### A Project on

"Design Of The Sustainable Pedestrian Infrastructure Based On Empirical Analysis Of Pedestrian Traffic In Lucknow"

By

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# **OBJECTVE OF PROJECT**

• To understated the existing condition of walkways near important Lucknow Metro Rail Stations .

• To identify important parameters necessary for development of pedestrian infrastructure which can provide safe, secure and convenient walk ability conditions to the city dwellers.

### **QUESTIONAIR**

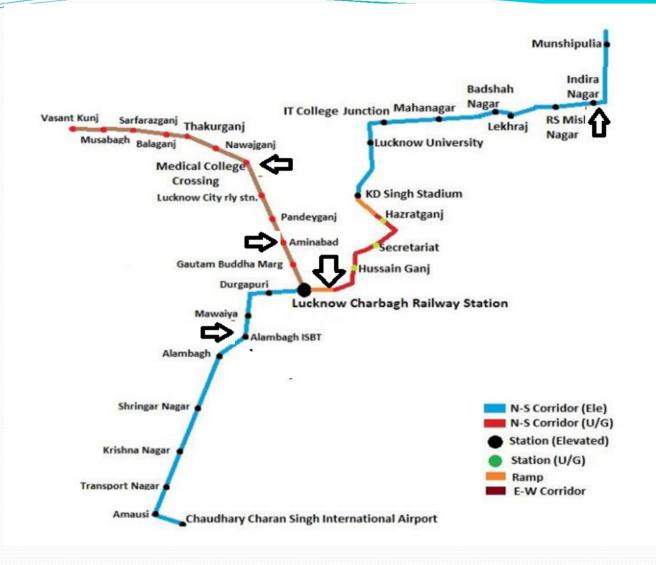
users were asked to identify

- Three factor responsible for Un comfort while using walk ways in Lucknow. Users were asked to list out these factors in the order of decreasing importance.
- Users were asked about, whether they feel safe/ unsafe while using walkways ?
- and whether they will prefer to walk than using other mode of transport If their concerns are taken care, and if yes for how much distance they can walk

### METHODOLOGY

• Survey has been conducted near five important proposed Metro Stations i.e Alambagh, Charbagh , Chowk, Aminabad And Indira Nagar.

- Sample consist mix of male and female members including pedestrian, Rickshaw Riders, Motor Bike and Auto passengers.
- The data thus obtained has been arranged in access database and for analysis of data excel pivoted tables has been used



## SAMPLE SIZE

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	Auto	Rikshaw	Two Wheeler	Walking	Grand Total
Female	17	18	5	40	80
Male	24	39	23	84	170
Grand Total	41	57	28	124	250

# SAFETY PERCEPTION

	SAFE	UNSAFE	GRAND TOTAL
Female	16	64	80
Male	43	127	170
Grand Total	59	191	250

# HAZARD PERCEPTION

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SAFETY CATEGERY	<b>PRIORITY</b> 1	<b>PRIORITY 2</b>	PRIORITY 3	Grand Total
OBSTRUCTION	76	41	43	160
BAD PATH WAY	48	76	27	151
NARROW PATH WAY	55	36	23	114
<b>CLIMATIC REASONS</b>	31	26	50	107
FAST ROAD TRAFFIC	15	19	36	70
<b>NO SAFE CROSSING</b>	22	35	28	85
POOR LIGHT	3	17	43	63
Grand Total	250	250	250	750

## WILLINGNESS TO WALK

	NO	YES	Grand Total
Female	8	32	40
Male	9	77	86
Grand Total	17	109	126

	Auto	Rikshaw	<b>Two Wheeler</b>	<b>Grand Total</b>
Less Than 1 KM	28	42	20	90
1 KM to 2 KM	6	9	4	19
Grand Total	34	51	24	109

### SOME OF THE IMPORTANT CONCLUSIONS DRAWN FROM THIS STUDY ARE

- People feel unsafe while walking on the footpaths in Lucknow.
- The three most important concerns for walkway users in Lucknow are
  - 1. Bad conditions of pathways
  - 2. Narrow pathways
  - 3. Infringements and obstruction on the pathways
- A large no of Rickshaw, Auto and Bike users are willing to walk up to one km if their concerns are taken care.

### **INFRENCES FROM STUDY**

#### 1. PEDESTRIAN CONVENIENCE AND ATTRACTIVENESS,

- Side walks should be kept free from obstructions, barriers, Removal of hurdles and obstruction due to advertisement hoardings, commercial encroachment, etc
- Strict law enforcement to prevent parking vehicles on the footpath which forces public to walk on the road
- Regulation on street hawkers
- Sufficient width of pathway

- Maintenance drives of walkways should be conducted on annual basis
- Sufficient zebra crossings and street skywalks, subways at areas separated by wide roads and faster road traffic such as Indira Nagar, Alambagh, and Charbagh.
- Trees can be planted to provide natural shed without causing obstructions
- Street light improvement

### 2. POLICY SUPPORT

- Traffic regulation must be made strict with penalties to control vehicular as well as pedestrian movement on the road to ensure safety for both.
- Involvement of the local public in decision making while planning pedestrian infrastructure.
- Policy planning for public mobility must also look into environment friendly approach.
- Fully pedestrinised lanes and car free zones connecting feeder service stations, important commercial establishments and Metro Station





New proposals for flyovers or widening of roads , some times at the cost of pedestrian conveniences and safety, discourages people to walk, which has very serious consequences on the health and habits of individuals.

Today urban planners of India need to rethink for whom they are planning, when we plan cities for cars and traffic we get more cars and more traffic, and when we plan cities for people we get more people

I think a suitable urban transport model for Indian city is needed to retain our socio cultural vibrancy through contribution of pedestrian sustainable approach.

- Almost all commuters using Metro Rail network, at a certain point after the trip, would behave as pedestrian hence it is anticipated that there will be tremendous increase of pedestrians near important metro stations.
- We need to know pedestrian behaviour within city and to know whether city has basic pedestrian infrastructure and walk ability conditions especially near important Metro Stations