



# **METRO RAIL IN INDIA**

# Background

- **53** urban agglomerations with a population over a million in 2011 against **35** in 2001
- Registered motor vehicles has grown **472 times** since **1951** with more than 10% growth in the last decade
- **1.46 lakh annual deaths** with 40% of fatalities attributed to urban areas- Among highest in the World
- India has ten cities in the top twenty most polluted cities in the world
- Transport produces **24% of the CO<sub>2</sub>** emissions in Indian cities

# Challenges for India

## 1. Growing Urban Population

2021: Urban population – 533 mil (38%)

2011: Urban population – 377 mil (31.16%)

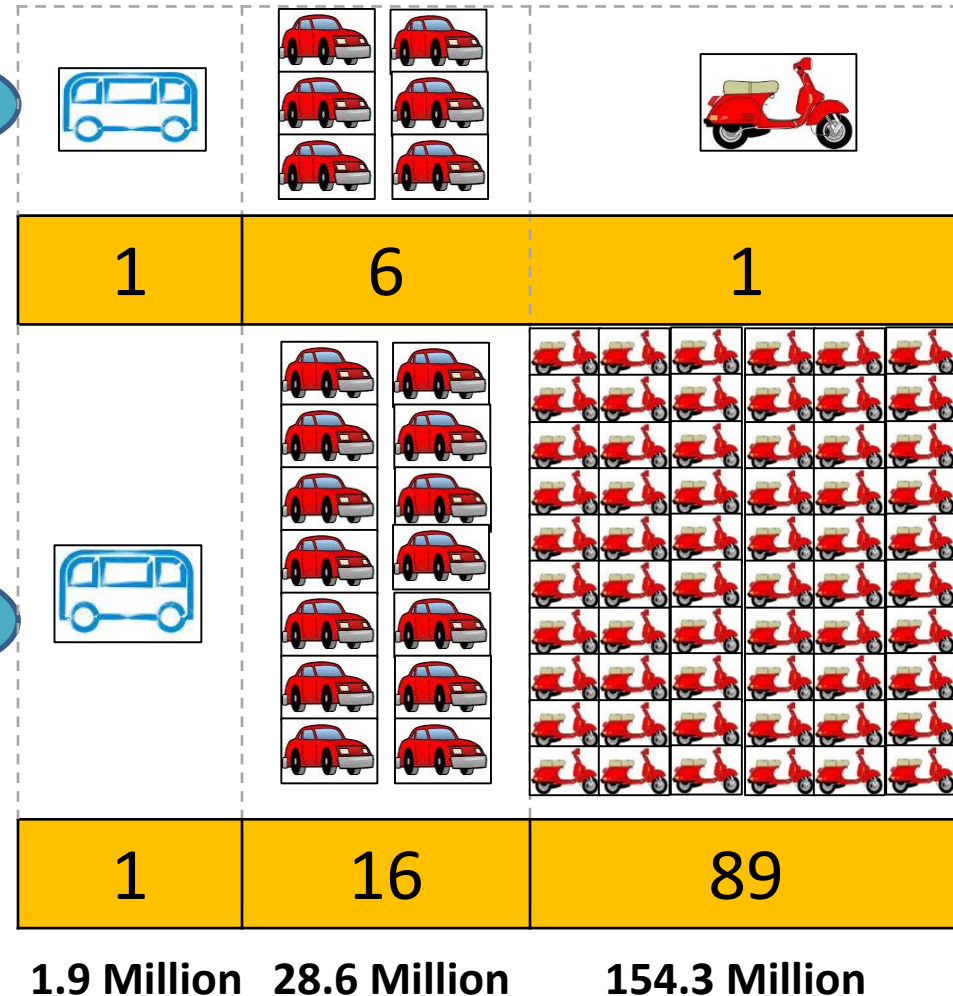
2001: Urban population – 286 mil (27.81%)

1951

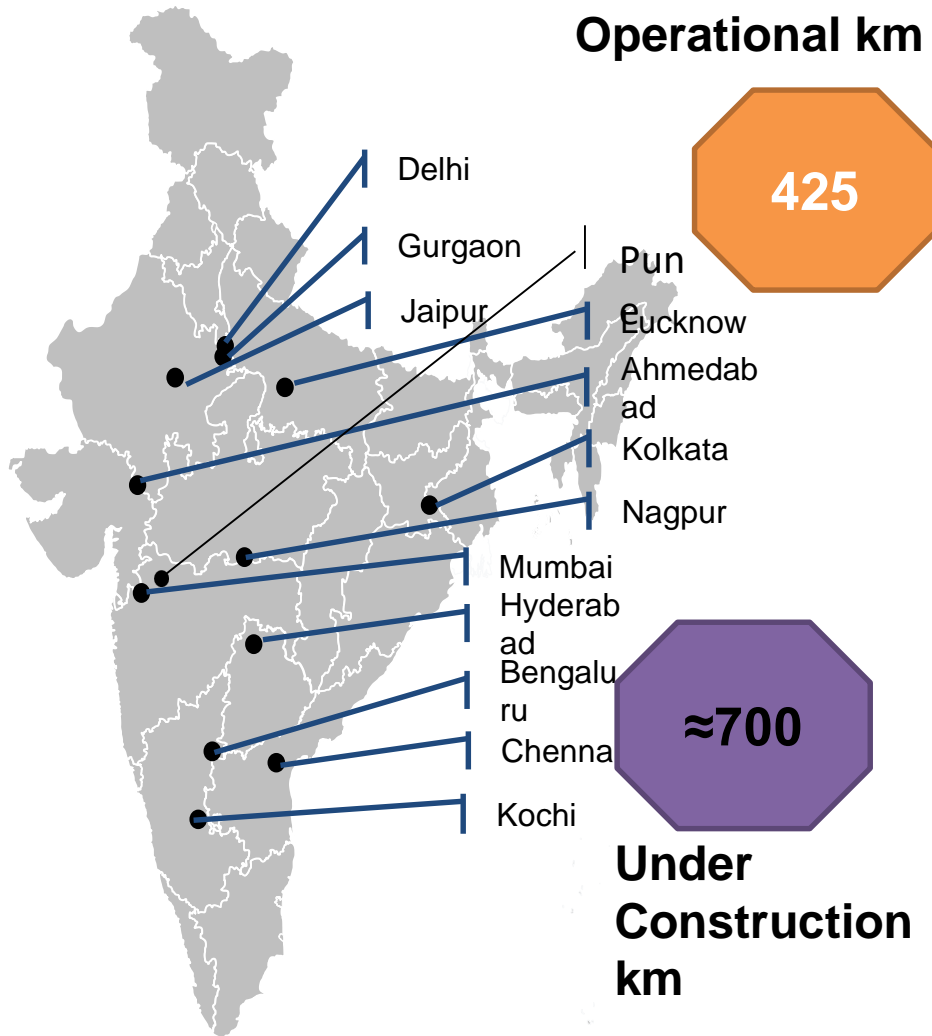
2015

**26% of the total cars sold are diesel vehicles**

## 2. High Growth of Private Vehicles



# Metro Rail Projects - 13 Cities

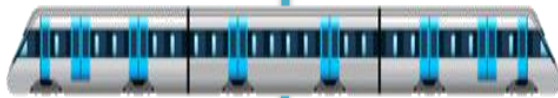


Operational km – City wise		Under Construction km – City Wise	
Delhi	- 230	Mumbai	- 175
Bengaluru	- 42.3	Delhi & NCR	- 130
Hyderabad	- 30	Kolkata	- 108
Kolkata	- 27.4	Bengaluru	- 72
Chennai	- 27.4	Hyderabad	- 42
Kochi	- 18.2	Nagpur	- 38
Gurgaon (Rapid Metro)	- 11.7	Ahmedabad	- 36
Mumbai (Line 1)	- 11.4	Pune	- 31
Mumbai Monorail	- 9	Chennai	- 27
Jaipur	- 9.6	Lucknow	- 14
Lucknow	- 8.5	Kochi	- 8
		Jaipur	- 3

# Financing Metro Rail – Fully Government

Central Government  
Share

State Government  
Share



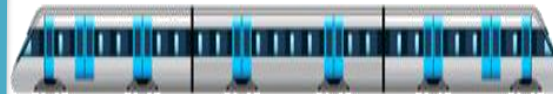
दिल्ली मेट्रो रेल कॉर्पोरेशन लिमिटेड  
DELHI METRO RAIL CORPORATION LTD.  
(भारत सरकार एवं दिल्ली सरकार का संयुक्त उपक्रम)  
(A JOINT VENTURE OF GOVT. OF INDIA AND GOVT. OF NCT DELHI)



Kolkata Metro Railway



Kolkata Metro Rail Corporation Ltd.



JAIPUR METRO



Mumbai Monorail

# Financing Metro Rail – PPP

20%

**Viability Gap Funding  
from Government of  
India**



Mumbai Metro  
Line 1



100%

**Fully Privately  
Financed Initiative**



THANK YOU

