The Taxi as Demand Management Tool

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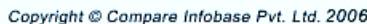
Mumbai, India

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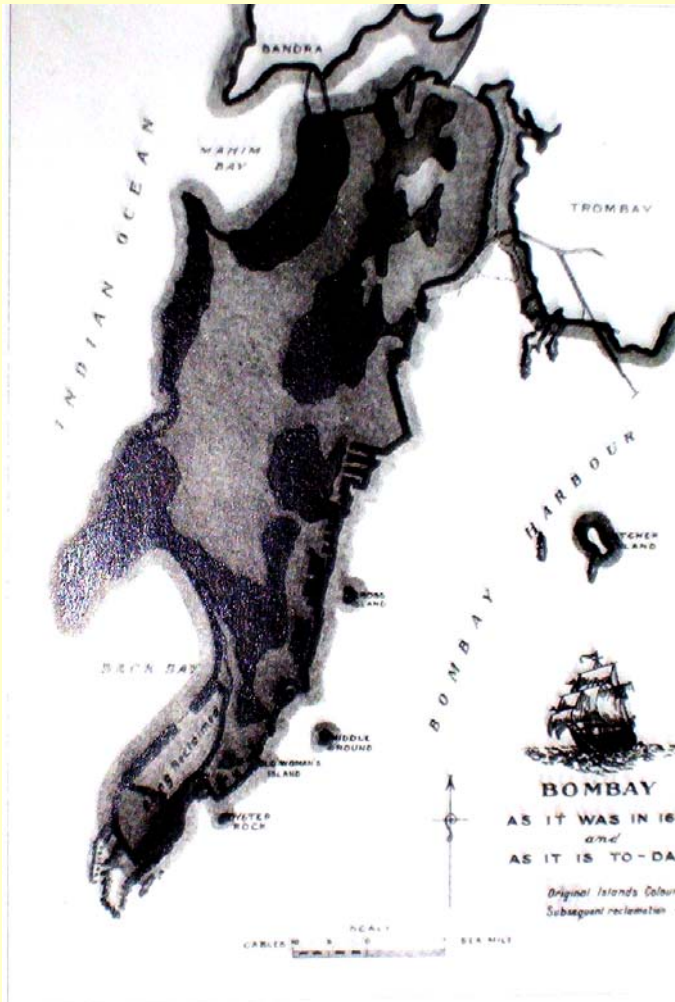
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Regional Setting of Mumbai

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Bombay Island

**Map of Bombay,
showing the original
7 islands that made
up
Bombay,
and the reclamation
up to 1930,
which made it one
large land mass**

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Mumbai Metropolitan Region
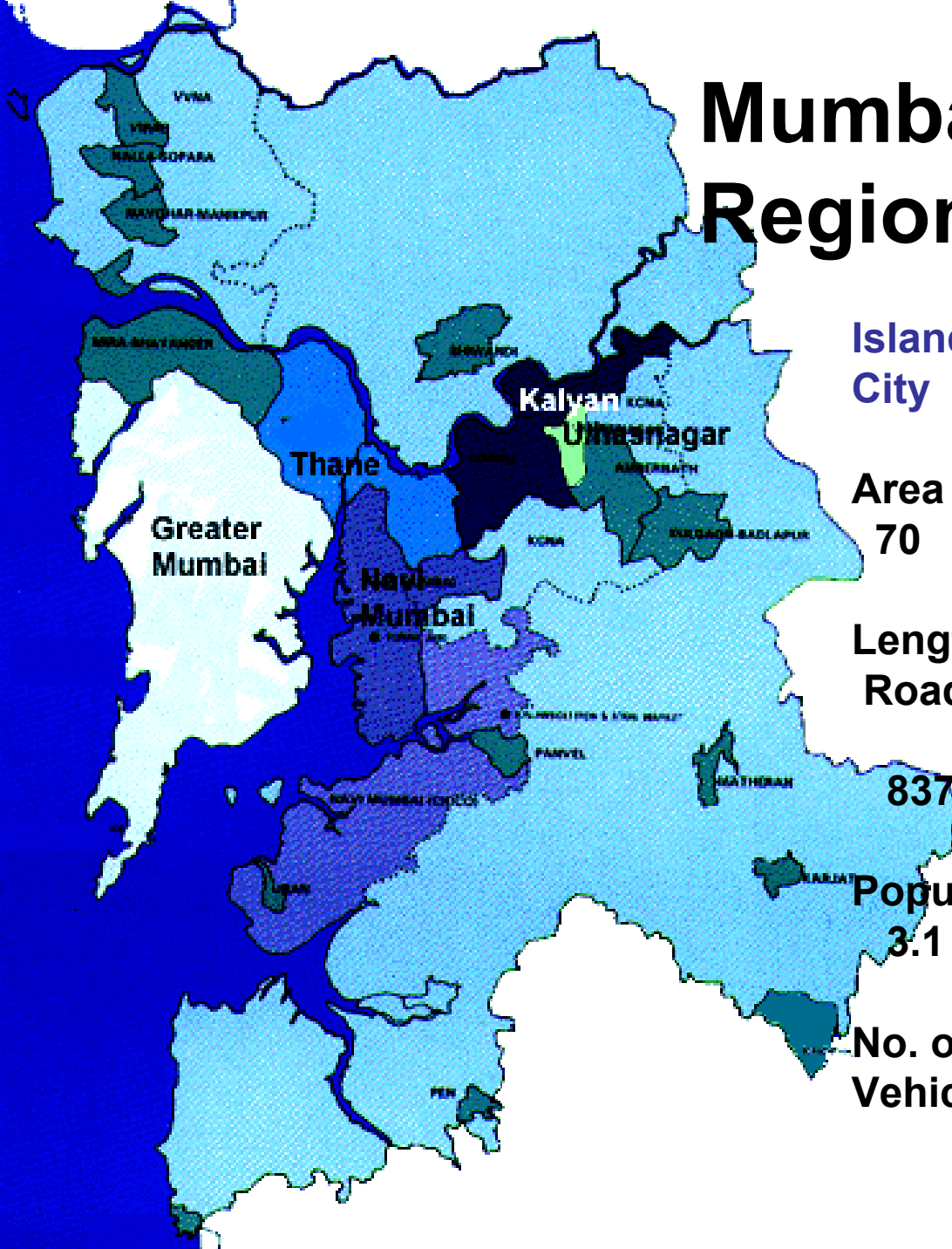
	Island City	Greater Mumbai	Rest Of MMR
Area (Sq Kms)	70	468	3887 (4355)
Length of Roads (Kms)	837	867	
Population (Million)	3.1	13.2	5.9
No. of Motor Vehicles		409000	

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Existing Railway Network in Mumbai

To Dahanu Road

Virar

Vasai

Borivali

Andheri

Santacruz

Bandra

Mahim

Dadar

Mumbai Central

Churchgate

To Kasara

Kalyan

Diva

Thane

Vashi

Kurla

Wadala Road

CST

To Karjat/Khapoli

Panvel

Corridor 1: WR Through

Corridor 2: WR Local

Corridor 3: CR Through

Corridor 4: CR Local

Corridor 5: Harbour

Non Suburban

5th line WR

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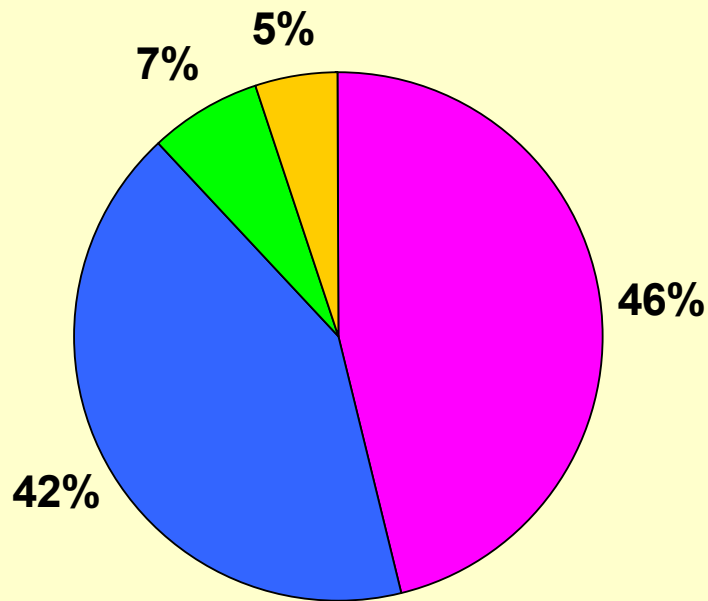International Colloquium on Taxis, Lisbon, Portugal, September 20-22, 2007

Mumbai Traffic

- Road lengths have increased only marginally since the 1950's

- Car ownership has increased by 400 % since 1981

- 300 new cars are added to Mumbai roads every day

- Mumbai has 1 car for every 1.92 meters of road length

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Existing Modal Split of Mumbai Suburban Traffic

Number of Passengers per day %

- 7%
- 5%
- 46%
- 42%

Passenger Kms per day %

- 7%
- 30%
- 63%
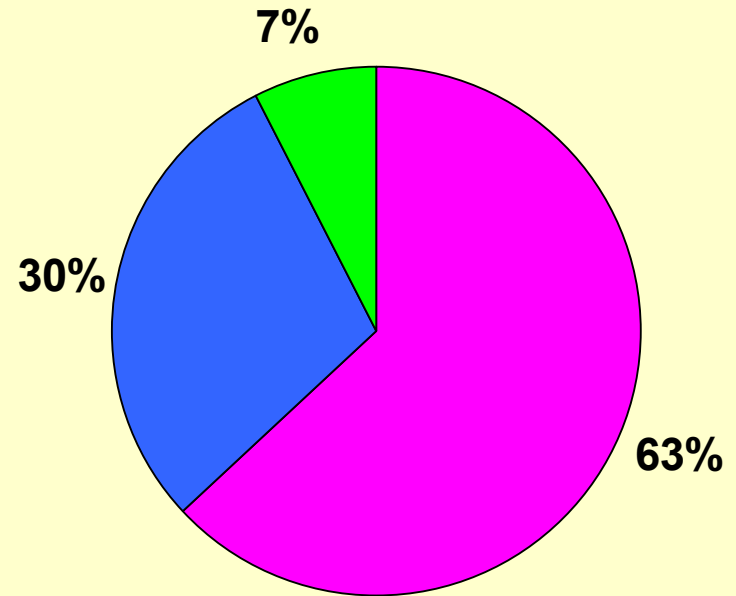
| Rail | Bus | Private Vehicles | Taxis |

Average Trip length: Rail 27 Kms & Road: 6 Kms

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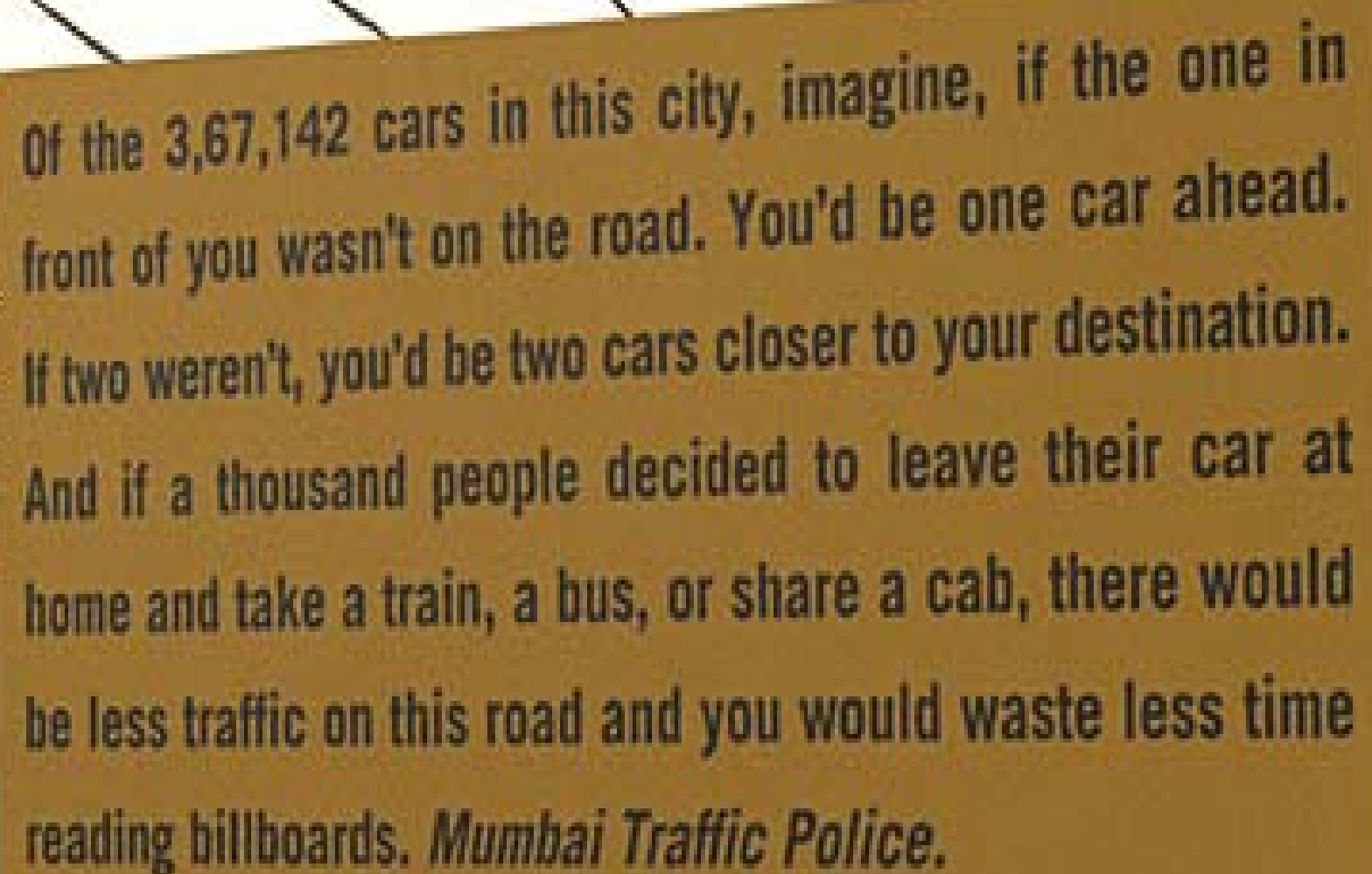
Overcrowded Stations

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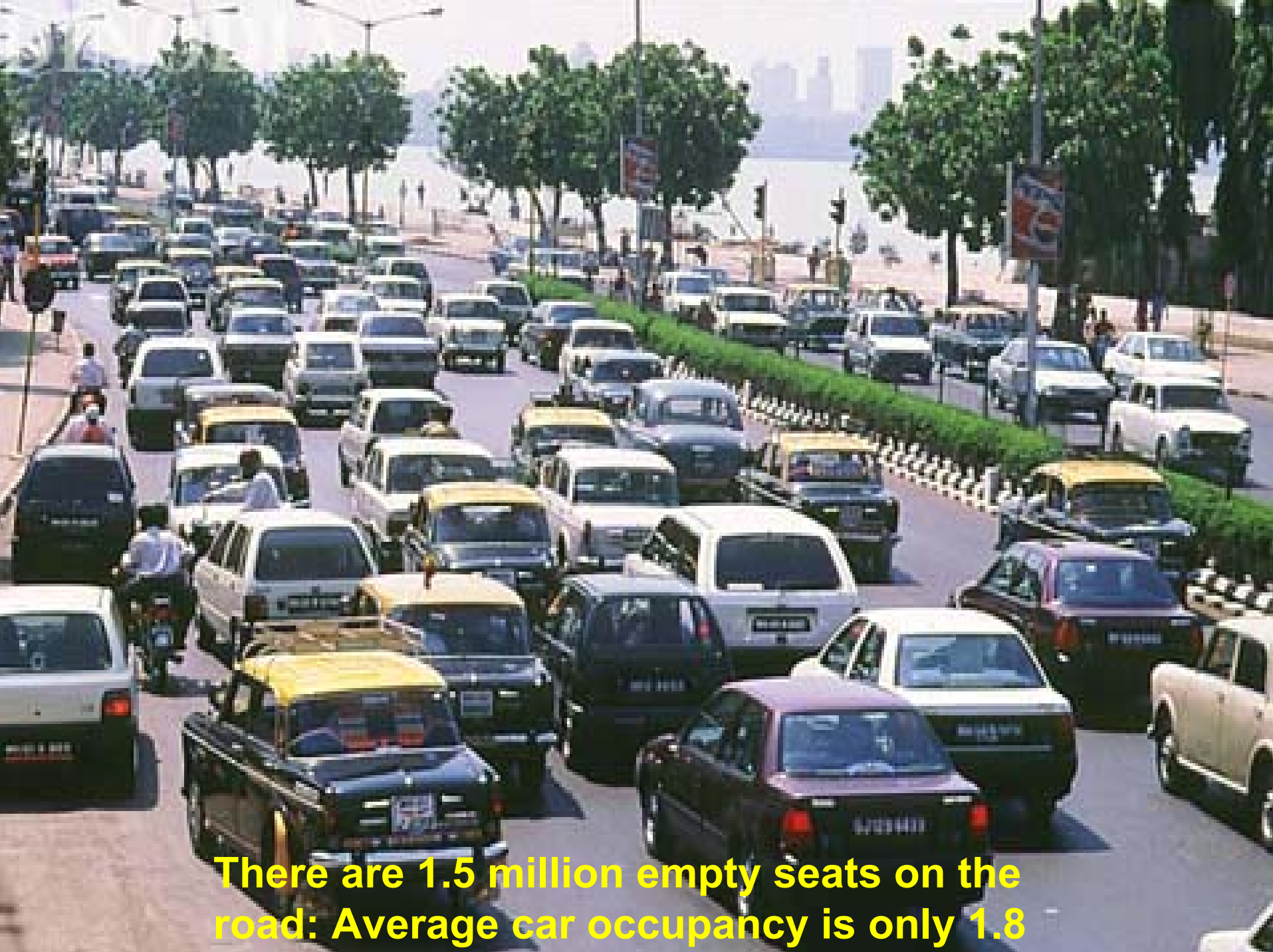
There are 1.5 million empty seats on the road: Average car occupancy is only 1.8

Of the 3,67,142 cars in this city, imagine, if the one in front of you wasn't on the road. You'd be one car ahead. If two weren't, you'd be two cars closer to your destination. And if a thousand people decided to leave their car at home and take a train, a bus, or share a cab, there would be less traffic on this road and you would waste less time reading billboards. *Mumbai Traffic Police.*

Consequences

- Severe levels of congestion due to high percentage of personal modes and taxis and parking demand

- Congestion goes all day long- peaks run into each other

- Speeds very low and pollution very high

- Unable to drive without a/c, can get an asthma attack

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Public Taxis

- Taxis have always played a major role in Mumbai's transport scenario

- Until a few years ago, 55,000 taxis

- Now pruned due to environmental considerations to 45,000

- Several long trips are made in public taxis

- Also largely used as shared taxis to meet the demand for taxis during peak hours

- Taxis also serve as dispersal mode from train stations, mainly as shared taxis

User Groups

- Public taxis used by all- fish monger, vegetable vendor as well as students & officer worker

- Small groups of children as pool vehicle: same man comes every day: very safe

- Very safe and affordable, even at night

- But, extremely dirty and poorly maintained: cannot climb slopes of Mumbai

- Upper class shun this

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Private Taxis

- Private taxis = 1,00,000 in great shape

- Costs too high

- Used by businessmen and upper class tourists

- Booked for the day or fractions of the day and/ or on distance traveled

- Cannot be hailed on the street, even if empty

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Taxi as a Demand Management Tool

- To reduce the demand for road space for cars, need to shift car trips to taxi trips because these vehicles will be in constant circulation, and can perform several trips

- Parking demand will be reduced

- Overall speeds will improve

- Road space can be re-allocated for mass transportation, NMT and pedestrians

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Change in Image

- Upgrade quality of ride offered, so acceptability is greater

- Old taxis- non a/c, old & shabby, uncomfortable, untrained drivers

- New taxis – a/c, new & well maintained, trained and courteous drivers

- Old taxis cruise slowly, looking for fare, often refusing to take passengers

- New taxis on-demand, no refusal, available 24 x 7

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Approach

Initiative taken by Corporate NGO

- Discussions with
  - Taxi owners & Unions
  - Car manufacturers
  - Private Taxi Operators
  - Banks, for Low interest loans with better cars
- Prepared Report, which was taken up by Government

Approach

- Government took the initiative
- Brought in private operators
- Existing drivers invited to shift to new operators
- Incentives given like:
  - Life insurance
  - Salary
  - One shift operations
  - Cars transferable after a period
  - No need to interact with the authorities
  - Better, more comfortable cars with A/c
- On- demand, with GPS facility

On-Demand, Fleet Taxis

- Well maintained, well groomed drivers, well conversant with the city
- Electronic meters, printed receipts
- Magazines
- Radio
- Off- street parking, on-demand
- No cruising
- Now about a 1000 of them on the road, and increasing
- Old vehicles will be scrapped

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Supporting Policies

- Higher parking charges
- No on-street parking - Only off- street parking, with higher rates
- Introduce DBL and BRTS, encouraging mass transportation usage
- Encouraging contract buses on DBLs
- These lanes can also be used by HOVs
- SOV's left with reduced road width

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Thank You

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Sources

- Presentations by Dr.P.C. Seghal, MD, MRVC

- KoolPool Presentation

- MMRDA Web site: www.mmrdamumbai.org

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