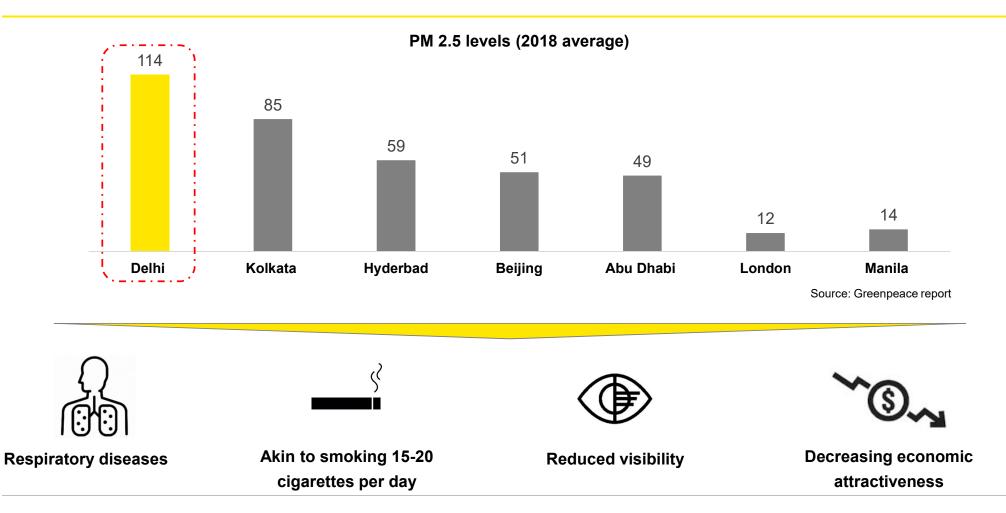
Provision of logistics services through RRTS corridors in NCR

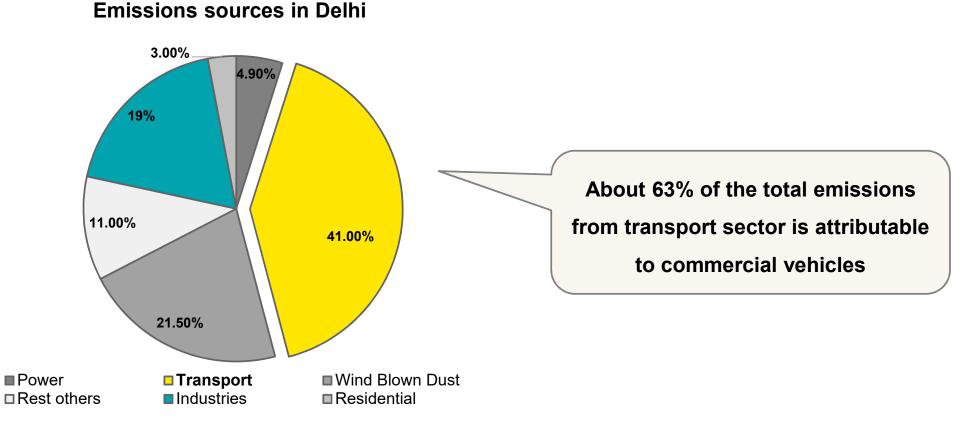
September 17, 2019



Delhi is the number 1 polluted capital in the world

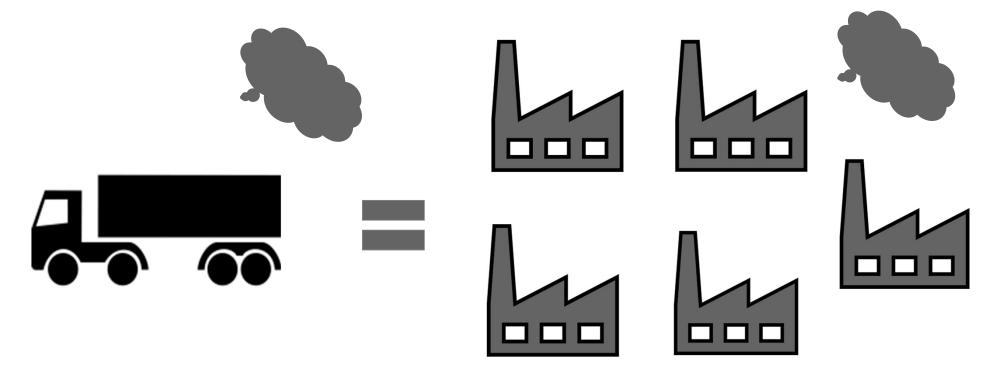


Commercial trucks among various vehicles contribute the most to emissions in Delhi



Source - EPCA report no.92 October 2018; urbanemissions.info

Emissions from trucks entering Delhi are equivalent to emissions from five 650 MW coal based power plants on a daily basis



Total number of trucks entering Delhi daily is estimated to be about **1,80,000** in 2019

Source: Study on Integrated Transport Plan for NCR – 2007; World Nuclear Association In 2007, number of trucks entering Delhi were about 1.1 lakh

Page 4 17 September 2019

In light of rising pollution in Delhi, strict regulations have been enforced on trucks entering in Delhi



Page 5 17 September 2019

In light of rising pollution in Delhi, strict regulations have been enforced on trucks entering in Delhi



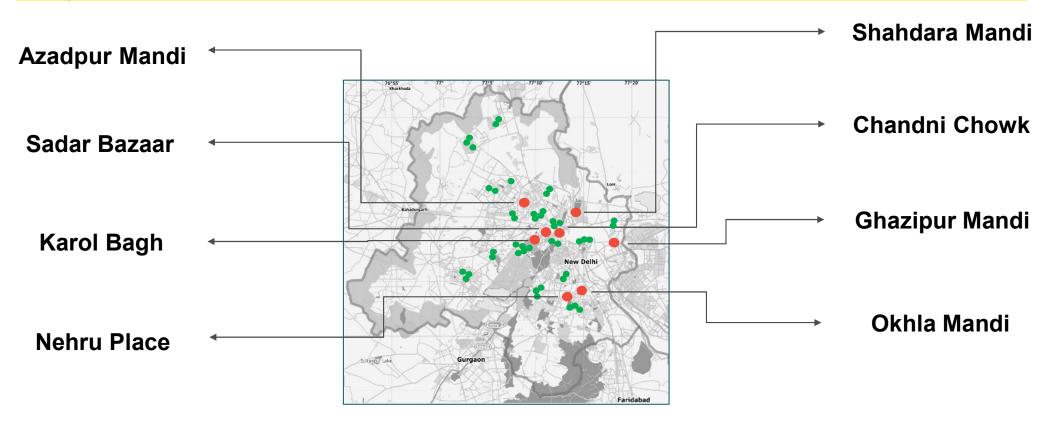
Source: Primary interaction with truckers, 2019





Queuing of trucks at Delhi border Source: Secondary research

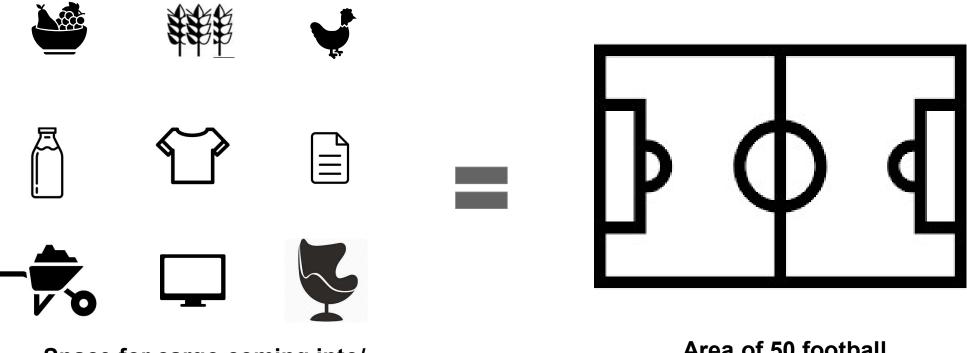
Delhi is a major consumption & distribution hub and houses major wholesale markets



Others: Narela, Patparganj, Nangloi, Paharganj, Kirti Nagar



Storage space for cargo consumed and distributed in Delhi on a daily basis is about area of 50 football stadiums



Space for cargo coming into/ getting distributed from Delhi daily

Area of 50 football stadiums

Source: Economic Survey of Delhi - 2018-19

Page 8 17 September 2019

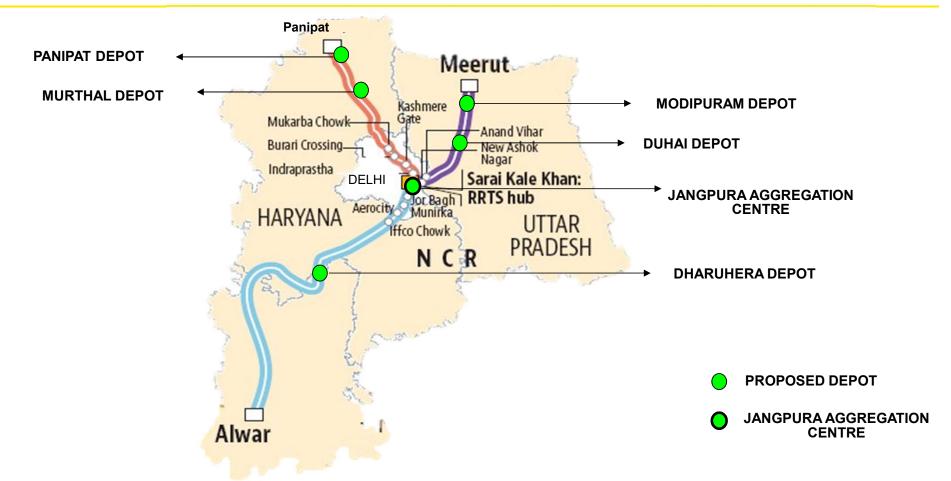
Rail Logistics solution has been successful in Paris

Project	Country	Key Parameters	Status	Details
Paris RER*- Monoprix	France	Length: 30km Commodities: Bottled Drinks, household goods, groceries Capacity: 120,000 tonnes or 210,000 pallets Frequency:1 train/day 16 wagons Technical Specs:140km/hr (speed), 3800hp(power), 1.5kV DC pantograph Enabler: Combining Regional Transit Railway with CNG trucks for last mile delivery of consumer goods inside Paris	Successful and operational	

*RER - Réseau Express Régional

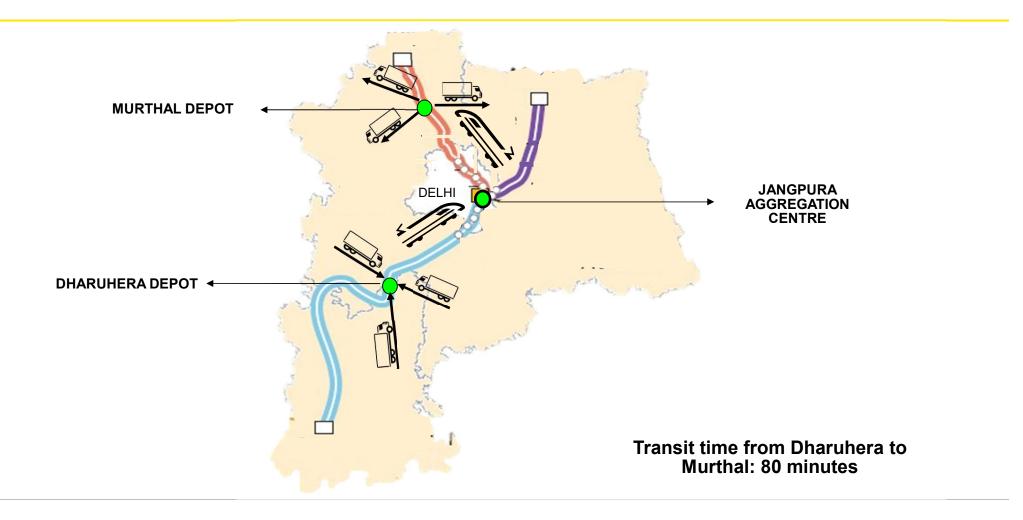
Page 9 17 September 2019

RRTS corridors are proposed along three major connections of Delhi with Haryana & Uttar Pradesh....



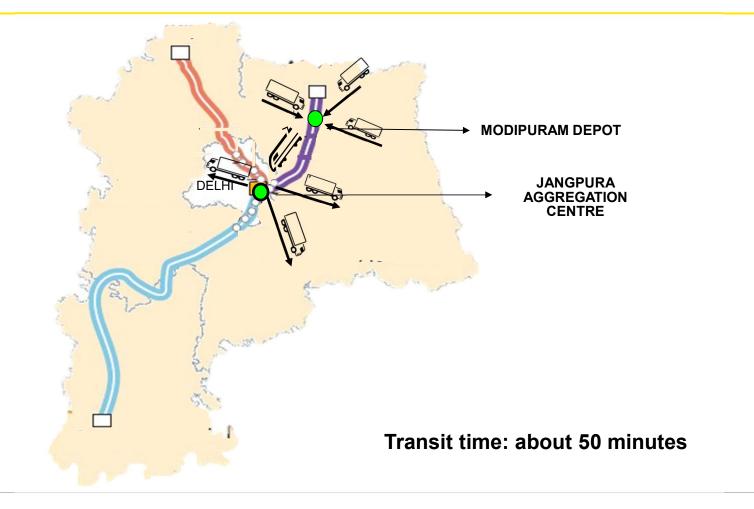
... depots are planned along each of the three RRTS corridors

Illustrative RRTS supply chain from Dharuhera to Murthal



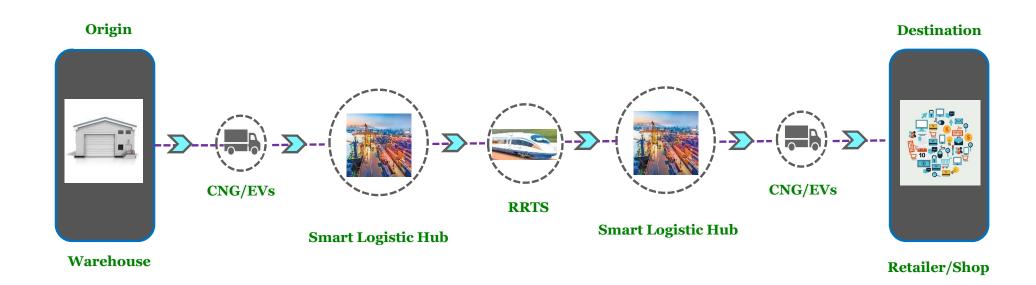
Page 11 17 September 2019

Illustrative RRTS supply chain from Modipuram to Jangpura



Page 12 17 September 2019

'Clean & Green Supply Chain' through RRTS



Why a Rail Logistics solution makes sense for NCR 🔶



Delhi is one of the most polluted and congested cities in the world





Regulators are already bearing down on truck traffic

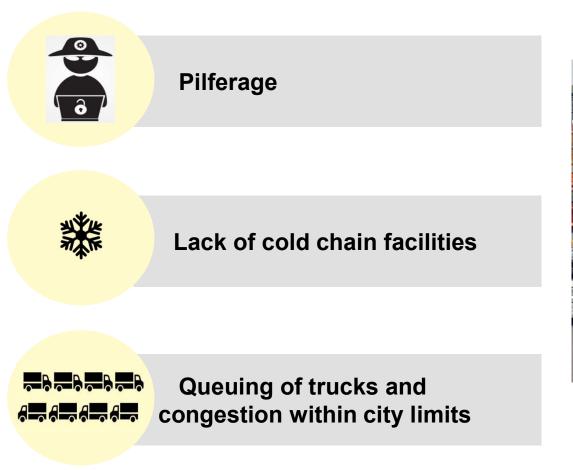




Delhi NCR- A key consumption and distribution hub



There exist several issues in existing supply chains...





Page 15 17 September 2019

...which are expected to be resolved by Rail Logistics through RRTS

✓ Reduced transit time
 ✓ Seamless handling and storage
✓ Integration with first and last mile connectivity
 ✓ Free from government restrictions
✓ No pilferage/ losses during transit

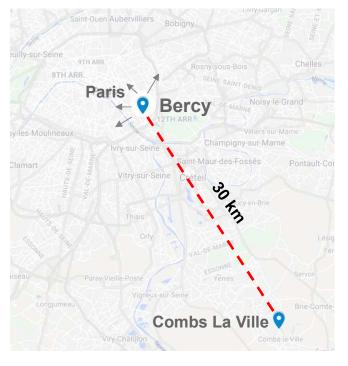
Thank You

Paris RER - Monoprix

Benchmarking in Urban Rail Freight Transport



Monoprix is a chain of supermarkets in Paris which aimed to save transportation costs and taxes by using rail transport to freight stock between its established warehouses in Bercy and Combs La Ville/Lieusaint



BERCY INTERCHANGE





Line Specifications				
Length	30km			
Purpose	Seamless service to 90 outlets in Paris			
Route	Bercy to Combs-La-Ville/Lieusaint			
Commodities				
Tonnage	210,000 pallets or 120,000 tn/year			
Status	Successful and operational			

Source- JTL-RELIT| Journal of Transport Literature , Manaus, vol.7, n.3, Jul (2013)

Paris RER - Monoprix

Freight Supply Chain



