

## INFRASTRUCTURE

03 October 2019

### NHAI analyst meet update – upbeat on BMP awards

We attended an analyst meet hosted by NHAI on Bharatmala Pariyojana phase-I (BMP). NHAI aims to award all BMP projects by FY22 (18,791km pending of 35,213km) and to complete construction by FY25. As on date, ~50% of the land is in its possession and balance acquisition is targeted by mid-FY21. BMP cost has risen 20% due to higher construction cost. NHAI is evaluating options to bridge the financing gap (incl. requesting more budgetary support). We expect ordering to moderate in FY20 as land acquisition remains in focus, with a pick-up from FY21.

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**Land acquisition gathering pace...:** NHAI has ~50% of the land required for BMP in its possession and expects to acquire the balance by mid-FY21. Total land cost is pegged at Rs 1.25tn, ~20% of BMP's outlay of Rs 6.4tn, and NHAI expects control land cost given a change in focus towards greenfield projects and relaxed right-of-way (ROW) requirements for select four-lane projects. Over FY15-FY18, land cost has averaged at ~40% of actual project cost and hence we find NHAI's assumptions rather optimistic.

**...awarding to follow suit:** NHAI expects to award 6,000-7,000km in FY20 (~1,500km already awarded in H1) under BMP. We believe this target looks ambitious as (a) NHAI is focusing on land acquisition to mitigate further delays (bids will be put out for HAM/EPC projects only after 80%/90% of the land is in its possession along with 10km of contiguous stretches), and (b) lending norms remain stringent as banks/NBFCs have turned cautious on the infrastructure space. Accordingly, we estimate order awards of ~5,000km in FY20 with a pick-up from FY21, assuming land acquisition progresses well.

**Bridging the financing gap:** NHAI aims to bridge the financing gap via a revised BOT (toll) policy, project-based financing, asset monetisation through TOT/InvIT/SPV models, land monetisation, securitisation of toll collections and other avenues. Peak borrowings are expected at ~Rs 1tn in FY22 due to a rise in construction activity and large debt repayments. As per NHAI, peak debt by FY23 could reach Rs 5.2tn (D/E at 1.1x). In our view, cost overruns on land/construction, below-expected toll collections, any cuts in budgetary support and delayed asset monetisation could take leverage higher.

**Our view:** Cost overruns and funding constraints in BMP have subdued sector valuations. While we expect ordering to pick up from FY21 as NHAI emerges from land bank consolidation, any delays in its financing initiatives could accelerate debt and derail award plans – representing a key risk to our estimates. Reiterate top picks of PNC Infra, KNR Constructions, HG Infra, Ashoka Buildcon.

### KEY RECOMMENDATIONS

Ticker	Price	Target	Rating
ASBL IN	97	185	BUY
DBL IN	394	610	BUY
HGINFRA IN	209	395	BUY
KNRC IN	220	360	BUY
PNCL IN	180	250	BUY
SADE IN	130	175	BUY

Price &amp; Target in Rupees | HGINFRA = HGIEL

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## NHAI meet takeaways

The NHAI meeting was addressed by Asheesh Sharma, Member Finance, along with Madhup Kumar, CGM Finance and SQ Ahmed, GM Finance.

### Project awards

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**FY20 ordering mix to be at 30%/10%/60% between EPC/BOT/HAM**

- The EPC/BOT/HAM award mix is likely to be at 30%/10%/60% going forward, per NHAI. The EPC mode is preferred by contractors as it keeps debt off their balance sheets – the proposed lower share of EPC in the award mix could thus result in high competition and aggressive bidding in the cash contract space.
- NHAI now bids out HAM/EPC projects only after 80%/90% of the required land is in its possession, which has resulted in delayed tendering in FY20. So far, the roads authority has awarded ~120 projects on HAM basis, of which 105 have achieved financial closure. About 40-45 of these were funded by PSU banks/NBFCs.

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**NHAI unwilling for 100% exit by developers on COD**

- BMP's total cost of Rs 6.4tn is proposed to be funded through budgeted cess and toll plough back at Rs 1.8tn (28.8%), borrowings at Rs 3.8tn (59%) and TOT (toll-operate-transfer) monetisation at Rs 0.8bn (12.2%). As per NHAI, this initial outlay has risen by ~20% due to construction cost overruns, implying a revised outlay of ~Rs 7.4tn per our estimates (Fig 8).
- NHAI is unwilling to compromise on the COD + 2-year clause to allow a developer to exit the project early (on COD). This will lead to a bunching up of HAM projects, resulting in a stressed balance sheet for developers.

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**New BOT (toll) policy on the cards; approval could come in by Dec'19**

- The roads authority plans to award three greenfield expressways in FY20, viz. Delhi-Vadodara, Amritsar-Jamnagar and Ambala-Kotputli.
- Given the lack of interest from private players and banks in BOT (toll) projects, NHAI is framing a new policy and expects approval by Dec'19. In our view, only drastic changes in the model concession agreement (MCA) that address the risks associated with the BOT (toll) model can encourage both developers and lenders to participate. As on date, 18-20 contracts are under consideration for award on BOT (toll) basis, of which a bulk of the orders are expected in FY21.

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**Monetisation through  
TOT/InvIT/SPV models**

### Fundraising initiatives

- **TOT:** NHAI plans to raise ~Rs 800bn from the monetisation of toll projects. It may also consider reducing concession periods for certain packages from the existing 30-year period to attract domestic players. Two TOT bundles are likely to be awarded in FY20 (one each in Q3 and Q4).
- **InvIT:** The plan is to attract financial investors and have professional project managers for operating & maintenance (O&M) obligations.
- **SPV-based model:** NHAI will take on the execution risk and then bid out the project SPV for tolling and O&M purposes. It may also consider bundling together existing brownfield projects in the vicinity to overcome the risk of toll leakage. NHAI has already signed an MoU for its first SPV with NIIF, which has the Abu Dhabi Investment Authority (ADIA) as a committed investor. In addition, 14 greenfield stretches are under development with a potential investment opportunity of up to US\$ 10bn.

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**Peak debt of Rs 5.2tn by  
FY23E and peak debt  
servicing of Rs 498bn in  
FY22E**

### Debt servicing plans

- NHAI expects a strong uptick in toll collections, higher budgetary support from cess, monetisation through TOT and securitisation of toll collections to support debt servicing requirements.
- The authority expects peak debt to reach Rs 5.2tn (1.1x gross D/E) by FY23. Debt repayment (principal and interest) is expected at Rs 199bn in FY20, before peaking at Rs 498bn in FY22 and reducing to Rs 464bn in FY23. Maturity of infrastructure bonds should result in a spike in debt servicing in FY22 and FY23. NHAI expects a steep 4.2x uptick in toll collections led by commissioning of newer HAM projects and maturity of traffic on existing toll roads to Rs 387bn in FY23 over FY19.
- According to NHAI, the land cost per hectare is likely to reduce due to a change in project mix (focus on greenfield projects where land cost is a fourth that of brownfield works) and relaxed ROW requirements for select four-lane projects (to 45mtr from 60mtr).
- NHAI is in talks with the finance ministry for higher fund allocation from the Central Road and Infrastructure Fund (CRIF), where its share for FY20 is Rs 161bn (-10.9% YoY).

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**Land acquisition cost per  
hectare a fourth that of  
greenfield projects**

## Initiatives for procedural improvement

**Targeting stake sale approval timeline of 15 days vs. 3-6 months now**

- **SOP for equity sale transactions:** NHAI is in the process of developing standard operating procedures (SOP) to slash the time required for approval of equity stake sale transactions in road projects, to 15 days as against 3-6 months currently. It has ~15 such projects pending approval.
- **One-time fund infusion:** Financial support in the form of loans is being examined to revive languishing highway projects.
- **Stuck projects:** NHAI has finalised a policy that will ensure completion of stranded projects on EPC basis and allow an exit route for stressed concessionaires (IL&FS for instance) by offering compensation.
- **Harmonious substitution:** If a project has become unviable from a developer's perspective, lenders can replace the developer in both ongoing and completed projects, after securing NHAI approval. As on date, 3-4 such proposals are pending for approval.
- **Formation of consultation committee:** NHAI has formed a three-member consultation committee to settle arbitration-related cases and resolve contractual issues.

**FIG 1 – KEY COMPONENTS OF BMP AS APPROVED BY CCEA IN OCT'17**

Components of Bharatmala Pariyojana program	Total length (km)	Phase-I (km)	Phase-I, NHAI (km)
Economic Corridor Development	25,329	9,000	8,000
Inter-corridors and Feeder Roads	11,764	6,000	6,000
National Corridor Efficiency Improvement	16,449	5,000	5,000
Border & International Connectivity Roads	8,159	2,000	860
Coastal & Port Connectivity Roads		2,000	2,000
Greenfield Expressways	2,504	800	800
<b>Total</b>	<b>64,205</b>	<b>24,800</b>	<b>22,660</b>

Source: Company, BOBCAPS Research

**FIG 2 – KEY COMPONENTS OF BMP AS UPDATED BY NHAI AND APPROVED BY CCEA**

Components of Bharatmala Pariyojana program	Total length revised (km)	Phase-I (km)	Civil cost (Rs bn)	Land cost (Rs bn)	Total outlay for Phase-I (Rs bn)
Economic Corridor Development	26,200	9,000	1,170	30	1,200
Inter-corridors and Feeder Roads	15,500	6,000	705	95	800
National Corridor Efficiency Improvement	13,100	5,000	910	90	1,000
Border & International Connectivity Roads	5,300	2,000	200	50	250
Coastal & Port Connectivity Roads	4,100	2,000	170	30	200
Greenfield Expressways	1,900	800	310	90	400
<b>Sub-total (A)</b>	<b>66,100</b>	<b>24,800</b>	<b>3,465</b>	<b>385</b>	<b>3,850</b>
<b>Balance Road works under NHDP (B)</b>		<b>10,000</b>			<b>1,500</b>
<b>Sub-total (A+B)</b>		<b>34,800</b>			<b>5,350</b>

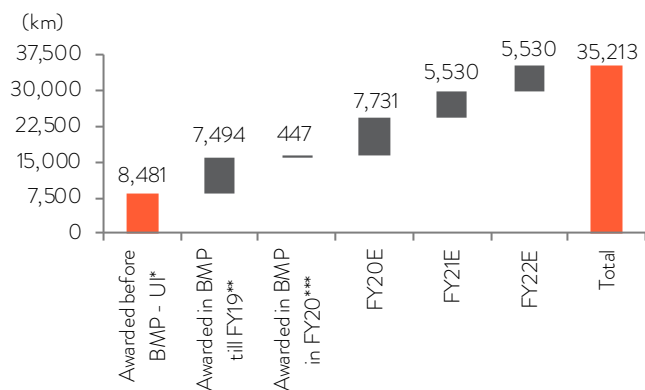
Source: NHAI, BOBCAPS Research | CCEA – Cabinet Committee on Economic Affairs

**FIG 3 – BMP PROGRESS SO FAR (UP TO AUG'19); OVER 50% AWARDING EXPECTED BY END-FY20**

Type of corridor	Awarded		Appraised – Pending for award		Awarded	
	No. of projects	Length (km)	No. of projects	Length (km)	No. of projects	Length (km)
Economic corridor	59	2,261	14	465	73	2,725
Inter corridor routes	11	483	2	79	13	562
Feeder routes	5	171	4	149	9	320
National corridor efficiency enhancement	45	1,640	6	179	51	1,819
Border roads	6	973	-	-	6	973
International connectivity roads	1	69	-	-	1	69
Port connectivity roads	4	91	-	-	4	91
Coastal roads	2	77	-	-	2	77
Expressways	17	464	4	119	21	583
<b>Bharatmala total (a)</b>	<b>150</b>	<b>6,228</b>	<b>30</b>	<b>991</b>	<b>180</b>	<b>7,218</b>
<b>Residual NHDP (b)</b>	<b>52</b>	<b>2,405</b>	<b>1</b>	<b>49</b>	<b>53</b>	<b>2,454</b>
<b>Total (a+b)</b>	<b>202</b>	<b>8,632</b>	<b>31</b>	<b>1,040</b>	<b>233</b>	<b>9,672</b>

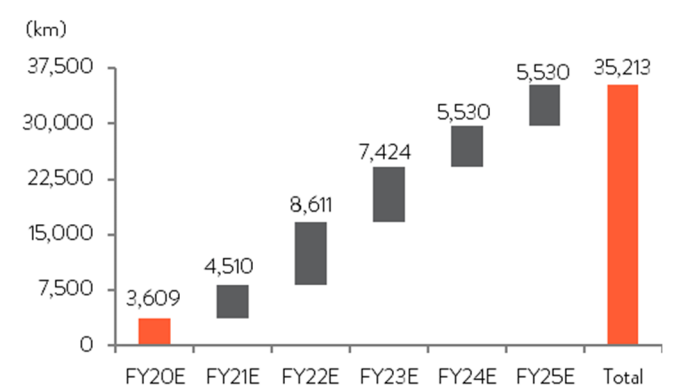
Source: NHAI, BOBCAPS Research

**FIG 4 – NHAI AWARD PLANS: 18,791KM OVER FY20-FY22; 8,150KM^ AWARDED SO FAR UNDER BMP**



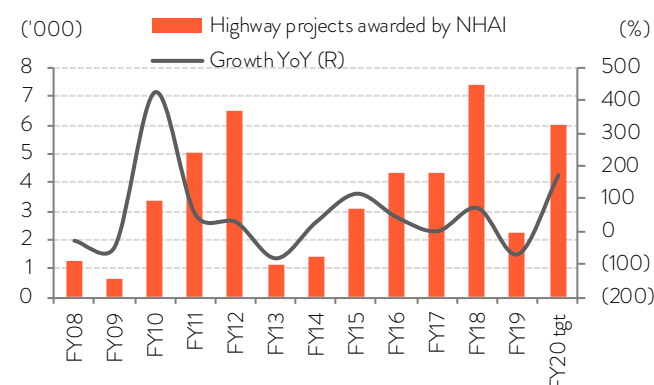
Source: NHAI, BOBCAPS Research | \*Includes 1,147km of projects awarded under other schemes after approval of BMP (UI - Under Implementation); \*\*209km awarded under BOT (Toll) mode not included (not in revenue computation as well); \*\*\*Till 15 Jun 2019 | ^8,150km awarded under BMP up to 15 Jun 2019; 16,422km including NHDP

**FIG 5 – NHAI CONSTRUCTION PLANS: PEAK EXECUTION IN FY22; BMP COMPLETION BY FY25**



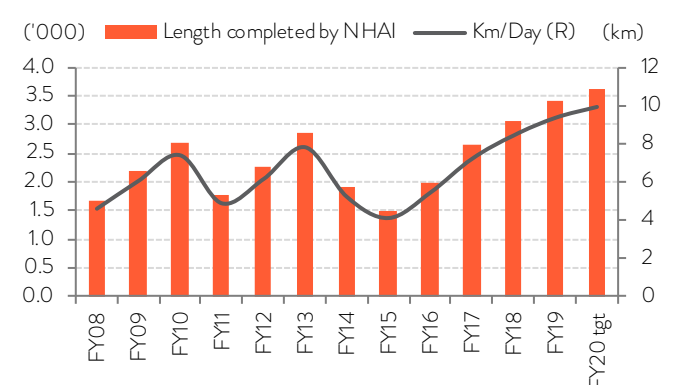
Source: NHAI, BOBCAPS Research

**FIG 6 – NHAI AWARD TARGET FOR FY20 AT 6,000-7,000KM**



Source: NHAI, BOBCAPS Research

**FIG 7 – FY20 CONSTRUCTION TARGET AT 3,609KM OR 9.9KM/DAY**



Source: NHAI, BOBCAPS Research

**FIG 8 – SOURCES OF FUNDS FOR BMP; ~ 20% COST OVERRUNS DUE TO INCREASE IN CONSTRUCTION COST**

Particulars (Rs bn)	FY19E	FY20E	FY21E	FY22E	FY23E	Total
Budget – Cess + Toll ploughback	300	333	369	409	427	1,840
Borrowings	786	548	565	895	969	3,763
TOT	50	56	81	154	439	779
<b>Total (a)</b>	<b>1,137</b>	<b>937</b>	<b>1,015</b>	<b>1,458</b>	<b>1,835</b>	<b>6,382</b>
<b>~20% cost overrun due to rise in cost of construction</b>						
Original construction cost (b)						4,965
<b>Additional cost of construction (c = 20% x b)</b>						<b>993</b>
Total cost of construction (b + c)						5,958
<b>Revised BMP outlay as per our estimates (incl. construction &amp; land cost) (d = a+c)</b>						<b>7,375</b>

Source: NHAI, BOBCAPS Research

**FIG 9 – NHAI YEAR-WISE EXPENDITURE PLANS**

Particulars (Rs bn)	FY19E	FY20E	FY21E	FY22E	FY23E	Total
Land acquisition cost	391	158	-	-	-	549
Project expenditure – work	444	456	620	741	891	3,153
Annuity / Grants	90	106	117	141	203	656
<b>Total Project expenditure (a)</b>	<b>926</b>	<b>719</b>	<b>737</b>	<b>882</b>	<b>1,094</b>	<b>4,358</b>
Operation & maintenance (b)	26	34	47	64	86	257
Debt servicing (c)	146	192	220	470	617	1,645
Others (d)	17	5	6	7	7	43
<b>Total (a + b + c + d)</b>	<b>1,115</b>	<b>951</b>	<b>1,010</b>	<b>1,423</b>	<b>1,804</b>	<b>6,303</b>
<b>% share</b>						
Land acquisition cost	35.1	16.6	-	-	-	8.7
Project expenditure – work	39.9	48.0	61.4	52.1	49.4	50.0
Annuity / Grants	8.1	11.1	11.5	9.9	11.2	10.4
<b>Total Project expenditure (a)</b>	<b>83.0</b>	<b>75.7</b>	<b>72.9</b>	<b>62.0</b>	<b>60.7</b>	<b>69.1</b>
Operation & maintenance (b)	2.4	3.6	4.7	4.5	4.7	4.1
Debt servicing (c)	13.1	20.1	21.8	33.0	34.2	26.1
Others (d)	1.5	0.6	0.6	0.5	0.4	0.7
<b>Total (a + b + c + d)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

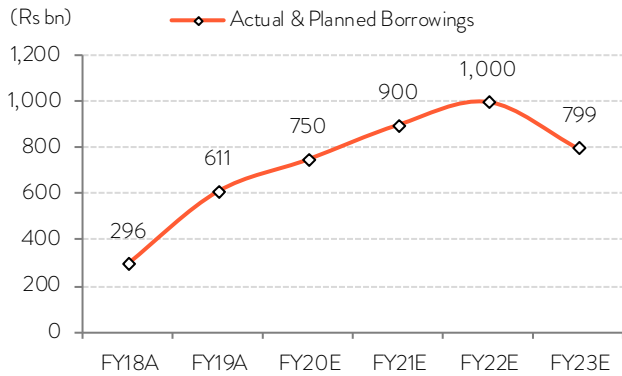
Source: NHAI, BOBCAPS Research

**FIG 10 – REVENUE RECEIPTS EXPECTED BY NHAI TO SUPPORT BMP**

Particulars (Rs bn)	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	Total
Cess through budget	124	161	177	195	214	236	1,107
Revenue from toll collections	86	92	102	148	252	387	1,068
Capitalisation from TOT (monetisation)	-	-	110	121	133	146	511
Securitisation	-	-	386	-	-	-	386
<b>Total funds</b>	<b>211</b>	<b>253</b>	<b>775</b>	<b>464</b>	<b>599</b>	<b>769</b>	<b>3,071</b>

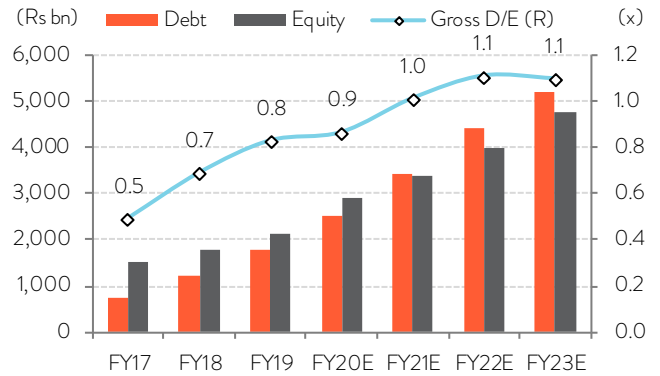
Source: NHAI, BOBCAPS Research

**FIG 11 – NHAI PLANS PEAK BORROWINGS OF ~RS 1TN IN FY22E**



Source: NHAI, BOBCAPS Research

**FIG 12 – GROSS D/E TO REMAIN UNDER CONTROL AT 1.1X BY FY23E**



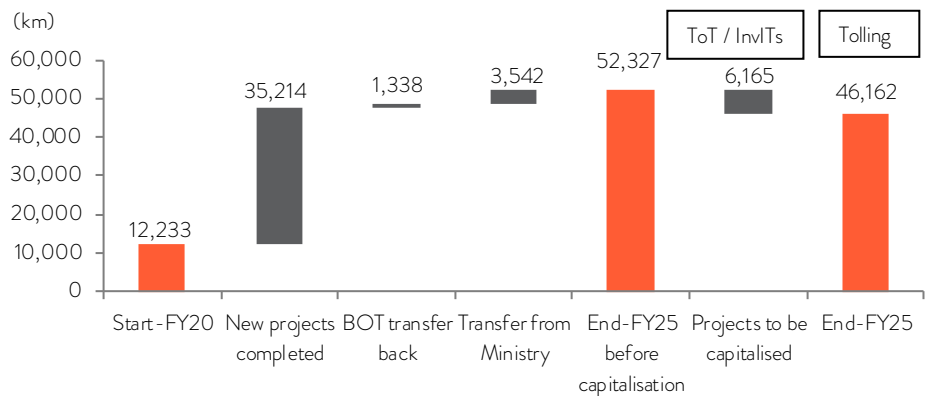
Source: NHAI, BOBCAPS Research

**FIG 13 – NHAI's DEBT SERVICING PLAN AT ~RS 1.7TN OVER FY18-FY23**

Particular (Rs bn)	FY18A	FY19A	FY20E	FY21E	FY22E	FY23E	Total
Debt servicing (Principal + Interest)	89	146	199	298	498	464	1,695
<b>Total</b>	<b>89</b>	<b>146</b>	<b>199</b>	<b>298</b>	<b>498</b>	<b>464</b>	<b>1,695</b>

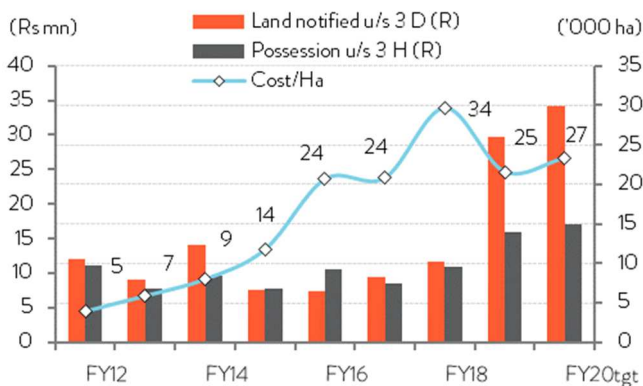
Source: NHAI, BOBCAPS Research

**FIG 14 – HIGH TOLL REVENUE POTENTIAL ON BMP COMPLETION BY END-FY25 (~52,327KM TO BE TOLLED, OF WHICH 6,165KM LIKELY TO BE MONETISED)**



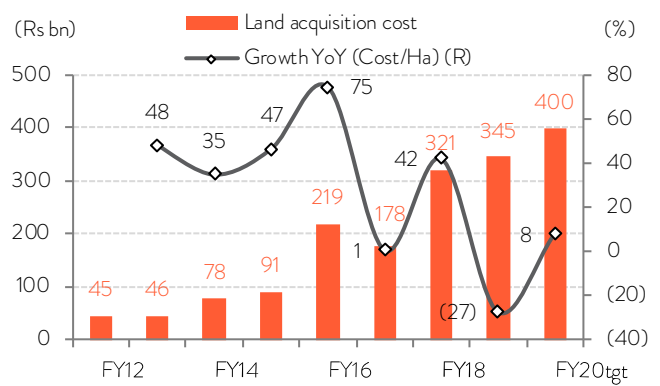
Source: NHAI, BOBCAPS Research

**FIG 15 – LAND COST/HA HAS STABILISED FROM FY19**



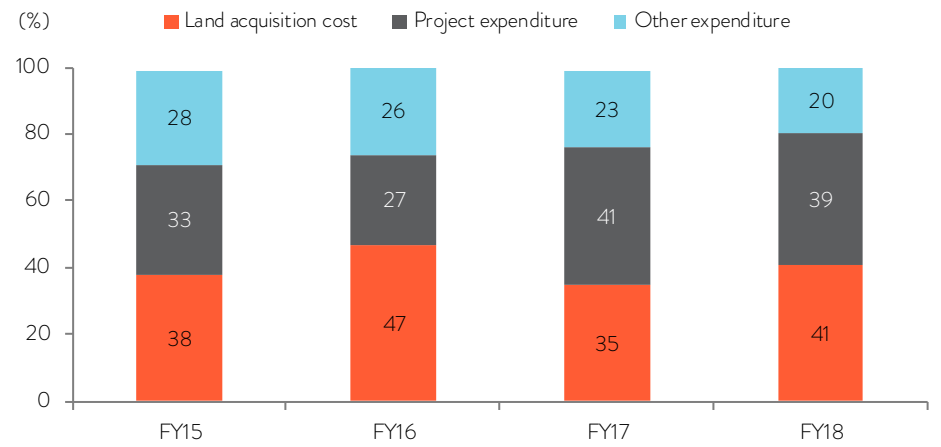
Source: NHAI, BOBCAPS Research

**FIG 16 – FY20 TARGET LAND ACQUISITION AT 15,000HA**



Source: NHAI, BOBCAPS Research

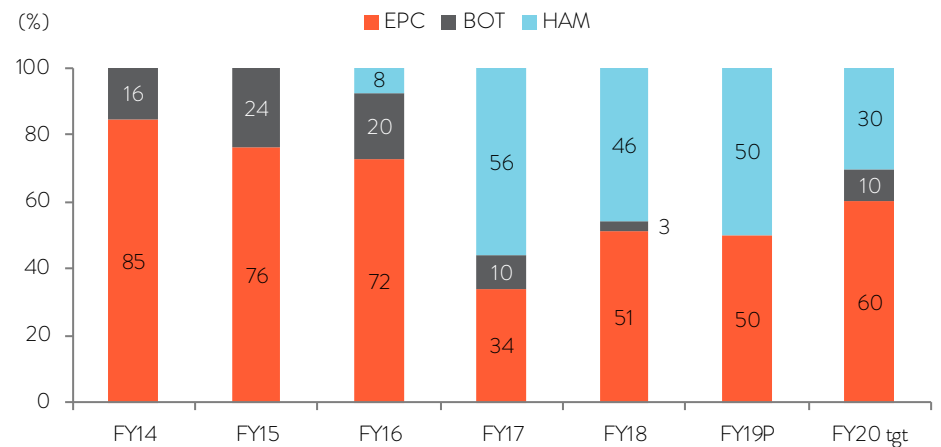
**FIG 17 – AVERAGE COST OF LAND AT ~40% OF TOTAL PROJECT COST OVER LAST FOUR YEARS**



Source: NHAI, BOBCAPS Research

NHAI’s focus on awarding ~60% projects on HAM basis in FY20 with no easy exit can stress the balance sheet of developers; EPC preferred

**FIG 18 – AWARD MIX: SHARE OF EPC TO RISE**



Source: NHAI, BOBCAPS Research

Three corridors likely to be awarded in FY20

**FIG 19 – ~US\$ 10BN OF PROJECTS IN 7 CORRIDORS READY FOR INVESTMENT**

Sr. No.	Greenfield economic corridors	Sr. No.	Greenfield economic corridors
1	Delhi-Vadodara	8	Surat-Ahmednagar-Solapur
2	Amritsar-Jamnagar	9	Hyderabad-Raipur
3	Ambala-Kotputli	10	Nagpur-Bangalore
4	Raipur-Vishakapatnam	11	Kharagpur-Siliguri
5	Chennai-Salem	12	Solapur-Kurnool
6	Hyderabad-Vishakapatnam	13	Bangalore-Pune
7	Indore-Hyderabad	14	Nagpur-Vajjayawada

Source: NHAI, BOBCAPS Research



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### Recommendations and Absolute returns (%) over 12 months

**BUY** – Expected return >+15%

**ADD** – Expected return from >+5% to +15%

**REDUCE** – Expected return from -5% to +5%

**SELL** – Expected return <-5%

**Note:** Recommendation structure changed with effect from 1 January 2018 (Hold rating discontinued and replaced by Add / Reduce)

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