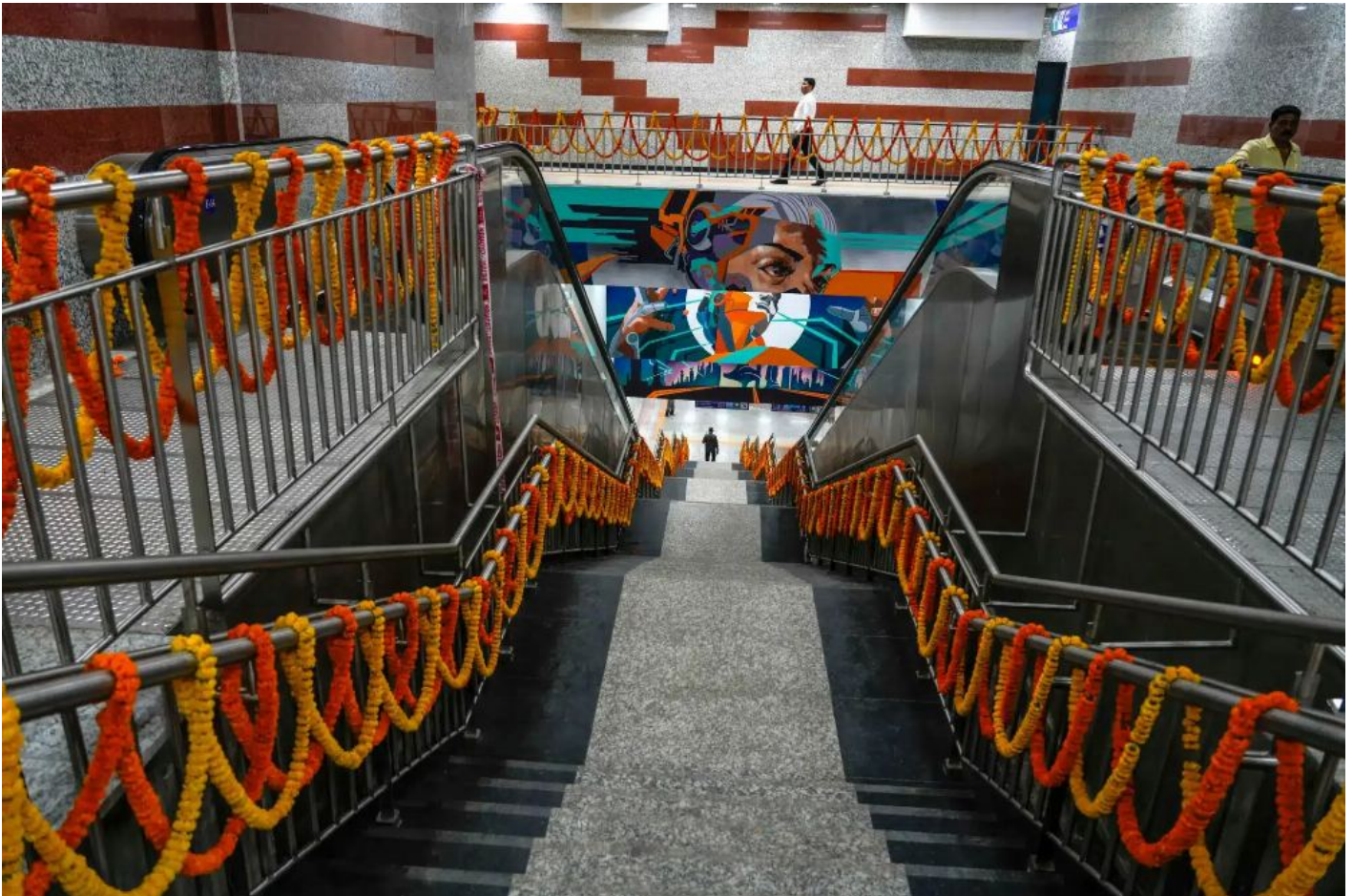


India's First Under-River Metro Tunnel

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About India's First Under-River Metro Tunnel

- It is a part of Kolkata Metro's East-West Corridor.
- It passes under the Hooghly River in the city's northeast, with the tunnel 13 meters below the riverbed and 37 meters below ground level.
- It forms part of the 4.8 km underground section from Howrah Maidan to Esplanade.
- It is the second section of the East-West Metro corridor and has been built at a cost of Rs 4,965 crore.
- The stretch also has the deepest metro station in the country, the Howrah Maidan station, at 32 metres below ground level.
- The metro is expected to cover the 520-meter stretch under the Hooghly River in 45 seconds.

Key Facts about River Hooghly

- The [Hooghly River](#), also known as the Bhagirathi-Hoogly and Kati-Ganga Rivers, is one of the significant rivers in West Bengal.
 - It is a distributary or arm of the Ganges River, about 260 km long.
 - Course:
 - It is formed in Murshidabad, where the Ganga splits into two parts, while the part flowing through Bangladesh is called the Padma.
 - The other part is the Hooghly, which flows through a heavily industrialized area of West Bengal.
 - The Hooghly River is silted up above Kolkata, and the river flows to the west and south to the estuary of Rupnarayan and then south and southwest to enter the Bay of Bengal through a 32-kilometer-wide estuary.
 - The Hooghly's majority of water comes from the Farakka Feeder Canal instead of natural water.
 - The Farakka Barrage is a dam that diverts water from the Ganges into a canal near the town of Tildanga in Malda district. This supplies the Hooghly with adequate water even in the dry season.
 - Haldi, Ajay, Damodar, and Rupnarayan are the rivers that feed the lower reaches of the Hooghly.
 - The important cities near the Hoogli River are Jiaganj, Azimganj, Murshidabad, and Baharampur.
 - It is spanned by a cantilever bridge between Haora and Kolkata and by the Bally Bridge between Bally and Baranagar.
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Q1) What is a cantilever bridge?

A cantilever bridge is a bridge built using cantilevers, structures that project horizontally into space, supported on only one end. For small footbridges, the cantilevers may be simple beams; however, large cantilever bridges designed to handle road or rail traffic use trusses built from structural steel, or box girders built from prestressed concrete.

Source: [PM Modi inaugurates India's first under-river metro route in Kolkata!](#)

Source: <https://vajiramandravi.com/current-affairs/indias-first-under-river-metro-tunnel-in-kolkata/>

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