Project Description

INTRODUCTION

Government of India has decided to develop ~42,000 km of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under the Bharatmala Pariyojana. One of the projects of the Bharatmala Pariyojana is Delhi-Vadodara green-field highway *via* Sohna, Alwar, Dausa, Sawaimadhopur, Bundi, Kota, Ratlam and Vadodara.

The proposed project is development of 8 lanes (Greenfield Highway) from Haryana-Rajasthan Boarder (Ch. 79.394 Km) near Firozpur Jhirka to Itawa (Ch. 284.000 Km) Section of NH-148N (Total length 204.606 Km), Under BHARATMALA PRIYOJANA Lot-4/Pkg-4 in the state of Rajasthan.

Proposed Greenfield Highway is notified as NH-148N by MoRTH Gazette Notification S.O. 1842 (E) dated 8th May, 2018.

PROJECT PROPONENT

National Highways Authority of India (NHAI), an autonomous agency of the Government of India, is responsible for management of a network of national highways across the country. It is a nodal agency of the Ministry of Road Transport and Highways (MoRTH), Government of India. Its vision is to meet the nation's need for the provision and maintenance of National Highways network to global standards and to meet user expectations in the most time-bound and cost-effective manner, within the strategic policy framework set by the Government of India and thus promoting economic well-being and quality of life of the people.

NHAI shall be the nodal authority / proponent for the development of this project.

PROJECT

Proposed project is a section of Delhi-Vadodara 8 lane greenfield excess control National Highway. The proposed section of the project follows a complete Greenfield alignment in the state of Rajasthan. Salient features of the project are as follows.

S. No.	Particular	Details			
1	Project Name	Development of 8 lanes (Greenfield Highway) from Haryana- Rajasthan Boarder (Ch. 79.394 Km) near Firozpur Jhirka to Itawa (Ch. 284.000 Km) Section of NH-148N (Total length 204.606 Km), Under BHARATMALA PRIYOJANA Lot-4/Pkg-4 in the state of Rajasthan.			
2	Nature of Project	8-lane, access-controlled Greenfield Highway			
3	Right of Way	100 m			
4	Location of project stretch	Alwar, Bharatpur, Dausa and Sawai Madhopur			
5	Geographical	Start Point - 27°39'13.12"N, 76°57'46.62"E &			

Table 1: Project Salient Features

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S. No.	Particular	Details				
	Coordinates	End Point - 26°01'57.27"N 76°15'42.06"E				
6	Topography	Proposed highway follows partly plain, rolling and mountainous terrain.				
7	Land use	Agricultural, Barren and Forest Area				
8	Land Distribution	Forest Area- 28.7203 ha. Non Forest Area- 2036.2307 ha.				
9	Nearest railway station	Bandikui Railway Station- 4.0 km (Ch. 159.500 km)				
10	Nearest state highway / National Highway	Proposed alignment is crossing SH 14, SH-25A, NH-11 & NH-11A				
11	Nearest airport	Jaipur Airport- Approx. 52.0 km				
12	Seismic Zone	Proposed alignment falls under Seismic Zone II (Low damage risk zone) & III (Moderate damage risk zone).				

PROJECT LOCATION

The project starts from Haryana - Rajasthan Boarder at Ch. 79.394 km (27°39'13.12"N, 76°57'46.62"E) near Firozpur Jhirka and traverses entirely through plain / rolling terrain in Rajasthan state and ends near Itawa village at Ch. 284.000 km (26°01'57.27"N 76°15'42.06"E) km of Sawai Madhopur district, Rajasthan. Total length of the proposed section is about 204.606 km.

PROJECT NEED AND IMPORTANCE

The proposed project is a part of the proposed 8-lane access-controlled Greenfield Delhi-Vadodara NH-148 N. The project is planned as an ambitious high-speed corridor which provides high speed connectivity between states of North India and states of West & South India, more importantly giving a reliable access to the country's prominent economic and social hubs like Gurugram, Jaipur, Delhi, Kota, Mumbai and Vadodara, *etc*.

The proposed highway will provide better connectivity to several towns and cities *viz*. Gurgaon, Alwar, Bharatpur, Dausa, Sawai Madhopur, Tonk, Bundi, Kota, Jaora, Ratlam etc. and give an infrastructure fillip to the states of Delhi, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Maharashtra. The highway will be access-controlled and ensure high speed traffic movement from Delhi to Mumbai. The proposed alignment is selected so as to cover one of the most important North-South arterial connectivity in the country, further interspersed with feeder highways on its either sides.

At present, the connectivity between Delhi and Mumbai is either via NH-48 or via NH-19 & NH-47, which are 4/6 lane. The new proposed highway shall bring down the travel distance by approximately 95 Km (as compared to alternate routes) and result in time savings of over 2-3 hours. Moreover, the new highway facility is access controlled and hence will provide good riding quality, better safety, and a reliable infrastructure. All of these elements will result in cost savings and efficiency improvement.

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Route map of proposed Project vs. existing road network

The Project will further have following benefits at national and regional level:

- **High-speed connectivity and access:** The projected corridor is a proposed 8-lane, access-controlled highway. This will avoid traffic congestion and speed-up the freight movement. It is expected that overall, the proposed Delhi-Mumbai corridor will reduce the travel time between the two economic hubs by half.
- Aiding economic growth: The seamless connectivity will provide better access to vehicles as a link to the National Highways. The Project will reduce travel time and provide boost to trade and commerce linked to the regions connected through this highway.
- **Growth of backward areas:** The biggest strength of the alignment is that it plans to cover backward districts of Rajasthan. As a result of connectivity and access to other parts of the country, these backward areas will be aided to integrate with other part of India. Further, freight and passenger traffic on the highway will help promoting ancillary economy of these regions.
- **Decongestion of existing National and State Highways:** The proposed corridor will take away traffic pressures from existing SH and NH passing through various cities. Also, long-distance traffic will shift to the proposed highway, thereby leaving the NH and SH for regional and local usage.
- Usage shift: Long-distance traffic will shift from existing National Highways to the proposed highway, resulting in lesser congestion on these highways

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- Improved safety: Due to access control, the Roadway & Travel Safety of the traffic connecting the cities will be enhanced as there will be minimum distractions & conflict zones
- Support to industry: Different types of industries like Manufacturing, Tourism etc. • along the proposed corridor will be facilitated in their business operation and reachability.

Following major types of traffic load is expected on the Project:

Commercial and Industrial: Traffic on the existing roads is driven by local, commercial and industrial traffic. Industries such as cement, chemicals and minerals are present along and around the proposed corridor as it traverses through Haryana, Rajasthan, Madhya Pradesh and Gujarat. These industries are expected to benefit from the highway.

Tourist: Passenger traffic will be generated due to many places of tourist interest in the districts connected by the project corridor. Apart from places of historical importance such as forts and palaces, traffic would be augmented due to several famous religious places such as the Mehandipur Balaji Temple (Dausa), Sariska Tiger Reserve and wildlife parks and safari like Ranthambore National Park and Tiger Reserve.

Health and Education: Faster connectivity and accessibility to Delhi NCR will help in higher flow of traffic from Rajasthan, especially for higher education, tertiary healthcare and specialized treatments. Reduction in travel time will allow patients to avail OPD / other medical services from the capital region.

TRAFFIC ESTIMATIONS

It is estimated that because of reduction in travel time and costs, more traffic will be diverted from other routes. Further, more traffic will be generated from surrounding regions to add to the expected traffic on the proposed Project. It is estimated that across various sections of the project, the following traffic will be generated:

SI.	Location	ADT		AADT	
No.	Location	Nos.	PCUs	Nos.	PCUs
1	Delhi - Jaipur section (NH-48)	45914	96487	45452	94963
2	Gwalior - Shivpuri section (NH-46)	6449	14587	6366	14336
3	Bhiwadi - Alwar section (SH-25)	14291	16695	14260	16604
4	Firozpur Jhirka - Alwar (NH-248A)	9829	11590	9802	11503
5	Gangapur - Sawai Madhopur section (SH-01)	14209	13064	14191	13008
6	Jaipur - Kishangarh section (NH-48)	40804	81212	40496	80058
7	Bundi - Kota section (NH-52)	23817	29132	23746	28896

Summary of ADT and AADT at survey locations

On an average, it is estimated that Average Potential Traffic Demand of ~37,000 PCUs (Passenger Car Units) per day shall be generated on the proposed section of Lot-4/Pkg-4. Growth and industrial development along the corridor will further induce more traffic in Manager (Tech.) future.

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