



# SMART CITIES PROJECTS & PROPOSALS



**JABALPUR**

**CITY OF EVENTS & FESTIVALS**

Organised by

**Smart Cities Council India**  
LIVABILITY | WORKABILITY | SUSTAINABILITY

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## About Smart Cities Council India

To tap into the transformative power of smart technologies, cities need a trusted, neutral advisor. Smart Cities Council provides that help. We are a network of leading companies advised by top universities, laboratories and standards bodies. We promote cities that embody our three core values:

**Livability:** Cities that provide clean, healthy living conditions without pollution and congestion. With a digital infrastructure that makes city services instantly and conveniently available anytime, anywhere.

**Workability:** Cities that provide the enabling infrastructure—energy, connectivity, computing, essential services—to compete globally for high-quality jobs.

**Sustainability:** Cities that provide services without stealing from future generations.

As India gears up to build 100 smart cities and takes giant strides in the infrastructure development of the country, Smart Cities Council India aims to participate in this development process by providing all stakeholders relevant information about Smart Cities' development in India. The aim of the India Chapter is to provide latest updates on what is happening on the smart cities development front, gather and disseminate resources, collate industry data and showcase achievements in this segment.

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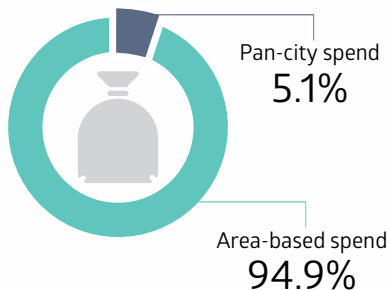
# Introduction



## Smart City Rank



Capital Outlay  
**₹4,247 crore**



State	Madhya Pradesh
Urban Status	Municipal Corporation
Area	152.53 sq km
Population	1,055,525
Literacy Rate (%)	87.39



## Demographics

Share of ULB population in Urban (%)	73.30
Population per sq km	6,920
Youth, 15-24 (%)	20.20
Working Age Group, 15-59 (%)	66.73
Share of ULB area in dist (%)	2.93
Slum Population (%)	45.82



## Economics

Urban Poverty Ratio (%)	16.93
Per Capita Income 2004Per Capita Income (Rs)	38,968
Work Participation Rate (%)	32.72
Self Employed (%)	39.72
Salaried Employees (%)	48.87
No Sanctioned SEZs	3



## Infrastructure

Households with access to tap water (%)	69.81
Households with access to electricity (%)	95.84
Households with toilet facility (%)	81.15
Households with waste water outlet (%)	91.11



## Slums

No of Slums	12
Slum Household	2,392
Slum Population	9,200

# Water Supply



Treated Water Quantity

**217 MLD\***

Existing Water Demand

**193.86 MLD**

## Proposals

- 100% coverage of Safe Drinking water
- Reduction of NRW to 10% and smart metering
- 24X7 Water Supply with SCADA
- Recycling and reuse of waste water
- Smart Water metering under AMRUT
- Energy efficient lighting and water supply
- DPR prepared

# Sewage



Generation

**121.52 MLD**

Existing Treatment Capacity

**50 MLD\*\***

## Proposals

- Sewer Connection to all
- Efficient Drainage system
- Well-organized Solid and Liquid Waste Management
- Door to Door Collection of solid waste
- Waste to energy
- RFID tagging of household dustbins  
Smart bins
- Capping of Ranital & Kathaonda Landfill Site

# Transportation



Length of Roads in the City

**811 Km**

Length of Major Roads

**326 Km**

## Proposals

- Bus based affordable and comfortable public transport systems
- Pedestrianization & Cycling access for last mile connectivity
- Discouraging Individual Vehicles
- Integrated and Intelligent Parking Spaces
- J CARD for cashless transactions
- Smart Road of 14.7 Kms
- Non motorized transport
- Junction Improvement at various locations

## Projects Identified:

### Stretch of 7 Km for NMT identified

Scope of Work: Upgradation, Augmentation, Foot path & Cycle track works, Utility Duct, Infrastructure Design, Road Markings, Street Furniture, Traffic signage, Bus Shelter, Vending Kiosk, etc

Project Cost – Rs 7.60 crore

Tender stage

## Smart Roads

- Utility Duct, Infrastructure Design, Junction Improvement, Road Markings, Street Furniture, Traffic signage
- Bus Shelter, Street Landscaping and other Miscellaneous works
- Smart Toilets, Water ATMs, Smart Solid-Waste Bins, Smart Signage, Smart Public Transport Station, Wi-fi "hot-spots", Smart security surveillance
- Tender stage

# Social Infrastructure



Hospitals

**100+**

Schools

**1000+**

Colleges

**90+**

- Upgradation of existing sports facilities
- Preparation of Redevelopment Master Plan

## Social Infrastructure

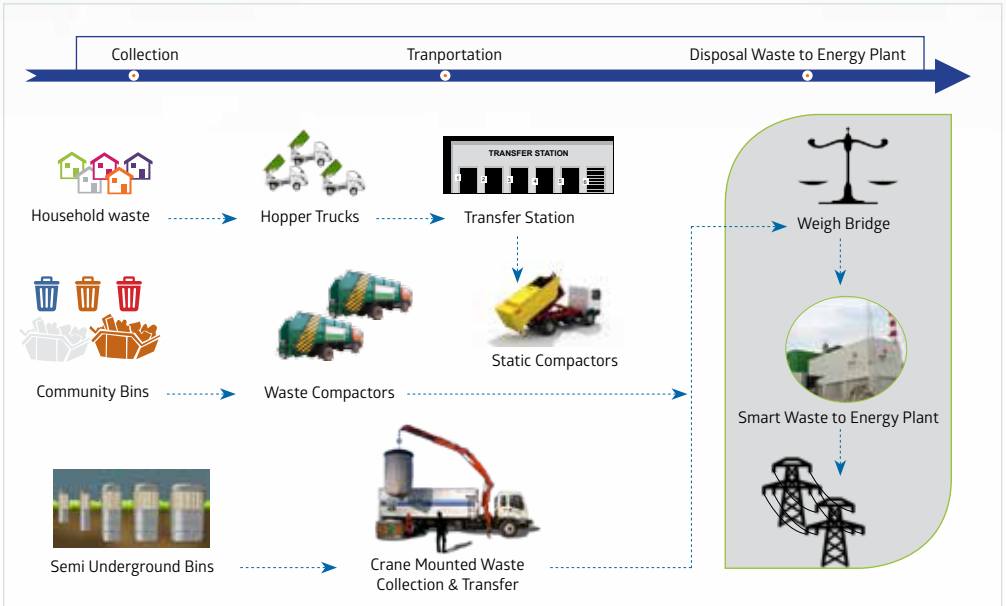
- e- Governance and m-Governance (apps)
- Command & Control Centre
- Wi-Fi enabled Smart Poles
- ITMS (Intelligent Traffic Management System)
- RFID Tagging and Smart bins
- Smart Health and Smart Classrooms
- SCADA based smart metering for water supply

## Projects Identified:

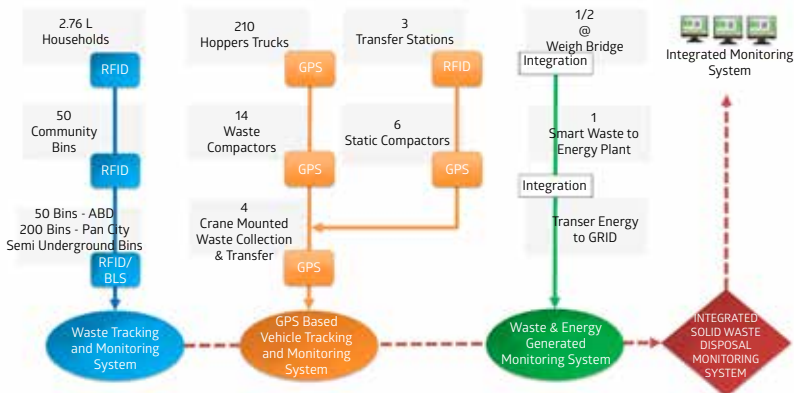
### Development of Ranital Recreational Zone

- Restoration of lake and Capping of landfill site
- Slum rehabilitation
- Development of Green & Recreational Areas

# Integrated Solid Waste Management



## Proposed SMART Integrated SWM System



## Integrated Solid Waste Management

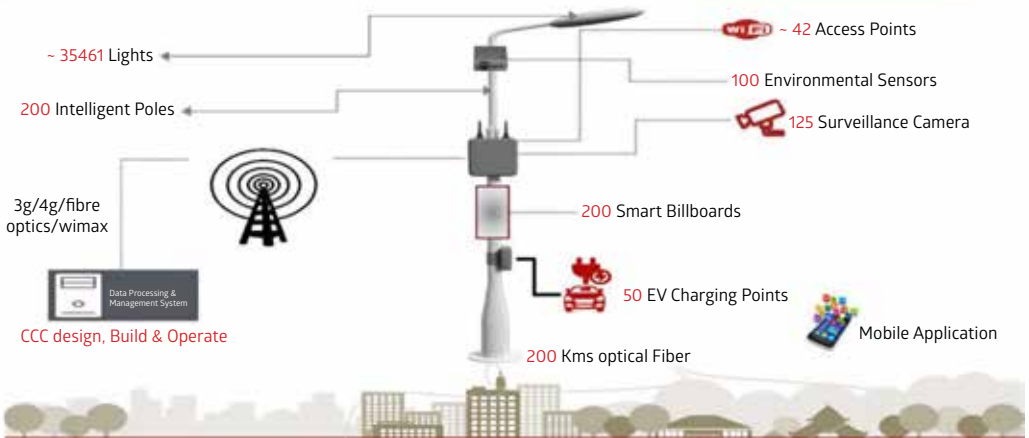
- Project worth Rs 6.5 crore
- Approximately 2.76 lacs houses to be RFID tagged - Work in progress
- Single municipal ward in ABD area to be selected for pilot implementation
- Duration of project 5 years and implementation of project 9 months

# Intelligent Pole



Total Municipal Area to be Covered

Concession Period:  
~ 15 years



## Intelligent Pole

- RFP floated
- **Bid submission on July 21, 2017**
- **Opening of Financial Bids by July 31, 2017**
- PAN City Project
- Project on PPP model
- **Project worth Rs 200 crore**
- Total duration of project 15 years with 1 year of implementation
- Replacement of Conventional Lights and Fixtures with energy efficient Lights and equipment
- Use of Solar Power
- Solar roof top at Government Buildings
- Solar Power plant on Municipal Lands



# Integrated Command and Control Centre

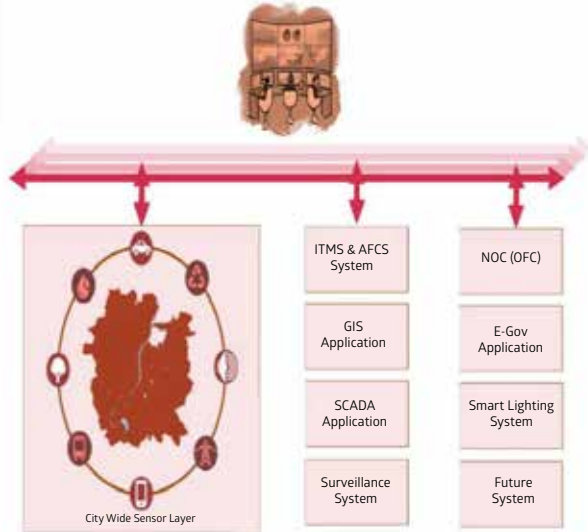


**Control centres operating in silos**  
The major bottleneck that arises in case of standalone setup of command centres is lack of co-ordination and unified decision in case of emergency.

**Integrated operations platform**  
Integration of all control centres will facilitate a super dataset for analysis and generate actionable intelligence for stakeholders involved.



**Objectives**  
Better collaboration  
Faster response  
Standardised process for emergencies  
Pre-emptive governance



- To provide, deploy and configure a centralized command and control Centre with an integrated operations and dashboard application that will integrate various Smart City components implemented in this project and in future.

- RFP floated
- **Project worth Rs 150 crore**
- Duration of project 5 years with one year implementation
- Services to be integrated in phase 1:
- Dial 100
- Dial 108
- Intelligent Traffic and Transit Management System
- Fire and Disaster Management
- 24x7 Water Supply
- Intelligent Lighting
- Integrated Solid Waste Management



# Development of Dumna Nature Reserve



- Client - **Jabalpur Smart City Limited**
- Project Cost - **Rs 60 crore**
- Scope of work
- Heritage Conservation, Tourist Information Centre
- Development of Ethnic Village
- Development of Recreational Zone - **DPR Preparation stage**
- Preparation of Master Plan
- Implementation mechanisms & Financial planning
- Marketing Strategy
- Total Site Area - **800 acre**

# City Identity and Culture



OUTCOMES	STRATEGIES
Conservation of tangible and intangible culture	Performance Spaces at 8 locations Organising festivals related to literature, art & culture
Strengthening and showcasing city festivals	Providing space for tribal culture Skill development in the field of art, craft and other field of culture
Development of City as “City of events and festivals”	Institutional development such as cultural centre/film city etc.
Performance Spaces at Various locations	Cultural Street & Amphitheatre at Bhawartal <ul style="list-style-type: none"> <li>· OAT at Bhitouli</li> <li>· Amphitheatre at Dumna</li> <li>· Convention Centre at Ghanta Ghar &amp; Gol Bazar</li> <li>· Performance Area Along Omti Corridor</li> </ul>
Organising festivals related to literature, art & culture  Providing space for tribal culture <ul style="list-style-type: none"> <li>· Skill development in the field of art, craft and other field of culture</li> <li>· Institutional development such as cultural centre/film city etc.</li> </ul>	Ethnic Village at Dumna for skill based communities <ul style="list-style-type: none"> <li>· Heritage and Cultural Museum</li> <li>· Depiction of Tribal Art along Culture street at Bhawartal</li> <li>· Use of Tribal Motifs and Art in selected Urban design and patterns</li> </ul>

## Sports



Project Name	Project Cost (in Rs Cr.)	Status	Project Timeline	
			Start Date	Expected Project Completion Date
Wright Town Stadium/ Multisports Complex (12500 Capacity)	150.0	DPR Prepared	March 2017	Nov. 2019

## OPPORTUNITIES

Sr No	Name of Project	Category	Sector	Type of Project	Project Cost (in Rs Cr.)	Source of Funding	Progress till date
1	Jabalpur Smart road Phase - 1 (Major Roads Class-A & Class-B) 14.7 Km including 1)Utility Duct(u/g electric cable & OFC) Smart Road 2) Water Supply 3) With NMT	ABD	Transport	NON PPP	160.00	Gol/State Grant/ULB	Tender stage
2	Jabalpur Smart road Phase - 2 of Class-C roads	ABD	Transport	NON PPP	165.00	Gol/State Grant/ULB	Project Identified
3	NMT ( Non Motorized Transport) Phase - 1 Madan Mahal to Ghanta Ghar (Omti nala) 2.4 Km Phase - 2 Remaiaing Omti nala 4.6 KM	ABD	Transport	Non PPP	7.60	Gol/State Grant/ULB	Tender stage
4	Transport Nagar (80 acre)	Pan City	Transport	PPP	25.00	Other / Real estate	DPR \ prepared
5	Modern City Bus services	Pan City	Transport	NON PPP	150.00	Convergence with JCTSL	Project Identified
6	Damoh Naka bus depot	Pan City	Transport	PPP	50.00	Pvt sector	Project Identified
7	Green BRTS and Bus terminus at Gwarighat	Pan City	Transport	NON PPP	111.00	Gol/State Grant/ULB	Project Identified
8	Double Piping	ABD	Water Supply	NON PPP	20.00	Convergence with AMRUT	Project Identified
9	24/7 Water Supply with SCADA	Pan City	Water Supply	NON PPP	250.00	Convergence (AMRUT WS)	DPR prepared
10	Smart Poles along with OFC and LED Fixtures, Public Wi-Fi Hot Spots	ABD	Energy/ Technology	PPP	400.00	Pvt Sector	Tender stage
11	Solar Panels on Govt. and Pvt. Buildings (20 MG WT.)	ABD	Energy	PPP	140.00	Pvt sector	DPR prepared
12	Door To Door collection of Solid waste	Pan City	Solid Waste	NON PPP	93.60	Convergence with ULB	Implemented
13	Waste to Energy	Pan City	Solid Waste	PPP	31.00	Pvt Sector	Implemented
14	Open Defecation free city	Pan City	Sanitation	NON PPP	64.00	Convergence with SBM	Implemented
15	RFID Tag for households dustbin	Pan City	Solid Waste	NON PPP	12.00	Convergence with SBM	Work in progress

## OPPORTUNITIES

Sr No	Name of Project	Category	Sector	Type of Project	Project Cost (in Rs Cr.)	Source of Funding	Progress till date
16	Capping of Ranital & Kathonda Landfill site (Grant from solid waste)	Pan City	Solid Waste	NON PPP	27.73	Convergence with SBM	DPR Preparation stage
17	M-Governance System for Resource Tracking and Project Management (jabalpur311)	Pan City	Technology	Non PPP	1.50	State Grant (DUTF)/ ULB	Implemented
18	Multipurpose Smart card for cashless Transaction for city transport and various other purposes	Pan City	Technology	Non PPP	0.00	State Grant (DUTF)/ ULB	Implemented
19	Convention center at Ghanta Ghar (2.5 Acre) along with NMT (PSP land use)	Pan City	Economy	PPP	85	Pvt Sector	Tender stage
20	Teen Patti Commercial Complex Including Metro Bus stand	ABD	Economy	PPP	270.00	Pvt Sector	RFP preparation stage
21	Madan mahal Eco tourism zone	Pan City	Economy	NON PPP		Convergence with ULB	Project Identified
22	Hospitality Projects for tourists ( Dumna and Gwarighat)	Pan City	Economy	PPP	300.00	Pvt Sector	Project Identified
23	Institutions related to Garment and Fashion Technology	Pan City	Economy	NON PPP	22.50	Convergence with NULM/ Skill India	Project Identified
24	Garment Park (Manufacturing hub)	Pan City	Economy	PPP	210.00	Pvt Sector	Project Identified
25	Institutions related to Hotel management and Tourism Development	Pan City	Economy	NON PPP	12.00	Convergence with NULM/ Skill India	Project Identified
26	Tourist Info Centre at 10 locations with allied Activities	Pan City	Economy	PPP	20.00	Pvt Sector	Design prepared
27	Wright Town Multi sports Complex (12400 Capacity)	ABD	Area Development (AD)	Non PPP	150.00	Gol/State Grant/Pvt Sector/Debt	DPR Prepared
28	"Multi-Level Parking cum commercial complex at George Town"	ABD	Area Development (AD)	PPP	12.00	Pvt Sector	Tender stage
29	Multi-Level Parking at NAV BHARAT, MANAS BHAVAN, Civic center	ABD	Area Development (AD)	PPP	24.00	Pvt Sector	Tender stage
30	Ranital Lake development	ABD	Area Development (AD)	PPP	12.22	Pvt Sector	DPR Preparation stage

## OPPORTUNITIES

Sr No	Name of Project	Category	Sector	Type of Project	Project Cost (in Rs Cr.)	Source of Funding	Progress till date
31	Development of Dumna Nature Park (Nature Study Centre, Cycle Track, Tribal Market, Tourist Market, Yoga and Spiritual villages, Ethnic Village and Cultural center and other facilities)	Pan City	Area Development (AD)		60.00	Gol/State Grant/ULB	DPR Preparation stage
32	River front event & institutional zone (Green field development - OAT at bhatoli, Recreation, Various institutions and Exhibition and Expo Centre)	Pan City	Area Development (AD)	PPP & Non PPP Both	310.00	Convergence with ULB	Draft design prepared
33	City Livelihood, Vocational & Skill Development Centers (SDC) at 6 locations	Pan City	Inclusive city	Non PPP	24.00	Gol/State Grant/ULB/ NULM-1 Cr.	Design prepared
34	Health & Sanitation Museum	Pan City	Inclusive city	PPP	8.00	Pvt Sector	Project Identified
35	City Social Welfare Centre at 6 locations	Pan City	Inclusive city	Non PPP	42.00	Gol/State Grant/ULB	Project Identified
36	Affordable Houses (600)	Pan City	Inclusive city	NON PPP	60.00	Convergence with PMAY	Project Identified
37	Super specialty Hospital (300 Beds)	Pan City	Inclusive city	PPP	160.00	Pvt Sector	Project Identified
38	Mini sports Centre at 10 locations	Pan City	Inclusive city	PPP	20.00	Pvt Sector	Project Identified
39	Development of Incubation Centers	ABD	Inclusive city	Non PPP	27	Gol/State Grant	Design preparation stage
40	Heritage and cultural museum of Jabalpur city (Near Bhawartal )	Pan City	Tourism	Non PPP	28.00	Debt	Project Identified
41	Development of Tripuri Memorial	Pan City	Tourism	Non PPP	8.00	Convergence with ULB	Design preparation stage
42	Narmada Darshan path	Pan City	Tourism	NON PPP	80.00	Convergence with ULB	Project Identified
43	"Beautification, restoration and improvement of Heritage Properties 1) Anjuman Islamia School 2) Ghanta Ghar 3) kamania Gate 4) Sangram sagar 5) JMC office 6) Town Hall 7) Gokuldas Dharamsala"	Pan City	Tourism	PPP & Non PPP Both	22.00	PPP (12)/ ULB (10)	Tender stage

## OPPORTUNITIES

Sr No	Name of Project	Category	Sector	Type of Project	Project Cost (in Rs Cr.)	Source of Funding	Progress till date
44	IT Park Bargi Hills	Pan City	Technology	Non PPP	90.00	Convergence with MPSEDC	Project Identified
45	Installation of SCADA System integrated with GIS	ABD	Technology	Non PPP	3.12	Gol/State Grant	Project Identified
46	Smart classroom with Wi-Fi facility for 22 schools in Area	ABD	Technology	Non PPP	11.37	Gol/State Grant	Tender stage
47	Intelligent Traffic Management System	ABD	Technology	Non PPP	2.00	Gol/State Grant	Tender stage
48	Command and Control center With Hardware and Software	ABD	Technology	Non PPP	200.00	Gol/State Grant	Tender stage
49	Disaster Management and Mitigation Center	ABD	Technology	Non PPP	2.00	Gol/State Grant	Project Identified
50	Smart bins (Geo-tagging of bins)	Pan City	Technology	Non PPP	5.00	Gol/State Grant	Work in progress
51	Public Bicycle Sharing	Pan City	Transport	Non PPP	6.00	Gol/State Grant	Work awarded
52	NMT from gorakhpur to gwarighat ( approx 6KM)	Pan City	Transport	Non PPP	6.00	Convergence with AMRUT	Tender Stage
53	City of events and festivals ( tourism and Garment)	Pan City	Tourism	Non PPP			DPR Preparation stage
54	Bhawartal swimming pool and mulilevel parking	ABD	Area Development (AD)	PPP	16.00	Pvt Sector	Tender stage
55	Implementation of mobile Application & Web portal for Tourism	Pan City	Technology	NON PPP	3.00	Gol/State Grant	Tender stage
56	Smart Health	Pan City	Technology	NON PPP	2.00	Gol/State Grant	RFP preparation stage
57	Laying of Sewer line at NMT Omti nala	Pan City	Sanitation	NON PPP	3.38	Gol/State Grant	Work awarded
Total					4,025.02		

This handbook is a part of a series that looks at Smart City proposals of 16 cities in the context of their respective needs, challenges and objectives. Each of these 16 cities will be the focus of upcoming Smart Cities Council India's Multi-city Smart City Workshops over the next few months.

Ajmer

Bilaspur

Naya Raipur

Raipur

Belagavi

Bhubaneswar

Coimbatore

Indore

**Jabalpur**

Jaipur

Kota

Lucknow

Solapur

Surat

Udaipur

Varanasi

Vellore

Visakhapatnam

Guwahati

Kochi