

Name of Association: Colombian Tunnelling Committee

Number of Members: 10 members that represent more than 2500 engineers in the country

ASSOCIATION ACTIVITIES DURING 2023 AND TO DATE

The Committee continues to participate with the Colombian Society of Engineers as part of the revision team for the Colombian Tunnel Design Manual developed by the National Roads Institute (INVIAS). The Committee worked on the following activities during 2023:

- The committee will organize more short talks with invited experts, which will be open to all members of the community
- Attendance at the World Tunnel Congress in May 2023
- World Road Tunnel Seminar: implementation of technologies in tunnel operation
- The committee organized and participated in the 2023 Tunnel Symposium, in which all Working Groups participated within topics discussed during the year

CURRENT TUNNELLING ACTIVITIES

In 2023, the excavation of the 9,730m Guillermo Gaviria Echeverri Main Tunnel was completed.

In addition to the Guillermo Gaviria Echeverri tunnel, Colombia has seven of the longest tunnels in America:

- La Línea Tunnel – 8.6km
- Oriente Tunnel – 8.2km
- Occidente Tunnel – 4.6km
- Occidente Tunnel (Second tube) – 4.6km
- Buenavista Tunnel – 4.5km
- Renacer Tunnel – 4.3km
- La Quebra Tunnel – 4.2km

FUTURE TUNNELLING ACTIVITIES

Studies and designs of tunnels in 2024

- Tunnel 1 (636m) - Mulálo to Loboguerrero
- Tunnel 2 (852m) - Mulálo to Loboguerrero

- Tunnel 4 (3.27km) - Mulálo to Loboguerrero
- Tunnel 5 (1.23km) - Mulálo to Loboguerrero
- Tunnel 9 (5.32km) - Mulálo to Loboguerrero
- Bogotá Metro Line 2 (15.5km)

Construction of road tunnels in 2024

- Fuemia tunnel (2.2km)
- Pamplona tunnel (1.4km)
- La Honda tunnel (0.40km)
- La Llorona tunnel (0.46km)

STATISTICS

Completed

La Paz Tunnel



In 2023, the construction of eight road tunnels was completed, with a length of more than 15.8km. Those tunnels represent an investment of close to \$0.74bn.

ITA MEMBER NATION ACTIVITY REPORTS 2023

Close to completion Buenavista II Tunnel



Approximately, 30 tunnels of different diameters and purpose are under construction in Colombia, comprising a length of more than 22km of underground space.

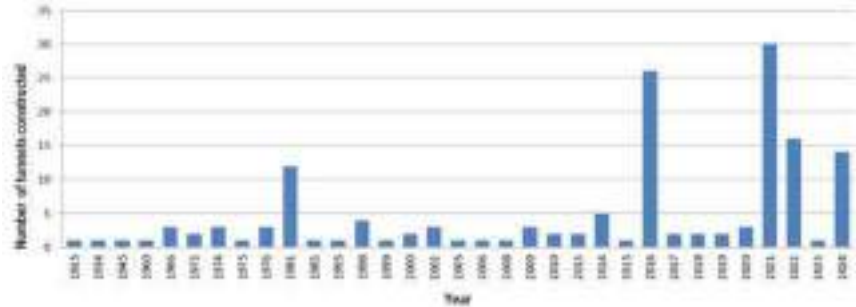
Under study Bogotá Metro Line 2



Currently, the construction of Line 2 of the Bogotá Metro is in the bidding phase - 12.6m of tunnel, 10.5m in diameter.

Colombia has 196 road tunnels built and under construction, totalling approximately 180km

Historical construction of tunnels in Colombia



EDUCATION ON TUNNELLING IN THE COUNTRY

Postgraduate course applied to tunnel engineering: University: Universidad Javeriana / Bogotá, Colombia.

Postgraduate course applied to mining engineering: University: Universidad Javeriana / Bogotá, Colombia.

Postgraduate course in Road Tunnels: Design, Construction and Management: University: Universidad de Los Andes/ Bogotá, Colombia.

Postgraduate course in rock embankments and tunnel design: University: Universidad de Los Andes/ Bogotá, Colombia.

Postgraduate course in underground construction: University: Universidad Militar Nueva Granada / Bogotá, Colombia.

Postgraduate course in road tunnels: University: Universidad Javeriana / Bogotá, Colombia.

Geotechnical risk assessment and management: INGETEC / Bogotá, Colombia

Postgraduate course in underground structures: University: Universidad del valle / Valle del Cauca, Colombia

Course Tunnel lighting design: University: Universidad Nacional de Colombia / Bogotá, Colombia

Seminar on mechanized tunneling in soft ground: Herrenknecht-INGETEC / Bogotá, Colombia