

# CHAPTER 21

## ROADS

Road network is vital to the economic development, trade and social integration of the country. It facilitates smooth conveyance of both people and goods. Size of the road network, its quality and access has a bearing on various parameters of the economy like travel time, transport costs, cost of input, cost of finished products etc. Besides, road network promotes wide market of various products/ services and thereby extend markets as a consequence enable exploitation of the economies of scale.

There must be matching growth between roads, traffic, vehicle population and population. Over crowded, overloaded, poorly funded, poorly constructed, poorly maintained roads can not be of much use for the development of a country and will increase the chances of road accidents, increase vehicular pollution, and various other problems.

In the publication titled “**Basic Road Statistics (BRS) of India**”, the M/o Road Transport & Highways provide comprehensive information / data on road network in the country. The basic information pertains to road length under various categories of road along with nature of Surface (like Water Bound Macadam, Black Top, Cement Concrete), Unsurfaced (Motorable, Non-motorable) and lane-wise information only in respect of National Highways & State Highways. Data presented in Basic Road Statistics in India are collected from about 280 source agencies spread across the Central, State and local levels. Some of the sources of data are State departments of Public Works, Forest, Irrigation, Electricity, Municipalities, Panchayati Raj & Rural Development, State Maritime Boards, Port Trusts, Sugarcane Authorities, Public Sector Undertakings in the Coal sector and Roads Wing of M/o Road Transport & Highways, Military Engineering Services, Zonal Offices of Indian Railways and Steel Authority of India.

The periodicity of data is annual provided the data are received in time from all the above source agencies.

The following concepts and definition are used in the subsequent tables.

**Road:** A way on land with a right of way for the public.

**Urban Road:** A road within the limits of the area of Municipality, Military Cantonment, Port or Railway Authority.

**Project Road:** A road within the limits of the area of a development project of a public authority for the exploitation of resources such as forest, irrigation, electricity, coal, sugarcane, steel etc.

**National Highways:** The arterial roads of the country for inter-state and strategic defence movements. They traverse the length and width of the country connecting the national and State capitals, major ports and rail junctions and link up with border roads and foreign highways.

Highways includes

PWD Roads (i) National Highways (ii) State Highways (iii) Other PWD Roads  
Panchayat raj Roads (i) Zila Parishad Roads (ii) Village Panchayat Roads (iii) CD/Panchayat Raj Roads

**State Highways:** The arterial roads in a State for inter-district movements. They traverse the length and width of a state connecting the state capital, district headquarters and important towns and cities and link up with the national Highways and adjacent state highways.

**Village Roads:** These roads serve as the feeder roads as well as the roads for inter village movements. They pass through rural areas connecting the village to one another and to the nearest road of higher category viz. District Roads, State Highways and National Highways etc.

**Below Standard Single Lane:** Surfaced roads having clear carriageway width of below 3.75 M.

**Standard Single Lane:** Surfaced roads having clear carriageway width between 3.75 M to below 7.0 M.

**Standard Double Lane:** Surfaced roads having clear carriageway width between 7.0 and below 10.5 M.

**Standard Multi Lane:** Surfaced roads having clear carriageway width of 10.5 M. and above.

## Highlights

- The Indian road network has increased from 2.4 Million Kilometer in 2001 to 3.1 Million Kilometer in 2008, whereas surfaced road length has increased from 1.4 million Kilometer to 1.7 Million Kilometer during the same period the share of the surfaced road length has also increased over the years. Surface road length accounted for 57.3% of total road length in March, 2001 as compared with 54.9% of the total road length in March, 2008.
- Up to 31st March, 2008, maximum Road length around 10 % of total road length is in Andhra Pradesh followed by Uttar Pradesh 8.9%, Karnatka (8.0%) and Assam (7.2%).
- Out of total Road length, highways accounts for 80% and Urban roads and Project roads account for 10% each.
- Category wise classification of road length showed that during 2001 to 2008, the length of National Highways increased from 57737 Kilometer to 66754 kilometer –an increase of about 15.6 %. During the same period, the length of State Highways (SHs) increased from 132100 kilometer to 154522 Kilometer-an increase of about 16.9 % and the length of other PWD roads increased from 736001 kilometer to 863241 registering a growth of 17.2%, zila Parishad roads are also increased by 17.8 % during the same period.
- Up to 31st March, 2008, the length of National Highway is maximum in Uttar Pradesh, followed by Rajasthan, Madhya Pradesh and Andhra Pradesh, whereas Statehighways are maximum in Maharastra, Karnatka and Gujarat. Zila Parishad roads are maximum in Karnatka, Andhra Pardseh and Maharastra
- The total length of State Highways in the country increased from 132100 km as on 31.3.2001 to 154522 km as of 31.3.2008(an increase of 16%). Maharastra reported the highest kilometers of State Highways 933675 km),followed by karnatka(20738) and Gujarat (18447 km)
- The total length of other PWD roads has increased by about 17.2 % from 7.3 lakh Killometer in 2001 to 8.6 lakh Killometer in 2008. Uttar Pradesh has the highest length of roads under Other PWD roads (1,38024 km) with 97.5 % of the roads being of surfaced category,followed by Rajasthan(92029 Km).
- About 508608 Km of Zila parishad Roards were reported as on 31st March, 2008 whereas in 2001 it was 487604 Km registering an increase of 4.3 %.
- The road length under Village Panchayat Roads was 670107km as on 31st March, 2008. During the period 2001-2008 the road length under Village Panchayat increased by about 54.7 %.
- Roads remain under Panchayat Samiti were reported at 336872 km as on 31st march,2008.Assam reported the largest share of Panchayat Samiti roads(64494 km), followed by Rajasthan(44287km) and Tamil Nadu(32053 km)
- The total length of Project Roads increased from 223665 Km in March2001 to 270189 Km in March 2008 reflecting a growth of 20.8 %. During this period surfaced roads formed only 25% to 27% of total road length under this category in 2008. Forest Department Roads accounted for the highest share of around 56% to 57% of total Project Roads followed by Irrigation Department Roads and Roads under Sugarcane Authrities.
- In case of Surfaced length of National Highways and State Highways, the maximum road length is in Standard double lane.
- Expenditure on National highways has increased (about 7.5 fold) from ₹ 1211.00 crores in 2000-01 to 9017.96 crores in 2009-10.

**This chapter contains the following tables:**

**Table 21.1-**Total and Surfaced Road Length

**Table 21.2-** Length of Highways by Authorities

**Table 21.3-**Length of Urban Roads by Authorities

**Table 21.4-**Length of Project Roads by Authorities

**Table21.5-**Length of National and State Highways-By Width

**Table 21.6-**Growth of National Highways in India and Central Government Expenditure Incurred There-On