

Putting urban transport sector on a low energy and low carbon path

A focus on passenger transport in million-plus cities

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Key transport issues in million-plus cities

- Lack of integrated land use and transport planning
 - o Urban and land use planning practices:
 - address current transport demands through specific projects, and
 - do not attempt to shape the structure of the city and influence its future growth
- Inadequate public transport and NMT infrastructure
 - o Public modes in most Indian cities constitute only 2-3% of the entire vehicular fleet
 - Negative growth rate in bus fleet size witnessed in large cities
 - o Dedicated public transport absent in most cities
 - Combination of para transit modes like jeeps, autos, etc. serve the purpose
 - o Absence of good quality and safe infrastructure for NMT users

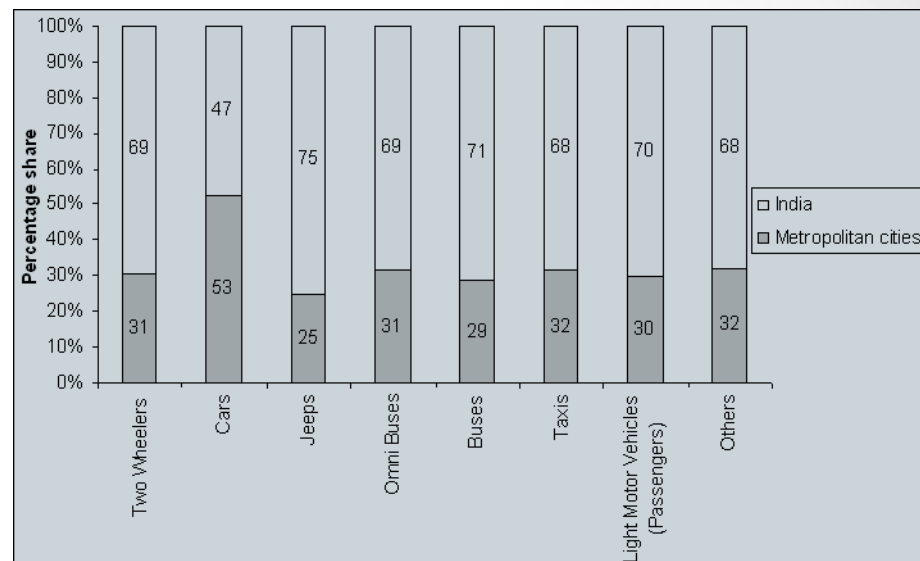
Key transport issues in million-plus cities (contd.)

Rapid motorization and increasing share of private vehicles

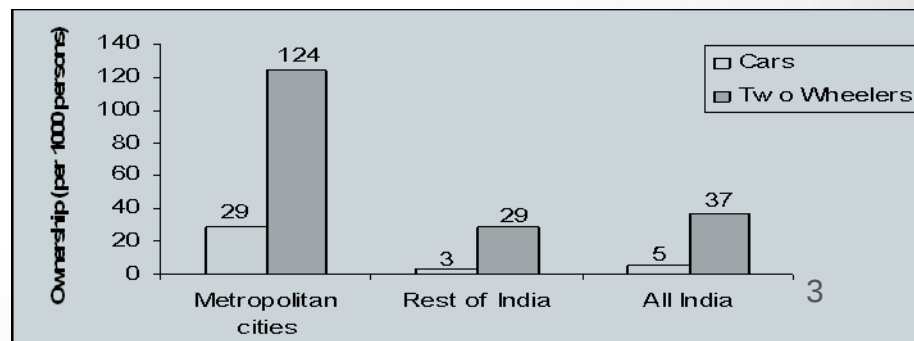
- o Exponential growth in the number of motorized personal vehicles
- o Heavy concentration of private motor vehicles in million-plus cities
- o Car ownership in 23 million-plus cities in 2001 was 29 cars per 1000 persons as compared to 3 cars per 1000 persons in the rest of the country

Concentration of passenger transport activities in large cities

Comparison of share of vehicles registered in 23 million-plus cities with the rest of the country in 2001



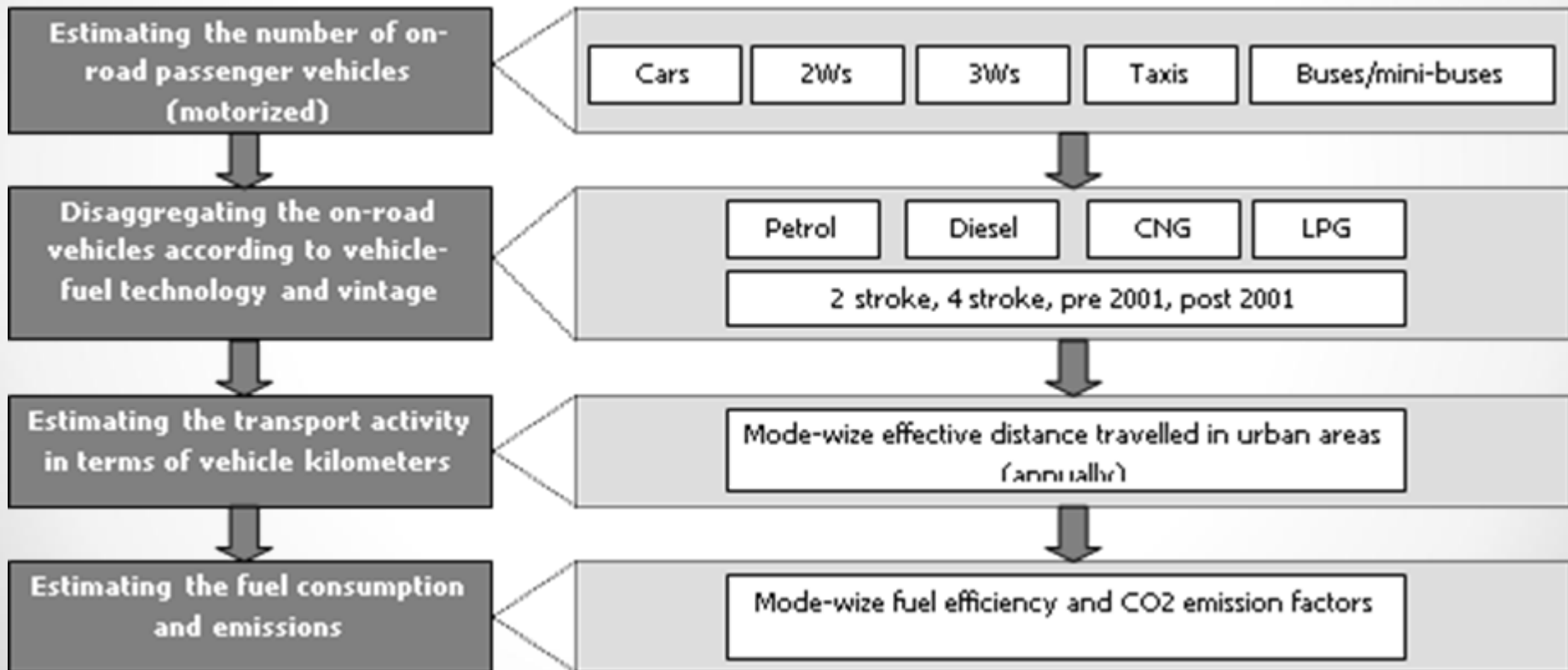
Car and two-wheeler ownership in 2001



Note: Only data for 23 million-plus cities available

Measuring the impact on energy consumption and CO₂ emissions

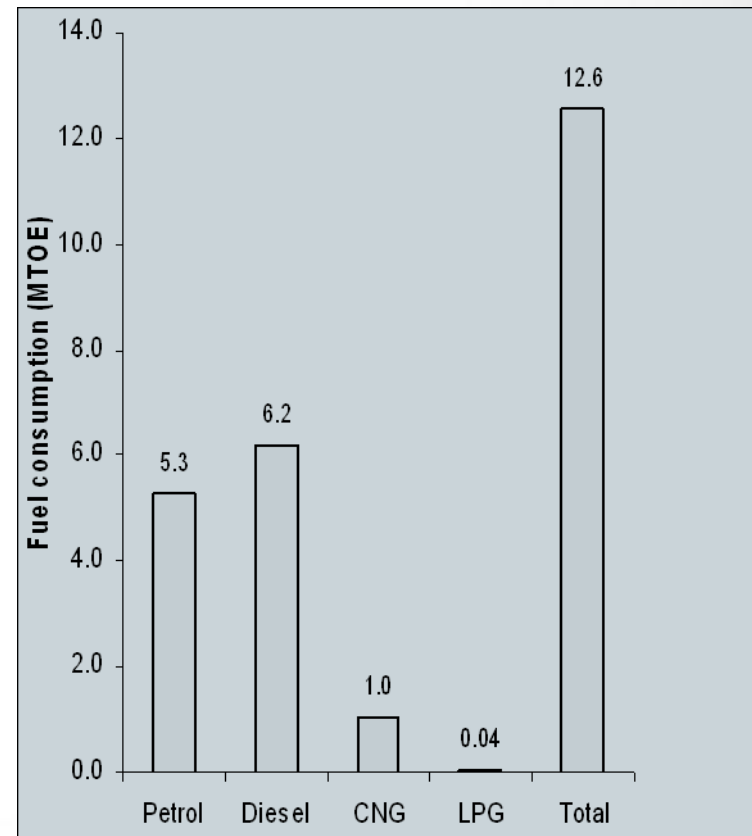
Framework for estimating energy consumption levels and CO₂ emissions from passenger transport activities in 23 million-plus cities



Energy consumption and CO₂ emissions from passenger transport activities in 23 million-plus cities

- 23 of the 35 million-plus cities have a significant share (about 40%) in energy consumption and CO₂ emissions from on-road transport activities in the country
- Estimated fuel consumption in these cities in 2001 - 12.6 MTOE
 - Diesel (50%)
 - Petrol (42%)
 - CNG (8%).
- CO₂ emissions - 18.9 MT in 2001
- Energy and emission estimates would be even higher if the impacts of poor road conditions, congestion, and idling, were to be considered

Estimated fuel consumption from motorized transport activities in 23 million-plus cities (2001)



Low carbon growth of the transport sector in Indian cities: Key approaches and strategies

Avoid

- Reduce number of trips or at least rate of growth of number of trips
- Reduce length of trips

Two key instruments to do this:

- Integration of land use and transport in new developments and retrofitting existing developments
- Use of information technology (IT) as a substitute for physical mobility
 - tele-/e-work and flexi-work hours, e-governance/shopping/education, etc.

Low carbon growth of the transport sector in Indian cities: Key approaches and strategies (contd.)

Shift

- Shift from personal vehicles to public transport and non-motorized modes
- Prevent shift from NMT and public transport (PT)

Instruments to do this:

- Encourage and facilitate NMT with appropriate policies and infrastructure provision
- Introduce/enhance public transport capacity as appropriate
- Regulate/rationalize para transit to supplement PT
- Introduce in parallel measures to discourage the routine use of personal vehicles

World experience has shown that an effective shift to public transport can occur only if transport demand management measures are adopted in tandem with increased provision of public transport

Difficult to discourage ownership, discourage routine use

growth of the transport sector in Indian key approaches and strategies (contd.)

Improve

nt and clean vehicles
flow

do this:

efficiency standards
p for emission standards beyond 2010
inspection and maintenance regime
use of alternate fuels and clean vehicle

gent transport systems to reduce congestion and
flow of traffic

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_15891

