

InvAsset's Voice



24th September, 2023



India's Best Performing and Most Customer Centric PMS

Introduction to Golden Quadrilateral Project

Initiated in 2001, the Golden Quadrilateral (GQ) project stands as a testament to India's ambitious infrastructural vision. Conceived under the leadership of then Prime Minister Atal Bihari Vajpayee, the GQ aimed to establish an extensive highway network that would seamlessly connect four of India's major metropolitan cities: Delhi (North), Mumbai (West), Chennai (South), and Kolkata (East). With an approximate span of 5,846 km, the GQ not only aimed at fostering faster movement of goods and people but also at propelling economic development in adjoining areas. The project, spearheaded by the National Highways Authority of India (NHAI), became one of the largest roadway projects in the country. Its foundation was rooted in the belief that modern highways could serve as catalysts for India's socio-economic growth, echoing the success stories of advanced nations. Over the years, as tarmac spread across vast swathes of land, the GQ became synonymous with India's infrastructural evolution, laying the groundwork for subsequent projects that furthered the nation's transport vision.



Importance of Golden Quadrilateral Project on Indian Economy

The importance of the Golden Quadrilateral project for India's infrastructure and economy can be substantiated further with the following facts and figures:

Scale of the Project: Spanning approximately 5,846 km, the GQ is one of the largest highway networks in India, costing around \$12 billion.

Economic Growth: Studies suggest that areas connected by the GQ experienced an increase in GDP growth by up to 2% higher than the national average.

Employment Generation: The construction phase itself created jobs for approximately 2 million individuals. An estimated 40% rise in indirect employment in connected areas has been reported due to the resultant commercial activities.

Transport Efficiency: Transit times reduced by almost 30% on average for commercial vehicles, leading to logistics cost savings.

Regional Development: Over 20 major cities and 50+ smaller towns and regions got interconnected, paving the way for regional growth.

Fuel Savings: Efficient roadways and reduced congestion led to significant fuel savings. According to some estimates, there was a 20% decrease in fuel consumption for long-haul trucks on these routes. FDI Inflow: Post-GQ, the sectors linked to infrastructure and logistics saw a 15% uptick in foreign direct investment, a clear testament to enhanced investor confidence.

Agricultural Impact: The project had an indirect effect on reducing wastage of agricultural produce due to quicker transport times. It is estimated that post-harvest losses, which previously hovered around 10%, were reduced in connected areas.

Vehicle Surge: The improved roadways led to an increase in vehicle registration. States along the GQ registered an average annual growth of 12% in vehicle numbers, compared to the national average of 10%.

In light of these figures, the GQ project emerges not just as a colossal infrastructure undertaking but also as a significant economic growth driver, touching multiple facets of the Indian economy and society.

The inception of the idea for Golden Quadrilateral Project

The inception of the Golden Quadrilateral (GQ) is a noteworthy chapter in India's infrastructural journey, driven by vision, ambition, and the need for robust connectivity.

The concept for the GQ stemmed from the recognition that for India to grow as a global economic power, it needed a solid foundation of infrastructure, particularly roads that connected its primary economic hubs. Roads and highways had always played a vital role in the economic and social development of nations, linking cities, towns, and villages, facilitating commerce, and fostering unity.

In the late 1990s, India was on the cusp of significant economic reforms and liberalization. The government, realizing that infrastructure could be the backbone of this new era of growth, began contemplating mega projects. The idea was simple yet grand: connect the four major metropolitan cities – Delhi, Mumbai, Chennai, and Kolkata – through a network of highways. These cities were not only political and cultural centers but also the primary economic engines of the country.

Under the leadership of the then Prime Minister Atal Bihari Vajpayee, the idea began taking shape. Vajpayee, an advocate for infrastructural development, saw the potential of such a project not just for economic growth but also for national integration. He envisioned the GQ as a means to reduce regional disparities, boost trade, and ensure smoother movement of goods and people.

The National Highways Authority of India (NHAI) was entrusted with the task of laying out the plan, overseeing its execution, and ensuring the vision was turned into reality. Thus, in 2001, the official launch of the GQ project marked the beginning of one of the most ambitious roadway endeavors in India's history.

The GQ wasn't just about roads; it was about a vision for India's future, a nation on the move, bridging distances, and driving progress. Its inception marked a definitive shift in India's infrastructural aspirations, laying the groundwork for many more such initiatives in the future.

States that Golden Quadrilateral Project covers

State	Distance
Uttar Pradesh	756 km (470 mi)
Rajasthan	725 km (450 mi)
Karnataka	623 km (387 mi)
Maharashtra	487 km (303 mi)
Gujarat	485 km (301 mi)
Odisha	440 km (270 mi)
West Bengal	406 km (252 mi)
Tamil Nadu	342 km (213 mi)
Bihar	204 km (127 mi)
Jharkhand	192 km (119 mi)
Haryana	152 km (94 mi)
Delhi	25 km (16 mi)
Total	5,846 km (3,633 mi)

Benefits of the Golden Quadrilateral Project

Enhanced Connectivity:

- Facilitates faster transportation between major cities and ports.
- Seamlessly links key agricultural, industrial, and cultural centers of India.



Economic Impetus:

- Catalyzes industrial growth in smaller towns by providing access to diverse markets.
- Generates demand for construction-related materials, boosting sectors like steel and cement.
- Sparks economic growth directly from construction activities.



Agricultural Advancements:

- Enables farmers to efficiently transport goods to major urban centers, supporting sales and potential exports.
- Leads to reduced agricultural waste and spoilage due to faster transport.



Industry and Trade Boost:

- Elevates truck transportation, making interstate commerce smoother.
- Encourages rapid industrialization by ensuring efficient flow of products, people, and ideas.



Cost and Time Efficiency:

- Reduces vehicle operating costs due to well-maintained roads.
- Saves time in transit, contributing to productivity and timely deliveries.



Social and Cultural Cohesiveness:

- Strengthens national unity and socio-economic progress through improved connectivity.
- Facilitates cultural exchange and understanding among diverse regions.



Workforce Mobility:

- Road infrastructure enhances the flexibility and mobility of the workforce, allowing people to seek opportunities in different regions.

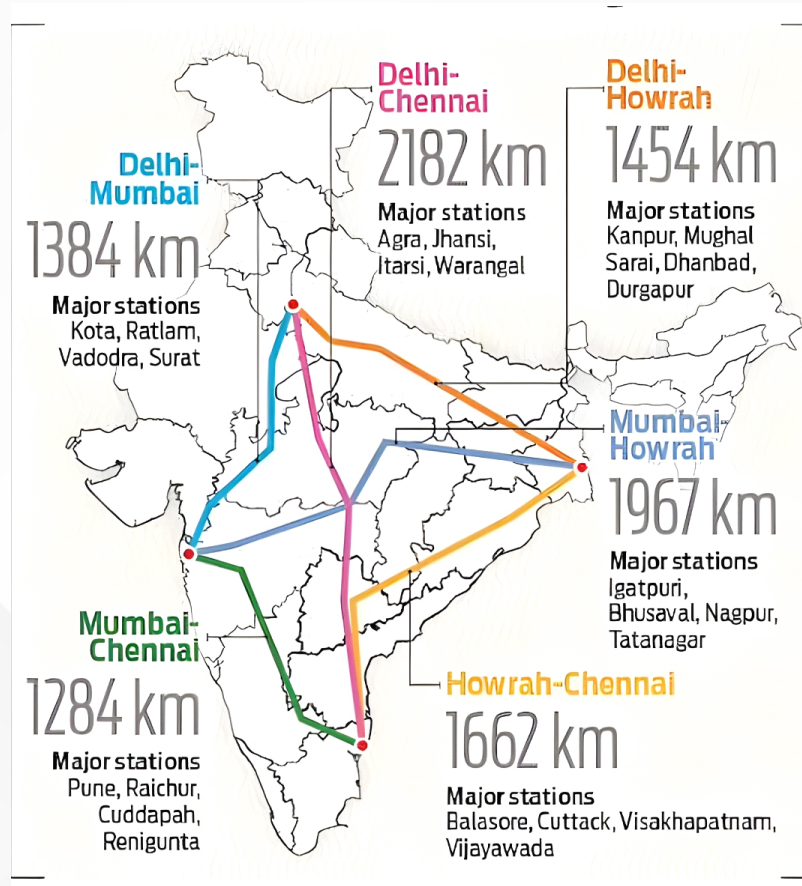


Urbanization and Infrastructure:

- Responds to rapid urbanization and population shifts by providing the required road infrastructure.
- Investment in road infrastructure becomes essential to support growing urban centers.

Companies which contributed to the Success of Golden Quadrilateral Project

The Golden Quadrilateral Project, one of India's most ambitious infrastructure endeavors, saw participation from a plethora of renowned national and international companies, each bringing their unique expertise to the table. At the forefront of this massive undertaking were major contractors like Larsen & Toubro, known for their infrastructural prowess, and global players like LG Engg. & Construction. Indian giants such as Nagarjuna Construction, IRCON International, and Punj Lloyd showcased their robust capabilities in the construction landscape. Collaborative efforts were witnessed through consortiums, with GVK International joining hands with BSCPL. The project also spotlighted contributions from Progressive Construction, ECSB-JSRC, B. Seenaiiah & Co., Madhucon Projects, Sadbhav Engg., and KMC Construction. Regional contributors such as the Gujarat Public Works Department, MSRDC, Mumbai, along with SKEC – Dodsai, played significant roles. Furthermore, established names like Skanska Cementation India, Hindustan Construction Company, RBM – PATI, Unitech, CIDBI Malaysia, and PATI – BEL rounded off this impressive roster. Funding for this colossal project, totaling a staggering Rs540bn, was meticulously sourced: taxes on fuel contributed Rs200bn, another Rs200bn was garnered through external assistance, Rs100bn from market borrowings, and a notable Rs40bn from private sector involvement. This intricate financing strategy underscored the project's significance. Adding to the uniqueness of its execution, a public-private partnership (PPP) model was adopted, spearheaded by the National Highways Authority of India (NHAI) in collaboration with the aforementioned contractors. As a part of this symbiotic arrangement, the contractors are entrusted with toll tax collection for a defined concession period, ensuring sustainability and continued maintenance of this monumental infrastructure.



Challenges faced by Golden Quadrilateral Project

Budgetary Constraints:

- Tight budgetary space made allocation of funds challenging.
- Balancing infrastructure expenditure with other critical areas became crucial.

Governance and Regulation:

- Navigating the complexities of governance and bureaucratic hurdles posed delays.
- Addressing issues related to business regulations, competition, and environmental clearances was challenging.

Climate Change Concerns:

- Ensuring the project's environmental sustainability and responsiveness to climate change was paramount.
- Balancing development with ecological concerns required meticulous planning.

Limited Impact in Certain Regions:

- Districts along the north-south and east-west (NS-EW) corridors observed minimal changes in activity post-construction.
- Ensuring equitable development and benefits across regions posed challenges.

Transportation Efficiency:

- India's average truck speed remains among the world's slowest, leading to increased fuel consumption and transit delays.
- Upgrading the road infrastructure to counter this was a focal concern.

Land Acquisition:

- Acquiring the necessary land for the highway stretches was a significant challenge, involving negotiations, compensations, and potential resettlement.

Coordination Between States:

- Ensuring consistent standards and obtaining necessary permissions across multiple states proved difficult.

Local Opposition and Socio-cultural Concerns:

- In some regions, there was resistance or opposition from local communities due to potential displacement or environmental concerns.

Technical and Geographical Challenges:

- Addressing geographical challenges such as terrain, soil quality, and weather conditions required specialized expertise and technology.

Safety and Quality Assurance:

- Ensuring the safety of both the workers during construction and travelers post-construction was paramount.
- Maintaining consistent quality across such an expansive project posed challenges.

.

Disclaimer: This report has been prepared by the research department of Invasset, is for information purposes only. This report is not construed as an offer to sell or the solicitation of an offer to buy or sell any security in any jurisdiction where such an offer or solicitation would be illegal. Invasset have exercised due diligence in checking the correctness and authenticity of the information contained herein, so far as it relates to current and historical information, but do not guarantee its accuracy or completeness. This Document may contain confidential and/or privileged material and is not for any type of circulation and any review, retransmission, or any other use is strictly prohibited. This Document is subject to changes without prior notice.

The opinions expressed are our current opinions as of the date appearing in the material and may be subject to change from time to time. Prospective investors are cautioned that any forward looking statement are not predictions and are subject to change without prior notice. Recipients of this material should rely on their own investigations and take their own professional advice. Invasset or any of its affiliates or employees shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. Invasset. or any of its affiliates or employees do not provide, at any time, any express or implied warranty of any kind, regarding any matter pertaining to this report, including without limitation the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. The recipients of this report should rely on their own investigations.

Invasset and/or its affiliates and/or employees may have interests/ positions, financial or otherwise in the securities mentioned in this report. Opinions expressed are our current opinions as of the date appearing on this material only. While we endeavour to update on a reasonable basis the information discussed in this material, there may be regulatory, compliance, or other reasons that prevent us from doing so. This report is not directed to or intended for display, downloading, printing, reproducing or for distribution to or use by any person in any locality, state and country or other jurisdiction where such distribution, publication or use would be contrary to the law or regulation or would subject to Invasset or any of its affiliates to any registration or licensing requirement within such jurisdiction. Invasset may or may not hold any securities discussed in the article in its portfolios. Invasset may or may not take decisions based on the information contained in the article while curating portfolios for its clients. Without limiting any of the foregoing, in no event shall Invasset, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind.

**This research has been done by the
Core Fundamental Research Team of InvAsset PMS Desk.**

Anirudh Garg

anirudhgarg@invasset.com

Harshal Dasani

harshaldasani@invasset.com

Kalp Jain

kalpjain@invasset.com



India's Best Performing and Most Customer Centric PMS



MUMBAI

911 One Lodha Place,
Lower Parel, Mumbai 400013

GURUGRAM

4th Floor Two Horizon Centre,
DLF Phase 5, Gurugram,
Haryana 122002

LUDHIANA

1401, Aspen 2, Centara Greens,
Pakhawal Road, Opp. Riviera Resort,
Ludhiana 141001



1800-309-2172
98158-10172



info@invasset.com



www.invasset.com
