

# Inclusive Street Design for India

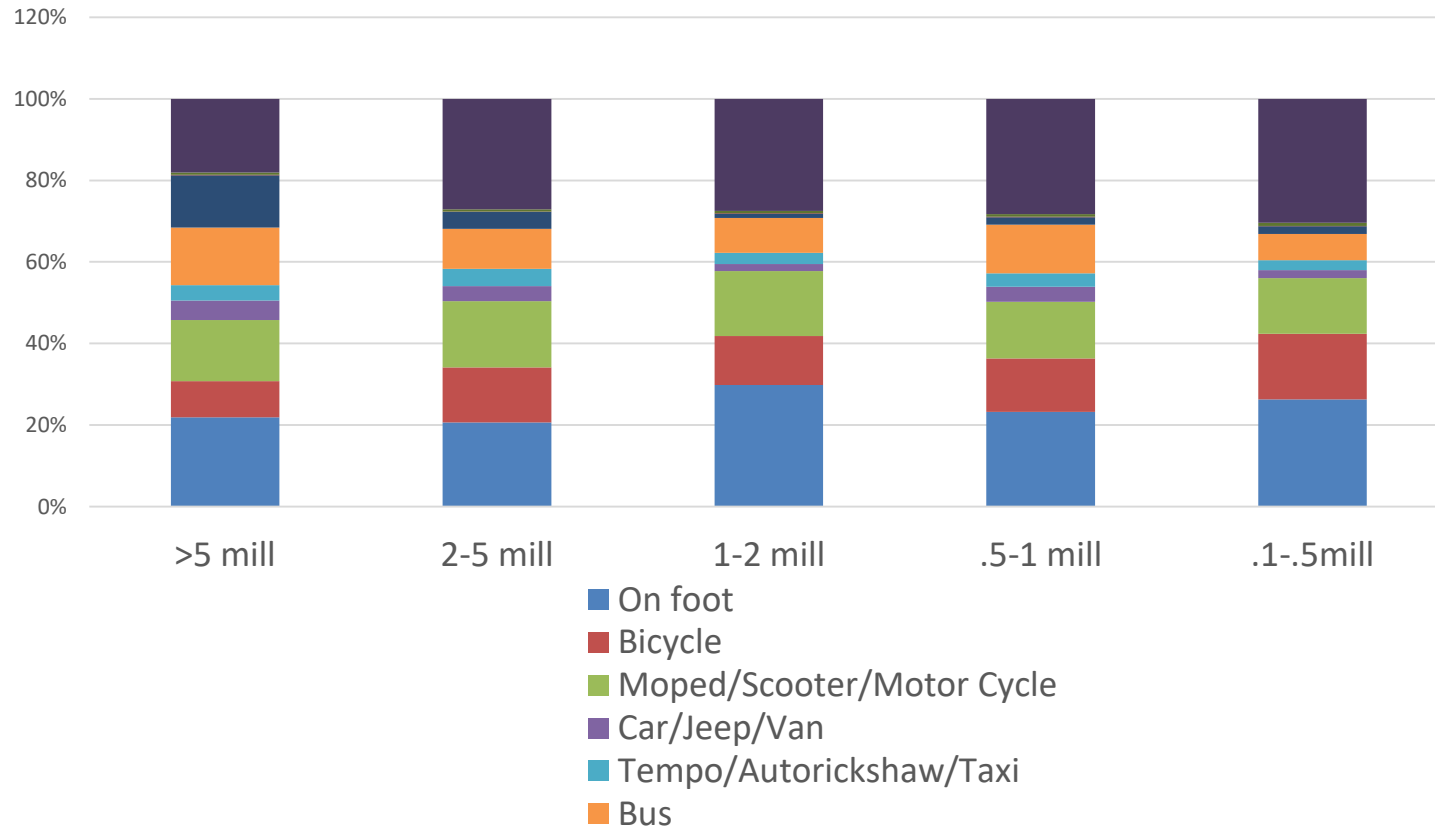
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**M**◊**BILIZE**  
Santiago

# 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

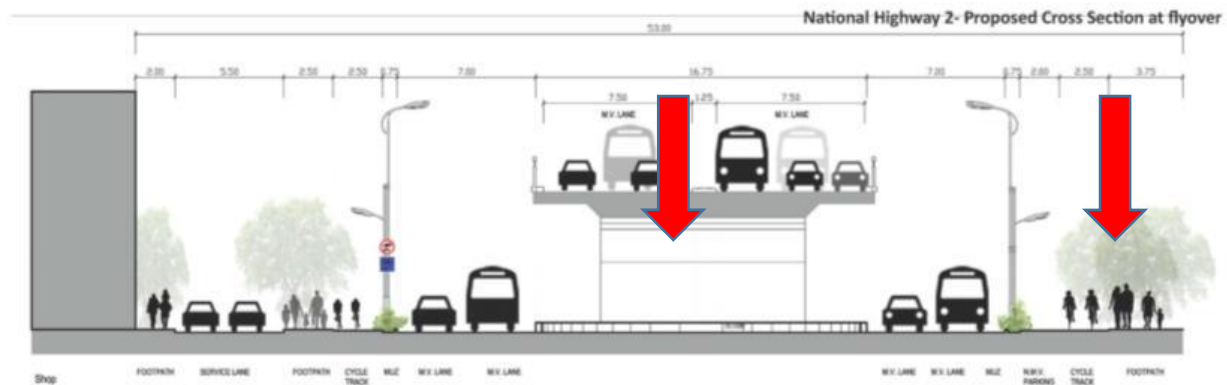
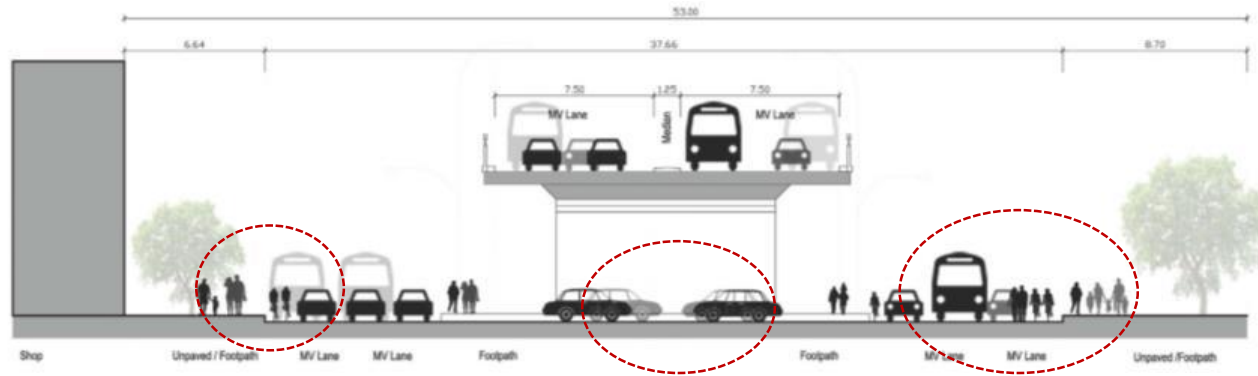
Different roads are to be designed differently based on land use and R/W availability.

<b>Road Typology</b>	<b>Right of Way-ROW (m)</b>	<b>Design speed (km/hr)</b>
<b>Arterial Roads</b>	<b>50-80</b>	<b>50</b>
<b>Sub Arterial Roads</b>	<b>30-50</b>	<b>50</b>
<b>Collector Roads</b>	<b>12 - 30</b>	<b>30</b>
<b>Access Streets</b>	<b>6 - 15</b>	<b>15</b>

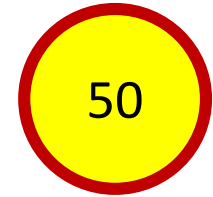
# Example 1

## Highway passing through the city Elevated+ at grade

50

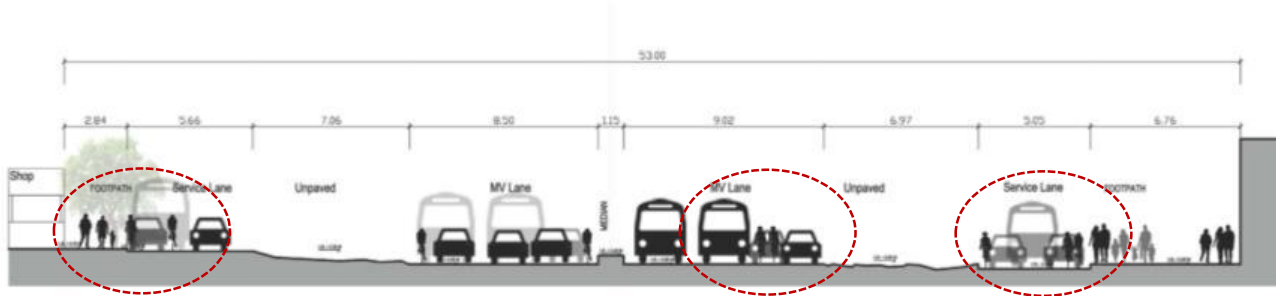


# Highway passing through the city At Grade

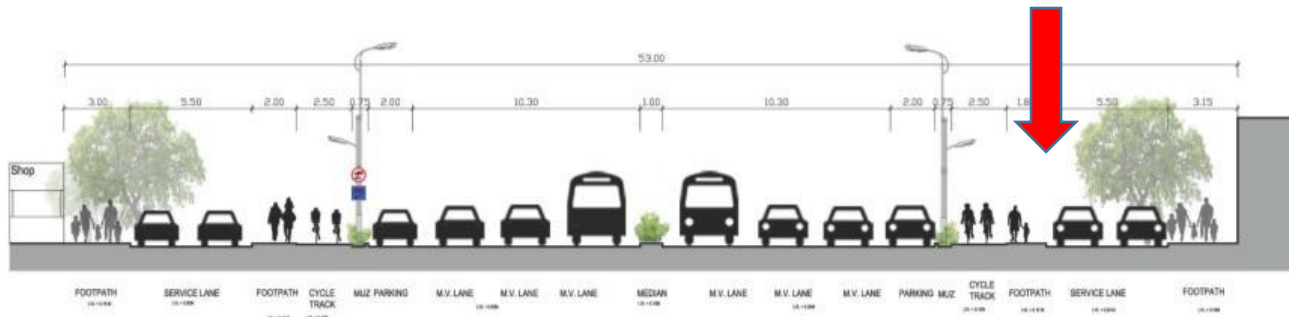


Example 2

National Highway 2 - Existing Cross section before intersection



National Highway 2 - Proposed Cross Section before intersection



# Main Arterial Roads 30m and above ROW

50

Example 3

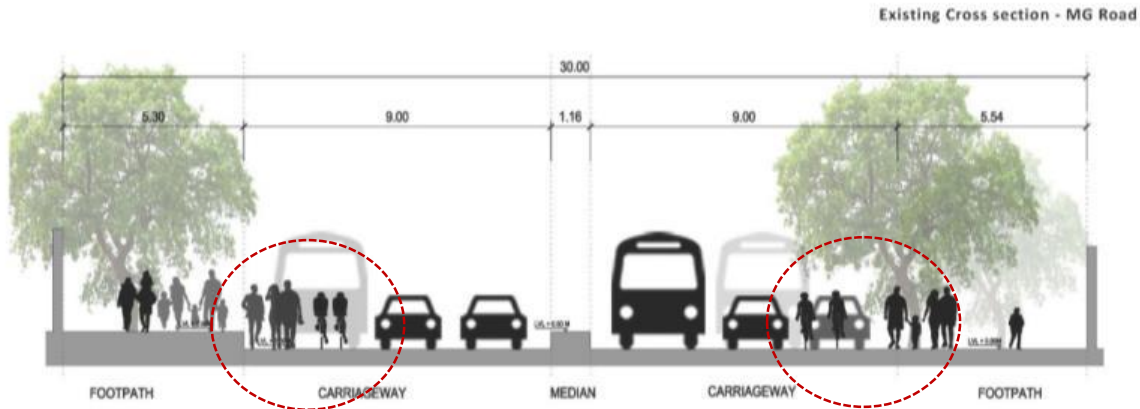
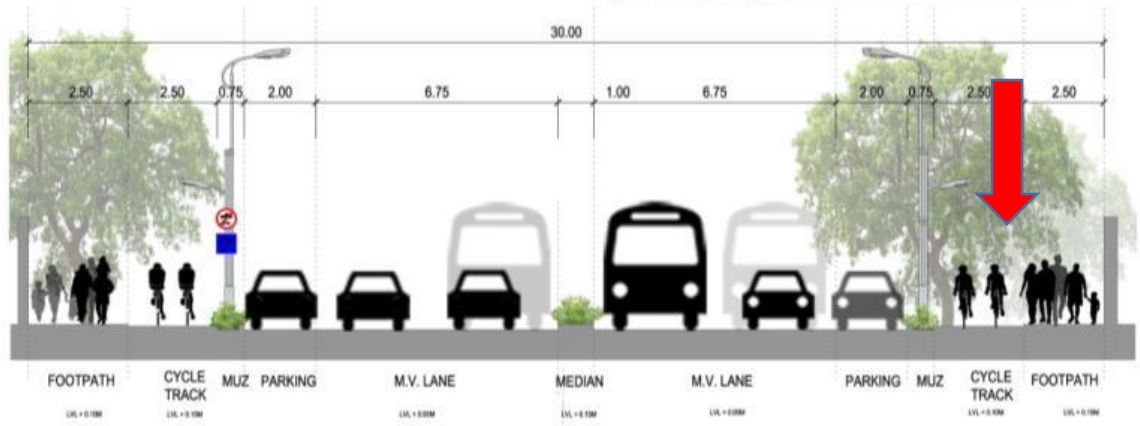


Figure 48: Proposed Typical Cross Section - Mahatma Gandhi Road

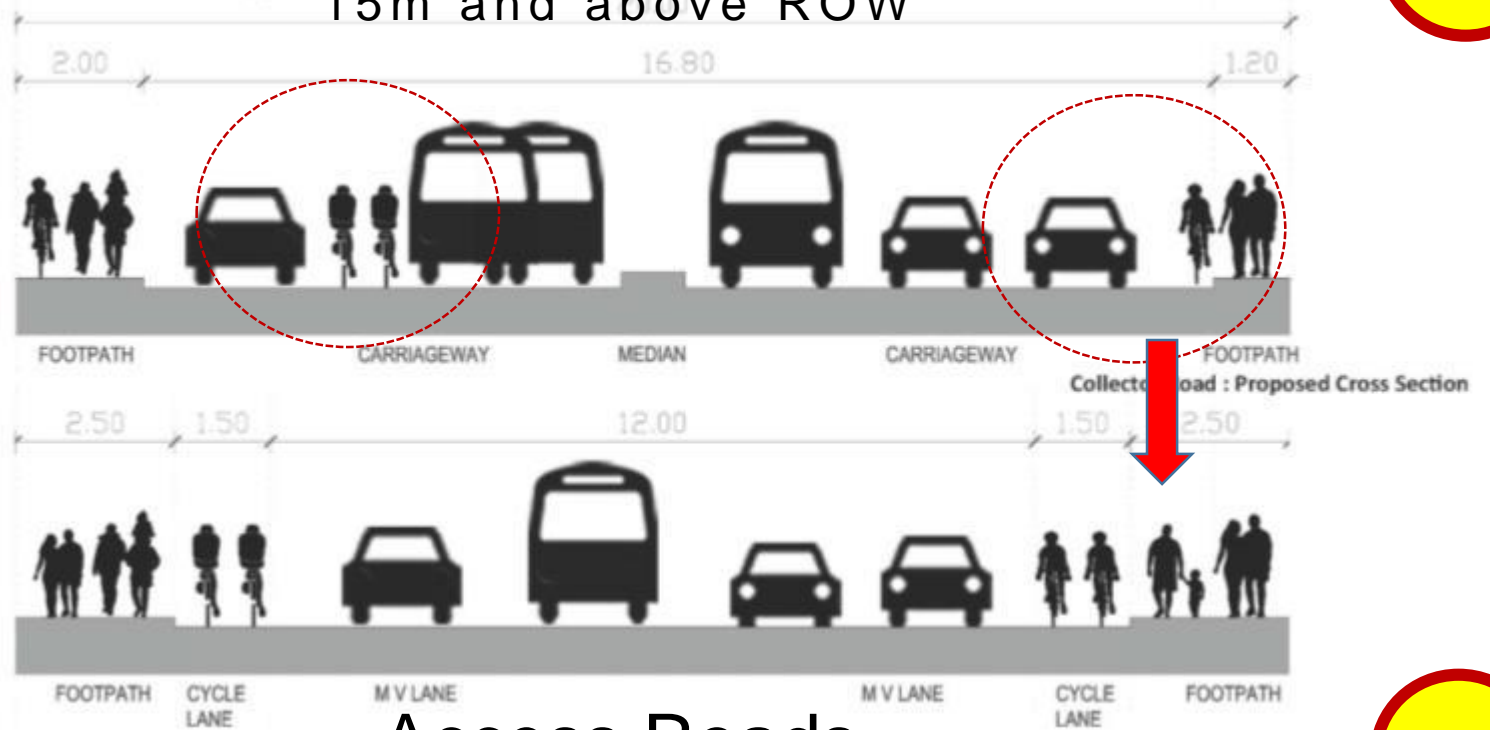




Example 4

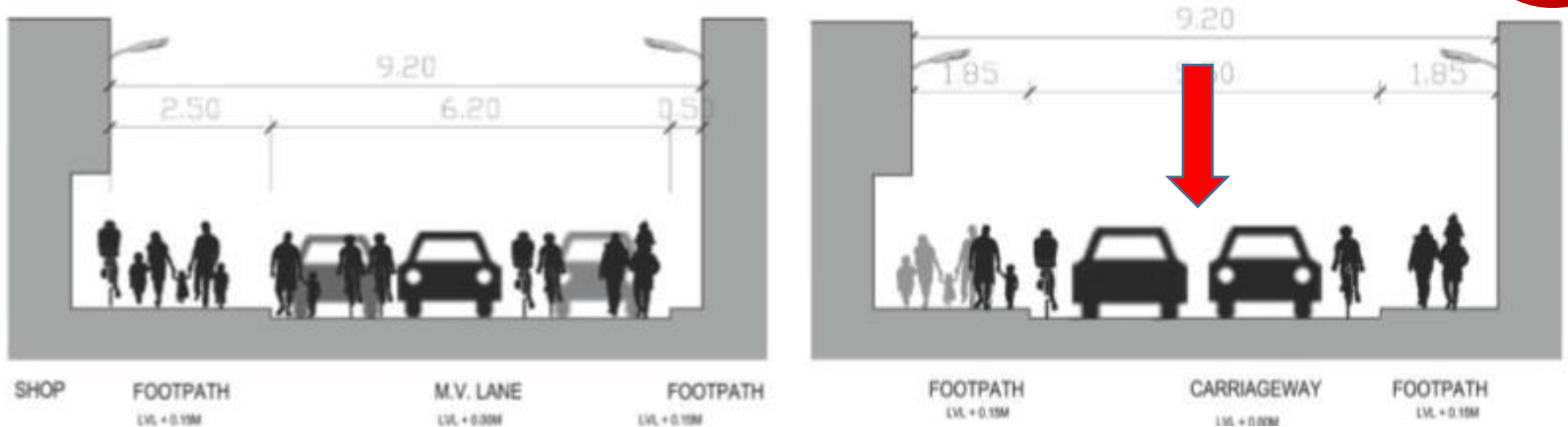
# Collector Roads

15m and above ROW



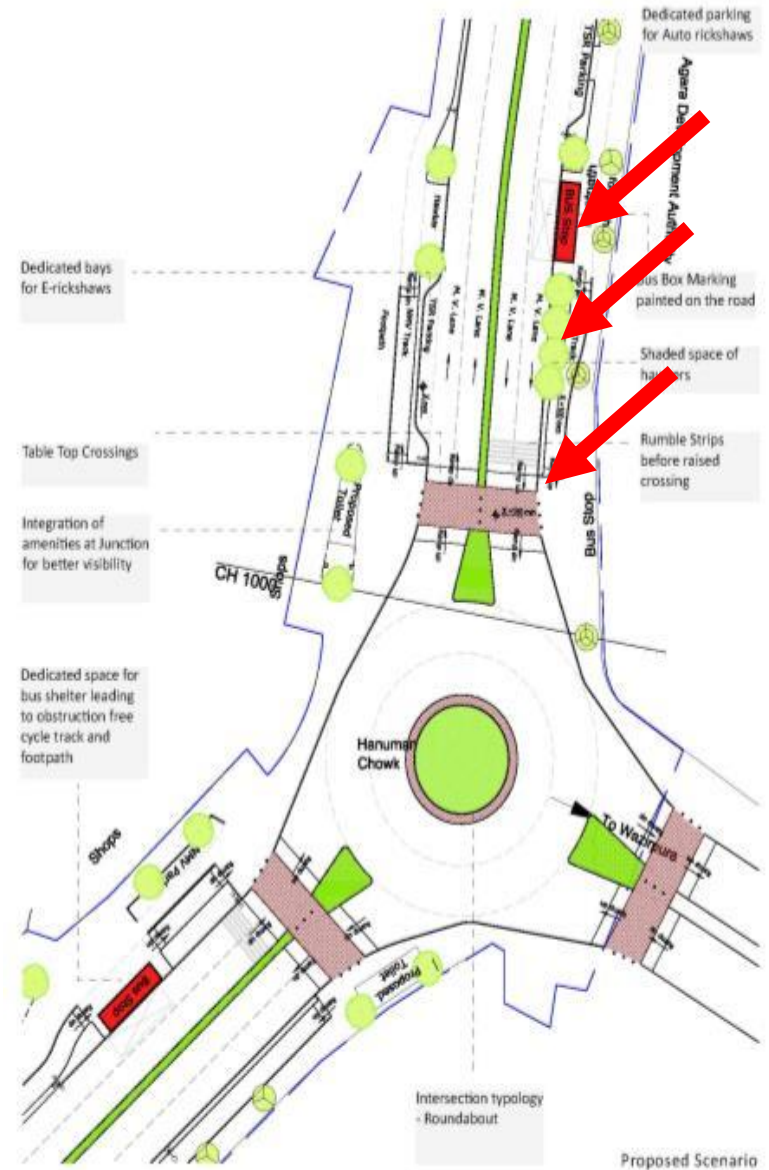
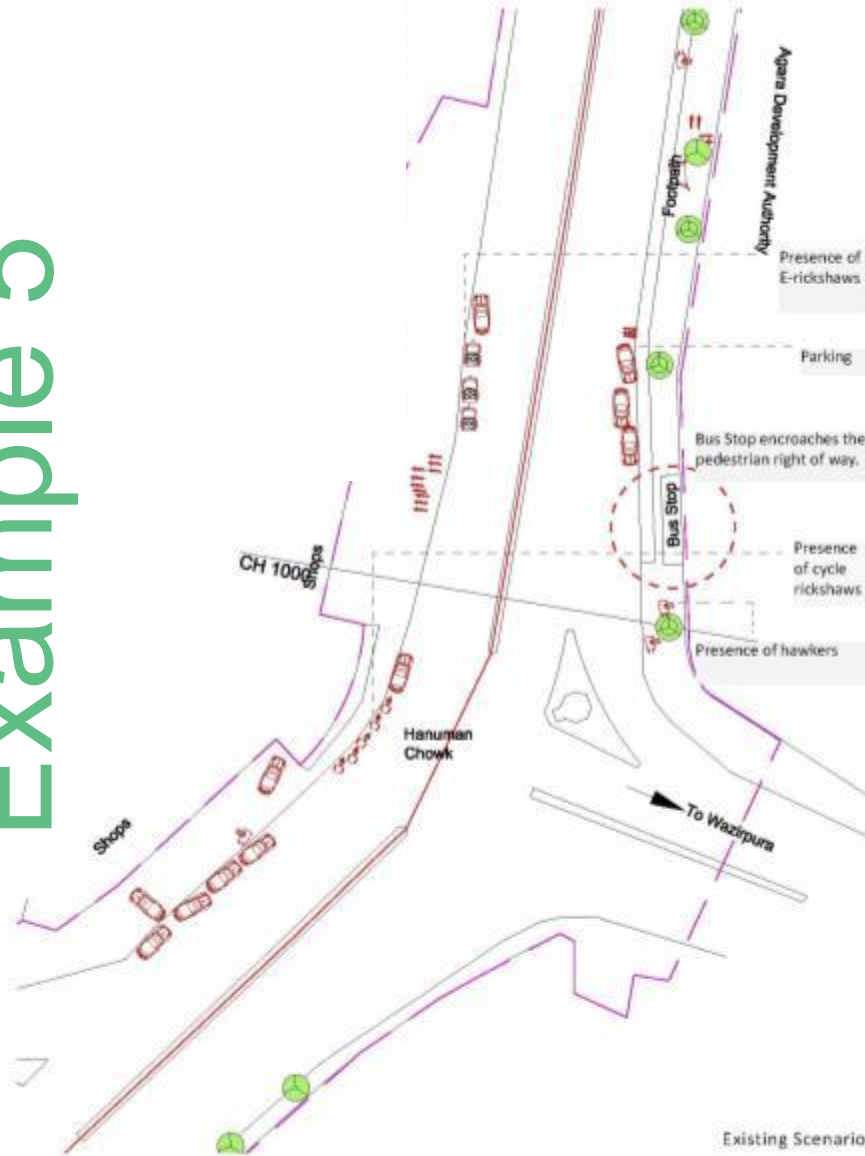
# Access Roads

15m and above ROW



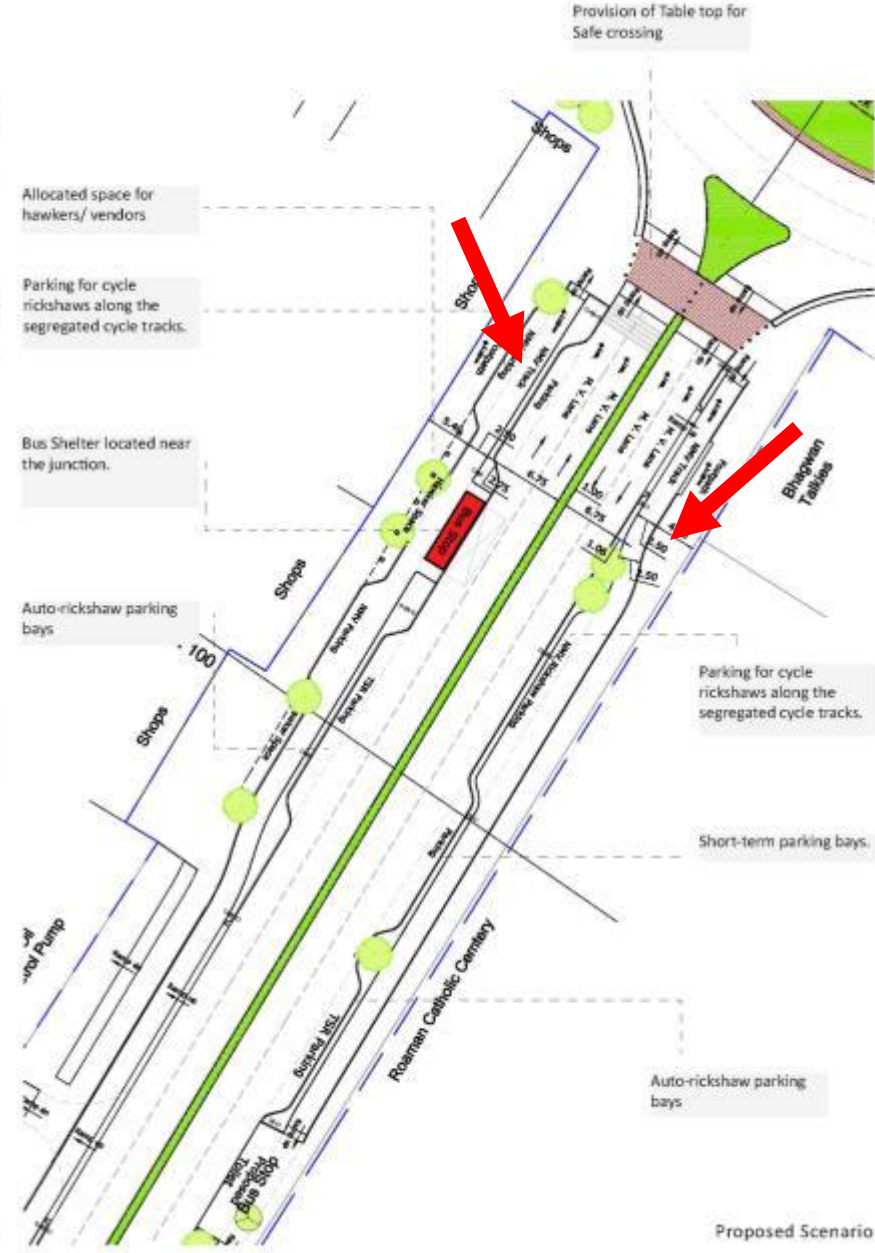
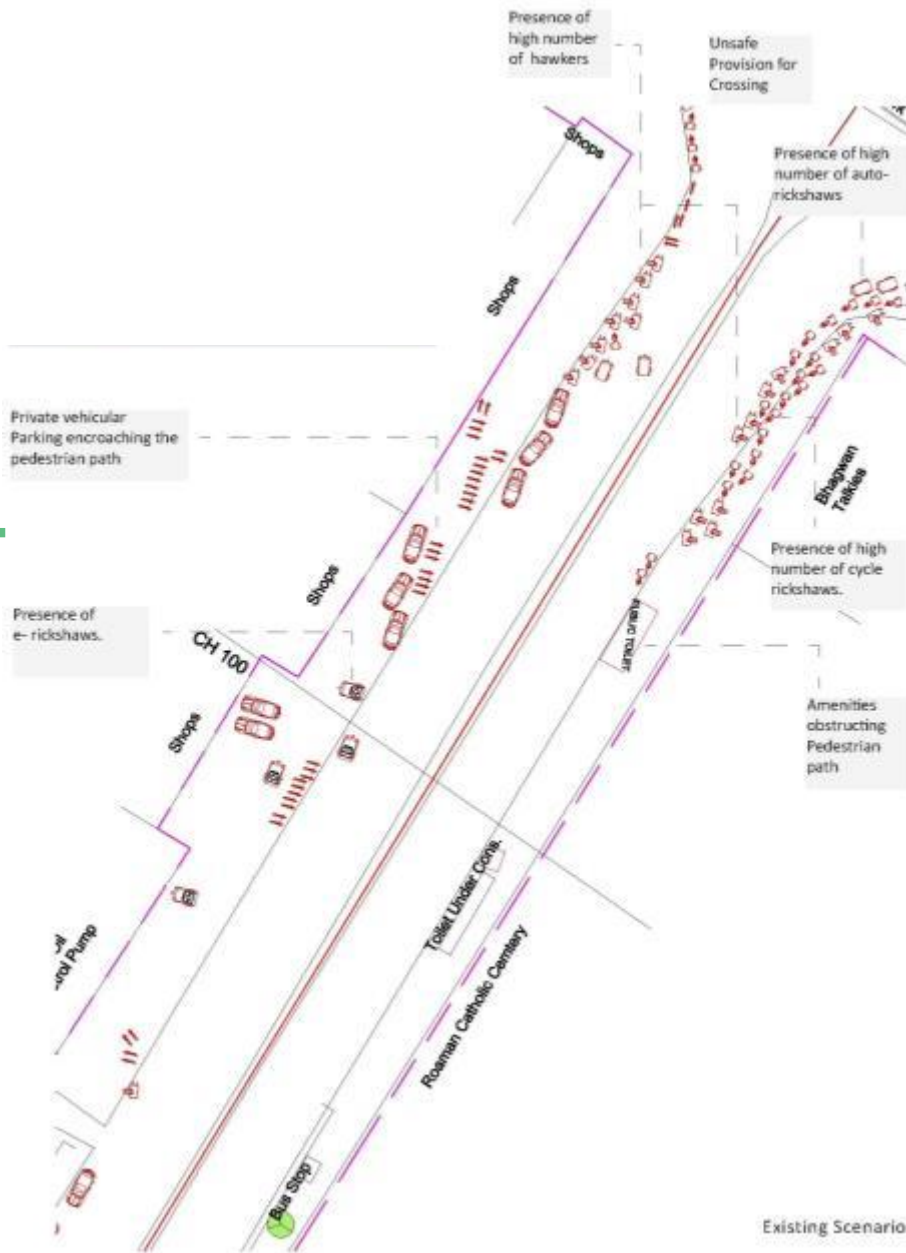
# Location of Bus Shelter

## Example 5



# Integration of Hawker Space

## Example 6



# 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