

# “Smart Cities in India: Reality in the Making”

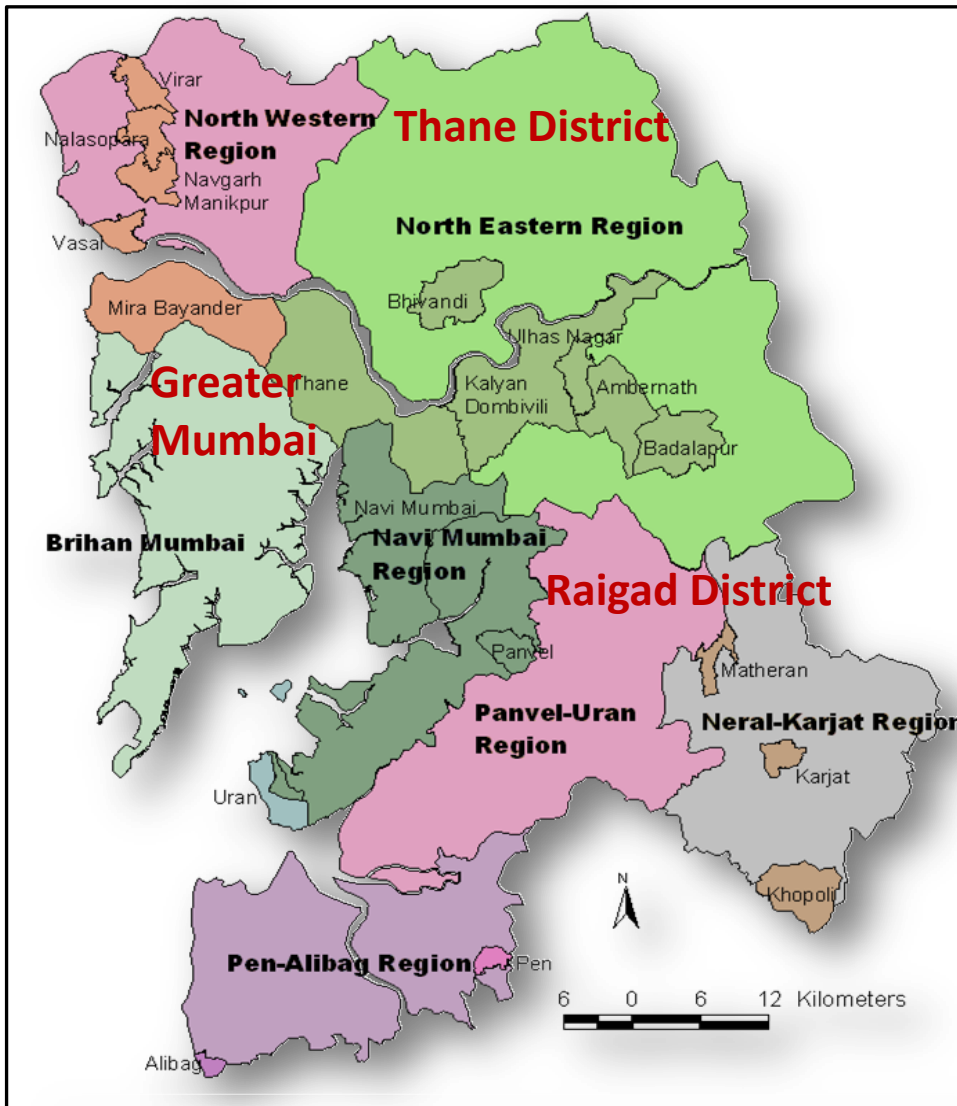
## Paving the way to Sustainable Growth

### Case study: Smart BKC



**Shri Sanjay Sethi, IAS**

**Additional Metropolitan Commissioner,  
MMRDA**



## MMR

- ❑ **Spread Over 4 Districts** : Mumbai, Mumbai Suburban, Parts of Thane and Raigad
- ❑ **Area** : 4,355 sq.kms
- ❑ **About 1000 Villages**
- ❑ **Population:**
  - 22.8 Million (2011) - 94% urban
  - 34 Million (2031 projected)
- ❑ **Employment:**
  - 7.6 Million (2005)
  - 15 Million (2031 projected)
- ❑ **Urban Local Bodies – 17**

# Three Dimension to Smart BKC



## ICT Initiatives

- Municipal Wifi,
- Smart Parking,
- Video Analytics and Citizen Apps
- Smart Building Installations
- Smart Kiosk Information Zone

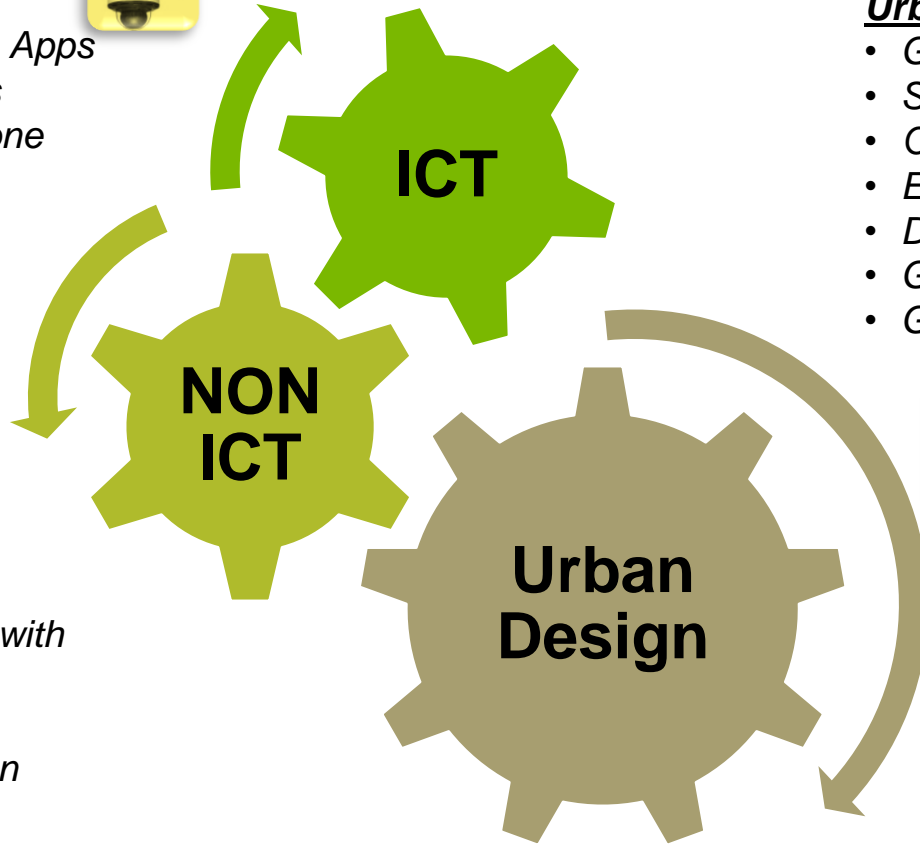
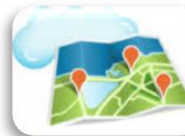
## Urban Design

- Green Buildings
- Smart Street Furniture
- Online Building Plan Approval
- Ease of Doing Business
- Digital MMR
- GIS & GPS enabled Services
- Green Parks & Gardens

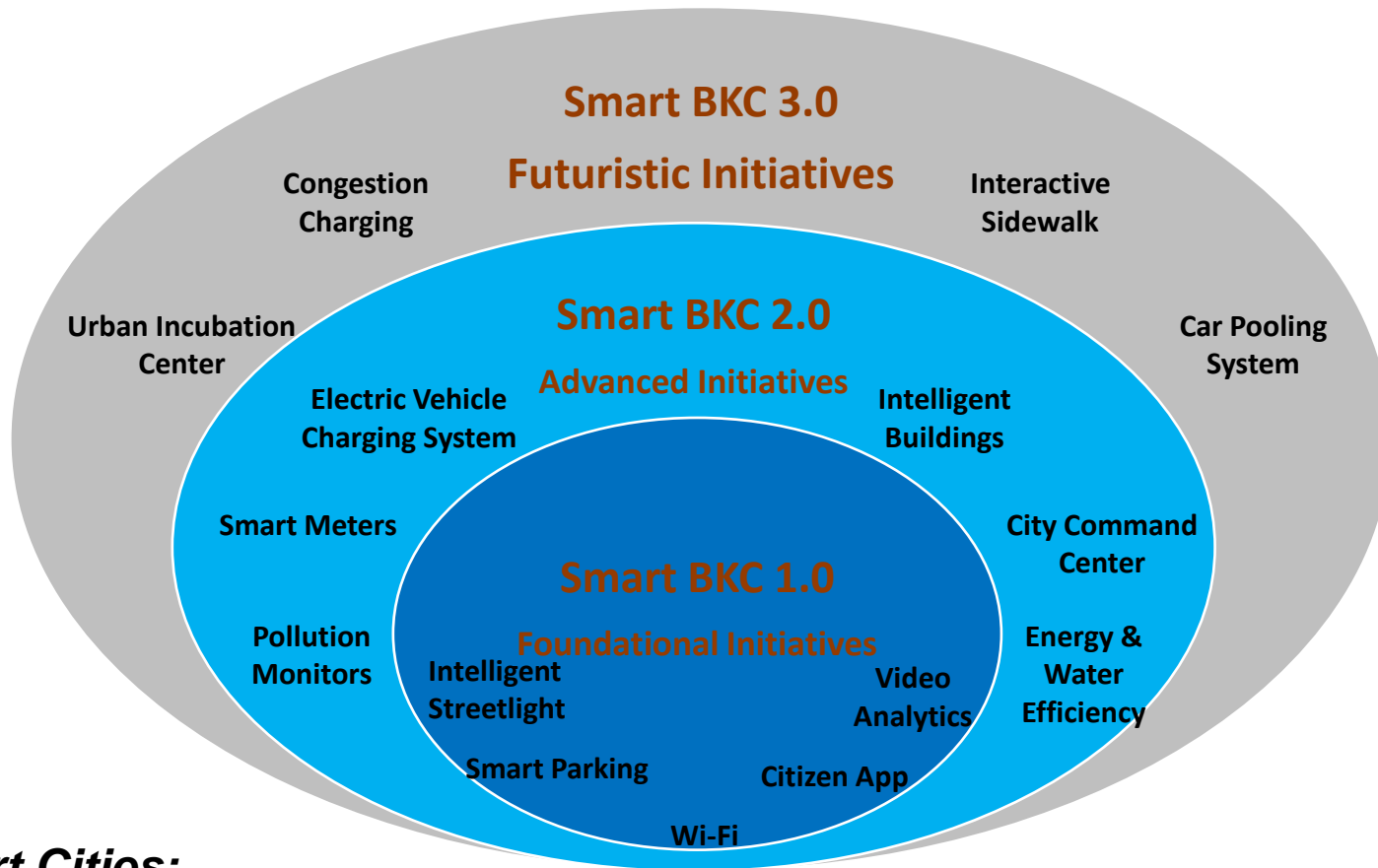


## Non ICT initiatives

- E-Busses- Hybrid & Pure Electric
- DHI- Viability Gap Funding
- Solar powered Streetlights with Smart Grid,
- Clean Mithi River
- Low Carbon/ Green & Clean Fuel Zone



# Brownfield Smart City Project- Smart BKC



**Smart Cities:**

***Equitable, Sustainable, Inclusive Collaborative and Participative***

# Smart BKC - Citizen, Business and Environment friendly

## Citizen Centricity

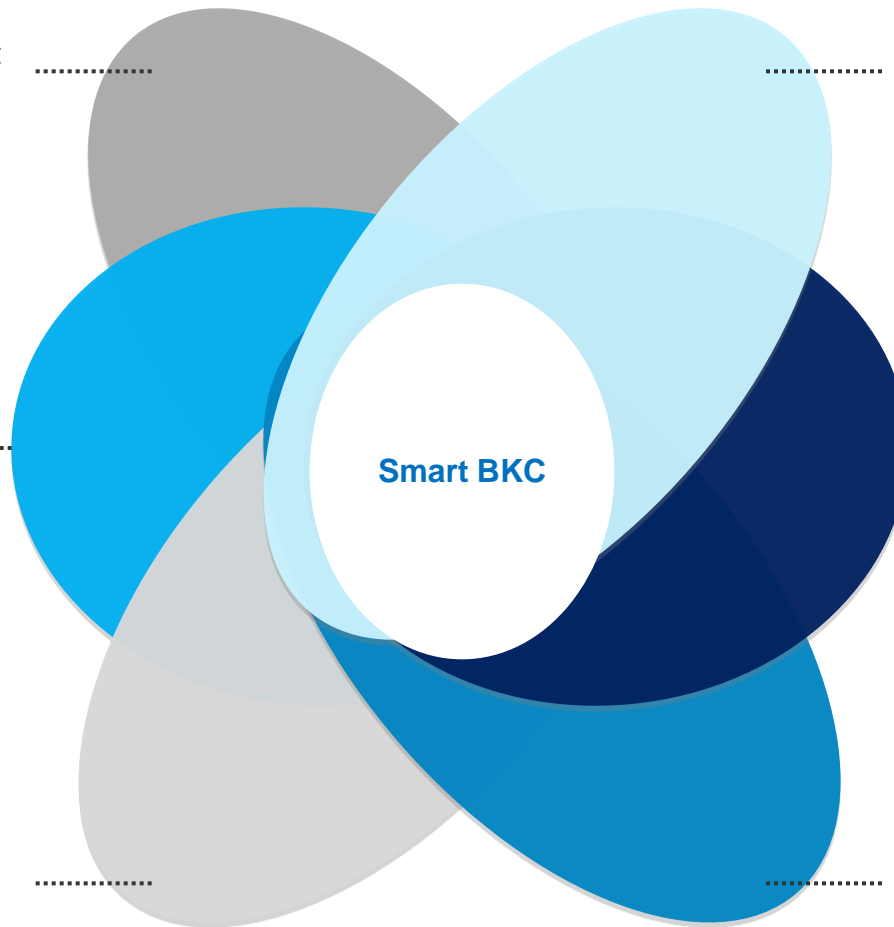
Identify & design the Smart City solutions keeping citizen in focus and citizen benefits in focus.

## User Friendliness & Ease of usage

Design the Smart city solution to ensure ease of usage for public at large. The design should be intuitive to use

## Citizen Privacy

The privacy of the public should be kept in mind and all solutions should safeguard it



## Impact on Climate & Reduction in Carbon footprint

The design should keep in mind the health of the planet and be able to showcase a reduction in carbon emissions




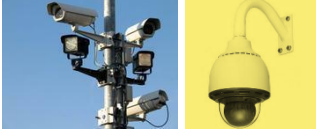

## Economic Sustainability of Projects

Where possible the solutions should be financially sustainable with innovative cost recovery/revenue generation mechanism

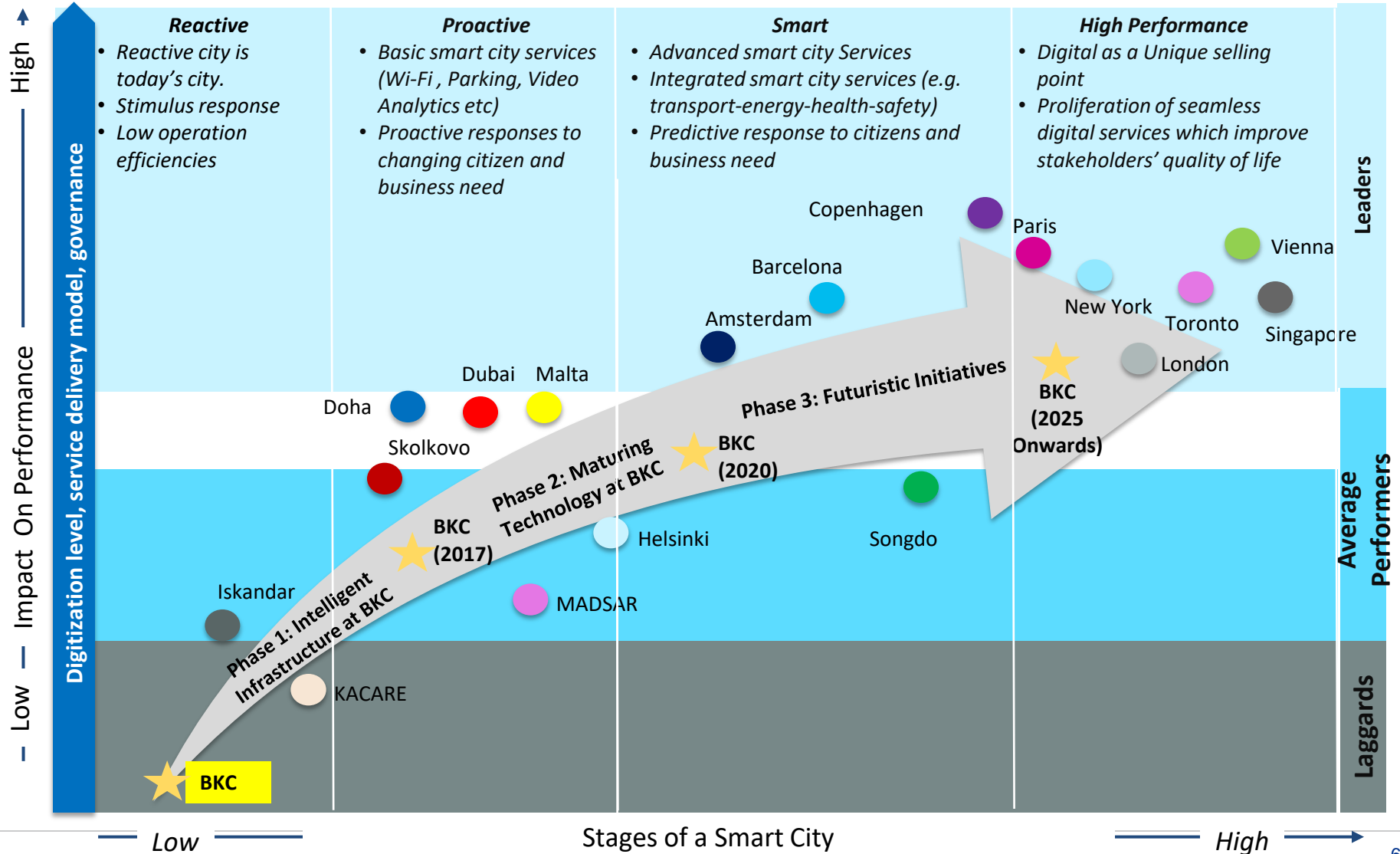
## Continuous Innovation

The solutions should be robust enough to be able to be upgraded continuously when better innovations rise up

# Smart BKC : Foundation Initiatives

<b>1.Public WIFI</b> 	<b>2. Smart Parking</b> 	<b>3. Smart Street Lighting &amp; Grid</b> 	<b>4. Video Analytics &amp; Surveillance</b> 	<b>5. Citizen Apps</b> 
5 MBPS High Speed Wireless Internet Connectivity	3000 Smart Parking Slots	841 Streetlights based on Solar power	Complete E & G Block covered with 90 cameras	33000 man-days saving due to ease of access of information
175 Hectare Area Covered in Public Wi-Fi in BKC	Parking Time Reduced from 20 minutes to 5 minutes	800 tonnes of Carbon Reduced Annually	Greater coordination among Security Agencies	Improves Citizen Communication
Seamless Wi-Fi Connectivity Across E& G Blocks	19000 Liters of Fuel saved annually	Energy Consumption reduced by 40%	Reduced Street furniture theft	Improved Emergency Alert and Response
50,000 man days saved per year	24 tonnes of Carbon Reduced Annually	200KW of Clean energy generated	Improved Emergency Response	6.5 lakhs Employees Covered
Public Wi-Fi as Value Added service for Business and Exhibition Use	Reduction in Unauthorized Parking	Reduced Maintenance Cost	Secured Business Environment	Increase in ease of Business in BKC

# BKC Smart city Journey in comparison to Global Cities



# SMART WADALA

## A GREENFIELD PROJECT

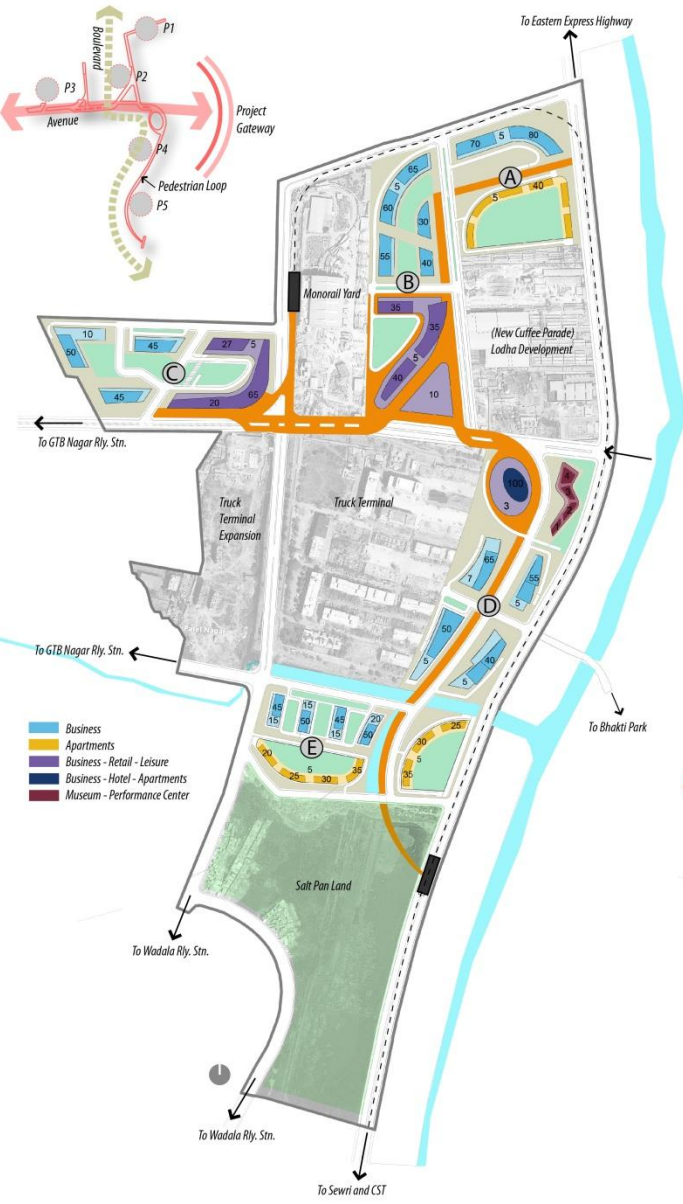
Besides BKC , the Development of the Wadala Truck Terminal Area has the potential to become much more than the creation of an additional commercial hub for the city.







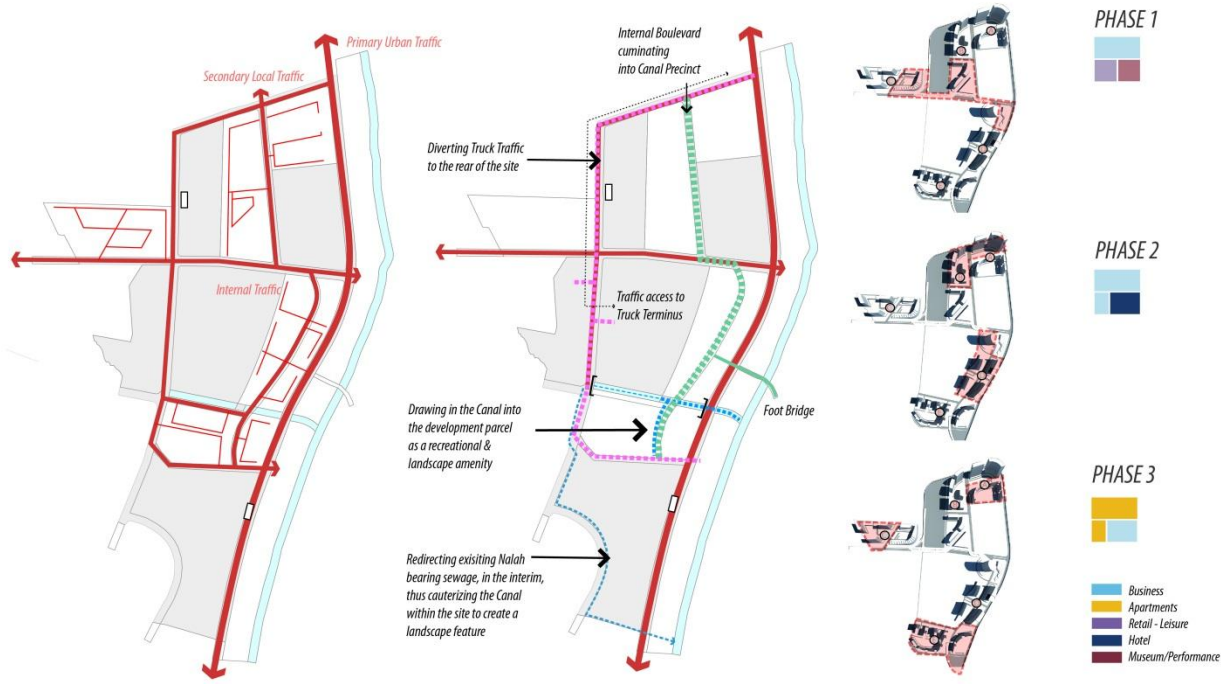
MIXED LAND USE  
 SMART TRANSPORT  
 PEDESTRIAN SEGREGATION  
 GREEN BUILDINGS  
 INTELLIGENT BUILDINGS  
 SMART PHYSICAL INFRASTRUCTURE



CIRCULATION Diagram

SUSTAINABILITY  
 Heavy Traffic Segregation & CANAL Upgrade

PHASING Diagram



# The JOURNEY AHEAD .....

- ✓ **Identification of Appropriate components  $O=f(C,P)$**
- ✓ **Evolving Domain Knowledge /Expertise**
- ✓ **Capacities Gap**
- ✓ **Vendor Driven Vs City needs**
- ✓ **Integration challenges**
- ✓ **Productivity measurement**

# Thank you

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