



G H Patel College of Engineering & Technology, V. V Nagar

Department of Civil Engineering

Report on

Visit to “BRTS Office and Control Room, Ahmedabad”

Aim of Visit:

“The main aim of visit was to make students aware and to teach them about the planning process of any urban transportation system like BRTS and to study thoroughly the monitoring system of BRTS, Ahmedabad.”

Introduction:

The Department of Civil Engineering had organized a visit to BRTS head office, Usmanpura, Ahmadabad on 7th of March 2018 for third year students, as a part of the elective subject, ‘Urban Transportation System’. The visit was observed by 38 students accompanied by Prof. Gaurav Gohil, Prof. Alpesh Sankhat, and Ms. Jyotika Talati.

The team departed from college campus at 9:00 Am and after an hour journey it reached the BRTS office, where a short introduction about BRTS was given through a audio-video presentation. After which an assistant manager of BRTS Ahmedabad interacted with the students and shared the knowledge regarding planning, route selection, monitoring system etc of the BRTS. He then led the team to control room where the students were briefly introduced about the monitoring system of BRTS, surveillance, devices and technologies used and steps taken to improve the existing system.

About BRTS Ahmedabad:

Janmarg, also known as Ahmedabad BRTS, is a bus rapid transit system in Ahmedabad, Gujarat, India. It is operated by Ahmedabad Janmarg Limited, a subsidiary of Ahmedabad Municipal Corporation and others. It is designed by CEPT University. It was inaugurated in October 2009. The network expanded to 89 kilometres (55 mi) by December 2017 with daily ridership of 2,49,000 passengers. BRTS won several nation and international awards for design, implementation and operation. It was rated Silver on BRT Standard in 2013.

The control room has access to every bus and station through GPS and 360 degrees CCTV camera. The station can monitor behaviour of bus, acceleration, behaviour of the driver, time lags in the actual timing. Driver can be contacted anytime and the safety is assured throughout the journey. The BRTS platforms are equipped with RFID technology for easy on-board boarding of passengers.

The control room is fully equipped with latest technologies, which ensures best efficiency. The BRTS is a growing firm which is expanding as per the demand. It takes care of fare prices by special discounts to students, blind and handicapped persons. BRTS has incredibly helped in decreasing the pollution of the city and cut the traffic jam issues to half. In future, BRTS will be integrated with Ahmedabad Metro, which is presently under construction and will serve as a feeder service to Metro, The under construction Gujarat International Finance Tec-City will be accessible through this multimodal mix of rapid transport systems.

Ahmedabad Janmarg Limited (AJL), the parent company which governs BRTS operations in Ahmedabad, was constituted as a Special Purpose Vehicle by Ahmedabad Municipal Corporation, Ahmedabad Urban Development Authority and Government of Gujarat. AJL introduced automated fare collection system through smart cards for commuters.

It has a mixed fleet of air conditioned and non-air conditioned buses. It has 220 Euro III and Euro IV-compliant diesel buses. Parts for the buses are provided by Tata Motors. These buses are built by Chartered Speed locally according to specifications.

The system runs on Integrated Transportation Management System (IMTS) which includes Advanced Vehicle Tracking System (AVLS), Fleet Management System (FMS), Automatic Fare Collection System (AFCS), Passenger Information System (PIS), Passenger announcement (PA), and Vehicle Scheduling and Dispatching (VSD). These technologies are provided by the consortium of Vayam Technologies and GMV Innovating Solutions since 2010.

Achievements of BRTS, Ahmedabad.

- National Award for “Award for Excellence in the category of Best IMTS Project – 2011” from Government of India.
- International Award for “Sustainable Transport Award – 2010” at Washington DC, United States.
- National Award for “Best Mass Transit Rapid System Project - 2009” from Government of India.
- International Award for “Outstanding Innovations in Public Transportation – 2010” from UITP, Germany.
- National Award for “Best Innovation Project Towards Improvement in Urban Mobility in the City of Ahmedabad through New Technological Innovations in Janmarg BRTS – 2010” from Government of India.
- International Award for Design – “Daring Ambition Award and Knowledge and Research Award – 2011” at 59th UITP World Congress, Dubai.
- UITP India Political Commitment Award at 60th UITP World Congress, Geneva on 27 May 2013.
- Markenomy Awards 2013 for " Best Urban Infra Mass Transport Project" from Falcom Media at Mumbai.

Criticism:

BRTS failed to increase the number of public transport users in Ahmedabad. Before launch of BRTS, in 2009, the number of public transport users (users of AMTS) was 8 to 8.5 lakh. After six years of operation, in January 2016, it is found that the number of public transport users (combined users of BRTS and AMTS) dropped to 7.5 lakh. During the same period, the number of private vehicles in the city increased by 54%, up from 18.2 lakh to 25.10 lakh. Only 18% of the total population of the city uses public transport.

In 2011, 42 km network of BRTS had daily average passenger traffic of 1.2 lakh which increased only marginally to 1.32 lakh in 2016 despite expansion of network to 89 km.

In 2015, AJL spent ₹ 98 crore on operation incurring loss of ₹ 35 crore. In 2015, there are 213 buses with AJL. 80% of them are air conditioned diesel buses which has average of 1.5 km per litre of diesel resulting in increase in air pollution. Air conditioned buses cannot be run on CNG and they are meant to attract more passengers. Dedicated BRTS corridors causes traffic jams at several places especially in Old Ahmedabad. As of June 2017, 186 out of 250 Buses are air conditioned.

Images of the Visit:

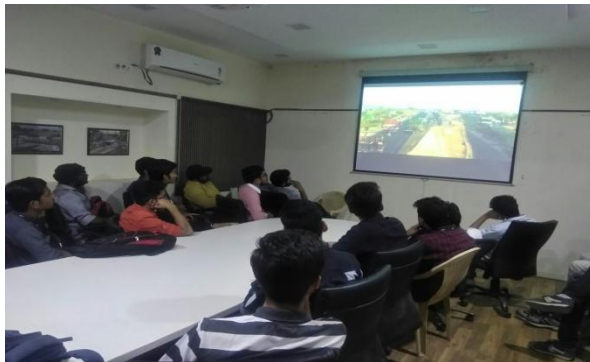


Figure 1: Introduction of BRTS through Short Film



Figure 2: BRTS Control Room.



Figure 3: Students and Faculty members at BRTS Ahmedabad Head Office.