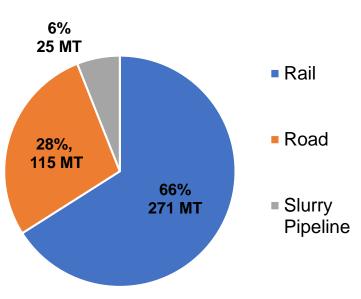
# Modernizing Railways: Movement & handling





- □ India Is the Second Largest Steel Producer in the World after China.
- □ Total crude steel production in India is estimated to be around 104 (MTPA) in FY18 (IBEF, 2018).
- □ Total Material Movement for steel Industry in India is more than 400 Million Tonnes/Annum.





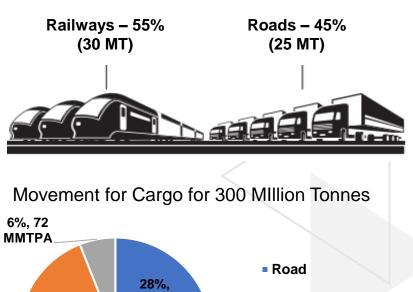


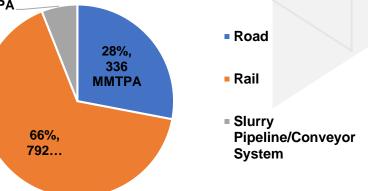
#### MATERIAL MOVEMENT BY MODE OF TRANSPORTATION FY 2017 (400 MT)

#### **JSPL Cargo Movement**

- □ JSPL total material movement is around 55 Million Tonnes/Annum.
- Capacity of Indian Steel Industry is anticipated to rise to 300 MTPA, by FY 2030 (The Hindu, 2018).
- Majority of New Capacity is coming near East Cost of India in States of Odisha, Chhattisgarh and Andhra Pradesh.
- Considering capacity of 300 Million tonnes, Total Material
  Movement of Steel industry will be around 1200 Million Tonnes.
- Considering Share by mode of Transportation Remain the same, railway share will be around 800 Million Tonnes.

#### **JSPL Logistics Share by Volume**









## **Current Challenges Faced by Railways**

- Freight Business which accounts for 66% of overall revenue of Indian railways, it has only grown by 7.5 % on YoY basis. Customer are preferring road to Railways for finished goods transportation because of the following
- Capacity Challenges
  - Capacity Constraints: Railway is not able to Fulfill customer requirement because of capacity constraints. Majority of steel Industry is situated at East cost of India where Majority of current Railway Infrastructure is congested.
  - Delay in dedicated freight corridor: Eastern and Western Freight corridor are delayed and are likely to be commissioned by March 2020. After commissioning of corridors, some cargo traffic from road is expected to switch to railways.





## Current Challenges Faced by Railways

Operational Challenges

- Low Visibility: As industries are facing Global challenges, low inventory model is must for business. Supply chain Visibility is a challenge in railways and Industries dependent on railways have to maintain large buffer stock Inventory to eliminate this issue.
- Error in Weigh Bridges: Weigh bridges installed by railway are not accurate and cause problems in Material reconciliation. Also Tare weight of wagons is fixed by railways irrespective of actual tare weight after modification and maintenance.
- □ Current Average speed for Movement of Cargo is 20 KMPH.
- Higher Cost
  - Increase in rail Freight: Indian Railway increased Rail Freight by around 8.75% in Nov 2018. This has reduced/Eliminated the cost advantage of railways compared to road Transportation after axle load increase for distance under 800 Km, If we include all elements, including Handling cost, transit time and trans-shipment cost.





### **Current Challenges Faced by Railways**

- Higher Dead freight: Railway considers a fixed capacity for wagons i.e. 68 tons without considering bulk density of the cargo. In case of Coking coal, only 62 tons can be loaded into wagon instead of 68 Tons. Around 9% is paid as dead freight for each wagon.
- Less Investors Under Public Private Partnership
  - Flawed GPWIS & SFTO Scheme (PPP): Wagon Purchased under SFTO scheme are not allowed to be moved on whole railway circuit. SFTO wagons are only allowed to be moved on a fixed circuit. Approval is required for Origination Station, Commodity handled, destination and the route which makes the Optimum Asset utilization a challenge. Current investment policy is One Sided.





#### **Key Areas for Improvement**

For Modernization of Railways Key Areas of Improvement are

- Capacity Building: From FY 2014-15 to 2016-17, total movement of material by Indian railways remained at same Level of 1100 Million Tonnes(Ministry of Railways, Feb 2018). To support the increasing demand of industries railway should:
  - Increase the average speed from 20 KMPH to 40 KMPH.
  - Increase the Throughput/Train
    - 1. By Increasing Axle Load
    - 2. Heavy/long Haulage
  - Identify and resolve gaps in rail network connectivity and Build terminals with equipment to handle these Trains
  - Most of the goods Movement for steel Industry is within 800 Km from steel plant vicinity. As most of the Steel industry is setup at East Cost, Railway should focus at congested lines to fulfill present and future requirement of the Industry.





- Automatic Signaling System: To improve safety and Improve capacity, Automatic signaling system should be implemented.
- □ Addition of New & Improved rolling Stock: New higher capacity Rolling stock should be introduced by IR.
- □ Improvement in Last Mile connectivity: Last mile connectivity is the biggest challenge faced by railways. Railways should focus on increasing no's of PFT and Implementation of RORO and Roadrailer concept.
- □ Changes in PPP Policies: Current Policies are one sided and must be modified to benefit both parties.





# THANK YOU

