





GOVERNMENT OF INDIA MINISTRY OF HOUSING AND URBAN AFFAIRS



### STRATEGIES FOR MEETING CHALLENGES IN MULTI-MODAL INTEGRATION OF TRANSPORT SYSTEMS



NEED FOR MULTIMODAL INTEGRATION IN SPECIAL TERRAINS



### **AIZAWL PROJECT**



Preparation of a Comprehensive Mobility Plan (CMP) for Aizawl Urban Area

**Prepare Feasibility studies,** 

And project preparatory activities for prioritised projects

**Strengthen Capacity Building & Institutional Development** 

Implementing Agency: Urban Development and Poverty Alleviation Department (UD&PA)

Funded By: Asian Development Bank













### **CHALLENGES**





# **CHARACTERISTICS**

- Area under AMC 103 sqkm
- Present Population of AMC estimated at 3.6 lakh
- Future projections by MP-2040 is 8.0 lakhs by 2040
- 429 km road length

### Average age of vehicles Two wheeler – 3.5 yrs Car - 5 yrs Two wheeler taxi – 2.8 yrs Car taxi – 6.2 yrs

### 2

Road space 80% has less than 8m RoW

90%of roads have no footpaths 3

Staircases 850,

Car Taxi stand 129,

Bike taxi stand 41 and

4 Cost of travel

10% of average HH income

## **TRAVEL DEMAND CHARACTERISTICS**

#### Modal Share in 2007-08 and Present





Staircases are long, steep, most are narrow and dark

Limited road space due to terrain

Pavements blocked by parking, shops & vendors

### **TRAFFIC DISCIPLINE**









## SOLUTIONS





### **PUBLIC STAIRCASES**



## **MEDELLIN, COLOMBIA**



Comuna 13 neighborhood - 231,000 residents Opened in 2011 Previously: 28 stories of elevation (350 steps) 25 minutes arduous walk → comfortable 6 minutes 384 meter long – split in 6 sections











### **ROPEWAYS AND FUNICULARS**





#### Conclusion

Public transport systems are more user friendly when they provide end to end connectivity. Multi-modal integration is the key to sustainable growth

Making traditional modes more user friendly e.g. walking will arrest the rampant increase of private vehicles Innovative use of technology/ systems to be explored to complement buses as public transport system