Inclusive Street Design for India

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The Context

Travel patterns in different city size

>1 million population
Dominance of no travel (very short trip), Walk, Bicycle
Bus 20-5%
Car < 5%
Train 2-18%

.1 m -1 million population
Dominance of no travel (very short trip), Walk, Bicycle
Bus 40-15%
Car < 7% (17% GB Nagar)
Train 2-18%
Guiding Principles Part I

1. Space allocation for different road users (pedestrians, bicycles, public transport, cars)
   - Separation vs integration
   - Crossing/intersections

2. Speed management by design
   - Traffic calming
Guiding Principles Part II

1. Road geometric standards from the perspective of buses/VRUs (pedestrians, bicyclists, public transport users)
2. Traffic management policies that enable safe mobility of VRUs
3. Road side vendors/ informal sector to be viewed as service providers
### Road Typology

Different roads are to be designed differently based on land use and R/W availability.

<table>
<thead>
<tr>
<th>Road Typology</th>
<th>Right of Way-ROW (m)</th>
<th>Design speed (km/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial Roads</td>
<td>50-80</td>
<td>50</td>
</tr>
<tr>
<td>Sub Arterial Roads</td>
<td>30-50</td>
<td>50</td>
</tr>
<tr>
<td>Collector Roads</td>
<td>12 - 30</td>
<td>30</td>
</tr>
<tr>
<td>Access Streets</td>
<td>6 - 15</td>
<td>15</td>
</tr>
</tbody>
</table>
Highway passing through the city
Elevated+ at grade

Example 1
Highway passing through the city
At Grade

Example 2
Main Arterial Roads
30m and above ROW

Example 3
Example 4

Collector Roads
15m and above ROW

Access Roads
15m and above ROW
Location of Bus Shelter

Example 5
Integration of Hawker Space
The Challenges

Inclusive streets prioritizing Pedestrian, Bicycle, PT is possible.

Equal benefits to all users is not possible.

Are we (professionals/ city authorities/ media/important citizens) ready to accept VRU priority which results in..

• Lower speeds for cars
• Less space for cars