April 21, 2017 I Industry Research

Roads and highways

Contact:

Madan Sabnavis
Chief Economist
madan.sabnavis@careratings.com
91-22-67543489

Ashish K Nainan
Research Analyst
ashish.nainan@careratings.com
91-22-67543443

Guided by:
Rajashree Murkute
Asst.General Manager - Corporate Rating
rajashree.murkute@careratings.com
91-22-67543440

Mradul Mishra (Media Contact)
mradul.mishra@careratings.com
91-22-67543515

Disclaimer: This report is prepared by Credit Analysis & Research Limited [CARE Ratings]. CARE Ratings has taken utmost care to ensure accuracy and objectivity while developing this report based on information available in public domain. However, neither the accuracy nor completeness of information contained in this report is guaranteed. CARE Ratings is not responsible for any errors or omissions in analysis/inferences/views or for results obtained from the use of information contained in this report and especially states that CARE (including all divisions) has no financial liability whatsoever to the user of this report

Overview

Roads and highways are the major logistical bloodstream of the Indian economy. Globally, India ranks second in road network, spanning a total of over 5.2 million kms. Roads account for 60 per cent of total goods movement and 85 per cent of total passenger traffic in the India. According to the National Highways Authority of India (NHAI), national highways make up about 2 per cent of the network but account for 40 per cent of road traffic.

During the Twelfth Five Year Plan (FYP i.e. for the period 2012-17) Government earmarked an investment of USD 32.4 billion for the development of roads. The Union Budget 2017 made an allocation of INR 64,900 crore towards roads and highway development which is a sizeable growth of 12% over Union Budget 2016.

As a stimulus to the sector for the next few years, the Governments initiative, *"National Transport Master Plan"* for an integrated transport policy wherein roads, railways, shipping & ports and inland waterways which would support each other for an end-to-end and one stop solution for logistical and goods movement. This could be a game changer for the roads sector as the Government would now focus on developing highway networks which would connect the above mentioned modes of transport through roads and rail network entirely. Additionally, an integrated road development approach focused on developing entire networks of roads/highways like the Golden Quadrilateral, rather than developing individual highways seems to be the new approach on the part of the government and the National Highway Authority of India.

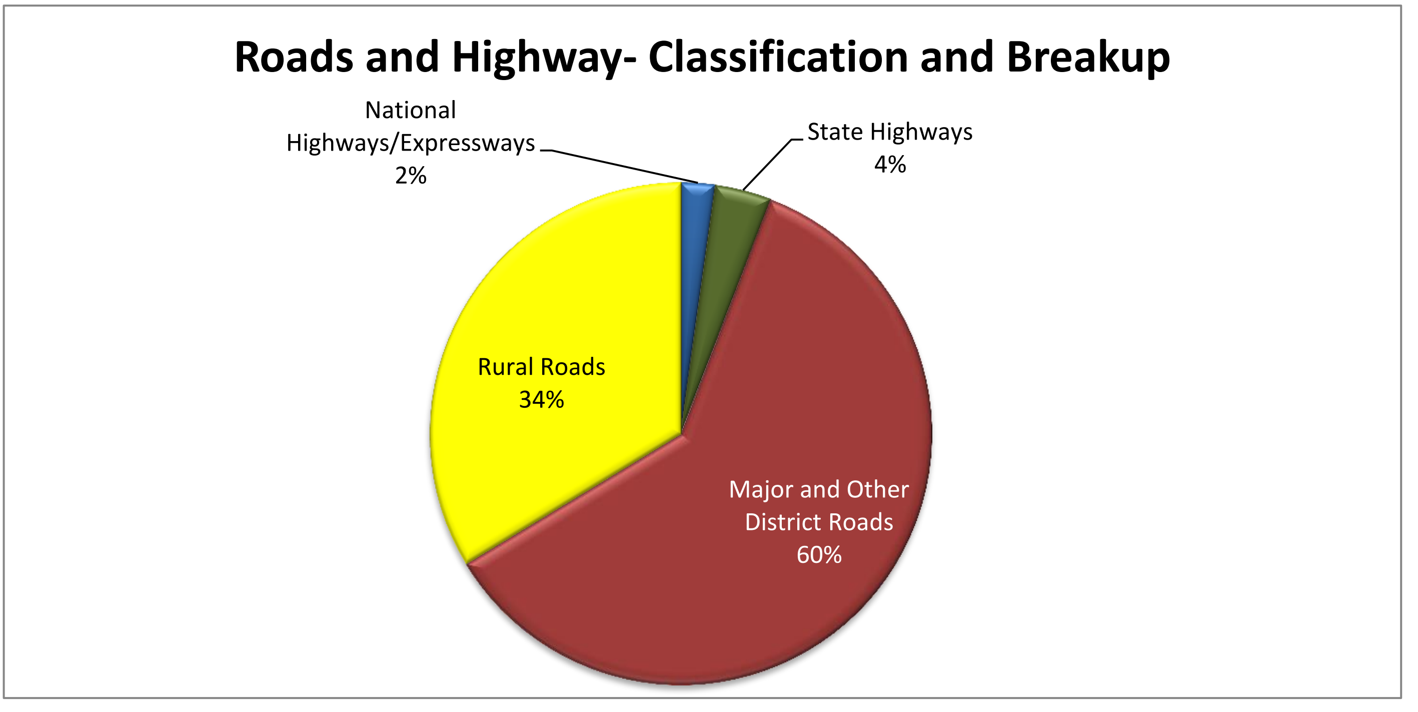
As per annual report of NHAI, 73 NH projects with aggregate length of around 8,310 km had been languishing after award for almost two and half years. These projects involved estimated capital investment of around INR 1,00,000 crore and saw execution delays and ***stalling due to land acquisition issues and inability in achieving financial closure for projects***. To curb these two major issues, proactive land acquisition by government agencies and introduction of Public Private Partnership model like Hybrid Annuity Model, in which the Government pays an upfront 40% of the project cost to ease the capital requirement of developers, have acted as major stimulus for the sector.

Outlook for the roads sector is promising and positive with these Government-led stimulus and policy initiatives. The sector is likely to continue with its growth and pick-up pace in 2017-18.

Road – Sector at a glance

In India, roads and highways are broadly classified into 4 categories-

- **National Highways** which facilitate medium and long distance inter-city passenger and freight traffic across the country.
- **State Highways** are intended to carry the traffic along major centers within the State.
- **Major and Other District Roads** primarily link and provide accessibility within the district and provide the secondary function of linkage between main roads and rural roads.
- **Rural Roads/Highways** provide villages accessibility to meet their social needs as also the means to transport agriculture produce from village to nearby markets.



The classification also forms the basis to understand the administrative bodies responsible for awarding/undertaking the projects operations, development and maintenance of these roads and highways.

The major administrative authorities for development of roads and highways in India are as follows:

- **National Highway Authority of India (NHAI)**: The National Highways Authority of India (NHAI) is an autonomous agency of the Government of India, responsible for management of a network of over 1 lakh km of National Highways in India. It is a nodal agency of the Ministry of Road Transport and Highways (MoRTH). The NHAI is also responsible of the toll collection on several highways.

- **State Public Works Department (PWD)**: Each state has a Public Works Department which is governed and funded by the respective state governments. It is engaged in planning, designing, construction and maintenance of various Infrastructural assets of the State Government with roads being one of the major one being roads. The PWD much like the NHAI, is also engaged in setting up tolls across its projects or awarding them to private players in the state.

- **District municipal Corporations and Gram Panchayats**: A Municipal Corporation is a local governing body, of cities, towns, districts etc. Gram Panchayats are equivalents of Municipal Corporations at village level. These governing bodies are independent like the PWD but are funded by both the Government of

India as well as the state Government under various schemes. Major District Roads and Rural roads & highways are developed and maintained by these bodies.

Developing major National highways: National Highway Development Project

National Highway Development Project is a 7- phase project aimed at widening, up-grading and rehabilitation of national highways. It is the single largest project which is aimed at developing 55,000 km of roads. The National Highway Development Project has been implemented in phases and the latest data pertaining to the status of the different phases is given below.

NHDP & Other NHAI Projects
31st January 2017

		Total Length (Km.)	Already 4/6Laned (Km.)	Under Implementation (Km.)	Contracts Under Implementation (No.)	Balance length for award (Km.)
NHDP	GQ	5,846	5,846 (100.00%)	0	0	-
	NS - EW Ph. I & II	7,142	6,427	458	39	257
	Port Connectivity	435	379	56	6	-
	NHDP Phase III	11,809	6,835	3,227	81	1,747
	NHDP Phase IV	13,203	2,054	4,654	64	6,495
	NHDP Phase V	6,500	2,359	761	22	3,380
	NHDP Phase VI	1,000	-	165	8	835
	NHDP Phase VII	700	22	19	1	659
	NHDP Total	46,635	23,922	9,340	221	13,373
Others (Ph.-I, Ph.-II & Misc.)		1844	1,614	230	11	-
SARDP -NE		110	105	5	1	-
Total by NHAI		48,589	25,641*	9,575	233	13,373

*Total 20,000 km was approved under NHDP Phase IV. Out of which 14,799 Km. as assigned to NHAI remaining Km. with MORTH.

Source:-NHAI website

The phases and the highways covered under each phase are as follows:

NHDP Phase I: Phase I mainly involved widening (to 4 lanes) and upgrading of 7,498 km of the national highway network and included four component packages. Highway network linking the four metropolitan cities in India i.e. Delhi-Mumbai-Chennai-Kolkata, covering a length of 5,846 km, popularly known as the Golden Quadrilateral (GQ) project. Highways along the North-South (NS) and East-West (EW) corridors, covering a length of 7142 km Port connectivity projects covering a length of 435 km; and Other highway projects, covering a length of 315km.

NHDP Phase-II: This phase involved widening and improving of the North/South-East/West (NS-EW) corridors (not covered under Phase-I) covering a distance of 6,647 km, besides providing connectivity to major ports on the east and west coasts of India and some other projects. This included 6,161 km of NS-EW corridors and 486 km of other highways. The total length of the NS-EW network under Phases I & II is about 7,200 km.

NHDP Phase-III: This phase involved up gradation of 12,109 km (mainly 4-laning) of high density national highways, through the Build, Operate & Transfer (BOT) mode at a cost of INR 80,626 Crore. The project consists of stretches of National Highways carrying high volume of traffic, connecting state capitals with the NHDP network under Phases I and II and providing connectivity to places of economic, commercial and tourist importance.

NHDP Phase IV: This phase involved up-gradation of 20,000 km of highways into 2-lane highways, at an indicative cost of INR 27,800 Crore (USD 5.6 billion). This phase was intended to ensure that the capacity, speed and safety of highways matched minimum benchmarks set for national highways. The government had approved strengthening of 5,000 km to 2-lane paved shoulders on Build-Operate-Transfer (Toll/ Annuity) under NHDP-IV A at a cost of INR 6,950 Crore.

Indian Road Network Growth		
Particulars	**FY03**	**FY16**
Length of national highways(kms)	58,112	100,475
Passenger vehicles sales (million)	0.71	2,864.50
NHDP Toll Collection (USD million)	64.5	1,078.3
Highway Projects awarded by NHAI (kms)	677	6,397

NHDP Phase V: This phase involved 6-laning of the 4-lane highways comprising the Golden Quadrilateral and certain other high density stretches, which have been implemented on BOT basis at an estimated cost of INR 41,210 Crore. These corridors have been 4-laned as part of the GQ in Phase-I of NHDP. Out of the 6,500 km proposed under NHDP-V, about 5,700 km would be taken up in the GQ and the balance 800 km would be selected on the basis of predefined eligibility criteria.

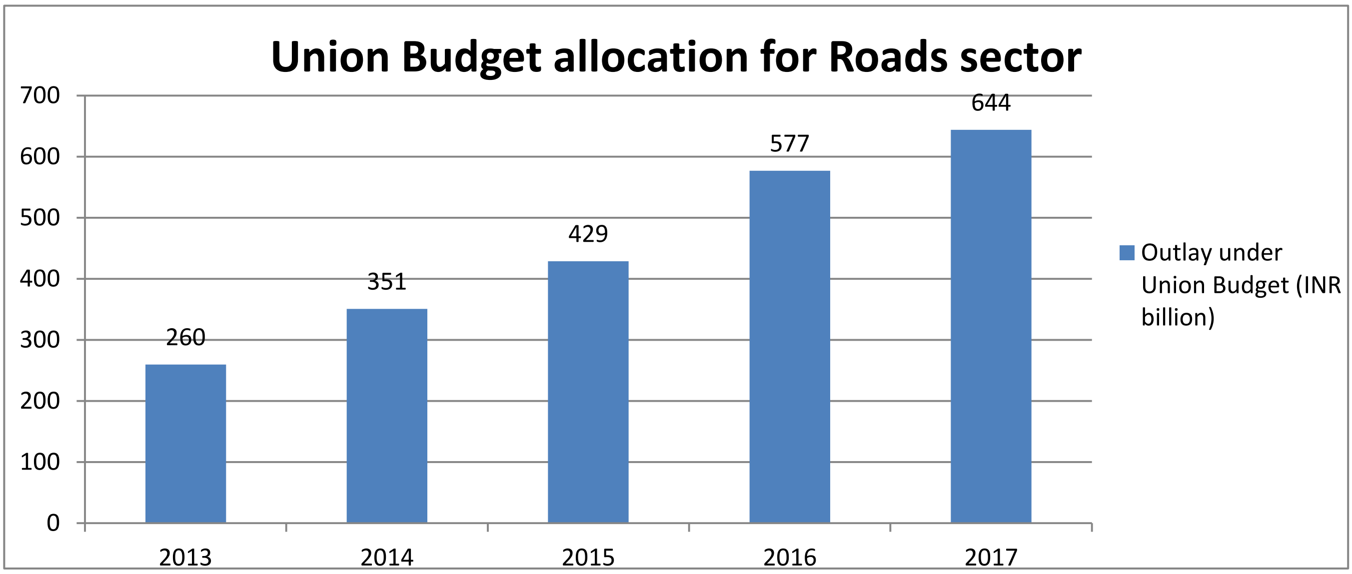
NHDP Phase VI: Under this phase the Government has approved 1,000 km of expressways to be developed on a BOT basis, at an indicative cost of INR 16,680 Crore. These expressways would be constructed on new alignments.

NHDP Phase VII: The development of ring roads, bypasses, grade separators and service roads are considered necessary for full utilization of highway capacity as well as for enhanced safety and efficiency. Apart from the high density corridors, a substantial part of the National Highways network would also require development during the 11th Plan period. These sections are characterized by low density of traffic.

<u>**Other Roads and Highway Development Programme**</u>:

The **Special Accelerated Road Development Programme for the North Eastern** region (SARDP-NE) is aimed at developing road connectivity between remote areas in the North East with state capitals and district headquarters. SARDP-NE would be responsible for the development of double-lane/four-lane national highways of about 7,530 kilometers and double laning improving about 2,611 kilometers of state roads, as on FY16 Implementation of the program would connect 88 district headquarters in North Eastern states to the nearest National Highways.

The government has also approved a **Road Requirement Plan** (RRP) for the development of 1,126 kilometers of National Highways and 4,351 kilometers of state roads in **Left Wing Extremism** (LWE) affected districts. The project has already been implemented in Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha and Uttar Pradesh at a total cost of approximately INR 7500 crore.



Source: Union Budget Documents

Financing mechanism for funding projects:

There are numerous funding avenues or mechanisms for road development initiatives undertaken by Central Government and State Agencies. Prominent amongst them are discussed below:

Budgetary allocation: The Central Government during its Union Budget every year makes a budgetary allocation to be spent for the development of roads and highway infrastructure. The Government based on its assessment of requirement of road infrastructure across the country, development of new roads and highways for connectivity to major business and industrial hubs with ports and other logistics center etc. comes up with a budgetary allocation in consultation with the statutory bodies and industry participants. This budgetary allocation is fulfilled by the Central Government through collection of direct and indirect taxes as well as borrowings from the markets. The various Central Agencies like NHAI, aid the government for raising funds to meet these budgetary allocation for development and maintenance of new and old projects as well as refinancing existing borrowings.

- **Cess:** The Government of India introduced a Cess on both Petrol and Diesel in the year…. This amount at that time (at 1999 prices) came to a total of approximately INR 2,000 crores per annum. Further, Parliament decreed that the fund so collected were to be put aside in a Central Road Fund (CRF) for exclusive utilization for the development of a modern road network. The Cess contributes between INR 5,000-INR 6000 crores per annum towards NHDP. The developmental work that it could be tapped to fund, and the agencies to whom it was available were clearly defined as :
    - Construction and Maintenance of State Highways by State Governments.
    - Development of Rural Roads by State Governments
    - Construction of Rail over- bridges by Indian Railways
    - Construction and Maintenance of National Highways by NHDP and Ministry of Road Transport & Highways.

- **Loan assistance from international funding agencies:** Loan assistance is available from multilateral development agencies like Asian Development Bank, World Bank, The Japan Bank for International Cooperation amongst others. Funding from aforementioned international bodies are for the infrastructural development of the country and usually repayable over a longer timeframe thereby allowing more time for the revenues to stabilize and make the repayments.

- **Market borrowings:** NHAI taps the securities markets, primarily bond markets, for raising debt to finance its existing projects and refinancing debt. NHAI issues two kinds of bonds, namely 54EC, also known as Capital

Gains Bonds with a maturity period of 3 years; and Tax Free Bonds with no Tax payable on the coupon received by the investor and has seen heightened demand from investors for the same reason.

- **Other initiatives to ease funding:** The NHAI has more recently decided to start its own Alternate investment fund (AIF) in order to fund projects. This AIF is in planning stage. Apart from this, a scheme by the name" **One-Time Fund Infusion**", under which NHAI along with State Bank of India will fund stalled BOT projects having a progress of over 50%. As the name suggests, this would be capital infusion scheme to complete stalled projects and make these projects operational.

- **Private financing under PPP frameworks (Private Sector Participation):** The Public Private Partnership (PPP) Project means a project based on contract or concession agreement, between a Government/statutory entity like NHAI on one side and a Private Sector Company on the other side, for investing in construction and maintenance of infrastructure asset and/or delivering an infrastructure service over a stipulated concession period. PPP framework was introduced to increase the efficiency of infrastructure projects through a long-term collaboration between the public sector and private business.

- While in a traditional BOT project award mode, the financing has to be arranged by the private player, NHAI also has a provision for providing grant up to 40% of the project cost to make projects commercially viable on a case to case basis. For e.g. where the revenue generating ability of the project is low as against the construction related costs, and therefore will be inadequate to service larger quantum of debt. This in turn will make it unattractive to avail bank finance. Such form of funding assistance is known as Viability Gap Funding. However, the quantum of grant is decided on a case- to-case basis and typically constitutes the bid parameter in Build-Operate-Transfer (BOT) projects generally not viable based on toll revenues alone. The disbursement of such grant is subject to provisions of the project concession agreements. Public Private Partnership is undertaken under a set of frameworks, depending upon the viability and size of the project, the capital requirement etc. Discussed below are the frameworks which are widely used in order to execute and implement roads and highway projects by NHAI.

- **Build operate transfer (BOT)**: The BOT enables direct private sector investment in large scale infrastructure projects. The theory of the BOT is as follows:

  - **Build**: A private company (or consortium) agrees with a Government to invest in a public infrastructure project. The company then secures financing to construct the project.
  - **Operate:** The private developer then owns, maintains and manages the facility for an agreed concession period and recoups its investment through annuity receipts or toll charges.
  - **Transfer**: After the concessionary period, the company transfers ownership and operation of the facility to the Government or relevant state authority.
  - Private developers invest in toll-able highway projects, are entitled to collect and retain toll revenues for the tenure of the project concession period. The contracts are awarded on the basis of a Model Concession Agreement (MCA). Under a **Model Concession Agreement**, the Contractor (Concessionaire) agrees to pay to the Concessioning Authority (NHAI or State Agency) a License Fee (if any) and royalty, and performs its obligations as set out in the Agreement between the two parties. The Concessioning Authority thereby grants to the Concessionaire an exclusive license for designing, engineering, financing, constructing, equipping, operating, maintaining, and replacing the Project / Project Facilities and Services. The single biggest drawback of BOT Model is that the private party bears all the risk including financial, revenue/toll collection and operational and maintenance risk, which makes it a high risk PPP framework for the private party and thus less lucrative on low traffic and non-major highways.

  - **BOT (Annuity):** The concessionaire bids for annuity payments from NHAI that would cover its cost (construction, operations and maintenance) and an expected return on the investment. The bidder quoting the lowest annuity is awarded the project. The annuities are paid semi-annually by NHAI/or other Concessioning Authority to the concessionaire and linked to performance covenants. The concessionaire does not bear the traffic/ tolling risk in these contracts. The revenue/toll collection risk in this case is born by the Authority, which ensures timely and regular cash flows for the developer. But aggressive bidding for these projects means the winner has a very wafer thin margin in most cases and any delay in execution or operation would lead to the developer facing losses.

- **Operate-Maintain-Transfer (OMT) Concession:** NHAI has taken up award of select highway projects to private sector players under an OMT Concession. Till recently, the tasks of toll collection and highway maintenance were entrusted with tolling agents/ operators and subcontractors, respectively. These tasks have been integrated under the OMT concession. Under the concession private operators would be eligible to collect tolls on these stretches for maintaining highways and providing essential services (such as emergency/ safety services).

Responsibility Allocation in Different Contract Models			
Mode	**Construction**	**O&M**	**Traffic and toll**
EPC	Private	Authority	Authority
BOT (Toll)	Private	Private	Private
BOT (Annuity)	Private	Private	Authority
HAM	Private	Private	Authority

- **Engineering, Procurement and Construction (EPC):** This framework of Public Private Partnership relies on assigning the responsibility for investigations, design and construction of roads to the Contractor for a lump sum price determined through competitive bidding. As in 2016-17, 84 National Highway projects with a total length of approximately 4,250 km are being implemented under EPC model which constitutes to 30% of the total highway projects under implementation and an addition 248 projects of approximately 12,500kms are in the pipeline under this model.

The NHAI comes up with a tender for a particular stretch of highway and calls for bids from contractors, who after due assessment and evaluation of the risk in the project, bid for the same. The objective is to ensure implementation of the project as per specified standards with a fair degree of certainty relating to costs and time while transferring the construction risks to a private sector Contractor. Under usual circumstances, the lowest bidder gets the contract, provided the work is done in manner as prescribed in terms of quality and other assessment parameters set by the Government. The major benefit of EPC model under PPP framework is to minimize the time and cost over-runs inherent feature of the extant item rate contracts. Further, it enables a faster rollout of projects with least costs and greater efficiency while minimizing the potential for excessive discretion. The Private Developer in an EPC framework does not face any kind of risk mentioned above. This framework is essentially on the premise of “payment made for work assigned and completed basis” and hence developers with robust project management and advanced construction technology know-how bid for these PPP framework projects. Prior to 2005, EPC was the preferred and default model of award under the NHDP.

- **Hybrid Annuity Model (HAM):** HAM is the latest entrant among the PPP models. It consists of a dramatic realignment of risk sharing wherein, the government accepts revenue/ toll collection risk, along with partial sharing (40% or on a case to case basis) of financial risk, and assigns the Contractor to continue managing executional and operational & maintenance risk. By doing so, they have combined the features of BOT (Annuity) model and EPC contract risks strategies. HAM as a model was brought in keeping in mind the stressed balance sheets of most infrastructure groups which was hampering their participation in the road construction segment, due to their inability to spare equity in new projects. The stressed banking sector due to mounting NPA’s, especially from the infrastructure segment itself, meant, banks were unwilling to grant funds unless the balance sheets of these infrastructure developers was deleveraged and there was a certain degree of Government support. Nearly 43 Projects totaling 2880km are being executed under this model.

- **Toll-Operate-Transfer (T-O-T):** As a recent measure to mobilize funds, the National Highway Authority of India decided to auction its operational highways to private investor's maintenance and toll collection for a period of 30 years. A private player is expected to operate and maintain the highway and collect toll for 30 years after making an upfront payment, without having to build the highway. The funds generated through auctioning would be spent on development of new road projects. The government has identified 75 highway projects which it intends monetize so that it could mobilize around INR 30,000-INR 40,000 crore which would be used for the development of new highways and road projects. A host of Pension Funds and Private Equity players have shown their intent and interest to participate in this auction and make investments in the roads sector in the country.

Trends in Award of Projects timeline

Road and highway development: A key growth area for the Government (Under 'Make In India')

Major policy initiatives undertaken by Ministry of Roads, Transport and Highways (MoRTH) during last two years include:

Mode of delivery - MoRTH is now empowered to decide on mode of delivery of projects-EPC/PPP.

Enhanced Inter-Ministerial coordination - An Infrastructure Group has been created under Chairmanship of Hon'ble Minister (Road, Transport & Highways) to resolve approval/clearance issues related to Environment & Forests, Railways and Defense, and most of the issues have been resolved.

Exit Policy -Private developers can now exit all operational BOT projects two years from start of operations irrespective of the date of award of the project.

Revival of Languishing projects - Now revival of BOT projects which are languishing in the construction stage is possible through one-time fund infusion by NHAI, subject to adequate due diligence of such projects on case to case basis through an institutional mechanism.

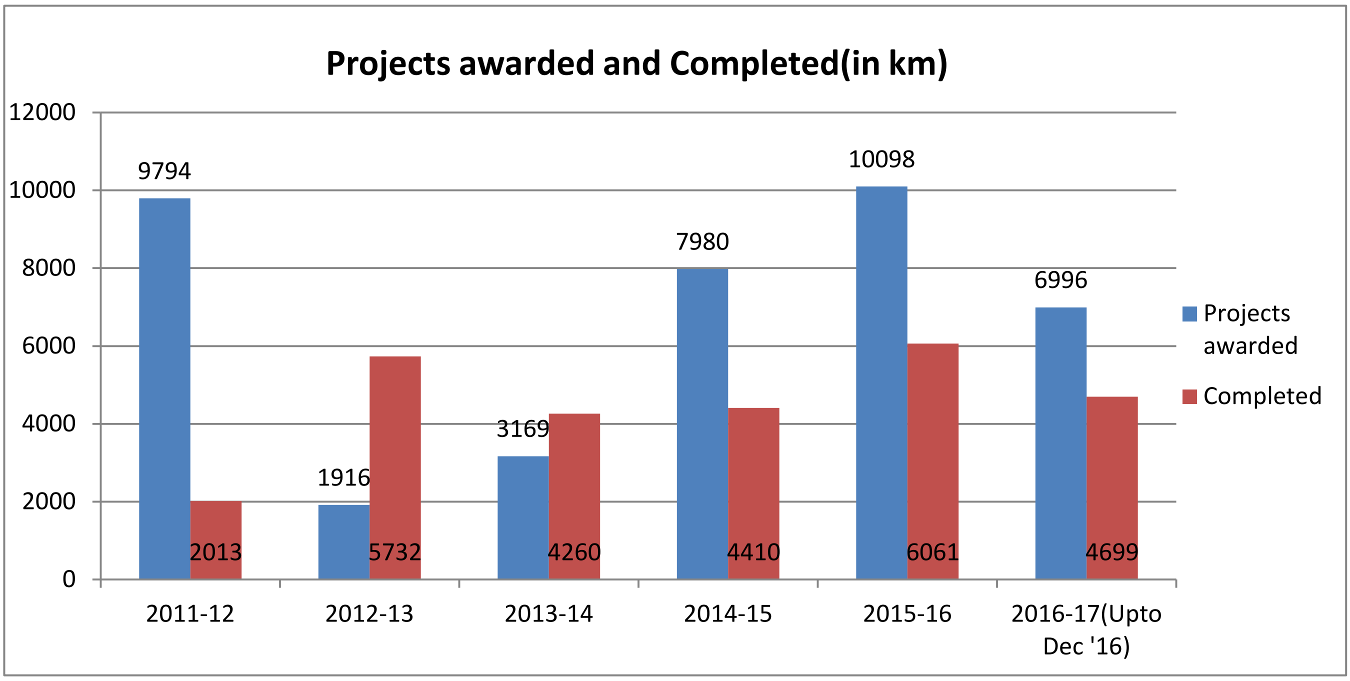
Promoting innovative project implementation models- The Hybrid Annuity Model (HAM) has been developed and adopted for implementation of highway projects. The model takes into consideration appropriate risk allocation. Fifteen projects have already been awarded under this model.

Amendments to the Model Concession Agreement (MCA) for BOT projects - Certain changes in the MCA have been approved by an empowered Committee headed by the Cabinet Secretary based on stakeholders feedback. This would facilitate streamlined development and operation of highway projects.

Challenges in Development of roadways and highways sector:

- **Stressed banking sector:** Banks are the single largest lenders to the road sector. Delay in execution, policy hold-ups and cash strapped and highly indebted promoter companies have left the banks unable to lend further, at the same time adding to the stressed assets portfolio. This has led to restructuring of certain bank loans, or whilst few projects underwent corporate debt restructuring (CDR). With inadequate funds flow from the banking system, companies too are abstaining from bidding for projects which led to delay in the award of projects by the Government.

- **Public Private Partnership (PPP) Framework related issues**: In the past, projects were contracted to developers not taking into consideration risk factors like- revenue/toll collection, operation & maintenance, and financing. Developers bid aggressively for projects which later turned out to be low traffic highways, which made it difficult for the developers to recover the projected revenue through toll collection. These have led to capital of these companies getting blocked with single large projects, which makes it impossible for them to commit their funds towards newer projects. Excess dependence on a particular PPP model over a long period has been one of the factors which have affected the sector and participation of private players negatively.
- **Legislation and political factors:** Lack of will on the part of the Government awarding contracts with regard to hike in toll charges and per kilometer toll chargeable has been another major factor which has led to under recovery of revenue/toll collection. Developers require support from the government either as a compensation for the losses or to be allowed to hike the toll in case of major shortfall in number of vehicles plying from the previously forecasted numbers. In absence of any such support, the developers end up with huge losses and are unable to service their financial obligations.



Source: NHAI Annual Report

- **Executional risk:** : Execution of many highway projects have been moving at a slower pace due to project cost overrun, issues with land acquisition, fund availability issues and delays in timely availability of approvals which can be collectively termed as executional risks. These risks are related to meeting various requirements in order to execute a project successfully and depend on both the Concessioning authority as well as the developer.
- Unwillingness on the part of the users to pay tolls has been another major factor which has led to law and order problems in the past and developers having to abandon projects, facing huge losses and endless legal disputes. Additionally, exemptions provided by Government/State Government/Authorities to various vehicles also leads to misuse of the same by owners of these vehicles which have also lead to disruption and disputes in several cases.
- Apart from the reason mentioned above, slow speed of construction of NHs may also be due to non-availability of soil/ aggregates, poor performance of contractors/subcontractors in certain cases, environment/ forest/ wildlife clearance, rail over bridge and rail under bridge issue with railways, public agitation for additional facilities, arbitration/ contractual disputes with contractors etc.

Outlook and Scope for the sector during 2017-18:

The road sector has seen major development in the past one decade and at the same time, participation from the private sector witnessed almost doubling of the national highway network between 2003 -2016. But even after doubling of the national highways, the road connectivity seems to be inadequate if one were to look at specific geographies and regions. The Authorities in the country seem to have identified this gap in connectivity and have been aggressively awarding new projects. The outlook for the roads sector looks promising for developers. This could be further gauged from the fact that major foreign pension funds and private equity firms are scouting for investments in the roads sector and a handful of them have successfully invested by buying out stakes in toll projects. Asset Managers and Pension Funds from Canada have invested close to INR 1000 cr. in various toll projects with one major deal closed at INR 563 cr.

The following factors could lead to a turnaround in the road sector in 2017:

- **Union Budget 2017**: The Finance minister in his Union budget speech announced an outlay of INR 64,900 crore which is the highest ever allocation to this sector. This could lead to higher award of new projects and one time infusion in stalled projects. Though not much relief is seen in funding by banks for road projects due to mounting NPA's and bad loans in the banking sector, but better financial package from the government would ensure, banks willingness to lend for projects.

- **Infrastructure Investment Trusts (InvIT)**: One of the most vital requirements for the development of roads and highways is the need for continuous capital. Even though, Government, Statutory Authorities and Regulators have been trying to bridge this gap with policy initiatives or modifying models of development, the sheer magnitude of development needed and the relative capital required makes these measures inadequate. In 2014, Securities and Exchange Board of India introduced Infrastructure Investment Trust (InvIT) Regulations 2014 meant to mobilize funds from private investors looking invest in long term return yielding infrastructure projects. The capital requirement for development of roads is so huge that it cannot be met alone by private sector infrastructure developers and government. InvIT which provides the much needed exit for the foreign investors could finally be a reality in the year 2017. This would ensure more foreign funds trying to venture or foray into Indian infra projects with clarity in exit route. One of the benefits of InvIT is providing the last mile funding of stalled projects which happens to be the biggest pain-point for the entire road and highways sector with these trusts allowed to invest up to 10% of their total corpus into such infrastructure projects, requiring last-mile funding. Currently, 3 developers having exposure into roads and highway development have either already applied or are in the process of filing documents with the regulator for listing their InvIT's.

- **FDI in Roads sector:** Though 100% FDI in roads through automatic route has been in place, but not many foreign funds and participants have shown interest beyond a certain level barring few transactions in the distress sale and change of ownership in some marquee road projects. With major infrastructure companies having already locked up a large part of their capital in huge projects, they are required to raise fresh capital in order to bid for upcoming projects. Foreign investors particularly pension funds and private equity firms are exploring to purchase stakes in infrastructure projects like roads, airports etc. The developers can consequently divest their stakes in infrastructure projects to these foreign investors given they fulfill the minimum regulations. InvIT's introduction and possible listing is likely to attract more foreign investment in the infrastructure space especially road projects.

- **Development of Multi-Modal Hubs:** Though in its preliminary phase, but the ministry of Roads, Railways and Shipping is planning to come together to develop transport hubs at 10 cities under the National Transport Master Plan in order to provide end-to-end solution for entities seeking efficient movement of goods and services. This would mean further development of ring roads and proper connectivity between railways goods yards, ports and other regional transportation hubs. This would be highly beneficial for the roads sector as it is the common thread between all other means of transportation for the ease of movement of freight. The Government is actively pursuing the plan and NHAI would have a sizable role to play in the development of hubs and road networks even though no concrete timeline is in place for the implementation and completion of this project.

- **Government push to develop all weather highways in Jammu & Kashmir and North-Eastern States:** One of the major concerns for the Government has been lack of connectivity and accessibility to states like Jammu and Kashmir and the seven states in the North-East. The topography and extreme weather conditions translate into road closures for up to nearly 6 months in a year. Government has proactively started building all-weather tunnels and highways through mountains which not only decreases the distance between places but also prevents any disruption due to weather or natural calamities. With development of these states being the focus area for the present Government and the strategic importance of these regions both with a security as well a territorial point of view, the Government would look at expediting the highway projects which have been stalled in the past in these two regions.

- **Other areas** where the sector would see opportunities are Bharat Mala Project, Sethu Bharatham Project and Char Dham Connectivity. The combined planned expenditure on these three projects alone would be to the tune of INR 2.8 trillion which would be spent over the next 5 years. There would be significant increase in projects in States where Government formation has happened recently, where there would be thrust on maintenance and development of roads.

CORPORATE OFFICE:
CREDIT ANALYSIS & RESEARCH LIMITED
Corporate Office: 4th Floor, Godrej Coliseum, Somaiya Hospital Road,
Off Eastern Express Highway, Sion (East), Mumbai - 400 022.
Tel: +91-22-6754 3456 I Fax: +91-22-6754 3457
E-mail: care@careratings.com I Website: www.careratings.com

Follow us on /company/CARE Ratings
/company/CARE Ratings