

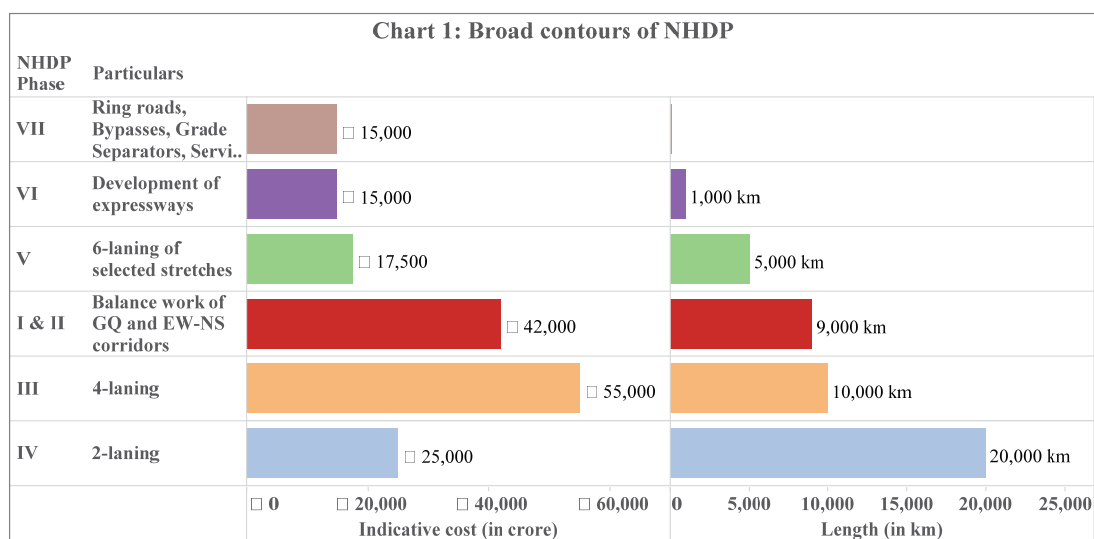
Chapter - 1

Introduction

1.1 India has a National Highways network of 65569 km which was 1.7 per cent of the total road network of the country, and it carried over 40 per cent of total traffic.

The role of developing, maintaining and managing National Highways in India has been entrusted to the National Highways Authority of India (NHAI) which was established in 1988 by an Act of Parliament, namely NHAI Act 1988, as a body corporate to discharge its functions on business principles. However, NHAI began its operations only in 1995 with the appointment of a full-time Chairman and Members. It is headed by a Chairman and comprises of five full-time members and four part time members appointed by Government of India (GoI).

NHAI is mandated to implement the National Highways Development Programme (NHDP) which is the amongst the world's largest road development programmes covering 55225 km (as on 31 March 2013). The Action Plan for NHDP involves a total investment of ₹ 2,20,000 crore on concessions/contracts to be awarded by 2012. The Committee on Infrastructure (CoI)¹ in its third meeting held in January 2005 approved the broad contours of NHDP and mandated that the programme as shown in Chart 1 below, be undertaken by 2012:



¹ The Cabinet Committee on Infrastructure (CCI) under the Chairmanship of the Prime Minister was constituted on 6 July 2009. It substituted the Committee on Infrastructure which was set up in August 2004 under the Chairmanship of Prime Minister. The CCI approves and reviews policies and monitors implementation of all infrastructure programs and projects across infrastructure sectors. In January 2013 the GoI constituted the Cabinet Committee on Investment and CCI has been merged with CCEA (Cabinet Committee of Economic Affairs).

1.2 Funding for road projects:

NHDP projects are financed primarily from the following sources:

- cess levied on petrol and high speed diesel (Central Road Fund),
- funds received for externally aided projects,
- additional budgetary support,
- market borrowings and
- plough back of revenue²

Financial management by NHAI is discussed in Chapter III of this report.

1.3 Phases of NHDP:

The status of seven Phases of NHDP as on 31 March 2013 is detailed in Table 1, Chart 2A and 2B below:-

TABLE 1: Status of NHDP projects

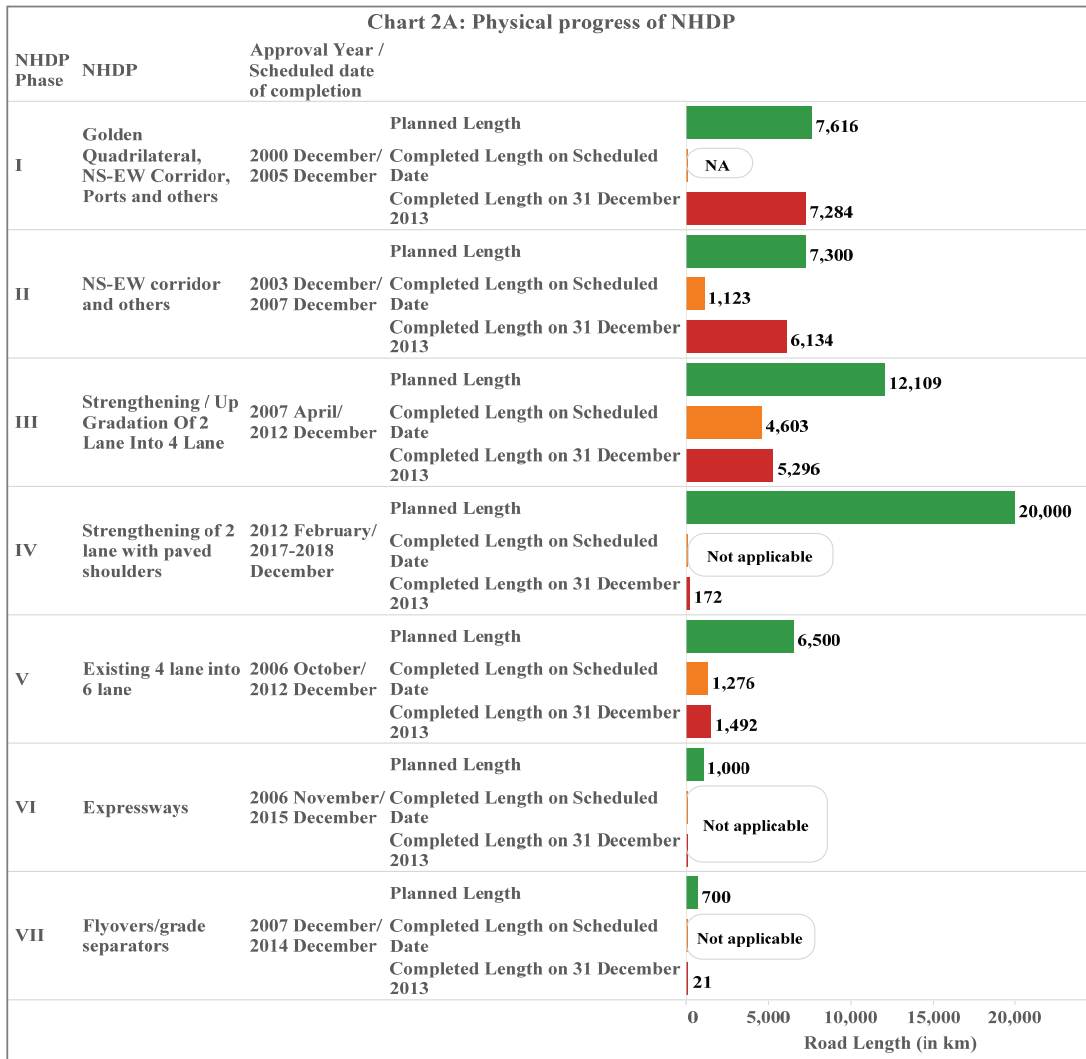
NHDP Phase Year of approval	NHDP	Length (in km) /Scheduled completion date	Completed length in km (including partial completed) as on		Percentage completion as on		Total estimated cost (₹ in crore)	Expenditure till 31 March 2013 by NHAI & concessionaire (₹ in crore)
			Scheduled date	31 March 2013	Scheduled date	31 March 2013		
Phase I / December 2000	Golden Quadrilateral (GQ), NorthSouth- East West (NS- EW) Corridor, Ports and others	7616 December 2005	Not Available	7284	Not Available	95.64 per cent	30,300	40979.83
Phase II / December 2003	NS-EW Corridor and others	7300 ³ December 2007	1123	6134	15.38 per cent	84.03 per cent	34,339	58633.84
Phase III / April 2007	Strengthening / Up Gradation Of 2-Lane into 4-Lane	12109 December 2012	4603	5296	38.01 per cent	43.74 per cent	33069(IIIA) +47557(IIIB) = 80,626	62111.72
Phase IV / February 2012	Strengthening of 2-lane with paved shoulders	20000 ⁴ December 2017-18	Not applicable	172	Not applicable	0.86 per cent	27800	3112.29
Phase V / October 2006	Existing 4-lane into 6-lane	6500 December 2012	1276	1492	19.63 per cent	22.95 per cent	41,210	20501.95

² Plough back of revenue includes toll collection, shared revenue, negative grant etc. collected by NHAI and deposited into the Consolidated Fund of India against which an equivalent amount is to be released by GoI to NHAI for investing in its projects.

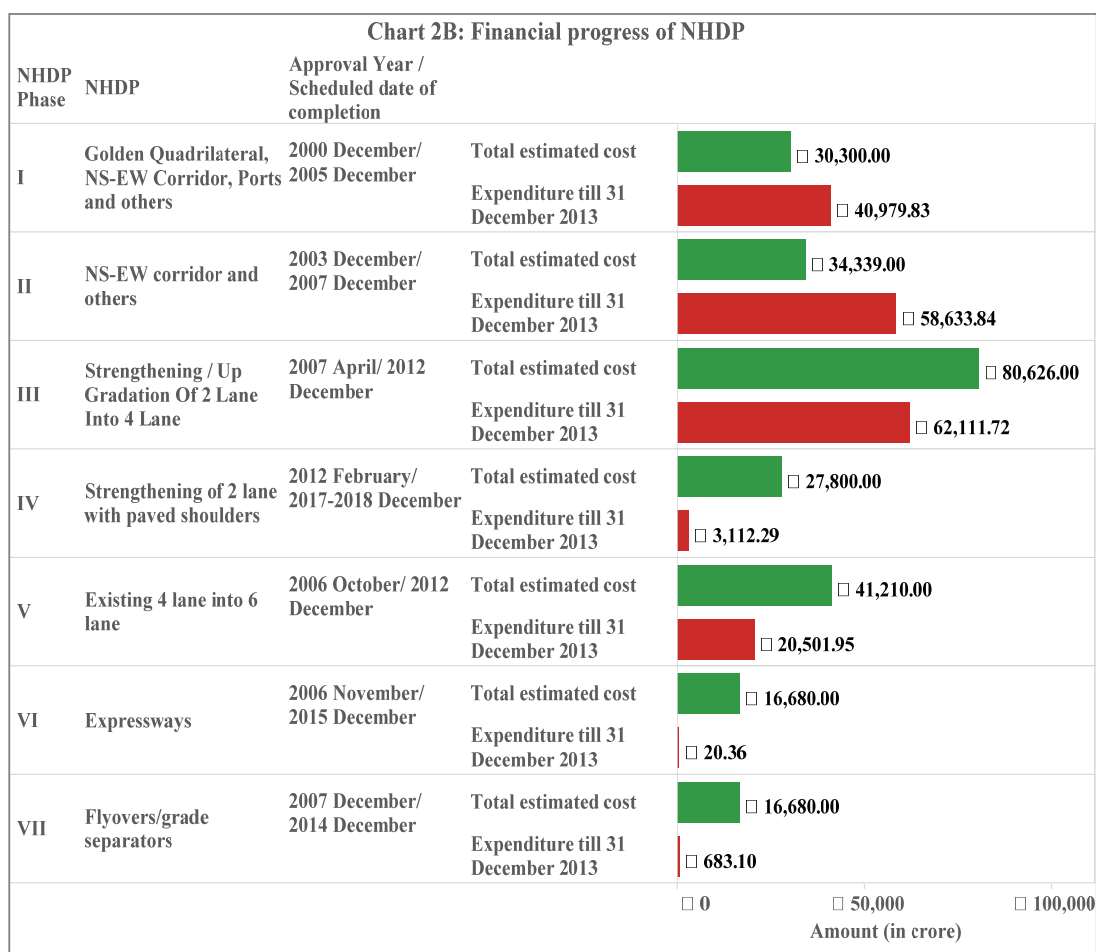
³ This includes 981 km of NS-EW Corridor undertaken in Phase-I.

⁴ Out of 20,000 km NHAI is entrusted with only 13389 km.

NHDP Phase of approval	NHDP	Length (in km) /Scheduled completion date	Completed length in km (including partial completed) as on		Percentage completion as on		Total estimated cost (₹ in crore)	Expenditure till 31 March 2013 by NHAI & concessionaire (₹ in crore)
			Scheduled date	31 March 2013	Scheduled date	31 March 2013		
Phase VI / November 2006	Expressways	1000 December 2015	Not applicable	NIL	Nil		16,680	20.36
Phase VII / December 2007	Flyovers/grade separators	700 December 2014	Not applicable	21	Not applicable	3.0 per cent	16680	683.10
Total		55225		20399			247635	186043.09⁵



⁵ NHAI's share in project expenditure (Fixed Assets / CWIP as on 31 March 2013) is ₹1,06,440.23 crore.



In terms of percentage completion on the scheduled date under Phases II, III, IV & V covered in Audit ranged from 19.63 *per cent* (Phase V) to 38.01 *per cent* (Phase III). None of the above Phases (except *Phase IV* which is scheduled to be completed by 2017-18) of NHDP had been completed till the end of March, 2013 though the due dates of completion were already over. Further, 100 *per cent* completion of the road projects under Phases II, III & V had not been achieved even by the end of March 2013. Actual expenditure incurred against total approved cost was at 170.75 *per cent*, 77.04 *per cent*, 11.20 *per cent* and 49.75 *per cent*, respectively, of the estimated costs, in these four Phases.

1.4 Mode of Execution of Projects

In Phases I & II of NHDP, projects were taken up for execution primarily under the Engineering, Procurement and Construction (EPC) mode. Under this mode, projects were entirely funded by the GoI / NHAI. With a view to further augmenting inflow of scarce budgetary resources and to encourage private sector participation, from Phase III onwards, GoI started awarding NHDP projects under the Public Private Partnership (PPP) mode, except one project viz. 6 laning of Bengaluru – Hosur, under Phase III.

1.5 Public Private Partnership (PPP)

Under the PPP arrangement, two main modes of execution were followed by NHAI:

- Build Operate and Transfer (BOT) - Toll basis.
- Build Operate and Transfer (BOT) - Annuity basis.

In BOT–(Toll) the concessionaire (i.e. the private partner) is responsible to finance, construct, operate and maintain the road stretch entrusted to him. He is entitled to collect and retain the toll collected during the concession period. In case the estimated toll collection falls short of the project costs including return on investment, NHAI provides finance to meet the gap in the form of viability gap funding. In certain cases the concessionaires may offer premium/revenue sharing instead of getting VGF.

In case of BOT (Annuity) mode, responsibility for construction, operation, finance and maintenance rests with the concessionaire and the toll collection responsibility rests with the NHAI. All construction and annual maintenance costs are initially borne by the concessionaire and the same are fully reimbursed by NHAI by way of annuity payments determined at the time of bidding.

After the approval of CCEA / CCI of individual projects the process of bidding i.e. engaging a concessionaire commences which consists of different stages such as Expression of Interest (EOI)/Request for Qualification (RFQ), Request for Proposal (RFP) evaluated by the Evaluation Committee formed by NHAI and final award of the project to the successful bidder. After award, the bidders form a Special Purpose Vehicle (SPV) i.e. the concessionaire, who executes the work.

1.6 Procedure for implementing PPP models:

The policy guidelines for formulation, appraisal and approval of PPP projects for Highways were notified by GoI vide OM No. 01 May 2005-PPP dated 12 January 2006. As per the policy, all projects were to be first offered on BOT-Toll basis failing which these were offered under BOT (Annuity). If both failed, they were to be taken up on EPC mode after specific approval of Cabinet Committee on Economic Affairs (CCEA).

Based on the recommendation of B.K.Chaturvedi Committee, GoI decided (November 2009) that for implementation of road projects all the three modes of delivery i.e. BOT (Toll), BOT (Annuity) and EPC were to be concurrently taken up rather than, sequentially, as earlier. Further, a road project, *prima facie*, not found suitable for BOT (Toll) could be implemented directly on BOT (Annuity) after approval of Inter Ministerial Group (IMG) chaired by Secretary, Ministry of Road Transport and Highways (MoRTH). However, before implementing a project on EPC basis, it was to be compulsorily tested for BOT (Annuity). In cases where there was no unanimity in IMG, the matter was to be placed before the Empowered Group of Ministers (EGoM).

NHAI's role in NHDP is that of an implementing agency of GoI and the former does not have the powers to approve and sanction road projects. PPP projects are appraised and approved by committees established for this purpose viz. Standing Finance Committee (SFC), Public Private Partnership Appraisal Committee (PPPAC) and CCEA/CCI depending on the investment/costs.

1.7 Status of PPP Projects

In Phase I & II, a total of 356 projects were awarded, of which 56 were awarded under the PPP mode. From Phase III onwards, 170 out of 171 projects were awarded under the PPP mode. At the end of December 2012, in all the seven phases combined, a total of 226 projects were undertaken by NHAI under PPP mode. Of these projects, 178 were awarded on BOT (Toll) and 48 projects awarded on BOT (Annuity) basis.

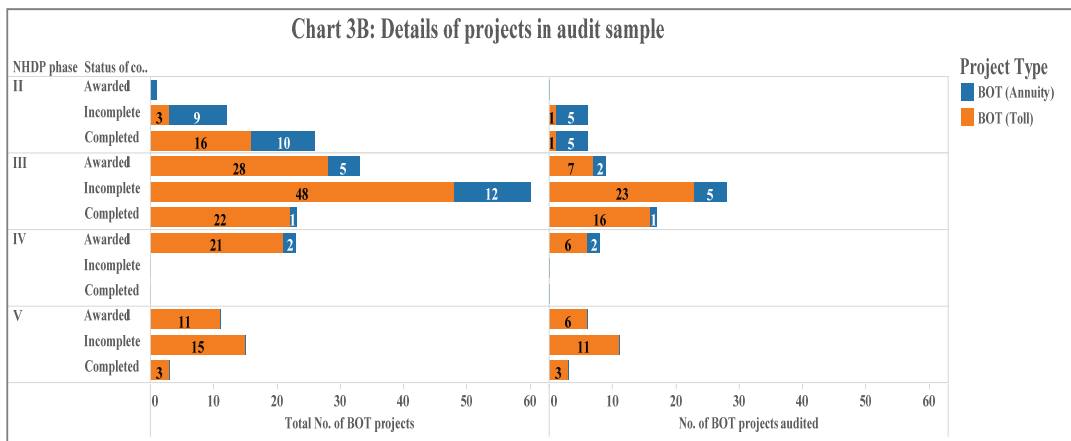
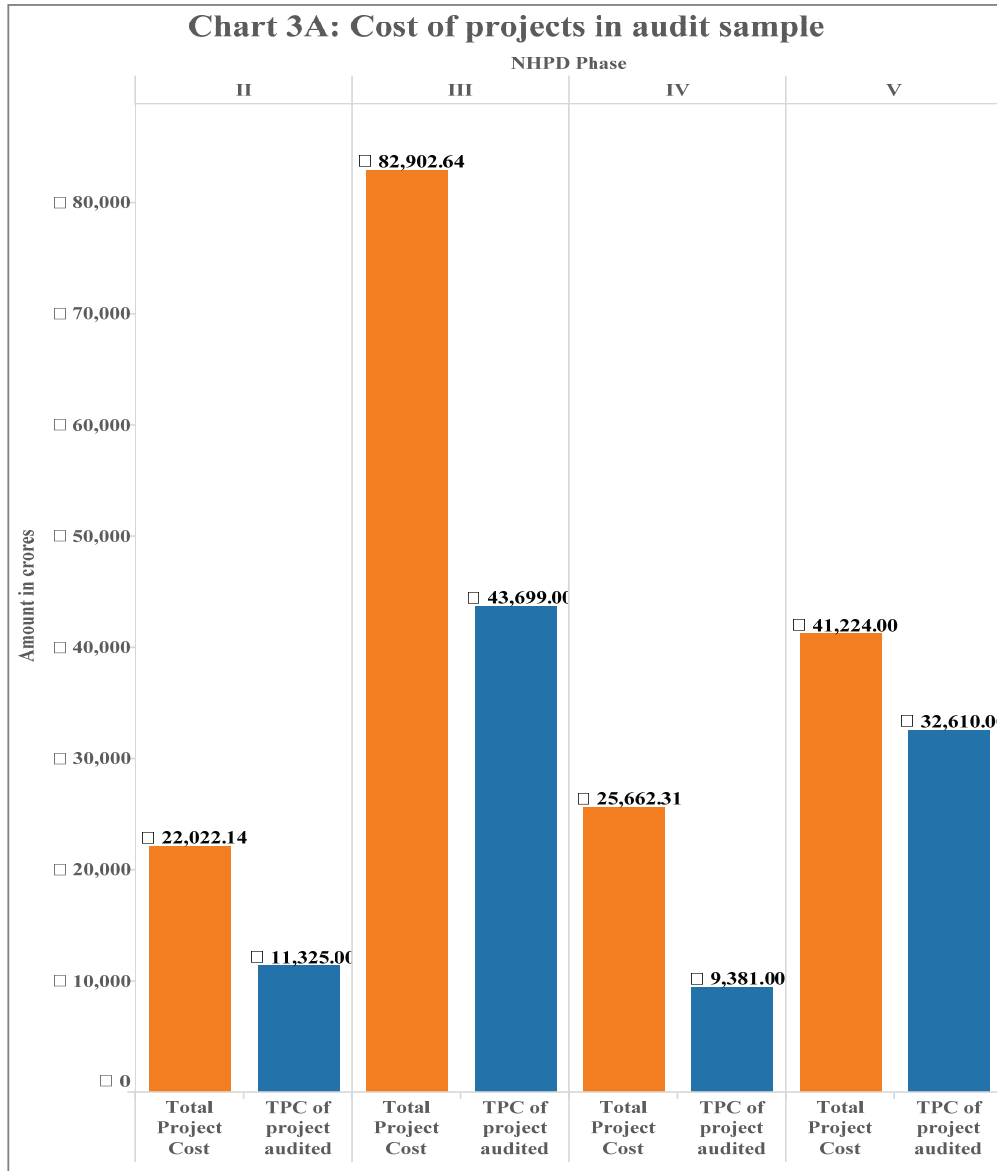
1.8 Scope of the Audit

Audit covered 94 projects under Phases II, III, IV and V of NHDP constituting 45.41 per cent of total 207 BOT projects awarded (as on 31.3.2012). Of these 94 projects, 74 were awarded under BOT (Toll) and 20 under BOT (Annuity) model. Selection of projects was based on Total Project Cost (TPC), quantum of expenditure, stages of completion as well as geographical location. Cost of these 94 projects as per the concession agreements is ₹ 97016 crore which represents 56.47 per cent of the total project cost of ₹ 171811 crore for 207 projects. Table 2, Chart 3A and Chart 3B below give details thereof: -

TABLE 2: Cost of projects in Audit sample

NHDP Phase	BOT (Toll)				BOT (Annuity)				Total	Total project Cost as per CA ₹ In crore
	Completed	Incomplete	Awarded	Total	Completed	Incomplete	Awarded	Total		
II	16 (1)	3 (1)	0	19 (2)	10 (5)	9 (5)	1 (0)	20 (10)	39 (12)	22022.14 (11325)
III	22 (16)	48 (23)	28 (7)	98 (48)	1 (1)	12 (5)	5 (2)	18 (8)	116 (54)	82902.64 (43699)
IV	0	0	21 (6)	21 (6)	0	0	2 (2)	2 (2)	23 (8)	25662.31 (9381)
V	3 (3)	15 (11)	11 (6)	29 (19)	0	0	0	0	29 (20)	41224.00 (32610)
Total	41 (20)	66 (35)	60 (19)	167 (74)	11 (6)	21 (10)	8 (4)	40 (20)	207 (94)	171811.09 (97016)
TPC (in crore)	8541	41616	28030	78187	2338	13509	2982	18829		97016
<i>Per cent</i> Selected with respect to number of projects including annuity					27.7	47.9	24.4	100		
<i>Per cent</i> Selected with respect to TPC of projects including annuity.					11.21	56.82	31.97	100		

Note: Figures in bracket indicates the projects selected for Audit



1.9 Audit objectives

Objectives of the Audit were to assess whether:

- Project identification / prioritization was done in a transparent/effective manner; whether defined criteria existed in this regard based on factors like traffic census, connectivity to important places/towns/commercial centres, strategic importance, harmonious development of different parts of the country and so on.
- Financial Management of funds was sound, mobilisation of resources was efficient and the available funds were utilised effectively and economy was kept in view while borrowing funds.
- Projections made in DPR/ Feasibility Report were sound and borne out by subsequent events; DPR/ Feasibility Report were prepared considering all the present as well as future aspects of the project and the TPC was arrived prudently.
- Bid evaluation procedures were well established and projects awarded to concessionaires according to competitive procedures, equitably and in public interest. Criteria for determining concession period were based on a sound financial model and consistent for all projects with no avoidable extra burden on users.
- Revenue management system in toll collection was effective; share of Toll revenue whenever due to GoI was being regularly received and internal control of NHAI was efficient to check short realisation of revenue, if any.
- Suitable mechanism for monitoring of projects was established at MoRTH and NHAI during execution and O&M stage; the output was consistent with the goals set under NHDP and value for money was realised from the projects. Projects were completed within estimated cost, desired timeframe and in cases of any delay/default; appropriate steps had been considered/taken as per MCA/CA.

1.10 Audit methodology and Criteria

Sample audit of a few Project Implementation Units (PIUs) of NHAI was conducted during November 2011 to January 2012. Based on the results of the test check, the Audit Plan, criteria for selection of projects, design matrix, etc. were designed. An Entry Conference with NHAI was held on 1 August 2012 and subsequently with MoRTH on 5 December 2012 wherein the audit objectives envisaged to be achieved through the audit were discussed. Audit teams conducted the field Audit during the period August 2012 to September 2013.

Audit criteria were derived from the following:

- Adherence to guidelines/procedures set forth for identifying private sector partners including review of Detailed Project Report (DPR)/Feasibility Reports, Sample surveys/Statistical Analysis Reports etc.
- Review of records of various phases of NHDP, selection of stretches under respective phases, appraisal of projects at various levels viz. NHAI/MoRTH, PPPAC, EoGM/GOM/CCEA/CCI etc.
- Terms and conditions of Model concession agreement, State Support Agreement, Escrow Agreement, Substitution Agreement, Agreement with Independent Engineer and Consultant.
- Traffic and Revenue assessment and projections.
- Departmental, technical and financial estimates prepared as per DPRs
- Project Management Control System prepared by the Independent Consultant (IC) for monitoring implementation, operation and maintenance of the project.
- System of evaluation of bids
- Work Plans of NHDP and Budget Provision for release of funds to MoRTH/NHAI
- Operation and Maintenance (O&M) Manual for project implementation.
- Financial Management System of NHAI.

The draft Performance Audit Report prepared after completion of audit was issued on 18 July 2014 to MoRTH and NHAI for confirmation of facts and figures contained therein and also to seek their reply on the Report. Subsequently, the Report was discussed with the MoRTH and NHAI in an 'Exit Conference' held on 22 July 2014.

1.11 Scope Limitation

During the Audit at MoRTH, records/files in respect of critical areas were either not furnished or only partially furnished. In the absence of these records, certain aspects could either not be reviewed at all or were reviewed only to a limited extent. The details of the records not provided or partially provided to Audit are indicated in Table 3 below:

TABLE 3-Records not provided/partially provided

Sl. No.	Records/files/information sought from MoRTH	Status
1	Basis of selection of stretches taken up for up-gradation and norms/criteria adopted for identification/prioritization of stretches under NHDP Phases II to V	No records were furnished.
2	Approval of NHDP Phases II, III, IV & V	Only one file related to approval of phase IV (15000 km.) was furnished.
3	Work plans as well as financial plans of NHDP for the last five years	Work plans for two years 2011-12 & 2012-13 only were furnished.
4	Project specific files	Only 10 out of 31 requisitioned files were furnished; however, these did not contain complete information.
5	Quarterly reports of PPP PRU (Project review unit) for the last five years	No records were furnished.
6	Justification for fixing the VGF limit of 40 per cent of TPC for VGF in BOT projects.	No records were furnished.

The issue of production of records was taken up repeatedly with MoRTH. However, neither was any communication received from MoRTH nor the requisite records were made available. Efforts made by Audit to obtain records from MoRTH are detailed below:

Sl. No.	Details of Requisitions /Meetings	Dated
1	Requisitions issued by the Audit team to MoRTH	07 Jan 2013 to 13 March 2013
2	Reminder for providing records to MoRTH	18 January 2013
3	Meeting with representatives of MoRTH for providing records	29 January, 2013
4	Reminder Letter to Joint Secretary (Highways), MoRTH for providing records	23 January 2013
5	Audit observations issued to MoRTH	12 February 2013 to 14 March 2013
6	Meeting with Joint Secretary, MoRTH for providing records.	15 February 2013
7	Letter to MoRTH regarding status of records received with a request to furnish wanting records	18 and 20 February 2013
8	Reminder letter to Joint Secretary (Highways), MoRTH	27 February 2013
9	D.O. letter to the Secretary (Highways), MoRTH from the Deputy CAG (Commercial)	9 April 2013