

**SURAT SMART CITY PROJECTS  
PAN-2-AFCS (AUTOMATIC FARE COLLECTION SYSTEM)**

**1. Name of the Project:** Design, Development, Implementation, Maintenance and Management of Automated Fare Collection System (AFCS) for Bus Rapid Transit System (BRTS) and City Bus operation for Surat City.

**2. Background:**

Surat is among the fastest developing city in the world. It has ranked 4<sup>th</sup> developing city of the world. Surat city is well-known for its diamond polishing business, textile market business, Real estate business. As a city develops it attracts many people around the city as well as far away from the city. Due to this population increases; and one can say that increase in population is directly proportional to the increase in traffic density. There is a substantial change of transportation condition in Surat city in last 3 years. SMC has introduced a high-quality public transport through BRTS for 30 Km route in Phase-I which has improved liveability and contributed to economic development. Phase-II of BRTS is about 42 Km. At present, in Surat city there are city buses (Citilink) & BRTS buses in operation. SMC has finalized Master plan for induction of 2000 city buses and 300 BRTS buses, in the next 3 years.

**3. Vision:** AFCS project aims to automate the fare collection mechanism and technology within Surat’s transport ecosystem (BRTS & City Bus Services) and enhance operational capability, citizen’s satisfaction, reliability and ease of operations for its services offered through various transits.

**4. Sector:** Transportation

**5. Cost and financing:**

SCP Cost	: Rs. 166.00 Cr
DPR Cost	: Rs. 105.42 Cr
Tender Estimated Cost	: Rs. 105.42 Cr
Tender Sanctioned Cost	: Rs. 80.22 Cr
Convergence Scheme/PPP/SMC	: Surat Smart City Project
Convergence/PPP/SMC Costing	: NA

**6. Brief Description (Technical Details):**

**The procurement and implementation of automated fare collection system is designed to advance a number of goals.**

- Implement integrated fare management process for transit services within Surat city
- Introduce Open/Closed loop based electronic ticketing platform

- Integrate with Banking infrastructure for best industry technology, practices and services
- Stimulate growth in ridership
- Simplify fare policy and ability for smart and integrated pricing
- Decrease dwell time
- Increase ease of use for customers to promote customer self-service
- A goal for the new fare collection system is to improve the rider experience by reducing complexity and giving the rider easier ways to pay that are familiar. The easy acceptance of electronic fares and consequent improvement in boarding speeds is expected to improve the rider experience.
- Foster regional transit fare integration
- It is important for the Authority to implement a solution that meets current needs, and provides a transition path to meet the future needs of the region. The Authority wishes to avoid technologies that are closed, out of date and not scalable.
- Decrease customer service costs
- Reduce current manual fare media and reduce maintenance costs
- Reduce cash and lower cash handling costs
- Integrate with other on-board equipment for single sign on for bus operators.
- Unify the riding experience by integrating mobile ticketing with other applications for trip planning, real time arrivals, etc.
- Provide seamless operation with the AFCS facilities.
- Monitor and manage service adherence and performance
- Integrate, automate and secure ticketing
- AFCS promotes cashless smart card technology in transportation as well as in retail areas
- It will be helpful to citizens using the Amenities like Library, Swimming pool, Aquarium and others.

#### **7. Speciality:**

- Support for Surat Money Card
- M-ticketing (Mobile)
- Integrated Ticket between City bus and BRTS

#### **8. Implementation Plan:**

- **Current status:** Pilot completed and Request order 01 issued.
- **Completion Date:** 20/03/2019

**9. Impact/ Envisaged Impact of the project:**

- This IT enabled service will make present public transport system more efficient and citizen friendly. It will be possible to manage the system centrally, simultaneously extending a package of transport options to citizens.
- This component will help in having an intelligent public transport system in Surat City. AFCS will not only help in overall management of the public transport system but also it will also give citizen friendly transit options.
- Transaction module will be easy and convenient to people in general. Saving time by avoiding 'Q' for user adaptive to the system. Minimal use of manual ticketing will reduce use of manpower at stations.

**10. Photos:**

**Google Map:** NA

**Site photo:**



**Turnstile**



**Pole Validator in City Bus**



**POS Machine at BRTS Stop**



**11. Video:**