

10 METRO STNS FROM BKC TO AAREY

OPEN IN MAY, 5 More Till Worli In July, Last 12 By Sept

Metro 3 To Have 3 Terminus As Services On The Underground Corridor Can Begin And Terminate At Aarey, Cuffe Parade And BKC, Ensuring Higher Operational Efficiency And Train Frequency. Reversals Will Be Possible From Two More Stations, Worli And CSMT. Phase I Is Expected To Start In May, And The Full Service By Sept. PM To Flag Off Integrated Trials Soon



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The much awaited underground Metro will have three terminuses. The Line 3 corridor, running from Aarey to Cuffe Parade, will be opened in phases this year, with Prime Minister Narendra Modi inaugurating integrated trial runs for the first phase during his impending visit to the city. Project authority Mumbai Metro Rail Corporation (MMRC) plans to commence Phase I operations, from Aarey to BKC, in May, an extension of services to Worli by

the Coastal Road project as additional municipal commissioner. On the likely three-month gap between the start of integrated trials and the commissioning of the first phase, she said trials on the entire Phase I stretch are necessary to ensure the system's reliability and safety before commercial operations start. Limited trials on the corridor had begun last October, the first taking place on Oct 8, between MIDC and Vidyannagari stations, spanning 1km across six stations (the total distance covered by the train was 17km since it returned to Seepz).

The first phase will connect only the western suburbs, the second cater to areas in central Mumbai, and the third the island city - though the opening of the third phase would imply the functioning of the entire corridor, covering north, central and western Mumbai. "If services are extended till Worli in July, it will cater to five more destinations, including Dharavi, Shitladevi, Dadar, and Siddhivinayak. These areas get high footfalls due to the presence of educational institutions, places of work, commercial establishments and corporate offices," said an MMRC official.

The corridor was initially supposed to have terminuses at its two ends, but the design was later revised. "At this design stage, we decided on the corridor to be operational in two phases (Aarey-BKC and BKC-Cuffe Parade, implying three terminal stations: Aarey, BKC and Cuffe Parade), but during the execution stage, we decided to incorporate crossovers at Worli and CSMT," explained Bhide. Crossovers are laid to ensure the reversal of trains in the up-down direction and vice versa whenever required.

Transport experts say that even though Phase I spans only over 12 km, it has the potential to transform travel patterns. "The BKC-Aarey stretch, with 10 stations, aims to address high-density traffic areas. Commuters from the financial district of BKC will have the option to travel to Santacruz Metro station and then walk a short distance to board the suburban railway network. Similarly, those who want to travel by the Central Railway line can take the Metro to Marol and then go to Charkopkar. Additionally, Metro 3 offers connectivity to both domestic and international airports," Bhide said.

Connectivity through interchanges will improve once more Metro corridors come up. "Metro 3 commuters can interchange at TI (domestic airport) to travel all the way to Dahisar once Line 7A (Gundavli-TI) is built. Line 7A, an extension of Line 7 (Dahisar-Gundavli), is expected to be opened in 2026," Bhide explained.

8-COACH TRAINS TO HAVE 85 KMPH TOP SPEED

- > Each train will have 8 coaches and can carry up to 2,400 passengers at a time
- > Will move at avg speed of 35 kmph, attain top speed of 85 kmph. Stns are 1km apart.
- > Trains to be equipped with energy-efficient engines and energy-generating brakes
- > Safety features include platform screen doors and sensor-based automatic stopping
- > Stations will have escalators and lifts
- > Trains designed to run without drivers, controlled by a smart system
- > Stations and trains will be fully air-conditioned
- > Lighting system will comprise smart LED lights to save energy
- > Tracks designed to reduce noise

For the first time, a fast and efficient commute in this hot, humid city will be comfortable from the moment you set foot at a station. For me, life will simply change. I often go to NCPA for chamber music recitals, but sometimes I skip at the thought of a grimy commute. On the 3rd, the great Barry Douglas played Schubert's Op. 90 Impromptus and also some Tchaikovsky. I regret that I had to skip it. Metro 3 will mean never again! —**ARNAB BANERJEE** (LIVES IN PUNJAB, WORKS IN MUMBAI)

July (referred to as Phase II in this Times Special for clarity and ease), and the entire corridor, up to Cuffe Parade, by Sept.

"Most of the work for Phase I has been completed, except for minor finishing, cleaning, signage installation, and system-related tasks. Once integrated trials commence, we will obtain various certifications," said MMRC managing director Ashwini Bhide, who is also in charge of

A 1ST FOR CITY: AC WAIT, AC TRAVEL, DESTINATION TO DESTINATION

METRO 3 PROJECT

FULLY UNDERGROUND
33.5 km

27 STATIONS
(Aarey to BKC to Cuffe Parade)

PROJECTED DAILY RIDERS
17 lakh per day

EXECUTION AGENCY
Mumbai Metro Rail Corporation. A 50:50 joint venture of Union and Maharashtra govt

PROJECT COST
₹37,276cr

PROGRESS REPORTS

WHAT'S OPENING IN MAY (PHASE I)

Station	BKC	96%	07/20
Vidyannagari	96%	08/20	
Santacruz	95%	03/20	
CSIA (domestic)	97%	03/20	
Sahar Road	97%	03/20	
CSIA (international)	97%	07/20	
Marol Naka	98%	07/16	
MIDC	99%	07/20	
Seepz	99%	07/20	
Aarey	90%	03/20	

WHAT'S OPENING IN JULY (PHASE II)

Worli	92%	07/23
Siddhivinayak	99%	02/20
Dadar	97%	03/20
Shitladevi	97%	03/20
Dharavi	95%	02/20

WHAT'S OPENING IN SEPT (PHASE III)

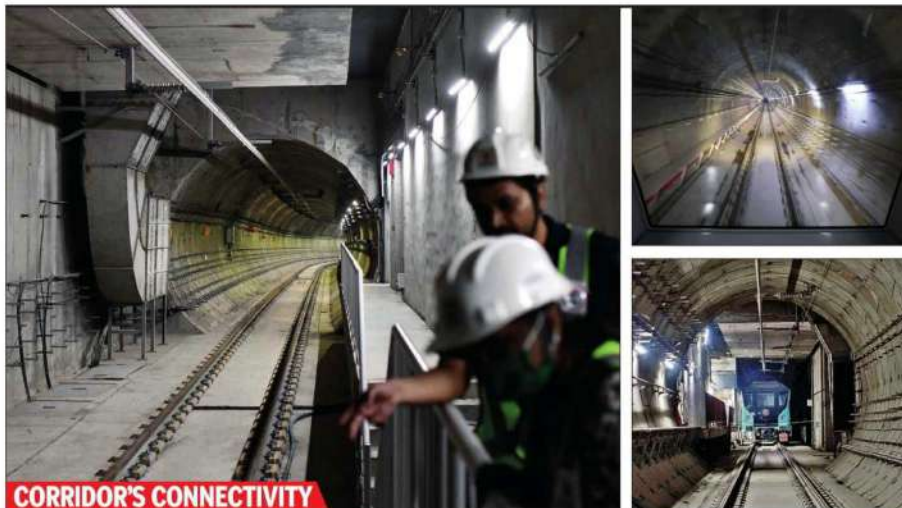
Cuffe Parade	98%	09/20
Vohar Bhavan	97%	09/20
Churchgate	97%	07/20
Hutatma Chowk	95%	04/20
CSMT	95%	07/20
Kalabaiyev	88%	09/20
Girgaon	83%	04/20
Grant Road	84%	01/20
Mumbai Central	92%	09/20
Mahalaxmi	92%	01/20
Science Museum	93%	01/20
AA Chowk	92%	09/20

FIRST SECTION TO OPEN

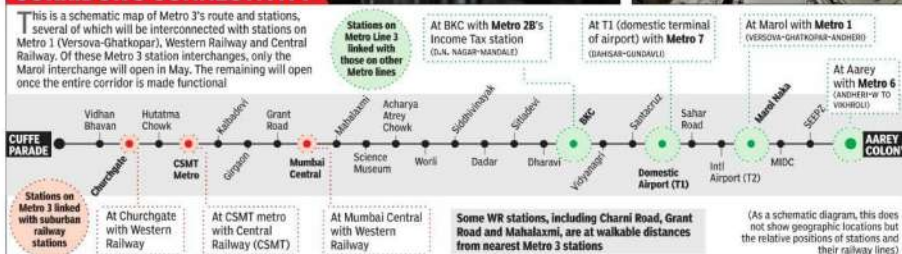
Phase I: Aarey to BKC

STATIONS	10	OPERATIONAL TIME (to be tweaked, based on passenger response)	6am to 11pm
TRAINS (1 on passenger service, 1 to be on standby, 1 to be in maintenance)	9	HEADWAY (frequency)	6 minutes 40 seconds
TRIPS	260 round trips		(130 Aarey-BKC + 130 BKC-Aarey)

Tunnelling progress is 100% for overall project



CORRIDOR'S CONNECTIVITY



'Trial runs a must for ensuring reliability of new Metro trains'

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Metro 3's tunnel is ready and much of its operational infrastructure in Phase I (BKC-Aarey) is in place. Officials say the route is almost good for services to start, but for the safety of passengers extended and thorough trials with a three-month margin are necessary. Trials play a pivotal role in ensuring the reliability and safety of new trains. These trials encompass two key phases: Static and dynamic testing. During the static testing phase, which has already been concluded, a Metro 3 rake (train) underwent rigorous assessments, including verification of movement, speed calibration, brake functionality, door operations, AC system performance, and indicator checks. "In the subsequent dynamic testing phase, a wide array of performance and safety parameters were evaluated. These included braking and acceleration capabilities, operational systems integrity, passenger comfort levels, energy efficiency and seamless integration with signalling and communication systems," said an official from Mumbai Metro Rail Corporation (MMRC). Prototype trains are subject to a comprehensive trial period covering a minimum distance of 10,000 km, while subsequent trains undergo trials spanning 2,000 km. Integrated trials, scheduled to commence on February 18, focus on ensuring the smooth operation of trains by validating their compatibility with signalling, telecommunication, track infrastructure, and traction systems. Additionally, critical components such as tunnel ventilation, platform screen doors, public address systems, and indicators will undergo thorough assessment. "Following the completion of dynamic tests and design-proven trials at a maximum permissible speed limit of 95 mph, internal oscillation trials are conducted on the mainline by Research, Design, and Standards Organisation (RDSD), the Indian Railways' Lucknow-based apex research institute," the official said. Subsequently, the trains will undergo pre-revenue service trials to ascertain their satisfactory performance under operational conditions. Upon successful completion of integration trials and obtaining safety certifications for various systems, approval is sought from the independent safety assessor (ISA) for the safe operation of trains for passengers. Meanwhile, service trials are conducted to assess adherence to the timetable, emergency evacuation procedures, and operational protocols. After obtaining the relevant certifications, MMRC will approach the commissioner of metro rail safety (CMRS) for the statutory permissions required to commence passenger services. Commercial operations will commence only after receiving the green signal from the CMRS, ensuring compliance with all safety regulations and operational standards.

VIDEO

Scan for a tour of the underground Metro corridor's stations to explore their unique features