Demand for Grants 2024-25 Analysis

Road Transport and Highways

The Ministry of Road Transport and Highways formulates and administers policies for road transport, and transport research. It is also involved in the construction and maintenance of National Highways (NHs) through the National Highways Authority of India (NHAI), and the National Highway and Infrastructure Development Corporation Limited (NHIDCL). It deals with matters relating to road transport, safety, and vehicle standards, through the implementation of the Motor Vehicles Act, 1988. This note looks at the proposed expenditure of the Ministry for 2024-25, and key issues in the sector.

Overview of finances

The total expenditure of the Ministry in 2024-25 is estimated to be Rs 2,78,000 crore. This is 1% higher than the revised estimates for 2023-24. The highest expenditure (61% of the total expenditure) is towards NHAI. In 2024-25, NHAI has been allocated Rs 1,68,464 crore. NHAI has been sustaining a debt servicing burden due to increased borrowings in the past few years. As of June 30, 2023, NHAI's total debt is Rs 3,42,086 crore.[1] It has not borrowed from the market since 2022-23.

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

	Actuals 22-23	RE 23-24	BE 24-25	% change (BE over RE)
NHAI	1,41,661	1,67,400	1,68,464	0.6%
Roads and Bridges	75,821	1,08,520	1,09,093	0.5%

Note: BE – Budget Estimate; RE – Revised Estimate.
Sources: Demand for Grants 2024-25, Ministry of Road Transport and Highways; PRS.

Capital expenditure for 2024-25 is estimated at Rs 2,72,241 crore. This is 3% more than the revised estimate for 2023-24. Revenue expenditure is estimated at Rs 5,759 crore. It is 51% lower than the revised estimate for 2023-24.

Table 2: Expenditure of the Ministry of Road Transport and Highways (in Rs crore)

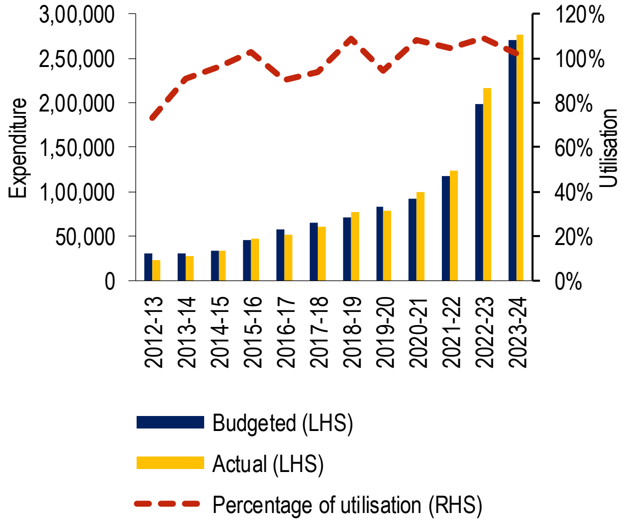
	2022-23	2023-24 RE	2024-25 BE
Revenue	11,104	11,826	5,759
Capital	2,05,986	2,64,526	2,72,241
Total	**2,17,089**	**2,76,351**	**2,78,000**

Source: Expenditure Budget, 2024-25, Ministry of Road Transport and Highways; PRS.

Fund Utilisation

In the last few years, the Ministry has been spending more than the amount allocated to it at the budget stage. In 2022-23, the actual expenditure of the Ministry was 9% more than the budget estimates. The revised estimates for 2023-24 are expected to be 2% more than the budget estimates. Since 2012-13, the actual expenditure has grown at an annualised average rate of 26%.

Figure 1: Utilisation of funds by the Ministry of Road Transport and Highways (in Rs crore)



*Actual expenditure for 2023-24 refers to revised estimates.
Sources: Demand for grants of the Ministry of Road Transport and Highways for various years; PRS.

Expenditure by the Ministry

The Ministry spends its budgeted funds on two major heads, namely the (i) NHAI and (ii) Roads and Bridges.

NHAI: Development and maintenance of national highways (NHs) is carried out through the NHAI. The Ministry has allocated Rs 1,68,464 crore towards NHAI in 2024-25. Of this, Rs 3,464 crore (2%) will be transferred from the Central Road and Infrastructure Fund (CRIF). Rs 30,000 crore (18%) will be transferred from the Permanent Bridge Fees Fund (PBFF) and Rs 15,000 crore (9%) will be transferred from the National Highways Fund (NHF).

Allocations to the NHAI are being utilised for carrying out the activities under Phase-1 of the umbrella programme, Bharatmala Pariyojana. This scheme seeks to improve the efficiency of freight and passenger movement by resolving critical infrastructure gaps. Under Phase-1 of Bharatmala

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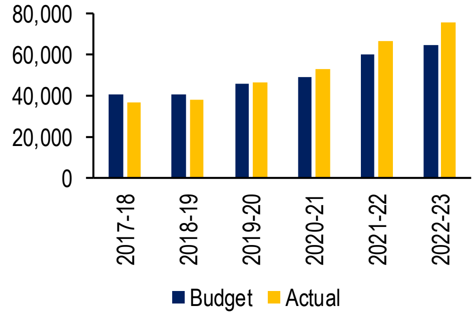
Pariyojana, 34,800 km of roads will be developed between 2017-18 to 2024-25.[2] Phase-1 will also subsume 10,000 km of balance roadworks under the National Highways Development Project (NHDP).[2] As of December 2023, 26,418 km (76% of the total 34,800 km) have been awarded for construction.[2] Of this, construction of 15,549 km has been completed (45% of the total 34,800 km).[2] An amount of Rs 4,23,000 crore has been spent under Bharatmala Pariyojana Phase-1 up to December 2023.[2]

Roads and Bridges: Expenditure under roads and bridges includes development of NHs, projects related to expressways, increasing the number of lanes under various projects, and development of road connectivity in left-wing extremism affected areas. The allocation towards roads and bridges in 2024-25 has increased by 0.53% as compared to the revised estimates of 2023-24. In 2022-23, the actual allocation towards roads and bridges was Rs 75,821 crore. The allocation in 2024-25 is 1,09,093 crore, which is 44% higher than the actual allocation in 2022-23 (Rs 75,821 crore).

Figure 2: Allocation towards Roads and Bridges (in Rs crore)



Sources: Expenditure Budget, Ministry of Road Transport and Highways, Union Budget Documents, 2018-19 to 2024-25; PRS.

Funds Managed by the Ministry

Finances of the Ministry are managed through four funds. They are the: (i) Central Road and Infrastructure Fund (CRIF), (ii) Permanent Bridge Fee Fund (PBFF), (iii) National Investment Fund (NIF), and (iv) Monetisation of National Highways Fund (NHF). Details of investment met from these funds are given below

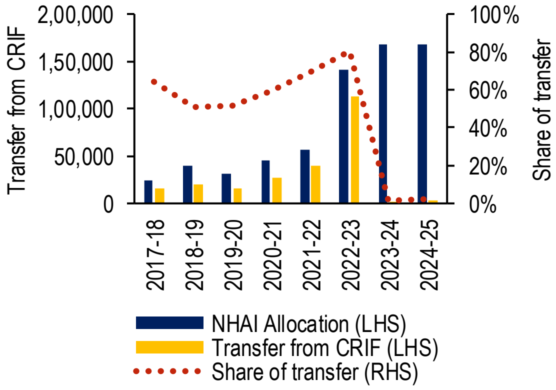
Table 3: Investment met from funds (in Rs crore)

	Actuals 22-23	RE 23-24	BE 24-25	% change BE over RE
CRIF	1,13,600	2,400	3,464	44%
PBFF	18,006	25,000	30,000	20%
NIF	10,664	10,565	13,508	28%
NHF	9,852	10,000	15,000	50%

Sources: Demand for Grants 2024-25, Ministry of Road Transport and Highways; PRS.

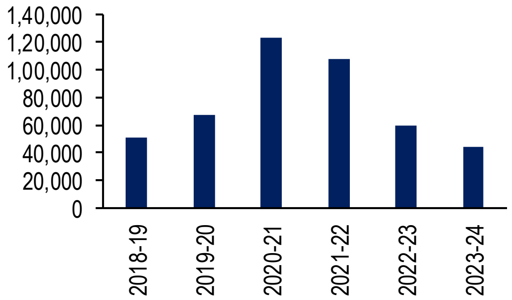
Central Road and Infrastructure Fund (CRIF): The CRIF is a non-lapsable fund created to service infrastructure projects.[3] It is used to fund road projects in states and union territories. CRIF is funded by a cess levied on petrol and diesel called the Road and Infrastructure Development Cess. This amount is eventually released to the NHAI, and to the state/UT governments for the development of road infrastructure (and other infrastructure projects such as railways) in the country.[3] Transfer to NHAI from the CRIF is budgeted to be Rs 3,464 crore in 2024-25, which is 44% more than the revised estimates of 2023-24. Since 2023-24, this share has come down as shown in the figure below. This may be due to a reduction in road and infrastructure cess collected since 2022-23. There was a 58% reduction in road and infrastructure cess in 2022-23. This was due to a revision of cess rates in May 2022. The cess was reduced from Rs 13 per litre to Rs 5 per litre for petrol and from Rs 8 per litre to Rs 2 per litre for diesel.[4]

Figure 3: Transfer from CRIF to NHAI (in Rs crore)



Note: Values for 2023-24 are revised estimates and 2024-25 are budget estimates.
Sources: Expenditure Budget, Ministry of Road Transport and Highways, Union Budget Documents, 2018-19 to 2024-25; PRS.

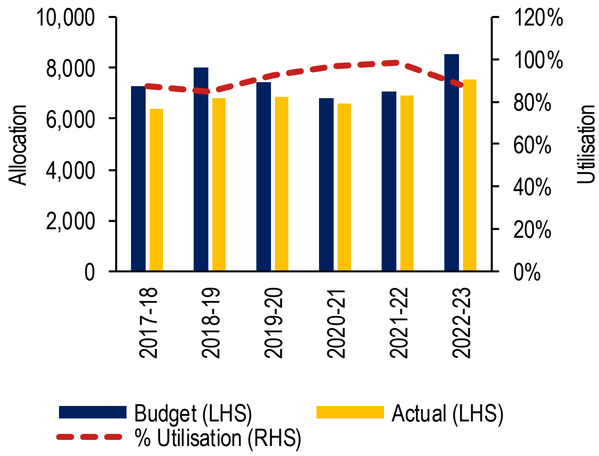
Figure 4: Collection of Road and Infrastructure cess between 2018-19 and 2023-24 (in Rs crore)



Note: Value for 2023-24 refers to revised estimates;
Source: Receipt Budget, Union Budget documents, 2019-20 to 2024-24; PRS.

From 2023-24, the component of transfers to the NHAI that was earlier being met from the CRIF, is being met through budgetary support from the central government. The CRIF is also used to fund road infrastructure in states and union territories. In 2024-25, Rs 9,030 crore is estimated to be utilised for states and UTs from the CRIF. This is same as the revised estimates for 2023-24. In 2022-23, Rs 7,552 crore was spent on states and UTs from the CRIF against a budget estimate of Rs 8,560 crore. Figure 5 shows the utilisation of funds from CRIF towards road infrastructure work in states and UTs in the last five years.

Figure 5: CRIF allocation towards States and UTs for road infrastructure (in Rs crore)



Note: Values for 2023-24 are revised estimates and 2024-25 are budget estimates
Sources: Expenditure Budget, Ministry of Road Transport and Highways, Union Budget Documents, 2018-19 to 2024-25; PRS.

The actual expenditure on states and UTs between 2017-18 and 2022-23 has been lesser than budget estimates. One possible reason for this is the carry-over of unspent allocation to states from previous years.[5]

Permanent Bridge Fees Fund (PBFF): Funds transferred to the PBFF are from revenue collected by the government through: (i) fees levied for the use of certain permanent bridges on NHs by motor vehicles, (ii) toll on NHs, and (iii) revenue share received on some Public-Private Partnership (PPP) projects. These funds are then released to the NHAI for the development of NHs entrusted to it. In 2024-25, Rs 30,000 crore has been allocated from the PBFF. This is 20% more than the revised estimates of 2023-24. In 2022-23, the Ministry spent Rs 18,006 crore from the PBFF.

National Investment Fund (NIF): The NIF was created in 2005 and receives proceeds from disinvestments of public sector enterprises.[6] The fund is also used to finance the Special Accelerated Road Development Programme in North East (SARDP-NE).[7] In 2024-25, Rs 13,508 crore is budgeted to be transferred from the NIF. This is an increase of 28% over the revised estimates of 2023-24 and 27% over the actual transfers in 2022-23.

National Highways Fund (NHF): The NHF is financed by monetising certain public-funded national highway projects.[8] This includes transferring maintenance of certain stretches to private contractors on a long-term basis. In 2024-25, Rs 15,000 crore is expected to be transferred from NHF. This is 50% more than the revised estimates of 2023-24.

Overview of the road network

Road Network: In 2019-20, the road sector carried passenger traffic of about 25,200 billion passenger-km and freight traffic of about 2,927 billion tonne km.[9] Road transport alone contributed 3% of gross value added (GVA) against the total transport sector contribution of 4.6% at the national level in 2019-20.[9] The road network in India has increased from 3.9 lakh km in 1951 to 63.3 lakh km in 2019, an increase of about 15 times in 68 years.[10]

Road length: Road length in India has increased at an average annual rate of 4% from 2009.[11] The length of NHs has increased at a pace of 7% between 2009 and 2019-20.[11] In the same period, state highways have seen a growth of 1%. As of February 2023, 1.45 lakh km of state roads have been notified as NHs.[12]

Table 4: Road Length of India as of 2019-20 (in kms)

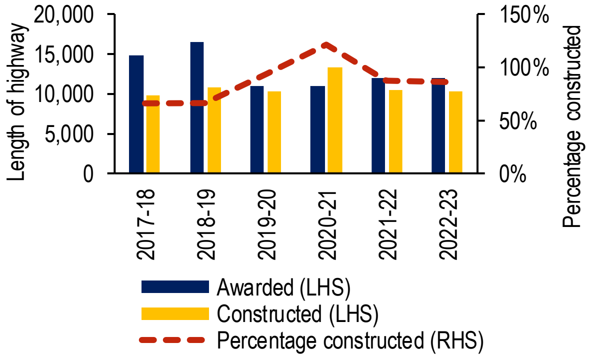
Road category	Length	% share
National Highways	1,32,499	2%
State Highways	1,79,535	3%
District Road	6,12,778	10%
Rural Roads	45,22,228	71%
Urban Roads	5,41,554	9%
Project Roads	3,43,163	5%
Total	**63,31,757**	**100%**

Source: Road Transport Year Book, Ministry of Road Transport and Highways, 2019-20; PRS.

Construction of NHs: The pace of construction of National Highways (NH) has increased between 2010-11 and 2022-23.[13] In 2010-11, the pace of NH construction was 12.3 km/day, which increased to 28 km/day in 2022-23.[13] However, between 2017-18 and 2022-23, the Ministry missed its annual NH construction targets in every year except 2020-21 (see Figure 6).

Since 2019-20, the Ministry has lowered its construction targets for National Highways. In 2023-24, as of November 2023, against a target of 12,500 kms, the Ministry had constructed 5,248 kms.

Figure 6: Construction of National Highways



Sources: Report No. 342, Standing Committee on Transport (2023-24); PRS.

Road widening/upgrading: In 2023-24, NHAI has widened and strengthened 6,644 Kms of existing weak pavement of National Highways against a target of 6,544 kms.[14] This is 36% higher than the road length improved in 2022-23.[14]

Road Density: Road density is defined as the average road length per 1,000 square kms. It indicates how much of a given area is connected by road. Road density in the country has increased from 1,423 kms per 1,000 square kms in 2011- 12 to 1,926 kms per 1,000 square kms in 2018- 19.[10] In this period, urban road density grew by 32% and rural road density grew by 64%.[10]

Roads in north-eastern regions: The Ministry develops road network in north-eastern states under the Special Accelerated Road Development Programme (SARDP-NE).[15] The programme seeks to provide connectivity to backward and remote areas and ensure that headquarters in the north-eastern region seek to be connected by at least two-lane highway standards. The Standing Committee on Transport (2022) had observed that Phase-A of the project which was scheduled to be completed by March, 2014 had incurred significant delays.[16]

The total length of works sanctioned under SARDP-NE is 5,468 km. This has been sanctioned at a total cost of Rs 63,542 crore. Of this, 3,699 km length (67% of sanctioned length) has been completed with an expenditure of Rs 38,160 crore (60% of sanctioned cost) as of July 25, 2024.

Issues to Consider

Financing Road Infrastructure

The road sector is financed through a combination of government and private sources. The government extends its support through budgetary allocations, which are financed from taxes, cesses, or dedicated road funds. Private financing is enabled through Public-Private Partnerships (PPP). In private financing, a private developer builds a road, and in return has the right to collect toll or receives a sum as annuity for a specified period. The developer is responsible for the maintenance of roads during this period. Some of the private financing models that have been used are: (i) Build Operate Transfer (Toll), (ii) Build Operate Transfer (Annuity) and (iii) Hybrid Annuity Model. Publicly funded projects are financed through Engineering Procurement Construction (EPC) contracts.[17] (Refer to Annexure for details)

Table 5: Risk distribution across models

Model	Financing	Traffic	Maintenance
EPC/ Item Rate	Government	Government	Government
BOT (Toll)	Private	Private	Private
BOT (Annuity)	Private	Government	Private
HAM	Both	Government	Private

Source: Report No. 296, Role of Highways in Nation Building, Standing Committee on Tourism and Transport, Rajya Sabha, 2021; PRS.

With the aim of monetising existing assets, the government announced the National Monetisation Pipeline (NMP) in the Union Budget for 2021-22. Under this programme, core brownfield assets would be monetised up to a value of Rs 6,00,000 crore, between 2021-22 and 2024-25.[18] Monetisation of assets in the road sector is being carried out through (i) Toll Operate Transfer (ToT) model, (ii) Infrastructure Investment Trusts (InvIT), and (iii) Project Based Financing (see Annexure)

Rs 35,000 crore was planned to be monetised through the asset monetisation pipeline during 2022-23.[19] Of this, Rs 14,268 crore had been realised at the end of the financial year.[19] The Standing Committee on Transport (2023), recommended that the Ministry ramp up its efforts to raise its targets.[19]

Issues with financing PPP based road projects

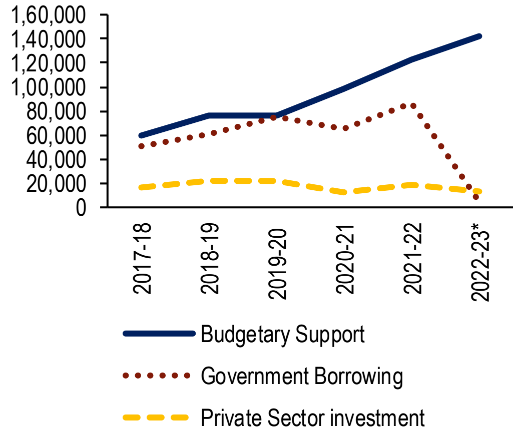
Private investment in the road sector has not seen any improvement in the past few years (see Figure 7). PPP projects are executed in stages. Typically, there are three stages. They are: (i) project development, (ii) construction phase and (iii) operation and maintenance phase. The risks involved in these phases can be seen in the table below

Table 6: Risks involved in PPP projects

	Pre-Construction	Construction	Post-Construction
Financing	High land cost	Lender aversion	Traffic/ Tolling risk
Operation	Delay in land acquisition	Delay in clearances	Safety

Source: Annual Report, NHAI, 2022; Report No. 296, Role of Highways in Nation Building, Standing Committee on Tourism and Transport, Rajya Sabha, 2021; PRS.

Figure 7: Investment in road sector (in Rs crore)



Note: Figures for 2022-23 are as of October 31, 2022
Sources: Economic Survey of India (2022); PRS.

These risks are shared across three main stakeholders. They are: (i) the private developer, (ii) the lender, and (iii) the regulatory authority.

Private Developer: One of the risks in the construction phase can be attributed to poor financials of highway developers.[20,17] Most developers have significantly leveraged their balance sheets in anticipation of high levels of growth.[20,17] However, revenue realisation has been much slower owing to the economic downturn in the past few years.[20]

Currently, financing large infrastructure projects is based on revenue streams spread over 20 to 30 years.[20] Therefore, a project that spans over a 10-to-15-year tenure period may face issues with asset-liability mismatch.[20] Moreover, developers have taken significant future obligations which makes debt servicing difficult.[20] This poses a challenge for prospective bidders.

The bids that are attracted for some projects are also aggressive.[17] This has led to projects being awarded to concessionaires who may not have the requisite capacity to raise finances.[17] Aggressive bidding results in private developers bidding at prices lesser than the value estimated by the authorities, to gain the project. In due course, this results in creation of non-performing assets, increasing the risk of lenders.[17]

Lenders: NHAI (2022) noted that lender risk is due to bank loans turning into NPAs.[20] A non-performing asset is a loan that is past due for a specific period of time (usually 90 days or more).[21] This ceases to generate income for lenders.[21] Earlier, the Standing Committee on Transport (2016) had observed that several long-term loans disbursed for the road sector were turning into non-performing assets (NPAs).[22] Further, in light of huge NPAs lying with a single bank, the Standing Committee (2019) recommended that guidelines prescribing a limit up to which a bank can lend to a single borrower be framed to minimise the risk involved in lending.[23]

To resolve the issues with private participation, the Kelkar Committee (2015) had recommended setting up an independent regulator for the roads sector to encourage private participation and regulate their activity.[24] The Standing Committee on Transport (2024), had observed that no action had been taken on the recommendation made by the Kelkar Committee in 2015.[25] It has asked the Ministry to provide details on the action taken on this suggestion.[25]

Debt Repayment Burden of the NHAI

Though the NHAI has halted its borrowings, its existing liabilities will have to be serviced in the upcoming years. The debt repayment burden of the NHAI in the upcoming years based on projected expenditure is shown in the table below.

Table 7: Funds required for debt servicing of NHAI (in Rs crore)

Year	Debt Repayment	Debt repayment as a % of total allocation
2020-21	25,497	21.1%
2021-22	40,191	25.2%
2022-23	32,443	17.6%
2023-24	33,261	20.5%
2024-25	31,636	16.9%
2025-26	40,839	18.6%
2026-27	42,109	16.8%
2027-28	53,239	20.5%

Sources: Report No. 342, Standing Committee on Transport Tourism and Culture, March 13, 2023; PRS.

The Standing Committee on Transport (2023) encouraged the NHAI to raise higher amounts through its asset monetisation programme as part of the National Monetisation Pipeline.[19] This would help NHAI keep a check on its debt servicing costs. The Committee also recommended that the Ministry/NHAI undertake effective measures to ensure that its stuck projects are completed at the earliest without further delays.[19] This would permit NHAI to free up a part of its capital for new road projects and also to monetise the completed assets for further revenue generation.

Management of Tolls

As of February 8, 2024 there are 929 toll fee plazas operating in the country.[25] However, the BOT (Toll) model has been facing some challenges in implementation. Several investors have expressed their apprehensions towards investing in BOT projects due to new competing routes.[26] The risk of ensuring traffic falls on the private developer in the case of BOT (Toll) model. Moreover, delays with regards to obtaining right of way and environmental clearances have increased the risks on the side of private concessionaires.[25]

The Ministry has amended the Model Concession

Agreement (MCA) on March 15, 2024 to resolve this issue.[27] Some key changes include: (i) NHAI will be liable to pay compensation to the concessionaire and extend the concession period if it constructs a competing road before a specified time period, (ii) in case of material breach of the MCA by NHAI, it will compensate the concessionaire for the direct costs suffered and loss of toll revenue (prior to commercial operation date), and (iii) equity support and construction support will be provided to the concessionaire up to 40% of the total project cost.[27]

As of January 17, 2024, 53 BOT (Toll) projects for a length of 5,200 km worth Rs 2,10,000 crore have been identified and bids for seven projects with a length of 387 km worth Rs 27,000 crore have been invited.[28] Details of toll collected in the last few years can be seen in the table below.

Table 8: User fee collected between 2018-19 and 2023-24 (in Rs crore)

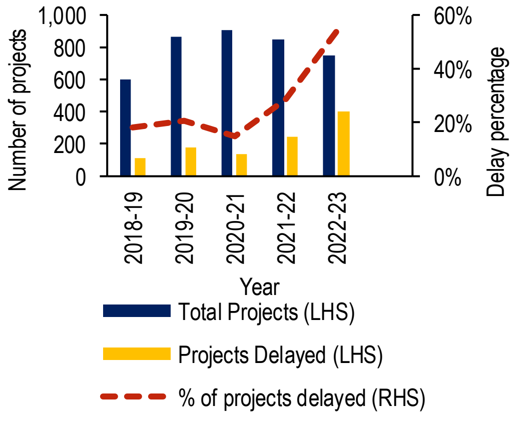
Year	Length	Public	Private	Total
2018-19	25,996	5,691	19,463	25,155
2019-20	29,666	6,927	20,711	27,638
2020-21	34,071	7,876	20,048	27,924
2021-22	38,315	11,284	22,624	33,908
2022-23	42,595	16,651	31,377	48,028
2023-24	45,428	15,862	20,515	36,378

Note: Length refers to tolling length in km; Public refers to user fee collected by the government, Private refers to user fee collected by the concessionaire, Collection for 2023-24 is until November 2023.
Source: Year-end review 2023, PIB, Ministry of Road Transport and Highways; PRS.

Delays in project implementation

As of March 2024, 1,093 road projects costing Rs 150 crore and above were being monitored.[14] Of these, 399 projects were delayed.[14]

Figure 8: Project Execution Status in the Roads Sector



Source: Flash Reports for years 2017-18 to 2022-23, Programme Implementation Reports, MoSPI; PRS.

These delays have resulted in significant cost and time overruns in road projects.[14] The report identified five key projects contributing to the bulk of the cost overruns.[14] The total project cost of these five projects was Rs 2,663 crore.[14] The actual cost incurred was Rs 6,288 crore, a cost overrun of 136%.[14] Some of the reasons identified for these delays are: (i) issues with land acquisition, (ii) delay in obtaining forest/environment clearances, (iii) lack of infrastructure support, (iv) issues with tie-up of project financing, and (v) delays in tendering.[14]

Audit of Bharatmala Pariyojana Phase-1[29]

The Comptroller and Auditor General (CAG) submitted a report on a performance audit of Phase-1 of the Bharatmala Pariyojana in 2023.[29] It made the following observations:

- While one of the stated objectives of the project was to improve the Logistics Performance Index of India, the Ministry did not set any targets to do so.
- Over-delayed projects of NHDP were taken up without resolving the existing issues in the availability of right of way or pending disputes regarding forest land.
- Development of 35 Multi Modal Logistics Parks was planned, however, not one has been developed till March 2023.
- As of March 31, 2023, only 76% of the approved project length had been awarded, but 158% of the approved financial outlay had been sanctioned.
- Projects were being awarded without ensuring availability of requisite land resulting in delayed commencement of construction.

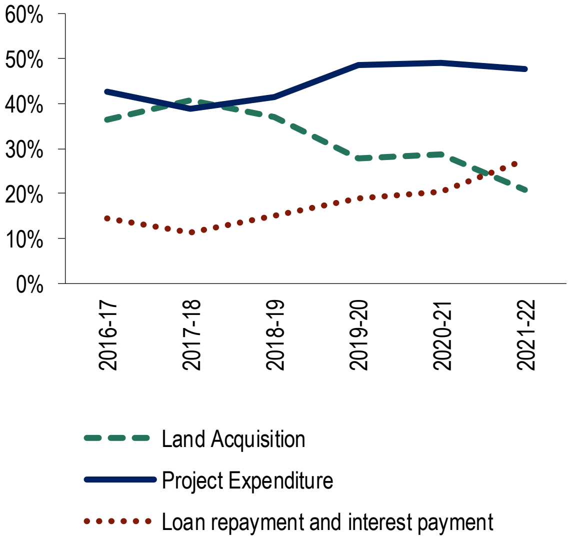
In order to resolve the delay in projects the Ministry has taken the following key steps: (i) implementing an exit policy which allows private developers to take out their entire equity and exit operational BOT projects two years from the start of operations irrespective of the date of award; (ii) providing rationalised compensation to concessionaires for languishing NH projects in BOT mode for delays not attributable to concessionaires, and (iii) a one-time fund infusion by NHAI which enables revival and physical completion of BOT projects with at least 50% progress.[23]

Land Acquisition Costs

One of the operational constraints involved in a highway construction project is acquisition of land.[19] The Standing Committee on Transport (2022-23), noted that the amount of funds released to NHAI had almost tripled between 2016-17 and 2022-23.[16] However, the length of highways constructed annually by NHAI had increased by only about 63% during the same time.[16] The Committee recommended that the Ministry may try to factor in the rising costs of land acquisition in calculating the cost estimates for its future projects.[16] Further, it urged the Ministry to come up with ways to monetise the land assets which have been acquired but not used.[16]

In the past five years, NHAI's expenditure on acquiring land has reduced (see Figure 9). This is because some states have agreed to bear a portion of the acquisition cost. Several states have already contributed or agreed to contribute towards the cost of land acquisition up to 100% for specific NH projects. These include the states of Kerala, Bihar, Tamil Nadu, Karnataka, Andhra Pradesh, Odisha, Punjab, Himachal Pradesh, and West Bengal.[30] Some other states such as Nagaland, Manipur, and Assam have provided land free of cost for the development of certain NH works.[30]

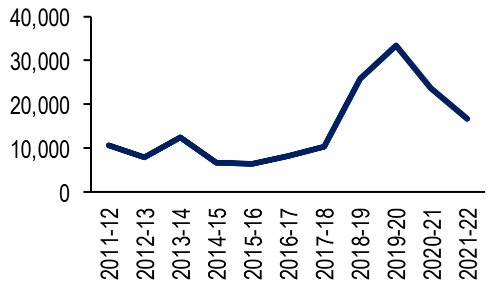
Figure 9: Category-wise share of expenditure of NHAI funds (% of total receipts)



Sources: NHAI Annual Reports for various years; PRS.

For the purpose of streamlining the land notification process, the government introduced the Bhoomi Rashi portal in 2018.[19] Various land acquisition related notifications are being published through Bhoomi Rashi portal.[19] The entire land acquisition process has been digitised and become paperless. The Standing Committee (2023) noted that the portal had fast-tracked the notification process significantly.[19]

Figure 10: Land area notified for acquisition annually (in hectares)



Source: Annual Reports, NHAI, 2013-14 to 2021-22; PRS.

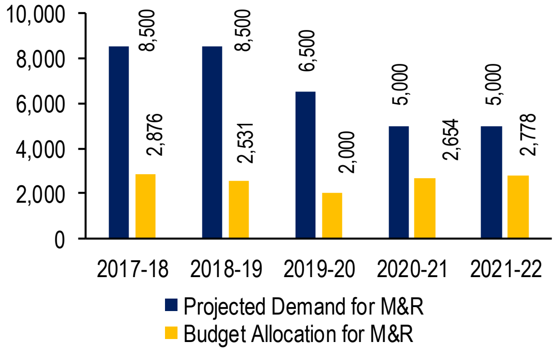
Value Capture Financing[31]

In order to reduce the burden of land acquisition costs on the NHAI, the Ministry announced a Value Capture Mechanism on November 4, 2019.[31] According to this mechanism, the development of NHs shall be carried out by NHAI whereas the capital for land acquisition would come from the states. The state government would deposit at least 50% of estimated land acquisition cost before publication of notification while NHAI would contribute the remaining amount for acquisition. The remainder would be reimbursed later by the state government. After development, the state will capture the value created in the "influence zone", which is defined as the areas within 500 meters on either side of the NH developed, through suitable mechanisms such as development charges.[31]

Maintenance and Repair of Highways

The onus of maintaining publicly funded projects primarily falls on the Ministry, NHAI or state public works departments.[17,32] In case of PPP projects, the concessionaire is responsible for maintaining the road for the entire concession period (BOT projects) or 15 years (HAM projects). In case of publicly funded projects, the contractor is responsible for maintaining the road only during the defect rectification period, which varies between one and four years. A large number of road projects are publicly funded projects. In this regard, the Standing Committee (2021) observed that the annual allocation for highway maintenance was minuscule.[33] The NITI Aayog recommended that maintaining existing roads should be prioritised over constructing new NHs.[34] It also recommended that 10% of the Ministry's budget be spent on maintenance of roads.[34] In 2022-23, the Ministry spent Rs 2,574 crore (about 1.24 % of the total expenditure) towards maintenance and repair work. As per the revised estimates of 2023-24, this was Rs 2,600 crore (1% of total expenditure). In 2024-25, the Ministry is expected to spend Rs 2,600 crore on maintenance and repair (about 1% of its total allocation).

Figure 11: Demand and budgetary allocation for maintenance and repair (M&R) (in Rs crore)

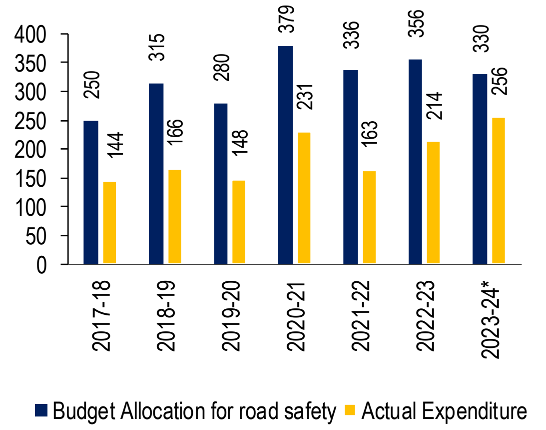


Note: Projected demand details and allocation are furnished by the Ministry of Road Transport and Highways.
Sources: Report No. 342 of the Standing Committee on Tourism, Transport and Culture on Demands for Grants, 2023-24; PRS.

Road Safety

Allocation towards road safety provides for safety programmes, relief support for accident victims, strengthening public transport, research, and development, and setting up of facilities on NHs.[19] In the past five years, the Ministry has been underutilising its budget towards road safety.

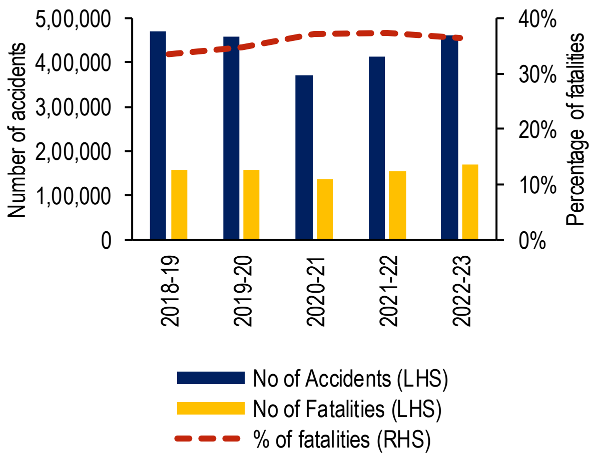
Figure 12: Underutilisation of funds for road safety (in Rs crore)



Note: Figures for 2023-24 refers to revised estimates
Sources: Expenditure Budget of Ministry of Road Transport and Highways, 2019-20 to 2024-25; PRS.

In 2022-23, the Ministry budgeted Rs 356 crore towards safety but spent Rs 214 crore (40% lesser than the budget). In 2023-24, the budgeted amount was Rs 330 crore, which has been revised to Rs 256 crore. In 2024-25, the Ministry has allocated Rs 273 crore for road safety (0.1 % of the budget). The number of road accidents reported in the past five years has consistently remained at an average of 4,34,657 accidents.[35] The share of fatalities in the reported accidents have also increased from 32% to 37% (see Figure 13). The Standing Committee on Transport (2023) noted that India contributed to about 10% of all road accident deaths worldwide, with just 1% of the world's vehicles. The Standing Committee on Transport (2023) recommended that the budgetary allocation and expenditure for road maintenance and road safety schemes be increased. It also urged the Ministry to target a quantifiable reduction of road accident fatalities in the ongoing decade.

Figure 13: Road Accidents and Fatalities



Source: Road Accidents in India (2022), Ministry of Road Transport and Highways; PRS.

The Standing Committee on Transport (2022) had also suggested some steps that the Ministry could take to reduce black spots (accident-prone zones) and improve road safety.[36] These include: (i) setting up a robust database of accidents to identify patterns pointing to faults in road engineering, (ii) mandatory installation of lights on the entire NH network as poor lighting conditions lead to severe accidents, (iii) increasing the availability of ambulances near black spots to provide immediate quality care to accident victims, (iv) devising a suitable mechanism to restrict commercial driving shifts to under 10 hours a day to ensure that drivers are well rested, and (v) installation of CCTV cameras at accident prone sites which are yet to be rectified, and other important locations on highways to monitor road accidents and arrange medical help.[36]

Annexure

- **Build Operate Transfer (Toll):** The developer is responsible for designing and developing the project, and operation and maintenance (O&M) during the entire concession period. The developer also has the right to collect toll during the specified period. The concession period is typically 25 to 30 years.[17]
- **Build Operate Transfer (Annuity):** This model is the same as BOT (Toll), except that the developer receives payment in annuity (by the government) in return for developing and maintain a road. The government has the right to collect toll, after a section is open for commercial operation.[17]
- **Hybrid Annuity Model (HAM):** Under this model, the government or its executing agency pays 40% of the project cost as a grant to the private developer.[17] The private developer invites bids for the remaining 60% of the investment in form of debt and equity. The private developer is paid back the amount of 60% as of half-yearly annuities, interest, and O&M payments over a period of 15 years.[17] While the concessionaire is responsible for the maintenance and operation during this period, the traffic risk is taken by the government.[17] Toll collection is carried out by the government after declaration of commercial operation of the developed section.[17]

- **Engineering Procurement Construction (EPC) contracts/ Item Rate Contract:** These models are usually given to contractors for publicly funded projects. Under EPC, the maintenance period is about four years.[17] Under the item rate contract, a project is designed by the government, and executed by the contractor. The contractor is responsible for correcting defects for a period of 1- 3 years.[17]

Table 9: Utilisation of funds by the Ministry of Road Transport and Highways (in Rs crore)

Year	Budgeted	Actual	Percentage of utilisation
2012-13	30,798	22,537	73%
2013-14	31,302	28,400	91%
2014-15	34,345	33,048	96%
2015-16	45,752	46,913	103%
2016-17	57,976	52,232	90%
2017-18	64,900	61,015	94%
2018-19	71,000	77,301	109%
2019-20	83,016	78,249	94%
2020-21	91,823	99,159	108%
2021-22	1,18,101	1,23,551	105%
2022-23	1,99,108	2,17,089	109%
2023-24	2,70,435	2,76,351	102%
2024-25	2,78,000	-	-

Note: Actual expenditure for 2023-24 refers to revised estimates.
Sources: Expenditure budget of various years; PRS.

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