



BHOPAL SMART CITY DEVELOPMENT CORPORATION LIMITED

Zone-14, Bhopal Municipal Corporation, BHEL, Govindpura, Bhopal-462023 (MP) Phone: 0755-2477770
Email: smartcitycell@bmconline.gov.in, bscdcl@smartbhopal.city | www.smartbhopal.city



AN INSIGHTFUL PROJECT FOR A SMARTER FUTURE

The Bhopal Smart City Vision is an idea that is being rigorously implemented to metamorphose the state capital of Madhya Pradesh into a smoothly operated, equipped for the future smart city with enhanced livability, workability, stability and sustainability by using information and communications technology (ICT).

Initiated in 2015, under the ambitious smart cities mission launched by the Government of India, this initiative is a time-bound advancement and redevelopment endeavour, sharply focussed on generating opportunities of growth by imbuing the substantial socio-cultural framework of the city with up-to-the-minute technology and futuristic planning.

This initiative follows a consolidated approach on re-strengthening, redeveloping, restructuring and redefining the following:



INFRASTRUCTURE



LIFESTYLE



ECONOMY



EMPLOYMENT



ENERGY



ENVIRO SUSTAINABILITY

SERVICES PROVIDED FOR START-UPS



MANAGED
OFFICE SPACE



BUSINESS
MODELLING



FINANCIAL
ADVICE SERVICES



LEGAL &
HR SERVICES



ADVERTISING AND
MARKETING SERVICES



TRAINING SERVICES



Sparking Entrepreneurial Thinking

THE INCUBATION CENTRE OF BHOPAL SMART CITY

B-NEST is a 24/7 co-working facility, well equipped with all kinds of technological, legal, marketing, and financial services a Start-up needs. It aids entrepreneurs by providing them technical guidance and employment opportunities while developing an enhanced network to cater the needs of demanding businesses.



SMART POLES

The Lighthouses for the Future Journey

The city has been decked with intelligent multi-functional Smart Poles, which facilitate several utility and connectivity services. These futuristic Smart Poles interconnect with a 200 km Optical Fibre Network with 4 core data flow enabling real-time monitoring throughout the city.

The poles empower and add-on to the infrastructural offerings with unique solar powered LED lights for improved street light management, surveillance cameras and environmental sensors for safety management and free WI-FI hotspots to help people connect with public utility services.

The integral features of Smart Pole are:

- Smart Pole has Telecom tower infrastructure to match with city aesthetic and ready to accommodate upcoming technology as 4G and 5G
- Energy efficient and remotely controllable LED Street Lights
- Wi-Fi hotspot services for the city
- Surveillance Cameras for safety and parking violation detection
- Environmental Sensors to monitor air quality, temperature and humidity
- Electric vehicle charging points to promote use of electric vehicles in the city
- Mobile based application with functionality of SOS
- Centralized Command and Control Centre for monitoring the implementation of smart solutions
- Optical fibre for better bandwidth to the Wi-Fi users/providing backhaul to Telecom operators



INTEGRATED
CONTROL &
COMMAND
CENTRE

SMART
CITY
BHOPAL

INTEGRATED CONTROL & COMMAND CENTRE

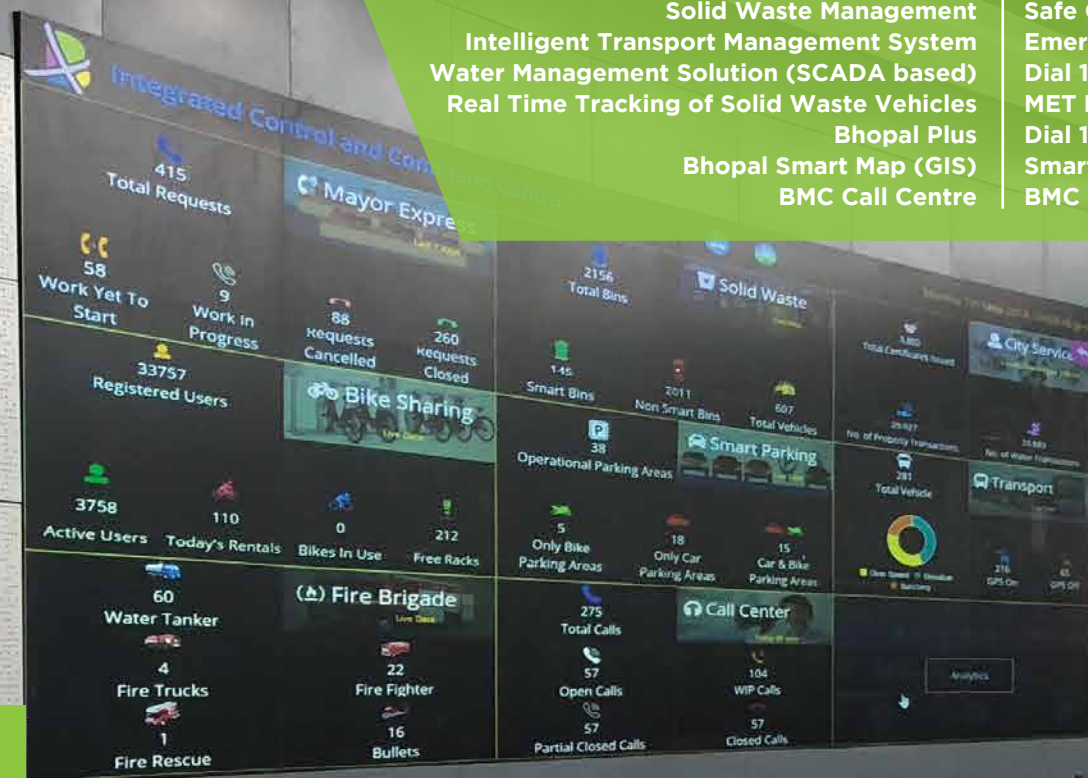
Smart Management Hub of
the Smart City

Leveraging the most advanced Cloud infrastructure instead of building a captive city data centre, the unique cloud based control and command centre of Bhopal is derived on Pay Grow and Pay Use model.

Breaking silos of city operations this, strategically works to monitor and facilitate all the smart services being offered in the city. It also collectively brings the State and Local Governance and their offerings at one place to provide a better connect, coordination and control over plans.

Public Bike Sharing
Smart Pole
Solid Waste Management
Intelligent Transport Management System
Water Management Solution (SCADA based)
Real Time Tracking of Solid Waste Vehicles
Bhopal Plus
Bhopal Smart Map (GIS)
BMC Call Centre

Integrated Plans, Services and Features:
Traffic System
Safe City
Emergency Response & Disaster Management
Dial 108 Ambulance & Jana Express Services
MET Department (Weather Forecast)
Dial 100
Smart Parking
BMC Services



BHOPAL PLUS SMART APP

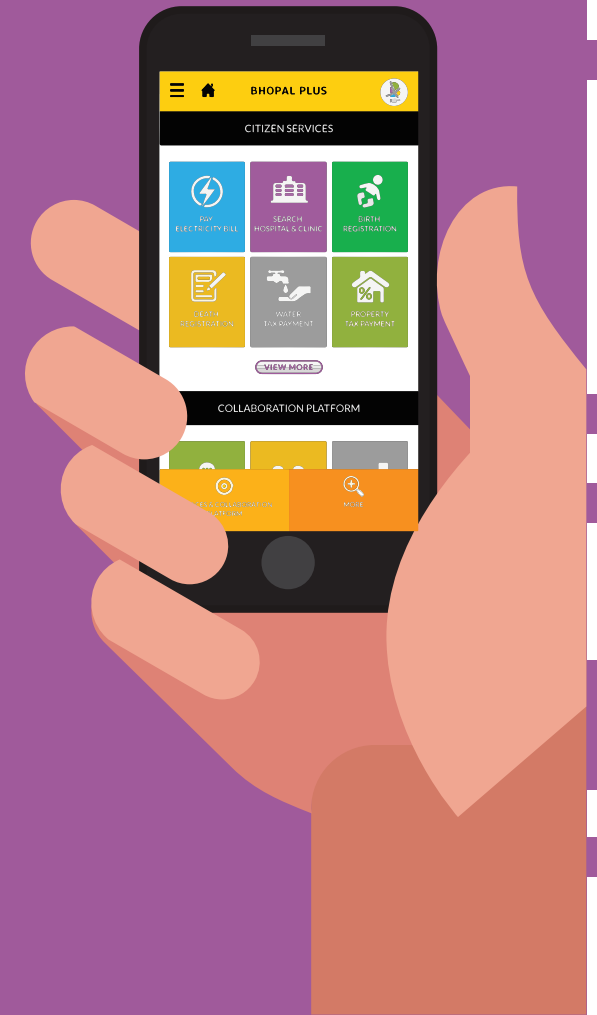
One City, One App

Bhopal Plus serves as a single digital platform for the citizens to engage with the government, avail services, receive issue resolution, and learn about Government schemes, projects, and initiatives. The four main components of the platform are Citizen Collaboration, Grievance Redressal, Citizen Service Delivery (G2C & B2C services) and Public Dashboard. Revolutionizing people's connect with the Government and services, the App provides instant, electronic access to the information people need, the services they require, and the interaction they want.



SERVICES AVAILABLE

- Property tax payment
- Water tax payment
- Electricity bill payment
- Birth registration
- Marriage registration
- Request for death certificate
- Live bus route planner service
- Payment gateways and wallets
- Search for local clinics, hospitals, institutions etc.
- Request for installation of solar plant for domestic use
- Government citizen collaboration platform
- Live city dashboard
- Grievance registration and tracking mechanism





HERITAGE CONSERVATION

Our Heritage, Our Pride

In a bid to conserve and renovate the rich heritage and culture of Bhopal, a heritage conservation project is being implemented in the city. Under this project renovation and restoration work has already been initiated on historical monuments including Old Chowk Bazar, Jama Masjid Complex and Sadar Manzil.

SOLAR ENERGY PROJECT

Towards a Sustainable Future

5MW solar rooftop energy projects have been set up in the city as a part of city's solar energy project. Also, to make Bhopal a pioneer in the field of renewable energy, a major project of Lake Front Solar Panels is being developed alongside Lake View, Bhopal with an estimated cost of Rs. 3.2 crore. The output of the project will be 10,95,000 kWh which will save the revenue of Rs. 76,65,000. It is estimated that the project will cover its cost within 5 years.



PUBLIC BIKE SHARING

Two Wheels. Countless Benefits

India's first automatized Bike Sharing system is now wonderfully serving the lake city. This provides the citizens with convenience to use a healthy, green and economical mode of mobility. Cycles are available in a closely spaced network of semi-automated stations. Users can check out cycles at one station and return them to any other station in the network. In the initial phase 50 different automatised cycle stations have been introduced in the city with 500 lightweight modern bikes. Integrated with a smart fare collection system, these cycles are accessible by smart phones or smart cards.



SOLID WASTE TRANSFER STATIONS

Reduce. Reuse. Recycle. Rise.



Waste Transfer Stations Locations in Bhopal-

- Arif Nagar
- Bairagarh
- Shahjahani Park
- Transport Nagar
- Bhadbhada
- Near Danapani Restaurant

Out of the above mentioned, three stations are being inaugurated.

Major Features

- Capacity- 20 cubic meters
- Fully Automated System
- Waste's Total Segregation- Green Compactors for Wet and Blue for Dry Waste
- 2 tons per cycle and 26 tons per hour compacting capacity

High-level Waste management

- Directing the wet and dry waste to the stations
- Bringing the waste to the compactors after segregation
- Automated compacting into rectangular shapes of 18-20 cubic meters by the machine.
- Waste-box pick-up with the help of transfer vehicle hook

Effective Results

- Now, Rs. 2 crores 76 lakhs per year are saved by the reduction of the number of cycles, to and fro, from waste collection centers to the dumping yard
- A decrease in manual labour
- With the compaction of garbage, the capacity of transfer vehicles increase manifold
- Contribution in reducing global pollution by preparing waste for reuse



INTEGRATED TRAFFIC MANAGEMENT SYSTEM (ITMS)

No More Violations of Traffic Rules

Integrated Traffic Management System (ITMS) is a modern, Artificial Intelligence-based system in which cameras and sensors are used to keep an eye on the traffic of Bhopal on daily basis. In future, this system will play an important role in keeping the increasing traffic under surveillance and collecting the real-time data. ITMS has become active in Bhopal since May 2018 after the trial run.

FEATURES AND SERVICES:

- Identifying and e-challaning of traffic rule breakers.
- Clicking pictures of the licence plates of vehicles which break traffic rules.
- Camera and radar-based system.
- Integrating the new data with RTO database.
- Auto e-mail challan
- Online payment port



Smart Parking - T.T. Nagar

SMART PARKING

Modern. Secure.
Convenient

To make optimum use of available land space, optimal state-of-the-art for vehicle parkings are being developed in series throughout the city. This public parking infrastructure is being developed on PPP model, connecting the system to the people with 'Smart Parking Mobile App' to give real-time parking availability information to the people.

Also, facilities of paperless ticketing, integrated parking management, cashless ticketing, CCTV surveillance, smart parking cards etc. are in accordance with the India smart cities mission.



Smart Parking - M.P. Nagar



MECHANISED VACCUM ROAD SWEEPING

Effective. Green. Modern.

Major Features

- 6 imported vehicles that cover 200 km lane length in Bhopal every night
- Waste Collection Machine Capacity- 5 cubic meters
- Water-Jetting Machine Capacity- 5000 liters
- Equipped with GPS and cameras, monitored and directed by Integrated Command & Control Centre
- Mechanized Sweeping has reduced pollution

Well-managed Smart Sweeping Procedure

- Manual collection of the scattered waste on roads
- Automated brooming coupled with water sprinkling by 3 Sweeping Machines
- Jet-Cleaning of Signboards, footpaths etc. by 1 Water-Jetting Machine
- Transportation of the waste to Waste Collection Centres by 2 Waste Collection Machines



Effective Results

- Reduction in the ppm quantity of air pollutants
- Intensive eradication of street waste from the desired place
- Uninterrupted traffic flow during the daytime because the cleaning is done at night
- Contribution in making Bhopal the 'Cleanest City in India'
- Reduction in the time spent on city cleaning

SMART UNDERGROUND DUSTBINS

Making Bhopal A Cleanliness Hub



Major Features

- 130 bins at 70 locations
- Each bin capacity- 3 m3
- LED indicators displaying live waste capacity
- Separate, Blue-Green sections or bins for dry and wet waste
- Monitored through Integrated Control and Command Centre

Role in Smart Solid Waste Collection

- Informing the citizen, who wants to dispose of waste, about dustbin's available capacity
- Segregation of waste into the dry and wet waste
- A signal is sent to the Integrated Command and Control Centre once the dustbin fills
- ICCC directs the waste collection vehicles to transport the waste to Waste Collection Centres

Effective Results

- Quick execution of waste
- Bhopal have gotten rid of waste on the street and stray animals
- Decrease in water and land pollution
- Accurate determination of the amount of daily waste produced in Bhopal



SMART INFRASTRUCTURE: ARCH BRIDGE

The Smart Connect

An Arch Bridge connecting Ginnori and Visarjan Ghats to BRTS road is taking shape in Bhopal. Its superstructure is built with world-class technique. Constant e monitoring is being done here to ensure quality and total safety.

Features-

- Connects Ginnori Ghat and Visarjan Ghat to BRTS Road
- The super-structure is of 200 m in length
- The Bridge Length including junction improvements is 534 m



SMART PARK

Green goes Modern

A theme based, 80% green, smart park has been opened for public use now. Spread across 23-acre land, it exhibits horticulture practice along with modern and aesthetic features.

Features-

- Around 80% under the greenery
- Dedicated Yoga Zone
- Wi-Fi Facility
- CCTV Surveillance
- Landscaping
- Natural Waterways
- Children Playing Area
- Effective Lighting Facility



GOVERNMENT HOUSING UNDER ABD

Comfortable Lifestyle Right At Bhopal's Centerpoint

Bhopal Smart City Development Corporation Ltd. is working towards making Bhopal a smart and highly developed city. In this link, F & G type multi-storey government houses are being constructed in the area of Area-based Development under Tatya Tope Nagar. A total of 3000 flats will be constructed in this project, out of which 688 flats are being constructed in the first phase.



Features:

- 2 & 3 BHK Flats
- Modern and convenient infrastructure
- Dual piping system
- Water recycling and automated solid waste management
- Solar panels on rooftops
- Multipurpose hall in the center
- Ample air and natural light
- Green building standards



SMART INFRASTRUCTURE: SMART ROAD

Now, Bhopal's Drives Smart

A 2.21-km road from Bharat Mata Square to Polytechnic Crossing has been laid with wide driving lanes on either side. Features like underground wiring, cycle lanes, utility ducts make it a road with near-perfect safety.

Features-

- 8.5 m wide driving lanes on both sides
- 2 m wide cycle lanes on both sides
- 2 m wide footpath-cum-utility duct on both sides
- Underground wiring
- Incessant Surveillance



SMART GOVERNANCE: DIGITAL DOOR NUMBERING

Comprehensive Data Collection: House-by-House

The objective of this project is to provide a Unique Smart Addressing Solution for Urban Establishments depicting an Alpha Numeric Smart Address Code. All the information related to any numbered property can now be accessed with a single click.

DDN's Data Includes-

- Geo-coordinates
- House layout
- Road
- Area
- Floors
- Registration documents etc.