BHUBANESWAR SMART CITY PROPOSAL

DECEMBER, 2015
INTRODUCING BBSR IN 2015

CITIZEN’S CONNECT INITIATIVE

TOWARDS A SMARTER BHUBANESWAR- PAN CITY PROPOSAL

TOWARDS A SMARTER BHUBANESWAR- AREA BASED PROPOSAL

DRAFT FINANCIAL PROPOSAL
SMART CITY BHUBANESWAR

INTRODUCING BBSR IN 2015
INTRODUCING BHUBANESWAR

City Context

City of Temples – Aspires to be UNESCO Heritage City

City Planning Initiatives – Konigsberger’s Plan

Emerging Technical Education & Healthcare Hub

Knowledge Sectors – IT investment region, progressive IT policy and perhaps only city 1 million population to have top Indian IT companies

Regional Economic Drivers – Steel Hub (Kalinga Nagar), Petro Chemical Hub (Paradeep), Golden Tourism Triangle (Puri, Konark, Chilika)

Demography

Self Assessment

Regional Economic Drivers –
Steel Hub (Kalinga Nagar), Petro Chemical Hub (Paradeep),
Golden Tourism Triangle (Puri, Konark, Chilika)
INTRODUCING BHUBANESWAR

Demography


9.74 Lakh

53% Male

47% Female

5,16,632

4,60,643

35%

(3,40,860) Population lives in Slums, spread over 5% of BMC area

BDP Area: 419 SQKM

BMC Area: 146 SQKM
INTRODUCING BHUBANESWAR

City Context

Demography

Self Assessment

80%
Household level coverage

85%
Collection Efficiency

0%
Segregation

86
Parks

2%
Recreational Space in the city

95%
water supply connections

250lpcd
Water Supplied

2hrs
Duration of supply

19,69,575
Annual Tourist Flow

24
Events throughout the year

16%
Public Transport Available

76km
Sidewalks in the city

21%
Signalized Intersections

74
Protected monuments

19%
Natural forest
SMART CITY BHUBANESWAR

CITIZEN’S CONNECT INITIATIVE
CITIZEN’S ENGAGEMENT - CITIZEN’S CONNECT INITIATIVE

Online Engagement

WEBSITE
Visits: 1.7 lakh | Polling: 29,184 | Votes: 47,238

FACEBOOK
Likes: 86,851 | Reach: 3.4cr | Comments: 1630

TWITTER
Tweets: 427 | Follower: 810 | Likes: 307

YOUTUBE
Views: 905

MyGOV
Submissions: 285 | Comments: 1500
### CITIZEN’S ENGAGEMENT - CITIZEN’S CONNECT INITIATIVE

<table>
<thead>
<tr>
<th>Engagement Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online Engagement</strong></td>
<td></td>
</tr>
<tr>
<td>SMS</td>
<td>Reach: 25.7 Lakhs</td>
</tr>
<tr>
<td>Radio</td>
<td>Reach: 22,62,739</td>
</tr>
<tr>
<td>MASS EMAIL</td>
<td>Reach: 5 Lakhs</td>
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<tr>
<td>Seminars</td>
<td>Events: 86</td>
</tr>
<tr>
<td><strong>Offline Engagement</strong></td>
<td></td>
</tr>
<tr>
<td>Offline Reach:</td>
<td>SUGGESTIONS: 1.6 Lakhs</td>
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<tr>
<td>Outreach</td>
<td></td>
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</tbody>
</table>
CITIZEN’S ENGAGEMENT- CITIZEN’S CONNECT INITIATIVE

- **Online Engagement**
- **Offline Engagement**
- **Outreach**

**Competitions**

**Mass Outreach**

**Stakeholder Meetings**

**Mass Campaign- Street Plays**

**Ward Committee**

**Seminars**
SMART CITY BHUBANESWAR

TOWARDS A SMARTER BHUBANESWAR
VISION

Bhubaneswar, through participatory decision-making, responsible governance and open access to information and technology, to be a:

- **Transit oriented city** with a compact urban form that promotes active, connected and sustainable mobility choices
- **Livable city** providing diverse range of housing, educational and recreational opportunities; while enhancing its heritage, arts and traditional communities
- **Child-friendly city** providing accessible, safe, inclusive and vibrant public places
- **Eco-city** co-existing in harmony with nature for nurturing a resilient, clean, green, and healthy environment
- **Regional economic centre** attracting knowledge based enterprises and sustainable tourism activities by leveraging and empowering its institutions, local businesses and informal workforce
TOWARDS A SMARTER BHUBANESWAR- SELECTION PROCESS

POLLING RESULTS | CITYWIDE SMART SOLUTION

- Heritage & Tourism: 1%
- Open Space: 2%
- Governance: 2%
- Energy: 20%
- Waste Management: 21%
- Drinking Water: 22%
- Mobility: 32%

POLLING RESULTS | AREA BASED DEVELOPMENT

- Lake Zone District: 2%
- Khandigiri District: 7%
- Lamisagar District: 10%
- Heritage District: 12%
- South City District: 21%
- Infocity District: 22%
- Town Centre District: 26%

MOBILITY

TOWN CENTRE DISTRICT

Total Votes: 2.69 Lakhs (26% of total population)
SMART CITY BHUBANESWAR

AREA BASED DEVELOPMENT - Bhubaneswar Town Centre District (BTCD) - Models for Development - Retrofitting + Redevelopment
INTRODUCING BTCD

City Context: Strategically placed at the center of the city

Demography: Well Connected: BBSR Railway Station, City Bus Stand

Road Network: Prominent Landmarks: Master Canteen Chowk; Janpath

Land Use: Development: Both "organic" and "planned" types

Acceptance for Mixed Use
INTRODUCING BTCD

**City Context**

**Demography (2015):** 46,000

**Area:** 985 Acres (3.9 sq.km)

2.4% of BMC | 0.3% of BDPA

**Wards:** 29, 30, 34, 35, 40, 41, 53

**Demography (2015):** 46,000

52% Male | 48% Female

24,150 | 21,850
INTRODUCING BTCD

City Context Demography Road Network Land Use

Road Network: 70.5 Km

5 km of 60m wide (7%)

6.5 km of 45m-18m wide (9.3%)

59 km of less than 18m wide (83.6%)
INTRODUCING BTCD

City Context  Demography  Road Network  Land Use

LAND USE

- Residential: 31%
- Public/Semi-Public: 19%
- Commercial: 12%
- Mixed Use: 15%
- Transport: 18%
- Green: 05%
PROPOSAL FOR BTCD

Mobility

**Multimodal Integration** - Integrated bus terminal and railway station

**NMT Zones** - Pedestrian friendly roadways

**Complete Streets**

**NMT Network** - Dedicated, continuous pedestrian and cycle network

**PBS Scheme**

**IPT & Rickshaw Management**
PROPOSAL FOR BTCD

Mobility

Physical Development

Social Development

- LED Streelighting Project
- Solar Roof Tops
- Waste Recycle Centres
- Sewerage Treatment System
- Water Recycling System
- Integrated Water Management Initiatives
- City Fiber Ducting
PROPOSAL FOR BTCD

Mobility

Physical Development

Social Development

4 Slum Redevelopment Projects

Public Art Installations

Safety: Community Policing “Ama Police”

Modern Education Facility

Women & Child Health Care

Health Care Centre
SMART CITY BHUBANESWAR

PAN CITY PROPOSAL - Mobility
INTRODUCING MOBILITY IN BHUBANESWAR

MODAL SHARE: PT share: 10%; IPT: 30%; NMT: 30%; Car+2 wheeler: 30%

Public Transport: Low frequency- 20 mins headway; 73 % area covered; Overlapping routes

Poor supporting infrastructure – 1 depots (3.5 acres); 165 buses; 3 Terminals; bus stops without shelter

Parking: minimal control on parking encroachments; leading to congestion

Unorganized IPT with increasing numbers

Lack of NMT infrastructure
**PROPOSAL FOR MOBILITY**

**Traffic Management:** Traffic signalling | Video surveillance | e-challan | simulation and modelling

**Parking:** Electronic parking systems | Parking availability data | Parking mobile app.

**Transit Operations:** Fleet tracking | Depot management | Bus scheduling | PIS

**Common payment card:** Integrated fare card | Prepaid and card facility

**Emergency Response and City Incidence Management System**
SMART CITY BHUBANESWAR

DRAFT FINANCIAL PROPOSAL
## DRAFT FINANCIAL PROPOSAL

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Project Cost</th>
<th>%age Share</th>
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</thead>
<tbody>
<tr>
<td><strong>Sub-Plans</strong></td>
<td></td>
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<tr>
<td>Governance Solutions</td>
<td>2,800</td>
<td>0.63%</td>
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<tr>
<td>Land Use Interventions</td>
<td>151,500</td>
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<tr>
<td>Transportation Improvement</td>
<td>31,100</td>
<td>6.98%</td>
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<tr>
<td>Affordable Housing Projects</td>
<td>167,800</td>
<td>37.66%</td>
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<td>Social Welfare Programmes</td>
<td>3,330</td>
<td>0.75%</td>
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<tr>
<td>Economic Initiatives</td>
<td>4,493</td>
<td>1.01%</td>
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<tr>
<td>Infrastructure Investments</td>
<td>36,030</td>
<td>5.78%</td>
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<tr>
<td>ICT Solutions</td>
<td>48,571</td>
<td>10.90%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>445,524</strong></td>
<td><strong>100%</strong></td>
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Total Cost: 4,450 cr  |  SCP Funding: 973 cr
Thank You