



June 2016



About

This presentation has been developed by Centre for Environment Education, Prasanna Desai Architects and Innovative Transport Solutions Pvt Ltd for Pune Municipal Corporation under the project for preparation of a Comprehensive Bicycle Plan for Pune. The project is financially supported by the Government of India, Ministry of Urban Development and the Pune Municipal Corporation.

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GROWTH OF MOTORIZED TRAFFIC IS A PROBLEM!

Transportation is one of the main civic issues identified by Pune's citizens.



Caught in congestion



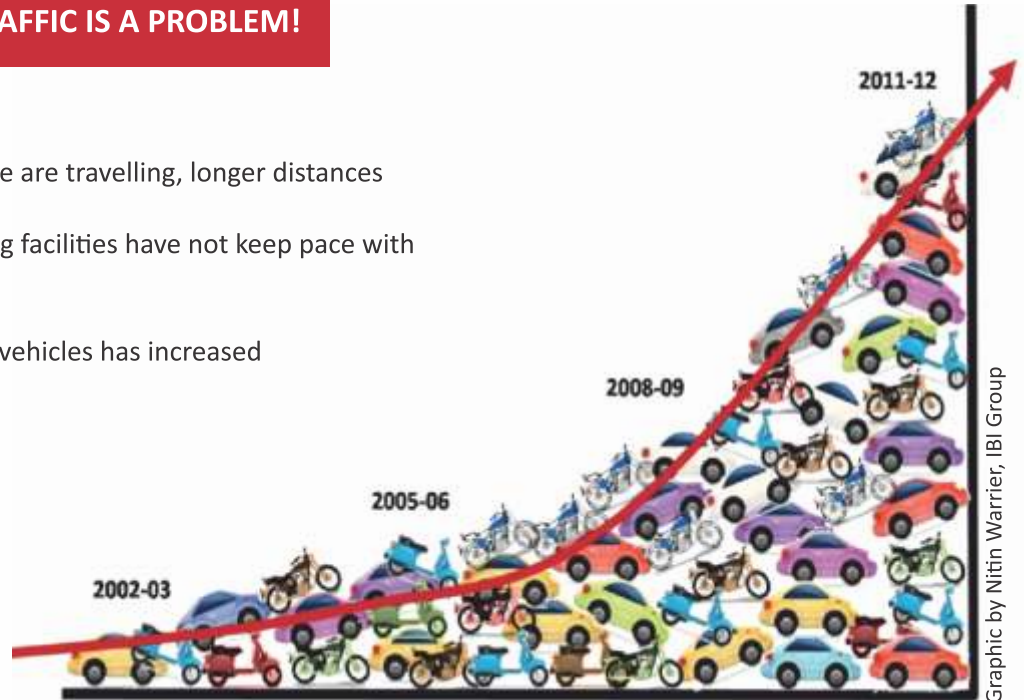
Unhealthy



Unsafe

GROWTH OF MOTORIZED TRAFFIC IS A PROBLEM!

- The city has grown, more people are travelling, longer distances
- Public transportation and cycling facilities have not keep pace with the growth of the city
- The number of personal motor vehicles has increased

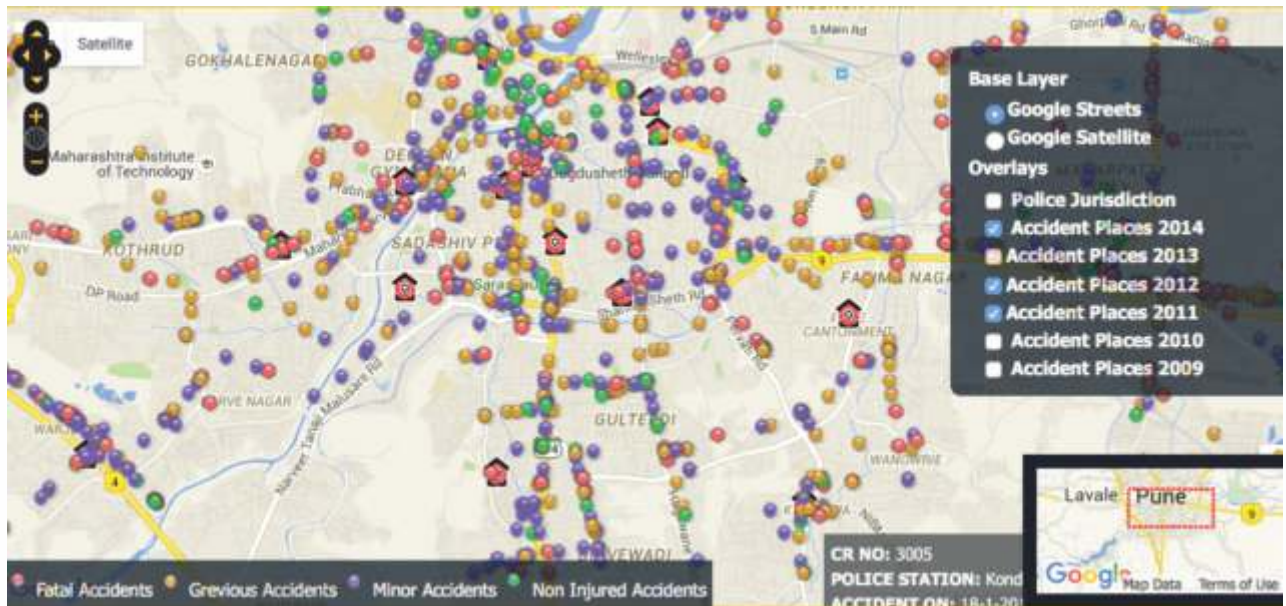


Over 500 cars and two-wheelers are registered everyday in Pune region

GROWTH OF MOTORIZED TRAFFIC IS A PROBLEM!

Approximately 1500 road accidents take place annually in Pune

The increase in motorized traffic is an underlying cause



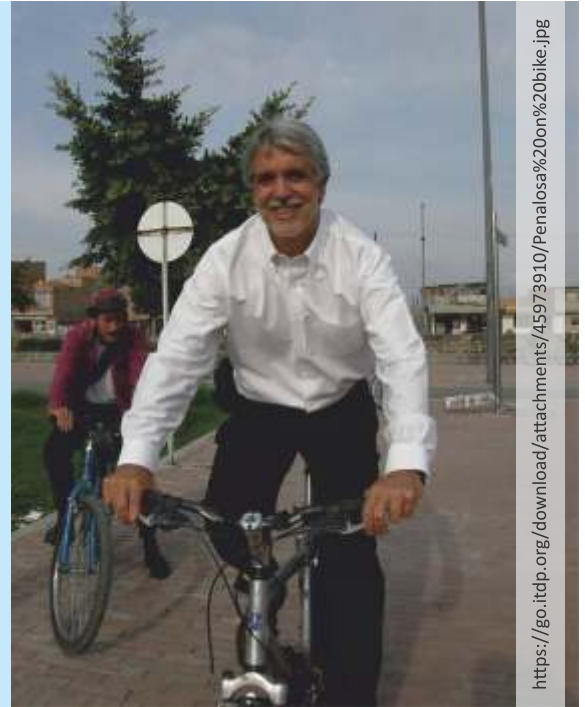
Inspiration

Widening roads and building flyovers are not real solutions. These invite more personal vehicles and increase congestion.

“Trying to solve congestion by building more roads is like trying to put out a fire using gasoline!”

“A great city is not the one that has highways, but one where a child on a tricycle or a bicycle can go safely anywhere.”

Enrique Peñalosa (President of Colombia)



<https://go.itdp.org/download/attachments/45973910/Peñalosa%20on%20bike.jpg>

U Turn in Transportation Planning in Pune

- The PMC General Body approved Pune's Comprehensive Mobility Plan in 2012
- The Vision articulated in the Comprehensive Mobility Plan (below) is in line with the National Urban Transport Policy, 2006

“Moving people safely and economically by emphasizing **public transport and non-motorized transport.**”



Major Components of Pune's Comprehensive Mobility Plan



Mobility Corridors
& road design



Traffic Management



Public Transport



Passenger/
Commercial Terminal



Walk & Cycle



Travel Demand Management



Road Management
& Maintenance



New links

Strategy

A number of projects are underway to make the Vision statement of the Comprehensive Mobility Plan a reality. These include adoption of street design guidelines, initiation of work to develop more than 100 km of pedestrian friendly roads, initiation of work on two new BRT corridors, support to PMPML for purchase of buses and organizational strengthening, preparation of a transit hub, etc.

Pune Cycle Plan

- A part of the city's transformation in transportation
- Being prepared in 2016
- Supported by the Ministry of Urban Development, Govt. of India



Safe rides for everyone, everywhere



Terms of Reference

Creation of a city-wide cycle track network and cycle-safe streets

A city-wide Public Bicycle Scheme with a detailed project report for a pilot project

Bicycle Parking Facilities

Integration with Public Transit

Design Guidelines for planning and implementing cycle-friendly infrastructure

Institutional Mechanisms, **Capacity-building and Financial Planning** for implementing the plan

Strategy for **Cycling Promotion** and **Awareness and Education** Campaigns

Consultants



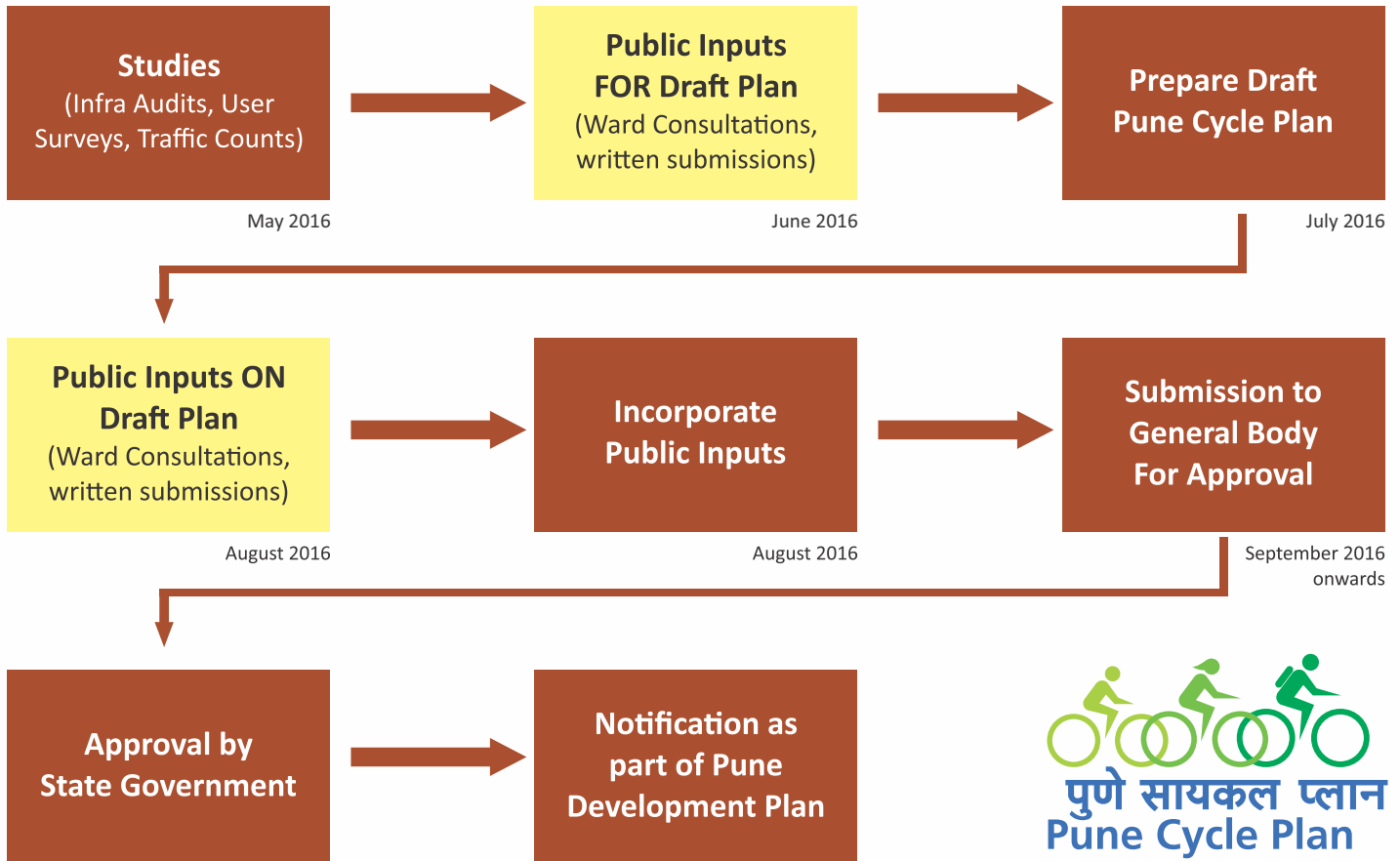
CEE

Centre for Environment Education



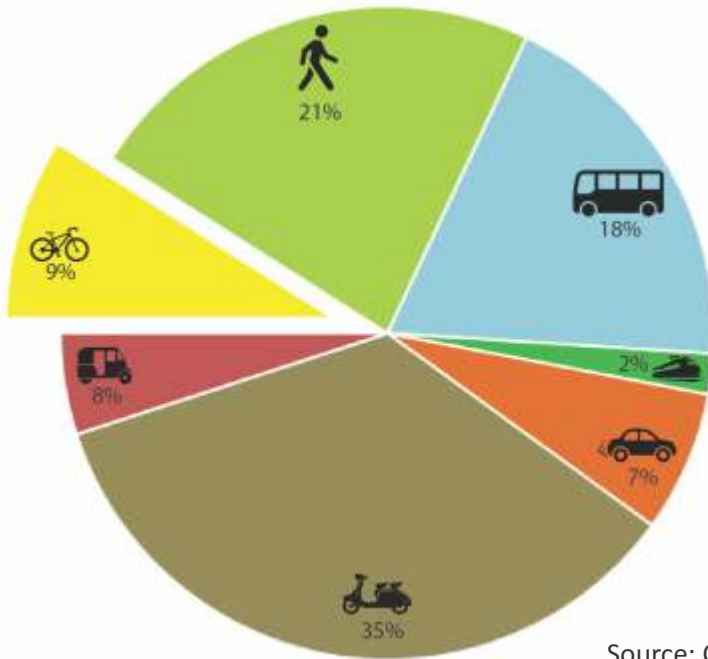
VISION

1 Current & Future Cyclists	2 Retain Cyclists	3 Long Trips	4 Short Trips	5 Safe Behaviour
<p>Safe, convenient, comfortable cycling conditions for existing and future cyclists</p>	<p>Current cyclists don't shift to motorized modes</p>	<p>Long distance private trips are converted to cycle + public transport</p>	<p>Short trips are by walk and cycle instead of motorized modes</p>	<p>Supportive, safe behavior by motorists towards non-motorized modes</p>





Cycling and other modes of transport in Pune

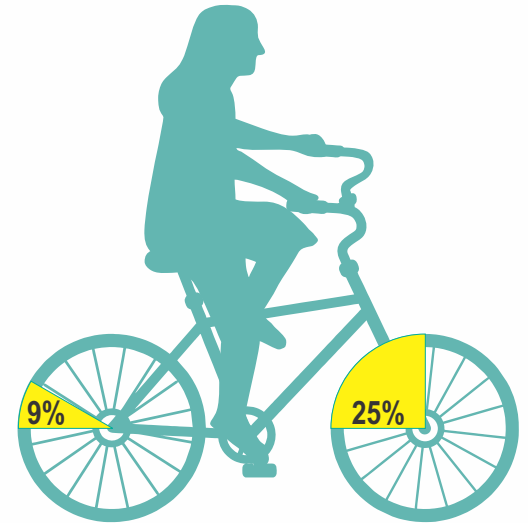
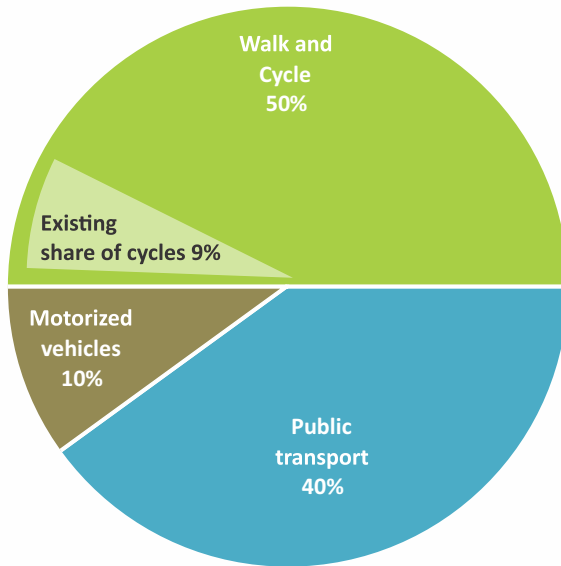


9% of those who travel to work, do so on a cycle
That is, **more than 1.6 lakh people cycle to work in Pune**

Source: Census of India, 2011



The Comprehensive Mobility Plan recommends this proportion of modes of transport by 2031



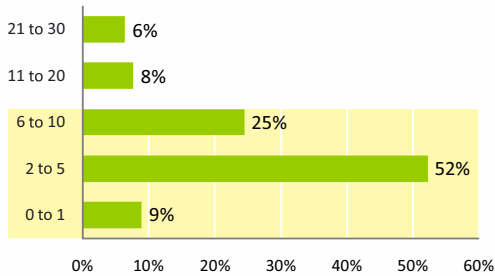
Current proportion → Recommended by 2031

The desired share for Walk and Cycle is 50%
Can the share of Cycling go up from 9% to 25% in Pune by 2031?



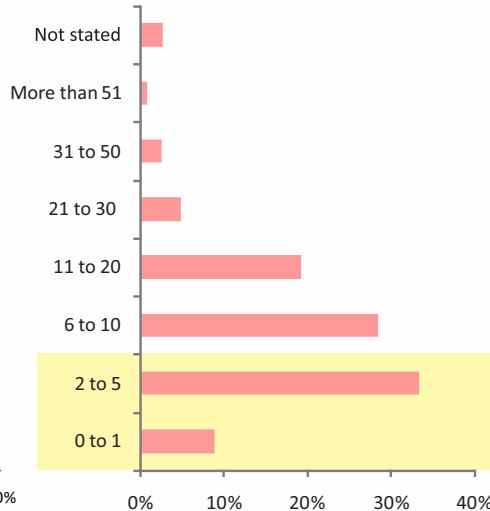
Extent of Cycling Today in Pune

About 40 thousand people cycle 6 to 10 km More than 80 thousand people cycle 2 to 5 km

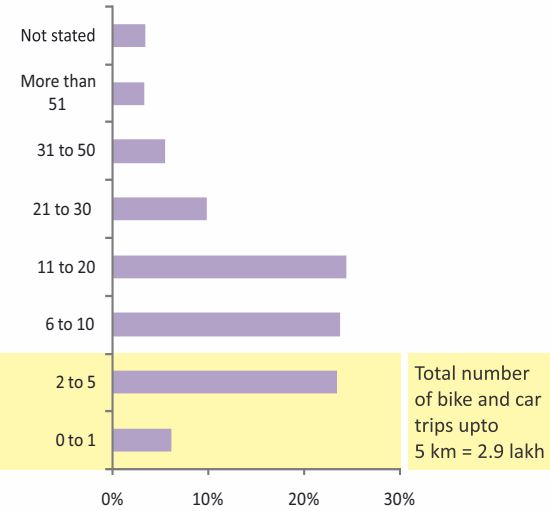


Percentage of working people travelling by cycle to work in Pune, Census 2011

Travel by two-wheelers and four-wheelers in Pune



Percentage of working people travelling by Moped/scooter/motorcycle to work place in Pune, Census, 2011



Percentage of working people travelling by car/jeep/van trips to work place in Pune, Census, 2011

Total number of bike and car trips upto 5 km = 2.9 lakh

Could trips up to 5 km be done by bicycle instead of by motorized two-wheeler or car ?



Pune's Cyclists



Informal Workers



Students, office goers



Professionals



Delivery men



Home & personal trips



Recreational cyclists

How can the city make cycling safe, convenient and attractive for current and future cyclists?

Recreational cycling is a great way to promote cycling. Could recreational cyclists also go to work on cycles?

STUDIES FOR PUNE CYCLE PLAN

EXISTING CYCLE TRACKS – AN OPPORTUNITY

The existing cycle tracks cover over 90km of distance across the city. This can be made usable by connecting the missing links, improving existing designs and strictly preventing other activities in the cycle tracks.



- *1. CYCLE TRACK AUDIT - RED ORANGE GREEN ANALYSIS
On-street survey for assessment of width and land-use

● NON -CYCLABLE



● SEMI- CYCLABLE



● CYCLABLE



*continued

STUDIES FOR PUNE CYCLE PLAN

- *2. On-street survey for assessment of width and land-use
3. Destination mapping – educational institutes, industrial areas, IT hubs, commercial areas, markets, restaurants, theatres, heritage/ tourist spots, gardens and parks, bus stops, railway stations
4. Traffic Volume Counts
5. User Surveys
6. Stakeholders Consultations



Mapping Destinations - Schools in Pune City



CORE CITY	BANER ROAD
SOLAPUR ROAD	UNIVERSITY ROAD
SATARA ROAD	OLD MUMBAI PUNE HIGHWAY
SINHAGAD ROAD	ALANDI ROAD
KARVE ROAD	NAGAR ROAD

*continued

*marking in clock wise direction (solapur onwards)



Examples of cycle-friendly Infrastructure

Cycle Network



Segregated cycle track on arterial roads



Painted cycle lane in collector roads



Examples of cycle-friendly Infrastructure

Cycle Network



Traffic calming to make internal streets cycle-safe



Cycle only greenways

https://en.wikipedia.org/wiki/File:Ciclovia%3%ADa_Pocuro.JPG
CC BY SA 3.0



Examples of cycle-friendly Infrastructure

Junctions



Identified waiting spaces for cyclists at junctions



Cyclist phase



Examples of cycle-friendly Infrastructure

Cycle Parking



On-street parking



Off-street parking



Examples of cycle-friendly Infrastructure

Examples



Cycle Parking with a quick shower booth in a university campus



Cycle Parking in Perth



Examples of cycle-friendly Infrastructure

Link to Public Transport



Rainbow BRT, PMPML Bus Stops, State Transport Bus stands, Railway Stations



Examples of cycle-friendly Infrastructure



Cycle Parking shelter for security

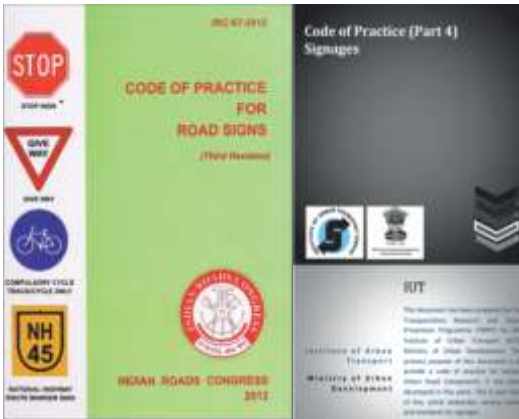


Cycle Parking right at the station platform



Examples of cycle-friendly Infrastructure

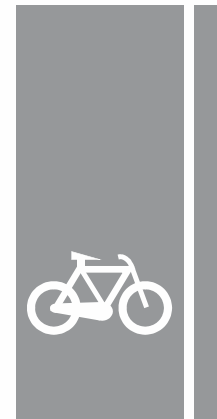
Signage



Signage Design Code of Practice, Road markings and Signage



Parking signage at a transit hub showing directions to train station, bus station etc.



Education about signage related to cycling



Examples of cycle-friendly Infrastructure

Public Bicycle System



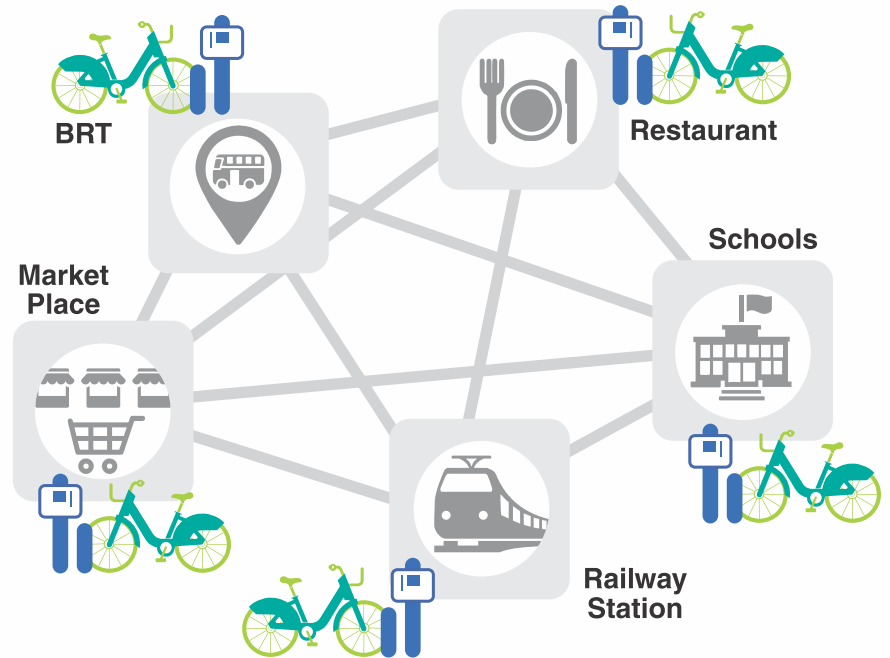


Public Bicycle System

Users can check out a cycle from any cycle station at any time of the day, use it to go anywhere they want to, and then return it to any cycle station located nearby their destination.

A city-wide public bicycle system may have

- Several hundred public bicycle stations
- Several thousand public bicycles for rent





Using Public Bicycle System - 4 Easy Steps



SIGN UP



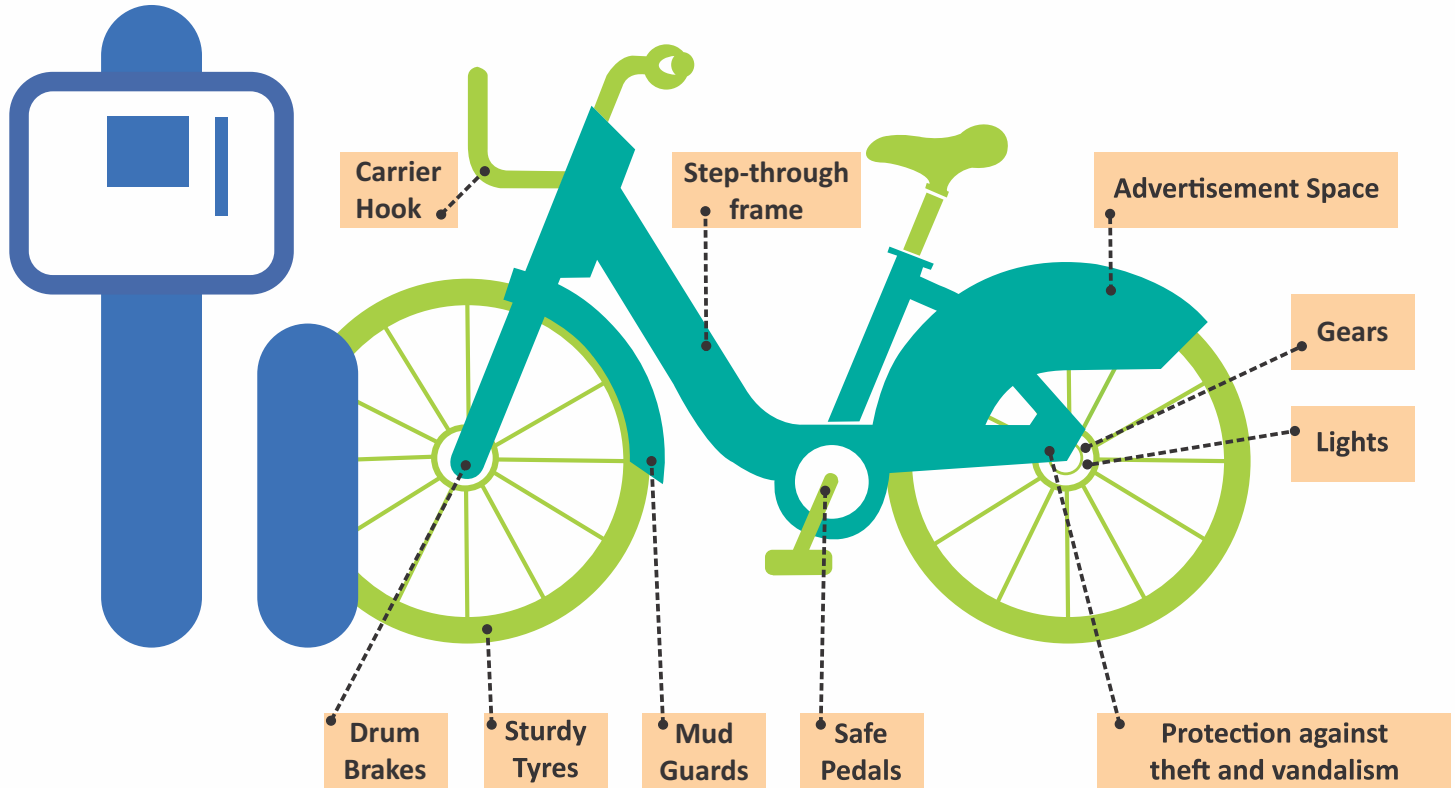
SWIPE OUT



RIDE!



DOCK





Cycle-friendly Infrastructure



Cycle Network

- Cycle tracks
- Cycle lanes
- Cycle only greenways
- Traffic calming to make internal streets cycle-safe

Junctions

- Cyclist phase
- Identified waiting spaces for cyclists

Cycle Parking

- On-street parking
- Off-street parking
- Private cycle parking

Link to Public Transport

- Bus stops
- Railway stations

Signage

- Code of practice
- Road marking
- Signage
- Education about signage

Public Bicycle System

- Docking stations
- Cycles
- Mobile app
- Smart card

PARTNERSHIP POSSIBILITIES

Cycle Friendly Workplaces

- Infrastructure - Convenient cycle parking, shower and clothes line, on-campus cycles, cycles for errands
- Incentives
 - Cyclists arrive 20 mins late or leave 20 mins early
 - Those who cycle for whole month get cash reward.
- Provide easy loans or gift cycles
- Cycle Culture - Cycle Day, Cycle Week
- Show cycling activities as part of ISO/TS certification



PARTNERSHIP POSSIBILITIES

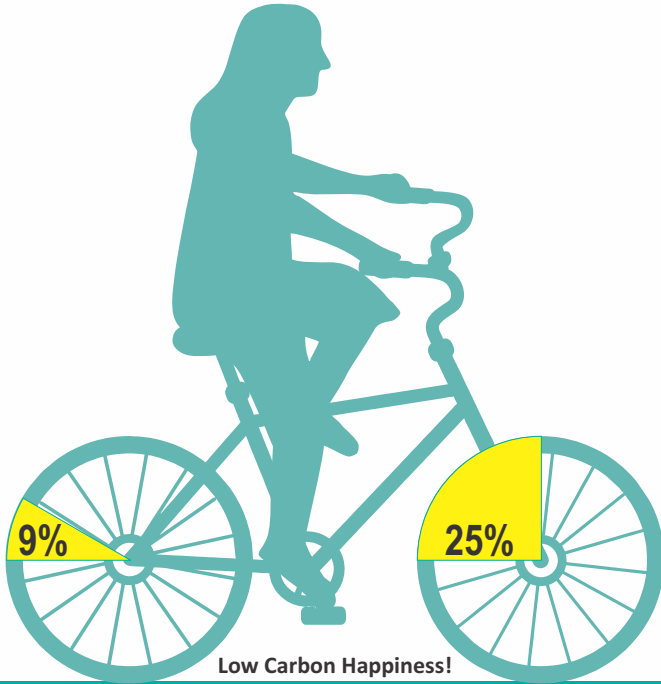
Cycle Oriented Educational Campus

- Gate management for students to cross safely
- Teach cycling and responsible behaviour, partnership with Traffic Police Road Safety Patrol
- School projects on how students come to school, audit footpaths and cycle routes to school, feedback to PMC
- Cycle Repair Service run by students
- Visible, convenient, secure cycle parking



WARD MEETINGS





पुणे सायकल प्लान Pune Cycle Plan

Safe rides for everyone, everywhere

Stay in touch
Pune Cycle Plan
Traffic Dept
Pune Municipal Corporation
3rd Floor, Veer Sawarkar Bhawan
Shivaji Nagar, Pune 411005