# TRANSPORT



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## 1. OVERVIEW



The transportation sector contributes 6.79% to Nepal's GDP, and tourism contributes another 6.7%. This underscores the importance of transportation to maximise returns from other economic functions



Nepal ranks 108<sup>th</sup> out of 138 countries in infrastructure, according to the Global Competitiveness Index



According to the World Bank's Nepal Development Update 2019, the country would need to invest about 10-15% of GDP on infrastructure annually for the next 10 years



Nepal had 3.4% of GDP allocated in 2023/2024 for public construction, in roads, railways, irrigation, water supplies, and electricity generation, among others



Nepal's public investment in infrastructure has averaged around 4% of GDP, which falls below the average among both South Asian and low-income countries

#### Long-term vision for transport sector (Km)

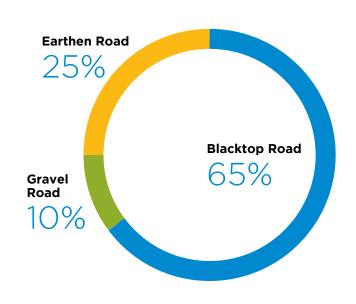
	2018/2019	2043/2044
National and Provincial highway (up to two lanes)	7,794	33,000
National highway (more than two lanes, including fast track)	96	3,000
Railroads	42	2,200

Source: National Planning Commission, 2019/20



The total length of national highways is 14,666.11 km, of which 9,543.07 km has blacktop and 1,449.07 km gravel; the remaining 3,673.97 km are earthen roads. There are plans to build an additional 2,987.88 km of national highways, while 514.51 km is under construction.

Poor road quality significantly impacts transport costs. Commercial vehicles face additional constraints, including inadequate road width (often featuring intermediate lanes), narrow curvatures, and steep gradients. Private investment in roads in Nepal is limited. Therefore, the sector offers significant opportunity for considering projects in the Public-Private Partnership (PPP) model.





Nepal has a network of airports connecting incountry destinations while three airports can serve international flights. The number of passengers handled by airports increased from 3.99 million in 2011 to 7.32 million in 2019. There was a decline to 2.43 million in 2020 largely due to COVID-19 travel restrictions. Travel began recovering in 2021 to reach 5.03 million passengers in 2021.

Nepal has 32 domestic airports in operation, and these are important for ensuring connectivity to remote and mountainous regions. The access to these destinations has improved following private investment in aviation. The sector already has substantial private investment, with nine companies operating fixed-wing aircraft for domestic travel, and 12 that offer rotary-wing aircraft.



#### **Ropeways**

There are over six operational passenger cablecar services operated by private companies, and some other large projects are under study or construction. Private sector involvement in ropeways is one indication of the viability as it can be designed to provide both vital connectivity and recreational access to remote regions.





#### **Railways**

The state-owned Nepal Railway Company Ltd. oversees the operational lines, including the Janakpur-Jainagar and Janakpur-Bijalpura connections. Nepal has plans to expand the rail network to other parts of the country and build rail connections with both China and India. More rail-based mass transport solutions are required in Nepal's urban centres, which provide opportunities for investment.





#### **Waterways**

The potential of using the perennial Himalayan rivers as alternative means of transport is a promising concept. Nepal's rivers flow from the mountains and empty into the Ganges basin in north India. These rivers could be developed into waterways to the Bay of Bengal, through India and Bangladesh. This is an area which remains to be studied for feasibility.

Nepal has jet boat services in some rivers such as Koshi and Narayani. Motorised boats from Chatara have also helped to reduce travel time to and from villages in Dhankuta and Bhojpur districts. Such initiatives remain to be explored on other large river basins.

## 2. INVESTMENT OPPORTUNITIES



#### **Road and tunnel projects**

The national roads network has been expanding and there have been improvements in surface standard/ quality. But the sector still requires upgradation in the technology and services through large bridges, tunnels, and access-controlled roads to facilitate safe, reliable, and efficient transport between major cities and trade centres. The proposed tunnel and expressway projects can reduce travel time, enhance connectivity, and improve overall logistics. Some of the projects that can be considered for private investment are:

- Khurkot-Sindhuli Tunnel
- Chandragiri-Chitlang-Palung-Chitwan Expressway
- Mirchaiya-Katrai-Ghurmi Road
- Malekhu-Lothar Road and Tunnel
- Daunne Khanda Road Tunnel
- Dharan Leuti Road Tunnel



#### **Bus rapid transit (BRT) projects**

Nepal's urban and regional roads have been upgraded through lane additions and cross-section development, and many can accommodate public transport services such as bus rapid transit (BRT). The proposed BRT projects are strategically positioned at major transportation and commerce hubs, some of which also serve as crucial gateways for trade between Nepal and India. Some of the BRT projects that can be considered for private investment are:

- Kathmandu BRT (Ring Road)
- Ratnapark Suryabinayak BRT
- Kohalpur Nepalgunj BRT
- Butwal Bhairahawa Lumbini BRT
- Birgunj Pathlaiya BRT
- Jogwani Dharan BRT
- Janakpur Dhalkebar BRT
- Phewa Lake Begnas Lake BRT



#### **Cable car projects**

Cable cars have been pivotal for jumpstarting tourism in areas that were difficult to access and also serve some wellknown destinations. Some of the Cable Car projects that can be considered for private investment are:

- Lukla-Sagarmatha Basecamp Cable Car
- Dharan-Bhedetar Cable Car
- Bhaktapur-Nagarkot Cable Car
- Dhulikhel-Namobuddha Cable Car



#### Railway/metro/monorail projects

The proposed Kathmandu Metro Project envisions a five-line, 77.28 km network connecting 57 stations. The different lines of the Kathmandu Valley metro and other rail-based systems that can be considered for investment are:

- Kathmandu-Banepa-Dhulikhel-Panchkhal tram/rail
- Nagdhunga-Kalanki-Koteshwor-Dhulikhel metro rail
- Saatdobato-Ratnapark-Narayangopal Chowk metro rail
- Koteshwork-Chabahil-Swyambhu-Koteshwor metro rail



#### **Airport projects**

The proposed Nijgadh International Airport, about 68 km south of Kathmandu in Madhesh Province is designed to address the capacity constraints at the Tribhuvan International Airport in Kathmandu. Discussions are underway for developing the project under the PPP model. The Government also has plans to introduce the PPP model for operation and maintenance of all international airports.





#### **Multistorey parking**

Parking is already a major problem in major cities of Nepal, which is likely to intensify with increase in the number of vehicles. A solution to this is building multistorey spaces to manage the demand for parking. There are opportunities for consider multi-storey parking infrastructure in all major cities





#### **Podway projects**

A "pod-way" is an emerging technology for personal and public transport in urban areas where the option of expanding road width has been exhausted. A pod-way can be built at a fraction of the cost of building elevated roads and can contribute towards reducing congestion-related delays in urban areas. Transport pods can also be used as alternatives to traditional ropeways and roads connecting rural areas, and tourism destinations. Developing pod ways provide an additional investment opportunity in Nepal.

### 3. SUPPORT SYSTEM

Nepal has various policies and laws on licensing of operators, safety standards, and operational guidelines. These along with existing laws on foreign investment can facilitate project development.



#### **Legal arrangements**

The Foreign Investment and Technology Transfer Act (FITTA) 2019 applies to all FDI, while the Public-Private Partnership and Investment Act (PPPIA) 2019 aims to facilitate public-private partnerships in infrastructure development. Some important provisions of laws relating to investing in infrastructure are discussed below:



## Public Private Partnership and Investment Act, 2019 (PPPIA 2019)

- Nine PPP models are available for private investors
- Investors can apply to undertake any project, including unsolicited projects, for development
- Under PPPIA 2019 IBN provides one-stop services for investments above NPR 6 billion
- The PPPIA has introduced Viability
  Gap Fund (VGF), which allows the
  Government to establish a fund to
  support projects with positive long-term
  returns but delayed financial profitability



#### Foreign Investment and Technology Transfer Act, 2019 (FITTA 2019)

The transport sector is open for private investment, including FDI



#### Public Road Act, 1974

The Public Road Act, 1974 regulates the development, maintenance, and expansion of public roads. It is the legal basis for classifying roads – into highways, feeder roads, district, and urban roads – acquiring land for development, maintenance, expansion, or improvement of public roads, and the collection of development tax.



All infrastructure projects — roads, bridges, tunnels, ropeways, railways, trams, trolley buses — receive a 40% exemption on income tax

Scan for full sectoral profile, including the data sources.



