Taking a toll

Traffic on highways set to de-grow 16.5% this fiscal, which would cull toll collection by 13% in base case

May 2020
**Toll collections to deflate 13% in base case**

With the nationwide lockdown to fight the Covid-19 pandemic restricting inter- and intra-state traffic to essential services, toll collections from build-operate-transfer (BOT) highway projects, and remittances from publicly funded projects would decline sharply in the near term.

The National Highways Authority of India (NHAI), the nodal agency for the roads sector, had stopped toll collections up to April 20, 2020, after the government imposed the nationwide lockdown on March 25 to contain Covid-19 afflictions. Toll collection has restarted since, but there is unlikely to be a V-shaped revival in traffic after the lockdown ends – probably – on May 17. There will only be a gradual return to normalcy.

Consequently, toll collections and remittances from existing roads will fall a sharp 13% assuming there’s only a 57-day lockdown (from March 22 to May 17). That decline will be an even sharper 17% if the lockdown is extended by another two weeks.

While construction of new highways is also affected, those constructed and commissioned over the past one year will help reduce the rate of decline in toll collections by more than half.

Over the long term (fiscals 2019-2024), CRISIL Research expects toll collections to bounce back to a healthier compound annual growth rate (CAGR) of ~11-12% on the back of new road construction. This, however, is lower than the 14.6% clocked in the preceding five fiscals. New road executions will hold the key to both reducing the impact of the lockdown in the immediate term and boosting growth over the long term.

**Economy disrupted**

The pandemic has disrupted the Indian economy and consequently, CRISIL has revised its gross domestic product (GDP) growth forecast for fiscal 2021 to 1.8%, from 3.5% earlier. This is based on two assumptions – that monsoon will be normal, and that the effect of the pandemic will subside materially, if not wear out completely, in April-June.

**Traffic de-growth to hit toll collections**

As can be seen from the scenario analysis below, toll collections and remittances from highway projects are set to decline sharply this fiscal. Longer the lockdown, steeper the fall in toll collections.

While new highway completion is expected to fall 20-25% from the initial expectation this fiscal, completions of last would help stem a slide in numbers.

Our base-case scenario (with lockdown ending on May 17) is traffic on existing stretches would de-grow 16.5% in fiscal 2021. Although some relaxations have been provided for the manufacturing sector in the recent guidelines, these are unlikely to help the sector revive immediately because of multiple factors such as hampered supply chains, persisting labour issues and slack end-consumer demand.
Factors impacting toll collections in short term

<table>
<thead>
<tr>
<th>Factors impacting toll collections in short term</th>
<th>Description of the factor</th>
<th>Nature of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decline in manufacturing</td>
<td>The sector to see a de-growth due to the shutdown in the first quarter of current fiscal and lower discretionary demand after that</td>
<td>▼ Negative ▼</td>
</tr>
<tr>
<td>Business-/work-related travel</td>
<td>Passenger traffic generated through business-/work-related travel is expected to revive moderately after the lockdown is lifted</td>
<td>▶ Positive ▶</td>
</tr>
<tr>
<td>Leisure and tourism travel</td>
<td>Passenger traffic generated due to vacation/leisure activities will take longer to revive</td>
<td>▼ Negative ▼</td>
</tr>
</tbody>
</table>

Note: ▼ Positive ▼ Negative ▶ Moderate

Impact of current lockdown on various factors influencing toll collection this fiscal

- **Freight traffic**: Expected to recover in a staggered manner as factories resume operations, ramp-up production and cater to pent up consumer demand. Restocking of the supply chain will also boost freight traffic after the end of lockdown.

- **Passenger traffic**: Business and work-related essential travel expected to revive first post the end of lockdown but the revival would be slow in pace. Leisure and tourism travel will be hit the hardest and also take the longest to revive.

- **Execution of new highways**: Expected to be down 20-25% from initial expectation this fiscal because of closure of construction sites in March and April.

*Lockdown for 33-days depicted period from 1st April 2020 to 31st May 2020*
Lockdown contracts consumption of major commodities

Commodities with high share in traffic to de-grow leading to a decline in freight traffic in the short term

- Construction materials such as cement and steel, which account for a high share of freight traffic, will see a significant drop in consumption due to the fall in construction activity in fiscal 2021.
- Some other major commodities, such as agri produce and e-commerce, are, however, expected to support the freight traffic, thereby lowering the rate of de-growth.
Despite the short-term speed bumps, long-term growth should be intact

Over fiscals 2019-2024, toll collections should bounce back to a healthier ~11-12% CAGR primarily because of new highway completions. This, however, would be lower than the 14.6% clocked in the preceding five fiscals.

- Traffic growth on road stretches operational as of fiscal 2019 is expected to be ~3.0-3.5% CAGR over fiscals 2019-2024, compared with 6.0-6.5% CAGR in the preceding five fiscals.

- Without new road additions in fiscals 2019-2024, toll collections growth would be half of the expected rate of ~11.0-12.0%. This is because the collections on existing roads would have registered a minimal increase in fiscal 2020 and gone into decline in fiscal 2021. From fiscal 2022, growth is expected to be strong.

- Execution of highways should pick up sharply in fiscal 2022 and make up for the loss of pace in the current fiscal, thereby limiting the impact on long-term toll collections.

**Passenger vehicle population growth to spur passenger traffic on roads**

Given the disruption in the economic activity, passenger vehicle (PV) sales could de-grow ~25% in fiscal 2021. This is on top of an 18% decline in fiscal 2020. Sales should recover gradually in the second half of this fiscal. Over fiscals 2021-2024, sales are likely to log ~12.6% CAGR. The PV market has huge potential because of lower penetration of vehicles, which stands at ~23 PVs per 1,000 people. In comparison, China has 155 PVs per 1,000 people and Brazil 119. Hence, we expect PVs to continue to boost passenger traffic and toll collections in future.
Passenger vehicle sales should rebound over the long term

![Graph showing PV & UV sales (mn units) (LHS) from FY20 to FY24P with a CAGR of ~12.6% and sales expected to degrow by 25% in FY21P.]

Source: CRISIL Research

E-commerce to propel freight traffic growth over the long term

Over fiscals 2020-2024, growth prospects of major commodities likely to support increase in freight traffic

<table>
<thead>
<tr>
<th>Growth prospects (volume)</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (Growth rate &gt; 10%)</td>
<td>• E-commerce and courier services</td>
</tr>
<tr>
<td>Moderate (Growth rate 5-10%)</td>
<td>• Cement</td>
</tr>
<tr>
<td></td>
<td>• Steel products</td>
</tr>
<tr>
<td></td>
<td>• FMCG</td>
</tr>
<tr>
<td></td>
<td>• Automobiles</td>
</tr>
<tr>
<td>Low (Growth rate &lt; 5%)</td>
<td>• Agri commodities</td>
</tr>
<tr>
<td></td>
<td>• Fertilisers</td>
</tr>
</tbody>
</table>

Note: Growth rate during FY20-24P
Source: CRISIL Research
Long-term growth of various commodities expected to remain intact

E-commerce would continue to remain a high-growth segment even after the pandemic subsides. Social distancing is likely to shift consumer behaviour majorly towards online shopping leading to sparse footfalls at shopping malls. That will provide further tailwind to the already-expanding sector.

Over the long term, the growth rate would be moderate on the back of infrastructure projects. The government has envisaged the National Infrastructure Pipeline (NIP) with an investment outlay of ~Rs 103 lakh crore, 90% of which will focus on core infrastructure. Consequently, the share of high-intensity segments such as roads, irrigation and urban infrastructure would rise in the overall infrastructure demand pie.

We also expect steel demand to grow moderately until fiscal 2024 on the back of strong spending in the infrastructure sector, which accounts for ~25-30% of total demand for the alloy. Its consumption in the building and construction sector, which constitutes ~35-40% of the total demand, is expected to see a more moderate growth, driven by rising steel intensity in buildings as also due to growth in the affordable housing segment and rural housing demand (on the back of three consecutive good monsoons and higher minimum support prices).

Agri goods, which command a high share of freight traffic, are expected to continue in the slow lane, though.

Growth in the consumption of farm goods means higher utilisation of commercial vehicles (CVs) that, in turn, will lead to higher truck sales and freight traffic on roads.

Strong execution of national highways to lead to higher toll revenue

Growth in toll collections and remittances from existing roads should grow ~6.0-6.5% between fiscal 2019 and 2024. Any further increase will likely come from new national highways. The NHAI executed 3,979 km of national highways in fiscal 2020 compared with 3,380 km in fiscal 2019. That growth was driven by order backlog and the award of appointed dates for delayed hybrid annuity model (HAM) projects. The pace of execution is expected to pick up further to ~3,500-4,000 km per year between fiscals 2021 and 2024.

Strong execution of national highways to increase tolling length

Source: NHAI, CRISIL Research
### Factors impacting growth in toll collections in long term

<table>
<thead>
<tr>
<th>Factors impacting toll collection in long term</th>
<th>Description</th>
<th>Nature of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV population growth</td>
<td>Revival in PV sales expected over the long term. A gradual recovery likely in the second half of the current fiscal. Over fiscals 2022-2024, the sales expected to log ~10-11% CAGR</td>
<td>Positive</td>
</tr>
<tr>
<td>CV population growth</td>
<td>Higher utilisation rate of CVs due to greater consumption of goods would lead to stronger sales of these vehicles. This would, in turn, boost traffic on highways</td>
<td>Positive</td>
</tr>
<tr>
<td>Start of dedicated freight corridors (DFCs)</td>
<td>This would have a moderate impact on toll collection, especially in the regions surrounding the corridors. In the long term, we expect roads to remain the preferred mode of transport for non-bulk goods. Roads account for ~75-80% of non-bulk freight movement in the country</td>
<td>Moderate</td>
</tr>
<tr>
<td>Strong execution of new highways</td>
<td>Higher execution of national highways in the long term would support the increase in tolling length</td>
<td>Positive</td>
</tr>
<tr>
<td>Electronic toll collection (ETC) &amp; better compliance</td>
<td>Plugging of leakages and lower exemptions on toll lanes would lead to slightly higher toll collections</td>
<td>Positive</td>
</tr>
</tbody>
</table>

**Note:** Positive

| Negative | Moderate |

### Key risks

While toll collections and remittances are expected to grow healthily over fiscal 2019-2024, the downside risks are the following:

- **Prolonged lockdown:** Any significant extension to the lockdown after May 17 would lead to a sharper fall in toll collections in the current fiscal

- **Macro-economic recovery:** A slower-than-expected revival on the economy would negatively impact toll collections. A deeper-than-expected slowdown in global trade would be negative for freight traffic

- **Delays in financial closures for new road projects:** Delays in financial closures have impacted the execution of HAM road projects in the past. Should banks continue to be conservative in lending to the sector, this could hamper new road executions – and hence toll collections – further
Conclusion

Long-term toll collections to be robust despite near-term decline

Our base-case scenario is road traffic reducing 16.5% this fiscal leading to a 13% decline in toll revenue. Recovery in freight traffic after the lockdown ends would be gradual. Improvement in passenger traffic will take time given that business and work-related essential travel will resume first, followed by leisure and tourism travel.

Over fiscals 2019-2024, we foresee toll collections and remittance (from ongoing and new projects) logging a robust 11-12% CAGR.

Without new road projects, growth in toll collections would be slower at ~6-6.5%. The increase in road traffic and toll collections would be supported by multiple factors such as a pick-up in the sales of PVs and also CVs.

Revival in the manufacturing sector and consumption of various commodities would push up fleet utilisation levels, and hence, CV sales. Toll revenue will also rise because of the strong execution pipeline, which would help increase tolling length.

Roads would remain the preferred mode of transportation of non-bulk goods, which would support freight traffic over the long term. Plugging of leakages and lower exemptions in toll lanes because of the implementation of ETC would also bolster toll collections.
About CRISIL Limited
CRISIL is a leading, agile and innovative global analytics company driven by its mission of making markets function better. It is India’s foremost provider of ratings, data, research, analytics and solutions with a strong track record of growth, culture of innovation, and global footprint.
It has delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers through businesses that operate from India, the US, the UK, Argentina, Poland, China, Hong Kong and Singapore.
It is majority owned by S&P Global Inc, a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

About CRISIL Research
CRISIL Research is India's largest independent integrated research house. We provide insights, opinion and analysis on the Indian economy, industry, capital markets and companies. We also conduct training programs to financial sector professionals on a wide array of technical issues. We are India's most credible provider of economy and industry research. Our industry research covers 86 sectors and is known for its rich insights and perspectives. Our analysis is supported by inputs from our large network sources, including industry experts, industry associations and trade channels. We play a key role in India's fixed income markets. We are the largest provider of valuation of fixed income securities to the mutual fund, insurance and banking industries in the country. We are also the sole provider of debt and hybrid indices to India's mutual fund and life insurance industries. We pioneered independent equity research in India, and are today the country's largest independent equity research house. Our defining trait is the ability to convert information and data into expert judgments and forecasts with complete objectivity. We leverage our deep understanding of the macro-economy and our extensive sector coverage to provide unique insights on micro-macro and cross-sectoral linkages. Our talent pool comprises economists, sector experts, company analysts and information management specialists.

CRISIL Privacy
CRISIL respects your privacy. We may use your contact information, such as your name, address, and email id to fulfil your request and service your account and to provide you with additional information from CRISIL. For further information on CRISIL's privacy policy please visit www.crisil.com/privacy.

Disclaimer
CRISIL Research, a division of CRISIL Limited (CRISIL) has taken due care and caution in preparing this Report based on the information obtained by CRISIL from sources which it considers reliable (Data). However, CRISIL does not guarantee the accuracy, adequacy or completeness of the Data / Report and is not responsible for any errors or omissions or for the results obtained from the use of Data / Report. This Report is not a recommendation to invest / disinvest in any company covered in the Report. CRISIL especially states that it has no financial liability whatsoever to the subscribers/ users/ transmitters/ distributors of this Report. CRISIL Research operates independently of, and does not have access to information obtained by CRISIL's Ratings Division / CRISIL Risk and Infrastructure Solutions Limited (CRIS), which may, in their regular operations, obtain information of a confidential nature. The views expressed in this Report are that of CRISIL Research and not of CRISIL’s Ratings Division / CRIS. No part of this Report may be published / reproduced in any form without CRISIL’s prior written approval.