

Urban Mobility in India: Recent experiences



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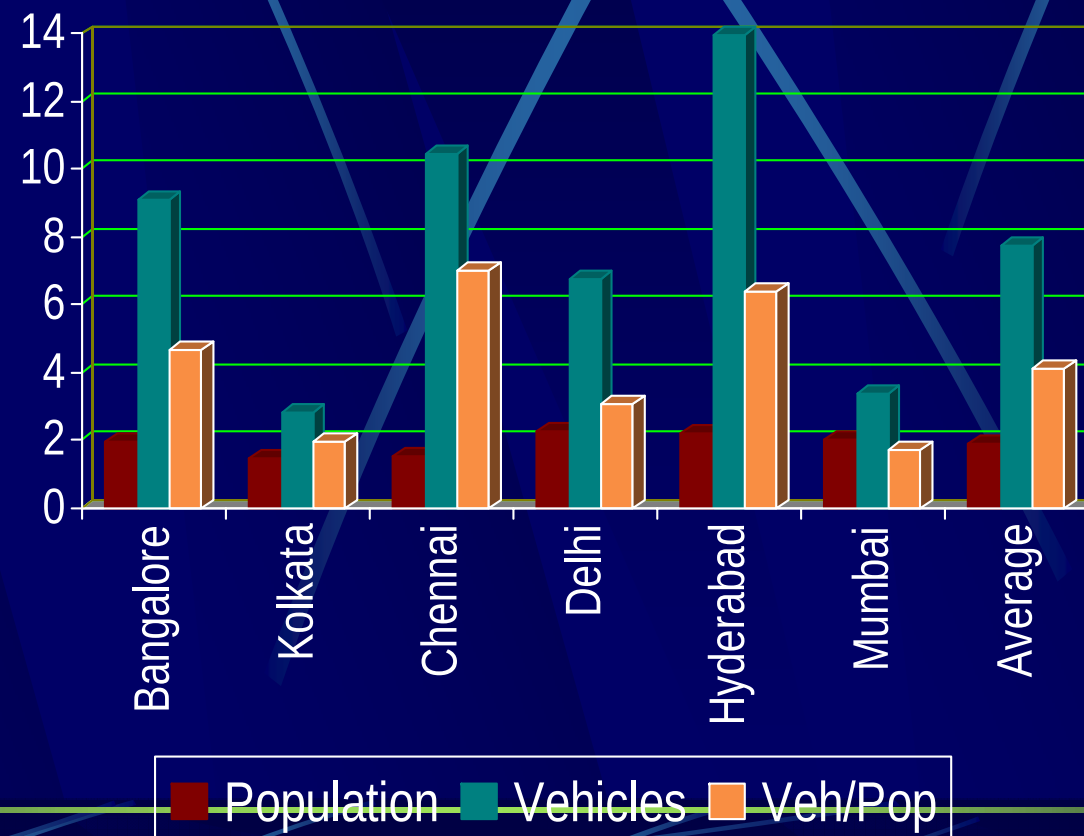
Cities in India are getting choked





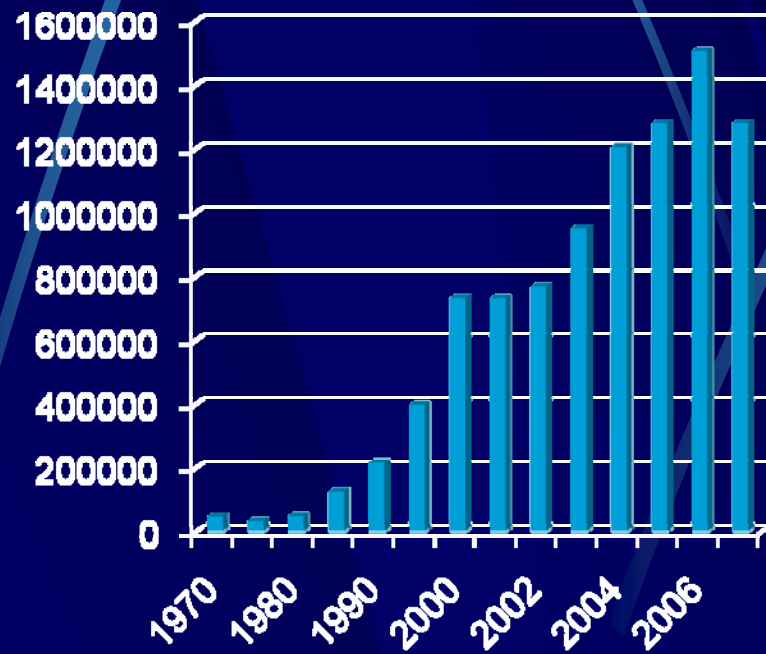


Growth of Vehicles to Population (1981-2001)

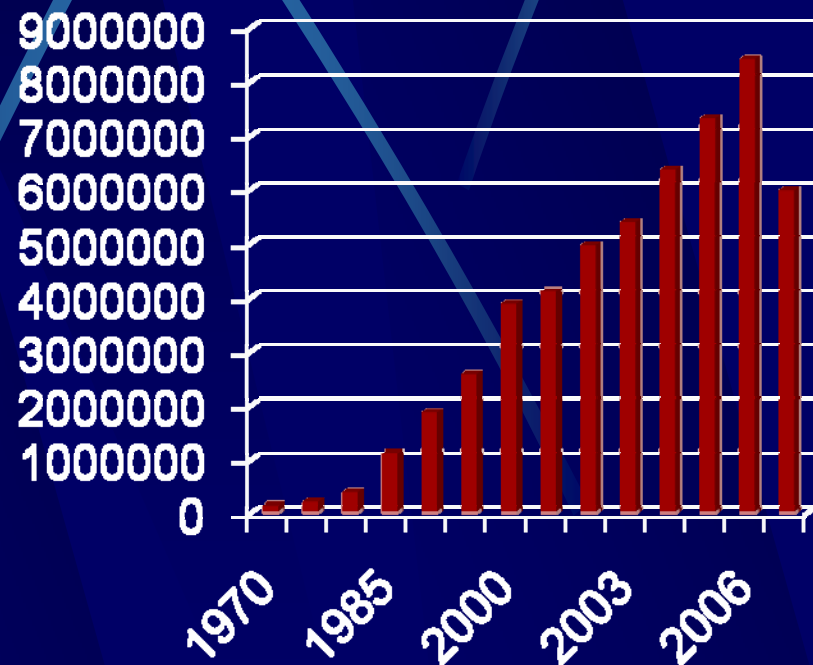


Motor Vehicle Sales Trends

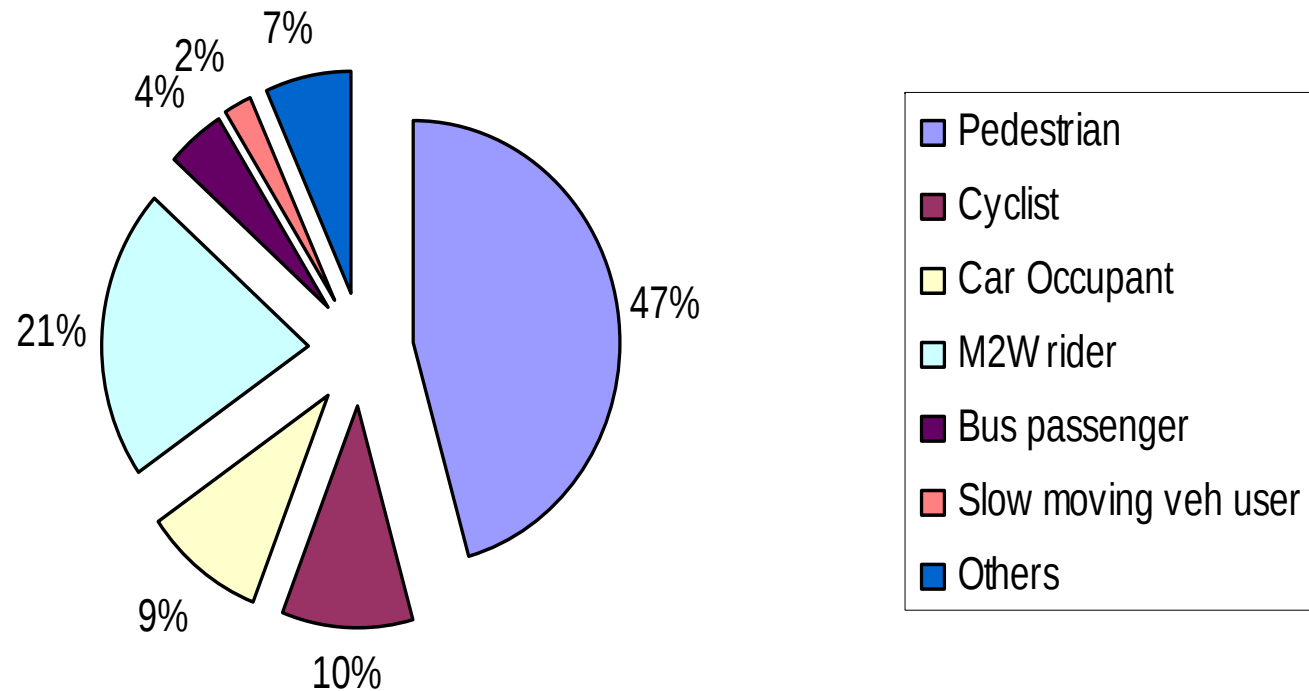
Passenger cars



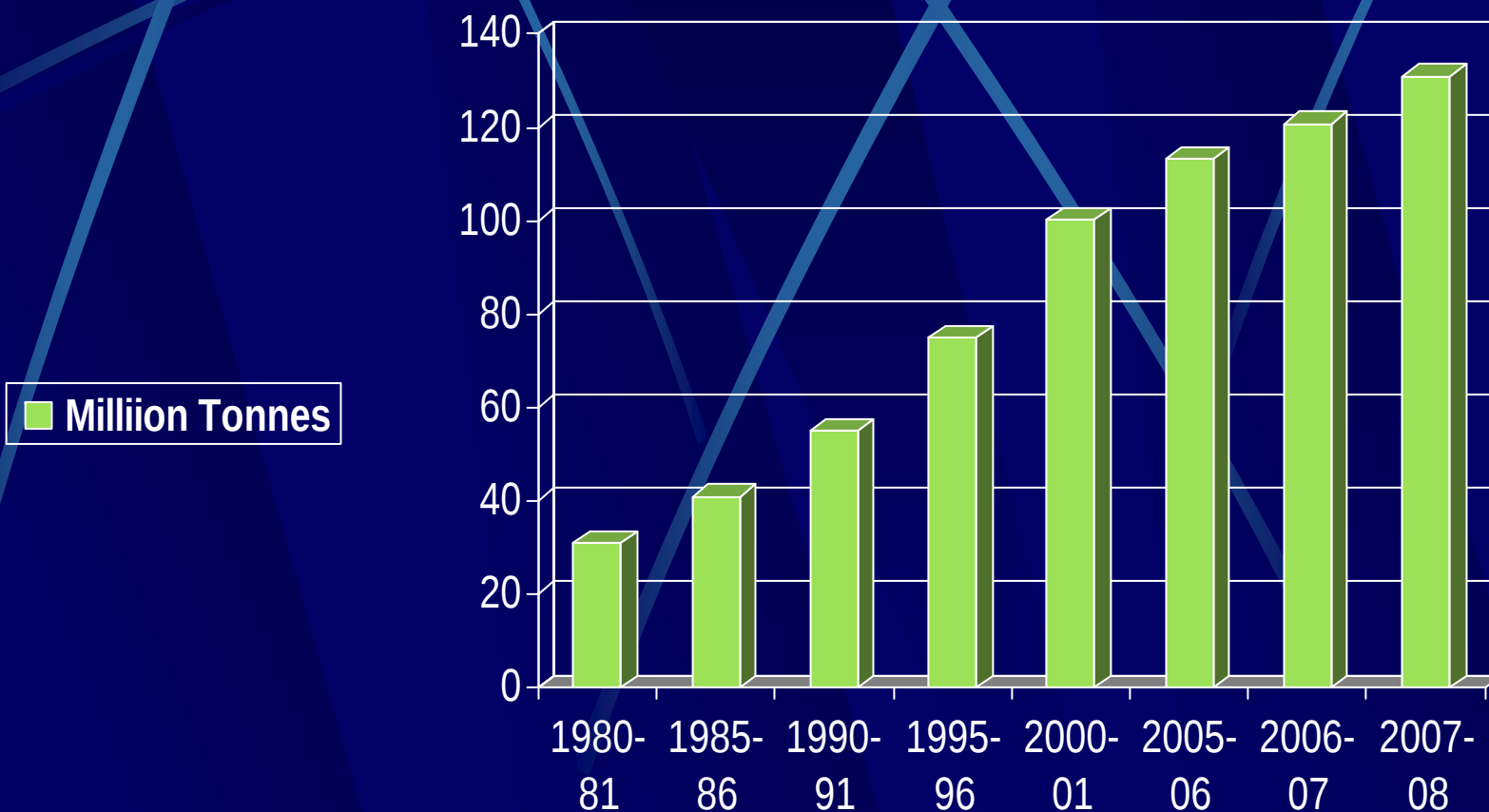
2 - Wheelers



Profile of persons killed in road accidents

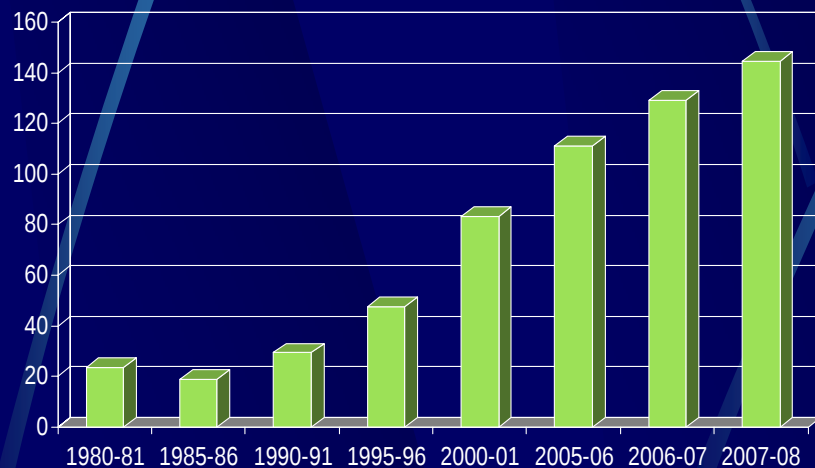


Petroleum fuel consumption

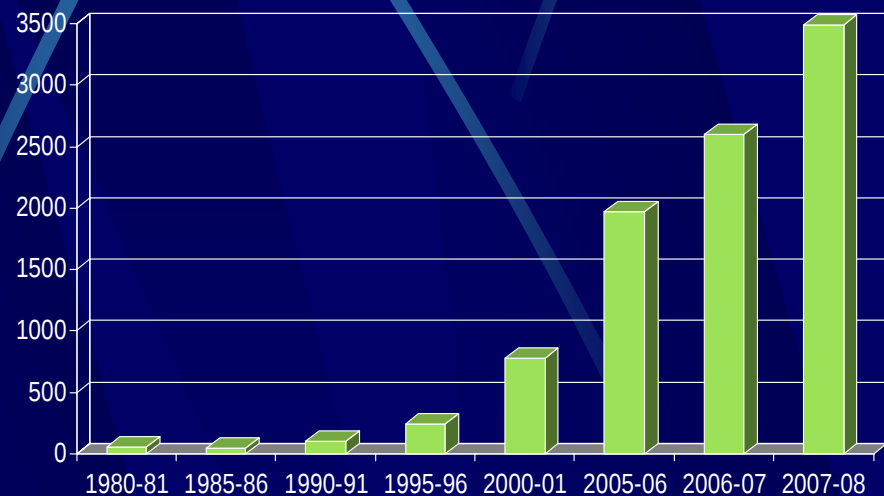


Energy security concerns

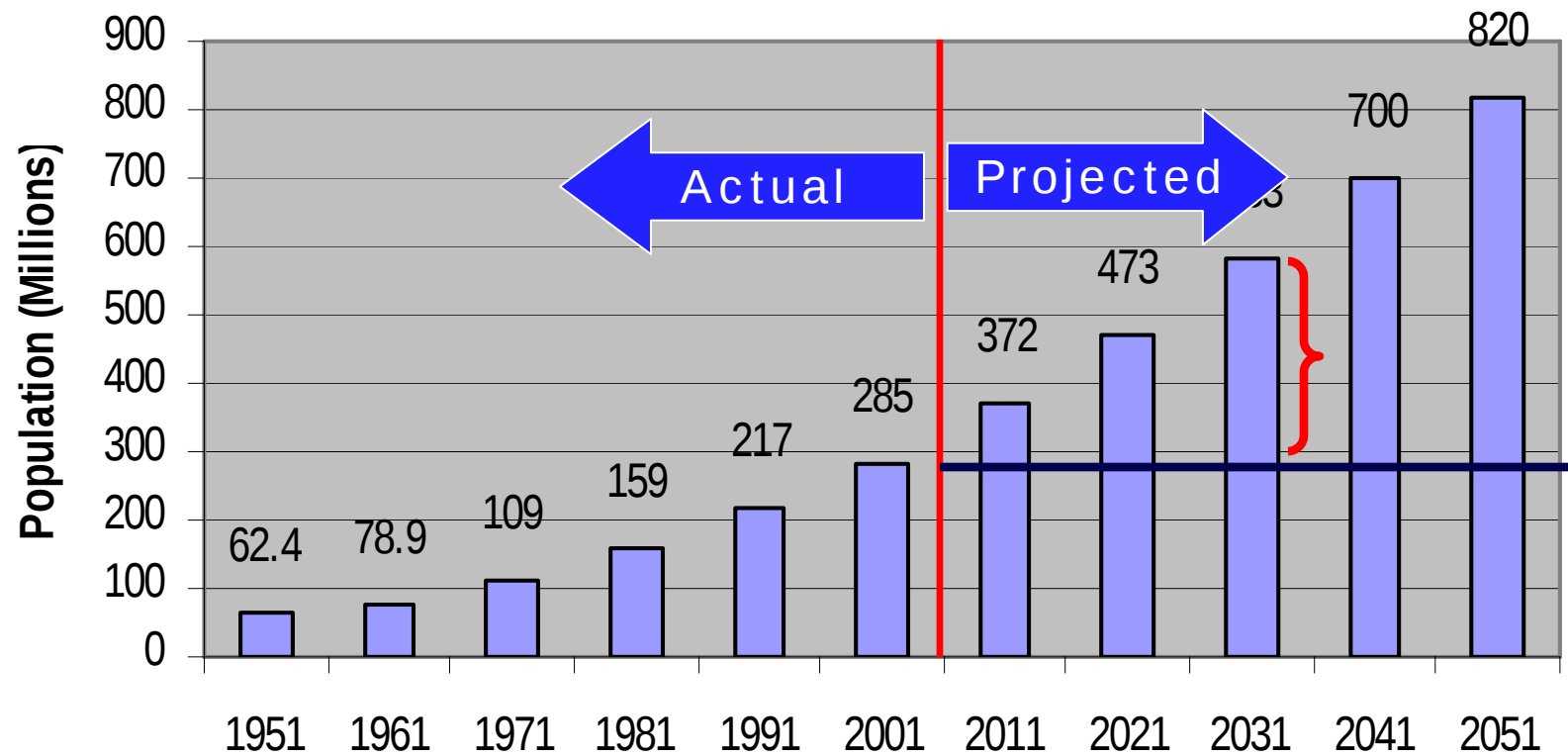
**Petroleum Fuel Imports
(Million Tonnes)**

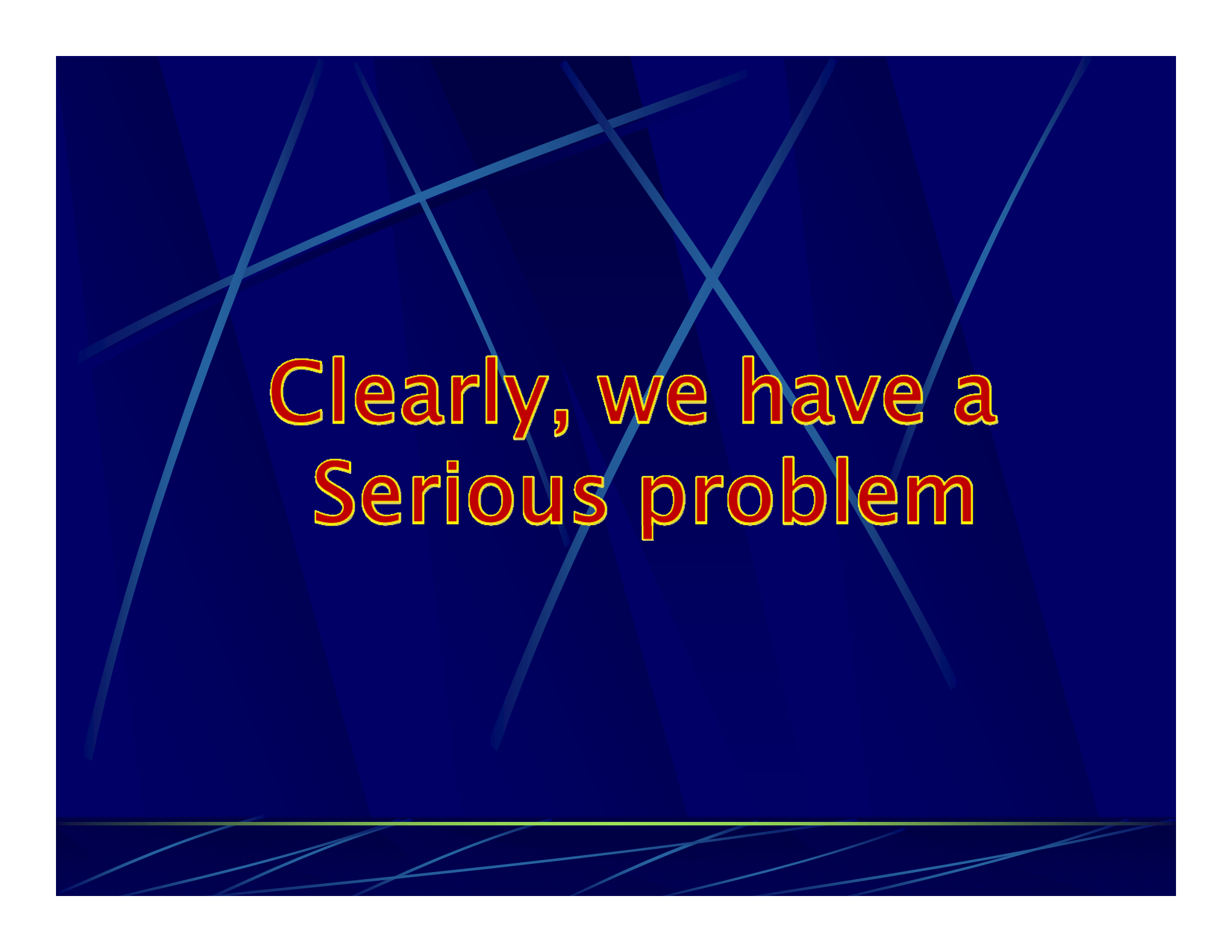


**Foreign Exchange Outgo
(Rs Billion)**



Urban population projections





Clearly, we have a
Serious problem

National Urban Transport policy

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graph TD; A((National Urban Transport policy)) --- B((Build capacity to plan for sustainable urban transport)); A --- C((Ensure coordinated planning for urban transport)); A --- D((Ensure integrated land use & transport planning)); A --- E((People focused & equitable allocation of road space)); A --- F((Investments in public transport & Non Motorized modes)); A --- G((Strategies for parking space and freight traffic movements)); A --- H((Establish Regulatory mechanisms for a level playing field)); A --- I((Innovative financing methods to raise resources)); A --- J((Promote cleaner fuel & vehicle technologies for cities)); A --- K((Projects to demonstrate best practices in sustainable transport));
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Build capacity to plan for sustainable urban transport

Ensure coordinated planning for urban transport

Ensure integrated land use & transport planning

People focused & equitable allocation of road space

Investments in public transport & Non Motorized modes

Strategies for parking space and freight traffic movements

Establish Regulatory mechanisms for a level playing field

Innovative financing methods to raise resources

Promote cleaner fuel & vehicle technologies for cities

Projects to demonstrate best practices in sustainable transport

National Urban Renewal Mission

- Established a partnership for the national, provincial and local governments to finance the needed urban infrastructure
- National government commits \$ 12 billion over a 7 year period
- Linked to prescribed reforms

Thus:

National Urban
Transport Policy



**Established a
framework for action**

National Urban
Renewal Mission



**Created an incentive
for implementation**

Unique features of the Indian situation

- Dominance of 2-wheelers – makes a shift to public transport much more difficult to achieve
 - Door to door
 - Marginal cost often lower than a bus
 - Fast and efficient
 - No waiting time
- Rising income creates an urge to own a personal vehicle
- Poor social image of the bus and cycling
- Climate and terrain can be constraints for NMT in some cities

Public Bus Transport in India

City population	Number	Number with formal bus services
> 4 million	7	7
1 – 4 million	28	8
0.5 to 1.0 million	50	5
0.1 to 0.5 million	370	NIL

Out of 85 cities with over 0.5 million people, only 20 have a structured bus service

Public bus transport in India

- Largely dominated by state owned monopoly entities
- Very poor quality buses – image of a poor man's compulsion
- Services lack customer focus
- Inadequate capacity
- Loss making despite prime land
- In Delhi – sizable segment of net cost private operators – small owners providing highly unsafe services
- Inability to attract corporate operators

Initiatives taken

- 15 cities have plans to introduce modern bus services
 - Indore has been a catalyst
- BRT coming up in 11 cities - others on the anvil
- 6 cities planning new metro rail systems
- National pressure for Unified Metropolitan Transport Authority
- Requirement for a comprehensive mobility plan
- Large capacity building program in the pipeline
 - Training, Education, Legal frameworks, Institutions, standards and manuals

Modern bus services

1. Attractive bus
2. Offering value added services
3. Financially sustainable
 - Innovative financing
4. Prioritization
 - Traffic light signaling
 - Road space



Bus Rapid Transit

- Two cities have started services
- Severe teething problems but now stabilizing
- Good learning opportunity for others
 - Need to avoid haste
 - Lack of capacity – city engineers, consultants, people at large
 - Unique problems need unique solutions
 - Poor Public awareness
 - Adverse impact on the influential section of society
 - Complexity of the design process
 - Value of reliable data

Metro rail systems

- 3 coming up on government financing
- Others looking at PPP options
- Hyderabad has been an eye-opener
 - Packaged with land for commercial exploitation –bidder willing to offer substantial premium

Institutional reforms: Indore model

- Have established the Indore City Transport Services Ltd (ICTSL)
- ICTSL undertakes planning and procures services from private operators
- ICTSL provides common services
- Regulation through Regional Transport Authority
- Financing through fares and advertising

Main challenges

- Lack of capacity – knowledge that can be applied
- Inadequate appreciation of holistic planning – tends to be fragmented
- Fragmented governance
- Preference for highly visible and high cost investments
- Lack of a reliable database for credible planning
- Inadequate contextual research

We have a long way to go,
but the direction is right

**Inadequate capacity and
institutional weaknesses
are our biggest challenge**

Thank You