

# **World Bank Support to Urban Transport in India**

A Proposed Framework for Bank Engagement in UT

New Delhi, November 25 2006



# Outline

- ▶ Key UT issues
- ▶ Government of India's leading efforts
- ▶ Objectives of Bank support
- ▶ Examples of Bank support
- ▶ Instruments and features of Bank support



# Key UT issues in India (1)

- ▶ Motorized trips demand will continue to grow faster than the population due to economic and motorization growth
  - Fast growth expected (GDP +7-8% during 11<sup>th</sup> Plan) faster in cities
  - motorization is growing faster than the population (more than 10%/year for sale of cars and 2/3 wheelers over the past 5 years)
- ▶ To keep cities competitive, and thus sustain and accelerate economic growth, cities must provide efficient urban transport systems.



# Key UT issues in India (2)

- ▶ Urban transport investment required for the 11<sup>th</sup> FYP is Rs 57,400 crs (USD12.8 billion)
  - About 2% of India's GDP
- ▶ Road network expansion cannot alone match the growth in demand
  - Exponential growth of investment
  - Environmental pollution
  - Land acquisition and resettlement
  - Road safety



# China has tried to build its way out of congestion ...

- ▶ Urban roadway network more than doubled between 1990 and 2003 (95,000 KM to 208,000 KM)
  - While Beijing's roadway network expanded by 24% between 1996 and 2003 (from 11,682 KM to 14,462 KM), most of this has been in the form of new construction in suburban areas.
  - Shanghai's road network has more than doubled between 1991 and 2004 (from 4,818 KM to 11,825 KM), of which urban road length has more than tripled.
  - In Beijing, the roadway expansion has already cost over USD 5 billion and the City is planning to spend another USD 4 billion on additional expressways and arterial roads.
- ▶ Most road improvements in the city centers have been in the form of road widening



# ...with the following consequences!

- ▶ Average peak-hour vehicle speeds in Beijing on the arterial roads have declined from 45 KMPH in 1994 to 33 in 1995, 20 in 1996, 12 in 2003 and less than 10 KMPH in 2005!
- ▶ Peak-hour vehicle speeds in Shanghai's center roads range from 9 to 18 KMPH
- ▶ In Shenzhen, traffic accidents have been the top killer over the past three years, with forty percent of those killed aged between 20 and 40.
- ▶ The amount of carbon monoxide and hydrocarbons from auto emissions accounts for 79% of the total in all of China

**Need for more investment in public transport!!**



# NMT and Safety in India

- ▶ About 25% of all trips in the major cities is by NMT
- ▶ About 64% of all accidents in India involve pedestrians/cyclists
  - Over 50% of all traffic fatalities are pedestrians
  - About 8% of all traffic fatalities are cyclists
- ▶ About 15% of all trips in cities with population over 5 million is by motorcycles

**Streets are not only for vehicles**



# Public Transport in India : a decline in usage

- ▶ According to CIRT, there has been a decline of about 15% in usage of public bus transport in India from 1999 to 2004.
- ▶ State transport undertakings have not been able to recover their costs in the last six years – overall cost recovery ratio in 2003-04 was 93%
- ▶ Due to financial crunch, STUs could not replace their buses in time and so overall fleet strength has declined by 6% from 1999 to 2004.



# Why has public transit usage declined?

## ▶ Higher disposable incomes

- National per capita income growth of 55% from 1999-2004
- AP and Maharashtra – per capita income growth has been 57% and 62% (1999-2005)
- Corresponding bus fare increases in these two states for same period – 11% and 17% respectively

## ▶ Preference for two-wheeler vehicles

- Two-wheelers have grown by 75% from 2001 to 2005

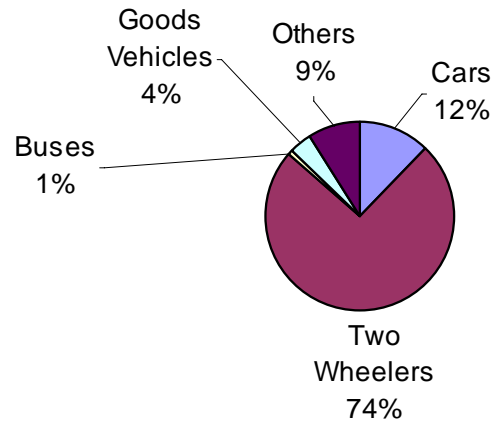
## ▶ Decline in bus services by city and state transport agencies

- Number of buses held by STUs has gone down by about 6% from 1999-2004
- Vehicle utilization has remained constant at 196 KM/day/bus from 1999-2004



# Vehicular Trends in India

**Vehicle Distribution in 2005**

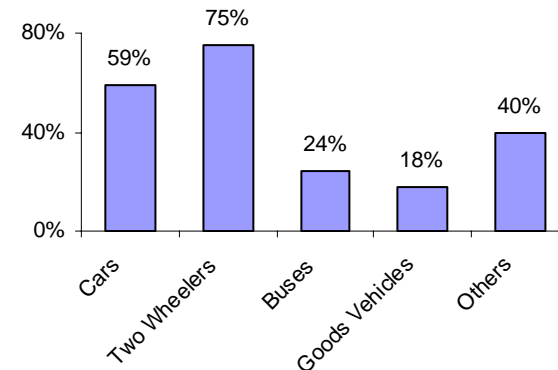


Source: Automobile Component Manufacturer's Association of India

2-Wheelers and 3-Wheelers have grown faster than cars and buses from 2001-2005

Two-wheelers have grown at a CAGR of 9.83% from 2000 - 2005

**Vehicular Growth, 2001 - 2005**



Source: Review of Urban Transport in India, SK Singh, Journal of Public Transportation, Vol. 8, No.1, 2005; Automobile Component Manufacturer's Association of India- Statistics



# Government of India

## Providing Strong Leadership

- ▶ MoUD designated as a nodal ministry for UT
- ▶ Jawaharlal Nehru National Urban Renewal Mission (JNNURM)
- ▶ National Urban Transport Policy (2006)
- ▶ Working Group on Urban Transport for the 11<sup>th</sup> Five-Year Plan (2007-2012)

**Good alignment of WB approach with the orientation taken by GoI**



# National Urban transport Policy

- ▶ *Gol issued the National Urban Transport Policy (NUTP) in April 2006*
- ▶ *to ensure “safe, affordable, quick, comfortable, reliable, and sustainable access for the growing number of city residents to jobs, education, recreation, and other needs”*
- ▶ *through*
  - integrated land use and transport planning,*
  - priority to public transport and non-motorized transport modes,*
  - use of cleaner technologies,*
  - enhanced regulatory and enforcement mechanisms for transport operations and road safety,*
  - effective institutional arrangements for coordination, etc*



# Key conditions for JNNURM

To apply for grant assistance under JNNURM, GoI requires eligible cities to:

- ▶ Formulate a medium-term City Development Plan
- ▶ Prepare project proposals
- ▶ Draw up a timeline for implementing urban sector reforms



# Scope and key features of JNNURM

- ▶ 63 cities in total including mega cities, million-plus cities and cities of religious/historic/tourist significance
- ▶ Duration of JNNURM would be 7 years beginning 2005-06
- ▶ Sectors include urban transport – roads, highways, expressways, MRTS and metro projects
- ▶ Encouragement of PSP in project development, financing and management



# Key policies supported by the WB for large cities

- ▶ Need for transport infrastructure
- ▶ Mobility of persons/goods, not just of vehicles
- ▶ Priority to public transport (saves space, less air pollution, more affordable to the poor)
- ▶ Priority to NMT and pedestrians (livable cities, service to the poor)
- ▶ Financial sustainability and operational efficiency of public transport services
- ▶ Integrated urban land use and urban transport planning and development
- ▶ Traffic management / road safety
- ▶ Institutional integration for planning and regulation
- ▶ Social integration, stakeholder participation
- ▶ Cleaner vehicles, emission monitoring



# Objectives for World Bank Support

- ▶ Assist GoI implementing the National Urban Transport Policy and the 11<sup>th</sup> FYP,
- ▶ Focus on cities of at least one million inhabitants (35)
- ▶ Focus on addressing the needs of the urban poor
- ▶ Focus on capacity building



# Main Features of proposed Bank Support

## How to best use the Bank

- ▶ Technical assistance

  - World wide experience and best practice

- ▶ Capacity building

  - Long lasting partnership of investment financing and reform support

- ▶ Demonstration projects

- ▶ Long Term concessional financing



# TA / Capacity buildings examples

- ▶ DFID – GEF sustainable urban transport program
- ▶ Road sector TA project



# GEF funded TA: Sustainable Urban Transport Project

## ▶ Components:

- Capacity Development and Technical Assistance for national and local agencies in urban transport.
- Preparation of demonstration Projects in selected states/cities.

## ▶ Status:

- Bank approved the project concept.
- GEF Secretariat approved the concept. GEF Council is reviewing the Application for GEF 4 pipeline entry and Project Preparation Grant.
- MoUD shortlisting consultants for project preparation
- Appraisal expected to be in August 2007



# Road sector TA Project

- ▶ Amount: USD 51 million
- ▶ Objectives: to support improvements in planning, financing and management of roads by state agencies, and to prepare road improvement investment project in selected states
- ▶ Results: road demonstration projects in five states supported by a Bank loan.



# Demonstration projects

- ▶ help initiate institutions and implementation systems required for sustainable urban transport.
- ▶ help establish good practices which can be replicated widely by states/cities.
  - similar to Bank support to the highway sector, which started from a Bank-funded road sector TA project to support demonstration projects in five states
  - Similar to urban transport Bank supported projects in China: several projects of similar structure were implemented in various chinese cities after the success in Shanghai



# Urban transport component of urban or air quality projects

- ▶ For medium size cities or limited investment in transport
- ▶ Focus on:
  - Urban roads maintenance and limited improvements (including links to NHs, SHs, and terminals)
  - Non-motorized transport facilities (e.g., sidewalks, bikeways)
  - Urban air quality management (e.g. implementation of innovative fuel and vehicle technologies, vehicle emissions monitoring)
  - Transport planning and management tools/systems



# Multi-component Urban transport project for larger investment and more complex issues

- ▶ Urban roads network improvement and maintenance (including links to NHs, SHs, and terminals)
- ▶ Public transport infrastructure (e.g. BRT, RRT, terminals/stations, buses), and Public transport management and regulation
- ▶ Traffic management policies and instruments (e.g., parking policy and facilities, advanced traffic management systems)
- ▶ Non-motorized transport facilities (e.g., sidewalks, bikeways)
- ▶ Urban air quality management Transport planning and management tools/systems
- ▶ Etc.



# Instruments of World Bank Support

- ▶ **Concessional and market-based loans to GoI**
  - Special Investment Lending (SIL)
  - Development Policy Lending (DPL)
  - Sector Wide Approaches (SWAps)
- ▶ **Sub-sovereign lending:**
  - WB/IFC Municipal/State Finance
- ▶ **Technical Assistance**
  - Policy advice for government agencies (AAA / ESW)
  - TA across a wide range of areas, including sharing global best practices/innovation (GEF, PPIAF, TFs)
- ▶ **Mobilizing financing from third parties via guarantees and risk mitigation products**
- ▶ **Carbon Finance**



# Proposed support to Gol

- ▶ DFID-GEF grant or TA loan
- ▶ For technical assistance and capacity building for transport planning and policy implementation



# Proposed support to State/Cities Complement to JNNURM funding

- ▶ Complement to JNNURM funding
  - Financing State/City's share of NURM funding (SIL/SWAp),
  - TA to local governments for developing proposals for NURM, project preparation and implementation, and implementation of required urban reforms.
  - Policy and institutional development at local level
- ▶ Complement to viability gap for PPP projects



# Support for PPP projects

## ▶ Technical assistance:

- Project preparation
- Transaction assistance
- Capacity building ; regulation

## ▶ Financing support :

- Upstream for the part financed by the Government through IBRD loan
- Downstream : IFC financing the concessionaire



# World Bank specifics

- ▶ Technical, economic viability
- ▶ Financial viability of the project including longer term sustainability
- ▶ Environmental and social impact assessments
- ▶ Adherence to procurement guidelines
- ▶ Transparency and accuracy of financial management
- ▶ Consultation and participatory process with stakeholders



**THANK YOU**

