# CANADA

Name of Association: Tunnelling Association of Canada (TAC)

Type of Structure: Federally incorporated non-for-profit society Number of Members: 558 individual members, 72 corporate members

# ASSOCIATION ACTIVITIES DURING 2023 AND TO DATE

The year 2023 has been a very successful year for TAC, most notably with the ITA's selection of Montreal as the host city for the 2026 World Tunnel Congress. This culminates many years of work by several dedicated members of TAC in order to put together this successful bid and we are grateful to the ITA to demonstrate confidence in TAC with this award. TAC looks forward to welcoming the worldwide tunnelling community to Montreal in May, 2026!

The 2023 TAC Conference was hosted in Toronto, Ontario from September 24 - 26, 2023, under the theme Tunnelling -Smart Solutions, Future Growth. This was TAC's biggest conference so far with over 750 attendees with a sold-out Awards Gala, 62 exhibitors and 31 sponsors. The conference featured two keynote speakers, short courses, two technical tours and 63 technical sessions with 163 speakers. The conference also included a moderated event hosted by the TAC EDI Taskforce on Women in Tunnelling. The Conference also include signing of the ITA – TAC agreement for the WTC2026 to be hosted in Montreal, Quebec in May 2026

across the five TAC chapters and the TAC Young Members Group (TACym) was very active hosting five webinars, three site visits, and one social event. The regional chapters hosted 16 in-person events in Vancouver, Toronto, Edmonton, Aberta and Montreal, Quebec.

As part of the conference, the annual TAC Achievement Awards were presented at the Gala dinner held on September 25, 2023. The 2023 recipients included:

- Lifetime Achievement Award – Dr. K. Y. Lo
- Young Tunneller of the Year Award Michael Dutton and Riley McMillan
- Tunneller of the Year Award
  - Mike Zegarac
- Canadian Innovation Initiative Award RockMass Technologies and Hatch for Digital Innovation in Tunnel Mapping using Mobile LiDAR and Machine Learning
- Canadian Project of the Year Award (Up to \$100M CAD) – Trans Mountain, McNally, Kiewit, Hatch and Herrenknecht for the Trans Mountain Expansion Project - Burnaby Mountain Tunnel Project
- Canadian Project of the Year Award (Over \$100M CAD) – City of Toronto, Hatch ltd. with Jacobs/Baird, and Southland Mole of Canada and Astaldi



Canada Design for the Ashbridges Bay Treatment Plant Outfall (ABTPO) Tunnel Project

- Photo of the Year Award Yusuf Soliman for Carving Through Bedrock (The Construction of a Cross Passage)
- TAC Outstanding Service Award
   Boro Lukajic
- Dan Eisenstein Memorial Scholarship
   Captain Chelsey Guo
- TAC Undergraduate Scholarship
  Madeleine Gaul

Full 2023 TAC Achievement Award details and videos are posted on the TAC website (https://www.tunnelcanada.ca/ awards\_2023.php). TAC looks forward to its next annual conference from October 6 to 8, 2024 in Montreal, Quebec.

TAC communicates with its members and the general public through a number of forums:



TAC 2023 at the Westin Harbour Castle in Toronto, Ontario

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There were monthly events hosted

- "Canadian Tunnelling" magazine in partnership with the Tunnelling Journal, this twice-yearly publication focuses on Canadian tunnelling activity and TAC events. Canadian Tunnelling was published in February and September 2023, with issues mailed to the TAC membership. Previous issues of Canadian Tunnelling are now available to TAC members on the TAC website.
- TAC and TACym maintain a full Social Media presence, including an active LinkedIn page (https://www.linkedin. com/company/tunnelling-associationof-canada/).
- TAC also implemented a bilingual bi-monthly newsletter which was published with six issues in 2023.

TAC has implemented a series of Special Projects over the years as a means to promote the Association and the tunnelling industry in Canada in general. In 2023, TAC carried out the following initiatives,

Launch of the "Canadian Tunnelling Projects Dashboard" – a GIS-enabled database that provides TAC members with an overview of current, upcoming and historical projects across Canada. This highly anticipated project provides the most comprehensive and up-todate information on the tunnelling industry in Canada.

### **CURRENT TUNNELLING ACTIVITIES**

The tunnelling industry in Canada continues to be very active with tunnelling projects underway in all five Canadian Chapters. The following are some of the key projects currently underway:

#### Key Western Canada projects currently in progress or completed in 2023 include:

- In Construction
- Broadway Subway Project 5.7km extension of the Millenium Line
- Annacis Water Supply Tunnel 2.3km below the Fraser River between Surrey and New Westminster
- Burnaby Lake North Interceptor No. 2
  3km of single pass 2,130mm sewer
- Second Narrows Water Supply Tunnel
- Eagle Mountain Woodfibre Gas Pipeline
  9km tunnel between Squamish and Howe Sound
- Annacis Island Wastewater Treatment Plant Outfall – 575m 4.2m ID tunnel, to outfall within the Fraser River
- Continued works under the Basement Flood relief (BFR) and Combined Sewer Outflow (CSO) programs, separation of 43 combined sewer districts in the City of Winnipeg
- Cockburn and Calrossie Contract C7 and C9A
- Jefferson East Sewer Separation Project Contracts

# Key Eastern Canada projects currently in progress or completed in 2023 include:

- Ontario Line Southern Civil, Stations and Tunnel
- Eglinton Crosstown West Extension (ECWE) Advance Tunnel
- Scarborough Subway Extension -Advance Tunnel
- Scarborough Subway Extension Stations, Rails and Systems
- Bowmanville Zone 1 Feedermain
- REM Montreal
- Lafontaine Tunnel Rehabilitation project

## FUTURE TUNNELLING ACTIVITIES

- Calgary Green Line Segment 2A
- Comox Valley Sewer Conveyance Project
- Stanley Park Water Supply Tunnel
- Pitt River Water Supply Tunnel
- Cambie-Richmond Water Supply Tunnel
- Coquitlam Intake No. 2 and Tunnel
- Coquitlam Main No. 4 City Centre Tunnel
- Lulu Delta Water Supply Tunnel
- Fraser River Tunnel Project (Immersed Tube Tunnel)
- Millenium Line Skytrain Extension to UBC (UBCX)
- Ferry Road and River Bend Combined Sewer Relief Project
- Inner Harbour West
- Taylor-Massey Creek Tunnel
- Toronto Black Creek
- Ontario Line North
- GE Booth Outfall
- Ontario Pumped Storage
- Snelgrove Watermains Phase 2
- Eglinton Crosstown West Extension Advance Tunnel 2
- Yonge North Subway Extension Advance Tunnel
- Yonge North Subway Extension Stations, Rails and Systems
- West Trunk Diversion
- West Vaughan Sewage System Project
- Toronto Midtown Area 17 Sewer
- Montreal Blue Line Metro Extension
- Montreal REM l'Est Project
- Quebec Tramway Project
- Quebec Third Link Project (under tender)
- South West Rail Link Extension NSW
- Borumba Dam Pumped Storage Hydro, Sunshine Coast, QLD