

Demand for Grants 2023-24 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 with the construction and maintenance of the 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 2023-24, and some issues in the sector.

Overview of finances

The total expenditure of the Ministry in 2023-24 is estimated at Rs 2,70,435 crore. This is 25% higher than the revised estimates for 2022-23. The highest expenditure (60% of the total expenditure) is towards NHAI. In 2023-24, NHAI is allocated Rs 1,62,207 crore, all of which is budgetary support.

NHAI has a high debt burden due to increased borrowings in the past few years. Upon the recommendations of several Committees, the Ministry has increased the budgetary allocation towards NHAI, and reduced its need to borrow from the market. However, the existing debt needs to be serviced. About 9% of the Ministry's allocation for 2023-24 will be used to service debt in the year.

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

	Actuals 21-22	RE 22-23	BE 23-24	% change (BE over RE)
NHAI	57,081	1,41,606	1,62,207	14.5%
Roads and Bridges	66,237	74,984	1,07,713	43.6%
Total	1,23,551	2,17,027	2,70,435	24.6%

Note: BE – Budget Estimate; RE – Revised Estimate.
Sources: Demand for Grants 2023-24; Ministry of Road Transport and Highways; PRS.

Capital expenditure for 2023-24 is estimated at Rs 2,58,606 crore, while revenue expenditure is estimated at Rs 11,829 crore. The proportion of capital expenditure in total expenditure has increased from the revised estimates of 2022-23, from 95% to 96%.

Announcements in the 2023-24 Budget Speech

An Infrastructure Finance Secretariat will be established to assist stakeholders and encourage private investment in infrastructure such as roads, railways and power.

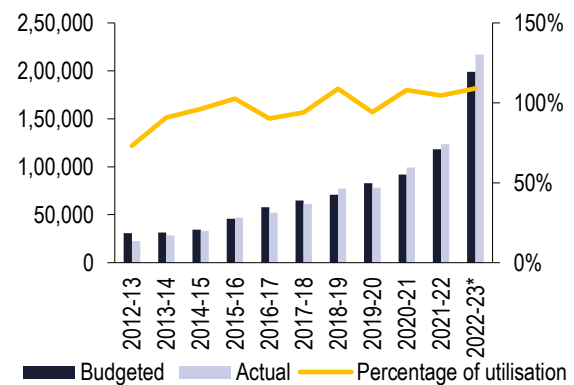
Particularly vulnerable tribal groups (PVTGs) will be provided with facilities such as road and telecom connectivity, safe housing, and clean drinking water under the Pradhan Mantri PVTG Development Mission.

Critical transport infrastructure projects for last and first mile connectivity for coal, steel, fertiliser and food grain sectors have been identified. They will be taken up on priority with investment of Rs 75,000 crore, of which Rs 15,000 crore will come from private sources.

Fund Utilisation

In the past several years, the Ministry has been spending almost all of the funds allocated to it. Since 2018-19 onwards (except for 2019-20), the Ministry has been spending more than the amount allocated to it at the budget stage. Between 2012-13 and 2022-23, the amount allocated to the Ministry increased by 21%, while the actual expenditure increased by 25%.

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



*Actual expenditure for 2022-23 refers to revised estimates.
Sources: Demand for grants of the Ministry for various years; PRS.

Issues to consider

Improving road network

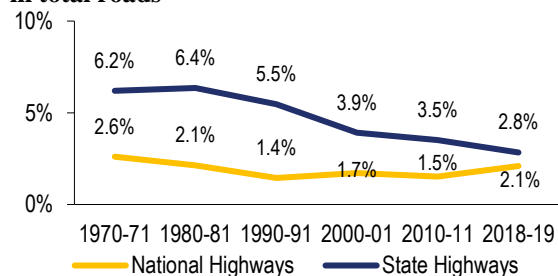
As of 2013, 90% of the passenger traffic and 67% of the freight traffic in the country was carried on the road network.¹ The Indian network of roads comprises National Highways (NHs), State Highways, District Roads, Rural Roads, Urban Roads and Project Roads. As of March 2019, 71% of all roads were rural roads, while NHs were 2%. District roads formed 10% of all roads, and urban roads 9%.¹ NHs include roads that connect major

ports, neighbouring countries, capitals of states, and roads required for strategic considerations. The Ministry of Road Transport and Highways is responsible for the construction and maintenance of NHs. It may also designate any road as an NH.

The National Transport Development Policy Committee (2013) observed that instead of looking at roads in isolation, they must be looked at as an integrated system of transport.² This implies ensuring that the primary road network (NHs) connects to major ports, railway stations, airports, and capital cities. The Ministry seeks to improve road network and connectivity by upgrading state highways to national highways, improving construction of national highways, and creating multimodal transportation networks.

Road length: In 2021-22, the total road length was 63 lakh kilometres, which has increased at an average annual rate of 3.7% from 2015.³ During this period, the length of NHs and rural roads increased by at an annual average rate of 7.8% each. Between 1970-71 and 2018-19, the share of NHs in total roads has decreased from 2.6% to 2%. However, there has been a marginal increase in the share from 2011 onwards (see Figure 2). The length of NHs (in kilometres) has increased at a pace of 4% between 1970-71 and 2018-19.⁴

Figure 2: Share of national and state highways in total roads



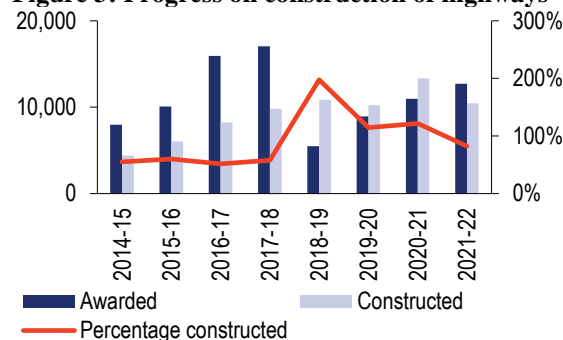
Sources: Basic Road Statistics 2018-19; PRS.

The share of state highways in total highways has reduced from 6% in 1970-71 to 3% in 2018-19.⁴ This may be because several state highways have been notified as NHs.⁴ State highways typically link important cities, towns, tourist places, minor ports, and connect them to NHs. These are constructed and managed by state governments through state public works departments.

Construction of NHs: The Ministry targeted to construct 12,200 km of NHs in 2022-23, of which 5,774 km (47%) has been constructed as of December 2022.⁵ As part of the Ministry's target to construct 60,000 km of NHs between 2019-20 and 2023-24, it envisaged to construct 13,000 km in 2023-24. However, as of February 9, 2023 the target has not been finalised.⁵ Between 2014-15 and 2017-18, the Ministry missed its annual NH construction targets by about 45% (See Figure 3). However, from 2018-19 onwards, the targets have been lowered while the Ministry has exceeded the revised targets. In 2021-22, the Ministry missed its

construction target by 18%. Note that the targets may have declined since NHAI is focusing more on widening existing highways, than constructing new expressways.

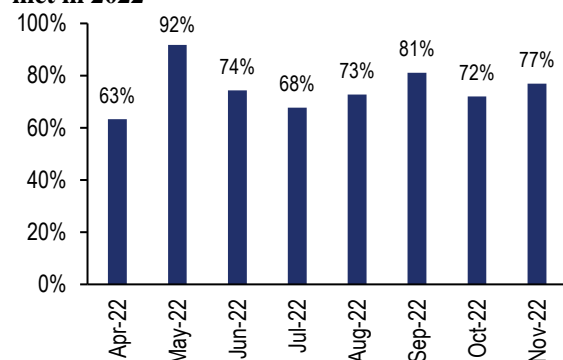
Figure 3: Progress on construction of highways



Sources: Standing Committee on Transport (2021); PRS.

Road widening/upgrading: Between April 2022 and November 2022, NHAI widened/upgraded 2,060 km of highways against a target of 2,743 km (75%). Monthly targets for road widening were missed for all months between April-November 2022 (See Figure 4).

Figure 4: Percentage of road widening targets met in 2022

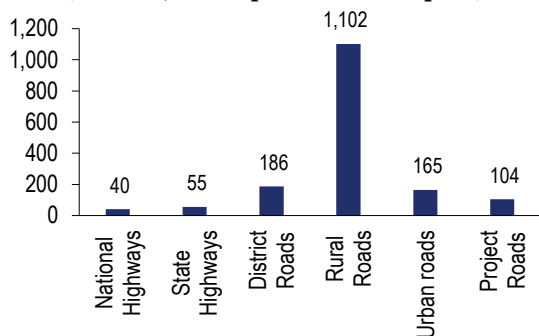


Sources: Programme Implementation Reports 2022; PRS.

Conversion of roads into NHs: NHAI notifies several state highways as NHs, and takes it upon itself to maintain and widen these roads. The criteria for declaring state roads as NHs include: (i) roads running through the length and breadth of the country, (ii) roads connecting adjacent countries or state capitals or major ports, (iii) strategic roads in hilly or isolated areas.⁶

As of February 2023, 1.45 lakh km of state roads have been notified as NHs.⁷ In 2022-23, about 3,639 km of state roads have been notified as NHs so far.⁸

Road Density is defined as the average road length per 1,000 sq km. It indicates how much of a given area is connected by road. Road density in India has increased by 4.4% between 2011-12 and 2018-19. Among all roads, rural roads have the highest density, followed by district roads (see Figure 5). In 2018-19, for every 1,000 sq km, there were rural roads of length 1,102 km. In comparison, there were 40 km of NHs for every 1,000 sq km.

Figure 5: Road density for various categories of roads (2018-19; in km per thousand sq km)

Sources: Basic Roads Statistics 2018-19; PRS.

There is regional variation in road density across states. States such as Delhi (10,904 km per 1,000 sq km), Kerala (6,690), Assam (5,088), and Goa (5,051) have high road density. States such as Jammu and Kashmir, Arunachal Pradesh, Mizoram, and Rajasthan have lower road density.

Bharatmala Pariyojana

Bharatmala is an umbrella programme for developing NHs to improve the movement of freight and passengers by road. It seeks to bridge critical infrastructure gaps in the highway infrastructure. It seeks to develop 50 economic corridors and provide connectivity to 550 districts, and improve the average speed of road travel.

As of 2021-22, 1,266 km of road has been built.³ This includes coastal and port connectivity roads, expressways, national corridors, and economic corridors. Cumulatively, 4,752 km of road length has been completed under Bharatmala Phase – I.³ The Scheme is implemented by NHAI, National Highways and Infrastructure Development Corporation, and the Roads Wing of the Ministry.

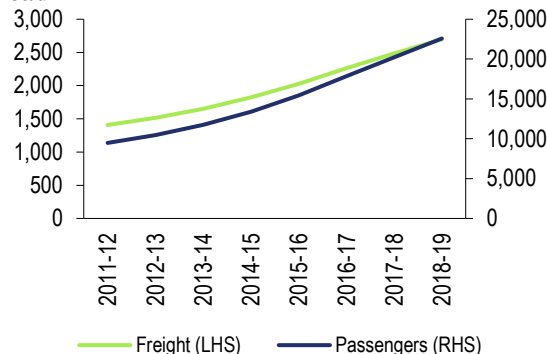
Expenditure for Bharatmala is met from various funds meant for NHAI. In 2023-24, Rs 42,772 crore worth of spending is meant to be met from these funds.

Roads in north-eastern regions: Connectivity in hilly regions such as north-eastern states in India is a challenge. The Ministry develops road network in north-eastern states under the Special Accelerated Road Development Programme (SARDP-NE).⁹ 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 average road density in north-eastern states is 2,259 km per thousand sq km.⁴ The rural network in north eastern states is relatively better compared to other categories of road. Among the north-eastern states, Sikkim has the highest proportion of surfaced roads (76%) followed by Mizoram (67%).⁴

Movement of freight by road: The National Transport Development Policy Committee (2013) observed that roads are a preferred mode of transport for carrying small loads over short distances to remote or easily accessible destinations. For example, it is preferable to transport foodgrain by road, across distances of

about 200 km. At distances greater than 200 km, rail is a preferred mode. This is true despite accounting for delays at intermodal nodes where grain is transferred from/to trucks.²

In India, passengers and freight transported by road have increased between 2011-12 and 2017-18 (see Figure 6). The amount of freight transported by road has increased by 9.7%, while the number of passengers has increased by 13%.¹ In 2020, roads carried 71% of all freight, compared to the 18% carried by rail.¹⁰

Figure 6: Freight and passenger movement by road

Note: Freight is in billion tonne kilometre and passengers are billion kilometres.

Sources: Road Transport Yearbook 2018-19; PRS

PM Gati Shakti

The PM Gati Shakti National Master Plan (NMP) was launched in October 2021 to provide for coordinated development of transport. It seeks to create a system for interconnected and multimodal transportation networks. It is expected that this would lead to economic development, improved trade competitiveness, promotion of exports and employment generation.

Different infrastructure sector projects such as National Highways, Railways, Waterways, or Telecom that cater to development requirements are envisaged to be developed in synergy. The NMP will rely on data on geographical features and land records for planning and implementation.

In order to reduce complexities involved in integration of networks and avoid duplication of effort NMP lays down an implementation framework. The framework consists of: (i) Empowered Group of Secretaries (headed by the Cabinet secretary), to review and monitor implementation of the scheme along with ensuring logistical efficiency, (ii) Network Planning Group (consisting of heads of network planning wings of infrastructure ministries), to assist the empowered group of secretaries, and (iii) Technical Support Unit (consisting of domain experts from infrastructure sectors), responsible for overall integration of networks and enhancing optimisation.

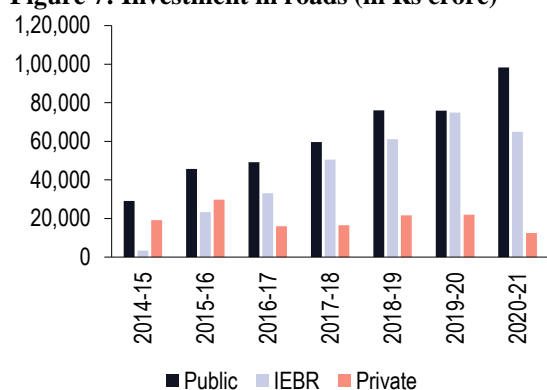
No separate funds are allocated under Gati Shakti. Funds are allocated projects-wise, as per the requirements, and within the sanctioned project costs.

Financing road infrastructure

Investment in road infrastructure is long-term, and returns are typically seen several years after construction. Currently roads are financed through government and private sources. Funding from government sources includes budgetary allocations, which are financed from taxes, cesses, or dedicated road funds. Under private financing, typically the private developer builds a road, and in return has the right to collect toll for a specified period of time. The developer is responsible for the maintenance of roads during this period. Most national highway projects are implemented under public private partnership. Variants under this model include: (i) Build Operate Transfer (Toll), (ii) Build Operate Transfer (Annuity), and Hybrid Annuity Model (See Annexure). Hybrid Annuity Model was introduced to increase improve project implementation, and revive private sector interest. As of 2019, 44% of all road projects were built under the HAM model.¹¹

Publicly funded projects are usually given to contractors under various contract models such as the Engineering Procurement Construction (EPC) or Item Rate contract. Under EPC, the maintenance period of a project (built by a contractor) is about four years. Under the item rate contract, a project designed by the government, and executed by the contractor. The contractor is responsible for correcting defects for a period of 1-3 years. Figure 7 indicates investment sources for road construction for the past six years. During this period, private investment has been low, and public investment and extra-budgetary borrowing is high.

Figure 7: Investment in roads (in Rs crore)



Note: IEBR: Internal and Extra-Budgetary Resources
Sources: 317th Standing Committee Report (2022); PRS.

Funds under the Ministry

The Ministry manages its finances through various funds meant for different purposes (types of roads). These include the Central Road and Infrastructure Fund (CRIF), Permanent Bridge Fee Fund (PBFF), National Investment Fund and Monetisation of National Highways Fund. Until 2022-23, a majority of the Ministry's expenditure was managed through transfers from the CRIF.

However, in 2023-24 allocation for CRIF has reduced by almost 100%. (See Table 2).

Table 2: Funds managed by the Ministry

	Actuals 21-22	RE 22-23	BE 23-24	% change BE over RE
CRIF	39,410	1,13,600	1,400	-99%
PBFF	12,670	18,006	20,807	16%
NIF	8,430	10,700	10,565	-1%
NHF	5,000	10,000	10,000	0%

Note: CRIF – Central Road and Infrastructure Fund; PBFF – Permanent Bridge Fee Fund; NIF – National Investment Fund; NHMF – Monetisation of NHs Fund.

Sources: Demand for Grants 2023-24, Ministry of Road Transport and Highways; PRS.

CRIF was established to develop and maintain NHs and state highways. It is a non-lapsable fund, financed by the road and infrastructure cess which is imposed on manufacture and imports of petroleum products. The amount is released to the NHAH and various state/UT governments for developing infrastructure. The reduction in allocation through CRIF may be on account of a 58% decrease in the collection of road and infrastructure cess at the revised stage in 2022-23.¹²

The PBFF is funded by revenue collected through: (i) fees levied for use of certain bridges on NHs, (ii) national highway toll, and (iii) revenue share received on some PPP projects. These funds are released to NHAH. In 2023-24, Rs 21,460 crore is budgeted as revenue from fees and tolls, 8% greater than the revised estimates for 2022-23.

The National Investment Fund receives proceeds from disinvestments. It is used to fund special road development projects in the north-east.¹³ In 2023-24 transfer from NIF is estimated at Rs 10,565 crore, same as the budget estimates for 2022-23.

The National Highways Fund is financed by monetising certain public-funded national highway projects. This includes transferring maintenance of certain stretches to private contractors on a long-term basis. In 2023-24, Rs 10,000 crore is estimated to be transferred from NHF, lower than the budget estimate of Rs 20,000 in 2022-23.

Expenditure by NHAH

NHAH's expenses are primarily met through the funds mentioned above. It may also raise funds through market borrowings and as loans from multilateral agencies. These are used for: (i) acquiring land, (ii) project expenditure, and (iii) repaying loans and interest payments.

Increased budgetary allocation to NHAH

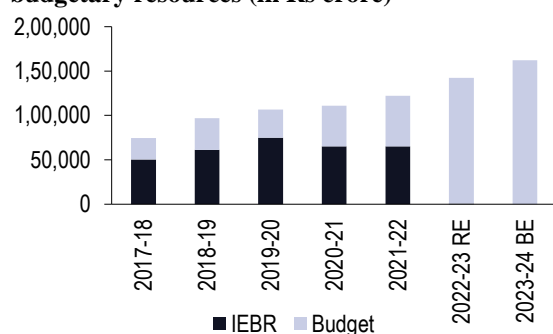
Institutions like NHAH raise sources through internal and extra-budgetary resources (IEBR) by appropriating surplus toll revenues, or through lines of credit. In 2022-23, noting the rising debt burden of NHAH, the government increased its budgetary

allocation and reduced its dependence on IEBR. In 2023-24 NHAI has been allocated Rs 1,62,207 crore, 15% more than the revised estimates for 2022-23. As of March 2022, NHAI's total outstanding debt was Rs 3,48,522 crore.

The Standing Committee on Transport (2022) noted that although the budgetary allocation to NHAI has increased, it may not be enough to meet the investment requirements for developing NHs.¹⁴ It recommended the Ministry to resolve the apprehensions of the private sector and encourage them to invest in infrastructure.¹⁴

Between 2017-18 and 2019-20, the amount raised by NHAI from extra budgetary sources formed a majority of its funding (See Figure 7). From 2022-23 onwards, almost all of NHAI's finances come from budgetary allocation. The total money spent by NHAI between 2017-18 and 2023-24 is estimated to increase by 14%.

Figure 8: Amount raised by NHAI through budgetary allocation and internal and extra budgetary resources (in Rs crore)



Sources: Expenditure Budget for various years; PRS.

The Standing Committee on Transport (2016) had observed that several long-term loans disbursed for the road sector are turning into non-performing assets. Project bids are often made without proper study and are awarded in a hurry. This results in stalling of projects, and concessionaires leave midway. There are several factors that affect the implementation of NH construction. These include: (i) pre-construction activities, (ii) fund mobilisation capacity of contractors, and (iii) climatic conditions like monsoons. The Comptroller and Auditor General of India (2016) had also noted some procedural inefficiencies with NHAI. For instance, it was unable to earn toll on projects due to delay in approvals, operations and procedural lapses.¹⁵

Table 3: Funds required for debt servicing of NHAI (in Rs crore)

Year	Debt Repayment	Interest payment as a % of total repayment
2020-21	25,497	74%
2021-22	40,191	59%
2022-23	31,282	79%
2023-24	24,189	132%
2024-25	30,552	78%

Sources: Rajya Sabha Question No. 2017, August 2022; PRS.

Initiatives such as streamlining the land acquisition process, improving cash flow to contracting agencies, securitisation of road sector loans, termination of stuck projects, and revamping dispute resolution are being undertaken to complete stalled projects.¹⁶ For projects that are stalled due to the contractor, penal action is taken as per the contract.

The Committee on Revisiting and Revitalising the PPP Model of Infrastructure Development (2015) recommended setting up an independent regulator for the roads sector to encourage private participation and regulate their activity.¹⁷ It had also noted that service delivery, such as constructing roads meant for citizens is the responsibility of the government, and should not be evaded through PPPs.

Investment Infrastructure Trusts

An Investment Infrastructure Trust (InvIT) is a collective investment vehicle that pools funds from long-term investors to acquire income-generating infrastructure from developers. InvITs invest in Special Purpose Vehicles through equity or debt instruments. In 2019, NHAI was authorised to set up InvITs for monetising completed NHs.¹⁸

As of November 2021, NHAI's InvIT was listed on Indian stock exchanges, and Rs 8,011 crore was raised from investors and banks. The Canda Pension Plan Investment Board and Ontario Teachers' Pension Plan Board have invested with each of them holding 25% units.³

Under the current tax laws, interest and dividend income earned by InvITs and distributed to investors is taxed from the investors. However, loan repayment distributions to investors are not taxed, despite those amounting to their income.¹⁹ The Ministry of Finance noted that the current special tax does not seek to exempt tax at two levels. Hence from 2023-24 onwards, income received as debt repayment will be taxed from an InvIT investor.

As per the National Monetisation Plan, 5,000 km of road worth Rs 30,000 crore was to be monetised during 2021-22.³ NHAI has monetised 390 km of road through InvITs. About 450 km of road has been bid out through Toll Operate Transfer (TOT).

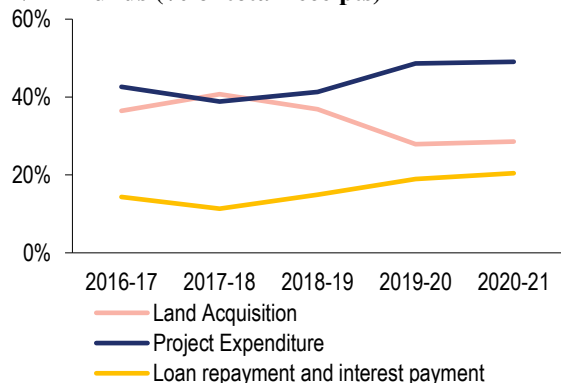
Cost of land acquisition

In the past five years, the land acquisition cost of NHAI has reduced, while the project expenditure costs have been rising. Although the share of loan repayment is lower than other costs, it rose by 38% between 2016-17 and 2020-21. Land acquisition costs may have reduced since several states have agreed to bear at least 25% of the land acquisition costs for projects executed through NHAI. For instance, Kerala has agreed for such an arrangement. States such as Andhra Pradesh, Telangana and Madhya Pradesh have also proposed similar land sharing arrangements.²⁰

Although the share of land acquisition costs has reduced, delay in projects due to land acquisition persists. As of January 1, 2023 the Ministry of Statistics and Programme Implementation was monitoring 724 projects related to road transport.

Of these, 428 have been delayed, and 105 have cost over-runs.²¹

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



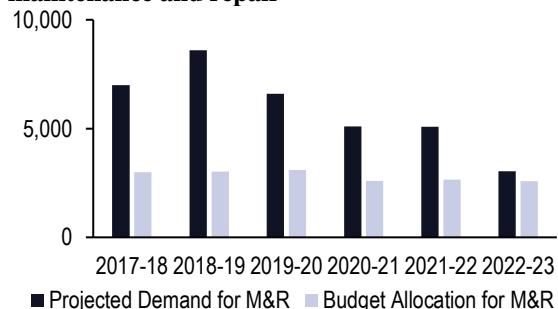
Sources: NHAI Annual Reports for various years; PRS.

Maintenance and Repair of Highways

The onus of maintaining public funded projects primarily falls on the Ministry or NHAI or state public works departments. The Standing Committee on Transport (2020) noted that the amount of funds allocated for maintaining NHs is miniscule, given the vast length of highways across the country.²² Several committees, including NITI Aayog, have recommended that maintaining existing roads should be prioritised over constructing new NHs.²³ It also recommended that 10% of the Ministry’s budget be spent on maintenance of roads. Further, it has been recommended that the Ministry be allocated 100% of its demand for maintenance and repair. Figure 10 indicates the allocation for maintenance against the demand by the Ministry.

In 2023-24, the Ministry has been allocated Rs 2,600 crore for maintaining highways (1% of the Ministry’s budget). Between 2017-18 and 2022-23, allocation for maintenance has remained fairly constant, while the proportion of allocation with respect to demand has increased. This is because demand itself by the Ministry for maintenance has reduced.

Figure 10: Demand and budgetary allocation for maintenance and repair

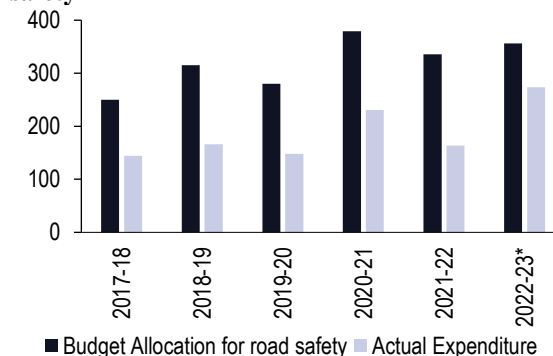


Sources: Standing Committee Reports for various years; PRS.

Road Safety

In 2023-24, the Ministry has allocated Rs 330 crore for road safety, 20% greater than the revised estimates for 2022-23. Between 2017-18 and 2022-23, the Ministry has underutilised road safety funds by about 41%.

Figure 11: Underutilisation of funds for road safety



Note: 2022-23 actual expenditure refers to revised estimates
Sources: Budget documents for various years; PRS.

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. The 2023-24 allocation for road safety is 0.1% of the Ministry’s budget. However, revised estimates in 2022-23 are greater than the actual expenditure in the past five years.

The Standing Committee on Transport (2020) suggested that the Ministry seek higher fund allocation towards road safety, and driver training programmes.²² In 2021, there were 4.1 lakh road accidents, of which 1.5 lakh were fatal.²⁴ The number of road accidents increased by 13% from 2020 to 2021. The increase may be due to a low base, i.e., reduced accidents during COVID when mobility was restricted. Compared to 2019, road accidents decreased by 8%.²⁸ However, fatalities increased by 2%. Further, 31% of all accidents took place on NHs. In 2021, the major cause of all road accidents on NHs was over-speeding (74%), followed by driving on the wrong side (4%). Note that 41% of all accidents of NHs involved a two-wheeler vehicle.²⁸

As per the World Road Statistics, 2018, India ranks first in the number of road accident deaths (among 199 countries reported), followed by China, and the US. The United States has a longer road network than India (66 lakh km). As per the WHO Global Report on Road Safety 2018, about 11% of the accident-related deaths in the world occur in India.²⁵ The Motor Vehicles (Amendment) Act, 2019 seeks to prevent road accidents. It provides for penalties for road traffic violations, electronic monitoring, and greater penalties for underage driving.²⁶ In 2021, the Ministry stated that implementation of the Act has led to improved road safety.³

The Standing Committee (2021) observed that the number of ambulances (111), patrol vehicles (509), tow away cranes (443) available with the Ministry are not commensurate with the size of the NH network in India.²² In September 2021, the central government constituted the National Road Safety Board, which will advise the central and state governments on all aspects of road safety and traffic management.²⁷ The Ministry has notified several Rules to implement provisions of the Act, such as: (i) protection of Good Samaritans, (ii) conditions for states to levy higher penalties than those in the Act, and (iii) amendments to obtaining driving licenses, among others.²⁸

There are several best practices followed by different countries to minimise road accidents and their risks. For instance, Sweden has a road safety policy based on the principles that: (i) human life is paramount, (ii) providers of services are responsible for the safety of the system, and (iii) road transport systems must minimise the opportunity for human error.² As per the policy, the Swedish Road Administration is responsible for road safety. The policy helped in upgrade single lane roads to 2+1 lanes with central cable barriers. The Australian safety system focuses enforcement and penalties to deter users from breaking rules.² It also encourages high quality active and passive safety systems in vehicles to reduce impact forces on occupants and those who are struck.

Annexure

Types of Public Private Partnership Models:

- **Build Operate Transfer (Toll):** The developer is responsible for: (i) designing and developing the project, (ii) conducting operation and maintenance during the entire concession period.²⁹ The developer also has the right to collect toll during the specified period.
- **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.
- **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. The private developer invites bids for the 60%, which is paid back as annuity over 15 years. The repayment includes interest, operations and management, and return on equity. The government has the right to collect toll during the maintenance period. This model is widely used for financing NHs in India.

Table 4: Use of NHAI funds (in Rs crore; 2016-17 to 2020-21)

Year	Land Acquisition	Project Expenditure	Loan repayment and interest payment	Others	Total
2016-17	17,823	20,843	5,130	7,010	50,806
2017-18	32,143	30,648	14,612	8,946	86,349
2018-19	36,048	40,380	14,612	6,685	97,726
2019-20	28,542	49,785	19,420	6,319	1,04,065
2020-21	35,858	61,484	25,633	2,375	1,25,350

Sources: Annual Reports of NHAI; PRS.

Table 5: 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	2,17,027	109%

Note: Actual expenditure for 2022-23 refers to revised estimates.
Sources: Expenditure budget of various years; PRS.

Table 6: State-wise density of NHs (as on March 31, 2019)

State/UT	Existing NH length (km)	% of NH	Length of existing NH in km/ 1000 sq km	Length of existing NH in km/ lakh population
Maharashtra	17,757	13.4%	57.7	15.8
Uttar Pradesh	11,737	8.9%	49.2	5.9
Rajasthan	10,342	7.8%	30.2	15.1
Madhya Pradesh	8,772	6.6%	28.5	12.1
Karnataka	7,335	5.5%	38.2	12.0
Andhra Pradesh	6,913	5.2%	41.8	13.8
Tamil Nadu	6,742	5.1%	51.8	9.3
Gujarat	6,635	5.0%	33.8	11.0
Odisha	5,762	4.4%	37.0	13.7
Bihar	5,358	4.0%	56.9	5.2
Assam	3,909	3.0%	49.8	12.5
Telangana	3,795	2.9%	33.1	10.8
West Bengal	3,664	2.8%	41.3	4.0
Chhattisgarh	3,606	2.7%	26.7	14.1
Jharkhand	3,367	2.5%	42.2	10.8
Punjab	3,274	2.5%	65.0	11.8
Haryana	3,166	2.4%	71.6	12.5
Uttarakhand	2,949	2.2%	52.8	29.2
Himachal Pradesh	2,607	2.0%	46.8	38.0
Arunachal Pradesh	2,537	1.9%	30.3	183.5
Jammu & Kashmir	2,423	1.8%	10.9	19.3
Kerala	1,782	1.3%	45.8	5.3
Manipur	1,750	1.3%	78.4	64.3
Nagaland	1,548	1.2%	93.4	78.1
Mizoram	1,423	1.1%	67.5	130.4
Meghalaya	1,156	0.9%	51.5	39.0
Tripura	854	0.6%	81.4	23.3
Sikkim	463	0.4%	65.2	76.2
A & N Islands	331	0.3%	40.1	87.0
Goa	293	0.2%	76.8	20.1
Delhi	157	0.1%	105.9	0.9
Dadra & Nagar Haveli	31	0.02%	63.7	9.0
Daman & Diu	22	0.02%	196.4	9.1
Puducherry	27	0.02%	54.3	2.2
Chandigarh	15	0.01%	134.0	1.4
TOTAL	1,32,502	100%	40.2	11.0

Sources: Ministry of Road Transport and Highways; PRS.

Table 7: Domestic sales of automobiles (in lakhs)

	Passenger Vehicles	Commercial Vehicles	Three wheelers	Two wheelers	Quadricycles	Total
2016-17	30,47,582	7,14,082	5,11,879	1,75,89,738	-	2,18,63,281
2017-18	32,88,581	8,56,916	6,35,698	2,02,00,117	-	2,49,81,312
2018-19	33,77,389	10,07,311	7,01,005	2,11,79,847	627	2,62,66,179
2019-20	27,73,519	7,17,593	6,37,065	1,74,16,432	942	2,15,45,551
2020-21	27,11,457	5,68,559	2,19,446	1,51,20,783	-12	1,86,20,233
2021-22	30,69,499	7,16,566	2,60,995	1,34,66,412	124	1,75,13,596
Total	1,82,68,027	45,81,027	29,66,088	10,49,73,329	1,681	

Sources: SIAM; PRS.

Table 8: Length of roads between 2015 and 2019 (in km)

	2015	2016	2017	2018	2019
NHs	97,991	1,01,011	1,14,158	1,26,350	1,32,499
State Highways	1,67,109	1,76,166	1,75,036	1,86,908	1,79,535
District Roads#	11,01,178	5,61,940	5,86,181	6,11,268	6,12,778
Rural Roads	33,37,255	39,35,337	41,66,916	44,09,582	45,22,228
All Roads	54,72,144	56,03,293	58,97,671	62,15,797	63,31,757

Sources: Basic Road Statistics 2018-19; PRS.

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