







GOVERNMENT OF INDIA MINISTRY OF HOUSING AND URBAN AFFAIR

NEED FOR MULTIMODAL INTEGRATION IN SPECIAL TERRAINS - CASE STUDY NORTHEAST INDIA PRESENTED BY: **ADITI SINGH** MOTT **AMIT KUMAR** MACDONALD

URBAN MOBILITY IN NORTH EAST STATES

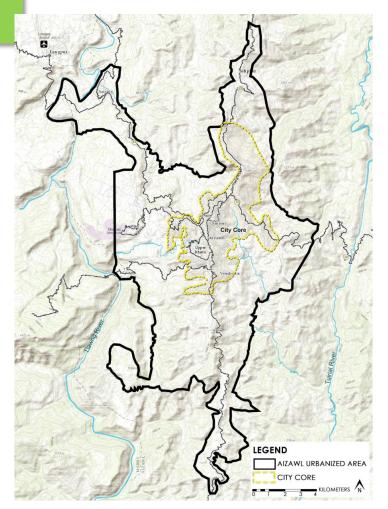
Mott MacDonald initiatives in Northeast states:

- Agartala, Tripura
- Aizawl, Mizoram





AIZAWL PROJECT PLANNING DESIGN AND MANAGEMENT CONSULTANCY



Objective: Support GoM to prepare Aizawl Sustainable Urban Transport Project, which will implement selected high-priority sub projects/projects identified through CMP



Output 1- Prepare Comprehensive Mobility Plan (CMP)- basis for priority projects identification



Output 2- Undertake Feasibility studies, DPRs and project preparatory activities for ensuing projects- Support project readiness for purpose of financing and implementation



Output 3- Strengthen project implementation capacity of executing agency- to carry forward urban transport planning and project implementations

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

Funded By: Asian Development Bank





DEVELOPMENT OF INDUSTRIAL ESTATES

TRIPURA

Objective: To improve readiness of integrated industrial infrastructure development projects in and around 15 industrial estates in 6 districts of Tripura

Executing Agency: Department of Industries and Commerce,
Government of Tripura (GoT)

Implementing Agency: Tripura
Industrial Development Corporation
Limited

Funded By: Asian Development Bank





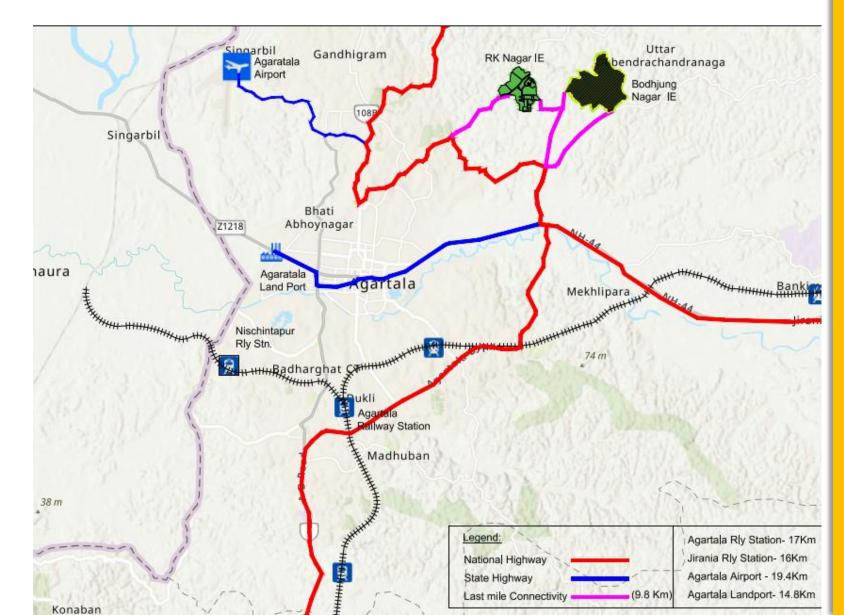
DEVELOPMENT OF INDUSTRIAL ESTATES

S. No.	Industrial Area	Acres	District & Town
1	Bodhjungnagar Industrial Area	535.73	West Tripura (near Agartala)
2	R. K. Nagar Industrial Area	222.16	West Tripura (near Agartala)
3	Sonamukhi Industrial Estate	-	Unakoti (Near Kailasahar)
4	Dukli Industrial Estate	52.37	West Tripura (near Agartala)
5	Lalchhari Industrial Estate	52.14	Dhalai District
6	Dewanpassa Industrial Estate	46.28	North Tripura District
7	IIDC Sarasima Industrial Estate	32.55	South Tripura District (Belonia)
8	IIDC Jalefa Industrial Estate (SEZ)	41.27	South Tripura (Sabroom)
9	IIDC Santirbazar Industrial Estate	18.29	South Tripura (Santirbazar)
10	Nagichera Industrial Estate	31.02	West Tripura (near Agartala)
11	Kumarghat Industrial Estate	45.66	Unakoti District, Kumarghat
12	Badharghat Industrial Estate	20.52	
13	Dhajanagar Industrial Estate	18.79	West Tripura (near Agartala)
14	A. D. Nagar Industrial Estate	8.41	
15	Dharmanagar Industrial Estate	7.95	North Tripura District





CONNECTIVITY BODHJUNGNAGAR AND RK NAGAR





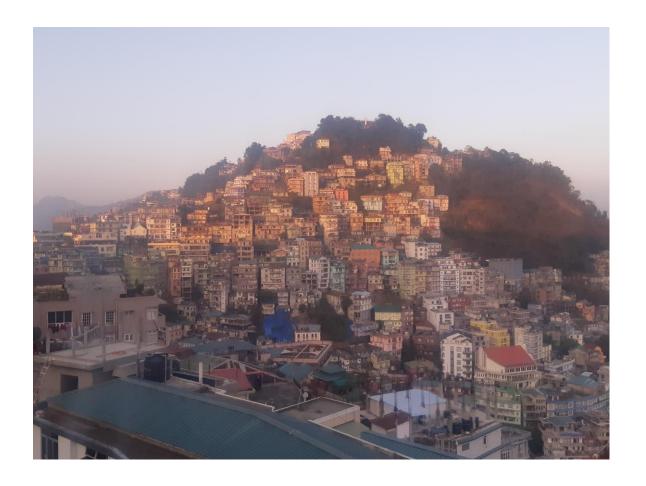
CHALLENGES

- Have international borders
- Topographical constraints
- Poor connectivity with rest of the country
- High disaster proneness Earthquake Zone 5
- High cost of Travel in urban areas









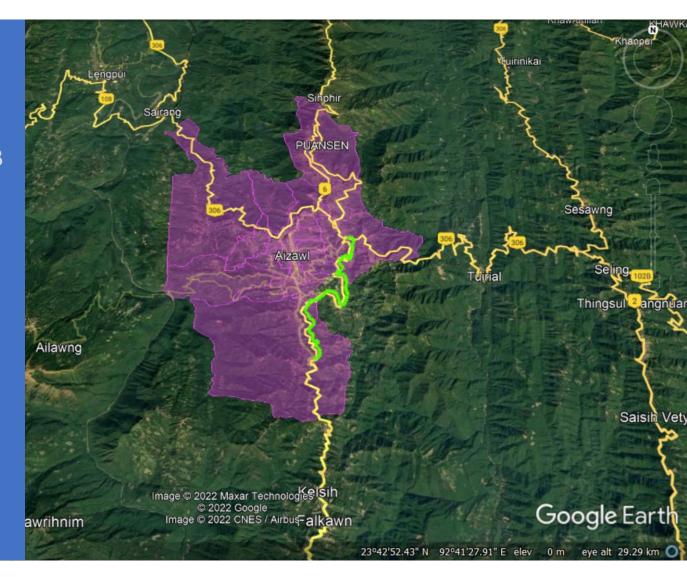
PLANNING FOR INTEGRATION IN AIZAWL





Aizawl City

- 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







1

Average age of vehicles

Car taxi – **6.2 yrs**

Two wheeler – 3.5 yrs
Car - 5 yrs
Two wheeler taxi – 2.8
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

93 Bus stops across city

4

Cost of travel

10% of average HH income





THUMPS UP: TRAFFIC DISCIPLINE

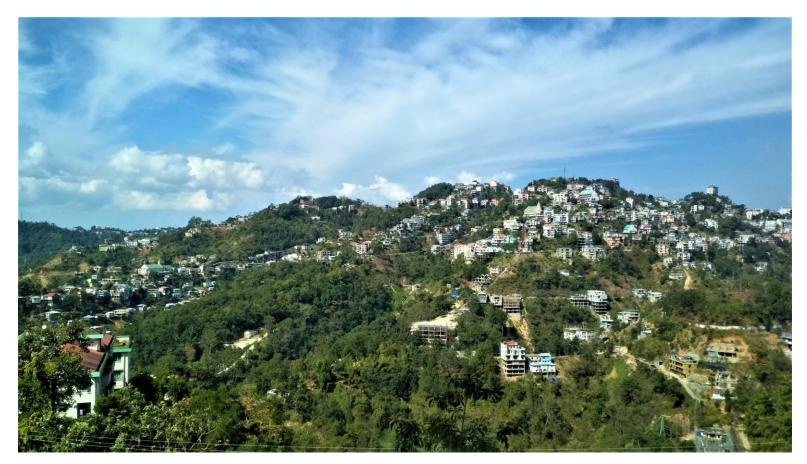








WAY AHEAD







INTEGRATION

- Non Motorised Transport
- Public Transport through Ropeways and Funiculars



















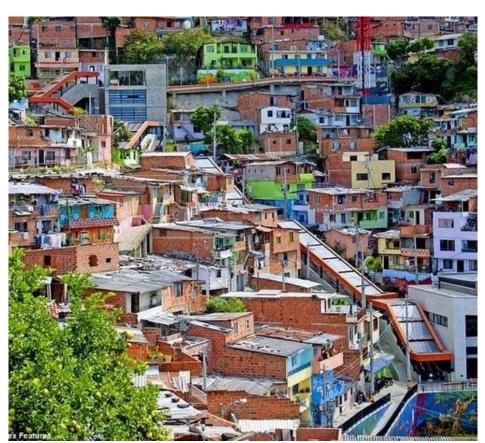


PUBLIC STAIRCASES HILL 2 m 3 m 6 m CARRIAGEWAY FOOTPATH BUS STOP HILL 2 m 6 m 2 m PUBLIC ESCALATOR CARRIAGEWAY FOOTPATH FOOTPATH VALLEY





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



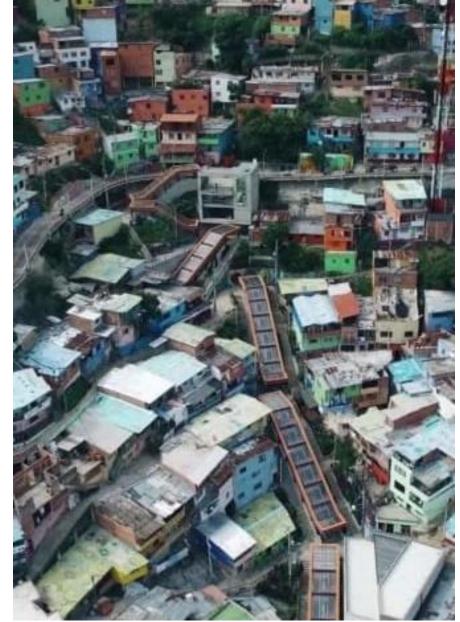
















ROPEWAYS AND FUNICULARS



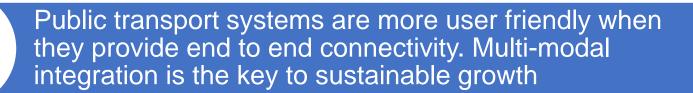








CONCLUSION



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





THANK YOU



