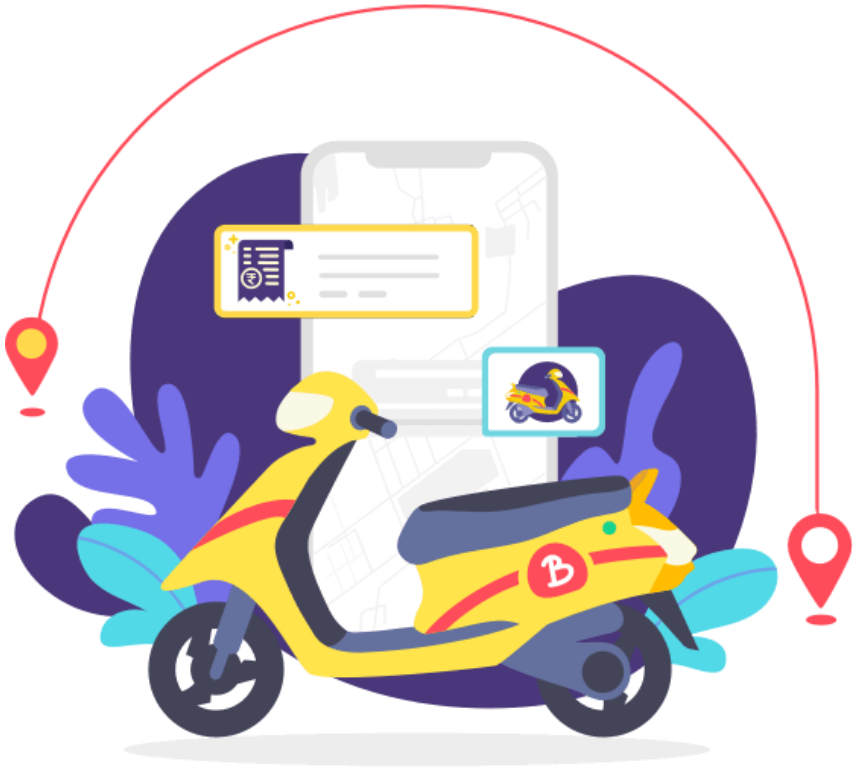


BOUNCE

Shared Electric Two-Wheeler Mobility

Problem Statement

THE ISSUE – Mobility is not seen as a "Fundamental Right"

Currently only 18% of India's population has access to personal mobility, rest struggle everyday to commute to their destination.

Public transport hasn't scaled and only few big cities have MRTs. Adoption has been an issue due to friction in first mile and last mile.

OUR VISION

At Bounce, we believe that mobility is a fundamental right. The vision of Bounce is to enable every Indian to have access to affordable mobility. We believe that access to mobility can change the way people live and change the economic situation of the country.

OUR SOLUTION

Bounce offers seamless, dock-less, scooter sharing solution which allows users to pick up a scooter anywhere and drop it off in any legal parking and walk away.

Key Differentiator

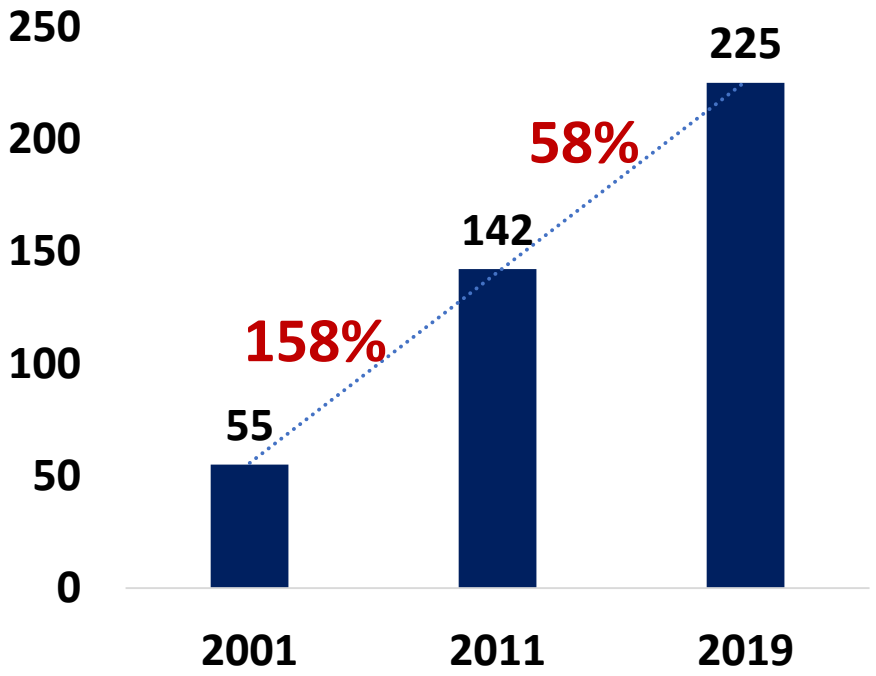
Accessibility

Affordability

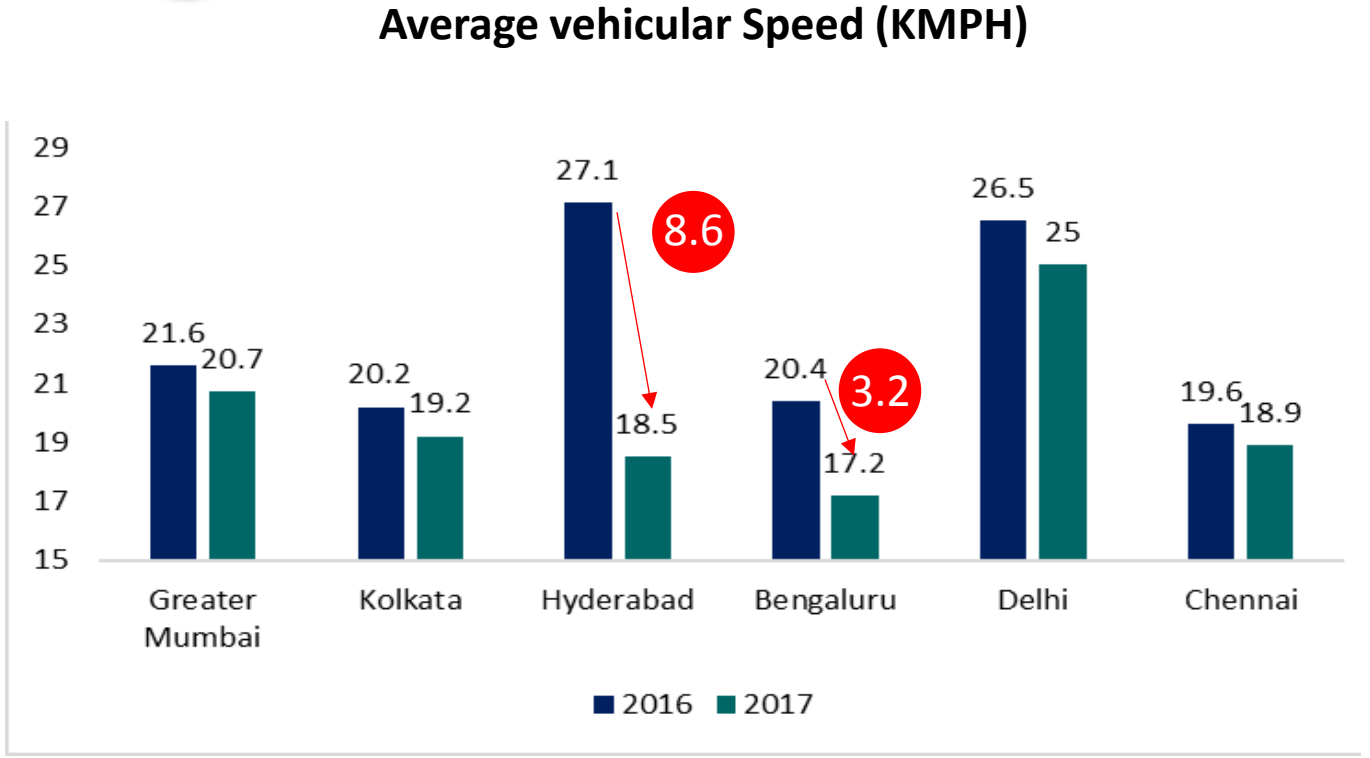
Agility

Problem Statement

1 Rapid growth of Vehicles



2 Increase in Traffic Congestion



- 2-wheelers constitute for 73% of all the non- transport modes of transportation and the total number is around 7 times higher than the total registered cars.

How Urban India Travels ?

Short Trips

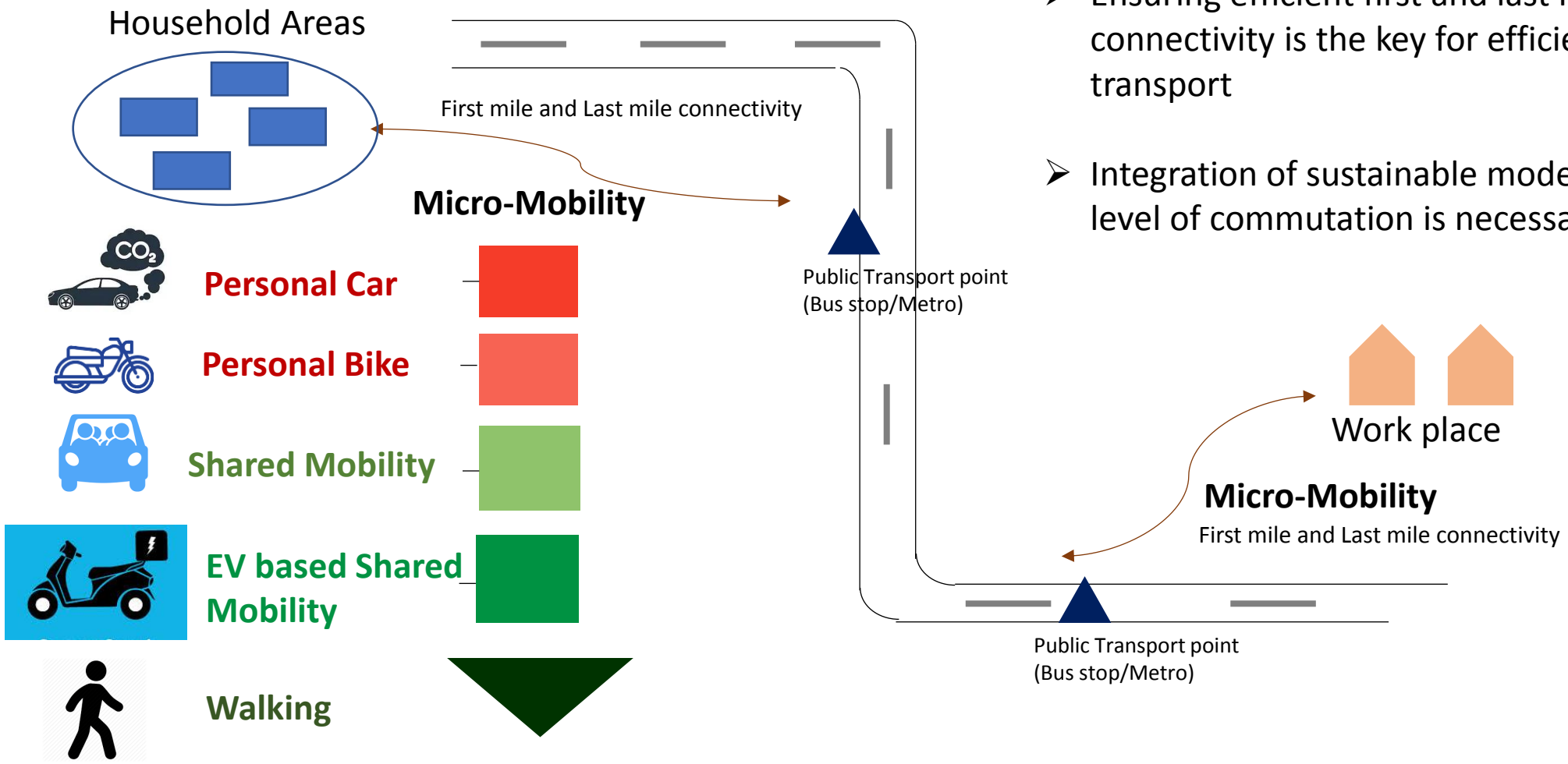
- ✓ It is estimated that, in major cities of India, 80% of the trips are less than 10 km and 70% of the trips are less than 5 km.
- ✓ **Example:** Pune 97% of the trips are less than 10 km and 80% of the trips are shorter than 5 km.

Low Public Transportation usage

- ✓ The share of public transport is just 18.1% of work trips.
- ✓ PNT (People Near Transit) analysis reveals that even if 96% of residents living within 500 m walkable distance of the Public Transport network, only 12% of trips are made by bus

Integrated Multi-Modal Transportation

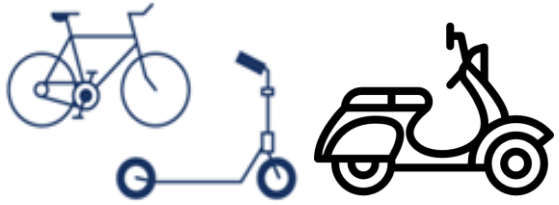
Representation not to scale only for illustration



- Ensuring efficient first and last mile connectivity is the key for efficient Public transport
- Integration of sustainable modes at every level of commutation is necessary

Transforming the Urban Mobility

Alternatives to usage of personal car/bike

	Micro Mobility 0-5 kms	Medium Distance 5-8 kms	Long Distance 8-15 kms
			
Potential modes of transportation	▪ **Scooter sharing (Dockless & Docked)** ▪ Bike Taxis	▪ Ride Hailing services ▪ Cab Pooling	▪ Bus Rapid Transit ▪ Metro
Service Providers	BOUNCE, VOGO, rapido	OLA, Uber, Quick Ride	namma metro, Bangalore Metropolitan Transport Corporation

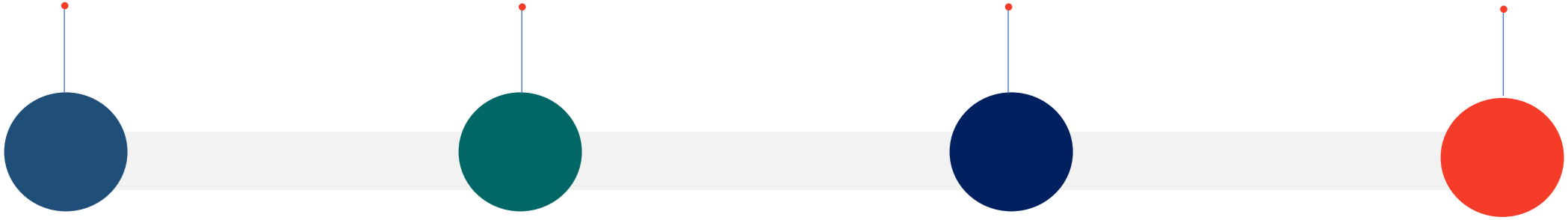
Individual rider preferences can vary, and the above figure represents the average users' preference

Shared Micro-Mobility

Definition:

Shared Micro-mobility is defined as the shared use of a scooter, bicycle or other low-speed mode for transportation strategy that enables users to take short rides either to destination or reaching a public transportation point to move to further distance.

How it all Evolved?



- Bike sharing mostly for health aspects but not for congestion and Micro-Mobility

- Low technology
- Manual booking

- Docked
- Majorly Cycle sharing

- Keyless
- Dockless
- High end Technology
- Digital payments

Operating models of Shared Mobility

a) Hub to Hub Model:

- Total area of operations is divided into ‘n’ number of hubs.
- Shorter distance makes it efficient. Many times, service providers tend to identify hubs such that it is nearer to the most potential users (like colleges, offices, Hostels etc.)
- Increasing number of hubs will increase the accessibility but increases the operations ultimately compromising on the basic premise of providing easy last mile connectivity.

b) Dockless Model

- Start of the day bikes will be kept available for booking in all the potential locations
- Bikes can be pick up from anywhere and can be dropped anywhere within a set boundaries
- Basis the fleet size average distance to reach a bike will vary

Illustration purpose only

H1…3: Hubs in which bikes are available for rent

Illustration purpose only

B1…7: Dockless bikes available for rent

Is 2-wheeler efficient for Micro- mobility

Comparison among modes of transportation in terms of Space occupancy and fuel consumption

Vehicle Type	Area Occupied on road (Sq.m)	Occupancy	Space occupied per person	Fuel consumed (Lit/Pax.km)
Car	25.4	1	25.4	0.067
Car	25.4	2	12.7	0.033
Car	25.4	3	8.5	0.022
Car	25.4	4	6.4	0.017
Scooter	7.5	1	7.5	0.025
Scooter	7.5	2	3.8	0.013
Bus	31.2	20	1.6	0.011
Bus	31.2	30	1.0	0.007
Bus	31.2	50	0.6	0.004

- 2 wheelers occupy same space and fuel efficient similar to bus with 20 occupancy
- 4-wheeler efficient enough only at 4 occupancy

Benefits of Shared Two-Wheeler Mobility

1. Reduced congestion
2. Reduced carbon footprint per person travelling
3. Time saved
4. Encourage usage of public transport
5. Save money to get to destination

Key Highlights

~7 Million trips — Till present

~40 Million kms — Till present

~2000 Electric Scooters — **Goal - Fully electric fleet**

300* Battery Public Swapping Stations

Impact

~45% of trips Start or End at Metro

~25-30% of trips are done women

~4800 Jobs Created

1.46 mn Kgs Reduction in Emissions

Project Highlight

Collaboration with Bangalore Metro Stations

- Across all local metro stations as the last-mile mobility provider
- Parking areas provided by Bangalore Metro to have ease of access to customer
- Currently 45% of the rides end or start from a Metro Station, showcasing Bounce enabling use of public transport.
- About 80% of our Bounce users weren't using Metro Rail before Bounce was made available, but are using it now

How EV Operations will work (VIDEO)

First and Last Mile Commute Partnerships

EXISTING PARTNERS

Next Steps and Feedback

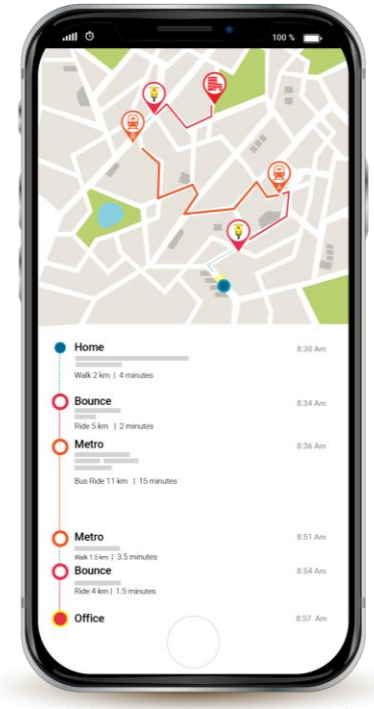
Areas of Collaboration

- Required shared mobility parking at all public transport hubs:

  Assuring there is parking available for shared mobility vehicles at all public transport hubs, inter and intra city at bus stops, metro stations and railway stations.

- Mandatory integration across all public transportation ecosystems:

  Ensuring last-mile mobility is part of every public transport ecosystem across the nation, promising every commuter ease of access to their nearest public transportation hub.



- Public data sharing platforms to optimize time of multi-modal commutes:

  Creating a secure, possibly blockchain based open data sharing platform for innovative transportation mobility providers to optimize the daily multi-modal commute of millions of people.

- Integrated payment platforms:

  Allow a seamless payment gateway for a commuter to pay for his/her multi-modal journey.

THANK YOU