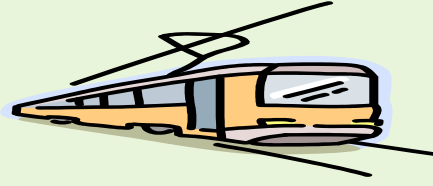
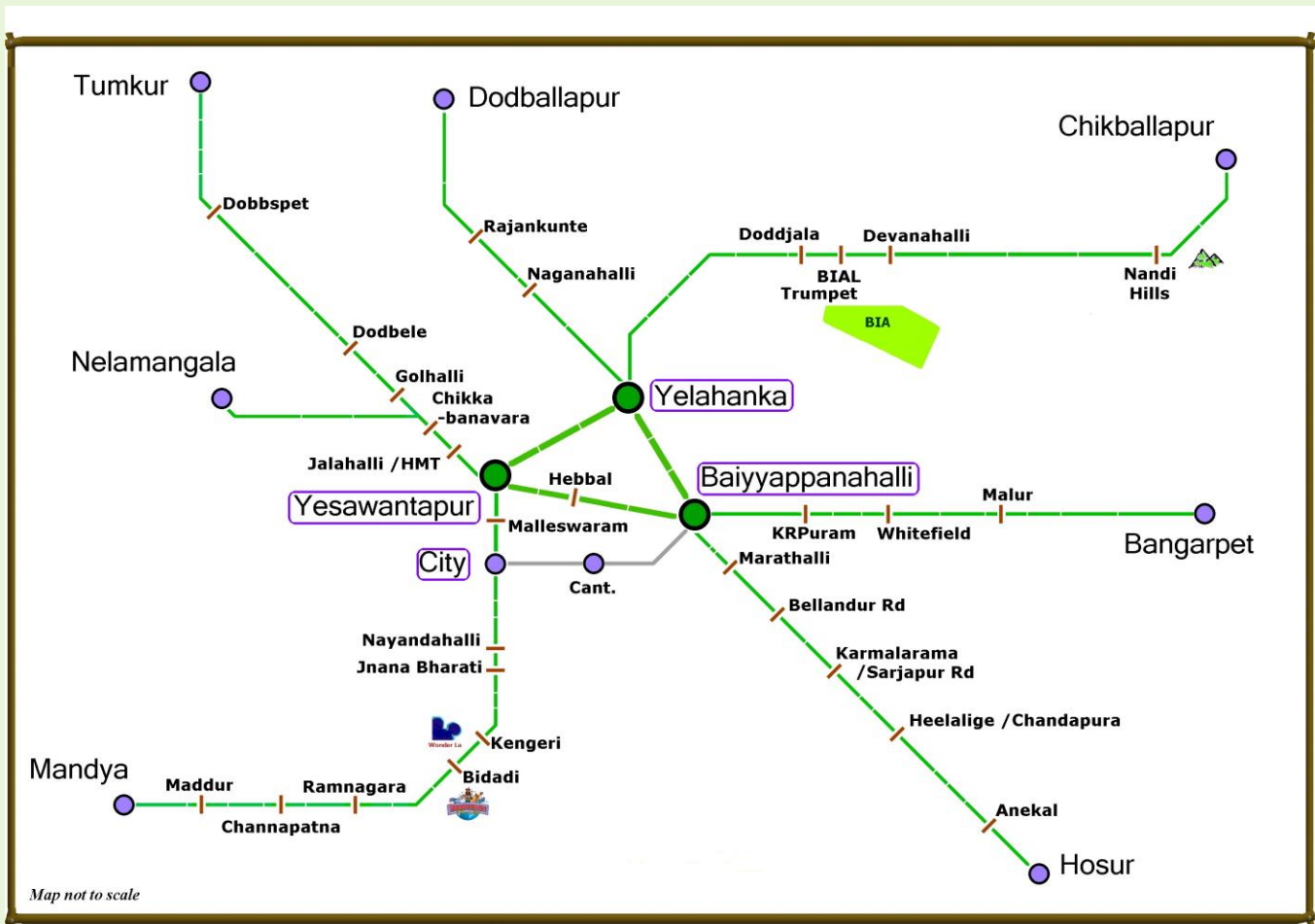


# Commuter Rail Service



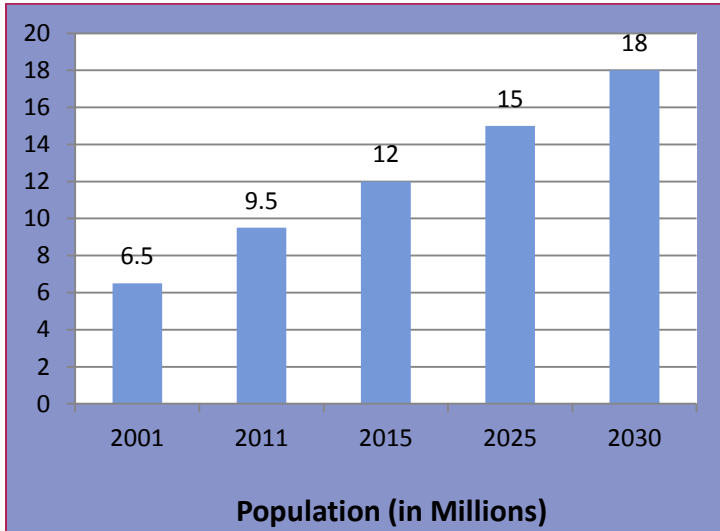
The Promise of moving growth beyond Bengaluru



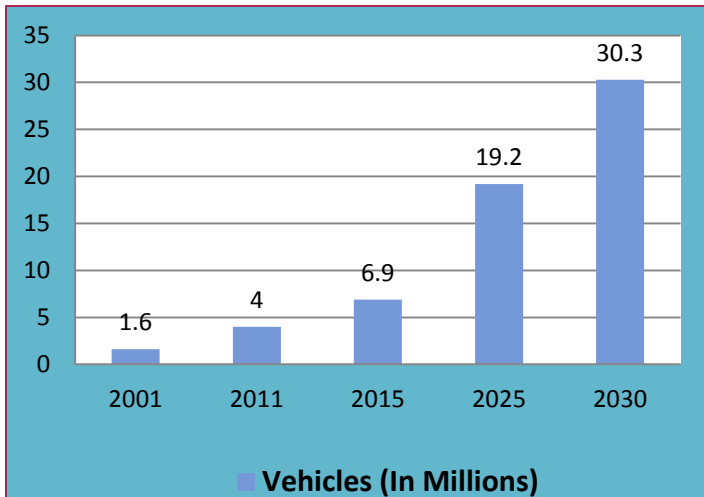
“...Commuter rail can draw a large number of commuters - people who travel on a daily basis from cities like Tumkur, Yelahanka, Hoskote, Whitefield, Hosur, Anekal, Kengeri, Ramanagar, Doddballapur and Chikkaballapura. Commuter rail provides a number of public benefits including reduced highway congestion, pollution and energy dependence and further, they serve lower density areas, and often share right-of-way with intercity or freight trains. When compared to rapid transit, commuter rail has lower frequency, following a schedule rather than fixed intervals, and fewer stations spaced further apart...”

- Prof. T. G. Sitharam, CiSTUP, Bengaluru.

## Bengaluru Today Population



## Vehicles

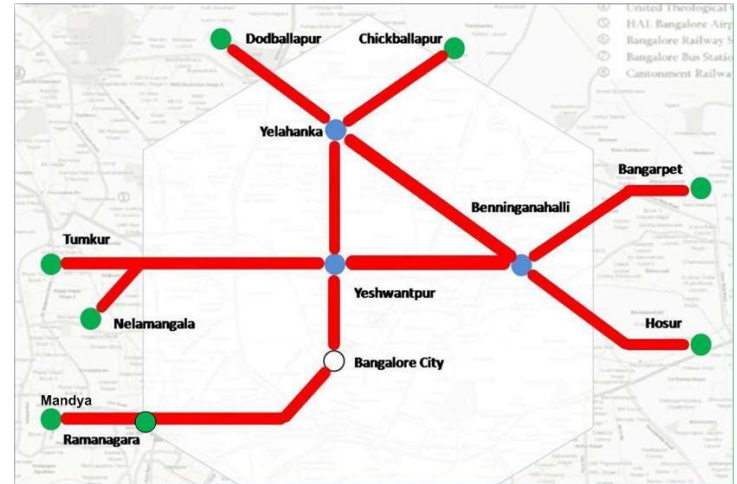


## Result



## Solution – Develop New Growth Centers

As the RITES report to the Department of Urban Land Transport (DULT) clearly highlights, Bengaluru has excellent rail lines of the Indian railways already running through the heart of the city. Just as in cities such as Mumbai, Chennai and more recently, Hyderabad, these rail lines can be effectively utilized and upgraded to add another high



capacity mass transit option at a much cheaper cost as compared to other options. By connecting neighboring towns such as Ramnagaram, Mandya, Tumkur, Doddaballapur, Bangarpet, Hosur etc., to Bengaluru city with a fast and efficient commuter rail system, multiple objectives will be achieved.

## Connecting City with Suburbs, Towns

People living in these Satellite towns will be able to commute to the city for their employment without having to relocate to Bengaluru. This will help in the economic prosperity of residents of these towns and routes along the way by connecting them to the economic hub that is Bengaluru. Already, travelers in long distance trains along these routes know the huge pent up demand as citizens use these trains for their commute. By providing them with efficient and economic commuting options, migration of the population of these areas to Bengaluru city can be slowed and many challenges such as water needs of the Bengaluru area can be better addressed.

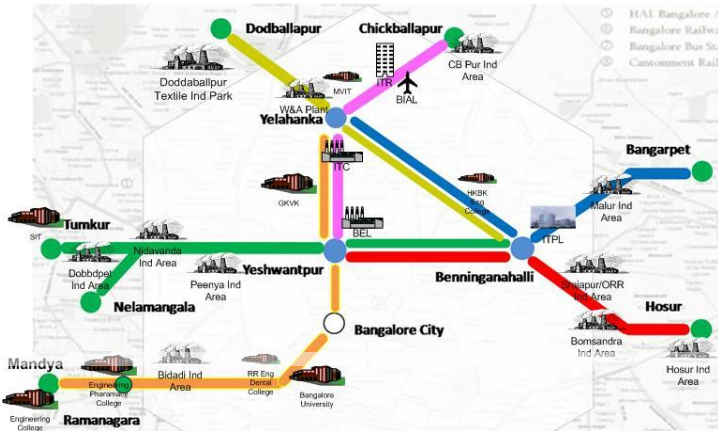
*"..No urban area will prosper unless it attracts those who can choose to live wherever they wish..."*

*- Jonathan Barnett*

## Bengaluru Commuter Rail Service



The proposed commuter rail service (CRS) would make use of the trains running on existing railway tracks to connect Bangalore with distant suburbs, as Mumbai's suburban trains do in that city. The RITES report submitted to DULT proposes setting up of a commuter rail system network of 405 km connecting Bengaluru with surrounding suburbs and towns.



The growth centers indicated as green dots on the map are the towns which will be connected by the Commuter Rail. These growth centers are significant because they are currently not very heavily populated despite their close proximity to Bengaluru. They have sufficient headroom for growth and are approximately within one hours traveling distance from Bengaluru. The catchment areas in between also have potential to grow with rail connections.

### Proposed CRS Routes/Segments

- Yeswantpur-Yelahanka-Devanahalli-Chiballapur
- Benninganahalli-Yelahanka-Doddaballapur
- Yeswantpur-Benniganahalli-Anekal-Hosur
- Tumkur/Nelamangala-Yeswantpur-Benninganahalli
- Yelahanka-Whitefield-Malur-Bangarpet
- Yelahanka-City-Kengeri-Ramanagaram-Mandya

## CRS Reach

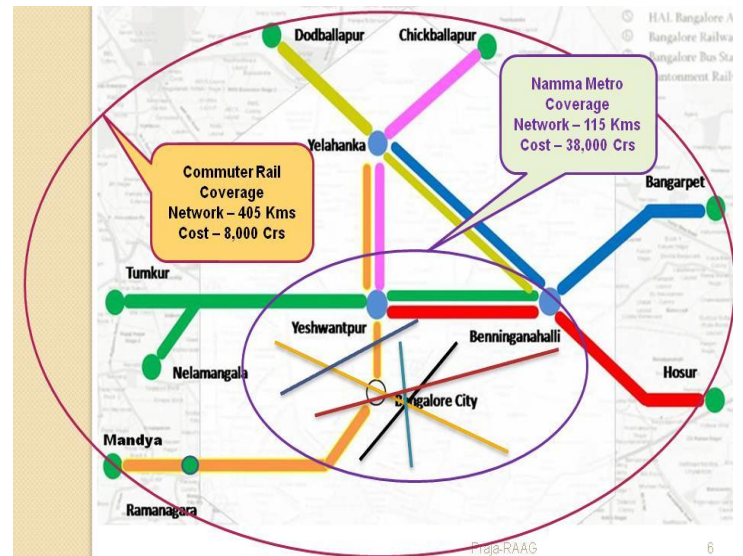
Proposed CRS Network will serve

- ❖ 8 Lok Sabha Constituencies
  - Bengaluru North
  - Bengaluru Central
  - Bengaluru South
  - Bengaluru Rural
  - Tumkur
  - Chikballapur
  - Kolar
  - Mandya
- ❖ 47 Assembly Constituencies
- ❖ 20 Lakh Commuter Trips per day

## Economics – Return on Investments

- ❖ Every 100 rupees investment would result in 600 rupees in economic returns.
- ❖ 8000 Crs of investment would result in 48,000 Crs in economic returns.
- ❖ Income of 1500 Crs per annum to GOK in taxes and receipts.
- ❖ Savings of 10,000 Crs in lieu of other heavy investment transport projects

## CRS in Comparison



*"..Transportation is not a technical problem. It is not an infrastructure problem. It is not even a financial problem. Most often it is a political problem..."*

# Bengaluru Commuter Rail Service FACTS



<b>Location</b>	<b>Bengaluru, Karnataka</b>
<b>Transit system</b>	Mass transit system running on existing railway lines
<b>Category</b>	Daily Commute
<b>Number of proposed lines</b>	6
<b>Catchment Population</b>	5.5 Million
<b>Suburbs covered in CRS coverage</b>	Peenya, Jalahalli, Yelahanka, Hebbal, K R Puram, Whitefield, Sarjapur, Electronic City, Nayandahalli, Kengeri
<b>Towns covered in CRS coverage</b>	Tumkur, Nelamangala, Doddballpur, Chikballapur, Devenahalli, Malur, Bangarpet, Anekal, Hosur, Bidadi, Ramanagaram, Channapatna, Maddur and Mandya.
<b>Network length</b>	405 Kms
<b>Coverage in radius</b>	70-100 Kms around Bengaluru
<b>Travel time to reach city center from towns</b>	60 – 90 Minutes
<b>Completion time</b>	Phase 1A – 2 Yrs, Phase 1B – 2 Yrs and Phase 2 – 3 Years
<b>Investment costs</b>	Total – 8000 Crs. Phase 1A – 3400Crs, Phase 1B – 2300Crs, and Phase 2 – 2500 Crs
<b>Cost of construction (Per Km)</b>	15-20 Crores Per Km ( Metro 200-400 Crs/Km)
<b>Daily ridership</b>	2.5 Million on completion
<b>Number of daily services</b>	460
<b>Number of rakes</b>	78
<b>Number of cars per Rake</b>	15
<b>Max. capacity of each rake</b>	3000 (200 per car) Commuters
<b>Peak hour frequency</b>	5-10 Minutes
<b>Non-Peak hours Frequency</b>	15-20 Minutes
<b>Schedule</b>	24/7
<b>Number of stations</b>	Existing-60, New-45, Total - 105
<b>Track gauge</b>	Broad Gauge
<b>Cost of operation (Per Train/Km)</b>	Rs. 22/-