



International Symposium on MEGACITIES

(For Sustainable Development in the Context of Global Urbanisation)

November, 11-14, 2014

Kolkata, India

Abstract

1. LATEST METROPOLITAN TRANSPORT DEVELOPEMENTS BY MODE

Heavy rail: HSR developments with double-decker trains: the case of France.

Conventional rail: HS thru tilting trains: the case of the UK.

Metropolitan rail: driverless systems with sliding doors: the case of Singapore.

Light rail networks on dedicated tracks: the case of Germany.

Bus Rapid transit: the case of Curitiba, Brazil.

2. TOWARDS A COMPLETE METROPOLITAN MOBILITY CONCEPT

A complete urban mobility concept should include the following components:

- Decoupling income progression from increase in energy use at the level of a region.

A case in point: Singapore, among others through its car ownership restraint, its congestion pricing, its network of high capacity driverless subway trains linked with pedestrian malls and its intermodal Easylink card.

- Lifestyles favouring non motorized transport clusters all over the metropolis, encouraged by fuel price increase.

A case in point: Copenhagen, among others through its high density-low rise urban planning, its bicycle network (36% of commuters using bicycle, notwithstanding the Scandinavian climate), its combination of regional rail covering Copenhagen and Malmö, its driverless urban Metro system and its extended pedestrian streets.

Among smaller cities a case in point seems Freiburg (Germany), among others through its urban development clusters and its synergy between low energy buildings and low energy buildings.

- Using opportunities for non motorized transport to policies and measures and actual practices, at urban and regional level.

A case in point: Portland (Oregon), among others through its systematic reconversion of empty urban blocks into high density mixed use urban development and small public squares (Pearl District) and through its steadily increasing accessibility by transit.

At regional level, the Metropolitan Planning Organization METRO, which covers the Urban Growth Boundary, has a directly elected Government, with powers including the development density per areas within the Region and fostering effective transit oriented development.

- Complete mobility through effective tram/bus right-of-ways and innovative use of rented bicycles for short trips.

A case in point: Paris. The extensive use of bus right of ways (more recently also trams), protected from automobile traffic by “banquettes” and passenger information about waiting times has triggered a strong revival of surface transport. The Paris bicycle rent “Velib” system, which provides close 20.000 bikes dispersed around the city, is reported as having substantially modified the lifestyle in favour of non-motorized transport, as well as having been politically rewarding. Extensions of the system to the periphery and bicycle lanes remain to be implemented.

- Implementing synergy between supply of regional public transport and restraint to the use of the car in the city.

A case in point: Zurich and its Region. The on-street parking is systematically reserved for registered residents, while automobile commuters are submitted to a limitation of their parking time. Conversely rail commuters have benefited from an increase service supply.

The parking measure has brought a return of inhabitants to the City (to be able to park) and has been politically rewarding.