOW AVAILABLE!

# Canadian Guide to Traffic Calming

## SECOND EDITION

Changes and additions include:

- Recognizing **EDUCATION & ENFORCEMENT** as valid, and/or preferred alternatives to physical measures;
- Describing measures applicable to **ARTERIAL ROADS & RURAL ROADS**;
- Adding **TRAFFIC CALMING DEVICES** some well-accepted and others ready to be further tested and evaluated; and;
- Referencing **PERFORMANCE OUTCOMES** where new information has become available since the first edition.

Click here to learn more about what's new in this edition

## UPDATED NATIONAL REFERENCE ON TRAFFIC CALMING PRINCIPLES AND APPLICATIONS

The Canadian Guide to Traffic Calming (Second Edition) presents traffic calming as a method to reduce the speed and/or volume of non-local traffic infiltrating into neighbourhoods. It explains principles and suggests a process for introducing and implementing traffic calming, and describes the applicability, effectiveness, and design principle for a wide range of traffic calming devices. The devices are categorized in terms of vertical deflection, horizontal deflection, roadway narrowing, surface treatment, pavement markings, access

restriction, gateways, enforcement, education, shared space, and emerging technologies and measures.

This second edition reflects changes in road conditions, attitudes toward vulnerable road users, and available technologies, and valuable experience regarding the efficacy of options. It was created through a partnership between the Transportation Association of Canada (TAC) and the Canadian Institute of Transportation Engineers (CITE).

**GET YOUR COPY IN THE TAC BOOKSTORE TODAY!**



Transportation Association of Canada



Canada's Community of Transportation Professionals

Visit the TAC Bookstore to view the Table of Contents and purchase:  
<http://www.tac-atc.ca/en/publications/ptm-trafcalm18-e>

## STEVEN KEMP P.Eng.



### Family

Married 25 years to my wife Wendy. Two sons Paul (17) and Randy (16)

### Personal hobbies

Downhill Skiing, Golf, Curling and anything on water

### City of Residence

Newmarket, Ontario

### Current Employment

Manager of Traffic Engineering and Operations,  
Regional Municipality of Durham

### Education

University of Waterloo, B.A.Sc. in Civil Engineering, 1994

### First job in transportation engineering

- *First as a student* – Manual traffic counts for the Regional Municipality of Peel (1990)
- *First full time transportation job* – Traffic Systems Analyst with the City of Toronto (1994)

### What positions have you taken on as a member of ITE?

- Toronto Section Executive (1999-2007)
- Toronto Section President (2006)
- Toronto CITE Annual Conference Local Arrangements Committee (2007)
- CITE Appointee to TAC Connected/Autonomous Vehicles (CAV) Task Force (2019)

### How long have you been involved with CITE?

Member since 1994

## CITE INVOLVEMENT

### When did you first attend a CITE event?

University of Waterloo hosted a student event sometime in the early 90s that I attended before I was first interested in transportation. Phil Master presented on MTO's COMPASS system. Not that many years later, I had the opportunity to work with Phil when I was responsible for the RESCU system at City of Toronto.

### What is your CITE involvement (past and present)?

Volunteering on the ITE Toronto Section executive was a great way for a then young, inexperienced engineer to establish contacts in the industry. I particularly enjoy the student events and student paper competitions. It is rewarding to talk to students getting ready to graduate and remembering what it was like to be in their shoes.

### What do you value most about your CITE membership?

In my career, the people I know have always been much more valuable than the things I know. CITE provides an opportunity to connect with transportation professionals across the country. I've gained valuable insight from many very accomplished people in the industry. More importantly, I've made life-long friends coast to coast.

## GETTING TO KNOW YOU

### How did you get into the transportation profession?

Like most things, part chance and partially by design. Region of Peel and other jurisdictions hired a lot of students to conduct manual traffic counts in the late 80s, early 90s. Many first year engineering students at Waterloo and other schools landed summer jobs conducting counts. At the time, I didn't really have any idea that transportation as a career was even a possibility. The job was boring, but you were outside in the sun, had paid lunches with a large group of

friends, played softball after work, and it paid pretty well. It also introduced me to the transportation profession.

Later, in the early 90s, I lost a first cousin that was the same age as me in a motor vehicle collision involving a drunk driver. That event sparked an interest in road safety that I never had before. I sought out opportunities to learn everything I could about traffic and transportation, taking every course available and looking for co-op work opportunities in the field.

Co-op works terms at Peel, IBI Group, Region of Ottawa Carleton, and MTO all led to me to a full time transportation job at the City of Toronto after graduation.

**How would you describe your job to someone you just met at a party?**

Lights, lines, and signs.

**What is the first thing people most commonly ask or say when they find out you're a transportation professional?**

They are sometimes surprised to know that the profession even exists. Followed by: Wow. Traffic is terrible! Can't you guys do better? How do red light cameras work? Why do I get stopped at every red light? That's a pretty unique job. How did you get into that??

**What is one aspect of your work that you particularly enjoy?**

The best part about my job is working with people. I enjoy spending time with residents working to address their traffic concerns. I also enjoy working with staff trying to encourage and coach them by sharing my experiences.

## PROFESSIONAL ACHIEVEMENTS

**What are one or two projects that you're most proud to have worked on?**

- Pushing for the design and construction of a roundabout on York-Durham Line at Durham Road 5.
- Helping to bring red light cameras to the Regional Municipality of York.

**During your career to date, have you pursued any professional designations through ITE?**

No. I think it is a very valuable thing for people entering the profession though—particularly in private practice.

**If asked to speak to a class of transportation students, how would you recommend it as a profession?**

It used to be much harder to get people interested in the transportation field. More recently with developments like

automated and connected vehicles, smart cities, Vision Zero safety programs and a focus on multi modal solutions, transportation is actually cool. It's a unique engineering discipline that combines elements of Information Technology, Systems Design, Civil Engineering, Planning, and Psychology. When I started, transportation professionals were almost exclusively trained as Civil Engineers. That is definitely changing. The field has opened up to all kinds of disciplines which is attracting more students to the field. Efficient and safe mobility is an essential component of our daily lives—particularly as we continue to grow and urbanize. It is an exciting field with lots of opportunity.

**Projecting yourself into the future, from an end-of-career perspective, what will you hope to have accomplished?**

I get the most satisfaction from watching others grow and achieve their own goals. I enjoy watching students or other staff who have worked with me in the past that have moved on to great positions and have done so well in the profession. I like to think I played a small part in helping them get there.

End of career perspective for me will be more about the personal connections that I've made than any particular thing I have accomplished.

**What is the single greatest satisfaction you take from your job as a transportation professional?**

Saving lives. It is really impossible to know how many people you may have saved over the course of a career. Implementing safety measures—whether it be minor geometric changes at an intersection, the creation of new roundabout, or guide rail modification—all have the chance to make a difference. Hopefully, at the end of the day, there is a family or two out there that has been saved a lot of heartache as a result of the work that we collectively do. That possibility makes it all worth it.



## GREATER VANCOUVER SECTION

The Greater Vancouver section started the year with two events in the spring of 2018.

The first event of the year was the annual Student Industry Night, hosted on February 7th by the University of British Columbia's ITE Student Chapter. The event took place at the Engineering Student Centre and was well attended by both students and industry professionals. More than 80 students were in attendance and the event provided a great opportunity for students to network with professionals and for companies to promote transportation engineering and showcase their areas of expertise.

The second event of the year was a lunch meeting held on February 13th. Gary Vlieg, P.Eng. and Jan Voss, P.Eng., PTOE from Creative Transportation Solutions Ltd. (CTS) provided an overview of the difference between a "peer" review and a "staff" review. The presenter's experience

over the past 30 years as both a reviewer and reviewee has demonstrated that there is a lack of understanding of what peer reviews are (and not) by professional engineers in British Columbia. As part of the presentation, a Top 10 List of what to include in a peer review and a Top 10 List of what to include in a staff review was provided as a useful checklist to all attendees.





## SOUTHERN ALBERTA SECTION

In Southern Alberta, luncheon meetings were held in January, February, March and April.

For January, City of Calgary General Manager of Transportation, Michael Thompson, provided an overview of his Department's accomplishments in 2018, and a glimpse of what the department plans to accomplish in 2019. This meeting was rounded out with the Section's Annual General Meeting and swearing in of the new executive.

Tomasz Kroman of Watt Consulting and Madhuri Seera of the City of Calgary presented the City of Calgary's Goods Movement Strategy at the February meeting. The Goods Movement Strategy is made up of six strategic directions with 26 action items, which are divided into short, medium, and long-term groups. The project team conducted extensive research, data collection and engagement in developing the Strategy. The engaging presentation provided an overview of the project approach and the insights into how the strategy was developed.

In March both a luncheon speaker and a workshop were delivered. Mars Otten-Andrew of WSP and Jen Malzer of the City of Calgary delivered a presentation of the Vancouver experience with the B-Line BRT. The presentation highlighted the planning goals and prioritization of measures that contribute to great transit service, and included interactive exercises to encourage discussion of equity and evaluation of trade offs in transportation planning. Following the luncheon presentation, Zibby Petch of IBI Group delivered a workshop on application of the City of Ottawa's Multimodal Level of Service (MMLoS) Application. Zibby provided an overview of the development of this tool, and facilitated application of the application by participants.

The April luncheon presentation was delivered by Jan Voss and Gary Vlieg of Creative Transportation Solutions Ltd., on the topic of Peer Reviews of Transportation Engineering reports and designs. In addition to the luncheon presentation, a student mixer with the University of Calgary ITE Student Chapter is scheduled for April 23.



**Top:** Tomasz Kroman and Madhuri Seera deliver February presentation on the City of Calgary Goods Movement Strategy.

**Middle:** Jen Malzer and Mars Otten-Andrew deliver on planning for the TransLink B-Line program in Vancouver, and Zibby Petch conducts a workshop on City of Ottawa's Multimodal Level of Service (MMLoS) Application in March.

**Bottom:** Jan Voss and Gary Vlieg of Creative Transportation Solutions.

## NORTHERN ALBERTA SECTION

February and March may have been the nastiest part of winter yet (and the nastiest cold stretch in quite a few years), but that didn't stop our Members from getting together for some networking and transportation talk during our February and March luncheons.

In February, the Northern Alberta Section welcomed Rodney Peacock, ISL Engineering and Land Services, and Ryan Teplitsky, City of Edmonton, to present on the journey they took and lessons they learned building the Walterdale Bridge, Edmonton's newest bridge over the North Saskatchewan River and signature piece of infrastructure. Rod talked about the planning process from a transportation perspective while Ryan talked about the construction challenges. The presentation and videos were very entertaining and informative—thanks to Rod and Ryan, and a big thanks to ISL Engineering and Land Services for sponsoring the luncheon!

In March, the Northern Alberta Section welcomed Blair Smith of IBI Group to present on the City of Edmonton's Transit Priorities Study. And even though winter still had a tight hold on Edmonton, it couldn't keep Blair away (who flew in from Vancouver) and it certainly didn't keep our members from getting out as we had our biggest turnout of the season with over 100 people attending! Thanks to Blair for a great presentation on a topic with a lot of interest and thanks to IBI Group for sponsoring the luncheon!

In April, the Northern Alberta Section partnered with our colleagues from the Alberta Professional Planners

Institute for our annual joint luncheon. This event is always a great opportunity to connect with city-builders who bring another perspective to discussions. Jenn Smyth and Howaida Hassan, both from the City of Edmonton, presented on the City's Smart Transportation Action Plan and the implementation of action items, specifically the autonomous vehicle pilot, and developing a Vision for Mobility as part of the City Plan. This luncheon is always extra fun and this year was no exception—thanks to everybody who made it out!

The Northern Alberta Section's next event will be a luncheon on May 1, 2019 at the Faculty Club. The May luncheon will be our final luncheon of the season so the Northern Alberta Section will also use the opportunity to host our Annual General Meeting at the conclusion of the presentation. Be sure to stick around and learn more about the Northern Alberta Section and how we are planning for 2019-20. Hope to see you there!







## SASKATCHEWAN SECTION

In February, the Saskatchewan Section hosted two Student Pizza and Pint nights; one at the University of Saskatchewan in Saskatoon and one at the University of Regina in Regina. Along with Engineering students and faculty, we also had some planning students and faculty attend the events. This was a great networking opportunity for all attendees!

The Section has an open posting for a Programs Director. If you would like to submit a nomination or have any questions regarding the position, please email [communications@saskatchewan.cite7.org](mailto:communications@saskatchewan.cite7.org).

In other news, we are actively planning our events for 2019 which will include a spring session in Regina on Tuesday, April 30th. If you are interested in presenting your project at the session, please contact us at [communications@saskatchewan.cite7.org](mailto:communications@saskatchewan.cite7.org).

Keep checking the Saskatchewan section Facebook page for the latest news and updates: [Institute of Transportation Engineers – SK Section](#)



## MANITOBA SECTION

From January through March 2019, the ITE Manitoba Section held three luncheons, as well as the annual Student Paper Competition, in honour of the late Kean Lew, a former member of the Manitoba Section.

The January luncheon featured Scott Suderman from Stantec presenting on the Detailed Design of the PTH3 and LaVerendrye Boulevard Roundabout. The roundabout is to be the first multi-lane roundabout on the Provincial highway system, and it will also serve as a gateway to the City of Morden. Scott included discussion on site context, high speed entry design, pedestrian and cycling accommodation, vertical design, construction details and traffic staging.

At the February luncheon, Jeff Crang from Dillon Consulting presented on the Planning and Design

of the Fermor Avenue Reconstruction. New features implemented as part of the reconstruction include a pedestrian-cyclist underpass, smart channels, raised crossings, accessibility for the visually challenged, cross-rides, and improved traffic operations and safety through the use of access management and auxiliary lanes.



Rob Poapst from MORR Transportation Consulting presented at the March Luncheon. Rob's presentation was titled TAC Bicycle Infrastructure Safety Study: What We Heard from Practitioners and Cyclists. Rob detailed the state of affairs regarding bicycle infrastructure in Canada, the lack of bicycle collision and volume data, conclusions from research on bicycle infrastructure safety, input from cyclists on bicycle infrastructure safety, and next steps to be taken.

The annual Kean Lew Student Paper Competition featured entries from Michael Olfert (Design of a Feasibility Study of Portable WIM Systems in Manitoba) and Karalee Klassen-Townsend (Using Rear-Axle Weights to Improve the Accuracy of Class 3 and Class 5 Vehicle Classification). Karalee Klassen-Townsend won the competition, and will receive a cash award from the ITE Manitoba Section, the opportunity to present at the ITE Manitoba Section May 2019 Luncheon, and entry into the CITE Student Presentation Competition. As runner up, Michael Olfert will receive a cash award from the ITE Manitoba Section.



Rob Poapst from MORR Transportation Consulting at the March luncheon.

## SOUTHWESTERN ONTARIO SECTION

Southwestern Ontario Section members gathered on January 30, 2019 to hear Jon Kostyniuk talk about big data. Jon is a Traffic and Transportation Engineer with the City of London. Jon discussed how transportation professionals can leverage partnerships and consider emerging technologies to determine strategy for the future. John's passion came through as he raised awareness of big data permeating our transportation industry. Big data can help us make better travel decisions today and plan for better infrastructure tomorrow. The topic attracted a diverse crowd and the resulting conversation strayed into all sorts of interesting topics including connected and autonomous vehicles, liabilities and evolving revenue sources.



## HAMILTON SECTION

The Hamilton Section held their first event of 2019 with a luncheon on March 7th featuring guest speakers Stephen Schijns and Khawar Ashraf from AECOM, and CITE President Edward Soldo to provide an update on some of the National initiatives.

Stephen and Khawar both have extensive experience in high order transit both locally and internationally, and presented around the opportunities to use BRTs and a range of real world situations and scenarios where BRTs have been designed and implemented. The presentation discussed why and where BRTs can bring value, and how

they can strategical fit into a wider network. There was also a discussion on a range of benefits and opportunities that BRTs can offer, including; supporting integrated transit networks; encouraging active and sustainable transportation practices; and supporting local economic activities and development.

There was a strong turnout to this event within the Hamilton Section area as well as the Greater Toronto Area with several municipalities in the process of planning or constructing dedicated transit systems in some form or another.



## TORONTO SECTION

The Toronto ITE Section has had a busy winter season and is looking forward to more exciting events in spring 2019. Toronto ITE Section strives to partner with complimentary organizations and municipalities to expand our reach and presentation material diversity. In winter 2019, ITE Toronto Section events included:

- **February 13** - Breakfast session on the King Street Transit Pilot Project. The King Street Transit Pilot Project was our 2018 Project of the Year award recipient.
- **February 20** - 11th Annual Joint CITE Section Student Presentation Competition, hosted by the section's newest student Chapter, York University. The Joint CITE event also included a poster presentation and networking sessions, and the York student chapter organized a social event after the competition.
- **March 25** - One-day training course on Work Zone Traffic Analysis, taught by John Shaw, MUP, P.E., RSP. The day also provided a good opportunity for networking with transportation professionals from a number of companies and municipalities.
- **April 2** - Breakfast information session on the Road Safety Professional (RSP) Certification, presented by Geni Bahar, P.Eng., P.E., RSP.

Upcoming events include:

- **April 25** - Annual Spring Luncheon, with a presentation on the City of Toronto's Vision Zero Road Safety Plan. 11am-2pm at Hart House, University of Toronto campus.
- **May 16** - Roundabout Training Session (1-day). 55 St Clair Avenue West (at Yonge Street).
- **May 27** - Groundside tour of the Pearson International Airport.

In addition to the above, in 2019, ITE Toronto is engaging in increased outreach and support for our student chapters including funding for student chapter activities and partnership with student chapters for events.

Thank you to all our attendees and sponsors. We look forward to seeing you in our future events.



**Top to bottom:** King Street Pilot Breakfast Session; Joint Student Presentation Competition; FHWA Work Zone Analysis Course; RSP Certification Breakfast Session

## UNIVERSITY OF BRITISH COLUMBIA - OKANAGAN (UBCO)

The Canadian Institute of Transportation Engineers (CITE) Student Chapter at the University of British Columbia Okanagan (UBCO) campus is a growing student club that is committed to promoting the principles and views of the ITE community. From 2018 to 2019, the club has organized and hosted several events to expose students to transportation engineering and planning practices. The club enjoyed the enthusiastic participation of our local professional engineers at our events, who focused on sharing and fostering their successes and experience with ITE. The club has exponentially grown in the past years with the help of the BC Interior Chapter, our academic advisors and hardworking executive team. During the last academic year, our student chapter focused on holding industry night events including:

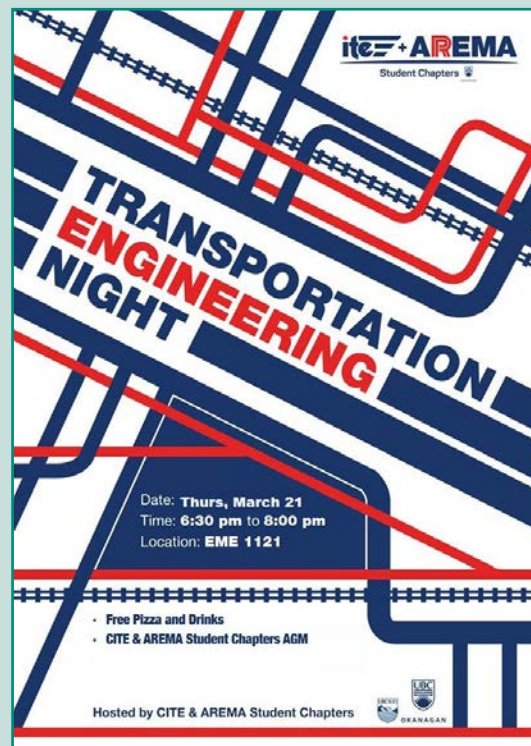
### Transportation Engineering Industry Night

On October 24, 2018, the CITE UBCO Student Chapter co-hosted an Industry Night with AREMA UBCO Student Chapter. Kathryn Weicker who works for the Ministry of Transportation & Infrastructure gave a presentation on what it's like to work for the BC government in transportation engineering. Ian Roth from Urban Systems also gave a presentation on ITE. Some 30 attendees at the event had the opportunity to network with the presenters after the event.

### Transportation Industry Night & AGM

On March 21, 2019 the CITE UBCO Student Chapter co-hosted an Industry Night with AREMA UBCO Student Chapter. Tom Baumgartner from Watt Consulting Group gave a presentation on the different types of projects he had done in the past and shared advice on professionalism to the student attendees. The president and CEO of Cariboo Central Railroad Contracting, Blair Irwin, gave a brief presentation on the rail industry. Some 30 attendees were able to network with the presenters after the event.

Looking ahead, our student chapter is planning to hold more industry nights related to transportation engineering and get students excited about transportation engineering.



## UNIVERSITY OF ALBERTA

The winter semester is always busy for the University of Alberta chapter and this year was no exception! In addition to the Presentation Competition, mentorship program kickoff, and first guest seminar featured in the last edition of Transportation Talk, the chapter has been busy with two other guest seminars, our flagship event of the year, the Student-Industry Mixer, and ongoing mentorship program activities.

Dr. Suliman Gargoum, past president of ITEUA and recent PhD graduate, came back to the University of Alberta on February 15, 2019, to deliver a seminar on the journey from graduate studies admission to defence. He examined reasons for pursuing graduate studies and what it takes to be successful in this environment. For students already engaged in graduate studies, Dr. Gargoum delivered tips to publish effectively and to ensure that grad school doesn't drag on forever. The seminar attracted students from various faculties, even outside of the transportation and urban planning realms.

Our most recent seminar took place on March 22, 2019, with Dr. Anne Goodchild, Professor at the University of Washington and founding director of its Supply Chain Transportation and Logistics Center. She presented a captivating seminar on innovation in the urban freight system, including policy, infrastructure, and private sector research needs. She explained how her research group defined a new area of research within urban freight, the 'final 50 feet', which questions how the last mile of goods delivery (from the curbside to the recipient inside a building) can be optimized for traffic safety, vehicle idling reduction, and roadway utilization. Dr. Goodchild also discussed her innovative lab model where operators in

the public and private sector participate in defining research problems. This outstanding seminar attracted students, faculty and practitioners from the industry.

The highlight of this semester was the Student-Industry Mixer, our annual flagship event where industry representatives are invited to share their most recent work and mingle with undergraduate and graduate students interested in transportation. This year, CTEP (Centre for Transportation Engineering and Planning) graciously sponsored the event and Director Neil Little took a few minutes to address attendees and explain CTEP's activities. This 2019 edition of the Mixer was a resounding success, with over 120 students and industry representatives attending.

Finally, the mentorship program initiated in January continued on. Mentor-mentee pairs meet at their convenience, but ITEUA does offer some activities to support ongoing conversations. On March 25, 2019, mentorship program participants were invited to take part in a speed mentoring event. Five mentors were present and each of the nine mentees in attendance were given ten minutes to ask questions and opinions of each of the mentors. This allowed for a diversity of answers and points of view to be gathered quickly. For mentors, the speed mentoring event is an opportunity to meet future professionals who are passionate about transportation issues.

Summer is a quieter time at the University of Alberta, but ITEUA already has several activities planned, including another seminar and participation in the Traffic Bowl. We look forward to seeing everyone in Ottawa for CITE 2019!



Dr. Goodchild discusses the urban freight system at the March ITEUA seminar.

ITEUA President Laura Cabral gives a short presentation on the role of ITEUA and its place within the ITE family at the Student-Industry Mixer.

# student chapter news

## UNIVERSITY OF CALGARY

With recent bus route revisions in Calgary, the UofC ITE Student chapter organized a presentation incorporating the recent changes and rationale behind them along with BRT functional planning process with **John Hubbell**, a pioneering transport professional. Mr. Hubbell is an Associate Vice President, Senior Transit Practitioner and the Western Canada Transportation Leader with HDR; an Adjunct Associate Professor with The University of Calgary's Department of Civil Engineering and has over 40 years of experience in planning, building and operating multi-modal transportation systems. It was a privilege to have him present at this event where students and other professionals gathered a lot of knowledge and information on BRT functional planning and recent bus route revisions.



One of the most discussed topics in the field of transportation in the present context is fair distribution/allocation of limited resources for various situations to achieve similar outcomes. **Ryan Martinson**, Sustainable Transportation Specialist from Stantec, took on this topic relating to transportation from a different fresh point of view. He did a very informative presentation on the topic 'Equity and Mobility' both in an engineering perspective and an ethical perspective. This created a good constructive discussion among the participants.



There is much enthusiasm for electric vehicles and autonomous and connected vehicles, especially with a big push for sustainability. The UofC ITE student chapter recently had the honor of having **Eric MacNaughton**, who is currently leading the development of an Electric Vehicle Strategy for Calgary, to speak about The City of Calgary's EV strategy and ongoing EV projects.



## ITE INDUSTRY MIXER

Tuesday, April 23rd, 2019 – 12 noon to 2 pm

The ITE Student Chapter of the University of Calgary is pleased to announce its one of the most awaited events, the Industry Mixer for the year 2019. We are looking for potential industry partners for sponsorship.

**Who:** Representatives from reputed companies in the field of Transportation Planning and Engineering operating at Calgary and final year and graduate students interested in the field of transportation.

**What:** This special event organized by UofC ITE is a "Mix and Mingle" event with finger food, to improve networking between students and industry leaders in the field of transportation.

**Where:** Blue Room, Hotel Alma (169 University Gate NW)

**Sponsorship** is priced at \$250 and can be claimed through the event webpage: <https://www.cite7.org/event/university-of-calgary-ite-student-mixer>.

The tentative schedule for the event can also be found through the above link.

## UNIVERSITY OF MANITOBA

The University of Manitoba ITE Student Chapter has been keeping busy since our last update, hosting a total of 13 events! We collaborated with Women in Science and Engineering to teach Grade 3 girls about what transportation professionals do, created communities with giant pieces of paper, and taught them how to fix flat tires with the help of our community bike shop, UMCycle. We organized a second Industry Networking Event in the midst of hiring season for summer students. We also had another successful Samosa sale fundraiser for our technical trip. In other exciting news, we held elections for our new executive who will take over in September. Additionally, the U of M Chapter held nine technical events which include four speaker luncheons and five exciting technical tours on our trip to New York City! In between Transportation Talk, you can follow along with our chapter through our published [newsletters](#), our [website](#), and [social media](#).

### Speaker Luncheons

Bruce Wilton (WSP) and Don McRitchie (Manitoba Infrastructure) presented on the construction of the P3 project for the PTH 59 & PTH 101 Interchange. Erica Vido (Manitoba Infrastructure) spoke on the Province's safety strategy for the City of Winnipeg south perimeter highway. Lea Cote (Green Action Centre) and Peter Obendoerfer (Seven Oaks School Division) spoke on the multi-year and multi-age Bicycle Education and Skills Training pilot program that they hope to implement at all schools in Manitoba. Chris Baker from the City of Winnipeg spoke on the City's active transportation initiatives from a planner's perspective. Thank you to all of our wonderful presenters!

### Top to bottom:

Collaborative event with Women in Science and Engineering for Grade 3 students.

Congrats to the new 2019-2020 UMITE Executive.

Chapter members with Lea Cote and Peter Obendoerfer following their speaker luncheon presentation.



# student chapter news

## Technical Trip - New York City

Over reading week, five student members travelled to New York City to learn more about the transportation system in a different city. We crammed five tours into the four-day trip and owe a big thank you to all of our tour guides and to Marvin Souza, ITE Met Section, for his help in coordinating three of the tours.

**Bike Tour:** we took a guided tour across the Brooklyn Bridge into Brooklyn where we explored the area and learned about aspects of the transportation system and community development. We learned the importance of the bridge in providing access to jobs and the history of the previous port in Manhattan. Thank you, Kevin Dann, from Unlimited Biking for the tour.

**LaGuardia Airport:** The Port Authority of New York and New Jersey (PANYNJ) gave us a tour of the traffic operations centre they have implemented to monitor and mitigate traffic impacts caused from the current major construction project at the airport. We toured the site to see the construction of new roadworks and how the airport will function in the future. Thank you to Rohan Wilson and Michael Lafazia with the LGA as well as Michael Hostage with Jacobs Engineering for the tour.

**Traffic Management Centre:** We toured the NYC DOT's TMC in Queens where we learned about their operations, signal timing, and the coordination between Queens with other NYC boroughs and the NYPD. Thank you Rachid Roumila for the tour.

**Brooklyn Marine Port Terminal:** On our tour of one of PANYNJ's ports, we learned about the world of marine freight, how the many ports in the PANYNJ jurisdiction are managed, as well as the challenges of intermodal transportation and city planning creating barriers for trucks. We were driven around the port and see the containers, ships, and trucks. Thank you to Henry Killian and Sean Kazmark for the tour.

**Office of Pedestrian and Bicycle Programs:** We received a detailed overview of NYC's Vision Zero initiatives followed by a presentation on NYC's process for implementing pedestrian and cycling infrastructure projects throughout the city. Public engagement is a large part of ensuring projects meet the needs of the public and create equity in transportation. Thank you to Rob Viola and Stephanie Shaw for the tour.





## MCMASTER UNIVERSITY

Over the 2019 Winter semester, McMaster's Student Chapter has been very active, holding various events to share information about the club and promote transportation knowledge across the campus. This semester, the chapter was delighted to have five guest lecture events, two traffic bowl preparation nights, and two joint events held within the City of Toronto.

### Guest Lectures

On January 31, Mr. **Brett Sears** lead the Student Chapter in their first event of the semester, a talk regarding **transportation planning** and how one can create an effective plan. The talk consisted of best practices, what a transportation professional could expect and the complexities of creating an effective transportation plan. Brett shared his experiences working with councils to help facilitate long term transportation plans and enforced the importance of creating holistic city plans that considered both land usage and transportation planning together to ensure synergies and an effective implementation. In addition, the group learned about environmental assessments, municipal consultations, and the various considerations that must take place prior to creating a transportation plan. The Student Chapter would like to thank Mr. Sears for his time, and for sharing his knowledge with the chapter.

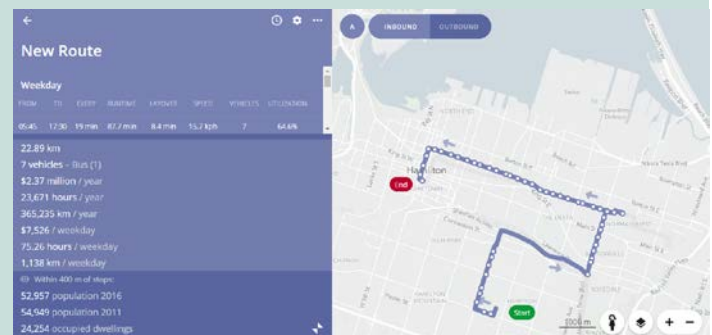
wisdom and for inspiring us all to be the best that we can be.



The Student Chapter was pleased to participate in a tutorial on **Remix Public Transit**. This is a software used by transit officials in order to optimize transit operations. The group learned about: frequency, headway, deadhead and how APC data is used in order to reduce cost while maximizing service. The software is very beneficial when looking at real world data and had a beautiful human machine interface, making it seamless to operate. The Student Chapter would like to thank the developers of Remix Public Transit for this opportunity.



As part of the Chapter's continuous efforts to help provide undergraduate students with a holistic view of transportation engineering, Mr. **BalaRama Iyer** was invited to talk about **transportation projects delivery** within the private and public sector. Moreover, Mr. Iyer touched on his personal experience of what it means to be an effective leader and what skills young transportation professionals should strive to develop. The Student Chapter would like to thank Mr. Iyer for his great words of



Continuing the transit theme, the Chapter was joined by **Sebastian Stula** and **Christie Meleskie** from the City of Hamilton-Public Works Department. The two led a presentation on the practical application of **transit planning, operation, and network review** as well as gave advice on careers and opportunities in transportation. The two individuals discussed what it was like to be a project manager in the transit network review team, as well as within the transit strategy and infrastructure team. The two presenters discussed many of the various

projects within the HSR such as the Mountain Climber project, as well as discussed, the new **(Re) Envision** project. The Student Chapter would like to thank Mr. Stula and Ms. Meleskie for their time and for sharing more information on transit operation.

On March 7, Dr. **Hany Hassan** of the McMaster Institute for Transportation and Logistics gave the ITE McMaster Chapter a talk on his most recent research on **Proactive and Integrated Traffic Management Systems**. Dr. Hassan outlined many of the methods used in gathering data to set up these management systems, such as determining the volume-capacity ratios using sensors built into the roads. He also informed the Chapter of his work on the automatic traffic violation system in the Middle East. His presentation gave a lot of insight into how different the Middle Eastern traffic system works compared to North America and how the automatic traffic violation system might be seen as an invasion of privacy in Western countries. The Student Chapter would like to thank Dr. Hassan for taking the time to share his insight into traffic management systems.

## Traffic Bowl Nights

The **Mohawk-McMaster Traffic Bowl preparation** was a simulation of ITE Traffic Bowl. Students from McMaster University and Mohawk were divided into several teams to compete against each other in Jeopardy questions which contained topics including Level of Service, Four-Step Travel Demand Models, Complete Streets, Signalized Intersection Operations. The event stimulated participants' interest towards transportation, nourished them with specific transportation knowledge and tightened the relationships between Mohawk and McMaster students.

The Student Chapter held their very first **McMaster Traffic Bowl Team tryouts** which took place on March 19th to determine the team that will represent McMaster at the Annual CITE Conference. The tryouts had a great attendance, with over nine students trying out for the three available positions on the team. This was a major accomplishment for the Student Chapter, showing the growth and interest gained from the years prior. The tryout was conducted in a Jeopardy style format covering a wide range of transportation-related topics including Level of Service, Four-Step Travel Demand Model, Complete Streets, and Signal Intersection Operations. The event concluded with the top three participants with the highest score becoming a part of the McMaster

University 2019 Traffic Bowl Team. The team looks forward to representing the Student Chapter well on Monday, June 3, 2019 in Ottawa.

## Adventures in Toronto

Executive members attended the ITE Toronto Section, Hamilton Section, and Southwest Ontario Section's **11th Annual Joint CITE Section Student Presentation Competition** that took place at York University. The session featured a section on how to effectively run, finance, and promote Student Chapters. Moreover, notes collected from the chapter have helped form the basis of how the chapter will be transforming in the coming months.

On Wednesday March 27th, 2019, six of the executive members from ITE McMaster Student Chapter attended the **University of Toronto's Industry Night**. We had the chance to learn more about the transportation industry by networking with active transportation engineers. The Chapter would like to thank the University of Toronto and all industry representatives for this opportunity. It was a great pleasure to connect with practicing engineers, discuss career paths, and how to become a successful individual in the industry. The students were able to ask many questions and discuss the availability for any Co-Op or Internship opportunities with all the various organizations represented. Throughout the event, the students focused on promoting ITE McMaster Student Chapter and succeeded in creating connections with some of the practicing engineers to help facilitate future guest speaker nights.



## UNIVERSITY OF TORONTO

### UofT ITE 2018-2019 Seminar Series

The weekly “Friday Seminar Series” established by the UofT ITE Student Chapter continued to invite speakers from a diverse set of backgrounds to discuss their work. This semester, seminars were delivered by a variety of transportation professionals. One of the more unique seminars this semester was delivered by Mr. **Tyrone Gan**, who presented his experiences and journey as an entrepreneur. Mr. Gan discussed the main challenges that he faced as a business owner and the lessons that he learned, as well as the requirements for a new business to distinguish itself from its competitors.

Dr. **Brendon Hemily** also delivered a seminar this semester on the topic of **fare policy**. Dr. Hemily began the seminar by providing a brief overview of his educational background and career path before diving into the factors that influence the development of a fare policy. He argued that transit services should be priced by distance and time-of-day, however a host of external factors make the determination of a fare policy challenging in practice. Dr. Hemily concluded his presentation by highlighting the different perceptions of equity, which further complicate the process of creating a fare structure.

### 2019-2020 UofT ITE Executive Elections

In order to begin preparations for the 2019-2020 academic year, the UT-ITE held its election for executive positions with the Chapter. Laura Minet was elected President, Daniel Olejarz Vice President, Jason Hawkins Financial Director, and Kiasnoush Mousavichashmi Administrative Officer. Congratulations to those who were elected! The election coincided with the Chapter’s annual general meeting, where President Laura Minet provided an overview of the past year’s activities and what is being planned for the upcoming year.

### UofT ITE 2019 Transportation Student-Industry Mixer

The UofT ITE Student Chapter hosted its annual student-industry mixer on March 27, 2019. The event brought together students, faculty, and transportation professionals. The mixer was an

opportunity for transportation engineering and planning students, as well as alumni, to network with industry professionals. The mixer allowed students to learn about potential job opportunities and to connect with professionals in the field.

### UofT ITE TTC Scavenger Hunt

The UofT ITE Student Chapter held its first scavenger hunt on March 2, 2019. The scavenger hunt gave graduate and undergraduate students the opportunity to team up with other transportation enthusiasts and explore Toronto’s public transit system. The teams were provided with a list of items to find, with each item earning the team a particular number of points. A total of three teams participated, with the Bunching Bunch coming out on top.

**Top:** Dr. Brendon Hemily’s seminar on fare policy.  
**Bottom:** The winning TTC Scavenger Hunt team.



# student chapter news

## YORK UNIVERSITY

The ITE York University Student Chapter has been very active since our last submission a few months ago. We now have thirty-one members and were recently announced as a 2019 Transportation Association of Canada (TAC) Foundation Student Activities Fund recipient. Their in-kind donation of textbooks will go a long way towards helping us expand our growing library that is accessible for all our student chapter members including our CITE Traffic Bowl team. In addition to purchasing several textbooks for our library, we have also been able to buy twelve hardhats, safety vests, and glasses thanks in-part to assistance from the ITE Toronto Section and our sponsor, Esri Canada.

We were very excited to host the 11th Annual Joint Toronto, Hamilton, and SW Ontario ITE Section Student Presentation Competition in February with Erik Nevland performing MC duties along with Sean Nix. In addition to the presentations performed by six students, the event included Canada's first Student Chapter Best Practices Session for ITE student leaders at the beginning and a poster session at the end. We would like to congratulate all presenters for participating and congratulate Anson Thomas and Erik Nevland from our Student Chapter for being awarded first place in the undergraduate and graduate presentation categories, respectively.

### Monthly Seminars and Presentations

Our February Seminar on Freight Transportation was postponed due to inclement weather, and therefore did not occur until March. Joe Lynch, the Vehicle Weights and Dimensions (VWD) Team Lead at the Ministry of

Transportation Ontario, presented on Ontario's Long Combination Vehicle (LCV) Program in addition to their development of the Truck Platooning Pilot Program. Gordon Reed, an Industrial Engineering Director with UPS Canada, presented on the many innovations at UPS relating to goods movement including fully-automated sorting facilities, alternative fuels, and drone delivery projects.

Our March seminar focused on New Urbanism, a design movement relating walkable, compact, vibrant, mixed-use communities. Dan Leeming, Partner and Urban Designer at the Planning Partnership, discussed the history and motivating factors behind the New Urbanism movement, including the successes with the community of Cornell located in Markham, Ontario. Nick Poulos, Owner of Poulos & Chung Limited, discussed his work in helping introduce alternative Canadian design standards to allow for New Urbanism projects to be realized.

11th Annual Joint CITE Section Presentation Competition competitors (above) and attendees (below).



We hosted one longer-format special presentation from **Maurice Masliah**, who discussed the real-world applications of human factors in transportation. Graduate student **Ubaid Ali** also presented at one of our general meetings on his previous work experience related to a transportation impact study of a GM Mobility Campus.

## Workshops and Field Trips

We hosted a PTV Vissim software workshop where our undergraduate student chapter members had the opportunity to learn more about the program from graduate students **Ravichandra Rampure** and **Crystal Wang**.

In addition, we facilitated three recent field trips for our student members. We visited the LinkedIn Canada headquarters where **Jennifer Catallo**, a Learning & Development Consultant, taught a group of executive members and directors how to maximize the resources of LinkedIn and Lynda.com for networking and skills development. We got a behind-the-scenes tour of Scotiabank Arena from **Kevin Kempcke**, the director security of Maple Leaf Sports & Entertainment. We also co-facilitated a tour of the Eglinton Crosstown Line 5 construction site with the York University CSCE Student Chapter, where **Krista Mihevc** with Crosslinx Transit Solutions guided us through two stations of the massive engineering project.

## Other Events

Our largest social event in the last few months occurred after our tour of Scotiabank Arena. A group of our members went out for supper and then attended a National Lacrosse League game where unfortunately the Saskatchewan Rush, our president's team, fell to the local Toronto Rock.

We also held our annual election where **MD. Tanvir Uddin Chowdhury**, **Soha Saiyed**, **Yashar Zarrin Zadeh**, and **Kathursan Loganathan** were elected to be the next president, vice-president, treasurer, and secretary, respectively. We thank **Erik Nevland**, **Anson Thomas**, **Ravichandra Rampure**, and **Davin Utama** for their hard work as the founding executive. The new executive will officially take over on May 1, 2019. At this election event we also handed out our internal student chapter awards to Crystal Wang (President's Award), Ravichandra Rampure (Faculty Advisor Award), Elanakayon



Top to bottom:  
February seminar speakers;  
March seminar speakers;  
Shot from the **ITE YorkU Informational YouTube Video**



Annalingam (Attendance Award, Academic Achievement Award), Ubaid Ali (Student Presentation Award), MD. Tanvir Uddin Chowdhury (Photography Award), and Erik Nevland (Logo Design Award).

Lastly, we congratulate our member Tavia and her new baby girl.

For information about our student chapter or to view our first-year annual report, visit our website at [www.ite.club.yorku.ca](http://www.ite.club.yorku.ca). Please let us know if you would be interested in speaking at one of our next year's events or if you are interested a sponsorship package. You can email us at [ite@yorku.ca](mailto:ite@yorku.ca) or visit one of our social media pages. We also encourage you to watch [our new informational video on YouTube](#).

# congratulations & welcome

*CITE extends a warm welcome to all new Canadian District ITE members who recently joined us!*

**Godly Abraham, C.E.T.**, City Of Toronto, Toronto, ON  
**Adam Mohamed Adam**, Seneca College, North York, ON  
**Brishank Adhikari, EIT**, WSP, Regina, SK  
**Nasir Ahmed**, University of Calgary, Calgary, AB  
**Sulman Ahmed, M.Eng., P.Eng., PMP**, Saskatchewan Ministry Of Highways And Infrastructure, Saskatoon, SK  
**Daniel Akhtar**, McMaster University, Hamilton, ON  
**Youmna Al Asta Alnajjar**, Ryerson University, Toronto, ON  
**Aly Al Samouly**, McMaster University, Hamilton, ON  
**Dania Aladhami**, York University, Toronto, ON  
**Monisha Alam**, University of Toronto, Toronto, ON  
**Saqib Amer**, Seneca College, North York, ON  
**Janz Arqueza, E.I.T.**, City Of Coquitlam, Coquitlam, BC  
**Danielle Aucoin**, York University, Ottawa, ON  
**Ma'moon Ayesh**, McMaster University, Hamilton, ON  
**Mohammad Azimi**, Seneca College, Toronto, ON  
**Balkaran Bains**, McMaster University, Hamilton, ON  
**Shawn Benbow**, Scheffer Andrew Ltd., Edmonton, AB  
**Lloyd Bie, P.Eng.**, City of Richmond, British Columbia, Richmond, BC  
**Oleh Bieliakov**, Seneca College, North York, ON  
**Adrien D. Blais, P.Eng.**, Saskatchewan Ministry Of Highways And Infrastructure, Saskatoon, SK  
**Steven Enzo Bon**, City Of Toronto, Toronto, ON  
**Kim Bonneau, P.Eng.**, Saskatchewan Ministry Of Highways And Infrastructure, Regina, SK  
**Amana Bouzrara**, McMaster University, Hamilton, ON

**Sheena J. Briggs**, Seneca College, Innisfil, ON  
**Devon A. Brownlee, E.I.T.**, City of Vancouver, BC, Canada, Vancouver, BC  
**Michelle Buchko, P.Eng.**, Saskatchewan Ministry Of Highways And Infrastructure, Saskatoon, SK  
**Donald L. Campbell, E.I.T.**, City of Vancouver, Vancouver, BC  
**Phillip R. Chan, P.Eng.**, City of Vancouver, Vancouver, BC  
**Carsen G. Chant, P.Eng.**, City of Vancouver, Vancouver, BC  
**Alan Chen**, City of Vancouver, Vancouver, BC  
**Kevin Cheuk**, McMaster University, Hamilton, ON  
**Linda Chow, P.Eng.**, City of Vancouver, Vancouver, BC  
**Nusruth Chowdhury**, McMaster University, Hamilton, ON  
**Rudaba Chowdhury, P.Eng.**, Saskatchewan Ministry Of Highways And Infrastructure, Prince Albert, SK  
**Noel Kristen Cochon**, McMaster University, Hamilton, ON  
**Ray Connoly**, Saskatchewan Ministry Of Highways And Infrastructure, Saskatoon, SK  
**Sevim Coskun**, Mississauga, ON  
**Arth Dalwadi**, Concordia University, Montreal, QC  
**Janine Danderfer, E.I.T.**, Saskatchewan Ministry Of Highways And Infrastructure, Saskatoon, SK  
**Kambiz M. Darban, P.Eng.**, City Of Toronto, Toronto, ON  
**Brandon Demurick**, City of Kamloops, Kamloops, BC  
**Mark Dylag, E.I.T.**, City Of Coquitlam, Coquitlam, BC  
**Diana Emerson**, WSP Canada, Winnipeg, MB  
**Nafeel Rauf Farooqui**, McMaster University, Hamilton, ON  
**Estifanos Fessehazion**, Seneca College, Toronto, ON

## Connect with CITE and your fellow members



[twitter.com/itecanada](https://twitter.com/itecanada)



[linkedin.com](https://www.linkedin.com/company/itecanada)



[facebook.com/itecanada](https://facebook.com/itecanada)

Find news and events  
from across the country on  
our website:

[cite7.org](https://cite7.org)

# congratulations & welcome

**Stephen Foerster**, City Of Toronto, Toronto, ON

**Jonathan Fullarton**, University of New Brunswick,  
Fredericton, NB

**Matthew Robert Gabruch, E.I.T.**, Saskatchewan Ministry  
Of Highways And Infrastructure, Saskatoon, SK

**Michael Georges**, York University, Brampton, ON

**Iman Gharraie**, University of Saskatchewan, Saskatoon,  
SK

**Christian Gilbey**, University of New Brunswick,  
Fredericton, NB

**Daniel Gorin, P.Eng.**, Saskatchewan Ministry Of Highways  
And Infrastructure, Saskatoon, SK

**Carly Grassing, E.I.T.**, City of Saskatoon, Saskatoon, SK

**Sylvia Green**, City of Vancouver, Vancouver, BC

**Jessie W. Gresley-Jones**, City of Vancouver, Vancouver, BC

**Raghav Grover, E.I.T.**, City of Vancouver, Vancouver, BC

**Matthew Gula**, McMaster University, Hamilton, ON

**Dennis R. Hall, E.I.T.**, City of Calgary, Calgary, AB

**Leah Hanvey**, UrbanLogiq, Vancouver, BC

**Rasha Ahmed Hassan**, Mcmaster University, Ancaster, ON

**Daniel Henrique**, Ryerson University, Toronto, ON

**Liqiong Hu**, City Of Toronto, Oakville, ON

**Alaa Itani**, University of Toronto, Toronto, ON

**Mathus Jeganathan III**, Seneca College, Toronto, ON

**Dan Kanak, P.Eng.**, Saskatchewan Ministry Of Highways  
And Infrastructure, Saskatoon, SK

**Karandeep Singh Kullar**, BC Institute of Technology,  
Burnaby, BC

**Jacob R. Lamb**, McMaster University, Hamilton, ON

**Andrea Landell, P.Eng.**, Saskatchewan Ministry Of  
Highways And Infrastructure, Saskatoon, SK

**Hayder Lateef, E.I.T.**, Saskatchewan Ministry Of Highways  
And Infrastructure, Saskatoon, SK

**Joyce W. Lee, P.Eng.**, City of Vancouver, Vancouver, BC

**Christopher Lehmann Skelton**, University of Waterloo,  
Waterloo, ON

**Jonathan Li**, Trans-Plan, Toronto, ON

**Zixuan Liu**, WSP Canada Group Ltd, Winnipeg, MB

**Kathursan Loganathan**, York University, North York, ON

**Shaun Lorincz**, Dillon Consulting, North York, ON

**Minhao Mao**, McMaster University, Hamilton, ON

**Saila Marocha**, McMaster University, Hamilton, ON

**Arash Mazaheri Sr.**, Concordia University, Montreal, QC

**Stefan Mckenzie**, McMaster University, Hamilton, ON

**Awny Moawad, P. Eng., CPESC**, Saskatchewan Ministry Of  
Highways And Infrastructure, Regina, SK

**Bilal Mohammad**, McMaster University, Hamilton, ON

**Lysa K. Morishita**, City of Vancouver, Vancouver, BC

**Rochelle Mueller**, University of Victoria, Calgary, AB

**Drishya Nair**, University of Toronto, Toronto, ON

**Connor Nikel**, McMaster University, Hamilton, ON

**Tejiri James Nikoro**, Seneca College, North York, ON

**Felita Ong**, University of British Columbia, Vancouver, BC

**Ricards Oskalns**, Seneca College, Toronto, ON

**John Packer**, McMaster University, Hamilton, ON

**Jeff Parks**, City Of Coquitlam, Coquitlam, BC

**Colby Parnell, B.Sc., C.E.T.**, City of Calgary, Alberta,  
Calgary, AB

**Olivia Parsons**, McMaster University, Hamilton, ON

**Ayman Imtiaz Patel Sr.**, McMaster University, Hamilton,  
ON

**Rakesh M. Patel, P.Eng.**, City Of Toronto, Brampton, ON

**Taija Paterson, P.Eng.**, Saskatchewan Ministry Of  
Highways And Infrastructure, Regina, SK

**Robert Patterson, OALA**, City Of Toronto, Toronto, ON

**Kelly Pederson, P.Eng.**, Saskatchewan Ministry Of  
Highways And Infrastructure, Saskatoon, SK

**Luis Perca**, University of Alberta, Edmonton, AB

**Anthony Pham**, University of Alberta, Edmonton, AB

**Kevin Picco**, BCIT, Burnaby,

**Vladan Poledica, P.Eng.**, City Of Coquitlam, Coquitlam,  
BC

**Sarah Power, E.I.T.**, City of Vancouver, Vancouver, BC

**Federico Martin Puscar**, Bunt & Associates Engineering  
Ltd., Vancouver, BC

**Ziaur Rahman, M.Eng., P.Eng.**, Saskatchewan Ministry Of  
Highways And Infrastructure, Prince Albert, SK

**Thanushan Rajeswaran**, Ryerson University, Toronto, ON

# congratulations & welcome

**Kaylea Rogers, E.I.T.**, Saskatchewan Ministry Of Highways  
And Infrastructure, Saskatoon, SK

**Steve Rose**, Barrie, ON

**Edo Rossetti**, Groupe Civitas, Laval, QC

**Iyad Sahnoon**, University of Calgary, Calgary, AB

**Marc Saleh**, University of Toronto, Toronto, ON

**Akshay Salwan**, Ryerson University, Toronto, ON

**Abdalla Sayed**, Seneca College, North York, ON

**Sheila Schindelka, P.Eng.**, Saskatchewan Ministry Of  
Highways And Infrastructure, Saskatoon, SK

**Patrick Scollard**, University of Calgary, Calgary, AB

**Kevin Shan**, McMaster University, Hamilton, ON

**Craig Sherwood**, Mohawk College, Hamilton, ON

**Sajad Shiravi**, Miovision Technologies, Kitchener, ON

**Abdul Basith Basith Siddiqui**, Carleton University,  
Ottawa, ON

**Samarapreet Singh**, McMaster University, Hamilton, ON

**Vaibhav Singh**, McMaster University, Hamilton, ON

**Eric Stewart**, Dillon Consulting Limited, Nepean, ON

**Sean W. Swanton, P.Eng.**, City of Calgary, Calgary, AB

**Jodene Oandasan Tagao**, Seneca College, North York, ON

**Edwin Tan**, McMaster University, Hamilton, ON

**Oscar A. Tapia**, McMaster University, Hamilton, ON

**Vania Y. Tse**, City of Vancouver, Vancouver, BC

**Kanapathy Umachandran**, City Of Toronto, Toronto, ON

**Noah John Marty Vanderaa**, Lakehead University,  
Thunder Bay, ON

**Naveen Varathan**, McMaster University, Hamilton, ON

**Tintu Vellamattathil Baby**, Lakehead University, Thunder  
Bay, ON

**Adrian Viegas**, McMaster University, Hamilton, ON

**Srdan Vlahovic**, University of Alberta, Edmonton, AB

**Kristina Ward**, Carleton University, Oakville, ON

**Erica White**, McMaster University, Hamilton, ON

**Andy Wong, P.Eng.**, City of Vancouver, Vancouver, BC

**Josh Workman**, Stantec Consulting Ltd., Calgary, AB

**Htet-Htet Wunn**, City Of Toronto, Toronto, ON

**Yang Xi**, University of Toronto, Toronto, ON

**Gary Yeung**, IBI Group, Toronto, ON

**Sivana Younan**, Mohawk College, Hamilton, ON

**Md Yousuf, M.A.Sc., P. Eng.**, Saskatchewan Ministry Of  
Highways And Infrastructure, Prince Albert, SK

**Joshua Yu**, McMaster University, Hamilton, ON

**Yashar Zarrin Zadeh**, York University, Toronto, ON

Welcome to your community of

**2,040**

Canadian transportation professionals



Image courtesy of Calgary Municipality Land Corporation

Rivers District, **Calgary**

West Block, **Edmonton**

Uptown, **Victoria**

Oakridge, **Vancouver**

**bunt & associates**  
bunteng.com

**We help our partners implement transportation solutions that leave our world better than we found it.**

- Transportation Planning
- Traffic Engineering
- Parking Planning
- Active Transportation & TDM

Collaborative | Transformational | Principled [www.ptsl.com](http://www.ptsl.com)

**BURNSIDE**

**Engineers and Environmental Consultants**

1 (800) 265-9662 [www.rjburnside.com](http://www.rjburnside.com)

- Barrie
- Collingwood
- Guelph
- Mississauga
- Newmarket
- Orangeville
- Pickering
- Stratford
- Wingham
- Calgary
- Winnipeg

Excellence in engineering

**CIMA+**

**CIMA+ provides the full range of transportation services for bridges, highways, airports and railways**

- > Traffic Engineering
- > Environmental Assessments
- > Intelligent Transportation Systems
- > Public Engagement
- > Transportation Planning
- > Transportation Safety
- > Functional Design
- > Detailed Design

Burlington | Calgary | Edmonton | Kitchener-Waterloo | Laval  
Montreal | Ottawa-Gatineau | Regina | Saskatoon | Toronto

[cima.ca](http://cima.ca)

**REACH CANADA'S LARGEST COMMUNITY OF TRANSPORTATION PROFESSIONALS**

[cite7.org/advertise](http://cite7.org/advertise)

**Evolving mobility**

**Stantec**

[stantec.com/transportation](http://stantec.com/transportation)

# CITE contacts

## CITE EXECUTIVE

|                     |   |   |   |
|---------------------|---|---|---|
| President.....      | Edward Soldo, P.Eng., FITE<br><a href="mailto:president@cite7.org">president@cite7.org</a>    | Secretary-Treasurer ....                    | Ryan Vanderputten, P.Eng.<br><a href="mailto:secretary@cite7.org">secretary@cite7.org</a> |
| Vice President..... | Julia Salvini, P.Eng.<br><a href="mailto:vicepresident@cite7.org">vicepresident@cite7.org</a> | District Director .....<br>& Past President | Jen Malzer, P.Eng., MITE<br><a href="mailto:director@cite7.org">director@cite7.org</a>    |

---

## TECHNICAL LIAISON COMMITTEE [tlc@cite7.org](mailto:tlc@cite7.org)

|                 |  |                |   |
|-----------------|--|----------------|---|
| Chair.....      | Irini Akhnoukh, M.Eng., P.Eng.<br><a href="mailto:iakhnoukh@mcelhanney.com">iakhnoukh@mcelhanney.com</a>           | Committee..... | Ryan Martinson, M.Eng., P.Eng.<br><a href="mailto:ryan.martinson@stantec.com">ryan.martinson@stantec.com</a>    |
| Vice Chair..... | Mariya (Mars) Otten-Andrew, P.Eng.<br><a href="mailto:Mariya.Otten-Andrew@wsp.com">Mariya.Otten-Andrew@wsp.com</a> | Committee..... | Farhad Shahla, M.Eng., P.Eng.<br><a href="mailto:Farhad.Shahla@mississauga.ca">Farhad.Shahla@mississauga.ca</a> |

---

## TRAINING COMMITTEE [training@cite7.org](mailto:training@cite7.org)

|                 |   |             |  |
|-----------------|---|-------------|--|
| Chair.....      | Vanessa Skelton, P.Eng.<br><a href="mailto:vskelton@cite7.org">vskelton@cite7.org</a>       | Member..... | Maryam Tabeshian, P.Eng.<br><a href="mailto:maryam.tabeshian@wspgroup.com">maryam.tabeshian@wspgroup.com</a> |
| Vice Chair..... | Mehemed Delibasic, P.Eng.<br><a href="mailto:mdelibasic@cite7.org">mdelibasic@cite7.org</a> | Member..... | Anna Bauditz, P.Eng.<br><a href="mailto:abauditz@stjohns.ca">abauditz@stjohns.ca</a>                         |

---

## *excite* – EMERGING MEMBERS IN CITE [excite@cite7.org](mailto:excite@cite7.org)

|                  |  |                    |  |
|------------------|--|--------------------|--|
| Co-Chair.....    | Heather Goodman, B.Eng., EIT<br><a href="mailto:hgoodman@ptsl.com">hgoodman@ptsl.com</a>   | Engagement.....    | Khulud Sheeraz<br><a href="mailto:khulud.sheeraz@gmail.com">khulud.sheeraz@gmail.com</a>       |
| Co-Chair.....    | Chun Man, P.Eng.<br><a href="mailto:cman@urbansystems.ca">cman@urbansystems.ca</a>         | Outreach.....      | Tamas Hertel, P.Eng.<br><a href="mailto:tamas.hertel@york.ca">tamas.hertel@york.ca</a>         |
| Development..... | Jordan Hart-Bishop<br><a href="mailto:jhartbishop@gmail.com">jhartbishop@gmail.com</a>     | Past Co-Chair..... | Garrett Donaher, P.Eng., M.A.Sc.<br><a href="mailto:gdonaher@gmail.com">gdonaher@gmail.com</a> |
| .....            | Lynn Machacek, EIT<br><a href="mailto:lynn.machacek@gmail.com">lynn.machacek@gmail.com</a> |                    |  |

---

## CITE SUPPORT

|                          |  |                     |  |
|--------------------------|--|---------------------|--|
| District Administrator.. | Steven Garner, M.Sc.<br><a href="mailto:cite_administrator@cite7.org">cite_administrator@cite7.org</a> | Communications..... | Evonne Donaher, MAES<br><a href="mailto:communications@cite7.org">communications@cite7.org</a> |
|--------------------------|--|---------------------|--|

## SECTIONS & CHAPTERS

|                             |  |                            |  |
|-----------------------------|--|----------------------------|--|
| Vancouver Island . . . . .  | Bruce Beames, P.Eng.<br>bbeames@morrisonhershfield.com       | Manitoba . . . . .         | Jennifer Chapman, P.Eng.<br>president@manitoba.cite7.org |
| Greater Vancouver . . . . . | Niraj Sunuwar, P.Eng.<br>president@citevancouver.org         | Southwestern Ontario .     | Doug MacRae, P.Eng.<br>dmacrae@london.ca                 |
| BC Interior . . . . .       | Tom Baumgartner, P.Eng.<br>cite.bcinteriorchapter@gmail.com  | Hamilton . . . . .         | Rob Merritt, C.E.T.<br>Rob.Merritt@hamilton.ca           |
| Northern Alberta . . . . .  | Dallas Karhut, P.Eng.<br>dallas.karhut@edmonton.ca           | Toronto . . . . .          | Amy Jiang, P.Eng.<br>president@toronto.cite7.org         |
| Southern Alberta . . . . .  | Meera Kopp, P.Eng.<br>meera.kopp@calgary.ca                  | National Capital . . . . . | Eric Stewart, P.Eng.<br>nationalcapital@cite7.org        |
| Lethbridge . . . . .        | Eric Dyson<br>edyson@mpe.ca                                  | Québec . . . . .           | Paul Bourque, IAITE<br>paul@pabeco.com                   |
| Saskatchewan . . . . .      | Nathalie Baudais, P.Eng.<br>president@saskatchewan.cite7.org | Atlantic . . . . .         | Mike Connors, P.Eng.<br>connorm@halifax.ca               |

## STUDENT CHAPTERS

|  | Advisors  | Presidents   |
|--|---|--|
| Carleton University . . . . .            | Ata Khan . . . . .<br>ata_khan@carleton.ca                            | Jana Sarran<br>cite.carleton@gmail.com                   |
| Lakehead University . . . . .            | Juan Pernia . . . . .<br>jpernia@lakeheadu.ca                         | Jeff Pascua<br>jpascua@lakeheadu.ca                      |
| McMaster University . . . . .            | Moataz Mohamed . . . . .<br>mmohame@mcmaster.ca                       | Angelo Pilla<br>itemac@mcmaster.ca                       |
| Mohawk College . . . . .                 | Craig Sherwood . . . . .<br>craig.sherwood@mohawkcollege.ca           | Jack Ready<br>jack.ready@mohawkcollege.ca                |
| Montréal-Québec Étudiant . . . . .       | Ciprian Alecsandru . . . . .<br>ciprian.alecsandru@concordia.ca       | Mohammad Karimi<br>mohammad.87.karimi@gmail.com          |
| Ryerson University . . . . .             | Bilal Farooq . . . . .<br>bilal.farooq@ryerson.ca                     | Ian Lindley<br>ilindley@ryerson.ca                       |
| York University . . . . .                | Kevin Gingerich . . . . .<br>kging@yorku.ca                           | Erik Nevland<br>nevland@yorku.ca                         |
| University of Alberta . . . . .          | Tony Z. Qiu . . . . .<br>zhijunqiu@ualberta.ca                        | Laura Cabral<br>iteua@ualberta.ca                        |
| University of British Columbia . . . . . | Tarek Sayed . . . . .<br>tsayed@civil.ubc.ca                          | Maria Albitar and Omar El Masri<br>president@ubccite.org |
| UBC Okanagan . . . . .                   | Gordon Lovegrove . . . . .<br>gord.lovegrove@ubc.ca                   | Brady Harris<br>ubccocite@gmail.com                      |
| University of Calgary . . . . .          | Lina Kattan . . . . .<br>lkattan@ucalgary.ca                          | Nadia Moshahedi<br>uofcite@gmail.com                     |
| University of Manitoba . . . . .         | Jeannette Montufar . . . . .<br>jeannette.montufar@morrconsulting.com | Abby Scaletta<br>president@iteumanitoba.ca               |
| University of New Brunswick . . . . .    | Eric Hildebrand . . . . .<br>edh@unb.ca                               | Andrew Northmore<br>anorthmo@unb.ca                      |
| University of Toronto . . . . .          | Marianne Hatzopoulou . . . . .<br>marianne.hatzopoulou@utoronto.ca    | Laura Minet<br>ite@utoronto.ca                           |
| University of Waterloo . . . . .         | Bruce Hellinga . . . . .<br>bhellinga@uwaterloo.ca                    | Zaid Alyami<br>uw.ite.sc@gmail.com                       |