

ROADS

9.65 The country's road network consists of national highways, state highways, major district roads, other district roads and village roads. Out of the total length of national highways, about 30 per cent length is single lane/intermediate lane, about 53 per cent is two-lane standard and the remaining 17 per cent is four-lane or more standard. Though national highways comprise only about 2 per cent of the total length of roads, they account for about 40 per cent of the total traffic.

National highways development project

9.66 The project is implemented by the National Highways Authority of India (NHAI). Phase I & II of NHDP envisaged 4/6 laning of about 14,330 kilometres of national highways, at a total estimated cost of Rs. 65,000 crore (at 2004 prices). These two phases consist of the Golden Quadrilateral (GQ), the North-South & East-West corridors, Port Connectivity and Other Projects. GQ connects Delhi, Mumbai, Chennai and Kolkata. The North-South and East-West Corridors connects Srinagar in the North to Kanyakumari in the South and Silchar in the East to Porbandar in the West. Under the Port Connectivity Project, roads connecting 12 major ports will be improved.

9.67 As of March 31, 2009, 11,037 km of national highways under NHDP has been completed, the bulk of which lies on the GQ (Table 9.20). Nearly 98 per cent works on GQ have been completed by March 2009 and the NS and EW corridors are expected to be completed by December 2009.

9.68 Approval of the Government has been given for; (a) upgradation of 12,109 km under NHDP Phase-

III at an estimated cost of Rs. 80,626 crore, (b) two-laning with paved shoulders for 5,000 km of national highways under NHDP Phase-IV at an estimated cost of Rs. 6,950 crore, (c) six-laning of 6,500 km of NHs comprising 5,700 km of GQ and balance 800 km of other sections of NHs under NHDP Phase-V at a cost of Rs. 41,210 crore, (d) 1,000 km of expressways with full access control on new alignments at a cost of Rs. 16,680 crore under NHDP-Phase-VI, and (e) construction of ring roads, grade separated intersection, flyovers, elevated highways, ROBs, underpasses and service roads at a cost of Rs. 16,680 crore under NHDP Phase-VII.

9.69 The implementation of NHDP has been faced with a number of constraints that include delays in land acquisition and removal of structures, shifting of utilities, law and order problem in some states and poor performance of some contractors.

Financing of NHDP

9.70 The main source of finance of NHAI for the implementation of various phases of NHDP is the fuel cess. The present rate of cess is Rs. 2.00 per litre on both petrol and diesel, a part of which is allocated to NHAI to fund implementation of NHDP. During 2008-09, an amount of Rs. 9,329.85 crore has been provided for the national highways and for state roads out of the same. Of this, Rs. 6,972.47 crore is for national highways and Rs. 2,171.64 crore for the state roads (including Rs. 500 crore from unspent balance of the previous years). An amount of Rs. 185.74 crore has also been allocated during 2008-09 for development of state roads.

9.71 The funds allocated from the cess is leveraged by NHAI to borrow additional funds from

Table 9.20 : National highways projects (March 31, 2009)

Sl. No.	NHDP Component	Total length	Completed 4 lane	Under implementation	Balance for award of civil works
1	GQ	5,846	5,721	125	-
2	NS-EW	7,142	3,436	2,915	791
3	Port connectivity	380	206	168	6
4	Other NHs	962	781	161	20
5	NHDP -III	12,109	787	1,878	9,444
6	NHDP Phase V	6,500	106	928	5,470
7	NHDP Phase VII	700	0	19	681
Total		33,639	11,037	6,194	16,412

Source : Department of Road Transport & Highways

the domestic market. The Government of India has also taken various loans from the World Bank (US\$ 1,965 million), Asian Development Bank (US\$ 1,605 million) and the Japan Bank for International Cooperation (yen 32,060 million) for financing projects under NHDP. These multilateral loans are passed on to NHAI by the Government partly in the form of a grant and partly as loan. NHAI also negotiated a direct loan of US\$ 165 million from ADB for one of its projects. The funds provided to NHAI including the borrowings from the market are utilized for the projects and for servicing and repayment of borrowings from domestic market (Table 9.21).

Special Accelerated Road Development Programme in the North-eastern Region

9.72 The Special Accelerated Road Development Programme for North-eastern region (SARDP-NE) aims at improving the road connectivity to state capitals, district headquarters and remote places of NE region. It envisages two- four-laning of about 5,174 km of national highways and two-laning/ improvement of about 4,589 km of state roads. This would provide connectivity to 85 district headquarters to national highways/ state roads. The programme has been divided into the following two phases:

- Phase A would include improving 2,619 km of roads consisting of 2,029 km of national highways and 590 km of state roads at an estimated cost of Rs. 16,286 crore. Of this, the Department of Road Transport & Highways (DoRTH), Border Roads Organisation (BRO) and State PWDs have been assigned with the development of 1,795 km of roads. Out of this, 1,400 km of roads at an estimated cost of Rs. 4,285 crore has been approved for execution and the remaining 395 km has been approved "in-principle" by the Government. Improvement of the remaining length of 824 km of national highways is to be done by NHAI. Out of this, works on 330 km will be done by inviting bids for construction works and balance length of 494 km will be taken up on BOT basis. Out of 1,400 km

roads to be executed by DoRTH, BRO & state PWDs, projects covering a length of 1,065 km at a cost of Rs. 3,378 crore has been approved till date and works are in progress. The likely target date of completion for phase A is 2012-13.

- Phase B involves two-laning of 4,825 km of national highways and two-laning/ improvements of state roads. Phase B is approved only for DPR preparation and investment decision is yet to be taken by the Government. The Arunachal Pradesh Package for Road and Highways involving roads of 2,319 km length was also approved by the Government. Out of this, 1,472 km is national highways and 847 km is state/general staff/ strategic roads.

9.73 The high-powered inter-ministerial committee, set up to appraise and coordinate individual subprojects under SARDP-NE, has approved sub-projects covering 1,065 km length at a cost of Rs. 3,378 crore, under Phase A of the programme.

Construction of rural roads under PMGSY

9.74 The Eleventh Five Year Plan has projected an investment requirement of Rs. 41,347 crore (at 2006-07 prices) in rural roads. During the first two years of the Eleventh Five Year Plan, an expenditure of Rs. 25,780.7 crore has been incurred on rural roads under PMGSY. Additionally, there are roads built by PWD and the Panchayati Raj institutions in the rural areas (Table 9.22).

9.75 Under PMGSY, the limited absorption capacity of states in terms of the number of programme implementation units (PIUs) at district level and at the State Rural Roads Development Agencies (SRRDAs) constrained the programme initially, but could be mitigated gradually. Further, shortage of contractors is being felt in many states. Need-based relaxation in the bidding capacity and packaging of works has helped to overcome this problem to an extent. Besides, in the beginning, in some states, the personnel with the implementing agencies like the Rural Engineering Services, Rural Works Departments, Zilla Panchayat Engineering Units and the Panchayat Raj Engineering Departments were not well-equipped in road construction compared to their counterparts in the Public Works Department.

Legal framework and recent initiatives

9.76 The expansion of the road network, carrying 87 per cent for passenger movement and 61 per cent for freight movement in 2004-05, has necessitated

Table 9.21 : Financial structure of NHAI

(Rs. crore)

Year	Cess Funds	External Assistance		Borrowings	Budgetary Support
		Grant	Loan		
2005-06	3,269.74	2400	500	1289	700
2006-07	6,407.45	1,582.50	395.50	1500	110
2007-08	6,541.45	1,788.80	447.20	305.18	265
2008-09	6,972.47	1,515.00	379.00	1,096.26	159

Source : Department of Road Transport & Highways

Table 9.22 : Construction of rural roads under PMGSY

Year	Length of road works completed (km)	Expenditure (Rs. crore)
2005-06	22891	4100.4
2006-07	30710	7304.3
2007-08	41231	10618.7
2008-09	52405	15162.0

Source : National Rural Roads Development Agency

appropriate changes in related laws and regulations. Some of the important changes include:

- The Carriage by Road Act, gazetted in October 2007, will replace the Carriers Act, 1865 that governs the rights and liabilities of the common carriers. This is expected to make the transport system transparent, facilitate modernization of systems of transportation trade through registration of common carriers and provide scope for apportionment of liability between common carrier and consignor. A working group has been constituted to frame rules under the Act.
- The Motor Vehicles Act, 1988 (MVA), amended thrice since, has been the principal instrument for regulating motor vehicles. In response to suggestions received from various quarters, a proposal for amendment of the MVA Act was approved by the Union Cabinet and a Bill was introduced in the Rajya Sabha on May 15, 2007. The Bill was referred to the department-related Parliamentary Standing Committee for examination. The committee submitted its report in April 2008 which has been examined.
- The Rules for accreditation of bus body builders, notified in March 2007, to bring in uniformity in bus body design and to enhance safety and comfort to passengers, came into effect from March 23, 2008. Bus body builders would be accredited through the system of zonal and national level accreditation board and only such approved builders would undertake bus body building, as per the laid-down specifications. Efforts are being made to operationalize the zonal/national accreditation system. Similarly, the department

is also in the process of finalizing the truck body code.

- Keeping in view the financial position of various states and the enormous unmet demand for public transport, the Central Government proposes to assist states through the viability gap funding to improve public transport, subject to certain reforms to be undertaken by the State Governments. A scheme in this regard has been approved by the Planning Commission.
- Road transport is primarily a state subject. However, due to heterogeneous approach by various state authorities, the sector has not achieved the growth commensurate with its potential. A committee was constituted under the chairmanship of Shri D. Thangaraj to finalize a policy for road transport sector. The committee submitted its report on March 27, 2008, inter alia, recommending a National Road Transport Policy. The Union Cabinet will now be approached for approval of the policy document.
- In February 2007, the Committee on Road Safety and Traffic Management recommended for the creation of a National Road Safety and Traffic Management Board, a National Road Safety Fund through earmarking 1 per cent of the cess on petrol and diesel and a National Road Safety Policy. The Union Cabinet would now be approached for creation of the board and the National Road Safety Fund and for seeking approval on the National Road Safety Policy. The proposed policy envisages focused and effective measures to address road safety issues.
- An ambitious scheme has been launched for the creation of National Register and State Registers of Driving Licences (DL) and Registration Certificates (RC) of motor vehicles and interlinking of the Regional Transport Registering Authorities/State Transport Authorities with an estimated cost Rs. 148 crore during the Eleventh Five Year Plan. This will enable creation of a national database on driving licences and registration certificates of motor vehicles will be accessed at the check posts to ensure whether taxes have been paid and documents of vehicles are in order.

CIVIL AVIATION

9.77 The Civil Aviation sector had undergone dramatic expansion during the Tenth Five Year Plan period which continued during 2007-08. The volume of air traffic increased sharply during 2004-07, with a near doubling of the number of domestic and international air passengers (combined). However, during 2008, this sector showed signs of slowdown due to steep rise in the cost of ATF (air turbine fuel) and the global economic slowdown. The number of domestic passengers declined by 5 per cent during 2008 as compared to 2007. However, the silver lining is that the domestic cargo showed a growth of 14.55 per cent. Fall in ATF prices augers well for the passenger traffic in 2009.

Fleet size

9.78 There are 11 scheduled passenger operators and one cargo operator in the country with a combined fleet size of 407 aircraft. In 2008, the scheduled operators/ companies were given permission to import 62 aircraft. To promote regional connectivity and to expand air connectivity among smaller cities, a separate category of Scheduled Air Transport (Regional) Services has been introduced. At present, MDLR Airlines operates such services in the Northern Region with two aircraft in its fleet. There are also 99 non-scheduled airline operators who have 241 aircraft in their inventory.

9.79 Subsequent to amalgamation of Air India and India Airlines with National Aviation Company Ltd., the brand name "Air India" has been retained with "Maharaja" as its mascot. The merged entity along with its subsidiary companies, with more than 140 aircraft, would enter the list of top 30 airlines globally in terms of fleet size. As on December 31, 2008, the company has inducted 42 new Boeing/Airbus aircraft to its fleet out of 111 aircraft ordered in December 2005.

Airport development

9.80 The international airports at New Delhi and Mumbai have been restructured and modernization and upgradation works are being carried out through private participation. The construction of first phase development works in Delhi started in early 2007 and is likely to be completed by March 2010. The cost of development works for first phase is about Rs. 8,975 crore. The construction works for Mumbai airport started in January 2007 and is expected to be completed by March 2010. The development

works are to cost around Rs. 9,802 crore and are expected to be completed by 2012.

9.81 The plan for modernizing/expanding Kolkata airport at Rs. 1,942.51 crore has been approved. Passenger terminal building would be 1,80,000 sq m. having pile foundations including all civil and superior finishing works at par with highest international standards. The pavement works include extension of secondary runway by 400 m towards southern side, construction of associated taxi tracks, apron/parking bays and two rapid exit taxiways. The integrated passenger terminal building is designed to handle 20 million passengers annually with peak hour capacity of 7,452 passengers. Construction of the building, to be completed in 30 months at the cost of Rs. 1,602.61 crore was awarded on October 6, 2008. The pavement works, to be completed in 12 months at Rs. 95.24 crore, was awarded on August 25, 2008. Both the works are in progress.

9.82 The plan for modernizing and expanding Chennai airport amounting to Rs. 1,808 crore was approved in August 2008. The proposal consists of construction of domestic terminal covering an area of 67,700 sq m, extension of existing Anna International Terminal of 59,300 sq m, extension of secondary runway across the Adiyar River and construction of parallel taxi-track and parking bays. The letter of intent for construction of terminal building amounting to Rs. 1,273 crore was issued in October 2008 and the work for extension of runway, taxi-track and parking bay has been awarded. The entire project is likely to be completed by the end of 2010. On completion, passenger handling capacity at Chennai will be increased from 9 million to 23 million.

Development of non-metro airports

9.83 The Airports Authority of India is upgrading and modernizing 35 non-metro airports in the country in a time bound manner. Development of airports in the North-eastern region is being taken up on priority basis. Architectural design competitions for terminal buildings at Ahmedabad, Thiruvananthapuram, Jaipur, Udaipur, Dibrugarh, Trichy, Lucknow, Mangalore, Bhubaneswar, Indore, Ranchi, Port Blair, Vadodara, Madurai, Bhopal, Raipur, Tirupati and Coimbatore airports have been held. The terminal buildings will be modular in design for easy expansion. The terminal building at Nagpur and Srinagar airports have been expanded and modified for integrated operations. Terminal building works have been completed in Ahmedabad (domestic), Kullu, Kangra, Porbandar, Udaipur, Gaya, Nagpur, Belgaum, Akola,