



Transportation Association of Canada

TAC Council News | Summer 2020

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TAC council and task force meetings are open to all employees of TAC member organizations, including young professionals; students are also welcome. See our website for more information on [TAC councils and committees](#), and on TAC’s upcoming [2020 Fall Technical Meetings](#).

TAC member organizations can: appoint one employee as a voting member of the Environment & Climate Change Council, Mobility Council, Technology Council, and Workforce Development Council; appoint any number of auxiliary members to any council or task force; and appoint any number of members to any committee. [Contact us](#) to find out more.

Connected & Automated Vehicles Task Force

Chair: Garreth Rempel, MORR Transportation Consulting

Vice-Chair: Kenedee Ludwar, British Columbia Ministry of Transportation & Infrastructure

This [Task Force](#) is a forum for dialogue and collaboration among transportation system owner-operators, regulatory bodies, businesses, industry organizations, and academia. Its purpose is to help TAC members respond to and benefit from the development and application of connected vehicle (CV) and automated vehicle (AV) technologies, with an emphasis on optimizing outcomes for public health and safety, mobility, economic prosperity and environmental sustainability in urban and rural communities.

Spring Meeting Highlights

The CAV Task Force met online on May 6, with 52 members and friends present. Attendees heard about TAC’s new online inventory of Canadian CAV initiatives,

and CAV research conducted by Mohawk College students. They also shared updates on CAV activities within their own agencies, businesses or institutions. The Task Force discussed a new “issues tracking matrix” that it will use to monitor CAV-related activities across TAC’s volunteer structure, as well as its own work plan.

2020 TAC Conference

The Task Force will host these technical sessions at the [upcoming TAC conference](#):

- CAV Pilot Deployments in Canada
- CAV Readiness (Part 1): Road Infrastructure
- CAV Readiness (Part 2): Digital Infrastructure
- Lessons from the CAV Ecosystem: Learning from TAC’s Partners

Projects

A new inventory of Canadian CAV initiatives is now on TAC’s [website](#), and a working group of Task Force volunteers is developing a primer for municipalities.

Environment & Climate Change Council

Chair: Shauna Lehmann, Saskatchewan Highways and Infrastructure

Vice-Chair: Ethan Askey, City of Calgary

This [Council](#) guides TAC in fulfilling its commitment to protection of the environment and climate in the delivery of transportation services, and in the planning, approval, design, construction, operation, maintenance and rehabilitation of transportation infrastructure.

More specifically, the Council is a national forum for information exchange and problem solving related to climate change mitigation and adaptation, environmental impact avoidance and mitigation, environmental legislation and regulation, and environmental management systems.

Spring Meeting Highlights

The Council met online on April 22, with 40 attendees present. The Council received presentations from the Environment and Climate Change Canada Road Salt Working Group, and on air quality monitoring during construction. Federal government representatives updated attendees on the *Impact Assessment Act*, including managing project delays and planned regulatory initiatives. Members provided individual updates on activities within their own organizations, and initiated a dialogue on the development of a Strategic Framework to guide the Council's future work.

The Council also heard from its three committees. The **Environmental Issues Committee** and **Environmental Legislation Committee** (36 attendees) held a joint meeting at which they heard presentations on updates to the *Canadian Navigable Waters Act* and *Fisheries Act*, and conducted a roundtable discussion on issues, innovations and success stories across Canada. The **Climate Change Integrated Committee** (33 attendees) heard about Transport Canada's climate change mitigation and adaptation initiatives, and discussed COVID-19 impacts and the application of climate change projections to improve design.

2020 TAC Conference

The Council and its committees will host these technical sessions at the [upcoming TAC conference](#):

- TAC Environmental Achievement Award Finalists
- Acting on Climate Change: Lightning Session
- Assessing and Managing the Environmental Consequences of Road Salt

- Environmental Compliance Management During Construction
- Going for Gold! Using the Envision Sustainability Performance Framework
- Invasion Collaboration: Working Together to Combat Invasive Species
- Low Carbon Construction: Examining Targets, Tools, Tracking and Materials

2020 TAC Awards

At its meeting in April, the Council approved the following [TAC awards](#).

TAC Environmental Achievement Award

City of Ottawa, Going Green by Seeing the Greens

TAC Individual Contribution Award

Maya Caron, Deloitte Canada (formerly with Ministry of Transportation, Ontario)

Project in Development

TAC is seeking funding partners for this project. More information is available [here](#).

Best Practices for Assessing and Mitigating Transportation Noise and Vibration

This project would: complete a jurisdictional scan of practices; review costing tools, models and decision-making criteria for planning, design and mitigation options; review current performance criteria, implementation approaches and practices for planning and mitigation; and develop a compendium of best practices for Canadian noise and vibration assessment methods, thresholds and mitigation.

Projects in Progress

More information on these projects is available [here](#).

Synthesis of Practices for Management and Enhancement of Roadway Ecology

This project is developing a compendium of practices to make roads more permeable for fish and wildlife, and reduce conflicts between wildlife and vehicles.

Environmental Performance Benchmarking

This volunteer project is identifying a suite of readily quantifiable, comparable and meaningful performance measures relating to transportation and environmental management. It will enable comparison of an organization's performance with others in Canada.

Invasive Species Management

This volunteer project is developing a synthesis of best practices outlining preventative actions to manage the

spread of invasive species along transportation corridors.

Infrastructure & Asset Management Council

Chair: Ashley Curtis, City of Toronto

Vice-Chair: Jennifer Graham Harkness, Ontario Ministry of Transportation

This [Council](#) guides TAC in fulfilling its commitment to safe, efficient and sustainable transportation infrastructure. More specifically, the Council is a national forum for information exchange and problem solving related to soils and materials, pavements, structures, asset management, and construction and maintenance practices.

Spring Meeting Highlights

The Council met online on May 4, with more than 30 persons in attendance. It received a presentation from the National Research Council on its work related to the impacts of climate change on infrastructure best practices. It initiated a dialogue on the development of a Strategic Framework to guide the Council's future work, and also heard from its six committees.

The **Asset Management Committee** (47 attendees) heard from Transport Canada on transport asset risk assessment, and held discussions on climate resiliency, human resourcing and organizational planning, and the impacts of COVID-19.

The **Construction Committee** (39 attendees) discussed topics including COVID-19 impacts, P3 and alternative project delivery, road cuts and coring, and issues around First Nations.

The **Maintenance & Operations Committee** (40 attendees) heard presentations on Environment and Climate Change Canada's Code of Practice for Salt Management, health and safety at New Brunswick Ministry of Transportation and Infrastructure, and culvert maintenance and repairs. The committee discussed the impacts of COVID-19, and approved a new proposed project on guidance for small culvert maintenance and repair.

The **Pavements Committee** (86 attendees) heard presentations on concrete sidewalks, infrared heating for asphalt repairs, municipal concrete pavement guidance, and stone-matrix asphalt pavements. They

discussed issues including the use of recycled asphalt pavement in hot mix asphalt, and the impacts of automated vehicle platooning on road performance.

The **Soils & Materials Committee** (74 attendees) heard presentations on lightweight concrete materials for pavement construction, a review of 2007 guidance on quality management practices for flexible pavement materials and construction, and the use of aramid/polyolefin fibers for asphalt mix reinforcement. Attendees discussed issues including the use of recycled asphalt pavement in road construction.

The **Structures Committee** (58 attendees) heard a presentation on bridge fabrication inspection certification, and discussed pedestrian bridge design, steel bridge fabrication inspection, bridge hydraulics guidance, and artificial intelligence for construction materials.

2020 TAC Conference

The Council and its committees will host these technical sessions at the [upcoming TAC conference](#):

- Asset Management and Road Safety
- Best Practices in Safe Operation of Highway Networks
- Green Technology in Geotechnical and Materials Engineering
- Innovation in Geotechnical and Materials Engineering
- Innovations in Asset Management
- Innovations in Pavement Management, Engineering and Technologies
- Journey to Safer Utilities in Our Roads
- Practical Applications of ME Pavement Design
- Responsible Use of Reclaimed Asphalt Pavement in Asphalt Mixes
- Safety Innovations in Delivery of Summer and Winter Maintenance
- Testing and Modeling of Road and Embankment Materials
- Transportation Asset Management: Experience from the World Road Association
- Transportation Structures

2020 TAC Awards

At its April meeting, the Council approved two [TAC awards](#).

TAC Individual Contribution Award

Mark Hearson, Stantec Consulting

TAC Leadership Award

Marta Juhasz, Alberta Transportation

Projects in Development

TAC is seeking funding partners for these projects. More information is available [here](#).

Best Practices and Toolkit for Location Referencing in Transportation Asset Management

This project would identify best practices and recommend tools and techniques for agencies of different sizes, resource constraints and GIS implementation maturity. It will show how GIS can help agencies move from individual asset management systems to enterprise asset management solutions, supporting their overall asset management frameworks.

Guide to Bridge Deck HMA Paving in Canada

This project will create a new guide to the use of hot-mix asphalt for paving bridge decks, based on a literature review and a survey of Canadian agencies. It will develop key performance indicators, selection criteria, a flowchart for individual projects, suggested specifications for various alternatives, and construction QA/QC minimum requirements and test procedures. Project work will begin this fall, and additional funding partners remain very welcome.

Guide to Maintaining and Repairing Small Culverts

This project would develop a technical guide explaining maintenance and repair interventions for small culverts

(i.e. those with a diameter smaller than about 3 m), which are less well documented than larger culverts. The guide will address all culvert materials but will focus on steel, concrete and HDPE as they are most common; it may also highlight technical differences among provinces and municipalities.

Projects in Progress

More information on these projects is available [here](#).

Guide to Evaluating Soil and Material Stabilization Products

This project is developing a synthesis of best practices for evaluating soil and material stabilization treatments, and recommending guidelines to help Canadian agencies evaluate and select soil stabilization products to support long-term roadway performance.

Performance-Based Decision Making: Lessons Learned and Practitioner Toolkit

This project is examining performance-based evaluation, optimization and decision-making processes and techniques, and recommending tools to support goals such as cross-asset optimization.

Vehicle Load Practices and Recommendations

This project is compiling traffic and vehicle load data from jurisdictions to determine the adequacy of traffic load provisions in the Canadian Highway Bridge Design Code as well as standard agency-specific truck factors for pavement design. It is developing recommendations for vehicle loadings and truck pavement design equivalent single-axle load factors.

Volunteer Projects

In addition to these pooled-fund projects, the Council's committees have eight ongoing volunteer projects.

Mobility Council

Chair: Lisa Salsberg, Access Planning

Vice-Chair: Brian Hollingworth, City of Hamilton

This [Council](#) guides TAC in fulfilling its commitment to integrated, multimodal mobility for people and goods. It is a national forum for information exchange and problem solving related to: planning, monitoring, governing and funding transportation systems, particularly in urban areas; understanding and managing transportation demand; and delivering mobility services related to active transportation, public transit and other modes in communities of all sizes.

Spring Meeting Highlights

The Council met online on April 23 with 32 people attending. Participants discussed focus issues including micromobility policy and operating models, transportation planning implications of electrification, and the role of parking in new mobility. They also discussed COVID-19 impacts on transit use, curbside management, and infrastructure plans. The Council began a dialogue on the development of a Strategic Framework to guide its future work, and heard about recent meetings of its four committees.

The **Active Transportation Integrated Committee** (39 attendees) discussed COVID-19 responses to improve walking and cycling, a tool to track active transportation issues across TAC's volunteer structure, and a possible project to create a national active transportation report card.

The **Mobility Management Committee** (31 attendees) received a presentation on national readiness for shared mobility services, and discussed volunteer projects on public engagement and legislation to support cycling facilities.

The **Transportation Finance Committee** (13 attendees) discussed its members' priority issues, an ongoing project on performance-based decision making, and upcoming conference sessions.

The **Transportation Planning Committee** (22 attendees) heard about a volunteer project on estimating demand for active transportation, and discussed possible new areas of work including equity and resiliency planning.

2020 TAC Conference

The Council and its committees will host these technical sessions at the [upcoming TAC conference](#):

- Best Practices in Urban Transportation Planning
- Cycling Solutions: Overcoming Challenges and Barriers
- Emerging Issues in Urban Transportation: New Mobility Systems
- Emerging Issues in Urban Transportation: Micromobility Research and Readiness in Metro Vancouver
- Emerging Issues in Urban Transportation: Micromobility Systems and Operators
- Engaging with Communities for Better Transportation Projects
- Goods Movement
- Governance of Seamless Transportation: Challenges and Approaches in a Time of Rapid Change
- Integrating Health and Transportation Planning
- Mind the Gap: Pedestrian and Cyclist Data Collection in Practice
- Mobility Pricing: So Much More than Revenue Generation
- P3s for Major Transit Projects: Lessons Learned from Across Canada
- TAC Sustainable Urban Transportation Award Finalists
- Transportation Demand Modelling

2020 TAC Awards

At its meeting in April, the Council approved the following [TAC awards](#).

TAC Individual Contribution Award

Martin Hotte, retired (formerly with the Ministère des Transports du Québec)

Timothy Spurr, Giro Inc. (formerly with the Autorité régionale de transport métropolitain)

TAC Leadership Award

Sabbir Saiyed, Regional Municipality of Peel

TAC Sustainable Urban Transportation Award

City of Nanaimo, Nanaimo Goes Dutch

Projects in Development

TAC is seeking funding partners for these projects. More information is available [here](#).

Measuring Transportation and Land Use Integration

This project would provide municipal transportation and land use planning authorities with standard indicators for evaluating the integration of transportation and land use in an urban environment.

Mobility Pricing Opportunities and Challenges

This project would identify how mobility pricing can contribute to the performance of urban transportation systems in Canada, and to the achievement of key social, economic and environmental outcomes. It would address shared policy priorities, recent technological advances, emerging business models, and observed shifts in consumer preferences.

Projects in Progress

More information on these projects is available [here](#).

Performance-Based Decision Making: Lessons Learned and Practitioner Toolkit

This project is examining performance-based evaluation, optimization and decision-making processes and techniques, and recommending tools to support goals such as cross-asset optimization.

Regulatory Approaches to Enable Bicycle Treatments

This volunteer project is developing a compendium of ways that Canadian legislation and regulations enable the implementation and operation of modern cycling facilities.

Public Engagement in Sustainable Mobility Projects

This volunteer project is identifying how transit, active transportation and transportation demand management initiatives are supported through engagement with the public and key stakeholders.

Methods for Predicting Cycling Demand

This volunteer project is summarizing different approaches to quantifying future cycling demands.

Safety, Design & Operations Council

Chair: Chris Brinkmann, City of Ottawa

Vice-Chair: Peter Hackett, Nova Scotia Transportation and Infrastructure Renewal

This [Council](#) guides TAC in fulfilling its commitment to a safe and efficient transportation system with enhanced mobility and a reduced rate of death and injury among all road users. More specifically, the Council is a national forum for information exchange and problem solving related to road safety programs, geometric design and traffic operations as key elements of a safe systems approach; it also offers a lens on priority issues for small municipalities.

Spring Meeting Highlights

The Council met online on May 8, with 27 participants. It received presentations on two pooled-fund projects, initiated a dialogue on the development of a Strategic Framework to guide its future work, and heard updates from its four committees.

The **Geometric Design Committee** (61 attendees) discussed street closures in response to COVID-19, and climate change adaptation issues. The Joint Roundabouts Subcommittee is working on a map of Canadian roundabout locations, and discussed low-cost roundabouts and approaches to provide transit priority. The Revisions & Additions Subcommittee discussed guidance for cross-falls and vertical curve sag sight distances, and approved a new pooled-fund project proposal on access management.

The **Road Safety Committee** (74 attendees) received presentations on two pooled-fund projects, and heard about road safety plans in Manitoba and Toronto. It also continued its dialogue on Vision Zero issues.

The **Small Municipalities Integrated Committee** (20 attendees) discussed COVID-19 impacts, how to engage with other TAC volunteer groups, and opportunities to develop a webinar and an informal discussion forum.

The **Traffic Operations & Management Committee** did not meet this spring, although its Executive met to address a number of issues including TAC's sign comprehension testing software, and work to update guidance on roadway lighting design.

2020 TAC Conference

The Council and its committees will host these technical sessions at the [upcoming TAC conference](#):

- Advances in the Safe Design/Operation of Roundabouts
- Complete Streets: How to Design Safely for all Modes
- Complete Streets in Small Municipalities: Accommodating All Users
- Designing Interchanges and Major Facilities to Improve Safety
- Emerging Topics in Road Safety
- Engaging the Political Level Effectively in Road Safety
- Incorporating Geometric Design Exceptions while Maintaining Safety
- #Innovative Traffic Control
- Low-Cost & Rapid Deployment of Road Safety Improvements
- Managing Public Expectations in Small Municipalities
- Safety and Micro-Mobility
- Strategic Road Safety Plans and Policies
- TAC Road Safety Engineering Award Finalists
- Temporary Measures: Construction Impacts and Managing Public Safety
- Vision Zero and Safe Systems in the Canadian Context

2020 TAC Awards

At its April meeting, the Council approved the following [TAC awards](#).

TAC Individual Contribution Award

Henning Buch, Jacobs

Greg Iwaskow, City of Calgary

TAC Leadership Award

Nancy Badeau, Ville de Montréal

TAC Road Safety Engineering Award

British Columbia Ministry of Transportation and Infrastructure, Road Weather Information System and Variable Message Sign Integration

Projects in Development

TAC is seeking funding partners for these projects. More information is available [here](#).

Access Management: Synthesis of Practice

This project would synthesize current access management practices for all roadway classifications across Canada, and will provide the technical basis for a subsequent project to create a new Chapter 8 in the *Geometric Design Guide for Canadian Roads*.

Guidelines for Permissive and Protected Turn Signals

This project would investigate the potential for innovative permissive turn signal applications to support safety and other transportation system goals, encouraging their acceptance by practitioners and road users while avoiding rampant applications that would dilute their effectiveness. It would define specific

Canadian applications and identify accompanying needs such as new traffic controller firmware.

Non-Standard Pavement Markings for Crosswalks

This project would research non-standard pavement markings for crosswalks in an effort to understand their impact on: driver perception and recognition of crosswalks; driver and pedestrian distraction; slip and skid resistance; and recognition by automated driving systems.

Projects in Progress

More information on these projects is available [here](#).

Manual of Uniform Traffic Control Devices for Canada: Sixth Edition

This complex, multi-year project is creating a new edition of TAC's *Manual of Uniform Traffic Control Devices for Canada* (MUTCDC) and its accompanying *Sign Pattern Manual*, featuring an overall review and many new or updated sections. Publication is expected in 2021.

Online Road Safety Training

This project is creating a series of online teaching modules to educate practitioners about essential aspects of road safety, exploring issues including measurement, human behavior, problem solving, and program implementation.

Volunteer Projects

In addition to these pooled-fund projects, the Council's committees have more than 15 ongoing volunteer projects.

Technology Council

Chair: Scott Stewart, IBI Group

Vice-Chair: Jeannette Montufar, MORR Transportation Consulting

This [Council](#) guides TAC in fulfilling its commitment to the innovative, efficient and effective integration of technology across the transportation sector. More specifically, the Council is a national forum for information exchange and problem solving related to intelligent transportation systems, connected and automated vehicles, vehicle electrification, data management, cyber security and smart cities.

Spring Meeting Highlights

The Technology Council held its inaugural meeting online on May 13, with 43 participants. It heard an update from the CAV Task Force as well as presentations on the ITS Architecture for Canada, the mobility data specification (MDS), emerging transportation technologies at General Motors, and the Smart City Standards Initiative of the American Society of Civil Engineers. Participants provided technology-related updates from their own organizations, and initiated a process of identifying major themes and priority topics to include in a Strategic Framework to guide the Council's future work.

Workforce Development Council

Chair: Jean-François Gysel, SNC-Lavalin

Vice-Chair: Derek Drummond, Stantec Consulting

This [Council](#) guides TAC in fulfilling its commitment to supporting the development of a skilled, interdisciplinary workforce for Canada's transportation sector. More specifically, the Council is a national forum for information exchange and problem solving related to: recruiting and retaining professional and technical staff; building leadership and managing knowledge within TAC member organizations; encouraging post-secondary institutions to develop and enhance transportation-related programs; and encouraging students to learn about and find employment in the transportation sector.

Spring Meeting Highlights

The Council met online on April 29, with 22 participants. It heard an update on the development of a new TAC inventory of post-secondary transportation programs in Canada, and a presentation on mental health in the workplace. After attendees provided updates from their own organizations, the Council initiated a dialogue on the development of a Strategic Framework to guide the Council's future work.

2020 TAC Conference

The Council will host these technical sessions at the [upcoming TAC conference](#):

- TAC Educational Achievement Award Finalists

- Public Trust, Expectations and Social Customer Service

2020 TAC Awards

At its meeting in April, the Council approved the following [TAC awards](#).

TAC Educational Achievement Award

British Columbia Ministry of Transportation and Infrastructure, Highway Maintenance Contract Training Course

TAC Individual Contribution Award

Darlene Cleven, Allan Widger Consulting Corporation
Ana Lopez, British Columbia Institute of Technology

Project in Development

More information on this project is available [here](#).

Developing Highly Qualified Personnel for Road Authorities: A Gap and Solutions Analysis in the Era of Connected and Automated Vehicles

The goals of this study are to understand the skills gap faced by road authorities, and to propose measures to address that gap. The study will identify the types of training and academic programs that are needed, and that could be implemented by Canadian stakeholders over the next few years. The project is fully funded and will begin work this fall, but additional funding partners are welcome.

Contact Us

Email [Geoff Noxon](#) for more information on
Connected & Automated Vehicles Task Force
Mobility Council

Email [Yuriy Shelkovyy](#) for more information on
Technology Council
Workforce Development Council

Email [Craig Stackpole](#) for more information on
Environment & Climate Change Council
Infrastructure & Asset Management Council
Safety, Design & Operations Council