Feasibility of Introducing New High-End AC Bus Routes
Objectives

- To determine the feasibility of introduction of new A/C bus services along important corridors
- To identify the feasible directions for operation of A/C bus services.
Methodology

Feasibility of Introducing New High-End A/C Bus Routes

Primary Survey at 8 locations using App
- Revealed preference survey
- Stated preference survey

Origin Destination (O-D) matrix formation & desire line diagram

Develop Discrete choice model to understand willingness to shift to A/C bus services

Suggesting feasible routes

Scenarios
- Scenarios 1 - Equivalent to existing A/C bus fare
- Scenario 2 - 20% reduction in existing A/C bus fare
# Survey Locations and Sample Size

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>No. of Locations and Sample Size</th>
<th>Mode of Data Collection</th>
<th>Date of Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuter opinion survey</td>
<td>8 Locations 6,730 Samples</td>
<td>Open Data Kit (ODK) App based survey</td>
<td>20th February - 28th February 2018</td>
</tr>
</tbody>
</table>
**App Interface for Survey**

**What is the mode of travel**
- BMTC bus
- Private Bus/Tempo Traveller
- Cab/Taxi
- Auto
- Private Car
- Bike/Scooter
- Others

**Travel Info**
- Total travel time (Including waiting time) (Min)
  - 40
- Travel distance (km)
  - 7
- Total travel cost (INR)
  - 200
App Interface for Survey

Willingness to shift to "AC Bus"

| Current Mode Travel Time (Min) | 40 |
| Current Mode Travel Cost (INR) | 200 |
| Scenario 1 |
| AC Bus Travel Time (Min) | 49 |
| AC Bus Travel Cost (INR) | 30 |
| Your Choice | Current Mode | AC Bus |

Willingness to shift to "AC Bus"

| Current Mode Travel Time (Min) | 40 |
| Current Mode Travel Cost (INR) | 200 |
| Scenario 2 |
| AC Bus Travel Time (Min) | 49 |
| AC Bus Travel Cost (INR) | 23 |
| Your Choice | Current Mode | AC Bus |
Origin - Destination Desired Lines

All locations

Origin trip - to survey location
Destination trip - from survey location

Mode shift analysis performed at locations with significant number of trips.

Potential directions identified.
Potential Direction for AC Bus Services

Hebbal

Origin - Destination Desired Lines

Feasible Direction of New A/C Bus Services
Findings and Recommendations

Findings

• ~25% - willing to shift to A/C bus services from:
  - Autos - 8-9%
  - Two wheelers - 6-7%

Recommendations

Potential directions for introduction of A/C bus services:

  - BEL Circle – Attur Layout – Yelahanka
  - Hebbal – Yelahanka