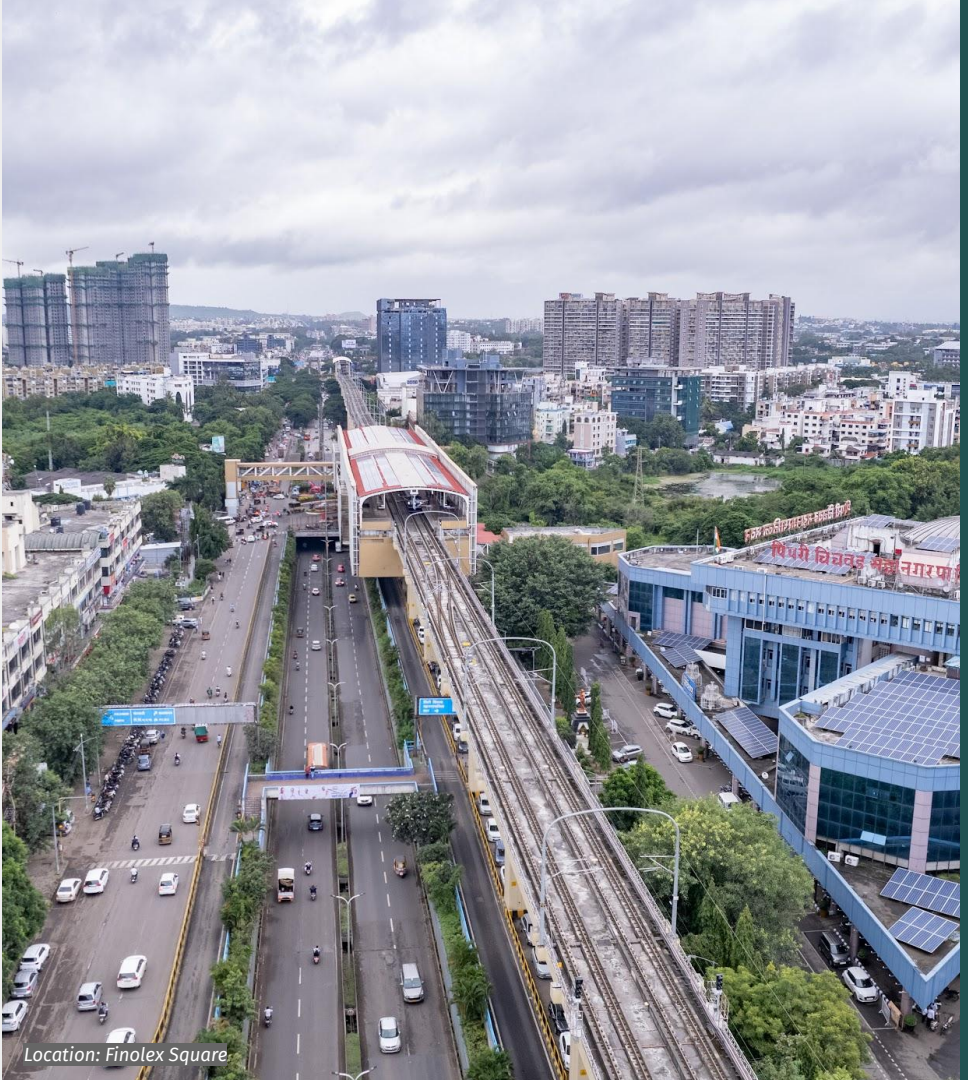


Location: Finolex Square

Pimpri Chinchwad City's Data Driven Approach

Shekhar Singh, IAS
Municipal Commissioner,
Pimpri Chinchwad Municipal Corporation

PCMC is a city of 181 sq.km with 2.4+ million population

Located in Maharashtra state, Pimpri Chinchwad (PCMC) is an **industrial city,** that is now **emerging as an upcoming residential & commercial centre.**

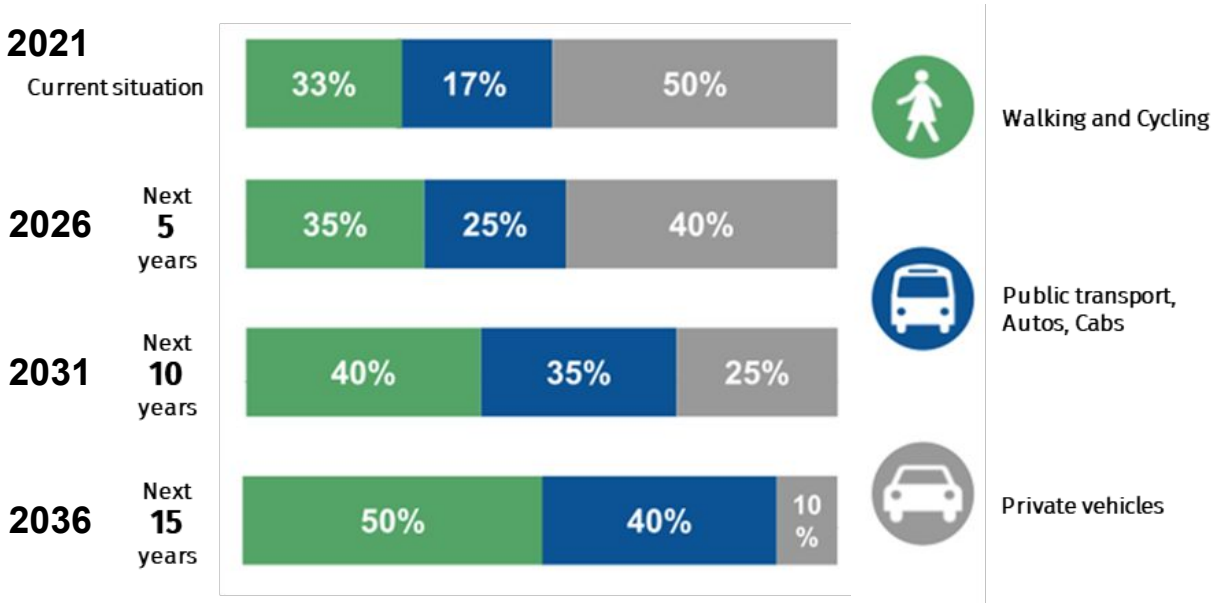
Third fastest-growing city in India.

Due to several large-scale industries in the city, several highways and high-speed freight corridors run through various parts of Pimpri Chinchwad.

Goal - By 2036, 9 out of 10 trips should be by sustainable modes

As per the **PCMC NMT Policy** (2021),

By 2036, **90%** of total trips by walking, cycling and public transport.

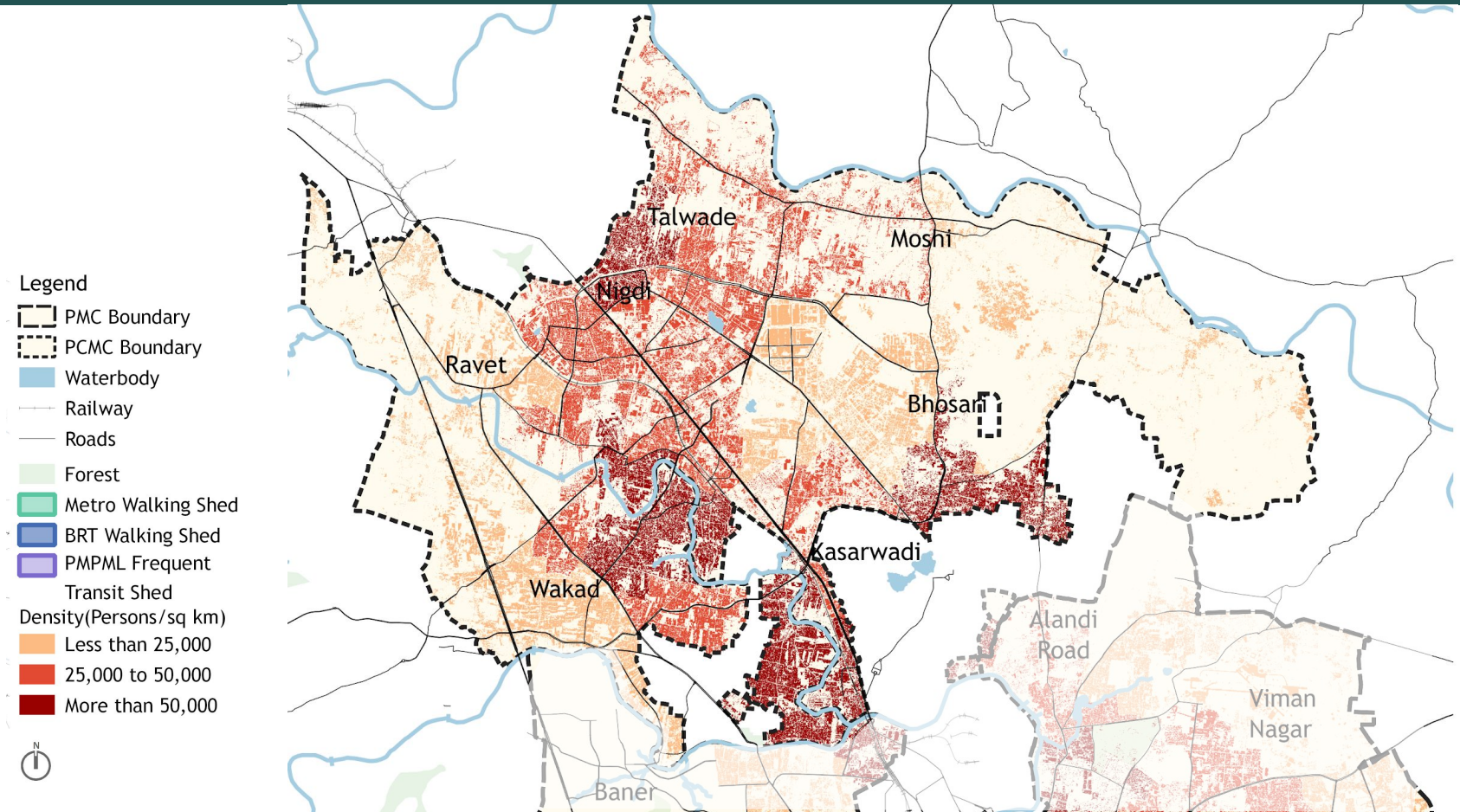


Success indicators as per NMT Policy

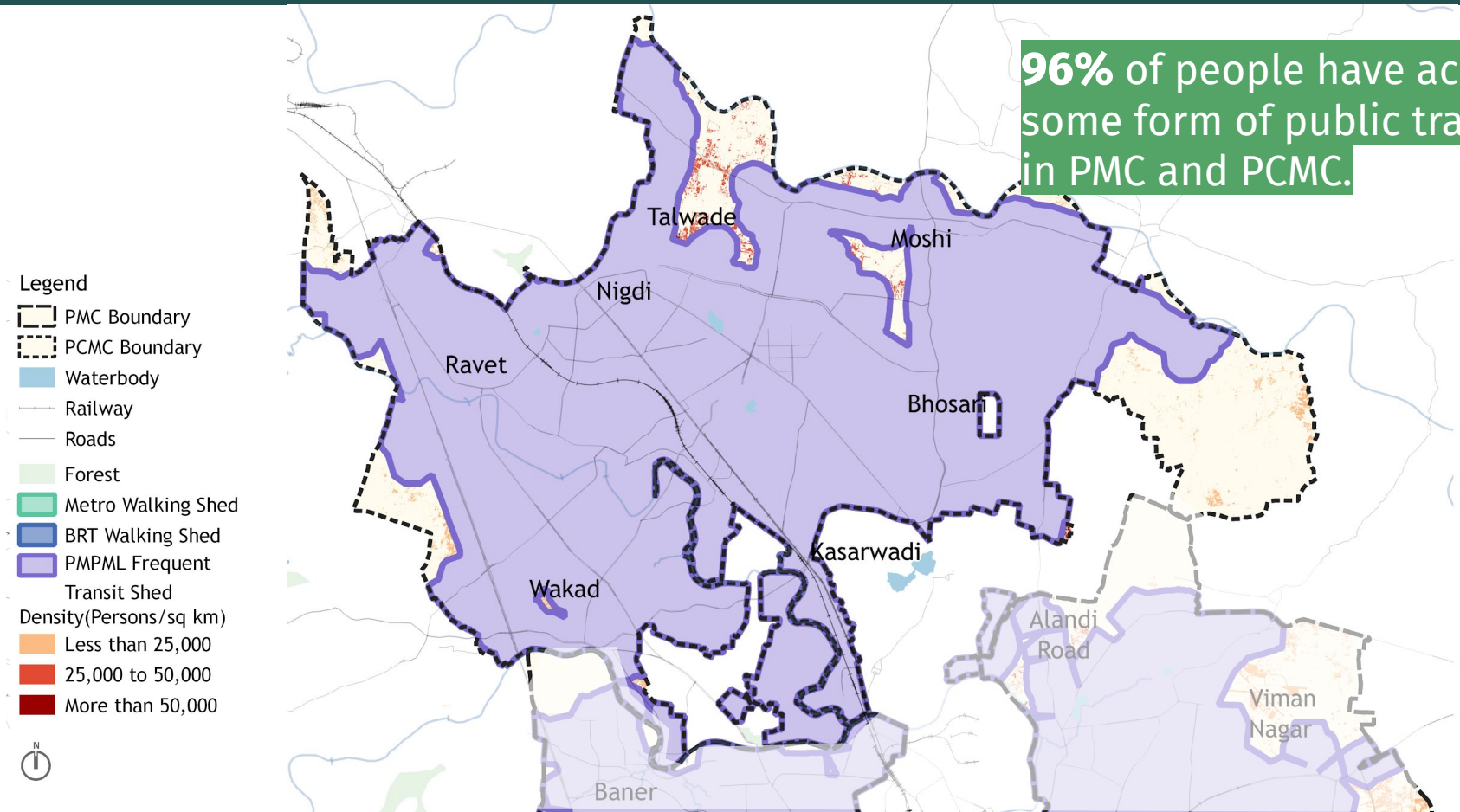
Vision	15 year Horizon		10 year Horizon		5 year Horizon	
	Goals	Outcomes	Goals	Outcomes	Goals	Outcomes
Improving walking infrastructure	The mode share of walking and cycling shall be increased to at least 50% of all trips, and maintained at this level.	All streets with a right-of-way (RoW) of 12m or more shall have footpaths compliant with IRC 103 (2021/latest version).	The mode share of walking and cycling shall be increased to at least 40% of all trips, and maintained at this level	At least 75% of streets with an RoW of 12m or more shall have footpaths compliant with IRC 103 (2021/latest version).	The mode share of walking and cycling shall be increased to at least 30% of all trips, and maintained at this level	At least 25% of streets that have a ROW of 12m or more shall have footpaths compliant with IRC 103 (2021/latest version).
Improving cycling infrastructure		1. 100% of streets shall be made safe for cycling, by creating dedicated cycle tracks or using traffic calming measures to create safe, low-speed space that can be shared by motorised and non-motorised vehicles. 2. Bicycle parking slots shall be provided free of charge every 100m of street edge. 3. Development Regulations shall mandate bicycle parking in all buildings and ensure they are located within 100m of building entrances. 4. PCMC shall implement a cycle sharing system with at least 200 cycles per 1 lakh population.		At least 75% of the final goal shall be met.		At least 25% of the final goal shall be met.
Improving reach of public transport	Mode share of public transport modes shall constitute at least 50% of all motorised trips.	At least 80% of the population in the city shall be within 400m walk of public transport stop/station with a service of 12 or more schedules per hour.	Mode share of public transport modes shall constitute at least 40% of all motorised trips.	At least 75% of the final goal shall be met.	Mode share of public transport modes shall constitute at least 30% of all motorised trips.	At least 25% of the final goal shall be met.
		Vehicle Kilometers Travelled (VKT) by Private Motor Vehicles (PMV) shall be within 20% or less of baseline year levels.		VKT by PMVs shall be retained at or below the higher of the 5 and 15 year horizon levels.		VKT by PMVs shall be within 15-20% or less of baseline year levels.
Improving reach of Mass Rapid Transit (MRT)		At least 50% of the population in the city shall be within 400m walk of Rainbow BRT or Metro.		At least 75% of the final goal shall be met.		At least 25% of the final goal shall be met.

Data as a
1. Planning Tool

People near Transit - Density Distribution

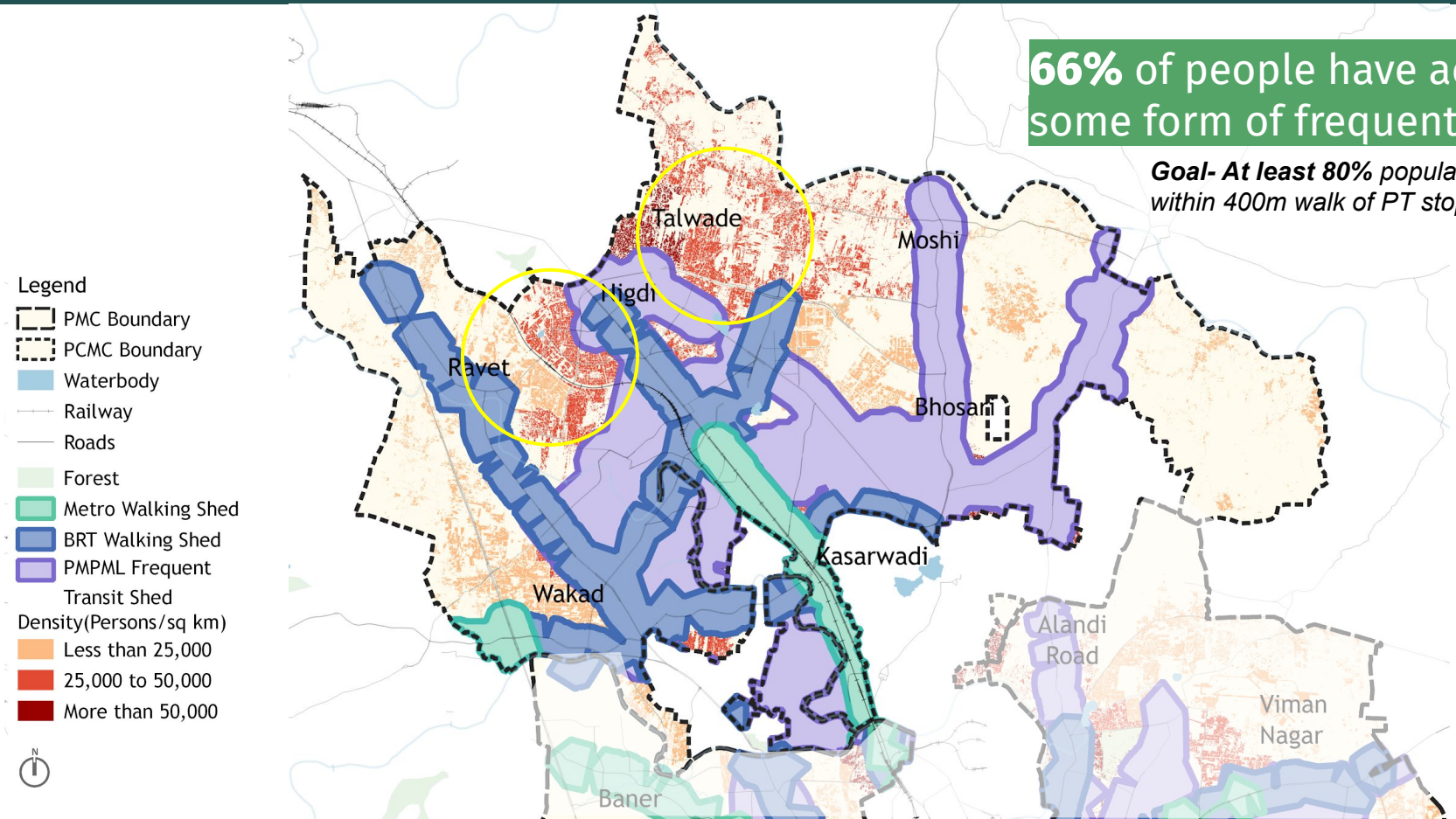


PNT: City Bus Coverage



96% of people have access to some form of public transport in PMC and PCMC.

Identifying transit deserts



Sustainable Street network in the city

Goal: by 2036, around 90% of all trips are to be by PT and NMT- at least all **major** streets should have good PT and NMT infrastructure.

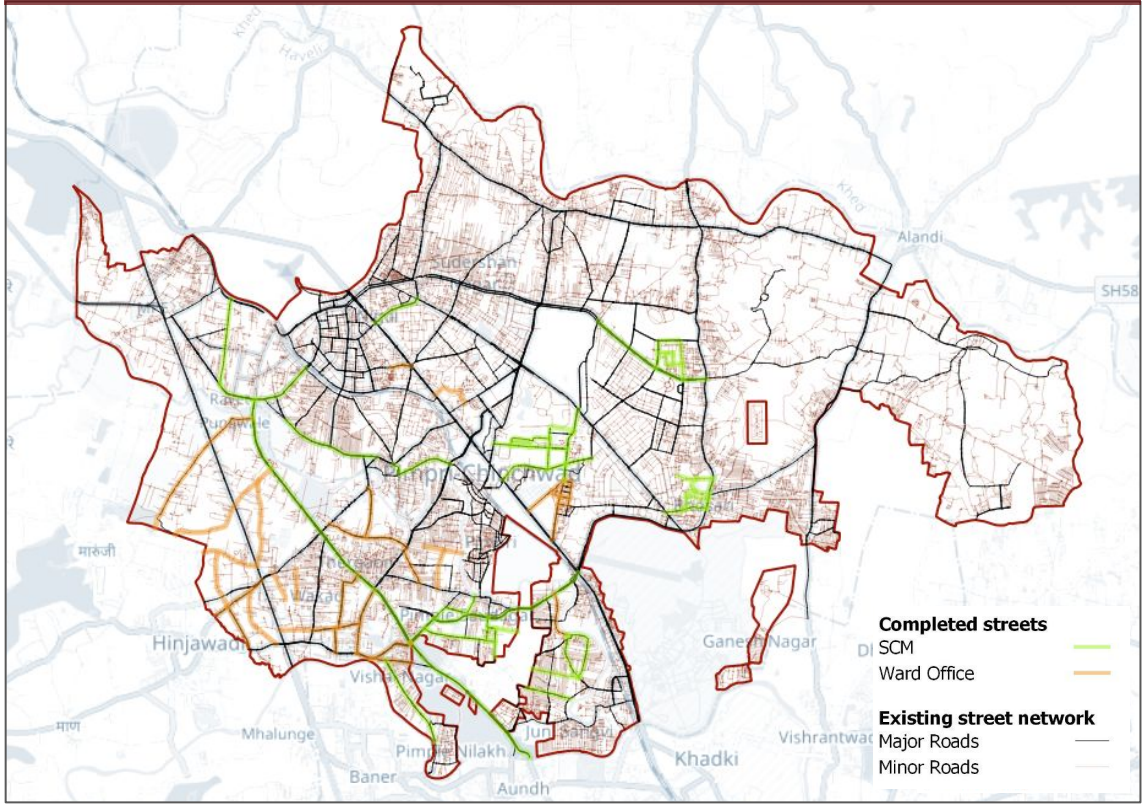
By creating **25 km** of healthy streets every year, **all major streets** would be **safe, accessible and healthy by 2035**!

PCMC would require at least ₹ **250** CR* investment in street design every year **just for major streets re-designs**!

*Considering 1 km of good street design would cost ~₹10 cr.

Based on this data, PCMC could
- Identify priority areas for infrastructure development
- Identify deficit and tap into external funding sources

PCMC has around **300 km** of major and **2000km** of minor streets.

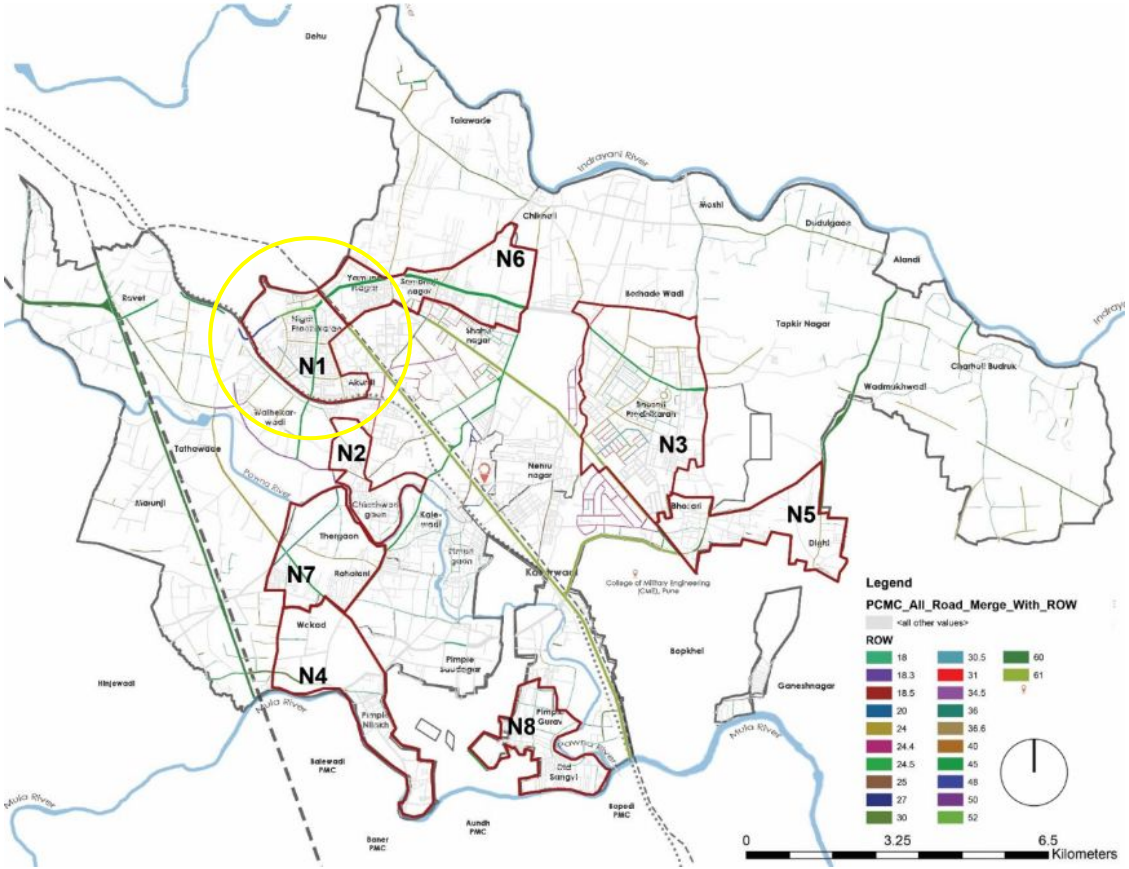


Harit Setu: NMT Master Plan

'Harit Setu' (green connectivity) is a citywide NMT Master Plan that plans enhances existing connections and creates new **green links to improve and encourage walking and cycling for short trips in the city**.

PCMC has **initiated the implementation** by transforming one pilot neighborhood into a 15-minute cycling and walking-friendly haven.

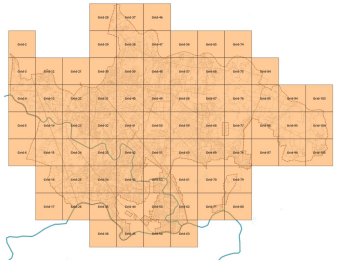
Total 32 neighbourhoods to be transformed



Graphic source- Prasanna Desai Architects

Low Emission Mobility Zones

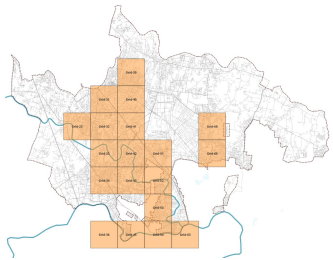
1. Identify grids with **high PM 2.5 concentration**



All grids in PCMC are breaching the permissible **PM 2.5 concentration limit level of 40 µg/m^3** as prescribed by NAAQS

Source: Washington University Database

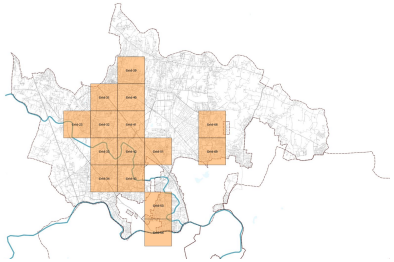
2. Identify grids with **high population**



Grids with population density over the **75th percentile (more than 35,000 people)** were identified

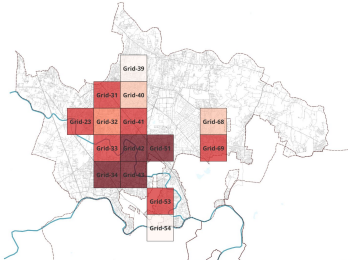
Source: Global Human Settlements Layer

3. Identify grids with **high road network density**



Grids with total street length over **75th percentile (more than 70 km)** of streets identified

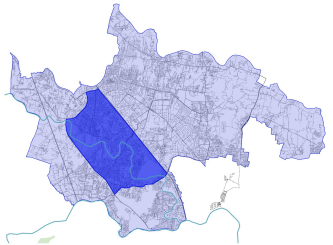
4. Identify grids with **high facility of NMT, public transport, EV chargers, schools & hospitals**



Following facilities were evaluated:

1. Metro & suburban railway station density
2. Bus stops
3. NMT infrastructure
4. EV charging stations
5. Schools
6. Hospitals

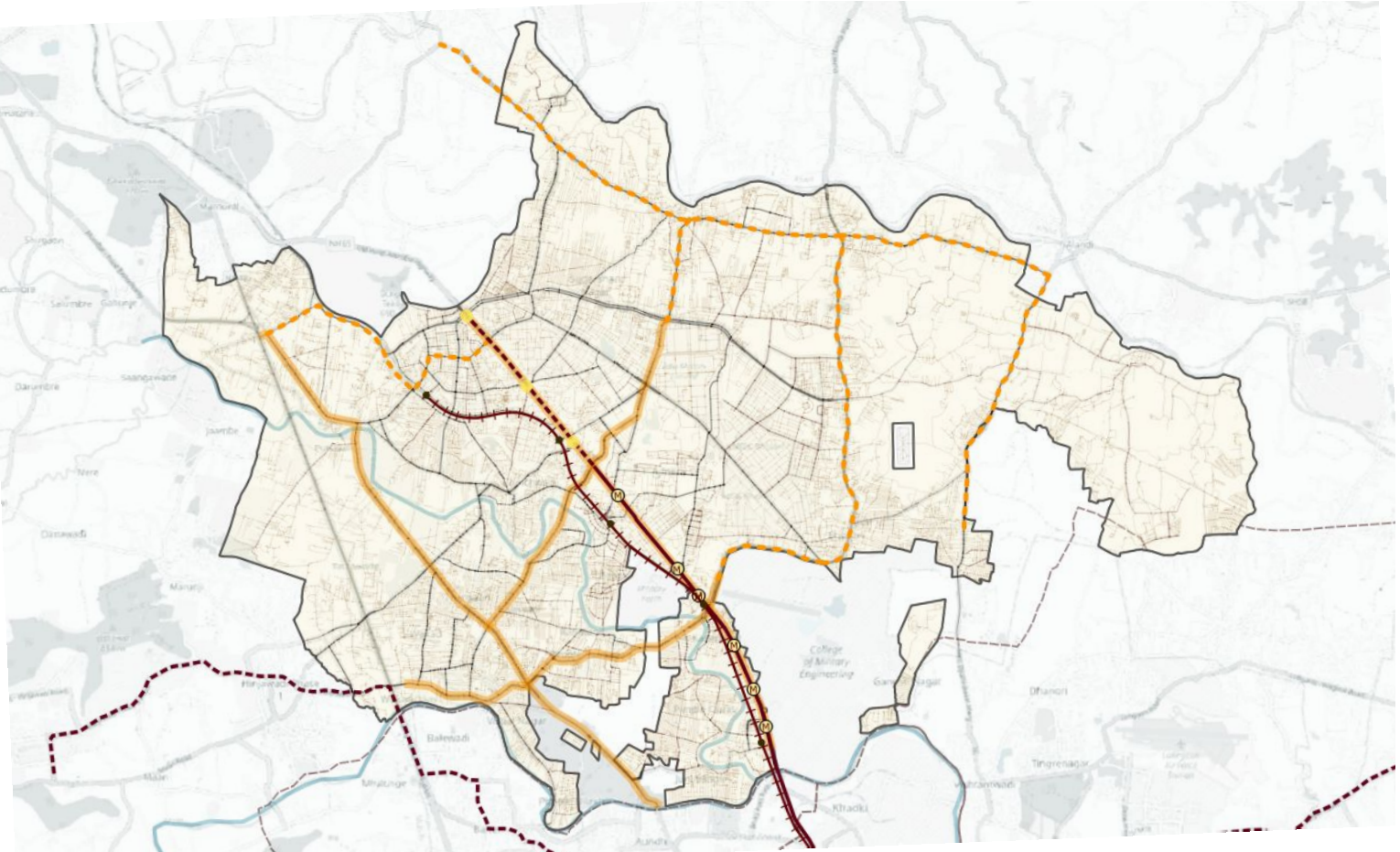
5. **Demarcate LEMZ areas**



Boundaries were identified by overlaying final grid scoring with existing street network

Data for progressive
2. Infrastructure Tracking

Public Transport Infrastructure



BRT

55km

Operational

MRT

7.1km

Operational

4.4km

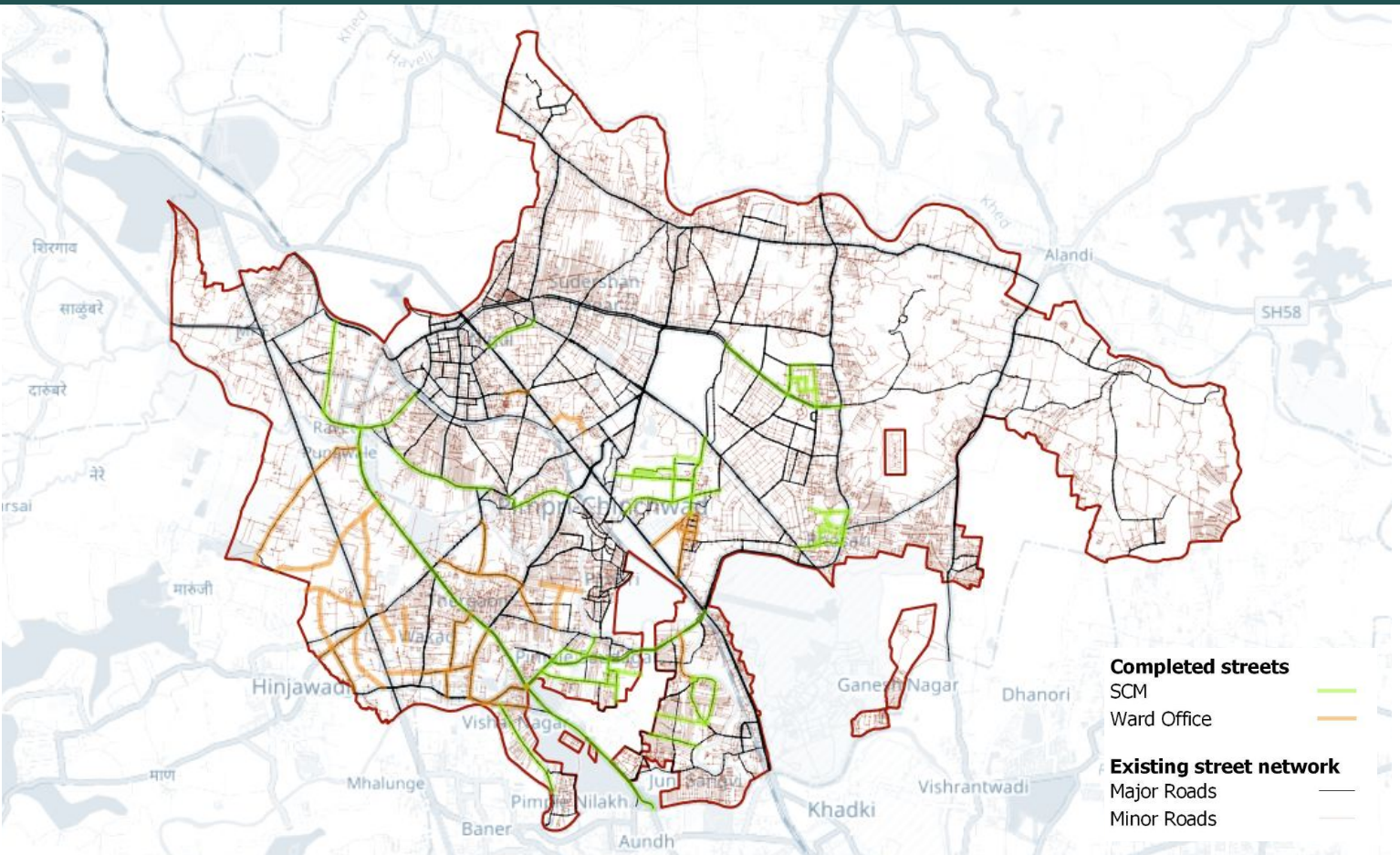
Proposed

Suburban Rail

16km

Operational

Walking and Cycling Infrastructure



Walking & Cycling Infrastructure

44.14km
Executed

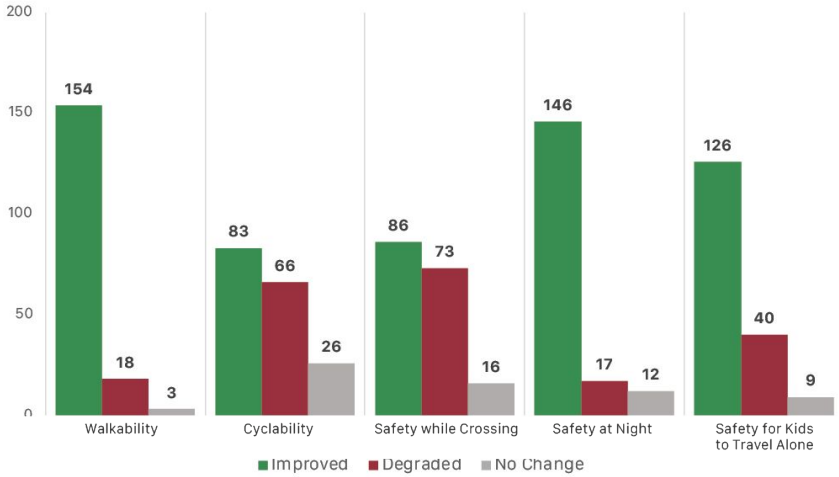
62.68km
Under Execution

83.89km
Proposed

Data as an
3. Evaluation Tool

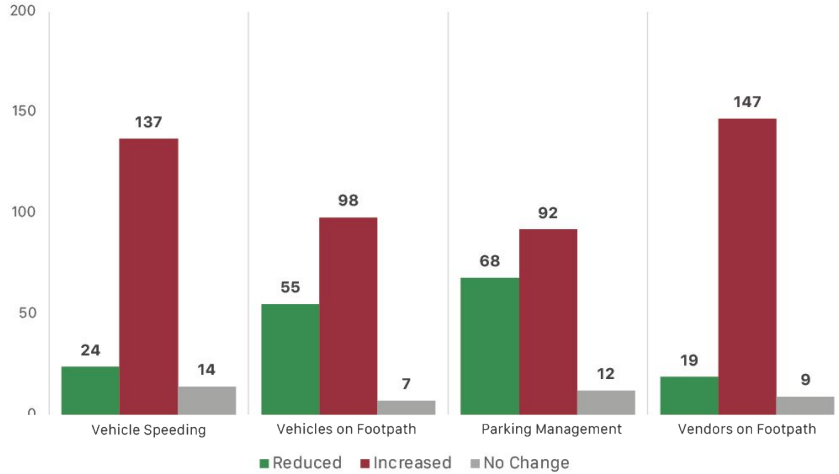
Walking and cycling - impact assessments

Walking & Safety Has Improved on the Streets; Improving Cyclability & Crossing Need More Efforts



88% of the respondents felt that the walkability of the streets has increased.

Lack of Enforcement and Management Pose a Threat to the good work.

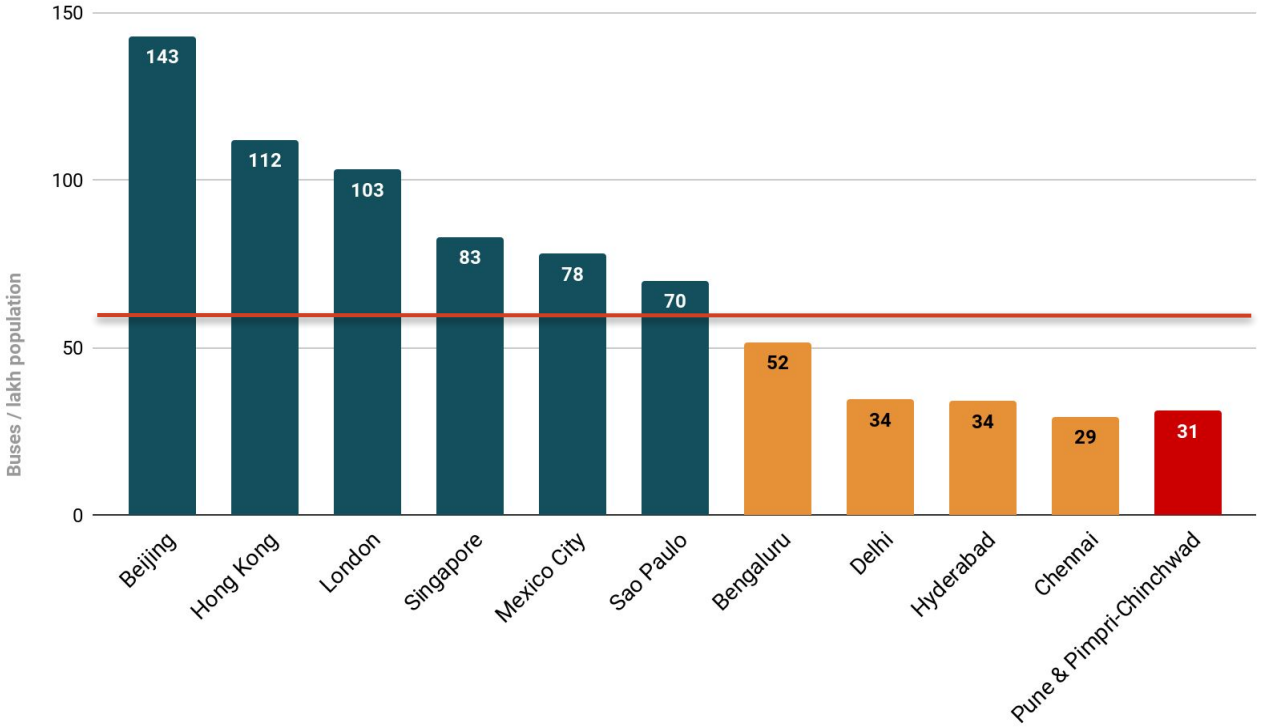


83% of the respondents felt that vehicular speeds are still a predominant issue on the streets

89% of respondents **spend more time on these streets** as compared to earlier.

Public transport assessments

As against the MoHUA benchmark of 50 buses per lakh population, PMPML has ~31 buses per lakh (100,00) population*.



**Analysis of data collected from city STUs.*
Total fleet held: 2200
Actual utilization: 1700

Source: MoHUA - Ministry of Housing and Urban Affairs - 2022

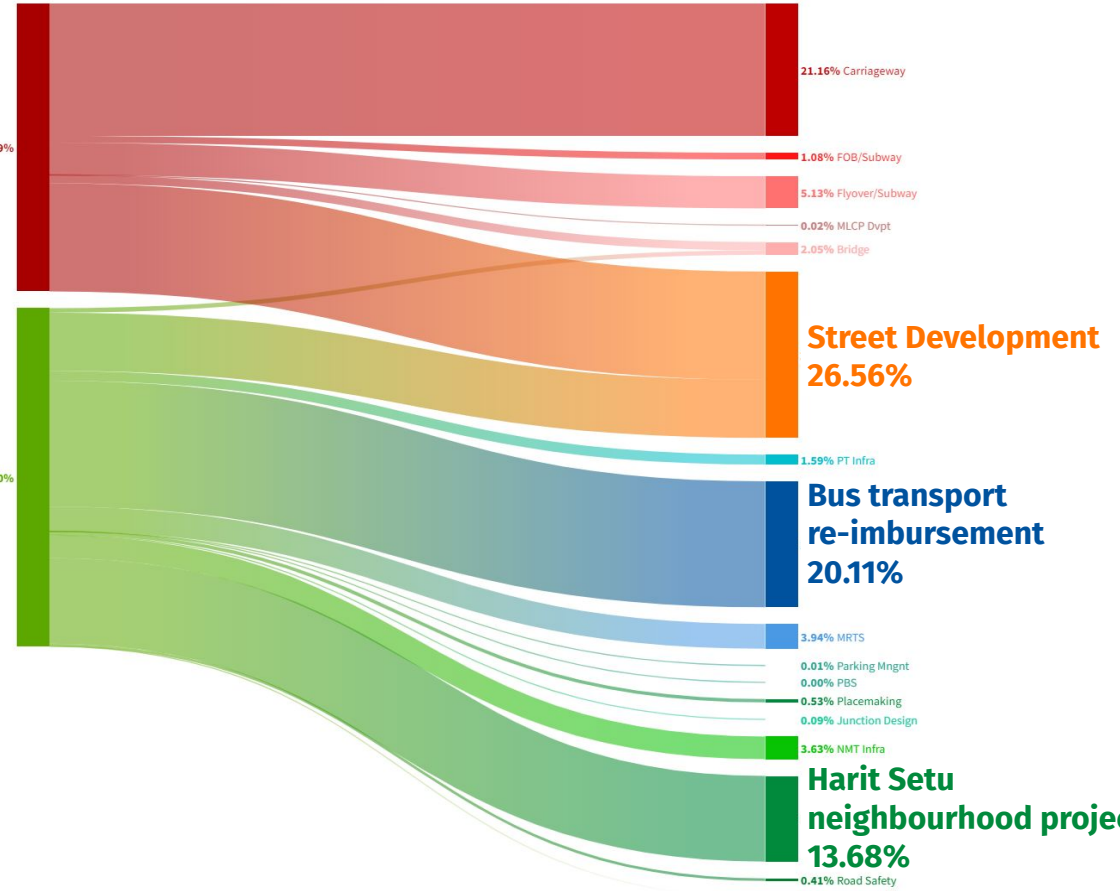
Transport Budget assessment

More than 50% of the current transport budget is allocated to sustainable mobility projects.

PCMC is the 1st ULB in India to raise funds for NMT infrastructure through green bonds for NMT development.

.99%

Pro-SusTrans **54.00%**




SANSHANTI SCHOOL
DYP
GATEWAY TO DIGITAL FUTURE
D Y PATIL ACADEMY
DR D Y PATIL INSTITUTE OF ENG
D Y PATIL INSTITUTE
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Thank you.