

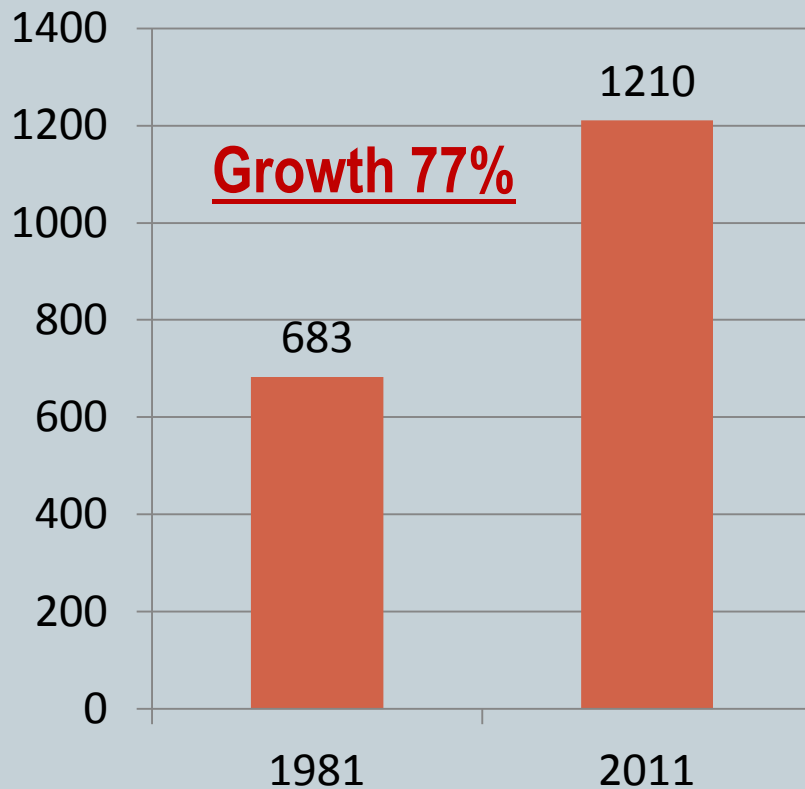
REMOVING CONGESTION

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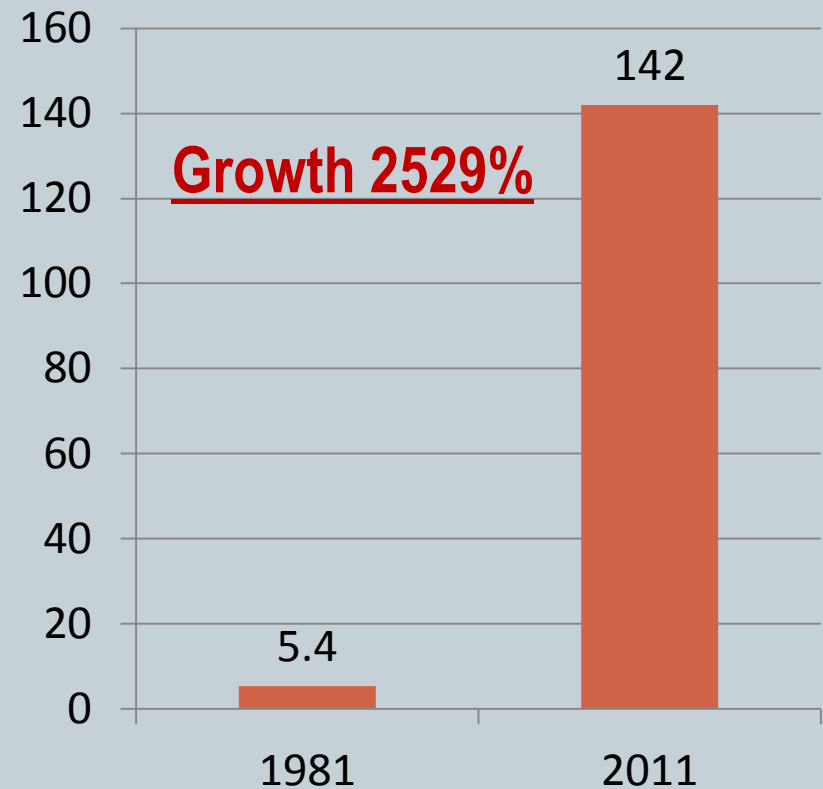
The Problem

Rapid Motorization

Population (million)



Number of motor vehicles (Million)



Manifestation of the problem



Manifestation of the problem

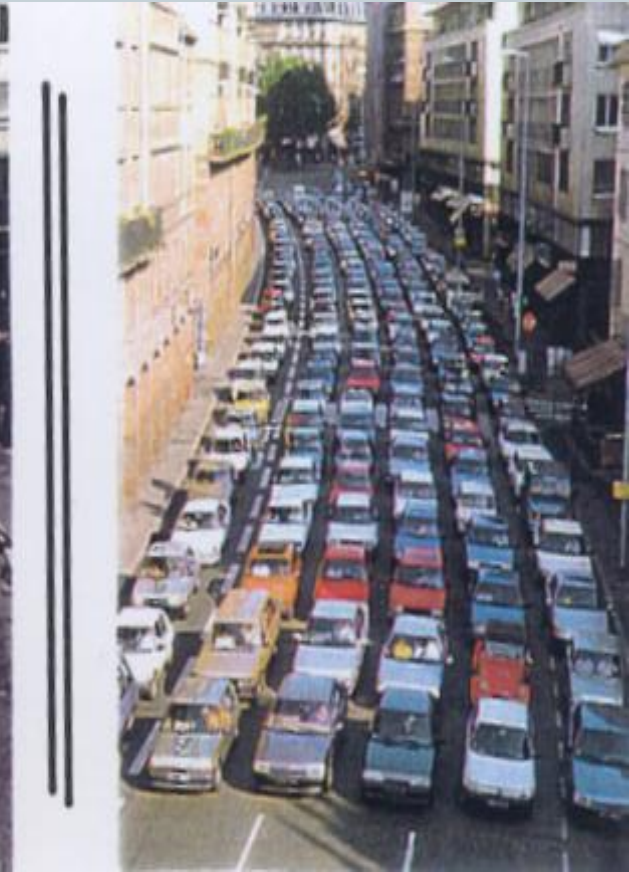


Reasons for rapid motorization

- **Cities are sprawling – longer travel distances**
- **Urge to demonstrate higher income status**
- **Poor integration of land use and transport planning**
- **Poor public transport**
 - **Quantity**
 - **Quality**
 - **Coverage**
- **Walking and cycling are no longer safe**



Resource efficient transport systems



Global Best Practices . . .

Cheonggyecheon Freeway, Seoul

1975 - 2002



After 2005



Positive Impacts

- Car in/out flow (CBD) : - 18.6 %
- Metro Ridership : + 13.7 %
- Air Pollution: - 34 % (NO₂)
- Speeds not very much worsened

9th Urban
Mobility India

2016

SOME MYTHS

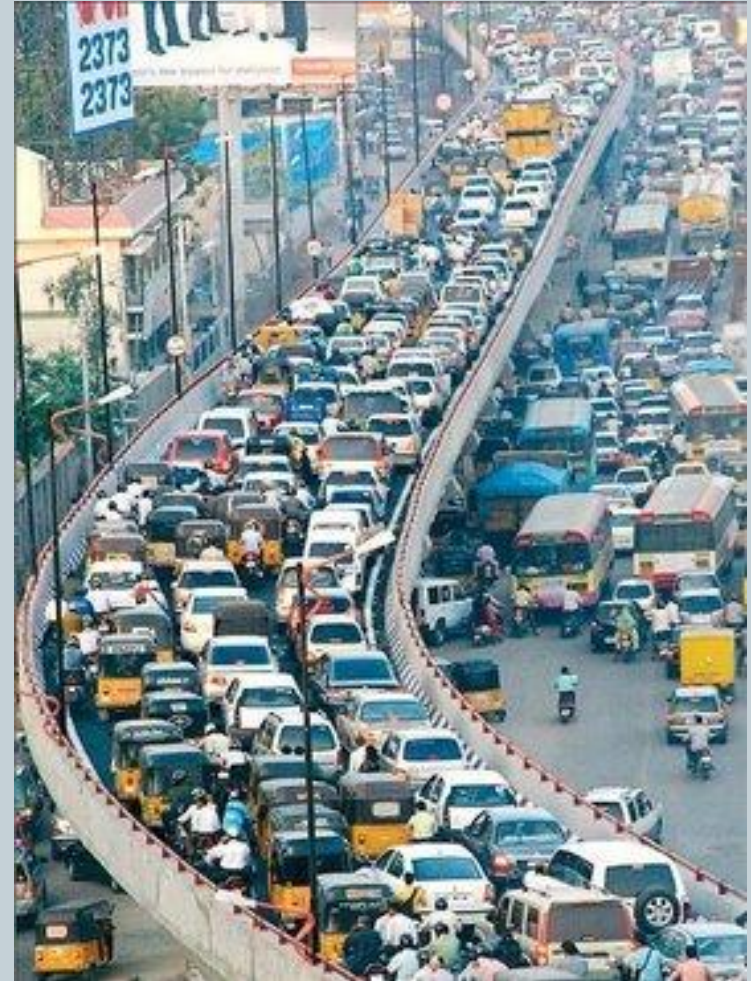
Myth 1

- We are building a metro and so congestion will go away
- MERELY BUILDING A METRO IS NOT ENOUGH
- Motor vehicles in Delhi have doubled in the 10 years after the metro became operational
- Metro needs to integrate with other systems
- Metro needs to be conceived as an urban transformation initiative – not just a rail transport project

Myth 2

- We are building flyovers and overpasses, and so congestion will go away
- IT DOES NOT HAPPEN
- Flyovers, overpasses and road widening lead to more vehicles coming on to the road – same level of congestion returns but at a higher volume of traffic

How have we tried to deal with it



Impact of endless road expansion



Courtesy Transfuture.net



We can not build our way out of congestion

Myth 3

- No body likes to use buses
- Buses are only for poor people
- **WRONG**
- In most large cities more people use buses than the metro
- Quality of buses and bus services can be improved to make them attractive for the rich also

Buses can be attractive too



Myth 4

- Since the big cities are facing severe problems, lets attend to them first
- WRONG
- If we attend to the smaller cities **NOW** we can save them from the problems that the big cities are facing
- Studies show that:
 - 30% of the growth in motorized travel will be from cities < 1 million population
 - Another 30% from 1-5 million population cities

Myth 5

- **Very few people walk or cycle**
- **WRONG**
- Over 50% of the trips in most cities in India is by walking or cycling
- Most people cannot drive
- Share of walking and cycling coming down due to unsafe infrastructure
- This is easy to improve
- And it is good for health

Global Best practices



Broadway, New York City



Missoula, Montana



Orchard Road, Singapore



Utrecht, Netherlands

So what is needed?

- An integrated approach to mobility planning – not individual projects - Integrated governance
- Plan for moving people – not vehicles - high quality public transport and safe walking and cycling facilities
- Reduce travel distances - compact cities with mixed use planning
- Restrain use of personal motor vehicles

Singapore

- Excellent public transport system
- Excellent integration with land use planning
- High density at mass transit stations and convenient access
- Strong restraints to the ownership and use of personal motor vehicles
- Very good walking environment

Seoul

- Excellent public transport system
- Excellent integration of bus, rail and other systems
- Highly dense and compact clusters
- Reduction of road space
- Difficult driving experience
- Excellent walking environment

Way Forward

- Good comprehensive mobility plans for all cities of more than 1 lakh population
- Set up lead transport institutions for all cities with more than 5 lakh people
- Demand management measures
- Focus on capacity building
- **Planners must “plan” & Engineers must “build” as per the plan**

THANK YOU