PIMPRI-CHINCHWAD MUNICIPAL CORPORATION

SMART CITY PROPOSAL

SMART CITY
PIMPRI–
CHINCHWAD

SMART CITY CODE

MH-01-PMP

Smart City
MISSION TRANSFORM-NATION

Ministry of Urban Development
Government of India

CRISIL
An S&P Global Company

Vision : "RE-defining Pimpri-Chinchwad"

Using the "Smart City" platform, the City now envisages to "Re-define" itself into an attractive, vibrant and liveable destination. Moving beyond providing basic facilities, the City aspires to invest in urban "software" - society, environment, community - to improve the quality of life of its citizens.

Goals :

STRENGTHS

[1] Good provision of **CIVIC INFRASTRUCTURE** and amenities
[2] Culture of **LEVERAGING TECHNOLOGY** in governance
[3] **STRONG ECONOMIC BASE** of automobile and IT industries
[4] Legacy of **URBAN PLANNING** and **DEVELOPMENT**
[5] **ACTIVE CITIZENRY**
[6] Vibrant **REAL ESTATE**

WEAKNESSES

[1] **MODAL PREFERENCE** for private vehicles
[2] **LACK OF CITY ATTRACTIONS** and regional recreational avenues
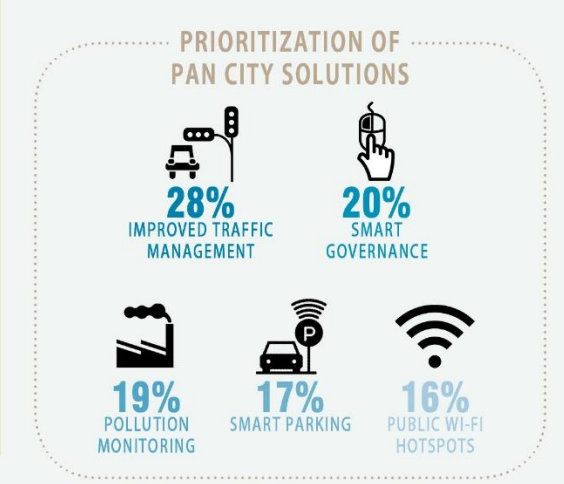[3] Lack of **INTEGRATION** between existing municipal information systems

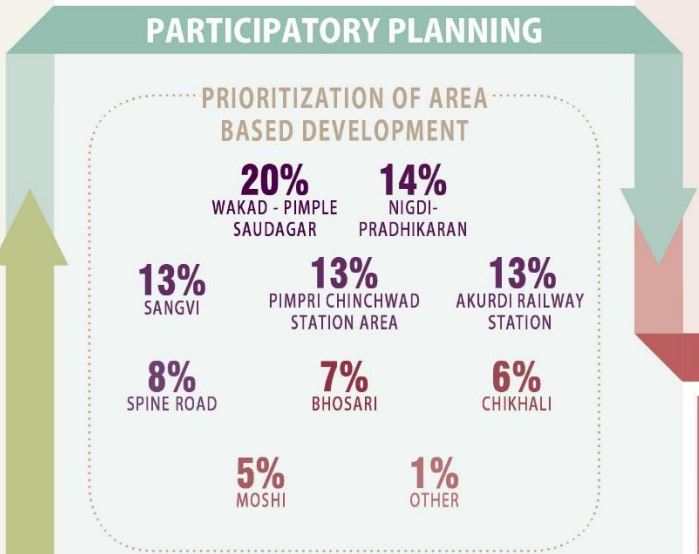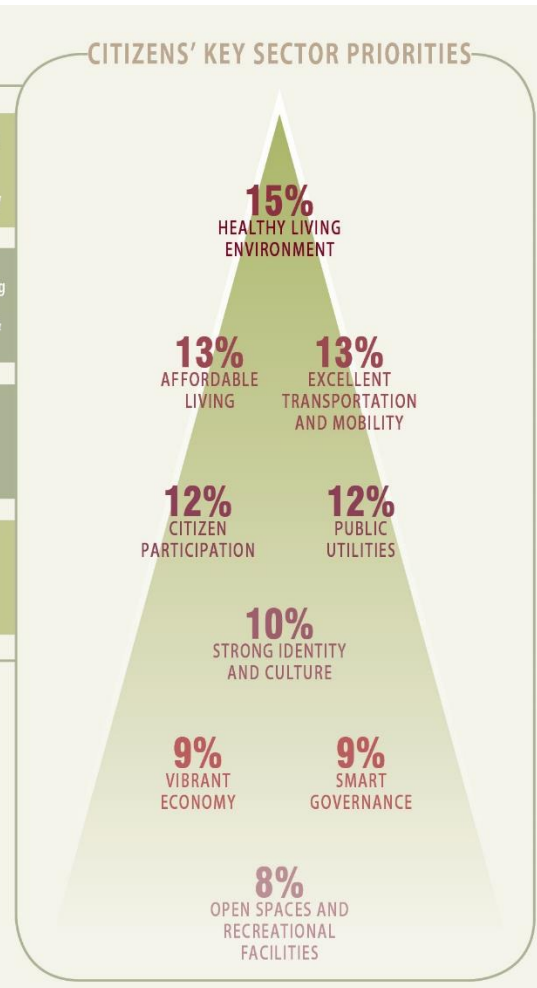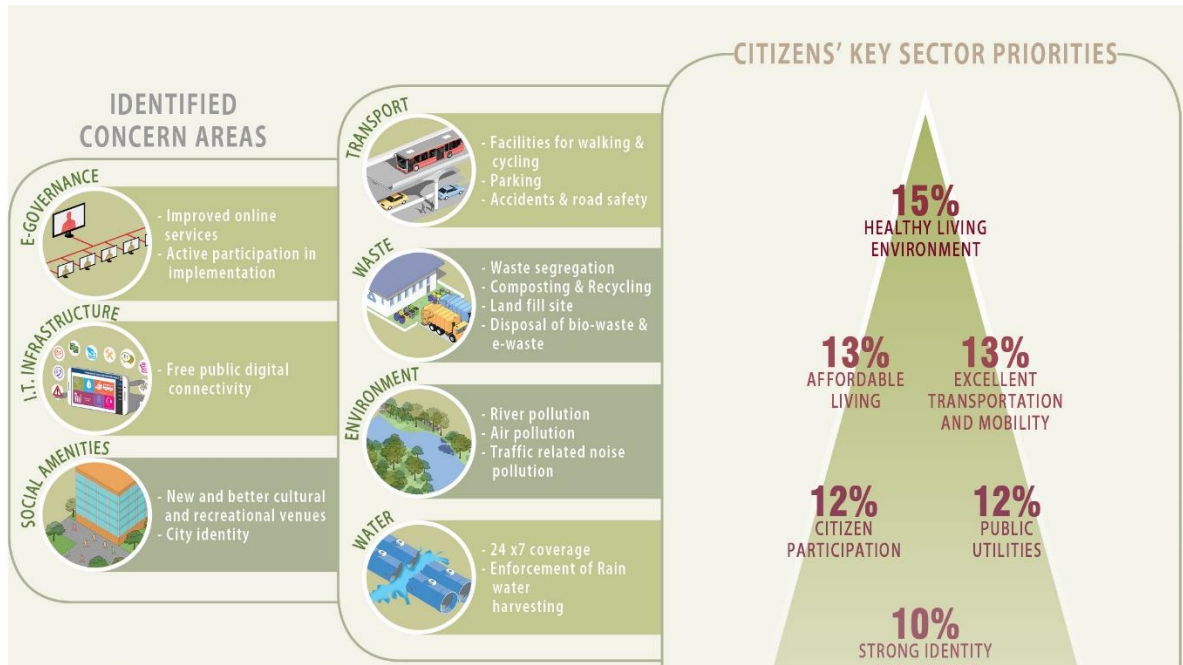**OPPORTUNITIES**
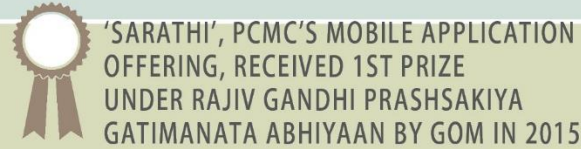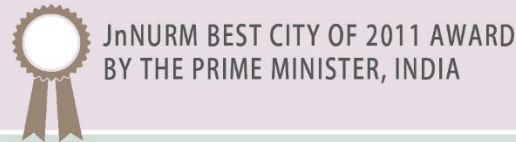
[1] **GROWING REAL ESTATE DEMAND** fueled by IT and auto industries in the region
[2] **AVAILABILITY OF LAND** for city expansion
[3] **IMPROVING** regional and public **TRANSPORT**

THREATS

[1] **CONVERSION** of industrial land to residential is leading to **DEPLETION OF ECONOMIC BASE**
[2] **UNMET ASPIRATIONS** of the emerging creative population
[3] Environmental **POLLUTION**

RE-CITY
PIMPRE CHINCHWAD 2.0
TOWARDS LIVABILITY

- JnNURM BEST CITY OF 2011 AWARD BY THE PRIME MINISTER, INDIA
- E-GOVERNANCE GOLD AWARD 2011
- 'SARATHI', PCMC'S MOBILE APPLICATION OFFERING, RECEIVED 1ST PRIZE UNDER RAJIV GANDHI PRASHSAKIYA GATIMANATA ABHIYAAN BY GOM IN 2015
- URBAN TRANSPORT AWARD, 2010
- SWACHH SARVEKSHAN – PCMC RANKED 9TH CLEANEST CITY IN INDIA & 1ST IN MAHARASHTRA IN 2015
- SKOCH AWARD FOR CITIZENS SERVICE DELIVERY

1 RE-CONNECTING NEIGHBOURHOODS

2 RE-ENERGIZING CITY GOVERNANCE

3 RE-LINKING MOBILITY NETWORKS

4 RE-THINKNG ENVIRONMENTAL SYSTEMS

5 RE-INVESTING IN SOCIAL DEVELOPMENT

6 RE-VITALIZING LOCAL ECONOMIC DEVELOPMENT

Citizen's engagement

IDENTIFIED CONCERN AREAS

E-GOVERNANCE
- Improved online services
- Active participation in implementation

I.T. INFRASTRUCTURE
- Free public digital connectivity

SOCIAL AMENITIES
- New and better cultural and recreational venues
- City identity

TRANSPORT
- Facilities for walking & cycling
- Parking
- Accidents & road safety

WASTE
- Waste segregation
- Composting & Recycling
- Land fill site
- Disposal of bio-waste & e-waste

ENVIRONMENT
- River pollution
- Air pollution
- Traffic related noise pollution

WATER
- 24 x7 coverage
- Enforcement of Rain water harvesting

CITIZENS' KEY SECTOR PRIORITIES

- **15%** HEALTHY LIVING ENVIRONMENT
- **13%** AFFORDABLE LIVING
- **13%** EXCELLENT TRANSPORTATION AND MOBILITY
- **12%** CITIZEN PARTICIPATION
- **12%** PUBLIC UTILITIES
- **10%** STRONG IDENTITY AND CULTURE
- **9%** VIBRANT ECONOMY
- **9%** SMART GOVERNANCE
- **8%** OPEN SPACES AND RECREATIONAL FACILITIES

WINNER OF LOGO COMPETITION

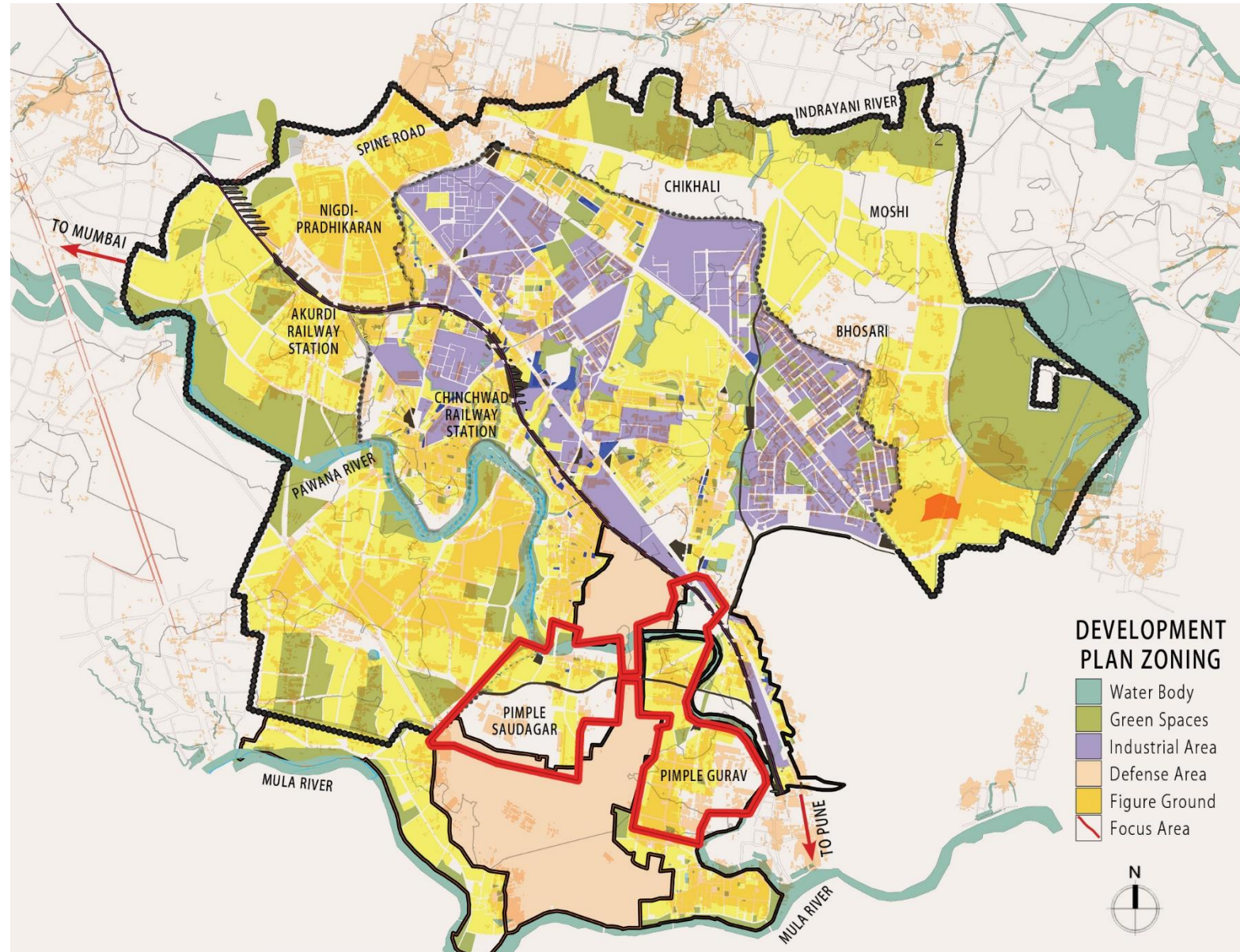
SMART CITY PIMPRI–CHINCHWAD

The butterfly is a symbol of transformation – from egg to larva to pupa to the butterfly. It reflects PCMC's own vision to reinvent itself moving beyond the provision of basic facilities. Soaring on the wings of technology (represented by the WiFi wings) and leveraging the existing basic infrastructure (represented by the left half of the leaf), PCMC aims to transform itself into an attractive, vibrant and live-able destination (represented by the green and vibrant right half of the leaf which also resembles the letter 'P' for Pimpri Chinchwad)

AWARENESS

ENVISIONING

PARTICIPATORY PLANNING

PRIORITIZATION OF AREA BASED DEVELOPMENT

- **20%** WAKAD – PIMPLE SAUDAGAR
- **14%** NIGDI-PRADHIKARAN
- **13%** SANGVI
- **13%** PIMPRI CHINCHWAD STATION AREA
- **13%** AKURDI RAILWAY STATION
- **8%** SPINE ROAD
- **7%** BHOSARI
- **6%** CHIKHALI
- **5%** MOSHI
- **1%** OTHER

PRIORITIZATION OF PAN CITY SOLUTIONS

- **28%** IMPROVED TRAFFIC MANAGEMENT
- **20%** SMART GOVERNANCE
- **19%** POLLUTION MONITORING
- **17%** SMART PARKING
- **16%** PUBLIC WI-FI HOTSPOTS

COMMUNICATION & COLLABORATION

LIST OF STAKEHOLDERS

Smart City

- CENTRAL INSTITUTE OF ROAD TRANSPORT
- PIMPRI CHINCHWAD NEW TOWN DEVELOPMENT AUTHORITY
- INSTITUTION OF ENGINEERS (INDIA)
- SENIOR CITIZENS ASSOCIATIONS
- JOURNALIST AND MEDIA
- MAHRATTA CHAMBER OF COMMERCE
- CREDAI

Pimpri Chinchwad Municipal Corporation

ABD : "RE-connecting Neighbourhoods"

SELECTED AREA

TOTAL AREA
1390 ACRE

DEVELOPMENT PLAN ZONING

- Water Body
- Green Spaces
- Industrial Area
- Defense Area
- Figure Ground
- Focus Area

Selected area : Pimple Saudagar & Pimple Gurav

1. **PLANNED AREAS**
2. **INDUSTRIAL ZONE**
3. **CONVERTED FARM PLOTS**
4. **GREENFIELD DEVELOPMENT**

City-wide replication strategy

TOTAL POPULATION **98828**

TOTAL HOUSEHOLDS **24645**

SEWERAGE NETWORK **100%**

WATER SUPPLY COVERAGE **100%**

SWM COLLECTION **100%**

NO. OF FLOODING SPOTS **0**

Pimpri Chinchwad Municipal Corporat

ABD Profile

ABD : "RE-connecting Neighbourhoods"

The south-western belt, namely, Pimple-Saudagar and Pimple-Gurav are the new & upcoming areas of the city, which have come up from tracts of farmland converting to residential use to service the real estate demand. This area has good connectivity & public transportation. However, to support the aspirations of the existing and new-coming population, this area needs to improve upon the aspects of mobility, convenience, walkability, cycling, active & passive recreational venues, urban design, and environmental sustainability.

Smart City

OLD MUMBAI PUNE HIGHWAY

PIMPLE GURAV

PIMPLE SAUDAGAR

NORTH

AREA-WIDE PROJECT

LOCATION SPECIFIC PROJECT

RETROFITTING AREA BOUNDARY

- RECONNECTING STREET
- RECONNECTING GREEN
- RECONNECTING PEOPLE
- RECONNECTING SYSTEM

01 STREET SCAPE REDESIGN

02 JUNCTION REDESIGN

03 ACCESSIBILITY IMROVEMENT AT BRTS STATION

04 REVAMPING OF BUS STOP

05 INTEGRATION OF KASARWADI METRO, BRTS AND SUBARBAN RAILWAY STATION

06 TOD AT BUS STATION

07 PARKING MANAGEMENT

08 SHIFTING OF OVERHEAD CABLE UNDERGOUND

09 MAJOR PARKS REDEVELOPMENT

10 MINOR PARKS AND GARDENS

11 OPEN SPACE UNDER BRIDGE OR FLYOVER BEAUTIFICATION

12 URBAN FORESTRY

13 HAWKER ZONE DEVELOPMENT

14 MUNICIPAL HOSPITAL RETROFIT AT SAUDAGAR

15 PUBLIC TOILETS

16 VEGETABLE MARKET RETROFITTING AND DEVELOPMENT

17 REFURBISHMENT OF SPORTS / EDUCATIONAL FACILITY

18 NALLAH DEVELOPMENT AT KASARWADI

19 SEWERAGE NETWORK IMPROVEMENT

20 1 MW SOLAR ROOFING AT KASARWADI STP

21 COMMUNITY LEVEL COMPOSTING

22 COMMUNITY LEVEL RAIN WATER HARVESTING

23 WASTE WATER RECYCLING FROM KASARWADI STP

ABD : Connected Streets

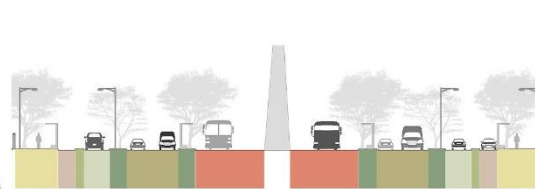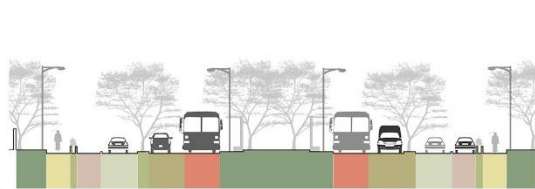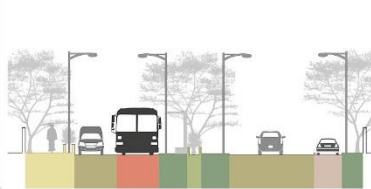| LESS THAN 7M WIDE ROAD | 7,10,12M WIDE ROAD | 18-20M WIDE ROAD | 30-45M WIDE ROAD |

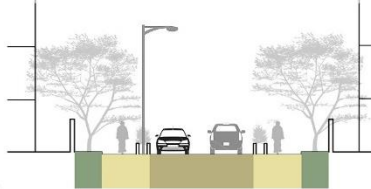**VIEWS**

EXISTING CONDITIONS

PROPOSED DESIGN

SECTION
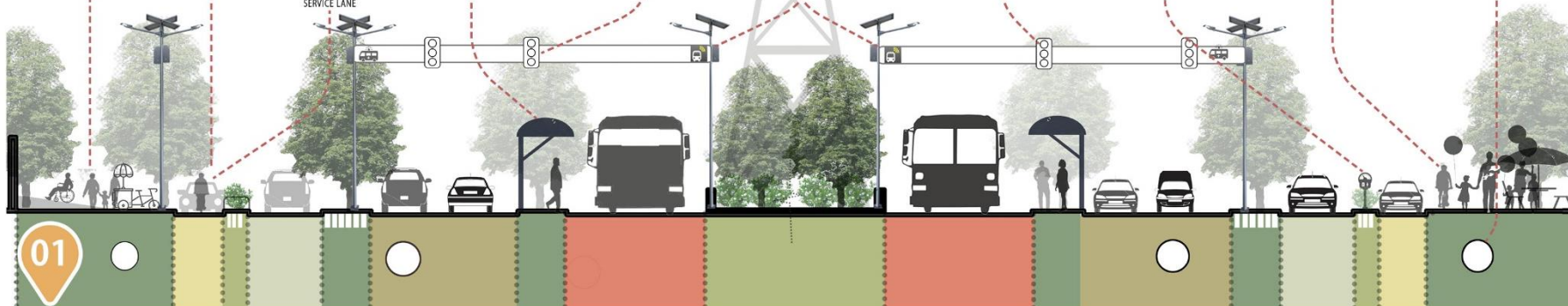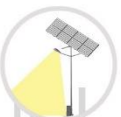
EXISTING CONDITIONS
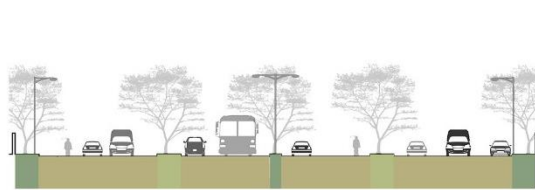
PROPOSED DESIGN

JUNCTION REDESIGN

As part of the street design, the junctions would be re-designed to improve legibility, add landmarks and visual value to the area.
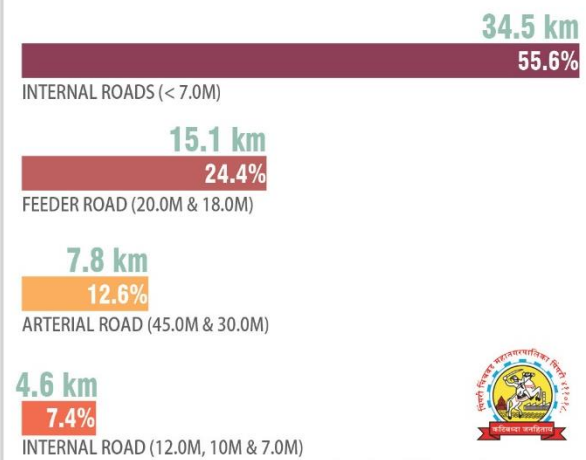
02

PEDESTRAIN FRIENDLY SURFACING

CYCLE TRACK

BICYCLE SHARING/ PARKING SERVICE LANE

SMART BUS INDICATOR

SMART SIGNALLING

SOLAR STREET LIGHTING

SIGNAL AND SIGNAGES

PAID STREET PARKING

STREET SIDE CAFES/ VENDORS

UNDERGROUND SERVICES

- BRTS ROUTE
- FOOTPATH
- CARRIAGE WAY
- SERVICE LANE
- TREE PIT
- CAR PARKING
- CYCLE TRACK

01

LENGTH OF ROADS

34.5 km
55.6%
INTERNAL ROADS (< 7.0M)

15.1 km
24.4%
FEEDER ROAD (20.0M & 18.0M)

7.8 km
12.6%
ARTERIAL ROAD (45.0M & 30.0M)

4.6 km
7.4%
INTERNAL ROAD (12.0M, 10M & 7.0M)

Pimpri Chinchwad Municipal Corporation

ABD : Connected Streets

INTEGRATION OF KASARWADI METRO, BRTS, & SUBURBAN RAILWAY STATION

As part of the street design, emphasis would also be laid on enhancing access to public transit nodes, so as to encourage use of public transit. The 3 modes – suburban rail station, the BRTS station and the future Metro station at Kasarvadi are proposed to be integrated so as to facilitate smooth interchange between them. Organization of para-transit & private vehicles accessing this interchange would also be undertaken.

KASARWADI RAILWAY STATION

BHOSARI METRO STATION

BRTS BUS STATION

BRTS

05

REVAMPING OF BUS STOPS

Similar focus would be given to the BRTS corridor and stations, whereby, the Bus stops would be revamped to make them more attractive and user-friendly.

Smart City

04

TOD OF BUS STATION , PIMPLE GURAV

The Pimple Gurav bus station is located in an areas which is slowly become a vibrant neighborhood node. Surrounded by the Dinosaur Park and a growing retail presence, this node is proposed to be developed as an attractive activity hub for the area. This plot would be developed as an integrated TOD hub, with well-organized BRTS and local bus stands, as well as a shopping facilities and community activities.

06
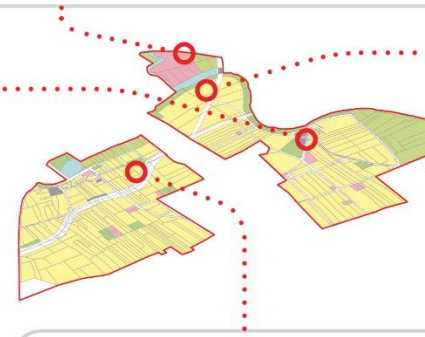
ACCESSIBILITY IMPROVEMENT AT BRTS STATION

The pedestrian access to the centrally placed BRTS stations would be redesigned and improved, such that there is smooth, unhindered and safe access to the bus stops.

BRTS

03
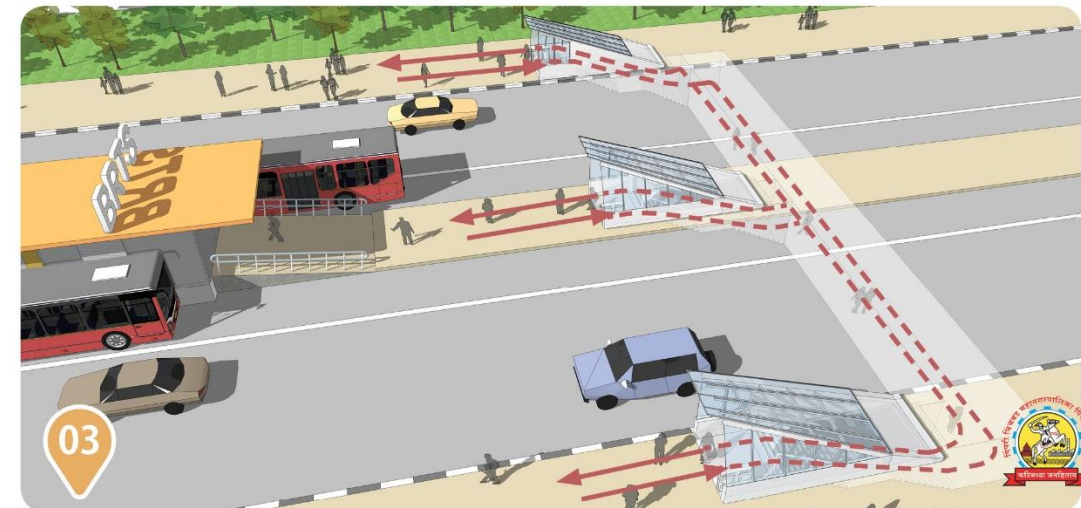
ABD : Connected Greens

LINEAR PARK

The Nashik Phata Road is a key transportation corridor for this area, along which the BRTS corridor plys. The two green strips - 600 metre long and approximately 30 metre wide – immediately abutting this Road, are proposed to be developed as linear city parks, with several attractive fitness, leisure, educational, cultural and entertainment activities planned within it.

WATERFRONT PARK

The 3 acre reservation along Kate Pimple road, across the river from Pimple Saudagar is proposed to be developed as a waterfront park, with a lushly planted garden and offering information about the City's environmental systems.
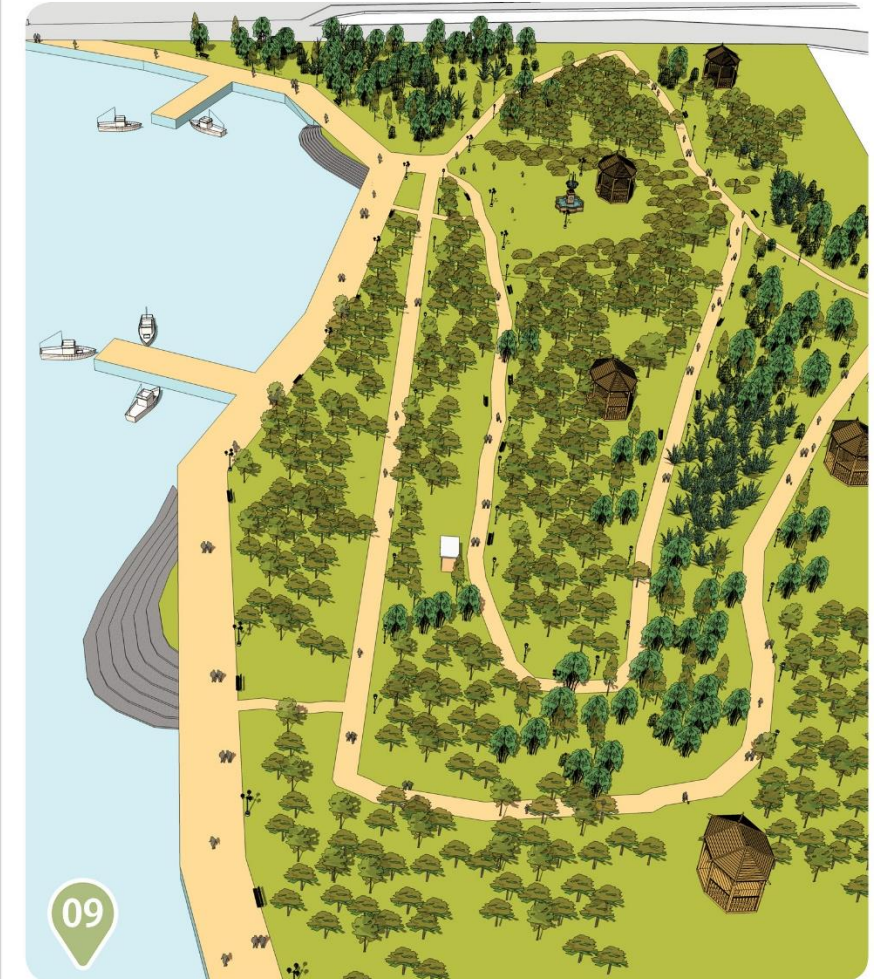
MAJOR AND MINOR PARKS

The major and minor garden and playground reservations in the area are proposed to be redesigned so as to add more activities and improve usage. This is proposed to be done through provision of additional facilities for all age groups, improving lighting, security, toilets, paving, landscaping & planting.
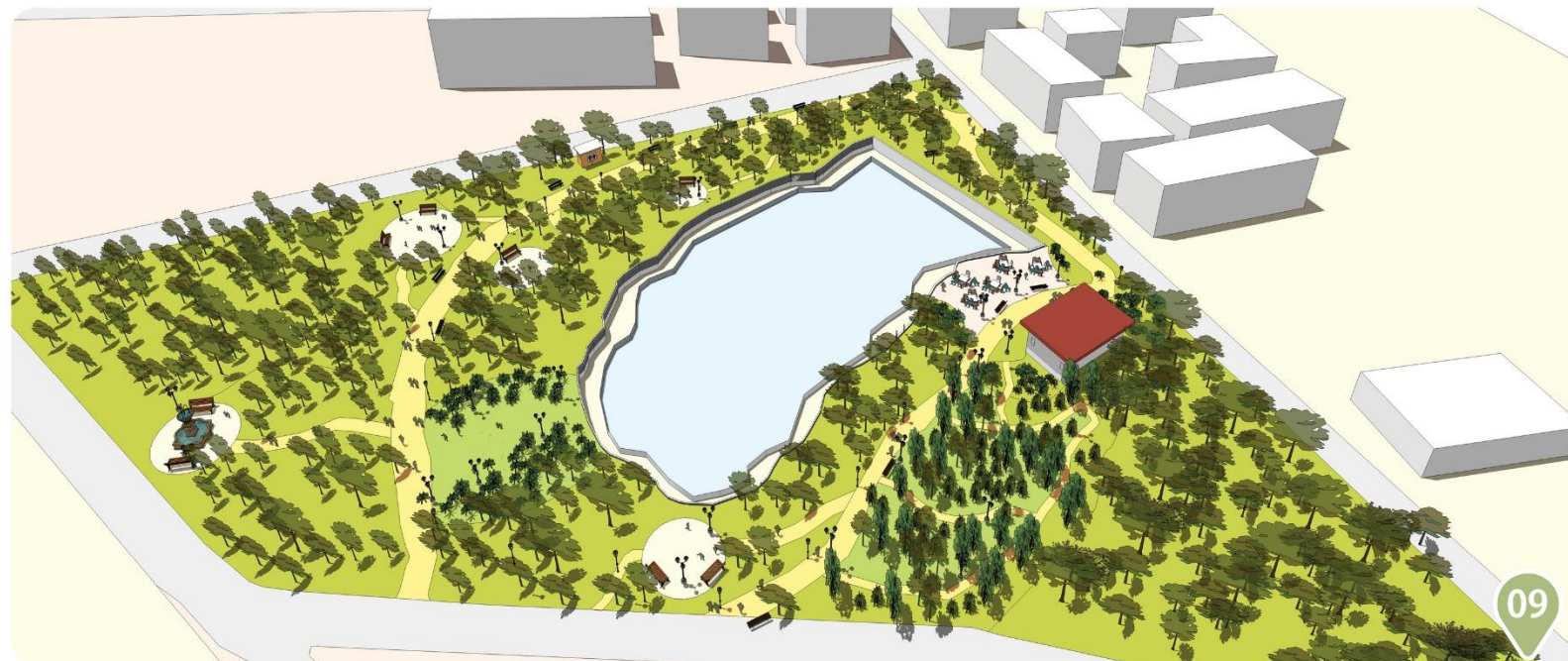
ABD : Connected Systems

NALLAH DEVELOPMENT AT KASARWADI

The Kasarwadi Nallah, currently an untrained natural stream, would be cleaned up, soft-lined with wetland vegetation, and developed as a linear recreational green.

WATER TREATMENT PLANT

18

COMMUNITY LEVEL COMPOSTING

While waste management at plot level is currently being taken care of by the municipal services, attempts will be made to put in place community composting programmes, wherein organic waste from households is diverted in the parks and gardens for community composting. This will double up an environmental education opportunity for the children and residents, as well as provide compost for local landscaping in the parks and gardens.

Misting system

Filtered air released

Delivery from community, mixed and shredded

Cover layer

Yard trimming food scraps

Perforated Pipe

Bio filter

Transfer to curing

Screening and Blending

Finished products delivered to community
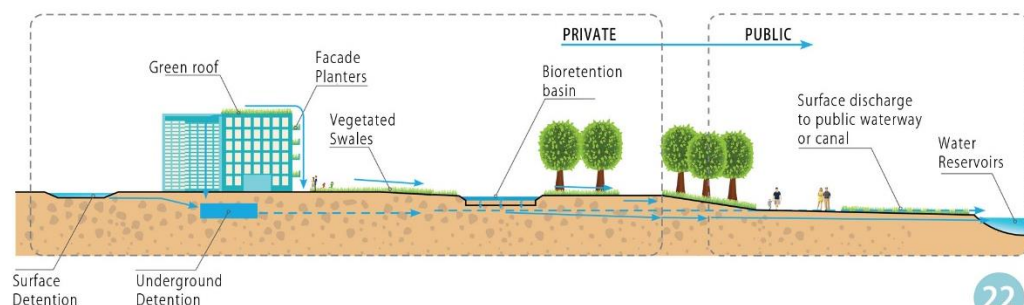
21

COMMUNITY LEVEL RAIN WATER HARVESTING

While plot level rain water harvesting is a function of the development control within the city, the interventions in this area would focus on community level rain water harvesting where run-off from roads and public areas would be diverted to parks and gardens where it will be diverted into a water catchment for ground water recharge. This feature will double us as a landscaped water body as well as provide water for irrigation and landscaping.

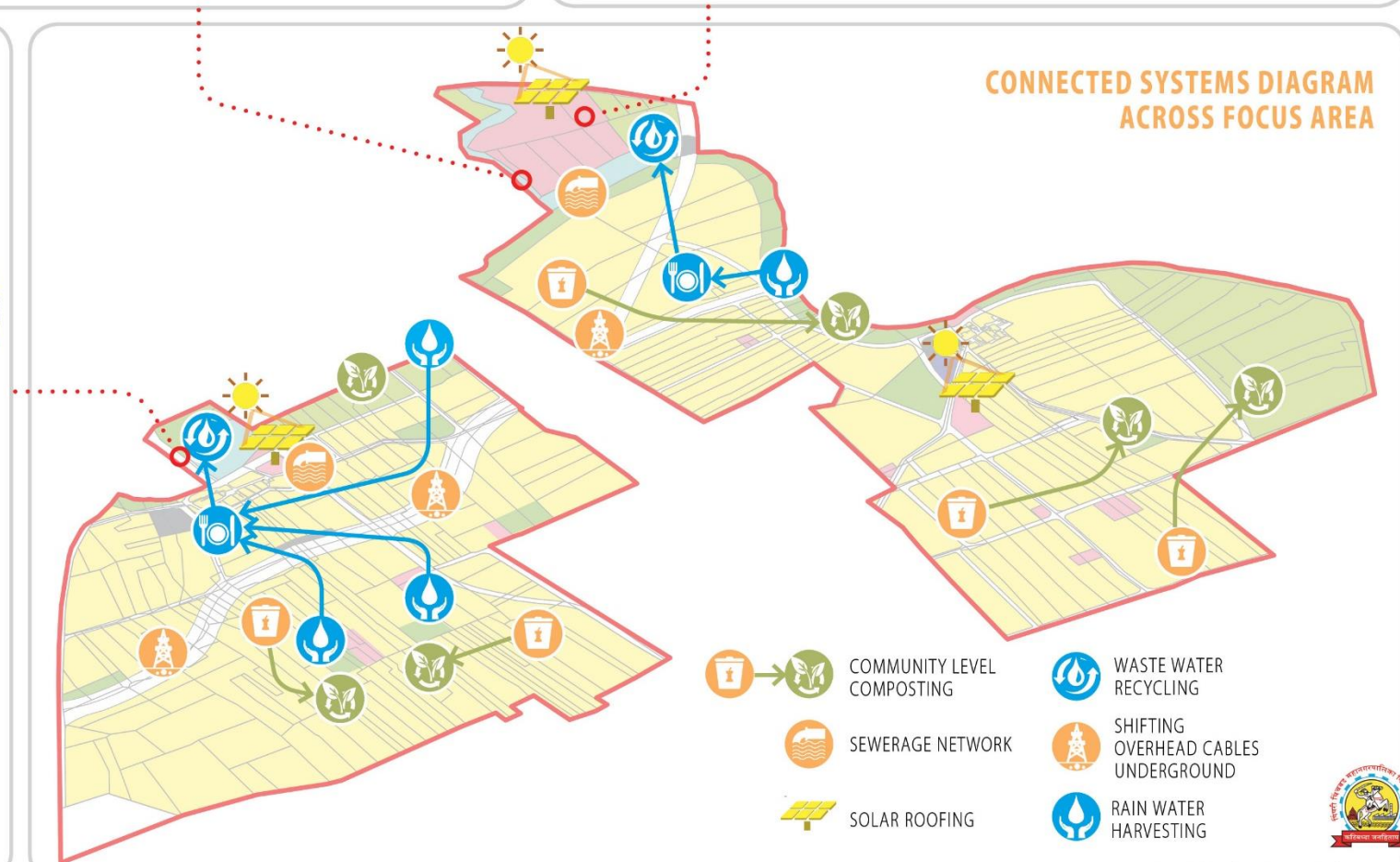Run-off from roads and public areas would be diverted to parks and gardens

From parks and gardens where it will be diverted into a water catchment for ground water recharge

Finally, runoff is slowed down and cleaner water would flow into our reservoirs.

PRIVATE | PUBLIC

Green roof
Facade Planters
Vegetated Swales
Bioretention basin
Surface discharge to public waterway or canal
Water Reservoirs
Surface Detention
Underground Detention

22

CONNECTED SYSTEMS DIAGRAM ACROSS FOCUS AREA

COMMUNITY LEVEL COMPOSTING

SEWERAGE NETWORK

SOLAR ROOFING

WASTE WATER RECYCLING

SHIFTING OVERHEAD CABLES UNDERGROUND

RAIN WATER HARVESTING

ABD : Connected People

The people focus within the ABD project is two-pronged. Firstly, the social amenities would be revitalized in order to improve usage and access to these facilities. Secondly, the various citizens groups and RWAs would be continually engaged in the implementation of various project in the ABD. Citizens' participation would form the backbone supporting the "re-connecting neighborhoods" efforts.
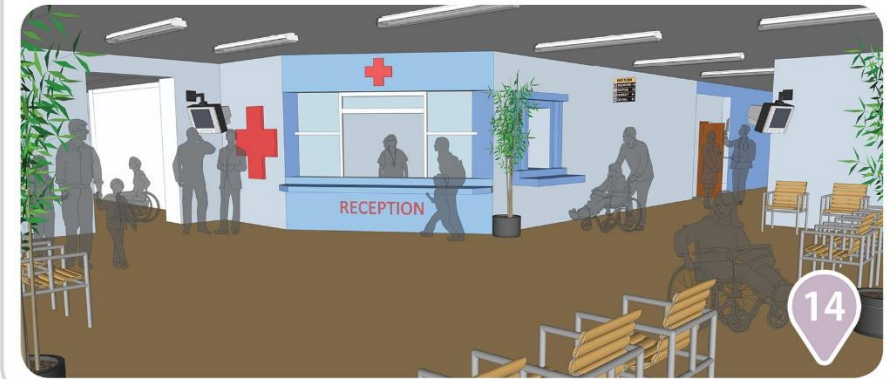
REFURBISHMENT OF SPORTS / EDUCATIONAL FACILITIES

The reservation near Kate Puram chowk would be developed as a state-of-the-art sporting and active recreational facility.

MUNCIPAL HOSPITAL RETROFIT AT SAUDAGAR

The Municipal Hospital would be retrofitted to improve the quality of services.

VEGETABLE MARKET RETROFITING AND DEVELOPMENT

The Vegetable market would be redeveloped to improve the quality of services.

PUBLIC TOILETS

In convergence with the Swachh Bharat Mission several public toilets, along key activity nodes in the areas, would be developed.

HAWKER ZONE DEVELOPMENT

The informal uses along the commercial streets in the area would be organized and regularized into vibrant hawking zones.

Pan City Solutions : Packages

SMART MUNICIPAL CORPORATION

INTELLIGENCE (LIVE DATA CAPTURING)

WATER SUPPLY — Smart water metering, water quality monitoring, hydraulic & energy modelling

SEWERAGE — SCADA upgrade and Dynamic energy modelling

SWM — Vehicle tracking, transfer stations with weighbridges

TRAFFIC MANAGEMENT — Smart signals for auto-synchronization

STREET LIGHTING — SCADA-linked LED street lighting with dimmers

ESTABLISHMENT LICENSING — RFID-enabled smart licenses

ENVIRONMENTAL MONITORING — Air quality, noise, decibel and water (lakes and rivers) quality monitoring systems

CCTV SURVEILLANCE — CCTV network in public places

SOLAR ROOFING — Solar roofing & net metering at all PCMC buildings

COMMUNICATION

OPTICAL FIBRE CABLING — Linking all PCMC offices and key instrumentation with OFC

COMMAND & CONTROL CENTRE — Control room with video wall, communications and disaster response capability

TRAFFIC E-CHALLAN — Number plate recognition, violator identification and e-challan generation

GIS ENABLED ERP — ERP with Dashboard integration, GIS platform and survey

SERVICE LEVEL BENCHMARKING — Performance MIS for water, sewerage, SWM and SWD

URBAN HEART BENCHMARKING — MIS for public health indicators

VIDEO ANALYTICS — Analytics for incident detection

RESPONSE

GOALS

2 RE-ENERGIZING CITY GOVERNANCE

3 RE-LINKING MOBILITY NETWORKS

4 RE-THINKING ENVIRONMENTAL SYSTEMS

5 RE-INVESTING IN SOCIAL DEVELOPMENT

6 RE-VITALIZING LOCAL ECONOMIC DEVELOPMENT

SMART CITIZENS

RECREATIONAL AVENUES — Online event management at all PCMC cultural centers, etc.

OUTDOOR

SMART KIOSKS — Citizen information, municipal payment, smart card re-charge and citizen participation

UNIFIED SMART CARD — One card for all transit, health and municipal purposes

PUBLIC E-TOILETS — Stand-alone units with automatic cleaning and incident alert capability

PUBLIC WIFI HOTSPOTS — Free limited usage public WiFi

TRANSIT

BRTS — Vehicle tracking, PIS along with app for bus ETA

UNIQUE SMART ADDRESS — Generation of unique number & geo-tag for all property

PARKING — Smart on-street parking meters, smart off-street MLCP

BICYCLE SHARING — Bicycle rental hubs with electronic payment feature

ONE TRANSIT APP — Unified app for all train, bus, parking & bicycle information

ECONOMIC DEVELOPMENT

SKILL DEVELOPMENT CENTRE — Upgrade of ITIs to expand offerings

MUNICIPAL E-CLASSROOMS — Projectors, e-tablets and online educational curriculum

START-UP INCUBATION CENTRE — Single Window Investor Desk Incubation Centers at old LBT building and Auto-Cluster Building

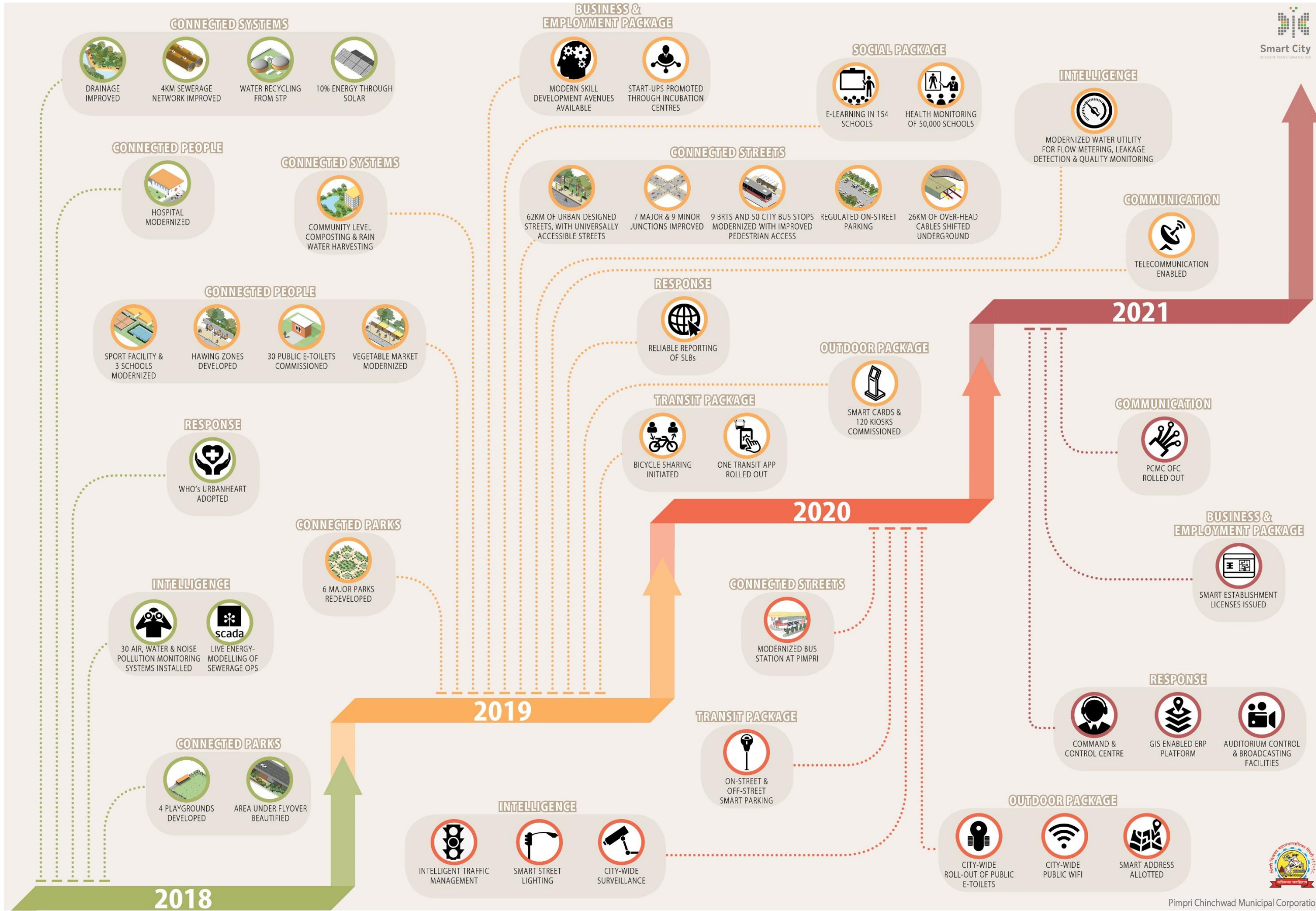**ONLINE PATIENT SERVICES** — Expanding patient medical e-record to all PCMC hospitals

SCHOOL HEALTH MONITORING — MIS on health-related aspects of school students

SOCIAL DEVELOPEMENT

CYBER SECURITY — IEC to promote awareness

SCP Implementation Plan

Smart City

CONNECTED SYSTEMS
- DRAINAGE IMPROVED
- 4KM SEWERAGE NETWORK IMPROVED
- WATER RECYCLING FROM STP
- 10% ENERGY THROUGH SOLAR

BUSINESS & EMPLOYMENT PACKAGE
- MODERN SKILL DEVELOPMENT AVENUES AVAILABLE
- START-UPS PROMOTED THROUGH INCUBATION CENTRES

SOCIAL PACKAGE
- E-LEARNING IN 154 SCHOOLS
- HEALTH MONITORING OF 50,000 SCHOOLS

INTELLIGENCE
- MODERNIZED WATER UTILITY FOR FLOW METERING, LEAKAGE DETECTION & QUALITY MONITORING

CONNECTED PEOPLE
- HOSPITAL MODERNIZED

CONNECTED SYSTEMS
- COMMUNITY LEVEL COMPOSTING & RAIN WATER HARVESTING

CONNECTED STREETS
- 62KM OF URBAN DESIGNED STREETS, WITH UNIVERSALLY ACCESSIBLE STREETS
- 7 MAJOR & 9 MINOR JUNCTIONS IMPROVED
- 9 BRTS AND 50 CITY BUS STOPS MODERNIZED WITH IMPROVED PEDESTRIAN ACCESS
- REGULATED ON-STREET PARKING
- 26KM OF OVER-HEAD CABLES SHIFTED UNDERGROUND

COMMUNICATION
- TELECOMMUNICATION ENABLED

CONNECTED PEOPLE
- SPORT FACILITY & 3 SCHOOLS MODERNIZED
- HAWING ZONES DEVELOPED
- 30 PUBLIC E-TOILETS COMMISSIONED
- VEGETABLE MARKET MODERNIZED

RESPONSE
- RELIABLE REPORTING OF SLBs

OUTDOOR PACKAGE
- SMART CARDS & 120 KIOSKS COMMISSIONED

RESPONSE
- WHO's URBANHEART ADOPTED

TRANSIT PACKAGE
- BICYCLE SHARING INITIATED
- ONE TRANSIT APP ROLLED OUT

COMMUNICATION
- PCMC OFC ROLLED OUT

2021

CONNECTED PARKS
- 6 MAJOR PARKS REDEVELOPED

2020

BUSINESS & EMPLOYMENT PACKAGE
- SMART ESTABLISHMENT LICENSES ISSUED

INTELLIGENCE
- 30 AIR, WATER & NOISE POLLUTION MONITORING SYSTEMS INSTALLED
- scada LIVE ENERGY-MODELLING OF SEWERAGE OPS

CONNECTED STREETS
- MODERNIZED BUS STATION AT PIMPRI

RESPONSE
- COMMAND & CONTROL CENTRE
- GIS ENABLED ERP PLATFORM
- AUDITORIUM CONTROL & BROADCASTING FACILITIES

2019

TRANSIT PACKAGE
- ON-STREET & OFF-STREET SMART PARKING

CONNECTED PARKS
- 4 PLAYGROUNDS DEVELOPED
- AREA UNDER FLYOVER BEAUTIFIED

INTELLIGENCE
- INTELLIGENT TRAFFIC MANAGEMENT
- SMART STREET LIGHTING
- CITY-WIDE SURVEILLANCE

OUTDOOR PACKAGE
- CITY-WIDE ROLL-OUT OF PUBLIC E-TOILETS
- CITY-WIDE PUBLIC WIFI
- SMART ADDRESS ALLOTTED

2018

Pimpri Chinchwad Municipal Corporation

Structure of SPV

SMART CITY SPV FOR PCMC

State Government has passed G.R. No. SmartC-2016/CR1503/UD-23 issued on 9th January, 2017 approved the formation of the Smart City SPV for PCMC with 15 directors and a 50:50 share-holding structure between State and PCMC

BOARD OF DIRECTORS

CHAIRMAN
MR. NITIN KAREER
PRINCIPAL SECRETARY
(UDD, GOVERNMENT OF MAHARASHTRA)

A PCMC

B GOVERNMENT OF MAHARASHTRA

C GOVERNMENT OF INDIA

D INDEPENDENT DIRECTORS

E FULL-TIME CEO

F EXECUTIVE COMMITTEE

G ADVISORY COMMITTEE

A
MAYOR

DEPUTY MAYOR

CHAIRMAN OF STANDING COMMITTEE

LEADER OF HOUSE

LEADER OF OPPOSITION

2 CORPORATORS

COMMISSIONER, PCMC

B
DIVISIONAL COMMISSIONER, PUNE

POLICE COMMISSIONER, PUNE

GM OF PMPML (BUS SERVICE

C
NOMINEE

D
2 NOS. FROM MINISTRY OF CORPORATE AFFAIRS' DATABASE

E assisted by
CHIEF FINANCIAL OFFICER

COMPANY SECRETARY

CHIEF INFORMATION & OPERATIONS OFFICER

PUBLIC RELATIONS OFFICER

CHIEF ENGINEER

CHIEF PLANNER

F
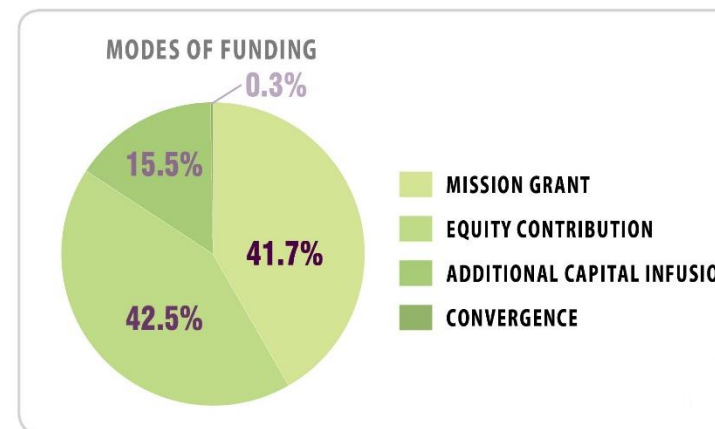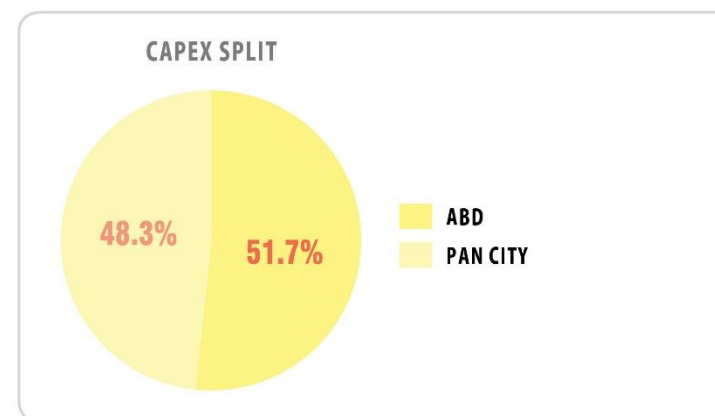CHAIRMAN

CEO

CFO

G
EXPERTS

NGOs

ACADEMICIANS

etc.

Pimpri Chinchwad Municipal Corporation

SPV Finance

PROJECT	TOTAL COST	CAPEX PHASING					CONVERGENCE	
		2018-19	2019-20	2020-21	2021-22	2022-23	SCHEME	AMT.
A1 Connected Streets	361.6	178.3	178.3	5.0	0.0	0.0	-	0.0
A2 Connected Parks	92.8	66.4	26.4	0.0	0.0	0.0	-	0.0
A3 Connected Systems	58.0	48.8	9.3	0.0	0.0	0.0	-	0.0
A4 Connected People	53.0	27.5	25.5	0.0	0.0	0.0	-	0.0
TOTAL ABD CAPEX	565.4	321.0	239.5	5.0	0.0	0.0		0.0
P1 Intelligence (Live Data Capture)	194.1	82.4	64.4	47.3	0.0	0.0	-	0.0
P2 Communication	40.0	7.5	17.5	7.5	7.5	0.0	-	0.0
P3 Response	148.0	29.3	32.9	42.9	42.9	0.0	-	0.0
P4 Outdoor Package	54.0	20.0	20.0	14.0	0.0	0.0	-	3.2
P5 Transit Package	67.0	24.2	26.2	16.7	0.0	0.0	-	0.0
P6 Business & Employment Package	12.0	5.0	5.7	0.7	0.7	0.0	-	0.0
P7 Social Package	14.0	5.0	9.0	0.0	0.0	0.0	-	0.0
TOTAL PAN-CITY CAPEX	529.1	173.3	175.6	129.1	51.1	0.0		3.2
Consulting	54.7	21.9	13.7	8.2	5.5	5.5		0.0
GRAND TOTAL	1149.2	516.1	428.8	142.3	56.6	5.5		3.2

CASH FLOW STATEMENT - SPV	2018-19	2019-20	2020-21	2021-22	2022-23	Total
INFLOWS						
Mission Grant - GoI	196.0	98.0	98.0	98.0	0.0	490.0
Equity contribution - GoM	75.0	75.0	50.0	50.0	0.0	250.0
Equity contribution - PCMC	75.0	75.0	50.0	50.0	0.0	250.0
Additional Capital infusion - PCMC	91.1	91.1	0.0	0.0	0.0	182.2
Soft Loan - PCMC	84.0	91.8	0.0	0.0	0.0	175.8
Convergence - AMRUT	0.0	3.2	0.0	0.0	0.0	3.2
Total	521.1	434.1	198.0	198.0	0.0	1351.2
OUTFLOWS						
Capital Expenditure	494.3	415.1	134.1	51.1	0.0	1094.5
Establishment Expenditure	2.0	2.1	2.1	2.1	2.1	10.5
Administrative Expenditure	3.0	3.2	3.2	3.2	3.2	15.7
Consultancy fees	21.9	13.7	8.2	5.5	5.5	54.7
Loan repayment	0.0	0.0	50.4	125.4	0.0	175.8
Total	521.1	434.1	198.0	187.2	10.8	1351.2
CLOSING CASH BALANCE	0.0	0.0	0.0	10.8	0.0	0.0
NET CASH FLOW	0.0	0.0	0.0	10.8	-10.8	0.0

CAPEX SPLIT — ABD 51.7%, PAN CITY 48.3%

MODES OF FUNDING — MISSION GRANT 41.7%, EQUITY CONTRIBUTION 42.5%, ADDITIONAL CAPITAL INFUSION 15.5%, CONVERGENCE 0.3%

ABD Capex

PROJECT	TOTAL COST	CAPEX PHASING					CONVERGENCE	
		2018-19	2019-20	2020-21	2021-22	2022-23	SCHEME	AMT.
A1 Connected Streets	**361.6**	**178.3**	**178.3**	**5.0**	**0.0**	**0.0**	**-**	**0.0**
- Street-scaping	265.3	132.7	132.7	0.0	0.0	0.0	-	0.0
- Junction Improvement	5.3	2.7	2.7	0.0	0.0	0.0	-	0.0
Accessibility Improvements to BRTS stations	10.0	5.0	5.0	0.0	0.0	0.0	-	0.0
BRTS stops and Bus stops Improvement	20.0	10.0	10.0	0.0	0.0	0.0	-	0.0
Multi-modal integration at Kasarvadi Railway, BRTS and Mero Stations	30.0	15.0	15.0	0.0	0.0	0.0	-	0.0
TOD at Pimple Gurav Bus Station	15.0	5.0	5.0	5.0	0.0	0.0	-	0.0
- Parking management	1.0	0.5	0.5	0.0	0.0	0.0	-	0.0
- Shifting electric cables underground	15.0	7.5	7.5	0.0	0.0	0.0	-	0.0
A2 Connected Parks	**92.8**	**66.4**	**26.4**	**0.0**	**0.0**	**0.0**	**-**	**0.0**
- Major Parks Redevelopment	52.8	26.4	26.4	0.0	0.0	0.0	-	0.0
- Playground Improvement	25.0	25.0	0.0	0.0	0.0	0.0	-	0.0
- Urban forestry	10.0	10.0	0.0	0.0	0.0	0.0	-	0.0
- Beautification of space under flyover	5.0	5.0	0.0	0.0	0.0	0.0		0.0
A3 Connected Systems	**58.0**	**48.8**	**9.3**	**0.0**	**0.0**	**0.0**	**-**	**0.0**
- Storm water drainage development	10.0	10.0	0.0	0.0	0.0	0.0		0.0
- Sewerage network improvement	10.0	10.0	0.0	0.0	0.0	0.0	-	0.0
- Recycling of waste water	5.0	5.0	0.0	0.0	0.0	0.0	-	0.0
- Solar power generation	15.0	15.0	0.0	0.0	0.0	0.0	-	0.0
- Community level composting	0.5	0.0	0.5	0.0	0.0	0.0	-	0.0
- Community level rainwater harvesting	17.5	8.8	8.8	0.0	0.0	0.0	-	0.0
A4 Connected People	**53.0**	**27.5**	**25.5**	**0.0**	**0.0**	**0.0**	**-**	**0.0**
- Refurbishment of sports and educational facilities	25.0	12.5	12.5	0.0	0.0	0.0		0.0
- Hawking zone development	10.0	5.0	5.0	0.0	0.0	0.0	-	0.0
- Retrofitting municipal hospital	10.0	10.0	0.0	0.0	0.0	0.0		0.0
- Installation of public e-toilets (30 no's)	3.0	0.0	3.0	0.0	0.0	0.0	-	0.0
- Development of vegetable market	5.0	0.0	5.0	0.0	0.0	0.0		0.0
TOTAL ABD CAPEX	**565.4**	**321.0**	**239.5**	**5.0**	**0.0**	**0.0**		**0.0**

Pan City Capex

PROJECT	TOTAL COST	CAPEX PHASING					CONVERGENCE	
		2018-19	2019-20	2020-21	2021-22	2022-23	SCHEME	AMT.
P1 Intelligence (Live Data Capture)	**194.1**	**82.4**	**64.4**	**47.3**	**0.0**	**0.0**	**-**	**0.0**
- Smart Water Supply	34.1	17.1	17.1	0.0	0.0	0.0	-	0.0
- Smart Sewerage	3.0	3.0	0.0	0.0	0.0	0.0	-	0.0
- Smart Traffic Management	42.0	14.0	14.0	14.0	0.0	0.0	-	0.0
- Smart Street-lighting	50.0	16.7	16.7	16.7	0.0	0.0	-	0.0
- Environmental Monitoring	15.0	15.0	0.0	0.0	0.0	0.0	-	0.0
- City Surveillance	50.0	16.7	16.7	16.7	0.0	0.0	-	0.0
P2 Communication	**40.0**	**7.5**	**17.5**	**7.5**	**7.5**	**0.0**	**-**	**0.0**
- Optical Fiber Cabling	30.0	7.5	7.5	7.5	7.5	0.0	-	0.0
- Telecommunication systems	10.0	0.0	10.0	0.0	0.0	0.0	-	0.0
P3 Response	**148.0**	**29.3**	**32.9**	**42.9**	**42.9**	**0.0**		**0.0**
- Command & Control Center	25.0	0.0	0.0	12.5	12.5	0.0	-	0.0
- GIS-enabled Enterprise Resource Planning	95.0	23.8	23.8	23.8	23.8	0.0	-	0.0
- Municipal Service Level Benchmarking	5.0	2.5	2.5	0.0	0.0	0.0	-	0.0
- UrbanHEART Benchmarking	3.0	3.0	0.0	0.0	0.0	0.0	-	0.0
-Auditorium Control and Broadcasting Facility	20.0	0.0	6.7	6.7	6.7	0.0	-	0.0
P4 Outdoor Package	**54.0**	**20.0**	**20.0**	**14.0**	**0.0**	**0.0**	**P4 -**	**3.2**
- Smart Kiosks	12.0	6.0	6.0	0.0	0.0	0.0	-	0.0
- Public E-toilets	10.0	3.3	3.3	3.3	0.0	0.0	SBM	3.2
- Public WiFi Hotspots	27.0	9.0	9.0	9.0	0.0	0.0	-	0.0
- Unique Smart Addressing	5.0	1.7	1.7	1.7	0.0	0.0	-	0.0
P5 Transit Package	**67.0**	**24.2**	**26.2**	**16.7**	**0.0**	**0.0**	**-**	**0.0**
- Smart Parking including multi level car parks	50.0	16.7	16.7	16.7	0.0	0.0	-	0.0
- Bicycle Sharing	15.0	7.5	7.5	0.0	0.0	0.0	-	0.0
- One Transit App	2.0	0.0	2.0	0.0	0.0	0.0	-	0.0
P6 Business & Employment Package	**12.0**	**5.0**	**5.7**	**0.7**	**0.7**	**0.0**	**P6 -**	**0.0**
- Skill Development Centers	5.0	2.5	2.5	0.0	0.0	0.0	-	0.0
- Start-Up Incubation Centers	5.0	2.5	2.5	0.0	0.0	0.0	-	0.0
- Establishment Licensing	2.0	0.0	0.7	0.7	0.7	0.0	-	0.0
P7 Social Package	**14.0**	**5.0**	**9.0**	**0.0**	**0.0**	**0.0**	**P7 -**	**0.0**
- Municipal E-Classrooms	4.0	0.0	4.0	0.0	0.0	0.0	-	0.0
- School Health Monitoring	10.0	5.0	5.0	0.0	0.0	0.0	-	0.0
TOTAL PAN-CITY CAPEX	**529.1**	**173.3**	**175.6**	**129.1**	**51.1**	**0.0**		**3.2**

Thank You !