

ACTIVE MOBILITY – Bringing People Together

- By
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Environment Officer
Pune Municipal Corporation

The Changing Mobility Scenario in Pune City



Pune City 1970-80 (Cycle City)



Pune City 1980 -90 (Moped City)



Pune City 2017-18





1st
in urban governance
across 23 Indian cities in
ASCIS survey, 2018



1st
in quality of life in India
along with Hyderabad,
as per Mercer, 2014



2nd
largest varsity in India
with 811 colleges



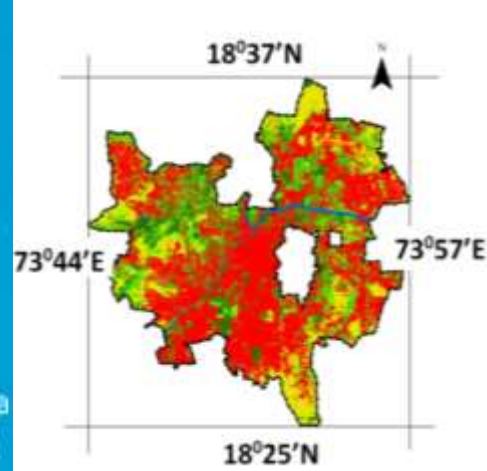
2nd
in India in
software exports



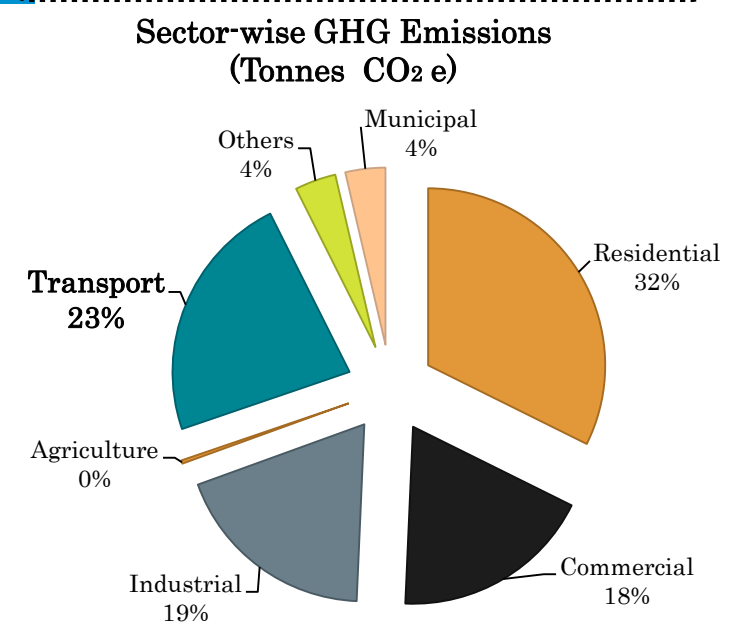
7th
highest GDP among Indian
cities at \$69bn, Brookings
Institute (2014)



8th
most populous Urban
Agglomerations in India

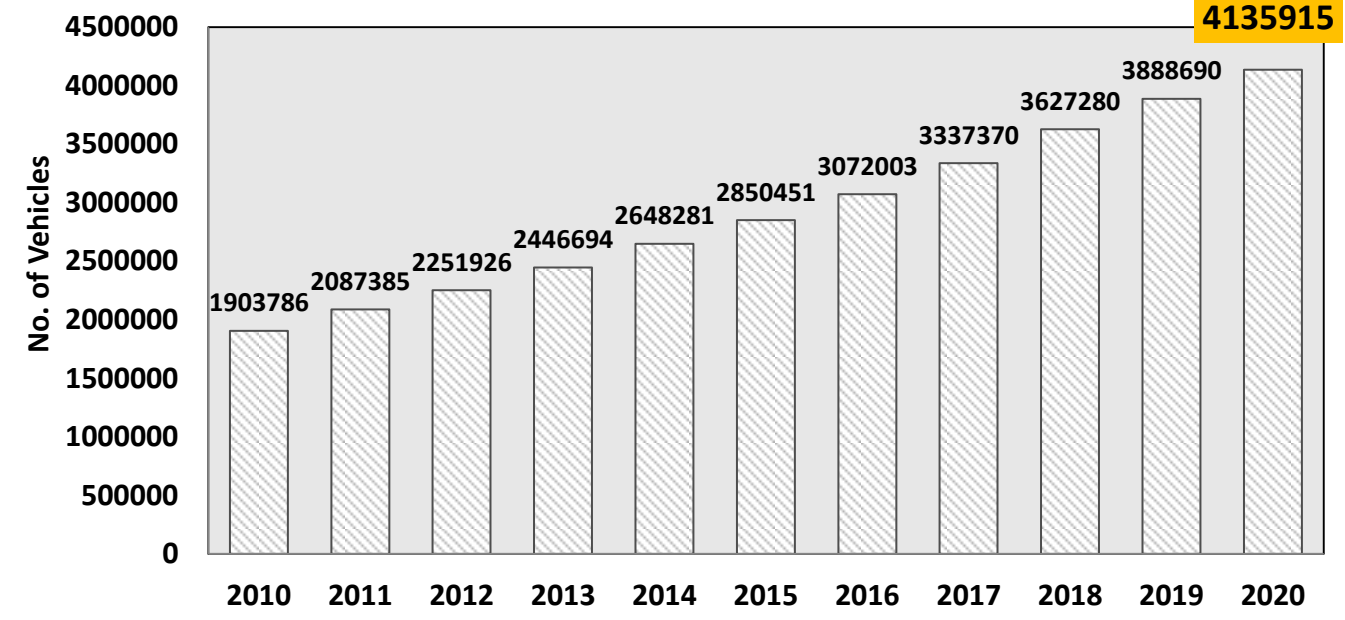


Area: 331.56 sqkm
Population: 3.4 million

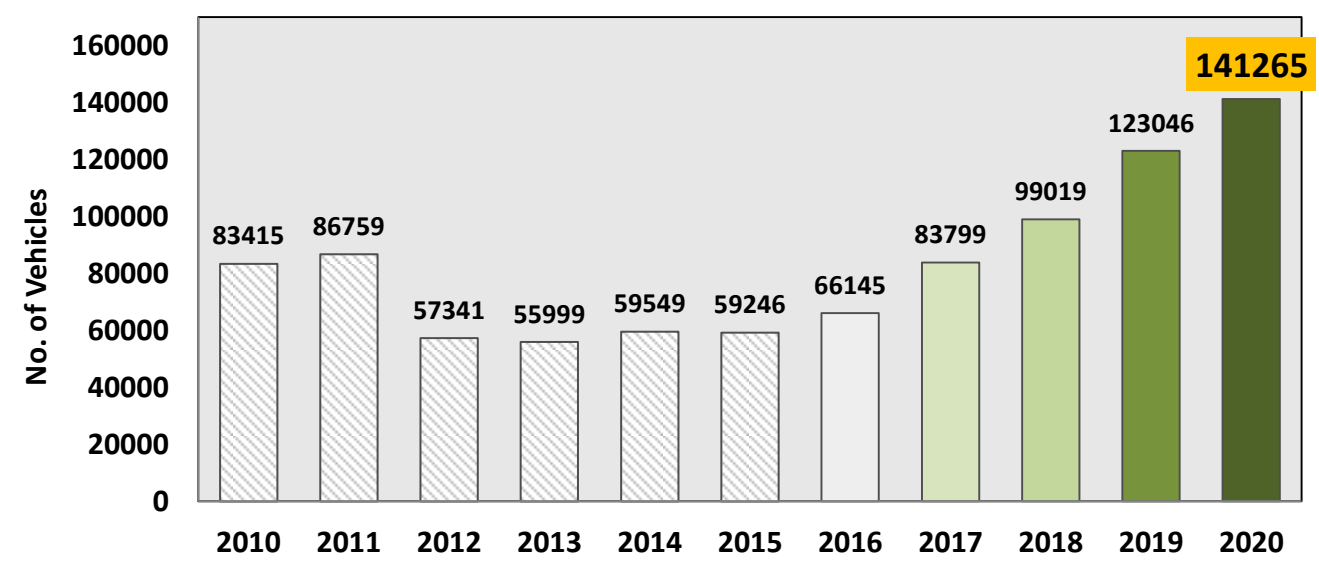


Source: ICLEI – Solar City Master Plan

Total Number of Vehicles



Number of Public Transport Vehicles (Auto-rickshaw, Taxi Cabs, Contract Carriages, School Buses)



Transportation & Mobility #1 concern of PUNEKARS'

Citizen engagement output - top concerns for citizens of Pune

Pan City Initiative
0.3 million Citizen Engaged
in Two Months



Environment & Sustainability



Safety & Security



Energy



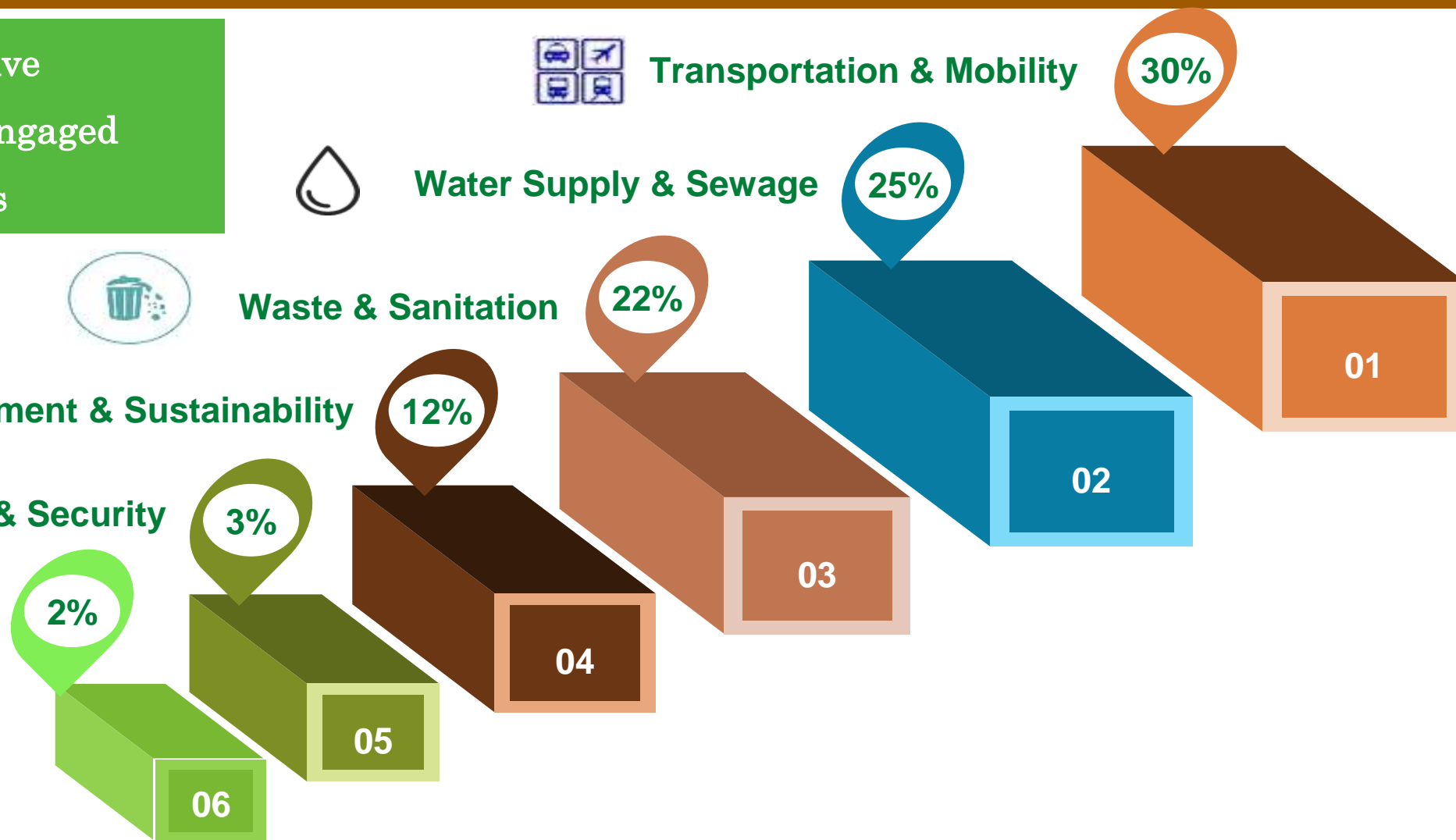
Waste & Sanitation



Water Supply & Sewage



Transportation & Mobility



Pune created a vision that is “future proof”



Pune aspires to become one of the most **liveable cities** in India, by solving its **core infrastructure issues** in a “**Future-Proof**” way, and by making its neighborhoods beautiful, clean, green and **liveable**



National Level Policies/Schemes



सत्यमेव जयते

National Urban Transport Policy (2014)

To Ensure Safe, Affordable, Quick, Comfortable, Reliable & Sustainable Access for The Growing Number of City Residents.

1

National Electric Mobility Mission Plan 2020 (2013)

To Achieve a Vehicle Population of About 6-7 Million Electric / Hybrid Vehicles in India by The Year 2020

2

Faster Adoption & Manufacturing of Hybrid & Electric Vehicles (Fame) (2015)

To Support The National Electric Mobility Mission Plan (NEMMP) 2020 with The Goal of Reaching 6-7 Million Electric/Hybrid Vehicles in India By 2020

3

Green Mobility Scheme

- To Address Infrastructure For Bus Based Transport To Bring In Private Entrepreneurial Spirit In Operations To Promote Non-motorized Transport (NMT) And Last Mile Connectivity
- To Promote Alternate Fuels And Electric Mobility And Address High Fatalities Of Pedestrians.

4

Discussion with stakeholders of Mobility Ecosystem in the city



“Nayana Gunde said, “There is a need of 3,200 buses for Pune and Pimpri Chinchwad. At present there are only two thousand buses. Both civic bodies will help to purchase 1600 buses in the next two years. After that each year 150

PUNE: “Private vehicles have changed rapidly, but there is no change in public transport buses. Due to this, more people prefer private vehicles over public vehicles,” said State Transport Secretary Ashish Kumar Singh on Friday. He added that considering this, State government is planning to purchase 10,000 buses on the lines of PMPML for the State Transport.



(L to R) PMPML CMD Nayana Gunde, transport secretary Ashish Kumar Singh,

PMC chief Saurabh Rao, ITDP chief Pranjali Deshpande Agashe at the release of...

Int'l transport policy body calculates accessibility across Pune by homes, offices

Outlining the reasons why Metro will not be a hit in the city and why Ltd (PMPML) is still struggling to extend efficient services and draw Development Policy (ITDP) has presented the results of its study as (PNT) and how this will help the city to go a long way in terms of put

The report was prepared by the international organisation after stuc the PNT in terms of percentage of people living within a walking dis Three tools were used for compiling the study, which included datal and calculation of ward-wise built up density.





Transportation Initiatives – Based on National Level Policy

NMT TIMELINE

1 COMPREHENSIVE MOBILITY PLAN (CMP)

Envisions improving the modal share of non-motorised transport and public transport from 50% to 90% in 2031.

90%
of all trips using
sustainable
transport by 2031?

2008

2 WALK SMART PEDESTRIAN POLICY

Drafted with the vision of making Pune a pedestrian-friendly city by prioritizing pedestrians and cyclists over vehicles.

2016

5 PUNE STREETS PROGRAMME (PSP)

Initiated a holistic approach in the design of streets under the USGD, with around 100 km of streets across the city to be redesigned with wide, safe, and continuous footpaths in coming years.

4 URBAN STREET DESIGN GUIDELINES

Defined the process for designing streets, provides design templates for streets of different right-of-way and highlights the standards for street elements.

3 PARKING POLICY

The first Indian city to adopt a progressive parking policy emphasising efficient parking management as a way to discourage private vehicle use and encourage citizens to use public transport.

6 COMPREHENSIVE BICYCLE PLAN

First city to create a City-wide Bicycle Plan, with a proposal to create 400 kms of cycle-friendly streets. Intended as the primary guidance document for the city to allocate resources, undertake projects and evaluate the outcomes towards achieving the goals set for improving cycling in Pune.

2017

7 PUBLIC BICYCLE SHARING SYSTEMS

Public Bicycle sharing systems 2017
4 PBS operators to serve as another mode of transport for commuters and provide efficient last-mile connectivity for public transit users.

8 URBAN 95 PROGRAMME

Focuses on walkable, mixed-use neighbourhoods that cater for the basic needs of Infants, Toddlers and Caregivers within 15 minutes on foot.

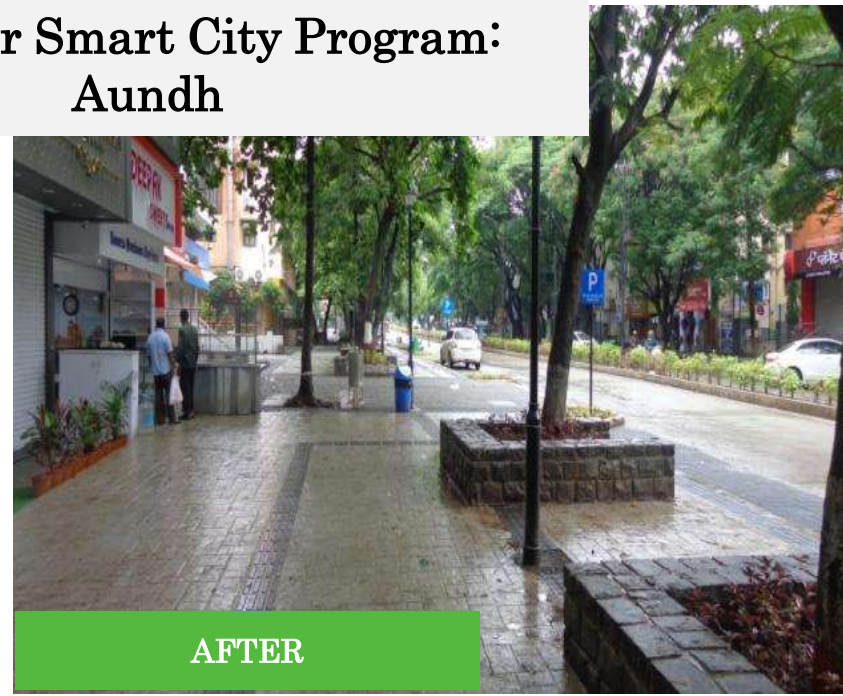
2018

Pune City – Sustainable Transport Planning

Pilot Stretch under Smart City Program: Aundh



BEFORE



AFTER

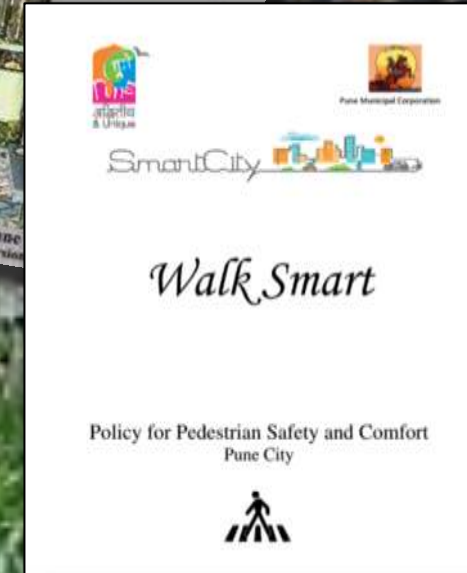


BEFORE



AFTER

Creating Streets For People



First Indian City to adopt Street Design Guidelines
Informing National And State Guidelines

DP road, Aundh



Walk the Talk

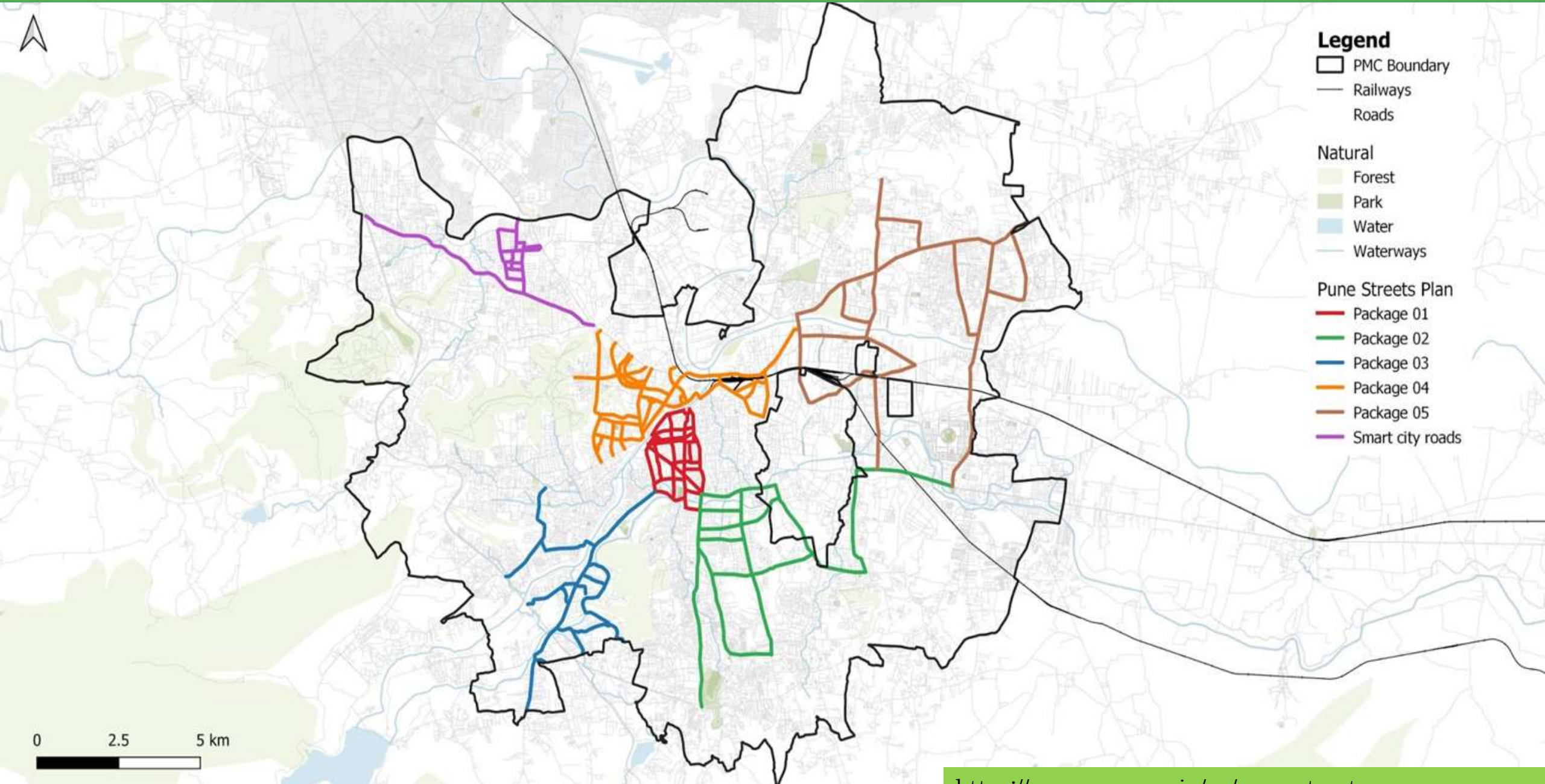
Successful implementation of
“Pune Street Programme
(PSP)”

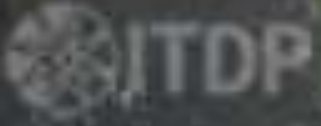
65 kms of streets completed by 2019

Natraj Junction



Pune City – Street Plan to retrofit 100km of Street





Bulb outs

Bollards

Lighting

Table top crossings

Refuge islands

Traffic calming

Creating safer for all, universally accessible streets

Pune City – Urban Street Design Guidelines

STREET ELEMENTS

All people should be able to move safely, smoothly and conveniently



Street elements

- Footpath - clear walkway
- Cycle Track - NMT Lane
- Bus stops
- BRT lanes
- Carriage way - MV lane
- Shoulders
- Parking

Make streets safe, clean, attractive and comfortable for people to walk and drive



Safety elements

- Pedestrian Crossings
- Traffic calming measures
- Speed breakers
- Traffic Signals
- Central Medians
- Railings
- Bollards
- Street lights
- Street furniture
- Signage, markings

Streets to reduce impact on natural and built environment. To have green streets in the city.

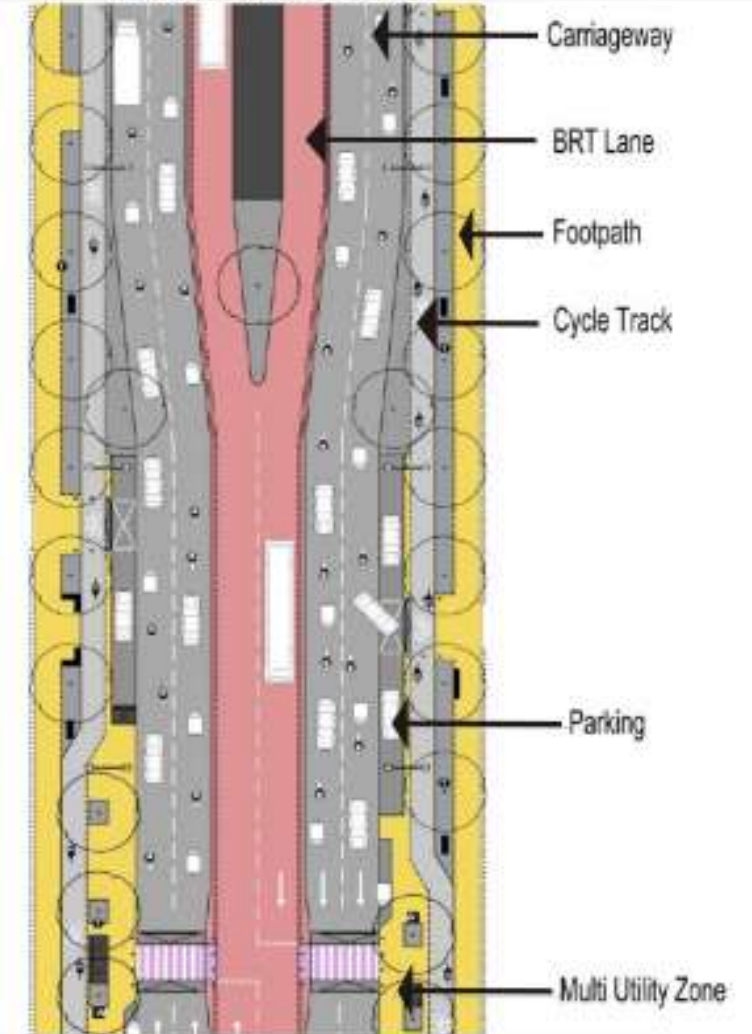


Multi utility zone

- Plantation
- Utility and services
- Storm water management
- Garbage containers
- Public toilet



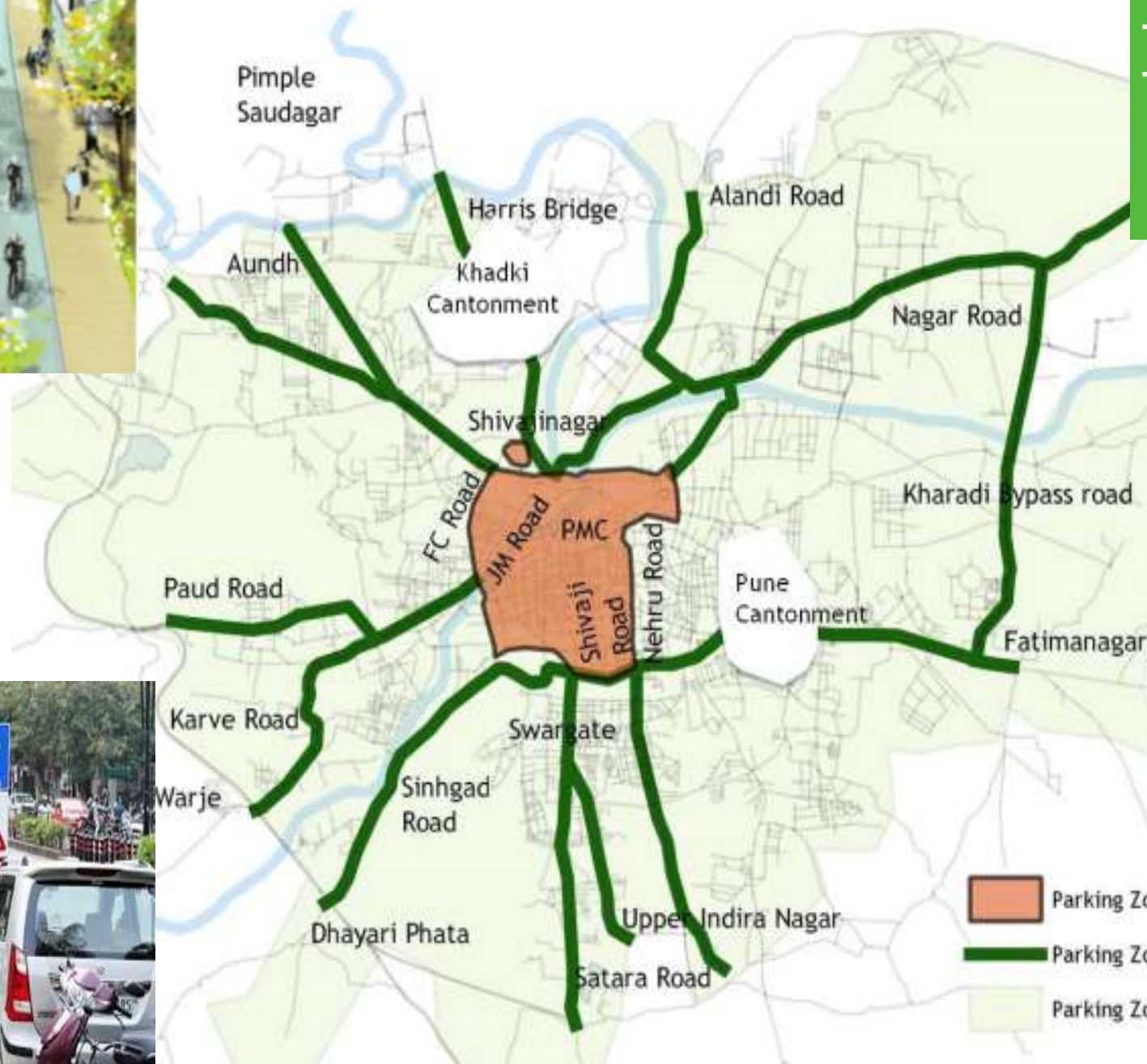
STREET CROSS SECTION



The sketch is only an illustration indicating various street elements and not its technical design.



Pune Parks it Right...



Pune City – Bringing Back Cycling Story



First city to create a City-wide Bicycle Plan
With a proposal to create 400 kms of cycle-friendly streets



Green Buffer

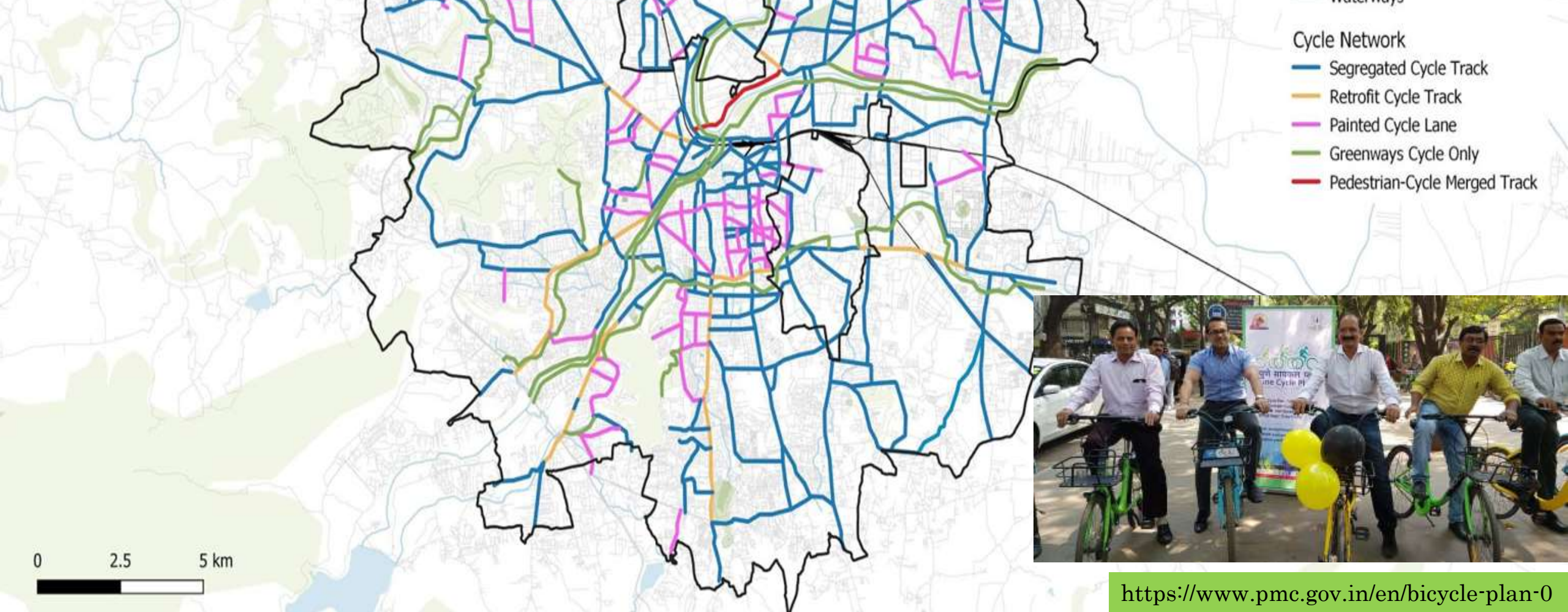
Dedicated
Cycle tracks

Shaded
walkways and
cycle tracks

Shaded
Sitouts



Last mile Connectivity: Public Bicycle Sharing Program



Satara Road



URBAN95

Eat Play Socialize

Urban 95 Programme
Child Friendly
Streets



ITI Road

PUNE METRO

HELPS YOU BREATHE
CLEANER AIR BECAUSE
OF POLLUTION
CONTROL

CO₂

30533
THOUSAND TONS
PER YEAR

NO_x

276
THOUSAND TONS
PER YEAR

SO₂

2
THOUSAND TONS
PER YEAR

PARTICULATE
MATTER

36
THOUSAND TONS
PER YEAR

HC

490
THOUSAND TONS
PER YEAR

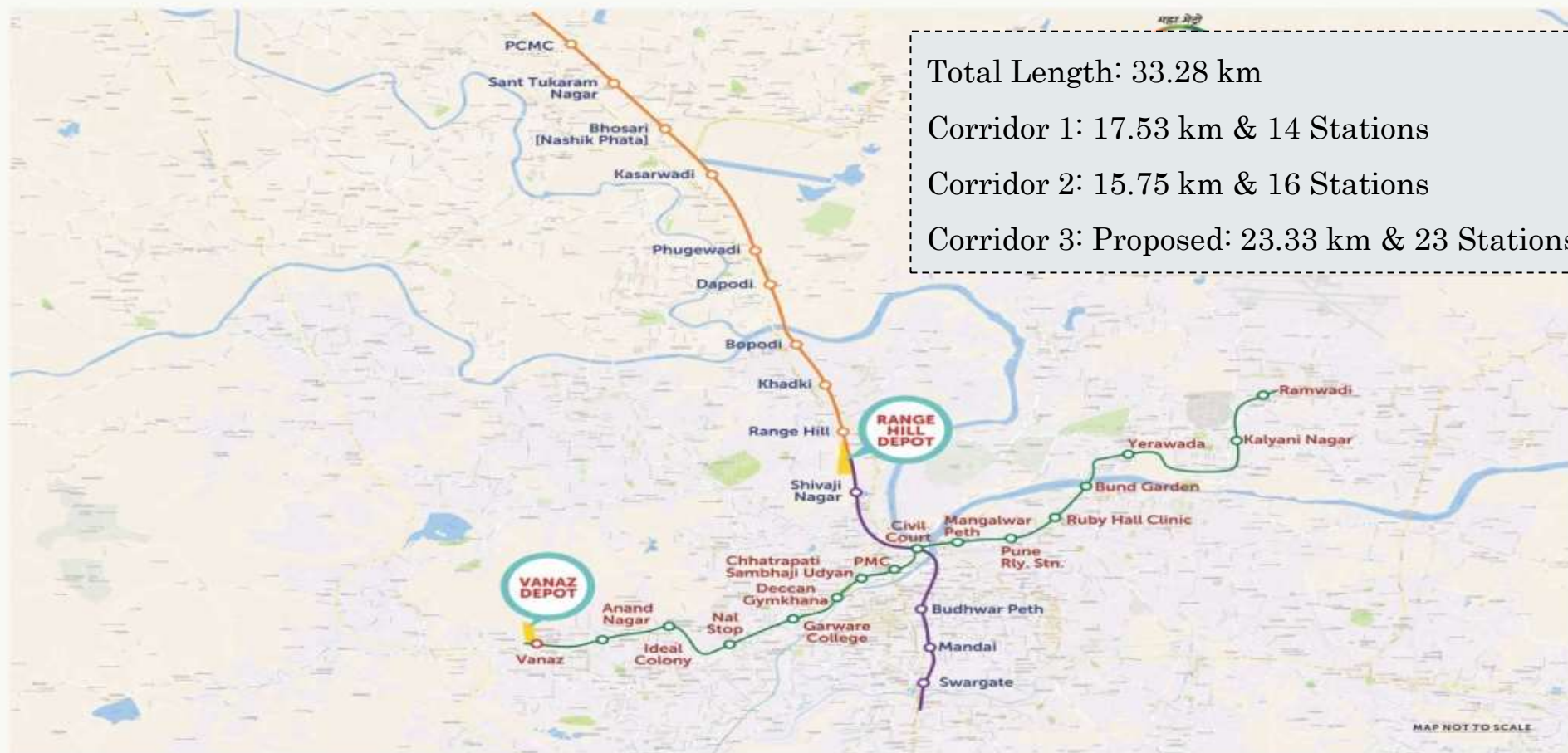
CO

1069
THOUSAND TONS
PER YEAR

Mass Transit System: METRO



ROUTE MAP PUNE METRO RAIL PROJECT



/MetroRailPune



@metrorailpune

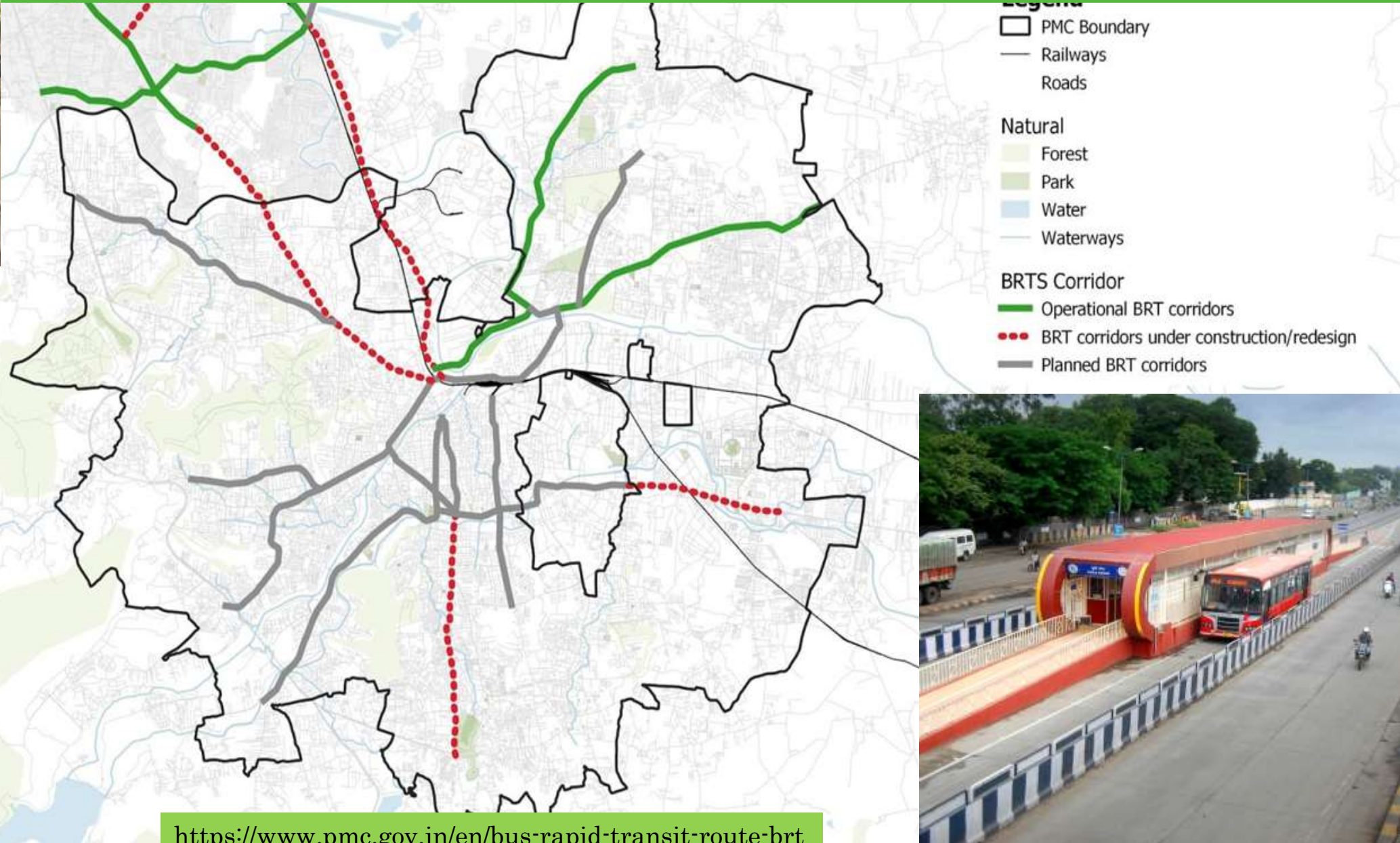


metrorailpune



www.punemetrorail.org

Pune pilots a '*Rainbow*' Bus Rapid Transit System (BRT)



<https://www.pmc.gov.in/en/bus-rapid-transit-route-brt>

Pioneer in Electric Buses
142 E-buses plying..

**Out of Total Bus-fleet
70% CNG buses..**

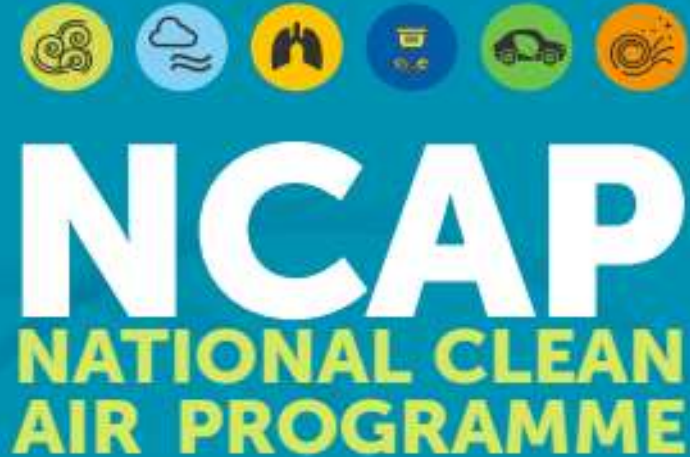


City with the Largest E-bus fleet in India...
India's first E-Bus depot built in Pune



सत्यमेव जयते

Preparation of Air Quality Action Plan of Pune City under National Clean Air Programme (NCAP)



Ministry of Environment,
Forest & Climate Change
Government of India

TENURE

Mid-term five (5) years action plan to begin with keeping 2019 as base year. Further extendable to 20-25 years in long-term after mid-term review of the outcomes.

OBJECTIVES

- Stringent implementation of mitigation measures for prevention, control and abatement of air pollution.
- Augment and strengthen air quality monitoring network across the country.
- Augment public awareness and capacity building measures.

APPROACH

- Multi-sectoral & Collaborative.
- Mainstreaming and integration into the existing policies and programmes of GoI including NAPCC.
- Use Smart Cities framework to launch NCAP in the 43 smart cities falling in the list of 102 non-attainment cities.



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

PAUL SCHERRER INSTITUT



International Institute for
Applied Systems Analysis
www.iiasa.ac.at

MoEFCC



TARGET

National level target of 20-30% reduction of PM2.5 and PM10 concentration by 2024.

EPFL

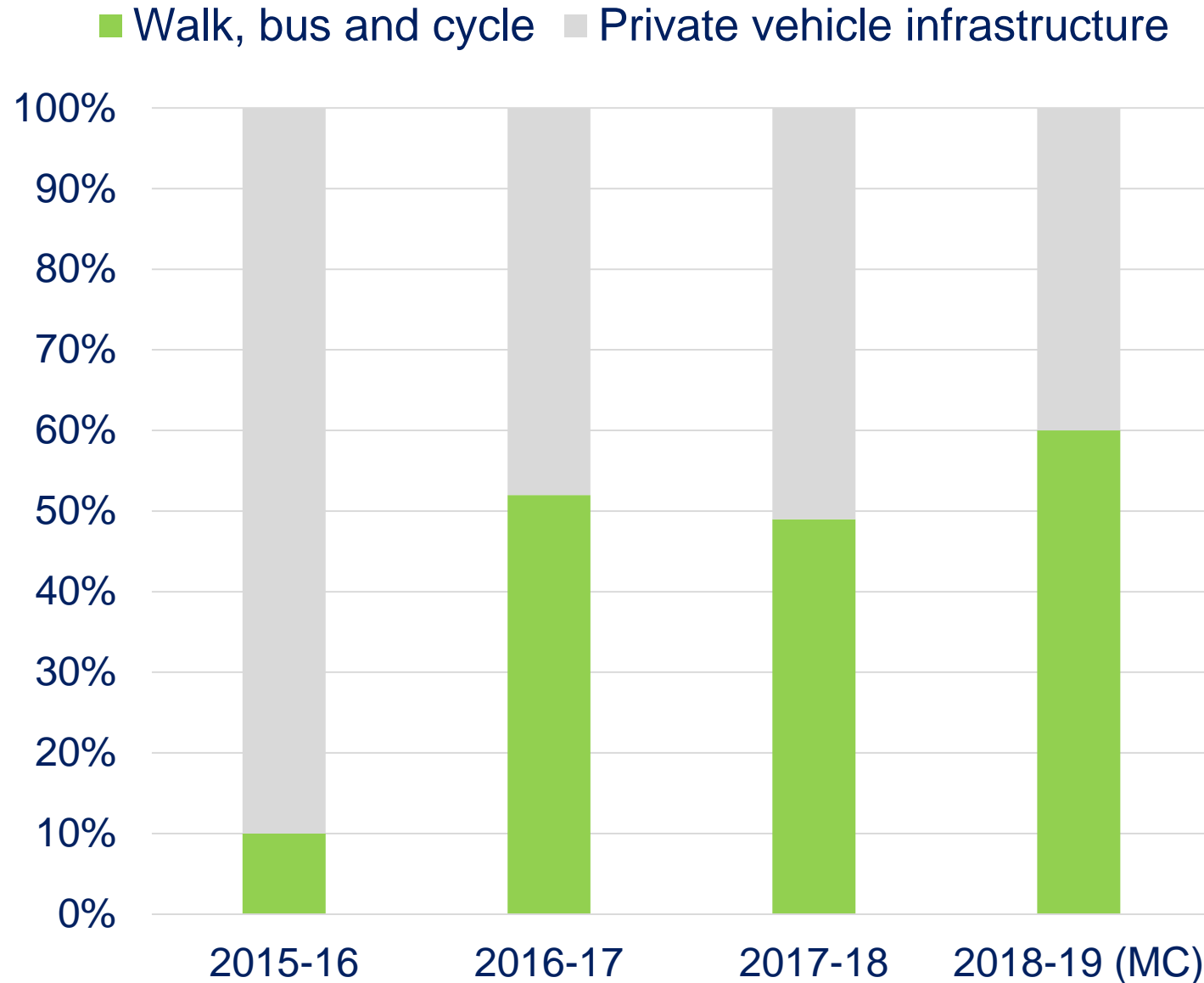


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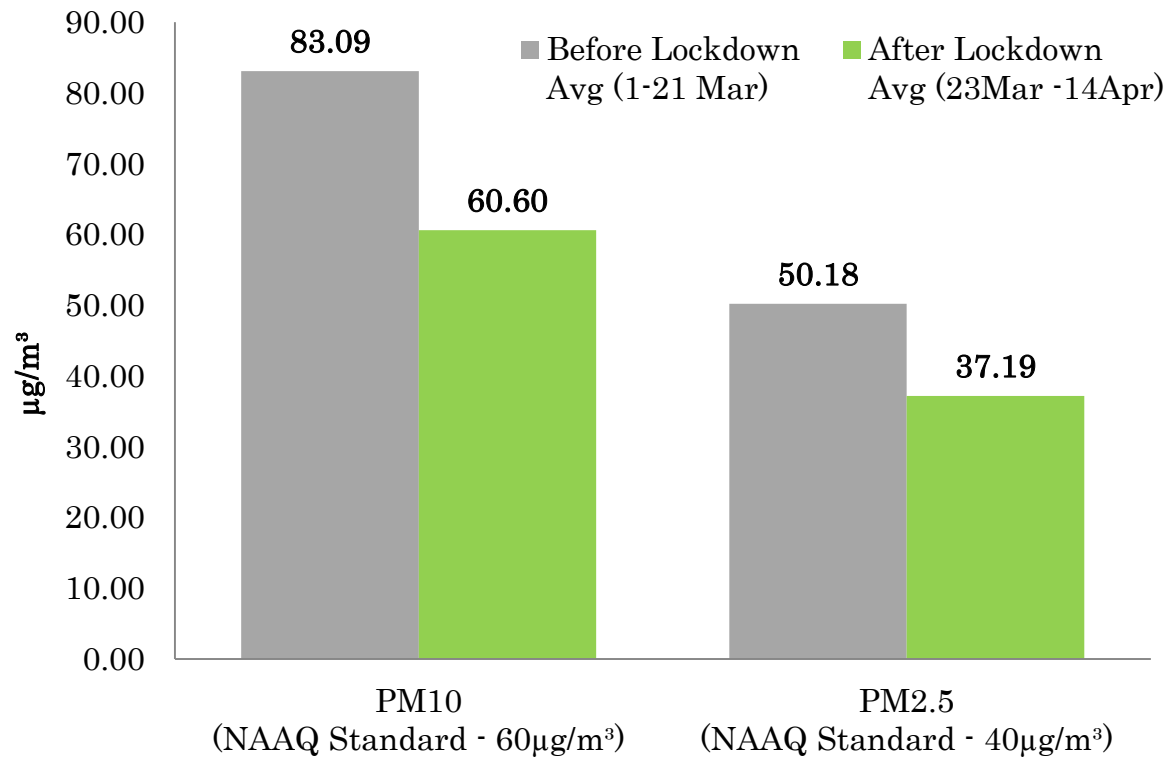


Since 2011, the 3wheeler Auto-rickshaws running on petrol & diesel are given a subsidy of Rs. 12,000/- to convert to CNG

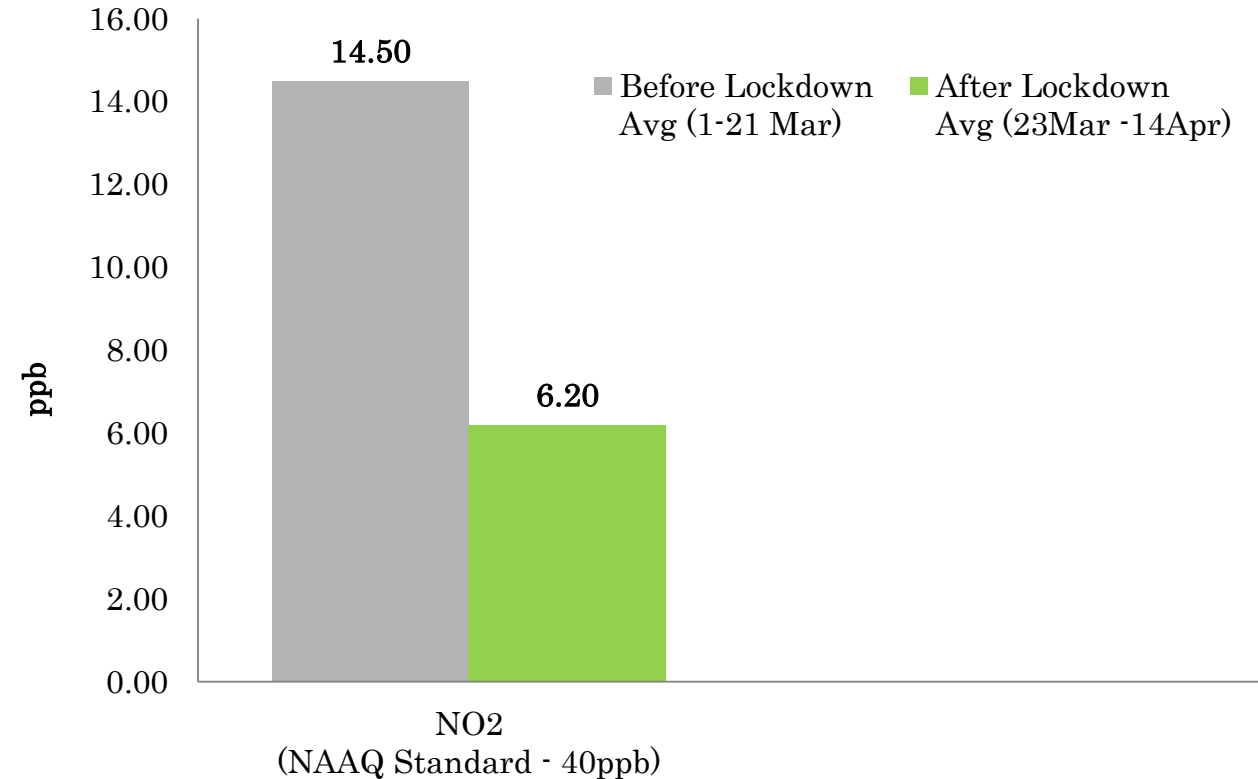
Auto-rickshaws taken benefit : 16,836

Covid -19 Lockdown - Reduction in Air Pollution

Particulate Matter - PM₁₀ & PM_{2.5}



NO₂ Concentration





SDG 13 – Climate Action

Take Urgent Action
to Combat
Climate Change
&
it's Impacts

Inspiring other Cities..



2016: Yichang, China

2017: Santiago, Chile

2018: Dar es Salaam, Tanzania

2019: Fortaleza, Brazil

Pune wins Sustainable Transport Award 2020!



Shreya Gadepalli, ITDP South Asia Director, accepted the **Sustainable Transport Award** on the behalf of the city of Pune, India from the First Lady of the city of Fortaleza, Brazil, Carolina Cunha Bezerra.

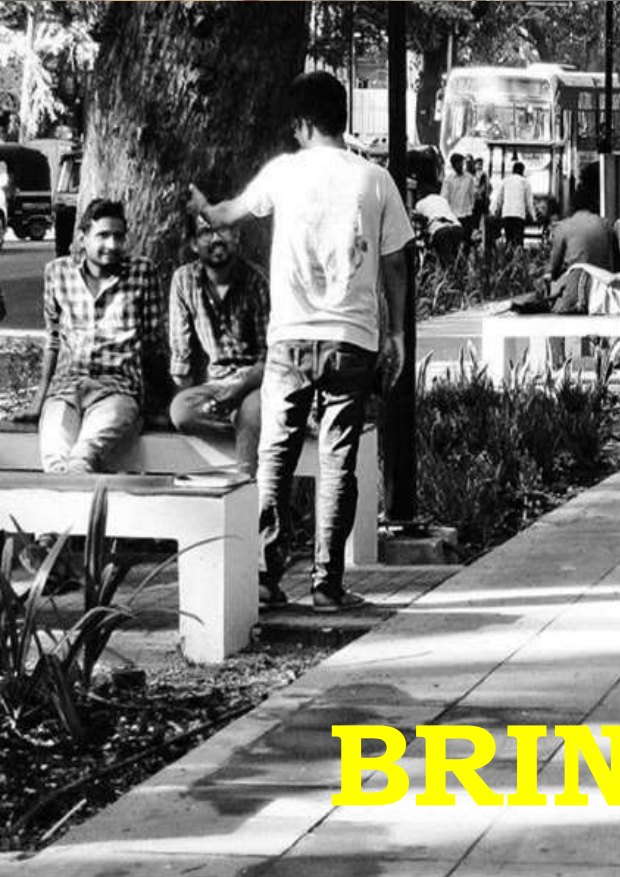




सायकल वापरु, जपू पर्यावरण.

प्रदूषणाचे विसरु टेन्शन.

पुणे महानगरपालिका सायकल क्लब



**ACTIVE MOBILITY –
BRINGING PEOPLE TOGETHER**