Smart Mobility Plan for Ahmedabad
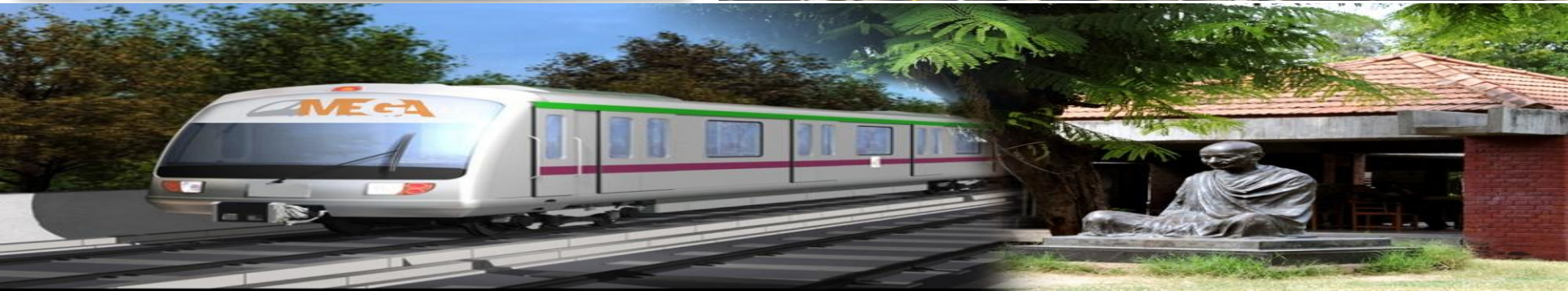
Presented By: Shri Mukesh Kumar, IAS,
Municipal Commissioner

Public Transport Initiatives for Ahmedabad

- ▶ MEGA
  - ▶ Total 39. 259 Kms (Phase 1)
  - ▶ Total 32 station (28 elevated and 4 underground)
- ▶ Ahmedabad Janmarg Ltd (BRTS)
  - ▶ Total 97 Kms
  - ▶ Total 157 stations
  - ▶ Fleet Size: 250 Buses
- ▶ Ahmedabad Municipal Transport Services
  - ▶ Total 460 sq kms
  - ▶ Fleet Size: 977 buses

Transforming Ahmedabad.. From 2005 to 2016

‣ Area- **466 sq kms**

‣ Population-**5.5 million** (year 2011)

‣ **Improved ranking to 4th** polluting city from **68th** in India

‣ Public Transport share increased from **7% (year 2005) to 12% (year 2016)**

‣ Shorter motorised trip length (**Ahmedabad 5.7km, Hyderabad 10.5 km**) and lesser travel time (**Ahmedabad 24min, Hyderabad 32 min**)

‣ Operational BRTS of **97 km** with fleet size of **250 buses** (**1.5 lakhs** passengers)

‣ **100%** increase in AMTS bus fleet size (450 buses to 977 buses)

‣ **39. 259 Kms MRTS** under construction (Phase 1)

Metro link Express for Gandhinagar & Ahmedabad (MEGA) Company

- System Length: 39.259 Kms (Phase 1)
- Number of Stations: 32 (28 elevated and 4 underground)
- Operational will start by October, 2018
  - East West Corridor
    - Vastral Gam to Thaltej Gam
    - Total Length – 20.737kms
    - Total Stations – 17 stations (13 elevated and 4 underground)
  - North South Corridor
    - APMC to Motera Stadium
    - Total Length – 18.522 kms
    - Total Stations – 15 stations (all elevated)
- Average expected speed : 45 Kmph

Ahmedabad BRTS - Janmarg Today...

- Ahmedabad Janmarg Ltd is registered under the Companies Act, 1956 and is 100% subsidiary of AMC.
- Total Project cost approved for 89 km is Rs.984 Crore (Approx. Rs 12 Crore per km)
- **First Full fledged BRT** system of India
- Commercial operation started from 14th October 2009
- System has grown from **12 kms. To 97 kms**. today
- **157 Bus stations** operational
- Total **13 routes** and with one transfer entire BRT network is accessible.
- Avg. daily ridership **increased from 18,000 pax/day** (October 2009) **to 1,50,000 pax/day** (October, 2016)
- Avg. daily collection **increased from Rs.73693/day** (October, 2009, with 20 buses) **to Rs.19,24,678/day** (October, 2016, with 250 buses)
- Total fleet – **250 buses** (incl. 184 A.C. buses)
- Headway of **2.5 mins in peak** hours (8:00 am to 10:30 am and 5:30 pm to 8:30 pm) to and **8 to12 mins in off peak** hours
- Avg. speed is **25 kmph in peak** hours and **27 kmph in off peak** hours

Rapid Boarding and Alighting :
Safe, fast, accessible for all..

14 passenger boarding/ alighting in 40 sec.

40-50 passenger boarding/ alighting in 40 sec. Can cater to higher demand with more than double the no. of people

- At level boarding reduces boarding time and increases safety
- Reduces delays
- Accessible for all..physically challenged, senior citizens, women, children
- Use of RFID technology for automatic door operations – First time used in city transport system

Automatic and Off-Board Fare collection

Total 1,20,000 Smartcards distributed. (Regular with 10%, Student with 40%, Physically challenged with 40% more travel value and free ride for Blind persons and Freedom Fighters.)

Daily Smart cards users are around 15,000 to 20,000.

Janmarg Control Centre

Operations monitoring at JANMARG - Control centre

- Follow scheduled departures/ arrivals
- Vehicle status i.e. before or after the schedule time
- Over speeds
- Breakdowns
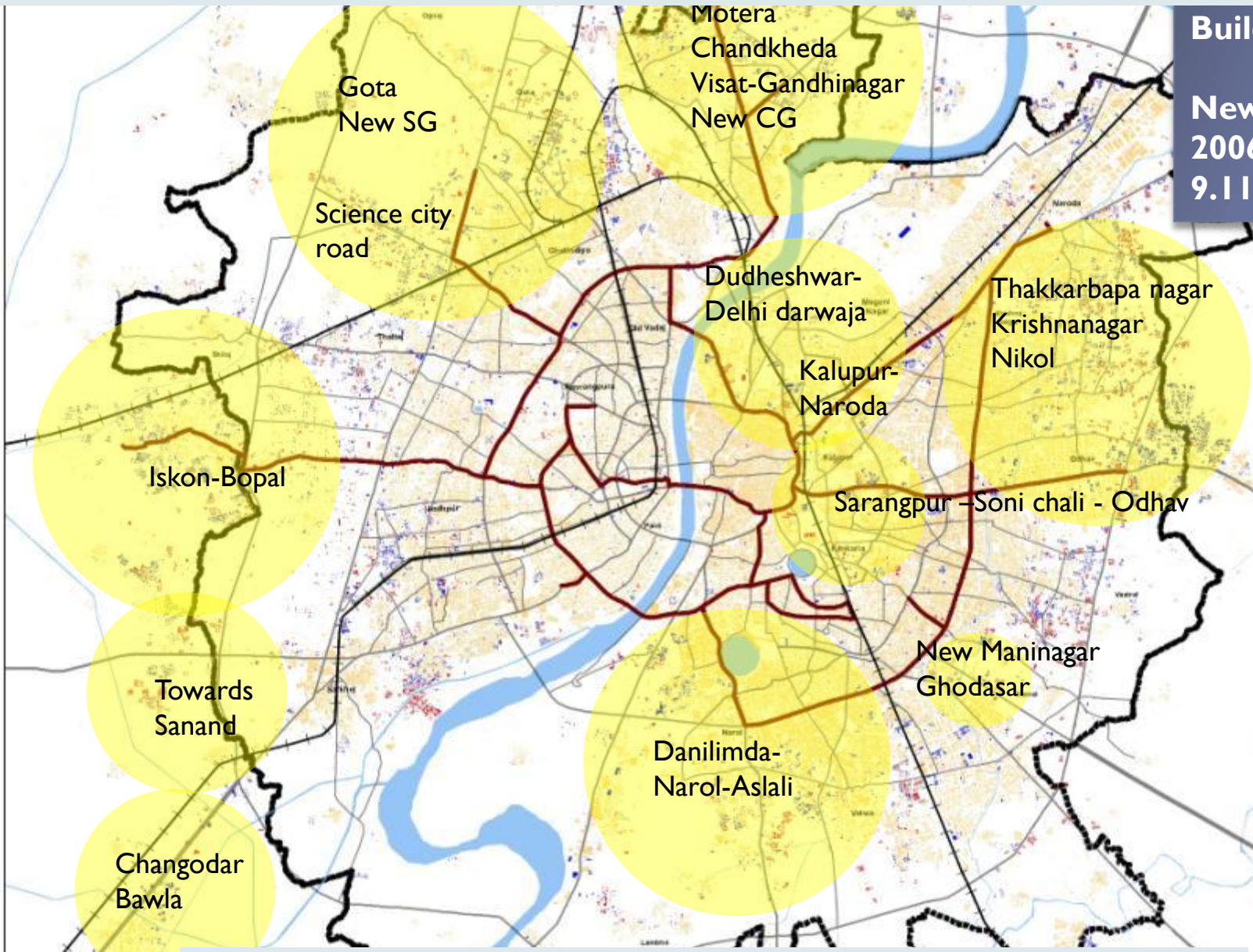- Data refreshing at every 10 secs

Passenger Information System

LED and audio announcements inside buses

LED displays at Bus stations and buses
Audio announcement systems in buses

Janmarg Network : Connecting new development areas

Buildings 2,75,029

New buildings after 2006: 25,065
9.11% INCREASE

Gota
New SG

Science city road

Motera
Chandkheda
Visat-Gandhinagar
New CG

Dudheshwar-
Delhi darwaja

Kalupur-
Naroda

Thakkarbapa nagar
Krishnanagar
Nikol

Iskon-Bopal

Sarangpur –Soni chali - Odhav

Towards
Sanand

New Maninagar
Ghodasar

Danilimda-
Narol-Aslali

Changodar
Bawla

Legend

Railway

National Highway

State Highway

Arterial

Subarterial

2006

2006_2011

2014

Water body

AMC_Bound

BRTS is catalyzing Transport Orient Development (TOD)

Ahmedabad Municipal Transport Service… Famously known as AMTS among the commuters….Serving Ahmedabad citizens since 1st April, 1947

અ. મ્યુ. ટ્રા. સર્વિસની સેવામાં મૂકાયેલ સર્વપ્રથમ બસ - 'શેવરોલેટ' - ૧૯૪૭

General Information about AMTS

▸ Established on - 1st April, 1947

▸ Total Covered Area - 466 Sq.KM.

▸ Total Fleet – 977

▸ Avg. no of buses on road – 850

▸ Avg. no of passenger per day – 6.00 lacs

▸ Number of Operational Routes - 161

▸ Number of Terminus – 10

▸ Number of Depot cum Terminus – 05

▸ Number of Depot - 11

▸ Number of Zone - 16

▸ Fleet Utilization – 87 %

Use of ITS in Fleet Monitoring

Sr.No	Description	AMTS (Owned)	On Contract (Private)	Total
		Installed	Installed	
1	Global Positioning System (GPS)	275	577	852
2	LED Display Board	231	497	728
3	Public Announcement System	-	300	300

Smart Mobility Solutions

▸ **Physical Integration**

  ▸ AMTS as feeder to BRTS and BRTS as feeder to Metro

  ▸ Physical integration of Metro and BRTS is planned.

  ▸ AMTS – BRTS concept for AMTS and BRTS integration

    ▸ Around 150 AMTS buses have been passing through BRTS corridor and providing last mile connectivity.

  ▸ Route Rationalization for AMTS is also planned.

  ▸ 2014 earlier effort met with

▸

  protest.

Smart Mobility Solutions

▸ Ahmedabad Intermodal Hub is planned.

▸ AMTS & BRTS Bus stops

▸ Metro connectivity

▸ Public Facilities

▸ Multilevel Parking Facilities

▸ Retail and Entertainment Hub

▸ Commercial offices

▸ Convention centre and other activities

Upper level connection to Metro station

Identification of 12m wide open Public domain space for transit facilities near station area

Smart Mobility Solutions

"Jan Mitra"

▸ Common City Payment Card

▸ Single Card will be used for METRO, BRTS and AMTS

▸ All services of AMC will be covered through one prepaid open loop card.

▸ Other services such as Online Shopping, Malls, Petrol pumps etc may be availed
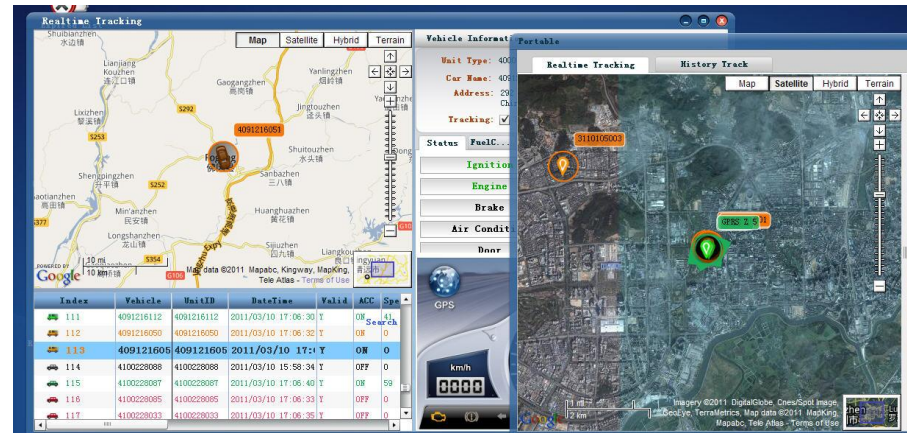
▸ 1000 cards already distributed on pilot basis.

▸▸ Encouraging cashless transit

Smart Mobility Solutions

- ▸ **System Integration**
  - ▸ New ITMS system for integration of AMTS and BRTS comprises of
    - ▸ Automatic Vehicle Locating System
    - ▸ Automatic Fare collection System
    - ▸ Passenger Information System
    - ▸ Scheduling and Dispatch System
    - ▸ CCTV cameras on all BRTS stations
    - ▸ Provision for online tickets through QR codes on cell phone and via PayTM application (Proposed)
- ▸ **Introduction of seamless connectivity through own OFCS network of 172 Kms**

Way Forward towards Urban Mobility in Smart City Ahmedabad

▸ Effective Execution for ITMS and OFCS network

▸ Fare Integration for AMTS, BRTS and Metro

▸ Policy Framework for Uniform Parking facility

▸ Smart solutions like Mobile Applications, Online Passenger information etc for ease in commuting

▸ Development of Intermodal Hub

▸ Policy framework to make it sustainable

High Density

Congestion

Spread Out

Free Mobility

Thank You….