

Largest National Transportation Conference & Exhibition in Canada!



CALL FOR SUBMISSIONS PROSPECTUS

Help us highlight this year’s theme, ***Innovation and Technology: Evolving Transportation***, when developing submissions for the 2018 TAC Conference & Exhibition.

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IMPORTANT DEADLINES

ACTION	DEADLINE*
Abstracts due	January 15
Response (<i>acceptance or rejection</i>) sent to authors	Week of February 26
Submissions due	April 27
Response (<i>acceptance, rejection or request for revisions</i>) sent to authors	Week of June 18
Submissions requiring revisions due	July 20
Final presentations and posters due	September 20

**Authors not adhering to these deadlines will be dismissed from the Call for Submissions process.*

GUIDELINES

Authors are invited to submit an abstract describing their presentation to be included in a TAC conference technical session or poster.

If the abstract is accepted, you will be asked to make a submission.

Submission Type	Includes	Deadline
Presentation <i>Check each session below to see if papers are <u>required</u> or <u>optional</u></i>	Paper and presentation OR Presentation only	Paper by April 27 Presentation by September 20 DRAFT presentation by April 27 FINAL presentation by September 20
Paper	Paper and presentation	Paper by April 27 Presentation by September 20
Poster	Poster	DRAFT Poster by April 27 FINAL Poster by September 20

If your submission is accepted, authors are expected to attend and present at the conference. In preparation for your submission, please review the [Guidelines for Authors](#).

All submissions, including the final presentation, become the property of the Transportation Association of Canada (TAC), which is entitled to publish them.

- Authors must use TAC’s online abstract software to submit an abstract. Authors who have an existing account should use the same credentials to login and submit an abstract.
- Submissions must be new, original or significantly different from any other previous submissions to other organizations for presentation or publication. They should not favour special interests or be of a commercial nature. This also applies to oral presentations.
- **Simultaneous interpretation** is available in rooms where French authors are presenting. Authors have the option to present in English, French or both.
- All accepted **papers and posters** will be included in the [Conference Papers](#) section of TAC’s website. **Presentations** will be available to conference delegates post conference.
- All student papers accepted for the TAC Conference via the Call for Submissions process are eligible for the [Student Paper Awards](#). To be considered, principal authors must be registered as full-time students at a recognized post-secondary institution.

QUESTIONS?

Contact [Christina Ghazal](#), Meetings and Events Coordinator.

TECHNICAL SESSIONS

Submit a 200- to 400-word abstract of your intended presentation for any of the sessions below.

ORGANIZED BY: ASSET MANAGEMENT TASK FORCE

INNOVATIONS IN ASSET MANAGEMENT

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Advancements in asset management
- Innovative methods, tools, techniques or applications/technologies applied to asset management
- Case studies presenting unique challenges of implementing asset management and lessons learned

INNOVATIONS IN TRANSPORTATION ASSET(S) DATA COLLECTION

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Innovative sources of data for identifying, inventorying and measuring/recording asset condition (satellite, terrestrial or airborne LiDAR, images)
 - Innovative methods for extracting asset inventory and/or condition from various data sources (pattern recognition, machine learning)
 - Innovative devices or equipment for capturing/recording asset data (vehicles, platforms, drones, handhelds)
 - Case studies related to the implementation of innovative data collection data sources, methods, devices or equipment
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ORGANIZED BY: CONNECTED AND AUTOMATED VEHICLES TASK FORCE

PLANNING AND DESIGNING ROADS FOR SMART CITIES

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Incorporating the Internet of Things into transportation infrastructure and traffic management
 - Applications of information and communications technology in transportation
 - Using transportation technology for improving quality of life
 - Leveraging CivicTech and open data to improve government relations with citizens and provide enhanced services
 - Identifying new data sources (e.g. crowdsourced and social media, to manage and operate the transportation system)
 - Real-time multi-modal data needs for Smart City transportation systems
 - Cybersecurity considerations for Smart Cities
 - Preparing the transportation system for mobility-as-a-service
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ORGANIZED BY: CONNECTED AND AUTOMATED VEHICLES TASK FORCE AND EDUCATION AND HUMAN RESOURCES DEVELOPMENT COUNCIL

CONNECTED AND AUTOMATED VEHICLES INFORMATION PLATFORMS AND HUMAN RESOURCE NEEDS

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Futures-building exercises or similar deployment scenario development for connected and automated vehicles (CAVs)
- Emerging regulatory frameworks and practices related to CAVs data and information platforms
- Implications of market power shift to a small number of companies and information platforms
- Implications of CAVs information platforms on transportation management, transportation planning, regulation, data management, data governance, data access, and policy
- Implications of CAVs on transportation professionals
- Human resources need assessments relating to CAVs
- Current initiatives by transportation agencies that address human resources and capacity development needs relating to CAVs (e.g. organizational and skills strategies)

ORGANIZED BY: CONNECTED AND AUTOMATED VEHICLES TASK FORCE AND TRANSPORTATION PLANNING AND RESEARCH STANDING COMMITTEE

MODELLING AND SIMULATING CONNECTED AND AUTONOMOUS VEHICLE OPERATIONS AND PLANNING

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Transportation demand modelling for CAVs
- Modelling of CAV-enabled technologies and systems
- Travel behaviour and CAVs
- CAV operation and traffic microsimulation
- CAV-related freight transport modelling
- Impact analysis on land use, urban design and travel

ORGANIZED BY: EDUCATION AND HUMAN RESOURCES DEVELOPMENT COUNCIL

2018 TAC EDUCATIONAL ACHIEVEMENT AWARD FINALISTS

PAPERS AND PRESENTATIONS ARE REQUIRED

TAC's Educational Achievement Award recognizes outstanding contributions by a TAC organizational or individual member in education and/or training relating to an in-house or external program. This session will feature a paper by the winner of TAC's 2018 Educational Achievement Award, as well as all other award finalists. (Abstracts for the [Call for Nominations](#) are required by December 4, 2017 and, if accepted, submissions are due by February 21, 2018 15:00 EST.)

ORGANIZED BY: ENVIRONMENT COUNCIL

2018 TAC ENVIRONMENTAL ACHIEVEMENT AWARD FINALISTS

PAPERS AND PRESENTATIONS ARE REQUIRED

TAC's Environmental Achievement Award recognizes exemplary contributions by a TAC organizational or individual member in environment with respect to providing transportation services. This session will feature a paper by the winner of TAC's 2018 Environmental Achievement Award, as well as all other award finalists. (Abstracts for the [Call for Nominations](#) are required by December 4, 2017 and, if accepted, submissions are due by February 21, 2018 15:00 EST.)

INNOVATIONS IN ENVIRONMENTAL TECHNOLOGIES

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Environmental management in transportation encompasses environmental data collection to support impact assessments and regulatory applications, mitigation and remediation planning and implementation, environmental monitoring, and tracking environmental performance.
- New tools allow road agencies to gain a better understanding of environmental impacts from projects, and assist in selecting cost-effective mitigation solutions. Innovative technologies may also ensure the compliance of federal and provincial regulatory requirements throughout the various phases of a project.
- Discussion of new technologies applicable to the field component of project work activity; assisting environmental managers with effective decision-making through the life cycle of a project; and assisting with reducing the environmental impact(s) of a project will be included.

INVASIVE SPECIES MANAGEMENT – INNOVATIVE APPROACHES AND TECHNOLOGIES

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Transportation agencies across Canada manage vast extents of land in their rights-of-way, pits, quarries, and maintenance yards as well as water crossings at ferry sites, bridges and culverts. These areas, when disturbed, create pathways for invasive plants and animals to spread.
- Elements of a successful invasive species management program go beyond determining which control method(s) to use. Transportation agencies need to find innovative ways to do more with less, by prioritizing their treatments, collaboration with neighboring landowners and engaging the public through communication and education.
- Highlight innovative approaches and technologies that contribute to successful invasive species management in the transportation sector.

ORGANIZED BY: GEOMETRIC DESIGN STANDING COMMITTEE

EMERGING ISSUES IN DESIGN

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Focus on lessons learned through ongoing practice of geometric design
- Geometric design issues and solutions leading to improved practices and better roads/streets

GEOMETRIC DESIGN CONSIDERATIONS

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Focus on emerging geometric design issues facing practitioners
- Unique or innovative approaches to geometric design challenges resulting in better and safer roads

ROUNDBOUT CHALLENGES IN DESIGN TO OPERATIONS

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Focus on roundabouts
 - Challenges and solutions related to planning, design, and/or operations of roundabouts
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ORGANIZED BY: GOVERNING TASK FORCE, CANADIAN NATIONAL COMMITTEE OF THE WORLD ROAD ASSOCIATION

INNOVATIONS IN ROADWAY ENGINEERING FROM AROUND THE WORLD

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Forum to showcase innovative roadway engineering projects being planned or delivered outside of Canada
 - Focus on best or innovative practices with potential applications in Canada
 - Consider urban and rural projects to ensure a broad segment of TAC membership session participation
-

ORGANIZED BY: INTEGRATED COMMITTEE ON CLIMATE CHANGE

CLIMATE CHANGE MITIGATION SOLUTIONS FOR TRANSPORTATION DESIGN AND CONSTRUCTION

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Many jurisdictions have and are taking steps to mitigate the future rate of climate change.
- Design features can streamline the future flow of traffic. Construction staging can minimize traffic congestion. Contract requirements can promote reduction of fuels used for equipment operations. Service provider selection criteria can include climate change perspectives.
- Profile a variety of solutions to reduce carbon footprint through shifting traditional approaches to design and construction of transportation infrastructure.

CARBON 101: GHG EMISSION MEASUREMENTS

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- The transportation sector contributes one quarter of greenhouse gas (GHG) emissions in Canada, significantly contributing to negative health and environmental effects.
- Highlight recent progress on transportation GHG emission research and planning
- Measurement and methods of calculating GHG emissions
- Modeling GHG emissions (local, regional, or provincial level)
- Emissions by transportation type (i.e. road, rail, marine, aviation)
- Emissions from current transportation infrastructure (i.e. road construction, building construction, freight transport, truck routes, etc.)
- Potential impacts of GHG emissions on land use, urban design and travel
- Technology or designs to combat GHG emissions from transportation

ZERO EMISSION VEHICLES (ZEV) AND GHG MITIGATION INITIATIVES IN THE CANADIAN TRANSPORTATION SECTOR

PAPERS AND PRESENTATIONS ARE REQUIRED

- Federal, provincial and municipal governments have initiated various programs and initiatives to deploy zero emission vehicles (ZEV) and/or reduce GHG emissions in the transportation sector.
- Electric vehicles are an emerging trend in the transportation sector.
- Reduction of GHG in transportation sector programs, initiatives and fleet management has been implemented in Canada.
- Many jurisdictions and local authorities have established best practices learning to share in the deployment of these technologies and initiatives.

ORGANIZED BY: MAINTENANCE AND CONSTRUCTION STANDING COMMITTEE

INNOVATION AND TECHNOLOGY IN ROAD CONSTRUCTION: EVOLVING TRANSPORTATION

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Road construction represents one of the largest expenditures for all Canadian jurisdictions.
- Road infrastructure construction ranges from rehabilitation to new construction.
- Jurisdictions and their service providers are constantly investing to rehabilitate existing infrastructure or construct new infrastructure to build Canada's economy.
- Include unique and innovative and technological approaches to road construction.
- Describe initiative or objective, benefits gained, lessons learned and future directions.

INNOVATION AND TECHNOLOGY IN SUMMER MAINTENANCE: EVOLVING TRANSPORTATION

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Canada's road infrastructure represents a huge investment for all Canadian jurisdictions.
- Jurisdictions have made significant progress in maintenance practices and treatments and are constantly striving to improve how they maintain road assets under constrained budgets.
- Showcase unique and innovative approaches on maintaining roads and highways through the summer months.
- Describe initiative or approach, benefits, lessons learned and future directions.

INNOVATION AND TECHNOLOGY IN WINTER MAINTENANCE: EVOLVING TRANSPORTATION

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Canada's winter climate presents some of the harshest environments in the world.
 - Transportation authorities have made significant investments in the past and are constantly striving to improve.
 - Many innovations have been pursued and approaches to winter maintenance vary significantly across Canada.
 - Showcase unique and innovative approaches on maintaining roads and highways through the winter months.
 - Describe initiative or approach, lessons learned and future directions.
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ORGANIZED BY: PUBLIC UTILITIES MANAGEMENT SUB-COMMITTEE

UTILITY RISK ON TRANSPORTATION PROJECTS

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Utility coordination
 - Utility engineering
 - Subsurface utility engineering
 - Managing utility risk
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ORGANIZED BY: PAVEMENTS STANDING COMMITTEE

INNOVATIONS IN PAVEMENT MANAGEMENT, ENGINEERING AND TECHNOLOGIES

PAPERS AND PRESENTATIONS ARE REQUIRED

- Innovative designs, tools, techniques or technologies applied to pavement management or pavement engineering
- Case studies presenting projects involving unique challenges in pavement management or engineering

Depending on the number of papers submitted, some may be moved to a poster session. Those presented as poster sessions still require a paper.

ORGANIZED BY: ROAD SAFETY STANDING COMMITTEE

2018 TAC ROAD SAFETY ENGINEERING AWARD FINALISTS

PAPERS AND PRESENTATIONS ARE REQUIRED

TAC's Road Safety Engineering Award recognizes exemplary projects or initiatives by a TAC member organization within road safety engineering. This session will feature a paper by the winner of TAC's 2018 Road Safety Engineering Award, as well as all other award finalists. (Abstracts for the [Call for Nominations](#) are required by December 4, 2017 and, if accepted, submissions are due by February 21, 2018 15:00 EST.)

DESIGNING STREETS FOR ALL ROAD USERS

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Measures to improve vulnerable road user safety to encourage active transportation
- Facility design to accommodate special needs of older and younger pedestrians
- Road diets, complete streets, shared spaces, and transit related issues
- Maintenance of pedestrian and cyclist facilities

GENERAL ISSUES IN ROAD SAFETY

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Work zone safety issues
- Median and roadside barriers
- Improving safety of commercial vehicles
- Managing vehicle speed

SAFE SYSTEMS APPROACH TO ROAD SAFETY

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Local examples of the application of the safe systems approach to road safety
- Multidisciplinary approaches to road safety
- Assessments before and after implementation of road safety measures
- Successful examples of incorporating human factors in design
- Safe systems innovations in foreign jurisdictions (e.g. UK, Europe, Australia, New Zealand)

SAFETY ISSUES RELATED TO CONNECTED AND AUTOMATED VEHICLES

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Designing roads for the vehicles of the future
- Human factors implications of CAVs
- Implications of CAVs on safety and operations of roadway networks
- Methods to validate and certify the safe operation of CAVs

USE OF EMERGING TECHNOLOGIES TO MEASURE SAFETY

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Mining alternative/surrogate data sources other than crash data (e.g. video-based conflict analysis)
- Use of crowd-sourced data (e.g. phone apps for trip surveys and self-reporting unsafe accidents and conflicts)
- Use of new technology to collect site data (e.g. LiDAR to confirm geometrics, drones to collect video observations)

ORGANIZED BY: SMALL MUNICIPALITIES TASK FORCE

EVOLVING TRANSPORTATION IN SMALL MUNICIPALITIES

PAPERS AND PRESENTATIONS ARE REQUIRED

- Recognize innovative projects or technology that evolved transportation in small municipalities.

ORGANIZED BY: SOILS AND MATERIALS STANDING COMMITTEE

GREEN TECHNOLOGY IN GEOTECHNICAL AND MATERIALS ENGINEERING

PAPERS AND PRESENTATIONS ARE REQUIRED

- Recycling and incorporating recycled materials
- Alternative materials for road construction
- Energy and CO₂ emissions reductions through innovative use/design of materials
- Durable construction materials that increase design life
- Field performance of products/methods using recycled materials vs traditional materials

INNOVATION IN GEOTECHNICAL AND MATERIALS ENGINEERING

PAPERS AND PRESENTATIONS ARE REQUIRED

- Advancements in design and construction of road and bridge embankments
- Incorporating climate change considerations for geotechnical and pavement materials engineering
- Application of trenchless technology in constructing new infrastructure under existing roadways
- Remote sensing and drone use for geotechnical engineering
- Recycling and incorporating recycled materials
- Alternative materials for road construction
- Energy and CO₂ emissions reductions through innovative use/design of materials
- Durable construction materials that increase design life
- Field performance of products/methods using recycled materials vs. traditional materials

TESTING AND MODELLING OF ROAD AND EMBANKMENT MATERIALS

PAPERS AND PRESENTATIONS ARE REQUIRED

- Innovative testing and modelling of embankment and road materials, including unbound and bound soil, geosynthetics, and bituminous and Portland cement based materials
- Development of estimation models for mechanical properties of pavement materials
- Assessment and use of frost and moisture susceptibility
- Seasonal variation mechanical properties of soil and pavement materials
- Case studies summarizing road and/or embankment construction projects with challenges and respective solutions applied
- Lessons learned from difficulties encountered in road and/or embankment construction
- Long term performance evaluations of road and/or embankments and lessons learned

ORGANIZED BY: STRUCTURES STANDING COMMITTEE

STRUCTURES

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Bridge structures: planning, design, construction, management, materials
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ORGANIZED BY: SUSTAINABLE TRANSPORTATION STANDING COMMITTEE

2018 TAC SUSTAINABLE URBAN TRANSPORTATION AWARD FINALISTS

PAPERS AND PRESENTATIONS ARE REQUIRED

TAC's Sustainable Urban Transportation Award recognizes exemplary contributions by a TAC organizational or individual member in sustainable urban transportation. This session will feature a paper by the winner of TAC's 2018 Sustainable Urban Transportation Award, as well as all other award finalists. (Abstracts for the [Call for Nominations](#) are required by December 4, 2017 and, if accepted, submissions are due by February 21, 2018 15:00 EST.)

CYCLING SOLUTIONS: IMPROVING CYCLING INFRASTRUCTURE

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Lessons learned from evaluating cycling infrastructure
- Addressing cycling safety issues and concerns through design
- New and innovative solutions to overcome challenges in implementing cycling infrastructure
- Designing for interactions between cyclists and pedestrians

EMERGING ISSUES IN URBAN TRANSPORTATION: CAN NEW MOBILITY SOLVE TRANSIT'S FIRST- AND LAST-MILE CHALLENGE?

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Explore the potential for "new mobility" solutions to improve access to transit stops and stations by overcoming first- and last-mile barriers.
- Possible topics include: bike sharing and car sharing services; dynamic transit services; ride-hailing services; real-time ridesharing applications; and mobility-as-a-service applications.
- The potential future role of driverless vehicles could also be explored.

ORGANIZED BY: SUSTAINABLE TRANSPORTATION STANDING COMMITTEE AND SMALL MUNICIPALITIES TASK FORCE

SMALL MUNICIPALITIES – INNOVATIVE TRANSPORTATION SOLUTIONS TO ENHANCE SUSTAINABILITY

PAPERS AND PRESENTATIONS ARE REQUIRED

- Transportation innovations planned or implemented in smaller municipalities.
- Include roadway elements (e.g., complete streets), multi-modal elements, transportation demand management, transit services, parking management and parking reductions, pedestrian and cycling facilities/strategies.

ORGANIZED BY: TRANSPORTATION PLANNING AND RESEARCH STANDING COMMITTEE

BEST PRACTICES IN URBAN TRANSPORTATION PLANNING

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Best practices or innovations in urban transportation master planning
- Best practices or innovations in travel data collection, analysis and demand forecasting
- Best practices or innovations in transit planning

GOODS MOVEMENT

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- Goods movement examples of best safety practices in all modes – trucks, rail, air, marine and pipelines.
- Optimizing use of existing transportation infrastructures and making targeted investments and regulations for improved safety.
- Need to develop safe and innovative solutions by improving current data collection practices, policies and regulations.
- Achieving successes through public/private partnerships and innovations.
- Effective integration with land-use planning and community building initiatives.
- Improved safe and efficient supply chain and logistics practices for meeting needs of public and private sector partners in the context of the Canadian and global economies.

INTEGRATED LAND USE AND TRANSPORTATION PLANNING: THEORY AND PRACTICE

PAPERS AND PRESENTATIONS ARE REQUIRED

- Innovative developments in integrated transportation and land use planning.
- Academic and practitioner perspectives are equally welcome.
- Case studies in which effective integrated planning strategies were put into practice are of particular interest.

ORGANIZED BY: TRAFFIC OPERATIONS AND MANAGEMENT STANDING COMMITTEE

EVOLVING TRANSPORTATION: MOBILITY AS A SERVICE REVOLUTION

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- MAAS – or mobility as a service – is the hottest acronym in transportation.
- Car, ride and bike sharing are part of the MAAS market.
- Operation services and innovations of MAAS will be presented.
- What can jurisdictions do to help the MAAS industry?
- Can road authorities become MAAS players through bike share or other transportation modes?
- How transit is evolving to respond to MAAS
- MAAS data and apps – helping users to get there
- Traffic and parking regulations vs MAAS

INNOVATIVE TRAFFIC CONTROL

PRESENTATIONS ARE REQUIRED, PAPERS ARE OPTIONAL

- #InnovativeTrafficControl is a showcase for what's new in the traffic control field.
- The showcase is open to innovative devices, methods and approaches to traffic control.
- New products from vendors may be presented but only in the context of a field study or research program.
- The showcase is open to all fields of transportation including active, commercial and transit.

POSTER SESSION

Submit a 200- to 400-word abstract of your intended poster to present at a poster session.

ORGANIZED BY: STRUCTURES STANDING COMMITTEE

STRUCTURES

POSTERS ARE REQUIRED

- Bridge structures: planning, design, construction, management, materials

PANEL DISCUSSION SEEKING PARTICIPANTS

The following panel discussion is seeking participants interested in a panel debate on automated vehicles. Participants interested are invited to make a submission providing contact information, bio and a supporting document showing their interest. Organizers will contact participants in late January/early February.

ORGANIZED BY: CONNECTED AND AUTOMATED VEHICLE TASK FORCE

AUTOMATED VEHICLES – THE DEATH OF PUBLIC TRANSIT AND THE RE-EMERGENCE OF URBAN SPRAWL: A DEBATE

The Connected and Automated Vehicle Task Force is soliciting expressions of interest to present an argument for or against each proposition of the two debate topics listed below. In addition to making a 15-minute presentation in support of the argument, participants must defend their position when challenged by other panelists and the audience.

- **Debate Topic #1:** Speakers will take opposing views on whether automated vehicles will eliminate the need for public transit
- **Debate Topic #2:** Speakers will take opposing views on whether increased urban sprawl is inevitable due to automated vehicles

PANEL DISCUSSIONS AND WORKSHOPS

Panel discussions begin with invited presentations and are followed by exchanges and debate among panel and audience members.

Workshops provide an opportunity for in-depth discussion and learning on topics of interest. They include opening presentations or remarks; invited speakers or keynote presentations; roundtable discussions; roundtable summary reports and closing remarks. Papers are not solicited for panel discussions or workshops.

ORGANIZED BY: EDUCATION AND HUMAN RESOURCES DEVELOPMENT COUNCIL

BUILDING FOR THE FUTURE: CONSTRUCTION MANAGEMENT RETENTION AND EXPERTISE

WORKSHOP

- What are the challenges in retaining people in the field and continuing to build construction expertise of the future?
- What is the industry currently doing to attract and retain talent?
- How do we bridge the gap with experience, opportunities, mentorship, and maintaining quality?
- How do we maintain interest and stay connected and up-to-date with changing technology?
- Present new training and education opportunities.

EVOLUTION IN THE TRANSPORTATION WORKPLACE (EFFECTIVE ONBOARDING, TRANSITIONS AND INNOVATIONS)

PANEL DISCUSSION

This panel will lead a best practices discussion on:

- Onboarding and transitioning staff (students through new employees including managers)
- Knowledge transfer and new ways of doing things
- Evolving workplaces – dispersed work units, managing from afar and in the field
- Harnessing technologies to help employees and managers
- Maintaining talent

RETIRING SOON? WHAT'S NEXT IN YOUR CAREER?

PANEL DISCUSSION

This panel will lead a discussion on the end of career management and related issues for transportation professionals; it will feature a series of short video clips, and highlight benefits and constraints associated with various approaches to retirement.

Topics will examine:

- How to transfer employee knowledge to the next generation of professionals
- How to take advantage of acquired experience of professionals before they leave (i.e. mentoring, advisor role, consultant)
- Options in making the shift from full-time employment to a retired status
- Options for a softer transition (i.e. from full-time to part-time, then to retirement)
- Options for individuals who do not want to retire

UNIVERSITY SESSION

PANEL DISCUSSION

- Panel discussion presenting a topic of interest (to be confirmed)
 - Table work where students interact with industry representatives to formulate questions on topic or to foster discussion on panel topic
 - Panel discussion Q&A
-

ORGANIZED BY: ENVIRONMENTAL ADVISORY AND LEGISLATION STANDING COMMITTEE

FEDERAL ENVIRONMENTAL LEGISLATION UPDATES – DO YOU KNOW YOUR NEW RESPONSIBILITIES?

PANEL DISCUSSION

- Provide updates on new federal legislative requirements (Canadian Environmental Assessment Agency, Fisheries Act, Navigation Protection Act).
 - Overview of the Canadian Environmental Protection Act and other relevant environmental reviews will be provided as applicable.
 - Many federal changes include enhanced requirements for indigenous involvement and recognize commitments made in UN resolution.
 - Include involvement of Indigenous Government representatives to provide an indigenous perspective and advice on how proponents can effectively engage to advance work on transportation projects.
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ORGANIZED BY: LOCAL ORGANIZING COMMITTEE (LOC)

AN UPDATE ON P3'S – CANADA INFRASTRUCTURE BANK

PANEL DISCUSSION

- Update to the 2017 TAC Opening Plenary Session panel discussion.
- Same format will likely include a representative from the Canada Infrastructure Bank.

FIRST NATIONS PARTNERSHIPS

PANEL DISCUSSION

- The lack of infrastructure in First Nations communities includes transportation.
 - Panelists will likely include a First Nation community leader, a representative discussing funding options, and representatives from the provincial and federal governments.
-

ORGANIZED BY: PAVEMENTS STANDING COMMITTEE (SUPPORTED BY THE ME PAVEMENTS DESIGN USER GROUP)

INNOVATIONS IN PAVEMENT DESIGN SOFTWARE – STATE OF THE PRACTICE

PANEL DISCUSSION

- The AASHTO Pavement ME software is still some time away from being fully functional (global re-calibration is under way for the 2018 software release). As a result, a number of pavement design software alternatives are entering the market.
 - Provide a forum for the presentation of innovations in pavement design software applications.
 - Panelists representing all facets of the industry (academia, consultants, and industry with agency support) will present a single pavement design software application.
 - Mechanistic and empirical design methodologies for both flexible and rigid pavement design.
-

ORGANIZED BY: PAVEMENTS STANDING COMMITTEE CO-SPONSORED BY: ASSET MANAGEMENT TASK FORCE; MAINTENANCE AND CONSTRUCTION AND SOILS AND MATERIALS STANDING COMMITTEES

PAVEMENT PRESERVATION

WORKSHOP

- Pavement preservation (PP) is a coordinated approach to major pavement maintenance and light rehabilitation treatments performed before the appearance of significant distresses, to extend the service life without adding structural strength to the pavement.
 - Examine PP considerations, including the growth and evolution of different rigid and flexible pavement rehabilitation materials and treatments, PP strategies, and future new and innovative preservation materials and solutions.
 - Focus on municipal and provincial PP programs, treatment types; benefits in terms of initial and life cycle costs/energy savings and reduced emissions/user costs and pavement life extension.
 - Results of the 2017 pavement preservation survey conducted by the Pavements Standing Committee will be presented.
 - Challenges for discussion include measuring/documenting benefits, proper treatment selection, lack of performance related specifications, improving quality control and acceptance testing.
-

ORGANIZED BY: SMALL MUNICIPALITIES TASK FORCE

EMERGING TRANSPORTATION STRATEGIES FOR SMALL MUNICIPALITIES

PANEL DISCUSSION

- Successful forward thinking studies/strategies completed in a small municipalities such as transportation master plans or other long-term studies.
-

INNOVATIVE WAYS TO CREATE ACTIVE TRANSPORTATION IN SMALL MUNICIPALITIES

PANEL DISCUSSION

- Successful projects or studies that relate to active transportation in small municipalities.
 - Focus on project details and how active transportation was implemented.
-

ORGANIZED BY: TRAFFIC OPERATIONS AND MANAGEMENT STANDING COMMITTEE AND CONNECTED AND AUTOMATED VEHICLE TASK FORCE

EXPECTATIONS: GETTING JURISDICTIONS READY FOR CONNECTED AND AUTOMATED VEHICLES

PANEL DISCUSSION

- Mobility providers and the auto industry are spending billions towards an automated transportation future.
- Road authorities are still adapting to active transportation, transit priority and road diets.
- The coming CV/AV revolution will be a major disruptive change to current practices.
- Public funding is often scarce and needs for basic maintenance are significant.
- What do CV/AV proponents expect from road infrastructure?
- What will jurisdictions need to do to adapt to autonomous mobility?
- How can the industry adapt their products to the limitations of public infrastructure?

TRANSPORTATION IN THE 21ST CENTURY: RIDING ON BITS AND BYTES

WORKSHOP

- Vehicles, road users, and transportation infrastructure are becoming increasingly interconnected and interdependent, thanks to wired and wireless communications technologies.
- Digital and Information and Communication Technologies (ICT) infrastructure – data, 3D maps, wired/wireless communications – will be critical components in the delivery of transportation services, maintenance, and operations.
- This workshop will combine perspectives from the ICT sector, road authorities, original equipment manufacturers and suppliers.
- Discuss how all three sectors are working together and areas for improvement.