

Chandragiri - Chitlang -Palung - Chitwan

Expressway





Background

The proposed expressway project is a large infrastructure development initiative undertaken by the Government of Nepal, aimed at enhancing the national transportation network. At present, the existing road infrastructure spanning 150 kilometers connects Chitwan and Kathmandu, necessitating roughly 5 hours of travel time. This expressway is designed to connect these two major hubs through an advanced road system incorporating tunnels and bridges, effectively reducing the travel distance to less than 100 kilometers and cutting down travel time to approximately an hour. Positioned as a strategic priority, the project is intended to catalyze economic growth and leverage Nepal's geographical advantage for improved regional connectivity. By offering a fast and safe transportation route, it promises significant benefits in terms of economic activity enhancement and road safety improvement across the region.



Transportation



Kathmandu, Makwanpur and Chitwan Districts



Road Length 96.5 km

Salient Features:

- Access Controlled Expressway
- Travel time: 57 minutes
- Number of lanes: 4
- Design Speed: 80-120 Kmph
- Number of Tunnels: 9
 - · Total length: 29.80 Km
 - Longest tunnel: 13.2 Km
- · Number of Bridges: 30
 - Total length: 9.53 km
 - · Longest bridge: 1.3 Km

Project Rationale:

- Directly connects Kathmandu and Chitwan, enhancing accessibility
- · Extend connectivity to critical trade nodes facilitating cross-border trade
- Provide an express route that offers faster transportation, reducing travel time for both domestic and international trade
- Provide an alternative route, easing pressure on existing roads and network

Project Components



Expressway



High bridges

Project Outcomes



Reduced Travel Time by 4 hours



Boost in trade 🖒 and Commerce



Reduced carbon emissions







Saving Vehicle **Operating Cost**



Decongestion of Highways



Financial Indicators

Estimated Project Cost (NPR)

221.12 Billion

| | | Financial Analysis | | _ |
|------------------------------------|---|--------------------|-----------------------|----------------------|
| | I | Toll Only | Toll + VOC Savings | Economic Analysis |
| IRR (%) | | 11.98 | 17.71 | 15.27 |
| NPV at 10 % discount (Billion NPR) | | 55.14 | 230.82 | 86.28 |
| Pay-back period (years) | | 11.26 | 8.52 | 6.45 |
| Discounted Pay-back period (years) | | 20.6 | 14.71 | 11.6 |
| Benefit Cost Ratio | | 1.3 | 2.4 | 1.7 |
| | | | (1/00 1/1/ | |

(Information is based on Pre-feasibility Study prepared in 2023)

(VOC = Vehicle Operating Cost)

Project Implementation Modality



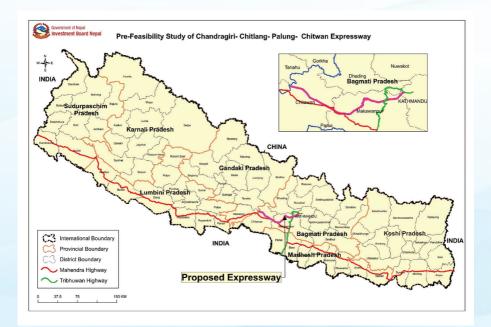
Public Private Partnership (PPP model)

Hybrid Annuity Model (HAM): BOT + EPC

BOT = Build, Operate & Transfer EPC = Engineering, Procurement & Construction

Project Implementation Timeline





Relevant Agencies

- Investment Board Nepal (IBN)
- Ministry of Physical Infrastructure and Transport (MoPIT)
- Department of Road (DoR)

About the Agency

The Investment Board Nepal (IBN)

IBN is a high-level government body chaired by the Right Honorable Prime Minister, that serves as a facilitator for both domestic and foreign investments in Nepal. Its primary objective is to create an investment-friendly environment by mobilizing and managing domestic as well as foreign investments to promote investment across different sectors through a transparent and efficient process. Being guided by the Long-term Vision (2043), the 15th Plan, international commitments such as Sustainable Development Goals and other subsequent policies of the Government of Nepal, IBN has been developing credible and bankable projects to garner investment.

Address:

ICC Complex | New Baneshwor, Kathmandu, Nepal

Contact Number: +977-1-4575276, +977-1-4575277, +977-1-4575278

Email: info@ibn.gov.np | Website: www.ibn.gov.np

