

Accelerating India's Journey Into The Future

Spanning across 508 kilometres, the Mumbai - Ahmedabad High Speed Rail corridor will offer fast connectivity between the two financial hubs located in the states of Maharashtra and Gujarat in western India.

After starting from Mumbai's Bandra Kurla Complex (BKC) area, the high-speed train running at a speed of 320 km/h will revolutionise intercity travel in the region. It will have stops at 10 cities in between namely Thane, Virar, Boisar, Vapi, Bilimora, Surat, Bharuch, Vadodara, Anand, Ahmedabad and will terminate at Sabarmati.

The entire journey will be completed in about 2 hours 7 minutes with limited stops (at Surat, Vadodara and Ahmedabad), which is substantially less than the time taken by conventional trains or road journeys.

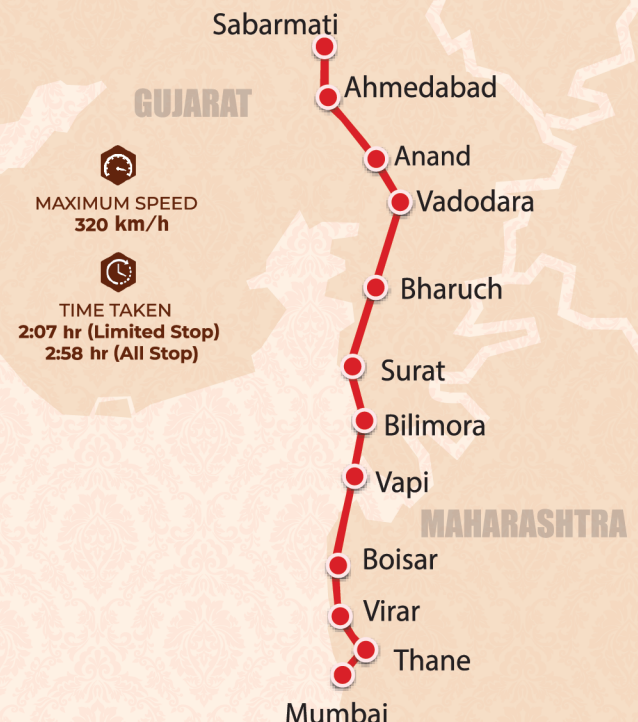
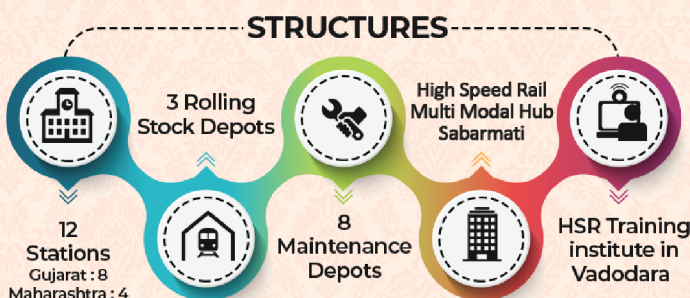
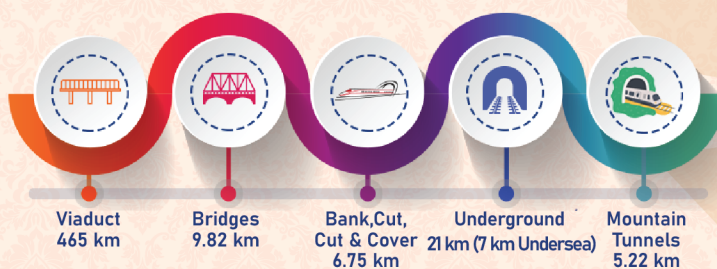
National High-Speed Rail Corporation Limited (NHSRCL) was incorporated on 12th February 2016 under the Companies Act, 2013 with an object to finance, construct, maintain and manage the High Speed Rail Corridor in India. The Company has been modelled as 'Special Purpose Vehicle' in the joint sector with equity participation by Central Government through Ministry of Railways and two State Governments viz. Government of Gujarat and Government of Maharashtra.

Mumbai-Ahmedabad High Speed Rail Project

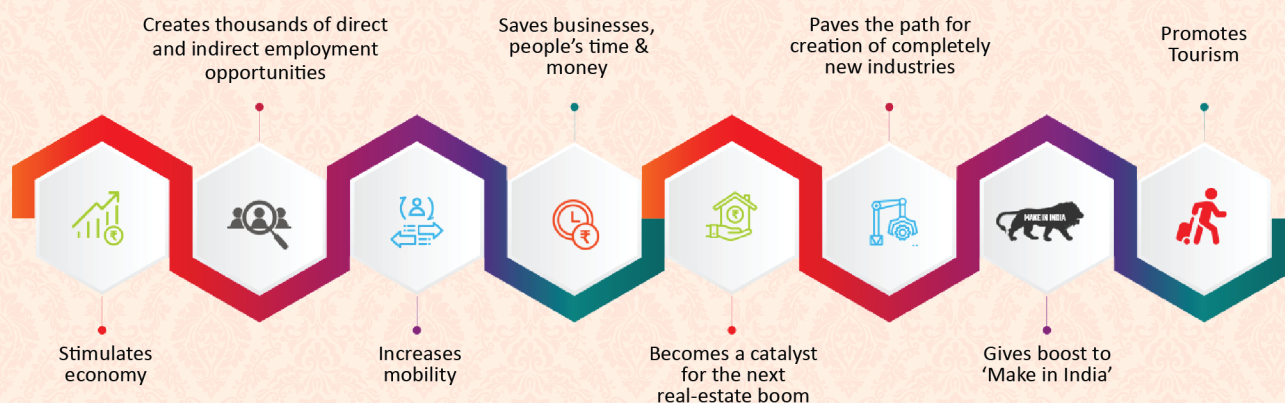
Total Length: 508 km

Gujarat and Dadra & Nagar Haveli : 352 km

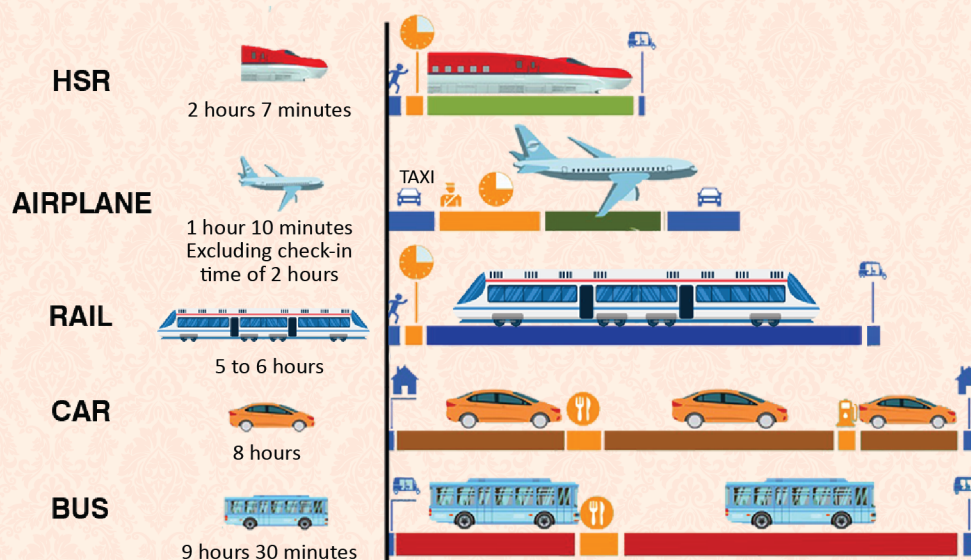
Maharashtra : 156 km



Benefits of introducing HIGH SPEED RAIL IN INDIA



HSR will be the **Most Efficient** travel mode from Mumbai to Ahmedabad (508 km)



Funding

The MAHSR project's estimated cost is INR 1,08,000 crore (USD 17 billion) and being executed with Official Development Assistance (ODA) Loan assistance from Japan International Cooperation Agency (JICA).

In overall capital structure, 81% of the Construction/Procurement cost will be funded from Government of Japan through JICA. The remaining project cost will be funded by Government of India. According to the equity structure of the Special Purpose Vehicle, 50% is held by the Government of India (GoI), through the Ministry of Railways, and 25% each by the Government of Maharashtra and the Government of Gujarat.

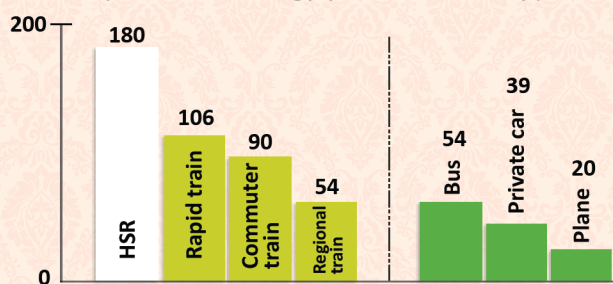
The conditions of the loan being given for MAHSR are at concessional terms and conditions. The tenure of the loan is 50 years at 0.1% interest rate and with a moratorium period of 15 years. Thus the loan repayment will be done in 35 years.

Environment Friendly Travel

According to statistics of UIC, a high-speed train is the most energy efficient mode of transport in terms of Passenger-kilometers carried per unit of energy. Rail is also the most environmental friendly mode of transport, with CO₂ emission being less than one fourth of air transport and less than one third of road transport (car).

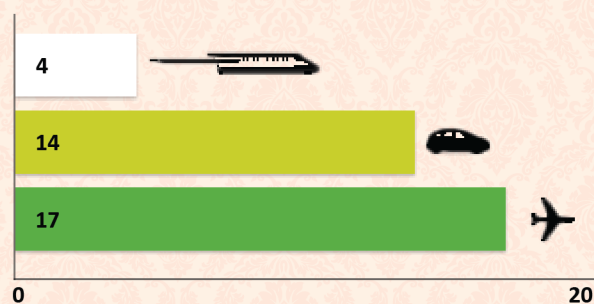
Energy efficiency Passenger-kilometres

carried per unit of energy (1kwh = 0.086kpe)



CO2 emissions kilograms of CO2

emissions per 100 passenger-kilometres



MAHSR with its elevated viaducts and underground/undersea tunnel will cause minimal disturbance to the existing flora & fauna in the region. Use of solar panels, rain water harvesting at HSR stations and maintenance depots are some of the important sustainability initiatives taken for the project. Plans to maximize the renewable content of the electrical energy sourced are under consideration.

Aesthetically Designed Stations

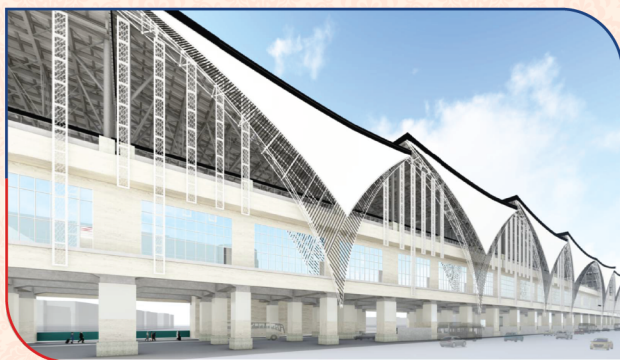
The design of each of the 12 stations on the MAHSR line will reflect the spirit of the city it is located in. This will bring about an instant connection with the local populace, and promote a sense of ownership of the high-speed system.

From an architectural point of view, to establish a connect with the local environment, some elements of the city that locals are proud of have been picked up and included in the station design concept. For instance, Ahmedabad's HSR station facade design is inspired by the rich cultural & historical ethos of the city with roof becoming a canvas for hundreds of vibrant kites flying in the sky.

The stations are being designed with contemporary architectural facade and state-of-the-art modern finishes.



Ahmedabad HSR Station*



Vadodra HSR Station*



Platform view of Mumbai HSR Station*

High Speed Rail Multi Modal Hub, Sabarmati

Sabarmati being the terminal station of the Mumbai-Ahmedabad High Speed Rail Corridor, NHSRCL has planned to develop it as a vibrant Multimodal Transport Hub in the region. To achieve seamless integration of various transport modes around the HSR station, a multi-modal transit terminal has been constructed on the east side of Sabarmati HSR station which shall ensure smooth traffic flow in the influence area of HSR station. The Multi Modal Integration schemes focus on integration of existing and planned transit facilities in the station area. The proposed Hub will provide connectivity to HSR Station, Western Railway Stations, Metro Station and BRT corridor via FOBs. Three Foot Over Bridges have been planned for smooth passenger flow.

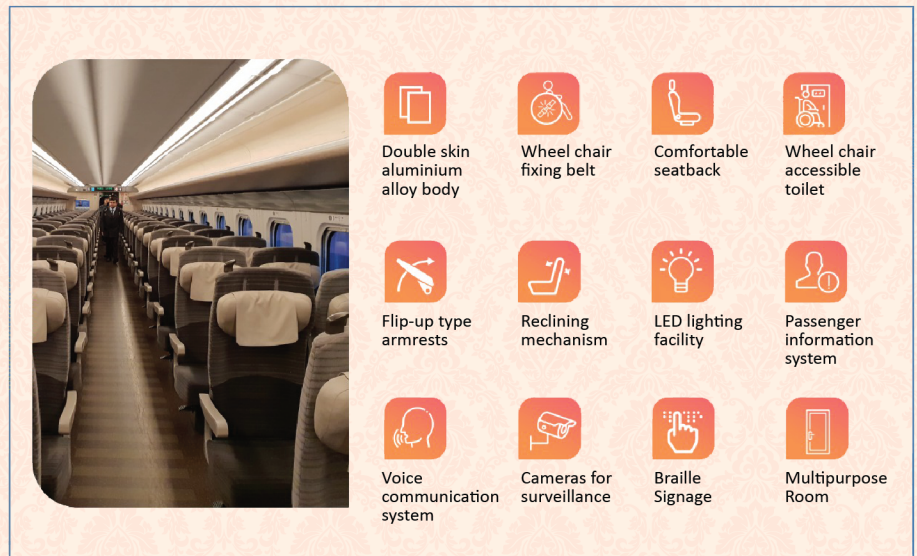


High Speed Rail Multi Modal Hub, Sabarmati

Comfortable Ride

One of the best global technologies in HSR – the Japanese Shinkansen technology – has been selected for the MAHSR corridor.

The Shinkansen system offers one of the highest safety levels in the world – there have been zero passenger fatalities since first Shinkansen train started in Japan, in 1964. They run at average punctuality levels of less than 1 min. per train, which is also impeccable.



The train will have double skin aluminium alloy air tight body and floors with noise insulation, sound absorbing side covers over bogie portion, noise insulation panels for pantograph to ensure a comfortable ride.

The reclining seats will be ergonomically designed with seat leg rest and ample leg space.

Passengers will be able to talk to train crew in emergency situation. One car will be provided with multipurpose room with folding bed for sick persons or child feeding mothers.

Construction

The work is in full swing on the 352 km section of Gujarat state out of the entire stretch of 508 km. To speed up the construction of viaduct, Full Span Girder Launching method is being used besides segmental launching method. Indigenous equipment and machinery like Straddle Carrier, Girder Launcher and Transporter are being used.

The work on Maharashtra portion of the corridor has also started.

