

# transportation

# TALK

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





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community of  
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**Ryan Vanderputten, P.Eng., FITE**

President, CITE

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

The summer heat is finally upon us! As people pack up their cars and head to the lake/mountains/beach/woods/pool this summer, I hope that it is a time of rest and relaxation. With so many travel and health restrictions over the past couple of years, I know there is such a demand to get out and visit family and friends again, so I hope you get the opportunity to reconnect this summer.

Speaking of reconnecting, it was so great to see so many people at our first in-person district meeting since 2019 as we gathered on the traditional, ancestral, and unceded territories of the Skwxwú7mesh (Squamish), səliilwətaʔ (Tsleil-Waututh), and xʷməθkʷəy̓əm (Musqueam) Nations. We had such a great turnout that we had to stop registration in the days leading up to the event to be able to manage space and catering with the hotel! There were many highlights:

- The Welcome Reception on the Sunday evening was a great opportunity to connect with peers, and visit our exhibit hall
- Monday morning, the conference kicked off with our keynote speaker, Mitchell Reardon from Happy Cities talking about rethinking our streets in a post-pandemic life.
- Our social events on Monday were well attended, including our typical East vs. West street hockey game at Sunset Beach (with a fantastic view of the Barge!) and our District Traffic Bowl, where the University of Manitoba came out on top, and will now represent CITE at the ITE Collegiate Traffic Bowl in New Orleans in August. The 'just for fun' traffic bowl round made its debut as well, with members of the CITE Board of Directors beating out the other teams to win bragging rights!
- Tuesday's QUAD Roundtable brought together leading transportation professionals from each of the QUAD Sections: Jeff Busby, TransLink (Greater Vancouver), Dongho Chang, Washington State DOT (Washington Section), Todd Litman, Victoria Transport Policy Institute (Vancouver Island Section), and Randy McCourt, former President, ITE International (Oregon Section) to discuss how transportation contributes to the resilience of cities. We also had Honourable Bowinn Ma (Minister of State for Infrastructure) drop in to bring us perspectives from the BC Provincial Government.



L-R: Vancouver 2022 Conference Chair Jan Voss, Honourable Bowinn Ma, CITE President Ryan Vanderputten, CITE Past President Julia Salvini & CITE Administrator Steven Garner

- Tuesday was capped off with an amazing Harbour Cruise, treating attendees to amazing views of Vancouver Harbour and the Lions Gate Bridge.
- The annual CITE awards lunch wrapped up the event, celebrating the excellence of our students, professionals, and long-standing members. Congratulations to all of our 2022 award winners, including Gene Chartier, who was recognized with the H. Robert Burton Distinguished Service Award, CITE's most prestigious honour! Read more about Gene's service to ITE on page 21.

The conference would not have been possible without the passion and dedication of the Local Arrangements Committee, including Chair Jan Voss, who started planning the Vancouver conference back in 2018! Thank you for sticking it out, and planning both the original 2020 conference and the rescheduled Vancouver 2022 conference. You are an amazing team of volunteers! If you missed the opportunity to join us in Vancouver, I hope you consider planning to join us next year in Winnipeg, June 4-7, 2023 for our joint conference with the Canadian Association of Road Safety Professionals (CARSP).

As you know, CITE is a volunteer-run organisation, with an elected Board of Directors consisting of representatives from each of our 13 sections. Your Board meets on a quarterly basis and starting this issue, we will be including a summary of our Board activities as part of *Transportation Talk*. This aligns with our guiding principle around integrity, increasing transparency between our Board of Directors and our membership. Check out the second quarter board highlights on page 5. One of the exciting initiatives your Board is working on from the 2020-2024 CITE Strategic Plan is a new Communications Plan. This strategy will support CITE in sharing information and engaging with members and non members of Canada's transportation community. Stay tuned for more details in our next issue of *Transportation Talk*.

This year, we are also seeing our Sections return to in-person activities, after a long stretch of virtual meetings. These activities are a great way to get out and meet new members in your Section, and reconnect with others who you may not have seen for a few years! I also hope to start getting around to join in some of these activities, and meet more of you at the local level. I really want to get a sense of what makes each Section unique and how the District can best support members at the Section level. Until then, please feel free to reach out to me directly at [rvanderputten@cite7.org](mailto:rvanderputten@cite7.org).

Have a great summer, and stay safe!



**Ryan Vanderputten, P.Eng., FITE**  
President, CITE



**Edward Soldo, P.Eng., FITE**  
Canadian District Director, ITE  
[director@cite7.org](mailto:director@cite7.org)

If I had to characterize in one word the CITE/QUAD 2022 Conference in Vancouver, I would have to go with *quintessential*. It would apply to everything from the weather, quality of the program, venue, tours, spectacular boat cruise, to the local hospitality and most importantly, the camaraderie of interacting with over 550 transportation professionals from across Canada and the globe. I would be remiss not to give a special shoutout to all those members that came out for the early morning runs. Special thanks to the Local Arrangements Committee and their Chair Jan Voss for all their hard work organizing this conference twice! The Greater Vancouver section as always puts on a great conference.

Congratulations to all the award winners—well-deserved acknowledgement and recognition to all! The H. Robert Burton Distinguished Service Award is CITE’s most prestigious award and recognizes an individual member who has shown a dedicated and strong commitment to advancing our practice as well as a strong record of service with CITE. I had the privilege to present it this year to one of my mentors and dear friend, Gene Chartier. His contributions to all things ITE for the past 30 years demonstrate his dedication to both the profession and to our organization.



The July edition of the *ITE Journal* provides an overview of the ITE Annual Meeting in New Orleans, LA from July 31 to August 4 and the conference theme is “Investing in Our Future”. I look forward to seeing some of you there at the various sessions and tours.

*ITE Journal* also provides some great Public Agency Showcase projects that improve transportation and enhance the quality of life in our communities. Highlighted in this edition are a few from the City of Calgary; congratulations to all of our members involved in those initiatives.

Congratulations also to the Southern Alberta Section as the International Board of Direction approved proposals for the 2027-2029 ITE Annual Meetings and Exhibitions. The 2027 ITE International Annual Meeting will be held in conjunction with the Canadian District in the City of Calgary.

Keep well, stay safe and if you have any questions regarding ITE, please contact me at [esoldo@cite7.org](mailto:esoldo@cite7.org) on Twitter [@EdwardSoldo](https://twitter.com/EdwardSoldo).

*Edward Soldo*

**Edward Soldo, P.Eng. (F)**  
Canadian District Director



# CITE Board Meeting Highlights

May 29, 2022 - Vancouver, BC



On Sunday, May 29, 2022, the CITE Board of Directors met in person for the first time since 2019. Chaired by immediate CITE Past President **Julia Salvini**, the meeting gave the Board an opportunity to move forward with priority items identified in the [2020-2024 Strategic Plan](#).

We were pleased to have ITE International Executive Director and CEO **Jeff Paniati**, Vice President **Rosana Correa**, and Vice President-elect **John Davis** in attendance. Jeff shared that ITE has shown great resilience over the pandemic, being flexible and successfully shifting many activities to virtual. In 2022, the focus for ITE will be on students, student-to-young member transitions, and supporting strong student chapters. Overall, ITE International is in a very good position with membership at a 15-year high and strong finances.



After a challenging 2020, CITE is also in a strong financial position coming out of 2021. The Board approved the [2021 year-end financial statements](#) and accepted the first-quarter 2022 financial report. The Board also received an update on the change of CITE's annual general meeting to December 2022 to facilitate changing the financial year-end to August 31. For more information about these changes, please see [this notice](#). Other business items included a discussion around a new Nominations & Elections Policy, presented by sub-committee member **Jason Dahl**, and approval of a Distribution of Surveys Policy.



The Board received annual conference and committee updates from Vancouver CITE/QUAD 2022 Joint Annual Conference Chair **Jan Voss**, Winnipeg CARSP/CITE 2023 Joint Conference Co-Chair **Mark Hearson**, and Training Committee Vice-Chair **Ian Roth**.

To continue moving forward with the implementation of the 2020-2024 Strategic Plan, the Board established a Task Force on Student Engagement and a Task Force on Governance, both of which will be working groups to review and provide direction on those key improvement areas. The Board was also informed that work has begun to investigate the creation of a foundation to support scholarships and fund research.

**Leanne Buck** of UpLift Communications gave a preliminary report on the District's Communications Strategy, summarizing what we heard from the interviews, workshops, and surveys completed with members and non-members. The final report will be released to the membership in the fall.

The formal business meeting was followed by an open roundtable discussion on Section activities, challenges and successes. The focus of this roundtable was on how Sections provide support to Student Chapters and what more could be done to engage students at the local level. Many Sections also shared their experience with shifting Section activities to virtual and managing the transition back to in-person events.

Thank you to all Board members for your continued efforts to support and strengthen the organizations.



# CITE/QUAD 2022 Joint Annual Conference

# VANCOUVER 2022 May 29 - Jun 1

## RESILIENT CITIES Planning for an Uncertain Future



A big THANK YOU to all our generous sponsors, to our speakers, moderators, exhibitors, tour facilitators, and to all our 550+ delegates for your passion and participation in making the 2022 CITE Annual Meeting and Conference in Vancouver, BC a success! Given that this was CITE's first in-person conference in 3 years, I hope everyone made the most of this opportunity to enjoy the technical program while reconnecting with colleagues and friends from across Canada and the United States.

A special heartfelt thank you to the amazing Local Arrangements Committee (LAC) for all their hard work in organizing not just one but two conferences between 2020 and 2022 as the LAC rose to the challenge of navigating through a pandemic. The conference theme *Resilient Cities: Planning for an Uncertain Future* that was selected back in 2018 for what was supposed to be the Vancouver 2020 conference was in hindsight even more fitting and relevant than ever before.

Take care friends and I look forward to seeing you all in Winnipeg in 2023!

*Jan Voss*

Vancouver 2020/2022  
Conference Chair



### Program

The full conference schedule, speaker list, and detailed presentation descriptions are available online at [pheedloop.com/cite2022quad/site](http://pheedloop.com/cite2022quad/site). The print program can also be viewed [here](#).

### Presentation Files

Presentations are available for registered attendees to download through the conference app. To access this via a web browser on your computer, log in at [go.pheedloop.com](http://go.pheedloop.com).

### Photos

We have launched a crowd-sourced [conference photo album](#) filled with dozens of photos contributed by attendees. Thank you to everyone who shared their snapshots! More photos can be added at any time.



Canada's Community of Transportation Professionals  
La communauté des professionnels du transport au Canada

# Inspiring Keynotes



**Lon LaClaire**, City of Vancouver's General Manager of Engineering Services, kicked us off with an introductory address highlighting the progressive initiatives happening in Vancouver. Then **Mitchell Reardon** of Happy Cities took to the stage with a keynote on *Resilient Cities: Rethinking Our Streets in Post-Pandemic Life*. **Jeff Paniati**, Executive Director & CEO and **Beverly Thompson Kuhn**, President brought us news from ITE International. We were pleased to have the **Honourable Bowinn Ma**, British Columbia Minister of State for Infrastructure, drop in for a surprise keynote. Finally, our *Panel on Transportation & Resilient Cities* brought together leading voices representing each of the ITE QUAD Sections: **Jeff Busby**, TransLink (Greater Vancouver), **Dongho Chang**, Washington State DOT (Washington Section), **Todd Litman**, Victoria Transport Policy Institute (Vancouver Island Section), and **Randy McCourt**, former President, ITE International (Oregon Section).



# Social Events

After three years apart, attendees were incredibly eager to reunite with their CITE family and build some new relationships. From the **Welcome Reception** to **Student Mixer**, **Street Hockey Classic** to networking breaks in the **Exhibitor Hall** and the quintessentially Vancouver **Banquet Dinner Cruise**, CITE/QUAD 2022 offered many opportunities to connect.



**ITE York University Student Chapter**  
321 followers  
1mo • 🌐

Last week we were representing [York University](#) at the CITE/QUAD 2022 Joint Annual Conference in Vancouver and had a blast.

ITE York U took the Outstanding Chapter Award this year. We're so proud of the work we've been doing during this transition period from virtual to in-person.

A big shout out to our Traffic Bowl team and the students who presented at the conference.

Thank you [UBC ITE Student Chapter](#) for the amazing summit and a great start. Beautiful campus and good people to chat with! Hope to see you all soon! 😊

Thank you [CITE](#) for an amazing event. Great presentations, interesting projects, beautiful setup, great hockey game, delicious food and the opportunity to connect with people from all over the world.

Thank you [Lassonde School of Engineering - York University](#) and our professor [Kevin Gingerich](#) for trusting in our work.



Check out the [conference photo album](#) for many more highlights!

**Jan Voss, P.Eng, PTOE** • 1st  
President and Founder at Creative Transportation Solutions Ltd  
3w • 🌐

Thrilled to finally see this \$100K travel bursary from our family estate in memory of my late wife Jenn get going after a 2 year pause due to Covid and to meet the first 5 recipients 😊❤️

**CITE**  
4,339 followers  
3w • Edited • 🌐

CITE was thrilled to have the inaugural group of Jenn and Jan Voss Travel Bursary for Women in Transportation Engineering recipients in Vancouver at the CITE/QUAD 2022 Joint Annual Conference. It was wonderful ...see more

**Dennis Wu, EIT** • 1st  
EIT - Transit at Mott MacDonald  
1mo • 🌐

The CITE [#conference](#) is a wrap! It was a pleasure to be a part of such a high energy, high performing LAC to put together this record breaking conference not once, but twice! While this was my first time taking part in ITE, I know it will not be my last.

The conference atmosphere was buzzing and it's comforting that it felt just like pre-COVID times when shaking hands was normal and entering a large conference room full of people would incite excitement rather than anxiety!

I look forward to future CITE events and fingers crossed they will only need to be planned once! [#CITE2022QUAD](#)



Credit: Tala Al-Sharif



Credit: Anthony Kwok



**Sabrena Jahan Ohi, E.I.T.** • 2nd  
 PhD Candidate at University of Alberta  
 1mo • Edited • 🌐

Met a bunch of amazing minds from both industry and academia while cruising across the English Bay during the #cite2022quad banquet dinner. The cherry on the cake was the surprisingly sunny weather. #CITE



**Reza AminGhafouri** • 2nd  
 PhD Student of Civil Engineering | Transportation  
 1mo • Edited • 🌐

There is nothing more interesting than making friendship! Today I got this chance to spend couple of hours with the best experts in the field of transportation engineering across Canada. Thanks to CITE and thanks to Ryan Vanderputten for running such interesting event. #CITE2022QUAD



# Technical Program

In addition to technical streams packed with almost 100 presentations, CITE/QUAD 2022 offered great variety with unique formats including panels, interactive workshops, listening sessions, an unconference, and poster presentations.



Sponsor-led Thought Leader Sessions featured panels and interactive workshops on emerging issues in the transportation field.



# Unique Sessions



Young Professionals in Transportation (YPT) Vancouver hosted an **Unconference** to exchange ideas and knowledge



Led by Mariam Bello, CITE hosted a small group **listening forum for BIPOC attendees** about the gaps and opportunities for improving diversity, equity, and inclusion (DEI) in transportation. This was followed by a **DEI Primer and Roundtable Discussion** open to all to help inform CITE's journey in championing DEI in the industry.



One of the highlights was a half-day workshop entitled **25 Lesson Learned from 25 Years of Road Safety Audits in Canada**. A Road Safety Audit (RSA) is a formal, independent multi-modal review of the safety performance of a road project at the planning, design, construction or pre-opening phase. Thousands of RSAs have been conducted since 1997 and they have helped prevent countless transportation-related injuries in Canada over the past 25 years.



Over 50 delegates gathered to discuss the history and learnings from past RSAs with Dr. John Morrall of Canadian Highways Institute Ltd. and Raheem Dilgir of TranSafe Consulting Ltd. Some of the lessons included enhancements to the RSA process to make them more effective while others were more technical in nature and covered issues that are repeatedly identified on RSAs, including speeds, project boundaries, design inconsistencies, issues beyond the clear zone, the increasing diversity of road users, and modal trade-offs. The objective of the workshop was to enhance RSAs by more systematically incorporating Vision Zero and Safe System thinking.

*Interested in road safety? CITE is partnering with the Canadian Association of Road Safety Professionals (CARSP) for our conference in 2023. Learn more on [page 16](#).*

# Technical Tours

## Cycling Tours

- Downtown South False Creek
- Recent Downtown Bike Projects
- Cycling and Public Spaces
- Downtown and East Van

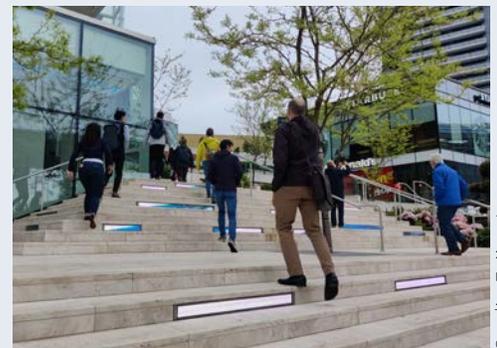


## SeaBus Multimodal Tour



Credit: Alvin Tse

## The Amazing Brentwood Tour



Credit: Fujjou Lu

## Walking Tours

- Plaza's Placemaking and Urban Spaces
- Transit Priority and Public Spaces



Credit: PJ Bell



Credit: PJ Bell



Credit: FrederickHeere

## Transportation Management Centre of BC



Credit: Niki Burkinshaw

# Sponsors

Thank you to the many industry-leading companies for your continued support and also to the many exhibitors for adding life to our conference! Learn more about our CITE/QUAD 2022 [sponsors](#) and [exhibitors](#) on our conference archive website.

## DIAMOND



## PLATINUM



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# Volunteers

We are ever grateful to the many dedicated volunteers and their employers for making CITE/QUAD 2022 possible

## Local Arrangements Committee (LAC)

- Chair: **Jan Voss**, CTS
- Vice-Chair & Facilities: **Jared Duivestein**, Parsons
- Technical Program: **Billy Dong**, City of Vancouver
- Technical Tours: **Alvin Tse**, ISL Engineering & **Cam Wakefield** (2020 LAC)
- Volunteers & Registration: **Niraj Sunuwar**, Urban Systems
- Social Program: **Shara Viaje**, WSP, **Dennis Wu**, Mott MacDonald & **Kati Tamashiro** (2020 LAC)
- Trade Show: **Gary Vlieg**, CTS
- CITE Executive Liaison: **Ryan Vanderputten**, CITE

## Technical Tours

**Leaders/Coordinators:** Kathleen Murphy, Karamjeet Deogan, Brigid Canil, Chris Lee, Porya Khorsandi, Ian Wasson, Darren Kwiatkowski, Stuart Ramsey, Mike Zipf, Dylan Passmore, Brian Gould, Paul Krueger, Angie Weddell, Cara Fisher, Jesse Wiebe, Ryan Hirakida, David Lewis, Lindsay Neufeld, Fraser Mah, Sam Khanny, Raeiti Azarkeyvan, Carter Xin, Daniel Kabat, Julio Bracho, Mark Onderwater, Jag Gill, Navkiran Tamna, Alvan Tan, Tony Liew, Karen Halex. *Special thank you to all the transit supervisors and bus drivers!*

**Chauffers/Photographers:** Eric Ma, Benjamin Corbett, Brendan Stevenson, Fujiou Lu, Robbie Lew, PJ Bell, Niki Burkinshaw, Megan Squires, David Richardson, Scott Juniper, Matthew Woo, Dennis Hoffart, Matthew Sallee, Beth Hurford, Ginelle Aziz, Jessie Lei, Mohamed Saleh, Timothy Young, Maryam Tabeshian, Jimin Park, Farhad Shahla, Liza Sheppard, David Blain, Frederick Heere, Lindsay Dagenais, Mars Otten-Andrew, Deirdre Bostock, and Chandni Desai



## Registration & General Support

Matthew Woo, Ava Li, Jael Lumba, Abbey Seneres, Maciej Wysocki, Breanna Jackson, Jason Yuen, Beverley Ng, Cody Pallin, Dawei Kang, Elyse Wong, Amir Hassanpour, Gurdiljot Gill

## Technical Program

**Abstract Reviewers:** Alon Weinberger, Becky Lai, Jonathan Ho, Shilpa Mallem, Peter Trutch, Bidoura Khondaker.

**Moderators:** Thomas Thivener, Michael Leong, Jen Malzer, Raheem Dilgir, Victor Ngo, Andrew Sullivan, Jeeshan Ahmed, Megan Pate, Iona Bonamis, Ken Tseng, Lynn Machacek, Sam Young, Matthew Chan, Kate Petak, Alyshia Burak, Dan Casey, Kanny Chow, Raieti Azarkeyvan, Peter Truch, James Donnelly, Alina Cheng, Paul Lee, Nadine King.



**ite** CARSP+ACPSER  
**WINNIPEG 2023**  
**Joint Conference**

**ROAD SAFETY**  
*Creating Impact Through Diversity*



The ITE Manitoba Section invites you to attend the 2023 Joint Conference between CITE (Canadian Institute of Transportation Engineers) and CARSP (Canadian Association of Road Safety Professionals) in Winnipeg, the heart of Canada, June 4-7, 2023.

Society has gone through many changes and challenges over the past few years. We, as transportation professionals, have considerable influence to pave the way forward. Now more than ever, we can take advantage of a diverse range of ideas and solutions as we consider safety, sustainability, and equitability. The conference program, driven by the theme Road Safety: Creating Impact Through Diversity, will explore and identify the impact of our work for a diversity of end users.

Conference sponsorship and exhibitor inquiries are welcome in advance of the prospectus being released this fall. Interested presenters can also look forward to the Call for Abstracts in fall 2022. Watch for emails from CITE and follow [#ITECARSP2023](https://twitter.com/ITECARSP2023) for news and updates!

Like the the Red and Assiniboine Rivers coming together in downtown Winnipeg, we look forward to gathering transportation and road safety professionals from across Canada at this historical meeting place. We welcome you and your family to come and explore Winnipeg with us in June 2023!



The logo features the word "itef" in a stylized, bold, blue font with a red maple leaf above the "i". To the right, the year "2022" is written in white inside a blue triangle. Below this, the words "STUDENT LEADERSHIP SUMMIT" are written in a smaller, blue, sans-serif font.

**itef** 2022  
STUDENT LEADERSHIP SUMMIT

By Benjamin Corbett, University of British Columbia



At the end of May, the University of British Columbia ITE Student Chapter hosted the 2022 CITE Student Leadership Summit. Over 15 transportation students from across Canada travelled to Vancouver in advance of the CITE/Quad 2022 Joint Annual Conference to attend the summit. Despite initial uncertainties about the conference format, the organizing team quickly mobilized an incredible lineup of speakers and student leaders to make the event a success.

The summit kicked off with a social night on Saturday, May 28th, followed by a full day of interactive leadership workshops held at UBC on Sunday, May 29th. Each of the five sessions was unique, engaging, and imparted on ITE student leaders new insights for personal and professional growth. The student leadership summit also included an important networking component, so that participating students can keep the conversations going after arriving home. During the

networking lunch, CITE Vice President Pedram Izadpanah and Canadian District Director Edward Soldo made a surprise visit to connect with the summit attendees. The summit provided a fantastic opportunity for students to sharpen their leadership skills and make valuable connections in advance of the conference.

Everyone involved in the 2022 SLS demonstrated an incredible level of enthusiasm and a true commitment to making the event a success. This includes the student attendees, for adapting their travel plans to attend the event; the guest speakers, who took the time to prepare and deliver impactful presentations; as well as CITE volunteers and staff, for their invaluable advice and technical support. The UBC ITE Student Chapter recognizes the contributions of Salvini Consulting, the ITE Legacy Fund, and all our industry night sponsors, without whose generous support the 2022 Student Leadership Summit would not have been possible.

*Continued on next page*

Mariam Bello shares her "Personal Journey in Professional Leadership"



## PARTICIPATING UNIVERSITIES

- University of British Columbia
- York University
- University of Manitoba
- University of Alberta

## ORGANIZING COMMITTEE

Thanks to the organizing committee from the University of British Columbia who made this event possible!

- Benjamin Corbett
- Tarek Ghoul
- Tala Alsharif
- Abbey Seneres

## SESSIONS & PRESENTATIONS

- *Agile Growth* - **Tanveer Singh Bhandal**, ISL Engineering and Land Services
- *Transitioning from the Academy to the Industry* - **Federico Puscar**, ISL Engineering and Land Services
- *A Personal Journey in Professional Leadership* - **Mariam Bello**, City of Calgary
- *Creative Leadership* - **William Hui**, TransLink
- *Constructive Communication* - **Brian Phillips**, Access Planning



Fede Puscar on "Transitioning from the Academy to the Industry"



Tanveer Singh Bhandal offering his insights on "Agile Growth"

Over 15 transportation students from across Canada attended the CITE Student Leadership Summit in May 2022





Canada's Community of Transportation Professionals  
La communauté des professionnels du transport au Canada

# CITE 2022

## Excellence in Transportation Awards & Scholarships



# H. ROBERT BURTON DISTINGUISHED SERVICE AWARD

## Gene Chartier

Toronto Section

*Paradigm Transportation Solutions Ltd*

*CITE's most prestigious honour, the H. Robert Burton Distinguished Service Award, is named after a man who dedicated much of his life to the transportation profession. A founder of the original Canadian Section in 1951, Bob was still attending CITE meetings right up to his death at the age of 101 years. This award is bestowed upon members who have shown these same qualities and demonstrated a notable career in the field and a record of service with CITE.*

This year's winner is Gene Chartier. Gene graduated from the University of Waterloo in 1992 with a Bachelors and Masters degree in Civil Engineering. He was the recipient of CITE's John Vardon Memorial Transportation Scholarship in 1991.

He started working in the Borough of East York as Transportation Engineer, went on to the Region of Durham, then became the Deputy CAO at the Township of Scugog. He decided to move to the consulting world, working for Hatch Mott MacDonald and finally to his current position as Vice President and Chief Development Officer at Paradigm Transportation Solutions Limited.

Gene's involvement with ITE has been long and extensive. He started at the University of Waterloo Student Chapter in 1990, served on the Toronto Section from 1994 to 1999, served on the Canadian District Executive from 2005 to 2013, and was on the International Board of Direction from 2016 to 2018. He has contributed to many ITE projects and committees over that time, of which we will share a few. Gene is the current Chair of the ITE Consultants Council, former Co-Chair of the ITE Professional Development Committee, was the Local Arrangement Committee Chair for the Joint ITE/CITE 2017 Annual Meeting in Toronto, Canadian District Traffic Bowl Coordinator for many years and championed the first Canadian Student Leadership Summit in 2018. He led the "Promoting Sustainable Transportation Through Site Design" project which is a ITE Recommended Practice and won the Stan Teply Outstanding Technical Project Award.

Gene has also held many volunteer roles with the Transportation Association of Canada and Ontario Good Roads Association. He played a pivotal role in the TAC/CITE Canadian Guide to Neighbourhood Traffic Calming in 1997.

Gene's contributions to ITE go well beyond the technical. He has served as mentor to many past, current, and future ITE leaders and demonstrates outstanding volunteer commitment in all of his endeavours. Thank you, Gene, for your dedicated service and leadership.



## OUTSTANDING VOLUNTARY CONTRIBUTION AWARD

### Todd Litman

Vancouver Island Section | *Victoria Transport Policy Institute*

*This award celebrates the hard work and dedication of members who have made exceptional voluntary contributions to CITE or its programs and projects.*

Todd has been an active member of ITE since 1995. He has served on the Vancouver Island Section Executive Committee and as a member of the ITE Parking Council, Sustainability Standing Committee, Transportation Health Working Group and has contributed to many other transportation organizations and committees. He has authored more than a dozen articles published in the ITE Journal, CITE's Transportation Talk, and as ITE technical briefs. Todd is also generous with sharing his knowledge at conferences and events. Finally, he was instrumental in establishing Canada's newest Student Chapter at the University of Victoria, a testament to his commitment to supporting the transportation profession.



Get to know Todd in the *Member Highlight* on page 37

## RISING STAR AWARD

### Jason Dahl

Toronto Section | *City of Richmond Hill*

*The Rising Stars Program identifies the next generation and new faces of the transportation profession, recognizing members under the age of 35 who have already made an impact on the profession.*

Jason Dahl, recipient of the Canadian Rising Star Award has also been named a Young Leader To Follow by ITE International. Jason was the first graduate from University of Windsor's transportation program and is now a Transportation Engineer at City of Richmond Hill. He serves on CITE's Board of Directors & as Past President for ITE Toronto. He has made valuable contributions to the Board, including participation in the Nominations & Elections Policy Sub-Committee and the Task Force on Student Engagement.



## DAVID TAM MEMORIAL AWARD

### Andrew Shan

Toronto Section | *True North Safety Group*

*This award is conferred to young professionals starting their careers in the transportation field in memory of David Tam, a well-liked and respected transportation professional, mentor, skilled consultant, and friend to all.*

Andrew Shan is a Transportation Safety Analyst at True North Safety Group. He has been involved in a wide range of transportation safety related projects including safety evaluations of electronic advertising signs, safety assessments using video conflict data and forensic investigations. Early in his career, he has already shown himself to be an honest, driven, hard-working, and personable individual and a great asset to the team.



*Presented by Chris Cheng, Bunt & Associates*

Award generously sponsored by



## RECOGNITION OF LOCAL ARRANGEMENTS COMMITTEE

### Greater Vancouver Section



The 2022 Local Arrangements Committee (LAC) were the epitome of the conference theme: resilience and planning for an uncertain future. Despite the unexpected challenges, this group and the many volunteers supporting them came together to plan CITE's largest stand-alone conference not once, but twice. Their dedication and commitment and the support of their employers made our annual event a major success!

*Front, left to right:  
Alvin Tse, ISL Engineering  
Niraj Sunuwar, Urban Systems  
Jan Voss, CTS*

*Back, left to right:  
Jared Duivestain, Parsons  
Billy Dong, City of Vancouver  
Ryan Vanderputten, CITE  
Shara Viaje, WSP  
Gary Vlieg, CTS  
Dennis Wu, Mott Macdonald*

## STAN TEPLY OUTSTANDING TECHNICAL PROJECT AWARD

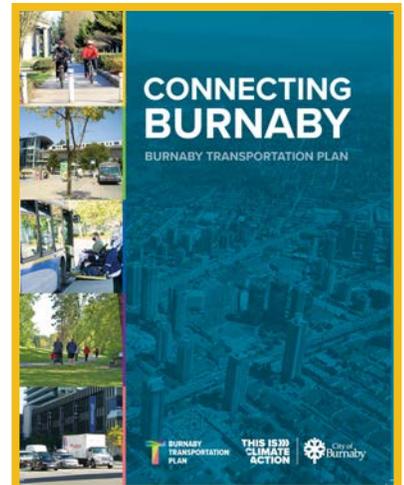
### Connecting Burnaby: Burnaby Transportation Plan

City of Burnaby

The Stan Tepy Award recognizes outstanding projects that showcase excellent technical achievement in transportation planning and/or engineering in Canada. The multiple worthy submissions were evaluated using the four award criteria: technical contents & transferability, complexity and innovation, project expectations, and overall presentation.

*Connecting Burnaby* charts a progressive vision and 30-year plan for transportation in the city. It sets out to create a vibrant and prosperous community by connecting people, places and goods; providing safe, accessible, healthy and sustainable transportation options and choice for all people; and supporting the ecological integrity of the environment.

A people-first plan, prioritizing the people-moving capacity of the transportation system and emphasizing sustainable modes, it is supported by six ambitious goals and three measurable city-wide targets that empowers citizens to shift to more sustainable travel behaviours.



Learn more about *Connecting Burnaby* in the [Project Profile](#) on page 31

## ITE INTERNATIONAL TRANSPORTATION ACHIEVEMENT AWARDS

### Canadian Nominees



The ITE International Transportation Achievement Awards is awarded annually for significant and outstanding transportation achievements in the advancement of transportation. ITE is proud to present the Canadian nominees to be considered for these awards in the following categories.

#### **Complete Streets Category**

##### **Montgomery Main Streets**

Urban Systems and the City of Calgary

#### **Transportation Planning Category**

##### **52nd Street Transit Improvement Project: From Vision to Implementation**

The City of Calgary

#### **Transportation Systems Management & Operations (TSMO) Category and Traffic Engineering Category**

##### **Connected Cities - Multi-jurisdictional Traffic Signal Interconnect System**

District of North Vancouver, City of North Vancouver, and Botech Engineering and Consulting Inc

## OUTSTANDING SECTION AWARD Southern Alberta Section



- Membership: 240+, ~420 broader community
- Held 13 events in 2021 including a social gala event that featured a virtual networking event using GatherTown
- Supported professional development for young members through a mentorship event, university student project presentations, and subsidized attendance
- Promoted diversity and inclusion throughout the membership, speakers and webinar topics

## SECTION MOMENTUM AWARD Saskatchewan Section



- Membership: 128 members
- Developed our first strategic plan to help guide our section forward over the next four years
- Supported our membership through virtual networking and technical events
- Provided increased support for our students
- Developed a quarterly newsletter to keep our membership informed of upcoming activities

## RECOGNITION OF SERVICE

### Jen Malzer



Recognizing the dedication, passion, leadership and grace that Jen brought to her 10+ years serving on the CITE Executive, including as a Past President and also as our District Director to the ITE International Board of Direction. She had a vision for how we could leverage our members' expertise and passion for transportation and their communities by finding ways to engage them more meaningfully in the organization. This and her many other accomplishments have set the foundation for a stronger Canadian community of transportation professionals.

## OUTSTANDING STUDENT CHAPTER AWARD

### York University

- Membership: 40+ members
- Organized more than 10 social events, 8 seminars and 3 major academic events where more than 100 students had the opportunity to connect with 25+ speakers and 30 enterprises/institutions represented in these events
- Hosted its first hackathon on micro-mobility for over 36 hours with more than 40 students from different faculties



## STUDENT CHAPTER MOMENTUM AWARD

### University of Manitoba

- Membership: 50 members total, 28 new members
- Revived student chapter activities during remote learning after being inactive for a year
- Hosted 6 virtual guest presentations on a variety of transportation topics
- Planned a fundraiser for the Winnipeg Christmas Cheer Board and gave presentations to middle school students
- Sent students to two virtual ITE student leadership summits



## DR. MICHEL VAN AERDE MEMORIAL TRANSPORTATION SCHOLARSHIP

**Jacob Lamb** | University of Calgary

Jacob is a PhD candidate at the University of Calgary. He chose Calgary after a student exchange program in 2016/17 from Heriot-Watt university, Scotland, graduating with an MEng in Civil Engineering in 2018. His research focuses on the optimization of autonomous goods delivery, including micro-fulfilment centres locations. He has also worked in the Edmonton Region Hydrogen Hub in 2021 where he established connections with OEMs that recently resulted in technology demonstrations. He served as the president and treasurer of his student ITE chapter, 2018 to 2020, and has supervised undergraduate student capstone teams that presented at SAITE in 2022.



## JOHN VARDON MEMORIAL TRANSPORTATION SCHOLARSHIP

**Felita Ong** | University of Toronto

Felita Ong completed her BAsC at the University of British Columbia in 2019. She is currently a MASc student at the University of Toronto and her master's research is on mode choice modelling, particularly in the context of emerging modes. She also has over two years of experience in transportation planning and operations through her work in both the public and private sectors. Felita strives to obtain a data-driven understanding in travel behaviour to help build sustainable communities.



Learn more in Felita's *Research Highlight* on page 39

## CITE UNDERGRADUATE SCHOLARSHIP

**Maxime Therrien** | University of British Columbia

Maxime Therrien graduated with a BAsC in Civil Engineering from the University of British Columbia in 2022. In his final year, Maxime conducted research with Dr. Omar Swei, supporting transportation agencies in reducing the global warming impact of their road networks using pavement management optimization tools. Throughout his degree, Maxime held engineering consulting work terms in municipal infrastructure design and construction, as well as in active transportation planning and facility design. He will be re-joining Urban Systems in Victoria, BC this as a transportation EIT, where he is excited to contribute to healthy communities and the uptake of sustainable modes of transport. He's an avid cyclist and user of bike lanes so he knows firsthand the impact of great engineering on everyday life.



## STUDENT PAPER COMPETITION AWARD

**Mingjian Wu** | University of Alberta



*Presented by Mark Hearson, Stantec*

Award generously sponsored by



Mingjian Wu is currently pursuing his PhD degree in Transportation Engineering at the University of Alberta (UofA) under the supervision of Dr. Tae J. Kwon. His research focuses on using AI, big data, GIS and other advanced techniques in building intelligent transportation systems including but not limited to winter maintenance, traffic safety and facility optimization. He has been actively involved in the ITE events since 2019 when he was doing his master at UofA. By the time this award is received, he has published a total of 12 peer-reviewed journal papers/book chapters and 15 conference papers/abstracts.

Read Mingjian's winning paper on the [CITE website](#)

## CITE WATT CONSULTING GROUP "TRANSPORTATION IN A SUSTAINABLE WORLD" STUDENT AWARD

**Mohamed Saleh** | University of Alberta



*Presented by Nadine King,  
WATT Consulting Group*

Award generously sponsored by



Mohamed Saleh received his BEng from the University of Manchester, an MSc from Imperial College London and he is currently undertaking a PhD in Pavement Engineering at the University of Alberta with a focus on resiliency and sustainability. Mohamed has won many scholarships and awards, the most recent of which are the TAC Foundation Scholarship and the GSA's Graduate Student Rising Star Award. Mohamed has multiple years of academic teaching and research experience—with several co-authored published papers and reports—where he drew on his practice as a design engineer working for Ramboll UK on prestigious projects such as the 2022 World Cup Al Rayyan Stadium & Precinct in Qatar. Mohamed actively participates in University of Alberta ITE Student Chapter events such as talk to your alumni, student industry mixer and the student presentation competition.

Read Mohamed's winning paper on the [CITE website](#)

## STUDENT PRESENTATION COMPETITION AWARD

**Duha Abdullah** | University of Regina

Duha Abdullah is an undergraduate Environmental Engineering student at the University of Regina. She worked as a research assistant for Dr. Yili Tang for around six months, where her research focus was on-demand transportation. Duha's research included data analyses and interpretations of Regina's on-demand services in 2020/2021 to assess the change in ridership and provide insights for operations and expansions. Duha and Tang submitted a paper for the 2022 CSCE Annual Conference, which is still under review. In addition, she won the CITE Student Technical Presentation Competition (2022), after presenting her research work in the competition hosted by the Saskatchewan Section of CITE.



## CANADIAN CAPACITY GUIDE (CCG) COMPETITION AWARD

**Benjamin Corbett** | University of British Columbia

During his BAsC degree, Benjamin Corbett has created opportunities for transportation students to get involved through the UBC ITE Student Chapter, helping UBC earn the Outstanding Student Chapter Award under his leadership as President in 2021. Benjamin was also a founding member and Captain of the new UBC Smart City engineering design team. Benjamin has one year of transportation consulting experience with leading roles on high-profile transit-oriented developments and long-range transportation master plans. He is currently a Civil Engineering Co-op Student at ISL Engineering and Land Services, where he is responsible for urban and rural roadway design. Benjamin believes bold action is needed for healthier transportation systems and seeks to push the boundaries for sustainable design in all his projects.



Competition generously sponsored by

**Jim Gough**



### Congratulations to all CCG Competition winners

First place: **Benjamin Corbett**, University of British Columbia

Second place: **Ethan Mccaw**, Mohawk College

Third place: **Kathursan Loganathan**, York University

## CITE 2022 COLLEGIATE TRAFFIC BOWL CHAMPIONS

### University of Manitoba

Excitement was high as the CITE Collegiate Traffic Bowl student competition returned to its in-person format at the CITE/QUAD 2022 Conference. Congratulations to the winning team from the **University of Manitoba**



**Student Chapter**—Cassidy Zrobek, Katie Wiebe & Vidhi Modha—and well done to the **University of British Columbia** and **York University** teams for your hard work!

Many thanks to all the volunteers, especially Traffic Bowl Coordinator Ian Lindley, who helped make this competition a great success. Check out the [conference album](#) for more photos of the event, including the bonus round featuring professionals vs students vs CITE Board members.



**University of Manitoba**  
Cassidy Zrobek, Katie Wiebe & Vidhi Modha

Award presented by Traffic Bowl Coordinator  
Ian Lindley, C.F. Crozier & Associates



**University of British Columbia**  
Benjamin Corbett, Tarek Ghoul & Tala Alsharif



**York University**  
Aditi Chowdhury, Kathursan Loganathan, Prateek Jain,  
and Ginelle Aziz



Judges Pedram Izadpanah, Ryan Vanderputten, Julia Salvini & Irini Akhnouk and MC Dave Richardson

See many more photos from Traffic Bowl & the Awards Luncheon in the [CITE/QUAD 2022 conference photo album!](#)

# Connecting Burnaby:

## Burnaby Transportation Plan

*Winner of the 2022 CITE Stan Teply Outstanding Technical Project Award*



All photos credit to City of Burnaby

*Connecting Burnaby*, which was approved by Burnaby City Council on December 13, 2022, sets out a 30-year plan to transform transportation in the city. As the City’s guiding policy document for transportation planning and decision-making, it articulates a long-term vision that will help shape the growth and development of the city. It’s a plan for Burnaby’s progressive transportation future, building on a series of sustainable city policies—*environmental*, *social* and *economic*, and the *Climate Action Framework*—to guide how the city can evolve to become an even more vibrant, resilient, and sustainable community.

## The Context

Burnaby, located in the centre of Metro Vancouver, is the third-largest city in British Columbia with over 249,000 residents and growing. Known for its beautiful surrounding natural environments, strong economy and diverse culture, and vibrant town centres, Burnaby is a much sought-after place to live, learn, work, and play.

As the first major update to the transportation plan in more than 25 years, *Connecting Burnaby* needed to respond to the significant changes that had occurred in the community while concurrently looking forward. The project introduces progressive transportation concepts and innovative policies and actions to respond to emerging issues and challenges such as climate change, social inequities, and sustainable growth management. A

departure from previous plans, the project advances a people-first approach to the transportation system and its networks. It focuses on the people carrying capacity of the road network, the safety and comfort of vulnerable road users, and access to transportation options and choices, emphasizing sustainable transportation options and choices for all people.

## The Plan

*Connecting Burnaby* outlines a progressive vision for the city’s advancement into a community of choice:

*The Burnaby Transportation System will contribute to a vibrant and prosperous community by connecting people, places and goods; providing safe, accessible, healthy and sustainable transportation options and choice for all people; and, supporting the ecological integrity of the environment.*

The plan envisions that, in 30 years, Burnaby’s transportation system will:

- provide access to transport options and choice.
- emphasize sustainable transportation modes such as walking and rolling, cycling, and transit to meet daily needs.
- create opportunities to participate in the life of the city through the design of streets for people.

*Continued on page 33...*



- support the local economy through efficient and reliable movement of goods and services.
- encourage health and well-being.
- support the City’s climate action initiatives towards zero emissions.

The plan lays out six ambitious goals that reflect this vision as well as three measurable city-wide targets:

- **Vision Zero:** by 2050 a 100% reduction in traffic fatalities and serious injuries
- **Mode Split:** which aims to have ¾ of all trips made by public transit and active transportation by 2050
- **Zero Emissions:** which focuses on a series of measures to incrementally reduce vehicle emissions by 100% by 2050

In order to support the envisioned transformational change, the Plan offers five foundational policy areas that influence access to transportation, transport choices and travel behaviours, each of which include policy directions to be advanced by the City:

- Land Use Integration
- Public Realm & Place-Making
- Streets are For Everyone
- Transportation Demand Management (TDM)
- Behaviour Change: 4Es (Educate, Encourage, Enable and Empower)

The plan then outlines specific policies, actions, network maps, and key performance indicators (KPIs) associated with five modes prioritized in a sustainable transportation hierarchy (Walking & Rolling, Cycling, Transit, Goods Movement, and Driving) that provide guidance as to how the City will achieve the vision and goals of the plan and support the three City-wide Targets.

While the plan is a long-range policy document, it also specifies priority initiatives with concrete outcomes for each mode called “Big Moves.” The Big Moves are identified as having the greatest impact towards achieving the plan’s vision. They align with the targets of the plan, are time-bound, measurable, and include supporting actions. An overview of the plan structure and elements is laid out in Figure 1.

## The Approach

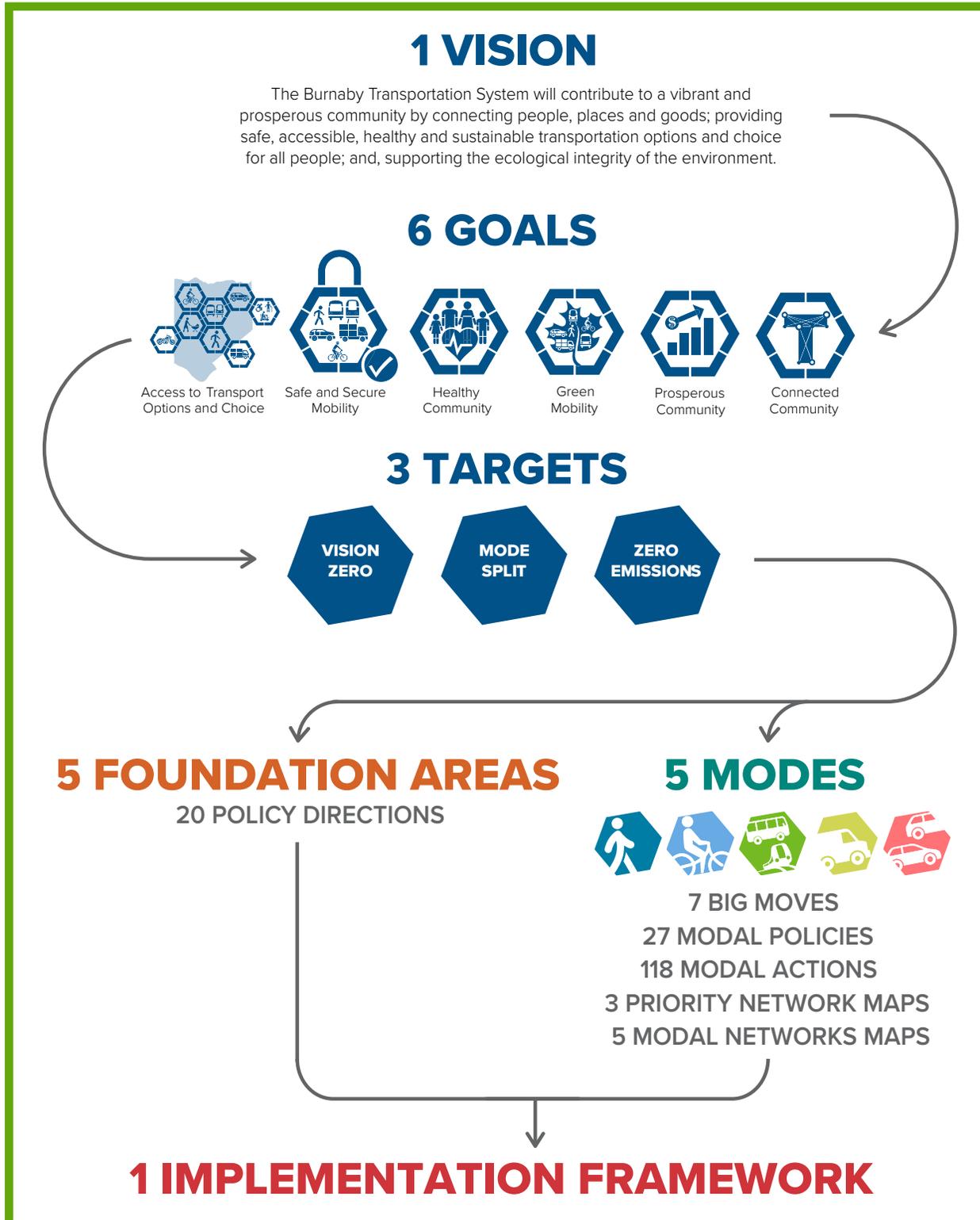
The plan was developed over four years and across three phases and included a comprehensive engagement program and rigorous technical work. The technical work program included modelling, mapping and feasibility assessment of networks, review of best practices, and a peer-review process culminating in a technically robust plan.

*Continued on page 35...*





Figure 1. Overview of the Burnaby Transportation Plan structure (Connecting Burnaby, p. 9)





The community and stakeholder engagement program that was an integral component of the process was one of the most accessible, inclusive, and creative public consultation programs the City has undertaken. Robust and comprehensive public and stakeholder engagement was completed for each phase of the project, using a variety of means including in-person and online workshops, meetings, open houses and events, one-on-one meetings, and by telephone. Despite challenges related to the COVID-19 pandemic, engagement pivoted to an online platform while ensuring access to as many people as possible. Where necessary, alternatives were provided for those unable to access technologies such as online surveys and attendance at online events.

Strong support and buy-in were achieved at all stages of the project from the community, stakeholders, and ultimately Council. Feedback received at each phase of the process directly resulted in plan development and refinement. Thus, *Connecting Burnaby* is reflective of the values and transportation priorities of the community, setting a solid foundation of community support that will help to ensure the future success of the plan.

## What's Next: Implementation

A major strength of the plan is the inclusion of an Implementation Framework that sets out a flexible approach for achieving the vision and targets. The framework lays out six Guiding Principles to help translate and prioritize the actions and supporting key policy directions identified in the plan into work programs.

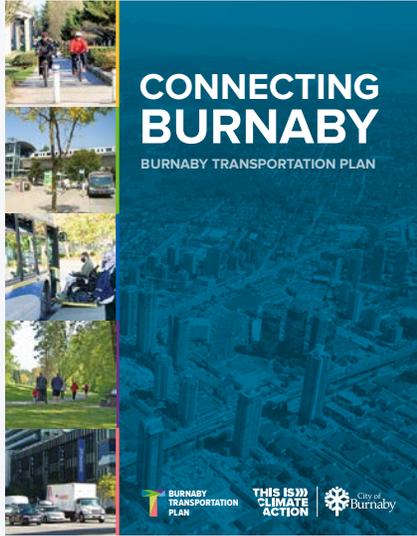
The implementation framework breaks down the policies and actions into two tiers of

implementation. The first tier, feeding into a five-year investment strategy and monitoring plan, prioritizes and accelerates the Big Moves and Foundational policy central to the overall plan. The second tier will move modal policies and actions forward and focus on detailed study.

The framework is supported by an ongoing data collection and monitoring feedback loop where the lessons learned from previous applications inform and guide future implementation.

Meeting the aspirations of the Burnaby Transportation Plan will require investment of time and resources, building on the City's commitments and leadership. This framework is critical to achieving the ambitious vision, targets and goals of *Connecting Burnaby*.

*Connecting Burnaby* was delivered in-house by a team of planners and engineers, with consulting support from Urban Systems and Parsons. As a joint project, which involved cooperation between the Planning, Engineering, and Corporate Services departments, this honour exemplifies the dedication of our staff, and the exceptional work our team achieves when working together.

Visit the [City of Burnaby website](#) to see related projects and download the full Burnaby Transportation Plan.




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# Todd Litman MES



## Current Employment

*Executive Director & Researcher, Victoria Transport Policy Institute*

**City of Residence:** *Victoria, BC*

**Education:** *Masters of Environmental Studies, 1995 & BA, with emphasis on urban planning, 1983  
Evergreen State College (Olympia, Washington)*

## First job in transportation

*Consultant to the BC Ministry of Highways (now the Ministry of Transportation and Infrastructure)*

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

- *Member of the Vancouver Island Section Executive Committee, 1999-2019*
- *ITE Parking Council & ITE Transportation Health Working Group*

**Family:** *spouse Shoshana Kort Litman & children Graham & Raviv*

## Things I like to do

*Bicycling; collecting antique atlases and geography books; walking our dog!*

## ITE INVOLVEMENT

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

My research investigates emerging transportation policy and planning issues. I frequently write related articles for CITE's *Transportation Talk* and *ITE Journal* and give presentations at conferences and workshops.

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

ITE members are my colleagues, people who struggle with solving day-to-day transportation problems such as traffic and parking congestion, traffic safety, inclusivity and affordability. They are a wonderful bunch!

### What was the first ITE event you attended?

I joined and started attending our section luncheon meetings in 1995. They took place in a dark basement room of an old hotel in downtown Victoria.

## GETTING TO KNOW YOU

### What attracted you to the transportation profession? Did you have another career in mind?

I became involved as a bicycle advocate and policy analyst who was interested in understanding the role that bicycling can play in an efficient and equitable transportation system. Over time my interests have expanded to consider a wider range of modes, impacts and goals. I did not actually plan this career—it grabbed me by the scruff of my neck. I could never have predicted that this would become my profession, but we deal with such interesting and important issues that I'm really glad that it happened.

What is the most daring thing you've done in your lifetime (that you're willing to see in print)?

When I was 18 I spent seven months backpacking through Central and South America, down to Southern Argentina and Chile. It was a terrific experience, although sometimes uncomfortable and lonely.

What is the last book that you read or are reading?

*The Englishman's Boy* by Guy Vanderhaeghe for my monthly book club.

What is your favourite mode of transportation?

I enjoy them all, but am particularly partial to ride my bamboo-frame bicycle.

## PROFESSIONAL ACHIEVEMENTS & PERSPECTIVES

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

I help communities solve problems, such as parking congestion, unaffordability and vehicle pollution.

Tell us about a project you're proud to have worked on

One of my studies on the costs of sprawl and benefits of compact urban development received considerable attention: "*Analysis of Public Policies that Unintentionally Encourage and Subsidize Sprawl*," in partnership with the *LSE Cities program* for *The New Climate Economy*. This report was cited by major media including, "*Try Jam Today: Policies To Slow Down Warming May Be More Attractive If Framed As Ways Of Speeding Up Growth*" in *The Economist*; "*The Cost of Sprawl: More Than \$1 Trillion Per Year, New Report Says*" in the *Wall Street Journal*; and "*The Steep Costs Of Living So Far Apart From Each Other*" in *The Washington Post*.

I am also very proud to have ridden on bus rapid transit (BRT) systems that I helped instigate in Mexico City and Cape Town, South Africa.

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

I love immersing myself in research when I have a general question or idea to explore, but I don't know what I will find. It's like digging for hidden treasure!

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

I hope that my research and writing contributes to creating a more equitable and sustainable world. I identify with Thomas the Tank Engine: I want to be useful!

If you could change one thing about the transportation practice, what would it be?

I would like to accelerate the shift from automobile-oriented to multimodal transportation planning, and from narrow analysis to more comprehensive planning.

What is the greatest opportunity you see for the field?

Transportation policy and planning decisions affect our lives and communities in countless ways, so there are always emerging issues. During my career these have included multimodal planning, transportation demand management, Smart Growth, parking management, healthy community transport planning, equity and affordability, the implications of new mobilities (e.g., e-bikes, autonomous vehicles and flying cars), and recently the effects of the Covid pandemic. It is interesting, challenging and rewarding to get involved in these issues while they are still new and developing.

# Examining the Impacts of the COVID-19 Pandemic on Modality Styles in the Greater Toronto Area

By Felita Ong, University of Toronto

Co-Authors: Patrick Loa & Khandker Nurul Habib, Ph.D., P.Eng, University of Toronto



*Felita Ong is the 2022 winner of CITE's John Vardon Memorial Transportation Scholarship recognizing excellence in a master's-level transportation program. This research was also presented at the CITE/QUAD 2022 Joint Annual Conference in Vancouver, BC.*

## Background

Like all aspects of daily life, travel behaviour has been significantly impacted by the COVID-19 pandemic. Aside from reductions in overall travel due to mobility restrictions implemented to curb the spread of the virus, early studies have observed a shift in modal preferences from public transit and ride-sourcing services to private vehicles.<sup>1,2</sup> The use of active modes, such as walking and cycling, has also been noted to have increased during the pandemic, particularly for non-commuting trips.<sup>3,4</sup>

Given the transformative nature of the pandemic and evidence of changes in modal preferences, the COVID-19 pandemic has likely impacted individuals' modality profiles—the set of travel modes an individual habitually uses.<sup>5</sup> Modality profiles have been suggested to influence both short- and long-term travel decisions.<sup>6</sup> Although they tend to be stable, modality profiles can be altered due to life events (such as a pandemic) and changes in attitudes and perceptions.

The objectives of this study are to

1. investigate how pandemic-related health measures have affected individuals' modality profiles,
2. understand whether any pandemic-induced shifts in behaviour would persist after the pandemic, and
3. identify policy recommendations to help mitigate mobility issues that have arisen due to the pandemic and anticipate future needs.

## Data & Methodology

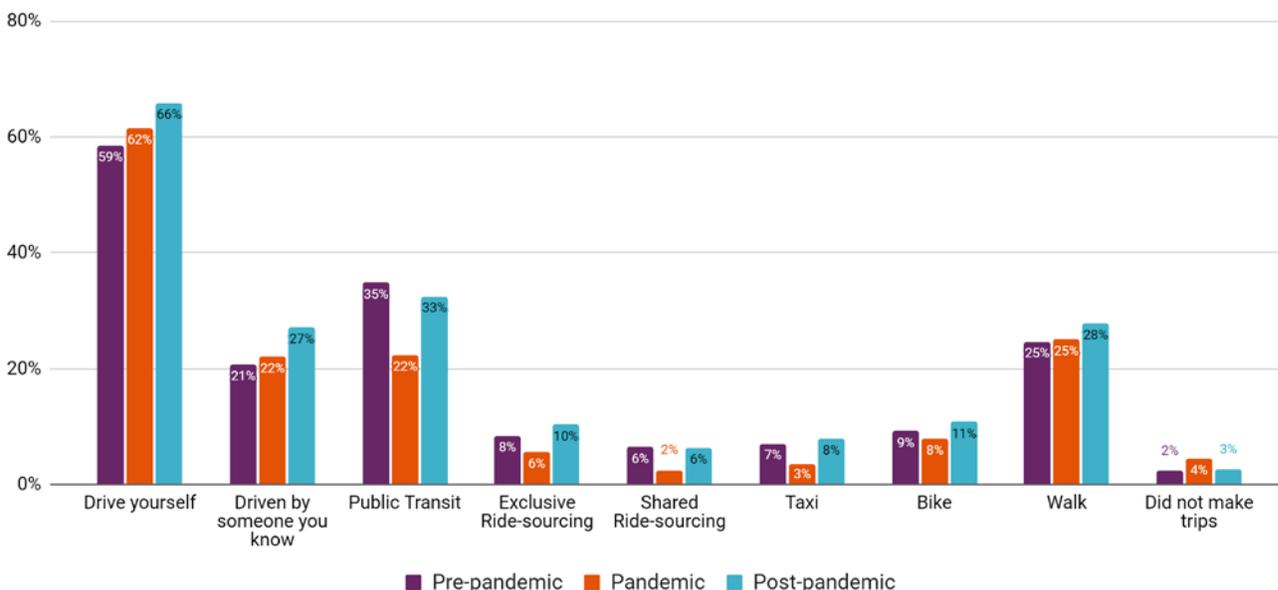
The data for this study were collected as part of a project aimed to understand the impacts of the COVID-19 pandemic on travel behaviour in the Greater Toronto Area (GTA). The project, named the Study into the use of Shared Travel Modes (SiSTM), investigated the impacts of COVID-19 on the use of shared travel modes (particularly ride-sourcing) through web-based surveys administered to residents of the GTA in July 2021.

The empirical model used is called latent class analysis (LCA), which is a statistical modelling technique used to identify sub-groups within a population.<sup>7</sup> These sub-groups, which show how preferences vary across different individuals, are not directly observed from the data (i.e., latent), but are identified based on patterns of responses to observed variables or indicators.

The objective of the LCA in this study is to segment individuals based on the mode (or combination of modes) they use to make non-commuting trips. The distribution of modes used by survey respondents can be seen in Figure 1. There are nine indicators—one for each of the modes shown, each of which is a binary variable representing whether a respondent uses a certain mode for non-commuting purposes. In this context, LCA probabilistically assigns individuals to classes (i.e., modality profiles) and determines class members' likelihood of using each of the nine modes. A separate LCA was conducted for each time period of interest: pre-pandemic, pandemic, and post-pandemic.

*Continued on page 41...*

**Figure 1.** Distribution of modes used for non-commuting trips for the pre-pandemic, pandemic, and post-pandemic periods



## Results and discussion

Based on the LCA, five profiles were identified in the post-pandemic period, while four profiles each were identified for the pre-pandemic and pandemic periods.

### Post-pandemic profiles

The probabilities of an individual choosing a mode (or a combination of modes) for non-commuting trips, given their membership in a modality profile, are shown in Table 1. Using socioeconomic information collected from the survey, each profile was characterized and compared to the sample as a whole (Table 2).

The post-pandemic profiles are as follows:

- **Strict Drivers** drive to make non-commuting trips. Strict Drivers are least likely to live in Toronto and tend to come from high-income households.

- **Private Mode Users** primarily use automobiles (either as a driver or passenger) or active modes such as walking and cycling. Individuals belonging to this class tend to be older, have lower levels of transit pass ownership, and work full-time hybrid during the pandemic.
- **Transit Users** are most likely to own a transit pass, live in Toronto, and come from lower-income households.
- **Multimodals** use a variety of modes to make non-commuting trips. Individuals in this class predominantly use public transit but also display a high probability of using on-demand services, active modes, and private vehicles. The Multimodals class has the highest share of females and unemployed persons.
- **Auto Passengers** are driven (either by a household member, taxi driver, or ride-sourcing driver); its members are relatively young and likely to be students. This class also has the highest share of persons working part-time during the pandemic.

*Continued on page 44...*

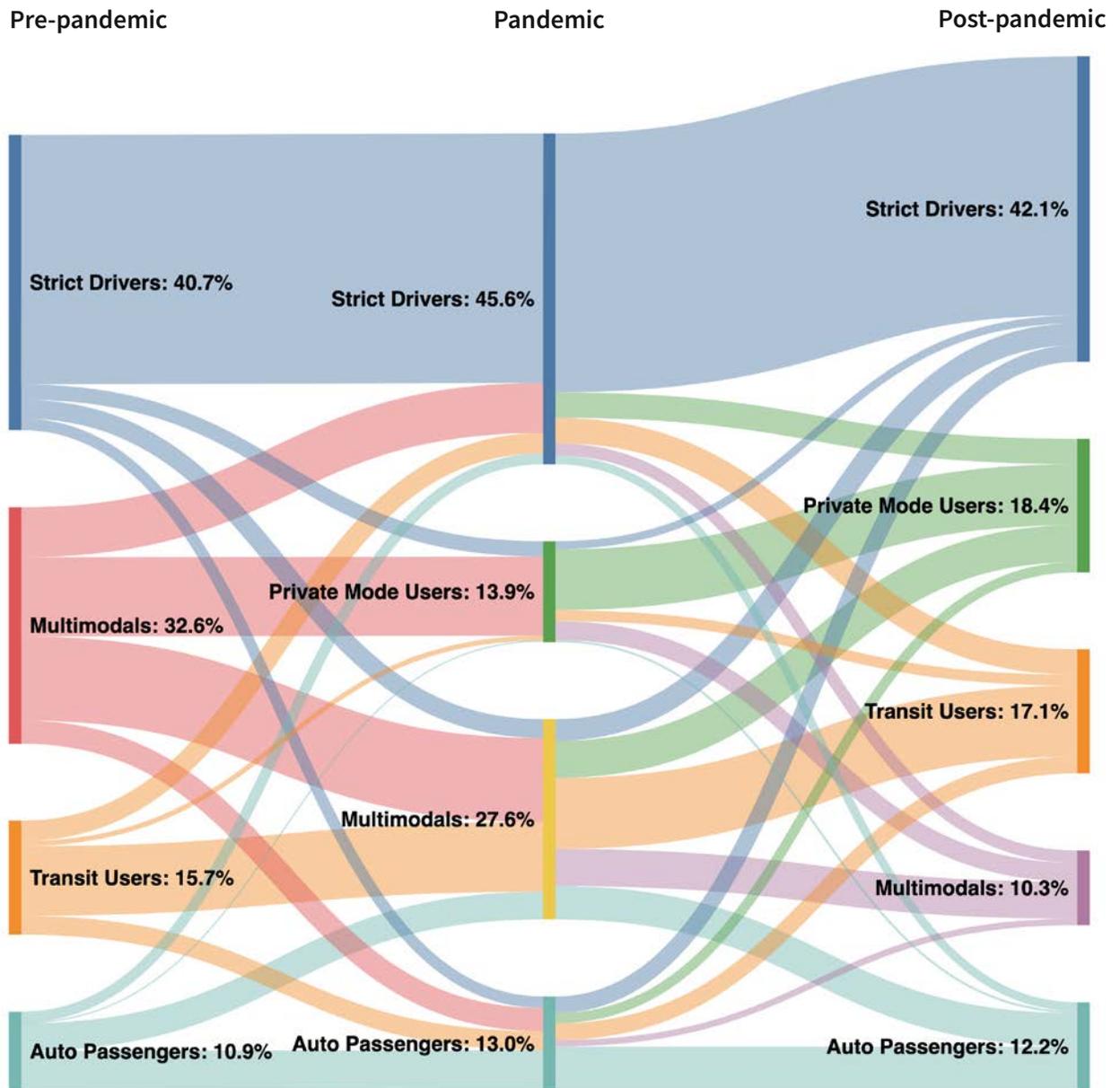
**Table 1.** Probability of using a mode for non-commuting trips after the pandemic, by modality profile

Class \ Mode	Drive yourself	Drive by someone you know	Public Transit	Exclusive Ride-sourcing	Shared Ride-sourcing	Taxi	Bike	Walk	Did not make trips	Size	% of sample
Strict Drivers	1.00	0.12	0.00	0.01	0.00	0.01	0.01	0.00	0.00	339	42%
Private Mode Users	0.64	0.28	0.36	0.02	0.00	0.06	0.30	1.00	0.01	148	18%
Transit Users	0.39	0.25	1.00	0.04	0.06	0.04	0.01	0.14	0.00	138	17%
Multimodals	0.53	0.58	0.86	0.56	0.40	0.54	0.37	0.69	0.00	82	10%
Auto Passengers	0.00	0.54	0.00	0.25	0.09	0.04	0.07	0.00	0.20	99	12%

**Table 2.** Characteristics of the post-pandemic modality profiles compared to the sample

Category	Characteristic	Sample	Strict Drivers	Private Mode Users	Transit Users	Multimodals	Auto Passengers
Personal and household characteristics	Average age	43.33	45	48.3	40.17	42.22	35.45
	Has a driver's license	86%	99%	82%	71%	74%	78%
	Has access to private vehicle	87%	98%	85%	72%	77%	82%
	Owns transit pass	41%	30%	31%	58%	54%	59%
	Average number of household vehicles	1.4	1.64	1.23	1.11	1.28	1.37
	Is a student	20%	15%	10%	28%	25%	40%
Gender	Female	59%	55%	60%	64%	68%	53%
	Male	40%	44%	40%	34%	31%	46%
	Prefer not to answer / non-binary	1%	1%	0%	2%	1%	1%
Home location	Toronto	45%	33%	51%	60%	59%	46%
	Peel	23%	29%	18%	17%	19%	19%
	York	18%	20%	15%	14%	15%	22%
	Durham	5%	7%	5%	4%	0%	3%
	Halton	9%	11%	10%	6%	7%	10%
Employment status	Not employed	12%	8%	12%	14%	17%	16%
	Part time at home	6%	4%	7%	12%	5%	7%
	Part time at workplace	8%	6%	8%	7%	11%	16%
	Part time hybrid	1%	1%	1%	2%	2%	1%
	Full time at home	21%	23%	20%	21%	22%	13%
	Full time at workplace	31%	38%	21%	28%	23%	33%
	Full time hybrid	4%	3%	9%	4%	4%	4%
	Other	17%	18%	22%	12%	16%	10%
Household income	< \$50,000	27%	21%	29%	39%	26%	32%
	\$50,000–150,000	54%	60%	48%	45%	52%	53%
	> \$150,000	10%	10%	11%	9%	13%	8%
	Prefer not to answer	9%	9%	12%	6%	9%	7%

**Figure 2:** Transitions between pre-pandemic classes to pandemic classes and between pandemic classes to post-pandemic classes



## Pre-pandemic and pandemic profiles

The LCA resulted in relatively similar profiles in the pre-pandemic and pandemic periods, with the exception of two profiles: Transit Users and Private Mode Users. The Transit Users profile is only present in the pre-pandemic period while the Private Mode Users profile emerged in the pandemic period.

## Transitions between profiles

To examine shifts in modality profiles between the pre-pandemic, pandemic, and post-pandemic time periods, the probability of transitioning from each pre-pandemic class to each pandemic class and subsequently the probability of transitioning from each pandemic class to each post-pandemic class are computed for every individual in the sample. The results of the transition analysis are summarized in Figure 2.

Figure 2 shows that modality profiles have been transformed due to the pandemic and that some of these changes will remain post-pandemic. In comparing the pre-pandemic and pandemic profiles, it can be seen that individual modes such as private vehicles, walking, and cycling played a more important role during the pandemic, while the opposite is true for shared modes such as public transit and ride-sourcing. A majority of pre-pandemic transit users also became multimodal during the pandemic, suggesting that some riders continued their use of public transit throughout the pandemic, albeit less prominently. This indicates that pre-pandemic transit users reduced their reliance on transit services by using other means of travel.

Post-pandemic, the role of private vehicles and active modes remain critical for non-commuting

purposes, given that the Private Mode Users profile remained. Similarly, a return to public transit comparable to pre-pandemic levels can be expected given that 17% of the sample are post-pandemic transit users while 16% were pre-pandemic transit users; however, overall post-pandemic ridership still depends on the frequencies with which riders use transit, which are not captured in this analysis.

## Policy implications

This study shows that the increase in prominence that active modes gained as a result of the pandemic, particularly for non-commuting purposes, is found to remain post-pandemic. During the pandemic, many municipalities temporarily rededicated road space to facilitate the use of active transportation. For instance, in the City of Toronto, the ActiveTO campaign was launched early in the pandemic to support “safe cycling and walking trips to essential services”.<sup>8</sup> To maintain and encourage the use of active modes post-pandemic, municipalities could make these infrastructure changes permanent and expand existing active transportation infrastructure, including cycling lanes and bike-sharing and micro-mobility services. To promote walking as a means of transportation, municipalities could ensure that sidewalks are walkable and meet accessible standards. In the long run, municipalities could consider implementing people-centric urban designs or concepts, such as the 15-minute city,<sup>9</sup> to increase the attractiveness of active travel within urban areas. Doing so could potentially revert the greater role that private automobiles have played during the pandemic and introduce long-term shifts to active modes.

This study also reaffirms a return to shared modes after the pandemic. As a rebound in public transit use is expected, it is critical to institutionalize proper health and safety measures on board vehicles and at transit stops or stations to regain riders' confidence in public transit services. This is especially important given that evidence suggests a higher perception of risk of virus infection in public transit during the pandemic.<sup>10</sup> The post-pandemic profiles also suggest a greater likelihood of lower-income individuals being transit users. To ensure that this population segment has continued access to transit, agencies could implement fare subsidies and reduce financial barriers to using public transit services. Increasing the supply of transit services to reduce crowding along high-demand routes or at peak travel times could also help recover public transit ridership as restrictions are eased. Additionally, the results indicate that some transit users rely solely on this mode to conduct non-commuting trips, particularly for longer-distance trips. Reallocating supply to areas with a greater reliance on transit services and partnerships with Transportation Network Companies (e.g., Uber, Lyft) could also contribute to equitable access to transit and ultimately help ensure that those who have no alternative means of transportation are not disproportionately affected by future pandemics.



**Felita Ong** is a Master of Applied Science student at University of Toronto. Her research is on mode choice modelling, particularly in the context of emerging modes. She also has over two years of transportation planning experience through her work in both the public and private sectors. Felita strives to obtain a data-driven understanding in travel behaviour to help build sustainable communities.

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**CITE extends a warm welcome to these new Canadian ITE members!**

**Connor Reginald Aalders**, Dalhousie University, Halifax, NS

**Hashaam Abid III**, Bend All Automotives, Cambridge, ON

**Mohammad Amir Ahmadian Shahreza**, York University, Toronto, ON

**Nael Alsaleh**, Ryerson University, Toronto, ON

**Rupinder Arora**, University of Regina, Regina, SK

**Alireza Bagheri Chimeh**, Stantec, Markham, ON

**Raha Bahrehdar**, City Of Toronto, Toronto, ON

**Emily Bardutz**, University of British Columbia, Vancouver, BC

**Elmira Berjisian**, University of British Columbia, Vancouver, BC

**Ken Bryson**, Miovision Technologies Inc., Kitchener, ON

**Sarah Cannon, RPP**, City Of Toronto, Toronto, ON

**Natalie Chan**, City Of Toronto, Toronto, ON

**Aditi Deb Chowdhury**, York University, Toronto, ON

**Shoummo Barua Chowdhury**, Concordia University, Montreal, QC

**Jacqueline Connors**, UNB, Fredericton, NB

**Braden Croin**, University of North British Columbia, Prince George, BC

**Aarzo Dhanani**, C.F. Crozier and Associates, Toronto, ON

**Raphael Dumas**, City Of Toronto, Toronto, ON

**Ali Essa**, University of British Columbia, Vancouver, BC

**Pirooz Ghaleh**, University of Waterloo, Waterloo, ON

**Maryam Hasanpour**, Ryerson University, Toronto, ON

**Braden Huggett**, University of Victoria, North Saanich, BC

**Tyson Johnson-Campbell**, University of Waterloo, Toronto, ON

**Don Pubudu Damsara Kapurubandarage**, University of Calgary, Calgary, AB

**Ali Khaksar**, York University, Toronto, ON

**Aarish Khan**, University of Windsor, Windsor, ON

**Matt Lee, RPP**, City Of Toronto, Toronto, ON

**Shelley Lynn**, University of Manitoba, Winnipeg, MB

**Seyed Mehdi Meshkani**, Ryerson University, Toronto, ON

**Ghazaleh Mohseni Hosseinabadi**, York University, Toronto, ON

**Albert I. Moore, E.I.T.**, New Brunswick Department of Transportation and Infrastructure, Fredericton, NB

**Nathan Bart Morhart, E.I.T.**, Saskatchewan Ministry Of Highways And Infrastructure, Saskatoon, SK

**Ryan O'Connor**, City Of Toronto, Toronto, ON

**Stephen Oliver**, Stantec Consulting Ltd., Waterloo, ON

**Miguel Pampolina**, University of British Columbia, Vancouver, BC

**Arundeepp Parmar**, York University, Brampton, ON

**Carl Puddy**, Miovision Technologies Inc., Kitchener, ON

**Raymond Ren**, Coquitlam, BC

**Racheal Saunders, P.Eng.**, City Of Toronto, Toronto, ON

**Harmon Sekhon**, University of British Columbia, Langley, BC

**Mohammadsina (Sina) Semnarshad**, IBI Group, Toronto, ON

**Ahmad Sear Sultani**, Ryerson University, Ajax, ON

**Ying Sun**, Transportation Planner, Markham, ON

**Islam Taha**, City Of Toronto, Toronto, ON

**Vanessa Umutoni**, York University, Toronto, ON

**Jeff Wach**, University of Manitoba, Winnipeg, MB

**Elyse Catherine Wong**, University of British Columbia, Burnaby, BC

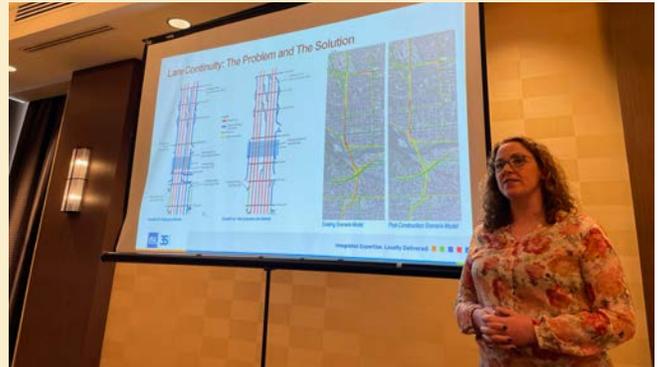
**Shirley Wong**, University of Toronto, Toronto, ON

**Jenna Wu**, EXP Service, Thornhill, ON

**Dustin Yanke**, Town of Coaldale, Coaldale, AB

## Southern Alberta Section

In May and June, the Southern Alberta Section (ITE SA) held two additional luncheons. Both events were well attended with the excitement of in-person events still going strong. The May event involved year-end project (i.e. capstone project) presentations by the student chapter to the membership. Both presentations were on Calgary Transit's Electric Bus Pilot Project that is expected to launch this Fall! Each group's objective was to develop a block schedule for the program that used 14 electric buses while maximizing ridership and staying within the battery capacity of the buses. The June event included a presentation by Alana Getty Somers, P.Eng. from ISL Engineering. She shared the details of and lessons learned from two major projects that ISL has been working on: Crowchild Trail Short-Term Improvements and 17 Avenue SE Stampede Crossing.



For our upcoming July event, we have planned a bicycle tour. The tour will take attendees on a trip around downtown Calgary to see the recent active transportation network improvements. With various stops planned, we will discuss specific design choices and their advantages and drawbacks. We plan to end the tour with some ice cream and informal networking!



At the CITE conference in Vancouver, ITE SA was presented with the Outstanding Section Award for 2021! We want to thank our membership for the continued support and regular attendance at our events. We hope that we can continue to improve throughout 2022 and look forward to more in-person events!



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- Traffic Accommodation Plans
- Traffic Signal Design



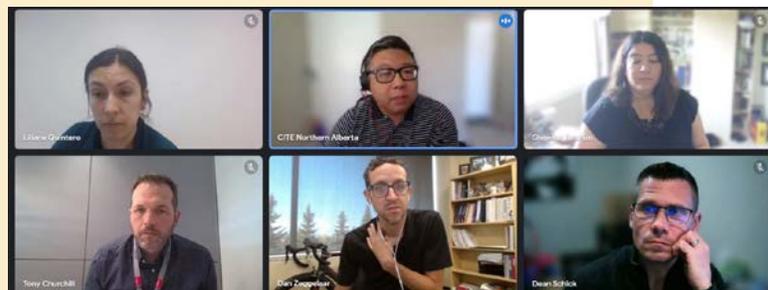
## Northern Alberta Section

The CITE Northern Alberta Section continued to hold webinars between May and June in 2022. The webinar held in May was focused on “Moving Beyond Theory: How to Apply and Integrate GBA+ Practices Within Your Organization” presented by Chanel Grenaway and Hannah Rosen. Chanel is currently the lead of Chanel Grenaway and Associates Inc. to support organizations to improve their equity and inclusion outcomes through equity assessments, training and knowledge building, community engagement, and action planning. Hannah is an intersectional gender equity specialist with experience applying GBA Plus in the private, public, and non-profit sectors. The goal of the webinar was to deepen an understanding of the utilization of GBA+ and demonstrate how to integrate it into current transportation projects. Participants learned how GBA+ could be used to uncover barriers to accessing transportation, build practices and policies into organizational structures to reduce barriers and biases in the workplace, and explore new ways of thinking and working that centre the experience of historically marginalized and underserved communities.

A panel discussion was held in June on the topic of Speed Limit Reductions in West Canada. Five panelists from across western Canada came together to discuss how they initiated speed limit changes, established methodologies and processes to make the changes, and implemented speed limit reduction measures, as well as what kinds of findings and lessons learned they obtained. The following panelists contributed to the discussion:

- Dean Schick, Transportation Manager with the City of St Albert;
- Daniel Zeggelaar, Transportation Project Manager with ISL Transportation Group in Edmonton;
- Shewkar (Sh-wee-car) Ibrahim (Eb-ra-heem), Manager of Safe Mobility Engineering with the City of Edmonton’s Safe Mobility Section;
- Tony Churchill, Senior Traffic Engineer with the City of Calgary; and,
- Liliana Quintero, Senior Transportation Engineer with the City of Vancouver.

NACITE will be taking a break over the summer from member events and will be incorporating in-person events starting in September 2022. We hope all our members enjoy their summer breaks and get in some vacations!



## Saskatchewan Section

The Saskatchewan Section hosted their annual Spring Session jointly with the Manitoba Section this year on April 26th. The virtual event was well attended by 76 participants. The presentations included a variety of presenters with topics ranging from the differences in planning and design practices between the two Provinces to stakeholder engagement as well as recent active, public, and rural transportation planning projects. Following the presentations, the Saskatchewan and Manitoba Section's used the Wonder.Me platform to host virtual discussions that allowed participants to join at different tables. The Saskatchewan Section would like to thank all the presenters and participants for making the session a success and for all their support for the Section's activities.

This year the Saskatchewan Section was awarded the CITE 2022 Section Momentum Award. The Saskatchewan Section has been actively improving the quality and variety of its programs and events.

The Saskatchewan Section is actively planning an in-person Fall Technical Session located in Saskatoon for mid-September. Additional events for 2022 are actively being planned, so watch your emails and check our Section's Facebook page for details about upcoming events and activities: [@ITEsaskatchewan](#)



Section President Destiny Piper accepting the Section Momentum Award on behalf of the Saskatchewan Section from CITE Vice President Pedram Izadpanah

## Manitoba Section

The summer was off to a great start for a small delegation of the CITE/CARSP 2023 Local Arrangements Committee who were able to attend the conference in Vancouver. Thank you to the Vancouver LAC for hosting a fantastic conference and welcoming everyone back together in person after so long. In Vancouver, we had a booth setup and ran a raffle for a carving from the Winnipeg Art Gallery to help promote next year's conference. ITE Manitoba wants to celebrate all the teams that participated in the traffic bowl and send a big congratulations to the University of Manitoba ITE Student Chapter for taking home the trophy once again. We are taking a break from events in the summer and look forward to planning a technical tour and other events in the fall.



Mark Hearson and Rebecca Peterniak, Co-Chairs of the Winnipeg 2023 CITE/CARSP Joint Conference, meet with future attendees in Vancouver



[community.ite.org](http://community.ite.org)

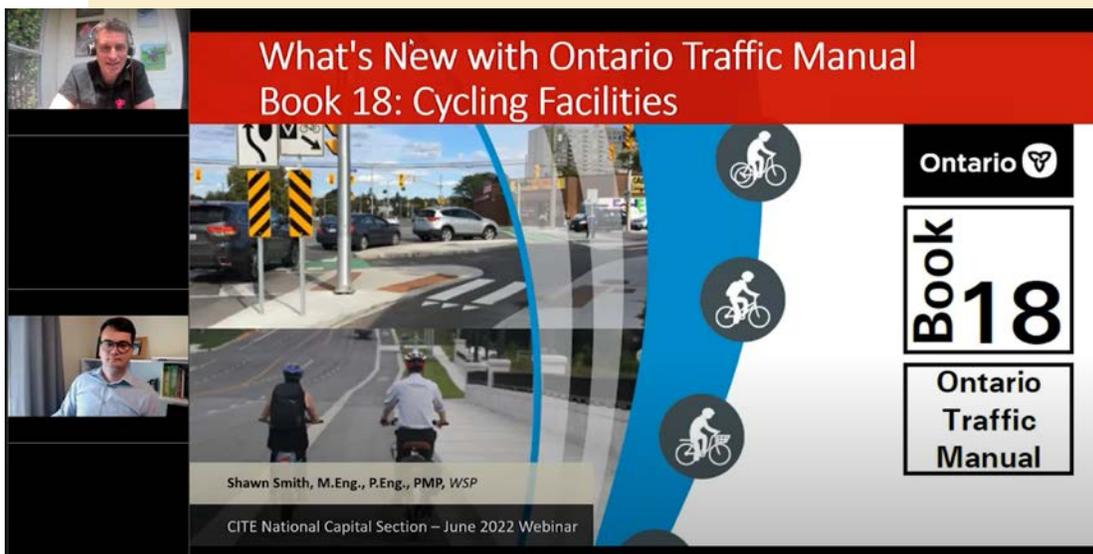
## National Capital Section

Moving from spring into what has so far been a beautifully temperate summer in the nation's capital, the National Capital Section (NCS) was able to get outside while giving back. In May, the NCS Executive took part in Ottawa's Cleaning the Capital Program. This initiative was a good volunteering opportunity for team building, where members of the executive signed up to clean pre-selected boulevards and active transportation facilities of litter on a beautiful, sunny day in the capital. The intention moving forward will be to participate in this program annually, and to continue to invite any of the general membership who are interested in joining the fun.

In June, the NCS held another technical webinar, this time presented by one of our own executive, Shawn Smith our section Vice President. Shawn provided an engaging overview of the new elements in Ontario Traffic Manual Book 18: Cycling Facilities. As co-author of the new

edition and a trainer on the material, he was able to offer insight into the content's rationale and background, and to provide numerous real-world examples of various evolutions of cycling facilities and instantiations of the new edition's design recommendations. The webinar was one of the NCS' best-attended to date, and the question and answer period was spirited. We are lucky to have such a knowledgeable and talented presenter on our executive team!

In July, the NCS executive will be on summer hiatus from which we are hoping to make a strong return with a fun and engaging, outdoor, in-person social event before summer ends, conditions permitting.



## Toronto Section

As the ITE Toronto section continues to transition from virtual to in-person and hybrid events, we are looking towards the future to find new ways to provide opportunities for professionals and students in our section to network and learn more about the transportation industry.

On April 1, we hosted a virtual event with our 2021 Project of the Year winners, the City of Toronto and IBI Group. Our members learned about the CaféTO program and the 2021 Café Guidelines that aided local restaurants in staying open during the COVID-19 pandemic shutdowns. Event speakers **Astrid Greaves** (IBI Group), **Jodi Callan** (City of Toronto), and **Matt Colwill** (IBI Group) presented this innovative project that provided the framework for the seasonal transitioning of curb lanes and parking spaces into restaurant patio spaces.

We held our first in-person event in the last two years on June 14; our 2022 Spring Luncheon provided a welcome opportunity for our members to dine and learn more about leading-edge issues in the transportation profession. **Sabina Filipescu** and **Sebastian Policht** from the Ontario Ministry of Transportation's Road Safety Program Development Office presented recent regulatory changes that introduce an Administrative Penalties framework to increase participation and adoption of municipalities using road-safety-focused camera-based enforcement programs, such as streetcar cameras, school bus cameras, red light cameras, and automated speed enforcement. **Brendan McEwan** (Dunsy Energy Consulting) presented on electric vehicle-ready residential parking requirements to ensure households have a simple process to implement an electric vehicle charger at their assigned parking space as they adopt electric vehicles. A big thank you to our event sponsors for helping make this in-person event possible.



ITE Toronto Project of the Year Presentation: CaféTO



ITE Toronto 2022 Spring Luncheon Sponsors



Left & Below:  
ITE Toronto 2022 Spring Luncheon



In addition to our ITE Toronto events, many of our members and executives attended the CITE/QUAD 2022 Joint Annual Conference in Vancouver, BC. The ITE Toronto Section wanted to thank the City of Vancouver, the local arrangements committee, and all the event sponsors, presenters, and volunteers for putting on an excellent in-person conference.

If you haven't already, please visit our website ([itetoronto.ca](http://itetoronto.ca)) and social media pages to find out more about our past and upcoming events. Thank you to all our attendees, speakers, volunteers, and sponsors. On behalf of the ITE Toronto Section, we wish everyone safety and the best of health.



ITE Toronto Section Executive at the  
CITE/QUAD 2022 Joint Annual Conference

## Atlantic Provinces Section

On June 8th, nearly 40 transportation professionals from across Atlantic Canada gathered in Halifax for the first time in exactly 946 days to drink beer and throw axes (yes, you read that correctly). Our first ever CITE Atlantic Provinces Axe Throwing Invitational was a huge success given that a) everyone seemed to have a great time and b) no one got hurt!

In the end, it was **Mathieu Melanson** (City of Dieppe) outlasting **Hanna McBride** (Halifax Regional Municipality) in an edge-of-your-seat final match to claim ultimate bragging rights as Atlantic Canada’s Best Axe Thrower who Simultaneously Understands the Definition of AADT! Congratulations Mathieu! We’d also like to give a big shout out to [HaliMac Axe Throwing](#) for being very accommodating and entertaining hosts for this event. Next time you’re in Halifax with time to spare and steam to blow off, we’d strongly encourage you to stop in and check them out.



Mathieu Melanson – Axe Throwing Champion!

As if the excitement of axe throwing wasn’t enough, an even bigger gathering of 75 transportation professionals showed up at Dalhousie University on June 9th to mark the in-person return of our Spring Technical Session. This jam-packed day of knowledge sharing, networking, and occasional heckling featured nine technical presentations, six poster presentations (by DalTRAC students), and a walking tour of the nearby Spring Garden Road Revitalization project.

The fact that nobody was caught napping during the afternoon session was a testament to just how interesting and engaging each of these presentations were. Well done to all presenters and a big THANK YOU to our event sponsors **DalTRAC, Dillon, EXP, Englobe, WSP, and Nova Scotia Public Works.**



DalTRAC students presenting their research during poster sessions.

Finally, as a token of our appreciation for coming out to support our first in-person event in more than 2½ years, all attendees were gifted an ITE-branded YETI insulated tumbler at the end of the technical session! These tumblers proved to be a very hot commodity. If you missed out, you can't say you weren't invited!

Plans are already in the works for the return of our Fall Technical Session in Fredericton this November. We will also soon be seeking nominations for the Secretary/Treasurer position on our Executive. Stay tuned for more details on each of these items in the coming weeks!

P.S. If you're keen to learn more about the Spring Garden Road project, check out the following link: [halifax.ca/about-halifax/regional-community-planning/streetscaping/spring-garden-road-enhancements](https://halifax.ca/about-halifax/regional-community-planning/streetscaping/spring-garden-road-enhancements)



CITE Atlantic Section Executive (L-R: Mark Gunter, Adam Lanigan, Tanta Davis, Greg O'Brien, Courtney Pyne) with ITE-branded YETIs.



Elora Wilkinson shares details about the Spring Garden Road Project during the lunchtime walking tour.

## University of Manitoba

The University of Manitoba student chapter is excited to have completed another academic year and is looking forward to enjoying the summer break. To celebrate the end of exams, student chapter members went to play some minigolf, then stopped at a nearby restaurant to enjoy some food and drinks.

Our student chapter had four members attend the CITE Conference in Vancouver. Preceding the conference, three of our students attended the Student Leadership Summit (SLS) hosted by the University of British Columbia. It was a great opportunity to meet students from across Canada and get insights from professionals on a variety of topics. Our attendees also enjoyed the sessions, technical tours, and social events at the CITE conference. One of our members, Navoda Rillagodage, gave a presentation at the conference, while our other three members competed in and won the traffic bowl competition.

Our traffic bowl team is very excited to represent the Canadian District at the ITE International competition in New Orleans! Our chapter was also the recipient of the Student Chapter Momentum Award, which recognized our efforts during remote learning. Thank you to the UBC SLS organizers and CITE organizing committee for a great conference.



## York University

The ITE York University Student Chapter has been very busy wrapping up the school year. During the final semester, we held in-person and online events including our yearly Industry Night, AGM Luncheon, Monthly Seminar Series, and our first-ever student hackathon.

### Industry Night

Our famous Industry Night event was hosted virtually on February 8th in collaboration with the York University Geomatics Club and the Civil Engineers of Lassonde. The event gathered over 50 passionate engineering students to explore prospective employment opportunities with local public and private engineering organizations. The event included industry speakers and networking time for students to speak with potential employers. Special thanks to our Platinum sponsor EllisDon; Gold sponsor GeoVerra; and Silver sponsors Kenaidan, Tulloch, BA Group, GEOSOLV, WSP, and Association of Ontario Land Surveyors for their donations and participation.

### 14th Annual Joint CITE Section Student Presentation Competition

On February 23rd we had two students, Adonai Garcia and Tanvir Chowdhury (former chapter president), participate in the 14th Annual Joint CITE Section Student Presentation Competition. Adonai presented “A Capacitated Electric Cargo Bike Routing Problem with a

Single Depot”, and finished first for graduate students. Tanvir presented on the “Impact of Truck Platooning on Passing Sight Distance of Two-Lane Highways in North America”, and finished second in the graduate category. We would like to congratulate both our members on their achievements!

### Hack ITE York U 2022

From Friday, May 13th to Sunday, May 15th we celebrated Hack ITE York U, our first official hackathon in person. Over 36 hours were spent with more than 40 students, 10 staff members and 6 sponsors (SARIT, City of Toronto, Region of Peel, BEST, MPN3D, Lassonde School of Engineering) to combine technical expertise and solve actual challenges to improve micro-mobility in our cities. Participants created, coded, and collaborated to build their projects and solve the challenges proposed by SARIT, the City of Toronto, and the Region of Peel.

Right: Testing the Sarit Vehicles at Hack ITE York U 2022

Below: York University Students at Hack ITE York U 2022



## CITE/QUAD 2022 Joint Annual Conference

In late May and early June, we had 12 students attend the CITE conference in Vancouver, BC and we received the CITE Outstanding Student Chapter Award.



## CTRF - Montreal

We also had a group of students attend and present at the 57th Annual Conference of the Canadian Transportation Research Forum (CTRF) that took place in Montreal. This year's topic was "Transportation and Supply Chains in Unprecedented Times". Presentations were given by Adonai García, Artem Solovey, and past members Ucchas Saha and Yashar Zarrin Zadeh.



## Elections 2022-2023

On June 27th, we celebrated our annual elections to select the next executive members who will lead the ITE York U Student Chapter during 2022 and 2023. The new executive members are:

- Adonai Garcia - President
- Prateek Jain - Vice-President
- Ginelle Aziz - Secretary
- MohammadAmir Ahmadian - Treasurer
- David Tran - Events Coordinator
- Abduljamal Lawal - Undergraduate Liaison

We thank the past executive members for guiding us through the whole process and paving the road to succeed as a student chapter. Thank you all and we wish you the best on your professional and personal goals.

## More Information

Please let us know if you would be interested in speaking at one of our seminars/events or if you are interested in sponsoring us. You can email us at [iteyorku@gmail.com](mailto:iteyorku@gmail.com) or visit us on one of our social media pages (@ite.yorku).

York University at the 57th Annual CTRF Conference

## Quebec Student Chapter

### Monthly Meetings

There is a monthly meeting of the chapter in order to discuss the challenges in transportation engineering and how they could introduce this part of civil engineering to the undergraduate students as well as to inform them of new developments in the field. Furthermore, there is a discussion about the latest publications and technology in the market.

### Organizing a VISTRO and VISUM Workshop in Montreal

The chapter organized a VISTRO and VISUM workshop for students who registered for the urban transit system and the public transportation. During the workshop, graduate students as well as undergraduate students were invited to participate. A total of 45 students took part in the event. During the workshop, there was a total of 14 hours of instruction.

In the PTV Vistro workshop, students learn intelligent traffic signal optimization at individual intersections, for districts, or across entire network.

In the VISUM workshops the ideal public transport planning software: they learned key figures on user experience (travel

times, frequency, walking times, fares), as well as operational aspects and costs (operating times, performance kilometres, empty runs, vehicle requirements, depot use). The students also evaluated network and timetable variants and operating concepts. By combining strategic transport demand models with operational assessment tools, they got an idea about decision making.

### Lunch and Learn with Norda Stelo Company and Hesion

The chapter organized a meeting in cooperation with Norda Stelo Smart mobility department and Hesion company, which is actively working in the province to introduce smart parking solutions as a novel technology.

CITE Quebec Student Chapter Lunch & Learn



## **Presentation in Next-Generation Cities Institute**

The chapter also actively participated in Next-Generation Cities Institute. The institute combines over 200 researchers within 14 university research centres representing disciplines ranging from science and engineering to the humanities and arts. It will provide a framework for the interdisciplinary collaboration uniquely required for next-generation city planning. In this event, the chapter members had a presentation about “Connected Cities - Connected Vehicles: Solutions to the Socio-Economic and Environmental Challenges of the Next-Gen City”.

## **Publications by the chapter’s members:**

Members of the chapter published two manuscripts as a result of their work.

The first study is entitled “Estimating Layers’ Structural Coefficients for Flexible Pavements in Costa Rica Road’s Network Using a Full Bayesian Markov Chain Monte Carlo Approach” and was published in the International Journal of Pavement Research and Technology. According to this article, Pavement layers’ structural coefficients play a crucial role in managing flexible pavements using AASHTO 1993 design methods to create deterioration models for the pavement’s structural capacity.

The second manuscript is entitled “Simplified Method for Predicting Pavement Treatment

Effectiveness: Case Study of Montreal Road Network” and is published in ASCE Journal of Transportation Engineering, Part B: Pavements. Based on this paper, Most initial implementations of pavement management systems face limited or unavailable local predictions of treatment effectiveness. This means decision makers either are forced to borrow benchmark values from elsewhere or should wait at least 5 years until time series data are collected, enabling them to measure effectiveness locally. This research proposes an initial approach to help agencies predict the effectiveness of maintenance interventions with limited data while data collection is underway and traditional time-series analysis is not yet available. This study contributes to improving asset management decision-making tools for roads and is extensible to other types of infrastructure, especially those under municipalities and railway systems.



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