Traffic Optimization in the Twin Cities of Hyderabad and Secunderabad
Hyderabad’s story

- Increase in Job opportunities
- Migration of people from rural to urban areas
- Increase in purchasing power of people
- Increase in the ownership of private vehicle
- Hyderabad - major industrial hub
Industrial density in Hyderabad

Source: APPCB – Andhra Pradesh Pollution Control Board
## Vehicle density in Hyderabad district

<table>
<thead>
<tr>
<th>District</th>
<th>Area (Sq. Kms)</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rangareddy</td>
<td>7564.88</td>
<td>726338</td>
<td>754839</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>650</td>
<td>1618756</td>
<td>1681294</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2345094</strong></td>
<td><strong>2436133</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: RTO, Khairatabad office
Survey Results

1. Major traffic problems encountered by commuters in Hyderabad and Secunderabad

Key Finding 1: Narrow roads and traffic congestion are the major traffic problems faced by commuters in the twin city.
2. Driving Behaviour
### Category wise Vehicle distribution in Hyderabad district

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport</strong></td>
<td></td>
</tr>
<tr>
<td>APSRTC</td>
<td>2832</td>
</tr>
<tr>
<td>Private</td>
<td>903</td>
</tr>
<tr>
<td>Goods vehicle</td>
<td>121945</td>
</tr>
<tr>
<td>Tractors and Trailors</td>
<td>984</td>
</tr>
<tr>
<td>All India Tourist buses</td>
<td>37</td>
</tr>
<tr>
<td>Maxi cabs</td>
<td>7193</td>
</tr>
<tr>
<td>7,6,5,4 Seater</td>
<td>20029</td>
</tr>
<tr>
<td>Auto – 3 wheeler</td>
<td>116903</td>
</tr>
<tr>
<td>School buses</td>
<td>3512</td>
</tr>
<tr>
<td>Private Bus service vehicles</td>
<td>2705</td>
</tr>
<tr>
<td>Ambulance</td>
<td>3197</td>
</tr>
<tr>
<td>Others</td>
<td>2519</td>
</tr>
<tr>
<td>Total transport vehicles</td>
<td>282759</td>
</tr>
<tr>
<td><strong>Non-Transport</strong></td>
<td></td>
</tr>
<tr>
<td>Motor cars</td>
<td>230366</td>
</tr>
<tr>
<td>Jeeps</td>
<td>6664</td>
</tr>
<tr>
<td>Two Wheelers</td>
<td>1141333</td>
</tr>
<tr>
<td>Tractors</td>
<td>1047</td>
</tr>
<tr>
<td>Omni Buses</td>
<td>16421</td>
</tr>
<tr>
<td>Rigs</td>
<td>519</td>
</tr>
<tr>
<td>Cranes</td>
<td>364</td>
</tr>
<tr>
<td>Road rollers</td>
<td>699</td>
</tr>
<tr>
<td>Agriculture Tractors</td>
<td>34</td>
</tr>
<tr>
<td>Fire Engines</td>
<td>133</td>
</tr>
<tr>
<td>Others</td>
<td>954</td>
</tr>
<tr>
<td>Total Non Transport vehicles</td>
<td>1398535</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1681294</td>
</tr>
</tbody>
</table>

**Key finding 2:**
The major traffic violators – 2 wheelers – are most in number in the twin cities.

Source: RTO, Khairatabad office
3. Pattern of the traffic in Hi-Tec city – The IT hub of Hyderabad

Time taken to commute to office in the mornings on normal days and rainy days

- 0 - 15 mins: 4% (Normal days), 2% (Rainy days)
- 15 - 30 mins: 14% (Normal days), 18% (Rainy days)
- 30 - 45 mins: 11% (Normal days), 24% (Rainy days)
- 45 - 60 mins: 25% (Normal days), 24% (Rainy days)
- 60 - 75 mins: 11% (Normal days), 5% (Rainy days)
- 75 - 90 mins: 4% (Normal days), 16% (Rainy days)
- 90 - 105 mins: 5% (Normal days), 9% (Rainy days)
- 105 - 120 mins: 4% (Normal days), 18% (Rainy days)
- > 120 mins: 0% (Normal days), 5% (Rainy days)
Time taken to commute back home from office in the evenings on normal days and rainy days

Key finding 3: The commute time gets significantly longer during rainy days.
Key finding 4: For the same distance, the commute time in the evening is more than the commute time in the morning.
4. Satisfaction Index

Respondents’ opinion about the way the traffic police handle the traffic crisis in the city

Key finding 5: Majority of the Hyderabad commuters are unsatisfied with the way the traffic police is handling the current traffic situation.
Respondents’ opinion of the quality of public transport system in the city

Key finding 6: Majority of the Hyderabad commuters are unsatisfied with the quality of the existing transport system.
5. Respondents’ inclination to switch to public transport if the quality is improved

Fact: An average car occupies at least six square meters of road space. But on an average a car carries only two people. So the space that should be allocated to it should not be more than .7 square meters. Therefore, a minimum of 5.3 square meters of precious road space gets wasted by each car.

Key finding 7: Majority of the people are willing to switch to the public transport buses if good quality, high frequency buses are made available.
Impacts of high traffic volumes

1. Pollution

1.1 Air Pollution:

Fact: The total vehicular pollution load in the twin cities of Hyderabad and Secunderabad alone is 1500T/day.

Source: APPCB- Andhra Pradesh Pollution Control Board
Pollution load by different categories of vehicles

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two wheelers</td>
<td>56.2%</td>
</tr>
<tr>
<td>Three wheelers</td>
<td>34.00% 9.08%</td>
</tr>
<tr>
<td>Four wheelers (Petrol)</td>
<td>12.00%</td>
</tr>
<tr>
<td>Four wheelers (Diesel)</td>
<td>2.00%</td>
</tr>
<tr>
<td>Trucks</td>
<td>18.85%</td>
</tr>
<tr>
<td>Buses</td>
<td>1.54%</td>
</tr>
<tr>
<td>Others</td>
<td>0.26%</td>
</tr>
</tbody>
</table>

Source: http://aptransport.org/

**Observation:** The two Wheelers are the biggest polluters.
1.2 Noise Pollution:

- According to a study by Centre for Science and Environment (CSE), Hyderabad is ranked second after Chennai in noise pollution levels.

- Standard limit is said to be 65 dB

- According to Andhra Pradesh Pollution Control Board (APPCB), till September 2009, the average noise level recorded at Hyderabad was 80.66 dB.
Effects of Noise Pollution

- Acts on a person physically and mentally in a slow manner
- Insomnia, depression, sleeping disorders, increases blood pressure, headache and tiredness.
- Excessive exposure to sound for a very long period of time may cause deafness and cardio vascular diseases
3. Economic loss

- Every day many hours of productive time are lost through traffic congestion.

- Commerce suffers through difficult, late and more expensive deliveries.

- Public transport suffers with reduced speeds of service and disruption to the timetable.

- The quality of life for those living along the suffocated roads is reduced.
4. Excessive Fuel consumption

Observation: Number of vehicles increased from 13 lakhs to 20 lakhs (rounded off) from 2002 to 2007 and the total fuel consumption during this period has increased by 41%. 
Steps taken and future plan by the government to combat the traffic in Hyderabad

- The Hyderabad Traffic Police website
- A traffic education park
- ‘Seetala Hamsa’ service - an air conditioned luxury bus service
- Hyderabad Metro Rail (MRTS) project
  - Phase 1 – 71 kms
  - By 2014 – 15 lakh passengers
  - By 2024 – 22 lakh passengers
- Bus Rapid Transit System (BRTS)
- Inner Ring Road (IRR)
- Outer Ring Road (ORR)
Recommendations

1. Improving the public transport
   - **Short term**
     - To discourage the use of private vehicles good quality, point to point bus service with higher fare need to be introduced. The current network of the ‘Seetala hamsa’ bus service needs to be expanded.
     - Provide additional buses for office going people during peak hours- 7 AM – 10AM, 5PM-9PM from high density office areas to rest of the city.
     - The number of regular public buses needs to be increased to solve the problem of overcrowding of buses.
     - The buses must also ply at fixed periods of time.

   - **Long Term**
     - Improve the existing MMTS network – Provide buses or shuttle services to MMTS stations.
2. Improvement of Infrastructure

**Short Term**

- **Route optimization**
  - The Bus Bays should be made away from the main road taking into account the space needed for people waiting for the buses.

- Roads coming from HITEC City, Ameerpet, Begumpet and Banjara Hills, all meet at the Punjagutta junction. This is a critical junction for people traveling back home from office in HITEC City. There are three movie halls in the vicinity – PVR, Inox, Adlabs. The movie ending timings must be such that the three do not clash.

- Implementing staggering holidays.

- Widening the roads, bringing down structures that are jutting into the road creating a bottle neck.

- Deny movement of heavy slow moving vehicles during peak hours.

- Separate lanes for pedestrians, bicyclists and non-motorized rickshaws.
Long Term

Decentralizing the industrial area. With the outer ring road coming up, the APGovt. should spread out the future companies in the region around the outer ring road.

Provide multi level or vertical parking lots for people in commercial areas like Patny, Abids, Ameerpet.
3. Enforce strict rules

- Defaulters must be penalized. The amount of fine is not as important as enforcement of the fine.

- There must be an active grievance cell that addresses the complaints of people. Auto drivers have a monopoly in the HITEC area.

- Auto drivers and 7 seaters are a menace in the city. Strict rules must be enforced so that they obey the traffic rules.

- The public buses must stop at the bus bays.

- There must be proper coordination between the various Govt. departments and the traffic police. For example, if the roads are dug up to lay cables then the traffic must be diverted accordingly. Also, it must be ensured that the road is tarred again.
4. Create Public awareness

- Lack of traffic sense among people disrupts traffic however good the infrastructure may be. Continuous awareness campaigns must be carried out in city schools, colleges and all working sectors. People must be made aware of the possible impact of their individual behavior on the entire traffic.

- Corporates must encourage their employees to opt for car pooling by making them aware of the benefits of doing so, providing incentives like special parking spaces etc.
Wake Up! Hyderabad - Campaign by Hyderabad Traffic Police

- **Wake Up! Hyderabad**: Two Wheelers are only for Two Humans
- **Wake Up! Hyderabad**: Footpaths are for sensible walkers not for senseless riders
- **Wake Up! Hyderabad**: What your Daughters don't know is that YOU Don't care for them!
- **Wake Up! Hyderabad**: Don't they have Right to Live?
- **Wake Up! Hyderabad**: You don't deserve even an inch on our Roads
- **Wake Up! Hyderabad**: Look who is riding the Bike ..!
Wake Up! Hyderabad

Hey Man ... Look thyself!

Animal Habits Die Hard

Wrong Route ...! Its my right!

Law Breaking is easy. Nation building is tough.

Why Boys have all the Fun!

Many heroes turned zeros by such feats.
You are just a feet away from them.
The Winner!

Wake Up! Hyderabad

How will you handle a Crisis ..?
Thank You...
The following is the Punjagutta junction at 5:45 PM when people are getting back home.