

# Infrastructure 'Re-accelerate' series – Roads and Railways sectors

How India's roads and railways sectors will rebound from COVID-19 crisis

September 2020



# Table of contents

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1	Executive summary
2	Roads and bridges
3	Railways
4	Policy recommendations

# Foreword

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The aftereffects of COVID-19 pandemic will be wide and large. The pandemic has already affected the economy severely. Although the recovery is going to be a long-drawn and hard-fought process, Indian economy is resilient and shall bounce back.

Indian economy largely consists of roads and railways sector. Investments in the sector have gradually increased over the years to improve inter-state connectivity. However, due to the recent unprecedented conditions posed by COVID-19, daily transportation and freight movement came close to a halt during the lockdowns, shaking up the industry. To re-accelerate, over the coming 5 years, Indian Government is set to boost investments to INR 30T in the transport sector. And by expanding requirement for faster movement of goods, the sector is poised for long-term growth.

This report is intended to provide various industry stakeholders including business leaders an overall perspective on the impact of COVID-19 on the roads and railways sector as the economy starts recovering.

We have identified the growth trends in the roads and railways sectors along with the key public and private sector players. We

have assessed how the roads and railways network has grown over the past years and how has budgetary allocation evolved for them. In the section on EPC companies, we have looked at the trends of receivables and payables for them, along with the impact on various demand and supply factors in short, medium and long term. We have also analysed the likely recovery scenario for all stakeholders in the sector, and what policy measures can the government take to revive economic activity in the sectors.

The situation is evolving rapidly, and some of the expected scenarios might have slight variations. This report reflects our perspectives in July 2020. Contact us for latest updates.

We, at PGA Labs, look forward to continuing the discussion with our friends across sectors and exchanging notes as the situation evolves.



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# Glossary

Abbreviation	Full form	Explanation (if required)
AP	Accounts payable	Money owed by a company to its suppliers.
AR	Accounts receivable	Money owed to a company by its customers
BOT	Build Operate Transfer	
CAGR	Compounded Annual Growth Rate	
Capex	Capital expenditure	Money spent by a company to buy, maintain or improve its fixed assets
CCC	Cash conversion cycle	Time taken by a company to convert its investment in inventory into cash flow from sales
DIO	Days inventory outstanding	Average number of days a company holds its inventory before selling it
DPO	Days payables outstanding	Average number of days a company takes to pay its suppliers
DRO	Days receivables outstanding	Average number of days an organization takes to receive payments from its customers
EBITDA	Earning before interest, taxes, depreciation and amortization	
ECB	External commercial borrowing	Debt raised by companies from other countries (where interest rates are lower)
EPC	Engineering, procurement and construction	Firms engaged in construction activities in the infrastructure sector
GDP	Gross Domestic Product	
NHAI	National Highway Authority of India	
NHIDCL	National Highway and Infrastructure Development Corporation Limited	
NPA	Non-performing assets	
PAT	Profit after tax	
PLR	Prime Lending Rate	
PWD	Public Works Department	
RM	Raw material	
WC	Working capital	Capital requirement of a business to maintain its day-to-day operations

# Key highlights: Roads and railways

## Overall

- Supported by expanding requirement for faster movement and goods, India's road and railways sector is poised for long term growth
- PPP participation in roads has been muted in the past two years and is expected to remain low in the near-term
  - Private players in the sector need **stable long-term funding** for BOT projects
- State PWDs maintain **~60%** of the NH stretch in India, funds for which are allocated by both central and state governments
- Railways targeting increased share in freight movement due to cost advantage over road transport
- COVID-19 will impact the construction activity in both roads and railways in short-to-medium term, resulting in project delays and increased project cost
  - Uncertainty due to COVID-19 and consequent impact on valuation can delay NHAI's asset monetization plan

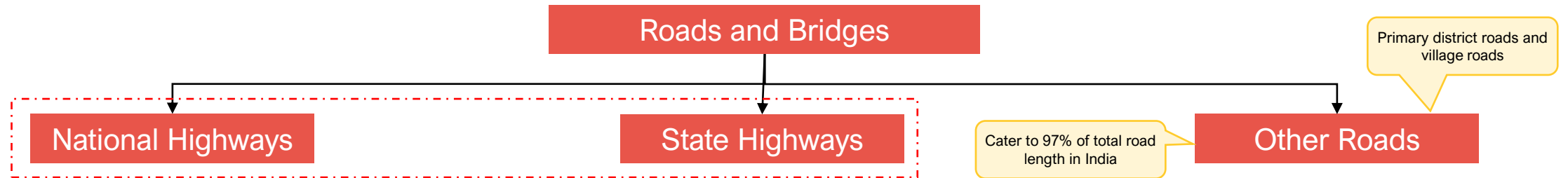
## Roads

- Highway accounts for only **~3%** of India's total road length, lower than the value for developed countries; High long-term growth potential
- Most of NH construction controlled by government through NHAI
  - Government is focusing more on EPC projects due to lower capital availability with private road developers
  - In long-term, NHAI may completely turn into asset monetization firm with NH construction in PPP mode
- Increase in project cost and slower revenue realization in recent times
  - WC requirement for EPC firms in the sector has increased from 1 to 2 months over FY08-19
- **Toll revenue is expected to recover to pre-COVID level within 9 months**; commercial traffic will rebound faster than passenger
- Going forward, private concessionaires will face more scrutiny due to stressed balanced sheet. NHAI might also need to explore more alternate financing options

## Railways

- Indian Railways has one of the biggest railway network in the world
  - Railways planning to increase its share in freight movement from 33% to 50% by 2030, resulting in new infra. projects such as Dedicated Freight Corridor
- **Station redevelopment**, passenger and freight operations are **emerging privatization** opportunities in railways
- EPC firms in the sector have seen healthy WC trend supported by Indian Railways financial health and stable supplier partnerships
- However, in near term, some new projects might get delayed due to budgetary constraints because of COVID. Existing projects will also be pushed back due to labor unavailability
- Freight revenue is expected to recover within 4-5 months, but passenger revenue may take more than 9 months to recover completely

# Roads and bridges primarily consists 3 major components – National highways, state highways and other roads

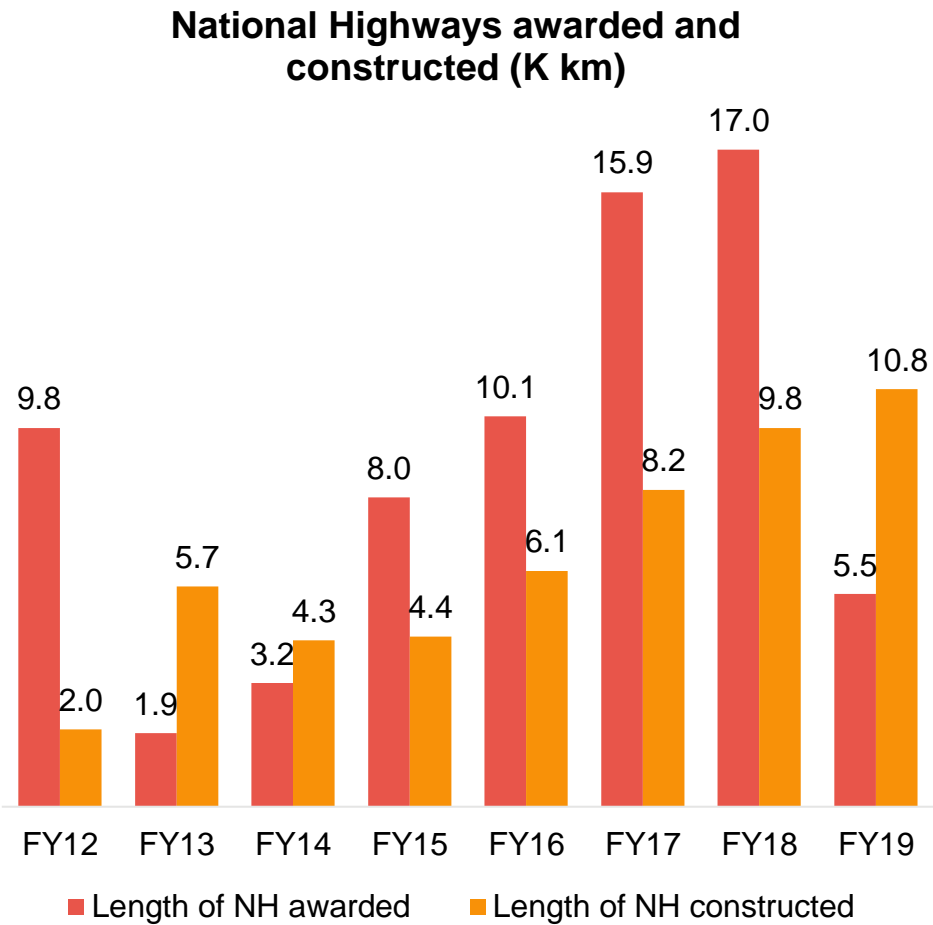
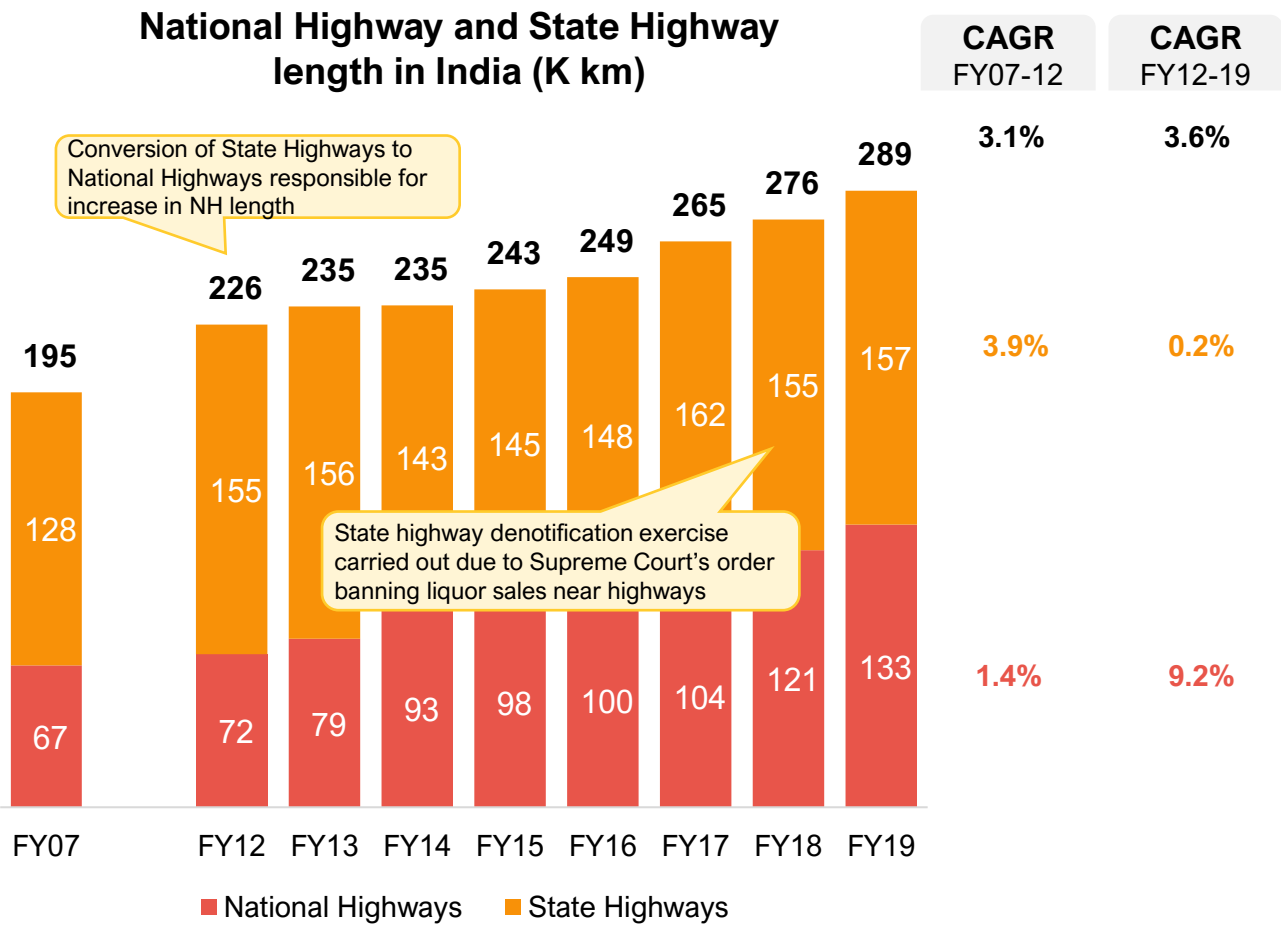


Type of road	Description	Agencies managing the road
National Highway	Managed by central government owned agencies	  
	Managed by state government	     
	Public-private partnership	   
State Highway	Managed by state government	     
	Managed by municipal corporations (for stretches passing through the city)	    
Other roads	Managed by municipal corporations, Cantonment Boards etc.	     

# National Highway project award and construction has increased significantly post FY14

National Highway length has grown at 9% CAGR over FY12-19

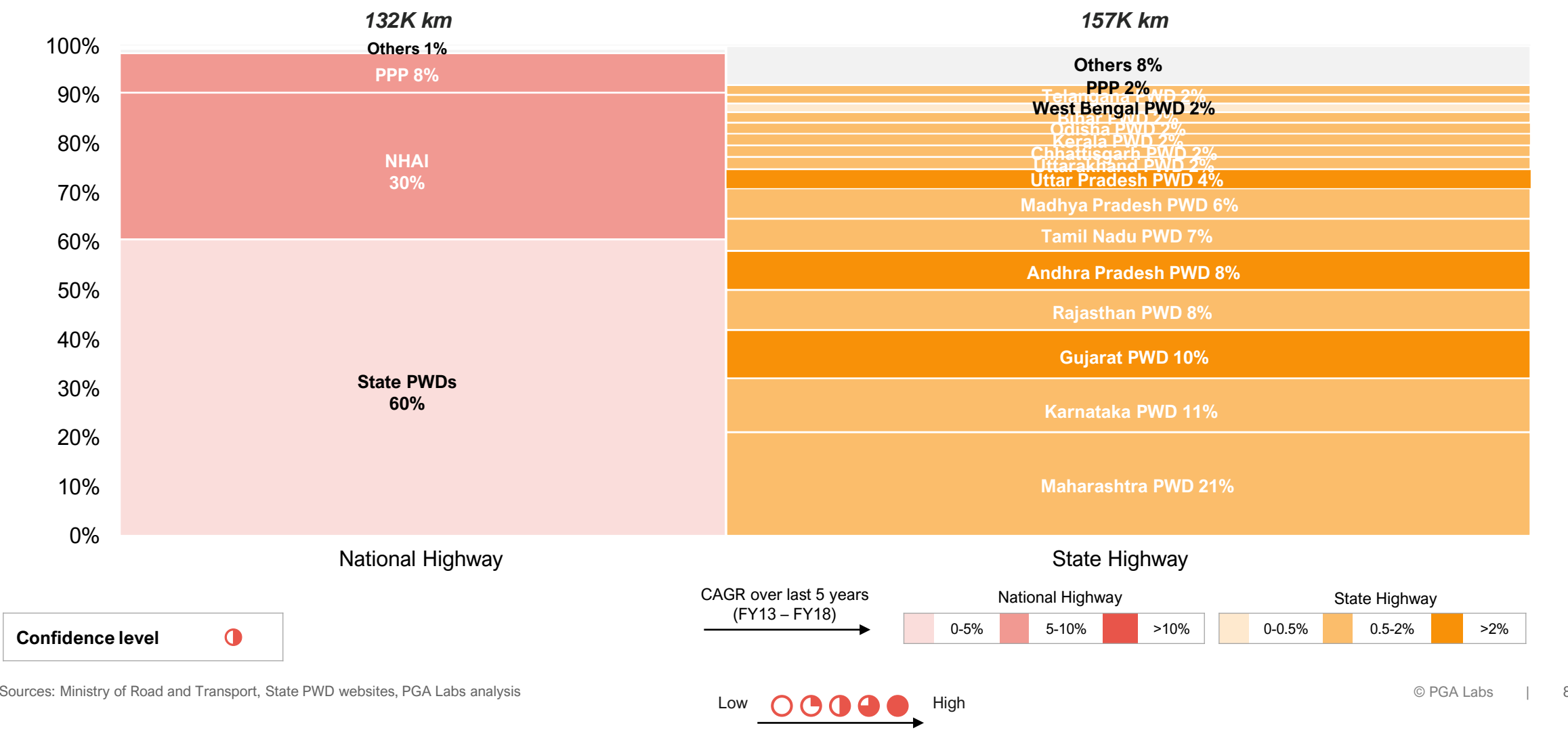
National Highway construction has picked up pace during FY16-19 due to increase in projects awarded



# State PWDs maintain the bulk of national highways in India; Maharashtra has the largest network of state highways

Overview by operational road maintained % (FY19)

Total ~ 289K km

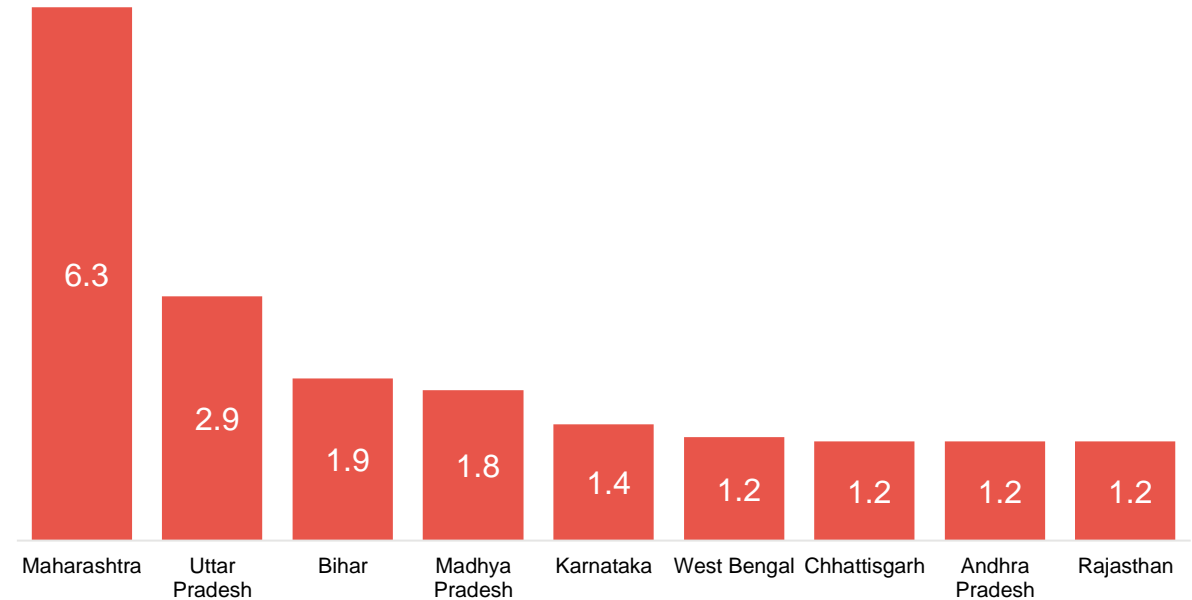




# Maharashtra has the highest length of stuck NH projects in India; delay in land acquisition a primary reason for project delays

	WIP projects	Length (km)
Roads	Upgradation of NH104 along Sitamarhi – Jaynagar – Narahia section	180
	Upgradation of NH85 along Bodimettu – Munnar section	42
	Upgradation of Ahmedpur – Jamkhed section of NH548D in Maharashtra	80
	Upgradation of NH353J on Katol – Warud section in Maharashtra	41
	Upgradation of Pratapgarh to Allahabad Bypass road section of NH96 to four lanes	35
Bridges	Rehabilitation of 4-lane MG Setu over Ganga river on NH19 in Bihar	5.75
	Construction of bridge across Zuari river on NH17 on Panjim – Mangalore section in Goa	-
	Construction of 6-lane elevated corridor on NH 163 to decongest urban limits of Hyderabad	7
	Construction of bridge across river Mandovi at Panaji	-

Stuck NH projects in key states in FY19 (K km.)



## Key reasons for stuck projects

- BOT projects stuck due to cash flow issues with concessionaires implementing the road project.
- Delay in land acquisition due to protest by villagers for fair compensation from the government.
- Delay in shifting utilities by concerned government agencies
- Poor performance of contractors
- Contractual issues with contractors

Notes: Stuck projects have been estimated based on total stuck project value of INR 2.7 lakh crore and net stuck project length of 28K kms, along with value-wise stuck projects in key states; State highways not included due to paucity of data

Sources: Ministry of Road Transport and Highways, PGA Labs analysis

# EPC company: Dilip Buildcon has slowly diversified into mining sector from roads; company has high DIO due to lower reliance on sub-contractors



Revenue\*

INR 94.1B

EBITDA\*

INR 18.1B

PAT\*

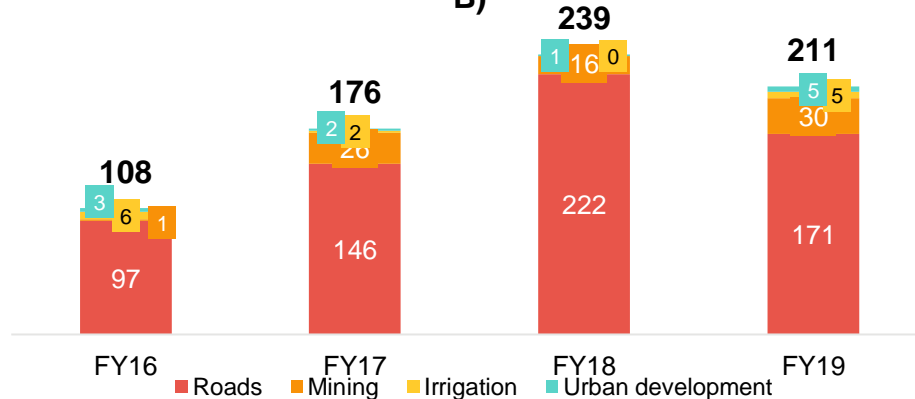
INR 5.5B

Order book size\*

INR 211B

Order book of Dilip Buildcon has grown at 25% CAGR over FY16-19; roads contribute 80-90% of the order book

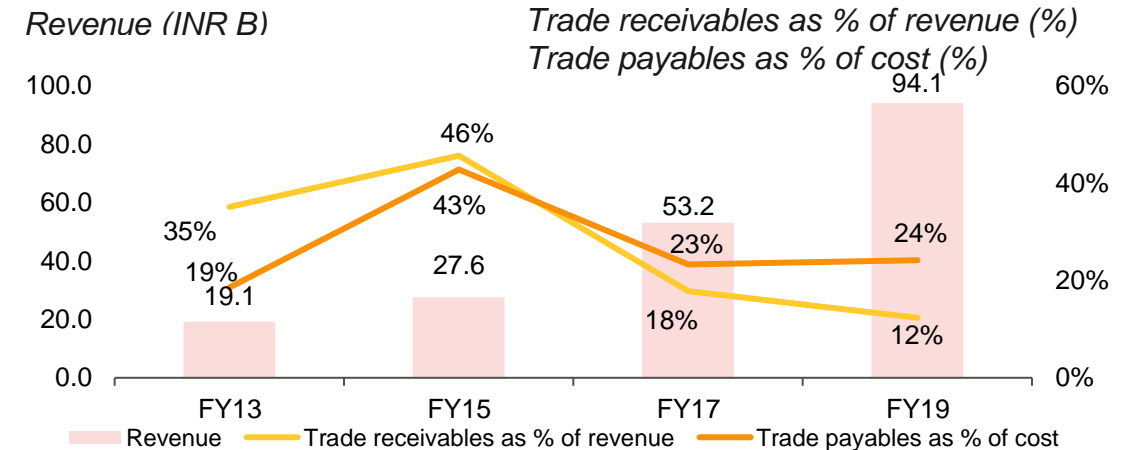
Order book composition for Dilip Buildcon (INR B)



% share in order book

	FY16	FY17	FY18	FY19
Roads	90%	83%	93%	81%
Mining	1%	15%	6%	14%
Irrigation	6%	1%	-	3%
UD	3%	1%	0.5%	2%

Dilip Buildcon has a WC requirement of 3-4 months; DRO has declined in FY19 as compared to previous years



	FY03	FY15	FY17	FY19
DPO	42	122	91	83
DRO	90	149	64	45
DIO	76	138	155	115
CCC	124	165	128	77

Lower dependence on sub-contractors

Note: \* represents values for FY19; Revenue refers to operating revenue; Sub-contracting expenses have been considered as a part of COGS for calculating DPO, DIO and CCC

<sup>1</sup>DPO is no. of days taken to pay off the suppliers; <sup>2</sup>DRO is number of days taken to receive payment from customers; <sup>3</sup>DIO is no. of days taken to liquidate inventory; <sup>4</sup>CCC is no. of days taken to convert its investment in inventory into cash flow from sales

Sources: Annual reports, PGA Labs analysis

# EPC company: Gayatri Projects' order book has increased driven by growth in the roads segment; working capital requirement has also increased



Revenue\*

INR 34.6B

EBITDA\*

INR 7.6B

PAT\*

INR 2.1B

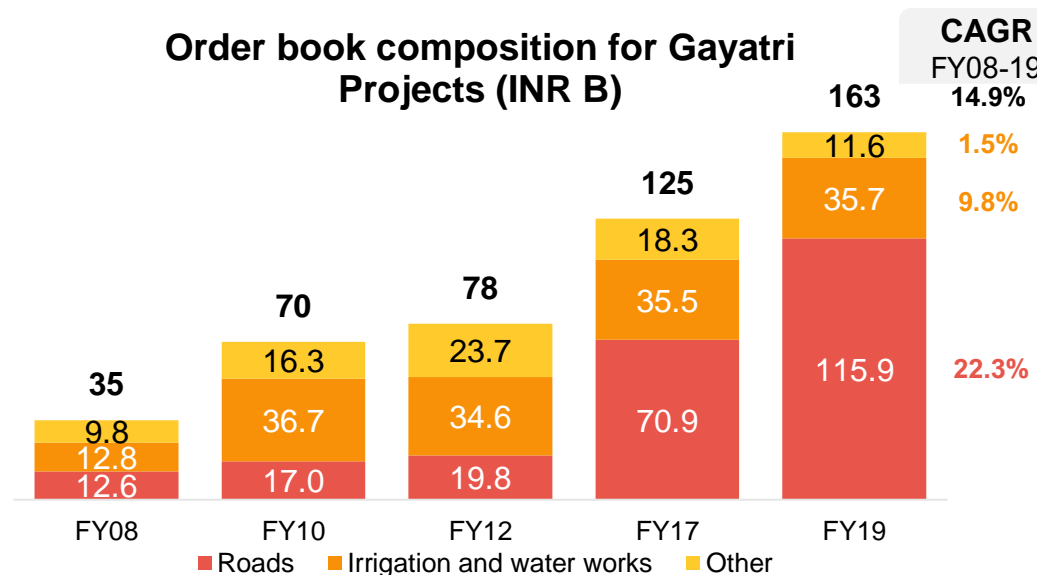
Order book size\*

INR 163.2B

Order book has increased at 15% CAGR over FY08-19; road projects comprise 71% of the order book

DPO has increased with DRO as the portfolio of roads projects has increased; CCC has increased marginally

Order book composition for Gayatri Projects (INR B)

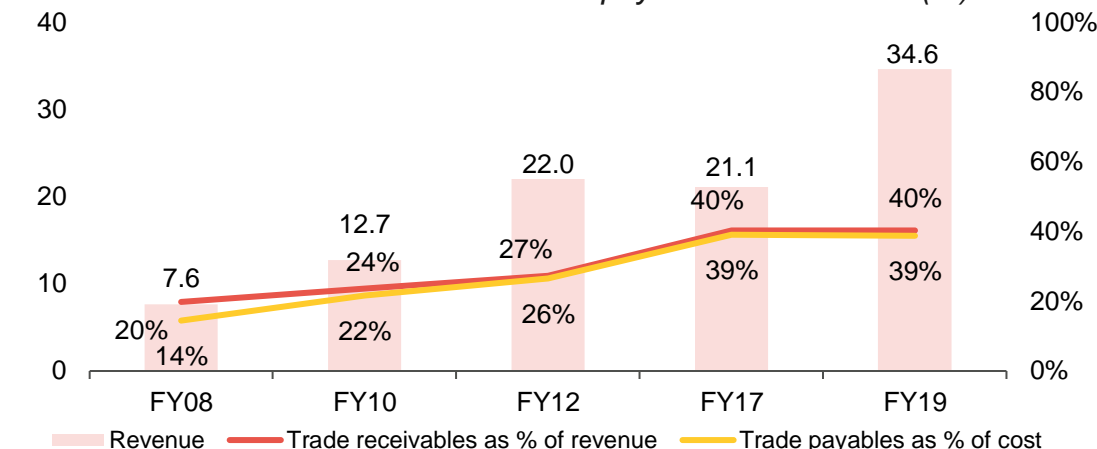


% share in order book

	FY08	FY10	FY12	FY17	FY19
Roads	36%	25%	26%	57%	71%
Irrigation	36%	52%	44%	28%	22%
Others	28%	23%	30%	15%	7%

Revenue (INR B)































Trade receivables as % of revenue (%)  
Trade payables as % of cost (%)



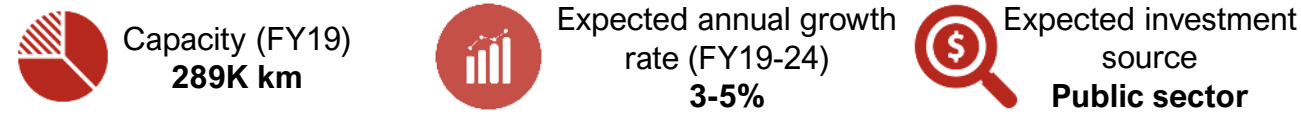
	FY08	FY10	FY12	FY17	FY19
DPO	41	65	73	118	125
DRO	56	73	83	122	133
DIO	23	22	22	55	54
CCC	39	31	32	59	52







Increase in WC requirement

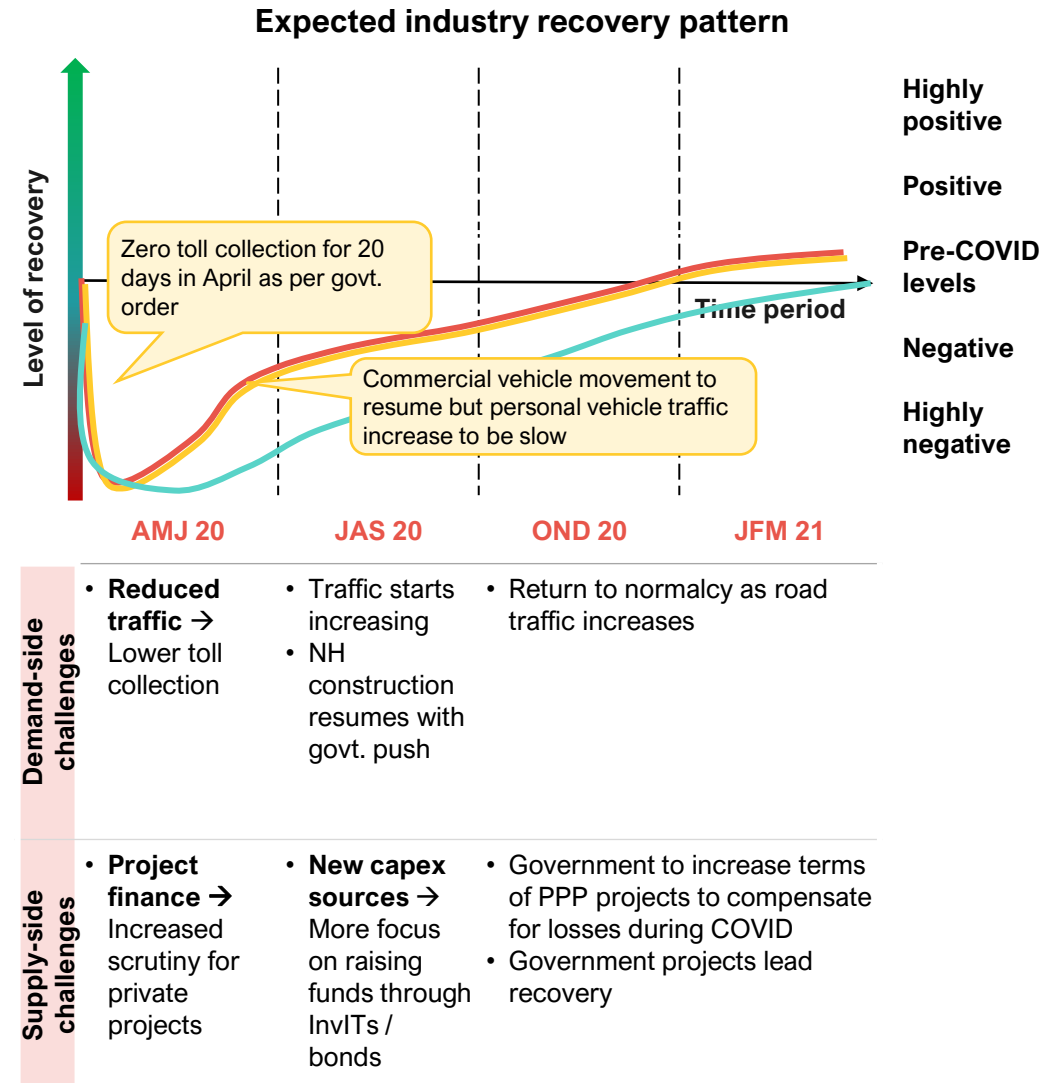
# COVID-19 is expected to have a high short term-impact across demand and supply factors; demand to increase in medium-term

		Supply side factors					Demand side factors		
		 <b>RM and equipment</b>	 <b>Labor</b>	 <b>Payment terms and costing</b>	 <b>Availability of finance</b>	 <b>Payment terms and pricing</b>	 <b>Highway demand</b>		
2008 crisis	Overall	 <ul style="list-style-type: none"><li>No restriction on availability of raw materials and equipment</li></ul>	 <ul style="list-style-type: none"><li>No restriction of availability of labor for construction</li></ul>	 <ul style="list-style-type: none"><li>Construction activity was not affected, but the overall speed of construction was slower</li></ul>	 <ul style="list-style-type: none"><li>Reduction in budgetary allocations for new projects by government</li></ul>	 <ul style="list-style-type: none"><li>AR increased for EPC companies due to payment delays</li></ul>	 <ul style="list-style-type: none"><li>No major impact as traffic movement on highways did not reduce</li></ul>		
	<div>Fixed cost due to idle equipment</div>								
	Short-term (1 to 3 months)	 <ul style="list-style-type: none"><li><b>EPC company: Limited availability</b> of raw materials due to supply chain disruption. On-site equipment to remain available, but transportation of new equipment to be affected</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Labor starts joining back in month 2 and 3, but disruptions continue. <b>Contract labor might not be available</b></li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> AP to increase due to delay in processing payments by NHAI. RM (steel etc.) cost to decrease to liquidate inventory, but other RM (sand, gravel etc.) cost will remain same. No impact on equipment cost</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> WC requirement to increase as projects are stalled.</li><li><b>Asset owners:</b> Effect on budgetary allocation for new projects by government. <b>Increased dependence on raising fiancé from alternate sources such as InvIT</b></li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Payments are <b>milestone-based</b>. Delay will impact cash flows. AR might increase due to delay in clearing pending bills. Pricing for project is <b>fixed during tender</b></li></ul>	 <ul style="list-style-type: none"><li>No short-term demand increase as traffic volume is expected to be lower than normal as people limit their movement; Only goods services will be fully operational</li></ul>		
	Medium-term (4 to 8 months)	 <ul style="list-style-type: none"><li><b>EPC company:</b> RM and equipment availability improves. Construction resumes for govt. projects</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> More <b>than 80% laborers</b> join back. <b>Contract labor starts returning to construction sites</b></li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> AP start decreasing as payments resume. RM cost starts increasing as construction resumes with a strong push from the government</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> WC requirement reduces as projects resume.</li><li><b>Asset owners:</b> Budgetary allocation remains affected. Increased dependence on alternate sources</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Payments re-start as construction resumes, and AR starts reducing. No pricing impact on ongoing projects</li></ul>	 <ul style="list-style-type: none"><li>Increase in demand as highway traffic increases with ease in restrictions</li></ul>		
COVID-19 crisis impact	Long-term (9 to 12 months)	 <ul style="list-style-type: none"><li><b>EPC company:</b> Full-scale resumption of road construction activity back to pre-COVID-19 level.</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Full labor joins back and construction resumes at pre-COVID-19 pace.</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> AP and RM cost back to pre-COVID level.</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> WC requirement back to pre-COVID levels.</li><li><b>Asset owners:</b> Govt. renews focus on alternate funding sources</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Payments normalize but cash flow remains impacted due to delay.</li><li>No pricing impact on ongoing projects</li></ul>	 <ul style="list-style-type: none"><li>Demand to increase in accordance with traffic volume growth and long-term construction plans</li></ul>		

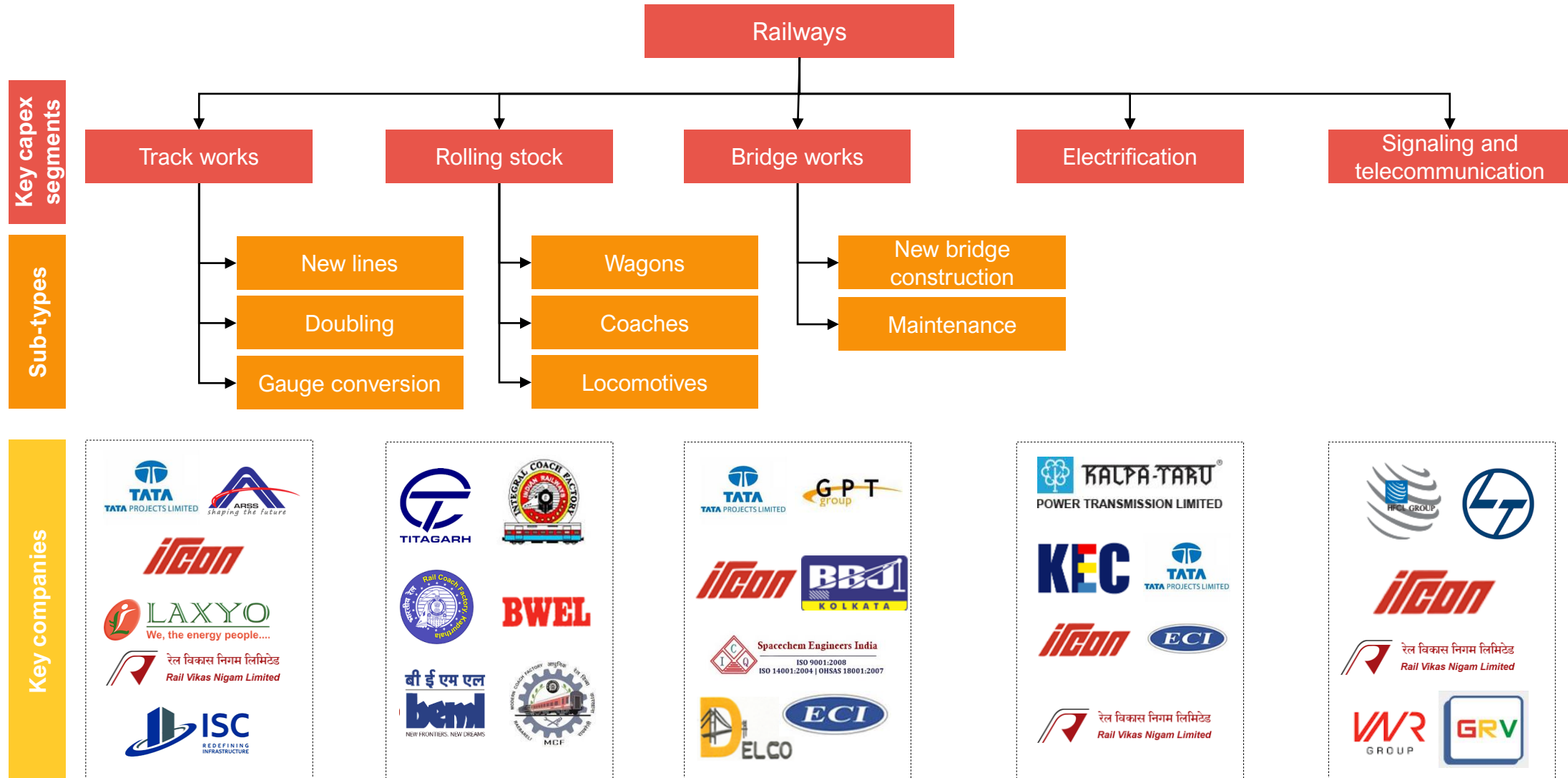
# Road sector is expected to recover with strong government push, but PPP projects to remain impacted in view of capex availability issues



	Public	PPP	EPC
Market structure	Oligopoly	Oligopoly	Oligopoly
Players			
COVID19 impact			
Industry outlook	<ul style="list-style-type: none"> <li>• <b>Higher government intervention</b> → More focus on EPC projects rather than PPP projects</li> <li>• <b>Impact on capex</b> → Lower revenue due to toll suspension and reduced traffic to affect <b>debt raising capacity</b> for NHAI</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Higher NPAs</b> → More projects failing to meet debt obligations</li> <li>• <b>Project finance</b> → Increased scrutiny by banks for upcoming projects</li> <li>• <b>Innovative models</b> → PPP models such as HAM to get more push to reduce burden on private players</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Delay in high-ticket projects</b> → Pushback in timelines of high-ticket projects</li> <li>• <b>Cost escalations</b> → Delays to increase overall project cost</li> </ul>

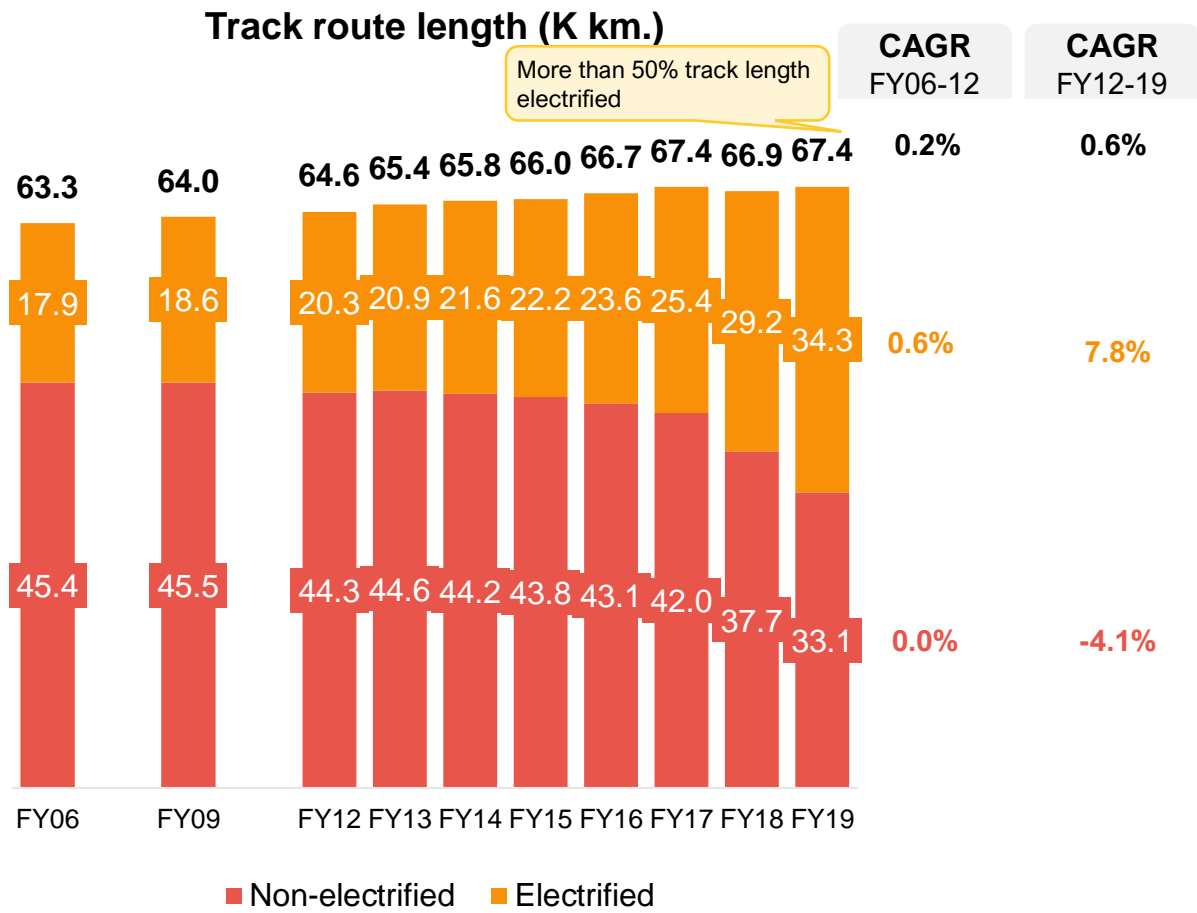


# Indian Railways have five key capex segments – track works, rolling stock, bridge works, electrification, and signaling and telecommunication

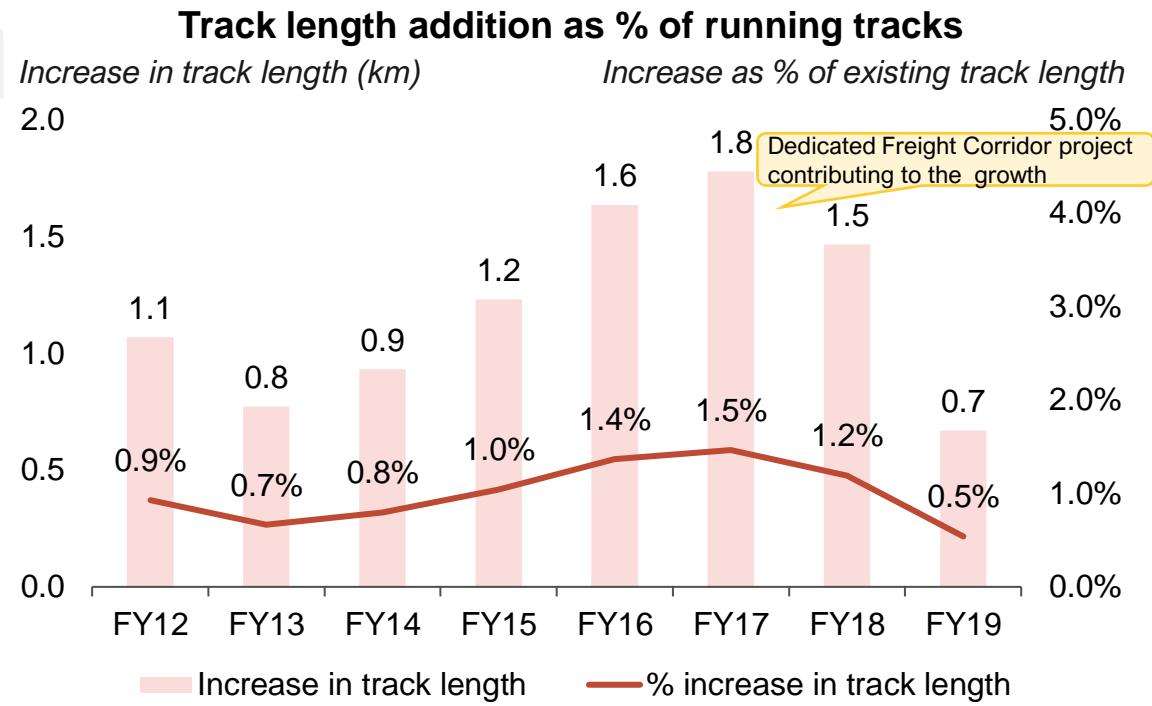


# Government funding remains the key driver of urban development in India; area development and urban mobility solutions are the key end uses of funds

Track route length CAGR has increased over FY12 – FY19 as compared to FY06 – FY12



Increase in % track length addition post FY13 with increased focus on doubling single track lines to improve route capacity



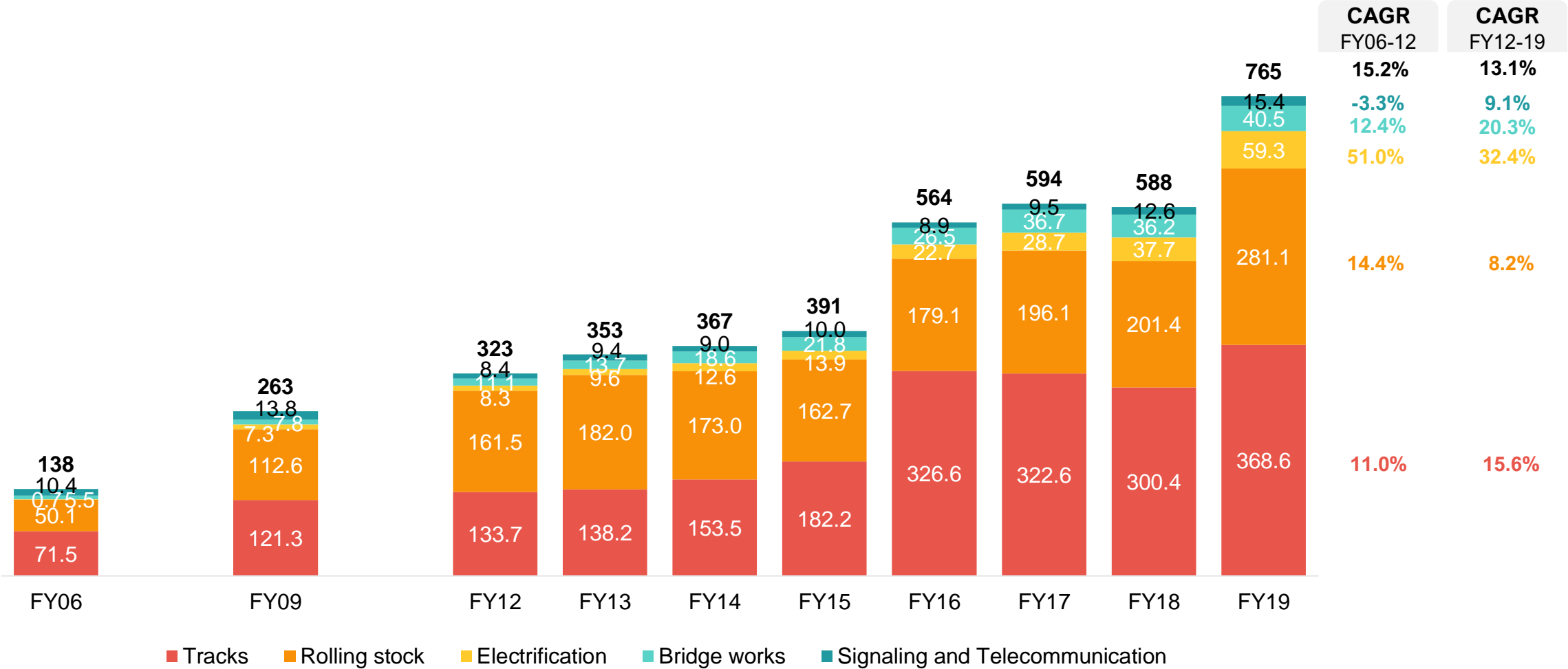
Key reasons for variation in % capacity addition

- Thrust on increasing railways network and carrying capacity through construction of more tracks
- Increasing demand to serve under-connected areas, mainly in North East India.



# Budgetary allocation for capex projects has grown at 13% CAGR; tracks accounted for ~50% of the amount allocated for key capex items

Revised budgetary allocation for key railway capex items (INR B)





EPC company: IRCON’s order book’s CAGR of 14.5% is primarily driven by railway sector projects; trade receivables and payables cycle is consistent for IRCON



Revenue*
INR 44B

EBITDA*
INR 6.41B

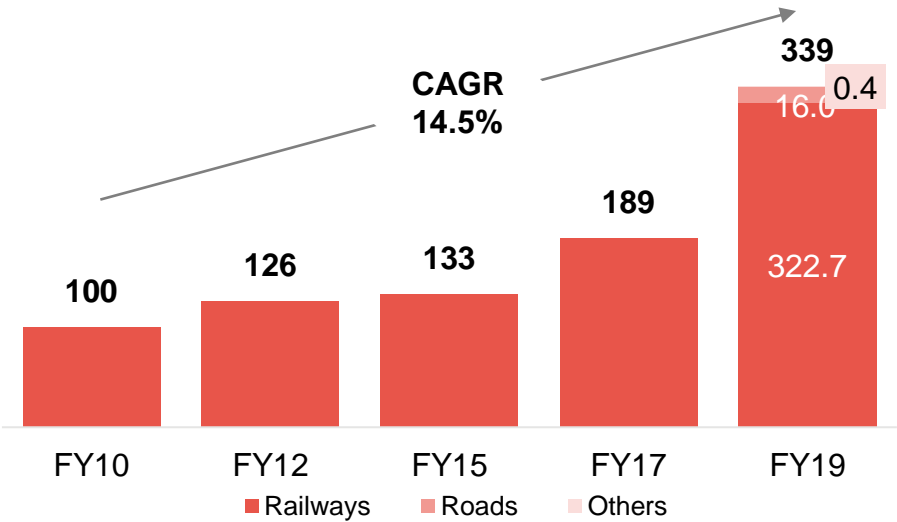
PAT*
INR 4.36B

Order book size*
INR 339B

Order book of IRCON has grown at 14.5% CAGR over FY10 – FY19; growth driven by railways sector projects

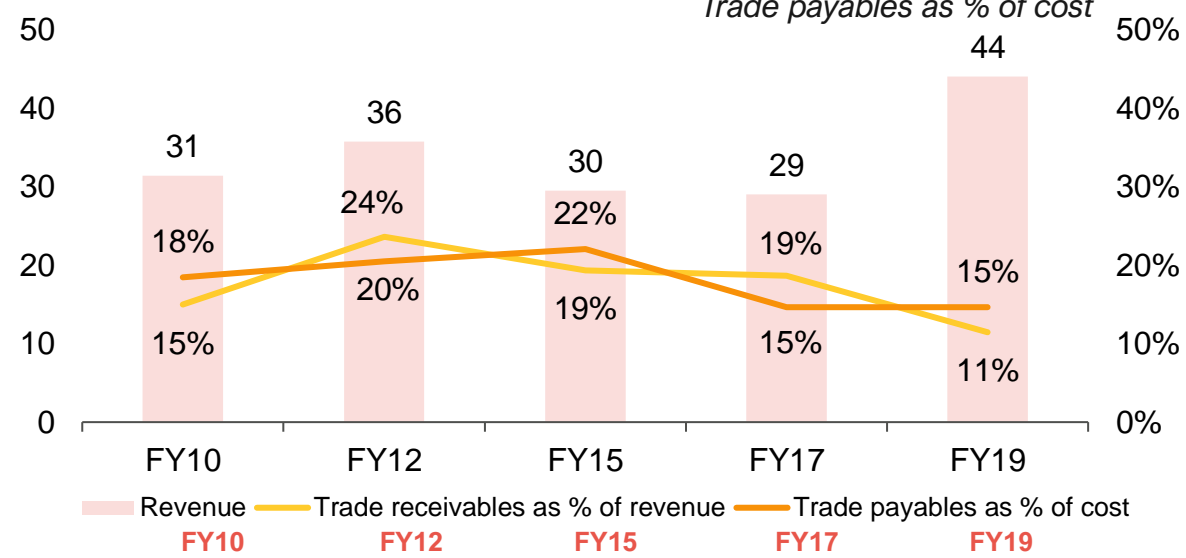
Order book of IRCON has grown at 14.5% CAGR over FY10 – FY19; growth driven by railways sector projects

Order book composition of IRCON (INR B)



% share in order book			
Year	Railways	Roads	Others
FY19	95%	5%	<0.1%































Revenue (INR B)



	FY10	FY12	FY15	FY17	FY19
DPO	65	68	93	57	52
DRO	50	88	83	78	49
DIO	53	20	21	21	23
CCC	38	40	11	42	20

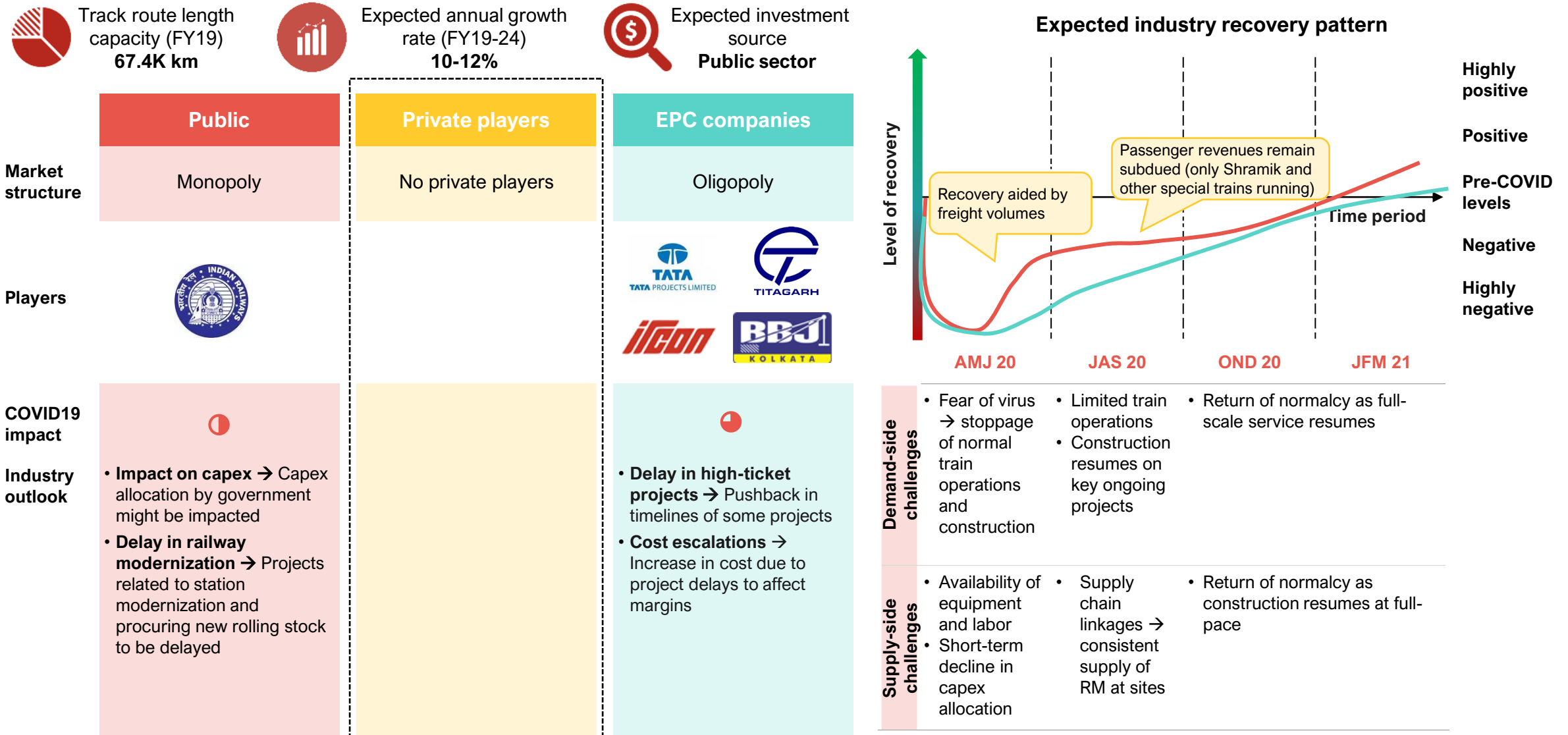
Notes: Note: \* represents values for FY19; Revenue refers to operating revenue; Sub-contracting expenses have been considered as a part of COGS for calculating DPO, DIO and CCC  
Sources: Company website, annual reports, PGA Labs analysis

# COVID-19 is expected to have moderate short-term impact on payment terms and finance availability; sector to pick up pace in the medium term

		Supply side factors				Demand side factors			
		 <b>RM and equipment</b>	 <b>Labor</b>	 <b>Payment terms and costing</b>	 <b>Availability of finance</b>	 <b>Payment terms and pricing</b>	 <b>Railway demand</b>		
2008 crisis	<b>Overall</b>	 <ul style="list-style-type: none"><li>No restriction on availability of raw materials and equipment</li></ul>	 <ul style="list-style-type: none"><li>No restriction of availability of labor for construction</li></ul>	 <ul style="list-style-type: none"><li>No major impact as the construction activity was not affected</li></ul>	 <ul style="list-style-type: none"><li>No major impact as overall project funding mainly through central government funds</li></ul>	 <ul style="list-style-type: none"><li>Increase in AR for EPC companies as government's finances were stretched</li></ul>	 <ul style="list-style-type: none"><li>No major impact as railway movement was not impacted</li></ul>		
	<b>Short-term (1 to 3 months)</b>	 <ul style="list-style-type: none"><li><b>EPC company; Limited availability</b> of RMs due to disruption. On-site equipment to remain available, but transportation of new equipment to be affected</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Labor starts joining back in month 2 and 3, but disruptions continue. <b>Contract labor might not be available</b></li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Minor payment delays might cause <b>AP to rise</b>. RM (steel etc.) cost to decrease to liquidate inventory, but other RM (sand, gravel etc.) cost will remain same. Equipment cost to decline in short-term</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> WC requirement to increase as construction is stalled. No major impact as projects typically funded by government, but some funds may be diverted for healthcare purposes</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Payments are <b>milestone-based</b>. AR might increase due to delay in clearing pending bills. Pricing for project <b>is fixed during tender</b></li></ul>	 <ul style="list-style-type: none"><li>Very low passenger volume (only Shramik and special trains; goods services will be fully operational)</li></ul>		
	<b>Medium-term (4 to 8 months)</b>	 <ul style="list-style-type: none"><li><b>EPC company:</b> RM and equipment availability return to pre-COVID levels. Construction resumes with National Rail Plan targets</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> More <b>than 80% laborers</b> join back and start working. <b>Contract labor starts returning to construction sites</b></li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Supplier payments continue but AP to remain a bit higher than usual. RM and equipment cost back to pre-COVID level as construction resumes with a strong push from the government</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> WC requirement reduces as construction resumes.</li></ul>	 <ul style="list-style-type: none"><li><b>Terms –</b> Payments re-start as construction resumes. AR start reducing, but cash flows impacted due to project delay. No impact on pricing</li></ul>	 <ul style="list-style-type: none"><li>Increase in demand as railway traffic increases and government resumes with its construction targets</li></ul>		
	<b>Long-term (9 to 12 months)</b>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Full-scale resumption of rail construction activity</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> Full labor joins back and construction resumes at pre-COVID-19 pace</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> AP returns to pre-COVID level. RM and equipment cost at pre-COVID level</li></ul>	 <ul style="list-style-type: none"><li><b>EPC company:</b> WC requirement back to pre-COVID levels</li></ul>	 <ul style="list-style-type: none"><li><b>Terms –</b> Payments normalize but cash flow remains impacted due to delays. No impact on pricing</li></ul>	 <ul style="list-style-type: none"><li>Demand to increase in accordance with passenger and freight volume growth</li></ul>		

Equipment sitting idle will increase contractor cost

# Railways to benefit from government intervention in the long-run as public infrastructure spending increases to re-invigorate economy



# Government can play an instrumental role to ensure continuity of capex plans and availability of WC with contractors to ensure smooth recovery

	Roads and bridges	Railways
Short-term (1 to 3 months)	<ul style="list-style-type: none"> <li>• <b>Ensure clearance of pending contractor bills</b> to ensure their WC requirements are met during the phase where construction is stalled</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure <b>clearance of pending contractor bills</b> to ensure their WC requirements are met during the phase where construction is stalled</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Extension of toll collection period</b> for concessionaires to compensate for revenue loss</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure completion of planned maintenance works which were stuck due to rail traffic movement</li> </ul>
Medium-term (4 to 8 months)	<ul style="list-style-type: none"> <li>• Inject liquidity in the system <b>by reducing lending rates for companies building roads under BOT / HAM models</b></li> </ul>	<ul style="list-style-type: none"> <li>• Ensure <b>adherence to planned capex</b> and timely award of contracts</li> </ul>
	<ul style="list-style-type: none"> <li>• Set up <b>fund for providing WC</b> at competitive interest rates to smaller sub-contractors who might find it difficult to raise additional WC from banks</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure optimum utilization of freed-up track capacity (due to lower passenger operations) for <b>increasing railways' share in freight movement</b></li> </ul>
Long-term (9 to 12 months)	<ul style="list-style-type: none"> <li>• Ensure more projects are awarded under innovative schemes such as HAM to ensure low-risk participation of private companies in the sector</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Aggressively chase modernization targets</b> such as station redevelopment, track length addition, bullet train project etc. to ensure investment in the sector</li> </ul>
	<ul style="list-style-type: none"> <li>• Speed up clearance for pending highway projects</li> <li>• Bundle projects to attract global players to ensure consistent flow of equity and debt capital into road projects</li> </ul>	<ul style="list-style-type: none"> <li>• Speed up clearance of pending proposals for PPP projects</li> </ul>



## Infrastructure

### Specific practitioner expertise



**Madhur Singhal**

Practice Leader

**Asset monetization and investments**



**Aryaman Tandon**

Practice Leader

**EPC and Waste management**



**Shishir Mankad**

Domain Leader

**Infrastructure services**



**Neerav Gupta**

Domain Leader

**Ports and SEZ**



**Ashutosh Somani**

Practice Member

**Airports and Roads**



**Anuj Mahajan**

Practice Member

**Urban development and policy formulation**

## How we help our clients

We work with leading infrastructure asset owners and service providers and help them navigate the uncertainties surrounding the sector and economy



### Portfolio strategy

Optimizing portfolio of clients by assessing current and future growth plans and creating strong pipeline strategies



### Cost optimization

Identifying sustainable opportunities for profit improvement by focusing on strategic cost management



### Growth and scale-up

Growing fast and scaling up by optimizing client offerings to target fast-growing infrastructure segments



### Customer loyalty and experience

Measuring and driving improvement in customer loyalty through detailed customer insights and proven frameworks



### Investment advisory

Assessing market conditions and identifying key assets to acquire / hive off in line with long-term growth plans



### Enablement and implementation

Handholding incubation process of new business units and handling PMO for large-ticket construction projects

## Key management



**Amrit Acharya**  
Cofounder & CEO



**Srinath Ramakkrushnan**  
Cofounder



**Vishal Chaudhary**  
Cofounder



**Rahul Sharma**  
Cofounder



**Peeyush Agarwal**  
Head Sales Strategy



**Dheeraj Dhingra**  
Business Head - Railways

## How we help our clients

We work across multiple manufacturing segments(Railways, T&D, Water, Fabrication etc.) to deliver best products at competitive prices



### On Time Delivery

Zetwerk with its manufacturing capabilities ensures 100% On time delivery



### Quality

With a quality team of >50 quality engineers, all manufacturing processes go through a stringent inspection ensuring best in class quality.



### Transparency and Real Time Visibility

Zetwerk's proprietary project management software ensures real time visibility of progress on ground.



### Pan India Presence

With manufacturing facilities in all corners of the country, we act as one stop solution for all your manufacturing needs.



### Small to Large Projects

We execute projects of all sizes ranging from few lakhs to upwards of multiple of crore

We have successfully worked with clients across verticals

**50+** VC firms  
**100+** Investors  
**250+** Engagements

Our people have deep experience in Business research



**Aryaman Tandon**  
Director  
Consumer Internet and Ecommerce



**Seema Karwa**  
Vice President  
FoodTech, Investments, and Consumer tech



**Abhishek Maiti**  
Vice President  
Shared mobility, Hospitality and E-groceries



**Vaibhav Tamrakar**  
Vice President  
EdTech, FoodTech, and Mobility



**Mehak Batra**  
Associate Vice President  
Healthcare and Analytics

## How we help our clients

We have a wide bouquet of deep business research skills and advanced analysis capabilities. Our research is unique, focusses on “What and Why” and our approach is holistic unlike a typical MR firm.



**Benchmarking (cost, product features)**  
Comparison of players across relevant parameters



**Sector360: Scan / fact-base**  
Detailed review and landscape of a sector



**Company360: Company review**  
Detailed review of company's details, strategy and operations



**Competitor intelligence**  
Intelligence and analysis of a company's tactics



**Survey administration and management**  
Design, oversee, implement, analyze and present findings



**Voice of the customer**  
Customer interviews and survey-based analysis



**Web scraping and analytics**  
Scraping and analysis of public data



**Process mapping and best practices**  
Enlist best practices



# Connect with us - We will be happy to share perspectives

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A group of hands are stacked together in a gesture of teamwork or agreement. The hands are of various skin tones and are resting on a wooden desk. In the background, there are several papers, some with charts and graphs, and a laptop is visible on the right side. The overall scene suggests a collaborative work environment.

**THANK YOU**  
***#BuildTogetherWinTogether***

