Demand for Grants 2018-19 Analysis
Road Transport and Highways

India has one of the largest road networks in the world with about 47 lakh km of road length. This road length includes National Highways (NHs), Expressways, State Highways (SHs), district roads, PWD roads, and project roads. In India, road infrastructure is used to transport over 60% of total goods and 85% of total passenger traffic.

The Ministry of Road Transport and Highways formulates and administers policies for road transport, and transport research. It is also involved with the construction and maintenance of the National Highways (NHs). It also deals with matters relating to road transport such as implementation of the primary central legislation, the Motor Vehicles Act, 1988.

This note looks at the proposed expenditure of the Ministry for the year 2018-19, its finances over the last few years, and issues with the same.

Allocations in Union Budget 2018-19

Expenditure: The total expenditure on the Ministry of Road Transport and Highways for 2018-19 is estimated at Rs 71,000 crore. This is 16% higher than the revised estimates for 2017-18.

In 2018-19, while revenue expenditure of the Ministry is expected at Rs 11,560 crore, capital expenditure is expected at Rs 59,440 crore. The Ministry has increased its capital expenditure significantly in the last few years. For 2018-19, the ratio between revenue and capital expenditure is estimated at 16:84. In comparison, the ratio between revenue and capital expenditure for the years 2015 was at 41:59.

Table 1: Budget allocations for the Ministry of Road Transport and Highways (in Rs crore)

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</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>11,039</td>
<td>10,136</td>
<td>11,560</td>
<td>14%</td>
</tr>
<tr>
<td>Capital</td>
<td>41,193</td>
<td>50,864</td>
<td>59,440</td>
<td>17%</td>
</tr>
<tr>
<td>Total</td>
<td>52,232</td>
<td>61,000</td>
<td>71,000</td>
<td>16%</td>
</tr>
</tbody>
</table>

Notes: BE – Budget Estimate; RE – Revised Estimate.
Sources: Notes on Demands for Grants, 2018-2019, Ministry of Road Transport and Highways; PRS.

Allocation and utilisation of funds

In the past few years, the actual allocation to the Ministry has been consistently lower than the budget estimates. However, it has been noted that the utilisation of the funds by the Ministry has been high. The Standing Committee on Transport, Tourism and Culture (2016) had recommended that the reduction of allocation at the revised estimates stage should be avoided.

Figure 1: Budget estimates vs actual expenditure

Policy proposals in the Budget Speech

In his budget speech, the Finance Minister made the following announcements regarding the roads sector:

- **Road and infrastructure cess**: The existing Road Cess (cess on motor spirit and high speed diesel) has been converted to the Road and Infrastructure Cess. This cess on petrol and high-speed diesel has been increased by Rs 2 per litre, while the excise and customs duty have been cut by the same amount.

- **Under the Bharatmala Pariyojana about 35,000 km of roads will be developed in Phase-I at an estimated cost of Rs 5,35,000 crore.**

- **To raise equity from the market for its mature road assets, NHAI will consider organizing its road assets into Special Purpose Vehicles and use other innovative monetizing structures like Toll, Operate and Transfer (TOT) and Infrastructure Investment Funds (InvITs).**

- The government will come out with a policy to introduce toll system on ‘pay as you use’ basis.

Overview of Finances

Expenditure of the central government

In 2018-19, of the total expenditure, the highest allocation is towards road works at 58% (Rs 40,881 crore). This is followed by allocation towards the National Highways Authority of India (NHAI) at 42% (Rs 29,663 crore).
Table 2: Expenditure heads for the Ministry of Road Transport and Highways

<table>
<thead>
<tr>
<th>Major Head</th>
<th>Actual 2016-17</th>
<th>Revised 2017-18</th>
<th>Budget 2018-19</th>
<th>BE 2018-19/ RE 2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road works</td>
<td>44,463</td>
<td>36,780</td>
<td>40,881</td>
<td>11%</td>
</tr>
<tr>
<td>NHAI</td>
<td>7,500</td>
<td>23,892</td>
<td>29,663</td>
<td>24%</td>
</tr>
<tr>
<td>Road transport and safety</td>
<td>1,127</td>
<td>171</td>
<td>315</td>
<td>84%</td>
</tr>
<tr>
<td>Others</td>
<td>144</td>
<td>158</td>
<td>141</td>
<td>-11%</td>
</tr>
<tr>
<td>Total</td>
<td>52,232</td>
<td>61,000</td>
<td>71,000</td>
<td>16%</td>
</tr>
</tbody>
</table>

Notes: BE – Budget Estimate; RE – Revised Estimate.
Sources: Notes on Demands for Grants, 2018-2019, Ministry of Road Transport and Highways; PRS.

Road works: Expenditure under road works includes development of NHs, projects related to expressways, increasing the number of lanes under various projects, and development of road connectivity in Naxalite affected areas. The allocation towards roads works is 11% more than the revised estimates of 2017-18 (Rs 36,780 crore). However, the allocation is 8% lower than the actual spending in 2016-17 (Rs 44,463 crore).

NHAI: The central government is responsible for the development and maintenance of NHs, and it carries out these functions through the NHAI. The NHs comprise about 2% of the road network but carry about 40% of the total road traffic. Expenditure on the NHAI includes funding provided towards projects under the National Highways Development Project (NHDP). Key projects under the NHDP include: (i) the Golden Quadrilateral, (ii) the North-South and East-West Corridors, and (iii) four-laning of 12,109 kms under phase III.

NHAI has been allocated Rs 29,663 crore in 2018-19, which is 24% more than the revised estimates for 2017-18 (23,892 crore). Of this amount, Rs 20,093 crore (68%) will be provided from the Central Road Fund (CRF), and the remaining Rs 9,570 crore (35%) will be provided from the Permanent Bridge Fees Fund (PBFF).

Funds managed by the Ministry

The Ministry manages its expenditure through various funds. Their details are provided below.

Table 3: Summary of transfers from funds (in Rs crore)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CRF</td>
<td>34,946</td>
<td>43,663</td>
<td>54,014</td>
<td>24%</td>
</tr>
<tr>
<td>PBFF</td>
<td>7,572</td>
<td>8,562</td>
<td>9,620</td>
<td>12%</td>
</tr>
<tr>
<td>NIF</td>
<td>4,465</td>
<td>5,265</td>
<td>6,210</td>
<td>18%</td>
</tr>
</tbody>
</table>

Notes: BE – Budget Estimate; RE – Revised Estimate.
Sources: Notes on Demands for Grants, 2018-2019, Ministry of Road Transport and Highways; PRS.

Central Road Fund (CRF): A majority of the Ministry’s expenditure is managed through transfers from the CRF. A portion of the cess collected on motor spirit and high speed diesel is earmarked for the development of NHs and SHs, and the amount is transferred to the non-lapsable CRF. This amount is eventually released to the NHAI, and to the state/UT governments for development of road infrastructure in the country. For 2018-19, the transfer from CRF is estimated at Rs 54,014 crore. This is a 24% increase from the revised estimates of 2017-18 (Rs 43,663 crore). These grants are expected to be used for the creation of capital assets.

Permanent Bridge Fees Fund (PBFF): Funds transferred to the PBFF relate to the revenue collected by the government by way of (i) fees levied for the use of certain permanent bridges on NHs by motor vehicles, (ii) toll on NHs, and (iii) revenue share and negative grants received on some PPP projects. The fund is utilised for development of NHs being undertaken by the government and those entrusted to NHAI.

For 2018-19, the transfer to PBFF is estimated at Rs 9,620 crore. This is a 12% increase from the revised estimates of 2017-18 (Rs 8,562 crore).

National Investment Fund (NIF): The NIF was created in 2005, and is credited with proceeds from disinvestments of public sector enterprises. The Ministry finances the Special Accelerated Road Development Programme in North East (SARDP-NE) with funds from the NIF.

For 2018-19, the transfer to NIF is estimated at Rs 6,210 crore. This is an 18% increase from the revised estimates of 2017-18 (Rs 5,265 crore).

Schemes

Bharatmala Pariyojana: The Bharatmala Pariyojana is a new umbrella programme covering highways. It aims to optimize efficiency of freight and passenger movement by bridging critical infrastructure gaps. The program aims to increase the number districts with national highway linkages from 300 to 550.

On October 24, 2017, the Union Cabinet approved phase I of Bharatmala Pariyojana under which 34,800 km of roads will be developed over a period of five years. Phase I will also subsume 10,000 km of balance roadworks under the NHDP. The estimated cost of Phase I is Rs 5,35,000 crore, spread over five years. Table 4 illustrates the various components of Phase I.
Table 4: Components of Phase I of Bharatmala Pariyojana (2017-2022)

<table>
<thead>
<tr>
<th>Components</th>
<th>Length (in km)</th>
<th>Outlay (Rs crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic corridors development</td>
<td>9,000</td>
<td>1,20,000</td>
</tr>
<tr>
<td>Inter-corridor and feeder roads</td>
<td>6,000</td>
<td>80,000</td>
</tr>
<tr>
<td>National Corridors efficiency improvements</td>
<td>5,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Border and International connectivity roads</td>
<td>2,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Coastal and port connectivity roads</td>
<td>2,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Expressways</td>
<td>800</td>
<td>40,000</td>
</tr>
<tr>
<td>Total</td>
<td>24,800</td>
<td>3,85,000</td>
</tr>
<tr>
<td>Balance road works under NHDP</td>
<td>10,000</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Total</td>
<td>5,35,000</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Ministry of Road Transport and Highways; PRS.

Issues to consider

The roads sector is facing several constraints such as: (i) availability of land for NH expansion and upgradation, (ii) significant increase in land acquisition cost, (iii) lack of equity with developers, (iv) bottlenecks and checkposts on NHs which could adversely impact benefits of GST, (v) higher cost of financing; and (vi) shortfall in funds for maintenance. Further, the value of NPAs in the infrastructure sector (including roads and highways) has been increasing, with NPAs at around Rs 2.6 lakh crore as of August 2016. We discuss some of these issues below.

Targets vs performance

Road construction: The achievement of construction targets (for NHs) has ranged between 55% to 70% in the last three years. The road construction target for 2017-18 was 15,000 km, of which 4,292 km has been constructed till November 30, 2017 (33%). This suggests a rate of construction of 20 km/day (see Table 6). This is slightly lower than the rate of construction for last year which was 22 km/day. Given that 33% of the target length has been constructed in the first eight months of the year, it remains to be seen how much of the target will be completed in the remaining four months.

Table 5: Targets vs achievements for road construction (National Highways)

<table>
<thead>
<tr>
<th>Year</th>
<th>Target (km)</th>
<th>Achievement (km)</th>
<th>Achievement (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td>6,300</td>
<td>4,410</td>
<td>70%</td>
</tr>
<tr>
<td>2015-16</td>
<td>10,950</td>
<td>6,061</td>
<td>55%</td>
</tr>
<tr>
<td>2016-17</td>
<td>15,000</td>
<td>8,231</td>
<td>55%</td>
</tr>
<tr>
<td>2017-18</td>
<td>15,000</td>
<td>4,942*</td>
<td>33%</td>
</tr>
</tbody>
</table>

The CAG had noted that between 2009-10 to 2012-13, the rate of NH construction was between 3.06 km/day and 17.81 km/day, as compared to a target of 20 km/day.

The Standing Committee on Transport (2017) had noted that none of the schemes or targets could not be met due to shortage of funds. The projects could not be completed due to various reasons such as delays in obtaining clearances, poor financial and technical performance of the contractors, and law and order issues.

Project delays

The Committee on Public Undertakings (2017) had noted that from 1995, till June 2016, out of the total 388 projects completed, only 55 projects were completed on or before time. Delays in the completion of the projects were mainly attributed to: (i) the long time taken in land acquisition, and obtaining environment and forest clearances, (ii) poor performance of concessionaires due to economic slowdown, and (iii) law and order issues.

The CAG had noted that several road projects get stalled due to court injunctions. As on July 31, 2017, 30 road projects with a total cost of Rs 11,216 crore were stayed for three years. Such delays increase project costs, eventually making certain projects unviable.

Table 6: Time taken in obtaining clearances

<table>
<thead>
<tr>
<th>Clearance required</th>
<th>Statutory Authority</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Ministry of Environment and Forest</td>
<td>12-15 months</td>
</tr>
<tr>
<td>Forest</td>
<td>Ministry of Environment and Forest</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Wildlife</td>
<td>National Board of Wildlife and Supreme Court of India</td>
<td>More than 3 years</td>
</tr>
</tbody>
</table>

Sources: Outcome Budget 2015-16, Ministry of Road Transport and Highways; PRS.

The Standing Committee on Transport (2015) had recommended that a coordination mechanism at the central level with the Ministries of Finance, Environment and Forest and Defence will help speed up the process of clearances. The Standing Committee (2016) had also suggested that the Ministry of Road Transport and Highways should obtain all these clearances before awarding the projects to concessionaires. The NHAI should: (i) technically examine, (ii) estimate costs, and (iii) ensure all clearances before awarding any projects to the concessionaires.

Increase in land acquisition costs

From January 1, 2015, the compensation for land acquired by NHAI is determined as per the Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act.
2013. The Committee on Public Undertakings (2017) had noted that due to higher compensation under the 2013 Act, the expenditure by the Ministry of Road Transport on land acquisition increased from Rs 9,097 crore in 2014-15 to Rs 21,933 crore in 2015-16.12

The Committee also observed that farmers who were entitled to lesser compensation under the older law, have been approaching courts for increased compensation.12 This has further delayed the land acquisition process and added to the cost of projects.

Performance of NHAI

The Comptroller and Auditor General of India (2016) had also noted several procedural inefficiencies with NHAI. For example, NHAI could not realise toll on certain projects due to delays in approvals, toll operations, and other procedural lapses.14 NHAI did not adhere to Ministry of Road Transport and Highways guidelines regarding maintenance of project wise balance sheet and cash flow.14 Loss of revenue was also noted due to inefficient bidding process for engagement of toll collecting agencies.14

The Committee on Public Undertakings (2017) had also noted several issues in the financial performance of NHAI such as: (i) insufficiency of funds, (ii) gap between the amount of fund allocated and released, and (iii) under-utilisation of funds.12 For example, funds that are left unspent at the end of a financial year is shown as ‘opening balance’ at the beginning of the next financial year. This opening balance was Rs 2,672 crore and Rs 6,740 crore for the years 2015-16 and 2016-17 respectively.12 This shows NHAI’s inability to optimally utilise the available funds.

Issues with financing

Role of central government in financing: The Standing Committee on Transport (2016) had observed that while the Ministry of Road Transport and Highways invests in the construction of roads, it does not have its own source of revenue other than budgetary support from the central government.15 The Committee recommended that the RBI and Ministry of Finance may help the Ministry of Road Transport to set up its own dedicated financial institutions to generate funds for development of the road sector. It also recommended that Ministry of Road Transport should monitor toll collection and channelise the surplus money towards stressed projects.

The Standing Committee (2016) had also noted that while the central government has allocated a huge budget for the road sector, this cannot sustain over a long term.15 It suggested that the government should devise ways and establish appropriate financial institutions and models to encourage the return of private investment to the road sector.

Private financing and contracts: It has been noted that the roads sector is struggling with regard to private financing.4,16 Several PPP projects have not been able to attract bids.16 The major highway developers in the country are also facing financial capacity constraints. Further, the lack of debt products that are aligned with the revenue stream profile of highway projects, makes financing of such projects difficult. These reasons have resulted in some projects getting stalled at the construction stage, and this is also discouraging prospective bidders.16

The Committee on Revisiting & Revitalizing the PPP model of Infrastructure Development (Chair: Dr. Vijay Kelkar) had looked at issues with PPP projects in India, in November 2015.17 It had recommended setting up an independent regulator for the roads sector. It had also noted that service delivery to citizens is the government’s responsibility and PPPs should not be used to evade such responsibilities.

The Kelkar Committee had noted that inefficient and inequitable allocation of risk can be a major factor leading to failure of PPPs.17 PPP contracts should ensure optimal risk allocation across all stakeholders. The basic principle for risk allocation should be to ensure that the entity that is best suited to manage a risk should be allocated that risk.

The Kelkar Committee had also observed that since infrastructure projects span over 20-30 years, a private developer may lose bargaining power because of abrupt changes in the economic or policy environment.17 It recommended that the private sector must be protected against such loss of bargaining power. This could be ensured by amending the terms of the concession agreement to allow for renegotiations.

In January 2016, the Cabinet Committee on Economic Affairs had approved the hybrid annuity model for implementing highway projects in partnership with the private sector.18 Under this model, government and the private entity will share the project cost in the ratio of 40:60. This model is expected to lower the initial capital outflow for the government, as bulk of the payment will be done through annuity payments. Further, the private entity will be insulated from traffic and inflation risks, as these will be looked after by the government.

Infrastructure lending: The Standing Committee on Transport (2016) had observed that several of the long-term loans disbursed for the road sector are turning into non-performing assets (NPAs).15 Project bids are often made without proper study, and projects are awarded in a hurry. This results in stalling of projects, and concessionaires leave mid-
way. Concessionaires had also anticipated higher revenue realization but achieved less due to the recent economic downturn.15

Banks and other infrastructure lending institutions have also been reluctant to finance the highways sector.15 This has led to difficulties in debt servicing, putting additional stress on the road infrastructure portfolios. Besides increasing the cost of the project, delays also make it difficult to obtain additional debt.15

The Committee recommended that banks should take due diligence while disbursing loans to concessionaires. It also suggested that the bank NPAs may be supported by government allocation. Further, banks could be empowered to recover the bad debts. The model concession agreement of NHAI should be restructured to change terms and conditions which ensure that banks do not end up accumulating NPAs.

Investment in maintenance of roads

In 2018-19 the Ministry has allocated Rs 3,071 crore towards maintenance of roads and highways (including toll bridges). This is Rs 37 crore lower than the revised estimates of 2017-18.

The Ministry allocates about 4% of its budget towards maintenance of NHs. This is for a total NH length of 1.15 lakh km. In comparison, in 2014-15 the US government allocated about 48% of its total budget ($19.2 billion) on roads and highways towards the maintenance of existing facilities.18 This was for a total highway length of 10.16 lakh miles (or 16.37 lakh km) (highways that receive federal aid).20

The National Transport Development Policy Committee (2014) had observed that as compared to the amount spent on construction and upgradation of roads, the amount spent on maintenance of existing roads is less.21 This results in roads with potholes, weak bridges, poor pavements, etc. Further, maintenance is carried out when required, as opposed to being a part of preventive measures.21

The Standing Committee on Transport (2017) had also raised concerns regarding the allocation towards maintenance of highways. The entire length of NHs in the country cannot be maintained with such an amount. It had recommended that the budget for maintenance of NHs should be increased. Maintenance of roads should be given top priority as it increases the life span of roads. An effective monitoring mechanism for repair and maintenance of roads should be put in place.16 Further, there should be penalties for contractors and engineers in case of poor quality repair, maintenance, and construction.

Investment in road safety

In 2018-19, the Ministry has allocated Rs 315 crore towards road transport and safety. This would provide for various things such as road safety programmes, setting up of facilities on National Highways for extending relief to accident victims, creation of National Road Safety Board, strengthening of public transport, research and development, and training.

This amount is about 0.4% of the Ministry’s total budget. In comparison, the US federal government spends about 20% of its total expenditure on roads and highways (around $7.8 billion) towards safety on highways.19

Between 2005 and 2015, the road network in India grew by 44%.22 During the same period, the number of road accidents increased by 14%, and road accident fatalities increased by 54%.23 In 2016, there were 4,80,652 road accidents in India, which killed about 1.5 lakh people and injured about five lakh people.24 As a signatory to the Brasilia Convention, the government intends to reduce traffic fatalities by 50% by 2020.25

The Motor Vehicles (Amendment) Bill, 2016, that was passed in Lok Sabha in April 2017 (currently pending in Rajya Sabha), seeks to amend the Motor Vehicles Act, 1988 to address various issues around road safety. The Bill provides for a Motor Vehicle Accident Fund which would be used for treatment of injured persons. It also provides for cashless treatment for road accident victims, and a golden hour scheme for immediate treatment of accident victims. It also provides for a National Road Safety Board. The Board will provide advice to the central and state governments on all aspects of road safety and traffic management.

Connectivity in remote areas

Funds are also allocated towards the development of highways in areas with poor connectivity. Some of these projects include Special Accelerated Road Development Programme in North East (SARDP-NE), Externally Aided Projects (EAP) and Roads Projects in Left Wing Extremism Affected Areas (LWE). In 2017, the government announced implementing 48,877 km of projects under these ongoing schemes between 2017 and 2022. These projects will have an outlay of Rs 1,57,324 crore.26

In Budget 2018-19, Rs 6,210 crore has been allocated towards the SARDP-NE project, which is 18% higher than last year’s revised estimates. With regard to projects in LWE areas, the Standing Committee on Transport had noted that the allocation had decreased by 24% in 2016-17 (revised estimates as compared to budget estimates). It had raised concerns that such budget cuts should be avoided as road connectivity in such areas is significant.
Notes on Demand for Grants 2014-15, Demand no 83, Ministry of Road Transport and Highways.


3 Notes on Demand for Grants 2014-15, Demand no 83, Ministry of Road Transport and Highways.


6 Outcome Budget 2015-16, Ministry of Road Transport and Highways.

7 Ministry of Road Transport and Highways, January 27, 2016.


10 Notes on Demand for Grants 2014-15, Demand no 83, Ministry of Road Transport and Highways.

11 Outcome Budget 2015-16, Ministry of Road Transport and Highways.


