Urban Transport in Developing Cities

Challenges, Strategies and Examples

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What do we get for 23% ?

1. Why is urban transport important now?
2. What are the major urban transport challenges in developing cities?
3. How does the World Bank help developing cities on urban transport?


HCMC PM Peak
Thursday
Why is Urban Transport Important?


उगम
Pune, India

Why Urban Transport Important

Bangalore, India

Beijing, China

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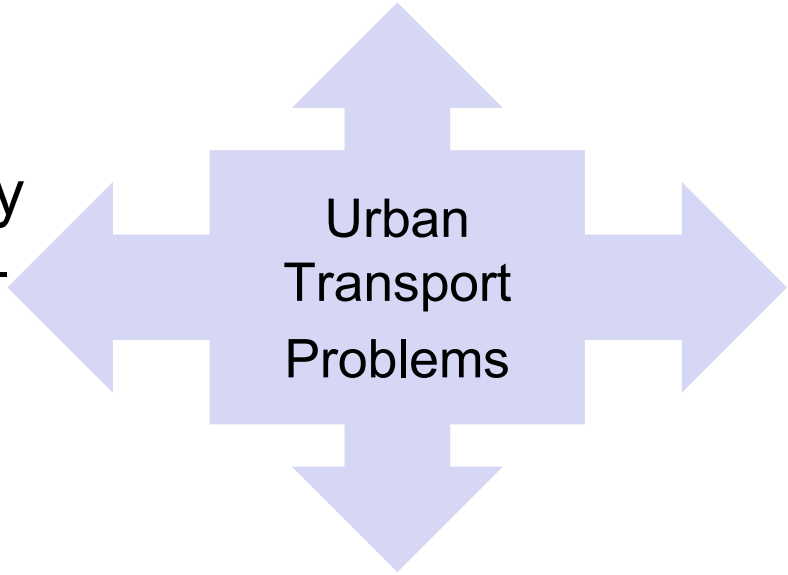
Why is Urban Transport Important?

Increasing use of non-renewal energy – impacting global environment

Severely hampering mobility and accessibility – impacting social and economic activities



Increasing pollution – impacting health and quality of life

Increasing accidents – impacting safety concerns

The poor are worst affected !

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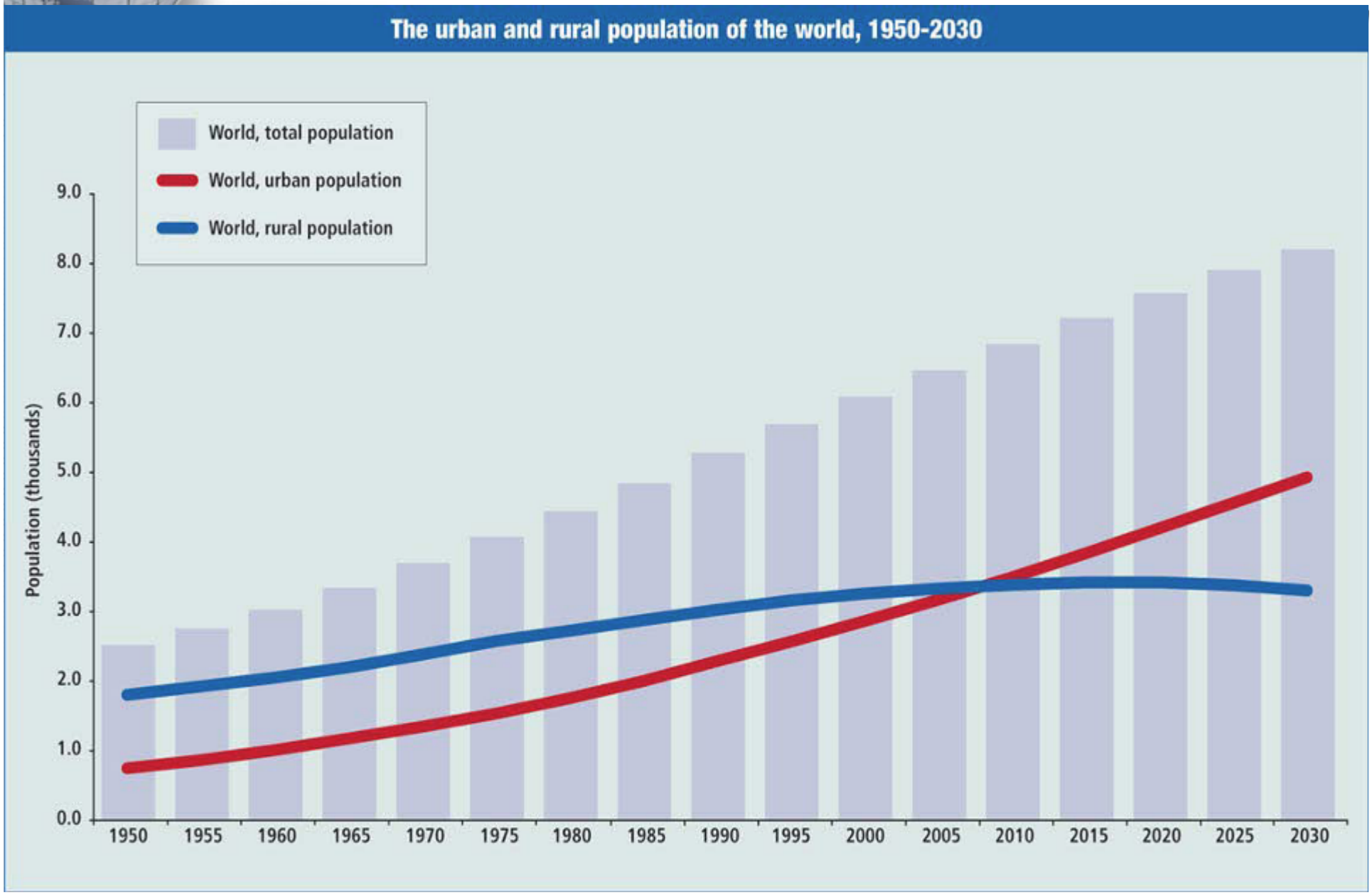
2. What are the Major Challenges?

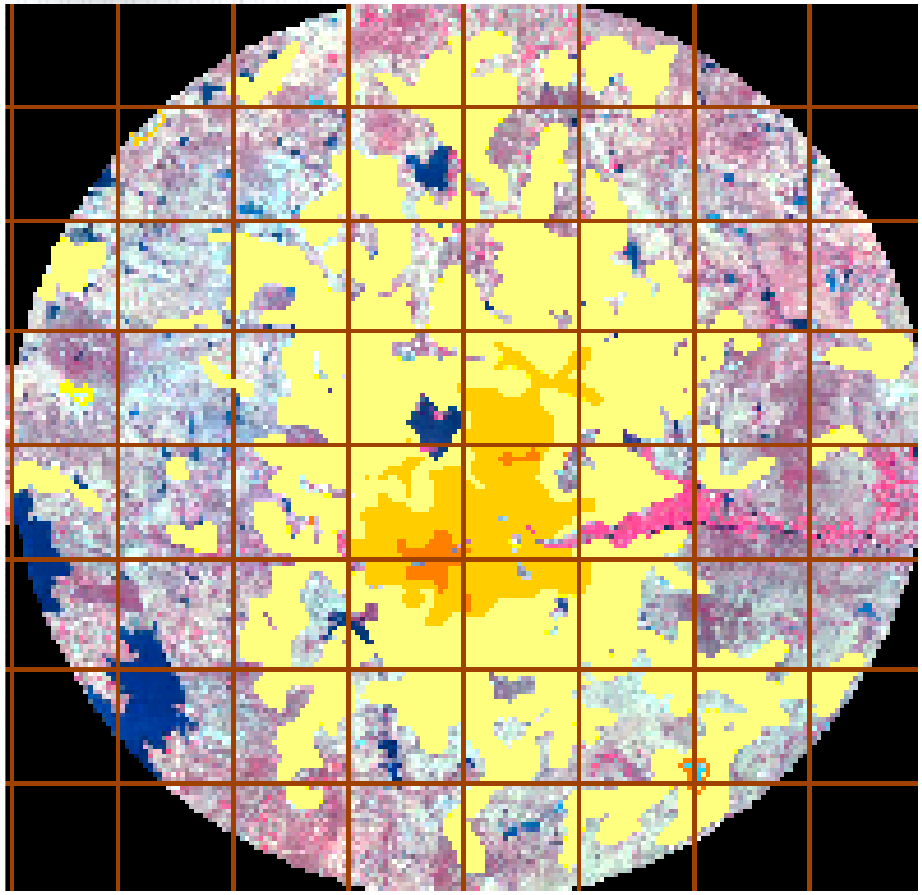
Urban Transport Challenges

- Rapid urbanization
- Increase in motorization
- Low quality public transport
- Lack of hierarchical highway, road and street systems
- Poor non-motorized transport (NMT) infrastructure
- Lack of Resources
  - People, Institutions, and $

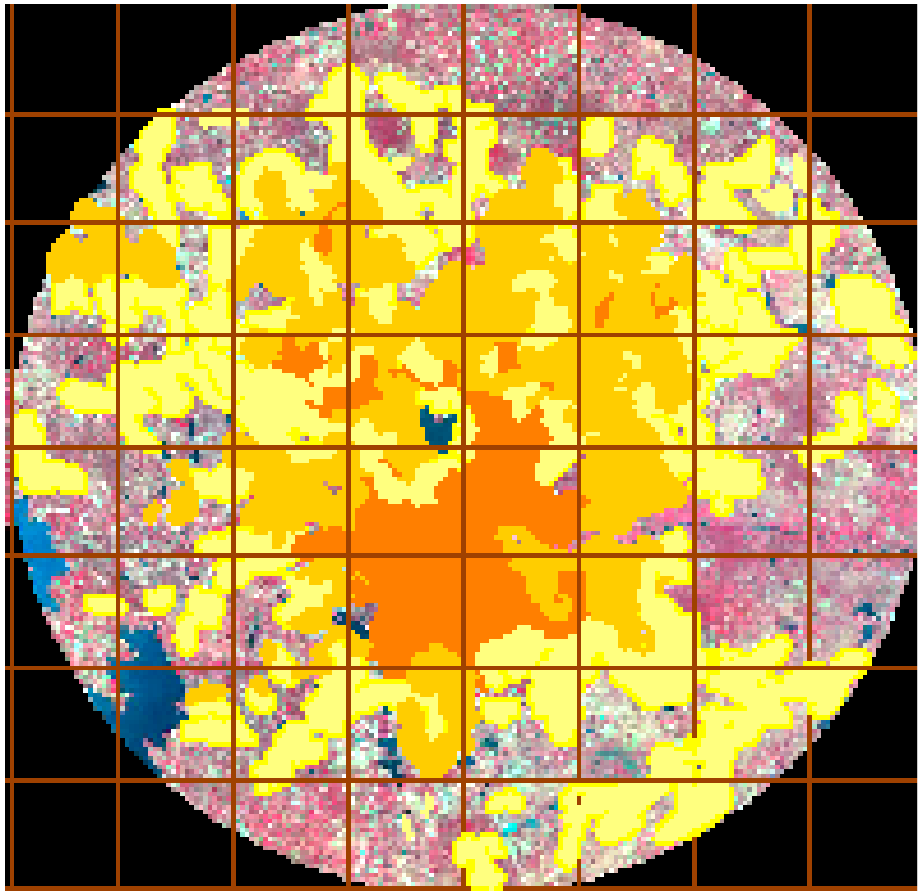
Urbanization



Urban Sprawl



Hyderabad in 1989
3,145,000 people



Hyderabad in 2001
5,742,000 people

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Lack of Hierarchical Highway/Road/Street Net.

- Freeways, major arterials, little else
- Virtually all trips, regardless of length and mode (e.g., animal carts, pedicabs, bikes, ped.'s) use general traffic lanes on high-level facilities
- Direct connection from arterials to alleys and pedestrian-only paths with nothing in between

Fushun, China

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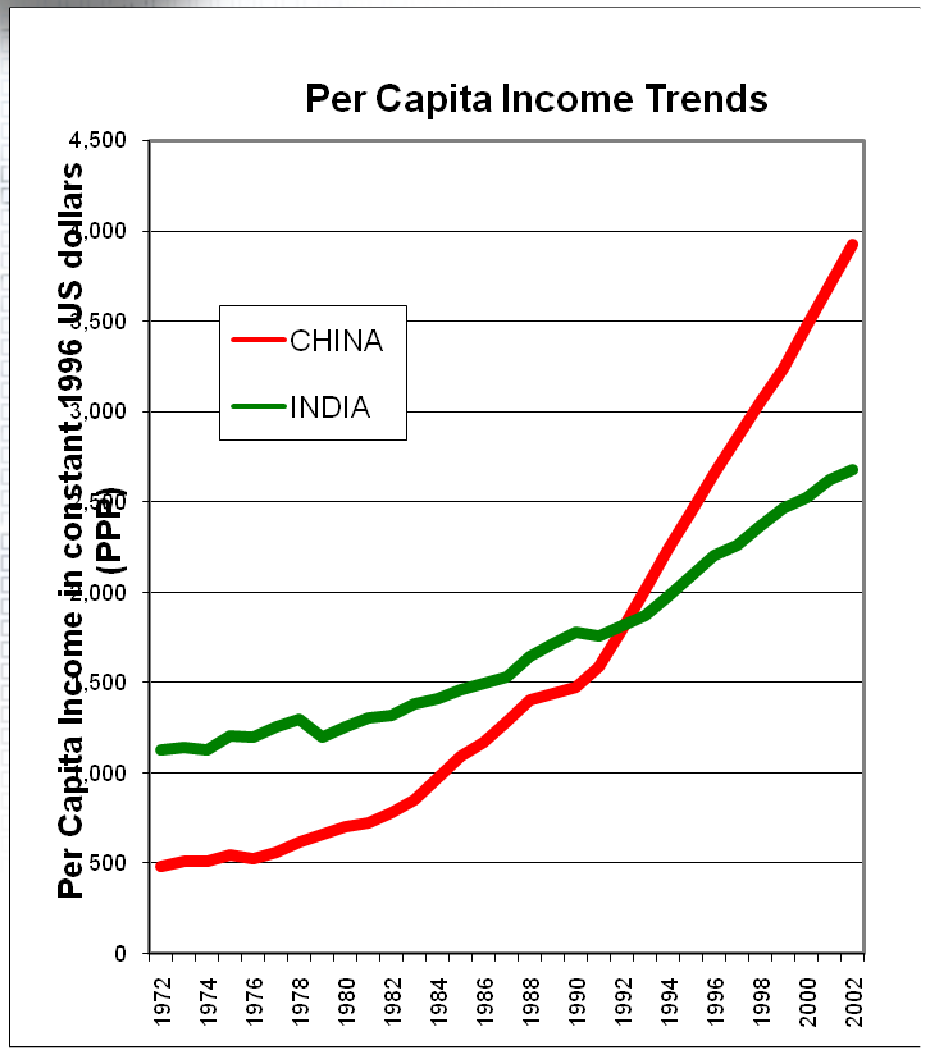
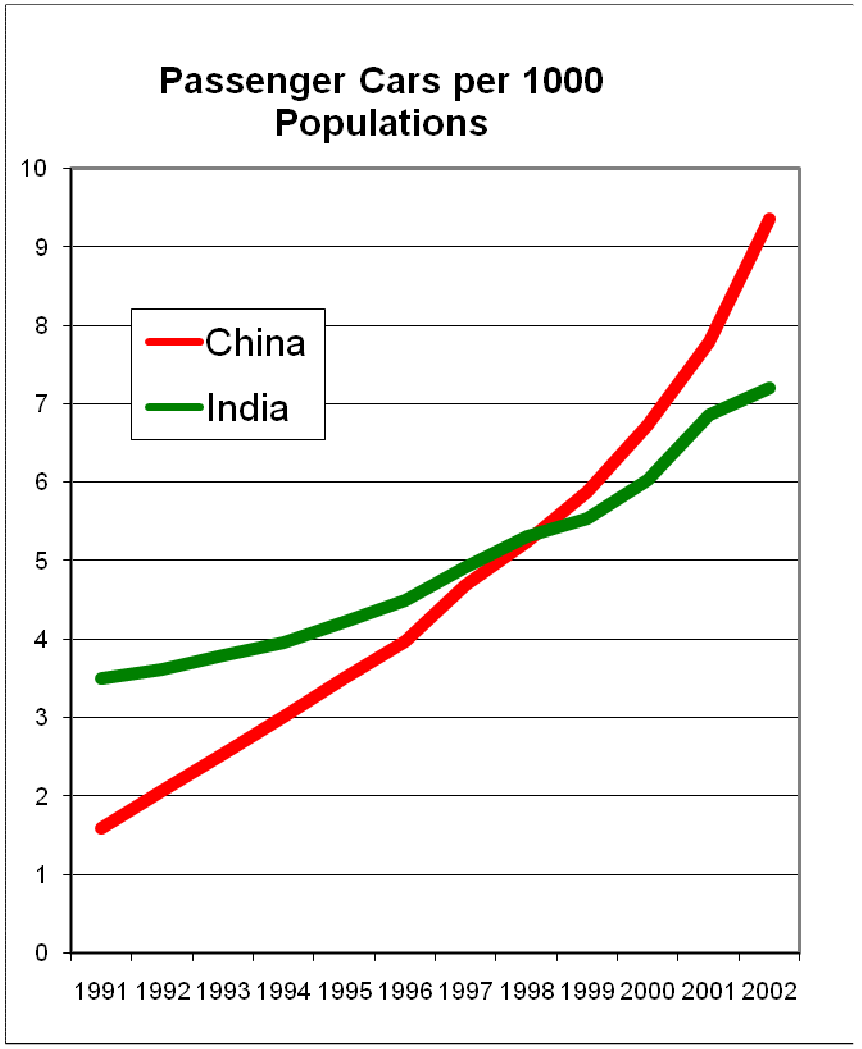
Increases in Motorization





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Increases in Motorization

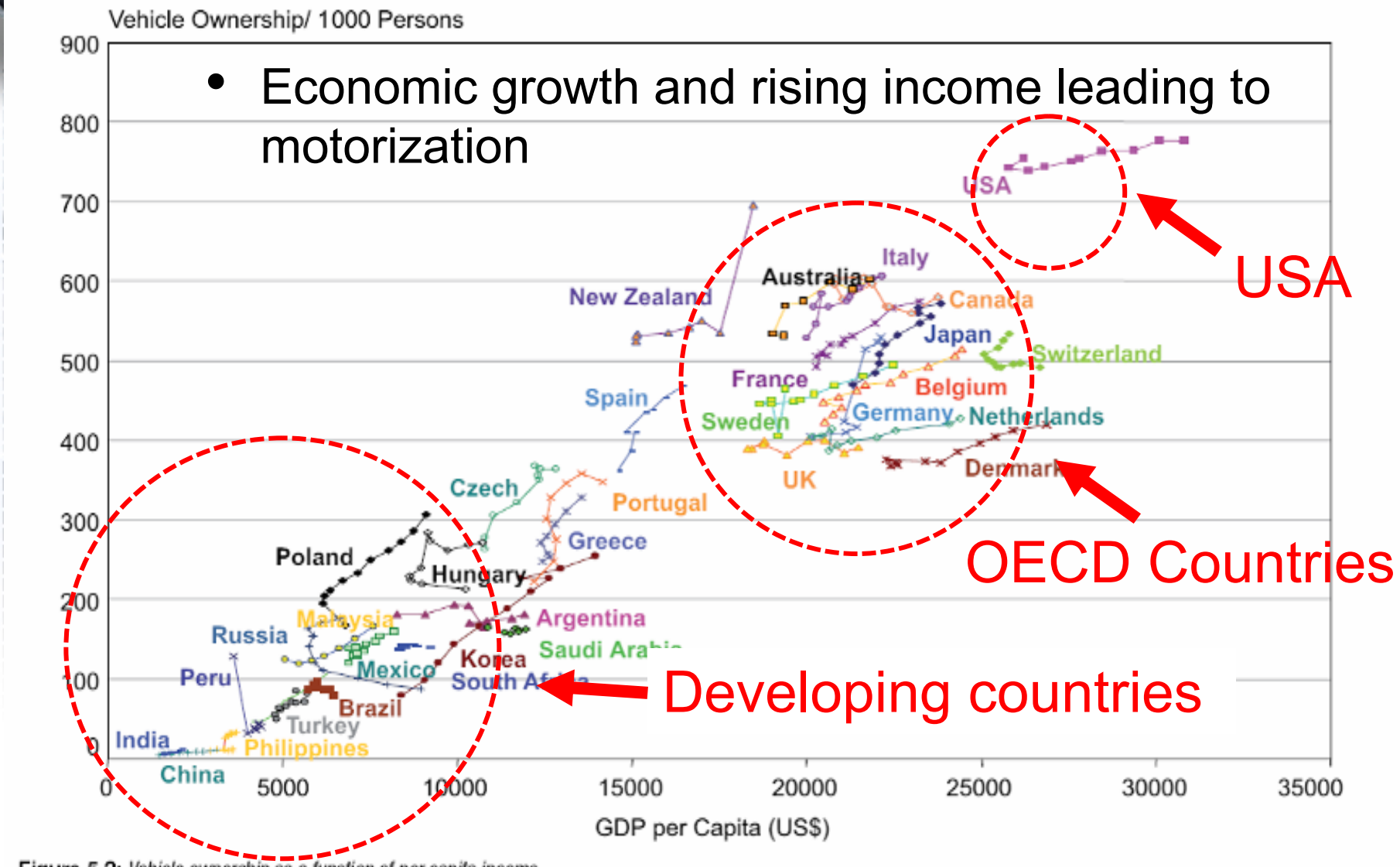


Figure 5.2: *Vehicle ownership as a function of per capita income*

Note: plotted years vary by country depending on data availability.

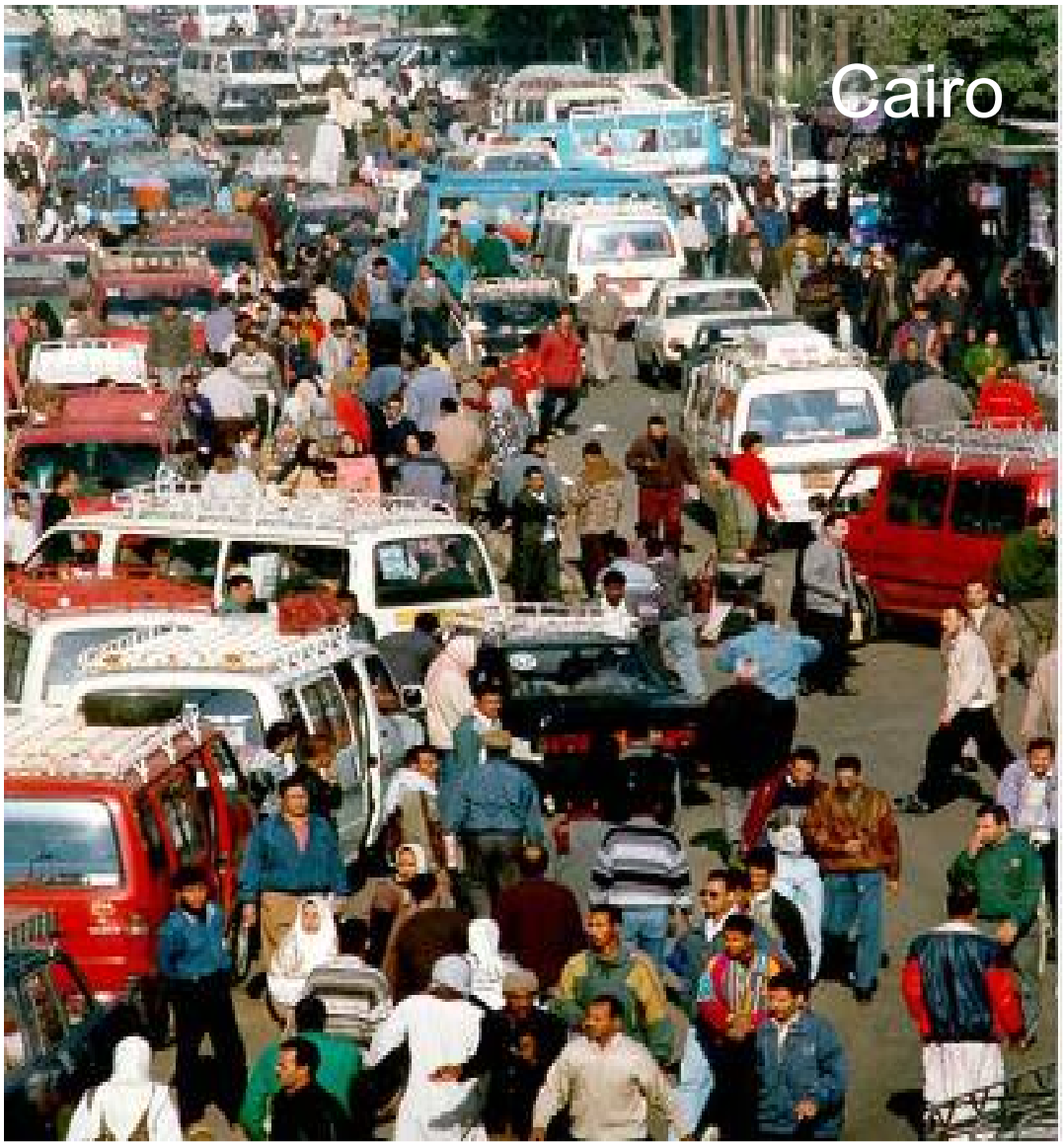
Data source: World Bank, 2004.


Hanoi
Not Just Cars
Beijing

Poor public transport services

Lima

Accra


Cairo


Dhaka

Poor, deteriorating NMT infrastructure

- Safe pedestrian passing is often missing

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Resources and Institutions

- Lack of essential technical skills in urban transport planning, management and operations
- Lack of experience with market-driven rather than supply-driven instruments/tools
- Fragmented institutional arrangement without effective coordination
- No or poor regulation of public transport services
- Little $, but drained quickly by expensive “glamour” projects with no or little left for other more cost-effective improvements.
- There is no quick fix for urban transport problems, but sustainable development options are available.

3. Can the World Bank Help, and How?

World Bank Urban Transport Support

- Safe
- Clean
- Affordable

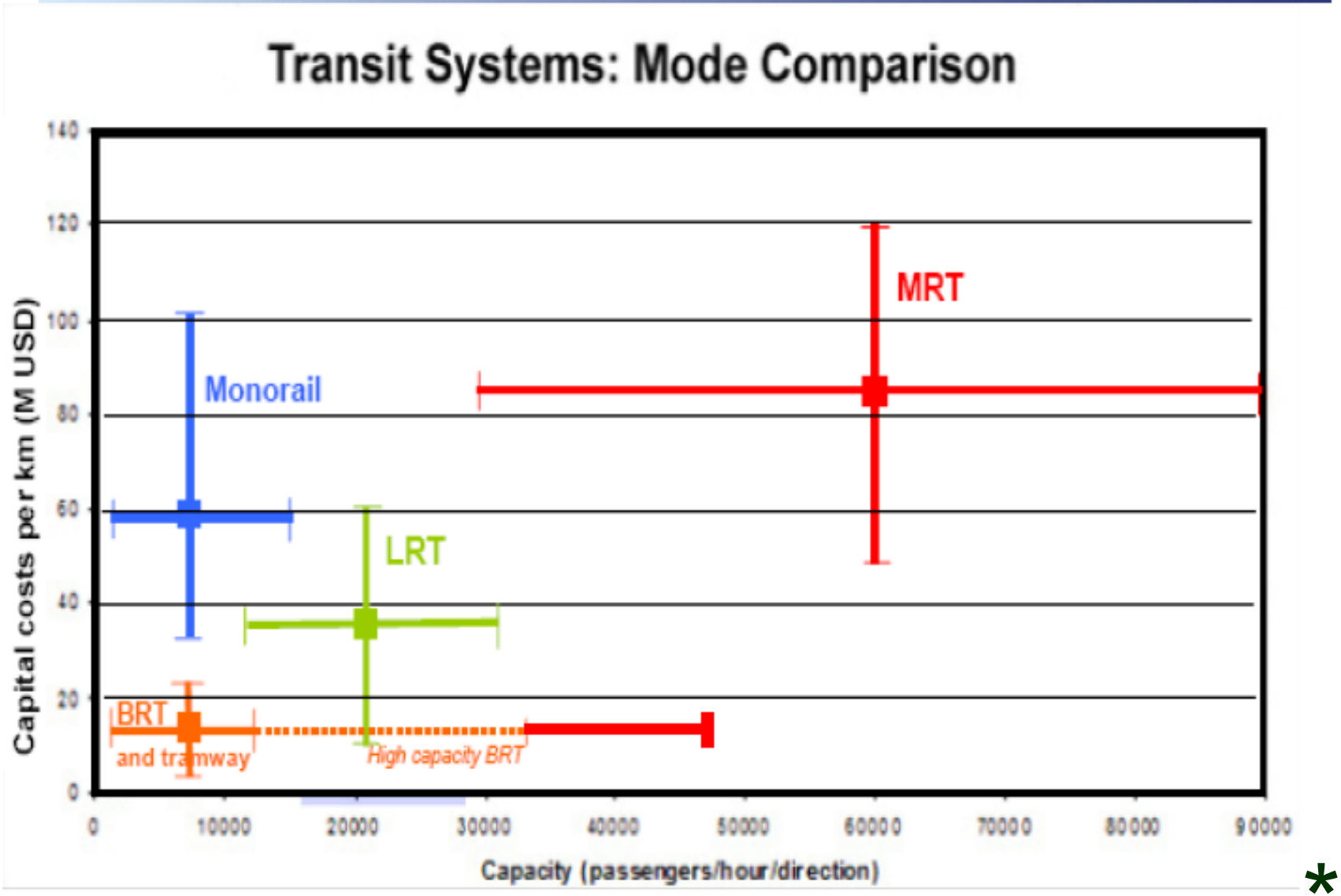
Focus of World Bank Support

- Policy formulation – "get the policy right"
  - Diagnostic and analytic work
  - Development of new policies and regulations
- Institutional development – support policy implementation
  - Structure, authority, capacity
  - Processes, instruments
- Investments – support policy implementation
  - Infrastructure and services
  - Development, operation and maintenance

Policy Formulation

- Development of National Policy Framework
- Preparation of Urban Transport Strategies/Plans/Programs
- Integration of transport plans and land use plans
  - support public transport and non-motorized transport-friendly land development
- Regulated Competition for the Bus Industry
  - “Off the street” competition rather than “on the street” competition
  - Clear distinction between government and private sector responsibilities and functions
  - Targeting/integrating subsidies
- Sustainable Urban Transport Financing
  - e.g., urban transport funds
- Transport Demand Management
  - parking and/or congestion fees

No Dominant, Magic “Silver Bullet”



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Montassar DRAIEF - SYSTRA

Key to Successful *Metropolitan* Transport Institutions

- Planning/decision-making for all significant public investments in all transport modes
- Authority over *strategic* operations and management policies
  - e.g., number of actors, levels and types of services, pricing, public information, integration of modes and services
- Defined and predictable sources of funding
- Formal linkages to land-use and environmental planning
- Formal public/private sector participation
- Sound quantitative basis for decisions

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Institutional Development

- Technical assistance/capacity building for establishment and operation of
  - National or city level urban transport authorities.
  - City/metropolitan urban transport planning bodies
    - Lagos LAMATA, Bogota TransMillenio
  - Public transport regulators and operators
  - Traffic management units
    - Traffic engineering, parking, enforcement

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Source: ATTT

Institutional Development

- Development of inclusive planning process for public participation
- Technical design standards for public transport and non-motorized transport (PT&NMT)-friendly infrastructure projects
- Pre-investment feasibility studies (integrating with social and environmental assessments)
- Impact monitoring and evaluation
  - assessments (“pre” investment)
  - evaluations (“post” investment)

Investments

- Public Transport
  - Rehabilitation and Expansion of Public Transport System
    - stations, passenger interchange terminals, operating/maintenance/storage depots, roads to divert traffic from public transport corridors, non-motorized transport (NMT) access, cleaner and more efficient bus fleets
  - Development of New Public Transport Systems
    - Regular bus, Bus Rapid Transit (BRT), Metro
- Traffic Management
  - Traffic safety measures
  - Traffic control, monitoring, enforcement systems
- Non-motorized transport
  - Sidewalks, bike tracks and parking facilities, pedestrian crossings, pedestrian-only zones, safety measures

Investments

- Environmental monitoring facilities & equipment
  - urban air pollution, vehicle emissions
- Urban road infrastructure
  - Rehabilitation and maintenance of existing roads
  - Development of new urban roads
    - secondary streets
    - (conditional) ring roads or arterial roads
- Integrated public transport corridor improvement
  - public transport, NMT, roads, safety, traffic management

Periera Megabus

Finance and Revenue

Funding

- Loans, grants and blends
- National programs and subsidies
- Global Funds, GEF
- Partnerships, Cities Alliance and UN Habitat
- PPPs, Private finance, DBOM + F,

Revenue

- Road space charging
- Taxing convenience
- Partnerships
- Commercial opportunities, advertising

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Urban Transport Team in World Bank

- 150+ transport specialists from around the globe
  - Technical experts
  - Former senior-level policy makers
- Urban transport program started in early 1970s
- Growing portfolio
  - About $250- 500 million/year in the past 5 years
  - $3.5 billion (including IBRD, IDA and grant) proposed for the next 3 years, spreading to 25 countries

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But Bank resource is limited…

- World Bank cannot do it alone…
  - Cooperation with multi- and bilateral development banks, e.g., ADB
  - Donors, e.g., JICA, AFD, DFID, AusAID, etc
  - GEF and UN agencies
  - international and local professional NGOs
- Most importantly, partnership with **national and local governments**
- Bank support focusing on
  - Demonstration of cost-effective sustainable urban transport options
  - Development of long term municipal financing mechanisms

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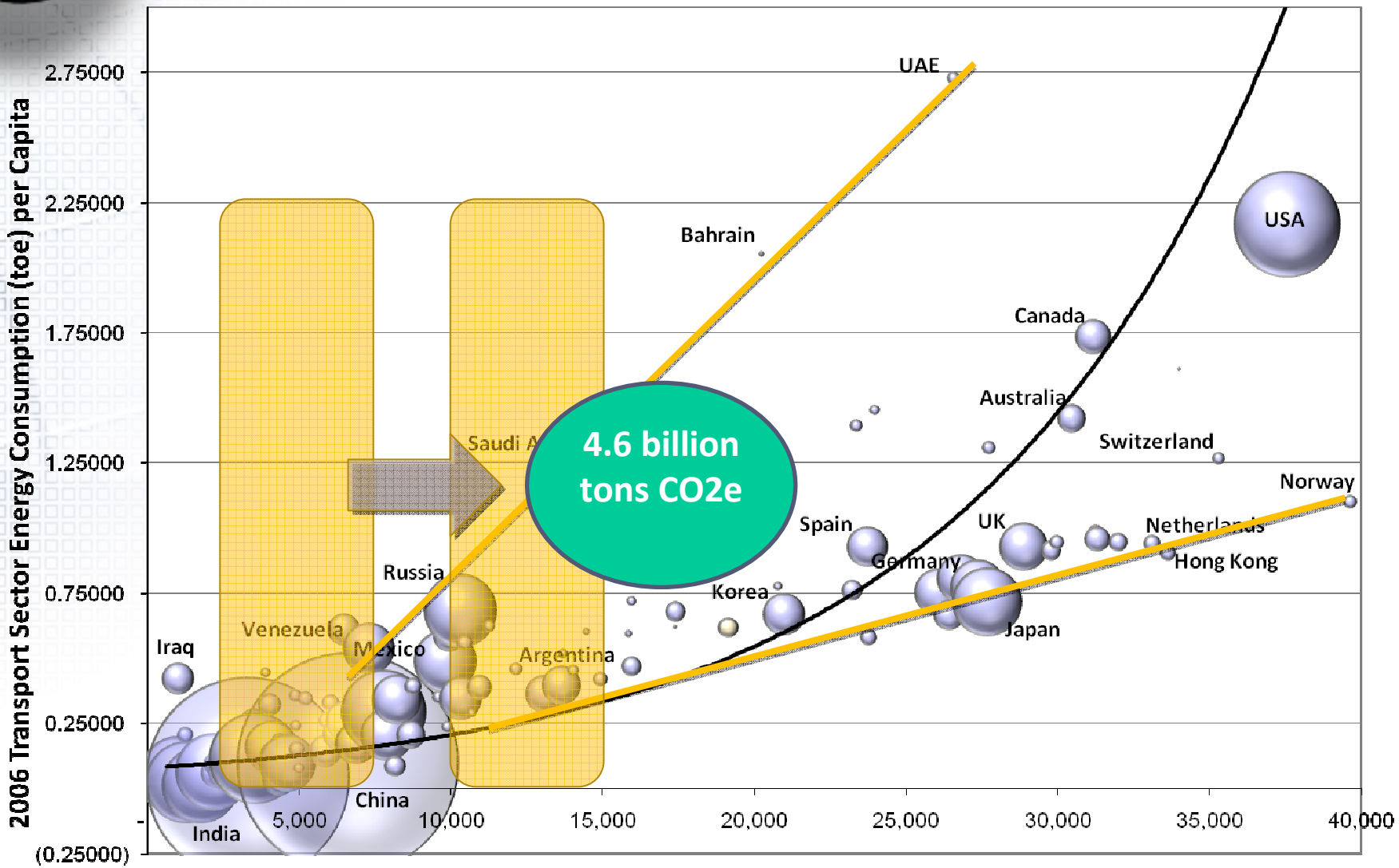
WB in Lagos, Nigeria

The Market for Transport GHG Emissions

Where Global Support for Energy Efficiency Improvement Comes From



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Climate-Based Finance

Supporting Transport GHG Mitigation (Energy Efficiency Improvement)

- Project-Based
  - Clean Development Mechanism
- Sector and City-Based
  - Clean Development Mechanism PoAs
  - Clean Technology Fund
  - Carbon Partnership Facility
  - Global Environment Facility (GEF-4)

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THANK YOU!

Video of Bank support to Urban Transport in Columbia