Janmarg
Bus Rapid Transit in Ahmedabad

An Initiative of Ahmedabad Municipal Corporation
under JnNURM
Prof. H.M. Shivanand Swamy, CEPT University, Ahmedabad
UITP 20th January 2010
Ahmedabad today

• Area- 466 sq kms. Population-5.6 Mill, By 2031 >10 Mill

• Compact City, Well Balanced Network, Mixed Landuse, Ahmedabad has 5 ring roads and 17 well developed radials. Mixed Land uses

• 2mill vehicles. 2 wheelers-73 percent, 0.8 Million Bicycles,
• 60000 Three-wheeler Auto (CNG), Addition of 430 vehicles every day

• Short and Distributed Trips, Safe City, Avg. Trip Length is about 5.5 kms in Ahmedabad (Bangalore–11 kms, Hyderabad–8 kms) – Avg. Travel Time – 20 Minutes, Road Fatalities -Ahmedabad 244 (Surat-267, Bangalore -840, Hyderabad-424, Delhi>2500, London-204, Singapore-190)

• Long tradition of Public Transport Operations (Ahmedabad Municipal Transport System (AMTS) operates buses since 1945), 1000 buses, Majority CNG, carry 1 Million passengers per day.
Ahmedabad Plan

Vision
- Long term Sustainability
- ‘Department of Climate Change’

Integrated, Comprehensive
Multimodal
- Metro System, Regional Rail, BRTS, Bus System, Feeder, Bicycles, Pedestrians

Land use Plans
- Network Completion, Missing links, bridges, rail over bridges
JANMARG

- Ahmedabad – 6 Million People
- 466 Sq. Kms Area
- 89 Kms of BRTS network
- Median Bus Stations,
- Rightside door, Standard Floor Bus (900 MM)
- External Ticketing
- Closed System Operations
JANMARG – COMPREHENSIVE

- NETWORK and Not Corridors
- Connectivity of important origin and destinations
- Catalyst for area development
- low income, low accessibility zones (old walled city)
- Availability of right of way to build infrastructure
- Formation of strong network for flexible route operations
- Overall impact of transit on city
- Connect ‘busy places’ but avoid ‘busy roads’

To upgrade the overall mobility of the city

Increasing the stake holder base: Citywide,
Start with easy to build and demonstrate full scope.
BEFORE..AT AKHBARNAGAR
AFTER.. BRT AT AKHBARNAGAR
BEFORE.. At Anjali
AFTER.. At Anjali
NICE BUS STATIONS

EACH COSTING US $ 1,00,000
BUSES

- Low floor vs Standard
- Cost of bus US $ 55000
- Inside flat floor
- Private operator on gross cost contract (INR 34/km)
- 12 meter long
- Diesel

Keep operating costs low
<table>
<thead>
<tr>
<th></th>
<th>BRT Trial Run Review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Driver’s training &amp; Assessment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Off-Peak Time</strong></td>
<td></td>
</tr>
<tr>
<td>Passengers not allowed</td>
<td></td>
</tr>
<tr>
<td>Mostly under construction</td>
<td></td>
</tr>
<tr>
<td>No schedule</td>
<td></td>
</tr>
<tr>
<td>6 buses… 8… 12… 14</td>
<td></td>
</tr>
<tr>
<td>6:00 – 8:00 AM 1:30 – 3:30 PM 8:00 – 10:00 PM</td>
<td></td>
</tr>
<tr>
<td><strong>Peak Hour operations Peak Time</strong></td>
<td></td>
</tr>
<tr>
<td>Buses skipping 5 bus stops &amp; run in mixed traffic-3km</td>
<td></td>
</tr>
<tr>
<td>6 &amp; 8 min.</td>
<td></td>
</tr>
<tr>
<td><strong>Facility Testing Scheduled service</strong></td>
<td></td>
</tr>
<tr>
<td>Buses skipping 5 bus stops &amp; run in mixed traffic-3km</td>
<td></td>
</tr>
<tr>
<td>6 &amp; 8 min.</td>
<td></td>
</tr>
<tr>
<td><strong>Testing Enhanced Scheduled service</strong></td>
<td></td>
</tr>
<tr>
<td>Adj. in Projection in platform</td>
<td></td>
</tr>
<tr>
<td>6 &amp; 8 min.</td>
<td></td>
</tr>
<tr>
<td><strong>Total passengers Per day</strong></td>
<td></td>
</tr>
<tr>
<td>25,000+</td>
<td></td>
</tr>
<tr>
<td>18,000</td>
<td></td>
</tr>
<tr>
<td>18,000</td>
<td></td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td></td>
</tr>
<tr>
<td>8:00 – 11:00 AM 5:00 – 8:00 PM</td>
<td></td>
</tr>
<tr>
<td>8:00 – 11:30 AM 5:00 – 7:30 PM</td>
<td></td>
</tr>
<tr>
<td>8:00 AM – 12:00PM 5:00 – 7:00 PM</td>
<td></td>
</tr>
<tr>
<td><strong>Bus stops</strong></td>
<td></td>
</tr>
<tr>
<td>6 &amp; 8 min.</td>
<td></td>
</tr>
<tr>
<td>6 &amp; 8 min.</td>
<td></td>
</tr>
<tr>
<td>6 &amp; 8 min.</td>
<td></td>
</tr>
<tr>
<td><strong>Buses</strong></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td><strong>Operating time</strong></td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td></td>
</tr>
<tr>
<td>8:00- 1:00 PM</td>
<td></td>
</tr>
<tr>
<td>7:00- 1:00 PM</td>
<td></td>
</tr>
<tr>
<td>8:00 – 9:00 PM</td>
<td></td>
</tr>
<tr>
<td>5:00 -9:00 PM</td>
<td></td>
</tr>
<tr>
<td>5:00 -10:00 PM</td>
<td></td>
</tr>
</tbody>
</table>
THREE MONTHS OF COMMERCIAL OPERATIONS

OPENED ON October 14, 2009.

- 18 Kilometers
- Operating Time: 6.00 am to 11.00 pm
- Frequency/Headway:
  - Peak: 4 Minutes
  - Intermediary Peak: 6 Min and 8 min
  - Off Peak: 10 min
- Number of buses /daily 23
- Daily avg no. of Passengers – 32 to 35,000 (Increased from 18,000)
- Avg. Bus Kms – 226 (increased from 207 km – first week)
- Avg. Earning / day INR 1,60,000/- (Increased from INR 75,000)
- Avg. Earning /bus/ day INR 7226/- (Increased from INR 4502)
- Avg. Pass. /bus/ day 1536/- (Increased from 962)
- Operating Speeds – Peak 26 to 29 KMPH
JANMARG User Feedback/ Satisfaction Survey

Current BRT Users: Previous Mode

1st month
(15 Oct ‘09 – 14 Nov ‘09)
• Sample Size : 300
  – Male – 58%
  – Female – 42%

2nd month
(15 Nov ‘09 – 15 Dec ‘09)
• Sample Size : 300
  – Male – 58%
  – Female – 42%

3rd month
(16 Dec ‘09 – till 7 Jan ‘10)
• Sample Size : 100
  – Male – 61%
  – Female – 39%

Max. transfer is from AMTS
Passenger Feedback and responses

They have decided to keep their vehicles at home and take the BRTS. TOI meets two Amdavadis who said ...

"Ab BUS karo .."
- Times Public Poll,
Times of India, Ahmedabad

"Thumbs UP to BRT .."
- Times Public Poll,
Times of India, Ahmedabad

"Comfort, Punctuality and Affordability make Ahmedabadis hope on to BRTS .."
- Times Public Poll,
Times of India, Ahmedabad

18 % 2 wheeler, 6% car users shift to BRT!
Common Man of Gujarat with Common People of Ahmedabad
Thank You..