Demand for Grants 2020-21 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 Highways and Infrastructure Development Corporation Limited (NHIDCL). It also deals with matters relating to road transport such as implementation of central legislation such as the Motor Vehicles Act, 1988.

This note looks at the proposed expenditure of the Ministry for the year 2020-21, its finances over the last few years, and issues with the same.

Allocations in Union Budget 2020-21

Fund allocation

The total expenditure on the Ministry of Road Transport and Highways for 2020-21 is estimated at Rs 91,823 crore. This is 11% higher than the revised estimates for 2019-20.

In 2020-21, capital expenditure is estimated at Rs 81,975 crore while revenue expenditure is estimated at Rs 9,849 crore. Note that in 2014-15, the ratio between revenue and capital expenditure was 50:50. In 2015-16, this ratio changed, with the Ministry spending more funds on capital expenditure. Since then, the Ministry has increased its capital expenditure significantly, while revenue expenditure has gradually declined. In 2020-21, 89% of the Ministry’s spending is estimated to be on capital expenditure.

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

<table>
<thead>
<tr>
<th></th>
<th>2018-19 Actual</th>
<th>2019-20 Revised</th>
<th>2020-21 Budget</th>
<th>% Change BE 2020-21/ RE 2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>9,655</td>
<td>10,854</td>
<td>9,849</td>
<td>-9%</td>
</tr>
<tr>
<td>Capital</td>
<td>67,646</td>
<td>72,162</td>
<td>81,975</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>77,301</td>
<td>83,016</td>
<td>91,823</td>
<td>11%</td>
</tr>
</tbody>
</table>

Notes: BE – Budget Estimate; RE – Revised Estimate.
Sources: Demands for Grants 2020-21, Ministry of Road Transport and Highways: PRS.

Overview of Finances

Utilisation of funds

In the past few years, the expenditure of the Ministry has seen a significant increase, with the maximum year-on-year increase at 42% seen in 2015-16.

Figure 1: Actual expenditure by the Ministry (in Rs crore)

Notes: Figures for 2019-20 are revised estimates.
Sources: Ministry of Road Transport and Highways budget documents 2009-20; PRS.

However, usually the actual expenditure by the Ministry has been lower than the budget estimates (see Figure 2). In 2018-19, the Ministry exceeded its budgeted expenditure for that year by 9%.

Figure 2: % change between Actual and Budgeted expenditure

Note: The number for 2019-20 compares the budget estimates with the revised estimates.
Sources: Ministry of Road Transport and Highways budget documents 2009-20; PRS.

Policy announcements in the Budget Speech

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

- Rs 100 lakh crore will be invested on infrastructure over the next five years.
- Accelerated development of highways will be undertaken. This will include development of 2,500 km access control highways, 9,000 km of economic corridors, 2,000 km of coastal and land port roads and 2,000 km of strategic highways.
- The Delhi-Mumbai Expressway and two other packages would be completed by 2023. The Chennai-Bengaluru Expressway will be started.
- At least 12 lots of highway bundles of over 6,000 km will be monetised before 2024.
Expenditure of the central government

In 2020-21, of the total expenditure, the highest allocation is towards roads and bridges at Rs 48,777 crore (53%). This is followed by allocation towards NHAI at Rs 42,500 crore (46%).

Table 2: Expenditure heads for the Ministry of Road Transport and Highways

<table>
<thead>
<tr>
<th>Major Head</th>
<th>2018-19 Actual</th>
<th>2019-20 Revised</th>
<th>2020-21 Budget</th>
<th>% Change BE 2020-21/ RE 2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads and bridges</td>
<td>37,825</td>
<td>45,897</td>
<td>48,777</td>
<td>6%</td>
</tr>
<tr>
<td>NHAI</td>
<td>39,267</td>
<td>36,691</td>
<td>42,500</td>
<td>16%</td>
</tr>
<tr>
<td>Road transport and safety</td>
<td>166</td>
<td>273</td>
<td>379</td>
<td>39%</td>
</tr>
<tr>
<td>Others</td>
<td>117</td>
<td>155</td>
<td>167</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>77,301</td>
<td>83,016</td>
<td>91,823</td>
<td>11%</td>
</tr>
</tbody>
</table>

Notes: BE – Budget Estimate; RE – Revised Estimate. Sources: Demands for Grants 2020-21, Ministry of Road Transport and Highways; PRS.

Roads and bridges: In 2020-21, the allocation towards roads and bridges is Rs 48,777 crore. This is 6% more than the revised estimates of 2019-20 (Rs 45,897 crore). Note that in 2018-19, the actual allocation towards roads and bridges (Rs 37,825 crore) was 8% lower than the budget estimate for that year. 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.

NHAI: The central government develops and maintains NHs through the NHAI. NHAI has been allocated Rs 42,500 crore in 2020-21, which is 16% more than the revised estimates for 2019-20 (Rs 36,691 crore). Of the budgeted amount, 49% (Rs 20,750 crore) will be provided from the Central Road and Infrastructure Fund, 27% (Rs 11,500 crore) will be provided from the Permanent Bridge Fees Fund, and the remaining 24% (Rs 10,250 crore) will come from the monetisation of the National Highways Fund.

Expenditure on the NHAI includes funding towards the umbrella highway scheme, Bharatmala Pariyojana. This scheme seeks to optimise efficiency of freight and passenger movement by bridging critical infrastructure gaps. It also aims to increase the number districts with NH linkages from 300 to 550. Under Phase I of Bharatmala Pariyojana, 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 National Highway Development Programme. The estimated cost of Phase I is Rs 5,35,000 crore, spread over five years.

Till October 2019, 255 road projects with an aggregate length of about 10,699 km, and costing Rs 2,64,916 crore have been approved under Bharatmala Pariyojana Phase-I. Out of the 255 approved projects, 225 projects with an aggregate length of about 9,561 km have already been awarded for construction.

For the current financial year (2019-20), the target of highway construction under Bharatmala Pariyojana is 4,462 km and target of award is 7,800 km, subject to pre-construction clearance, land availability and project viability.

Funds managed by the Ministry

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

Central Road and Infrastructure Fund (CRIF): A majority of the Ministry’s expenditure is managed through transfers from the CRIF. 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 CRIF. This amount is eventually released to the NHAI, and to the state/UT governments for development of road infrastructure (and other infrastructure projects such as railways) in the country.

For 2020-21, the transfer from CRIF towards the Ministry is estimated at Rs 59,622 crore. This is a 9% increase from the revised estimates of 2019-20 (Rs 54,539 crore).

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 received on some PPP projects. These funds are then released to the NHAI for the development of NHs entrusted to it.

For 2020-21, the transfer to PBFF is estimated at Rs 11,518 crore. This is a 9% increase from the revised estimates of 2019-20 (Rs 10,610 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 2020-21, the transfer to NIF is estimated at Rs 6,780 crore. This is 12% higher than the revised estimates of 2019-20 (Rs 6,070 crore).

National Highways Fund: In August 2016, the Union Cabinet had authorised NHAI to monetise certain public funded NH projects. Such monetisation includes transferring operations and maintenance of stretches of NHs to private contractors on a long-term basis. In 2020-21, Rs 10,250 crore is estimated to be generated through such monetisation. This is marginally higher than the revised estimate of 2019-20 (Rs 10,000 crore).
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**Table 3: Summary of transfers from funds (in Rs crore)**

<table>
<thead>
<tr>
<th>Funds</th>
<th>2018-19 Actual</th>
<th>2019-20 Revised</th>
<th>2020-21 Budget</th>
<th>% Change BE 2020-21/ RE 2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIF</td>
<td>50,762</td>
<td>54,539</td>
<td>59,622</td>
<td>9%</td>
</tr>
<tr>
<td>PBFF</td>
<td>5,584</td>
<td>10,610</td>
<td>11,518</td>
<td>9%</td>
</tr>
<tr>
<td>National Highways Fund</td>
<td>9,682</td>
<td>10,000</td>
<td>10,250</td>
<td>2%</td>
</tr>
<tr>
<td>National Investment Fund</td>
<td>5,980</td>
<td>6,070</td>
<td>6,780</td>
<td>12%</td>
</tr>
</tbody>
</table>

Notes: BE – Budget Estimate; RE – Revised Estimate.
Sources: Demands for Grants 2020-21, Ministry of Road Transport and Highways; PRS.

**Issues to consider**

India has one of the largest road networks in the world with about 59 lakh km of road length.9 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.9 NHs comprise about 2% of the road network but carry about 40% of the total road traffic.10

However, the roads sector has been facing several constraints such as: (i) lack of equity with developers, (ii) higher cost of financing, (iii) shortfall in funds for maintenance, (iv) unavailability of land for the expansion of NHs, (v) significant increase in land acquisition cost, and (vi) bottlenecks and checkpoints on NHs which could adversely impact benefits of GST.11 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 2016.12 We discuss some of these issues below.

**Issues with financing**

The table below highlights the total investment in roads sector, as highlighted by the Economic Survey 2019-20.13

**Table 4: Investment in road sector (in Rs thousand crore)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Budgetary Support</th>
<th>Borrowings</th>
<th>Private Sector investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td>29</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>2015-16</td>
<td>46</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>2016-17</td>
<td>49</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>2017-18</td>
<td>60</td>
<td>17</td>
<td>51</td>
</tr>
<tr>
<td>2018-19</td>
<td>76</td>
<td>22</td>
<td>61</td>
</tr>
<tr>
<td>2019-20</td>
<td>43</td>
<td>12</td>
<td>26</td>
</tr>
</tbody>
</table>

Sources: Economic Survey 2019-20; PRS.

**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.14 It 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 should monitor toll collection and channel any surplus funds towards stressed projects.

The Committee (2016) had also noted that while the central government has allocated a huge budget for the road sector, this will not be sustainable over the long term.14 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.

More recently, the Standing Committee on Transport (2018) noted that road development needs concerted efforts in the form of mobilisation of funds from other sources along with increasing budgetary allocation as private sector involvement has been depleting in recent years.15 In November 2019, the Union Cabinet approved certain changes in existing contract methods to allow NHAI to monetise existing NHs.16

**Borrowings:** In 2020-21, NHAI estimates to borrow Rs 65,000 crore towards capital outlay. This amount is 13% lower than the revised estimates for borrowings (Rs 75,000 crore). Note that this borrowing is in addition to the Rs 42,500 crore of budgetary support discussed earlier.

In 2018-19, about 68% of the funding for capital outlay towards roads and highways was estimated to come from borrowings, and the remaining from budgetary support. However, as per the actual figures, 63% of the funding came from borrowings. In 2017-18 also, the actual capital outlay funding from borrowings was marginally lower than what was estimated. In 2018-19, the budgetary support was 21% higher than the budget estimates for that year. This could imply that NHAI has been unable to raise the required level of borrowing, and the central government has to step in to bridge the funding gap. The Standing Committee on Transport (2018) had questioned the ability of the government to complete projects in the absence of the required funding.

**Private financing and contracts:**

It has been noted that private financing for the roads sector is a challenge.10,17 Several PPP road projects have not been able to attract bids.17 The major highway developers in the country are also facing financial capacity constraints. Further, there is a lack of debt products that are aligned with the revenue stream profile of highway projects (long-term projects where toll collection can begin only after the entire project is completed). This makes financing of such projects difficult, and has resulted
in some projects getting stalled at the construction stage. This also discourages prospective bidders.\textsuperscript{17}

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.\textsuperscript{18} It had recommended setting up an independent regulator for the roads sector to help bring in and regulate private players in the sector. It had also noted that service delivery (such as constructing roads) to citizens is the government’s responsibility and should not be evaded through PPPs.

The Kelkar Committee (2015) 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.\textsuperscript{18} 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.

**Non-performing assets:** 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).\textsuperscript{14} Project bids are often made without proper study, and projects are awarded in a hurry. This results in stalling of projects, and concessionaires leave midway. Concessionaires had also anticipated higher revenue realisation but achieved less due to the economic downturn.\textsuperscript{14}

Banks and other infrastructure lending institutions have also been reluctant to finance the highways sector.\textsuperscript{14} 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.\textsuperscript{14}

The Standing Committee (2016) 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. Banks could be empowered to recover the bad debts. 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.\textsuperscript{19}

The Standing Committee on Transport (2019) also suggested that NHAI should revisit the financial requirements for bidders to ensure their eligibility for bidding process.\textsuperscript{20} While the onus of the feasibility of the bids made by the concessionaire lies mainly with the banks, NHAI should exercise due diligence while awarding projects to concessionaire with poor performance history.

**Performance of NHAI**

The Comptroller and Auditor General of India (2016) had noted several procedural inefficiencies with NHAI.\textsuperscript{19} For example, NHAI could not realise toll on certain projects due to delays in approvals, toll operations, and other procedural lapses. NHAI did not adhere to the Ministry’s guidelines on maintenance of project wise balance sheet and cash flow.\textsuperscript{19} Loss of revenue was also noted due to inefficient bidding process for engagement of toll collecting agencies.\textsuperscript{19}

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 funds allocated to the Ministry, and released to NHAI, and (iii) under-utilisation of funds.\textsuperscript{24} 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.\textsuperscript{24} This shows NHAI’s inability to optimally utilise available funds.

Committees have also suggested more due diligence on the part of NHAI. The Standing Committee on Transport (2019) recommended that NHAI should compare its project cost estimates with the actual costs incurred on road projects. If there is a substantial difference between the bid price offered by the concessionaire and the project cost estimates made by the government, NHAI should review its cost estimation methodologies.

**Investment in maintenance of roads**

In 2020-21 the Ministry has allocated Rs 2.618 crore towards maintenance of roads and highways (including toll bridges). This is Rs 492 crore (16\%) lower than the revised estimates of 2019-20.

The Ministry has allocated about 3\% of its budget towards maintenance of NHs. This is for a total NH length of 1.14 lakh km. In comparison, in 2020-21 the US government seeks to allocate $23.74 billion (51\% of its total budget on highways) towards its National Highway Performance Program, to improve the condition and performance of their National Highway System (roughly 2.2 lakh miles of length).\textsuperscript{21}

The National Transport Development Policy Committee (2014) had noted that the amount spent on maintenance of roads is low.\textsuperscript{22} This results in roads with potholes, weak bridges, and poor pavements, and has safety consequences. Further, maintenance is carried out only when required, as opposed to being a part of preventive measures.\textsuperscript{22}

The Standing Committee on Transport (2017) had observed that the entire length of NHs in the country cannot be maintained with this amount. It had recommended that the budget for maintenance
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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. Further, there should be penalties for contractors and engineers in case of poor quality repair, maintenance, and construction. The Standing Committee on Transport (2018) had also noted issues of under-utilisation under maintenance and repairs works.

**Investment in road safety**

In 2020-21, the Ministry has allocated Rs 379 crore towards road transport and safety. This is 39% higher than the revised estimates of 2019-20. This would provide for various things such as road safety programmes, setting up of facilities on NHs, for extending relief to accident victims, 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 $2.7 billion on its Highway Safety Improvement Programme (6% of its total expenditure on highways).21

In 2017, there were 4,64,910 road accidents in India, which killed about 1.5 lakh people and injured about 4.7 lakh people.23 In 2019, Parliament passed the Motor Vehicles (Amendment) Bill, 2019 which seeks to address various issues around road safety. It increases the penalties for various offences under the Act, and provides for a Motor Vehicle Accident Fund which would be used for treatment of persons injured in road accidents. It also provides for a National Road Safety Board, which would advise the central and state governments on all aspects of road safety and traffic management.

**Targets vs performance**

**Road construction:** The rate of road construction has improved in the last few years. Achievement of construction targets (for NHs) has ranged between 55% to 70% in the last five years.

The Standing Committee on Transport (2018) noted that of the total length to be constructed under NHDP i.e., 56,323 km, 33,820 km (60%) has been completed.15 The balance work has been transferred under the Bharatmala Pariyojana.

The Standing Committee on Transport (2017) had noted that the targets could not be met due to shortage of funds. Reasons for incomplete projects include delays in obtaining clearances, poor financial and technical performance of the contractors, and law and order issues. The Economic Survey 2018-19 also highlighted issues such as time and cost overruns due to delays in project implementation, procedural delays, and lesser traffic growth than expected which increased the risk factor of the projects resulting in stalling of projects. Table 5 below shows the road length constructed per year.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Target (km)</th>
<th>Constructed (km)</th>
<th>% achievement (constructed/target)</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>9,829</td>
<td>66%</td>
</tr>
<tr>
<td>2018-19</td>
<td>15,000</td>
<td>10,855</td>
<td>72%</td>
</tr>
<tr>
<td>2019-20</td>
<td>15,000</td>
<td>4,622</td>
<td>31%</td>
</tr>
</tbody>
</table>

Note: Construction figures for 2019-20 are till September 30, 2019.
Sources: Economic Survey 2019-20; PRS.

**Connectivity in remote areas**

The Ministry also allocates funds towards the development of highways in areas with poor connectivity. Some of these projects include the Special Accelerated Road Development Programme in North East (SARDP-NE), Externally Aided Projects and Roads Projects in Left-Wing Extremism Affected Areas.

In 2020-21, Rs 6,780 crore has been allocated towards the SARDP-NE project, which is 12% higher than the revised estimates of 2019-20. The Standing Committee (2018) had noted underutilisation of funds and under-achievement of targets in SARDP-NE.13

**Project delays and increase in project costs**

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.22 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, (iii) cash flow problems, and (iv) law and order issues.25

Such delays increase project costs, eventually making certain projects unviable. As of December 2018, 435 infrastructure and road projects were pending, and the Ministry expects to complete them by October 2020.26

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.17 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.

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Note: Construction figures for 2019-20 are till September 30, 2019.
Sources: Economic Survey 2019-20; PRS.
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 2015-16.24 The Committee also observed that farmers who were entitled to lesser compensation under the older law, have been approaching courts for increased compensation.24 This has further delayed the land acquisition process and added to the cost of projects. In 2017-18, NHAI spent more funds on land acquisition (41% of the expenses) as compared to project expenditure (39%).10

3 Lok Sabha Unstarred question no. 1129, Ministry of Road Transport and Highways, December 21, 2017.
4 Rajya Sabha Unstarred question no. 2373, Ministry of Road Transport and Highways, December 9, 2019.
5 Rajya Sabha Unstarred Question No. 1563, Ministry of Road Transport and Highways, December 2, 2019.
6 Lok Sabha Unstarred Question No. 1688, Ministry of Road Transport and Highways, November 28, 2019.
7 Notes on Demand for Grants 2014-15, Demand no 83, Ministry of Road Transport and Highways.
25 Lok Sabha Unstarred Question No. 1808, Ministry of Road Transport and Highways, November 28, 2019.
26 Lok Sabha Unstarred question no. 505, Ministry of Road Transport and Highways, December 13, 2018.