SterliteTech

Smart City of Gandhinagar

Sterlite Tech Leads the Development of India's First Smart City – Gandhinagar

Scope: Equitable and High Quality of Life for Citizens

Named after the father of the nation, Mahatma Gandhi, the city of Gandhinagar is India's first smart city, and the second planned city after Chandigarh.
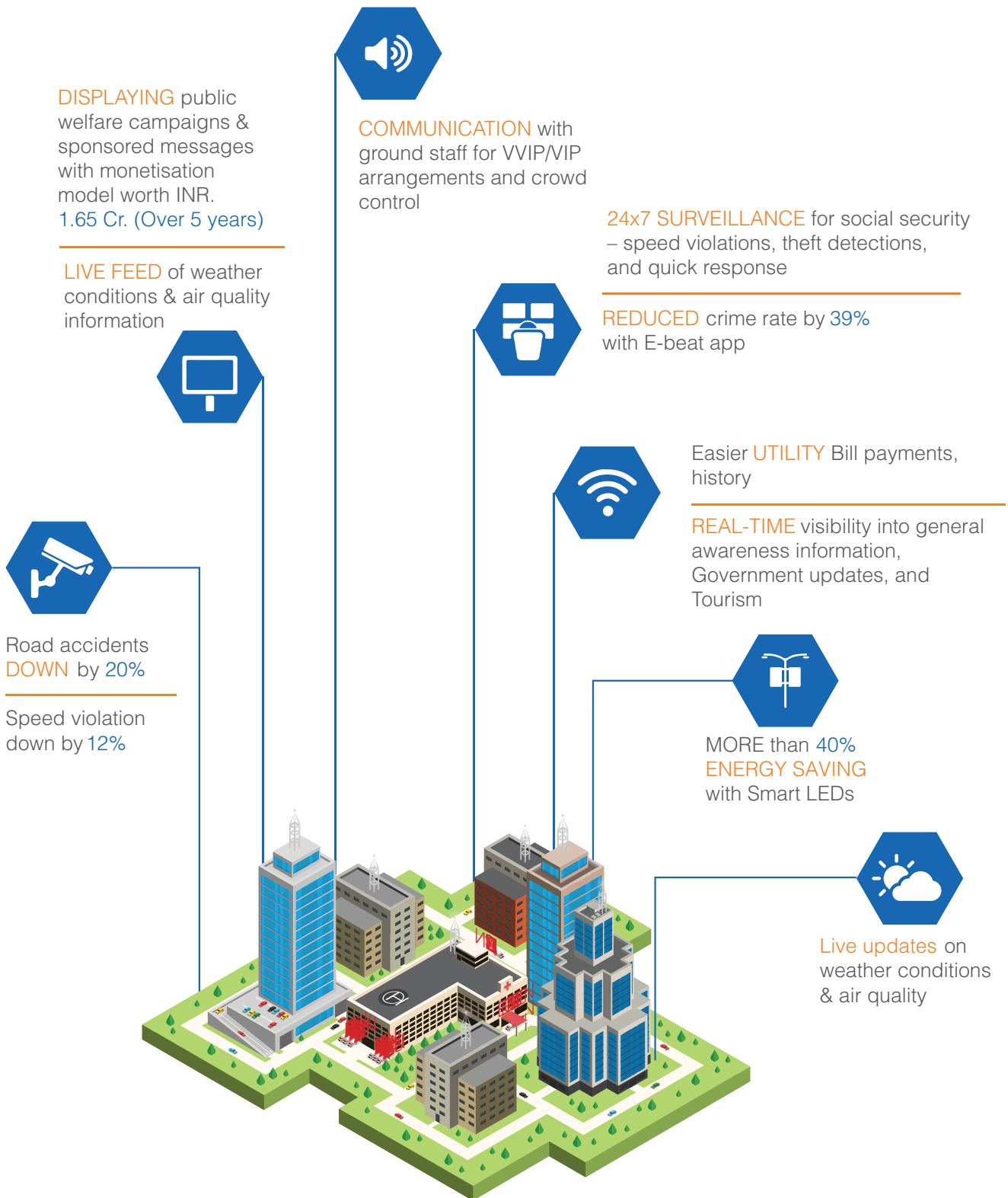
This capital city of Gujarat had the vision of being an equitable urban centre that provides a high quality of life to all its citizens.Towards this vision, Gandhinagar Municipal Corporation (GMC) endeavoured to create a worldclass ICT infrastructure to cater to the growing population as well as to empower the citizens to easily and digitally access administrative services.

Based on its proven expertise and vast experience, Sterlite Technologies was chosen as the master integrator to execute this prestigious project. The company was enlisted to deliver the end-to-end smart city solution for Gandhinagar.

Since this was the first smart city deployment in the country, Sterlite Tech took up the challenge of working without established

DISPLAYING public welfare campaigns & sponsored messages with monetisation model worth INR. 1.65 Cr. (Over 5 years)

LIVE FEED of weather conditions & air quality information

COMMUNICATION with ground staff for VVIP/VIP arrangements and crowd control

24x7 SURVEILLANCE for social security – speed violations, theft detections, and quick response

REDUCED crime rate by 39% with E-beat app

Easier UTILITY Bill payments, history

REAL-TIME visibility into general awareness information, Government updates, and Tourism

Road accidents DOWN by 20%

Speed violation down by 12%

MORE than 40% ENERGY SAVING with Smart LEDs

Live updates on weather conditions & air quality

benchmarks. The company focused on requirement gathering and analysis, followed by regular and intensive deliberations with government officials to decide the approach and plan of action for the project. The next stage included the identification of OEMs for system integration, designing the entire project blue print, and finalising the project scope and timelines. The project started following approvals from the government bodies. In fact, an important aspect for Sterlite Tech's team was coordination between the different government departments for the completion of the project. The team had to

regularly liaise with the National Highway Authority of India and several municipal departments, such as legal, human rights, and forest departments for various approvals.

Sterlite Tech's expertise in handling large and diverse government projects in the past helped it to efficiently handle the multi-department coordination.

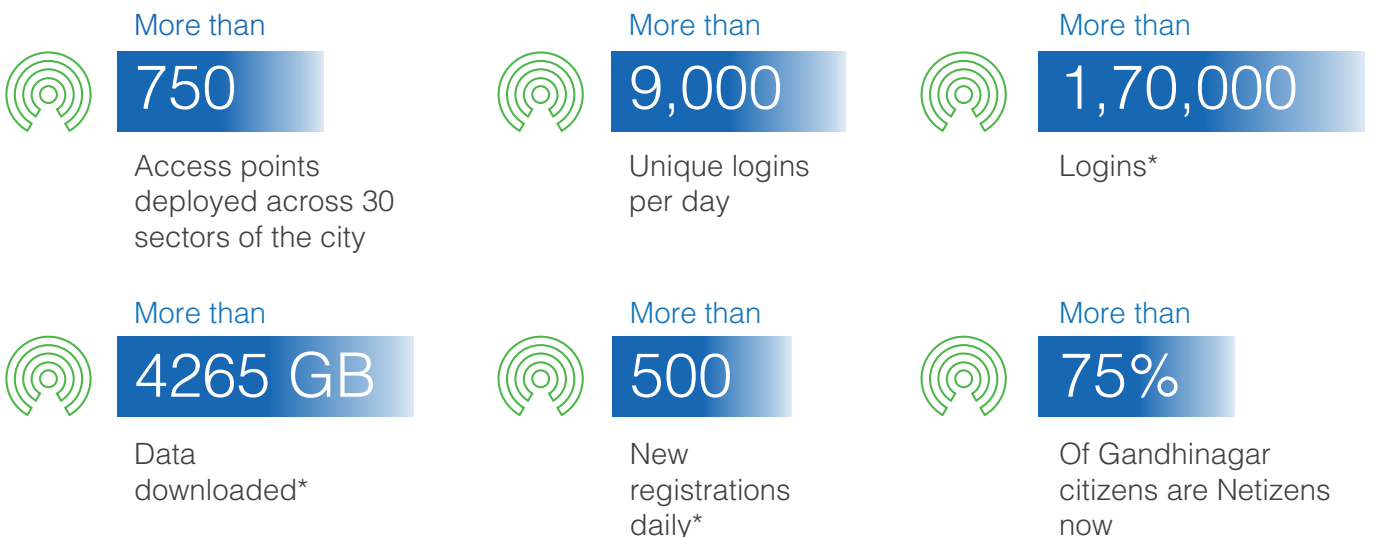## Solution: WiFi and App Access, Citizen Safety, Information Dissemination,

Access to Administrative Services

WiFi Services

Ubiquitous wireless connectivity is accepted as a core building block for a smart city, promoting user engagement, and connecting smart devices and sensors. It becomes the basis for all government-to-citizen and government-to-business communications.

In Gandhinagar, more than 75% of the area is already covered with

open-to-air WiFi services. Citizens can access free WiFi for the first two hours of usage with a limit of 2 GB, after which the services are charged at competitive rates. While on one end, people are able to access administrative services as per their convenience, on the other, GMC has added another revenue stream by monetising the target advertisements on a mobile app and web portal. It is also able to offer advanced location services, such as tracking and multiple payment option for monetary realisation of online services.

More than **750**	More than **9,000**
Access points deployed across 30 sectors of the city	Unique logins per day

More than **1,70,000**

Logins*

More than **4265 GB**	More than **500**
Data downloaded*	New registrations daily*

More than **75%**

Of Gandhinagar citizens are Netizens now

* After 1st month of Installation

Smart Security - IP Surveillance

Public safety is at the heart of a smart city. Real-time monitoring of different areas of the city helps in enhancing the security of citizens while also allowing better traffic management. More than 209 cameras for CCTV set up were installed at 35 vantage points in the city to prevent criminal and malicious activities. Face detection, traffic monitoring, vehicle-speed detection, and number-plate recognition systems were also installed by Sterlite Tech as part of developing Gandhinagar as a smart city. Today, because of real-time monitoring, the administration is able to identify miscreants within a short span of time.

Smart Lighting

Sterlite Tech deployed 1000 motion sensor based streetlights across five key roads in Gandhinagar.
The sensors automatically activate or deactivate when they sense any motion. For GMC, it has brought down energy expenditure by as much as 40%, allowing them to bring down their carbon emissions. More importantly, the city administration is able to provide a safer environment to the city's residents.

Environmental Sensors with Display on Digital Signages

Increased engagement with citizens is the hallmark of any smart city. At Gandhinagar, digital signages have been deployed at five locations, allowing GMC to display critical information and announcements to the city's residents. For instance, the platform is used for displaying critical information, such as important announcements related to voting, government campaigns, emergency situations,

Public Address System Citizen Services and Convenience Mobile Applications

Gandhinagar citizens no longer have to wait in long queues for regular work, such as paying bills,other transactions and regulatory services. The launch of mobile applications has not only enhanced GMC's engagement with the citizens but also increased operational efficiency. Citizens are also able to learn about the latest government services and easily connect with the right departments.

health, weather related updates, tourism promotions for tourists, directions,latest government initiatives, etc. They help in gaining more attention enabling government to reach to the masses and promote government initiatives and programs. GMC is also able to monetise this platform by lending it for private advertisements.

Integrated Central Control Room

Sterlite Tech's centralised command and control centre is considered one of India's most advanced.
The video wall at the command and control centre transmits video from various CCTV cameras across the city. Not only does it allow GMC to

control and monitor the different ICT applications deployed across the city, but also collect data, which provides vital insights in the usage pattern of the smart city infrastructure. It can be of great significance for the police department in unfortunate events of emergency or natural calamities. Since it is also integrated with the CCTV cameras, it enables the concerned authorities to remotely assess the situation and take control. It also allows them to make announcements on the PA system.

Smart Help – Help Desk/Call Centre
With a 24/7 call centre, Gandhinagar citizens can now connect with the administration anytime, anywhere.

A multi-level IVR is equipped to provide information about the different government initiatives and procedures. Residents can also use the service to lodge complaints and give feedback. Useful information, such as the names and contact details of the nearest hospital in case of an emergency are also provided.

Impact and Post Deployment As a smart city, Gandhinagar has recorded significant gains. The deployment empowered the citizens to connect with the city management anytime anywhere, thus enhancing the confidence of citizens in the administration. GMC has brought down its operational expenditure by deploying smart lighting and

energy sensors. It has also added new revenue streams through WiFi and digital signage. The Municipal Corporation believes that it will be able to generate annual revenue of Rs. 4 crore through these initiatives. Besides, GMC has recorded savings of up to 40% from Smart Lighting initiative.

Conclusion
The successful development of Gandhinagar as India's 1st Smart City in a short span of time proves that Smart Cities are no longer just buzzwords. A smart city plays a significant role in the way we live and manage day-to-day activities. In addition to Gandhinagar, the deployment of Jaipur as Smart City

Overcoming Challenges in Implementation

Industry Benchmarks as Guidelines

Sterlite Tech teams applied their expertise from a decade of experience in creating effective networks to set up new benchmarks for the industry.

Accommodating Multi-departments Multi-user Aspiration

Sterlite Tech's excellent program management practices ensured that all the stakeholders were in sync throughout the project's duration.

Departmental Procedures and Participation

Sterlite Tech's seamless project management practices ensured complete coordination across various levels and channelised multiple activities all. along the duration of the project.

and Kakinada's road to becoming a Smart City, have also rightly placed Sterlite Tech at the forefront of the Smart Cities revolution in the country. The company's comprehensive Design-Build-Manage suite, enabled by its multi-partner approach, allows it to offer best-in-class, end-to-end solutions. Accomplished expertise at delivering large and challenging system integration projects has ensured flawless creation of these smart cities. Extensive network planning, design and deployment experience further position Sterlite Tech as a front-runner in Smart City Solutions and Deployment.