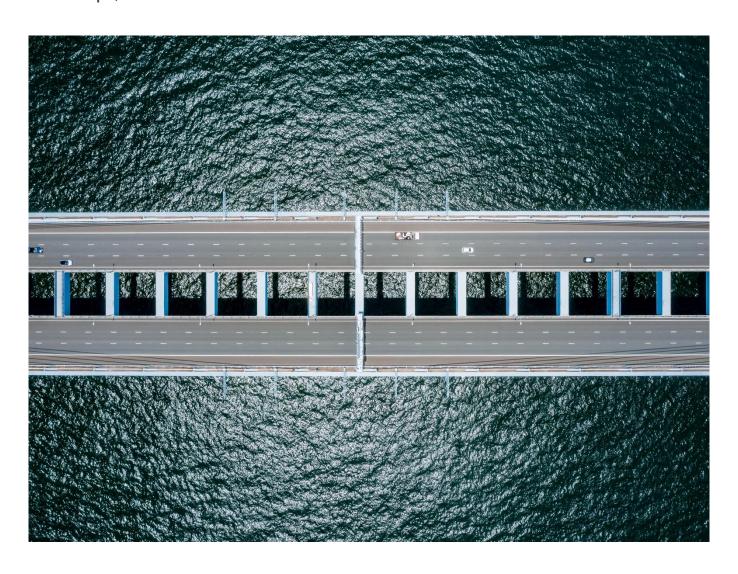


Monetisation road

NHAI's asset pool can generate 15% of the potential funding it needs over the next 5 fiscals

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Research



CRISIL Research analytical contacts

Isha Chaudhary

Director isha.chaudhary@crisil.com

Sehul Bhatt

Associate Director sehul.bhatt@crisil.com

Priyanka Agrawal

Senior Research Analyst priyanka.agrawal@crisil.com



Road monetisation central to NMP

Success of the National Monetisation Pipeline (NMP) unveiled by the Centre recently hinges critically on road assets, a CRISIL Research analysis underlines.

As per the report of the Task Force for the National Infrastructure Pipeline (NIP), 15-17% of the Rs 111-lakh crore investment outlay envisaged under it is to be met through innovative and alternative initiatives such as asset monetisation and funding through a development finance institution (DFI).

NMP has two stated objectives. One, to recycle public capital by generating upfront fees on the existing brownfield infrastructure assets and utilising the proceeds for new asset creation. Two, to bring in private sector efficiencies in operation and management of these assets sans the construction risk.

Monetisation of road assets holds the key here, as it accounts for ~27% of the NMP in value terms. The government aims to generate Rs 1.6 lakh crore by monetising 26,700 km of four-lane-and-above national highways via the toll-operate-transfer (TOT) and the infrastructure investment trust (InvIT) routes at Rs 6 crore per km.

TOT mop-up - a mixed bag so far

The National Highways Authority of India (NHAI) had bid out TOT bundles 1, 3 and 5 successfully, netting Rs 14,700 crore and giving investors ~7% yield. Bundles 2 and 4, however, received tepid response and were cancelled.

Bundles 6, 7 and 8, currently under bidding, have been kept smaller in size to attract domestic capital. The NHAI is also looking to raise Rs 5,000 crore this year via a privately-placed InvIT.

CRISIL Research's analysis of the NHAI's asset pool of 300 national highway projects (across 25,000 km) — extracted from our proprietary database on the basis of historical toll collection and per km toll collection — indicates that 65% of the sample set analysed (in km) recorded medium-to-high toll collection growth of >15% since operation.

Around 31% of the projects (in km) earned >Rs 70 lakh toll revenue per km in fiscal 2020 (pre-pandemic), with >15% growth in toll revenue over the history of the projects, in line with the three TOT bundles successfully monetised so far by the NHAI.

In comparison, TOT bundles 2 and 4, bids for which were cancelled, exhibited average toll collection of Rs 50-70 lakh per km. While TOT bundle 4 posted healthy growth of >30% in toll collection since the commencement of operation of its stretches (weighted average age of only 4.6 years), it was plagued by issues linked to political agitations and limited revenue growth visibility in some stretches.

Another 28% of the projects analysed are yet to stabilise their operations, given their weighted average age of only 4 years.

3



65% of NHAI projects have exhibited healthy toll collection growth since inception

Newly-launched TOT bundles 6 and 7 fare well in terms of toll collection/ km and growth





Toll collection CAGR since operation

Toll collection CAGR since operation

Notes:

- 1. Analysis of >25,000 km of length under tolling across 300+ national highway projects, excludes bridges and tunnels.
- 2. % based on km
- 3. *TOT bundles: toll collection at the time of bidding
- 4. TOT bundles: Green indicates TOT bundles successfully bid, red indicates cancelled bids, yellow indicates recently tendered bundles currently under bidding

Source: NHAI, CRISIL Research - roads and highways projects database

Given that toll collection and growth are contingent on a project's stability/ age since commissioning, we plotted the sample set on an S-curve, grouping projects by age.

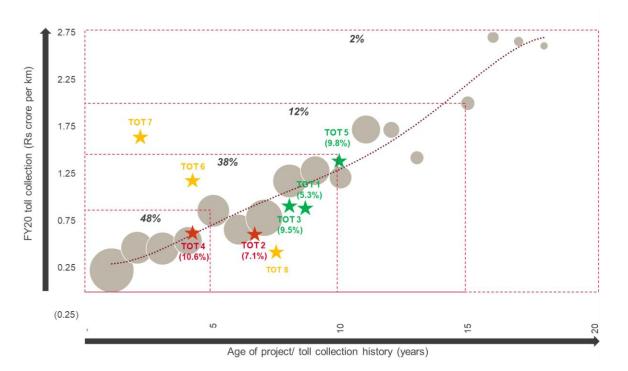
Almost half of the NHAI's asset pool (in km) is less than 5 years old, with average toll revenue of Rs 46 lakh per km, as of fiscal 2020.

As we move up the age bracket, 38% of projects have 6-10 years of toll collection history and garner an average of Rs 1 crore per km, while only 12% are 11 years or older, with a very high average toll collection record of Rs 1.6 crore per km, as of fiscal 2020.

That said, older projects run the risk of alternative or feeder routes being constructed that could divert traffic away, as well as higher operation and maintenance costs.



Nearly half of NHAI asset pool, with median operational age <5 years, yet to stabilise operations



Notes:

- 1. Size of the bubble indicates share of projects with particular age in the sample set
- 2. Figures inside boxes indicate cumulative share of projects in the range
- 3. Figures in brackets indicate yield for bundles based on award value
- 4. Data for TOT bundles is at the time of bidding

Source: NHAI, CRISIL Research - roads and highways projects database

Successful asset monetisation can greatly ease the NHAI's burden

The NHAI has greatly accelerated its pace of national highway construction, from only 2,623 km in fiscal 2017 to 4,175 km in fiscal 2021. However, more projects being executed on the engineering, procurement and construction (EPC) and hybrid annuity model (HAM) modes has meant a greater burden on public funds, with the NHAI's balance sheet seeing its debt-to-equity ratio tripling to 1.5 times as of fiscal 2021.

Given the ambitious targets under Bharatmala and the construction of high-value expressways, along with higher repayment of borrowings, the NHAI's fund requirements are expected to double to Rs 10 lakh crore over the next 5 years vis-à-vis the previous 5 years. If these funding requirements are met, we estimate that the NHAI could construct ~25,000 km of national highways over fiscal 2022-2026P, compared with 17,228 km over fiscal 2017-2021.

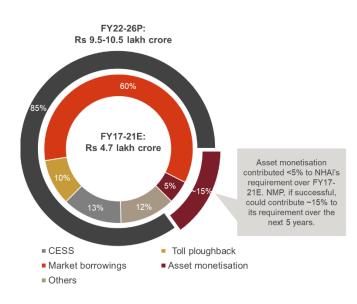
Thus, successful monetisation of the roads pipeline of Rs 1.6 lakh crore is critical as it could potentially meet 15% of the NHAI's fund requirements over fiscal 2022 to 2026P, compared with less than 5% over fiscal 2017-2021E.

A number of factors would bear watching, though, including:

- The attractiveness of projects from the standpoint of future revenue generation potential, given the long tenure of the concession, coupled with the investor's risk appetite
- The operational experience of players in running and maintaining highway assets
- The pace of tendering of these assets by the government at the required valuation

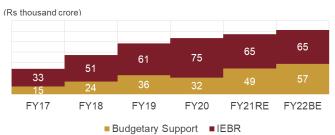


NHAl's requirement to double over the next 5 years



Source: NHAI, CRISIL Research

Budgetary support to NHAI was increased 16% for FY22BE due to higher requirement



NHAI borrowings have risen 6x in the past 5 years



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