

Proposal for Modernisation of the Transport System in Delhi

Modernisation of the transport system in Delhi would require a systematic and comprehensive planning for an integrated multi-modal mass transit system. Issues of capacity augmentation & integration, pedestrian/NMT connectivity, efficient feeder systems would need to be addressed to encourage use of public transport system. A coordinated and sustained effort to be made to achieve a modal split of 80:20 in favour of public transport in the next 10 yrs, in order to achieve decongested city roads, reduced fuel consumption and safe & pollution-free city environment. Less use of cars on city streets particularly during peak hours is to be achieved partly through sustained publicity campaign and partly through various disincentive /incentive measures supported by an integrated public transport system with higher level of mobility for daily commuters.

2. However, a coordinated approach by various agencies at planning, implementation and operational levels is a prerequisite for achieving a modernized transport system. Rail, Metro-rail and all other form of road based transport modes should integrate into an efficient seamless multi-modal transport system with single ticketing and ITS enabled traffic management and transportation facilities.

3. **Components of an Integrated and Modernized Public Transport System** for NCR/ NCT that could be implemented in the following Order of Priority.

I. **High-Speed Regional Rail :**

The permanent immigration of people can be reduced to a major extent by giving people the opportunity to travel quickly, conveniently and cheaply to various urban job centres, but returning to their hometowns at the end of the workday. This can be done only through the provision of efficient High Speed Regional Rail Networks, as exemplified by cities in China, Eastern America, Taiwan, etc. A Regional Rapid Rail Network Plan as proposed in NCR plan

should be implemented with top priority. It would help decentralize job centres and facilitate the growth of Tier-2 cities.

- II. **Integrated Mass Rapid Transit System-** Radial Metro, Ring BRT and Rationalized DTC System should be designed and operated as an integrated system to optimize investment cost, increase efficiency, reduce interchange time for encouraging commuters to use public transport. A comprehensive mass transit network plan comprising of (i) **Primary Systems** (Rly, metro, BRT-High speed /high frequency/segregated on major ring/radial corridors with interchange nodes) (ii) **Secondary Systems** (Rationalised DTC bus system on all other sub-arterial and collector roads and tram/ ETB- etc on inner city core areas) (iii) **Feeder systems** (low capacity buses, autos, rickshaws, pedestrians etc – operating between residential areas and major Primary Transport nodes) should be facilitated and encouraged at the earliest to cope with the mobility demand of the metropolis.
- III. **Pedestrian and NMV Prioritization in Road Design** : is absolutely necessary in order to help increase Public Transport Usability through **increased last-mile connectivity**. Good infrastructure for pedestrians and non-motorized users is of foremost importance in making people comfortably shift to the use of public transportation.
- IV. **ITS (Intelligent Transport System)** : will allow for highly increased efficiency in the **operation, monitoring and performance of public transport systems like BRT**, etc. Real time traffic management would also be facilitated by ITS, thus helping people make informed decisions about when and where to travel.
- V. **Smart Cards**: would allow commuters to **pay once, but travel on all** public transport and para-transit modes. Seamless operational Integration between modes will help commuters save time and money.
- VI. **Transit Oriented Development (TOD)**: encompasses any type of development that induces people to prefer the use public transportation. TOD includes the

increase of connectivity and walkability to station areas, provision of supportive uses like taxi/auto stands, hawker zones, markets and multi-modal interchange opportunities, as well as the provision of mixed-use high-density uses near MRTS stations so that maximum people can walk, cycle or rickshaw to the closest Station. This type of Urban Design and Planning not only helps reduce car-dependency and minimizes urban sprawl, but is also a desirable source of **cross-subsidy for public transport agencies** without ticket-burdening the actual public transport users.

4 **Important issues/proposals for coordination**

i) High speed regional network and integrated MRTS, Railways need to come forward to take the share of sub-urban/regional as well as intra city commuter travel by **a) augmenting their system capacity** with high frequency EMU trains on radials as well as on rings **b) developing all station areas**(eg. Lajpat nagar, patparganj, okhla etc) with pedestrian/NMT connectivity to attract intra-city daily commuters. **c) working out integrated plans** with the concerned public transport agencies/road owning agencies to provide seamless commuter movement with interchange facilities in all **major rail terminals** (New Delhi Railway Station, Nizamuddin etc) and **Integrated passenger terminals** (eg.Anand Vihar, Sarai Kalekhan, Dwarka, Narela etc). Similar actions are required to be taken by DMRC, Transport Deptt/ DTC.

**Coordination reqd.- Min. of Rlys., Min. of Surface
Transport, GNCTD,MOUD /DMRC**

ii) Ped/NMT prioritisation UTTIPEC has already released **Pedestrian Design Guidelines** for Delhi, which should be uniformly adopted across the city by all concerned agencies. The same can be downloaded from the Thumbnail link on UTTIPEC's homepage: <http://uttipec.nic.in/>. PWD and MCD have a major role to play along with/ in coordination with other agencies.

Coordination required – MoUD (PWD, MCD, NHAI, DMRC, DDA)

iii) ITS and Smart cards- For effective performance of multi-modal transport system, a coordinated effort by concerned agencies ie. Rlys, Metro, Transport Deptt/ DTC, Traffic Police is required for adopting an integrated system of planning and operation based on standard operating procedures.

Coordination required- Min. of Rlys, MOUD, GNCTD, MHA

iv) Transit Oriented Development (TOD) – A City level Study for TOD, Increased Connectivity and Multimodal Integration Strategies in being initiated by UTTIPEC. Several Pilot projects and relevant policy changes will also be explored in the coming months as per the decision taken in the meetings held under Hon’ble LG./ Chairman, UTTIPEC.

Coordination required – MOUD (DDA/UTTIPEC, DMRC, NDMC), GNCTD (Transport Deptt , DTC, MCD, PWD, etc) Min. of Rlys