

26. TRANSPORTATION IN INDIA

- The Present transport system of the country comprises several modes of transport including rail, road, coastal shipping, air transport etc.

Road Transport

- The total length of the roads in the country is **42.36 Lakh Km.**(Upto March 2011)
- India is one of the largest road transport systems in the world.
- India's road network consists of Expressways, National Highways, State Highways, Major District Roads, Other District Roads and Village Roads.

National Highways

- They are constructed and maintained by the central government.
- The National Highways has **70,934 Km.**(upto March 2009) length Comprising only 1.94 % of the total length of roads, carries about 40% of the total traffic of India.
- The central government has taken up a programme of 4/6 laneing of about 13,000 kms. of National Highways (NH) under the National Highways Development Programme (NHDP).
- This programme includes the '**Golden Quadrilateral**' (GQ) comprising the National Highways connecting the four metropolitan cities of Delhi, Mumbai, Chennai and Kolkata.
- The programme of development of National Highways also includes the creation of the North-South Corridor connecting Srinagar to Kanyakumari and East-West Corridor connecting Silchar to Porbander. This component of the NHDP has a total length of about 7,300 kms. and is to be completed by December, 2007.
- Total length of '**Golden Quadrilateral**' (GQ) is 5846 Km.

Some Important National highways

- There are around 225 National Highways in the country. Some of them are:
N.H. 1. : Delhi-Ambala-Indo-Pak Border(Amritsar) (546 Km)
N.H. 2. : Delhi-Agra - Kanpur - Varanasi - Kolkata (1490 Km)
N.H. 3 : Agra- Gwalior - Indore - Nasik - Mumbai

(1161 Km)

N.H. 4 : Junction with N. H. 3 near Thane - Belgaum - Bangalore - Ranipet - Chennai (1235 Km)

N.H. 5 : Kolkata-Chennai (1610 Km)

N.H. 6: Kolkata-Mumbai(1945Km)

N.H. 7 : Varanasi - Jabalpur - Nagpur - Hyderabad - Bangalor - Madurai - Kanyakumari (2369 Km).

N.H. 8 : Delhi-Jaipur - Ahmedabad - Vadodara - Mumbai (1428 Km)

- The longest National highway in India is NH-7; which has a length of 128 kms in Uttar Pradesh, 504 kms in Madhya Pradesh, 232 kms in Maharashtra, 753 kms in Andhra Pradesh, 125 kms in Karnataka, 627 Kms in Tamil Nadu i.e. total 2369 kms.

- Smallest National Highway in India is NH-47A

State Highways

- They are constructed and maintained by the state government.
- Maharashtra has the maximum length of roads.
- Maharashtra also has the maximum length of metalled roads.
- Orissa has the maximum length of unpaved roads.
- West Bengal has the maximum road density.
- Roads on the borders are constructed and maintained by the Border Roads Organisation (BRO).
- BRO was established in May 1960.
- Today, the BRO is a premier construction agency not only of roads but also airfields, bridges, buildings, hospitals and Schools.
- Since inception and upto March 2005, it has completed over 40,450 km of roads and constructed permanent bridges totaling a length of about 21,314 running meters.
- The BRO, through 'Project Dantak' is constructing and maintaining a large road infrastructure and executing other prestigious projects in Bhutan.
- The BRO is doing highly commendable jobs of construction and maintenance in Myanmar and Af-

ghanistan too.

Rail Transport

- The Indian Railways have been a great integrating force for more than 150 years.
- From a very modest beginning in 1853 Indian Railways have grown into a vast network of 7,031 stations spread over a route-length of **64,400 Km.(March 2011)** with a fleet of 7,817 locomotives, 5,321 passenger service vehicles 4,904 other coaching vehicles and 2,28,170 wagons as on 31 March, 2004.
- Indian Railway network is the largest in Asia and second largest in the World.

Zone

West Central Railway Jabalpur

North Central Railway Allahabad

South East Central Railway Bilaspur

New Zones that were created on 10th October, 2002

North Western Railway Jaipur

East Central Railway Hajipur

well.)

Old Zones as they are after April, 2003

Western Railway Mumbai

divi

Central Railway Mumbai

Eastern Railway Kolkata

Southern Railway Chennai

Northern Railway New Delhi

South Central Railway Secunderabad

- The first rail in India started in 1853 between Mumbai and Thane (34 kms.)
- Indian Railway Board was established in March 1905.
- Indian Railway was nationalised in 1950.
- There are three types of rail lines in India : (i) Broad Gauge (ii) Meter Gauge and (iii) Narrow Gauge.
- The management and governance of the Indian railways is in the hands of the Railway Board.
- Railways have been divided into 17 zones.

Headquarters

Divisions

Jabalpur and Bhopal divisions of CR, reorganized Kota division of WR

Reorganized divisions : Allahabad of NR, Jhansi of CR, and new Agra division

Nagpur division and reorganized Bilaspur division of SER, new Raipur division

Jodhpur division and reorganized Bikaner division of NR, reorganized Jaipur and Ajmer division of WR

Sonepur and Smastipur divisions of NER, Danapur, Mughalsarai and Dhanbad divisions of ER, (was earlier constituted to have katihar division of NFR as

Bhavnagar and Mumbai divisions, reorganized Ratlam, Rajkot and Vadodara divisions, new Ahmedabad division.

Bhusawal and Nagpur divisions, reorganized Mumbai CST and Solapur divisions, new Pune divisions (including Pune-Kolapur)

Howrah, Malda, Sealdah and

Asansol divisions Chennai, Palghat, Tiruchirapalli, Thiruvananthapuram and Madurai divisions

Ferozpur, Ambala, Lucknow and Moradabad divisions, reorganized Delhi division.

Reorganized Secunderabad, Hyderabad, Guntakal (including Bellary-Guntakal (MG) and Bellary-Rayadurg), and Vijayawada divisions, new Guntur and Nanded divisions.

Other zones are

South East Railway	Kolkata
North-Eastern Railway	Gorakhpur
North-East Frontier Railway	Maligaon
Eastern Railway	Bhubneswar
South-Western Railway	Hubli

Air Transport

- Airways in India started in 1911.
- Indian National Airways Company was started in 1933.
- All the airway companies were nationalised in 1953 and were put under two corporations namely – Indian Airlines and Air India.
- Indian Airlines provides its services to the internal parts of India along with neighbouring countries of nepal, Bangladesh, Pakistan, Afghanistan, Sri Lanka, Myanmar and Maldives.
- Air India provides its services to the foreign locations.
- Vayudoot was established in 1981 for domestic services, but was later merged in Indian Airlines.

Major International Airports of India

- Chhatrapati Shivaji International Airport (Santa Cruz Airport) Mumbai
- Subhash Chandra Bose Airport (DumDum Airport) Kolkata
- Indira Gandhi International Airport Delhi

- Meenambkam International Airport Chennai
- Thiruanathpuram Airport Thiruvananthpuram
- Rajasansi Airport Chandigarh

Water Transport

- The Central Water Tribunal was established in 1887.
- Its headquarter is in Kolkata.
- The waterways of the country have been divided into - Internal water - ways and Oceanic waterways.
- About 44 million tonnes of Cargo is being moved annually by Inland Water Transport (IWT).
- The waterway from Haldia to Allahabad was made a national highway in 1986.
- The Inland Waterways Authority of India (IWAI) came into existence on 27 October, 1986 for development and regulation of inland waterways in the country.

Oceanic Waterway

- The peninsular bank is very important for this purpose.
- There are 13 large and 200 small ports on the major bank of 6,100 kms.
- Large ports are maintained by the central government whereas small ports are included in the concurrent list and are managed by the state government.

Major Ports of India

Name	State	River/Strait/Ocean
1. Kolkata/Haldia	West Bengal	Hoogly River
2. Mumbai	Maharashtra	Arabian Sea
3. Chennai	Tamil Nadu	Bay of Bengal
4. Kochhi	Kerala	Arabian Sea
5. Vishakhapatnam	Andhra Pradesh	Bay of Bengal
6. Paradip	Orissa	Bay of Bengal
7. Tuticorin	Tamil Nadu	Bay of Bengal
8. Marmagao	Goa	Arabian Sea
9. Kandla	Gujarat	Arabian Sea
10. New Mangalore	Karnataka	Arabian Sea
11. Nhavasheva (Jawahar Lal Nehru Port)	Maharashtra	Arabian Sea
12. Ennore	Tamil Nadu	Bay of Bengal
13. Port Blair	A&N	In Bay of Bengal

- Largest port of India is Jawaharlal Nehru Port in Mumbai.
- The largest natural port is in Vishakhapatnam.
- Kandla & Haldia are tidal port.