

Expert Roundtable Discussion on

My Bengaluru, My Manifesto

Mobility & Infrastructure





MY BENGALURU MY MANIFESTO

SWALPA ADJUST MADBEDI

Discussion topics



- Current Mobility Scenario in Bengaluru
- Analysis Manifestos and Budgets by ruling political parties
- Recommendations to improve the mobility sector in Bengaluru
 - Governance
 - Road quality and infrastructure
 - Public Transport
 - Last mile connectivity
 - Pedestrian friendly
 - E-transport, parking and others

Outcome:



- Recommendations
- Short term and long term strategy to achieve recommendations
- Manifesto will be shared with political parties
- Continuous advocacy efforts



• The fastest-growing metropolitan city in the country, Bengaluru is struggling with the challenges of an overburdened and unsustainable transport network. In the last one decade, it jumped from 50.33 lakh (2011 -12) to 1.04 crore in (till March 2022).

Bengaluru traffic in 2022

Bengaluru was the 10th most congested city in 2021 and was sixth in 2020

Bengaluru world's second most congested city



World rank 2022

On average, how long did it take to drive 10 km in 2022?

29 min 10 s

40 s more than in 2021

Private vehicle registration has increased by 350 % between 2007 – 2022 (2.1 million to 10 million).



Country	World rank ▼	City	Average travel time per 10 km ▼	Change from 2021 ▼	Time in rush hour per year			
1	2	Bengaluru	29 min	+ 40 s	260 hours	→	Fridays in Bengaluru	
2	6	Pune	27 min	+ 1 min 10 s	249 hours	→	6 PM - 8 PM	
3	34	New Delhi	22 min	+10 s	196 hours	→	Driving 10 km took on average: 37 min 20 s	
4	47	Mumbai	21 min	+ 40 s	190 hours	→		

Bengalureans spent 260 hours (10 days) in driving and 134 hours due to congestion.

The lack of a robust public transport system has forced Bengalureans to rely on private vehicles.



BENGALURU'S GROWTH







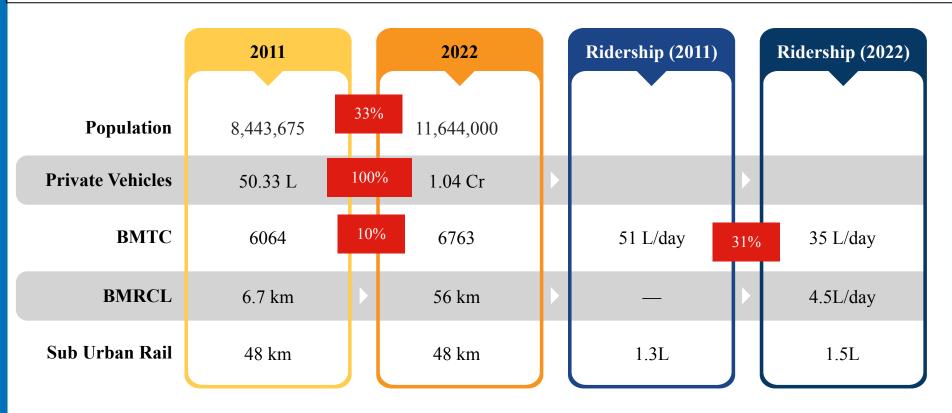




BBMP Budget 2023 plans for 16 more flyovers at a cost of INR 1650 CR

Are flyovers a long term solution or a band-aid to congestion problems?







In Progress



BMTC

Government will provide **Rs.500** crores for buying 1,200 new buses in the year 2023-24. It is for the first time that the government is giving such a big support for adding buses to the corporations.



BMRCL

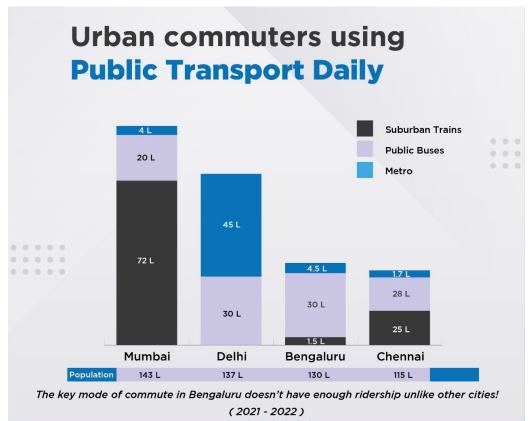
After missing several deadlines in the past, the BMRCL finally started a trial run to extend the **Purple Line of Namma Metro** to Whitefield. The metro stretch from K.R. Puram to Whitefield is expected to be operational by March 2023, and the remaining stretch from **Baiyappanahalli** to K.R. Puram is likely to be opened for the public by mid-2023.



The **Suburban Rail** project after years of political and bureaucratic hurdles 148.17 kms will be constructed in four Sub-Urban Rail Corridors under Bengaluru **Sub-Urban Rail Project** at Rs. 15,767 crore has been taken up by K-RIDE. **these projects will have a long gestation period.** KRIDE, issued a work order to Larsen & Toubro for civil works of corridor -2 (Mallige Line) from Baiyappanahalli to Chikkabanavara.

The only immediate solution for the city for enhancing public transportation infrastructure in this interim period is the bus.





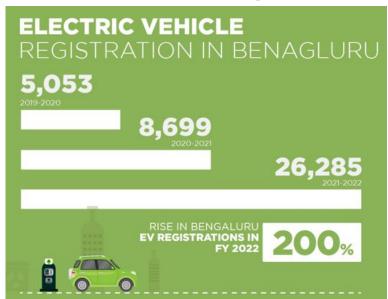
Bengaluru modal share of bus ridership 83% is the highest and will continue to be the dominant mode because of narrow roads and built in environment even after metro and suburban rail investment

BMTC has failed to expand its fleet size and increase the ridership. While the number of buses in 2011-12 was 6,064, now it is 6,763 with 5600 operational. The lack of a robust public transport system has forced Bengalureans to rely on private vehicles.

At present, Bengaluru witnesses 10 million trips (including public and private transport) per day, which will reach 23 million by 2031.



Status of EV in Bengaluru



BESCOM have set up **136 EV charging stations** — 106 AC and 30 DC chargers in Bengaluru

BESCOM has also provided a dedicated mobile app "EV MITRA" (both Android and iOS) for EV users to utilize the charging services.

Number of EV registered in Bengaluru metropolitan area 2021-2022



Of the 26,285 EVs registered in FY 2021-22 around 88% were two- wheelers and 5.3% were four-wheelers, 4.9% 3W Goods, only 0.9% e rick and 0.6% 3w Autorick

Governance

Manifestos v/s Budgets by ruling Political Parties (2019-2023)



BJP Bengaluru Manifesto 2018	State Budget 2020-21	State Budget 2021-22	State Budget 2022-23	State Budget 2023-24
Establish Bengaluru Metropolitan Transit Authority (BMTA) which will subsume BMTC, BMRCL and the suburban rail network in accordance with international best practices. BMLTA Bill was passed in the assembly in December 2022 the proposed authority would aim at regulation of development, operation, maintenance, monitoring and supervision of urban mobility holistically	A feasibility study will be taken up to develop an 'Integrated Multi Modal Transport Hub' in the outskirts of Bengaluru city, with privatepartnership in order to reduce heavy vehicle density in the city.			
Institute the Bengaluru Transit Challenge Fund with a ` 200 Crore initial corpus to incentivise citizen driven transit innovation in the city.				
Establish the Bengaluru Traffic Management Centre to support the Adaptive Traffic Management System through big data collection, analysis and real time traffic management to ensure the smooth flow of traffic in the city. The project envisages automatic control of optimal signal timing based on the traffic volume measured by roadside sensors. The contractor has completed the procurement and the project is estimated to be completed by June 2023.		Vanitha Sangathi' programme for providing BMTC bus passes at concessional rate to women labourers of garment sector who are in highest number in Bengaluru was announced in previous year's budget it was not implemented due to Covid-19 Pandemic. Hence, this programme will be implemented by BMTC in partnership with Labour Department at a cost of Rs. 30 crore during the current year.		14

Road & Infra

Manifestos v/s Budgets by ruling Political Parties (2019-2023)

Road & IIII a				
BJP Bengaluru Manifesto 2018	State Budget 2020-21	State Budget 2021-22	State Budget 2022-23	State Budget 2023-24
The city administration will aim to develop 5000 KM of scientifically designed footpaths. These footpaths will be optimized for space utilization and will also be made differently-abled friendly footpath / pavements in the city	It is proposed to develop "Bus Priority Lane" in 12 corridors having high traffic density in Bengaluru city under Phase-2. The CMP proposes to implement 202 km of BPL by 2035 in addition to other measures like expansion of mass transit network, up gradation of bus fleet etc. Bus Priority Lanes for approx.			To reduce the traffic congestion in the Bengaluru city, it is proposed to develop 75 important junctions with highest traffic congestion at a cost of Rs.150 crore. As a supplementary to this, traffic congestion will be reduced by using Artificial Intelligence for the management of traffic signals by adopting Seamless Signalling.
Divyang Friendly Bengaluru: Make Bengaluru Divyang-friendly city (Physically challege ppl).	Twelve high density zones in the jurisdiction of Bengaluru city contribute to 80% of traffic congestion. These zones measure up to about 190 km and it is proposed to get them developed under the supervision of Karnatak Road Development Authority. The vision for HDC is to facilitate multimodal travel, with priority to sustainable modes like public transport, cycling and walking. The HDCs will be maintained to high-level of standards to ensure improved mobility for people. 65 km on High Density Corridors and 21.5 km on stretches under National Highway Authority jurisdiction			White topping of 120 kms arterial roads in Bengaluru at a cost of Rs.1000 crore and 300 kms of Arterial and sub-arterial roads in the city will be developed at a cost of Rs.450 crore.
	have been designed and shared with the respective implementing agencies			15

Manifestos v/s Budgets by ruling Political Parties (2019-2023) Public Transport

BJP Bengaluru Manifesto 2018	3	State Budget 2021-22	State Budget 2022-23	State Budget 2023-24
Introduce through the	For convenience of the public, the total			For proper usage of Sir M Vishveshwaraiah
BMTA, a "United Transport	Metro network including 51 stations is being			Terminal at Byappanahalli, the access roads
Card" (UTC) which can be	made ready by August 2021 to accept 'One			around the terminal will be comprehensively
used in DMTC Name	Notice One Cord' This cord con be used in			developed and it is proposed to take up the

developed and it is proposed to take up the used in BMTC, Namma Nation. One Card'. This card can be used in Metro, Suburban Rail and both Namma Metro and buses of Bengaluru necessary works at a cost of Rs.300 crore to

reduce the traffic congestion. Cycle Sharing. Metropolitan Transport Corporation. Double the fleet of BMTC. A comprehensive mobility programme for in the year 2022-23, 33 km Government will provide Rs.500 crores for Bengaluru is prepared for the first time. of metro line will be added. buying 1,200 new buses in the year Infrastructure facilities, transit based (in progress, unable to 2023-24. It is for the first time that the development and essential regulatory complete within With this government is giving such a big support for measures will be taken up with an objective Namma Metro will have a adding buses to the corporations. of increasing the utilization of public total 89 km line. transport from 48% to 73%.

benefiting those in

Unorganized and

long commutes)

50% reduction in BMTC Bengaluru Metropolitan Transport To decongest traffic and Traffic congestion will be reduced by fares for long rides (for Corporation is purchasing 1500 diesel buses enable signal free constructing 5 km elevated road at a cost of at an expenditure of Rs.600 crore to movement of all vehicles. Rs.350 crore from Tin factory to Medahalli

augment transport facility for the increasing grade separator and and the integrated flyover from Low-income sectors with population in Bengaluru city. flyover works will be taken Yeshwanthpur Railway Station to Mathikere up jointly by B.B.M.P., and BEL Roadand by providing direct

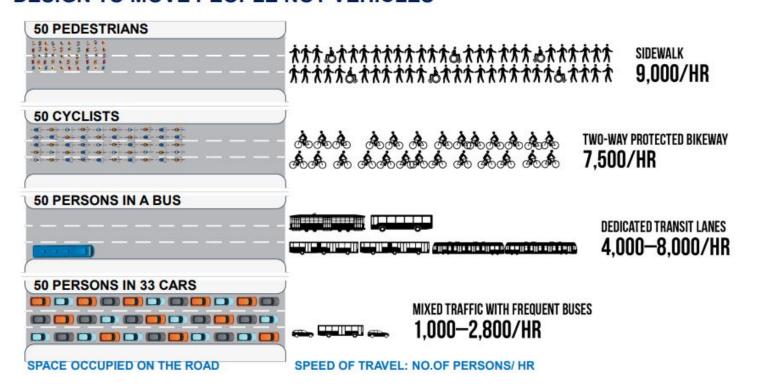
access. This will be done by integrating it B.D.A. and N.H.A.I. with the rail networking of Sub-urban Railway Corporation.

Manifestos v/s Budgets by ruling Political Parties (2019-2023)

BJP Bengaluru Manifesto 2018	State Budget 2020-21	State Budget 2021-22	State Budget 2022-23	State Budget 2023-24
"The Purple line of Namma Metro will be extended upto Hosakote Bus Terminus through Kadugodi on one side and Bidadi Bus Terminus through Kengeri on the other side after conducting feasibility analysis in an expeditious manner"	Under FAME-2 scheme of Government of India, 300 air-conditioned electric buses are being added to the fleet of Bengaluru Metropolitan Transport Corporation. On similar lines, State Government is providing a grant of Rs.100 crore for adding 500 ordinary electric buses to the fleet of the corporation			The work order for Bengaluru Sub-urban Railway Project between Chikkabanavara and Byappanahalli Corridor-2 Via-duct for Rs.860 crore has been issued and the works have been commenced.
The new RV Road Metro line to Bommasandra line will be extended until Attibele after conducting feasibility analysis in an expeditious manner.	Action has been taken to purchase 90 non AC Electric buses under Smart City Project in order to encourage mass transport and to provide effective Metro Feeder Transport facility to Metro commuters			
A Special Purpose Vehicle will be launched to implement the Rs 17,000 Cr Bruhat Bengaluru Suburban Railu (BBSR) services. B-Ride, METRO and BMTC will urgently transformed into an integrated intermodal transport system to facilitate passenger movement including integrated single ticketing/voucher system	To improve the last mile connectivity in public transport in Bengaluru, it is proposed to implement "Electric Bike Taxi" project			17



WHAT WE KNOW ALREADY.. DESIGN TO MOVE PEOPLE NOT VEHICLES





Governance

- Seed fund of Rs.100 crores for the formation of Bengaluru Metropolitan Land Transport Authority (BMLTA).
- BMLTA Act to Authority within 100 days
- BMLTA to be staffed with persons with technical and planning expertise in comprehensive sustainable mobility
- BMLTA to be the authority to make a commuter-centric, multimodal mobility plan with a clearly outlined budget for each mode of mass transport, and coordinate execution.
- To enhance mass transport for the city from the current 48% of commuters to 80% by 2028.
- Every transport project to have three to five public consultations, in an appropriate format based on the size and scale of the project.
- Appoint technical members/advisory groups to the transport service providers/authority to help bring in the
 expertise and technical decision support to improve the services in each of public transport modes and reduce
 commuter travel time.
- Aggregators are allowed to legally aggregate closed loop shared cabs, shared autos and bike pool within the existing contract carriage permit. This would encourage shared mobility and innovative mobility solutions.



Road and Infra

- Uniform design specifications for residential roads of 20 to 40 feet wide prepared by experts.
- Publish inspection reports of all road development/improvement projects undertaken

Public Transport

- Mass rapid transport to be made accessible, affordable, available and attractive to different cohorts
- Physical Integration: Parking facilities to FMLM options in all metro stations
- Service Integration: To extend feeder bus systems and e-rickshaws to all the metro stations in the city.
- Common Mobility Cards need to be implemented
- Add Bengaluru Cess to all newly purchased personal vehicles. This Cess to be utilized for improving sustainable transport, including: public transport, walking and cycling.



BMTC

- Enhance the current fleet of 6,673 buses to 16,000 buses by 2028.
- Service provision has to be commuter centric. Appropriate segmentation of market by commuters at different price points and service expectations, driven by technology that provides accurate information, payments and seamless integration with other modes
- Use appropriate size buses depending on demand, road condition and geometry
- Feeder buses from interior areas to be prioritized to connect to main bus routes
- BMTC to annually change 20% of its fleet to Electric Vehicles (EV). All buses to be electric by 2030
- Provision of priority lanes for BMTC buses across 12 High Traffic Density Corridors in Bengaluru
- Frequency of buses to be increased substantially to increase the carrying capacity of the bus lane

BMRCL

• Target to achieve 1000 km of metro in Bengaluru by 2030



Sub urban Rail

- Target to complete four corridors of 148 km of suburban rail in 5 years. Ensure the work on all 4 suburban railway corridors commences immediately. Currently negligible progress even after 1 year of announcement.
- Use existing railway infrastructure for faster outcomes
 - e.g i) Increase frequency and reliability for airport rail connectivity.
 - ii) Just 4 MEMUs running up and down 3 existing corridors (1. City to YNK via YPR 2. City to YNK via BYPL/KJM and 3. YNK to CBP via Airport/Devanahalli). These can be implemented very quickly to provide local commute option



Auto rickshaw

- Auto Rickshaw All autos to be electric in next 5 years.
- Incentivize purchase of electric auto and retrofitting to existing auto
- Grant 50,000 permits to electric autos in the city

Last Mile Connectivity

- No citizen should have to walk more than **500m to get to a public transport**
- Last mile connectivity options such as cycles, e-bikes, shared autos to be made available from public transport hubs to the nearest high concentration areas such as tech parks, markets, malls, offices and educational institutions.

Pedestrian Friendly

- Xxxxxx Kms of walkable and accessible footpaths and safe pedestrian crossings across Bengaluru and also with 1 Km radius of all metro stations
- Inclusive road plan with dedicated hawker zones



E-transport, parking and others

- Identify and designate streets to be 'No Parking' and 'Paid Parking' and enforce strict parking rules
- Introduce dedicated park and pickup zones or arterial and sub-arterial roads for shared mobility/radio taxis
 & autos providers/users
- Implement electric vehicle parking regulation, exempt parking fees for EV & provide designated parking
- Announce annual EV Targets for Bengaluru City (short, mid and long term targets)
- Set up Bengaluru EV Dashboard to report progress
- Creation of low-emission zones
- Electrifying all new government vehicles in Bengaluru
- Making 80% of city government office parking spaces EV ready by 2028
- Integrating electric mobility planning into the city's development plan
- Providing property tax rebates to residential owners who install their own private charging stations
- Promotion of electric first- and last-mile connectivity and delivery services



NAMMA BENGALURU NAMMA MANIFESTO





NAMMA

What should we Demand from our leaders to improve the Mobility condition in the city?

Open for Expert Discussion ANIESTO