

maha-metro CONNECT

Year 03 | Volume 02 | March 2021



The year 2021 is turning out to be a testament of Maha Metro's excellence in executing Mass Rapid Transit projects as can be seen from the multiple new projects recently awarded to us. We have been rewarded for our hard work with the sanction of Nagpur Metro Phase–II & Nashik Metro Neo and also with the opportunity to complete balance works of Navi Mumbai Metro Line-1. These are just new beginnings with many more additional responsibilities to come.

The sanction of Phase - II of Nagpur Metro Project is an endorsement of the good work done by us over last 6 years & is a matter of great pride for us. It is very rare that Phase-II of a project gets sanctioned even before completion of Phase-I. Nagpur city is attaining new heights and Maha-Metro is happy to be a part of the process.

It is also a matter of great pride for us that our concept of Metro Neo has been given recognition by the Union government as a new MRT system to be implemented in cities having a Peak Hour Peak Direction Traffic (PHPDT) of less than 10,000. Nashik will be the first city to have Metro-Neo & this MRTS system will act as a game changer in propelling city's growth.

The agreement with CIDCO to complete balance work of Navi Mumbai Metro Line 1 reflects the belief of the other organizations on Maha-Metro's ability to effectively execute a project and is a reflection of our excellence.

We have furthered our cause of being Environment friendly by signing an MoU with DRDE-DRDO for installation of Bio-digester technology at all Pune Metro stations & Depot.

We also had the fortune to host Sh. Durga Shanker Mishra, Secretary/MoHUA and Chairman, Maha-Metro in Pune. During his visit of Pune Metro, he chaired various meetings on new & innovative MRTS systems like Metro Neo, Water Metro & Metro Lite. He also reviewed the progress of Pune Metro and was very satisfied with the swift work being carried out by us.

Nagpur Metro and Pune Metro also celebrated their 6th and 4th Foundation day respectively. Nagpur Metro also achieved a remarkable feat of crossing 50,000 ridership and have taken over many other Metros in terms of post-Covid ridership recovery.

Lastly, as Covid cases are resurging again in Maharashtra and having touched the all-time high daily count of Covid cases, I would like to again emphasize on being extremely cautious about the situation and ensure 100% adherence to the SOP/guidelines issued on this matter. All necessary precautions and due care must be taken not just at office but also while you are outside of office.

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NAGPUR METRO PHASE – II UPDATE



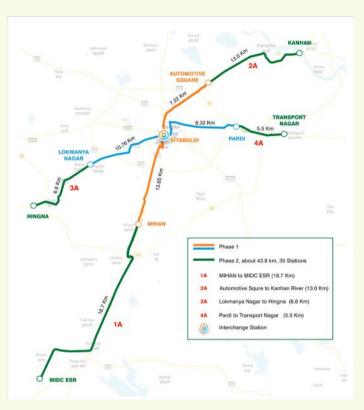
CONNECT

Finance Minister announces budgetary provision for Nagpur Metro Phase–II in the Union Budget for 2021-22

In a significant development, the Union Finance Minister Smt. Nirmala Sitharaman has announced a budgetary provision of Rs. 5,976 Crore for Nagpur Metro Phase-II project. The announcement was made as a part of Union Budget 2021-22 speech delivered by Hon'ble Minister on 1st February 2021. The project also got clearance from Public Investment Board (PIB) recently. The cabinet approval for the project is also expected soon.

It is rare that the Phase-II of a project gets approval even before completion of Phase-I. This approval is a testimony of the quality and speed with which Maha-Metro is executing the Phase-I of its projects.

The Nagpur Metro Phase-II will cover the rural parts of Nagpur district and will serve as an extension to the ongoing Nagpur Metro Phase-I project. The proposed Phase-II project will be spread over 43.8 km length with 32 stations.



Corridors identified for Phase II of Nagpur Metro include:

S.No.	Corridor	Length	No. of Stations	Key Catchment Areas
1	Automotive Square to Kanhan	13 km	12	Khasara, Lekha Nagar, Kamptee, and Dragon Palace
2	MIHAN to Butibori MIDC ESR	18.7 Km	10	Jamtha, Dongargaon, Mohgaon, Butibori, MHADA Colony & Indorama Colony
3	Prajapati Nagar to Transport Nagar	5.5 km	3	Ambe Nagar, Kapsi, Transport Nagar & Asoli
4	Lokmanya Nagar to Hingna	6.6 Km	7	Nildoh, Gajanan Nagar, Rajiv Nagar, Lakshmi Nagar, Raipur, MIDC & Hingna Village

The land requirement for Nagpur Metro Phase-II project is substantially less as compared to Phase-I project. Maha-Metro will execute Phase-II at an even faster pace than Phase-I. The entire Phase-II network is elevated. This phase will enable easy, faster and comfortable journey form one part of Nagpur to other. This will particularly help those who are employed in industrial areas of Nagpur and have to commute long-distance daily.

NASHIK METRO NEO UPDATE

Finance Minister announces budgetary provision for Nashik Metro Neo in the Union Budget for 2021-22

In another significant development, the Union Finance Minister Smt. Nirmala Sitharaman has announced a budgetary provision of Rs. 2,092 Crore for Nashik Metro Neo Project. The announcement was made as a part of Union Budget 2021-22 speech delivered by Hon'ble Minister on 1st February 2021. This further validates the trust which Govt. of India have on Maha-Metro's capabilities in efficiently executing MRTS projects as well as on the unique concept of Metro Neo. This project also got cleared from PIB recently and the cabinet approval is expected soon.

The concept of Metro-Neo was formulated after an extensive and comprehensive technical consultations, interactions and due diligence with several stakeholders & technical experts. Government of India has been contemplating since long to find an optimal transport solution for Tier 2/3 cities having a population of 1.5-3 million which are mobility gridlocked and where high capacity, capital intensive Metro Rail Systems will not be an ideal solution.

The Metro Neo model developed for Nashik was discussed on various forums and finally Govt. of India on 21.08.2019 constituted a committee under the Chairmanship of Dr. Brijesh Dixit, MD/Maha-Metro and having members from MoHUA & other Metro Rail Corporations for standardization of detailed specifications for a Rubber-Tyred Mass Rapid Transportation System with a view to implement this across India.

This Metro Neo system is an innovative, cost-effective, environment-friendly, energy efficient and safe solution for the traffic need of cities having population similar to Nashik. This system will make use of Electric Bus Coaches, having a length of 25/18 meter and a carrying capacity of 200/300 passengers. These buses will



Nashik Metro Neo Proposed Route Map

Corridor 1 (22 Km, 19 Stations) Corridor 2 (10 Km, 10 Stations)

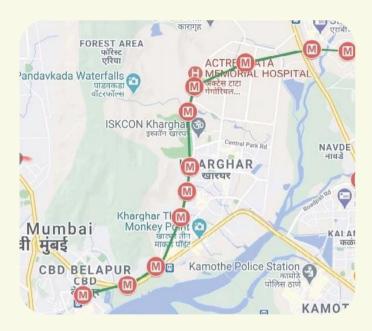
have Rubber-tyre and will draw power from the overhead electric wire having 600-750 V DC supply.

The salient features of Nahik Metro-Neo project are outlined below:

- Two corridors are planned initially having a total length of 32 Km.
- Corridor 1 will run from Gangapur to Mumbai Naka and will have 10 stations spread over 10 Kms.
- Corridor 2 will run from Gangapur to Nashik Road and will have 19 stations spread over 22 Kms.
- CBS will be an interchange station where both the corridors will meet.
- There will also be 2 feeder corridors, one running between Satpur Colony Garware Mumbai Naka and the other running between Nashik Road Nandur Naka Shivaji Nagar.

MOU FOR NAVI MUMBAI METRO

Agreement signed between Maha Metro & CIDCO for completion of balance works of Navi Mumbai Metro Line 1



Maharashtra Metro Rail Corp. Ltd. & CIDCO has signed an agreement on 23rd February 2021, for completion of balance work of 11.1 km long Navi Mumbai Metro Line 1 (Phase-1) which spans from Belapur to Pendhar. The trust which CIDCO has placed on Maha Metro for completion of balance works, reflects that Maha Metro has established itself as a prominent organisation in executing MRTS projects.

Maha Metro have an expert team comprising of personnel specializing in Civil Construction, Electrical, Signalling, Rolling Stock, Traction, Design, Planning & Property development disciplines. Having an expert team experienced in efficient planning and timely project execution, helps Maha Metro in completing mega MRTS projects within stipulated time. CIDCO has therefore entrusted Maha Metro to complete the balance work of Belapur to Pendhar, Navi Mumbai Metro Line 1 (Phase-1) project on deposit terms.

Maha-Metro will invite bids (wherever necessary) on behalf of CIDCO and enter into contracts for execution of the balance civil and system works, including rolling stock, Signalling and other

components and for procurement of systems and services required, if any, for the said project. The entire work will be executed by Maha-Metro and financed by CIDCO.

Maha Metro will complete the balance work of Belapur to Pendhar line in 24 months from the date of signing of agreement. The Belapur to Phandhar line of Navi Mumbai Metro has 11 stations and is covering a length of 11.1 km. The Rolling Stock and Systems equipment will also be inspected by Maha Metro.

Alignment of the Project:

The alignment of the Navi Mumbai Metro Rail Project Corridor–I, Line-1 from Belapur to Pendhar will have following stations:

Belapur terminal - RBI Colony - Belapada -Utsav Chowk - Kendriya Vihar - Kharghar Village - Central Park - Pethpada - Amandoot -Pethali Taloja - Pendhar

- **Length:** 11.10 Kms (complete elevated Metro Rail Corridor)
- **Total Stations:** 11 Metro Rail Station with one Terminal at Belapur.
- OCC/Depot: OCC & Major Depot at Taloja.



PUNE METRO'S GREEN INITIATIVE



Pune Metro signs MOU with DRDE-DRDO for installation of Bio-digester technology at all Pune Metro stations & Depot

In line with Maha-Metro's vision of being an environment friendly Metro, Pune Metro has gone ahead and signed a MoU with DRDE-DRDO on 5th January 2021 for installation of Bio-digester technology at all 30 Pune Metro stations & Depot. The agreement was signed by Sh. Atul Gadgil, Director (Works)/Maha Metro and Dr. D.K. Dubey, Director/DRDE. The MoU's were exchanged between Sh. Brijesh Dixit, MD/Maha-Metro & Dr. A.K. Singh, Director General/DRDO.

A similar MoU with DRDO was already signed by Nagpur Metro for installation of Bio-digester technology at all 38 stations, 2 Depots & Administrative building. The Bio-digester is already operational at 9 stations in Nagpur and is in process of being completed at 6 more stations.

Bio-digester technology is a patented technology of DRDE-DRDO & it is being widely used by the Indian Army and Indian Railways. Bio-digester is an apparatus in which organic waste material is decomposed by microbial (anaerobic bacteria) action with the production of biogas. The system is sustainable, totally eco-friendly & conserves water. The advanced Biodigester Mk-II technology encompasses three components: a specially designed multi-chambered fermentation tank (Biodigester), anaerobic microbial consortium, and a secondary treatment module.

Maha-Metro's objective for using the Bio-digester technology is to ensure 100% recycling of used water & no discharge to public drain. Maha-Metro will use the Bio-digester treated water for Horticulture purposes & for flushing in toilets.

In the context of the ever-increasing problem of water scarcity in Maharashtra and other parts of India, the use of Bio-digester technology will be quite fruitful. The joint effort of DRDO and Maha-Metro assumes greater significance and can have far-reaching implications for the state where treated water can be recycled for other domestic



MoU Signing Ceremony

By installing bio-digesters, we will take a giant leap in conserving significant amount of water in a state where water scarcity is increasing day by day. Pune Metro was already making use of many environmental conservation technologies especially while constructing the stations, as the stations are being built in line with Indian Green Building Council guidelines.

Pune Metro has also been playing a key role in other facets of environmental conservation through environmental friendly measures such as:

- Transplantation of trees
- Rain water harvesting
- Effective & extensive utilization of Solar energy
- Transforming Garbage dumping site into Metro

Depot

· Energy saving initiatives in Lighting,

Air-conditioning, Lift & Escalator, Rolling Stock, etc.

The agreement on Bio-digester technology will further Maha-Metro's cause of being an environment friendly Metro.



SECRETARY/MOHUA'S VISIT



Hon'ble Secretary/MoHUA's visit of Pune Metro



Shri. Durga Shanker Mishra, Secretary, Ministry of Housing and Urban Affairs (MoHUA), Govt. of India visited Pune Metro to chair a meeting on Metro Lite, Metro Neo and Water Metro. The meeting was attended by MD's of all Metro Rail Corporations and Principal Secretaries of Urban Development department of all State Governments & Union Territories.

The meeting began with a presentation & discussion on Metro Lite. Metro Lite is a tram like system which does not require the paraphernalia of a rail based metro system. Metro Lite which roughly costs around 60-65% of a Heavy/Regular Metro system, is ideal for Tier 2 cities having a PHPDT of less than 15,000.

The concept of Metro Neo was also presented & discussed during the meeting. Metro Neo is a rubber tyre articulated coaches which will draw power from overhead electric conductor. At a cost less than one-third of Heavy/Regular Metro system, it is ideal for Tier 2/3 cities having a PHPDT upto 10,000.

The concept of Water Metro was also discussed, which is a Ferry based transport system. This system is ideal for cities having large navigable waterways like Lakes, Rivers and Back waters.

Apart from the above mentioned discussions, Secreatry/MoHUA also chaired an Industry

Interaction with various organizations involved in design and manufacturing of various components related to Metro Neo & Metro Lite. The organizations showed keen interest in the Rolling stock and some other key requirements of Metro Lite & Metro Neo.

The large scale implementation of Metro Lite & Metro Neo in Tier-2, Tier-3 cities as well as outskirts or less PHPDT areas of Tier-1 cities will transform the lives of commuters & improve economic activities in these cities.

Secretary / MoHUA also reviewed the mission of achieving 1000 km of Metro network operational & 1 crore passenger ridership by August 2022. The implementation of the National Common Mobility Card (NCMC) was also reviewed by Secretary/MoHUA.

On the next day, apart from chairing Maha-Metro's 24th Board Meeting, Secretary/MoHUA also reviewed the progress of Pune Metro Rail Project. After the meeting, Secretary/MoHUA graced Pune Metro's 4th Foundation day function as a Chief guest. After the function, Secretary/MoHUA went for a site visit which included taking a round of Sant Tukaram Nagar station and a train ride. He also visited the site of Multi-modal hub planned at Swargate. He was all praise for the swift work being done by Team Maha-Metro.



FOUNDATION DAY CELEBRATION





Pune Metro Celebrates 4th Foundation Day



Pune Metro celebrated its 4th foundation day on 23rd January 2021. Sh. Durga Shankar Mishra, Secretary / MoHUA & Chairman / Maha-Metro was the chief guest for the function which was celebrated at the Phugewadi Office of Pune Metro. Four year ago, Pune Metro started with just 3 employees and now it has grown into a team having over 230 employees. A team was built in quick time, some key tenders were called/finalized and the actual foundation of first pier of the Pune Metro was completed in a record time of just 6-7 months. Pune metro has now completed 50 percent work and in this year 2021 Punekars will see commercial operation of Pune Metro.

Sh. Durga Shankar Mishra congratulated MD/Maha-Metro & team and also instructed to continue the good work. After the Foundation day function, Sh. Durga Shankar Mishra also visited Sant Tukaram Nagar Metro station of Reach-1. He was quite satisfied with the quality of work and with the facilities being provided at the station. He also took a train ride between Sant Tukaram Nagar station and Phugewadi station.

Sh. Durga Shankar Mishra also inspected the stretch from PCMC to Khadki, Bund Garden to RTO and Swargate Multi-Modal Transport Hub - underground station. He was quite satisfied with the progress of Pune Metro work and instructed to expedite the work so that Punekars can start using the Metro for their daily commuting at the earliest.

Nagpur Metro Celebrates 6th Foundation Day



The 6th Foundation day of Nagpur Metro was celebrated on 18th February 2021 at Metro Bhawan. The event was celebrated with the key address of Dr. Brijesh Dixit. Prominent local personalities who had helped Maha-Metro including Sh. Sachin Dhomne, noted music composer, Sh. Jugal Kishor Borkar, Teacher, Sh. Sudhir Dabir, Social Media Activist, Sh. Anand Nirban, President of Vidarbha Sewa Samiti and Sh. Nikhil Wankhede, who has used Maha Metro Card on maximum occasions, were felicitated during the event.

Special sessions on `Maha Card & App: The way to cashless Journey', `Green Journey for Citizens of Nagpur' and `Metro: Safe Journey for Women' were held. The sessions were moderated by various Maha-Metro officials. The participants - prominent local residents representing various fields - aired their views during the 3 sessions as mentioned above. The Foundation day function proceedings culminated with the three moderators for technical sessions summing up their respective sessions.

Later in the day, Feeder Bus service from Airport Metro Station to Dr Babasaheb Ambedkar International Airport was launched jointly by Maha-Metro, NMC and MIHAN India Limited (MIL). Similar facility was also introduced between MIHAN and Khapri Metro Station, jointly by Maha Metro and India Pacific Travels.

NAGPUR METRO RECORD RIDERSHIP



Nagpur Metro operations reaches new milestone with a single day traffic crossing 50,000 on 26th January 2021

Maha Metro broke all previous Ridership records to establish a new ridership benchmark on 26th January 2021 - Republic Day. The accumulated ridership on both the lines - Orange and Agua was 56,406 on 26th January 2021. The previous best ridership figures achieved by Maha Metro was on 27th December last year, when a ridership figure of 22,123 was recorded. With the figures achieved on 26th January 2021, Maha Metro has overtaken many other Metro organizations in terms of post-Covid ridership recovery.

Long and serpentine queues were witnessed at Nagpur Metro Stations, especially at Sitabuldi Interchange station, as commuters lined up in large numbers to buy tickets for



Metro ride. The tremendous response to the Metro's efforts for ridership supplemented with the carnival organized to celebrate the Republic Day. As part of these efforts, events like drawing competitions, skating performances, music programmes, CRPF Band, calligraphy show were organized at different Nagpur Metro Stations.

In fact, Maha Metro had made ample preparations in anticipation of this huge response. Guards, Station Staff and other essential staff were adequately deployed at all the Metro Stations. This historic and record-breaking ridership would definitely go a long way in boosting Nagpur Metro's ridership.

मैटो रेल नागप्र

सबका साथ है, सबका विकास है। मैट्रो-रेल, पूरे नागपुर का अभिमान है।। संदरता और सृव्यवस्था, इसकी पहचान है। श्री ब्रिजेश दीक्षित जी की मेहनत का परिणाम है।। सबका साथ है, सबका विकास है। उनतालीस स्थानक इसके है, तेरह मील लम्बाई है।। तीन डब्बो में लोगो ने, अदुभुत दुनिया बसाई है। जीवन रेखा है ये नागपुर की, हमको यही समझ आई है।। सबका साथ है. सबका विकास है। जन्मदिन और हल्दी- कुमकुम ने जगह पाई है।। स्वास्थ्य और अनुशासन भी, मैट्रो ने सिखाई है। मैटो-रेल ने पुरे नागपुर को, मैटो परिवार बनाई है।

> Written By Sh. Nilotpal Mrinal Chief Controller (O&M), Maha Metro

Social Media Engagement

Citizens Love Maha Metro!

Social media engagement of Pune & Nagpur Metro far exceeds its other counterparts in the country. Pure testimony of 'Maazi Metro'



NAGPUR METRO

NAGPUR METRO

Average acquisition of FB followers per month 10,249





f 6,18,002 **(** 13,200



15.15.585 14.200



PUNE METRO

Average acquisition of FB followers per month **8,900**



5,93,188



3,200







