

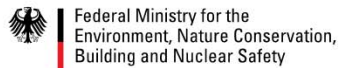


# UNEP Transport Project: Key Messages for Urban Transport

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UNEP DTU Partnership, Copenhagen

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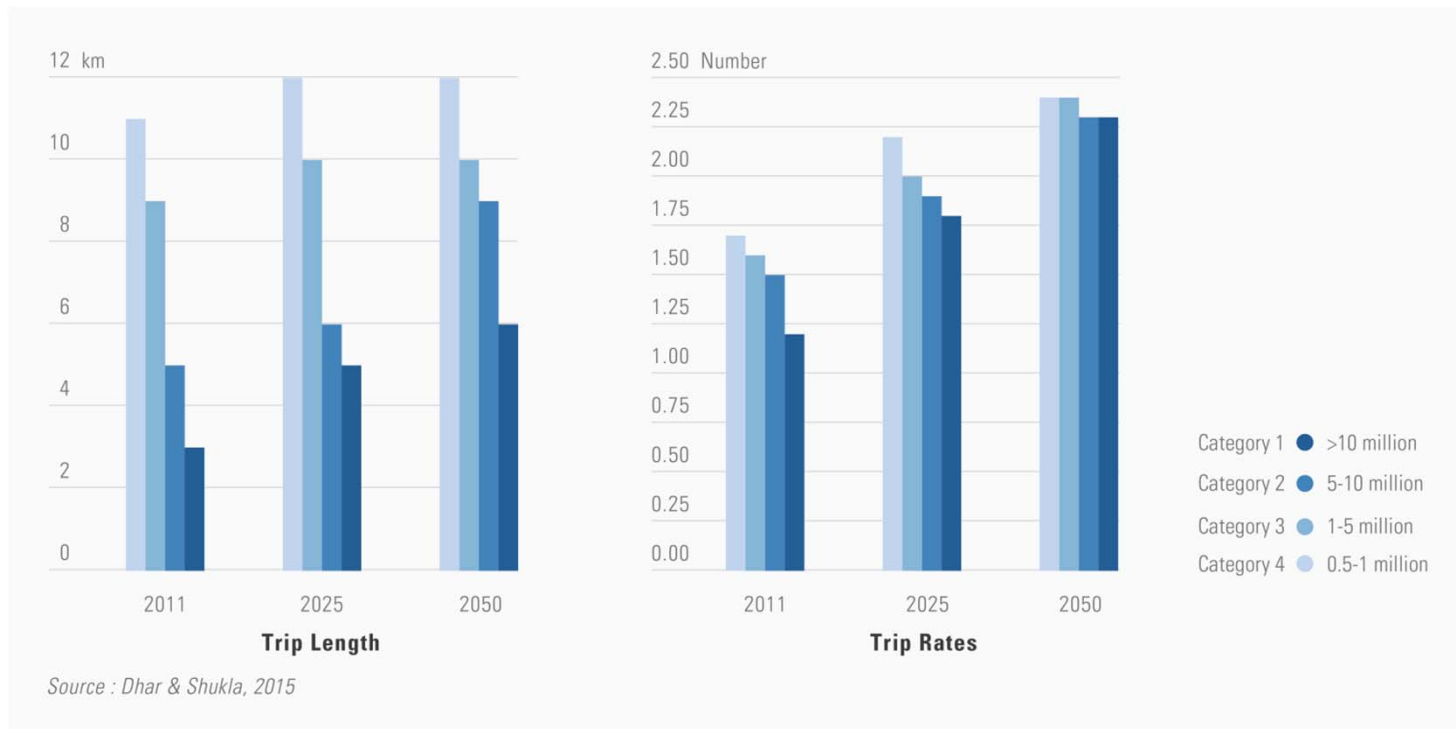
# Contents

- Current Narrative
- Future Drivers
- Strategies for Low Carbon Cities
- Key Messages

# Trip Rates and Trip Lengths

	Modal Shares (% of trips)			Average Trip Length (km)		
	Vizag	Rajkot	Udaipur	Vizag	Rajkot	Udaipur
3-wheeler	9.0%	10.8%	11.0%	5.9	4.31	4.47
Bus	18.0%	3.1%	2.0%	11.7	8.47	8.47
Car	2.0%	2.3%	3.0%	9.3	11.67	5.98
2-wheeler	15.0%	35.4%	34.0%	5.8	4.18	5.22
Bicycle	3.0%	10.0%	2.0%	3.2	3.4	5.08
Cycle-rickshaw	1.0%	0.8%			4	
Walk	52.0%	37.7%	48.0%	0.7	1.68	2.54
Average Trip Length (km)				4.1	2.8	3.9
Average Trip Rate	1.66	1.30	1.12			

# Trip Rates and Trip Lengths

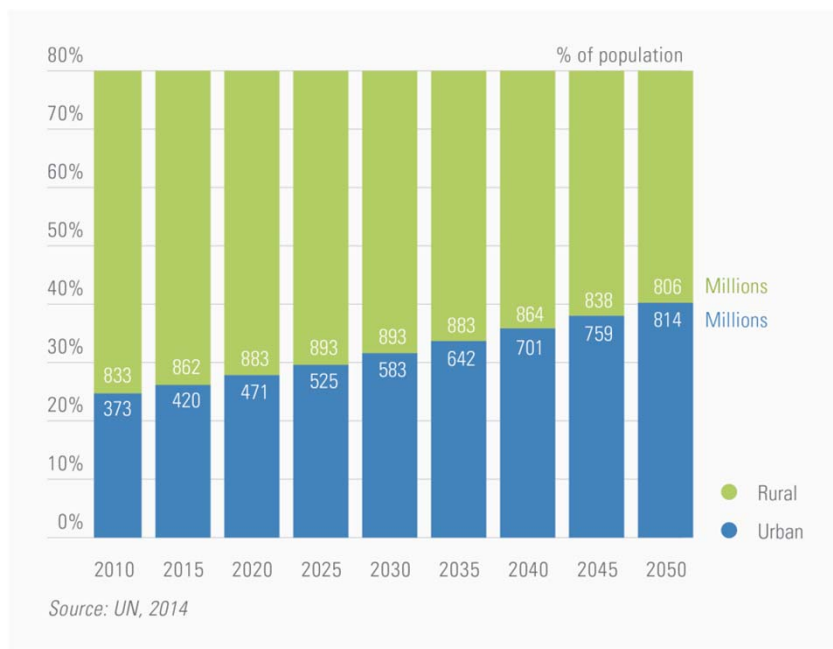


Under BAU Conditions:

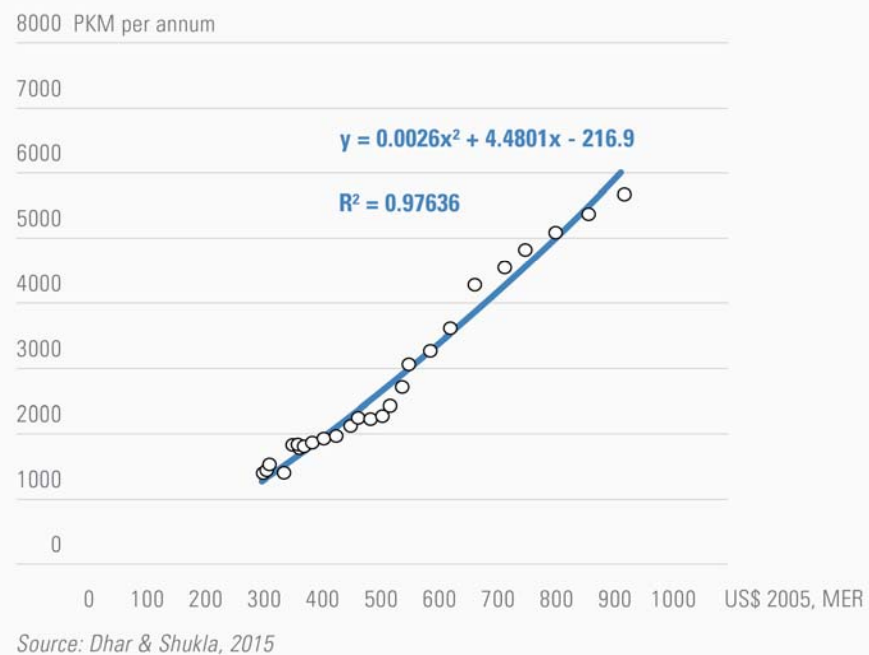
Trip rate and trip lengths will increase with time however there will be variation according to city size

# Future Drivers

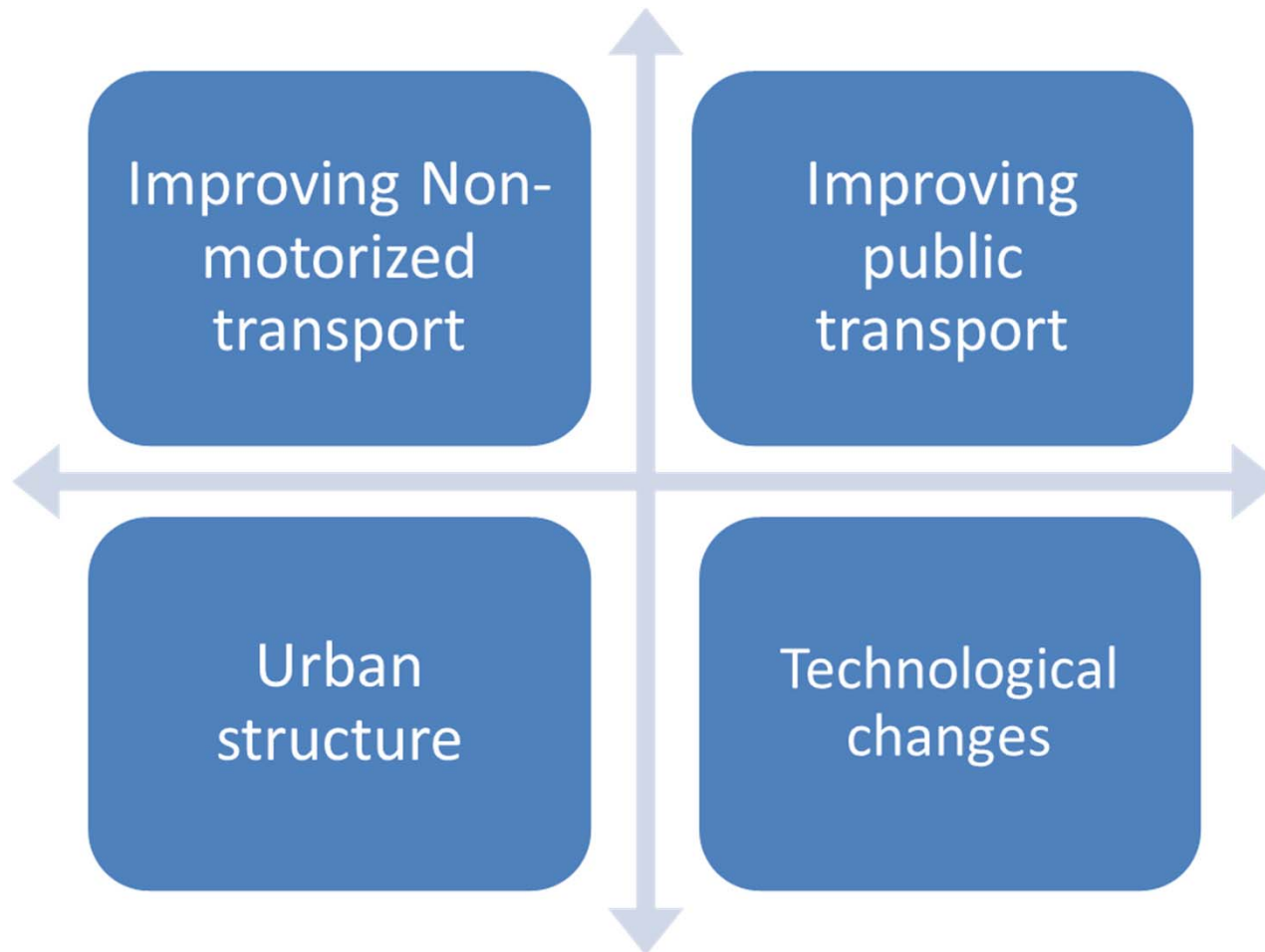
## Urbanisation



## Per Capita GDP Vs Mobility

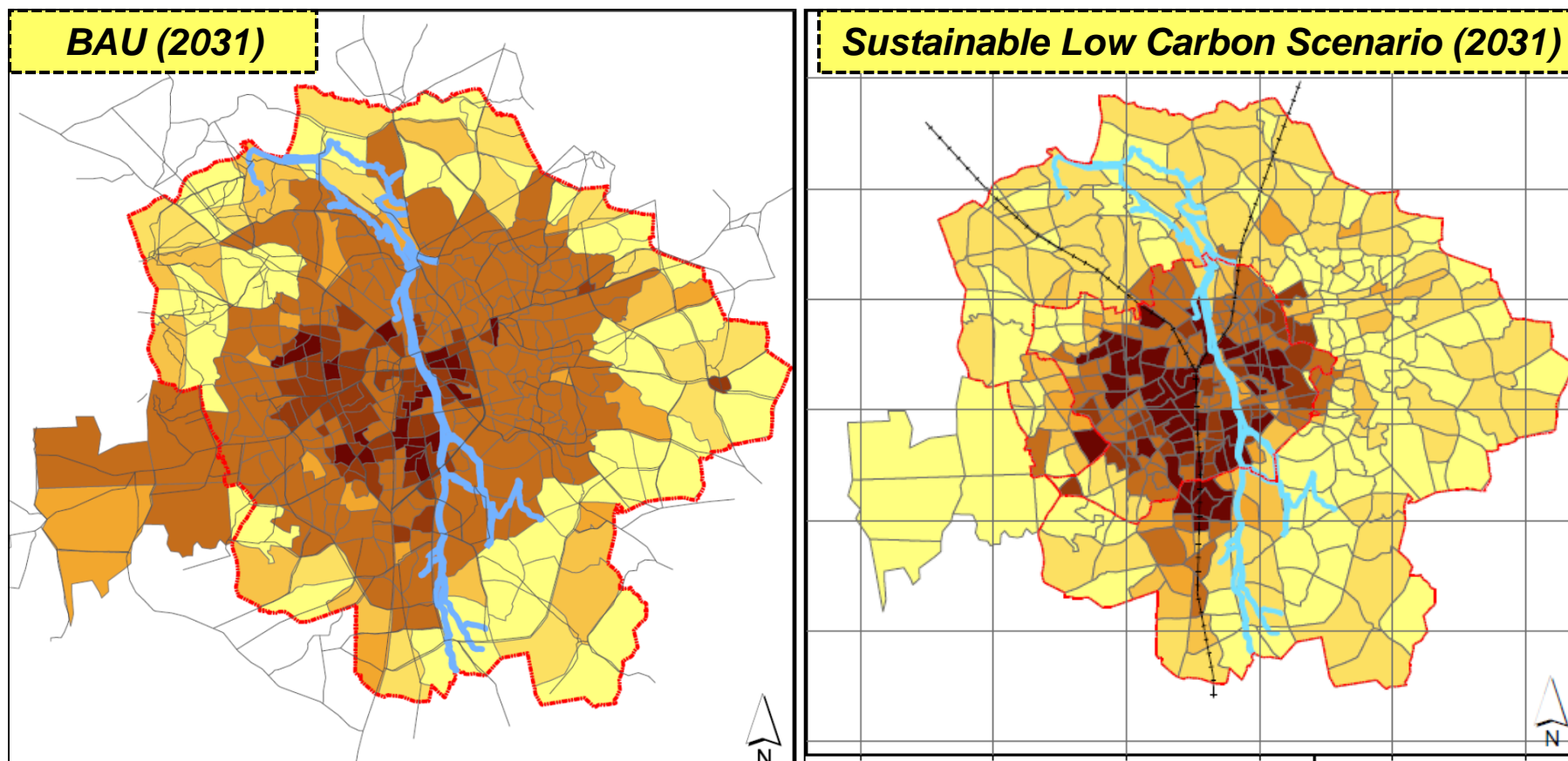


# Mitigation Strategies for Urban Transport



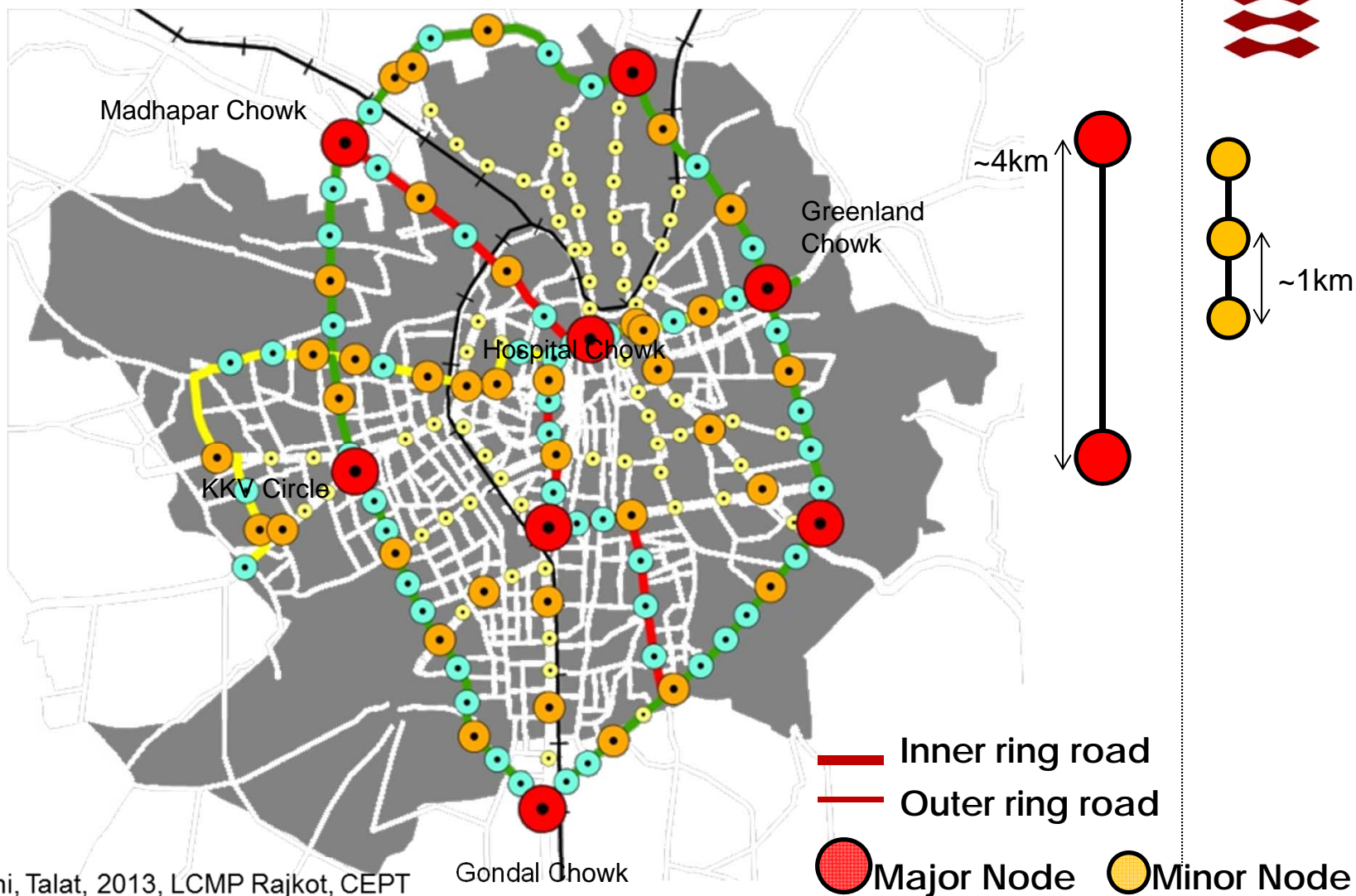


# Land Use Scenarios: Rajkot



Source: LCMP Rajkot, CEPT

# Improved Public and NM Transport

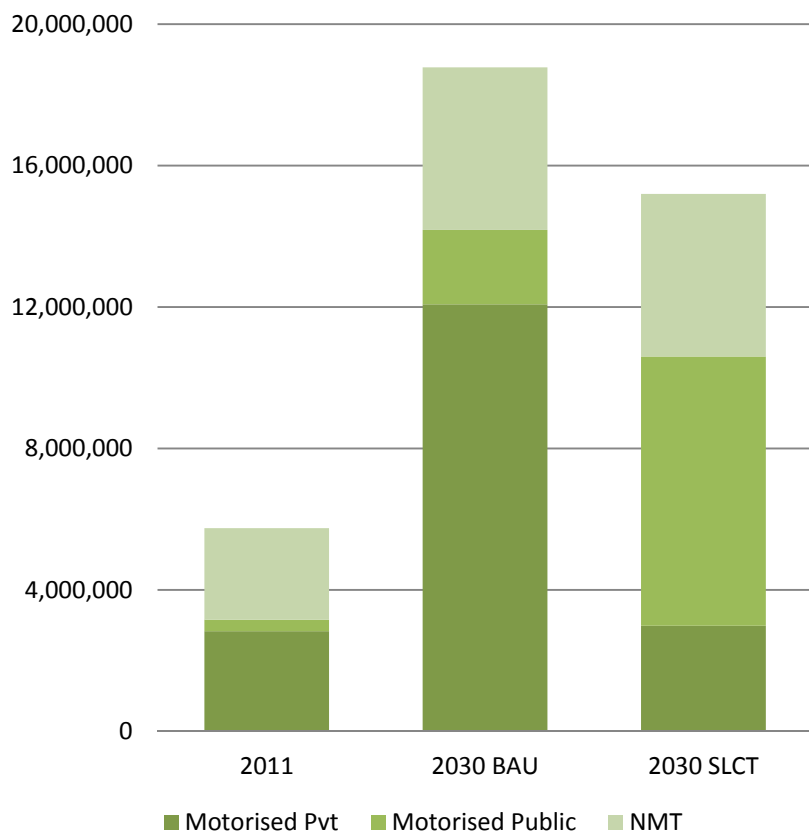


Source: Munshi, Talat, 2013, LCMP Rajkot, CEPT

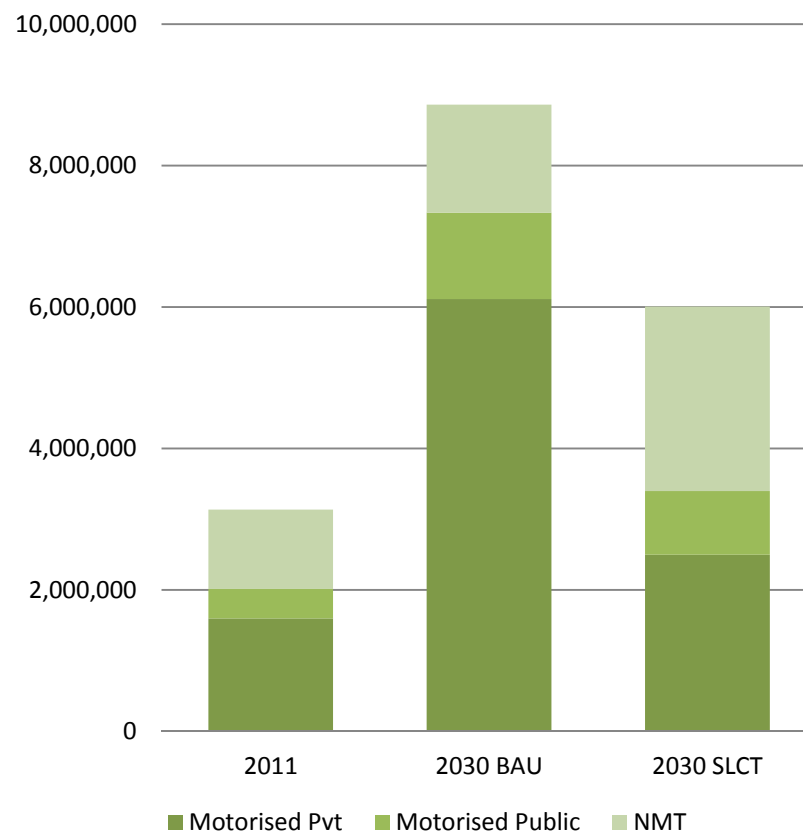


# Travel Demand - Passenger

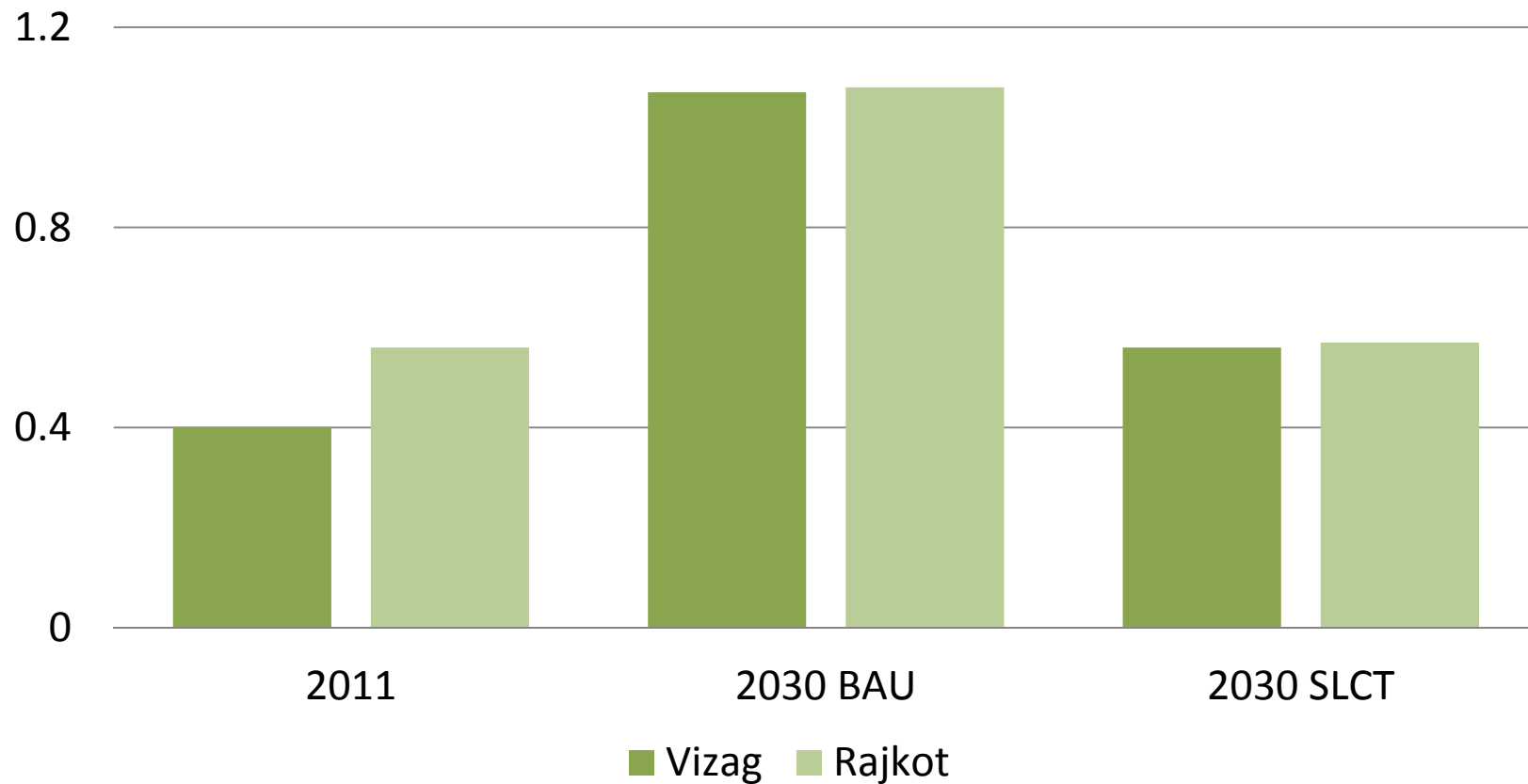
## Rajkot (VKT)



## Vizag (VKT)



# Per capita CO2 (tonnes)



# Co-benefits for Cities (e.g., Udaipur LCMP)



Indicators	Base Year 2011	Business As Usual Scenario (2031)	Sustainable Urban Transport Scenario (2031)
Average travel time (min)	22	27	14
Average trip length (km)	4.3	6.5	3.5
Accident rate / million population	163	217	130

## Key Messages

- Though the trip rates and trip length are low in Indian cities they will increase in future
- Urban structure, public transportation and NMT strengthening can change the travel demand in a significant fashion and therefore reduce CO2 emissions
- There will be also significant benefits for mobility, access, fatalities and local environment

- Questions?

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- Ressources

- Project Website  
[www.unep.org/transport/lowcarbon](http://www.unep.org/transport/lowcarbon)

*Reports Referred*

- LCMP Report for Vizag, Rajkot and Udaipur
- Revised CMP Toolkit
- Dhar, S., Pathak, M., & Shukla, P. R. 2015. ***Transport Scenarios for India: Harmonising Development and Climate Benefits***: UNEP DTU Partnership, Technical University of Denmark