

# Golden Quadrilateral & Golden Diagonal (GQ-GD)

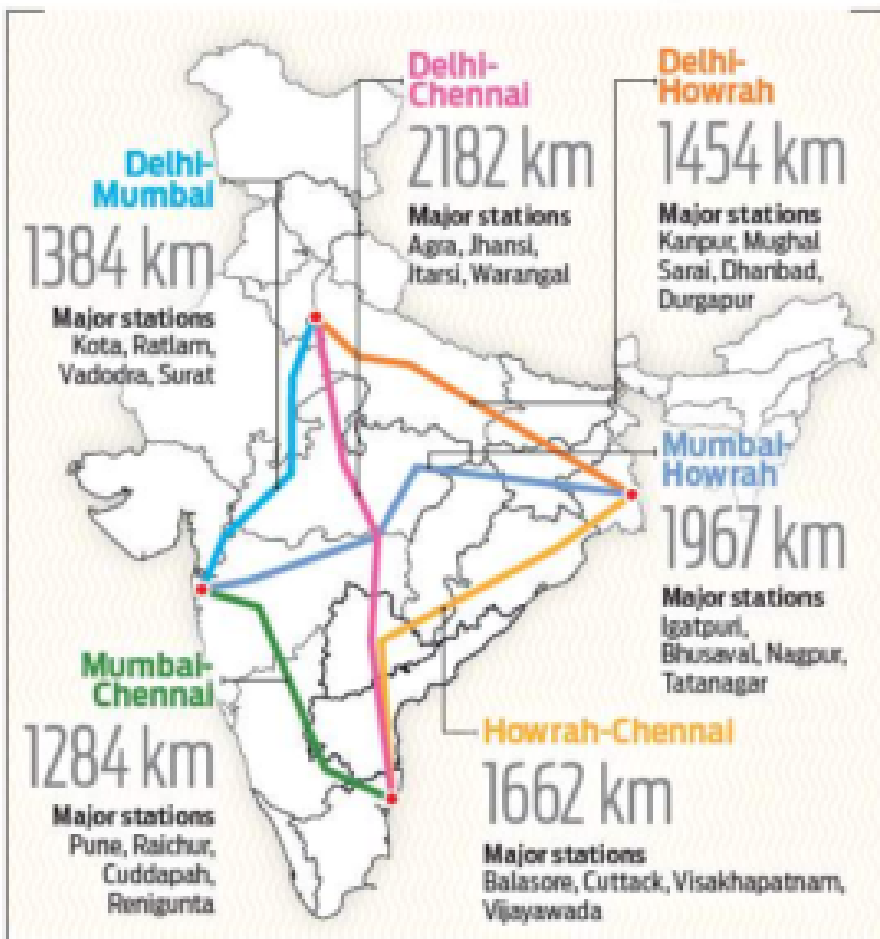
January 11, 2021

In news

Indian Railway enhances Speed to 130 Kmph Along the Golden Quadrilateral & Golden Diagonal sections

Key updates

- Indian Railway has started the New Year by achieving a landmark achievement by drastically enhancing the maximum speed to 130 kmph for 1,280 km length out of 1,612 Km in Golden Quadrilateral – Golden Diagonal (GQ-GD) route.
- This covers the entire GQ-GD route over South Central Railway, except Vijayawada – Duvvada section, where signaling up-gradation work is in progress.
- Principal routes of the Railways on Golden Quadrilateral along with diagonals (Delhi – Mumbai, Delhi – Howrah, Howrah – Chennai, Chennai – Mumbai, Delhi – Chennai and Howrah – Mumbai) carry about 58% of freight traffic and 52% of coaching traffic with a share of approximately 15% of the network i.e. about 9100 Route kilometers.



### How did Indian Railways achieve it?

- The enhanced speed limits could be achieved due to the systematic and planned strengthening of track & its infrastructure by removing bottlenecks in these sections on a fast pace.
- This included heavier rails, laying of 260 meters Long welded rail panels, improvement of curves and gradients among others.
- Railways has utilized the opportunity of the Lockdown period and low train movement last year (due to the COVID-19 pandemic) to complete all necessary infrastructure up-gradation works.
- Based on these improvements done by the Zone, the RDSO/Lucknow conducted oscillation trials through Confirmatory Oscillograph Car Run (COCR) consisting of instrumented coaches of all classes at 130 Kmph speed during July and October last year

## Which routes have been given approval for enhancing the speed?

The South Central Railway zone has received sanction to enhance the maximum speed limits to 130 kmph along the following routes:

1. Golden Diagonal (Grand Trunk) Route: 744 Route Km

- Ballarshah to Kazipet – 234 Rkm
- Kazipet-Vijayawada-Gudur – 510 Rkm

2. Golden Quadrilateral Route (Chennai -Mumbai section): 536 Route Km

- Renigunta to Gooty- 281 Rkm
- Gooty to Wadi – 255Rkm

Already, the maximum speed limits in the High-Density Network (HDN) between Secunderabad – Kazipet (132 Kms distance) had been enhanced to 130 kmph.

As such, including both the Up and Down lines in these sections, a total of 2,824 kms (1412Rkms) has now been made fit to run at a speed of 130 kmph. This covers the entire GQ-GD route over SCR, except Vijayawada – Duvvada section, where signaling up-gradation work is in progress.