Micro-mobility Integration Pilot in Chennai

11th May 2022
Smrithi, Pranjal, Vaishali, Siva
The total share of private vehicles (two-wheelers, car) and auto, rose by 9%, whereas the share of bus services declined by 3% from 2008 to 2018.**

The number of private motor vehicles in the city has increased from 23 lakh registered vehicles in 2008 to 51 lakh registered vehicles in 2018, showing an increase of over 120% during the decade.*

*Comprehensive Mobility Plan (CMP), 2019.CMDA
**Road Transport Yearbook, 2007-09. MoRTH & Transport Department of Tamil Nadu
VISION

To boost the use of public transport by providing crucial last-mile connectivity, thereby expanding the catchment areas for the region’s public transit systems.
ITDP India team members along with Mr. Kunal Kumar, Joint Secretary, Smart Cities Mission, MOHUA riding the standard Eco-bikes, during his visit to Chennai’s Pedestrian Plaza on 29th August 2019.

Launch of world class electric bicycles and the country's first shaft transmission (no chain) NextGen bicycle in Chennai by the Chief Minister of Tamil Nadu on 28th January 2021.

The SmartBike Electric (E-Bike) possesses hybrid functionality of Pedal-Assist (pedaling gives a boost in speed) and throttle that enables a pedalling-less ride.
The ITDP India team along with Mr. Kunal Kumar, Joint Secretary, Smart Cities Mission, MOHUA tested the SmartBike electric bikes and NextGen bikes.

The ITDP India team at the official launch of SmartBike e-bikes and NextGen bikes in Chennai organized by Greater Chennai Corporation (GCC) and Chennai Smart City Limited (CSCL) on 07th February 2021.

The event was intended to promote the usage of e-bikes among the public, free rides for public.
Initiating integration of PBS with the Public Buses in Chennai

- Tamil Nadu Transport Department
- Metropolitan Transport Corporation (Chennai) Limited
- Greater Chennai Corporation (GCC)
- SmartBike - service provider
Bus Terminals recommended by the Metropolitan Transport Corporation (MTC) of Chennai for Integration with the Public Bicycle Sharing system.
01

Vallalar Nagar

GCC Zone 5 Corporation Station 500
0.7 km

Vallalar nagar bus terminal is integrated with Washermanpet metro

1.5 kms
Basin Bridge Junction
Sub-urban railway station

Mannadi metro Station 430
2 kms

0.5 km
Washermanpet Sub-urban railway station

2.3 kms
GCC Zone 4 Tondiarpet station Station 541

2.0 kms
Royapuram Sub-urban railway station

Cycling Cities | ITDP
02
KK Nagar
04
Besant Nagar
Thiruvanmiyur

- 0.8 km from Indira Nagar MRTS Station 525
- 1.2 km from Writer’s Cafe Station 493
- 2.9 km from Kasturbai Nagar MRTS Station 217
- 2.5 km from GCC Zone 13 - Adyar Station 501
- 2.4 km from Rajaji Bhavan Station 540
- 2.3 km from Government Staff Quarters Station 185
- 0.4 km from Unit 38 Thiruvanmiyur Station 221
- 1.8 km from Taramani MRTS station
- 1.8 km from Seashore Apartments Thiruvanmiyur beach Station 185
06
Foreshore Estate
07
Mandaveli
Finalizing bus terminal for pilot integration

After various assessments based on several site visits made by the ITDP India team members in collaboration with the SmartBike service operators to all the seven bus terminals, K.K. Nagar bus terminal seems to fit into most of the criteria and would be a potential site for the pilot.
Conducting the Pilot at KK Nagar
Analysing the Existing site conditions
PHYSICAL INTEGRATION:

Options for potential areas of deploying a Smartbike - PBS station (near the entry gate)

OPTION 1

Setback in the front with a low height compound wall

OPTION 2

Sidewalk along the K.K.Nagar bus terminal
KK Nagar Bus Terminal - PBS Pilot Station

SmartBike PBS station of size 30 x 5 sq.ft with docking facility and hoardings.
All the 3 varieties of SmartBike cycles deployed at the KK Nagar pilot station

Electric bikes

NextGen bikes

Standard eco-bikes
Impact Assessment

The absolute ridership in the KK Nagar locality has increased with the introduction of KK Nagar Bus Depot PBS pilot station.

The ridership at the KK Nagar Bus Depot pilot station is at par with the ridership at the metro station in the KK Nagar locality.
Way Forward - Information integration

- Social Media Outreach Plan to Increase Ridership of the pilot(s)
  - Wayfinding posters & signage boards
  - Data through Perception surveys
- Integration with Google maps

Next Stop?
Plan of expansion -
Scaling up the integration with 19 other bus terminals

Adding charging infrastructure to the existing SmartBike stations

Incentivising PBS trips