BUS REFORMS IN BMTC

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**BMTC- An Overview**

Came into existence from 15-8-1997 after bifurcating from Karnataka State Road Transport Corporation (KSRTC)

As on SEP 2014

- Own: 6691 buses
- Operate: 6305 bus schedules
- Perform: 13.14 lakh service kms per day
- Make: 79,798 bus trips
- Earn: Rs 61.14mn
- Carry: 4.9 mn passengers
- Bus Depots: 40 Divn 05
- Bus Stations: 50
- Manpower: 36,146
- Bus Staff Ratio: 5.4

**BMTC: Bringing Bangalore To Your Doorstep**
Transport in Bangalore

Motorised Trips - Modal Split (2011)

- 2-Wheelers: 38%
- Public Transport: 42%
- Car: 9%
- Auto: 11%

Sources: Bangalore Mobility Indicators 2011

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Composition of Total Revenue-2013-14

Total Revenue - Rs.2013.94 cr

- Traffic Revenue Rs.1765.57 crore (88%)
- Subsidies from GOK Rs.165.98 crore (8%)
- Misc. Revenue Rs.82.39 crore (4%)

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KEY INITIATIVES FOR IMPROVING OPERATIONS

- Range of services to cater to all kinds of requirements –
  ranging from AC buses to regular buses and Atal Sarige
- Introduction of daily/monthly passes
- Dedicated services for schools and companies
- Construction of Traffic and Transit Management Centre
- Park and Ride facilities at all TTMCs
- Modernizing and branding of fleet
- Operation of direction oriented and ring road services
- Introduction of Intelligent Transport System
HUB AND SPOKE MODEL

- DIRECTION ORIENTED SERVICES
EXISTING MODEL

3 HUBS – 3 DESTINATIONS = 9 ROUTES
GROWTH IN ROUTES

3 HUBS – 6 DESTINATIONS = 18 ROUTES
GROWTH IN ROUTES

3 HUBS – 9 DESTINATIONS = 27 ROUTES
Because of financial constraints, usually fleet size cannot keep up with the exponential increase in number of routes

This finally results in a situation where there are large number of routes with only 1 or 2 buses

If these routes are long – as routes serving the city periphery tend to be – this results in long wait times on individual routes
FREQUENT BUS NETWORK

- Individual Routes along Major Roads are rationalised into a small number of Very High Frequency Routes
- Routes that require moving beyond the major road are served by routes connecting to the Frequent Bus Network at interchange points (Feeder Routes)
- Specific Travel Patterns are served not by direct routes, but by a collection of ‘direction-oriented’ services connected by transfers (Connecting Routes)
BMTC: Sustainable, People-Centered and Choice mode of Travel for Everyone
<table>
<thead>
<tr>
<th>Category</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplicity in System</td>
<td>• Fewer Routes</td>
</tr>
<tr>
<td></td>
<td>• Easier to navigate</td>
</tr>
<tr>
<td>Quality of Service</td>
<td>• More buses per route</td>
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<tr>
<td></td>
<td>• Higher frequency</td>
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<tr>
<td>Enhanced System Capacity</td>
<td>• Higher frequency on specific routes</td>
</tr>
<tr>
<td></td>
<td>• Easier to match demand and supply</td>
</tr>
</tbody>
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SURVEY RESULTS

INCREASE IN NUMBER OF PAX
- 38% shifted from other buses
- 27% shifted from 2-wheelers and cars

OVERALL DECLINE IN TRAVEL TIME

COST EFFICIENCY – WITH FEWER BUSES REQUIRED
INTELLIGENT TRANSPORT SYSTEM
BMTC: Sustainable, People-Centered and Choice mode of Travel for Everyone

BMTC: Bringing Bangalore To Your Doorstep
Vehicle Tracking System

- Location, Time & Speed Monitoring
- Based on above Driver Appraisal Card
- Incident management through two way communication system
- Tracking on GIS maps @ 1:2500 scale
- Various graphical, tabular and spatial reports on important parameters
- Alerts on exceptions (reporting) – missing targets
Electronic Ticketing Machines

- Online - automated & secure ticketing
- Reduced tamper & pilferage
- Spot-Issue of tickets (SPT) & manage inventory of Pre-printed tickets (PPT)
- EOD cash audit/recon of SP/ PP tickets
- Online Revenue monitoring
- Empowering S&V Squad Checking
- On & Offline Depot Management System to address connectivity
Depot Management System

- Vehicle Scheduling & Dispatch
- Crew Roster/Allocation
- Ticket and Inventory Management
- Smart Card Identification for Crew
- IT Infrastructure & Connectivity
- Work Flow Improvement & Automation
Passenger Information System

- Real-time information on ETA/ETD
- Service and other alerts for commuters
- Access: USSD, SMS, IVRS, LED, LCD
- Web-based query services
- Bi-Lingual Display (Kannada & English)
- Streaming advertisements and multimedia content at Bus Stations
When is the bus coming???

Which bus should I take to reach my destination???

When should I reach the bus stop to take my bus??

Is the next stop my destination?

What is the bus route between my origin & destination?
BMTC: Sustainable, People-Centered and Choice mode of Travel for Everyone

Management Perspective

Revenue earned, Targets Met & Exceptions Reported Per Bus, Per Route, Conductor, Depot

- Duty/ Depot management
- Scheduling

MIS Reports on
- Fleet Usage, Exceptions, Incidents
Supported by Graphs and Chart

✓ Providing facilities for commuters
✓ Providing facilities to Users/Crew
✓ Driver and Conductor Appraisal
Operations Manager Perspective

- Where are the buses??
- Are they on time? OTP Status
- What is revenue collection status? Are ETM's online?
- Is any of the bus over-speeding?
- Has there been any accident?
- Are there any breakdowns/Idling/Bunching?
- Have any of the buses missed any scheduled stops/trips?
Crew Perspective

- Control Centre Support for incident management
- Ease of issuing and accounting of tickets
- Easy reconciliation and end of duty process
- Driver appraisal, performance based incentives
Thank You