















# 2023/24

## Who We Are

The Transportation Association of Canada (TAC) is a neutral forum for organizations with interests in roads, highways and urban transportation.

Through TAC, those organizations and their staff **share ideas and exchange information** on technical transportation issues. TAC helps its members build knowledge and pool resources to **tackle transportation challenges** that are important to them.

Member organizations include all levels of government, private companies, academic institutions, and other associations.

A **network of hundreds of transportation professionals** from TAC's member organizations volunteer to guide the Association's work in safety, mobility, environment and climate change, infrastructure and asset management, technology, and workforce development.

TAC doesn't set standards, but **develops technical guidance** for planning, designing, constructing, managing, operating, and maintaining road, highway, and urban transportation infrastructure, systems and services. The guidance promotes good practices and encourages their harmonization across Canada.

TAC is a non-profit organization funded by membership dues and the sales of its products and services.



Transportation that makes Canada safe, healthy, and prosperous



### **Our Mission**

Working together to share ideas, build knowledge, promote best practices, foster leadership, and encourage bold transportation solutions

## President's Message



To my colleagues and fellow members of TAC, greetings from the office of the President. As a longtime supporter of this Association, I value this network and its commitment to bringing together the expertise of transportation practitioners from across the country. Over the years, I've taken on different volunteer roles for TAC and I'm now very proud to have the opportunity to contribute as a senior leader, working with our Board of Directors.

#### These are exciting times for the Association.

Our membership is expanding, our technical resources are improving, and we have more people getting involved in our councils, committees, and collaborative projects. More and more, we're seeing how much members appreciate TAC as a forum to share information and build knowledge, which is one of the Association's fundamental purposes. And TAC isn't just growing, it's evolving. Our work relies on – and is made better by – welcoming new perspectives, skill sets, and innovations to the shared business of transportation. That's why we've been actively encouraging high-tech companies, software developers, telecom providers, and other professional firms that offer products and services relevant to roads, highways, and urban transportation to get to know our Association and the benefits of membership.

Our growth and evolution will be clear this September when we gather in Vancouver for the 2024 TAC Conference & Exhibition. Our theme is *"Technology and Transformation"*, and we'll explore how technological advances are giving us new tools to build and operate transportation systems. We'll also have a variety of sessions that relate to TAC's core focus areas, an extensive exhibition, and interesting technical tours. There will be no shortage of opportunities to share and learn, and I look forward to seeing many of you there.

Peter Hackett President

## TAC isn't just growing, it's evolving.

## Executive Director's Report

The year 2023/24 has wrapped up and, once again, it's impressive to look back at the Association's achievements made possible thanks to the contributions of members, volunteers and staff.

A full slate of familiar activities rolled out as usual. Among those:

- About **100 technical meetings** were organized, attracting thousands of attendees
- Over 40 technical projects progressed
- Three **new publications** were released, including TAC's first-ever emerging practice briefing
- Webinars and training courses offered learning opportunities for about 2,000 practitioners
- Over 20 awards were conferred on deserving recipients
- The **library collection grew** with dozens of additions to the catalogue
- Across a variety of platforms, TAC communications reached several thousand contacts

A highlight of the year was convening the 2023 TAC Conference & Exhibition in Ottawa. We were delighted to join our local hosts in welcoming a record-breaking number of delegates to the nation's capital. The program was packed with papers, presentations and technical tours. The exhibition hummed with activity. The support of sponsors was outstanding. Best of all, the energy and enthusiasm of delegates to share knowledge and learn from each other was inspiring.

Unfortunately, TAC was a victim of fraud last fall when our security systems were breached, resulting in some payments being diverted to false accounts.



Although most funds were recovered, the incident highlighted the need to protect ourselves against vulnerabilities. An independent cybersecurity audit was conducted, and a series of recommendations are being implemented to improve our security posture going forward.

Despite that incident, TAC continues to be in good health overall, as reflected in our key performance measures presented in this report. Our diversified revenue is sufficient to fund regular operations, and the Board has established reserves for special initiatives. We are fortunate to have a loyal membership and active community engaged in our work. We see good levels of activity with respect to our annual conference and projects.

TAC's continued success is a joint effort of members, volunteers, the Board of Directors, and staff. We appreciate your involvement and consider it an honour to serve and support the network.

Dr.Sarah We<mark>lls</mark> Executive Di<mark>rector</mark>

## Board of Directors

TAC is governed by a Board of Directors elected from all levels of government, the private sector, and other organizations. The Board sets the strategic direction for our Association and oversees TAC's volunteer structure.

#### Executive

#### PRESIDENT & CHAIR

#### Peter Hackett

Deputy Minister Nova Scotia Public Works

#### VICE PRESIDENT MEMBERS-AT-LARGE

#### **Scott Stewart**

Chief Executive Officer Scott Stewart & Associates

#### VICE PRESIDENT F/P/T

#### **Bryce Stewart**

Deputy Minister Alberta Transportation and Economic Corridors

#### TREASURER

#### **Michael Thompson**

General Manager, Infrastructure Services City of Calgary

#### VICE PRESIDENT MUNICIPAL

#### Lon LaClaire

General Manager, Engineering Services City of Vancouver

#### SECRETARY

#### Sarah Wells

Executive Director Transportation Association of Canada

#### **Other Directors**

| Brad Anguish              | Executive Director, Public Works                                       | Halifax Regional Municipality                                  |
|---------------------------|--|--|
| Jim Berezowsky            | Director of Public Works   | City of Winnipeg   |
| Hugues Bessette           | Director, Urban Development Projects, Urban Planning and Mobility      | City of Montreal   |
| Gerry Chaput              | Director, Partnerships   | Arcadis  |
| Cory Grandy               | Deputy Minister  | Newfoundland and Labrador Transportation and Infrastructure    |
| Barbara Gray              | General Manager, Transportation Services                               | City of Toronto  |
| Catherine Harwood         | Deputy Minister  | Yukon Highways and Public Works                                |
| John Hawkins              | Assistant Deputy Minister  | Nunavut Economic Development and Transportation                |
| Stephanie Hébert          | Assistant Deputy Minister, Programs                                    | Transport Canada   |
| Doug Jones                | Deputy Minister  | Ontario Ministry of Transportation                             |
| Ryan Klos                 | Deputy Minister  | Manitoba Transportation and Infrastructure                     |
| Steve Loutitt             | Deputy Minister  | Northwest Territories Department of Infrastructure             |
| Brian Matheson            | Deputy Minister  | Prince Edward Island Transportation and Infrastructure         |
| Jeannette Montufar-MacKay | Founding Partner and CEO   | MORR Transportation Consulting                                 |
| Frédéric Pellerin         | Assistant Deputy Minister, Engineering and Infrastructure              | Ministère des Transports et de la Mobilité durable du Québec   |
| Suzanne Proulx            | Executive Director   | AQTr   |
| Patrick Puccini           | Vice President   | AECOM  |
| Rob Taylor                | Deputy Minister  | New Brunswick Transportation and Infrastructure                |
| Kyle Toffan               | Deputy Minister  | Saskatchewan Ministry of Highways                              |
| Kevin Volk                | Assistant Deputy Minister, Major Projects, Infrastructure & Properties | British Columbia Ministry of Transportation and Infrastructure |

# 2023/24 Performance

### Membership Distribution









92.7%



**# of Unique** Volunteers

# 2023/24 Performance



### **Diversification of Revenue Sources**



|                                      | ACTUAL      |             |             |
|--------------------------------------|-------------|-------------|-------------|
| Financial Summary *                  | 2023/24     | 2022/23     | 2021/22     |
| Revenues                             | \$5,020,457 | \$4,423,080 | \$3,517,071 |
| Conference & Learning Program        | 1,781,350   | 1,571,749   | 365,050     |
| Publication Sales                    | 214,635     | 262,574     | 393,360     |
| Non-Government Membership Fees       | 601,902     | 567,975     | 567,376     |
| Government Membership Fees           | 637,998     | 616,422     | 598,465     |
| Project Contributions & Other Income | 1,784,572   | 1,404,360   | 1,592,820   |
| Expenses                             | \$4,256,462 | \$3,703,585 | \$3,027,985 |
| Net Revenue                          | \$763,995   | \$719,495   | \$489,086   |
| Net Assets                           | \$8,374,173 | \$7,406,106 | \$7,268,250 |
| Unrestricted Funds                   | 4,005,458   | 3,297,148   | 2,690,541   |
| Invested in Capital Assets           | 239,442     | 207,508     | 265,518     |
| Defined Benefit Pension Plan         | 720,091     | 613,186     | 1,194,825   |
| Internally Restricted Funds          | 3,409,182   | 3,288,264   | 3,117,366   |

\*As per audited financial statements. Includes revenue for reserves and intergovernmental programs.

## Advancing TAC's Work

Focus areas are the over-arching tenets that influence the technical work of the Association. Aligned with TAC's vision, **focus areas describe the core interests** of TAC's councils and committees.

#### Safety, Design and Operations

Death and injury on Canada's roads are a devastating and costly public health issue. The practitioners who design and operate our roads use a Safe System Approach when they develop engineering solutions that help move people and goods. TAC provides technical guidance and training to help improve vital transportation outcomes in an increasingly complex environment.

#### Mobility

Mobility means seamlessly moving people and goods where they need to go, using one or more modes of transportation. This is realized by seeking new and better ways to fund, plan and manage transportation systems. TAC brings its members together to tackle key mobility issues, like urban development, data collection, walking and cycling facilities, shared mobility services, goods movement, curbside management, road pricing, and electrification.



#### Infrastructure and Asset Management

Canadians expect our transportation infrastructure to be safe, robust, and cost-effective and to meet our social and environmental needs. TAC helps its members get value for money when managing assets by optimizing their building, maintenance, and rehabilitation materials and processes.



#### **Environment and Climate Change**

Protecting the environment while moving people and goods has always meant conserving resources, preventing pollution, and protecting natural systems. Mitigating and adapting to climate change are among our most important challenges. TAC helps its members share knowledge and experience with environmental best practices in ecology and climate.



#### Technology

Technology is having a profound impact on how we plan, deliver and operate transportation systems. Many innovations—big data, artificial intelligence, ubiquitous connectivity, electric and automated vehicles—are promising and disruptive. They require new ways of doing things, offer surprising benefits, and could have unexpected impacts. TAC provides a forum for its members to learn, adapt and prosper.



#### Workforce Development

Transportation employers face worker shortages while grappling with the need to improve equity, diversity and inclusion. They are working to find, train and keep employees in various roles. Educational institutions are ensuring that new practitioners have the proper knowledge and skills. TAC helps its members build a strong workforce through strategies like education, recruiting, professional development, and knowledge management.

These are the facets that TAC presents outwardly to the world in its **technical discussions**, **projects**, **publications**, **and other products** for members and stakeholders.

Through TAC, transportation organizations and practitioners come together to identify and discuss important issues, and develop tools and resources they need for their work in the transportation sector.

### Environment and Climate Change

#### **Topics at This Year's Meetings**

The Environment & Climate Change Council and its committees continue to address a range of interesting topics. This year, the Council heard presentations on net zero highways, Vancouver's Climate Emergency Action Plan, Saskatchewan's invasive weeds initiative, Ontario's Indigenous relations program, Calgary's roadside naturalization project, and climate resiliency. Other meeting guests represented the Canadian Council on Invasive Species and the Road Salt Working Group of Environment and Climate Change Canada.



#### Sharing Knowledge About Transportation and Wildlife

The Council works to support efforts to protect flora and fauna from the impacts of transportation projects. Recent discussions have addressed issues related to bats and bridges, fish habitat protection, migratory bird challenges and wetland compensation. Ongoing volunteer projects are looking at strategies to prevent collisions between motor vehicles and wildlife and to reduce the negative impacts of invasive species.

#### Moving Forward on Indigenous Collaboration

During a roundtable discussion at the Council's fall 2023 meeting, members confirmed the **importance of incorporating Indigenous concerns into transportation projects** and the need for proper collaboration at the environmental assessment stage. They also expressed a desire to proactively support related practices in TAC member organizations in coordination with other councils and committees.

#### Supporting Climate Change Mitigation and Adaptation

The Climate Change Integrated Committee is TAC's centre of expertise on **mitigating and adapting to climate change**. This year, it considered issues ranging from net zero highway strategies to municipal climate plans and integrating climate risks into design guidance.

#### The Environment and Climate

Change Council guides TAC in fulfilling its commitment to protecting the environment and climate in the delivery of transportation services, and in the planning, approval, design, construction, operation, maintenance and rehabilitation of transportation infrastructure.

The Council is supported by:

- Climate Change Integrated
  Committee
- Environmental Issues
  Committee
- Environmental Legislation Committee

Council Chair: Dawn Irish, Ontario Ministry of Transportation Council Vice-Chair: Glen Furtado, Cement Association of Canada Board Liaison: Lon LaClaire, City of Vancouver

Visit the council webpage 🗹

#### CLIMATE ACTION ACHIEVEMENT AWARD

This award recognizes initiatives that mitigate emissions from transportation that cause climate change and/or improve the resiliency of transportation systems in response to climate change.

Recipient: British Columbia Ministry of Transportation & Infrastructure in partnership with McElhanney Ltd. Project: Culvert Vulnerability Asset Management System

#### ENVIRONMENTAL ACHIEVEMENT AWARD

This award recognizes initiatives that protect and enhance the natural environment through transportation projects.

Winner: Alberta Transportation and Economic Corridors Project: Alberta Wildlife Watch

### Infrastructure and Asset Management

#### The Infrastructure & Environment

**Council** guides TAC in fulfilling its commitment to safe, efficient and sustainable transportation infrastructure.

The Council is supported by:

- Asset Management Committee
- Construction Committee
- Maintenance and Operations
  Committee
- Pavements Committee
- · Soils and Materials Committee
- Structures Committee

Council Chair: Brad Neirinck, City of Winnipeg Council Vice-Chair: Ian Pilkington, British Columbia Ministry of Transportation and Infrastructure Board Liaison: Stephanie Hébert, Transport Canada

Visit the council webpage 🗹

#### **Topics at This Year's Meetings**

Meetings of the Infrastructure & Asset Management Council and its six committees heard about a wide variety of technical issues this year. Presentation topics included Ottawa's Transportation Asset Management Plan and the Canadian Construction Association's perspective on current procurement practices.



#### Northern Transportation Infrastructure Working Group

TAC's new Northern Transportation Infrastructure Working Group met for the first time. This informal group of volunteers representing TAC member organizations will report to the Infrastructure & Asset Management Council and provide a **forum for information exchange among Canada's territorial and provincial governments, consultants and academics**. Issues of concern include roads in permafrost regions, winter roads, ice roads, maintenance and project delivery practices, workforce development and **collaboration with Indigenous stakeholders**.

#### **Update on Pooled-Fund Projects**

Two projects are nearing completion – one is developing guidance on bridge deck surfacing and the other is updating TAC's *Guide to Bridge Hydraulics* to address climate change and a range of best practices. A third project that began this year will develop guidance on the use of recycled asphalt pavements for roads in Canada.



202

#### **Online Training in Data Governance**

TAC developed a new instructor-led online course, "**Data Governance for Performance-Based Decision Making**." The course will help transportation engineering managers meet key objectives for transparency, accountability and security in a "big data" world and will be offered for the first time in 2024/25. It represents an extension of issues addressed in TAC's 2021 publication *Performance-Based Decision Making for Asset Management: Lessons Learned and Practitioner Toolkit.* 

#### INFRASTRUCTURE ACHIEVEMENT AWARD

This award recognizes initiatives that use best practices to deliver safe, durable and efficient transportation infrastructure, with a focus on major road, highway and urban transportation assets.

Recipient: City of Kingston, ON in partnership with Hatch Systra IBT and Peter Kiewit and Sons Project: Kingston Third Crossing (Waaban Crossing)

## Safety, Design and Operations

#### **Topics at This Year's Meetings**

This year, the Council heard presentations on connected automobiles and road safety, Ottawa's automated camera-based system for speed limit enforcement, roundabouts in Canada, and increased cross slopes on roadways as a potential solution to severe weather events.



#### Sharing Knowledge Through Webinars

Three TAC webinars this year focused on road safety, design and operations. Almost **400** people attended an event on **traffic calming** in Ottawa, Toronto, and Edmonton, more than **200** watched a webinar on **2+1 highway planning** in Ontario, and about **70 participants** enjoyed an event on **non-standard pavement markings for crosswalks**.

#### **Survey of Small Municipalities**

TAC's Small Municipalities Integrated Committee reported on a **survey of 190 small municipality members**. The survey asked municipalities about their transportation staffing levels and core responsibilities, significant transportation challenges, engagement with TAC, and technical topics and activities of interest.

#### **Update on Pooled-Fund Projects**

Work continues on a project to develop a **new, comprehensive road safety guide for Canada**. A project that will address the design and operation of lower-speed collector and arterial roads is now actively underway, and two other projects (on road cross-section elements and flashing amber arrow signals) have launched and are at the stage of consultant selection.



#### ROAD SAFETY ACHIEVEMENT AWARD

This award recognizes initiatives that apply and advance best practices in road safety engineering.

**Recipient:** British Columbia Ministry of Transportation & Infrastructure in partnership with the Insurance Corporation of British Columbia

Project: High Friction Surface Treatment at Signalized Intersections

#### SMALL MUNICIPALITIES ACHIEVEMENT AWARD

This award recognizes initiatives that improve transportation systems in rural or small urban communities, with a focus on road safety and traffic operations.

Recipient: City of Selkirk, MB

Project: Eveline Street Reconstruction



#### The Safety, Design & Operations

**Council** guides TAC in fulfilling its commitment to a safe and efficient transportation system with enhanced mobility and reduced death and injury for road users.

The Council is supported by:

- Geometric Design Committee
- Road Safety Committee
- Small Municipalities Integrated
  Committee
- Traffic Operations and Management Committee

Council Chair: Katie Munroe, Yukon Highways and Public Works Council Vice-Chair: Daniel Beaulieu, City of Montréal Board Liaison: Kevin Volk, British Columbia Ministry of

Visit the council webpage 📝

Transportation and Infrastructure

## Safety, Design and Operations

#### **Expanding TAC's Online Training Courses**

TAC has continued to receive a very positive response to our **five-course "Road Safety for Canadian Practitioners" online training program**, developed in partnership with ITE Canada. This year, the courses saw over **60 new registrants** as work continued towards a French-language version.

TAC also delivered a new instructor-led online roundabout planning and design course, intended to support users of our **Canadian Roundabout Design Guide**. This course will be offered two more times in 2024/25.

Finally, TAC is working with a consultant to develop a new self-directed online course called "**Foundations of Geometric Design**" that will be based on Chapters 1 through 4 of the *Geometric Design Guide for Canadian Roads*, making use of reserve funds allocated for this purpose by the Board of Directors.





#### New Research on Non-Standard Crosswalk Pavement Markings

TAC released **new research on the use and impacts of crosswalk pavement markings** other than parallel white lines, zebra or ladder markings (e.g. "rainbow" crosswalks). The report resulted from a pooled fund project and addresses uncertainties about the impacts of such crosswalks on pedestrian and driver safety.

It provides a foundation for new technical guidance that would be included in a future update to TAC's *Manual of Uniform Traffic Control Devices for Canada*.

#### **New Publication on Access Management**

TAC published Access Management: Synthesis of Practice, which resulted from a pooled-fund project.

It addresses current access management practices for all roadway classifications in rural, suburban and urban areas and will provide the technical basis for a subsequent project to update "Chapter 8 – Access" of the *Geometric Design Guide for Canadian Roads*.



## Mobility

#### **Topics at This Year's Meetings**

The Mobility Council, supported by its four committees, addresses many aspects of integrated, multimodal mobility. Presentations this year offered details on transportation planning in Ottawa, the Green Municipal Fund of the Federation of Canadian Municipalities, and the Canadian Urban Transit Association's work to reimagine transit in Canada. Other issues of recent interest include integrated land use and transportation planning, infrastructure delivery challenges, continuous sidewalks and bike paths, and transportation funding.



#### New Publication – Emerging Practice Briefing: Continuous Sidewalks and Bike Paths

This briefing is based on a project report developed by volunteers from the Active Transportation Integrated Committee. It presents information on several **implementations of continuous sidewalks and bike paths in British Columbia and Alberta**. It is intended to acknowledge this emerging practice and to help practitioners conduct further testing and evaluation. The webinar on this briefing was TAC's best attended of the year, with **453** signing in. The **Mobility Council** guides TAC in fulfilling its commitment to integrated, multimodal mobility for people and goods.

The Council is supported by:

- Active Transportation Integrated
  Committee
- Mobility Management
  Committee
- Transportation Finance
  Committee
- Transportation Planning Committee

Council Chair: David MacIsaac, Halifax Regional Municipality Council Vice-Chair: Elizabeth Pugh, Nova Scotia Public Works Board Liaison: Michael Thompson, City of Calgary

Visit the council webpage 🗹

#### **Update on Pooled-Fund Projects**

Two projects made good progress this year and are close to being completed. One will lead to a publication on **road pricing opportunities and challenges in Canada**, while the other will document **lessons learned from the experiences of Canadian communities with shared micromobility services**. Two other projects were added to the list of those seeking funding – one would develop guidance on curbside charging for electric vehicles, and the other would summarize the state of alternative financing and procurement models for major transportation projects in Canada.

#### Sharing Knowledge About Transportation Modelling

TAC's Transportation Planning Committee formed a new Modelling User Group this year. This collection of practitioners will exchange information and build knowledge on **transportation modelling tools and practices in Canadian jurisdictions**. It met several times and continues to add new members.

### $\sim$



#### ACTIVE TRANSPORTATION ACHIEVEMENT AWARD

This award recognizes initiatives that improve facilities or services to encourage and benefit people who walk, bike or use other forms of active transportation.

**Recipient:** City of Ottawa, ON in partnership with Robinson Consultants Inc. **Project:** Montreal Road Revitalization

#### MOBILITY ACHIEVEMENT AWARD

This award recognizes initiatives that deliver integrated or multimodal mobility for people and goods while reinforcing the social, economic and environmental pillars of sustainability.

**Recipient:** City of Calgary, AB in partnership with Ground Cubed and Urban Systems Ltd. **Project:** Cresent Road N.W. Master Plan

## Technology

#### The Technology Council guides

TAC in fulfilling its commitment to innovative, efficient and effective technology integration across the transportation sector.

The Council is supported by:

- Connected and Automated
  Vehicles Integrated Committee
- Digital Applications Committee
- Intelligent Transportation Systems
  Committee

#### Council Chair: Ken Moshi,

Transport Canada

Council Vice-Chair: Ed Stubbing, AECOM

**Board Liaison:** Scott Stewart, Scott Stewart and Associates

Visit the council webpage 🗹

#### **Topics at This Year's Meetings**

TAC's Technology Council explores how technology benefits and challenges current transportation practices. Its meetings included presentations on cyber attacks and the public sector, electric vehicle charging infrastructure deployment, zero-emission vehicle infrastructure programs, Ottawa's Area X.O research and development complex, and the evolving nature of traffic management centres. The Council and its three committees also discussed topics ranging from intelligent transportation systems in rural areas to digital twinning, video analytics, and data-driven traffic signal operations.

#### Sharing Knowledge About Connected and Automated Vehicles

TAC partnered with CSA Group to deliver the webinar "**Codes** and Standards: A Strong Foundation for Connected and Automated Vehicles in North America" to about 150 people. Participants at this special event heard presentations by several North American leaders on CAV infrastructure standardization needs and challenges, followed by a facilitated panel discussion. They gained valuable insights on the latest advancements in CAV infrastructure standards, stakeholder roles, and the future path toward seamless and secure implementation of CAVs.



#### Working Towards Harmonization of Road Authority Data

A volunteer project of the Technology Council is **exploring challenges, opportunities and priorities related to a potential framework for harmonizing road authority data in Canada**. A survey of TAC member jurisdictions in the summer of 2023 yielded baseline information on linear referencing systems, asset inventory and condition data, and the use of data from sensors and connected vehicles. Volunteers plan to produce a discussion paper in the future that would share results and identify key issues for consideration.





#### TECHNOLOGY ACHIEVEMENT AWARD

This award recognizes initiatives that use advanced technologies to address road, highway or urban transportation challenges.

**Recipient:** British Columbia Ministry of Transportation and Infrastructure in partnership with PBX Engineering **Project:** Automated Avalanche Detection System on Highway 37A

### Workforce Development

#### **Topics at This Year's Meetings**

The Workforce Development Council continued its efforts related to education, professional development and human resources. At its meetings, members heard presentations on the accreditation of post-secondary programs that educate technicians and technologists on work by Engineers Canada related to equity, diversity and inclusion, and post-secondary accreditation. Council and committee meetings also entertained discussions on teaching and learning at Carleton University and the University of New Brunswick, on geometric design instruction for students and practitioners, job shadowing programs, and professional development programs in provincial transportation departments.



### Developing Highly Qualified Personnel for a Disruptive Future

The Workforce Development Council received the final report of a volunteer task force charged with prioritizing and refining the recommendations in TAC's 2022 publication **Developing Highly Qualified Personnel for an Era of Connected and Automated Vehicles**. The task force report suggests helpful actions taken by TAC's Chief Engineers Panel, Technology Council, Workforce Development Council, and Secretariat staff, and it includes a tracking tool to measure future progress.

#### The Workforce Development

**Council** guides TAC in fulfilling its commitment to supporting the development of a skilled, interdisciplinary workforce for Canada's transportation sector.

The Council is supported by:

- Education Committee
- Human Resources Committee
- Professional Development
  Committee

Council Chair: Brittney Speed, British Columbia Ministry of Transportation and Infrastructure Council Vice-Chair: Rebecca Farrugia, GHD Board Liaison: Patrick Puccini, AECOM

Visit the council webpage 🗹

#### Sharing Knowledge About Human Resources Management

Early in this fiscal year, TAC's Human Resources Committee conducted an **online survey on staff recruitment and retention in Canada's transportation sector**. The survey was designed to help TAC better understand the human resources challenges facing our 500 member organizations and identify opportunities for new projects and learning events. The survey addressed challenges and strategies related to hiring and keeping staff, and approaches to improving diversity, equity and inclusion. Committee volunteers presented the results to TAC's Board of Directors and in a webinar that attracted **70 participants** from across the country.





#### EDUCATIONAL ACHIEVEMENT AWARD\*

This award recognizes initiatives that use advanced technologies to address road, highway or urban transportation challenges. Recipient: City of Edmonton, AB in partnership with Empower Me and the Electric Vehicle Association of Alberta

Project: Electric and Hydrogen Vehicle Expo

\*This award was renamed the Workforce Development Achievement Award as of 2024.

### Other Highlights

#### Highlights from the 2023 TAC Conference & Exhibition

The 2023 TAC Conference & Exhibition set a new attendance record of over **1,450 delegates**. The event featured more than **80 companies in the Exhibition** and a technical program of **113 sessions, panels, workshops and 11 technical tours**. Local hosts Transport Canada and the Ontario Ministry of Transportation offered their partnership and collaboration in support of the event. The City of Ottawa also contributed toward making the event a success.

Highlights of the event, themed "Lessons in Leadership," included the Opening Plenary Session with insights from Arun Thangaraj and Doug Jones, the Distinguished Service Award being conferred upon Scott Stewart, and a keynote presentation by Jennifer Keesmaat. Outstanding member projects receiving 2023 Technical Achievement Awards were acknowledged during the opening, while recipients of TAC's Volunteer Recognition Awards and Young Professional Awards were congratulated at lunches on Monday and Tuesday, respectively.

Networking opportunities abounded at the Welcome Reception, three programmed lunches, and the Night at the Museum event. Student Day, a Mini Career Fair and a dedicated networking reception provided valuable experiences for young professionals.

The 2023 conference showed the strength and collaborative spirit of Canada's transportation industry, fostering connections and learning opportunities that will benefit attendees, our economy, and our people.



80 exhibiting companies

113

sessions, panels & workshops

technical tours



### New TAC Grant for Young Innovators in Transportation

In 2023, TAC launched the **Grant for Young Innovators in Transportation** to support young professionals under 35 with over three years of experience in Canada's transportation technology sector.

This annual grant, made possible by the **generous support** of Scott Stewart & Associates, provides financial aid to one such professional, enabling their active participation in TAC's technical meetings and annual conference.

Grant recipients will **attend key TAC meetings, receive coaching** from industry leader Scott Stewart, and **connect with sector experts**.

### <mark>Other</mark> Highlights

#### TAC's Website: A Step Toward a Better User Experience

In 2023, TAC began a project to redevelop its website, which was last redesigned in 2014. Recognizing the evolving needs of visitors, the new website will aim to **simplify TAC users'** experience and make accessing the Association's technical resources easier.

The 2023/24 fiscal year saw the delivery of a comprehensive survey to our website visitors, issuing an RFP, awarding the contract and conducting research on the existing website.

Planning the new website included **developing a new** information architecture, rewriting content using simpler language and fewer words, and updating the design.

Stay tuned to see the results of the final work to build functionality, complete the content, and test and deploy the new website by summer 2024.





#### **Extending TAC's Reach Beyond Traditional Stakeholders**

Recognizing the tremendous growth and change happening in the transportation sector, TAC continues to transform along with it. The Technology Council and its related committees **support information exchange and problem-solving related to intelligent transportation systems, connected and automated vehicles, vehicle electrification, data management, cybersecurity and smart cities**.

In the past year, TAC increased its outreach efforts to let **leaders and innovators using new technology in transportation** know that they have a place within the Association's network to share their work and help create new best practices.

The upcoming **2024 TAC Conference & Exhibition is themed "Technology & Transformation"**. Through this event and other ongoing technical work, the Association looks forward to welcoming new stakeholders with a broad range of perspectives and skill sets at its tables.

### Other Highlights

#### **Project Funding Commitments**

TAC's pooled-fund project model allows member and partner organizations to **collaboratively produce national technical guidelines, syntheses of practice, and research reports**. As shown below, TAC's 2023/24 pooled-fund projects (including those in progress and in development) were supported by **54 different organizations** — with half of those funders supporting multiple projects. This success is evidence of the benefits of a pooled-fund approach — collaborating organizations can maximize the impact of their own resources while leveraging TAC's experience in managing projects and producing respected publications. They also give their staff the opportunity to participate in project steering committees, where they work closely with peers and experts from across Canada.

| Alberta Transportation and Economic Corridors                  | City of Montréal  | National Research Council Canada                              |
|--|---|---|
| Asphalt Institute of Canada                                    | City of Ottawa  | New Brunswick Department of Transportation and Infrastructure |
| Autorité régionale de transport métropolitain                  | City of Richmond Hill   | Newfoundland and Labrador Transportation and Infrastructure   |
| Bitume Québec  | City of Saskatoon   | Northwest Territories Department of Infrastructure            |
| British Columbia Ministry of Transportation and Infrastructure | City of Toronto   | Nova Scotia Public Works                                      |
| Bunt and Associates  | City of Vancouver   | Ontario Good Roads Association                                |
| Canadian Association of Road<br>Safety Professionals           | City of Vaughan   | Ontario Ministry of Transportation                            |
| City of Brampton   | City of Whitehorse  | Ontario Road Builders' Association                            |
| City of Burlington   | City of Winnipeg  | Prince Edward Island Transportation and<br>Infrastructure     |
| City of Calgary  | Colas Canada  | Region of Waterloo  |
| City of Edmonton   | Durham Region   | Saskatchewan Government Insurance                             |
| City of Guelph   | G. Ho Engineering Consultants                                   | Saskatchewan Ministry of Highways                             |
| City of Hamilton   | Halifax Regional Municipality                                   | Tetra Tech  |
| City of Kamloops   | Insurance Corporation of British Columbia                       | TransLink   |
| City of Kelowna  | ITE Canada  | Transport Canada  |
| City of Kingston   | Manitoba Transportation and Infrastructure                      | True North Safety Group                                       |
| City of Mississauga  | McAsphalt Industries  | York Region   |
| City of Moncton  | Ministère des Transports et de la Mobilité<br>durable du Québec | Yukon Highways and Public Works                               |

Over the past 20 years, TAC has collaborated with nearly 80 funding partners to execute around 150 pooled-fund projects with a total worth of \$15 million.



## <mark>Other</mark> Highlights

### **Technical Meetings**

Technical meetings allow practitioners to **contribute to and learn about progress in Canada's transportation sector**. They are also **essential to the productivity and success of TAC** as an organization.

### SPRING 2023 | ONLINE



### Making Connections Across the Transportation Sector

Networking is essential for sharing information and learning about the latest issues and innovations relevant to the transportation sector. TAC strives to connect with other organizations to ensure work on our shared interests is comprehensive and complementary and makes efficient use of our scarce resources. TAC connected with the following organizations in 2023/24:

American Association of State Highway and Transportation Officials • Asphalt Institute of Canada • Association of Consulting Engineering Companies – Canada • Association Québécoise des transports • Bitume Québec • Canadian Association of Road Safety Professionals • Canadian Construction Association • Canadian Council of Motor Transport Administrators • Canadian Journal of Civil Engineering • Canadian Public Works Association • Canadian Society for Civil Engineering • Canadian Technical Asphalt Association • Canadian Transport Research Forum • Canadian Urban Transit Association • Cement Association Of Canada • CNIB Foundation • Coordinating Council On Automated and Connected Vehicles • CSA Group's Connected And Automated Vehicles Advisory Council • Engineers Canada • Environment and Climate Change Canada's Road Salt Working Group • Federation of Canadian Municipalities Information and Communications Technology Council Invest Ottawa • ITE Canada • ITRD • ITS Canada • Mobilizing Justice National Research Council Canada
 North American Bikeshare & Scootershare Association • Ontario Good Roads Association • Ontario Road Builders' Association • Ontario Smart Mobility Readiness Forum Special Libraries Association • Standards Council Of Canada • TAC Foundation • Technology Accreditation Canada • Transportation Research Board • Urban Robotics Foundation • World Road Association



MEETINGS

#### Committee Executive Forum

This **first-ever online learning event** involved staff and volunteer leaders in presentations and discussions on committee operations, activities and products, focusing on keys to success and tips on effective leadership.

Fifty-six current committee executive volunteers participated and gave very positive feedback.



#### Academic Roundtable

TAC's **third Academic Roundtable** meeting convened in June 2023, with **18 researchers and instructors** in attendance. During the meeting, staff provided a brief overview of TAC's programs and services for academics and post-secondary students, and facilitated discussion on several topics.



#### Webinars

TAC's **free webinar program** provides year-round learning opportunities. This year, **1,848 participants attended 19 live events** – six that were mentioned in the previous sections, nine that featured winners and finalists for TAC's 2023 Technical Achievement Awards, and four corporate demo webinars with presentations by TAC sponsor organizations. Recordings of the webinars are available for on-demand viewing a day or two after each live event.

### Individual and Committee Award Recipients

### **Volunteer Recognition Awards**

#### **Distinguished Service Award**

Scott Stewart, Arcadis IBI Group

#### Leadership Award

- Ania Anthony, Saskatchewan Ministry of Highways
- Rob Hird, Nova Scotia Public Works
- Dr. Jonathan Regehr, University of Manitoba

#### Individual Contribution Award

- · Mike Pearsall, Ontario Ministry of Transportation
- Denis St-Laurent, Ministère des Transport et de la Mobilité durable du Québec

#### **Committee Excellence Award**

- Road Safety for Canadian Practitioners Project
  Steering Committee
- Soils & Materials Committee
- Vision Zero & Safe System Subcommittee

### Young Professional Awards

#### Young Transportation Professional Award

• Dr. Suliman Gargoum, University of British Columbia

#### Allan Widger Consulting Corporation Grant for Young Geotechnical Engineers in Transportation

• Dr. Sarah Bouchard, Ministère des Transports et de la Mobilité durable du Québec

### **Student Paper Prizes**

| 2 <sup>nd</sup> prize               | 3rd prize   |
|-------------------------------------|---|
| Silas Henrique Barbosa De Carvalho  | Ali Faisal  |
| University of Alberta               | University of British Columbia  |
| Paper: Using Sensing Technology for | Paper: Automated Assessment of  |
| Pavement Performance Monitoring –   | Pavement Rutting and Roughness  |
| A Case Study in Edmonton, Alberta   | using Mobile LiDAR data   |
|                                     | Silas Henrique Barbosa De Carvalho<br>University of Alberta<br>Paper: Using Sensing Technology for<br>Pavement Performance Monitoring – |



401-1111 Prince of Wales Drive | Ottawa, ON K2C 3T2 613-736-1350 | secretariat@tac-atc.ca

www.tac-atc.ca

