



Smart City
MISSION TRANSFORM-NATION



**SURAT MUNICIPAL
CORPORATION**



SMART CITY- SURAT



Need of Smart City

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“Smart city mission is one of several major urban development programs focused on India’s rapid growth and its challenges and opportunities. The aim is to promote economic growth, strengthen governance and improve results for urban residents”



Surat Selected among First 20 Smart Cities of India

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Smart City Mission announced by Prime Minister Shri Narendra Modi on 25 Jun, 2015.

Surat selected at **4th position** in 20 Smart Cities list declared in first round by MoUD on 28 Jan, 2016.



Surat Smart City: VISION

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“Smart Utilization of Surat City’s Potential for enhancing Quality of life for the citizens by Providing Equal Access to Best Quality Physical Infrastructure, Social Infrastructure and Mobility through leveraging state of the art technology; thus making Surat a Futuristic Global city with focus on enhancing economy, protecting the ecology and preserving the identity & culture of the city.”



Surat Smart City Financial Plan (FY 2016-2020)

(Rs in Crores)

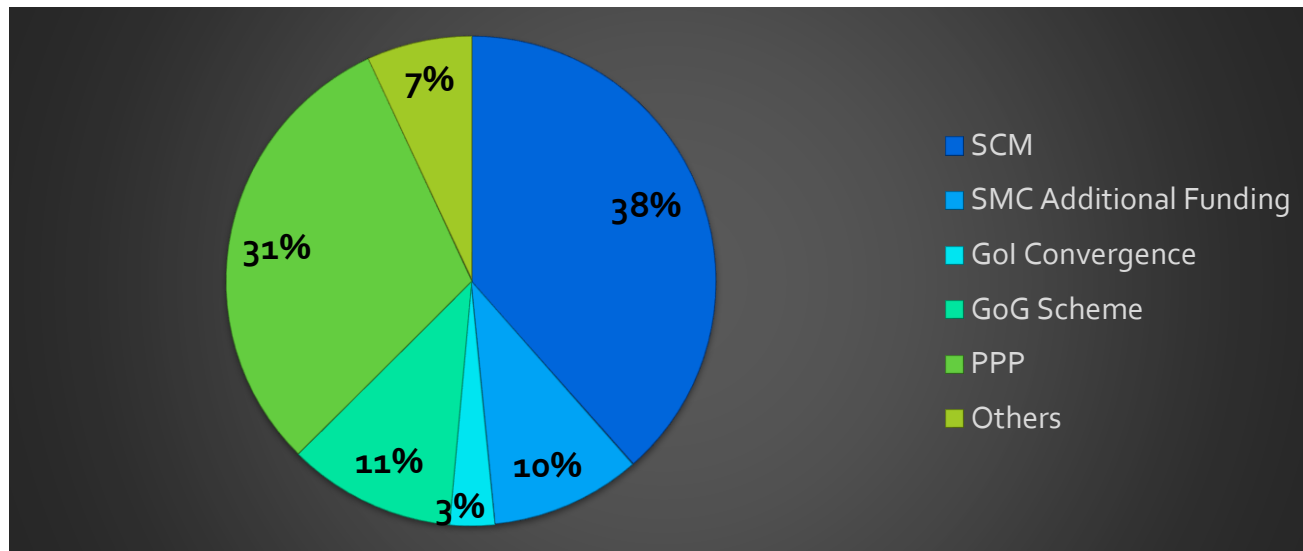
SN	Subject	Total Financial Plan
(A)	PAN City	
	Transportation - Connectivity	795.00
	Total Amount (A)	795.00
(B)	Retrofitting – Area Based Development for South East zone and East Zone areas of City	
1	Water Supply Management, Quality & Water Recharging	215.00
2	Sewerage- Recycle & Reuse and Storm Water	465.00
3	Renewable Energy Sources (Solar, Wind & Biogas) & Street Light	67.00
4	Town Planning & Development (Non-vehicle zone street, Walkability- Footpath, Non-motorized vehicles, Signages, Skywalk)	260.00
5	Economic Development (Logistic Park & Incubation Center)	70.00
6	Housing & Inclusiveness (Affordable Housing)	700.00
7	Smart City Solution (CCTV TV, Air Quality, Advance Grievance Redressal System and Smart Waste Collection System)	25.00
	Total Amount (B)	1802.00
	Total Amount (A + B) (Rs. in Crores)	2597.00

Surat Smart City Financial Plan (FY 2016-2020)

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(Rs. in Crores)

SCP	Total	Smart City Mission			Convergence		SMC Additional Funding	PPP	Other
		Gol's Share	GoG's Share	SMC	Gol Scheme	GoG Scheme			
Pan city	795				0	0	0	110	0
Area Based Development	1802	500	250	250	110	255	260	685	179
Total	2597	1000			78	287	258	795	179





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AREA BASED PROPOSAL

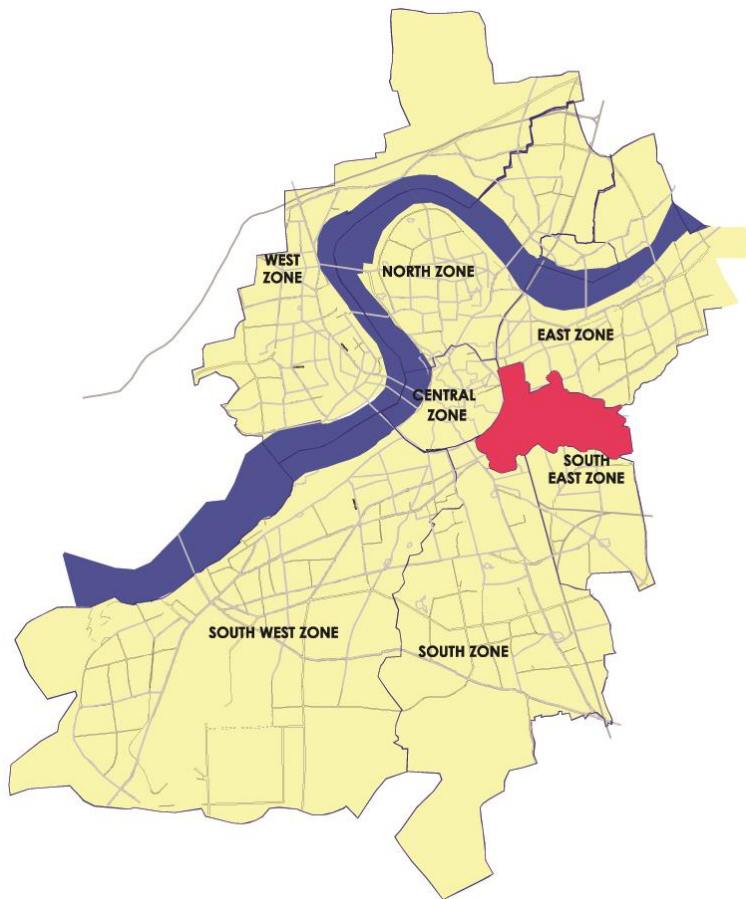


Retrofitting



Smart City Proposal- Area Based Development

**Total City Area -
326.515 Sq.Km.**

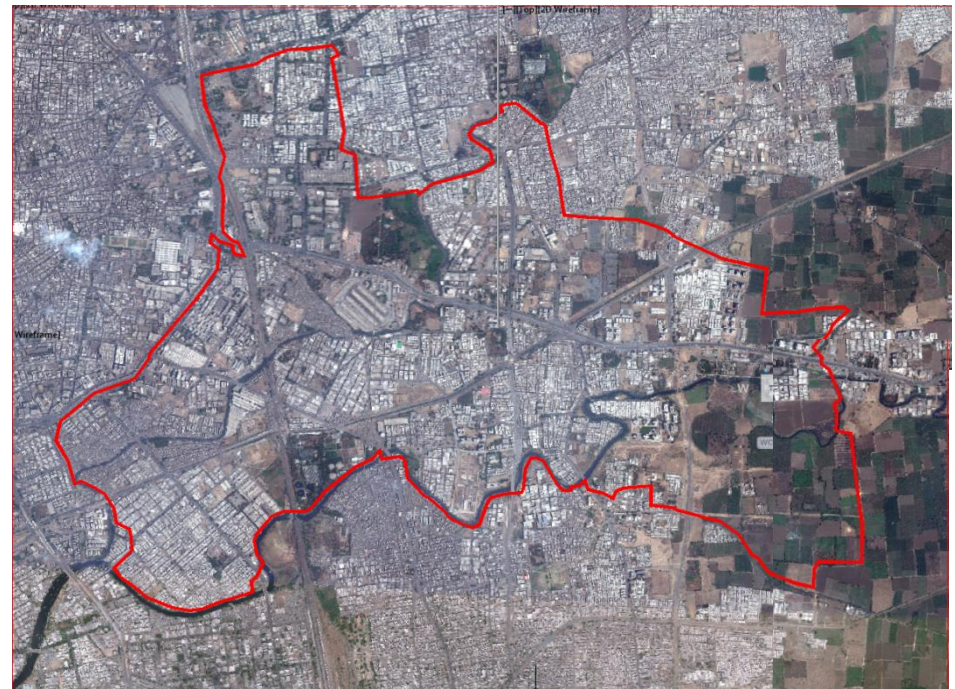


**Retrofitting Area: 2167 acres
(8.77 Sq.Km)**

includes 7 TP schemes

Present Population 5 lakhs

Floating Population : 1 lakh



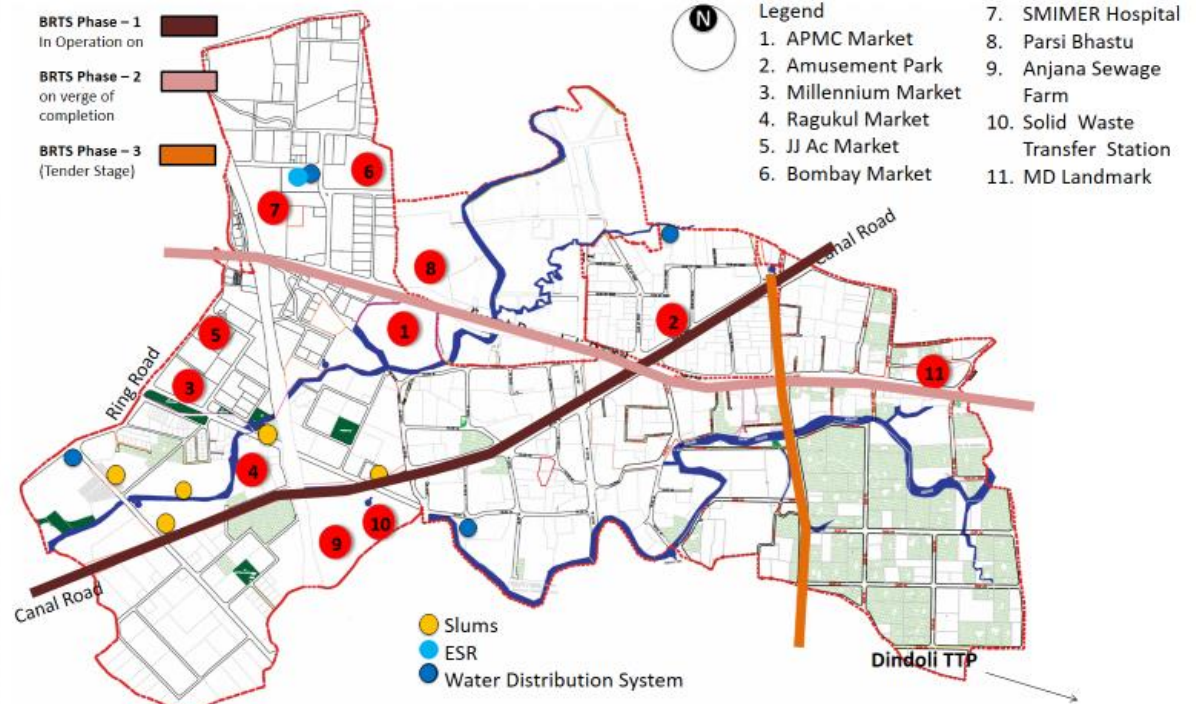
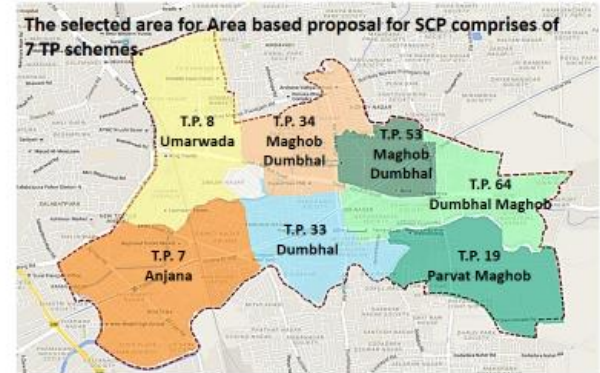
Smart City Proposal- Area Based Development

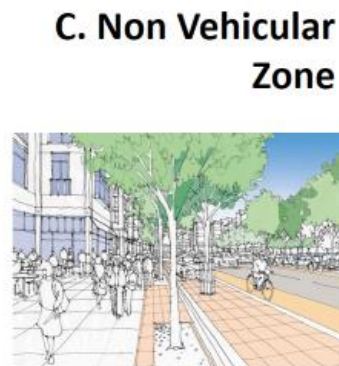
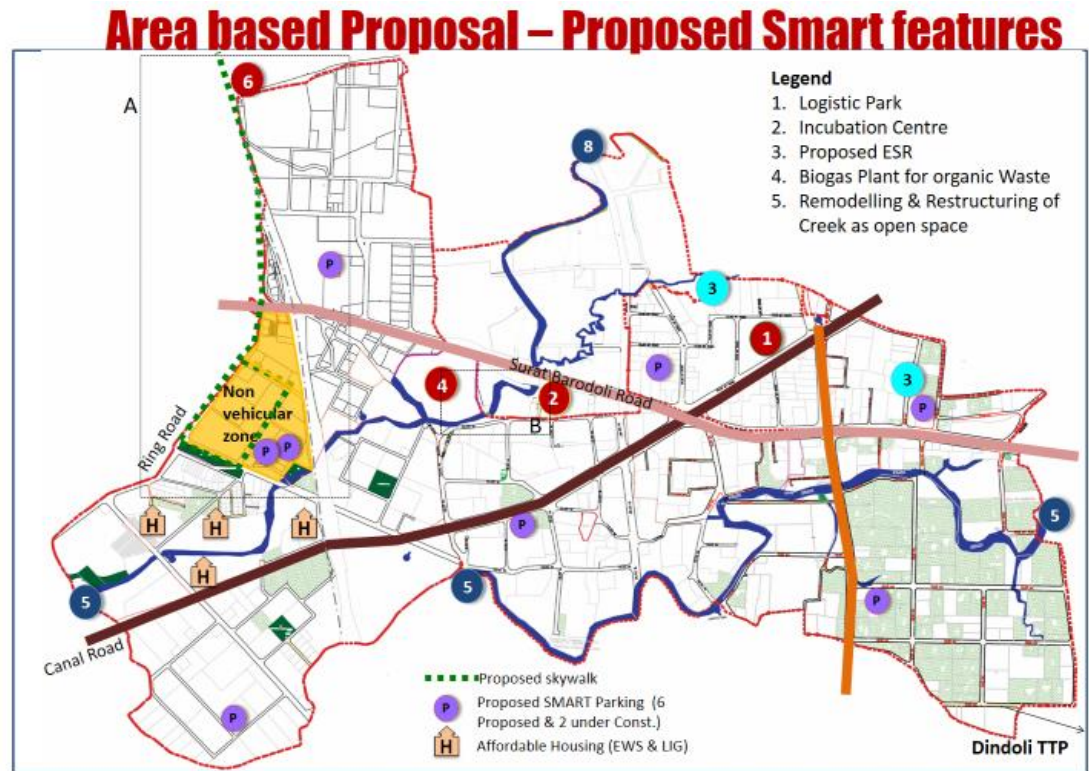
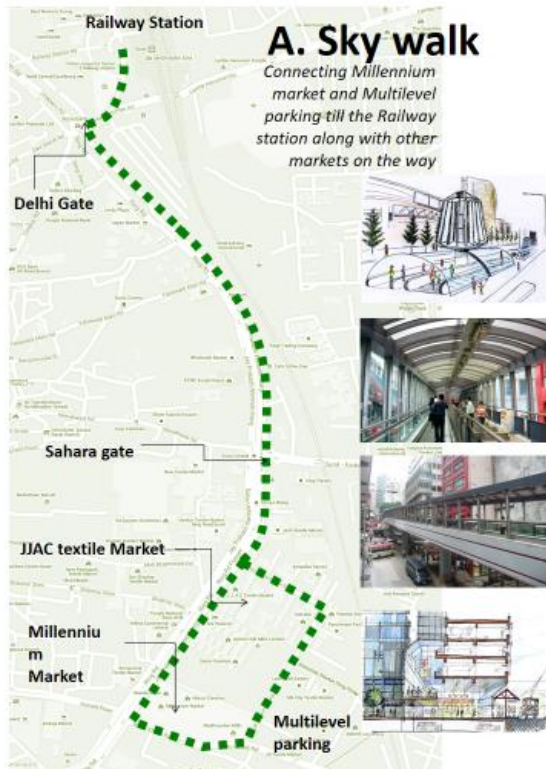


The area occupies 3% of physical area of the city, houses 10% of the population and contributes to 16% of the GDP share of the city.



Area Based Development: Selected Area Existing Plan





Area based Development: Smart Solutions

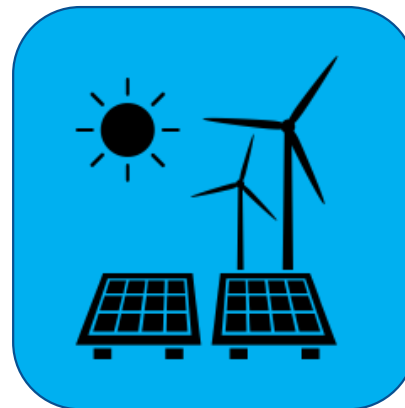
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**Water Supply
Management,
Quality & Water
Recharging**



**Sewerage- Recycle &
Reuse and
Storm Water**



**Renewable Energy
Sources & LED Street
Lights**



**Town Planning &
Development**



**Economic
Development**



**Housing &
Inclusiveness**



Smart City Solutions

AREA BASED DEVELOPMENT- Smart Solutions Financial Plan (FY 2016-2020)

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(Rs in Crores)

SN	Subject	Total Financial Plan
	Retrofitting – Area Based Development for South East zone and East Zone areas of City	
1	Water Supply Management, Quality & Water Recharging	215.00
2	Sewerage- Recycle & Reuse and Storm Water	465.00
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5	Economic Development (Logistic Park & Incubation Center)	70.00
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7	Smart City Solution (CCTV TV, Air Quality, Advance Grievance Redressal System and Smart Waste Collection System)	25.00
	Total Amount	1802.00



Water Supply Management, Quality & Water Recharging

- Up-gradation of existing water supply system to 24 x 7 water supply in the proposed area.
- Smart Metering – for meter reading/ billing remotely
- To Reduce NRW up to 15% due to known quantum of unaccounted water.
- Advance online water quality monitoring and on site testing by mobile testing van.
- Zero Liquid Discharge WTP – Recycling of backwash water received during treatment process in Water treatment plant.
- Rain water recharging – to uplift the existing ground water table in the area.
- “Water Conservation” through IEC Activities – For Awareness in Citizens.

Projected Cost : Rs 215 Crores



- Up-gradation and augmentation of two existing Sewage treatment plants in the proposed area.
- Recycling & treatment of secondary sewage water through Tertiary treatment plant for reuse by nearby industries for Industrial use.
- Remodelling and restructuring of existing 5.5 km creek passing through proposed area – Beautification of both sides of Creek by construction of footpath, cycling track, plantation etc.
- Rain water recharging by storm water pipes.

Projected Cost : Rs 465 Crores



Renewable Energy Sources (Solar, Wind & Biogas) & LED Street Light

- As per Smart City guideline, 10% of total electricity consumption of area to be achieved by Renewable energy resources.
- Proposed increase in the existing capacity of Wind, Biogas and Solar energy resources as follows:
 - ✓ Wind Energy – 2.1 MW
 - ✓ Biogas plant for organic waste (In association with APMC)
 - ✓ Solar Energy (Roof top) – 1 MW
- LED Street lighting and Smart monitoring system in the proposed area- Automatic On-Off of Streetlights through auto sensors.

Projected Cost : Rs 67 Crores



■ **Smart Parking (Mechanized)**

- ✓ Proposed area is bursting with commercial activities – mainly textile & APMC markets of traders, wholesalers & retailers. To prevent the road side parking practiced currently, mechanized smart Parking is proposed on PPP basis at 7 different locations in the proposed area .

■ **Skywalk (Travellator)**

- ✓ As the proposed area with many textile markets is near to railway & inter-state bus station, it has high floating population density and pedestrians find no place on road currently.
- ✓ Further traffic situation is worsened due to pedestrians on road.
- ✓ To solve this problem walkability is provided by 3.6 Km long skywalk / travellator connecting textile market area to Inter-state Bus station and railway station.

■ **Visual Improvement in area**

- ✓ For visible improvement in the area, implementation of road dividers, proper signage, decorative traffic islands etc. relevant to smart city is proposed.
- ✓ Cycle track and footpaths without encroachment to improve the walkability
- ✓ No Vehicle Zone to reduce the pollution and to promote recreation/ art display .

Projected Cost : Rs 260 Crores



■ **Logistics Park**

- ✓ Although proposed area is bursting with many textile markets, currently no planned logistics facility is available and hence due to haphazard and on-road activities of transportation/ loading/ unloading of goods, traffic problem persists for full day.
- ✓ To solve heavy traffic problem due to such activities in the proposed area, advanced logistic park is proposed.
- ✓ Due to proposed Logistic park, systematic loading-unloading & transportation of textile goods will be possible and traffic congestion will be reduced.

■ **Incubation/ Start up centre**

- ✓ High employment opportunities are available in the proposed area due to various commercial activities.
- ✓ A Start up & Incubation centre is proposed here to train the semi-skilled/ skilled job seekers in various trades and to provide necessary information through single window clearance to promote start ups .

Projected Cost : Rs 70 Crores



- To improve the liveability condition of citizens in the slum pocket, Affordable housing projects are proposed in the area:
 - ✓ Planning of 1050 EWS and 1950 LIG Houses under **Pradhan Mantri Jan Aawas Yojana** .
 - ✓ Planning of **Zero Slum Area** by developing 5750 houses based on PPP model.
 - ✓ Total Projected cost of Rs 700 crores. It includes **Rs 460 crores of PPP**.

Projected Cost : Rs 700 Crores



- **Improvement in the existing system to match with Smart City standards in the following ways:**
 - ✓ **Advance Grievance Redressal System.** (web & mobile application based advanced system)
 - ✓ **Smart Waste Collection System**
 - special types of solid waste collection and segregation at source
 - ✓ **Air and Water Quality Monitoring**
 - To make the citizens aware of critically harmful pollution parameters, air and creek water quality will be monitored through automatic sensors and displayed at various places in the proposed area.
 - ✓ **CCTV Surveillance Network**
 - Area surveillance Network planned for safety and security of Citizens especially for women, elderly and children.

Projected Cost : Rs 25 Crores

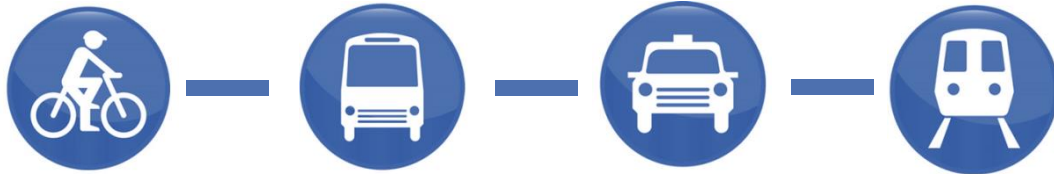




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PAN CITY PROPOSAL



Transport - Connectivity



PAN City: Smart Solutions

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**Surat
IT-MAC**



**Automatic Fare
collection System**



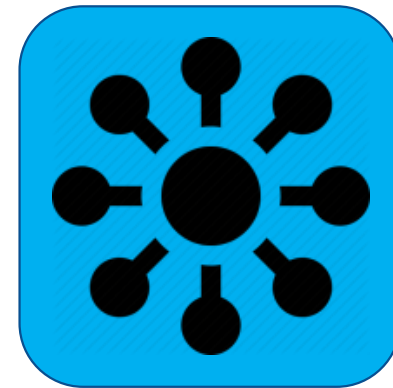
**ERP with
GIS system**



**SMAC-
Smart City Centre**



**S-Connect
Card**



**Connected
Surat (FTH)**

PAN City - Smart Solutions & Their Financial Plan (FY 2016-2020)

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(Rs in Crores)

#	Smart Solutions	Financial Plan
1	Surat IT-MAC (Integrated Transport-Mobility Administration Center)	183
2	Automatic Fare collection system	166
3	Development of ERP with GIS Platform	107
4	SMAC Center (SMARt City Center)	75
5	S-Connect Card Management System	44
6	Connected Surat WiFi-Surat : FTH (Fibre to Home)	220
Total (Rs. in Crores)		795



Transport: Smart Solution: Surat IT-Mac & AFCS

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- **IT Mac (Integrated Transport-Mobility Administration Center)**
 - ✓ ITMS (Integrated Transit Management System)
 - ✓ ATCS (Automated Traffic Control System)
 - ✓ Automatic Sliding Door System
- **AFCS (Automatic Fare Collection System)**



Benefits:

- ✓ IT-Mac is proposed to solve heavy traffic congestion problems faced by citizens currently.
- ✓ It will serve as integrated platform for all services like - BRTS, City Bus, Traffic police, RTO, Fire, emergency services etc. IT enabled applications will help all the concerned agencies to co-ordinate and support each other for smooth traffic operations.
- ✓ It will make present public transport system more efficient and citizen friendly.
- ✓ AFCS will help in issuing single cashless ticket for all modes of transport.

Projected Cost : Rs 349 Crores



■ Smart City Center (SMAC Center)

- ✓ It is envisaged as central monitoring control center of the city by displaying all essential service related parameters on a large screen wall for effective and efficient service delivery to citizens.
- ✓ This center will serve as integrated platform to connect functioning of all the departments on real time basis.
- ✓ Online monitoring of Key Performance Indicators (KPIs) at one place.
- ✓ Automated sensors and systems will send various data sets to the SMAC Center, which will be analyzed to avail important information to make decisions.
- ✓ It will help all the departments in maintaining civic service delivery standards on day-to-day basis.



■ Mysurat.in

- ✓ Citizen Participation and idea exchange can be done easy through this portal.
- ✓ Through Mysurat.in portal, all the necessary data/information regarding Citizen's facilities will be available to all citizens and two way communication will be possible.
- ✓ Citizen will be able to give their valuable opinions/ suggestions related to the future projects of the city through online portal.



■ S-Connect Card

- ✓ Cashless facility for Citizens for all facilities like City Bus, BRTS, Library, Science Center etc. provided by Surat Municipal Corporation.
- ✓ SMC will launch S-Connect card in association with State bank of India and Citizens can top up amount to the card like Prepaid mobile service.



■ City Wi-fi and Fibre to Home (FTH)

- ✓ All citizens to be connected through Internet
- ✓ Through Wi-fi and FTH, internet facilities to be provided to all citizens at reasonable rates (On PPP basis)



- For implementation of Smart City Projects, SPV (Special Purpose Vehicle) is registered as a Company named **“Surat Smart City Development Limited”** as per Smart City Mission Guidelines, with following Board of Directors.

Sr. No.	Board of Directors	Designation
1	Municipal Commissioner, Surat	Chairman
2	Standing Committee Chairman	Director
3	City Engineer	Director
4	Dy. Municipal Commissioner (F)	Director
5	Dy. Commissioner of Police (HQ)	Director
6	Dy. Municipal Commissioner (P & D)	Director
7	Dy. Municipal Commissioner (ISD)	Director
8	Central Government Nominee	Director
9	State Government Nominee	Director
10	Managing Director/ Chief Executive Officer	Director

- Surat Smart City Development Ltd. incorporated on 31st March, 2016.
- First board meeting of SPV was held on 13th April, 2016.



- Bank Account opened in the name of Company.
- Board appointed Chairman of the company as interim CEO till regular CEO is appointed.

THANKING
YOU!

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