

# **A Crisis in Asian Transport: The Sustainable Transport Challenge**

Copenhagen: Bridging the Gap  
with Land Transport

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# Asian Experience

- Walking and NMT public transport – up to 1900
- Shift towards public transport (rail, bus, trams, rickshaws) but NMT still dominant 1900–1945
- Emergence of individual mobility for privileged few 1945–1975
- Expansion of individual mobility demand while maintaining broad based public transport 1975-1990
- Explosion of individual mobility, neglect of public transport systems and dismantling NMT systems 1990–2005
- Re-emerging interest in public transport and NMT 2005 –





# Hanoi, Vietnam



Photo: Corrie Hulzena



# Shanghai, China



Photo: Cornie Huizenga



# Dhaka, Bangladesh



Photo: Karl Fjellstrom



# Manila, Philippines



# Kathmandu, Nepal





# Beijing, PRC



**Predict and Provide**

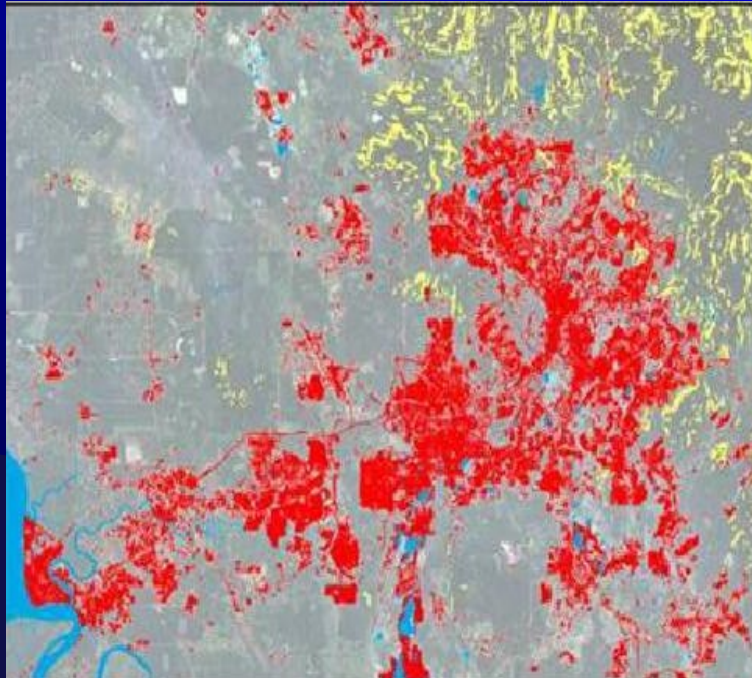
**ADB**



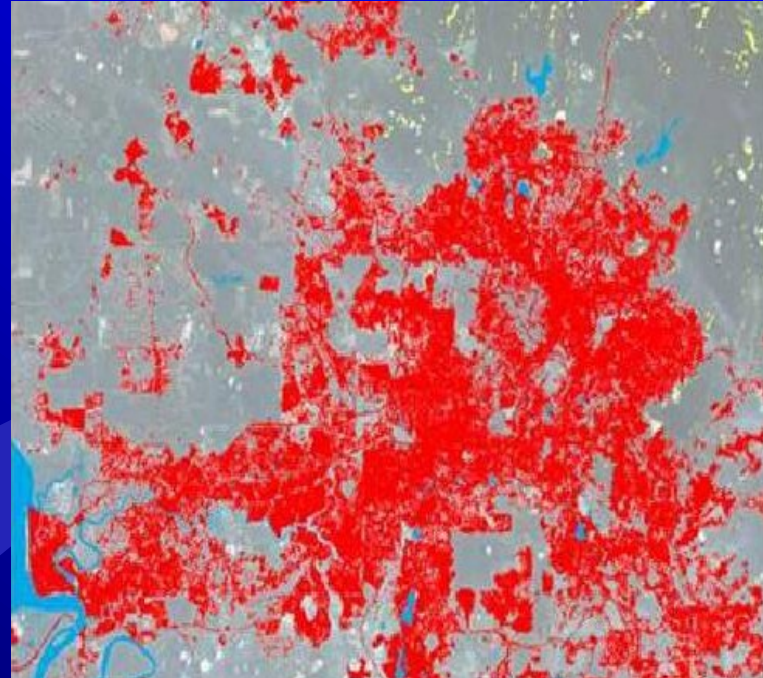
# Urban Expansion in Asia

## Kuala Lumpur 1989-2002

- Built up area doubled - 385 to 805 sq km
- Population increase - 2.7 to 5 million
- Density decrease - 7,130 to 6,160 per sq km



1989

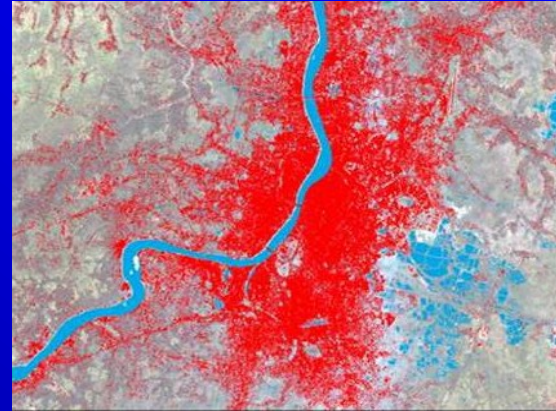


2001

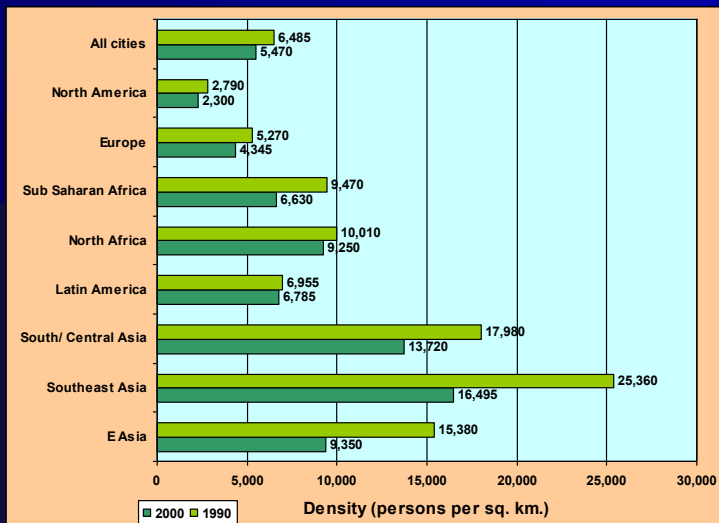
# Asian Urban Transport Managing Mega-cities

## Kolkata

- Pop: 7.8 million
  - Density 16,200 per sq. km
  - Built up area: 480 sq. kms
- If
- Density decrease (3,000/sq.km)
  - Population increase



How best to provide access  
and/or mobility?





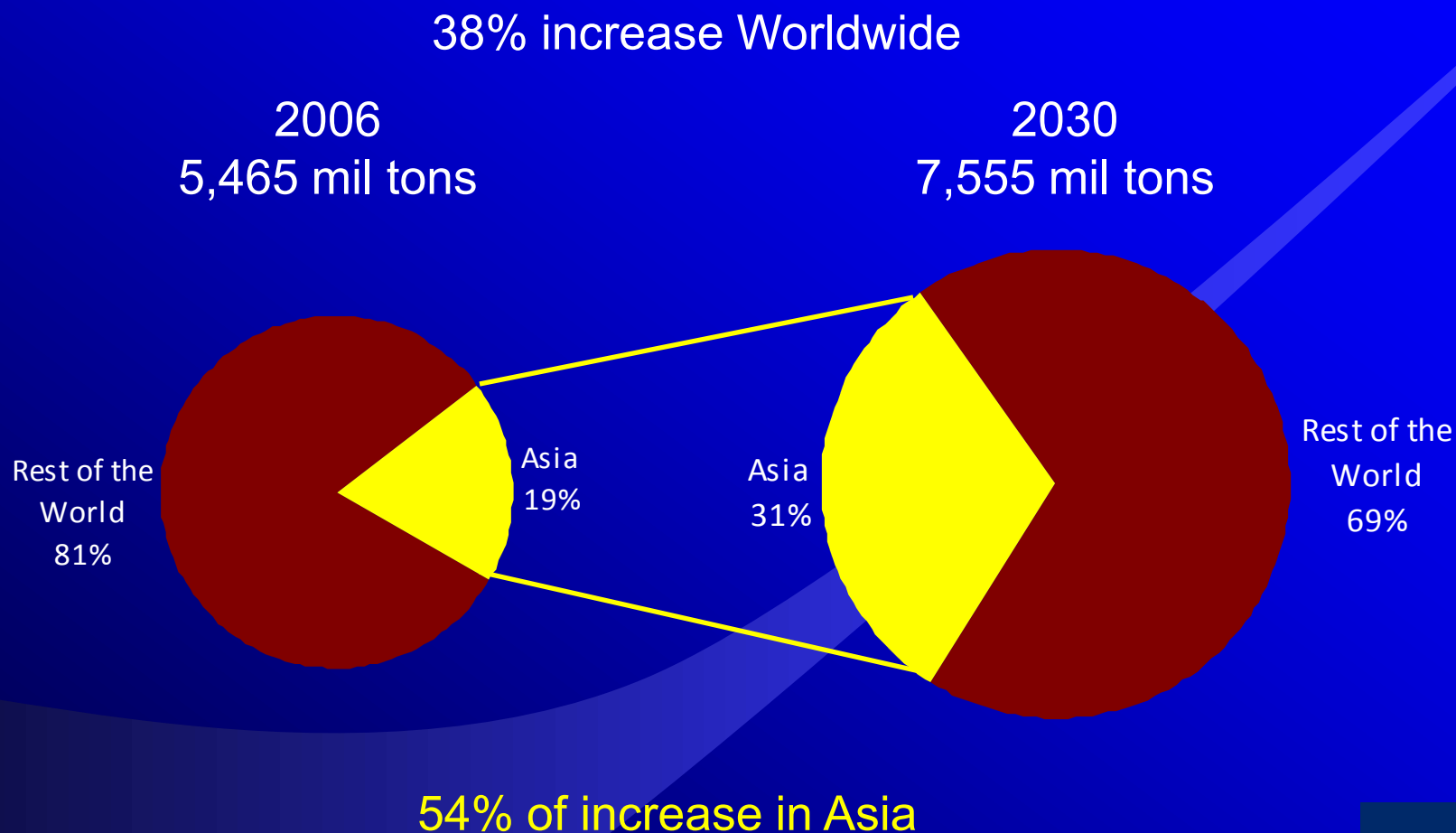
# A Crisis in Asian Transport

- Congestion costs 2-5% of Asian GDP
- Road accidents cost 2-5% of Asian GDP
- Energy use ~ 30% of World energy
- Fuel security - US\$50-150/barrel
- CO<sub>2</sub> - 23% from transport sector
- Local pollution - respiratory health cost

## Impacts

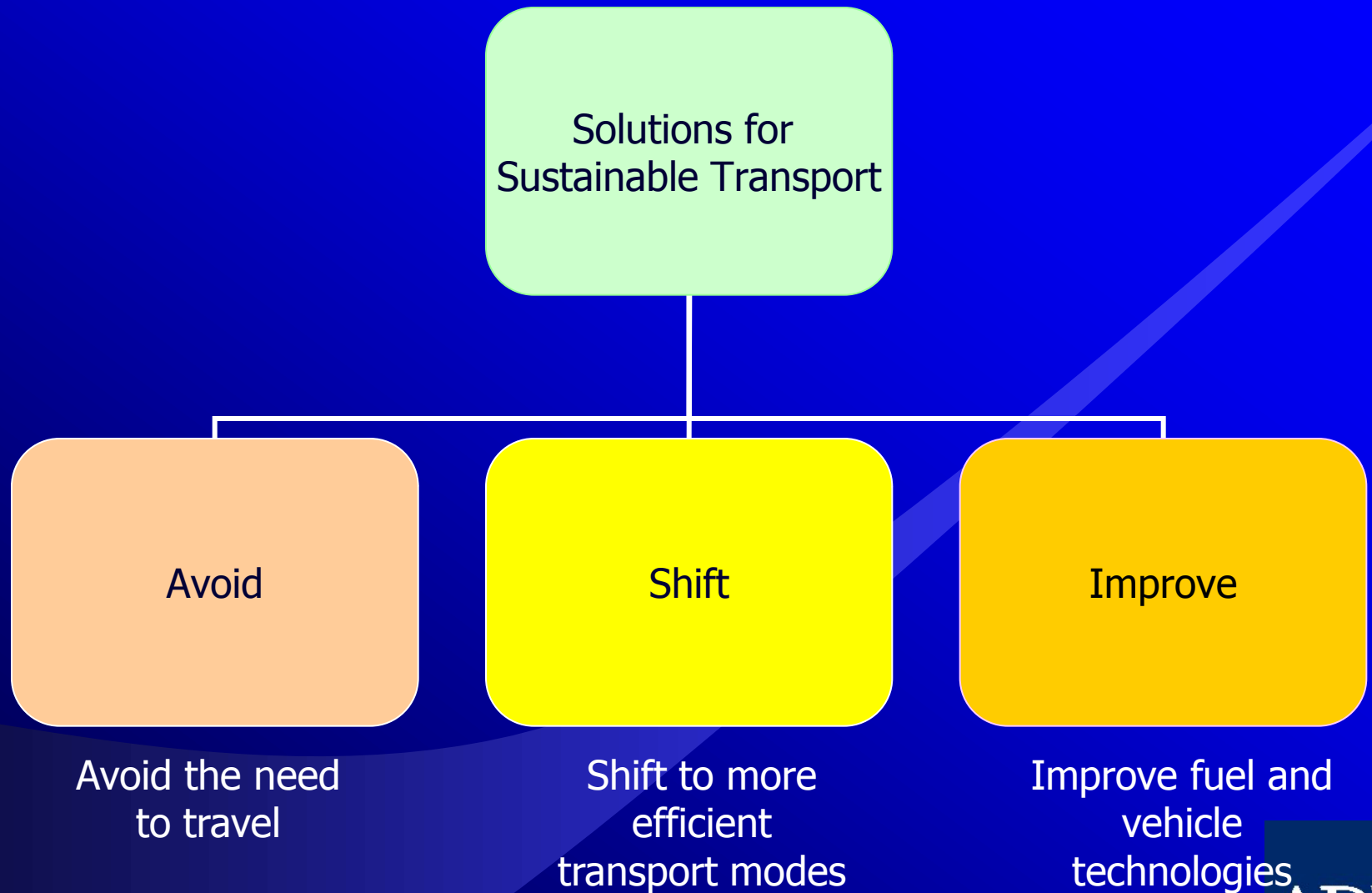
- Economic development
- Equitable access
- Quality of Life

# Transport Sector CO<sub>2</sub> emissions





# A Sustainable Transport Path

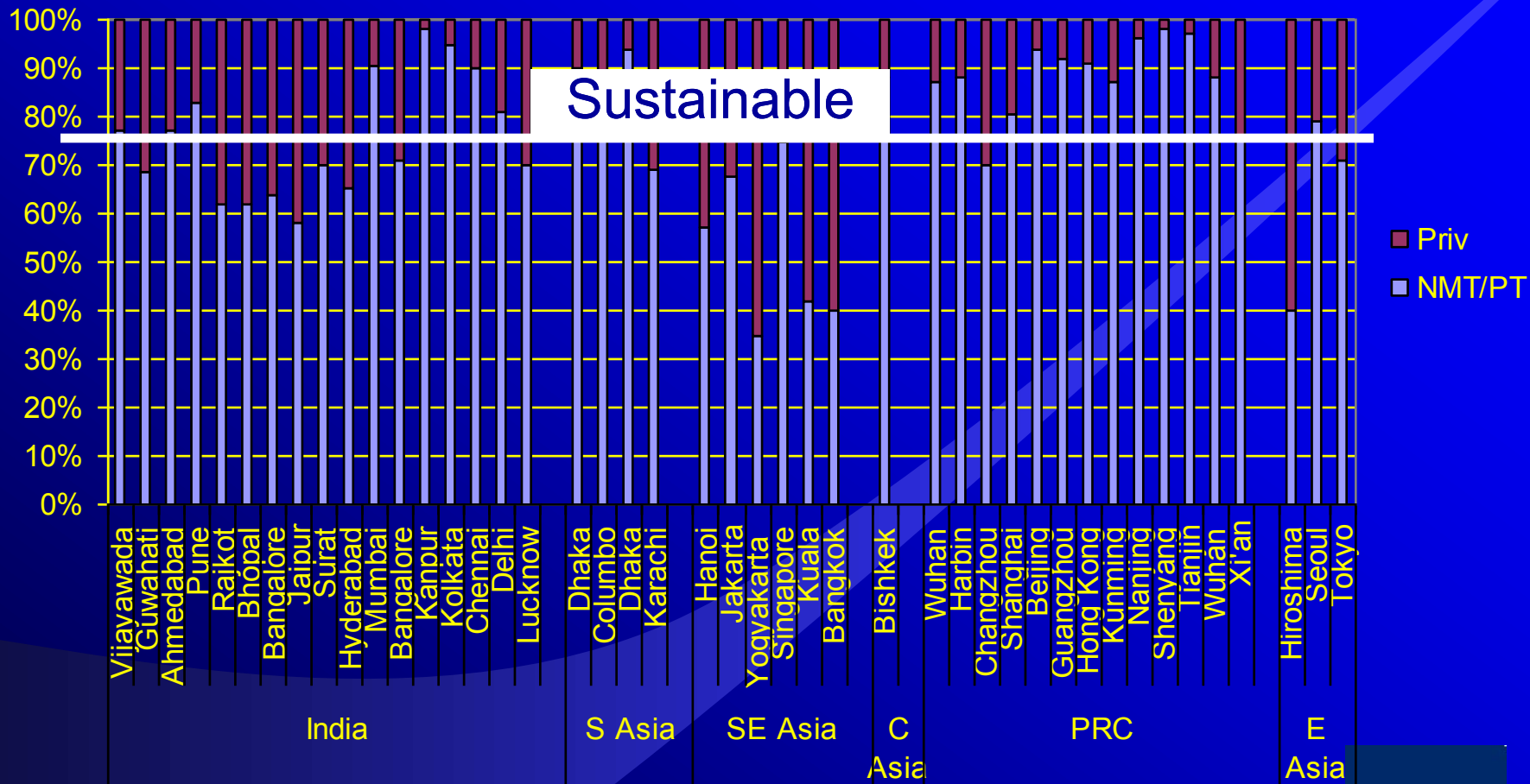


# Same Principles but Different Requirements

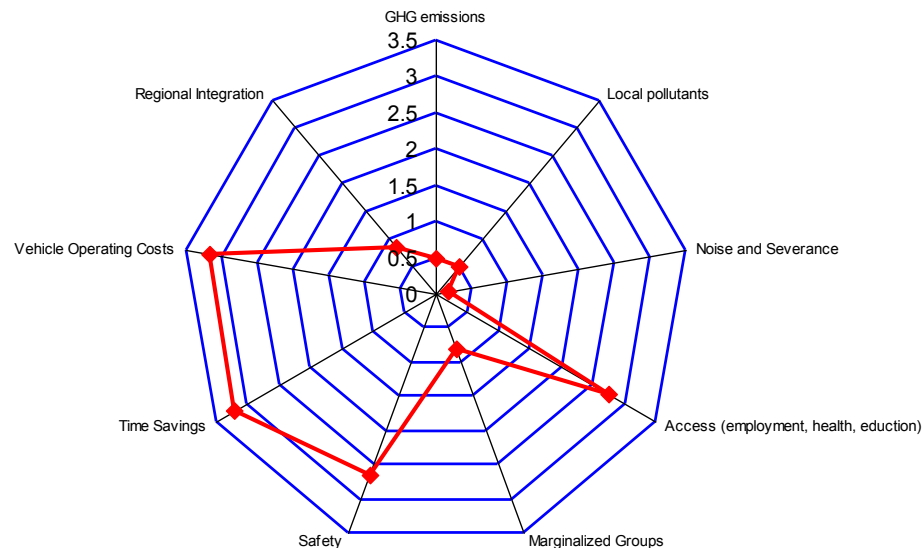
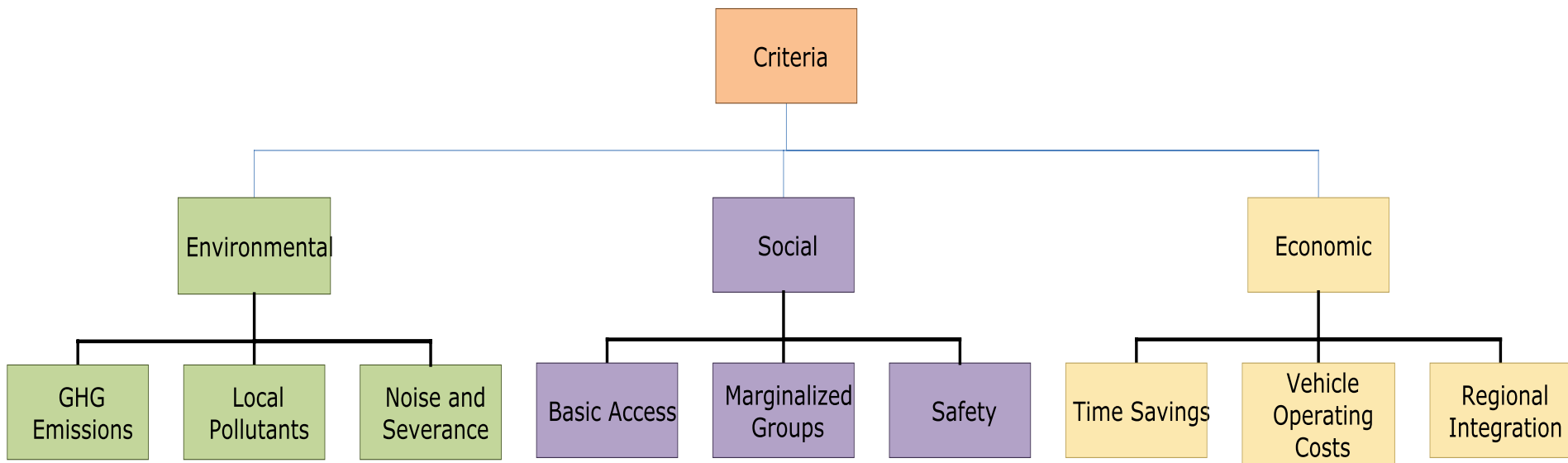
| Principles     | Developed Countries   | Developing Countries   |
|----------------|---|--|
| <b>Avoid</b>   | Reduce travel through traffic demand management (TDM)                       | Avoid unnecessary generation of travel through land use planning, integrated land use and traffic management |
| <b>Shift</b>   | Shift from private vehicles to non-motorized transport and public transport | Prevent shift to private vehicles from non-motorized transport and public transport                          |
| <b>Improve</b> | Clean up existing vehicles and fuels  | Ensure that future vehicles are as clean as possible   |



# Asian City Transport Mode Share



# Evaluation Criteria

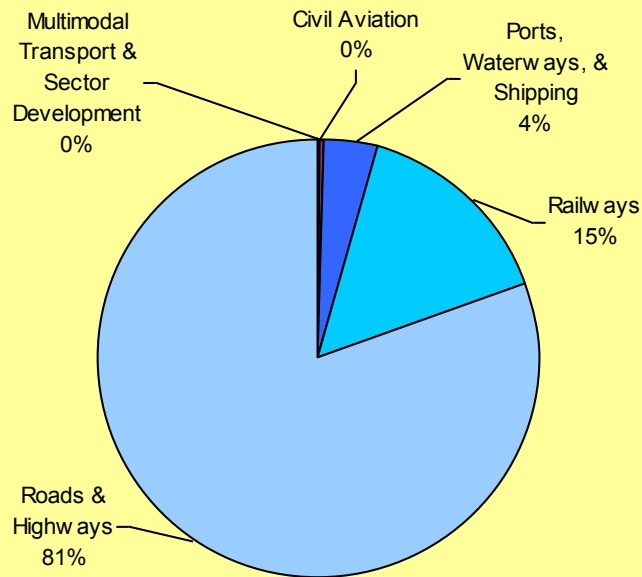




# ADB's Sustainable Transport Initiative

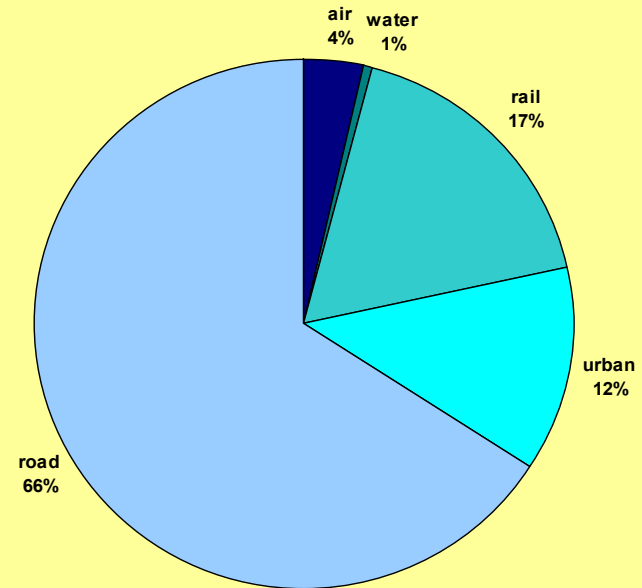
Transport is a priority sector for ADB lending

ADB Transport Lending - Public Sector  
(2004-2008)



**\$2.19 billion per annum**

ADB's Transport Lending Pipeline - Transport Sector  
(2009-2011)



**\$5.89 billion per annum**

**“Our Sustainable Transport Initiative will make more cities more ‘people-friendly’ and advance climate change mitigation objectives.”**

Haruhiko Kuroda  
President, Asian Development Bank  
2009 Delhi Sustainable Development Summit



Partnership on Sustainable  
Low Carbon Transport

**Thank you**

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**ADB**