



Kanpur and Agra Metro's First Prototype Train Unveiled

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Why in News

On September 18, 2021, Uttar Pradesh Chief Minister Yogi Adityanath unveiled the **first prototype train of Kanpur and Agra Metro**.

Key Points

- Speaking on the occasion, the Chief Minister said that under the Prime Minister's **'Make in India'** and **'Self-reliant India' campaign**, this metro train has been **completely manufactured in the country**.
- He said that this first prototype train has been made available ahead of time despite the adverse conditions of the Covid period by the undertaking of Vadodara.
- Adityanath said that metro trains are being successfully operated in four cities of the state – **Lucknow, Ghaziabad, Noida and Greater Noida**. Metro work has been completed in Kanpur and Agra. Along with this, **DPRs for Metro in five other major cities- Gorakhpur, Varanasi, Prayagraj, Meerut and Jhansi are ready or in the final stages**.
- According to the **Uttar Pradesh Metro Rail Corporation**, metro trains in Kanpur will have the feature of **'regenerative braking'**, with the help of which up to 45 percent of the energy through the brakes applied in the train will be regenerated and used again in the system.
- These **trains will have state-of-the-art 'propulsion systems' to reduce air pollution**. These trains will have a carbon dioxide sensor based air conditioning system, which will run according to the number of passengers present in the train and will save energy.
- Keeping in mind the automatic train operation, these trains will run on a Transmit Based Train Control System. The passenger capacity of Kanpur Metro train will be 974 passengers.

- These trains will have a design speed of 90 km/h and an operation speed of up to 80 km/h. There will be a separate space for **wheelchairs of Divyangjan** in the first and last coach of the train. There will be a '**Long Stop Request Button**' near the wheelchair location, by pressing which PwD can inform the train operator to keep the door open for a longer period of time.
- The metro train of Kanpur will draw energy from the third rail, which will run parallel to the tracks, so it will not require the setup of pillars and wires and the infrastructure will look better and beautiful.
- These trains are designed on the basis of state-of-the-art fire and crash safety standards. Each train will have CCTV cameras, the video feed of which will directly reach the train operator and the center security room.
- Every train will also have LCD screens or panels for infotainment. By pressing the talk back button, passengers will be able to talk to the train operator in case of emergency. The location of the passenger and the CCTV footage will be directly visible on the monitor placed with the train operator.