

# Re-Design Road Based Public Transport Infrastructure for De-Congestion on Roads

1

## **UNDERSTANDING KEY PROBLEMS AND THEIR SOLUTIONS**

**A PRESENTATION**

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# Study Reports

2

- **Plan BENGALURU2020**
  - Focus on Public Transport
  - Priority for Public Transport
- **NUTP**
  - Recognizes the importance of Public Transport
  - Priority for Public Transport
- **CTTP**
  - Public Transport to be the Backbone of City's transport infrastructure

# Road Based Public Transport System

3

- **Continues to be a major player**
- **Serves 35% of the total traffic**
- **Every study and plan suggests, this to be the backbone**
- **Every study and plan suggests this to be the cheapest and viable mode of transport**
- **Has inherent benefits like economical in operation and safest among other modes**
- **BMTC Buses, Cabs, Autos and Mini Vans, Public Sector Buses, Contract Service Buses**

# Common Problems

4

- No integrated transit points
- No priority on roads
- Compete with cars, 2 wheelers
- Speed slow down due to congestion
- Bus/Cab/Auto stands far away
- Not public friendly
- Known for rude behavior

# Current Picture

5

- **BMTC Service**
  - Reliability at its lowest
  - Known for erratic, irregular frequency
  - Some areas overly served, Most under served
  - No rational for present routes and frequency.
  - No planning in # of bus stops, their locations
  - Il-designed bus stops
    - ✦ No safety considerations
    - ✦ No vicinity considerations

# Current Picture

6

- **BMTC Service**
  - No facility on ground for easy transfer to other modes
  - No discipline in parking, stopping at bus stops
  - No public evidence of fleet management, maintenance
  - No evidence to suggest cooperation with other agencies
  - No evidence seen for any planning for expansion and adding new routes
  - No evidence seen on usage of technology for better customer service.

# Current Picture

7

- **Autos**

- Expensive, low on customer friendly
- Cause of rise in pollution
- Safety concerns
- Stands hardly located at right spot

- **Taxis/Cabs**

- Expensive, known for rash driving
- Known for most accidents on roads
- Not readily available when needed
- Slightly above from autos on customer friendliness
- Hardly any stop exists

# Silver lining and Motivation

8

- **Vayu-Vajra service to BIAL airport**
  - Reliable and Economical
  - Popular among airport users
  - Public likes and patronizes the service
- **Re-assurance**
  - PT can be the choice of transport mode
  - If properly run and managed, can expect public to use PT for daily commute
  - Great help for industries and businesses who can not afford to ply own transport.
  - Greater would be the saving on foreign exchequer



# Possible Solutions

9

- **End BMTC Monopoly**
- **An Independent Authority/Regulatory Body**
- **Infrastructure**
  - Multi-Mode transit centers Integrating with Metro & other PT systems
  - Bus Stops, Parking, Maintenance Sheds at right locations
  - Customer Service Centers / Call Centers
- **Redesign the Routes and Schedules**
  - Re-jig the whole bus route system
  - Divide the area as CBD, OBD and Satellite
  - Routing and frequency based on need and requirements
- **Trunk/Main Road Service Providers**
  - Leverage BMTC's fleet and operations
  - Private Players to fill the gap, expansion, goods carrier and charter needs
- **Feeder/Last Mile Service**
  - Leverage Mini-Vans, Taxis, Cabs and Autos

# Element 1 - End BMTC Monopoly

10

- **Transfer the entire exercise of planning, scheduling and routing to Independent Transport Authority**
- **Convert into a 100% service provider entity**
- **End its monopoly on transport operation in B'lore**
- **Leverage its each and every asset to meet the transport needs in a newly designed PT system**
- **BMTC's existing assets would be in top of priority for use.**
- **Private Players would fill the gaps, expansion and charter needs.**

# Element 2 - Independent Transport Authority

11

- **Responsible for Bangalore's all Road Base Public Transport System (RBPTS) Needs**
- **Works under Higher Transport authority like BMLTA**
- **Buck stops at this regulator**
- **Responsible for Planning, Execution, Operation and its maintenance**
- **Owns responsibility for creating RBPTS infrastructure**
  - **MMTC, Bus Stops, Safety Provisions, Dedicated/Priority Lanes**
- **Responsible for all expansions, changes and rebuilding**

# Element 3 - Multi-Mode Transit Centers

12

- **Integrated transit Facility for all transport modes**
- **Concept similar to use of airport terminals by airlines**
- **Designed to minimum congestion due to transfers**
- **Congestion-less Exit/Entry points**
- **Priority for Mass Public Transport Service and feeder service**
- **Disincentive for private vehicles – Higher Parking fees, Parking lots away from transit centers.**
- **Decent public amenities**
- **Safety at all times**

# Element 4 - Priority for Public Transport

13

- **On smaller roads, allow only PT vehicles**
- **Possibly, dedicated lanes as suggested in various planning forums**
- **Priority for Govt lands/facilities for Parking, Maintenance Sheds**
- **Private vehicles, only on wider roads**
- **Incentive for businesses/Industry to use PT – Concession rates for monthly passes to their employees**
- **Tax Breaks for money spend on Employee's Bus Passes**

# Element 5 – Bus Stops

14

- **Reconsider the present location of all bus stops**
- **Location, Size to fit the needs of re-vamped PT setup**
- **Should serve the purpose**
  - PT vehicles stops only at bus stops
  - Vehicles stops at marked lanes/spots only
- **Should encourage use of public transport**
  - Walking distance from a locality/vicinity
  - Facilitate transfers
  - Safety – 24/7
  - Aids to physically disadvantage sections
    - ✦ Physically Handicapped, Aged, Women, Children

# Element 6 - Customer Service – 24/7

15

- A separate department under transport authority to serve the public needs
- Physical presence in major Bus stops, in all MMTCs
- Available by Phone and Web
- All data/schedules display to be current
- Facility for filing complaints/suggestions
- Policy for response to complaints/suggestions
  - Display it on websites
  - Facility to know the status
  - Facility to appeal the decisions

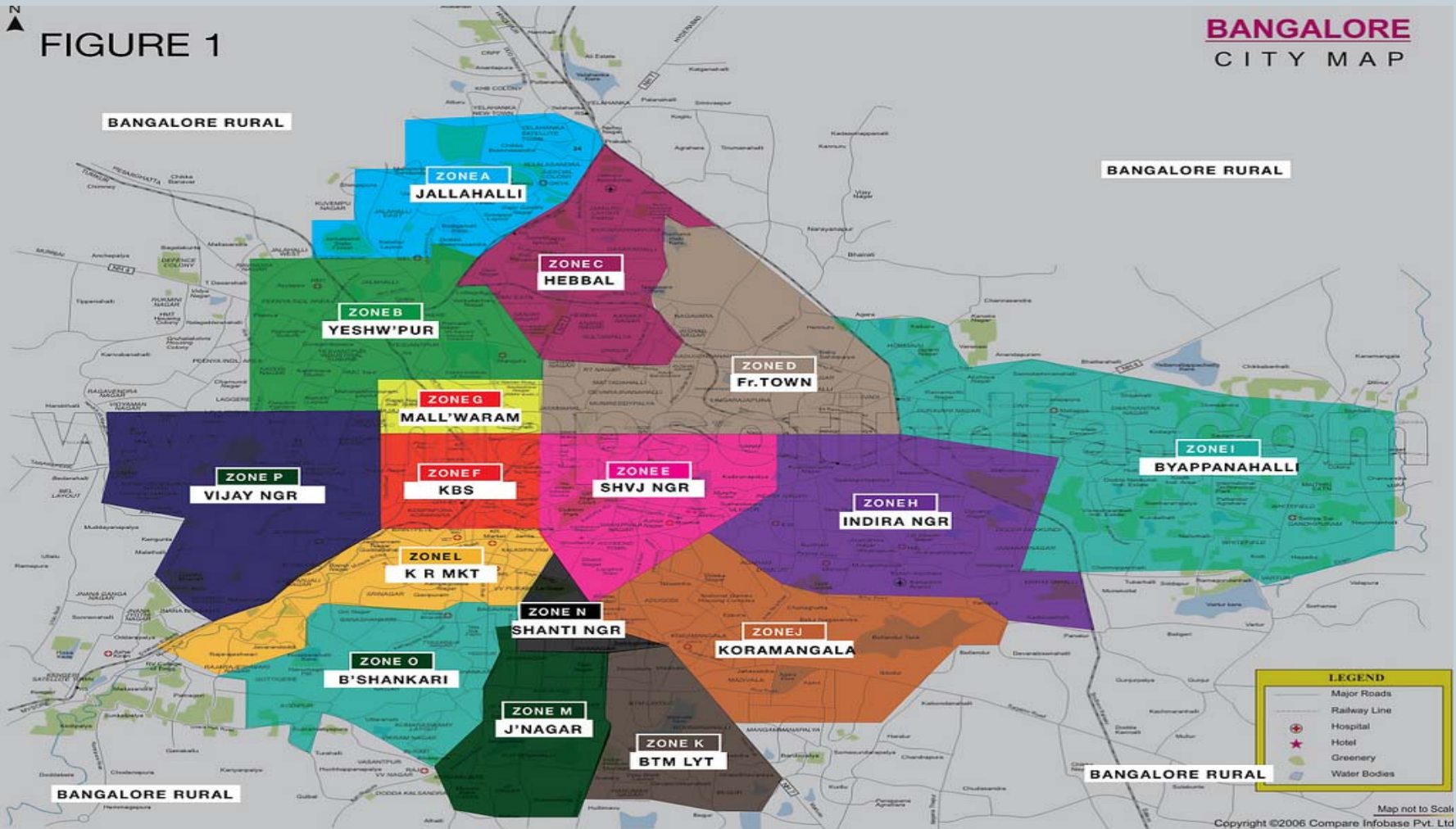
# Zones & Routes — Courtesy Mr. Narayan Gopalan

16



FIGURE 1

**BANGALORE**  
CITY MAP





# Element 7 – Redesign Routes

17

- **Divide the city into zones**
  - Partition the city areas into Zones
    - ✦ As given in the diagram
    - ✦ Further into CBD Zones, ORR Zones, PRR Zones
  - Re-use the present depots/bus stations, future MMTCs to be Zone center
  - Future expansion to be considered as Satellite Zones
- **Re-jig the present routes**
  - Zone-to-Zone Routes
  - Intra-Zone Routes serving the zone localities
    - ✦ Trunk/Main Road Routes,
    - ✦ Feeder/Last mile Routes

# Re-Design Routes – Part 2

18

- **Single fare/ticket for complete journey**
  - Same ticket should be valid up to the destination
  - Promote return ticket purchases
    - ✦ Economical than purchasing separately
  - Make monthly passes economical
  - Allow transfers from other PT modes like Metro, Trains, RTCs
- **Special Services**
  - Continue/Spruce up the VV service to BIA
  - Provision for starting Planned Circular Shuttle Routes
- **Satellite Zone routes**
  - Routes serving localities under it
  - Connects to nearest Zone Center
- **Charter Services**
- **School Routes**

# Element 8 – BMTC Bus Service

19

- **As a service provider only**
- **Current fleet to be deployed 100% for zonal routes**
- **Inter Zone Routes Service**
  - Between zone centers
  - Fast, minimum stops
- **Intra Zonal Routes Service**
  - Serving zonal localities
  - Starts/End at zone center
- **Buses to be run only on trunk/main roads**

# Element 9 – Feeder/Last Mile Connectivity

20

- **New policy to regulate Taxi/Cab/Auto services.**
  - Promote fuel efficient vehicles – Stop issuing new licenses for autos?
  - Promote private and economically disadvantage sections
  - License renewal based on Highest Safety compliances
- **Part of Public Transport System**
  - Feeder service
  - Last mile connectivity
  - No scope to decline a passenger request
  - Highest level of customer service
  - Non compliance a cause to loose the contract/license

# Element 9 – Private Bus Service

21

- Fills the short fall from BMTC service
- Mainly on Zone, Trunk, Satellite Routes
- For all new additions on inter-zone/intra-zone routes
- For all new additions on Satellite Routes
- For Semi-Goods Carriers Service
- Allow single vehicle owners also
  - Must arrange backup if needed
- Preference to economically disadvantage sections
- Owns all Profits/Losses

# Element 10 – Semi Goods Carriers

22

- **Special service from designated locations and timings**
  - Fruit/Vegetable Market in K R Market to various BBMP run markets
  - Specially in Morning
- **Special service allowing carrying of goods along with passengers**
- **Should be like BIAL concessionaries operating taxis to BIA**