

Basic Road Statistics of India (2018-19)



सत्यमेव जयते
75
आज़ादी का
अमृत महोत्सव

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
TRANSPORT RESEARCH WING
IDA BUILDING, JAMNAGAR HOUSE,
SHAHJAHAN ROAD, NEW DELHI-110011
www.morth.nic.in

BASIC ROAD STATISTICS 2018 - 19



सत्यमेव जयते

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
TRANSPORT RESEARCH WING
NEW DELHI
www.morth.nic.in**



Foreword

Road network works as arteries of the economic, social and cultural health of a country by transporting men and materials both during peace and war. It is essential to project a strategic and sustained expansion and an adequate maintenance of these networks to guarantee quality connections between the different parts of country. They enable the supply of goods and services around the country and connect people to workplaces, schools, hospitals, etc. Road infrastructure improves the effectiveness and efficiency of country and increases the standard of living of people and making their lives easier. India has one of the largest road network in the world with road length of around 63.31 lakh km. The country's road network consists of National Highways, Expressways, State Highways, District Roads, Urban Roads, Village Roads, Rural Roads etc.

Along with the modern infrastructure, there is need for adopting a holistic and integrated approach in infrastructure construction. In this endeavour, Government of India launched National Master Plan of Prime Minister Gati Shakti' on 13th October, 2021. It will incorporate the infrastructure schemes of various Ministries and State Governments like Bharatmala, Sagarmala, inland waterways, dry/land ports, UDAN etc. Economic Zones like textile clusters, pharmaceutical clusters, defence corridors, electronic parks, industrial corridors, fishing clusters, agri zones will be covered to improve connectivity & make Indian businesses more competitive.


The development of National Highways is the responsibility of the Government of India. Ministry of Road Transport & Highways is continuously making effort to enable easy accessibility, flexibility of operation, door to door service and reliability of road transport. The Ministry has launched major initiatives to upgrade and strengthen National Highways through various phases of the National Highways Development Project (NHDP) and is taking the initiative forward through the umbrella program of Bharatmala Pariyojna, Phase-I and other schemes and projects. The Ministry has taken up the Connectivity Improvement Program for Char Dham (Kedarnath, Badrinath, Yamunotri & Gangotri) in Uttarakhand. The program includes projects of improvement /development of 827 km length of NHs at total estimated cost of about Rs. 12,070 crores. The National Highways have a total length of 1,40,995 km, which in totality serve as the arterial network of the country.

The Ministry has launched the Special Accelerated Development Programme in the North East (SARDP-NE) etc. to bridge the critical infrastructure gaps in areas of intense economic activity, places of religious and tourist interest, border areas, backward and tribal areas, coastal areas and trade routes. NHIDCL was formulated in 2014 to speed up the road construction in strategic areas along the international border and North Eastern Region and assigned the target of developing and improving road connectivity for about 12,000 km roads in the North Eastern region.

The Government of India plans to undertake development of Cable Propelled Transit, i.e., Ropeways, as an alternate mobility transport solution in areas where other modes of transportation are infeasible, for example, in hilly areas. Ropeways can provide first and last mile connectivity for transportation of passengers in an environmentally sustainable way. The National Electronic Toll Collection (NETC) programme, the flagship initiative of the Ministry, has been implemented on pan-India basis to ensure seamless movement of traffic through fee plazas and increase transparency in collection of user fee using FASTag.

The present issue of "Basic Road Statistics of India" provides comprehensive information on the total road network of the country as on 31st March, 2019. I hope this publication would be useful to administrators, policy makers and the academia especially those interested in infrastructure development. I acknowledge the support and cooperation of all the agencies of the States/UTs, Centre involved in providing information as per prescribed format to TRW in time.

New Delhi
May 25, 2022


(GiridharAramane)



PREFACE

The Basic Road Statistics of India is an annual publication brought out by Transport Research Wing of the Ministry of Road Transport and Highways. The present issue of "Basic Road Statistics of India 2018-19" provides detailed information on State/UT wise road length data of various categories of roads at national, state, district and local levels.

The road network of the country consists of National Highways, State Highways, District Roads, Rural Roads, Urban Roads and Project Roads. The construction and maintenance of National Highways is mandated with the Ministry of Road Transport and Highways.

As per the report, the road network of the country is 63.31 lakh Km as on 31.03.2019 of which National Highways constituted 2%, State Highways constituted 3%, District Roads constituted 10%, Rural Roads (including JRY) constituted 71%, Urban Roads constituted 9% and Projects Roads constituted 5%.

The present publication provides, inter-alia, an overview of the composition and growth of the road sector over a period of time, State/UTs spread of different category of roads and also provides a chapter on recent initiatives taken by Ministry of Road Transport and Highways for improving road network including the budgetary provisions and expenditure incurred, etc.

The data given in the publication is based on the information sourced from various agencies from both Central and State Government viz Public Works Departments of States and UTs, Municipalities, Railways, Forest, Ports, Mines, etc. I express my deep gratitude to all the data source agencies for sharing valuable data/information to bring out this publication. I also express my deep gratitude to the officers and staffs of Transport Research Wing for their concerted efforts for finalisation and in bringing out this publication.


(Dinesh Kumar)

New Delhi
31st May, 2022

LIST OF CONTENTS

Sl. No.	Sections	Page No.
1	Executive Summary	1-3
2	Section 1: Road Network in India	4-23
3	Section 2: National Highways	24-32
4	Section 3: State Highways	33-37
5	Section 4: District Roads	38-41
6	Section 5: Rural Roads	42-49
7	Section 6: Urban Roads	50-55
8	Section 7: Project Roads	56-59
9	Section 8: Major Schemes & Initiatives of Ministry of Road Transport & Highways	60-71

LIST OF TABLES

Sl No.	Tables	Page No.
1	Table 1.1: Road network as on 31 st March – 2019 vis-à-vis 2018	5
2	Table 1.2: Road length by Categories during 2015 to 2019 (as on 31 st March)	7
3	Table 1.3: Road network by Categories (in Km) 1950-51 to 2018-19	8
4	Table 1.4: CAGR (%) of Road Networks -1951 to 2019	11
5	Table 1.5: Public and Private Sector Investment in Road Transport (Rs in crore)	12
6	Table 1.6: Surfaced and Total Road as of 31 st March	14
7	Table 1.7: Snap shot of Surfaced and Total Road as of 31 st March, 2019	15
8	Table 1.8: Total Road and Surfaced Road in North Eastern States as of 31 st March, 2019	19
9	Table 1.9: Trends in Road Density	19
10	Table 1.10: The Category wise Road Density per 1000 Sq. Km. for Top Five States/UTs as on 31 st March, 2019	21
11	Table 1.11: The Category wise Road Density per 1000 Sq. Km. for North Eastern States as on 31 st March, 2019	22
12	Table 1.12: Category Wise Road Density per 1000 Population for Top Five States as on 31 st March, 2019	22
13	Table 1.13: Number of Accidents, Persons Killed and Injured	23
14	Table 2.1: National Highways 2019 vis-à-vis 2018	25
15	Table 2.2: National Highways Network (1950-51 to 2018-19)	26
16	Table 2.3: Award of NHs/Road Projects and Construction of NHs/ Road Projects	28
17	Table 2.4: Fund Allocation and Expenditure for Development and Maintenance of National Highways	28
18	Table 2.5: State/UT wise break-up of National Highways as on 31.03.2019 (km)	30-31
19	Table 3.1: State Highways in 2019 vis-à-vis 2018	33
20	Table 3.2: State Highways Network	34

Contd...

List of Tables Contd...

SI No.	Tables	Page No.
21	Table 3.3: State wise break up of State Highways and Surfaced SH	35
22	Table 3.4: State Highways in North Eastern States as on 31.03.2019.	37
23	Table 4.1: Districts Roads network	39
24	Table 4.2: State wise distribution of District Road on 31 st March, 2019	40
25	Table 5.1: Profile of Rural Road in 2019 vis-à-vis 2018	42
26	Table 5.2: Rural Roads Network	43
27	Table 5.3: Components wise profile of Rural Road as on 31 st March, 2019	44
28	Table 5.4: Components wise profile of Rural Road in 2019 vis-à-vis 2018	45
29	Table 5.5: Components wise profile of Surfaced Rural Road in 2019 vis-à-vis 2018	46
30	Table 5.6: Components wise Profile of Rural Road as on 31 st March, 2019	46
31	Table 5.7: State wise distribution of Rural Road on 31 st March, 2019	47-48
32	Table 6.1: Urban Road network in 2019 vis-à-vis 2018 31 st March, 2019	50
33	Table 6.2: Trend of Urban Roads: 1960-61 to 2018-19	51
34	Table 6.3: Category wise profile of Urban Road as on 31 st March, 2019	53
35	Table 6.4: State/UT-wise distribution of Urban Roads as on 31 st March, 2019	54
36	Table 7.1: Profile of Urban Road in 2019 vis-à-vis 2018	56
37	Table 7.2: Project Roads Network	57
38	Table 7.3: State/UT wise distribution of Project Roads as on 31 st March, 20219	58
39	Table 8.1: Central Road Sector Outlay (at RE stage) and Expenditure (At Current Price) for the period 2016-17 to 2019-20	67
40	Table 8.2: Expenditure (Actual) incurred in the Development and Maintenance of National Highways by MORTH by Source of Financing in the last 8 years	68
41	Table 8.3: The State/UT-wise details of Fund Allocation/Utilized for Development of NHs	69-71

LIST OF CHARTS

Sl. No.	Chart	Page No.
1	Chart 1.1: Share of various categories of roads in total road network as on 31 st March, 2019 (in percent).	6
2	Chart 1.2: Category wise trends in Road Length	7
3	Chart 1.3: Trends of Decadal Growth of Construction of Road during 1951 to 2011	9
4	Chart 1.4: Trends of Construction of Road from 2001 to 2019	9
5	Chart 1.5: Trends of construction of Roads of different categories from 2010 to 2019	9
6	Chart 1.6: Trends of construction of roads of different categories (2010-2019)	10
7	Chart 1.7: Trends in total Investment in Road Transport	12
8	Chart 1.8: Trends in Public and Private Investment in Road Transport	13
9	Chart 1.9: Trends in Surfaced and Total Road Network	15
10	Chart 1.10: Surfaced and Total Road Length as of 31 st March, 2019	16
11	Chart 1.11: State/UT wise break-up of Total Road and surfaced road as of 31 st March, 2019	17
12	Chart 1.12: Percent share of Surfaced Road to Total Road Length across State/UTs as of 31 st March, 2019	18
13	Chart 1.13: Road Density per 1000 Sq. Km	20
14	Chart 1.14: Road Density in Km per 1000 Population	20
15	Chart 2.1: National Highways and Total Surfaced National Highways	26
16	Chart 2.2: Decadal trend of construction of NH from 1951 to 2011	27
17	Chart 2.3: Trend of construction of NH from 2012 to 2019	27
18	Chart 2.4: Fund Allocation and Expenditure for construction of National Highways	29
19	Chart 2.5: Public and Private Expenditure for construction of National Highways	29
20	Chart 2.6: Private and Public Investment in Total Investment (in percent)	30

Contd...

List of Charts Contd...

Sl. No.	Chart	Page No.
21	Chart 2.7: The State/UT wise network of National Highways as on 31.03.2019	32
22	Chart 2.8: National Highways network in North Eastern States as on 31.03.2019	32
23	Chart 3.1: Total and Surfaced State Highways	33
24	Chart 3.2: Trends of construction of State Highways from 2010 to 2019	34
25	Chart 3.3: State/UT wise break up of total and surfaced State Highways as on 31 st March, 2019	36
26	Chart 3.4: Share of North Eastern States State Highways as on 31.03.2019.	37
27	Chart 4.1: Construction of District Roads- (2001 to 2019)	39
28	Chart 4.2: State/UT-wise break-up of District Roads as on 31.03.2019	41
30	Chart 5.1: Rural Road network in 2019 vis-à-vis 2018	43
31	Chart 5.2: Trends in the construction of Rural Roads from 2010 to 2019	44
32	Chart 5.3: Component wise profile of Rural Roads as on 31 st March, 2019	45
33	Chart 5.4: The State/UT-wise break-up of Rural Roads as on 31 st March, 2019.	49
34	Chart 6.1: Urban Road Network	51
35	Chart 6.2: Trend in construction of Urban Roads from 2010 to 2019	52
36	Chart 6.3 State/UT wise distribution of Length of Urban Roads as on March 31 st , 2019.	55
37	Chart 7.1: The trends of construction of Project Roads from 2010 to 2019	57
38	Chart 7.2: State/UT-wise Length of Project Roads (in Km) as on 31 st March, 2019	59

LIST OF ANNEXURE

Annexure	Annexure	Page No.
1.1	Total and Surfaced Road Length By Categories in India as on 31.03.2019	72
1.2	Road Length By Categories and by type of Surface in India as on 31.03.2019	73
1.3	State/UT wise Total & Surfaced Length of Roads in India as on 31.03.2019 (State/UT-wise)	74
1.4	Total Road Length and Percentage Share of Each Category of Road to total road length (1951-2019)	75
2.1	Length of National Highways in India as on 31.03.2019 (State/UT-Wise)	76
2.2	Lane wise Length of National Highways in India As on 31.03.2018	77
3.1	Total and Surfaced Length of State Highways in India as on 31.03.2019 (State/UT-wise)	78
3.2	Length of State Highways in India - By Type of Surface as on 31.03.2019 (State/UT-wise)	79
4.1	Total & Surfaced Length of District Roads as on 31.03.2019 (State/UT-Wise)	80
4.2	Total and Surfaced Length of District Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)	81
5.1	Total & Surfaced Length of Rural Roads As on 31.03.2019 (State/UT-wise)	82
5.2	Length of Pradhan Mantri Gram Sadak Yojana Roads - By type of Surface as on 31.03.2019 (State/UT-wise)	83
5.3	Length of Rural Roads built by State PWD/RWD - By Type of Surface As on 31.03.2019 (State/UT-wise)	84
5.4	Length of Panchayati Raj Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)	85
6.1	Total & Surfaced Length of Urban Roads as on 31.03.2019 (State/UT-wise)	86
6.2	Length of Municipal Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)	87
6.3	Length of Military Engineering Service Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)	88
6.4	Length of Roads in Major Ports - By Type of Surface as on 31.03.2019 (State/UT-wise)	89

Contd...

List of Annexures Contd...

Annexure	Annexure	Page No.
6.5	Length of Roads in Minor Ports - By Type of surface as on 31/03/2019 (State/UT-wise)	90-91
6.6	Length of Roads in Railway Zones - By Type of Surface in India as on 31.03.2019 (State/UT-wise)	92
7.1	Total & Surfaced Length of Project Roads as on 31.03.2019 (State/UT-wise)	93
7.2	Length of Roads under Forest Departments - By Type of Surface in India as on 31.03.2019 (State/UT-wise)	94
7.3	Length of Roads under Border Roads Organisation - By Type of Surface in India as on 31.03.2019 (State/UT-wise)	95
7.4	Length of Roads under coal fields/ coal units of Coal India Limited - by Type of Surface as on 31.03.2019 (State/UT-wise)	96
7.5	Length of Roads under Electricity Departments of States/UTs - By Type of Surface in India as on 31.03.2019	97
7.6	Length of Roads under Irrigation Departments of States/UTs - By Type of Surface in India as on 31.03.2019	98
7.7	Length of Roads under Sugarcane Departments of States/UTs - By Type of Surface in India as on 31.03.2019	99
7.8	Length of Roads under SAIL & NMDC - By Type of Surface in India as on 31.03.2019	100
7.9a	Road Density per 1000 Sq. Km of Roads in Rural and Urban area	101
7.9b	Road Density per 1000 Sq. Km for different Categories of Roads	102
7.9c	Road length per 1000 population	103
8.1	The details of National Highways (New No.) in the country and their length	104-105
	Terms & Definitions	106-107
	Abbreviations	108

EXECUTIVE SUMMARY

1. The present volume of 'Basic Road Statistics in India-2018-19' provides information on various facets of road statistics in the country during the year 2018-19. It has eight sections and covers information relating to road length, surfaced road length, major initiatives of Ministry of Road Transport and Highways. Data/information presented in this report is sourced from various departments of States/Union Territories like State Public Work Departments, Municipalities, Panchayati Raj institutions, Railway, Forest etc.
2. The Basic Road Statistics of India 2018-19 provides State/UT-wise data on various categories of roads constructed at National, State/UT, District and Local Levels (Municipal/Panchayat). The report highlights the role of various Department/Organisation/Agencies who are responsible and executes construction and maintenance of different categories of Roads in India.
3. **Section 1** of the report provides an overview of road network in India. This section throws lights on category-wise break up of construction of roads in India, long run trend in the construction of road, decadal CAGR analysis and investment in highways by both Public and Private Entities. This section highlights points as under-
 - i. India has a road network of 63, 31,757 Km of roads as on 31st March, 2019, which is the second largest in the World after the United States of America with a road network of 66,45,709 Km. The Rural Roads constitute 71.4 percent (45,22,228 km) of total road network in the country as on 31st march,2019, followed by District Roads with 6,12,778 km (10%), Urban Roads 5,41,554 km (9%), Project Roads 3,43,163 km (5%), State Highways 1,79,535 km (3%), and National Highways 1,32,499 km (2%).
 - ii. The construction of roads in the country has increased consistently from 3.99 lakh km in 1951 to 63.32 lakh km in 2019, i.e. an increase of more than 15 times in 68 years.
 - iii. Total length of surfaced roads has increased from 37,48,291 km in 2017-18 to 40,95,725 km in 2018-19.
 - iv. State wise distribution of construction of roads (excluding JRY roads) for the period up to 31st March 2019 reveals, Maharashtra has the largest road network with 6,36,887 km (11.72%) followed by Uttar Pradesh with 4,42,907 km (8.1%), Assam with 3,99,122 km (7.3%) Madhya Pradesh with 3, 65,045 km(6.7%) and Karnataka with 3,58,300 km (6.9%), (**Annexure 1.3**). These five States accounted for a combined share of 41% of road network in India.

- v. Public expenditure by the Government of India for construction of roads in rural as well as urban areas increased during the period 1950-51 to 2018-19. Public investment's share in the road sector has increased from 51.65 % in 2012-13 to 86.4 % in 2018-19, whereas that of private investment decreased from 48.35% to 13.6%.
 - vi. Indicators of road infrastructures like density of roads per 1000 Sq. Km and Density of road per 1000 population have been on increase since 2011-12. Besides this, density of roads in Rural and Urban areas depicts upturn during 2011-12 to 2018-19.
4. **Section 2** of the report gives details on State / UT wise break up of National Highways. National Highways constitutes 2.09 percent of total road network in the country and the total length of National Highways as on 31.03.2019 was at 1,32,499, registering an increase of 4.9 percent compared to the same period last year. All National Highways are surfaced. On States front, Maharashtra has the largest network of National Highways with 17,757 km (13.4%) followed by Uttar Pradesh and Rajasthan with 11,737 km (8.9 %) and 10,342km (7.8 %) respectively, as on 31st march,2019.
 5. **Section 3** of the report brings out State/UT wise distribution of State Highways in country. Total State Highways constructed

was 1,79,535km as on 31st March 2019, constituting 2.8 percent of total road network in the country. More than 99 percent (1,78,384 km) of State Highways are surfaced. Maharashtra has the largest State Highways network in the country i.e. 17.83 per cent (32,005 Km) followed by Karnataka 10.85 per cent (19473 Km), Gujarat 9.33 per cent (16746 Km), Rajasthan 8.39 per cent (15,061 Km) and Andhra Pradesh 7.52 per cent (13,500 Km). These five States accounted for 53.9% of the total State highways network in the country.

6. **Section 4** throws lights on State/UTs wise distribution of total length of District Roads. The total District Road constructed was 6,12,778 km as on 31st March 2019, of which surfaced roads constitute 95.8 percent of total District Road network (i.e. 5,87,004 km). For the second consecutive year in 2018-19, Maharashtra topped the States in the total length of District Roads with 1,08,419 km (17.7%) followed by Uttar Pradesh 55,816 km (9.1%), Madhya Pradesh 50,714 km (8.3%), Karnataka with 49,555 km (8.1%) and Tamil Nadu 48,236 km (7.9%). These five States together account for 51% of the total District Roads network in India.
7. **Section 5** of the report highlights on Rural Roads constructed by Panchayati Raj Institutions, (Zilla Parishad, Panchayat Samiti, Gram Panchayat), roads of the

Pradhan Mantri Gram Sadak Yojana (PMGSY) and roads constructed by the State PWD Rural Roads. India has Rural Road network of 45,22,228 km (including JRY Roads) as on 31st March 2019. Rural Roads constitute 71.4% of total road network in the country as of 31st March, 2019. For second consecutive time in 2019, Maharashtra (Table 5.7) accounted for the largest network of Rural Roads with 4,26,327 km (11.7%) followed by Assam 3,72,510 km with (10.2%), Bihar 2,59,507 km (7.1%), Uttar Pradesh 2,55,576 km (7.0%) and Madhya Pradesh 2,32,344 km (6.4%). These five States account for 42 % of the total Rural Roads in the country.

8. **Section 6** of the report gives details on Urban Roads network in the country. It includes Municipal Roads under Urban Development Departments of States and UTs, roads in Railway Zones, MES roads constructed by Military Engineering Services (MES) and Major and Minor Port Roads. The total length of Urban Road as on 31st March, 2019 was at 5,41,554 km, of which surfaced road constitute about 79 percent (4,28,076 km) of total Urban Roads. On States front, West Bengal accounted has largest network of Urban Road with 95,065 km (17.6%) followed by Uttar Pradesh with 70,178 km with (13.0%), Karnataka 41,396 km (7.6%), Rajasthan 32,772 km (6.1%) and Madhya Pradesh 31,343 km (5.8%). These five

States account for 50 % of the total length of urban Roads in the country.

9. **Section 7** of the report provides the details on Project Roads. This includes roads of Forest Departments, Irrigation Departments, Electricity Departments, roads in coal fields and coal mines of Coal India Ltd., roads under the plant areas of Steel Authority of India Limited (SAIL), National Mineral Development Corporation (NMDC), and Sugarcane Departments of States/UT and Border Roads Organisation (BRO). Projects roads coming under the purview of Central and State Government agencies and departments. This reports brings out as follows-
 - i. Construction of Project road has decreased marginally from 3,47,547 km in 2017-18 to 3,43,163 km in 2018-19, registered a decline of 1.3 percent relative to same previous period.
 - ii. Uttar Pradesh has the largest network (12.28%) of Project Roads as on 31st March 2019, followed by Gujarat (9.1%), Madhya Pradesh (8.9%), Odisha (7.4%) and Maharashtra (6.4%). These five States together account for 44% of the total Project Roads as on 31.03.2019.
10. **Section 8** of the report describes in detail on the initiatives taken by Ministry of Road Transport and Highways for improving the Road network in the country. This Section is followed by Annexures on Road Statistics.

Section - 1

Section – 1

ROAD NETWORK IN INDIA

OVERVIEW: ROAD TRANSPORT SECTOR IN INDIA

1.1 Road Transport is the most cost effective modes of transportation in India for both freight and passengers, keeping in view its level of penetration in populated areas. Thus, it is vital for economic development and social integration of the country. Road transport emerged as the dominant segment in India's transport sector and contributed 3.06 per cent to GVA against the total transport sector contribution of 4.58 percentages for the year 2019-20, where the share of Railways was at 0.74 per cent, Air Transport at 0.12 per cent and Water Transport at 0.08 per cent. Road Transport also serves as the feeders to railway, shipping and air traffic.

1.2. The road network of the country consists of National Highways (NH), State Highways

(SH), District Roads, Rural Roads, Urban Roads and Project Roads. The construction and maintenance of National Highways is mandated with the Ministry of Road Transport and Highways (MORTH). State Roads are executed through the State Public Works Departments (PWDs). District Roads are constructed & maintained by Public Works Department of States while Rural Roads are executed by Panchayati Raj Departments, State PWD/RWD Departments & National Rural Road Development Agency (NRRDA) of Ministry of Rural Development. Urban Roads are executed by Municipalities and Project Roads are constructed by various Central and State Government Departments.

ROAD LENGTH- CATEGORY WISE

1.3. India has a network of over 63,31,757 kilometres of roads as of 31st March 2019, which is the second largest in the world, after the United States with 66,45,709 kilometres of roads. There has been a consistent increase in the construction of roads under various categories during the period 1950-51 to 2018-19 (Table 1.3).

1.4. This is primarily due to the proactive policy steps such as leveraging of Private and Public Investment and the deployment of

innovative financing models initiated by Ministry of Road Transport and Highways. Besides this, projects like National Highways Development Programme, Bharatmala Pariyojana Phase-I, Special Accelerated Road Development Programme for North-Eastern region (SARDP-NE), Char Dham Pariyojana, Connectivity to the Border Areas, Connectivity to the Backward/ Aspirational Areas etc. added to enhance the length and

the quality of road network in the country. The significant upturn in road construction is also due to the increase in public expenditure by the Government of India to a critical sector that generates employment and supports infrastructure, act as feeder to other modes of transportation.

1.5. The total road constructed has increased from 62,15,797 km in 2018 to 63, 31,757 Km in 2019, registered a growth of 1.9 percent relative to the corresponding period last year. It may be noted in Table 1.1 that, all categories of roads except States Highways and Project Roads have shown increase in construction of road in 2019 and the National Highways achieved the highest increase of 4.9 percent over same period last year. The construction of

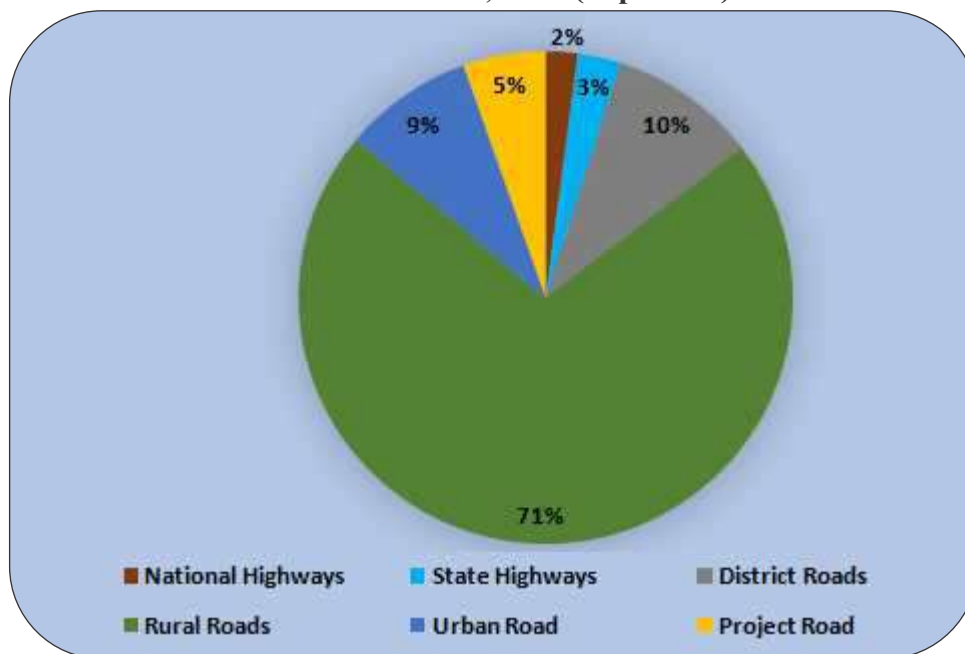
National Highways increased to 1,32,499 km in 2019 as compared to 1, 26,350 km in 2018, indicating an increase of 4.9 per cent over previous period. However, there has been a decline in construction of State Highways i.e. declined to 1,79,535 km in 2019 from 1,86,908 km in 2018, whereby registering decrease of 3.9 percent compared to same period last year. This may probably be due to the conversion of State Highways into National Highways. Rural Roads including JRY road constitute 71.4 percent of total road network in the country in 2019 (Chart 1.1) and its length rose to 45,22,228 km in 2019 from 44,09,582 km in 2018, registering a growth of 2.5 percent relative to corresponding period of last year. Details are at **Annexure 1.4**.

Table 1.1: Road network as on 31st March – 2019vis-à-vis 2018

Road Category	2018 (In Km)	2019 (In Km)	% share in total road	%change in 2019 over 2018
National Highways	1,26,350	1,32,499	2.09	4.87
State Highways	1,86,908	1,79,535	2.84	-3.94
District Roads	6,11,268	6,12,778	9.68	0.25
Rural Roads (Include JRY Road)	44,09,582	45,22,228	71.42	2.55
Urban Road	5,34,142	5,41,554	8.55	1.39
Project Road	3,47,547	3,43,163	5.42	-1.26
Total	62,15,797	63,31,757	100	1.87

Source: MoRTH

Chart 1.1: Share of various categories of roads in total road network as on 31st March, 2019 (in percent).



1.6. For the fifth consecutive years, the total length of road constructed in the country has increased in 2019 (Table 1.2). The total road constructed has increased from 54,72,144 Km in 2015 to 63,31,757 Km in 2019, registering a growth of 15.7 per cent relative to the corresponding period in 2015. There has been a consistent increase in the construction of National Highways, which increased from 97,991 km in 2015 to 1,32,499 km in 2019, indicating an increase of 35.2 per cent over 2015. The construction of State Highways shows upturn till 2018, thereafter, it declined to 1,79,535 km in 2019 from 1,86,908 km in 2018, registering a decrease of 3.9 percent compared to same period of last year. The conversion of State Highways into National Highways constitute one among the possible reasons for this decline. There

has been a clear upturn in construction of Rural Roads in the country and this primarily due to schemes like Prime Minister Gram Sadak Yojana initiated by government of India to enhance village level road network. Rural Roads constitute more than 70 percent of total road network in the country since 2016. There has been a remarkable decline in District Road, i.e. declined from 11,01,178 km in 2015 to 6,12,778 km in 2019, subsequently its share in total road network has dropped to 9.7 percent from 20.1 during the period mentioned due to Other PWD Roads which were considered as District Roads have been divided into Districts Roads and Rural Roads built by State PWD/RWD since 2016. Projects Roads constructed by other Government Departments like Railways, Mines, Forest, etc. constitute

considerable part of road network in the country, depicting an increase from 3,01,505 km in 2015 to 3,43,163 km in 2019. Trends in the construction of various categories of roads during the period 2015

to 2019 given in Chart 1.2 indicate stable growth with marginal fluctuations for all categories of roads except Rural Road.

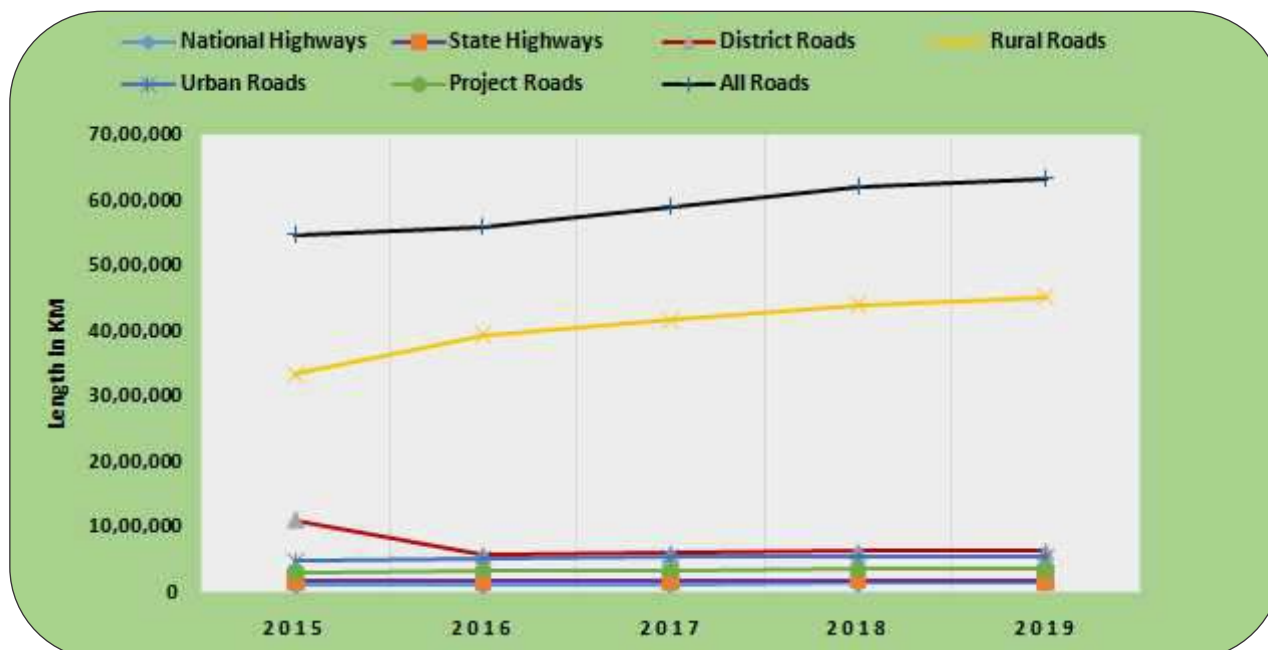
Table 1.2: Road length by Categories during 2015 to 2019 (as on 31st March)

Category	2015	2016	2017	2018	2019
National Highways	97,991	1,01,011	1,14,158	1,26,350	1,32,499
% share in total	1.8	1.8	1.9	2	2.1
State Highways	1,67,109	1,76,166	1,75,036	1,86,908	1,79,535
% share in total	3.1	3.1	3	3	2.8
District Roads#	11,01,178	5,61,940	5,86,181	6,11,268	6,12,778
% share in total	20.1	10	9.9	9.8	9.7
Rural Roads	33,37,255	39,35,337	41,66,916	44,09,582	45,22,228
% share in total	61	70.2	70.7	70.9	71.4
Urban Roads	4,67,106	5,09,730	5,26,483	5,34,142	5,41,554
% share in total	8.5	9.1	8.9	8.6	8.6
Project Roads	3,01,505	3,19,109	3,28,897	3,47,547	3,43,163
% share in total	5.5	5.7	5.6	5.6	5.4
All Roads	54,72,144	56,03,293	58,97,671	62,15,797	63,31,757

* include JRY road

Since 2016 Other PWD Roads which was part of District Roads have been divided into District Roads and Rural Roads built by State PWD/RWD.

Chart 1.2: Category wise trends in Road Length



LONG RUN TRENDS IN ROAD LENGTH – CATEGORY WISE

1.7. Despite some marginal fluctuations, there has been consistent increase in the construction of road during the period 1950-51 to 2018-19 (Table 1.3). The total length of roads constructed under different categories has increased significantly from 3,99,942 km in 1950-51 to 63,31,757 km in 2018-19 (Table 1.3). There has been a consistent increase in the construction of National Highways during 1950-51 to 2018-19, i.e. increased from 19,811 km in 1950-51 to 1,32,499 km in 2019, registering increase of more than 6 times in 68 years. The construction of State Highways has been increased till 2017-18, thereafter, it declined to 1, 79,535 km in 2018-19, and this may probably be due to

the conversion of State Highways to National Highways. Rural Road achieved highest increase, i.e. from 2,06,408 km in 1950-51 to 45,22,228 km in 2019, registered an increase of more than 21 times in 68 years. Besides this, Rural Road constitutes more than 70 percent of total road network in the country since 2015-16 (Table 1.3). Rural Roads also include 9 lakh km of road constructed under Jawahar Rozgar Yojana. Trends in the construction of different categories of roads given in Chart 1.5 and Chart 1.6 show stable growth with marginal fluctuations for all roads categories except State Highways and District Roads during the period 2009-10 to 2018-19.

Table 1.3: Road network by Categories (in Km) 1950-51 to 2018-19

Road Category	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2015-16	2016-17	2017-18	2018-19
National Highways	19,811	23,798	23,838	31,671	33,650	57,737	70,934	1,01,011	1,14,158	1,26,350	1,32,499
% share in total	4.95	4.54	2.61	2.13	1.45	1.71	1.52	1.8	1.94	2.03	2.1
State Highways			56,765	94,359	1,27,311	1,32,100	1,63,898	1,76,166	1,75,036	1,86,908	1,79,535
% share in total			6.2	6.35	5.47	3.92	3.5	3.14	2.97	3.01	2.8
District Roads [#]	1,73,723	2,57,125	2,76,833	4,21,895	5,09,435	7,36,001	9,98,895	5,61,940	5,86,181	6,11,268	6,12,778
% share in total	43.44	49.02	30.26	28.4	21.89	21.82	21.36	10.03	9.94	9.83	9.7
Rural Roads*	2,06,408	1,97,194	3,54,530	6,28,865	12,60,430	19,72,016	27,49,804	39,35,337	41,66,916	44,09,582	45,22,228
% share in total	51.61	37.6	38.75	42.34	54.16	58.46	58.8	70.23	70.65	70.94	71.4
Urban Roads		46,361	72,120	1,23,120	1,86,799	2,52,001	4,11,679	5,09,730	5,26,483	5,34,142	5,41,554
% share in total		8.84	7.88	8.29	8.03	7.47	8.8	9.1	8.93	8.59	8.6
Project Roads			1,30,893	1,85,511	2,09,737	2,23,665	2,81,628	3,19,109	3,28,897	3,47,547	3,43,163
% share in total			14.31	12.49	9.01	6.63	6.02	5.7	5.58	5.59	5.4
Total	3,99,942	5,24,478	9,14,979	14,85,421	23,27,362	33,73,520	46,76,838	56,03,293	58,97,671	62,15,797	63,31,757

* Includes 9 lakh Km of Rural Roads constructed under Jawahar Rozgar Yojana

^ - Included in District Roads,

Since 2016 Other PWD Roads which was part of District Roads have been divided into District Roads and Rural Roads built by State PWD/RWD.

Chart 1.3: Trends of Decadal Growth of Construction of Road during 1951 to 2011

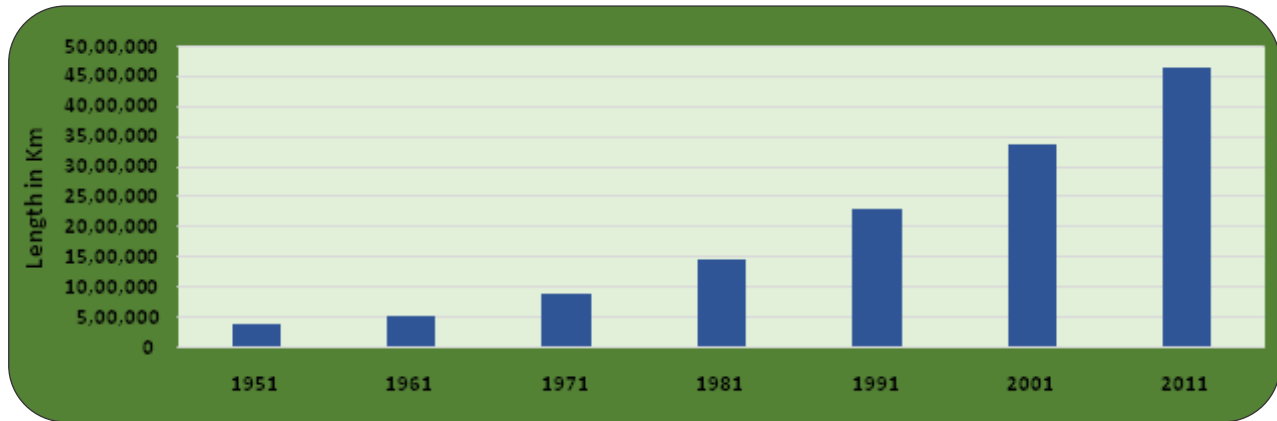


Chart 1.4: Trends of Construction of Road from 2001 to 2019



Chart 1.5: Share of construction of Roads of different categories from 2010 to 2019

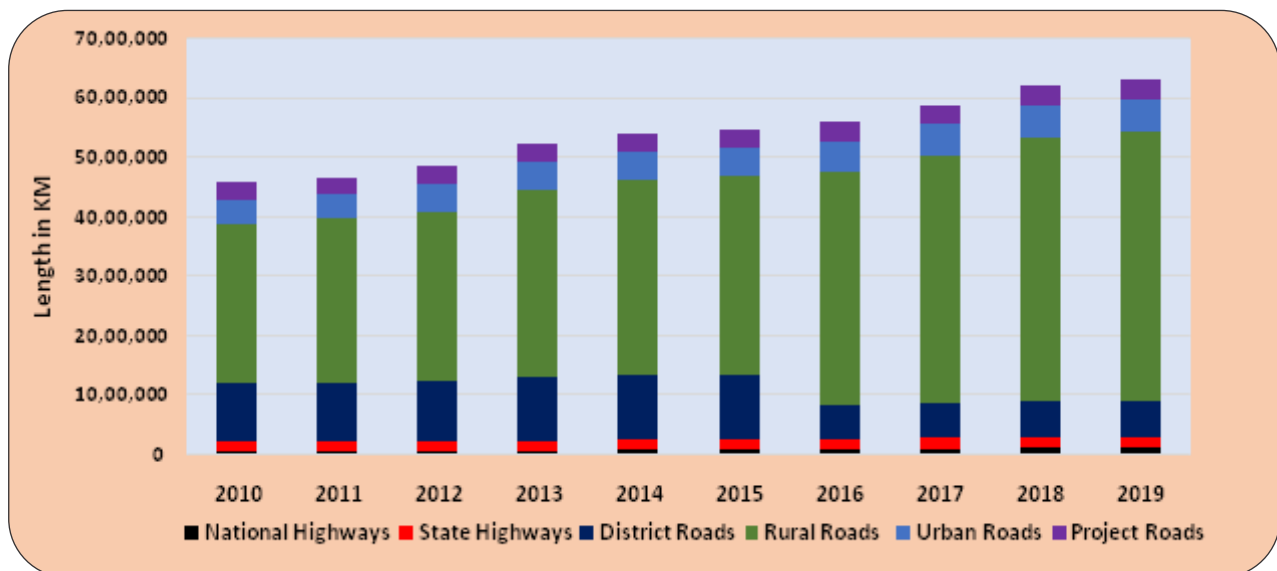
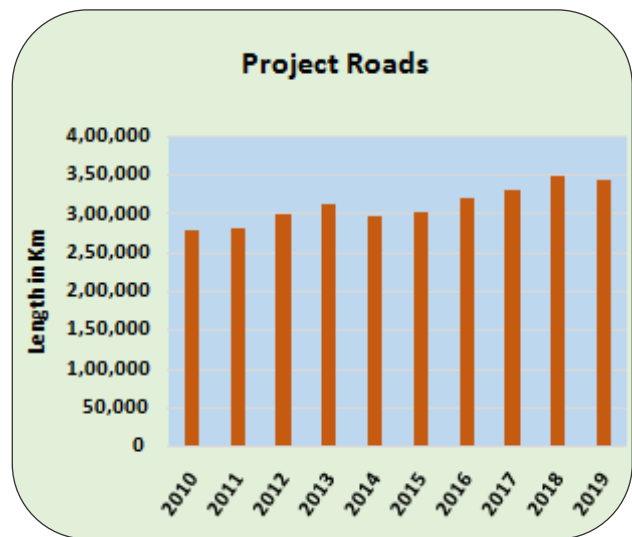
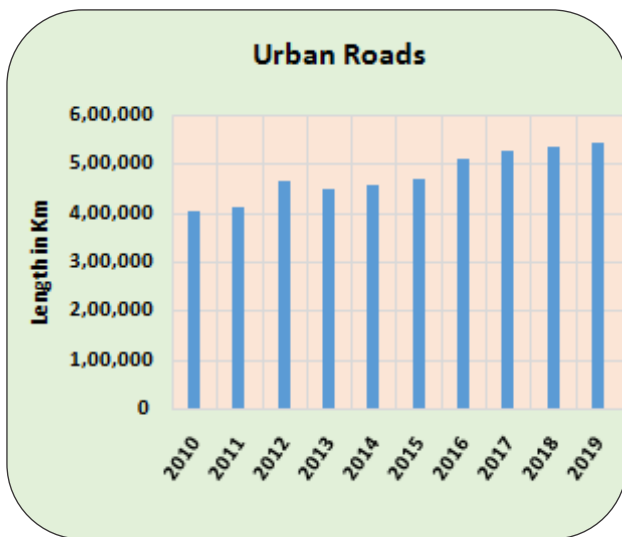
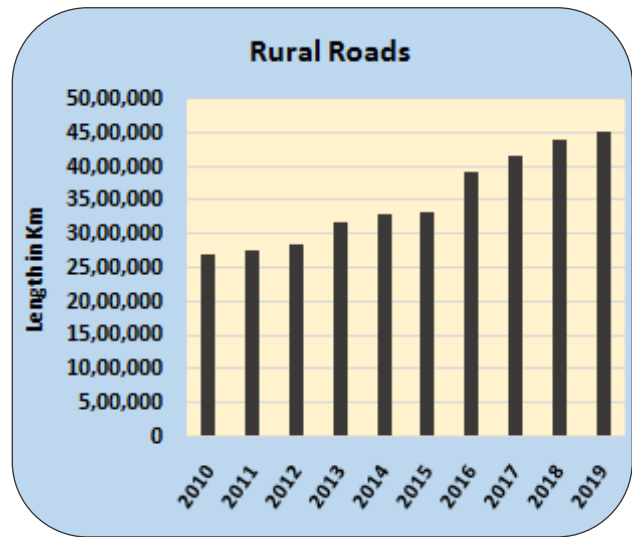
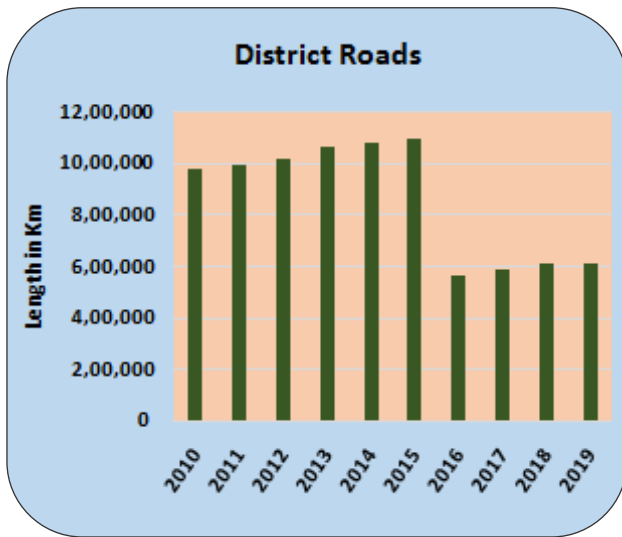
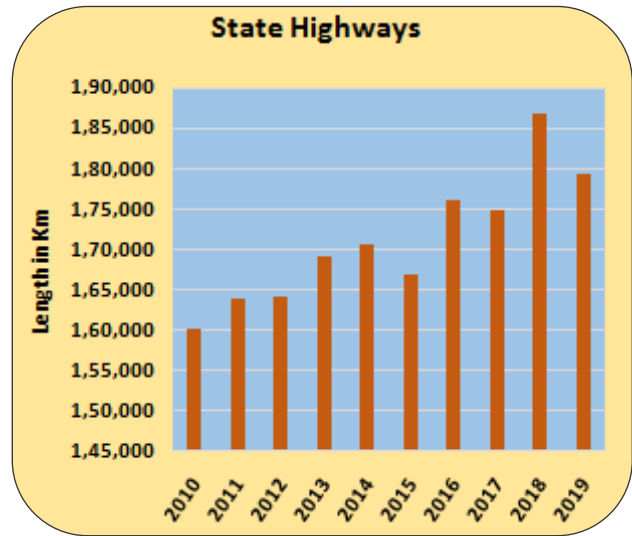


Chart 1.6: Trends of construction of roads of different categories (2010-2019)



DECADAL ANALYSIS

1.8 The total length of roads in the country has increased consistently from 3.99 lakh km in 1951 to 63.31 lakh km in 2019, growing

at a Compound Annual Growth Rate (CAGR) of 4.1% (Table 1.4). CAGR for the period 1951-2019, along with decadal CAGRs, are presented in Table 1.4 below.

Table 1.4: CAGR (%) of Road Networks -1951 to 2019

Period	NH	SH & District Road	Rural Road	Urban Road	Project Road	Total
1951/1941	2.7	2.3	4.7	NA	NA	4.2
1961/1951	1.9	4	-0.5	NA	NA	2.7
1971/1961	0	2.6	6	4.5	NA	5.7
1981/1971	2.9	4.5	5.9	5.5	3.5	5
1991/1981	0.6	2.1	7.2	4.3	1.2	4.6
2001/1991	5.5	3.1	4.6	3	0.6	3.8
2014/2004	3.4	3.9	4.4	4.3	1.3	4.1
2015/2005	4.1	3.1	3.9	5	1.5	3.7
2016/2006	4.3	-2.5	5.5	5.7	2	3.7
2017/2007	5.5	-2.6	5.7	5.8	2	3.9
2018/2008	6.6	-2.4	6.1	5.8	2.5	4.2
2019/2009	6.5	-3.4	5.6	3.8	2.2	3.5

** Note: Since the year 2015-16 the category Other PWD Road (OPWD) has been discontinued and PWD road, other than SHs, are categorized under District Roads and Rural roads under PWD. Because of this change, the figures in respect of OPWD, District Road & Rural Roads are not comparable with figures of previous years.*

1.9 During 2009-2019, National Highways registered CAGR growth of 6.5%, which is the highest decadal growth, followed by Rural Roads with CAGR growth of 5.6% and Urban Roads with CAGR growth of 3.8%. In Table 1.3, the length of National Highways was 70,934 Km in 2010-11 which has increased consistently to 1,32,499 Km in 2018-19 with growth of about 86.8 percent over 2010-11.

1.10 The proactive policy steps, leveraging of private and public investment, innovative

financing models, have resulted in increase in the pace of development of National Highways in recent years. The details of Investment in National Highways are given in Table 1.5. The combined public and private investment has increased during 2012-13 to 2018-19@ CAGR of 24.83% (Table 1.5). The total investment in construction of Highways has increased from Rs. 41998.4 crore in 2012-13 to Rs. 1,58,958.53 crore in 2018-19. The share of public sector investment in Highways has

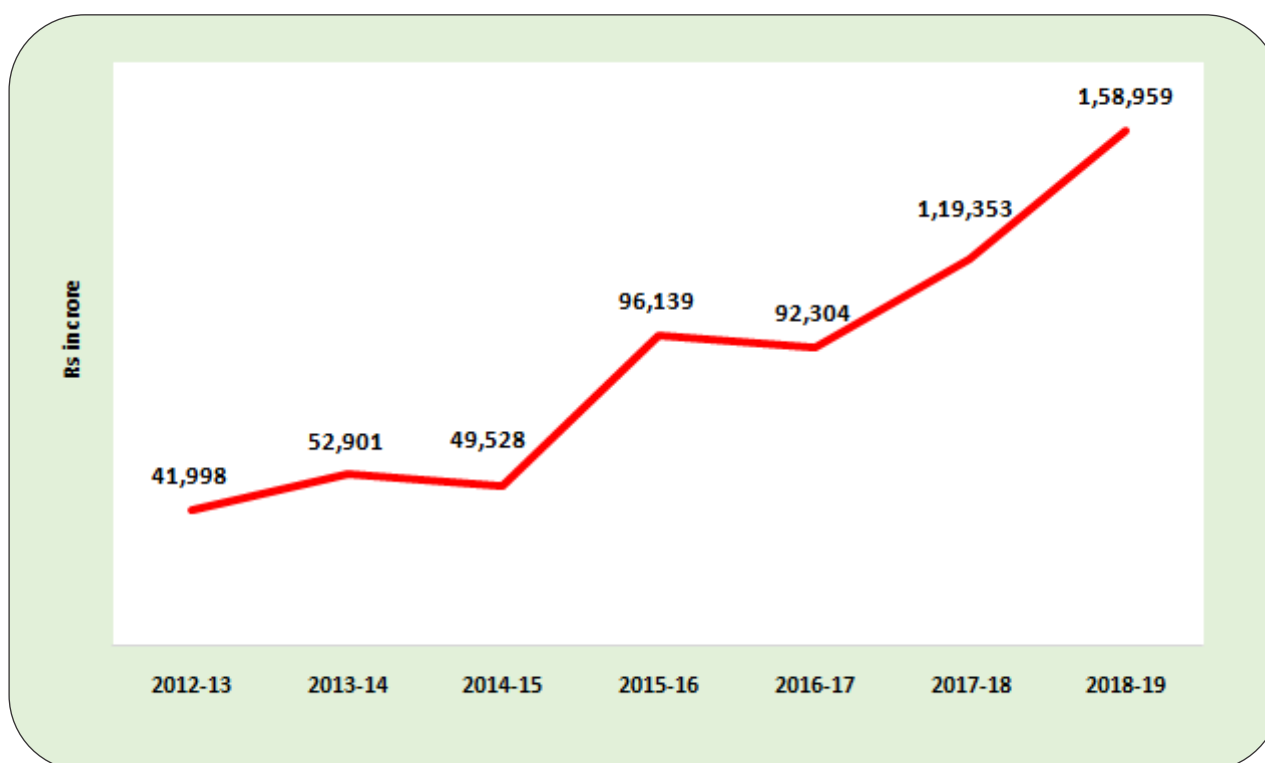
increased from Rs 21,693.74 crore in 2012-13 to Rs 1,37,353.53 crore in 2018-19 while that of private sector has

increased from Rs 20,304.66 crore in 2012-13 to Rs 21,605 crore in 2018-19 (Table 1.5).

Table 1.5: Public and Private Sector Investment in Road Transport (Rs in crore)

Sr. No.	Year	Expenditure		
		Private Investment	Public Investment	Total
1	2012-13	20,304.66	21,693.74	41,998.40
2	2013-14	22,515.05	30,385.64	52,900.69
3	2014-15	19,232.44	30,295.26	49,527.70
4	2015-16	29,770.00	66,369.14	96,139.14
5	2016-17	16,028.64	76,275.26	92,303.90
6	2017-18	16,500.64	1,02,852.38	1,19,353.02
7	2018-19	21,605.00	1,37,353.53	1,58,958.53
		CAGR (2012-13/2018-19)		24.83

Chart 1.7: Trends in total Investment in Road Transport



Note-include private investment

Source: Planning Zone, MoRTH

1.11 Public expenditure by the Government of India for construction of road in rural as well as urban areas increased consistently since 2012-13 (Chart 1.7). The share of public investment has been increased during the period 2012-13 to 2018-19, while that of private investment has been declined (Chart 1.8). It may be noted that

Public expenditure constitute 86.4 percent of total investment in road sector in 2019, which was only 51.7 percent in 2012-13. However, there has been a decline in total private investment in road construction, as a result, total share has declined from 48.3 percent in 2012-13 to 13.6 percent in 2018-19.

Chart 1.8: Trends in Public and Private Investment in Road Transport



Source: Planning Zone, MoRTH

SURFACED ROAD BY ROAD CATEGORIES- (QUALITY)

1.12 The total road constructed in the country during 1950-51 to 2018-19 (Table 1.6) has increased tremendously, subsequently construction of paved/ surfaced road also has increased. The length of paved/surfaced road rose from 1.57 lakh km as on 31st March 1951 to 40.95 lakh Km as on 31st March 2019, registering an increase of more than 26 times in 68 years. The percentage share of length of Surfaced Road to total length has increased from 39.26 percent as on 31st

March, 1951 to 64.7% as on 31st March, 2019, implies improvements in the quality of public transportation system in the country. This, resulted in significant decline in road accidents and number of persons killed in 2018-19 as compared to 2017-18 (see chapter 2). Out of total surfaced road length, about 84 percent length constitute Bituminous and Cement Concrete roads (**Annexure 1.2**) in 2019 and the remaining 16 percent is Water Bound Macadam roads.

Table 1.6: Surfaced and Total Road as of 31st March

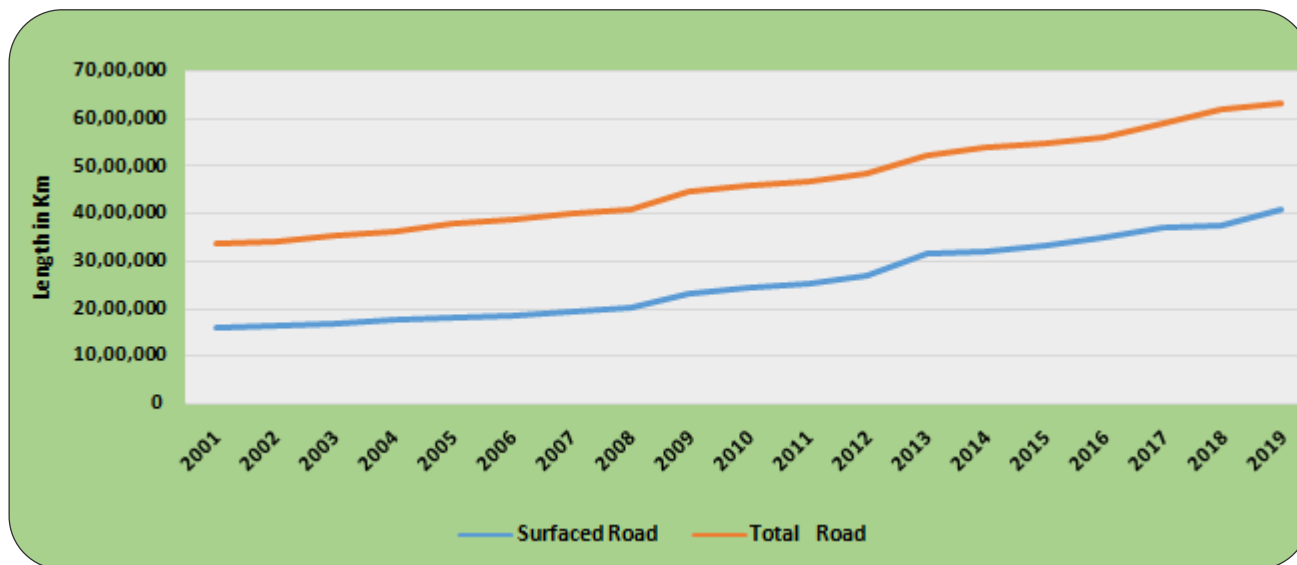
Year	Surfaced Road (Km)	Total Road(Km)	% of surfaced road
1951	1,57,019	3,99,942	39.3
1961	2,63,052	5,24,478	50.2
1971	3,97,948	9,14,979	43.5
1981	6,83,676	14,85,421	46
1991	10,90,167	23,27,362	46.8
2001	16,01,745	33,73,520	47.5
2002	16,61,555	34,26,600	48.5
2003	17,01,258	35,28,654	48.2
2004	17,60,768	36,21,507	48.6
2005	17,95,298	38,09,156	47.1
2006	18,58,684	38,80,651	47.9
2007	19,44,758	40,16,401	48.4
2008	20,36,063	41,09,592	49.5
2009	23,24,504	44,71,510	52
2010	24,32,813	45,82,439	53.1
2011	25,24,682	46,76,838	54
2012	26,98,590	48,65,394	55.5
2013	31,71,002	52,31,922	60.6
2014	32,20,502	54,02,486	59.6
2015	33,41,008	54,72,144	61.1
2016	35,01,906	56,03,293	62.5
2017	37,29,781	58,97,671	63.2
2018	37,48,291	62,15,797	60.3
2019	40,95,725	63,31,757	64.7

Including JRY road

1.13 The snap shot of total and surfaced road length (in Km) during the period 2001 to 2019 is presented in Chart 1.8. Despite some marginal fluctuations, there has

increase in total length of surfaced during 2001 to 2019. Total road the constructed consistently increased during the same period as seen in Chart 1.8.

Chart 1.9: Trends in Surfaced and Total Road Network



* Include JRY road

1.14 It may be noted in the Table 1.7 about 64.7 per cent of total roads (including JRY roads) in the country are surfaced as of 31st March, 2019. National Highways are

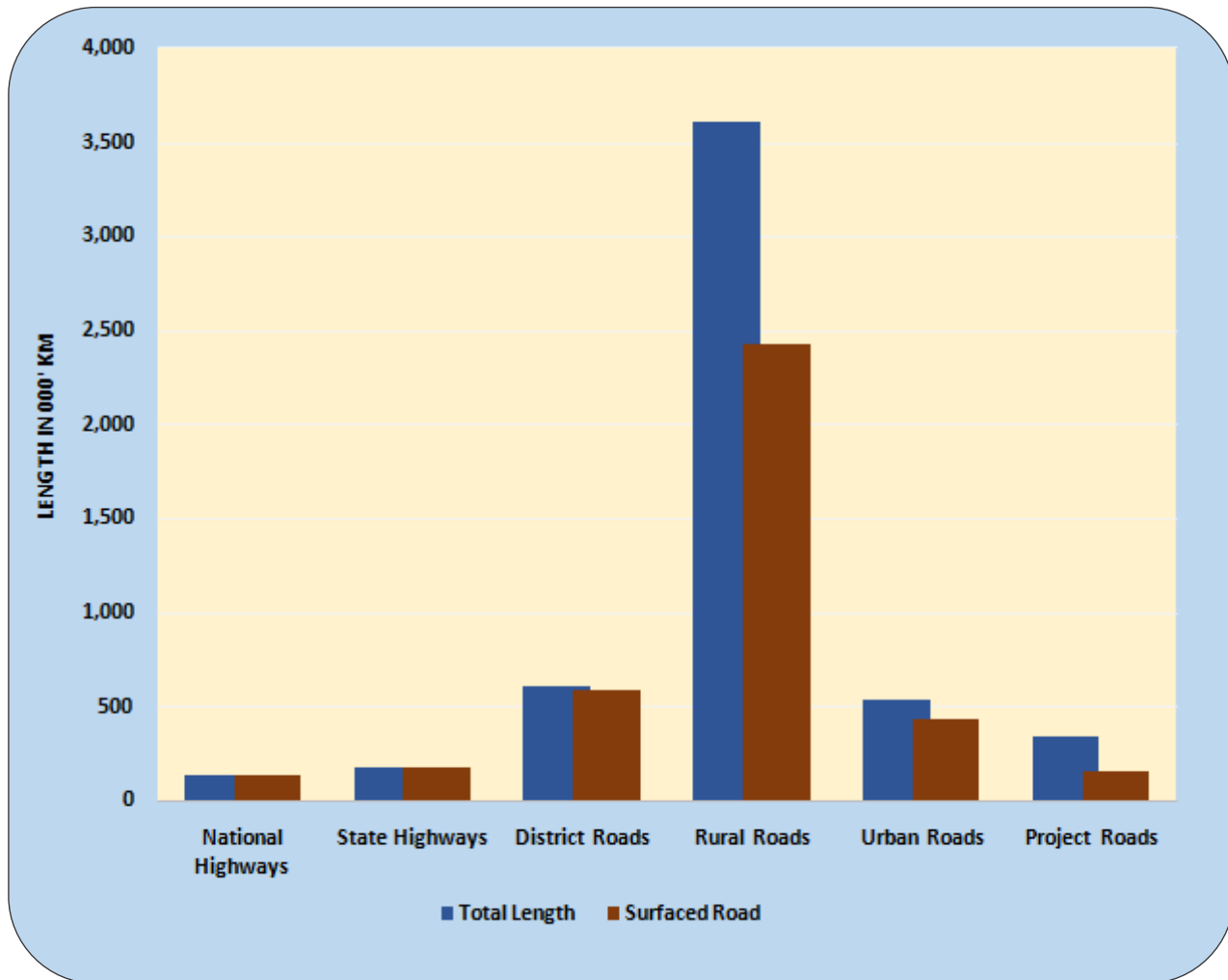
fully surfaced and about 99.4 percent of State Highways and 95.8 percent of Districts Roads are surfaced.

Table 1.7: Snap shot of Surfaced and Total Road as of 31st March, 2019

Category	Surfaced Road(Km)	Total Length(Km)	% of Surfaced Road
National Highways	1,32,499	1,32,499	100.0
State Highways	1,78,384	1,79,535	99.4
District Roads	5,87,004	6,12,778	95.8
Rural Roads*	24,29,388	36,22,228	67.0
Urban Roads	4,28,076	5,41,554	79.0
Project Roads	1,57,171	3,43,163	45.8
Total (Excluding JRY Roads)	39,12,523	54,31,757	72.0
Total (Including JRY Roads)	40,95,725	63,31,757	64.7

* Exclude JRY road

Chart 1.10: Surfaced and Total Road Length as of 31st March, 2019



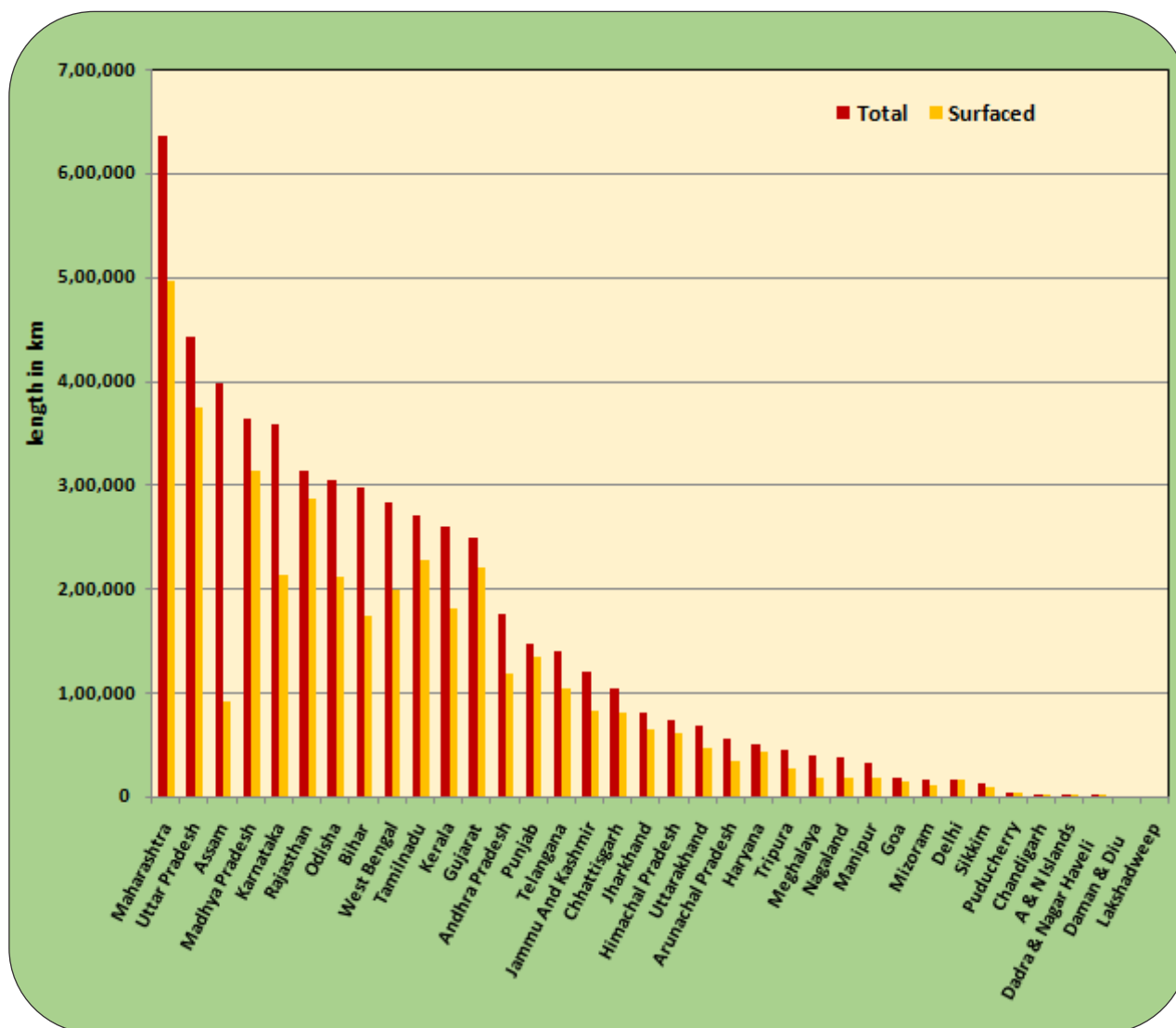
* Exclude JRY road

STATE/UT WISE DISTRIBUTION OF TOTAL ROAD AND SURFACED ROAD

1.15 State/UT wise distribution of total road construction (excluding JRY roads) depicts, as of 31st March 2019, Maharashtra accounted for the largest share (11.72%) with 6,36,887 km in total length followed by Uttar Pradesh (8.1%) with 4,42,907 km, Assam (7.3%) with 3,99,122 km Madhya Pradesh (6.7%) with 3,65,045 km and Karnataka (6.5%) with 3,58,300 km and (Annexure 1.3).

These five States with the largest road networks accounted for a combined share of about 40% of road length in India. Details of State/UT wise distribution of total road length is at Annexure 1.3 and the State wise distribution of construction of total road and surfaced road is presented in Chart 1.11 below.

Chart 1.11: State/UT wise break-up of Total Road and Surfaced Road as of 31st March, 2019

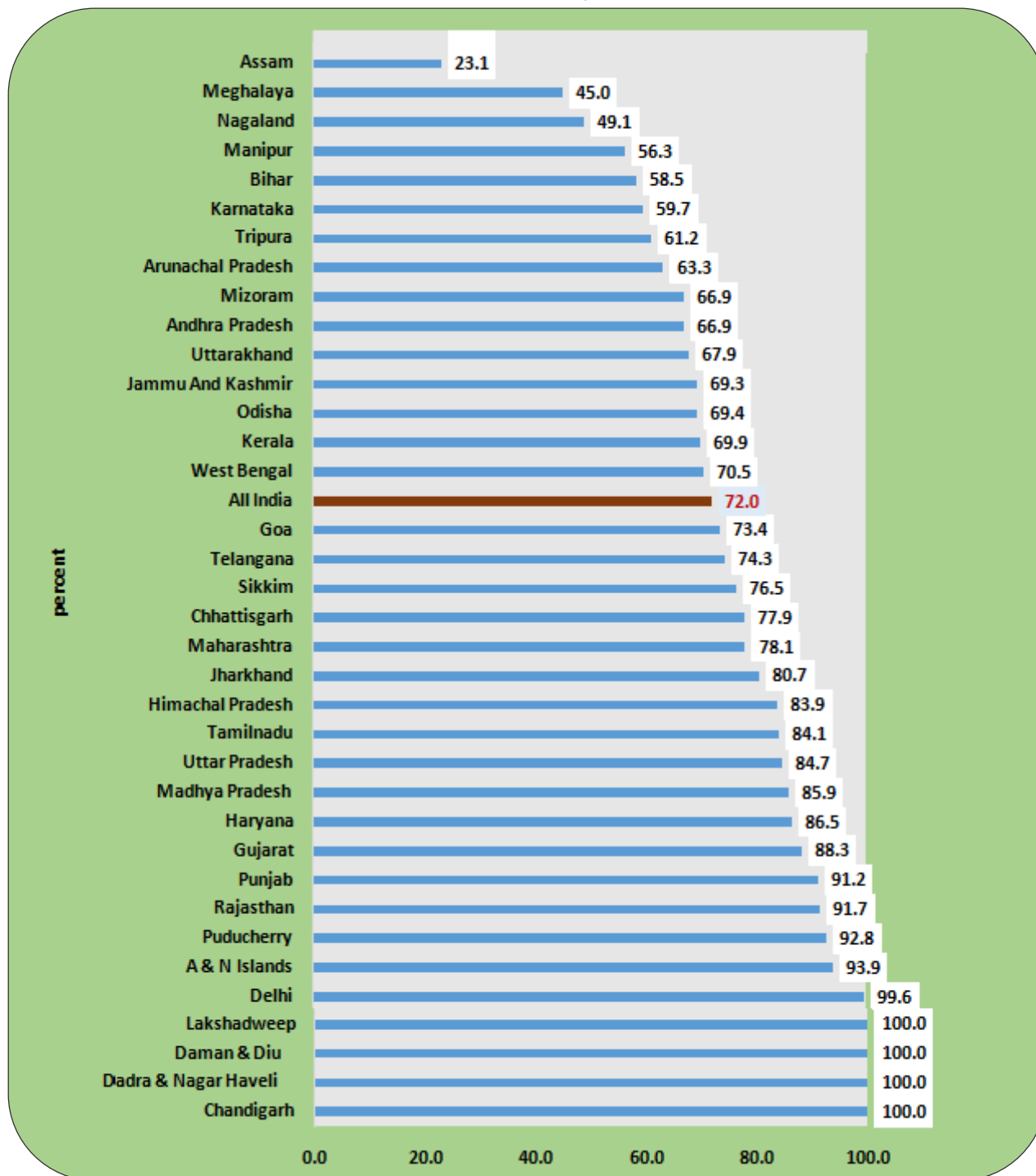


1.16 State/UT wise break-up of surfaced road presented in the Annexure 1.3 of the report which shows Maharashtra top amongst the States with 4,97,342 Km (12.71 %) followed by Uttar Pradesh with 3,75,002 Km (9.58%), Madhya Pradesh with 3,13,482 Km (8%), Rajasthan with 2,87,310 (7.3) and Tamilnadu with 2,28,006(5.82).

1.17 As on 31st March, 2019, about 72 percent of total roads (Excluding JRY) in the

country are surfaced. Amongst the major States, Rajasthan has the highest percent of surfaced road in total roads i.e. 91.7 percent (Chart 1.11) followed by Punjab (91.2%), Gujarat (88.3%), Haryana (86.5%), Madhya Pradesh (85.9%), Uttar Pradesh (84.7%) and Tamil Nadu (84.1%). Himachal Pradesh (83.9%), Jharkhand (80.7%), etc. are at the bottom level. More than 73 percent of total roads are surfaced in 57 percent of States/UTs.

Chart 1.12: Percent share of Surfaced Road to Total Road Length across State/UTs as of 31st March, 2019



1.18 Share of Surfaced Road to Total Road is the lowest in Assam i.e. only 23.1 percent followed by Meghalaya (44.98%) and Nagaland (49.07). For other North

Eastern States, more than fifty percent of roads are surfaced as of 31st March, 2019.

Table 1.8: Total Road and Surfaced Road in North Eastern States as of 31st March, 2019

States	Total Road (in Km)	Surfaced (in Km)	Surfaced as % of Total Road
Arunachal Pradesh	55,262	34,977	63.29
Assam	3,99,122	92,209	23.10
Manipur	32,389	18,224	56.27
Meghalaya	40,258	18,112	44.99
Mizoram	16,250	10,866	66.87
Nagaland	37,871	18,584	49.07
Sikkim	12,182	9,317	76.48
Tripura	45,120	27,601	61.17

INDICATORS OF ROAD INFRASTRUCTURE

1.19 Road density of country, is defined as average road length per 1000 Km, depicting an increasing trend since 2011-12 (Table 1.9). This indicate an

improvement of the quality and strength of public transportation system in the country.

Table 1.9: Trends in Road Density

Indicators	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
All India Road Density								
Per 1000 Km ²	1,422.63	1,479.98	1,591.47	1,664.55	1,704.44	1,793.99	1,890.75	1,926.02
Per 1000 Population	3.86	4.02	4.32	4.52	4.63	4.87	5.13	5.23
Urban Road Density								
Per 1000 Km ²	4,026.12	4,540.68	4,364.10	4,568.18	4,985.04	5,148.88	5,223.78	5,296.30
Per 1000 Population	1.09	1.23	1.18	1.24	1.35	1.40	1.42	1.44
Rural Road Density								
Per 1000 Km ²	886.61	915.12	1,018.75	1,076.02	1,268.86	1,343.53	1,421.77	1,458.10
Per 1000 Population	3.30	3.41	3.79	4.00	4.72	5.00	5.29	5.42

Note: Population and area is as per 2011 census and road length is as on 31/3/2019

1.20 Road density/availability has increased from 1422.63 per 1000 Sq. Km in 2011-12 to 1926.02 per 1000 Sq. Km in 2018-

19, registered a growth of about 35 per cent corresponding to same period in 2011-12. For rural area, it has increased

from 886.61 per 1000 Sq. Km 2011-12 to 1458.1 per 1000 Sq. in 2018-19 and for the urban area it increased from 4026.12 per 1000 Sq. Km and 5296.3 per 1000 Sq. Km respectively for the same period. Similarly, availability of roads per 1000 population is increasing over the years as shown in Table 1.9, where it has increased from 3.86 per 1000 population in 2011-12 to 5.23 per 1000 population in 2018-19.

There is corresponding increase in the availability of roads in rural and urban area. It is worthwhile to note that density of road per 1000 population increased significantly in rural area is due to the impact of PMGSY and other schemes of Government of India initiated specifically for development of rural roads network (Chart 1.13).

Chart 1.13: Road Density per 1000 Sq. Km

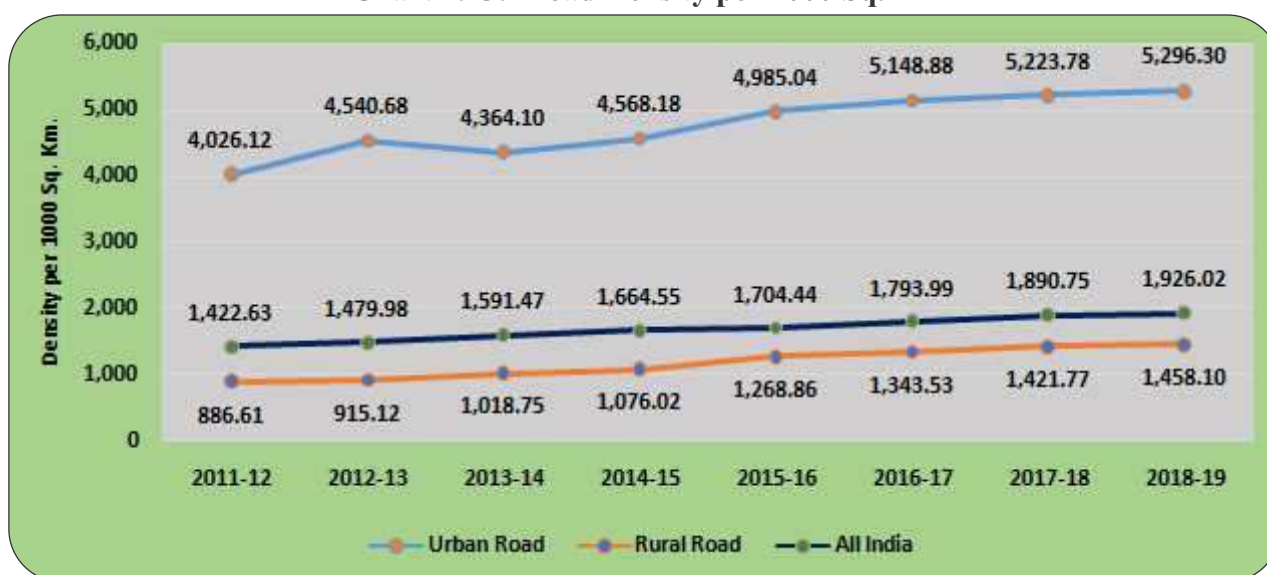
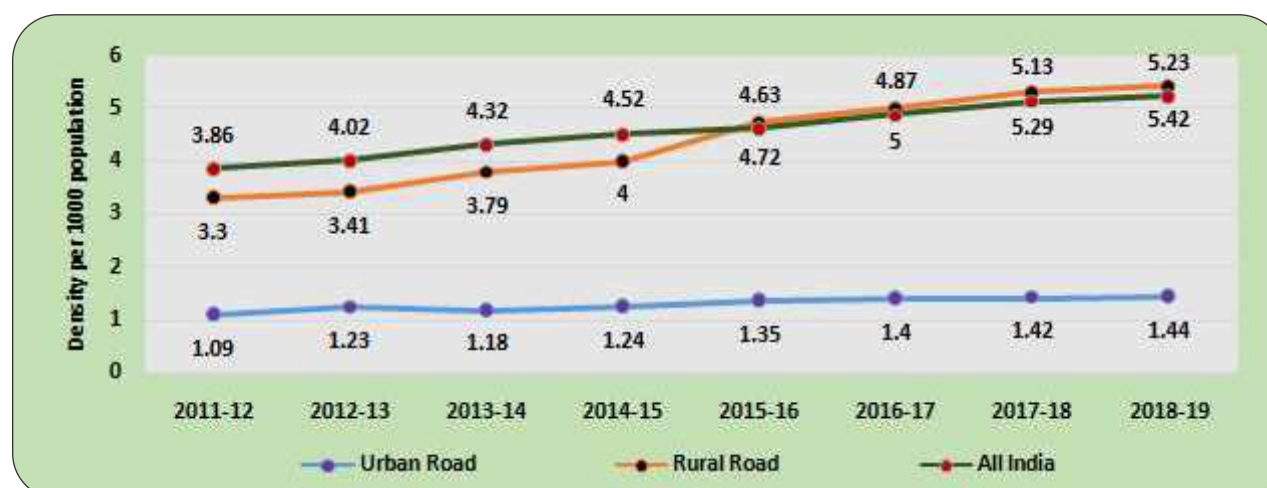


Chart 1.14: Road Density in Km per 1000 Population



ROAD DENSITY ACROSS STATE/UTs

1.21 State wise distribution of road density per 1000 Sq. Km as on 31st March, 2019 is at Annexure 7.9b indicates, Chandigarh's road density (22567.24 km per 1000 Sq.) stands out be highest followed by Delhi (10903.86 km per 1000 Sq. km), Puducherry (8763.07 km per 1000 Sq.), Lakshadweep (7732.33km per 1000 Sq.), and Kerala (6690.30 km per 1000 Sq. Km). Similarly, with respect to NH density presented in the Annexure 7.9b, Daman &Diu with 198.2 per 1000 Sq. has highest NH density followed by Chandigarh (134 km per 1000 Sq.), Delhi (105.9 km per 1000 Sq.), Nagaland (93.4

km per 1000 Sq.km) and Tripura 81.4 km per 1000 Sq.km). The availability of roads per 1000 Sq. Km is comparably higher in Union Territories. State Highways density amongst all States/UTs, Daman & Diu (198.2 km per 1000 Sq.km) has the highest SH density followed by Arunachal Pradesh (161.2 km per 1000 Sq.km), Kerala (111.7 km per 1000 Sq.km), Maharashtra (104 km per 1000 Sq. km), and Karnataka (101.5 km per 1000 Sq.km) refer annexure 7.9b. The Category wise distribution of Road Density per 1000 Sq. Km. for Top Five States/UTs is presented in the Table 1.10.

Table 1.10: The Category wise Road Density per 1000 Sq. Km. for Top Five States/UTs as on 31st March, 2019

Sl. No.	National Highways	State Highways	Rural Roads	Urban Roads	Project Roads
1	Daman & Diu (198.20)	Daman & Diu (198.20)	Lakshadweep (7589.00)	Chandigarh (21627.19)	Punjab (262.00)
2	Chandigarh (134.00)	Arunanchal Pradesh (161.20)	Puducherry (5623.03)	Delhi (10695.69)	Kerala (232.56)
3	Delhi (105.90)	Kerala (111.70)	Kerala (4852.19)	Puducherry (2185.97)	Uttar Pradesh (175.04)
4	Nagaland (93.40)	Maharashtra (104.00)	Assam (4749.11)	West Bengal (1071.13)	Jharkhand (174.73)
5	Tripura (81.40)	Karnataka (101.50)	Goa (4336.69)	Kerala (740.89)	Odisha (165.27)

**Excludes JRY Roads*

1.22 Amongst North Eastern States, Assam with 5088.38 Km has the highest Road density followed by Tripura (4302.87 km) and Nagaland (2284.29km). However, Nagaland has the largest National

Highway density (93.4 km) followed Tripura (81.4km) and Manipur (78.4 km). Rural road network in north eastern State relatively better as compared to other categories of road.

Table 1.11: The Category wise Road Density per 1000 Sq. Km. for North Eastern States as on 31st March, 2019

North East States	National Highways	State Highways	District Roads	Rural Roads	Urban Roads	Project Roads	Total Road Density
Assam	49.8	32.3	78	4,749.11	79.90	99.60	5,088.38
Tripura	81.4	100.8	44	3,837.12	102.36	137.20	4,302.87
Nagaland	93.4	39.2	309	1,691.21	88.70	62.44	2,284.29
Meghalaya	51.5	34.2	206	1,450.66	25.46	26.86	1,794.91
Sikkim	65.2	93.4	207	1,204.95	22.02	124.10	1,716.72
Manipur	78.4	35	139	1,134.90	5.63	58.13	1,450.66
Mizoram	67.5	8.1	81	562.09	0.52	51.34	770.82
Arunachal Pradesh	30.3	161.2	103	308.47	0.71	56.33	659.90

1.23 Amongst States, Arunachal Pradesh has the highest road density per 1000 population with 40 km per 1000 population followed by Sikkim with 20 km per 1000 population and Nagaland

with 19 km per 1000 population (refer Annexure 7.9c). Category wise distribution of Road Density per 1000 population for Top Five States in the Table 1.10.

Table 1.12: Category Wise Road Density per 1000 Population for Top Five States as on 31st March, 2019

Sl. No.	National Highways	State Highways	District Roads	Rural Roads	Urban Roads	Project Roads
1	Arunachal Pradesh (1.83)	Arunachal Pradesh (9.8)	Arunachal Pradesh (6.2)	Arunachal Pradesh (19)	Chandigarh (2.34)	Arunachal Pradesh (3.41)
2	Mizoram (1.30)	Sikkim (1.1)	Nagaland (2.6)	Sikkim (14) & Nagaland (14)	West Bengal (1.04)	Jammu & Kashmir (1.58)
3	A & N Island (0.87)	A & N Island (0.7)	Sikkim (2.4)	Assam (12)	Delhi (0.94)	Sikkim (1.44)
4	Nagaland (0.78)	Uttarakhand (0.4)	A & N Island (1.6), Meghalay (1.6), Mizoram (1.6) and J & K (1.6)	Goa (11), Meghalaya (11) & Mizoram (11)	Puducherry (0.86) and Kerala (0.86)	Himanchal Pradesh (1.13)
5	Sikkim (0.76)	Tripura (0.3), Gujrat (0.3), Karnataka (0.3), Maharashtra (0.3), Manipur (0.3), Meghalay (0.3) and Nagaland (0.3)	Karnataka (1.1 & Manipur (1.1)	Manipur (9) & Tripura (9)	Nagaland (0.74)	Mizoram (0.99)

QUALITY

1.24 The road transport sector in India has expanded manifold in more than seventy years after independence, both in terms of spread (total road length & road density) and capacity (No. of registered vehicles on road and the volume of passenger and freight traffic handled). The total road length has increased from 4.0 lakh km. as on 31.03.1951 to about 63.31 lakh km as on 31.03.2019, an increase of about 16 times. The total length of National Highways has increased from 19,811 Km to 1,32,499 km increase of more than 6 times during the same period (Table 1.2). The share of surfaced roads in the total road length increased from 47 % in 2001 to 64.7 % in 2019. As of 31st March, 2019, all National Highways (100%), about 99 per cent of State Highways and about 96 percent of Districts Roads are surfaced (Refer Table 1.5).

1.25 Road Density, may be considered as an indicator of accessibility of road per thousand Km, which has increased not only for All India but for Rural and Urban areas as well (Table 1.9). The total road density per 1000 sq.km has increased from 1,026.24 Km in 2001 to 1,926.02 in 2019, with an increase of about 87.7 percentage over 2001. Correspondingly, Rural and Urban road density has increased (refer Table 1.9). Similarly, road density per 1000 population increased from 3.8 Km per 1000 population in 2001 to 5.23 Km in 2019.

1.26 Total number of road accidents and fatalities have also come down over the years, due to the improvement in the quality of roads, i.e. all National Highways are surfaced, 99 percent of State Highways are surfaced (Table 1.7) as on 31st March, 2019.

Table: 1.13: Number of Accidents, Persons Killed and Injured

Years	Number of Road Accidents	% Change	Number of Persons Killed	% Change	Numbers of persons Injured	% Change
2016	4,80,652	-4.14	1,50,785	3.18	4,94,624	-1.13
2017	4,64,910	-3.28	1,47,913	-1.9	4,70,975	-4.78
2018	4,67,044	0.46	1,51,417	2.37	4,69,418	-0.33
2019	4,49,002	-3.86	1,51,113	-0.2	4,51,361	-3.85
2020	3,66,138	-18.46	1,31,714	-12.84	3,48,279	-22.84

Source: Road Accidents in India 2020

Section - 2

Section – 2

NATIONAL HIGHWAYS

- 2.1 The road network is the backbone of the transport system in India and it is very well integrated with the multi-modal system of transportation. In the road sector, the National Highways are the predominant mode of transportation with road network of 1, 32,499 Km as on 31st March, 2019. Though National Highways constitute about 2.09% of the Road Network of the country, these NHs carry nearly one third of total traffic on road. National Highways running through the length and breadth of the country connecting capitals of States and UTs, major ports, rail junctions, industrial and tourist centres and link up with border roads and highways of neighbouring countries. Highways facilitate, conveyance of people, goods, raw-materials, manufactured articles etc. speedily and easily in the different parts of a country. National Highways are also feeders to railways, shipping and air traffic.
- 2.2 The Ministry of Road Transport and Highways (MORTH) is mandated with the construction, development and maintenance of the National Highways (NH). The Ministry is progressing towards provision of improved service access to citizens with quality and efficiency in service delivery, transparency in the system and reduced workload for RTO staff. MORTH implements National Highways projects/flagship schemes through the agency of National Highways Authority of India Ltd (NHAI), National Highways Infrastructure Development Corporation Ltd. (NHIDCL), State PWDs (2 lane NH) & Border Roads Organization etc. Ministry is also responsible for administration of National Highways Act, 1956, National Highways Authority of India Act, 1988, National Highways Fee (Determination of Rates and Collection) Rules, 2008, Motor Vehicles Act. 1988 and Central Motor Vehicles Rules 1989, formulation of broad policies relating to road transport, environmental issues, automotive norms etc. besides arrangements for movement of vehicular traffic with neighbouring countries.
- 2.3 At present, projects of widening to 4-lane NH configurations or more and Expressways under Bharatmala Pariyojna (Phase-I) and other Schemes have been assigned to the NHAI. The projects of development to 2-lane NH configurations, with or without paved shoulders are primarily being assigned to the State Governments, viz. State PWDs, State Road Construction Departments/Corporations, etc. The Projects under

Special Accelerated Road Development Programme for North-Eastern Region (SARDP-NE), including Arunachal Pradesh Package of Roads, are primarily assigned to NHIDCL. Further, NHIDCL

is also being assigned projects under other Schemes in hill States including States in the North East Region, the three hill States in North-West Region and the Andaman & Nicobar Islands.

NATIONAL HIGHWAYS – PROFILE OF 2019 vis-à-vis 2018

2.4 India's road network (including highways) is one of the most extensive road networks in the world with 63.31 lakh kilometre as on 31st March 2019. With the proactive policy initiatives in the sector, the road network has continuously been expanding in the country. The total road network consists of 1.32 lakh km of National Highways, 1.79 lakh km of State Highways and 60.2 lakh km of Other Roads (which include District Roads, Rural Roads, Urban Roads and Project Roads). In percentage term, National Highways, State Highways and Other Roads constitute

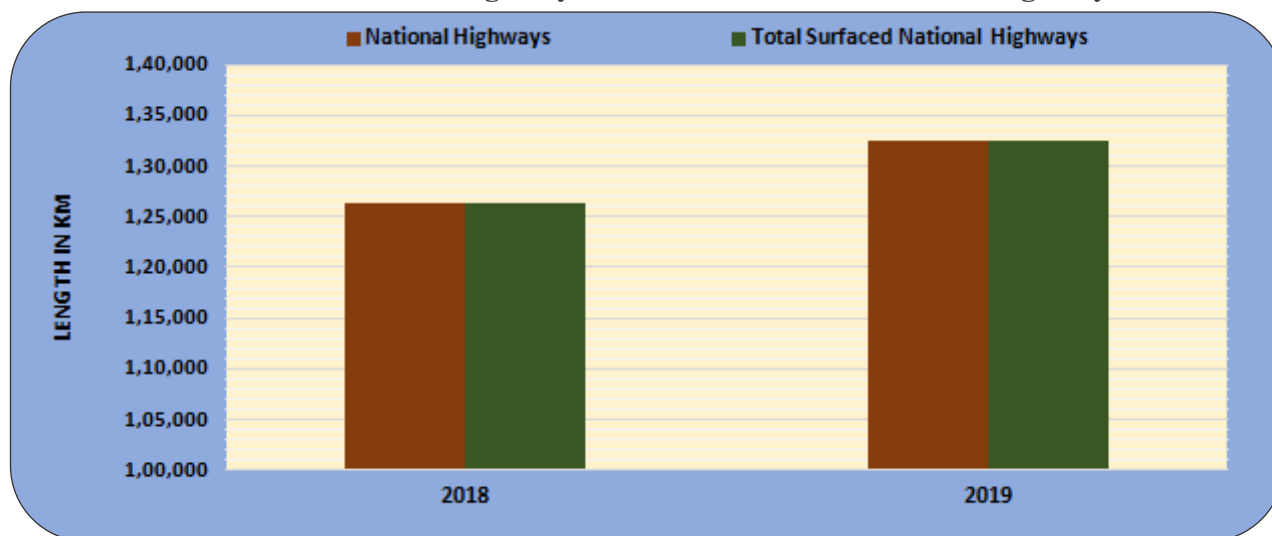
2.09 per cent, 2.83 per cent and 95.08 per cent respectively in total road network. The total length of National Highways has increased from 1,26,350 km in 2018 to 1,32,499 km in 2019, recorded an increase of 4.86 percent on an average relative to the corresponding previous period (Table 2.1). For the second consecutive year in 2019, National Highways in the country are fully surfaced (Table 2.1 and Chart 2.1). Major programmes initiated by MoRTH for development of National Highways network in the country is given at Section 8 of this report.

Table 2.1: National Highways 2019 vis-à-vis 2018

	As on March, 2018 (km)	As on March, 2019 (km)	% change in 2019 over 2018
Total Length (NH)	1,26,350	1,32,499	4.86
% Share in Total Road	2.03	2.09	
Surfaced NH	1,26,350	1,32,499	4.86
% share of Surfaced Road	100	100	

Data source: Planning Division, MoRTH

Chart 2.1: National Highways and Total Surfaced National Highways



NATIONAL HIGHWAYS NETWORK

2.5 There has been a consistent increase in the construction of National Highways/ roads since 1950-51, increasing from 19,811 km of roads in 1950-51 to 1,32,499 km of roads in 2018-19, i.e. recorded more than six times increase in 68 years. The proactive policy interventions of Ministry of Road Transport and Highways on development of National Highways constitutes among the major possible

factors responsible for widening NHs network in the country. The total length of National Highways as on 31.03.2019 was 1,32,499 km, registered increase of 4.9 percent corresponding to same period last year. However, percentage share of National Highways in the total road network has been declined from 4.9 percent in 1950-51 to 2.09 percent in 2018-19 (Table 2.3).

Table 2.2: National Highways Network (1950-51 to 2018-19)

Year	National Highways* (in km)	Total Road Length # (in Km)
1950-51	19,811	3,99,942
1960-61	23,798	5,24,478
1970-71	23,838	9,14,979
1980-81	31,671	14,85,421
1990-91	33,650	23,27,362
2000-01	57,737	33,73,520
2010-11	70,934	46,76,838
2015-16	1,01,011	56,03,293
2016-17	1,14,158	58,97,671
2017-18	1,26,350	62,15,797
2018-19	1,32,499	63,31,757

*Include Expressways

#Include JRY

Chart 2.2: Decadal trend of construction of NH from 1951 to 2011

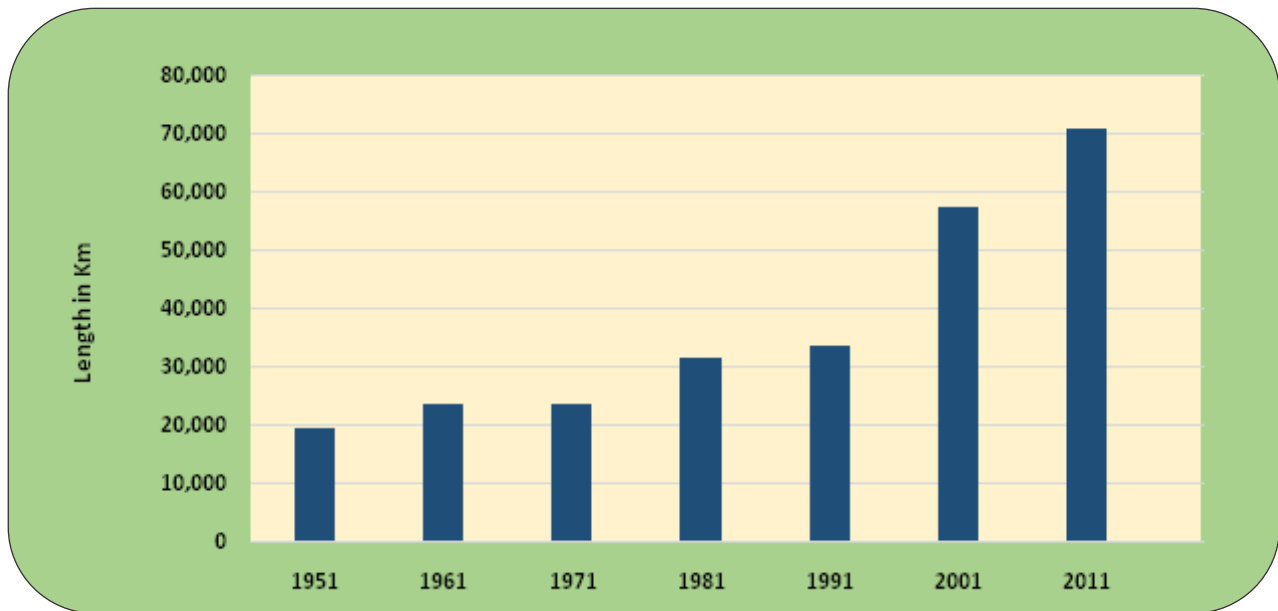
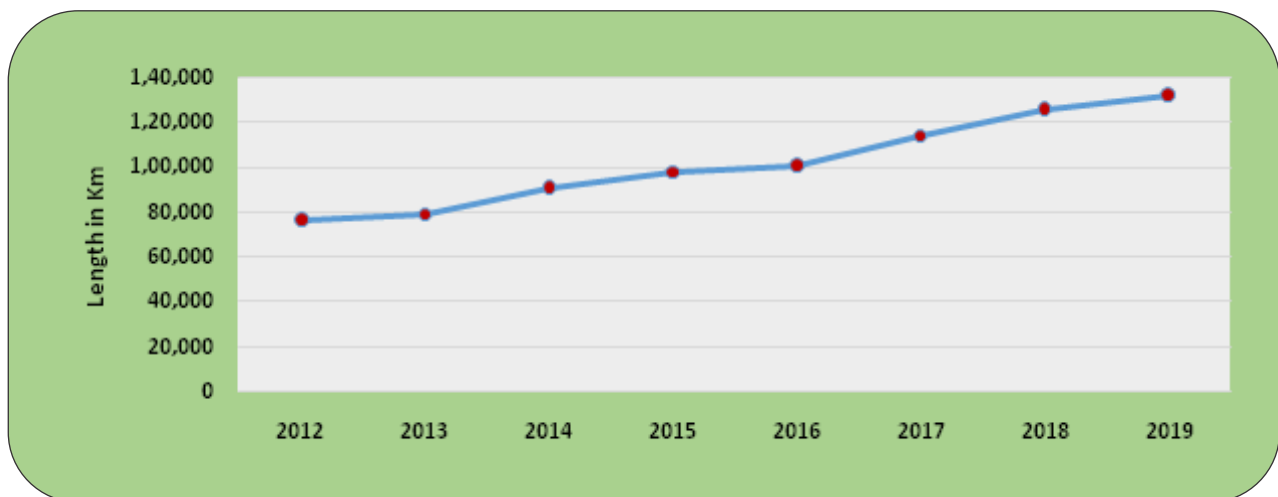


Chart 2.3: Trend of construction of NH from 2012 to 2019



NH Include Expressways

2.6 The National Highway Authority of India (NHAI) was set up as a Special Vehicle in 1997 for the development of highways in the country through National Highways Development Programme (NHDP). Further, NHDP has been implemented through 7 phases from 1998 to 2017 with target of construction of 55,000 km of roads. As a result of this innovative programme, National Highways network

in the country has entered in to a new era of strengthening and enlarging quality of public transportation system. Since 2000-01, there has been consistent increase in the construction of National Highways (Table 2.3 and Chart 2.2 & 2.3). Bharatmala Pariyojana the new umbrella programme for highways sector contributed to bridge the critical infrastructural gaps in the road sector.

AWARD /CONSTRUCTION OF NATIONAL HIGHWAYS

2.10 The year wise details on Award and construction of National Highways are presented in Table 2.4. Award and construction of NHs has been on increase since 2013-14. However, award of NHs fell to 5494 km in 2018-19 from 17,054 km in 2017-18, registering a decrease of 68 percent year on year. Whereas, construction of road has increased from

9829 km in 2017-18 to 10,855 km in 2018-19, recorded a growth of 10.4 percent relative to corresponding previous period. In 2018-19, 10,855 km of national highways were constructed. The extent of road construction per day increased substantially in 2018-19 to 30 km per day from 27 km per day in 2017-18.

Table 2.3: Award of NHs/Road Projects and Construction of NHs/ Road Projects

Item	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Awarded Length (Km)	3,196	7,972	10,098	15,948	17,054	5,494
% change over previous period	66.8	149.4	26.7	57.9	6.9	-67.8
Length Constructed (km)	4,260	4,410	6,061	8,231	9,829	10,855
% change over previous period	-25.7	3.5	37.4	35.8	19.4	10.4
Road Constructed per day (Km)	12	12	17	23	27	30

Data source: Planning Division, MoRTH

FUND ALLOCATION AND EXPENDITURE

2.11 Details of fund allocated and expenditure incurred for Development and Maintenance of National Highways during FY 2012-13 to 2018-19 is presented in the Table 2.4. There has been significant upturn in road construction expenditure, is a reflection of the impetus given by the Government of India to

critical sector that generates employment and supports infrastructure. Total investment in the Roads and Highway sector has gone up more than three times in the seven years period from FY13 to FY 19 (Table 2.4), which also led to increased road density across the states.

Table 2.4 Fund Allocation and Expenditure for Development and Maintenance of National Highways (Rs. in Crore)

Year	Allocation	YoY Growth	Expenditure				YoY Growth	Allocation as % of Expenditure	
			Private	YoY Growth	Public*	YoY Growth			Total
2012-13	32,011.46	-	20,304.66	-	21,693.74	-	41,998.40	-	76.22
2013-14	30,587.57	-4.45	22,515.05	10.89	30,385.64	40.07	52,900.69	25.96	57.82
2014-15	34,918.32	14.16	19,232.44	-14.58	30,295.26	-0.30	49,527.70	-6.38	70.50
2015-16	86,363.32	147.33	29,770.00	54.79	66,369.14	119.07	96,139.14	94.11	89.83
2016-17	1,03,556.70	19.91	16,028.64	-46.16	76,275.01	14.93	92,303.65	-3.99	112.19
2017-18	1,12,464.40	8.60	16,500.64	2.94	1,02,852.38	34.84	1,19,353.02	29.30	94.23
2018-19	1,32,741.90	18.03	21,605.00	30.93	1,37,353.53	33.54	1,58,958.53	33.18	83.50

*Include Internal and Extra Budgetary Resources (IEBR).

Chart 2.4: Fund Allocation and Expenditure for construction of National Highways

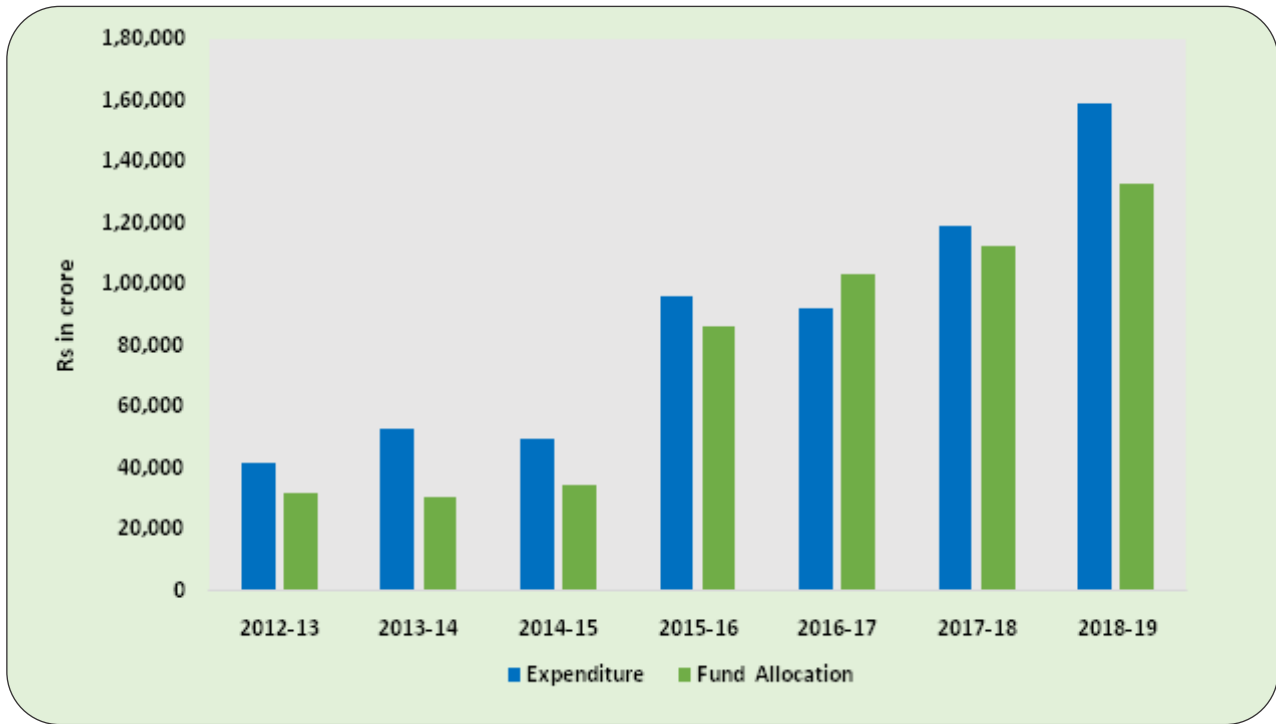
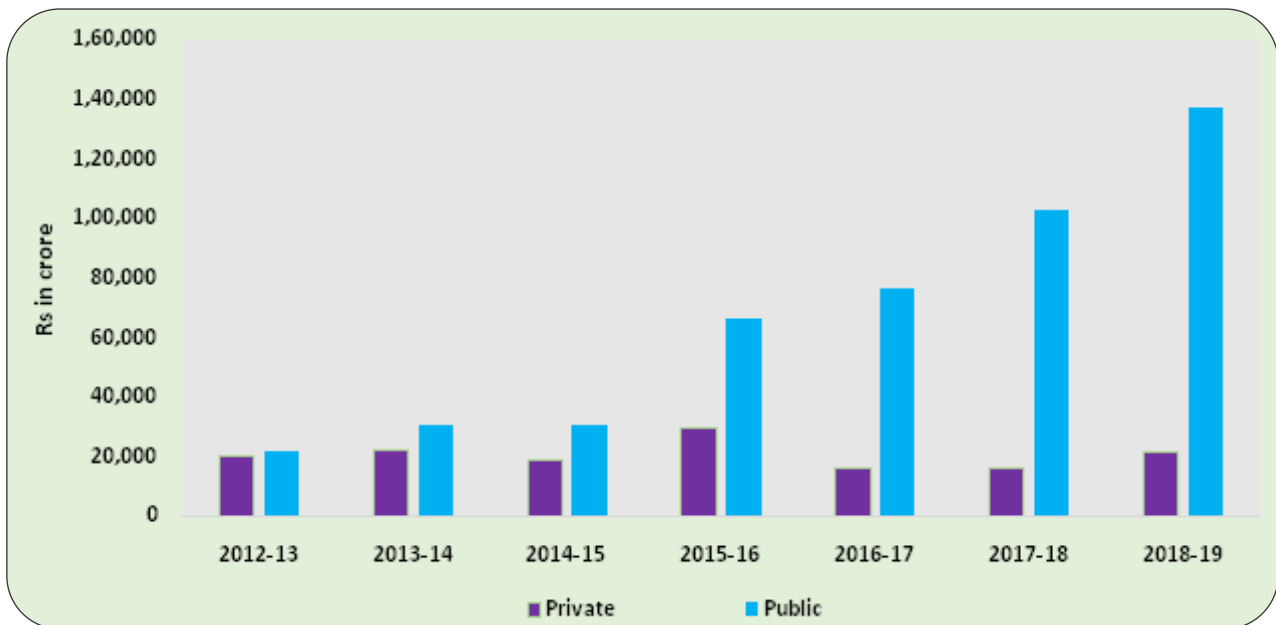


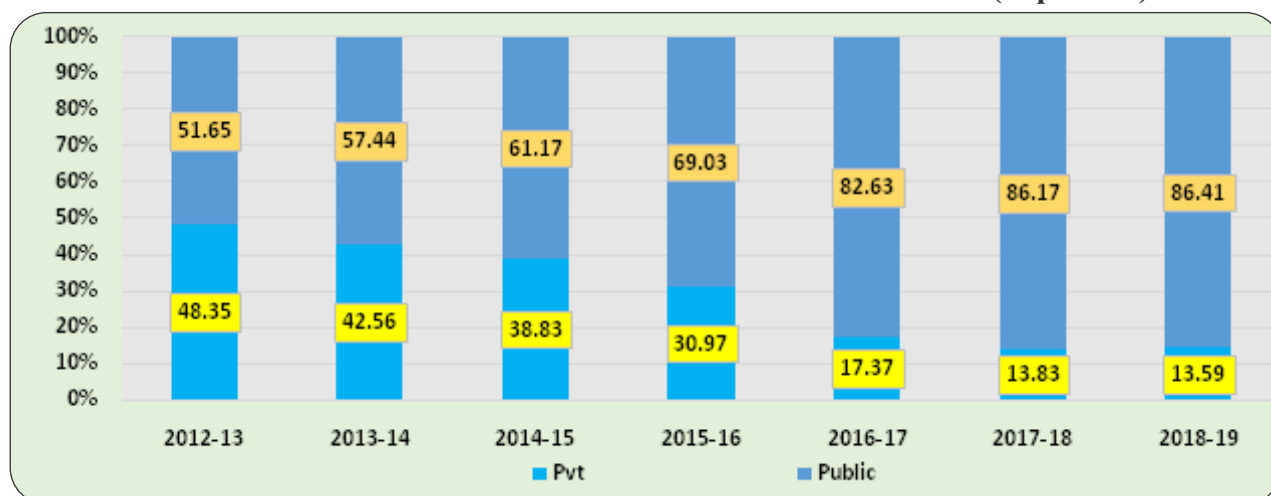
Chart 2.5: Public and Private Expenditure for construction of National Highways



2.12 Chart 2.8 reveals share of public investment in road sector has been increasing during the period 2012-13 to 2018-19, whereas that of Private sector has been declining. Similarly, Private investment's share to total investment has

drastically declined to 13.59 percent in 2018-19 from 48.35 percent in 2012-13, whereas during the same period, share of public investment increased to 86.41 percent from 51.65 percent.

Chart 2.6: Private and Public Investment in Total Investment (in percent)



NATIONAL HIGHWAYS NETWORK: STATE/UT WISE BREAK-UP

2.13 State/UT's share of National Highways amongst other factors depends on the geographical area. Top 5 States share 42.2 per cent of total National Highways network in the country during 2018-19. Maharashtra has the highest NH network in 2018-19 with 17,757 km (13.4%) followed by Uttar Pradesh and Rajasthan

with 11,737 km (8.9 %) and 10,342km (7.8 %) respectively (Table 2.5 and Chart 2.7). Madhya Pradesh with 8772 km (6.6%) and Karnataka 7335 km (5.5%) rank fourth and fifth respectively. The State/UT wise break-up of length of National Highways is at **Annexure 2.1**.

Table 2.5: State/UT wise break-up of National Highways as on 31.03.2019 (km)

Sl. No.	Name of State/ UT	Length of NH	% shares in Total NH
1	Andhra Pradesh	6,913	5.2
2	Arunachal Pradesh	2,537	1.9
3	Assam	3,909	2.9
4	Bihar	5,358	4.0
5	Chhattisgarh	3,606	2.7
6	Goa	293	0.2
7	Gujarat	6,635	5.0
8	Haryana	3,166	2.4
9	Himachal Pradesh	2,607	2.0
10	Jammu & Kashmir	2,423	1.8
11	Jharkhand	3,367	2.5
12	Karnataka	7,335	5.5

Contd...

Table 2.5 Contd...

Sl. No.	Name of State/ UT	Length of NH	% shares in Total NH
13	Kerala	1,782	1.3
14	Madhya Pradesh	8,772	6.6
15	Maharashtra	17,757	13.4
16	Manipur	1,750	1.3
17	Meghalaya	1,156	0.9
18	Mizoram	1,423	1.1
19	Nagaland	1,548	1.2
20	Odisha	5,762	4.3
21	Punjab	3,274	2.5
22	Rajasthan	10,342	7.8
23	Sikkim	463	0.3
24	Tamil Nadu	6,742	5.1
25	Telangana	3,795	2.9
26	Tripura	854	0.6
27	Uttarakhand	2,949	2.2
28	Uttar Pradesh	11,737	8.9
29	West Bengal	3,664	2.8
30	Andaman & Nicobar Island	331	0.2
31	Chandigarh	15	0.0
32	Dadra & Nagar Haveli	31	0.0
33	Daman & Diu	22	0.0
34	Delhi	157	0.1
35	Lakshadweep	0	0.0
36	Puducherry	27	0.0
Total		1,32,499	100

Note-All NH are surfaced, NH include expressways

Chart 2.7: The State/UT wise network of National Highways as on 31.03.2019

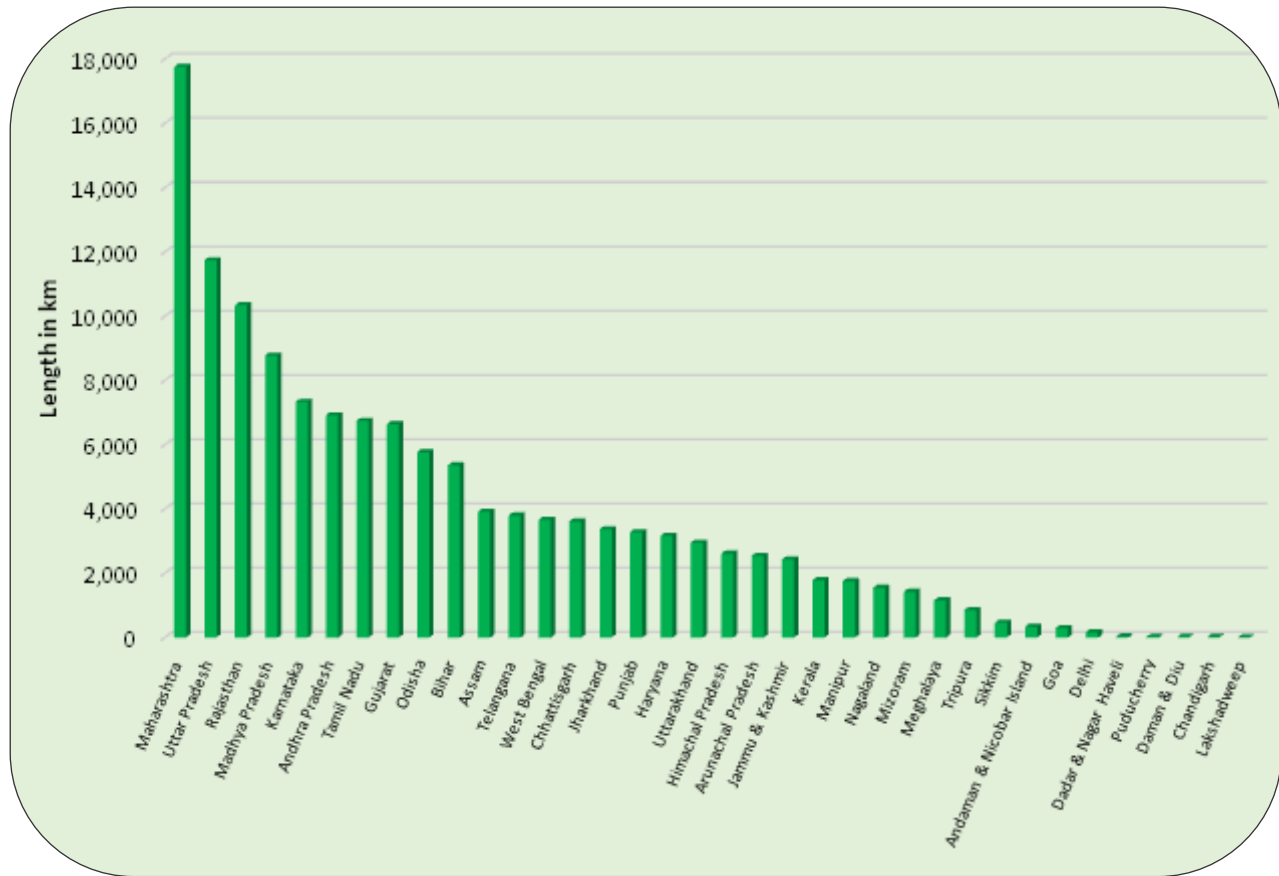
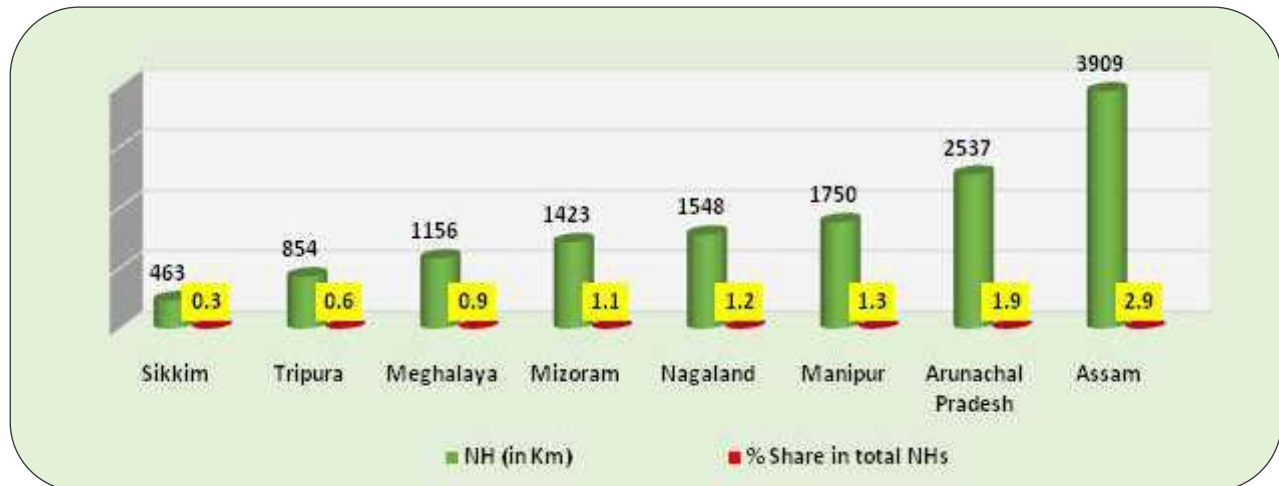


Chart 2.8: National Highways network in North Eastern States as on 31.03.2019



Section - 3

Section – 3

STATE HIGHWAYS

3.1 State Highways are constructed and managed by State Governments through the State Public Works Departments. The State Highways are usually roads that link important cities, towns and district headquarters, tourist places, minor ports and connect them with National Highways or State Highways of neighbouring states. State Highways together with major district roads contribute the secondary system of road transportation in the country.

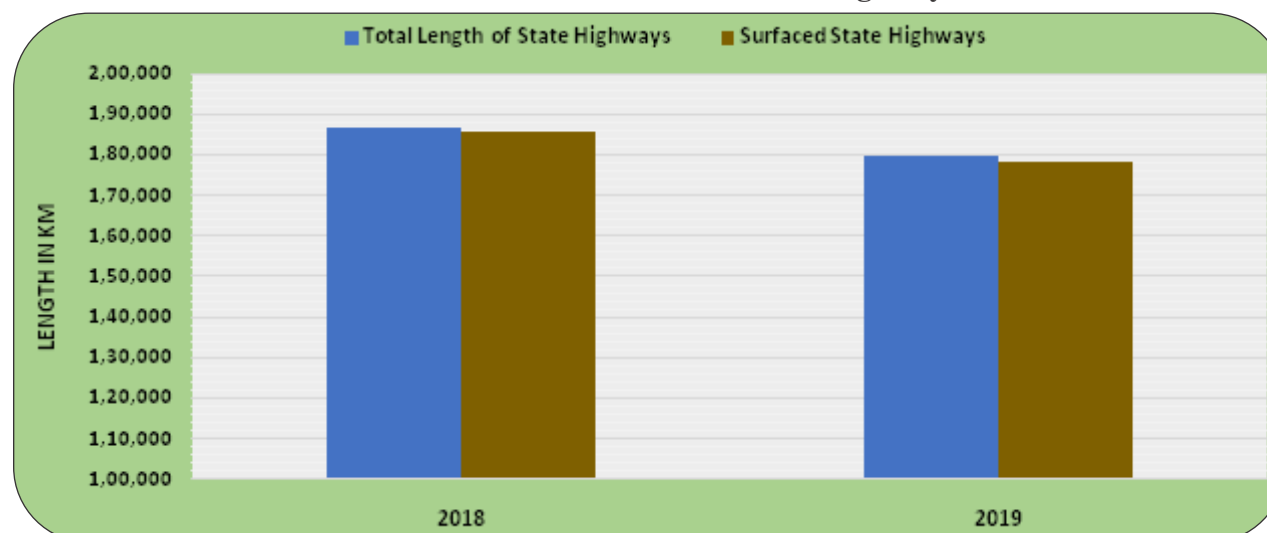
3.2 Total State Highways constructed was 1,79,535km as on 31st March 2019, which constitute 2.8 percent of total road

network in the country and 99.35 percent (1,78,384 km) of SHs are surfaced (Table 3.1). However, total length of State Highways fell by 3.9 percent, from 1,86,908 Km in 2018 to 1,79,535 Km as on 31.03.2019. This is primarily due to conversion of State Highways into National Highways for better transport infrastructure. Similarly, marginal decline recorded in the construction of surfaced roads, i.e. it decreased from 1,85,495 km in 2017-18 to 1,78,384 km in 2018-19, registering 3.8 percent decrease in 2018-19 compared to same period last year.

Chart 3.1: Total and Surfaced State Highways

Item	2018	2019	% Change in 2019 over 2018
Total Length of SH	1,86,908	1,79,535	-3.9
% Share in Total Road	3.0	2.8	
Surfaced SH	1,85,495	1,78,384	-3.8
% Share of Surfaced SH in total SH	99.24	99.35	

Chart 3.1: Total and Surfaced State Highways



STATE HIGHWAYS NETWORK

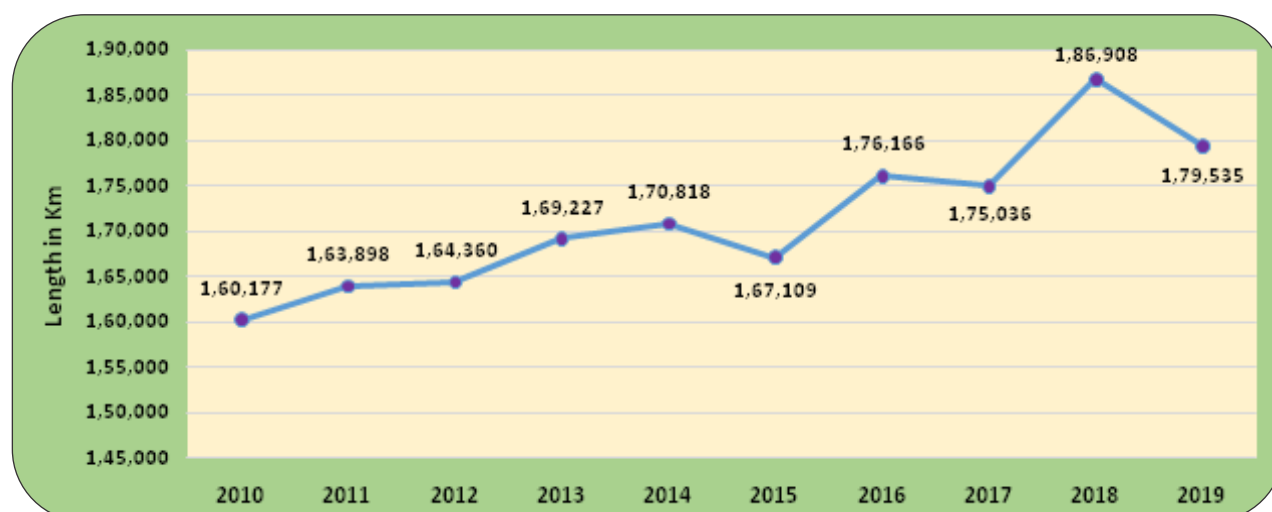
3.3 Prior to 1970, State Highways were added in Districts Roads. There has been a consistent increase in the construction of State Highways/roads since 1970-71,

increasing from 56,765 km of roads in 1950-51 to 1,79,535 km of roads in 2018-19, i.e. recorded increase of more than three times in 68 years.

Table 3.2: State Highways Network

Year	Length in Km	% Share in Total Roads
1970-71	56,765	6.2
1980-81	94,359	6.4
1990-91	1,27,311	5.5
2000-01	1,32,100	3.9
2010-11	1,63,898	3.5
2014-15	1,67,109	3.1
2015-16	1,76,166	3.1
2016-17	1,75,036	3.0
2017-18	1,86,908	3.0
2018-19	1,79,535	2.8

Chart 3.2: Trends of construction of State Highways from 2010 to 2019



STATE/UT WISE DISTRIBUTION OF STATE HIGHWAYS

3.4 Out of 1,79,535 km of State Highways constructed in 2019, 1,78,384 km (99.4%) of SH were surfaced. Majority of the States have fully surfaced State Highways (Chart 3.3). Maharashtra has the highest share of State Highways network in the country i.e. 17.83 per cent (32005 Km) followed by Karnataka 10.85

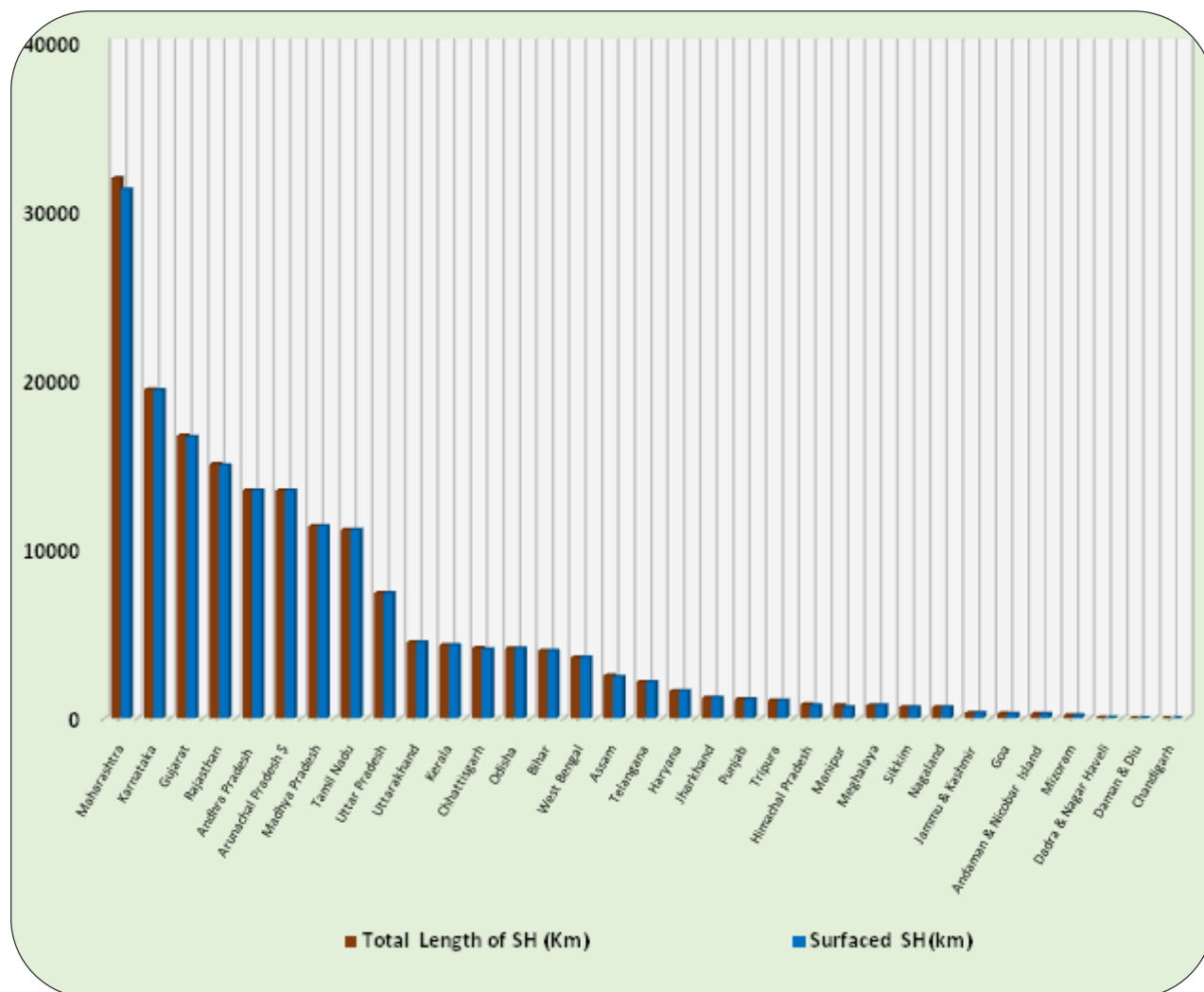
per cent (19473 Km), Gujarat 9.33 per cent (16746 Km), Rajasthan 8.39 per cent (15061 Km) and Andhra Pradesh 7.52 per cent (13500 Km). These five States accounted for about 53.9% of the total length of SHs in the country. State/UT-wise break-up of State Highways is given in the following table 3.3.

Table 3.3: State/UT wise break up of State Highways and Surfaced SH

Sl.No.	Name of State / UT	Total Length of SH (in km)	Share in Total SH (%)	Surfaced SH (in km)	% of Surfaced SH in total SH
1	Andhra Pradesh	13,500	7.52	13,500	100
2	Arunachal Pradesh \$	13,500	7.52	13,500	100
3	Assam	2,530	1.41	2,452	96.9
4	Bihar	4,006	2.23	4,006	100.0
5	Chhattisgarh	4,176	2.33	4,098	98.1
6	Goa	279	0.16	272	97.5
7	Gujarat	16,746	9.33	16,679	99.6
8	Haryana	1,602	0.89	1,602	100
9	Himachal Pradesh	827	0.46	782	94.6
10	Jammu & Kashmir	310	0.17	310	100
11	Jharkhand	1,232	0.69	1,232	100
12	Karnataka	19,473	10.85	19,450	99.9
13	Kerala	4,342	2.42	4,342	100
14	Madhya Pradesh	11,389	6.34	11,389	100
15	Maharashtra	32,005	17.83	31,351	98.0
16	Manipur	781	0.44	661	84.6
17	Meghalaya	768	0.43	768	100
18	Mizoram	170	0.09	170	100
19	Nagaland	650	0.36	650	100
20	Odisha	4,143	2.31	4,143	100
21	Punjab	1,133	0.63	1,133	100
22	Rajasthan	15,061	8.39	15,000	99.6
23	Sikkim	663	0.37	663	100
24	Tamil Nadu	11,169	6.22	11,169	100
25	Telangana	2,149	1.20	2,146	99.9
26	Tripura	1,057	0.59	1,057	100
27	Uttarakhand	4,517	2.52	4,502	99.7
28	Uttar Pradesh	7,427	4.14	7,427	100
29	West Bengal	3,612	2.01	3,612	100
30	A & N Island	257	0.14	257	100
31	Chandigarh	9	0.01	9	100
32	Dadra & Nagar Haveli	30	0.02	30	100
33	Daman & Diu	22	0.01	22	100
34	Delhi	0	0.00	0	0.0
35	Lakshadweep	0	0.00	0	0.0
36	Puducherry	0	0.00	0	0.0
	Total	1,79,535	100	1,78,384	99.4

Note: \$ Figure for Arunachal Pradesh pertain to roads under State PWD. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR).

Chart 3.3: State/UT wise break up of total and surfaced State Highways as on 31st March, 2019



3.5 Out of total length of State Highways roads (1,79,535Kms) as on 31st March, 2019, about 99.35% of SH roads (1,78,384Kms) were surfaced(Annexure 3.2).Out of total length of surfaced State Highways, Bituminous Top (BT) and Cement Concrete (CC) roads accounted for about 92.3% and the remaining 7.7% were Water Bound Macadam (WBM) roads. The State/UT-wise break up of length of State Highways in India by type

of surface is given in the **Annexure 3.2**.

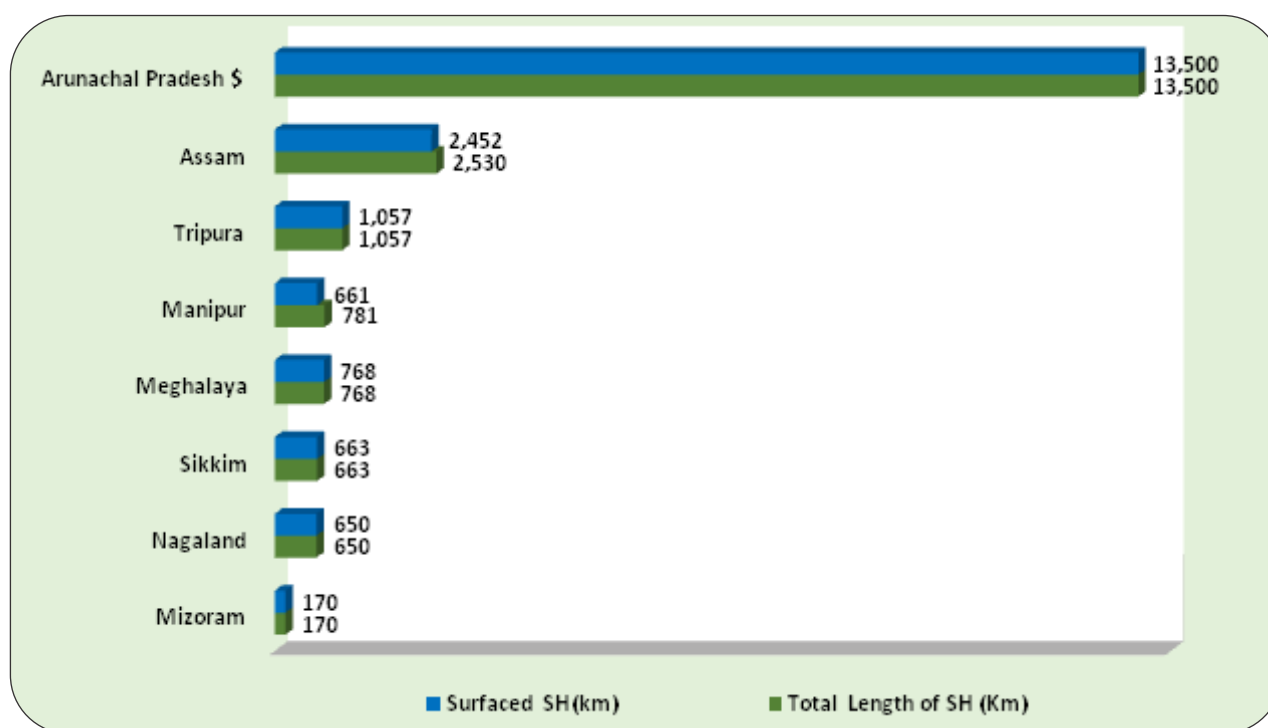
3.6. North Eastern States share 11.2 percent of (20,119 km) of total States Highways network in the country as on 31st march, 2019. In North East, 99 percent (19,921 km) of States Highways are surfaced in 2019. Arunachal Pradesh has largest State Highways network (13,500 km) followed by Assam (2530 km) and Tripura (1057 km).

Chart 3.4: Share of North Eastern States State Highways as on 31.03.2019

Sl.No	Name of State / UT	Total Length of SH (km)	% Share in Total SH	Surfaced SH (km)	% of surfaced SH
1	Manipur	781	0.44	661	84.6
2	Meghalaya	768	0.43	768	100
3	Sikkim	663	0.37	663	100
4	Nagaland	650	0.36	650	100
5	Mizoram	170	0.09	170	100
6	Arunachal Pradesh ^{\$}	13,500	7.52	13,500	100
7	Assam	2,530	1.41	2,452	96.9
8	Tripura	1,057	0.59	1,057	100
Total NE States		20,119	11.21	19,921	99
Total SH		1,79,535	100	1,78,384	99.4
% Share of NE in Total SH		11.2		11.2	

Note: \$ Figure for Arunachal Pradesh pertain to roads under State PWD. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR).

Chart 3.4: Share of North Eastern States State Highways as on 31.03.2019



\$ Figure for Arunachal Pradesh pertains to roads under State PWD. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR).

Section - 4

Section – 4

DISTRICT ROADS

4.1 District Roads are the strength of Rural Economy, these are key roads within a district, which connects Taluk headquarters and major rural areas to District headquarters. District Roads are constructed & maintained by Public Works Department of States and UTs. District Roads along with the State Highways, account for the secondary system of road transportation in the country. District Roads comprised of Major District Roads (MDRs) and Other District Roads (ODRs) which provide

connection between District and Taluk headquarters with the State Highways and National Highways. These roads which run within districts contribute significantly to the economy and country's industrial development by connecting areas of production with markets and enabling movement of raw materials and finished products. As per the classification of roads broadly the MDRs are to have a minimum width of 15 metres with traffic density of less than 10,000 PCUs but more than 5000 PCUs.

PROFILE AND TREND OF DISTRICTS ROADS

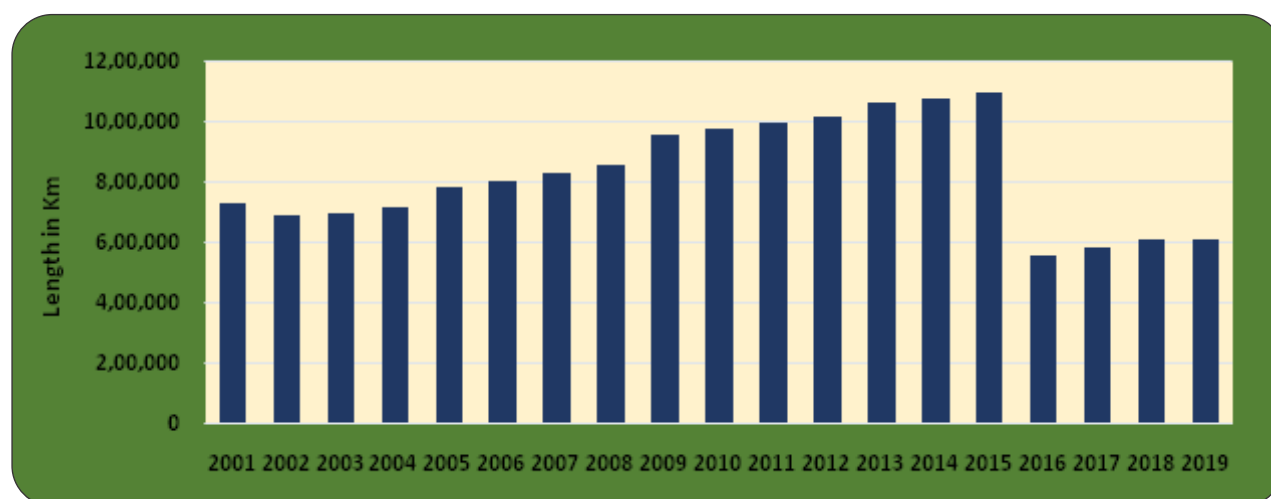
4.2 The total district road constructed was 6,12,778 km as on 31st March 2019, of which surfaced roads constitute about 95.8 percent of total district road network (i.e. 5,87,004 km). There has been consistent increase in the construction of District Roads till 2014-15, thereafter, it declined to 5,61,940 Km in 2015-16. However, total length constructed has taken upturn since 2016-17. The year 2018-19 registered improvement in construction of districts roads compared to 2017-18, road construction has increased from 6,11,268 Km in 2017-18 to 6,12,778 km in 2018-19, registered an increase of 0.24 percent in 2018-19

relative to same period last year. However, percent share of District Roads in total road length has been on decline since 1960-61 (Table 4.1). District Roads shared about 43.4 percent and 49.0 percent of total road network in the country respectively during 1950-51 and 1960-61 (Table 4.1) and in 2019 it was 9.8 percent. The declining share of District Roads is due to Other PWD Roads which was part of District Roads have been divided into District Roads and Rural Roads built by State PWD/RWD. State wise details are presented at **Annexure 4.1**.

Table 4.1: District Roads network

Year	Length(Km)	% Share in Total Roads
1950-51	1,73,723	43.4
1960-61	2,57,125	49.0
1970-71	2,76,833	30.3
1980-81	4,21,895	28.4
1990-91	5,09,435	21.9
2000-01	7,36,001	21.8
2010-11	9,98,895	21.4
2014-15	11,01,178	20.1
2015-16	5,61,940	10.0
2016-17	5,86,181	9.9
2017-18	6,11,268	9.8
2018-19	6,12,778	9.7

Chart 4.1: Construction of District Roads- (2001 to 2019)



Note: The declining share of District Roads from the year 2015-16 is due to the Other PWD Roads which was part of District Roads have been divided into District Roads and Rural Roads built by State PWD/RWD.

STATE/UT WISE DISTRIBUTION OF DISTRICT ROADS

4.4 The total length of District Roads as on 31st March, 2019 was 6,12,778Km. State-wise distribution of total Districts Roads and surfaced District Roads are presented in Table 4.2. For the second consecutive year in 2018-19, Maharashtra topped the States in the total length of District Roads in the country with 1,08,419 km (17.7%) followed Uttar Pradesh 55,816 km

(9.1%), Madhya Pradesh 50,714 km (8.3%), Karnataka 49,555 km (8%) and Tamil Nadu 48,236 (7.9%)(refer Chart 4.2). These five States together account for about 51% of the total length of District Roads in India. The details of State/UT-wise length of District Roads as on 31.03.2019 are at **Annexure 4.1**

Table 4.2: State wise distribution of District Road on 31stMarch, 2019

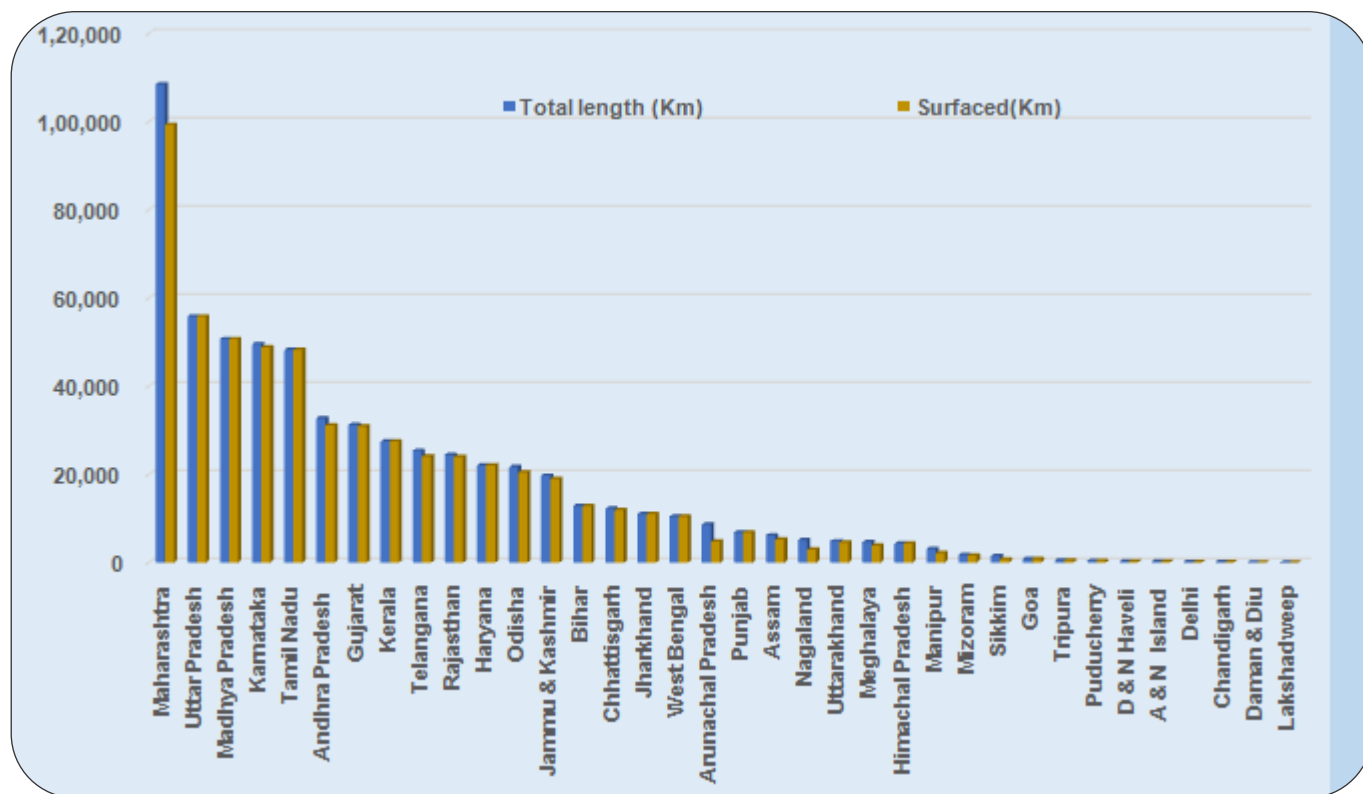
Sl.No.	Name of State/UT	Total Length (Km)	Surfaced (Km)	% of Surfaced Road
1	Andhra Pradesh	32,711	31,096	95.06
2	Arunachal Pradesh @	8,616	4,726	54.85
3	Assam	6,093	5,201	85.36
4	Bihar	12,797	12,797	100
5	Chhattisgarh	12,221	11,913	97.48
6	Goa	824	824	100
7	Gujarat	31,262	30,888	98.8
8	Haryana	22,051	22,051	100
9	Himachal Pradesh	4,277	4,277	100
10	Jammu & Kashmir	19,695	18,990	96.42
11	Jharkhand	10,969	10,969	100
12	Karnataka	49,555	48,790	98.46
13	Kerala	27,470	27,470	100
14	Madhya Pradesh	50,714	50,714	100
15	Maharashtra	1,08,419	99,305	91.59
16	Manipur	3,095	2,164	69.91
17	Meghalaya	4,624	3,853	83.31
18	Mizoram	1,714	1,610	93.94
19	Nagaland	5,129	2,913	56.79
20	Odisha	21,647	20,427	94.37
21	Punjab	6,808	6,808	100
22	Rajasthan	24,448	23,932	97.89
23	Sikkim	1,469	732	49.87
24	Tamil Nadu	48,236	48,236	100
25	Telangana	25,372	24,069	94.86
26	Tripura	461	461	100
27	Uttarakhand	4,828	4,522	93.66
28	Uttar Pradesh	55,816	55,816	100
29	West Bengal	10,449	10,442	99.93
30	A & N Island	180	180	100
31	Chandigarh	83	83	100
32	Dadra & Nagar Haveli	190	190	100
33	Daman & Diu	59	59	100
34	Delhi	100	100	100
35	Lakshadweep	0	0	0
36	Puducherry	397	397	100
	All India	6,12,778	5,87,004	95.8

@Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR)

- 4.5. State-wise distribution of type of surface of District Roads indicates that about 96 percent of the total District Roads are surfaced as of 31st March, 2019. Out of the total surfaced District Roads length of 5,87,004 Km, Bituminous Top (BT) and Cement Concrete (CC) roads together accounted for about 95.5% and the remaining 4.5% are Water Bound Macadam (WBM) roads. Chart 4.2 depicts that most of the States have surfaced district roads. The State/UT-wise break up of length of District Roads by type of surface is at Annexure 4.2.
- 4.6. In respect of surfaced district road length seen in Chart 4.2, again Maharashtra topped the States with 99,305 km followed by Uttar Pradesh (55,816 km),

Madhya Pradesh (50,714 km), Karnataka (48,790 km) and Tamil Nadu (48,236 km). These five States together account for about 52% of the total surfaced District Roads in the country. In majority of the States, District Roads are fully surfaced. In Maharashtra, about 91.6 percent of District Roads are surfaced where as in Karnataka this is about 98.4 percent. In States of Uttar Pradesh, Madhya Pradesh, Tamil Nadu, Kerala, Haryana, Jharkhand, Bihar, Punjab and Himachal Pradesh District Roads are fully surfaced. In Union Territories also District Roads are fully surfaced. North Eastern States like Sikkim (50%), Arunachal Pradesh (55%) and Nagaland (57%) are at the bottom in respect of surfaced District Roads.

Chart 4.2: State/UT-wise break-up of District Roads as on 31.03.2019



Note: Arunachal Pradesh has not classified PWD roads into State Highways, District Roads and Other Roads. The length of PWD roads in the State have been reflected under State Highways.

Section - 5

Section – 5

RURAL ROADS

5.1 In India, Rural Roads consists of roads built and constructed by of Panchayati Raj Institutions, (ZillaParishad, Panchayat Samiti, Gram Panchayat), Pradhan Mantri GramSadakYojana (PMGSY) and State PWDs. Rural Roads though defined as low traffic volume roads are a key component of rural

development, since it promotes access to economic and social services, thereby generating increased agricultural productivity, non-agriculture employment as well as non-agricultural productivity, which in turn expands rural growth opportunities and real income through which poverty can be reduced.

RURAL ROADS IN INDIA

5.2 India has rural road network of 45,22,228 km (including JRY Roads) as on 31st March 2019 (**Annexure 1.4**). Rural Roads constitute 71.4% of total road network in the country as of 31st March, 2019 (Table 1.1). Length of Rural Road excluding JRY road has increased from 35, 09,582km in 2017-18 to 36, 22,228 km in 2018-19, registered growth of 3.2 percent on an average relative to same period last year (Table 5.1 and Chart 5.1).

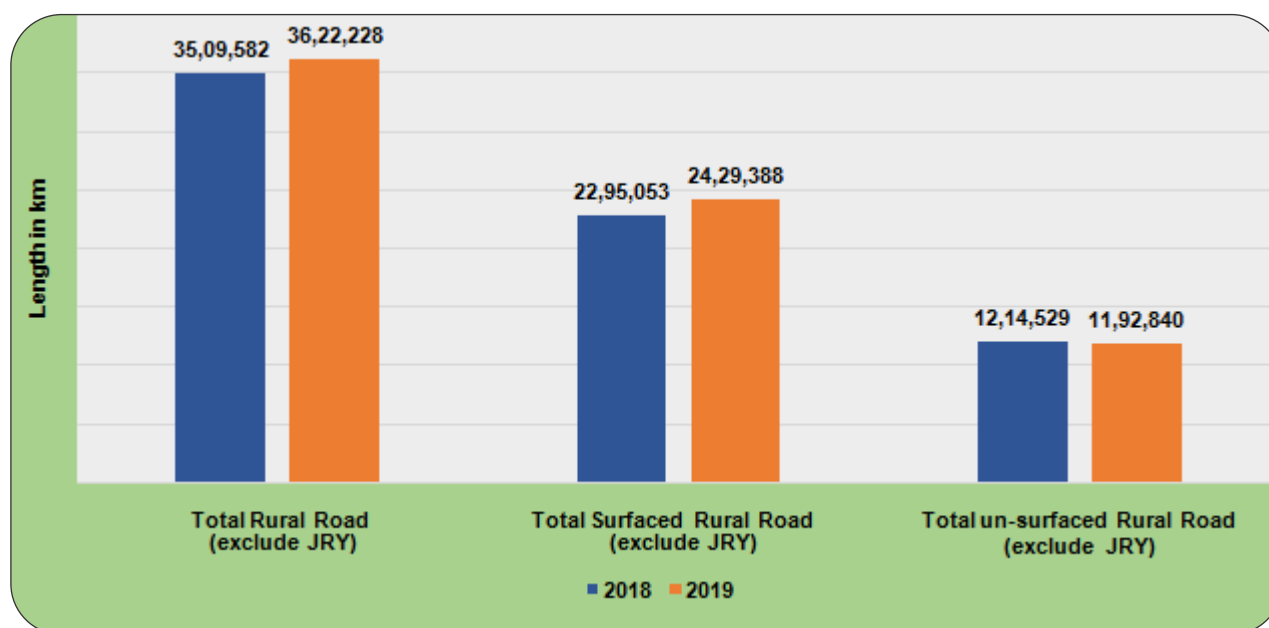
5.3 The total Rural Road (excluding JRY road) constructed as on 31st March, 2019

was at 36,22,228 Km of which 24,29,388 km are surfaced road (67%). The Rural Road shares 78.5 percent of total unsurfaced roads and 62 percent of total surfaced roads in the country as on 31st, March 2019 (Table 5.1). Out of the total surfaced rural road, Bituminous Top (BT) and Cement Concrete (CC) roads together accounted for about 86.3 percent (20,97,837 km) and the remaining 13.7 percent (3,31,552) are Water Bound Macadam (WBM) roads (**Annexure 1.2**). Details are given at **Annexure 1.2**

Table 5.1: Profile of Rural Road in 2019 vis-à-vis 2018

Category	Length as on 31st, March (in km)		% change over previous year
	2018	2019	
Total Rural Road (exclude JRY)	35,09,582	36,22,228	3.2
Total Road (excluding JRY)	53,15,797	54,31,757	2.2
% share in Total Road	66	66.7	
Total Surfaced Rural Road (exclude JRY)	22,95,053	24,29,388	5.8
Total Road surfaced (exclude JRY)	37,48,292	39,12,523	4.3
% share in total surfaced road	61.2	62.1	
Total un-surfaced Rural Road (exclude JRY)	12,14,529	11,92,840	-1.7
Total Road un-surfaced (exclude JRY)	15,67,506	15,19,234	-3.1
% share in total un-surfaced road	77.5	78.5	

Chart 5.1: Rural Road network in 2019 vis-à-vis 2018



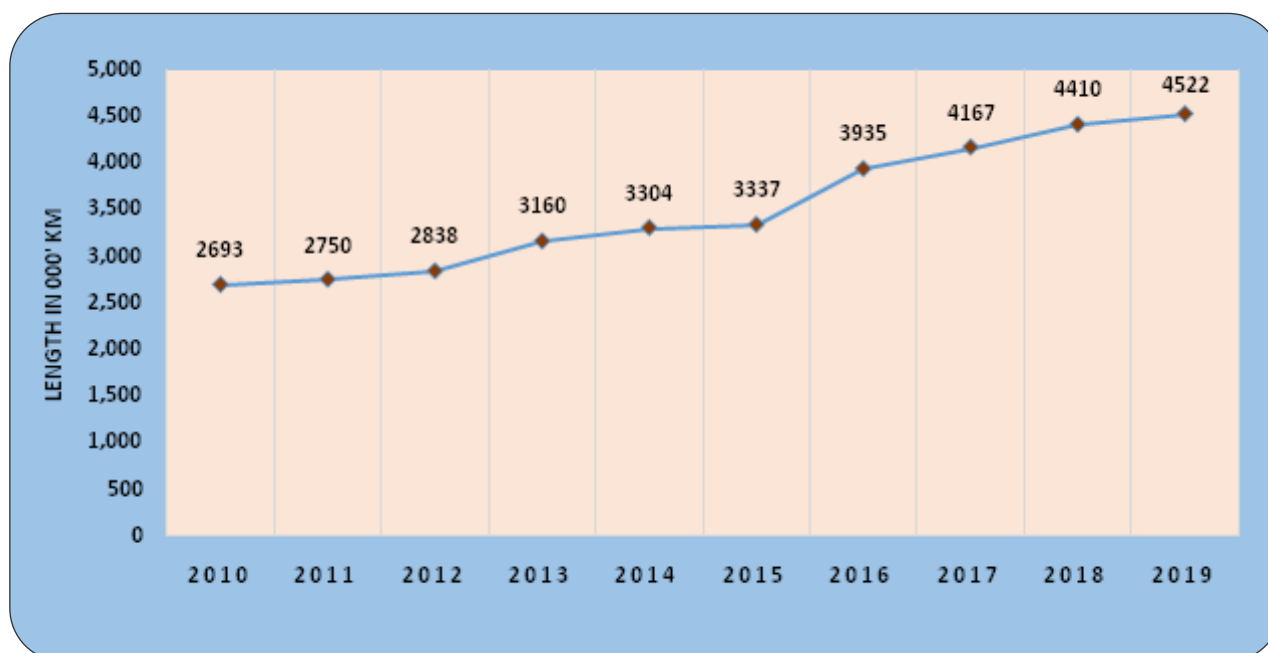
5.4. Despite some marginal fluctuations, there has been a clear increase in construction of Rural Roads since 1950-51 (Table 5.2). Subsequently, its percentage share in total road has been consistently increased during the period 1950-51 to 2018-19. Rural Road constructed has increased from 20.6 lakh Km in 1950-51 to

45.22lakh Km in 2018-19, recorded more than 2 times increase in 68 years (Chart 5.2). There has been significant increase in the construction of Rural Road since 1990-91. Rural Road constitutes 71.4 percent of countries total road network in 2018-19.

Table 5.2: Rural Roads Network

Year	Length (Km)	% Share in Total Roads
1950-51	2,06,408	51.6
1960-61	1,97,194	37.6
1970-71	3,54,530	38.7
1980-81	6,28,865	42.3
1990-91	12,60,430	54.2
2000-01	19,72,016	58.5
2010-11	27,49,804	58.8
2014-15	33,37,255	61
2015-16	39,35,337	70.2
2016-17	41,66,916	70.7
2017-18	44,09,582	70.9
2018-19	45,22,228	71.4

Chart 5.2: Trends in the construction of Rural Roads from 2010 to 2019



COMPONENTS OF RURAL ROADS

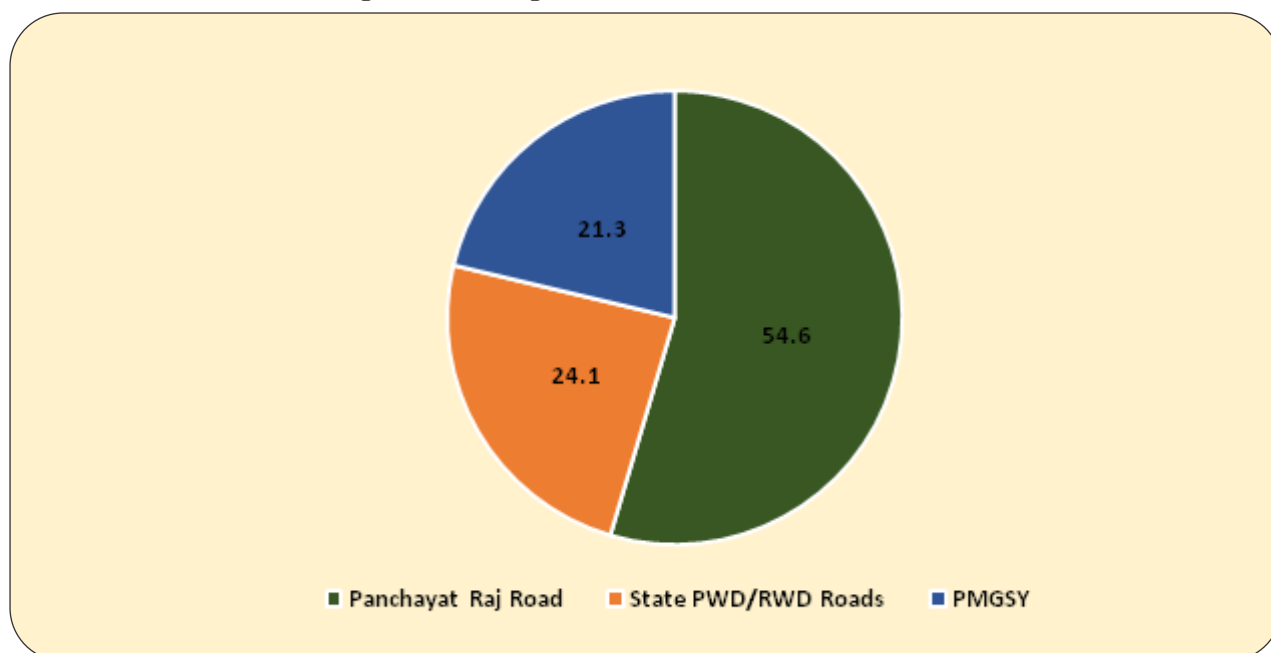
5.5 Rural Roads consisted of roads built and constructed by of Panchayati Raj Institutions, (Zilla Parishad, Panchayat Samiti, Gram Panchayat), Pradhan Mantri Gram Sadak Yojana (PMGSY) and State PWDs. Details are given at **Annexures 5.2 to 5.4**. The total length of Rural Road (excluding JRY road) as on 31st March, 2019 is at 36,22,228 Km, out of which, 7,70,904 km (21%) of PMGSY Roads have been constructed by the National Rural Road Development Agency (NRRDA) of

Ministry of Rural Development (**annexure 5.2**), 8,72,530 Km (24%) of road built by the State PWD/RWD Departments (**annexure 5.3**), 19,78,794 Km (55%) of Panchayat Raj Roads have been built by the States/UT Panchayati Raj Departments (**Annexure 5.4**) and the remaining 9 lakhs km of roads was constructed under the erstwhile Jawahar Rozgar Yojana (JRY) Scheme as of 31st March, 2019 (Table 5.3 & Chart 5.3).

Table 5.3: Components wise profile of Rural Road as on 31st March, 2019

Components	Total (km)	Surfaced (km)	% of surfaced road
PMGSY Roads	7,70,904	6,25,973	81.1
State PWD/RWD Roads	8,72,530	7,13,977	81.8
Panchayat Raj Roads	19,78,794	10,89,439	55.1
Rural Roads(excluding JRY)	36,22,228	24,29,388	67.1

Chart 5.3: Component wise profile of Rural Roads as on 31st March, 2019



5.6 As compared to the previous year 2018, there has been increase the construction of Rural Road, which has increased from 35,09,582 km in 2018 to 36,22,228 km in 2019, registering a growth of 3.2 percent on average over previous period. Panchayati raj road constitute more than fifty percent of Rural Road, however, its length has declined from 20,02,379 km in

2018 to 19,78,794 km, i.e. marginal decline in growth of about -1.2 percent over previous period. Other categories like PMGSY and PWD/RWD Roads showed increase in length in 2019 as compared to 2018 (Table 5.4). Rural road (excluding JRY) constitutes 66.6 percent of total surfaced road network in the country in 2019.

Table 5.4: Components wise profile of Rural Road in 2019 vis-à-vis 2018

Components	Length of Rural road as on 31st, March (km)		
	2018	2019	% change in 2019 over 2018
PMGSY Roads	7,31,234	7,70,904	5.4
% share	20.8	21.3	
PWD/RWD Roads	7,75,970	8,72,530	12.4
% share	22.1	24.1	
Panchayati Raj Roads	20,02,379	19,78,794	-1.2
% share	57.1	54.6	
Rural Roads* (excluding JRY)	35,09,582	36,22,228	3.2
% share in total road (excluding JRY)	66	66.6	

5.7 Surfaced road length excluding JRY road has increased from 22,95,053 km in 2018 to 24,29,388 km in 2019, recorded growth of 5.9 percent on average over previous period (Table 5.5). Length of surfaced Rural Road has increased for all categories in 2019 as compared to 2018

seen in Table 5.5. Rural Road (excluding JRY) constitutes 61.8 percent of total surfaced road network in the country in 2019. Category wise profile of Rural Road as on 31st March, 2019 is presented at Table 5.6.

Table 5.5: Components wise profile of Surfaced Rural Road in 2019 vis-à-vis 2018

Components	Surfaced Rural Road as on 31st, March (km)		
	2018	2019	% change in 2019 over 2018
PMGSY Roads	5,85,284	6,25,973	7.0
% share	25.5	25.8	
PWD/RWD Roads	6,33,340	7,13,977	12.7
% share	27.6	29.4	
Panchayati Raj Roads	10,76,429	10,89,439	1.2
% share	46.9	44.8	
Rural Roads* (excluding JRY)	22,95,053	24,29,388	5.9
% share in total surfaced (excluding JRY)	61.2	62.1	

Table 5.6: Components wise Profile of Rural Road as on 31st March, 2019

(Length in km)

Components	Total Length	WBM/WMM	BT/CC	Total Surfaced	Un-surfaced
PMGSY Roads	7,70,904	27,173	5,98,800	6,25,973	1,44,931
% share	21.2	8.2	28.5	25.8	12.1
PWD/RWD Roads	8,72,530	68,451	6,45,526	7,13,977	1,58,553
% share	24	20.6	30.8	29.4	13.2
Panchayati Raj Roads	19,78,794	2,35,928	8,53,511	10,89,439	8,89,355
% share	54.6	71.2	40.7	44.8	75
Rural Roads (excluding JRY)	36,22,228	3,31,552	20,97,837	24,29,388	11,92,840

RURAL ROADS - STATE/UT WISE DISTRIBUTION

5.8 The State/UT-wise break-up of length of Rural Road is presented at Table 5.7. Rural Road (including JRY) constitutes 63.78 percent of total surfaced road

network in the country as on 31st March, 2019. For second consecutive time in 2019, that Maharashtra (Table 5.7) accounted for the largest share of Rural

Roads with 4,26,327 km (11.8%) followed by Assam 3,72,510 km with (10.3%), Bihar 2,59,507 km (7.2%), Uttar Pradesh 2,55,576 km (7.1%) and Madhya Pradesh 2,32,344 km (6.4%). These five States account for about 43 % of the total length of Rural Roads in the country. The State/UT-wise break-up of Rural Road is at **Annexure 5.1**

5.9 In States of Uttar Pradesh, Punjab, Puducherry and Rajasthan more than 90

percent of Rural Roads are surfaced (Table 5.7), whereas in Assam, Karnataka, Arunachal Pradesh, Manipur and Nagaland, more than half of the Rural Roads are un-surfaced. Assam is second largest in respect of total length of Rural Road in the country, however lies at the bottom in respect of surfaced rural roads (20.3%) followed by Meghalaya (35.5%) and Arunachal Pradesh (42.9%). The State/UT-wise break-up of Rural Road is at **Annexure 5.1**.

Table 5.7: State wise distribution of Rural Road on 31st March, 2019

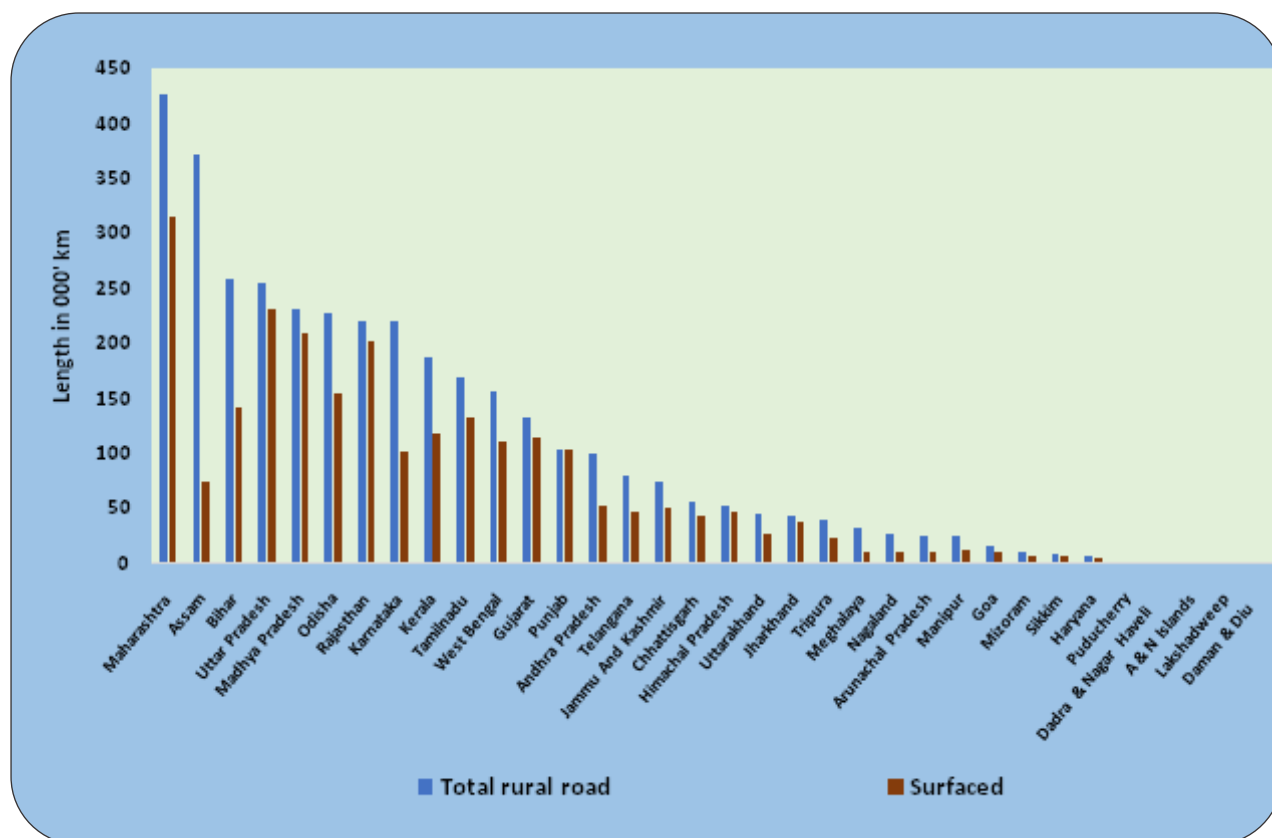
Sl.No.	Name of State/UT	Total	Surfaced	% of Surfaced Rural Road
1	Andhra Pradesh	1,00,132	52,287	52.2
2	Arunachal Pradesh	25,832	11,083	42.9
3	Assam	3,72,510	75,645	20.3
4	Bihar	2,59,507	1,42,300	54.8
5	Chhattisgarh	56,575	43,832	77.5
6	Goa	16,054	11,362	70.8
7	Gujarat	1,32,467	1,15,428	87.1
8	Haryana	7,027	5,614	79.9
9	Himachal Pradesh	53,033	47,374	89.3
10	Jammu And Kashmir	75,684	51,047	67.4
11	Jharkhand	44,317	38,081	85.9
12	Karnataka	2,20,130	1,02,302	46.5
13	Kerala	1,88,517	1,19,161	63.2
14	Madhya Pradesh	2,32,344	2,09,425	90.1

table contd...

table 5.7 contd...

Sl.No.	Name of State/UT	Total	Surfaced	% of Surfaced Rural Road
15	Maharashtra	4,26,327	3,15,832	74.1
16	Manipur	25,339	12,376	48.8
17	Meghalaya	32,537	11,544	35.5
18	Mizoram	11,849	6,879	58.1
19	Nagaland	28,039	11,765	42.0
20	Odisha	2,26,922	1,54,430	68.1
21	Punjab	1,04,565	1,03,919	99.4
22	Rajasthan	2,20,402	2,03,108	92.2
23	Sikkim	8,550	6,803	79.6
24	Tamilnadu	1,70,246	1,32,245	77.7
25	Telangana	80,701	46,671	57.8
26	Tripura	40,236	24,147	60.0
27	Uttarakhand	44,805	28,244	63.0
28	Uttar Pradesh	2,55,576	2,31,077	90.4
29	West Bengal	1,57,497	1,11,202	70.6
30	A & N Islands	610	556	91.3
31	Chandigarh	0	0	0.0
32	Dadra & Nagar Haveli	798	798	100.0
33	Daman & Diu	116	116	100.0
34	Delhi	0	0	0.0
35	Lakshadweep	228	228	100.0
36	Puducherry	2,755	2,508	91.0
Total (Excluding JRY Roads)		36,22,228	24,29,388	67.1
Total (Including JRY Roads)		45,22,228	26,12,590	57.8

Chart 5.4: The State/UT-wise break-up of Rural Roads as on 31st March, 2019



5.10 In respect of total surfaced Rural Road as seen in Chart 5.4, again Maharashtra topped amongst the States with 3,15,832 km of road followed by Uttar Pradesh (2,31,077 km), Madhya Pradesh (2,09,425 km), Rajasthan (2,03,108 km) and Odisha (1,54,430 km). In Maharashtra, 74.1 percent of Rural Roads are surfaced where as in Uttar Pradesh

and Rajasthan more than 90 percent of Rural Roads are surfaced. In Odisha only 68 percent of Rural Roads are surfaced. North Eastern States like Assam (20.3%), Arunachal Pradesh (42.9%), Meghalaya (35.5%) and Nagaland (42%) are at the bottom in respect of surfaced Rural Roads.

Section - 6

Section – 6

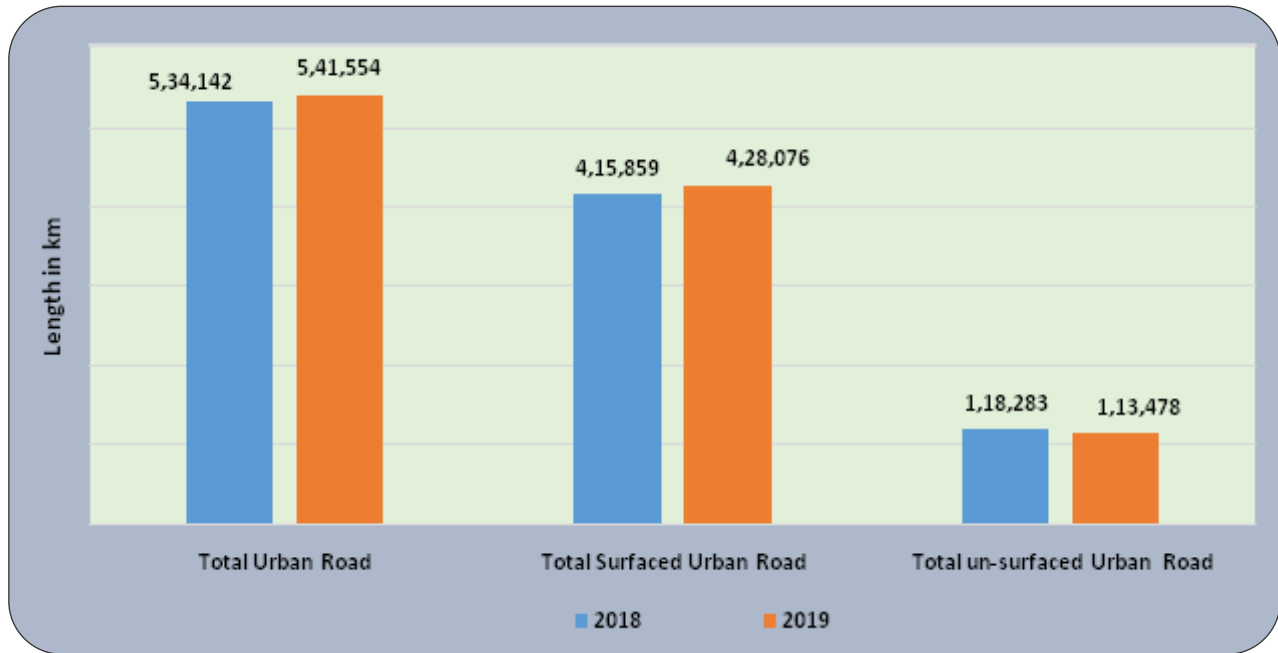
URBAN ROADS

- 6.1 Urban Roads consist of Municipal Roads under Urban Development Departments of States and UTs, roads in Railway Zones, MES roads constructed by Military Engineering Services (MES) and Major and Minor Port Roads. Details on categories of Urban Road is presented at **Annexures 6.1 to 6.5**.
- 6.2 The total length of Urban Road as on 31st March, 2019 was at 5,41,554Km, of which surfaced road constitute about 79 percent (4,28,157 km) of total Urban Roads. The Construction of Urban Road has increased from 5,34,142 km in 2017-18 to 5,41,554 km in 2018-19, registered growth of 1.4 percent relative to the same period last year. (Table 6.1 and Chart 6.1). Urban Road shares about 8.5 percent of total road network in the country as on 31st March, 2019.
- 6.3 The total length of surfaced Urban Road increased from 4,15,859 km in 2017-18 to 4,28,157 km in 2018-19, registering an increase of 3 percent in 2019 corresponding to same period in 2018. Around 79 percent of total surfaced roads in the country are surfaced road percent (4,28,157 km). Urban Road constitutes 10.4 percent of total surfaced road (Table 6.1) and 5 percent (1,13,479 km) of total unsurfaced road in the country as on 31st, March 2019 (**Annexure 1**). Out of the total surfaced Urban Road, Bituminous Top (BT) and Cement Concrete (CC) roads together accounted for 71.5 percent (3, 87,087 km) and the remaining 7.6 percent(41,071 km) are Water Bound Macadam (WBM) roads (**Annexure 1.2**).

Table 6.1: Urban Road network in 2019 vis-à-vis 2018

Category	Length as on 31st, March (km)		% change in 2019 over 2018
	2018	2019	
Total Urban Road	5,34,142	5,41,554	1.4
Total Road(include JRY)	62,15,797	63,31,757	1.8
% share in Total Road	8.6	8.5	
Total Surfaced Urban Road	4,15,859	4,28,157	3.0
Total Road surfaced (include JRY)	39,31,494	40,95,725	4.2
% share in total surfaced road	10.6	10.4	
Total un-surfaced Urban Road	1,18,283	1,13,478	-4.1
Total Road un-surfaced (include JRY)	22,84,304	22,36,032	-2.1
% share in total un-surfaced road	5.2	5.0	

Chart 6.1: Urban Road Network



TRENDS OF URBAN ROAD

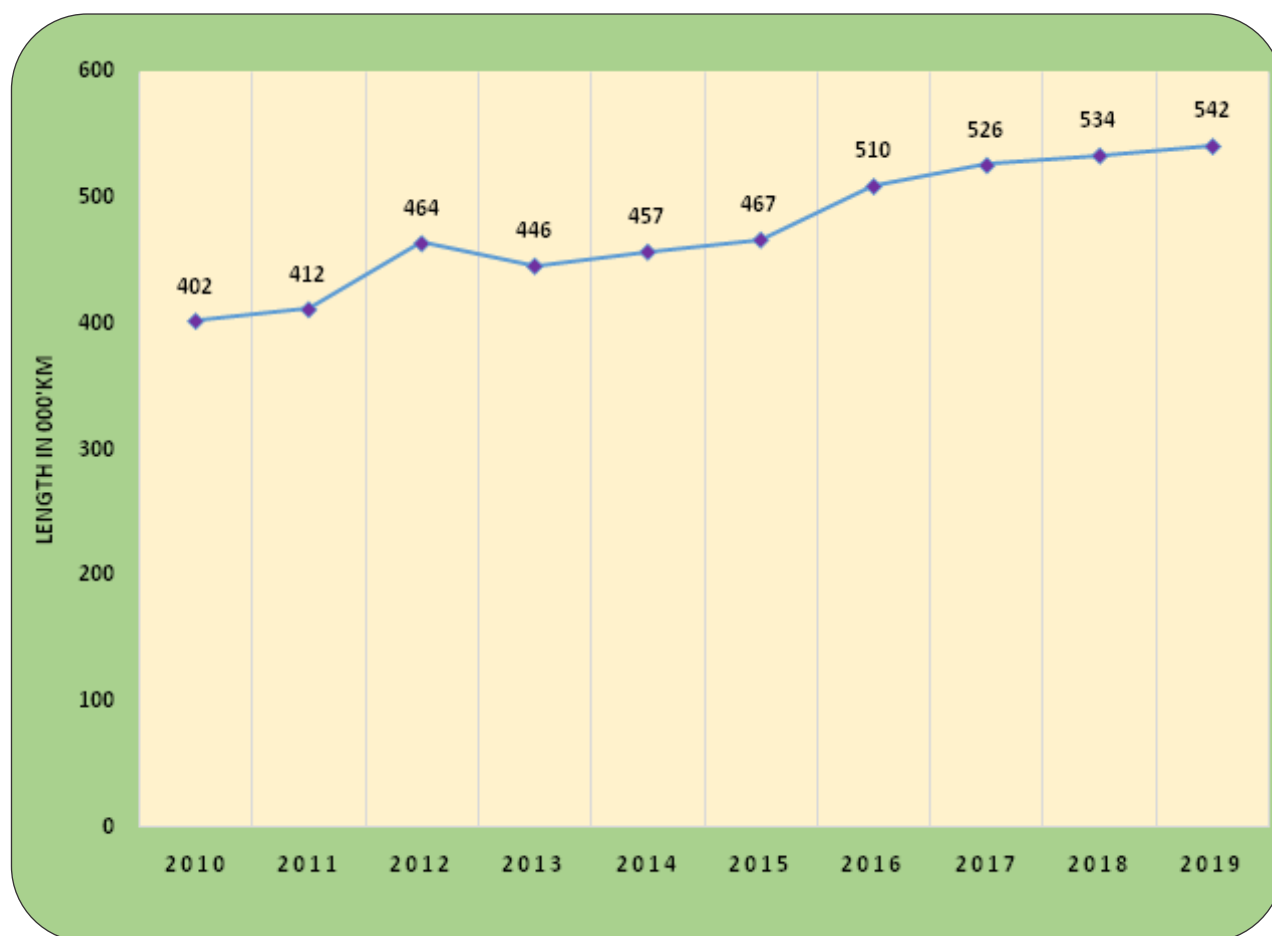
6.4 Despite some marginal fluctuations, there has been a clear increasing trend in total length of Urban Roads since 1960-61 (Table 6.2 and Chart 6.2). The share of Urban Road in total road has stabilised marginal variations during the period

1960-61 to 2018-19. The construction of Urban Road has increased from 46 thousand Km in 1960-61 to 542 thousand Km in 2018-19, marked more than 11 times increase (Chart 6.2).

Table 6.2: Trend of Urban Roads: 1960-61 to 2018-19

Category	Urban Roads (Km)	% Share to Total Roads
1960-61	46,361	8.8
1970-71	72,120	7.9
1980-81	1,23,120	8.3
1990-91	1,86,799	8.0
2000-01	2,52,001	7.5
2010-11	4,11,679	8.8
2014-15	4,67,106	8.5
2015-16	5,09,730	9.1
2016-17	5,26,483	8.9
2017-18	5,34,142	8.6
2018-19	5,41,554	8.5

Chart 6.2: Trend in construction of Urban Roads from 2010 to 2019



CATEGORY WISE DISTRIBUTION OF URBAN ROADS

6.5 Urban Roads consist of Municipal Roads under Urban Development Departments of States/UTs, roads in Railway Zones, MES roads constructed by Military Engineering Services (MES) and Major and Minor Port Roads. Details on categories of Urban Road are presented at **Annexures 6.1 to 6.5**.

6.6 The total length of Urban Road as on 31st March, 2019 was at 5,41,554 Km, out of which 5,10,319km (94.2%) has constructed by Municipalities (**Annexure 6.2**), 17,573Km (3.2%) built by Military Engineering Services

(annexure 6.3), 761Km (0.1%) built by Major Ports (**Annexure 6.4**), 677 km (0.1%) constructed by Minor Port (**Annexure 6.5**) and the remaining 12,224 km (2.3%) constructed by Railways(**Annexure 6.6**).

6.7 Category wise distribution of Urban Road reveals Municipal Roads with 5,10,319 km constitute more than 94 percent of total Urban Roads in the country in 2019 followed by MES road with 17,573 km (3.2%) (Table 6.3).

Table 6.3: Category wise profile of Urban Road as on 31st March, 2019

Category	Total Length (km)	WBM/WMM	BT/CC	Total Surfaced	Un-surfaced
Municipal Roads	5,10,319	38,614	3,59,280	3,97,893	1,12,425
% share	94.2	94	92.8	92.9	99.1
MES Roads	17,573	1,116	16,346	17,462	111
% share	3.2	2.7	4.2	4.1	0.1
Major Port Roads	761	55	656	710	50
% share	0.1	0.1	0.2	0.2	0
Minor Port Roads	677	43	583	626	51
% share	0.1	0.1	0.2	0.1	0
Railway Roads	12,224	1,243	10,141	11,384	839
% share	2.3	3	2.6	2.7	0.7
Urban Roads	5,41,554	41,071	3,87,006	4,28,076	1,13,476

STATE/UT-WISE DETAILS OF URBAN ROADS

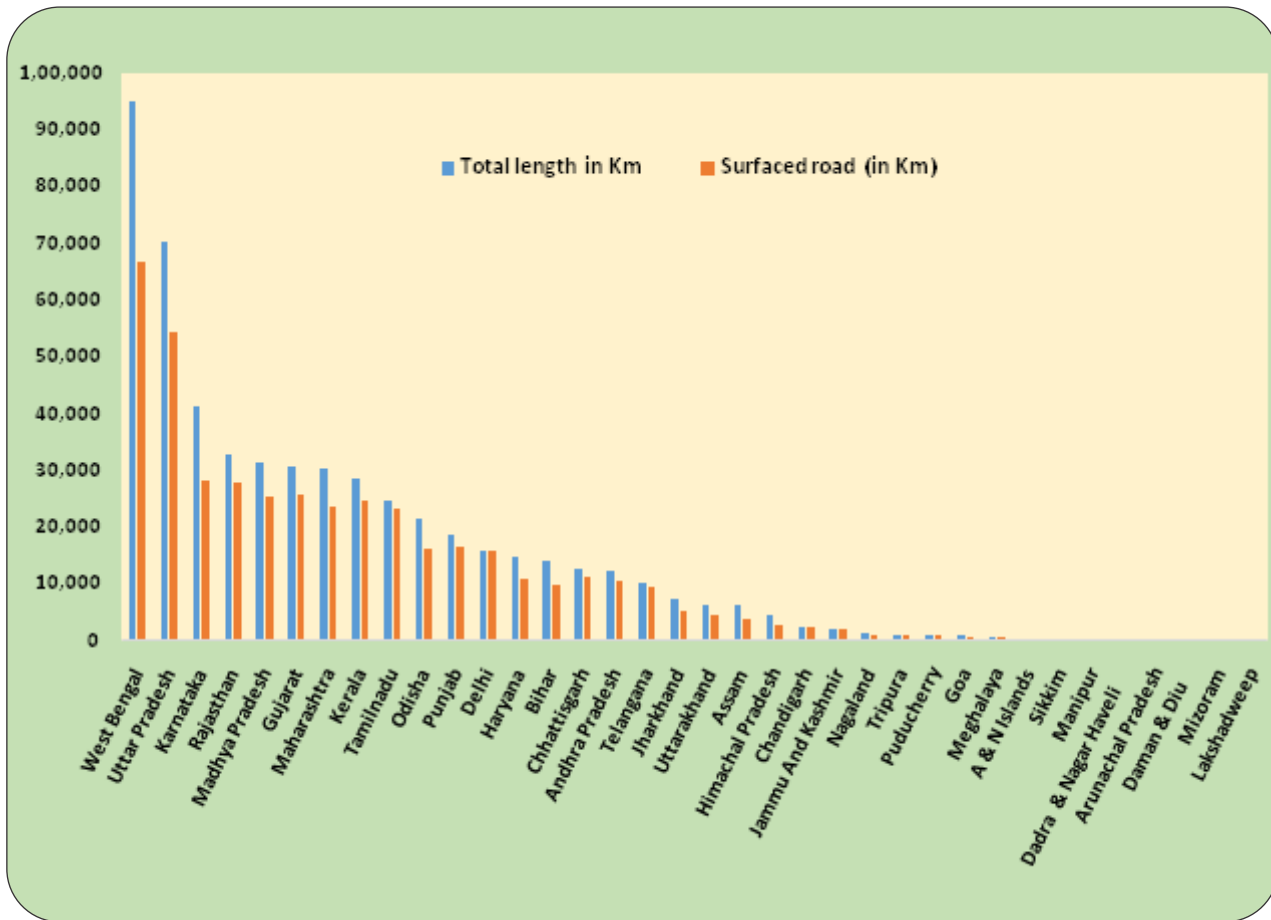
6.8 The State/UT-wise break-up of Urban Roads (**Annexure 6.1**) shows, for the second consecutive time in 2019, West Bengal accounted for the largest share with 95,065 km (17.6%) followed by Uttar Pradesh with 70,178 km with (13.0%), Karnataka 41,396 km (7.6%), Rajasthan 32,772 km (6.1%) and Madhya Pradesh 31,343 km (5.8%). These five States account for about 50 % of the total length of Urban Roads in the country.

6.9 In respect of surfaced Urban Road length as seen in Table 6.4, again same set of States topped the list. West Bengal accounted for the largest share of surfaced urban road in 2019 with 66,746 km (70.2%) followed by Uttar Pradesh with 54,260 km (77.3%), Karnataka 28,323 km (68.4%), Rajasthan 28,058 km (85.6%) and Madhya Pradesh 25,441 km (81.2%).

Table 6.4: State/UT-wise distribution of Urban Roads as on 31st March, 2019

Sl.No	Name of State/UT	Total (km)	Surfaced (km)	% of Surfaced road
1	Andhra Pradesh	12,342	10,715	86.8
2	Arunachal Pradesh	59	57	96.6
3	Assam	6,268	3,978	63.5
4	Bihar	14,308	9,923	69.4
5	Chhattisgarh	12,824	11,229	87.6
6	Goa	912	817	89.6
7	Gujarat	30,920	25,779	83.4
8	Haryana	14,853	10,800	72.7
9	Himachal Pradesh	4,706	2,881	61.2
10	Jammu And Kashmir	2,096	2,069	98.7
11	Jharkhand	7,433	5,335	71.8
12	Karnataka	41,396	28,323	68.4
13	Kerala	28,785	24,817	86.2
14	Madhya Pradesh	31,343	25,441	81.2
15	Maharashtra	30,386	23,749	78.2
16	Manipur	126	70	56.1
17	Meghalaya	571	564	98.7
18	Mizoram	11	5	48.2
19	Nagaland	1,470	913	62.1
20	Odisha	21,425	16,327	76.2
21	Punjab	18,887	16,508	87.4
22	Rajasthan	32,772	28,058	85.6
23	Sikkim	156	155	99.2
24	Tamilnadu	24,693	23,475	95.1
25	Telangana	10,382	9,637	92.8
26	Tripura	1,073	1,062	98.9
27	Uttarakhand	6,360	4,752	74.7
28	Uttar Pradesh	70,178	54,260	77.3
29	West Bengal	95,065	66,746	70.2
30	A & N Islands	214	200	93.5
31	Chandigarh	2,466	2,466	100
32	Dadra & Nagar Haveli	84	84	100
33	Daman & Diu	54	54	100
34	Delhi	15,862	15,802	99.6
35	Lakshadweep	4	4	100
36	Puducherry	1,071	1,020	95.2
	All India	5,41,554	4,28,076	79

Chart 6.3 State/UT wise distribution of Length of Urban Roads as on March 31st, 2019.



Section - 7

Section – 7

PROJECT ROADS

7.1 Project Roads largely include roads built/coming under the purview of Central and State Government agencies and departments. Roads under this category include roads of Forest Departments, Irrigation Departments, Electricity Departments, roads in coal fields and coal mines of Coal India Ltd., roads under the plant areas of Steel Authority of India Limited (SAIL), National Mineral Development Corporation (NMDC), Sugarcane Departments of States/UT and Border Roads Organisation (BRO). Details on categories of Project Road is presented at **Annexures 7.1 to 7.8**.

7.2 The total length of Project Roads as on 31st March, 2019 was at 3,43,163km, of which surfaced road constitute about 45.8 percent (1,57,171km) of total Projects Roads. Construction of Project Road has decreased marginally from 3,47,547km in 2017-18 to 3,43,163 km in 2018-19,

registered a decline in growth of about 1.3 percent on an average over previous period (Table 7.1). Project Road shares 5.4 percent of total road network in the country as on 31st March, 2019.

7.3 The total length of Project Road as on 31st March, 2019 is at 3,43,163 km, of which surfaced road constitute about 45.8 percent (1,57,171km). Total Surfaced Project Road constitutes 3.8 percent of total surfaced road in the country (Table 7.1). Out of the total surfaced Project Road, Bituminous Top (BT) and Cement Concrete (CC) roads together accounted for 61.1 percent (96,116 km) and the remaining 38.9 percent (61,056 km) were Water Bound Macadam (WBM) roads (**Annexure 1.2**). However, Unsurfaced Project Road share 8.2 percent (1,85,992 km) of unsurfaced road in the country as on 31st, March 2019 (Table 7.1). **Annexure 1.2**.

Table 7.1: Profile of Urban Road in 2019 vis-à-vis 2018

Category	Length as on 31st, March (Km)		% change over previous year
	2018	2019	
Total Project Road	3,47,547	3,43,163	-1.3
Total Road(include JRY)	62,15,797	63,31,757	1.8
% share in Total Road	5.6	5.4	
Total Surfaced Project Road	1,45,471	1,57,171	8
Total Road surfaced (include JRY)	39,31,494	40,95,725	4.2
% share in total surfaced road	3.7	3.8	
Total un-surfaced Project Road	2,02,077	1,85,992	-8
Total Road un-surfaced (include JRY)	22,84,304	22,36,032	-2.1
% share in total un-surfaced road	8.8	8.3	

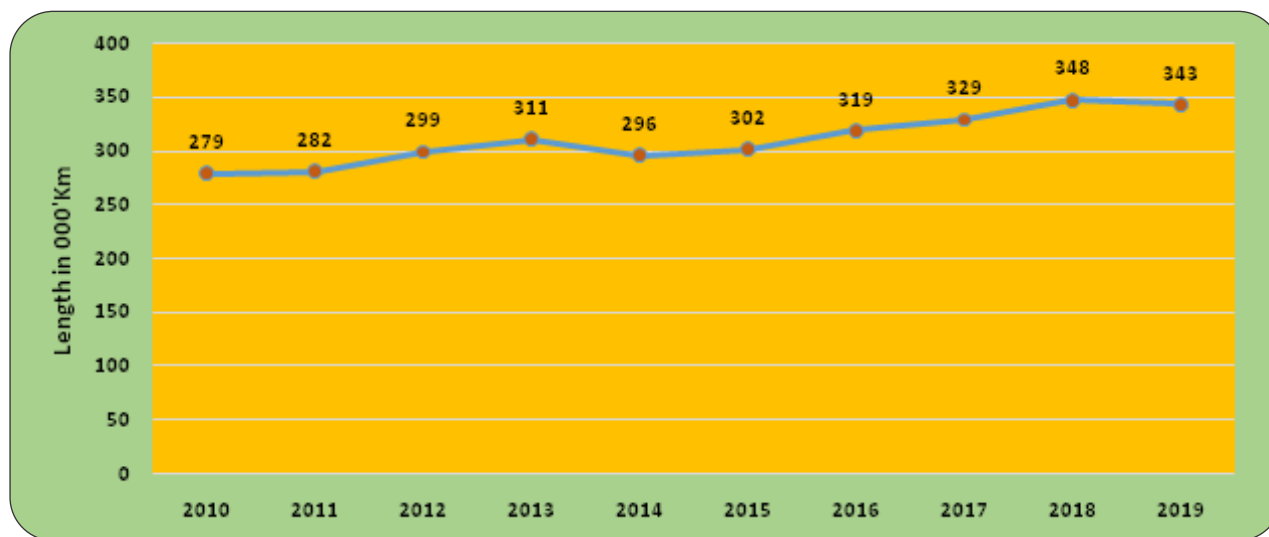
7.4 The construction of Project Roads has increased during the period 1970-71 to 2017-18, however shown marginal decrease during 2018-19 (Table 7.2). Project Road shares 5.4 percent of total roads network in the country in 2018-19.

The total length of Project Roads has decreased from 347547 km as on 31.3.2018 to 343163 as on 31.03.2019, registering a decrease of 1.3% in 2019 relative to same period in 2018. (Table 7.2).

Table 7.2: Project Roads Network

Category	Projects Roads	% Share in Total Roads	% Change in 2019 over 2018
1970-71	1,30,893	14.3	
1980-81	1,85,511	12.5	41.7
1990-91	2,09,737	9	13.1
2000-01	2,23,665	6.6	6.6
2010-11	2,81,628	6	25.9
2014-15	3,01,505	5.5	7.1
2015-16	3,19,109	5.7	5.8
2016-17	3,28,897	5.6	3.1
2017-18	3,47,547	5.6	5.7
2018-19	3,43,163	5.4	-1.3

Chart 7.1: The trends of construction of Project Roads from 2010 to 2019



The State/UT-wise break-up of Project Roads

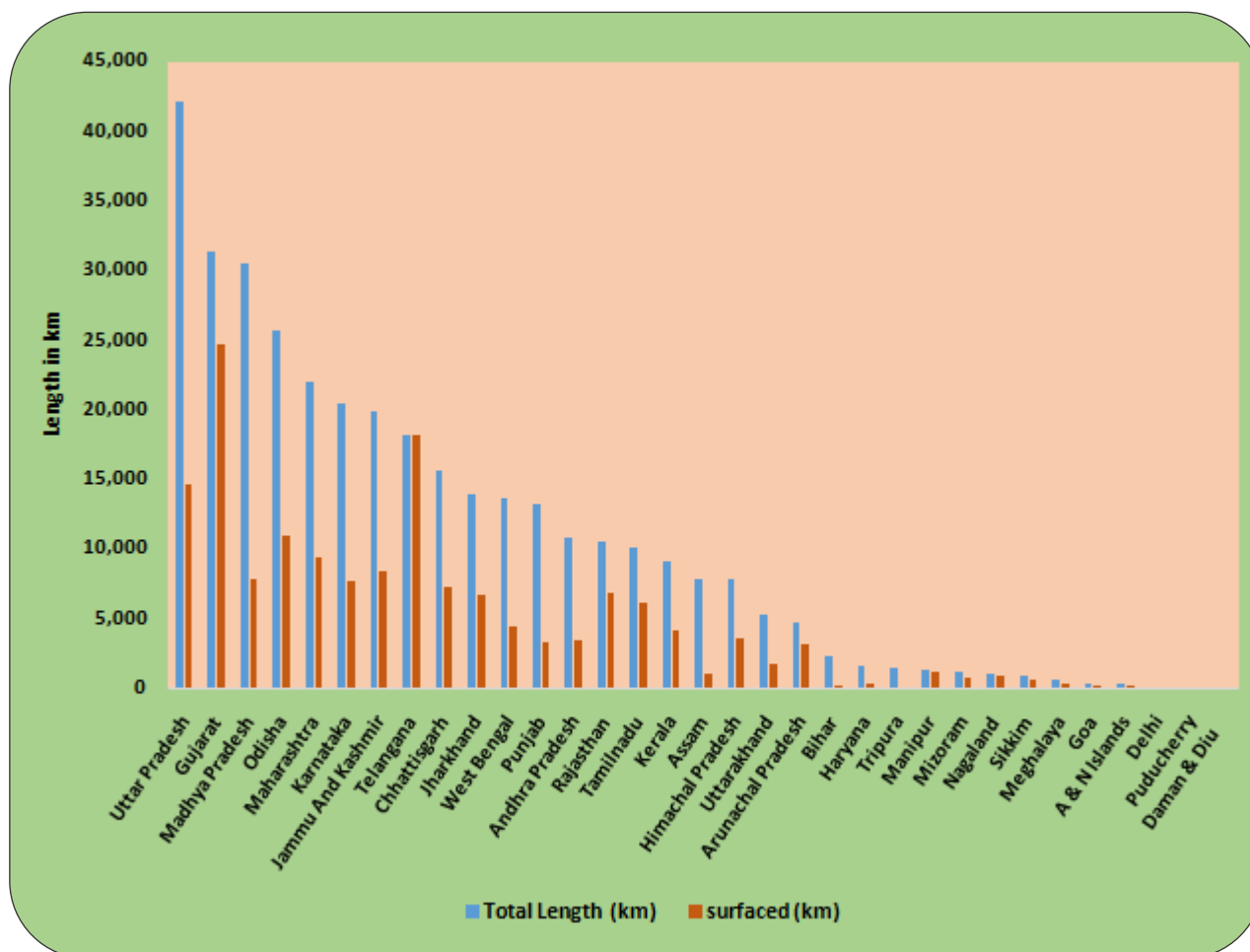
7.5 It may be seen from the Chart 7.2 that Uttar Pradesh accounted for the largest share (12.28%) in total Project Roads as on 31st March 2019, followed by Gujarat (9.1%), Madhya Pradesh (8.9%), Odisha (7.4%) and Maharashtra (6.4%). These

five States together account for about 44% of the total length of Project Roads as on 31.03.2019. The State/UT-wise break-up of Project Roads is given in the **Annexure 7.1**.

Table 7.3: State/UT wise distribution of Project Roads as on 31st March, 20219

Sl.No	Name of State/UT	Total	Surfaced	% of Surfaced road
1	Andhra Pradesh	10,751	3,443	32
2	Arunachal Pradesh	4,717	3,073	65.2
3	Assam	7,813	1,026	13.1
4	Bihar	2,230	107	4.8
5	Chhattisgarh	15,672	7,172	45.8
6	Goa	334	165	49.5
7	Gujarat	31,343	24,725	78.9
8	Haryana	1,594	268	16.8
9	Himachal Pradesh	7,781	3,542	45.5
10	Jammu And Kashmir	19,826	8,391	42.3
11	Jharkhand	13,928	6,621	47.5
12	Karnataka	20,413	7,625	37.4
13	Kerala	9,036	4,055	44.9
14	Madhya Pradesh	30,484	7,741	25.4
15	Maharashtra	21,993	9,349	42.5
16	Manipur	1,298	1,202	92.6
17	Meghalaya	603	229	37.9
18	Mizoram	1,082	778	71.9
19	Nagaland	1,035	796	76.9
20	Odisha	25,733	10,962	42.6
21	Punjab	13,195	3,208	24.3
22	Rajasthan	10,444	6,870	65.8
23	Sikkim	881	501	56.8
24	Tamilnadu	10,052	6,140	61.1
25	Telangana	18,156	18,146	99.9
26	Tripura	1,439	20	1.4
27	Uttarakhand	5,268	1,670	31.7
28	Uttar Pradesh	42,173	14,685	34.8
29	West Bengal	13,576	4,400	32.4
30	A & N Islands	218	174	79.7
31	Chandigarh	0	0	0
32	Dadra & Nagar Haveli	0	0	0
33	Daman & Diu	1	1	100
34	Delhi	52	52	100
35	Lakshadweep	0	0	0
36	Puducherry	44	36	81
All India		3,43,163	1,57,171	45.8

Chart 7.2: State/UT-wise Length of Project Roads (in Km) as on 31st March, 2019



7.6 The details at **Annexure 7.2 to 7.8** and the summary in **Annexure 7.1** reveals that out of the total of 3, 43,167 Km of Project Roads, as on 31st March, 2019, Forest Roads (1,82,266 Km) approximately account for 53.1% followed by Irrigation Department Roads (1,12,349 Km) with a share of about 32.7% and BRO Roads (20,949 Km) with a share of 6.1 %. The remaining 8.1% of Project Roads come under the purview of coal fields and

mines of Coal India Ltd.; SAIL and NMDC; Sugarcane and Electricity Departments of States and UTs.

7.7 Since Forest Roads run through reserved forest areas and wild life sanctuaries, only a small share (42%) are surfaced. Out of total surfaced forest roads of length 76,715 Km, B.T. / C.C. roads constitute about 48.1 per cent and the remaining 51.9 per cent is constituted by the Water Bound Macadam roads.

Section - 8

Section – 8

Major Schemes/Initiatives of Ministry of Road Transport and Highways

- 8.1 The Ministry of Road Transport and Highways has been making constant efforts to expand and upgrade National Highways (NHs) Network in the country into a road network of international standards for uninterrupted flow of traffic with enhanced safety features. The Ministry implements several Central Sector Schemes such as the Special Accelerated Road Development Programme in the North East (SARDP-NE) including Arunachal Package, Development of the Left Wing Extremism, the Vijayawada Ranchi corridor, Bharatmala Pariyojana etc for enhancing connectivity for remote far flung and isolated areas, including North-East Region (NER), Left Wing Extremism (LWE) affected areas including Tribal areas.
- 8.2 The pace of construction of National Highways (NH) has increased incrementally from 2014-15 to 2021-22 due to the systematic push and focus of the government on transport infrastructure development. In 2014-15, the NH construction was 12 km/day, which increased to 28 km/day in 2019-20 and subsequently to 37 km/day in 2020-21. In 2021-22, the ministry has a target to construct NHs of length 12,000 Km (33 km/day). The ministry has constructed 5,835 km in 2021-22 (till Dec'21) despite the impact of 2nd wave of Covid-19 and monsoons. The ministry is confident of achieving the overall target by the end of 2021-22.
- 8.3 The Ministry has implemented several reforms and initiatives to address the issues leading to a significant improvement in the pace of construction. These initiatives are (i) Increase in the Total Fund Available and Capital Expenditure by the Ministry, (ii) Increase in Public Private Partnerships, (iii) Promotion of domestic contractor ecosystem under 'Atmanirbhar Bharat', (iv) Providing relief measures from the impact of COVID-19 pandemic to Contractors/Developers Under 'Atmanirbhar Bharat', (v) Focusing on minimizing project delays, (vi) Decentralization and delegation measures, coupled with digital initiatives, etc.
- 8.4 **Comprehensive guidelines regarding delegation of authorities for the procurement, preparation, review and approval of DPRs**
- MoRTH was empowered through a Cabinet decision to decide on mode of delivery of projects –PPP/EPC. It was authorized to appraise projects up to Rs. 1,000 crores – both for PPP and EPC mode in place of earlier Rs. 500 crores. In

order to enhance inter-ministerial coordination, an Infrastructure Group has been created under the Ministry headed by the Minister to resolve multi-stakeholder issues. Processes have been streamlined like online approval of General Arrangement Drawings (GADs) for ROBs/RUBs. Forest and Environmental Clearances have been de-linked. Stage - I Forest Clearance is now considered as deemed approval for

8.5 Land Acquisition-New Comprehensive guidelines

For streamlining land acquisition (LA) under NH Act, 1956 and applicability of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement (RFCTLARR) Act 2013 for LA of NH projects, the Ministry has issued comprehensive guidelines on 28.12.2017 in supersession of all previous guidelines/ circulars on the issue after obtaining legal advice from learned Attorney General of India.

These guidelines have been circulated to all State / UT Governments and all concerned executive agencies of the Ministry. These guidelines cover all

8.6 Measures taken for revival of languishing projects on National Highways

At the beginning of the year 2016-17, there were more than 70 projects that were languishing in construction stage. This was due to inadequate project preparatory activities related to land acquisition, utility shifting and obtaining

cutting of trees. Segregation of Civil Cost from Capital Cost for NH projects for appraisal & approval has been approved by the CCEA to speed up appraisal and approval process leading to faster project award. The Ministry has issued comprehensive guidelines regarding delegation of authorities for the procurement, preparation, review and approval of DPRs

possible aspects related to applicability of the RFCTLARR Act, 2013 to the NH Act, 1956, such as determination of market value of land, payment of additional amount, issue regarding multiplication factor, bulk acquisition/ purchase of land through consent of land owners, determination of compensation amount by competent authority, disbursement of compensation amount and possession of land, etc.

Further, in continuation to this, the Ministry has circulated Manual of Guidelines on Land Acquisition for NHs under NH Act, 1956 in the Month of December, 2018.

statutory clearances & approval and also shortcomings on part of Concessionaires. Aggregate length of these problem projects was about 8,300 km involving around Rs. 1,00,000 crores of investment.

The Ministry and NHAI have been monitoring the languishing projects very rigorously. Wherever feasible one-time fund infusion by NHAI has been done to revive Languishing Projects. For any languishing highway project in BOT Toll/ Annuity mode that has achieved at least 50% physical completion and it is also established that infusion of moderate funding can quickly bring this project to

completion, NHAI provided financial assistance to such a project. The assistance is on a loan basis at Bank rate +2%. At present the funds was arranged through the common fund available with NHAI for development of roads. With proactive policy interventions, all of these projects have now been put back on track, or appropriately reengineered and restructured and revived as under:-

Resolved through regular monitoring	15 nos.	2,055 km
Terminated and repackaged and rebid	48 nos.	5,091 km
Projects revived after policy interventions like fund infusion	10 nos.	1,041 km

8.7 Major Initiatives towards Expediting Implementation of Delayed Projects

The Ministry / NHAI has taken various steps to stimulate growth and the magnitude of investment in the road sector. Regular meetings are held with project developers, State Governments and contractors in Head Quarter by Ministry with Regional Officers, concessionaires / contractors to make the construction of projects hassle free. To expedite completion of these projects various steps have been taken which include streamlining of land acquisition & environment clearances, exit for equity investors, premium re-schedulement, close coordination with other Ministries, revamping of dispute resolution mechanism frequent reviews at various levels etc.

Further, taking a judicious approach in

terms of adopting the project implementation mode for approved projects, Hybrid Annuity Model (HAM) vis-à-vis EPC has been adopted. As capital expenditure is deferred under HAM, the Authority requires lesser amount of funds during construction years in comparison to projects on EPC mode. Further, initiatives such as monetization of projects through the Toll-Operate-Transfer (ToT) model, securitization of toll revenue, adopting the 'Infrastructure Investment Trusts (InvITs)' route, other innovative financing options including LIC, Long Term Pension Funds, etc., has been taken to attract fresh capital from the market on the strength of already operational projects.

8.8 New Contract / Concession documents for Highways Projects

Ministry has issued new EPC Contract documents in December 2018 to ease out the contractual complications in the old documents. Also Ministry is in the

process of finalising new Concession document on NBOT(TOLL) to attract private investment in Highways Projects.

8.9 Monetisation of National Highways stretches

Great focus is being given on monetisation of completed NH stretches through TOT and InvIT Modal. So far Rs. 16,954 cr has been realised by monetizing 1,406 km of completed NH stretches in 4 bundles. National

Highways Authority of India sponsored one InvIT that will attract international and domestic institutional investors. Target to raise Rs. 10,000 Cr through InvIT in FY 2022. 5 stretches (400 km) identified for raising Rs. 5000 Cr.

8.10 Amendment in Model Concession Agreement for PPP projects

Ministry has amended the Model Concession Agreements for BOT and HAM Projects by reducing the risk element of the Concessionaire. This has

resulted in increased private sector participation and more than 50% of NHAI bids are now being awarded on PPP mode.

8.11 Relief measures towards Atmanirbhar Bharat

As per the relief measures provided under Atmanirbhar Bharat, all out efforts were made to extend all possible help to Contractors, Concessionaires and developers of Road Sectors by way of Time Extensions (3-6 months), relaxation in Contact provisions for ensuring cash flow, direct payment to sub-contractors and release of retention money to

augment cash flow, waiver of penalty in case of delay in submission of Performance Security (for new Contracts), and compensation of toll loss. The detailed Circular in this regard was issued by the Ministry vide letter no. COVID-19/RoadMap/JS(H)/2020 dated 03.06.2020.

8.12 Action Plan for Garib Kalyan Rojgar Yojana

Government has identified around 116 Districts of the Country, where majority of migrant workers are expected to be present and process of providing employment is being undertaken. The Ministry has identified ongoing works/new works for the Road Construction in these 116 Districts for

which the likely expenditure in next four months would be around Rs. 6,200 Crores (on around 7,000 Kms) in around 177 Road projects. All efforts are being made to employ the locally available skilled, semi-skilled and unskilled manpower on the ongoing projects.

8.13 Developing NH stretches by Securitisation of Toll

Development of NH stretches is being done through the Securitisation of Toll Receipts in SPV mode. Delhi Mumbai Expressways is currently being done

through SPV mode. Other Greenfield Expressways are being tried to be executed through SPV mode.

8.14 National Highways development aligned to National Multimodal Logistics Master Plan

- Greenfield Corridors (22) enhances connectivity to 750+ Economic & industrial nodes, multimodal logistics terminals planned in National Multimodal Logistics Master Plan
- Corridors with optimized alignment, improved geometry enables high speed (avg. 80 – 100 km/hr) and safer freight & passenger movement and lower logistics cost
- Integrated transport corridors being planned
- Ahmedabad – Dholera (Expressway and Metro), UER II and Dwarka Expressway (LRT/Metro)
- Delhi Mumbai Expressway and Delhi Katra Expressway (Feasibility of High Speed Rail being explored by Railways)
- Right of way earmarked for utilities along all new NH corridors
- Optic Fiber Cable in NH right of way being piloted in Bengaluru – Hyderabad (NH corridor) and Delhi Mumbai Expressway
- Additional 8,500 km of Greenfield Economic Corridors and Expressways identified based on National Logistic Masterplan & LEEP study of World Bank

8.15 Increasing penetration of Electronic Toll Collection (ETC)

- ❖ All Toll plazas on NHs made ETC compliant
- ❖ All new vehicles fitted with FASTag (Dec' 17)
- ❖ FASTag mandatory for fitness certificate & 3rd party insurance for old vehicles
- ❖ MoUs signed with 13 States – 138 SH toll plazas integrated with FASTag system
- ❖ Multiple recharge options (BHIM, BBPS1)
- ❖ Automated Number Plate Recognition piloted on Delhi Meerut Expressway
- ❖ GIS for monitoring congestion at toll plaza

8.16 Incident Management System

Ministry recently decided to take up Incident Management Services (with Ambulances) on all National Highways to be implemented through State

Government and UTs including all Medium Term Contract maintenance works effective from 1st April, 2021. This would facilitate timely evacuation of road

accident victims from accident location to nearest Hospitals / Trauma Care

Centers and their treatment within Golden Hour.

8.17 Simplification of Reimbursement Procedure in M&R:

It has been observed that States/UTs in general are unable to claim full reimbursements for works done in a Financial Year (FY) as per the funds allocated for OR works for such States/UTs. In most of the occasions, States/UTs do not surrender funds sufficiently in advance leading to eventual surrender of such unutilized funds. In subsequent FYs, many States/UTs have been sending proposals to the Ministry through State Accountant Generals for reimbursements of

expenditures incurred for which claims could not be raised in the particular FY. Accordingly, the Ministry has decided to allow booking of expenditure/ reimbursement of Ordinary Repairs (OR) on continuing basis in the next FY. The booking/expenditure of total OR for allocation of funds made in a particular FY is to be allowed in subsequent FY as OR (Continuing) subject to the maximum allocation made under OR during the particular FY. This is applicable from 1.4.2020.

8.18 Problem and Challenges being faced by the Ministry and action being taken:

- i. Some National Highway projects have been delayed mainly due to land acquisition, utility shifting, non-availability of soil/aggregate, poor performance of contractors, environment/forest/wildlife clearances, ROB & RUB issues with Railways, public agitation for additional facilities, arbitration/contractual disputes with contractors etc.
- ii. In order to ensure timely completion of the projects, regular meetings are held with project developers, State Governments and contractors. Regular review meetings are held in Head Quarter by Ministry/ NHAI with Regional Officers, concessionaires/ contractors to make the construction of projects hassle free. To expedite completion of these projects various steps are taken which include streamlining of land acquisition & environment clearances, exit for equity investors, premium re-scheduling, close coordination with other Ministries, revamping of dispute resolution mechanism, frequent reviews at various levels etc.
- iii. A real time on line monitoring system, “e-Samiksha” has been set up by the Cabinet Secretariat for monitoring of follow up action on the decisions taken during the presentations made by different Ministries/ Departments to the Hon'ble Prime Minister periodically.
- iv. Also, the portal “PRAGATI” (pragati.nic.in), i.e. Pro-Active

Governance and Timely Implementation, has been set up by the Prime Minister's Office. The portal is aimed at addressing the Common man's grievances and monitoring important programmes and projects. The Hon'ble Prime Minister, himself, reviews the progress of important infrastructure projects periodically with inputs from the nodal Ministries/Departments and State Governments, etc., hosted on the Portal. Both these portals, also, discuss the Centre-State Coordination issues within the platform for facilitating better cohesive approach of resolving the outstanding bottlenecks.

- v. In addition to above, at the behest of Hon'ble Prime Minister, a high level Group of Infrastructure has been constituted under the Chairmanship of Hon'ble Minister of Road Transport and Highways with Hon'ble Ministers of Railways, Civil Aviation, Minister of State (IC) of Environment, Forest and Climate Change, Principal Secretary to Prime Minister, Cabinet Secretary, Secretary (RT&H), Chairman(Railway Board), Secretary (Environment & Forests), Secretary(Shipping) and Secretary (Civil Aviation) as Members. The Group would meet as often required to review and resolve all pending Inter-Ministerial matters.

8.19 Details of Central Road Sector Outlay at the RE stage and Expenditure incurred are given in Table 8.1. It may be noted

that the total budgetary support provided to MORTH, Market Borrowings by NHAI and Expenditure incurred has been increasing consistently over the years. Private sector Investments have slowed down somewhat due to difficulties in the market conditions i.e. availability of finance from Banks in the face of growing NPAs, uncertainty in returns on account of projected traffic, investors preferring short term investment periods as against roads requiring long term financing etc.

8.20 The Expenditure (Actual) incurred in the Development and Maintenance of National Highways by MORTH by source of financing in the last 8 years is given in table 8.2 which shows that Market Borrowing, Central Road Fund (CRF) Cess, and Permanent Bridge Fee Fund (PBFF) constitute important sources of financing for the maintenance and construction of Highways.

8.22 Development and maintenance of National Highways of 2-lane and below are primarily assigned to State Governments viz. State PWDs for which Ministry provides funds from its budget to the respective States. Table 8.3 provides State-wise allocations and expenditure made by States for the period 2015-16 to 2019-20 and shows an increasing trend in the total allocations and expenditure incurred to States for the construction of National Highways.

**Table 8.1: Central Road Sector Outlay (at RE stage) and Expenditure (At Current Price)
for the period 2016-17 to 2019-20**

Sl. No.	Scheme	2016-17		2017-18		2018-19		2019-20	
		RE	Expd	RE	Expd.	RE	Expd.	RE	Expd.
Part A-Major Development Schemes									
1	EAP- (a) Externally Aided (RW)	290.00	289.12	1,213.00	1,010.46	732.00	740.77	1,328.00	1,145.82
	EAP- (b) Counterpart Fund (RW)	820.00	819.76	613.00	548.31	1,043.00	428.02	900.00	794.08
	Total EAP	1,110.00	1,108.88	1,826.00	1,558.77	1,775.00	1,168.79	2,228.00	1,939.90
2	NH (O)	19,860.00	19,326.46	18,049.31	18,034.64	23,926.81	23,888.55	29,526.00	29,309.05
3	Works under BRDB incl. Strategic Roads under BRDB								
4	Other Charges & IT	8.00	6.93	7.00	4.74	8.25	8.13	7.00	5.73
5	R&D & Training and Quality Assurance	83.00	16.79	78.32	8.05	40.88	8.71	39.28	29.52
6	Charged Expd.	10.00	8.22	10.00	5.54	10.00	0.80	10.00	-
7	NHAI (Investment) (Cess)	7,476.60	7,410.47	15,429.45	15,429.45	16,569.00	16,567.05	16,091.00	15,732.83
8	Remittance of toll receipts (NHDP + non-NHDP)	7,500.00	7,500.00	8,462.14	8,462.14	9,570.13	9,570.13	10,600.00	10,600.00
9	TOT remittances					9,681.50	9,681.50	10,000.00	5,000.00
10	E&I for States from CRF	805.00	746.35	759.00	678.00	500.00	475.00	400.00	399.98
11	Special Packages								
(i)	SARDP-NE	4,520.00	4,464.71	5,265.00	5,237.77	5,610.00	5,344.50	3,680.00	3,592.08
(ii)	LWE (including TSP) incl. Vijayawada-Ranchi Road	760.00	739.27	1,050.00	901.86	905.00	552.03	475.00	409.05
(A)	Sub Total- Major schemes	42,132.60	41,328.08	50,936.42	50,320.52	68,596.69	67,265.13	73,056.28	67,018.14
Part B- M&R, CRF(State Roads), Transport, Sectt.									
12	Maintenance & Repairs (M&R) incl. Swachhata Activities	2,845.23	2,502.99	2,966.75	2,654.78	2,631.18	1,797.17	2,100.00	1,650.52
13	Central Road Fund(CRF)	7,175.00	5,069.82	6,764.48	6,367.11	6,998.93	6,784.50	7,421.58	6,868.66
14	Permanent Bridge Fee Fund(PBFF)	100.00	72.29	37.86	21.42	13.96	4.09	10.46	3.20
15	NH Tribunals, NHs Administration, PIARC	3.57	-	3.57	0.22	0.07	-	0.07	-
16	Transport Wing	143.50	127.23	171.00	144.36	258.00	158.65	273.00	142.49
17	Secretariat Expenses	103.03	100.04	119.92	111.08	126.68	117.24	154.58	136.31
(B)	Sub Total- Part B	10,370.33	7,872.37	10,063.58	9,298.97	10,028.82	8,871.52	9,959.69	8,801.18
	Total (Gross Budgetary Support-MoRTH)	52,502.93	49,200.45	61,000.00	59,619.49	78,625.51	76,136.65	83,015.97	75,819.32
(C)	IEBR / Borrowings by NHAI	59,279.00	33,118.00	59,279.00	50,533.00	62,000.00	61,217.00	75,000.00	74,988.00
(D)	Grand Total (Budget)	1,11,781.93	82,318.45	1,20,279.00	1,10,152.49	1,40,625.51	1,37,353.65	1,58,015.97	1,50,807.32
(E)	Total Private Sector Investments	26,850.00	16,028.64	32,400.00	16,500.64	25,000.00	21,605.00	25,000.00	21,926.00
(F)	Grand Total	1,38,631.93	98,347.09	1,52,679.00	1,26,653.00	1,65,625.51	1,58,958.65	1,83,015.97	1,72,733.32

Table 8.2: Expenditure (Actual) incurred in the Development and Maintenance of National Highways by MORTH by Source of Financing in the last 8 years
(Amount in Rs. Crore)

Year	CRF Cess	Additional GBS	GBS-NER*	Toll		Market Borrowing	Pvt. Investment	Total
				TOT	PBFF			
2012-13	6003	9080.03	1825.69	-	1882.95	2902	20305	41998.67
2013-14	6,857.45	7,746.98	3,009.27	-	4,829.81	7,942.00	22,515.00	52,900.51
2014-15	13,944.04	4,678.51	2,843.33	-	5,485.98	3,343.40	19,232.00	49,527.26
2015-16	29,879.06	2,714.91	3,945.88	-	6,548.29	23,281.00	29,770.00	96,139.14
2016-17	29,049.08	2,070.93	4,464.71	-	7,572.29	33,118.00	16,029.00	92,304.01
2017-18	35,910.91	2,687.14	5,237.77	-	8,483.56	50,533.00	16,500.00	1,19,352.38
2018-19	42,523.99	750.39	5,944.08	9,681.50	9,574.22	61,217.00	21,605.00	1,51,296.18
2019-20	45,511.26	1,175.34	5,982.08	5,000.00	10,603.20	74,988.00	21,926.00	1,65,185.88

Source: Planning Division, MoRTH

TOT: Toll Operate Transfer

PBFF: Permanent Bridge Fee Fund

* Exclusively under SARDP-NE, apart from this, NH works in NER is also taken up under NH(O) for which financing is from CRF Cess and additional GBS.

Table 8.3: The State/UT-wise details of Fund Allocation/Utilized for Development of NHs
Amount in Rs. crore

Sl. No.	States/UTs/ Schemes/ Agency	Allocation				Expenditure			
		2016-17	2017-18	2018-19	2019-20	2016-17	2017-18	2018-19	2019-20
1	Andhra Pradesh	2,010.31	1,781.18	2,260.26	1,808.90	2,014.50	1,780.70	2,054.04	2,010.60
2	Arunachal Pradesh	100	62.05	90	80.66	90.66	62.05	88.96	80.66
3	Assam	177.44	308.05	413.99	430.47	137.8	307.75	421.27	428.35
4	Bihar	1,362.64	1,689.90	1,598.31	1,899.14	1,331.61	1,523.88	1,554.30	1,552.55
5	Chhattisgarh	1,553.30	1,107.93	1,831.32	709.16	1,495.68	1,071.58	1,341.81	697.1
6	Goa	400	527.48	940	1,003.78	434.51	527.48	973.24	976
7	Gujarat	251.87	166.08	391.55	544.9	213.41	163.29	389.91	719
8	Haryana	150	105.17	330	104.89	161.27	105.17	374.8	108.41
9	Himachal Pradesh	210.95	307.14	350.8	160.18	182.14	305.69	327.65	98.77
10	Jammu & Kashmir	40.06	35.44	45	49.95	23.16	35.44	44.44	26.48
11	Jharkhand	200	260.88	320	163.35	212.5	260.88	319.96	181.72
12	Karnataka	783.52	1,240.99	1,630.02	1,360.69	871.96	1,202.70	1,560.90	1,292.80
13	Kerala	259.89	171.74	280.45	293.84	237.8	171.74	300.76	326.92
14	Madhya Pradesh	1,760.00	854.79	1,665.00	2,279.38	1,558.90	854.79	1,887.28	2,535.25
15	Maharashtra	1,371.92	2,966.03	7,050.88	10,340.82	1,154.00	2,964.15	7,445.16	10,997.57
16	Manipur	25.25	75.85	260.21	397	18.65	75.47	259.65	392
17	Meghalaya	41.27	30.22	70.97	35.3	28.44	28.28	57.76	20.3
18	Mizoram	40	41	80	84.96	46.13	41	79.91	84.96
19	Nagaland	50	38.27	200	445.25	38.84	38.27	199.76	413.72
20	Odisha	925.55	708.4	790.47	451.26	951.35	717.08	773.93	462.24
21	Punjab	2,740.50	746.02	786.18	882.84	2,702.48	745.8	808.34	1,020.44
22	Rajasthan	964.83	888.27	1,295.87	1,123.66	1,012.99	886.08	1,290.32	1,061.50
23	Sikkim	0	5.09	0.73	0	0	5.09	0.09	0

table contd...

table 8.3 contd...

Sl. No.	States/UTs/ Schemes/ Agency	Allocation				Expenditure			
		2016-17	2017-18	2018-19	2019-20	2016-17	2017-18	2018-19	2019-20
24	Tamil Nadu	575	664.48	870	530.43	640.11	664.48	883.95	423.1
25	Telangana	380	409.93	1,220.00	1,515.19	358.43	409.93	1,212.83	1,494.45
26	Tripura	5	61	50	65	2.38	61	50.42	62.39
27	Uttar Pradesh	1,849.02	1,110.79	2,040.05	1,838.27	1,820.85	1,106.96	1,995.79	1,755.07
28	Uttarakhand	332.62	980.67	1,000.49	964.35	314.48	980.14	1,010.76	1,053.90
29	West Bengal	1,333.62	1,229.89	991	805.99	1,223.19	1,184.69	980.37	792.02
30	Andaman & Nicobar Islands	0.13	0	0	0.42	0.13	0	0	0
31	Chandigarh	2	5.3	1.5	5	0.69	5.3	1.49	0
32	Dadar & Nagar Haveli			2	11.78			0	0
33	Daman & Diu			2	8			0	0
34	Delhi	1	36	3	3	0.62	23.01	0	0
35	Puducherry	20	13.63	30	1.5	14.28	13.63	12.64	0.94
36	First Come first served for State/UT under NH(O) 2019-20 (Expd. Included in States/UTs)				1,513.14				
A	Sub Total (Sr. 1 to 33)	19,917.69	18,629.66	28,892.05	31,912.45	19,293.94	18,323.50	28,702.49	31,069.21
37	Other projects under NH(O)*	781.38	214	2.75	4	779.72	211.92	2.36	2.3
38	National Highways Authority of India (NHAI)- Cess*	2,326.50	12,429.45	11,569.00	11,091.00	2,326.50	12,429.45	11,569.00	11,091.00
39	NHAI- Toll	7,500.00	8,462.14	9,570.13	10,600.00	7,500.00	8,462.14	9,570.13	10,600.00
40	NHAI- NH(O)	5,389.02	3,900.00	0	1,000.00	5,389.02	3,900.00	0	1,000.00
41	NHAI-TOT			9,681.50	10,000.00			9,681.50	5,000.00

table contd...

table 8.3 contd..

Sl. No.	States/UTs/ Schemes/ Agency	Allocation				Expenditure			
		2016-17	2017-18	2018-19	2019-20	2016-17	2017-18	2018-19	2019-20
42	National Highways & Infrastructure Development Corporation Ltd. (NHIDCL) under NH(O)*	72.2	296	1,000.00	2,165.00	72.2	296	1,000.00	2,165.00
43	Border Roads Organization (BRO)*	0	0	135	355.92	0	0	135	353.88
44	Special Accelerated Road Development Programme for North-East Region (SARDP-NE) including Arunachal Package*	4,520.00	4,865.00	5,610.00	3,680.00	4,464.71	4,837.77	5,345.00	3,592.08
45	Special Programme for development of Roads In Left Wing Extremism affected Area (LWE) including Development of Vijayawada-Ranchi Road	760	1,050.00	905	480	739.27	901.86	552.03	409.05
46	Externally Aided Projects - Head Quarters#, NHAI, NHIDCL	59.38	316	222	1,322.00	56.72	283.41	219.23	1,303.59
B	Sub Total (Sr. 34 to 42)	21,408.48	31,532.59	38,695.38	40,697.92	21,328.14	31,322.55	38,074.25	35,516.90
	Total (A+B)	41,326.16	50,162.25	67,587.43	72,610.37	40,622.08	49,646.05	66,776.74	66,586.11
47	IEBR / Borrowings by NHAI	59,279.00	59,279.00	62,000.00	75,000.00	33,118.00	50,533.00	61,217.00	74,988.00

ANNEXURES

Total and Surfaced Road Length By Categories in India as on 31.03.2019
(in km)

Sl. No.	Category	Sub Category	Category wise Total Road length (% share of Total Road length)	Category wise Surfaced road length (% age of col. 4)
1	2	3	4	5
1	National Highways		132499 (2.09)	132499
2	State Highways		179535 (2.83)	178384
3	District Roads		612778 (9.67)	587004
4	Rural Roads*		3622228 (57.21)	2429388
		PMGSY Roads	770904	625973
		PWD/RWD Roads	872530	713977
		Panchayati Raj Roads	1978794	1089439
5	Urban Roads		541554 (8.55)	428076
		Municipal Roads	510319	397893
		MES Roads	17573	17462
		Major Port Roads	761	710
		Minor Port Roads	677	626
		Railway Roads	12225	11383
6	Project Roads		343163 (5.42)	157171
		Forest Department Roads	182266	76715
		BRO Roads	20949	18118
		Coal Mine Roads	4765	4460
		Electricity Department Roads	4710	4,151
		Irrigation Department Roads	112349	39,374
		Sugarcane Authorities Roads	15190	11,547
		SAIL & NMDC Roads	2933	2805
	Total* (Excluding JRY Roads)		5431757	3912523
	Total** (Including JRY Roads)		6331757.14	4095725

Note : (1) Totals may not add up due to rounding off of decimals.

(2) * excludes 9 lakh km length of rural roads constructed under Jawahar Rozgar Yojana (JRY)

(3) ** Includes 9 lakh km length of rural roads constructed under Jawahar Rozgar Yojana (JRY) from 1990-1999.

Road Length By Categories and by type of Surface in India as on 31.03.2019

Sl. No.	Category	Sub Category	Total (6+7)	WBM/WMM	Surfaced BT/CC	Total (4+5)	Un-surfaced
1	2	3	4	5	6	7	8
1	National Highways		132499	0	132499	132499	0
2	State Highways		179535	13725	164659	178384	1151
3	District Roads		612778	26504	560500	587004	25773
4	Rural Roads* (excluding JRY)		3622228	331552	2097837	2429388	1192840
		PMGSY Roads	770904	27173	598800	625973	144931
		PWD/RWD Roads	872530	68451	645526	713977	158553
		Panchayati Raj Roads	1978794	235928	853511	1089439	889355
5	Urban Roads		541554	41071	387005	428076	113479
		Municipal Roads	510319	38614	359280	397893	112425
		MES Roads	17573	1116	16346	17462	111
		Major Port Roads	761	55	656	710	50
		Minor Port Roads	677	43	583	626	51
		Railway Roads	12225	1243	10141	11383	841
6	Project Roads		343163	61056	96116	157171	185992
		Forest Department Roads	182266	39782	36933	76715	105551
		BRO Roads	20949	1003	17116	18118	2831
		Coal Mine Roads	4765	629	3831	4460	305
		Electricity Department Roads	4710	985	3166	4151	560
		Irrigation Department Roads	112349	18560	20814	39374	72974
		Sugarcane Authorities Roads	15190	5	11542	11547	3643
		SAIL & NMDC Roads	2933	92	2714	2805	127
		Total* (Excluding JRY Roads)	5431757	473907	3438616	3912524	1519234
		Total** (Including JRY Roads)	6331757	657109	3438616	4095726	2236032

Note : (1) Totals may not add up due to rounding off of decimals.

(2) * excludes 9 lakh km length of rural roads constructed under Jawahar Rozgar Yojana (JRY)

(3) ** Includes 9 lakh km length of rural roads constructed under Jawahar Rozgar Yojana (JRY) from 1990-1999.

State/UT wise Total & Surfaced Length of Roads in India

As on 31.03.2019 (State/UT-wise)

(in km)

Sl.No.	Name of State/UT	Total	Surfaced
1	2	3	4
1	Andhra Pradesh	176,351	117,955
2	Arunachal Pradesh	55,262	34,977
3	Assam	399,122	92,209
4	Bihar	298,205	174,490
5	Chhattisgarh	105,074	81,850
6	Goa	18,697	13,733
7	Gujarat	249,373	220,135
8	Haryana	50,292	43,502
9	Himachal Pradesh	73,230	61,463
10	Jammu And Kashmir	120,034	83,231
11	Jharkhand	81,245	65,604
12	Karnataka	358,300	213,826
13	Kerala	259,932	181,627
14	Madhya Pradesh	365,045	313,482
15	Maharashtra	636,887	497,342
16	Manipur	32,389	18,224
17	Meghalaya	40,258	18,112
18	Mizoram	16,250	10,866
19	Nagaland	37,871	18,584
20	Odisha	305,631	212,050
21	Punjab	147,862	134,850
22	Rajasthan	313,469	287,310
23	Sikkim	12,182	9,317
24	Tamilnadu	271,137	228,006
25	Telangana	140,555	104,463
26	Tripura	45,120	27,601
27	Uttarakhand	68,727	46,639
28	Uttar Pradesh	442,907	375,002
29	West Bengal	283,865	200,067
30	A & N Islands	1,809	1,698
31	Chandigarh	2,573	2,573
32	Dadra & Nagar Haveli	1,133	1,133
33	Daman & Diu	274	274
34	Delhi	16,170	16,110
35	Lakshadweep	232	232
36	Puducherry	4,294	3,987
Total *		5,431,757	3,912,523

* Excluding JRY Roads

Total Road Length and Percentage Share of Each Category of Road to total road length (1951-2019)
(in km)

Year (as on 31st March)	National Highways	State Highways	Other PWD Roads	District Roads	Panchayat Raj Roads	JRY & PMGSY Roads*	Rural Roads built by State PWD / RWD	Urban Roads	Project Roads	Surfaced	Total (Col. 2+3+4+5+6+7 +8+9+10)
1	2	3	4	5	6	7	8	9	10	11	12
1951	19,811	#	173,723		206,408	0		0	0	157,019	399,942
	4.95	0.00	43.44		51.61	0.00		0.00	0.00	39.26	100
1961	23,798	#	257,125		197,194	0		46,361	0	263,052	524,478
	4.54	0.00	49.02		37.60	0.00		8.84	0.00	50.16	100
1971	23,838	56,765	276,833		354,530	0		72,120	130,893	397,948	914,979
	2.61	6.20	30.26		38.75	0.00		7.88	14.31	43.49	100
1981	31,671	94,359	421,895		628,865	0		123,120	185,511	683,676	1,485,421
	2.13	6.35	28.40		42.34	0.00		8.29	12.49	46.03	100
1991	33,650	127,311	509,435		931,288	329,142		186,799	209,737	1,090,167	2,327,362
	1.45	5.47	21.89		40.01	14.14		8.03	9.01	46.84	100
2001	57,737	132,100	736,001		1,068,020	903,996		252,001	223,665	1,601,745	3,373,520
	1.71	3.92	21.82		31.66	26.80		7.47	6.63	47.48	100
2002	58,112	137,711	695,335		1,134,326	926,697		250,295	224,124	1,661,555	3,426,600
	1.70	4.02	20.29		33.10	27.04		7.30	6.54	48.49	100
2003	58,112	134,807	696,960		1,155,491	926,697		297,259	259,328	1,701,258	3,528,654
	1.65	3.82	19.75		32.75	26.26		8.42	7.35	48.21	100
2004	65,569	133,177	719,257		1,189,058	951,511		301,310	261,625	1,760,768	3,621,507
	1.81	3.68	19.86		32.83	26.27		8.32	7.22	48.62	100
2005	65,569	144,396	786,230		1,299,463	966,976		286,707	259,815	1,795,298	3,809,156
	1.72	3.79	20.64		34.11	25.39		7.53	6.82	47.13	100
2006	66,590	148,090	803,669		1,318,258	989,867		291,991	262,186	1,858,684	3,880,651
	1.72	3.82	20.71		33.97	25.51		7.52	6.76	47.90	100
2007	66,590	152,235	835,003		1,372,867	1,020,621		300,580	268,505	1,944,758	4,016,401
	1.66	3.79	20.79		34.18	25.41		7.48	6.69	48.42	100
2008	66,754	154,522	863,241		1,388,750	1,061,809		304,327	270,189	2,036,063	4,109,592
	1.62	3.76	21.01		33.79	25.84		7.41	6.57	49.54	100
2009	70,548	158,497	962,880		1,514,952	1,114,213		373,802	276,617	2,324,504	4,471,510
	1.58	3.54	21.53		33.88	24.92		8.36	6.19	51.98	100
2010	70,934	160,177	977,414		1,518,205	1,174,330		402,448	278,931	2,432,813	4,582,439
	1.55	3.50	21.33		33.13	25.63		8.78	6.09	53.09	100
2011	70,934	163,898	998,895		1,530,366	1,219,438		411,679	281,628	2,524,682	4,676,838
	1.52	3.50	21.36		32.72	26.07		8.80	6.02	53.98	100
2012	76,818	164,360	1,022,287		1,587,787	1,250,433		464,294	299,415	2,698,590	4,865,394
	1.58	3.38	21.01		32.63	25.70		9.54	6.15	55.46	100
2013	79,116	169,227	1,066,747		1,725,318	1,434,321		446,238	310,955	3,171,002	5,231,922
	1.51	3.23	20.39		32.98	27.41		8.53	5.94	60.61	100
2014	91,287	170,818	1,082,267		1,800,747	1,503,581		457,467	296,319	3,220,502	5,402,486
	1.69	3.16	20.03		33.33	27.83		8.47	5.48	59.61	100
2015	97,991	167,109	1,101,178		1,831,043	1,506,212		467,106	301,505	3,341,008	5,472,144
	1.79	3.05	20.25		33.46	27.53		8.54	5.51	61.05	100
2016	1,01,011	176,166		5,61,940	18,60,573	15,26,377	5,48,387	5,09,730	3,19,109	35,01,906	56,03,293
	1.80	3.14		10.03	33.20	27.24	9.78	9.10	5.70	62.49	100
2017	114,158	175,036		586,181	1,935,693	1,584,343	646,880	526,483	3,28,897	3,729,781	5,897,671
	1.94	2.97		9.94	32.82	26.86	10.97	8.93	5.58	63.63	100
2018	126,350	186,908		611,268	2,002,379	1,631,234	775,970	534,142	347,547	3,748,291	6,215,797
	2.03	3.01		9.83	32.02	26.33	13.00	8.59	5.59	63.25	100
2019	132,499	179,535		612,778	1,978,794	1,670,904	872,530	541,554	343,163	4,095,725	6,331,757
	2.09	2.84		9.68	31.25	26.39	13.78	8.55	5.42	64.69	100

Included in Other PWD Roads.

Totals may not add up because of rounding off of decimals.

Note : (1) The second row of each year indicates the percentage share of each category of roads to the total road length.

(2) * Includes roads constructed under PMGSY launched in December 2000 and JRY launched in 1989-90.

(3) JRY road lengths for years since 1996-97 are the same as on 31.3.1996.

Length of National Highways in India as on 31.03.2019 (State/UT-Wise)
(in km)

Sl. No.	Name of State/ UT	Length of NH
1	Andhra Pradesh	6,913
2	Arunachal Pradesh	2,537
3	Assam	3,909
4	Bihar	5,358
5	Chhattisgarh	3,606
6	Goa	293
7	Gujarat	6,635
8	Haryana	3,166
9	Himachal Pradesh	2,607
10	Jammu & Kashmir	2,423
11	Jharkhand	3,367
12	Karnataka	7,335
13	Kerala	1,782
14	Madhya Pradesh	8,772
15	Maharashtra	17,757
16	Manipur	1,750
17	Meghalaya	1,156
18	Mizoram	1,423
19	Nagaland	1,548
20	Odisha	5,762
21	Punjab	3,274
22	Rajasthan	10,342
23	Sikkim	463
24	Tamil Nadu	6,742
25	Telangana	3,795
26	Tripura	854
27	Uttarakhand	2,949
28	Uttar Pradesh	11,737
29	West Bengal	3,664
30	Andaman & Nicobar Island	331
31	Chandigarh	15
32	Dadar & Nagar Haveli	31
33	Daman & Diu	22
34	Delhi	157
35	Lakshadweep	0
36	Puducherry	27
Total		132,499

Source : Roads Wing, Ministry of Road Transport & Highways

Note: All National Highways are surfaced

Lane wise Length of National Highways in India As on 31.03.2018

(in km)

Sl. No.	Name of State/ UT	Total Length	Less than Two-Lane	Two-Lane	Four-Lane and above
1	Andhra Pradesh	6,412	848	3,590	1,974
2	Arunachal Pradesh	2,537	1,757	758	22
3	Assam	3,909	1,196	2,598	115
4	Bihar	4,877	417	3,631	829
5	Chhattisgarh	3,592	257	2,850	485
6	Goa	293	62	174	57
7	Gujarat	6,050	1,532	2,100	2,418
8	Haryana	2,788	180	1,191	1,417
9	Himachal Pradesh	2,607	979	1,591	37
10	Jammu & Kashmir	2,327	411	1,694	222
11	Jharkhand	2,686	116	2,192	378
12	Karnataka	7,266	1,425	3,748	2,093
13	Kerala	1,781	294	1,350	137
14	Madhya Pradesh	8,219	3,101	3,438	1,680
15	Maharashtra	17,728	10,170	3,779	3,779
16	Manipur	1,751	277	1,442	32
17	Meghalaya	1,155	564	534	57
18	Mizoram	1,423	1,115	308	0
19	Nagaland	1,548	1,460	88	0
20	Odisha	5,430	141	4,387	902
21	Punjab	3,269	527	1,417	1,325
22	Rajasthan	8,916	438	5,770	2,708
23	Sikkim	463	171	292	0
24	Tamil Nadu	6,741	1,760	2,746	2,235
25	Telangana	3,795	1,222	1,608	965
26	Tripura	854	556	298	0
27	Uttarakhand	2,949	2,183	664	102
28	Uttar Pradesh	11,376	3,017	5,606	2,753
29	West Bengal	3,074	279	1,698	1,097
30	Andaman & Nicobar Island	332	299	32	1
31	Chandigarh	15	0	0	15
32	Dadar & Nagar Haveli	31	31	0	0
33	Daman & Diu	22	22	0	0
34	Delhi	70	1	-7	76
35	Lakshadweep	0	0	0	0
36	Puducherry	64	0	40	24
Total		126,350	36,808	61,607	27,935

Source : Roads Wing, Ministry of Road Transport & Highways

Note: All National Highways are surfaced

Total and Surfaced Length of State Highways in India as on 31.03.2019 (State/UT-wise)
(in km)

Sl.No.	Name of State / UT	Total	Surfaced
1	2	3	4
1	Andhra Pradesh	13,500	13,500
2	Arunachal Pradesh ^{\$}	13,500	13,500
3	Assam	2,530	2,452
4	Bihar	4,006	4,006
5	Chhattisgarh	4,176	4,098
6	Goa	279	272
7	Gujarat	16,746	16,679
8	Haryana	1,602	1,602
9	Himachal Pradesh	827	782
10	Jammu & Kashmir	310	310
11	Jharkhand	1,232	1,232
12	Karnataka	19,473	19,450
13	Kerala	4,342	4,342
14	Madhya Pradesh	11,389	11,389
15	Maharashtra	32,005	31,351
16	Manipur	781	661
17	Meghalaya	768	768
18	Mizoram	170	170
19	Nagaland	650	650
20	Odisha	4,143	4,143
21	Punjab	1,133	1,133
22	Rajasthan	15,061	15,000
23	Sikkim	663	663
24	Tamil Nadu	11,169	11,169
25	Telangana	2,149	2,146
26	Tripura	1,057	1,057
27	Uttarakhand	4,517	4,502
28	Uttar Pradesh	7,427	7,427
29	West Bengal	3,612	3,612
30	Andaman & Nicobar Island	257	257
31	Chandigarh	9	9
32	Dadra & Nagar Haveli	30	30
33	Daman & Diu	22	22
34	Delhi	0	0
35	Lakshadweep	0	0
36	Puducherry	0	0
	Total	179,535	178,384

State Highways are constructed by State PWD/ Roads & Bridges Depts.

Note: \$ Figure for Arunachal Pradesh pertain to roads under State PWD. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR).

Length of State Highways in India - By Type of Surface as on 31.03.2019 (State/UT-wise)
(in km)

Sl.No.	Name of State/UT	Total Length (6+7)	Surfaced			Un-surfaced
			WBM/WMM	BT/CC	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	13,500	12,876	624	13,500	0
2	Arunachal Pradesh *	13,500	0	13,500	13,500	0
3	Assam	2,530	0	2,452	2,452	78
4	Bihar	4,006	0	4,006	4,006	0
5	Chhattisgarh	4,176	162	3,936	4,098	78
6	Goa	279	0	272	272	8
7	Gujarat	16,746	39	16,640	16,679	67
8	Haryana	1,602	3	1,599	1,602	0
9	Himachal Pradesh *	827	0	782	782	45
10	Jammu & Kashmir*	310	0	310	310	0
11	Jharkhand	1,232	0	1,232	1,232	0
12	Karnataka	19,473	144	19,306	19,450	22
13	Kerala	4,342	0	4,342	4,342	0
14	Madhya Pradesh	11,389	0	11,389	11,389	0
15	Maharashtra	32,005	227	31,124	31,351	654
16	Manipur	781	20	641	661	120
17	Meghalaya	768	26	741	768	0
18	Mizoram	170	0	170	170	0
19	Nagaland	650	199	452	650	0
20	Odisha	4,143	1	4,142	4,143	0
21	Punjab	1,133	0	1,133	1,133	0
22	Rajasthan	15,061	4	14,996	15,000	61
23	Sikkim	663	0	663	663	0
24	Tamil Nadu	11,169	0	11,169	11,169	0
25	Telangana	2,149	0	2,146	2,146	3
26	Tripura	1,057	0	1,057	1,057	0
27	Uttarakhand	4,517	24	4,479	4,502	15
28	Uttar Pradesh	7,427	0	7,427	7,427	0
29	West Bengal	3,612	0	3,612	3,612	0
30	Andaman & Nicobar Island	257	0	257	257	0
31	Chandigarh	9	0	9	9	0
32	Dadra & Nagar Haveli	30	0	30	30	0
33	Daman & Diu *	22	0	22	22	0
34	Delhi	0	0	0	0	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	0	0	0	0	0
Total		179,535	13,725	164,659	178,384	1,151

State Highways are constructed by State PWD/ Roads & Bridges Depts.

Note: \$ Figure for Arunachal Pradesh pertain to roads under State PWD. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR).

* Figures is as on 31/03/2018-Data not received.

\$ Figures is as on 31/03/2017-Data partially received.

Total & Surfaced Length of District Roads as on 31.03.2019 (State/UT-Wise)
(in km)

Sl.No.	Name of State/UT	Total	Surfaced
1	2	3	4
1	Andhra Pradesh	32,711	31,096
2	Arunachal Pradesh @	8,616	4,726
3	Assam	6,093	5,201
4	Bihar	12,797	12,797
5	Chhattisgarh	12,221	11,913
6	Goa	824	824
7	Gujarat	31,262	30,888
8	Haryana	22,051	22,051
9	Himachal Pradesh	4,277	4,277
10	Jammu & Kashmir	19,695	18,990
11	Jharkhand	10,969	10,969
12	Karnataka	49,555	48,790
13	Kerala	27,470	27,470
14	Madhya Pradesh	50,714	50,714
15	Maharashtra	108,419	99,305
16	Manipur	3,095	2,164
17	Meghalaya	4,624	3,853
18	Mizoram	1,714	1,610
19	Nagaland	5,129	2,913
20	Odisha	21,647	20,427
21	Punjab	6,808	6,808
22	Rajasthan	24,448	23,932
23	Sikkim	1,469	732
24	Tamil Nadu	48,236	48,236
25	Telangana	25,372	24,069
26	Tripura	461	461
27	Uttarakhand	4,828	4,522
28	Uttar Pradesh	55,816	55,816
29	West Bengal	10,449	10,442
30	Andaman & Nicobar Island	180	180
31	Chandigarh	83	83
32	Dadra & Nagar Haveli	190	190
33	Daman & Diu	59	59
34	Delhi	100	100
35	Lakshadweep	0	0
36	Puducherry	397	397
	Total	612,778	587,004

Note: The District Roads comprise Major District Roads & Other District Roads constructed and maintained by State PWD/ Roads & Bridges Depts.

@ Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR).

Differences in sum on account of rounding off of decimals.

Total and Surfaced Length of District Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)
(in km)

Sl.No.	Name of State/UT	Total Length (6+7)	Surfaced			Un-Surfaced
			WBM/WMM	BT/CC	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh*	32,711	297	30,799	31,096	1,615
2	Arunachal Pradesh	8,616	1,626	3,101	4,726	3,890
3	Assam	6,093	0	5,201	5,201	892
4	Bihar	12,797	0	12,797	12,797	0
5	Chhattisgarh	12,221	326	11,587	11,913	308
6	Goa	824	1	823	824	0
7	Gujarat	31,262	151	30,737	30,888	374
8	Haryana	22,051	5	22,046	22,051	0
9	Himachal Pradesh	4,277	0	4,277	4,277	0
10	Jammu & Kashmir*	19,695	8,141	10,849	18,990	705
11	Jharkhand	10,969	0	10,969	10,969	0
12	Karnataka	49,555	1,178	47,612	48,790	765
13	Kerala	27,470	0	27,470	27,470	0
14	Madhya Pradesh	50,714	700	50,014	50,714	0
15	Maharashtra	108,419	11,001	88,304	99,305	9,114
16	Manipur	3,095	338	1,826	2,164	931
17	Meghalaya	4,624	234	3,618	3,853	772
18	Mizoram	1,714	0	1,610	1,610	104
19	Nagaland	5,129	1,780	1,133	2,913	2,217
20	Odisha	21,647	429	19,999	20,427	1,219
21	Punjab	6,808	0	6,808	6,808	0
22	Rajasthan	24,448	17	23,916	23,932	516
23	Sikkim	1,469	38	694	732	736
24	Tamil Nadu	48,236	0	48,236	48,236	0
25	Telangana	25,372	181	23,888	24,069	1,303
26	Tripura	461	0	461	461	0
27	Uttarakhand	4,828	29	4,492	4,522	306
28	Uttar Pradesh	55,816	0	55,816	55,816	0
29	West Bengal	10,449	33	10,409	10,442	8
30	Andaman & Nicobar Island	180	0	180	180	0
31	Chandigarh*	83	0	83	83	0
32	Dadra & Nagar Haveli	190	0	190	190	0
33	Daman & Diu*	59	0	59	59	0
34	Delhi	100	0	100	100	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	397	1	396	397	0
Total		612,778	26,504	560,500	587,004	25,773

Notes: The District Roads comprise Major District Roads & Other District Roads constructed and maintained by State PWD/ Roads & Bridges Depts.

* Figures is as on 31/03/2018-Data not received.

§ Figures is as on 31/03/2017-Data partially received.

Total & Surfaced Length of Rural Roads As on 31.03.2019 (State/UT-wise)

(in km)

Sl.No.	Name of State/UT	Total	Surfaced
1	2	3	4
1	Andhra Pradesh	1,00,132	52,287
2	Arunachal Pradesh	25,832	11,083
3	Assam	3,72,510	75,645
4	Bihar	2,59,507	1,42,300
5	Chhattisgarh	56,575	43,832
6	Goa	16,054	11,362
7	Gujarat	1,32,467	115,428
8	Haryana	7,027	5,614
9	Himachal Pradesh	53,033	47,374
10	Jammu And Kashmir	75,684	51,047
11	Jharkhand	44,317	38,081
12	Karnataka	2,20,130	102,302
13	Kerala	1,88,517	119,161
14	Madhya Pradesh	2,32,344	209,425
15	Maharashtra	4,26,327	315,832
16	Manipur	25,339	12,376
17	Meghalaya	32,537	11,544
18	Mizoram	11,849	6,879
19	Nagaland	28,039	11,765
20	Odisha	2,26,922	1,54,430
21	Punjab	1,04,565	1,03,919
22	Rajasthan	2,20,402	2,03,108
23	Sikkim	8,550	6,803
24	Tamilnadu	1,70,246	132,245
25	Telangana	80,701	46,671
26	Tripura	40,236	24,147
27	Uttarakhand	44,805	28,244
28	Uttar Pradesh	2,55,576	2,31,077
29	West Bengal	1,57,497	1,11,202
30	A & N Islands	610	556
31	Chandigarh	0	0
32	Dadra & Nagar Haveli	798	798
33	Daman & Diu	116	116
34	Delhi	0	0
35	Lakshadweep	228	228
36	Puducherry	2,755	2,508
Total (Excluding JRY Roads)		3,622,228	2,429,388
Total (Including JRY Roads)		4,522,228	2,612,590

Notes: The Rural Roads comprise of PMGSY, rural roads built by State PWD/RWD & those constructed by Panchayati Raj Roads

**Length of Pradhan Mantri Gram Sadak Yojana Roads - By type of Surface as on 31.03.2019
(State/UT-wise)**

(in km)

Sl. No.	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M	BT/CC	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	20,788	352	14,219	14,572	6,217
2	Arunachal Pradesh	13,964	307	7,942	8,249	5,715
3	Assam	27,471	0	22,020	22,020	5,451
4	Bihar	62,052	401	51,136	51,537	10,515
5	Chhattisgarh	43,237	513	31,863	32,376	10,861
6	Goa	207	2	155	157	50
7	Gujarat	18,482	79	12,568	12,647	5,835
8	Haryana	7,027	33	5,581	5,614	1,412
9	Himachal Pradesh	22,206	2,076	14,998	17,074	5,132
10	Jammu And Kashmir	20,051	2,247	10,255	12,502	7,549
11	Jharkhand	29,391	165	22,989	23,155	6,236
12	Karnataka	22,847	30	18,569	18,599	4,248
13	Kerala	7,450	347	3,510	3,857	3,593
14	Madhya Pradesh	83,007	3,044	75,420	78,465	4,542
15	Maharashtra	31,703	553	26,320	26,873	4,830
16	Manipur	12,051	48	7,101	7,149	4,902
17	Meghalaya	4,687	1,578	1,907	3,486	1,201
18	Mizoram	4,344	0	3,126	3,126	1,218
19	Nagaland	4,163	90	3,697	3,786	377
20	Odisha	67,630	5,610	55,068	60,678	6,952
21	Punjab	8,926	67	8,213	8,280	646
22	Rajasthan	71,630	709	67,130	67,839	3,791
23	Sikkim	5,506	129	3,959	4,088	1,419
24	Tamilnadu	21,696	1,661	17,565	19,226	2,470
25	Telangana	12,454	184	10,507	10,692	1,762
26	Tripura	6,671	152	4,340	4,492	2,179
27	Uttarakhand	18,863	57	11,124	11,181	7,682
28	Uttar Pradesh	80,159	1,573	56,003	57,576	22,583
29	West Bengal	41,822	4,884	31,446	36,329	5,492
30	A & N Islands	132	79	0	79	53
31	Chandigarh	0			0	
32	Dadra & Nagar Haveli	182	182	0	182	0
33	Daman & Diu	0			0	
34	Delhi	0			0	
35	Lakshadweep	0			0	
36	Puducherry	107	19	69	88	19
Total		7,70,904	27,173	5,98,800	6,25,973	1,44,931

Length of Rural Roads built by State PWD/RWD - By Type of Surface As on 31.03.2019
(State/UT-wise) (in km)

Sl. No.	Name of State/UT	Total Length (6+7)	Surfaced			Un-surfaced
			WBM/WMM	BT/CC	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	0	0	0	0	0
2	Arunachal Pradesh*	6,624	0	1,615	1,615	5,009
3	Assam	45,336	0	25,522	25,522	19,814
4	Bihar*	74,857	7,599	33,723	41,322	33,534
5	Chhattisgarh	13,009	1,283	9,844	11,127	1,882
6	Goa	5,073	0	4,788	4,788	285
7	Gujarat	69,551	3,037	57,977	61,014	8,537
8	Haryana	0	0	0	0	0
9	Himachal Pradesh	29,849	0	29,849	29,849	0
10	Jammu & Kashmir*	47,878	6,348	28,383	34,731	13,147
11	Jharkhand *	14,926	0	14,926	14,926	0
12	Karnataka	0	0	0	0	0
13	Kerala	0	0	0	0	0
14	Madhya Pradesh*	26,482	4,980	18,762	23,742	2,740
15	Maharashtra	157,734	43,252	62,751	106,004	51,730
16	Manipur	6,187	263	1,945	2,207	3,980
17	Meghalaya	3,671	397	1,778	2,175	1,496
18	Mizoram	2,284	0	846	846	1,438
19	Nagaland	4,421	0	1,376	1,376	3,044
20	Odisha	0	0	0	0	0
21	Punjab	30,761	0	30,761	30,761	0
22	Rajasthan	121,704	669	118,669	119,338	2,366
23	Sikkim	0	0	0	0	0
24	Tamil Nadu	0	0	0	0	0
25	Telangana	0	0	0	0	0
26	Tripura	11,107	0	10,357	10,357	750
27	Uttarakhand	24,490	531	15,364	15,895	8,595
28	Uttar Pradesh	169,511	0	169,511	169,511	0
29	West Bengal	5,476	83	5,186	5,270	206
30	A & N Island	478	8	469	478	0
31	Chandigarh	0	0	0	0	0
32	Dadra & Nagar Haveli	616	0	616	616	0
33	Daman & Diu	24	0	24	24	0
34	Delhi					
35	Lakshadweep	228	0	228	228	0
36	Puducherry	254	0	254	254	0
	Total	872,530	68,451	645,526	713,977	158,553

Note : This category of roads are built by State PWD/Rural Works Department of States/UTs.

* Figures is as on 31/03/2018-Data not received.

**Length of Panchayati Raj Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)
(in km)**

Sl. No.	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	BT/CC	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	79,344	9,212	28,503	37,715	41,629
2	Arunachal Pradesh*	5,245	0	1,219	1,219	4,026
3	Assam	299,703	14,038	14,065	28,102	271,601
4	Bihar *	122,598	7,240	42,200	49,440	73,158
5	Chhatisgarh	329	0	329	329	0
6	Goa	10,775	1,071	5,346	6,417	4,357
7	Gujarat *	44,434	5,640	36,127	41,767	2,667
8	Haryana	0	0	0	0	0
9	Himachal Pradesh	977	68	383	451	527
10	Jammu & Kashmir	7,754	1,161	2,654	3,814	3,940
11	Jharkhand	0	0	0	0	0
12	Karnataka	197,283	21,925	61,778	83,703	113,580
13	Kerala	181,067	17,962	97,342	115,304	65,763
14	Madhya Pradesh [#]	122,855	19,403	87,815	107,218	15,637
15	Maharashtra*	236,890	78,635	104,320	182,955	53,935
16	Manipur	7,101	0	3,020	3,020	4,081
17	Meghalaya	24,179	697	5,186	5,883	18,296
18	Mizoram	5,221	59	2,849	2,907	2,314
19	Nagaland *	19,455	3,141	3,461	6,602	12,853
20	Odisha	159,292	22,915	70,837	93,752	65,540
21	Punjab	64,878	0	64,878	64,878	0
22	Rajasthan	27,068	3,915	12,016	15,931	11,137
23	Sikkim	3,044	344	2,372	2,715	329
24	Tamil Nadu	148,550	10,862	102,157	113,019	35,531
25	Telangana	68,247	11,098	24,881	35,979	32,268
26	Tripura	22,458	1,942	7,356	9,298	13,160
27	Uttarakhand	1,452	5	1,163	1,168	284
28	Uttar Pradesh	5,907	231	3,759	3,990	1,917
29	West Bengal	110,200	3,962	65,641	69,603	40,597
30	A & N Islands	0	0	0	0	0
31	Chandigarh	0	0	0	0	0
32	Dadra & Nagar Haveli	0	0	0	0	0
33	Daman & Diu*	92	1	91	92	0
34	Delhi	0			0	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	2,394	400	1,765	2,165	229
	Total	1,978,794	235,928	853,511	1,089,439	889,355

Note : Panchayati Raj Roads include Gram Panchayat, Panchayat Samiti & Zilla Parishad Roads

* Figures is as on 31/03/2018-Data not received.

Figures is as on 31/03/2018-Data not received from MPRRDA for BT/CC & Unsurfaced Road

Total & Surfaced Length of Urban Roads as on 31.03.2019 (State/UT-wise)
(in km)

Sl.No.	Name of State/UT	Total	Surfaced
1	2	3	4
1	Andhra Pradesh	12,342	10,715
2	Arunachal Pradesh	59	57
3	Assam	6,268	3,978
4	Bihar	14,308	9,923
5	Chhattisgarh	12,824	11,229
6	Goa	912	817
7	Gujarat	30,920	25,779
8	Haryana	14,853	10,800
9	Himachal Pradesh	4,706	2,881
10	Jammu And Kashmir	2,096	2,069
11	Jharkhand	7,433	5,335
12	Karnataka	41,396	28,323
13	Kerala	28,785	24,817
14	Madhya Pradesh	31,343	25,441
15	Maharashtra	30,386	23,749
16	Manipur	126	70
17	Meghalaya	571	564
18	Mizoram	11	5
19	Nagaland	1,471	913
20	Odisha	21,425	16,327
21	Punjab	18,887	16,508
22	Rajasthan	32,772	28,058
23	Sikkim	156	155
24	Tamilnadu	24,693	23,475
25	Telangana	10,382	9,637
26	Tripura	1,073	1,062
27	Uttarakhand	6,360	4,752
28	Uttar Pradesh	70,178	54,260
29	West Bengal	95,065	66,746
30	A & N Islands	214	200
31	Chandigarh	2,466	2,466
32	Dadra & Nagar Haveli	84	84
33	Daman & Diu	54	54
34	Delhi	15,862	15,802
35	Lakshadweep	4	4
36	Puducherry	1,071	1,020
	Total	541,554	428,076

Note : The Urban Roads comprise of Municipal Roads; (coming under purview of Municipal Corporation under the Urban Development Department of States/Uts), Military Engineering Service Roads; Major & Minor Port roads and roads in Railways Zones.

Length of Municipal Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)
(in km)

Sl. No.	Name of State/UT	Total Length		Surfaced		Unsurfaced
		(6+7)	WBM/WMM	BT/CC	Total (4+5)	Total
1	2	3	4	5	6	7
1	Andhra Pradesh	11,170	874	8,690	9,564	1,606
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	4,824	612	1,970	2,583	2,241
4	Bihar	13,563	240	8,991	9,231	4,332
5	Chhattisgarh	12,383	965	9,850	10,815	1,568
6	Goa	682	79	508	587	95
7	Gujarat	29,635	2,815	21,723	24,538	5,097
8	Haryana*	13,747	594	9,114	9,708	4,039
9	Himachal Pradesh	4,452	764	1,868	2,632	1,820
10	Jammu & Kashmir	600	20	570	590	10
11	Jharkhand	6,696	485	4,163	4,648	2,048
12	Karnataka*	40,482	5,419	22,017	27,436	13,046
13	Kerala	28,543	2,263	22,315	24,578	3,965
14	Madhya Pradesh*	29,368	4,623	18,901	23,524	5,844
15	Maharashtra	27,502	5,688	15,272	20,960	6,542
16	Manipur*	122	22	46	68	54
17	Meghalaya	399	26	366	392	7
18	Mizoram	4	0	0	0	3
19	Nagaland	1,401	0	846	846	556
20	Odisha*	20,245	3,636	11,575	15,211	5,034
21	Punjab*	16,320	519	13,458	13,978	2,343
22	Rajasthan	30,503	2,963	22,863	25,826	4,677
23	Sikkim	132	0	131	131	1
24	Tamil Nadu	23,465	592	21,716	22,309	1,156
25	Telangana*	9,103	0	8,360	8,360	743
26	Tripura	1,010	0	1,010	1,010	0
27	Uttarakhand	5,751	438	3,716	4,154	1,597
28	Uttar Pradesh	67,309	0	51,572	51,572	15,737
29	West Bengal*	92,963	4,831	59,928	64,759	28,204
30	Andaman & Nicobar Islands	92	0	79	79	13
31	Chandigarh*	2,334	0	2,334	2,334	0
32	Dadra & Nagar Haveli	84	0	84	84	0
33	Daman & Diu*	46		46	46	0
34	Delhi*	14,336	0	14,336	14,336	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	1,052	145	859	1,005	47
Total		510,319	38,614	359,280	397,893	112,425

Source: State & UT Urban Departments.

* Figure is as on 31/03/2018- Data not received.

Length of Military Engineering Service Roads - By Type of Surface as on 31.03.2019 (State/UT-wise)
(in km)

Sl. No.	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	337	0	337	337	0
2	Arunachal Pradesh	55	51	5	55	0
3	Assam	829	134	685	819	10
4	Bihar	58	0	58	58	0
5	Chhattisgarh	30	0	30	30	0
6	Goa	120	0	120	120	0
7	Gujarat	332	0	332	332	0
8	Haryana	746	0	746	746	0
9	Himachal Pradesh	234	4	227	231	3
10	Jammu & Kashmir	1,351	0	1,347	1,347	4
11	Jharkhand	157	0	157	157	0
12	Karnataka	551	19	524	543	8
13	Kerala	96	0	96	96	0
14	Madhya Pradesh	1,255	192	1,063	1,255	0
15	Maharashtra	1,630	221	1,408	1,629	1
16	Manipur	0	0	0	0	0
17	Meghalaya	170	98	72	170	0
18	Mizoram	0	0	0	0	0
19	Nagaland	57	0	57	57	0
20	Odisha	103	0	103	103	0
21	Punjab	2,222	259	1,964	2,222	0
22	Rajasthan	1,631	82	1,536	1,618	13
23	Sikkim	24	0	24	24	0
24	Tamil Nadu	569	37	529	566	3
25	Telangana	558	0	558	558	0
26	Tripura	0	0	0	0	0
27	Uttarakhand	561	0	558	558	3
28	Uttar Pradesh	1,599	0	1,593	1,593	6
29	West Bengal	739	13	726	739	0
30	Andaman & Nicobar Islands	112	2	109	112	0
31	Chandigarh	125	0	125	125	0
32	Dadra Nagar Haveli	0	0	0	0	0
33	Daman & Diu	0	0	0	0	0
34	Delhi	1,318	5	1,253	1,258	60
35	Lakshadweep	4	0	4	4	0
36	Puducherry	0	0	0	0	0
Total		17,573	1,116	16,346	17,462	111

Source : Directorate of Works, Engineering in Chief's Branch, Integrated HQ of MoD (Army).

Length of Roads in Major Ports - By Type of Surface as on 31.03.2019 (State/UT-wise)
(in km)

Sl. No.	States/UTs	Major Port Trusts	Total Length (6+7)	Surfaced			Unsurfaced
				W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7	8
1	Andhra Pradesh*	Visakhapatnam	73	0	73	73	0
2	Goa	Mormugoa	25	0	25	25	0
3	Gujarat*	Kandla *	97	0	97	97	0
4	Karnataka*	New Mangalore	47	3	44	47	0
5	Kerala*	Cochin	37	4	33	37	0
		Total	107	0	107	107	0
6	Maharashtra*	Jawaharlal Nehru Port Trust*	40	0	40	40	0
		Mumbai Port Trust	67	0	67	67	0
7	Odisha*	Paradeep	73	0	73	73	0
		Total	98	0	98	98	0
8	Tamil Nadu	Chennai Port					
		Kamrajar Port (Ennore Port Trust)					
		Total	204	47	106	154	50
9	West Bengal	Kolkata Port					
		Haldia Dock					
Total			761	55	656	710	50

Source: Individual Port Trusts

* Figures is as on 31/03/2018-Data not received.

Length of Roads in Minor Ports - By Type of surface as on 31/03/2019 (State/UT-wise)
(in km)

Sl.No.	Name of State/UT	Name of the Ports	Total Length	Surfaced			Unsurfaced
				W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7	8
1	Andhra Pradesh	Bhavanapadu	28	0	28	28	0
		Kakinada					
		Machilipatnam					
		Nizampatnam					
2	Goa*	Tiracol	80	0	80	80	0
		Chapora					
		Panajim					
		Betul					
		Talpona					
3	Gujarat	Jakhau	122	5	109	114	8
		Mandavi					
		Mundra					
		Navalakhi					
		Okha					
		Bedi					
		Rozi					
		Porbandar					
		Veraval					
		Jafrabad					
		Victor					
		Alang Ship Breaking					
		Bhavnagar					
		Dahej					
		Surat					
		Madalla					
		Dumas					
		Dholai					
Onjal							
Kosamba							
4	Kerala*	Vizhinjam	11	1	10	11	0
		Valiyathura					
		Kollam					
		Kochupilamooodu					
		Neendakara					
		Sakthikulangara					
		Pullikkada					
		Alappuzha					
		Kodungallur					
		Kayamkulam					
		Ponnani					
		Thalassery					
		Azhikkal					
		Kasaragod					
Beyepore							
Kannur							

Contd..

Length of Roads in Minor Ports - By Type of surface as on 31/03/2019 (State/UT-wise)
(in km)

Sl.No.	Name of State/UT	Name of the Ports	Total Length	Surfaced			Unsurfaced
				W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7	8
5	Karnataka	Karwar	15	0	15	15	0
		Old Mangalore					
		Belekeri					
		Honnavar					
		Bhatkal					
		Hangarakatta					
		Malpe					
		Tadadi					
		Padubidri					
Kundapura							
6	Odisha	Gopalpur	354	32	289	321	33
		Dhamara					
7	Maharashtra		29	1	22	23	5
8	A&N Islands	Port Blair	11	3	7	10	1
		Campbell Bay					
		Hut Bay					
		Rangat Bay					
		Car nicobar					
9	Daman & Diu*	Daman	8	0	8	8	0
		Diu					
10	Puducherry	Puducherry	19	1	14	15	4
		Karaikal					
11	Tamil Nadu *	Cuddalore	0	0	0	0	0
		Nagapattinam					
		Rameswaram					
		Colachel					
Total			677	43	583	626	51

Source: State Maritime Boards incharge of Minor Ports

The roads under minor ports in Tamil Nadu are not under the purview of the state maritime boards but are under National Highways and State Highways.

* Figures is as on 31/03/2018-Data not received.

**Length of Roads in Railway Zones - By Type of Surface in India as on 31.03.2019
(State/UT-wise)**

(in km)

Sl. No.	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	734	46	667	713	21
2	Arunachal Pradesh	4	0	2	2	2
3	Assam	615	36	540	576	39
4	Bihar	688	32	603	634	54
5	Chhattisgarh	411	37	348	385	26
6	Goa	5	0	5	5	0
7	Gujarat	734	52	645	698	36
8	Haryana	359	10	336	346	14
9	Himachal Pradesh	21	8	10	18	2
10	Jammu & Kashmir	145	0	132	132	12
11	Jharkhand	580	74	456	530	50
12	Karnataka	300	49	232	282	19
13	Kerala	98	10	85	95	4
14	Madhya Pradesh	720	101	562	663	57
15	Maharashtra	1,119	190	839	1,029	89
16	Manipur	4	1	1	2	1
17	Meghalaya	2	0	2	2	0
18	Mizoram	8	3	3	5	3
19	Nagaland	12	1	9	10	2
20	Odisha	649	52	567	618	31
21	Punjab	344	20	289	308	36
22	Rajasthan	638	71	544	614	23
23	Sikkim	0			0	
24	Tamil Nadu	561	64	439	502	59
25	Telangana*	720	52	666	719	2
26	Tripura	63	22	30	52	12
27	Uttarakhand	48	7	33	40	8
28	Uttar Pradesh	1,270	92	1,002	1,094	175
29	West Bengal	1,159	181	913	1,094	65
30	A & N Islands	0			0	
31	UT Chandigarh	6	0	6	6	0
32	Dadra & Nagar Haveli	0			0	
33	Daman & Diu	0			0	
34	Delhi	208	33	175	208	0
35	Lakshadweep	0			0	
36	Puducherry	0	0	0	0	0
Total		12,225	1,243	10,141	11,383	841

Source : Data based on Railway Zones which had reported.

* Figures is as on 31/03/2018-Data not received.

Total & Surfaced length of Project Roads as on 31.03.2019 (State/UT-Wise) (in km)

Sl.No.	Name of State/UT	Total	Surfaced
1	2	3	4
1	Andhra Pradesh	10,751	3,443
2	Arunachal Pradesh	4,717	3,073
3	Assam	7,813	1,026
4	Bihar	2,230	107
5	Chhattisgarh	15,672	7,172
6	Goa	334	165
7	Gujarat	31,343	24,725
8	Haryana	1,594	268
9	Himachal Pradesh	7,781	3,542
10	Jammu And Kashmir	19,826	8,391
11	Jharkhand	13,928	6,621
12	Karnataka	20,413	7,625
13	Kerala	9,036	4,055
14	Madhya Pradesh	30,484	7,741
15	Maharashtra	21,993	9,349
16	Manipur	1,298	1,202
17	Meghalaya	603	229
18	Mizoram	1,082	778
19	Nagaland	1,035	796
20	Odisha	25,733	10,962
21	Punjab	13,195	3,208
22	Rajasthan	10,444	6,870
23	Sikkim	881	501
24	Tamilnadu	10,052	6,140
25	Telangana	18,156	18,146
26	Tripura	1,439	20
27	Uttarakhand	5,268	1,670
28	Uttar Pradesh	42,173	14,685
29	West Bengal	13,576	4,400
30	A & N Islands	218	174
31	Chandigarh	0	0
32	Dadra & Nagar Haveli	0	0
33	Daman & Diu	1	1
34	Delhi	52	52
35	Lakshadweep	0	0
36	Puducherry	44	36
Total		343,163	157,171

Note: The Project Roads comprise of Forest Roads, roads of Border Roads Organisation, Coal Departments, Electricity, Irrigation, Sugarcane Department and of Steel Authority of India Limited and National Mineral Development Corporation.

**Length of Roads under Forest Departments - By Type of Surface in India as on 31.03.2019
(State/UT-wise)**

(in km)

Sl. No	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh*	4,047	1,133	64	1,197	2,849
2	Arunachal Pradesh	1,213	232	45	276	936
3	Assam	5,965	264	381	645	5,320
4	Bihar*	2,030	0	0	0	2,030
5	Chhattisgarh*	10,868	5,055	0	5,055	5,813
6	Goa	164	0	49	49	115
7	Gujarat*	22,112	0	22,112	22,112	0
8	Haryana*	26	23	3	26	0
9	Himachal Pradesh*	2,254	0	26	26	2,228
10	Jammu & Kashmir	11,540	1,308	35	1,342	10,197
11	Jharkhand*	9,442	1,729	2,470	4,199	5,243
12	Karnataka	10,196	619	391	1,010	9,185
13	Kerala	4,846	885	514	1,398	3,447
14	Madhya Pradesh*	29,798	2,208	4,946	7,154	22,644
15	Maharashtra*	13,575	4,669	913	5,582	7,993
16	Manipur	0	0	0	0	0
17	Meghalaya	155	75	22	97	58
18	Mizoram	53	11	10	21	32
19	Nagaland*	288	0	102	102	187
20	Odisha	7,478	1,965	611	2,576	4,902
21	Punjab*	707	0	0	0	707
22	Rajasthan*	5,343	512	1,600	2,113	3,231
23	Sikkim*	6	0	4	4	3
24	Tamil Nadu *	3,351	833	799	1,632	1,719
25	Telangana	17,117	17,117	0	17,117	0
26	Tripura *	1,345	0	11	11	1,334
27	Uttarakhand*	3,731	0	468	468	3,264
28	Uttar Pradesh	8,349	890	951	1,841	6,508
29	West Bengal	6,072	172	320	492	5,579
30	A & N Islands	194	81	86	167	27
31	UT Chandigarh	0	0	0	0	0
32	Dadra & Nagar Haveli	0	0	0	0	0
33	Daman & Diu*	1	1	0	1	0
34	Delhi	0	0	0	0	0
35	Lakshadweep	0			0	
36	Puducherry	0	0	0	0	0
	Total	182,266	39,782	36,933	76,715	105,551

Source : State Departments of Forests

Blank cells refer to States and UTs who have not furnished data or have insignificant or nil forest roads

* Figures is as on 31/03/2018-Data not received.

**Length of Roads under Border Roads Organisation - By Type of Surface in India
as on 31.03.2019 (State/UT-wise)**

(in km)

Sl.No	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	0			0	
2	Arunachal Pradesh	3,504	188	2,609	2,797	707
3	Assam	220	0	217	217	3
4	Bihar	0			0	
5	Chhattisgarh	0			0	
6	Goa	0			0	
7	Gujarat	0	0	0	0	0
8	Haryana	0			0	
9	Himachal Pradesh	977	60	749	809	168
10	Jammu & Kashmir	7,864	579	6,337	6,916	948
11	Jharkhand	0			0	
12	Karnataka	0			0	
13	Kerala	0			0	
14	Madhya Pradesh	0			0	
15	Maharashtra	0			0	
16	Manipur*	1,298	20	1,182	1,202	96
17	Meghalaya	0			0	
18	Mizoram	895	14	719	733	162
19	Nagaland*	747	54	639	694	53
20	Odisha	0			0	
21	Punjab	203	0	198	198	5
22	Rajasthan	3,254	52	3,175	3,228	26
23	Sikkim	875	19	478	497	378
24	Tamil Nadu	0			0	
25	Telangana	0			0	
26	Tripura*	12	0	0	0	12
27	Uttarakhand	956	11	688	699	256
28	Uttar Pradesh	0			0	
29	West Bengal	122	0	122	122	
30	A & N Islands	24	5	2	7	17
31	UT Chandigarh	0			0	
32	Dadra & Nagar Haveli	0			0	
33	Daman & Diu	0			0	
34	Delhi	0			0	
35	Lakshadweep	0			0	
36	Puducherry	0			0	
Total		20,949	1,003	17,116	18,118	2,831

Source : DG Border Roads

Blank Cells refer to States and UTs who have nil BRO roads

* Figures is as on 31/03/2018-Data not received.

**Length of Roads under coal fields/ coal units of Coal India Limited - by Type of Surface as on
31.03.2019 (State/UT-wise)**

(in km)

Sl. No.	Name of States/UTs (Names of Coal Fields)	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	0			0	
2	Arunachal Pradesh	0			0	
3	Assam					
	i. North Eastern Coalfields, Margherita- Tinsukia*	51	2	42	44	7
4	Bihar	0			0	
5	Chhattisgarh*					
	i. South Eastern Coal Fields, Bilaspur	793	78	681	759	34
6	Goa	0			0	
7	Gujarat	0			0	
8	Haryana	0			0	
9	Himachal Pradesh	0			0	
10	Jammu & Kashmir	0			0	
11	Jharkhand*					
	i. Bharat Coking Coal Ltd., Dhanbad*	545	48	415	463	82
	ii. Eastern Coal Fields Ltd.	104	29	57	85	19
	iii. Central Coal Fields, Ranchi	678	41	627	668	10
12	Karnataka	0			0	
13	Kerala	0			0	
14	Madhya Pradesh*					
	i. Western Coal Fields	211	13	198	211	0
	ii. Northern Coal fields Ltd. Singarauli*	302	26	212	238	64
15	Maharashtra*					
	i. Western Coal Fields Ltd, Nagpur	560	184	334	518	41
16	Manipur	0			0	
17	Meghalaya	0			0	
18	Mizoram	0			0	
19	Nagaland	0			0	
20	Odisha*					
	i. Mahanadi Coal Fields. Sambalpur*	314	96	200	296	18
21	Punjab	0			0	
22	Rajasthan	0			0	
23	Sikkim	0			0	
24	Tamil Nadu	0			0	
25	Telangana*					
	i. Singareni Coal field, Kothagudem, Bhadradi Dist.*	906	70	833	903	3
26	Tripura	0			0	
27	Uttarakhand	0			0	
28	Uttar Pradesh	0			0	
29	West Bengal*					
	i. Eastern Coalfields Limited, Burdwan	301	42	232	274	27
30	Andaman & Nicobar Islands	0			0	
31	UT Chandigarh	0			0	
32	Dadra & Nagar Havelli	0			0	
33	Daman & Diu	0			0	
34	Delhi	0			0	
35	Lakshadweep	0			0	
36	Puducherry	0			0	
	Total	4,765	629	3,831	4,460	305

Notes: Western Coal fields are located in Maharashtra and in Madhya Pradesh.

Eastern Coal Fields are located in Jharkhand & in West Bengal.

* Figures is as on 31/03/2018-Data not received.

**Length of Roads under Electricity Departments of States/UTs - By Type of Surface in India
as on 31.03.2019**

(in km)

Sl.No	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	6	4	5	3	7
1	Andhra Pradesh	237	29	178	207	30
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	76	15	53	69	8
4	Bihar	200	41	66	107	92
5	Chhattisgarh	11	1	10	11	0
6	Goa	11	3	7	10	1
7	Gujarat*	462	235	213	448	14
8	Haryana*	131	9	122	131	0
9	Himachal Pradesh*	99	35	40	75	24
10	Jammu & Kashmir	0	0	0	0	0
11	Jharkhand	3	0	3	3	0
12	Karnataka	191	26	151	177	15
13	Kerala	233	45	170	215	18
14	Madhya Pradesh	60	12	27	39	21
15	Maharashtra*	343	183	124	307	36
16	Manipur	0	0	0	0	0
17	Meghalaya	132	6	111	117	15
18	Mizoram *	134	3	21	24	110
19	Nagaland	0	0	0	0	0
20	Odisha*	70	37	31	68	2
21	Punjab*	449	28	393	421	28
22	Rajasthan	529	9	518	527	1
23	Sikkim	0	0	0	0	0
24	Tamil Nadu	859	253	530	784	75
25	Telangana	19	2	17	19	1
26	Tripura	0	0	0	0	0
27	Uttarakhand*	165	4	145	149	15
28	Uttar Pradesh	24	0	19	19	5
29	West Bengal*	216	8	161	169	47
30	Andaman & Nicobar Islands	0	0	0	0	0
31	UT Chandigarh	0	0	0	0	0
32	Dadra & Nagar Haveli	0	0	0	0	0
33	Daman & Diu	0	0	0	0	0
34	Delhi*	52	1	51	52	0
35	Lakshadweep	0	0	0	0	0
36	Puducherry	3	0	2	3	0
Total		4,710	985	3,166	4,151	560

Source : State Departments of Electricity

Blank cells refer to States and UTs who have not furnished data or have insignificant or nil electricity roads

* Figures is as on 31/03/2018-Data not received.

**Length of Roads under Irrigation Departments of States/UTs - By Type of Surface in India
as on 31.03.2019**
(in km)

Sl.No	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced Total
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh	6,467	1,305	733	2,038	4,429
2	Arunachal Pradesh					
3	Assam	1,501	37	14	51	1,450
4	Bihar					
5	Chhattisgarh*	3,023	111	296	407	2,616
6	Goa	159	22	84	106	53
7	Gujarat*	8,768	1,340	825	2,165	6,603
8	Haryana*	1,437	6	105	111	1,326
9	Himachal Pradesh*	4,452	764	1,868	2,632	1,820
10	Jammu & Kashmir*	422	133	0	133	289
11	Jharkhand*	2,604	566	133	700	1,904
12	Karnataka*	9,731	4,425	1,825	6,250	3,481
13	Kerala	3,957	591	1,851	2,442	1,515
14	Madhya Pradesh	72	8	64	72	0
15	Maharashtra*	7,497	1,871	1,059	2,931	4,567
16	Manipur					
17	Meghalaya	315	6	9	15	301
18	Mizoram					
19	Nagaland	0	0	0	0	0
20	Odisha*	17,388	4,430	3,113	7,542	9,845
21	Punjab	11,836	188	2,401	2,589	9,248
22	Rajasthan	1,318	579	423	1,002	316
23	Sikkim	0	0	0	0	0
24	Tamil Nadu*	4,070	281	1,671	1,952	2,118
25	Telangana	113	0	107	107	7
26	Tripura*	82	0	9	9	72
27	Uttarakhand*	406	18	325	343	63
28	Uttar Pradesh*	20,492	0	3,049	3,049	17,443
29	West Bengal	6,238	1,878	852	2,730	3,508
30	A & N Islands					
31	UT Chandigarh					
32	Dadra & Nagar Haveli					
33	Daman & Diu					
34	Delhi					
35	Lakshadweep					
36	Puducherry					
	Total	112,349	18,560	20,814	39,374	72,974

Source : State Departments of Irrigation

Blank cells refer to States and UTs who have not furnished data or have insignificant or nil irrigation roads

* Figures is as on 31/03/2018-Data not received.

**Length of Roads under Sugarcane Departments of States/Uts - By Type of Surface in India
as on 31.03.2019**

(in km)

Sl.No	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh					
2	Arunachal Pradesh					
3	Assam					
4	Bihar					
5	Chhattisgarh					
6	Goa					
7	Gujarat					
8	Haryana					
9	Himachal Pradesh					
10	Jammu & Kashmir					
11	Jharkhand					
12	Karnataka*	156	0	52	52	104
13	Kerala					
14	Madhya Pradesh					
15	Maharashtra					
16	Manipur					
17	Meghalaya					
18	Mizoram					
19	Nagaland					
20	Odisha					
21	Punjab					
22	Rajasthan					
23	Sikkim					
24	Tamil Nadu*	1,676	0	1,676	1,676	0
25	Telangana					
26	Tripura					
27	Uttarakhand	10	0	10	10	0
28	Uttar Pradesh	13,307	0	9,776	9,776	3,531
29	West Bengal					
30	A & N Islands					
31	UT Chandigarh					
32	Dadra & Nagar Haveli					
33	Daman & Diu					
34	Delhi					
35	Lakshadweep					
36	Puducherry	41	5	28	33	8
	Total	15,190	5	11,542	11,547	3,643

Source : State Sugarcane Departments

* Figures is as on 31/03/2018-Data not received.

Blank cells refer to States and UTs who have not furnished data or have insignificant or nil Sugarcane authority roads

Length of Roads under SAIL & NMDC - By Type of Surface in India as on 31.03.2019
(in km)

Sl.No	Name of State/UT	Total Length (6+7)	Surfaced			Unsurfaced
			W.B.M.	B.T./C.C	Total (4+5)	
1	2	3	4	5	6	7
1	Andhra Pradesh					
2	Arunachal Pradesh	0	0	0	0	0
3	Assam					
4	Bihar					
5	Chhattisgarh	977	16	924	940	37
6	Goa					
7	Gujarat					
8	Haryana					
9	Himachal Pradesh					
10	Jammu & Kashmir					
11	Jharkhand	552	12	491	503	50
12	Karnataka	139	10	126	136	3
13	Kerala					
14	Madhya Pradesh	40	11	16	27	13
15	Maharashtra	18	3	8	11	7
16	Manipur					
17	Meghalaya					
18	Mizoram					
19	Nagaland					
20	Odisha	483	3	476	479	4
21	Punjab					
22	Rajasthan					
23	Sikkim					
24	Tamil Nadu	96	0	96	96	0
25	Telangana					
26	Tripura					
27	Uttarakhand					
28	Uttar Pradesh					
29	West Bengal	628	36	577	614	14
30	A & N Islands					
31	UT Chandigarh					
32	Dadra & Nagar Haveli					
33	Daman & Diu					
34	Delhi					
35	Lakshadweep					
36	Puducherry					
Total		2,933	92	2,714	2,805	127

Sources: 1. Steel Authority of India Limited

2. National Mineral Development Corporation

Blank cells refer to States and UTs who have not furnished data or have insignificant or nil SAIL/ NMDC roads

* Figures is as on 31/03/2016-Data not received.

Road Density per 1000 Sq. Km of Roads in Rural and Urban area

Name of the States	1	2	3	4	5	6	Total Population	Rural Road length (as on 31/3/2019)	Urban Road length (as on 31/3/2019)	Total Road Length (as on 31/3/2019)	Urban Road density	Rural Road density	Entire State Road length per 1000 sq km	Urban Road length per 1000 sq km	Rural Road length per 1000 sq km	Entire State Road length per 1000 pop
Andhra Pradesh	275,045	275,045	267,191	7,855	56,361,702	28,219,075	84,580,777	180,833	22,724	316,906	2,893.1	676.8	1,152	0.81	3.21	3.75
Arunachal Pradesh	83,743	83,743	77,178	1,260	1,066,358	317,369	1,383,727	25,832	59	55,262	4,974.7	4,826.6	660	0.19	24.22	39.94
Assam	78,438	78,438	91,838	2,325	26,807,034	4,398,542	31,205,576	372,510	6,268	399,122	6,154.9	2,825.7	5,088	1.42	13.90	12.79
Bihar	94,163	94,163	131,940	3,252	92,341,436	11,758,016	104,099,452	259,507	14,308	298,205	3,943.8	428.8	3,167	1.22	2.81	2.86
Chhattisgarh	135,192	135,192	2,937	765	19,607,961	5,937,237	25,545,198	56,575	12,824	105,074	1,192.7	5,465.9	777	2.16	2.89	4.11
Goa	3,702	3,702	188,839	7,405	551,731	906,814	1,458,545	16,054	912	18,697	4,175.3	701.5	5,051	1.01	29.10	12.82
Gujarat	196,244	196,244	44,212	1,976	34,694,609	25,745,083	60,439,692	132,467	30,920	249,373	7,516.3	166.4	1,271	1.20	3.82	4.13
Haryana	55,673	55,673	220,990	1,246	16,509,359	8,842,103	25,351,462	7,027	14,853	50,292	7,376.1	957.2	1,138	1.68	0.43	1.98
Himachal Pradesh	222,236	222,236	79,716	2,424	6,176,050	688,552	6,864,602	53,033	4,706	73,230	1,682.1	342.5	1,315	0.61	8.31	10.67
J & K (1) ++	308,252	308,252	220,990	1,246	9,108,060	3,433,242	12,541,302	75,684	2,096	120,034	3,066.3	573.4	540	0.94	1.77	2.46
Jharkhand	307,713	307,713	185,777	6,014	25,055,073	7,933,061	32,988,134	44,317	7,433	81,245	1,184.9	1,427.7	1,019	1.75	5.87	5.86
Karnataka	191,791	191,791	31,253	7,599	17,471,135	15,934,926	33,406,061	188,517	28,785	259,932	3,788.1	6,031.9	6,690	1.81	10.79	7.78
Kerala	308,252	308,252	300,506	7,746	52,557,404	20,069,405	72,626,809	232,344	31,343	365,045	4,046.1	773.2	1,184	1.56	4.42	5.03
Madhya Pradesh	307,713	307,713	298,619	9,094	61,556,074	50,818,259	112,374,333	426,327	30,386	636,887	3,341.5	1,427.7	2,070	0.60	6.93	5.67
Maharashtra	22,327	22,327	22,148	180	2,021,640	834,154	2,855,794	25,339	126	32,389	700.2	1,144.1	1,451	0.15	12.53	11.34
Manipur	22,429	22,429	20,494	587	2,371,439	595,450	2,966,889	32,537	571	40,258	2,018.8	1,469.2	1,795	0.96	13.72	13.57
Meghalaya	21,081	21,081	16,579	1,633	525,435	571,771	1,097,206	11,849	11	16,250	18.8	578.2	771	0.02	22.55	14.81
Mizoram	16,579	16,579	155,707	3,352	1,407,536	570,966	1,978,502	28,039	1,471	37,871	6,039.9	1,716.4	2,284	2.58	19.92	19.14
Nagaland	50,362	50,362	47,847	2,515	17,344,192	10,399,146	27,743,338	104,565	18,887	147,862	7,510.9	2,185.4	2,936	1.82	6.03	5.33
Punjab	342,239	342,239	335,606	6,633	51,500,352	17,048,085	68,548,437	220,402	32,772	313,469	4,940.7	656.7	916	1.92	4.28	4.57
Rajasthan	7,096	7,096	83,626	5,126	456,999	153,578	610,577	8,550	156	12,182	4,084.2	1,211.5	1,717	1.02	18.71	19.95
Sikkim	130,060	130,060	10,094	392	37,229,590	34,917,440	72,147,030	170,246	24,693	271,137	1,810.9	1,462.3	2,085	0.71	4.57	3.76
Tamil Nadu	10,486	10,486	233,366	7,562	2,712,464	961,453	3,673,917	40,236	1,073	45,120	2,739.0	3,986.1	4,303	1.12	14.83	12.28
Tripura	240,928	240,928	53,483	902	155,317,278	44,495,063	199,812,341	255,576	70,178	442,907	9,280.0	1,095.2	1,838	1.58	1.65	2.22
Uttar Pradesh	53,483	53,483	88,752	83,626	7,036,954	3,049,338	10,086,292	44,805	6,360	68,727	7,051.7	852.1	1,285	2.09	6.37	6.81
Uttarakhand	88,752	88,752	8,249	38	62,183,113	29,093,002	91,276,115	157,497	95,065	283,865	18,547.2	1,883.3	3,198	3.27	2.53	3.11
West Bengal	8,249	8,249	114	4	237,093	143,488	380,581	610	214	1,809	5,650.1	74.2	219	1.49	2.57	4.75
A. & N. Islands	491	491	445	46	183,114	160,595	1,055,450	0	2,466	2,573	22,509.8	0.0	22,567	2.40	0.00	2.44
Chandigarh	111	111	62	49	60,396	182,851	343,709	798	84	1,133	1,834.5	1,792.0	2,307	0.52	4.36	3.30
D & N.Haveli	490	490	326	1,157	419,042	16,368,899	16,787,941	116	54	274	1,112.9	1,863.0	2,468	0.30	1.93	1.13
Daman & Diu	30	30	9	21	14,141	50,332	64,473	228	4	232	206.4	24,827.7	7,732	0.09	16.10	3.60
Delhi	490	490	335	155	395,200	852,753	1,247,953	2,755	1,071	4,294	6,930.1	8,213.9	8,763	1.26	6.97	3.44
Lakshadweep	3,287,469	3,287,469	3,101,474	102,252	833,748,852	377,106,125	1,210,854,977	3,622,228	541,554	5,431,757	5,296.3	1,167.9	1,652	1.44	4.34	4.49
Puducherry																
INDIA (1) ++																

Notes : 1. Andhra pradesh includes the road length of Telengana

2. Total length excludes JRY roads

Road Density per 1000 Sq. Km for different Categories of Roads

Name of the States	Road Density per 1000 Sq. Km														
	National Highways	State Highways	District Roads	Rural Roads	Urban roads	Project Roads	Total road Length	Total Area	Road Density	National Highways	State Highways	District Roads	Rural Roads	Urban roads	Project Roads
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Andhra Pradesh*	10,709	15,649	58,083	180,833	22,724	28,907	316,906	275,045	1,152.20	38.9	56.9	211	657.47	82.62	105.10
Arunachal Pradesh	2,537	13,500	8,616	25,832	59	4,717	55,262	83,743	659.90	30.3	161.2	103	308.47	0.71	56.33
Assam	3,909	2,530	6,093	372,510	6,268	7,813	399,122	78,438	5,088.38	49.8	32.3	78	4,749.11	79.90	99.60
Bihar	5,358	4,006	12,797	259,507	14,308	2,230	298,205	94,163	3,166.91	56.9	42.5	136	2,755.93	151.95	23.68
Chhattisgarh	3,606	4,176	12,221	56,575	12,824	15,672	105,074	135,192	777.22	26.7	30.9	90	418.48	94.86	115.92
Goa	293	279	824	16,054	912	334	18,697	3,702	5,050.61	79.1	75.5	223	4,336.69	246.40	90.29
Gujarat	6,635	16,746	31,262	132,467	30,920	31,343	249,373	196,244	1,270.73	33.8	85.3	159	675.01	157.56	159.71
Haryana	3,166	1,602	22,051	7,027	14,853	1,594	50,292	44,212	1,137.53	71.6	36.2	499	158.93	335.95	36.06
Himachal Pradesh	2,607	827	4,277	53,033	4,706	7,781	73,230	55,673	1,315.37	46.8	14.9	77	952.57	84.53	139.77
Jammu & Kashmir	2,423	310	19,695	75,684	2,096	19,826	120,034	222,236	540.12	10.9	1.4	89	340.56	9.43	89.21
Jharkhand	3,367	1,232	10,969	44,317	7,433	13,928	81,245	79,716	1,019.18	42.2	15.5	138	555.93	93.24	174.73
Karnataka	7,335	19,473	49,555	220,130	41,396	20,413	358,300	191,791	1,868.18	38.2	101.5	258	1,147.76	215.84	106.43
Kerala	1,782	4,342	27,470	188,517	28,785	9,036	259,932	38,852	6,690.30	45.9	111.7	707	4,852.19	740.89	232.56
Madhya Pradesh	8,772	11,389	50,714	232,344	31,343	30,484	365,045	308,252	1,184.24	28.5	36.9	165	753.75	101.68	98.89
Maharashtra	17,757	32,005	108,419	426,327	30,386	21,993	636,887	307,713	2,069.74	57.7	104.0	352	1,385.47	98.75	71.47
Manipur	1,750	781	3,095	25,339	126	1,298	32,389	22,327	1,450.66	78.4	35.0	139	1,134.90	5.63	58.13
Meghalaya	1,156	768	4,624	32,537	571	603	40,258	22,429	1,794.91	51.5	34.2	206	1,450.66	25.46	26.86
Mizoram	1,423	170	1,714	11,849	11	1,082	16,250	21,081	770.82	67.5	8.1	81	562.09	0.52	51.34
Nagaland	1,548	650	5,129	28,039	1,471	1,035	37,871	16,579	2,284.29	93.4	39.2	309	1,691.21	88.70	62.44
Odisha	5,762	4,143	21,647	226,922	21,425	25,733	305,631	155,707	1,962.86	37.0	26.6	139	1,457.36	137.60	165.27
Punjab	3,274	1,133	6,808	104,565	18,887	13,195	147,862	50,362	2,935.98	65.0	22.5	135	2,076.26	375.02	262.00
Rajasthan	10,342	15,061	24,448	220,402	32,772	10,444	313,469	342,239	915.94	30.2	44.0	71	644.00	95.76	30.52
Sikkim	463	663	1,469	8,550	156	881	12,182	7,096	1,716.72	65.2	93.4	207	1,204.95	22.02	124.10
Tamil Nadu	6,742	11,169	48,236	170,246	24,693	10,052	271,137	130,060	2,084.71	51.8	85.9	371	1,308.98	189.86	77.29
Tripura	854	1,057	461	40,236	1,073	1,439	45,120	10,486	4,302.87	81.4	100.8	44	3,837.12	102.36	137.20
Uttar Pradesh	11,737	7,427	55,816	255,576	70,178	42,173	442,907	240,928	1,838.34	48.7	30.8	232	1,060.80	291.28	175.04
Uttarakhand	2,949	4,517	4,828	44,805	6,360	5,268	68,727	53,483	1,285.03	55.1	84.5	90	837.75	118.92	98.50
West Bengal	3,664	3,612	10,449	157,497	95,065	13,576	283,865	88,752	3,198.40	41.3	40.7	118	1,774.58	1,071.13	152.97
A. & N. Islands	331	257	180	610	214	218	1,809	8,249	219.29	40.1	31.1	22	73.90	25.97	26.41
Chandigarh	15	9	83	0	2,466	0	2,573	114	22,567.24	134.0	78.0	728	0.00	21,627.19	0.00
D. & N. Haveli	31	30	190	798	84	0	1,133	491	2,307.20	63.1	60.7	387	1,625.17	170.74	0.00
Daman & Diu	22	22	59	116	54	1	274	111	2,467.57	198.2	198.2	527	1,048.65	486.49	9.01
Delhi	157	0	100	0	15,862	52	16,170	1,483	10,903.86	105.9	0.0	67	0.00	10,695.69	35.06
Lakshadweep	0	0	0	228	4	0	232	30	7,732.33	0.0	0.0	0	7,589.00	143.33	0.00
Puducherry	27	0	397	2,755	1,071	44	4,294	490	8,763.03	54.8	0.0	809	5,623.03	2,185.97	89.83
INDIA (I) ++	132,499	179,535	612,778	3,622,228	541,554	343,163	5,431,757	3,287,469	1,652.26	40.3	54.6	186	1,101.83	164.73	104.39

Notes : * Andhra Pradesh also includes the road length of Telengana

2. Total length excludes JRY roads

Road length per 1000 population

Name of the States	Road length per 1000 population										Road length per '000 pop				Road length per '000 Population			
	National Highways	State Highways	District Roads	Rural Roads	Urban Roads	Project Roads	Total road Length	Total Population	Road length per '000 pop	National Highways	State Highways	District Roads	Rural Roads	Urban roads	Project Roads			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Andhra Pradesh*	10,709	15,649	58,083	180,833	22,724	28,907	316,906	84,581	4	0.13	0.2	0.7	2	0.27	0.34			
Arunachal Pradesh	2,537	13,500	8,616	25,832	59	4,717	55,262	1,384	40	1.83	9.8	6.2	19	0.04	3.41			
Assam	3,909	2,530	6,093	372,510	6,268	7,813	399,122	31,206	13	0.13	0.1	0.2	12	0.20	0.25			
Bihar	5,358	4,006	12,797	259,507	14,308	2,230	298,205	104,099	3	0.05	0.0	0.1	2	0.14	0.02			
Chhattisgarh	3,606	4,176	12,221	56,575	12,824	15,672	105,074	25,545	4	0.14	0.2	0.5	2	0.50	0.61			
Goa	293	279	824	16,054	912	334	18,697	1,459	13	0.20	0.2	0.6	11	0.63	0.23			
Gujarat	6,635	16,746	31,262	132,467	30,920	31,343	249,373	60,440	4	0.11	0.3	0.5	2	0.51	0.52			
Haryana	3,166	1,602	22,051	7,027	14,853	1,594	50,292	25,351	2	0.12	0.1	0.9	0	0.59	0.06			
Himachal Pradesh	2,607	827	4,277	53,033	4,706	7,781	73,230	6,865	11	0.38	0.1	0.6	8	0.69	1.13			
Jammu & Kashmir	2,423	310	19,695	75,684	2,096	19,826	120,034	12,541	10	0.19	0.0	1.6	6	0.17	1.58			
Jharkhand	3,367	1,232	10,969	44,317	7,433	13,928	81,245	32,988	2	0.10	0.0	0.3	1	0.23	0.42			
Karnataka	7,335	19,473	49,555	220,130	41,396	20,413	358,300	61,095	6	0.12	0.3	0.8	4	0.68	0.33			
Kerala	1,782	4,342	27,470	188,517	28,785	9,036	259,932	33,406	8	0.05	0.1	0.8	6	0.86	0.27			
Madhya Pradesh	8,772	11,389	50,714	232,344	31,343	30,484	365,045	72,627	5	0.12	0.2	0.7	3	0.43	0.42			
Maharashtra	17,757	32,005	108,419	426,327	30,386	21,993	636,887	112,374	6	0.16	0.3	1.0	4	0.27	0.20			
Manipur	1,750	781	3,095	25,339	126	1,298	32,389	2,856	11	0.61	0.3	1.1	9	0.04	0.45			
Meghalaya	1,156	768	4,624	32,537	571	603	40,258	2,967	14	0.39	0.3	1.6	11	0.19	0.20			
Mizoram	1,423	170	1,714	11,849	11	1,082	16,250	1,097	15	1.30	0.2	1.6	11	0.01	0.99			
Nagaland	1,548	650	5,129	28,039	1,471	1,035	37,871	1,979	19	0.78	0.3	2.6	14	0.74	0.52			
Odisha	5,762	4,143	21,647	226,922	21,425	25,733	305,631	41,974	7	0.14	0.1	0.5	5	0.51	0.61			
Punjab	3,274	1,133	6,808	104,565	18,887	13,195	147,862	27,743	5	0.12	0.0	0.2	4	0.68	0.48			
Rajasthan	10,342	15,061	24,448	220,402	32,772	10,444	313,469	68,548	5	0.15	0.2	0.4	3	0.48	0.15			
Sikkim	463	663	1,469	8,550	156	881	12,182	611	20	0.76	1.1	2.4	14	0.26	1.44			
Tamil Nadu	6,742	11,169	48,236	170,246	24,693	10,052	271,137	72,147	4	0.09	0.2	0.7	2	0.34	0.14			
Tripura	854	1,057	461	40,236	1,073	1,439	45,120	3,674	12	0.23	0.3	0.1	11	0.29	0.39			
Uttar Pradesh	11,737	7,427	55,816	255,576	70,178	42,173	442,907	199,812	2	0.06	0.0	0.3	1	0.35	0.21			
Uttarakhand	2,949	4,517	4,828	44,805	6,360	5,268	68,727	10,086	7	0.29	0.4	0.5	4	0.63	0.52			
West Bengal	3,664	3,612	10,449	157,497	95,065	13,576	283,865	91,276	3	0.04	0.0	0.1	2	1.04	0.15			
A. & N. Islands	331	257	180	610	214	218	1,809	381	5	0.87	0.7	0.5	2	0.56	0.57			
Chandigarh	15	9	83	0	2,466	0	2,573	1,055	2	0.01	0.0	0.1	0	2.34	0.00			
D. & N. Haveli	31	30	190	798	84	0	1,133	344	3	0.09	0.1	0.6	2	0.24	0.00			
Daman & Diu	22	22	59	116	54	1	274	243	1	0.09	0.1	0.2	0	0.22	0.00			
Delhi	157	0	100	0	15,862	52	16,170	16,788	1	0.01	0.0	0.0	0	0.94	0.00			
Lakshadweep	0	0	0	228	4	0	232	64	4	0.00	0.0	0.0	4	0.07	0.00			
Puducherry	27	0	397	2,755	1,071	44	4,294	1,248	3	0.02	0.0	0.3	2	0.86	0.04			
INDIA (1) ++	132,499	179,535	612,778	3,622,228	541,554	343,163	5,431,757	1,210,855	4	0.11	0.1	0.5	3	0.45	0.28			

Notes : 1. Andhra prdesh includes the road length of Telengana
2. Total length excludes JRY roads

The details of National Highways (New No.) in the country and their length

Sr. No.	Name of State/UT	National Highway No.	Total Length as on 31.03.2019 (in km)
1	Andhra Pradesh	16, 216, 216A, 516C, 516D, 516 E, 716, 716A, 716B, 26, 326, 326A, 30, 40, 140, 340, 340C, 42, 44 N.S., 544D, 544F, 544DD, 544E, 150A, 65, 165, 365BB, 565, 765, 67, 167, 167A, 167B, 167BG, 69, 71, 75	6,912
2	Arunachal Pradesh	13, 113, 313, 513, 713, 713A, 15, 115, 215, 315, 415, 515, 315A	2,537
3	Assam	2, 702, 702C, 702D, 6, 306, 8, 208A, 15, 115, 215, 315, 315A, 415, 515, 715, 715A, 17, 117, 117A, 217, 27 E.W., 127, 127A, 127B, 127C, 127D, 127E, 427, 627, 29, 129, 329, 329A, 37	3,909
4	Bihar	19 G.Q., 119, 219, 319, 319A, 20, 120, 22, 122, 122A, 122B, 322, 722, 922, 27 E.W., 227, 227A, 227F, 227J, 227L, 327, 327A, 327AD, 527, 527A, 527B, 527C, 527D, 527E, 727, 727A, 727AA, 31, 131, 131A, 131B, 231, 331, 431, 531, 33, 133,	5,358
5	Chandigarh	5	15
6	Chhattisgarh	30, 130, 130A, 130B, 130C, 130D, 130CD, 930, 43, 143B, 343, 45, 49, 149B, 53, 153, 353, 63, 163, 163A	3,605
7	Delhi	9, 709B, 44, 344M, 344N, 344P, 48, 148A, 148AE, 148NA, 248BB	157
8	Goa	748, 748AA, 66, 366, 566	293
9	Gujarat	NE-1, 27, 927D, 41, 141, 341, 47, 147, 147D, 48, 148M, 148N, 848, 848A, 848B, 51, 151, 151A, 251, 351, 351F, 751, 751D, 751DD, 53, 753B, 953, 754K, 56, 756, 58, 64, 68, 168, 168A	6,635
10	Haryana	NE2, 703, 5, 105, 7, 907, 907G, 9, 709, 709A, 709AD, 11, 919, 334B, 334D, 44, 344, 344N, 344P, 444A, 48, 148A, 148B, 148N, 148NA, 248A, 248BB, 54, 52, 152, 152A, 152D, 352, 352A, 352R, 352W, 254	3,166
11	Himachal Pradesh	3, 103, 303, 503, 503A, 5, 105, 205, 305, 505, 505A, 705, 7, 707, 907A, 907, 154, 154A, 44 N.S.	2,607
12	Jammu & Kashmir	1, 301, 501, 701, 701A, 3, 44, 144, 144A, 244, 244A, 444	2,423
13	Jharkhand	114A, 18, 118, 218, 19, 419, 20, 220, 320, 320D, 320G, 22, 522, 33, 133, 333, 133A, 133B, 333A, 39, 139, 43, 143, 143A, 143B, 143AG, 143D, 143H, 343, 49	3,367
14	Karnataka	44 N.S., 544DD, 544E, 48 G.Q., 548B, 548H, 648, 748, 748AA, 948, 948A, 50, 150, 150A, 52, 752K, 160, 161A, 561A, 163, 65, 66, 166E, 766, 766C, 766E, 766EE, 67, 167, 367, 367A, 69, 169, 169A, 369, 369E, 73, 173, 373, 75, 275, 275K, 181	7,335
15	Kerala	544, 744, 66, 766, 966, 966 A, 966 B, 183, 183A, 85, 185	1,782
16	Madhya Pradesh	719, 27, 927A, 30, 34, 135, 135B, 135BB, 135BD, 135BG, 135C, 44, 45, 934, 39, 339B, 539, 43, 543, 943, 46, 146, 146B, 346, 47, 147E, 347, 347A, 347B, 347C, 547, 548C, 52, 552 Ext., 752B, 752C, 752G, 752L, 56, 161G	8,772
17	Maharashtra	930, 930D, 130D, 543, 44, 47, 547, 547E, 347C, 247, 647, 347A, 48, 348, 348A, 348B, 348BB, 548A, 548B, 548C, 548DD, 548H, 548D, 548, 548CC, 548E, 848, 848A, 50, 150, 52, 652, 752E, 752G, 752I, 752K, 752H, 53, 353C, 353D, 353E, 753, 753A, 753B, 753E, 753F, 953, 353B, 353I, 753J, 753L, 353J, 353K, 753C, 753BB, 753AB, 753H, 753M, 60, 160, 160A, 160B, 160C, 160D, 160H, 61, 161, 161A, 161E, 161G, 161H, 461B, 361F, 361, 361B, 361C, 361H, 561A, 561, 561, 761,	17,757

Contd...

The details of National Highways (New No.) in the country and their length

Sr. No.	Name of State/UT	National Highway No.	Total Length as on 31.03.2019 (in km)
18	Manipur	2, 102, 102A, 102B, 102C, 202, 702A, 29, 129A, 37, 137, 137A	1,750
19	Meghalaya	6, 106, 206, 217, 127B	1,156
20	Mizoram	2, 102B, 302, 502, 502A, 6, 306, 306A, 108	1,423
21	Nagaland	2, 202, 702, 702A, 702B, 702D, 29, 129, 129A, 229, 329A	1,548
22	Odisha	16 G.Q., 316, 316A, 516, 516A, 18, 20, 220, 320D, 520, 720, 26, 126, 126A, 326, 326A, 130C, 130CD, 143, 143H, 49, 149, 53, 153B, 353, 55, 655, 57, 157, 157A, 59, 63	5,762
23	Puducherry	32, 332	27
24	Punjab	3, 503, 503A, 703, 703A, 703B, 5, 105B, 205, 205A, 7, 9, 44, 344, 344A, 344B, 148B, 148BB, 52, 152, 152A, 54, 154, 154A, 254, 354, 354B, 354E, 754, 62	3,274
25	Rajasthan	709, 11, 311, 911, 911A, 919, 21, 921, 23, 123, 25, 125, 325, 925A, 27, 927A, 44, 48, 148, 148B, 148C, 148D, 148N, 248, 248A, 448, 52, 552, 552G, 752, 54, 754K, 954, 56, 156, 58, 158, 458, 758, 62, 162, 162A, 68, 168, 168A, 968, 70	10,342
26	Sikkim	10, 310, 310A, 510, 710, 717A, 717B	463
27	Tamil Nadu	16 G.Q., 716, 716A, 716B, 32, 32 Ext., 132, 132B, 332, 332A, 532, 36, 136, 136, 136B, 336, 536, 38, 138, 338, 40, 42, 44 N.S., 544, 544H, 744, 744A, 844, 944, 48 G.Q., 648, 948, 66, 75, 77, 79, 179A, 179B, 179D, 81, 181, 381, 381A, 381B, 83, 183, 383, 85, 785, 87	6,742
28	Telangana	30, 44, 150, 353B, 353C, 61, 161, 161B, 161AA, 161BB, 63, 163, 363, 563, 65, 365, 365A, 365B, 365BB, 565, 765, 765D, 167	3,795
29	Tripura	8, 108, 108A, 108 B, 208, 208A	854
31	Uttar Pradesh	NE2, 307, 9, 509, 709A, 709AD, 709B, 19, 219, 319D, 519, 719, 21, 321, 321G, 123, 24, 124C, 124D, 27, 227A, 727, 727A, 727AA, 727BB, 727B, 727G, 727H, 927, 28, 128, 128A, 128B, 128C, 328, 328A, 30, 230, 330, 330A, 330B, 330D, 530, 730C, 730S, 530B, 730H, 730A, 31, 731, 731A, 731B, 731AG, 731K, 135, 335, 931, 931A, 34, 234, 334, 334A, 334C, 334B, 334D, 334DD, 534, 734, 35, 135C, 135A, 135BB, 135B, 39, 339, 539, 44, 344, 552 Ext.	11,737
30	Uttarakhand	7, 107, 107A, 507, 307, 707, 707A, 9, 109, 309, 309A, 309B, 30, 34, 134, 334, 334A, 534, 734, 344	2,949
32	West Bengal	10, 110, 12, 112, 312, 512, 14, 114, 114A, 314, 16, 116, 116A, 116B, 316A, 17, 317, 317A, 517, 717, 717A, 18, 218, 19, 419, 27, 327, 327B, 327C, 31, 131A, 33, 133A, 49	3,664
33	A & N Islands	4	331
34	D & N Haveli	848A	31
35	Daman & Diu	848B, 251	22
Total			132,500

TERMS AND DEFINITIONS

Sl. No.	Terms	Definitions
A. ROADS		
1	Track	A path on the land much trodden by persons and animals.
2	Cart Track	A land way for use by carts.
3	Road	A way on land with a right of way for the public.
4	Urban Road	A road within the limits of the area of Municipality, Military Cantonment, Port or Railway Authority.
5	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.
B. HIGHWAY CLASSES BY FUNCTION		
1	Expressways	Expressways offer superior highway facility with higher specifications. It provides for more lanes, better surface, divided carriageway, controlled access grade separations at cross-roads and fencing etc. Expressways permits only fast moving vehicles and are meant to carry through traffic. The Expressway may be owned by the Central Government or State Government depending upon whether the route is a National Highway or a State Road.
2	National Highways	The arterial roads of the country for inter-state movements of goods and passengers. 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.
3	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.
4	District Roads	The branch roads of the State and National Highways to serve as the main roads for intra-district movements. They traverse the length and breadth of a district to connect the area of production and marketing in the district to one another and to the National Highways.
5	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, National Highways, etc.

Contd...

Sl. No.	Terms	Definitions
C. HIGHWAY CLASSES BY WIDTH		
1	Below Standard Single Lane (BSSL)	Surfaced roads having clear carriageway width of below 3.75 M.
2	Standard Single Lane(SSL)	Surfaced roads having clear carriageway width between 3.75 M and below 7.0 M.
3	Standard Double Lane (SDL)	Surfaced roads having clear carriageway width between 7.0 M and below 10.5 M.
4	Standard Multi Lane (SML)	Surfaced roads having clear carriageway width of 10.5 M and above.
D. ROAD SURFACE		
1	Bitumen or Tar Macadam	A type of construction in which the fragments of coarse aggregate are bound together by bitumen applied either premix or grouting method.
2	Bitumen Concrete Surfacing	A type of construction in which coarse and fine mineral aggregates are mixed with bitumen and laid not to the desired thickness.
3	Black Top Surface	The surface of roads made with bitumen as a binder.
4	Brick Paving	A paving composed of bricks laid in regular courses.
5	Cement Bound Macadam	A surface in which a matrix of a cement sand mixture is interposed between two layers of road metal spread on the road and the whole mass watered and consolidated so that the matter works into the interstices of the road metal to produce a compact mass.
6	Cement Concrete	A surface obtained by placing and consolidating cement concrete to required thickness.
7	Earth Road	A road with the carriageway composed of natural soil.
8	Gravel Road	A road with the carriageway composed of a consolidated layer of gravel.
9	Water Bound Macadam	A type of surfacing in which stone fragments are first inter locked by rolling and then bound with smaller stone gravel etc. which enforced into the intersection by brimming, watering and rolling.
10	Motorable	(i) For Plain Areas: Surfaced or unsurfaced road of minimum 3.0 M Carriageway width is motorable. (ii) For Hilly Areas: Surfaced or unsurfaced road of minimum 3.0 M Carriageway width having no horizontal curve of radii less than 14 M and grade not steeper than 7% is motorable. A bridle path is non motorable.

ABBREVIATIONS

Abbreviation	Meaning
BT	Bituminous Top
BOT	Build on Transfer
BRO	Border Roads Organization
CC	Cement Concrete
CRF	Central Road Fund
CAGR	Compound Annual Growth Rate
DPR	Detailed Project Report
ETC	Electronic Toll Collection
EAP	Externally Aided Projects.
GAD	General Arrangements Drawings
GVA	Gross Value Added
HAM	Hybrid Annuity Mode
IEBR	Internal and Extra Budgetary Resources
InvITs	Infrastructure Investment Trusts
JRY	JawaharRozgarYojana.
LWE	Left Wing Extremism
MORTH	Ministry of Road Transport and Highways
NHIDCL	National Highways Infrastructure Development Corporation Limited.
NHDP	National Highway Development Programme
NH	National Highways
NH (O)	National Highways (Original)
NRRDA	National Rural Road Development Agency
NMDC	National Mineral Development Corporation
PRAGATI	Pro-Active Governance and Timely Implementation.
PWD	Public Works Department
PMGSY	Pradhan Mantri Gram SadakYojana
PBFF	Permanent Bridge Fee Fund
ROB	Road Over Bridge
RUB	Road Under Bridge
RFCTLARR	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement.
SARDP	NE Special Accelerated Road Development Programme for North – Eastern.
SAIL	Steel Authority of India Limited
TOT	Toll Operate Transfer
WBM	Water Bound Macadam



सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
TRANSPORT RESEARCH WING
IDA BUILDING, JAMNAGAR HOUSE,
SHAHJAHAN ROAD, NEW DELHI-110011
www.morth.nic.in