2019 Rail Conference

Call for Papers, Presentations and Session Ideas

APTA's Rail Conference features sessions that address all passenger rail modes: commuter rail, heavy rail/subways, light rail, streetcars, and high-speed and intercity rail. It is the public transportation's leading conference for professionals engaged in passenger rail. Most sessions are developed by drawing upon the expertise and experience of APTA industry professionals, so your input is critical to providing the most interesting and value-added meeting agenda.

APTA's primary tool for developing the Conference sessions is through its "Call for Papers, Presentations and Session Ideas," distributed to its Member organizations and Committees. These abstracts are brief summaries of proposed session topics and specific technical papers or presentations.

A successful conference demands fresh, innovative, cutting-edge ideas, case studies, and best practices that will motivate participants during—and beyond—the conference. Abstracts should address specific needs, challenges, trends, or issues you believe are most appropriate for discussion and/or which you are proposing to present. It is important that the abstracts detail the topic's importance and relevance to today's passenger rail discussion and practice. **We ask that each abstract/submission identify three main take-aways or messages the audience will learn from the proposed presentation or session.**

Guidelines

Below are guidelines to help you with your submission.

- Submitters (all presenters, authors, and co-authors) must belong to an APTA member organization.
- Abstracts should contain full contact information for authors, co-authors, and presenter/s.
- Abstracts should be 200 words or less (about a half page in length) – this is intended only as a description of the idea or topic.
- Selected authors will be required to submit a bio and presentation and/or technical paper by the deadline.

Schedule
- To increase the chances of TTC papers and presentations being accepted, a TTC panel will review abstracts before submission to APTA. Please send your abstract to Angela.Haynes@ttc.ca no later than Wed., Nov. 28.
- Author notifications will start in February 2019.

- Technical papers and presentations are due to APTA by May 31st, 2019.
- Technical papers and presentations will be posted online/in the APTA app

Tracks and Topics

The 2019 conference will be organized into six tracks:

- Track 1: Capital Programs, Infrastructure Engineering, and Maintenance
- Track 2: Operations, Systems Integration, Engineering, and Innovation
- Track 3: Vehicles, Mechanical Systems, and Vehicle Maintenance
- Track 4: Safety, Security, and Emergency Preparedness
- Track 5: Planning, Policy, and Project Development
- Track 6: Transit Future Workforce

Track 1: Capital Programs, Infrastructure Engineering, and Maintenance

Capital programs, state of good repair, and infrastructure maintenance are inherently linked and ignoring one of these can land a system in a heap of trouble very quickly. Share your experiences, both good and bad, the do's and don'ts, etc. Abstracts and presentation ideas are invited that address any of the following topics:

- Funding and financing
- Contracting for services, procurement of construction, Buy America
- Capital project implementation case studies and success stories
- The cost of capital projects
- "Mega projects" around the world
- Rail corridor recapitalization and expansion
- Privatization of asset management: best practices for outsourcing
- Project management and FTA New Starts program standard-setting
- Alternative delivery
- Elevators, Escalators
- Noise and vibration mitigation
- Infrastructure maintenance practices
- Implementation case studies of Systems Engineering practices/Systems approaches applied to capital projects

Track 2: Operations, Systems Integration, Engineering, and Innovation

Technology is rapidly changing the transit industry. Innovations arise daily. This track will showcase new and emerging technology options available to streamline operations and provide enhanced services to transit riders. Emerging technologies and current issues in critical fields will be addressed. Abstracts and presentation ideas are invited that address any of the following topics:

- Rail systems: electrification; train control; communications; signals; track
- PTC: implementation, interoperability, data security and best practices
- Technology and emerging technologies, implementation case studies
- Energy, environment and rail

- The changing mobility paradigm
- Recent technology trends and innovations
- Integrating operations on corridors with multiple users
- Driverless/automated trains
- Fare technologies, implementation case studies
- Rail operations control centers, dispatch and scheduling
- Intercity, high-performance and high-speed passenger rail
- Hyperloop and Magnetic Levitation
- Operations planning, modelling and integration
- Tunnel ventilation and fire life safety issues

Track 3: Vehicles, Mechanical Systems, and Vehicle Maintenance

This track is dedicated to the rail vehicle, from concept to testing to revenue operations. Abstracts and presentation ideas are invited that address any of the following topics:
- Rolling stock design
- Innovations and trends
- Changing customer preferences
- Melding rail, LRT and streetcar technologies
- High speed vehicle design and operations
- Crash energy management
- Rail standards and recommended practices
- Vehicle procurement practices
- Vehicle refurbishment and overhaul best practices
- Standardized vehicle designs and infrastructure considerations
- Vehicle maintenance programs
- Vehicle and track interaction issues

Track 4: Safety, Security, and Emergency Preparedness

This track focuses on how public transportation systems safeguard assets, systems, and riders. Abstracts are invited that address any of the following topics:
- Building a safety-first culture
- Role of riders in a safety-first culture
- Safety and other impacts of scooters, bicycles and other new mobility
- State Safety Oversight Programs
- Safety Management System
- Safety and protection of train operators
- Emergency preparedness drills
- Traffic prioritization systems design and operations
- Strengthening data security
- Cybersecurity threats and responses
- Partnerships with municipal and state law enforcement agencies
- Security challenges and major events
- Transit's role in stopping human trafficking
- Preventing loss, reducing cost, managing claims

- Risk management insurance
- Transit's responses to homelessness

Track 5: Planning, Policy and Project Development

Transit agencies are teaming up with local partners, cities, and businesses to achieve success in increasing options for accessible, sustainable, and livable communities throughout the nation. This technical planning track will include educational sessions on planning for rail at regional, corridor, and station levels. Canadian experiences in these areas are welcome. Abstracts and presentation ideas are invited that address any of the following topics:

- Impacts of new mobility options on transportation providers and route systems
- Prioritizing rail in the region including travel demand modeling and integrating with multiple modes
- 1st and Last Mile transportation
- Transit referenda and ballot measures
- Privately funded projects
- Managing the environmental planning process
- TOD polices and guidelines; FTA programs such as TOD planning grants
- Why design matters, including sustainable and universal design in projects and construction strategies
- Station area and access planning
- Funding and financing rail and transit projects
- New options for value capture
- Creative placemaking strategies including arts in transit capital projects
- Partnerships for equitable transit and community development
- Creating accessible, sustainable, and livable communities
- Climate resiliency/climate adaptation strategies
- New business models for financing capital projects
- Key partnerships and stakeholder collaboration
- Transit Asset Management Plans, including target setting of conditions and facilities and incorporating plans into regional decision-making transportation plans.
- Implementation case studies of Systems Engineering practices/Systems approaches applied to capital projects
- Transit's responses to homelessness

Track 6: Transit's Future Workforce

Investments continue to be made to increase capacity and improve passenger rail services as a function of a growing and changing demand. In addition, new technologies are expected to increase efficiency while requiring new and different skills from future workers. Strategies for approaches to address these changing and evolving conditions is the focus of this track. Abstracts and presentation ideas are invited that address any of the following topics:

- Succession planning
- Innovative models: leadership/management, business, governance, partnerships
- Workforce sustainability
- Impact of technology innovations on the future workforce
- Knowledge sharing and transfer
- Internships, apprenticeships, certifications
- Frontline training and development
- Organized labor and management: building/sustaining relationships
- Organizational development practices

- Educational partnerships: building the talent pipeline