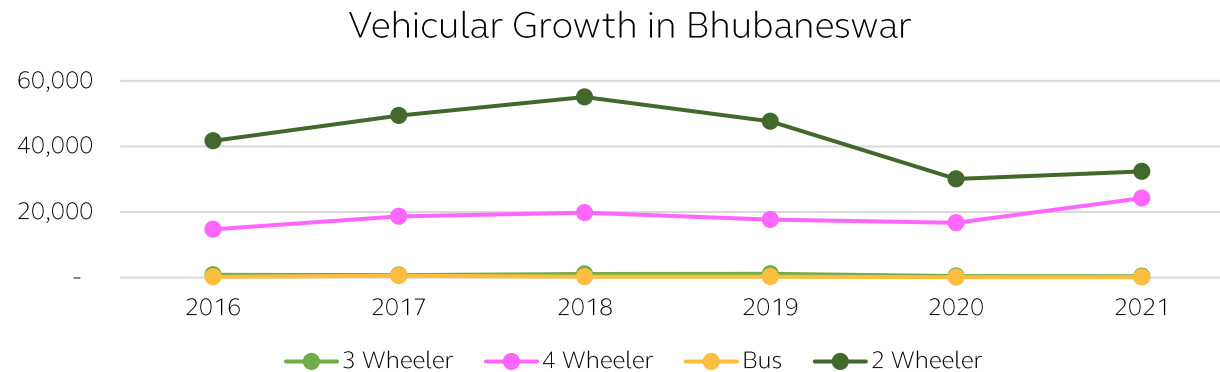
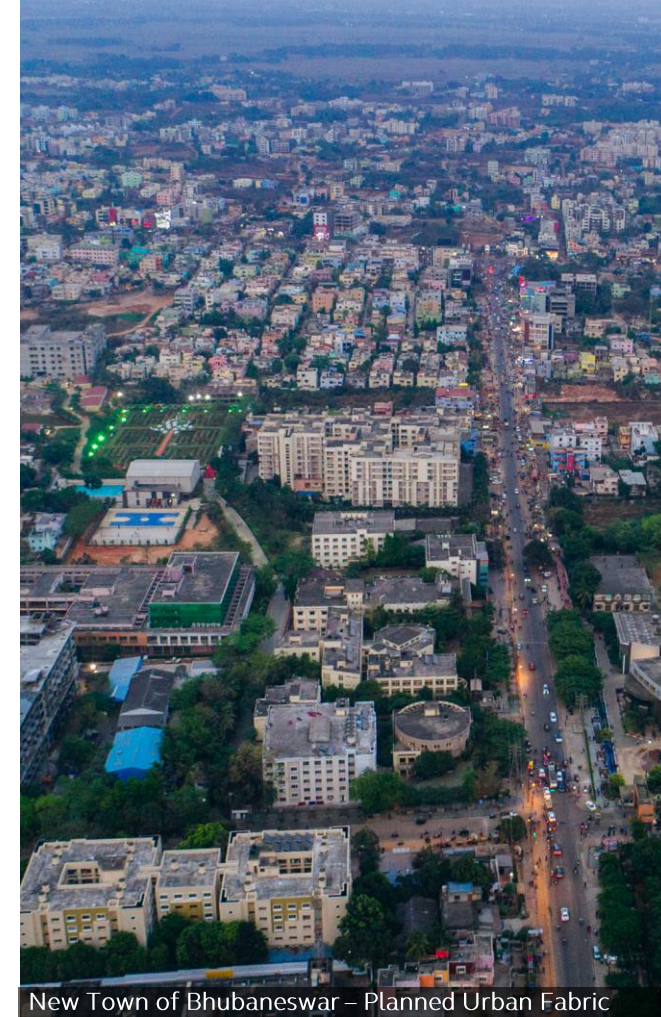


# STREET - A CONDUIT OF CHANGE

A PRESENTATION ON STREET DESIGN GUIDELINES OF BHUBANESWAR

# CONTENTS

- RATIONALE
- PROCESS
- LEARNINGS
- WAY FORWARD

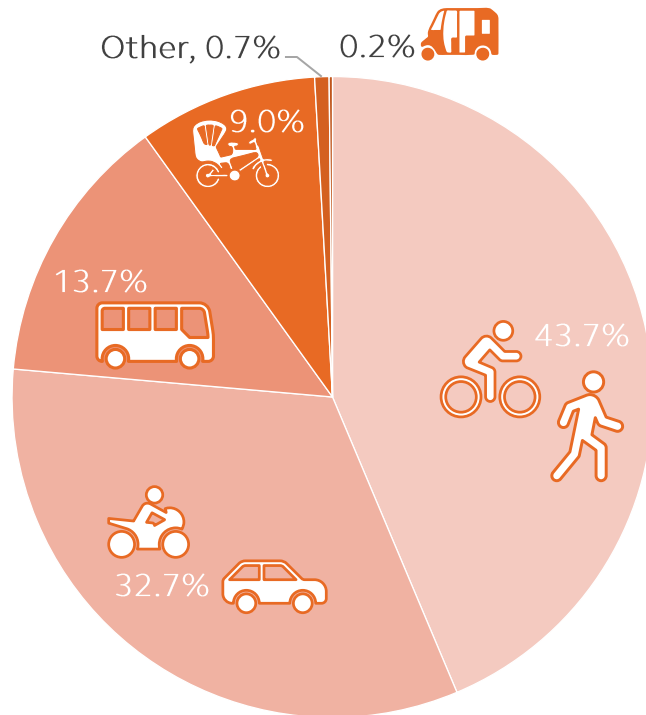


# RATIONALE

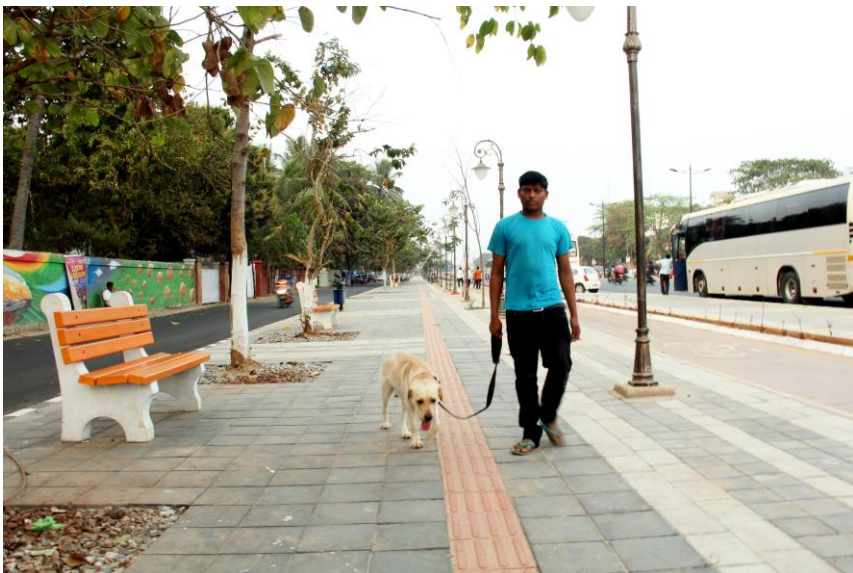
1900s

- High mode share of cycle in spite of lacking infrastructure
- Streets designed for movement of vehicles
- Identity of streets as public spaces – Khati Jagah
- Focus on Carriageway design and road widening

Mode Share in Bhubaneswar City  
(Twin City Development Report - RITES 1994)



2000s onwards



## Institutional Assessment



Sn	List of Functions	Bhubaneswar Development Authority	Bhubaneswar Municipal Corporation	Bhubaneswar Smart City Limited	Capital Region Urban Transport	Housing & Urban Development Department	Odisha Motor Vehicle Department	Odisha State Road Transport Corporation	Odisha Traffic Police	State Transport Authority	Works Department
1	Capacity Building	✓		✓	✓	✓				✓	✓
2	Conflict resolution		✓		✓	✓	✓		✓	✓	
3	Data management	✓	✓	✓	✓		✓	✓	✓		✓
4	Design/ propose streets	✓		✓		✓			✓		✓
5	Enforcement	✓	✓	✓		✓			✓		
6	Fare Fixation				✓			✓		✓	
7	Formulation of policies	✓	✓	✓		✓	✓		✓	✓	
8	Implementation of policies & reforms	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	O & M of bus operations				✓			✓			
10	Project Implementation	✓	✓	✓		✓					✓
11	Land Ownership		✓	✓		✓					✓
12	Fines and charges	✓	✓		✓		✓	✓	✓	✓	
13	License & registration					✓	✓			✓	
14	Maintenance of roads										✓
15	Monitoring & review	✓		✓		✓					✓
16	Parking management	✓	✓			✓		✓	✓		
17	Policy preparation	✓	✓			✓	✓		✓	✓	

## Preparation

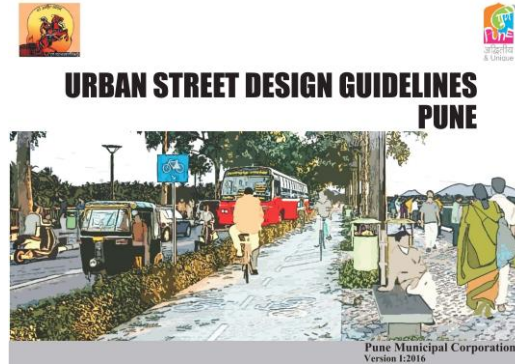
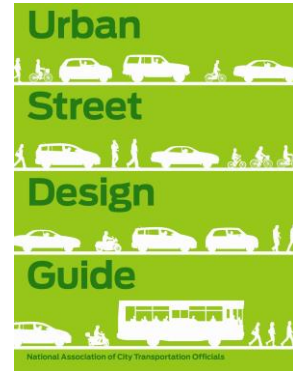
Stakeholder Buy In

International Best Practices

Identify City Specific Elements



H&UDD, Works Department, RTO,  
Commerce & Transport Dept



IRC & Urban Road Codes

### 1. PEDESTRIAN ZONE

- 1. Frontage Zone
- 2. Clear walking zone

### 2. CYCLE ZONE

- 1. Cycle Tracks
- 2. Cycle Lanes

### 3. MULTI-UTILITY ZONE

- 1. Bus Stops
- 2. IPT Stops
- 3. On-street parking
- 4. Cycle stand/PBS stand
- 5. Street Furniture
- 6. Street Vendors
- 7. Landscape
- 8. Underground Utilities

### 4. CARRIAGEWAY

- 1. Carriageway Design
- 2. Service Lanes

### 5. MEDIAN & REFUGE

- 1. Median Design
- 2. Pedestrian Refuge

### 6. STREET LIGHTS

- 1. Lights for pedestrians
- 2. Lights for Carriageway

### 7. SIGNAGE

- 1. Mandatory/Regulatory
- 2. Cautionary/Warning
- 3. Information/Guide
- 4. Pedestrian Signs

### 8. INTERSECTIONS

- 1. Round About
- 2. Signalised Intersections
- 3. Grade Separation

### 9. TRAFFIC CALMING

- 1. Lane Narrowing
- 2. Corner Radii
- 3. Gateway Treatment
- 4. Median & refuge
- 5. Mini Roundabouts
- 6. Pavement Materials

### 10. STORMWATER MANAGEMENT

- 1. Bio Swales
- 2. Rain Gardens
- 3. Pervious Strips
- 4. Pervious Parking

## Notification

Guideline Review

Authority Approval

Citizen Suggestion & Objection



**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

**ARCADIS**

**IBI GROUP**



**BHUBANESWAR DEVELOPMENT AUTHORITY**  
Akash Shova Building, Lok Seva Marg, Kharavela Nagar, Unit-III  
Bhubaneswar

No. 37631/BDA, Bhubaneswar,  
File No: Planning (UTP)-11/15

Dated the 9<sup>th</sup> November, 2021

### NOTIFICATION

Whereas, the Odisha Development Authorities Act, 1982 (Odisha Act 14 of 1982) prescribed provisions for framing of street design guidelines under clause xxii of sub-section (2) of Section 124.

And whereas, Regulation 52 of BDA (P and BS) Regulations, 2018 have the provision for Authority to specify street design guidelines with approval of the State Government to promote and develop sustainable urban transport infrastructure. Similar provision has been prescribed under Rule 53 of Odisha Development Authorities (P and BS) Rules, 2020 notified vide Gazette No. 1043 Dtd. 12.08.2020.

And whereas, Bhubaneswar Development Authority (BDA) has prepared a "Draft Street Design Guidelines for Bhubaneswar" as part of the draft BDA (Street Design) Regulations in consultation with various stakeholders. The aforesaid draft guidelines was approved by the Authority in its 136<sup>th</sup> meeting held on Dt.20.12.2017.

Therefore, in pursuance to Rule 53 of ODA (P & BS) Rules 2020 and in exercise of powers conferred under section 124 of Odisha Development Authorities Act, 1982 (Odisha Act 14 of 1982), the following draft "**BDA (Street Design) Regulations, 2021**" is hereby published as required by sub-sections (1), (2) and (3) of section 125 of the said Act for information of all persons likely to be affected thereby; and the notice is hereby given that the said draft will be taken into consideration on or after the expiry of the period of thirty days from the date of publication of this notification in the Odisha Gazette. The said draft regulations will be available in BDA website <https://www.bda.gov.in/>.

Any objection or suggestion which may be received by the Secretary to Bhubaneswar Development Authority from any person in respect of the said draft before expiry of the period so specified will be considered by the said Development Authority.

**Note:** The person making any objections or suggestions shall furnish his/her full name and address and mention the subject as "Objection or Suggestion on Draft BDA (Street Design) Regulations, 2021".



**The Odisha Gazette**

EXTRAORDINARY  
PUBLISHED BY AUTHORITY

No. 193 CUTTACK, WEDNESDAY, FEBRUARY 2, 2022/MAGHA 13, 1943

**BHUBANESWAR DEVELOPMENT AUTHORITY**

NOTIFICATION

The 9<sup>th</sup> November 2021

No.37631—Planning(UTP)-11/15-BDA.—Whereas, the Odisha Development Authorities Act, 1982 (Odisha Act 14 of 1982) prescribed provisions for framing of street design guidelines under clause xxii of sub-section (2) of Section 124.

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## Implementation

Inclusion in the  
DCR

City level Urban  
Transport Cell

Strengthening  
Enforcement Wing



**BHUBANESWAR DEVELOPMENT AUTHORITY**  
Akash Shova Building, Lok Seva Marg, Kharavela Nagar, Unit-III  
Bhubaneswar

No. 37631/BDA, Bhubaneswar,  
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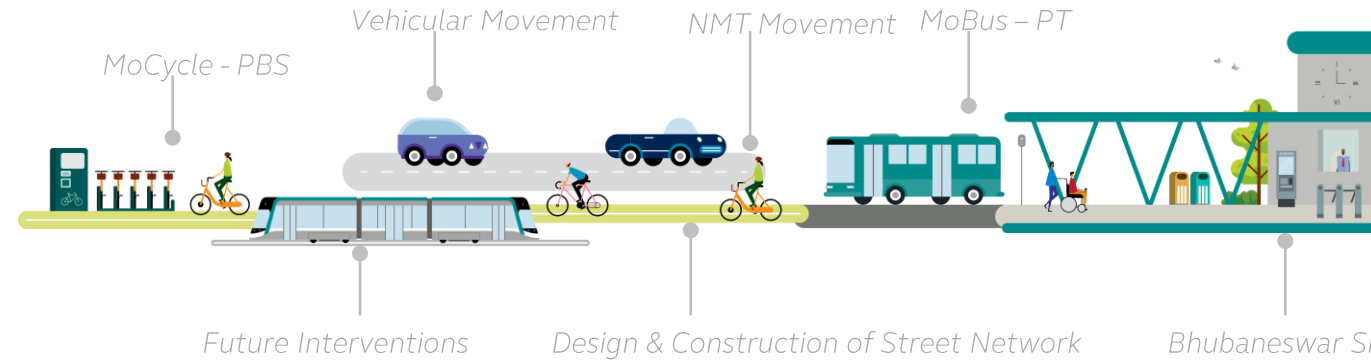
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BBSR Urban Transport Cell

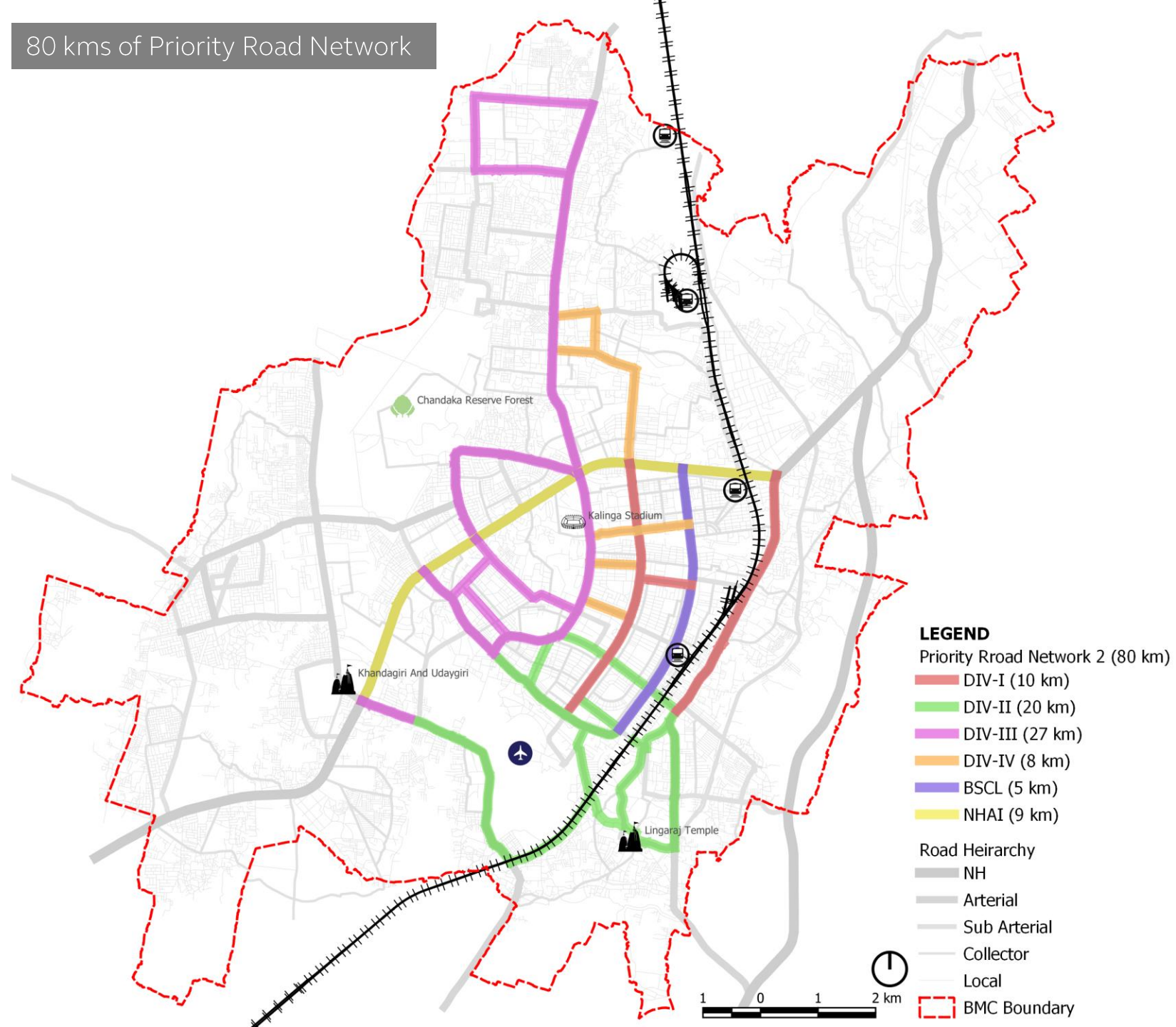




# LEARNINGS



## 80 kms of Priority Road Network



## Using Events as Impetus for Street & Placemaking Interventions

Asian Athletics Championship - 2017



## Using Events as Impetus for Street & Placemaking Interventions

Hockey World Cup - 2018



## Using Events as Impetus for Street & Placemaking Interventions

Hockey World Cup – 2023 – Work in Progress

Before



Envisaged



## Using Events as Impetus for Street & Placemaking Interventions

Hockey World Cup – 2023 – Work in Progress

Work In Progress – in the span of 1 month time



## Using Events as Impetus for Street & Placemaking Interventions

Hockey World Cup – 2023 – Work in Progress



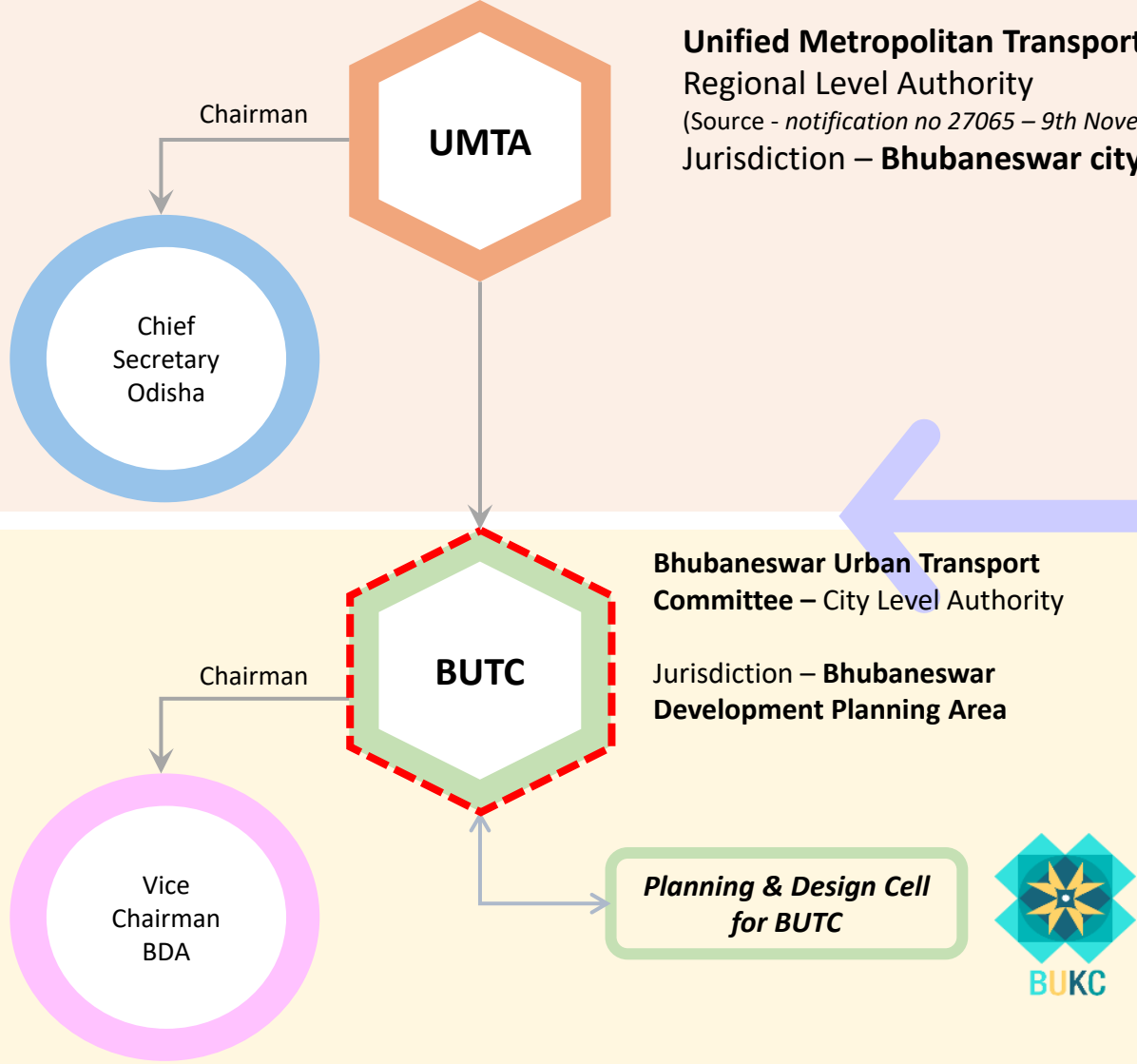
Before



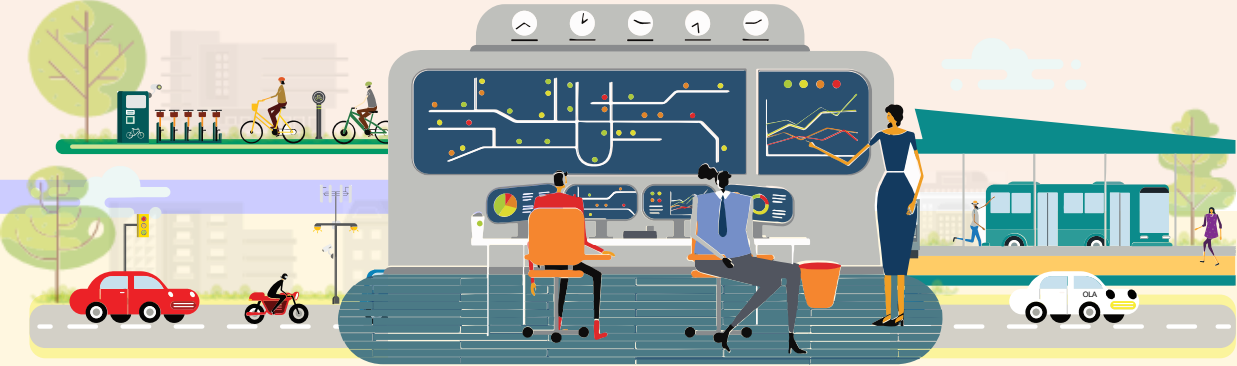
After



## URBAN TRANSPORT COMMITTEE



Reactivate UMTA at regional level headed by Chief Secretary Odisha



**Citywide Traffic Management Strategy\***  
Strategy document as base of operations

\*preparation initiated by BUKC

Concept note for establishment of UTC at Bhubaneswar city level submitted by BDA for further approval



## CHILD FRIENDLY PUBLIC SPACES DESIGN GUIDELINES

Design Guidelines for following spaces



Parks

A park is a piece of open land for social, physical and recreational use in urban areas.

Streets

A street is the basic unit of urban space through which people experience a city.

Public Building Premises

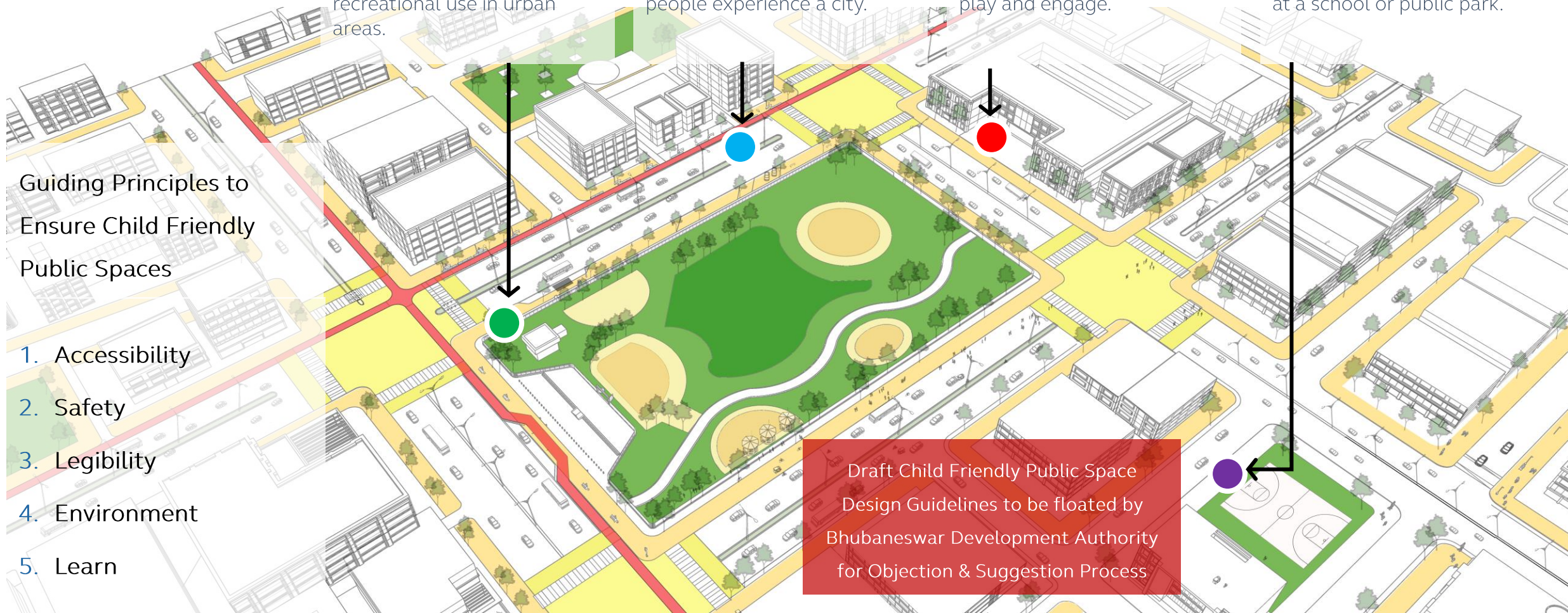
They provide expansive setting for children to learn, play and engage.

Playgrounds

An outdoor area provided for children to play in, especially at a school or public park.

Guiding Principles to Ensure Child Friendly Public Spaces

1. Accessibility
2. Safety
3. Legibility
4. Environment
5. Learn



Draft Child Friendly Public Space Design Guidelines to be floated by Bhubaneswar Development Authority for Objection & Suggestion Process

# THANK YOU

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Transportation Planner

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