THE TIMES OF INDIA

TOI Games Videos City India World Business Tech Cricket Sports Entertainment Astro TV Web Series Life & Style EducationToftlagos ellager Q



Tunnel roads prone toflooding: IISc study

Hamsaveni.N / Dec 21, 2024, 00:06 IST





Bengaluru: Tunnel roads and doubledecker corridors proposed in the city are not only expensive but will also fail to address the root causes of congestion and instead exacerbate urban challenges, a new study has found.

While pointing out that tunnel roads are

prone to flooding, raising safety concerns during extreme weather events, the study evaluating Bengaluru's proposed transit solutions reiterated that an integrated mass rapid transit system (MRTS) could help the growing metropolis achieve an 80% sustainable model by 2041.

"...The analysis reveals that double-decker roads and tunnel corridors, despite offering localised travel time reductions, encourage private vehicle usage, reduce public transit ridership, and exacerbate environmental and social disparities," the study conducted by researchers from the IISc Sustainable Transportation (IST) Lab and the department of civil engineering of the institute, read.

The findings were made public at Misplaced Priorities of BBMP's Projects (Tunnel Roads, Skydeck etc), a discussion involving civic experts and activists. The event was organised by Civic, a citizens' group.

Speaking on the occasion, Prof Ashish Verma, convenor, IST Lab, said the report has been submitted to BMRCL, which operates Namma Metro, and K-Ride, which is implementing the Bengaluru Suburban Rail Project. The research, which analysed various transportation scenarios for milestone years 2027, 2031, and 2041, found that combining Metro and suburban rail networks would provide the most effective solution to the city's mounting transportation challenges.

With Bengaluru's population expected to reach 30 million in the coming years, the study warns that the city's existing infrastructure is reaching its limits, manifesting in severe traffic congestion and rising pollution levels.

While the Metro network is set to expand from 77km in 2027 to 317km by 2041, and the suburban rail project will add 156.3km of rail lines, the study raised concerns about proposed double-decker roads and the north-south tunnel corridor.

The research demonstrates that the suburban rail system, operating with nine-car trains at three-minute intervals, could achieve a capacity of 89,000 passengers per hour per direction. The Metro system, running six-car trains at 1.5-minute intervals, could handle up to 69,000 passengers per hour per direction.

"The findings emphasise the need for increased suburban rail capacity, comprehensive MRTS coverage, and seamless modal integration," the study noted, suggesting that policymakers should prioritise public transit investments over road infrastructure projects to create an equitable and sustainable urban mobility framework.