

# Mumbai to Ahmedabad High Speed Rail (MAHSR) Project

## Bullet Train Project in India

Owing to the growing economy and dependence on railways for transportation, India has planned to increase the speed of its trains. It has planned a multi-point strategy for running high-speed trains (with a speed >300 kmph), semi speed trains (with a speed >160 kmph to 200 kmph), the introduction of fast & faster train sets and increasing the speed of existing trains.

### Mumbai-Ahmedabad Bullet Train

The Mumbai-Ahmedabad high-speed corridor will have a high-speed train, with financial assistance from the Japanese Government. The Shinkansen high-speed technology will be used in this train. "National High-Speed Rail Corporation Limited", a Special Purpose Vehicle (SPV) has been formed for the implementation of this project.

Indian railways will hold 50% of the equity in the SPV. The project cost is estimated at 1.10 Lakh Crore. Financial assistance has been provided by the Japanese government in the form of a loan up to 81% of the project cost to be repaid in 50 years with a 15-year moratorium at a nominal interest rate of 0.1%. The foundation stone for India's first high-speed rail project was laid by our Prime Minister Narendra Modi and the Japanese Prime Minister Shinzo Abe at the Sabarmati Station Ground, located in Ahmedabad. The Mumbai to Ahmedabad High-Speed Rail (MAHSR) project will cover a distance of 508 km and is expected to be completed by 2022 (earlier scheduled to be completed by 2023).

The project fulfils the twin complementary objectives of "Make In India" and employment generation. It is expected to give a stimulus to manufacture of advanced components and create about 15 lakh jobs in India.

### Shinkansen Technology

Shinkansen means "new trunk lines" in literal terms, which refers to the high-speed rail network in Japan. The train attains a high speed without having to compromise on comfort and safety, through the use of this technology. Unlike conventional rail lines, Shinkansen routes are strictly off-limits to any other kind of traffic. This network makes use of viaducts and tunnels to go through the obstacles, rather than going around them, thereby saving time spent on covering the distance. Due to the lighter vehicles used, chances of damage to the tracks is minimal. These trains offer fast acceleration & deceleration and are electric multiple units.

Also see:

## [New Metro Rail Policy](#)

### Frequently Asked Questions related to Bullet Train

#### **Are bullet trains safe?**

Japan's Shinkansen network is one of the safest rail systems in the world, with zero passenger fatalities since bullet trains began operation in 1964, and accidents of any kind are reassuringly rare. However, there have been a number of suicides resulting from people throwing themselves in front of passing trains.

#### **Do bullet trains float?**

Maglev train: Wheels are not needed as they float on magnetically supported rail tracks. Bullet train: Bullet trains (except Maglevs) run on wheels. There are a few countries using powerful electromagnets to develop high-speed trains, called maglev trains. These trains float over guideways using the basic principles of magnets to replace the old steel wheel and track trains. There's no rail friction to speak of, meaning these trains can hit speeds of hundreds of miles per hour.

#### **Why are there no cabooses on trains?**

Cabooses today are mostly used if a train has to go backward for an extended period of time and the engineer wants someone in back to see where the freight cars are going. Even in those cases, the caboose is losing ground since many freight companies prefer to use a second engine in the back, Merc said.

#### **Who invented the bullet train?**

Hideo Shima (20 May 1901 – 18 March 1998) was a Japanese engineer and the driving force behind the building of the first bullet train (Shinkansen).