Ahmedabad Today

- Area of 490 sq kms
- Finance and administrative hub of Gujarat
- Population of 5.6 million - decadal growth of 75%
- 1.45 million vehicles, growing at 7% per year
- 2 wheelers - 73 percent (vehicle share)
- Bus trips 0.9 million per day
- Average trip length 5.8 kms
What is Janmarg BRTS

**System**
Janmarg BRTS was conceptualized as a public transit system. It has all the important components like operations planning and scheduling, ITS systems for operations, electronic fare collection, along with well thought out road, junction, station, terminal and allied infrastructure.

**Ownership**
Primary responsibility is in the hands of the Municipal Corporation. Government of Gujarat, AUDA and Police have provided full support to the initiative. AMC is supported by Indian as well as International experts in the area of sustainable transport systems and development of world class BRTS.

**Passenger studies**
Extensive studies were done including a household survey and large sample Bus and IPTS passenger origin-destination surveys. A comprehensive model has been built which is constantly being calibrated with fresh data. A proper operations plan is under development for all form of public transit which includes Janmarg BRT and AMTS to form a comprehensive and integrated system for passenger convenience.

**Network**
A large network has been created based on passenger studies, road infrastructure attributes, existing landuse and future development plans. As part of Phase-1, 58 km network is tendered / under construction. Another 30km is planned as part of Phase-2.
JANMARG – CORRIDOR PHASING

Phase 1 corridors (58 km)

Phase 2 corridors (30.5 km)

Elevated Corridor

LEGEND

Airport
Railway Stations
GSRTC terminals
University/ educational campus
Industrial estates

AHMEDABAD - LANDUSE PLAN

RESIDENTIAL
INDUSTRIAL
INSTITUTIONAL
BRT trunk routes – boarding/alighting
BRT Corridor – work in progress
Cycle tracks on Nehrunagar Park edge
Cycle tracks on Nehrunagar Park edge

- Retaining existing trees from existing park
- Redeveloping the park with cycle tracks, pedestrian paths
Corridor design – trees being protected

Existing trees retained and incorporated in design
BRT and Flyovers – System access
Intersection design

Signalized

Round about
(square about)

Size based on turning movement volume

Signal cycle an essential component of geometric design

Short signal cycle essential avoid jam

Short signal cycle gives frequent pedestrian crossing time
Intersection design – square about
TWO PHASE OPTIONS

Only straight movement allowed at junction with two phase signals.

Right turning movement through
U-turn - Left turn combination.
Bus Station Location

- Fewer lanes to cross to reach BRT station
- Synchronized signals for safe pedestrian crossing
- Median Station allows for easy transfers
- More space for mixed traffic at intersection

BRT Stop Away from Intersection

Junction Design
BRT Station - design elements

- System Identity and Station Name
- High ceiling with partial roof cover over Bus
- Route information
- Safe distance between Bus and BRT station (250mm)
- Platform extension for close docking of bus (>125mm)
BRT Bus – Median and Curb access
If BRT Station is at the Junction then

Many buses cannot utilize GREEN signal since earlier bus blocks the bus bay because it is waiting at the RED signal

Results in Long queues and bunching of buses and slows down the BRT system

May result in unwanted pedestrian behavior wishing to reach bus stop
‘Car free day’ – CG road

Source: Shreya Gadepalli, ITDP
‘Car free day’ – CG road

Source: Shreya Gadepalli, ITDP
Kankaria Lakefront Development