

Though Construction On The First Phase Of India's Longest Underground Metro Rail Corridor Will Be Over In Six Months, Commissioning Is Slated For December At The Earliest Because Of Safety Trials

BKC-AAREY UNDERGROUND METRO TO BE READY BY MID-OCT

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India's longest underground Metro project is approaching a crucial phase as engineers, technicians, labourers and planners work tirelessly to complete Phase I of the Metro corridor (Colaba BKC-Aarey) by October for trial runs. The authorities estimate that Phase I (BKC-Aarey) could open for commuters any time by December or within three months after that.

Implementing authority Mumbai Metro Rail Corporation (MMRC) considers Metro 3 as one of its most prestigious projects since it is the only Metro corridor, as of now, which will connect suburban Mumbai to the island city. The corridor will also provide connectivity to the key financial district of BKC and link the international and domestic terminals of the airport.

Gravel trouble hits car shed work too

Metro 3 depot work timelines have recently been affected due to a lack of aggregate supply including stonechips and crushed stones. While the situation is gradually improving, almost a month's worth of workdays have been impacted, said an official. The lack of ballast stones has held up the laying of a few stabilising lines, and these aggregates are also essential for constructing the compound buildings' walls and floors, too.



WEB STORY
What is Metro 3 all about? Scan this code to find out in a 10-point summary

The project has been under planning since 2011, and work began at the end of 2018. Ashwin Bhidre, MMRC's managing director, said, "We hope that Phase I will be commissioned this year as all work is on track. The target to commission Phase I is December 2023, but the date could be in March 2024 as well."

The authorities have set a target to complete the system by October, after which service trials can commence. Following this, the Commissioner of Metro Rail Safety (CMS) can inspect the route from December onwards.

Phase I (BKC-Aarey) caters to areas with high traffic density and has nine stations. MMRC plans to operate 10 services on the 22km section, with a travel time of 25 minutes.

Despite the curtailed route's opening, the authorities are optimistic about a decent ridership, Bhidre explained. "The 33km length of the entire corridor

(both phases) is pretty long for an underground corridor, and some stations in phase II will take more time for completion. So, naturally, citizens can't be deprived of whatever length is available until the entire corridor is operational. But it will still be beneficial because the line connects major employment centers like MIDC and Seepz in Andheri (East), BKC and the airport."

Citing the recently commissioned Metro Lines 7 and 2A, she said, "Those initially operated on smaller lengths, which helped gain operational experience and resolve problems. Eventually, when these lines became fully operational, ridership picked up immediately."

For Metro 3 Phase I operations, MMRC requires nine rakes, of which three have already arrived and the rest are expected to arrive by July. The depot will have all necessary facilities ready to make Phase I operational within the deadline, Bhidre said. "Our focus is to complete all the facilities required for Phase I. While it will not be a full-fledged depot when Phase I begins, certain essential equipment such as the train wash plant, stabilising lines for nine trains, and basic workshop facilities will be commissioned. The operations and control system (OCC) centre is the most crucial part of the project, and hence, we will rely on a back-up OCC whose work is in an advanced stage of completion at BKC."

The project faced a delay of almost 30 months due to various issues and was originally scheduled to be completed by 2021. Bhidre said, "There were innumerable challenges, right from finalizing the alignment, planning, and its execution. We also faced the challenging task of acquiring land, rehabilitating project-affected people (PAP), and obtaining environmental and forest clearances."

Explaining how tough the construction work was, she said, "Metro 3 construction is not easy compared to a city like Delhi, where there is a lot of space and you could adopt certain construction methodologies which are less time-consuming. Here, there are 26 stations below the road, where lanes had to be blocked for traffic and temporary decks laid, to open some lanes for vehicles. These decks are now being removed, and the roads are being reinstated."

For the authorities, every step was a challenge as work was going on in congested areas with the presence of dilapidated and heritage buildings. She said, "We had to ensure the safety of buildings through continuous monitoring. That is the reason why the time requirement and the financial requirement were more than in comparable projects. When you conceive a project and plan it on paper, you assume certain timelines based on previous experiences, but we in our country have never done Metro work in such congested areas."



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'Game changer': Thousands at Seepz SEZ, BKC diamond bourse await safe commute

Bela Jaisinghani & Manthan K Mehta | TNN

The imminent partial opening of Metro 3 is a dream come true for many Mumbaiites, who are waiting to avoid road travel almost entirely. They want to take interconnected train routes to work in the comfort of AC coaches, and save time and money in the bargain. Sample this: If a person decides to travel only on Metro 3 between Aarey and BKC, the journey time is expected to be just 25 minutes compared to 60-80 minutes by road during peak hours.

"Game changer" is the universal opinion that prospective commuters are using to describe Phase I of Metro 3. One end of the line will cater to employees of the Seepz SEZ, the world's largest cluster of studded jewellery firms. At the other end at BKC, it will ease the lives of staff at the world's biggest diamond trading bourse. Apart from this, scores of banks, multinationals, top pharma companies, foreign consultancies, corporate and IT firms, and government offices will benefit.

Metro 3 is going to open a truncated route to begin with, but even so, it is likely to get robust ridership because of its connectivity to central business districts like BKC, Seepz and MIDC. This route will have an interchange facility at Marol with Metro 1 (Overseas-Andheri-Ghatkopar), which in turn provides linkages with Line 7 at Gunduli station, and Line 2A at D N Nagar station. Both routes go up to Baharaj via Western Express Highway and Link Road, respectively. Moreover, Metro 3 commuters can also reach Andheri station on WR and Ghatkopar station on CR



A Metro ride between Aarey and BKC will take under half an hour. By road, it takes over an hour

to board suburban local trains after changing into Lines 1 and 7 at Marol. The authorities at Seepz are relieved. CPS Chaudhari, joint development commissioner, Seepz SEZ, said, "The Metro station is located 10 metres away from our gate No. 1. Metro 3 will bring immense benefit to Seepz and will generate jobs since potential employees will be willing to travel." He explained, "Diamond traders and their employees frequently commute between Seepz, which is a jewellery manufacturing hub, and Bharat Diamond Bourse in BKC, where their offices are lo-

cal. The long journey by road takes a toll, besides being risky since they may travel with valuables. Metro 3 as a direct connector between both ends is a boon for them. It will be a very successful project."

A media advisor working for a western diplomatic mission in BKC said, "I travel from Kandivli. The commute takes 45-50 minutes by train. But the return journey is pathetic with WGH jammed with traffic. The opening of the Metro 3 line, though partially, will come as a great relief to me as someone coming down to BKC from up north. Also, there aren't many



How will a Metro network change how Mumbai travels? Scan the code to find out

cheaper options besides BEST buses for a lot of people. Metro 3 connecting BKC will be a boon for daily commuters like me, both economically and comfort-wise. It will also reduce vehicle congestion for BKC, thereby helping the environment."

Dharam Jain, a diamond industry insider, says 40-45 employees out of 60 in a particular firm commute from Borivli to BKC. "We start work at 8am and wrap up by 5:30pm. The Metro will give our employees big relief from peak-hour rush. It takes up to 45 minutes just to reach Bandra railway station from BKC, and a

refuse to ply Metro 3 will provide travel in AC comfort within closed doors. No more hanging out of overcrowded coaches!" Pointing to his own hectic commute from Goregaon to BKC, Darshil Shah, sales and marketing executive at Kamal Chhatral Diamonds, says, "The summer is so harsh! Metro will provide relief."

Amid the euphoria, conscience keepers like Manisha Shinde say blue collar workers are hoping tickets are affordable. Shinde, sales and HR head at Kallati Jewels in Seepz, says, "A jewellery worker who earns Rs 30,000 per month cannot afford to spend over Rs 40 per ride by Metro. He will still buy a Rs 10 ticket to take a crowded local to Vihar, unless Metro fares are cheap."

PHASE I HAS 9 STATIONS IN AREAS WITH DENSE TRAFFIC



Most challenging site
MAROL Use directly under Line 1. Construction had to be carefully done, using a slightly different method so as not to disturb Line 1 pillars.

COST ESCALATION
Metro 3 overall project cost

Original	Revised
₹23,136 cr	₹33,405 cr

AGENCIES INVOLVED
MMRC has roped in top firms from across the world for the project. These are working either independently or through joint ventures:

- TUNNERS | Shanghai Tunnel Engineering Corporation, Moscow Metro, URS, JGC, Dong's Soma, China Railway Group
- BRANS | Engineered by French MNC Alstom, which is also providing technology for platform screen doors, signalling, etc.
- GENERA | Consultation from a consortium led by Korea's AECOM ASIA, including Japan's Pathon, URS, Hochtief, and France's Egis Rail
- INFRA | Indian major IAT, HCC, Tata Projects, Kumar Infra
- OTHERS | Automatic fare collection system by Baker's & Baker Electronic Operations to be handled by Delhi Metro Rail Corporation (DMRC)

WORK STARTED 6 YEARS AGO
2011 | Metro 3 project is conceptualized
2017 | Work on Metro 3 depot begins at Aarey
Oct 2019 | Bombay High court dismisses petitions to declare Aarey a forest and refuses to stop felling 2,500 trees are cut. Later, Supreme Court stays tree cutting



PROJECT PROGRESS
As of May 5, 2023
DEPOT: 62% completion in both phases
OCS WORK: 100% completion
STATIONS: 100% completion
TUNNELLING: 100% completion
OVERALL: 77% completion

DEPOT WORK HALTS
Nov 2019 | The then chief minister Uddhav Thackeray stays depot work on environmental grounds



WHO BENEFITS
Metro 3 serves six CBDs (Central business districts):
Nariman Point, Cuffe Parade (WTC), Fort, Worli-Lower Panel, BKC, Seepz-MIDC
Connects areas not served by suburban rail:
Nariman Point, Cuffe Parade, Kalbadevi, Worli, BKC, Airport, Seepz-MIDC

CORRIDOR WORK STOPS
March 2020 | Covid lockdown is announced. Work on the line is suspended. Officials say work stopped only for 15 days because of Covid
July 2022 | Chief minister Eknath Shinde's government announces resumption of depot work following previous court clearances



WORKS TO BE COMPLETED
Phase I: BKC-Seepz
Phase II: Seepz-MIDC