



Restrain cars

What's going wrong? Parking

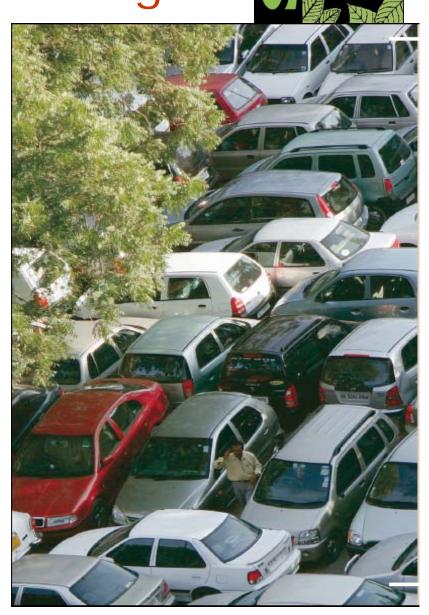
Wasteful use: 90 to 95 per cent of the time a car is parked

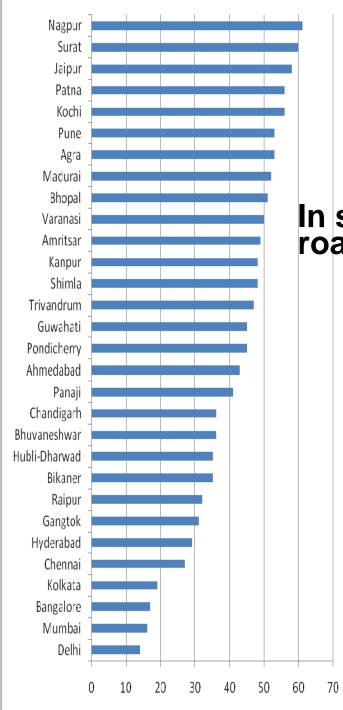
Insatiable demand for land:

Annual registration of cars generate demand for land bigger than 310 football fields in Delhi!

Inequitous use of land: A car is allotted 23-26 sq m for parking. Under low cost housing scheme only 18-25 sq m is allotted to very poor families.

Parking takes away walkspace from pedestrians, green areas





On-street parking worsens congestion. Takes away space from people



In smaller cities higher share of roads under parking encroachment

Major road lengths used for parking (%)

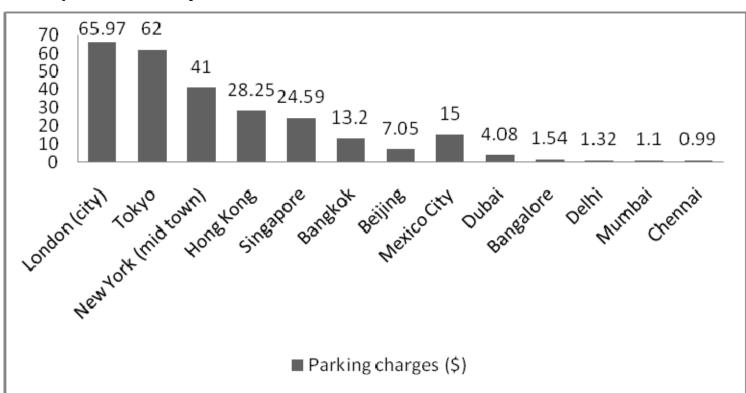


Source: Computed based on WSA/MOUD study, 2008

Free or for pittance: Indian cities have lowest parking charges in the world



Comparison of daily rates in commercial business Districts in different cities



Source: Colliers International (2011) - CBD daily parking charges (in US \$)

If hidden subsidies are removed parking rates in multi level car parks will increase six times

Countries are learning to control parking demand and cap supply



Portland, Oregon Overall cap of 40,000 parking spaces downtown. This increased public transport usage from 20-25 per cent in the 1970s to 48 per cent in mid 1990s.

Seattle allows a maximum of one parking space per 100 square metres at downtown office San Francisco limits parking to seven per cent of a downtown building's floor area

New York has very high parking fees and limited parking supply which lowers car ownership far below the US average

Bogota Removed limit on the fees charged by private parking companies. The revenue goes to road maintenance and public transit improvement.

Shenzhen: Hike in parking fees during peak hours leads to 30% drop in the parking **Bremen:** No free parking in city centre. Parking charges higher than public transport cost.

Barcelona – Parking revenue directed to a special fund for mobility purposes.

London: parking income channeled to transportation projects.

Tokyo: Enforcement against parking violations cuts congestion drastically. Private firms allowed to issue tickets for parking violations. This makes on-street parking expensive.

Antwerp: parking fines are invested into mobility projects

Paris: Street space freed for bike sharing and trams

Copenhagen: Streets freed up for bike lanes

Parking principles must be right



Limit parking requirements

Parking should be public, shared and priced

Design parking for multimodal integration

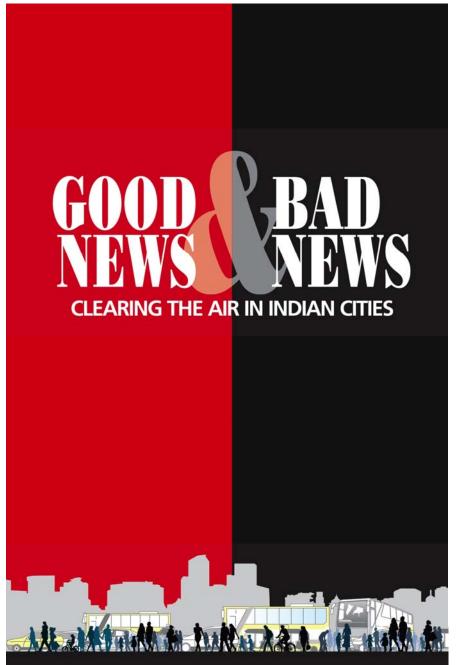
Plan multi-level parking not for a site but as a overall parking plan of a zone

Enforce strict penalty for violation of parking regulations and walkway encroachment

Meet the parking needs of public transport buses, non-motorised transport and freight

Introduce high and variable parking rates according to duration of parking

Promote common public-shared-priced parking in residential and mixed land-use parking

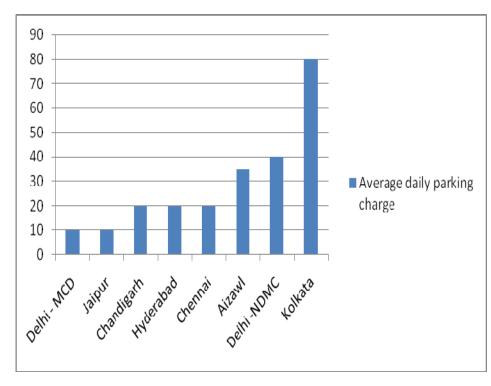




Good news Fighting the bulge

Kolkata – leads today in parking charges





Maximum restraint principles

Surface parking charges are highest in Kolkata – Rs 10 per hour

Only city with residential parking pricing policy: Personal vehicles pay night charges for on street parking in neighbourhood with narrow streets.

Those who cannot park on roads rent spaces to park cars. They pay in the range of about Rs. 1000-1200 per month.

This is similar to Tokyo model

Delhi: Protects green cover and parks from parking



A significant step has been taken in Delhi to prevent parking in green areas and in neighbourhood parks.

Following the intervention from EPCA the Delhi Master Plan 2021 has been amended to ensure that parks and playgrounds are not permitted to be utilized for parking purpose as it would destroy breathing space and playground for children

Gangtok: demands proof of parking before registration



Sikkim transport department notification makes it mandatory for buyers to produce an availability-of-parking-space certificate before registering vehicles

- The superintendent of police issues certificates after physical verification of the parking space
- This is followed by an inspection by motor vehicles inspector, who submits details to the transport department along with a rough map of the site
- In the hills, car owners often park along the road and walk to their houses, which may be located higher up or lower down
- Two car dealers received notices from the transport department directing them not to sell cars without first asking for the availability-ofparking-space certificate

Aizawl: passes law to regulate control vehicle parking



To own and buy a car.....

- the owner of any type of motor vehicle including two wheelers shall have a garage within his own residential or business compound or in some other place, or a garage hired from any other person, for parking the vehicle (*The Mizoram Gazette, Vol XL, Issue No. 52, February 2011*)
- Purchaser, before purchasing any type of motor vehicle including two wheelers or the person intending to purchase any such motor vehicle shall obtain a certificate from thetransport department...that he has a garage, within his own residential or business compound or in some other place, or a garage to hire from other person, for parking the vehicle he intends to purchase (*The Mizoram Gazette, Vol XXXIX, Issue No. 295, August 2010*)

Bengaluru: takes steps to expand pay and park scheme



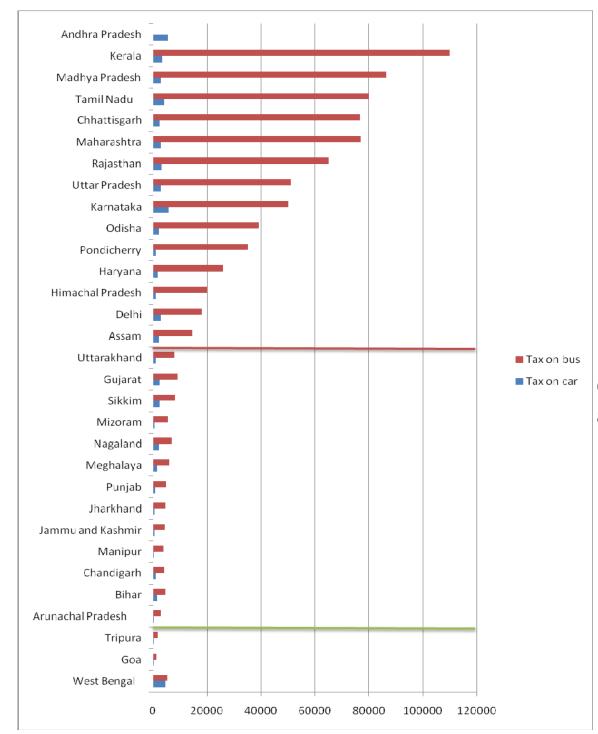
Bruhat Bengaluru Mahanagara Palike decision in September 2013: New pay and park scheme to be expanded to cover 85 roads.

So far, only two streets had paid parking scheme

Roads classified into premium parking, business parking and ordinary parking. Hourly tariff is proposed -- Rs 15, Rs 10 and Rs 5 for two-wheelers and Rs 30, Rs 20 and Rs 10 respectively.

Provision of yearly revision of parking fee linked to wholesale price index

Parking Information System and parking meters



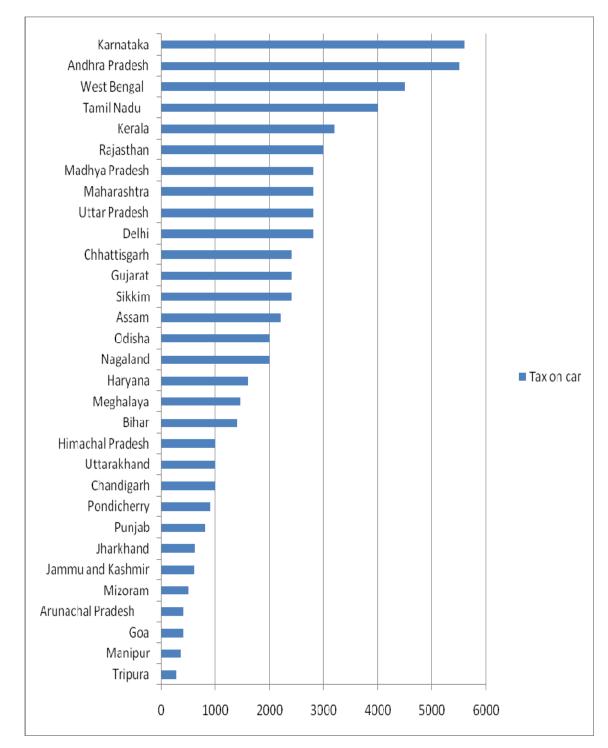


All states tax buses more than cars

Comparison of motor vehicle tax cars and buses

Only Tripura, Goa and West Bengal have lowest differential

Source: CSE computation based on Road Transport Year Book, 2009-10 and 2010-11, Transport Research Wing, Ministry of Road Transport and Highways, Government of India, New Delhi

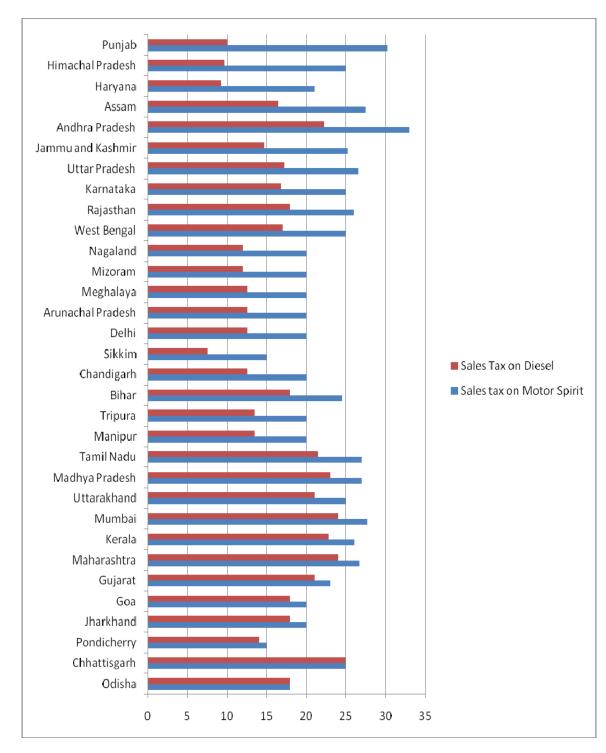




All states tax cars with care and love

Tax on cars is highest in Karnataka followed by Andhra Pradesh and West Bengal.

Source: CSE computation based on Road Transport Year Book, 2009-10 and 2010-11, Transport Research Wing, Ministry of Road Transport and Highways, Government of India, New Delhi





All states tax diesel with love

Only Odhisa and Chattisgarh do not maintain any differential between petrol and diesel tax

All other states tax diesel lower than petrol

Need tax policy to discourage dirty fuel

Source: Source: CSE computation based on Basic Statistics on Indian Petroleum and Natural Gas, 2011-12, Ministry of Petroleum and Natural Gas, Government of India, New Delhi

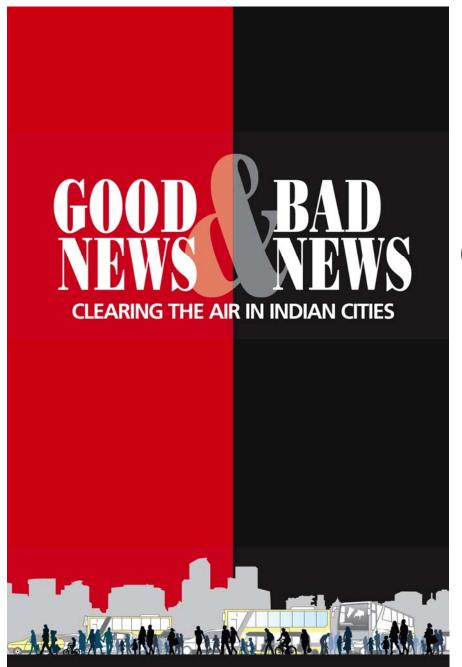
Build fund for public transport: imperative for future



The 12th five year plan working group of the Union ministry of urban development estimates a total investment requirement of about **Rs.3,88,308 crore** for whole range of interventions to scale up public transport and non-motorised transport and the related support infrastructure.

Delhi needs Rs. 5,444 crores which is 1.6 times the total transport department's budget for one year.

This needs innovative fiscal approaches





Good news (some)

Green Tax Higher taxes on older vehicles



Tamil Nadu: Requires commercial vehicles that have completed 7 years of age and personal vehicles that have exceeded the age of 15 years from the date of its registration have to pay additional tax or green tax.

Maharashtra Public and private vehicles, which are over 8 and 15 years old respectively will have to pay a green tax every year.

Delhi Air Ambience Fund: Polluter pay principle



Air Ambience fee of 25 paise per litre of diesel fuel sold in the city implemented on March 28, 2008

The Delhi Pollution Control Committee (DPCC) administers and collects this cess.

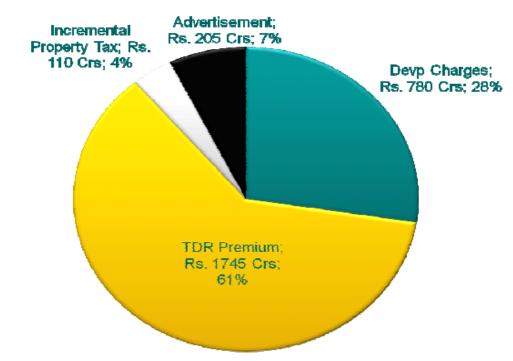
The revenue from this cess goes to Air Ambience fund

Revenue of Rs. 116 crore generated as of May 2013 Rs. 39.76 crore spent on subsidizing battery vehicles

Pimpri Chinchwad: Innovative steps

PCMC allows densification along the BRT corridor Advertisement revenue and incremental property tax are the key source

In 2012-13 revenue worth Rs 92 crore generated This is used to construct and maintain BRT



Total income potential of BRT corridors

Source: Commissioner PCMC 2013, Financing the development of BRT corridor, Pimpri Chinchwad, Pune, SUTP

Towards dedicated fund Karnataka (State level) and Bengaluru and Mysore (City level)



Government of Karnataka has created urban transport fund for Bangalore and Mysore in 2010.

To start the fund, Rs 10 crores and Rs 5 crores sanctioned for Bengaluru and Mysore respectively

The Government has also set up State Level Urban Transport Fund and sanctioned Rs. 10 crores

The revenue sources include cess on motor vehicle tax, cess on taxes collected by Urban Local Bodies, annual amount of Rs. 20 crores from State Finance Corporation as grants

The fund to be spent on capacity building; non-motorized transport; improvement in accessibility and efficiency of public transport; awareness among the general public on traffic related issues



Cities need both conventional and non conventional sources of funds to meet the cost of transition and reinvent mobility