

Implementing LCS Options: Transport Sector in India

P.R. Shukla
Indian Institute of Management
Ahmedabad, India

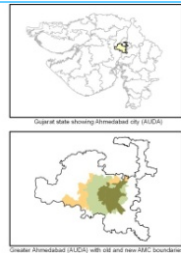
Presented at

Side-event at COP17:

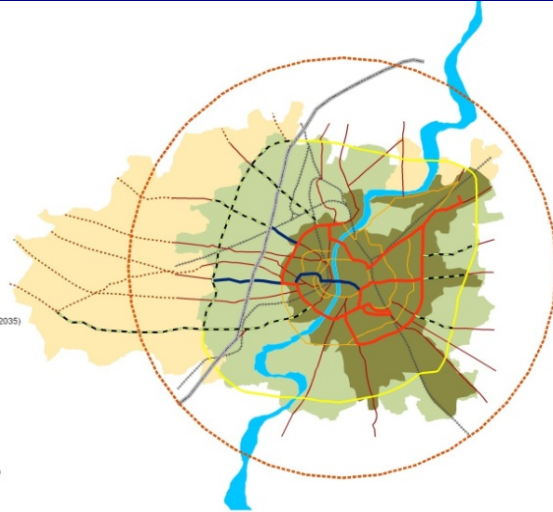
Low CARBON Society in Asia: From Planning to Implementation

Durban, South Africa, December 2, 2011

Ahmedabad City: LC Transport



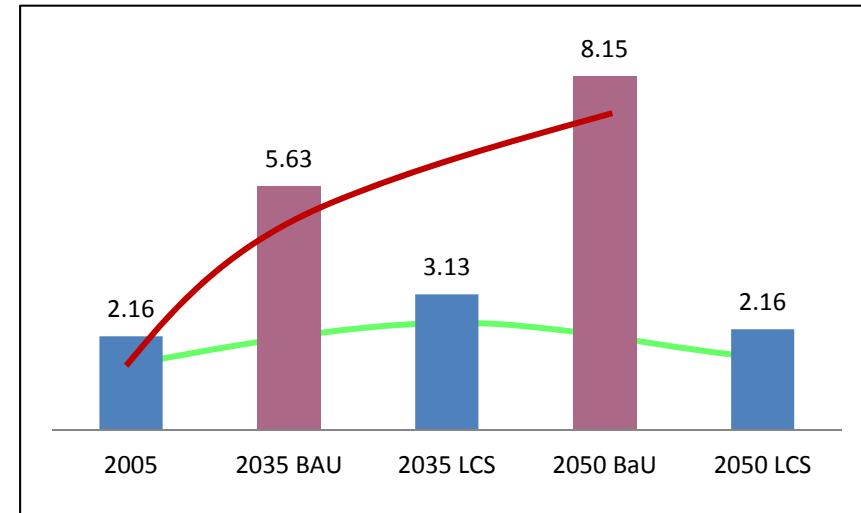
Ahmedabad City: Pop. In 2010 - 5.5. Million



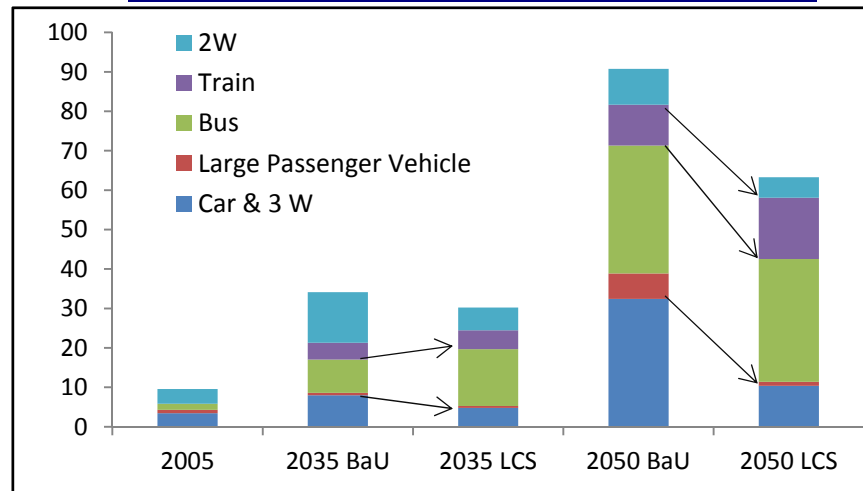
Note: Based on Ahmedabad Janmarg Map, AMC 2010

External boundaries not authenticated

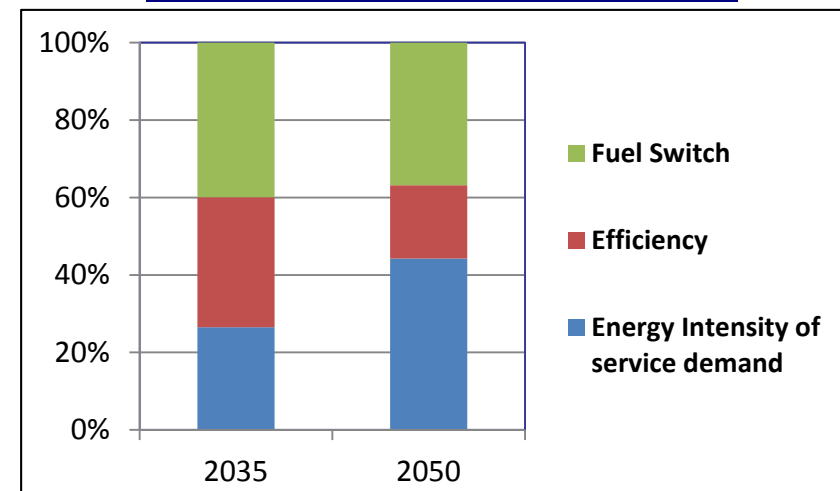
Per Capita CO2 Emissions (Ton)



Transitions in Transport Modes



Transport Sector Mitigation Options



Low Carbon Mobility Plan

Ahmedabad 2035

Total travel demand (billion passenger km) : 53.3

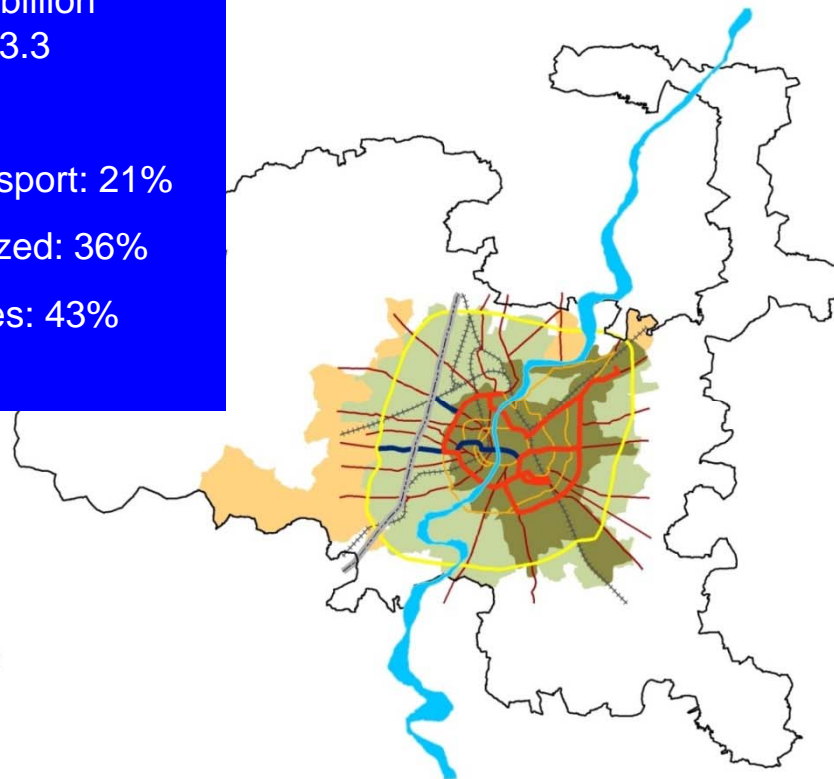
- Modal Share
 - Public Transport: 21%
 - Non-motorized: 36%
 - Other modes: 43%

Legend

- Sabarmati River
- Greater Ahmedabad (AUDA)
- S.G. Highway
- S.P. Ring Road
- Bus Rapid Transit System Phase-I
- Bus Rapid Transit System Phase-II
- City's other major ring roads
- City's major radial roads
- Railway line
- Ahmedabad old boundary (before 2007)
- Ahmedabad city (after 2007)
- Ahmedabad city in 2035 (assumed)

0 12.5 25 50 km

Note: Based on Ahmedabad Janmarg Map, AMC 2010



Mobility Module

Inputs

- Economic output from Household, Industry and Commercial sector
- City Development Plans
- National Development Plans
- Labour input for different sectors

Outputs

- Demand for mobility
- Modal shares
- Infrastructure needs
- Traffic speed

Model Framework

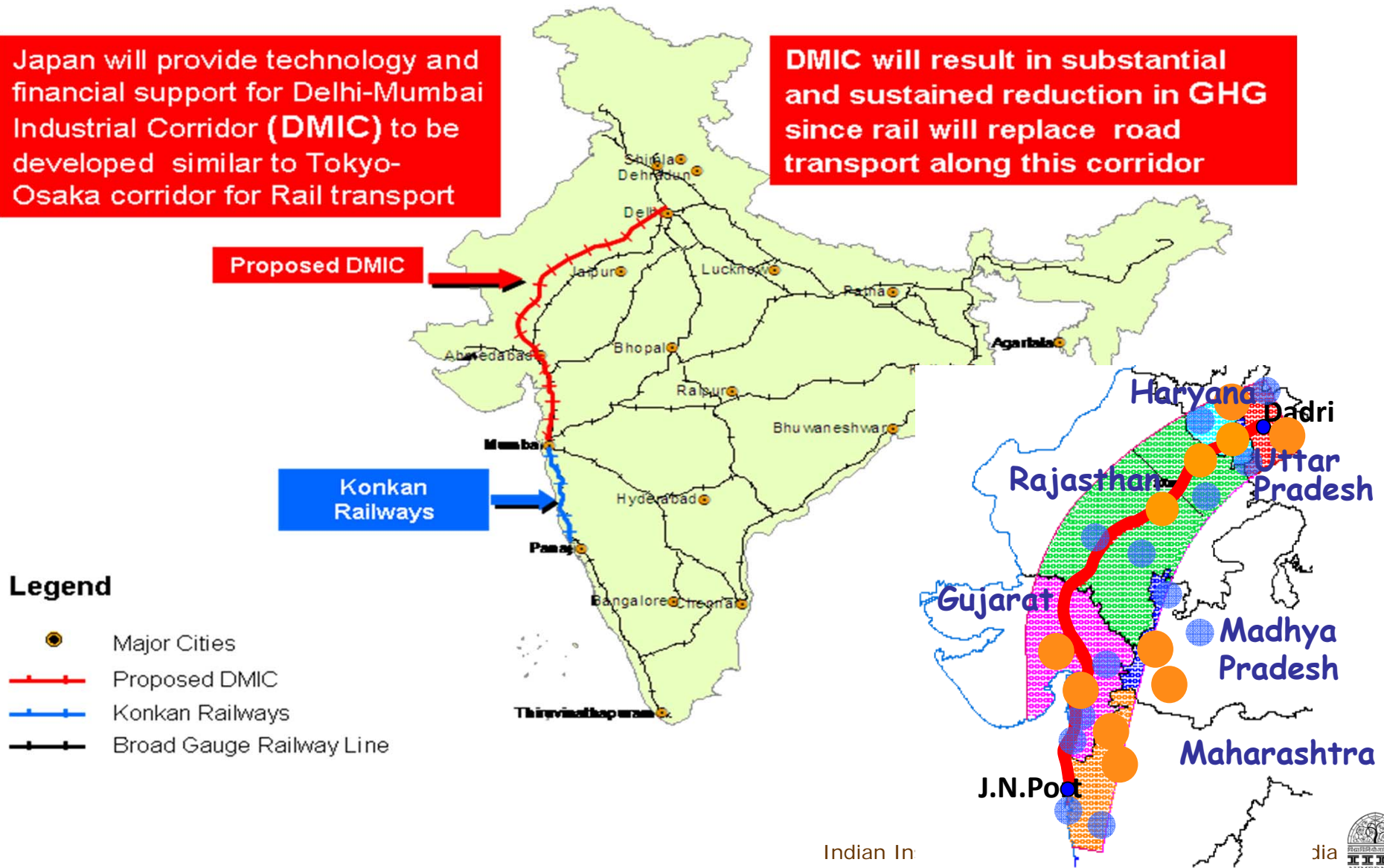
- Land use transportation model

Infrastructures to Overcome Lock-ins

Train Corridors

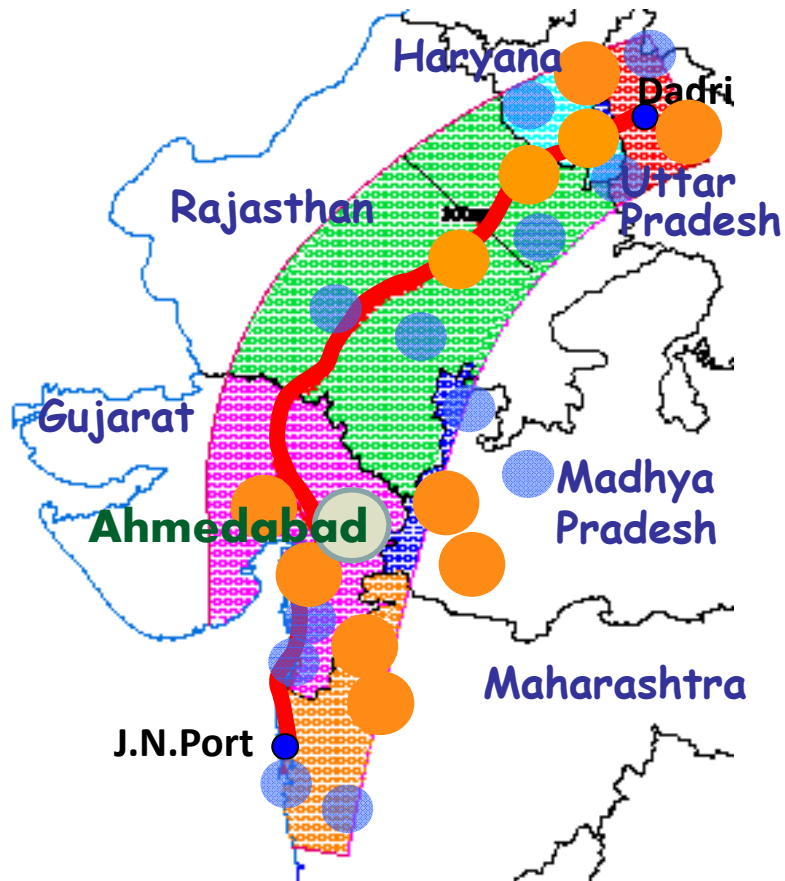
Japan will provide technology and financial support for Delhi-Mumbai Industrial Corridor (DMIC) to be developed similar to Tokyo-Osaka corridor for Rail transport

DMIC will result in substantial and sustained reduction in GHG since rail will replace road transport along this corridor

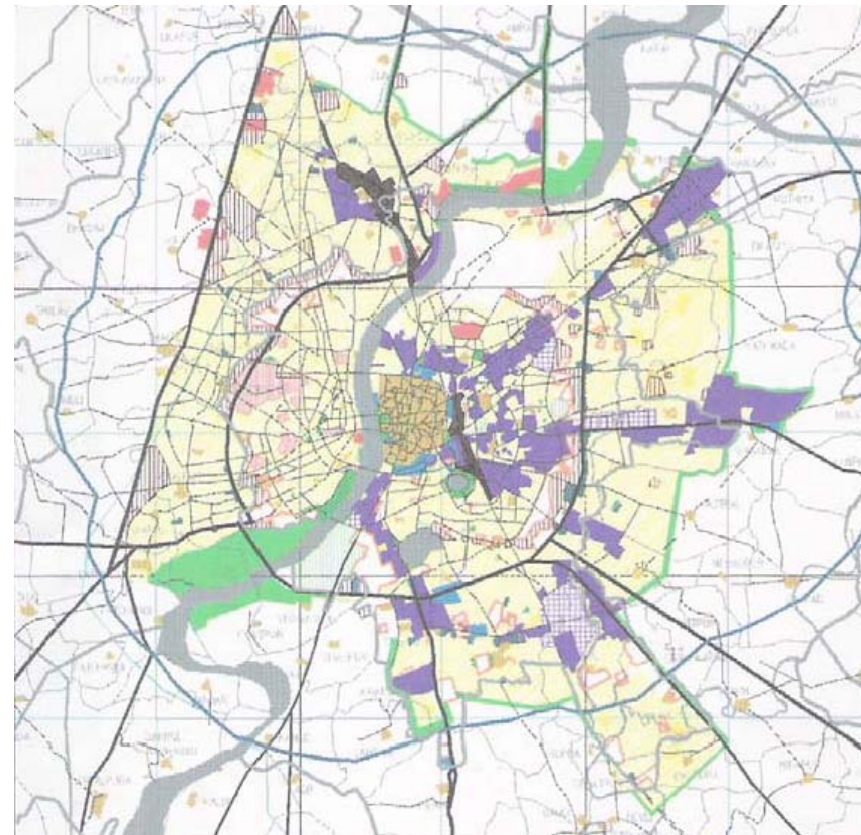


Linking Intra and Inter-city Mobility

DMIC Freight Corridor



Ahmedabad: Land Use Plan



Source. City Development Plan for Ahmedabad

2010



Website: www.unep.org/transport/lowcarbon

2050

