




# How **Transport Disadvantage** affects the life of Lower Income Group in Gurgaon

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Only **14% (37.3 million)** Households have access to a Motorized Vehicle

Source : Census 2011



**43.7% (83.8 million)** Households own a Bicycle

**34.5% (66.2 million)** Households do not own any mode of transport

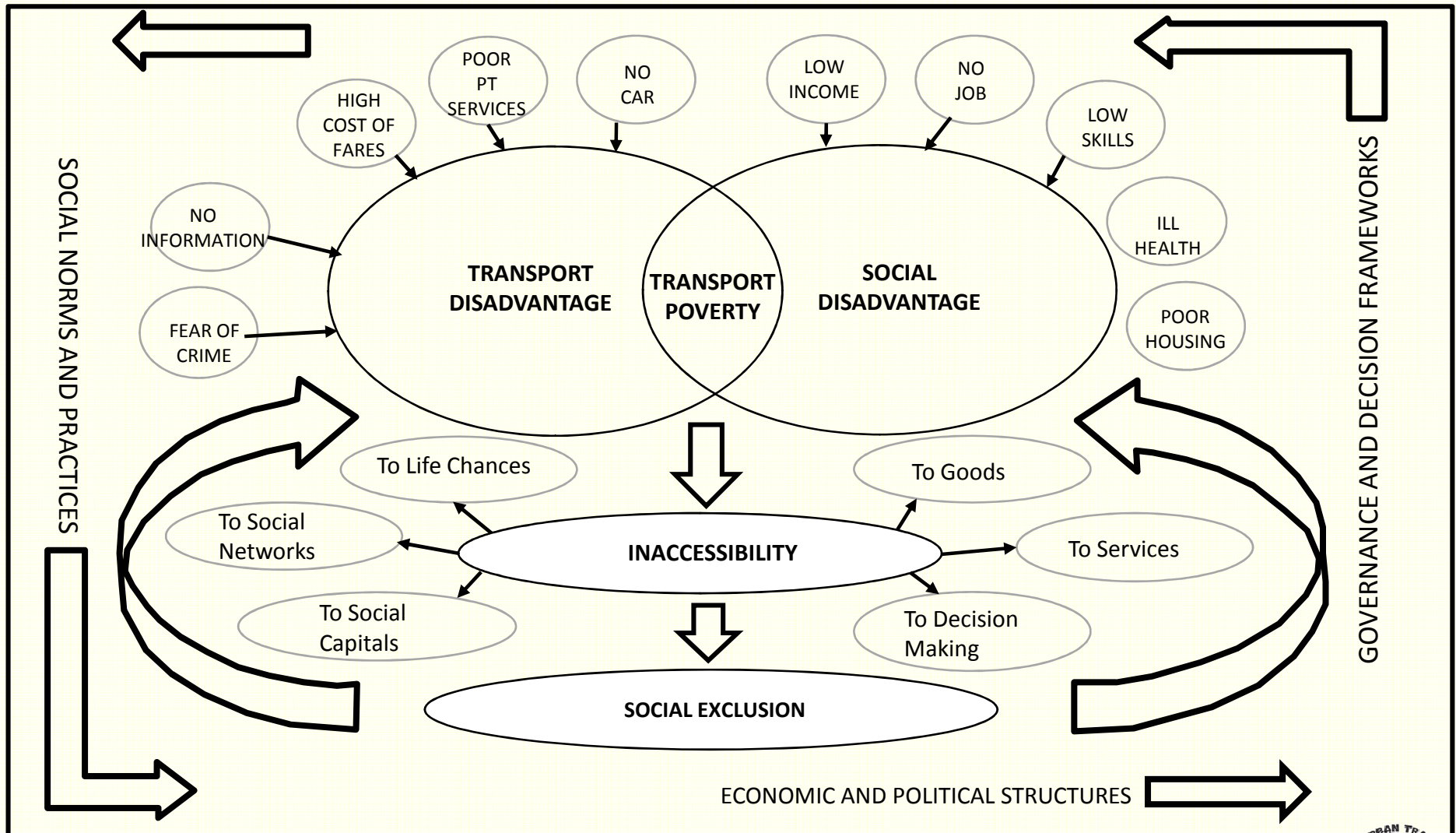
Source : Census 2011

# Social Exclusion

...’the **lack or denial of resources**, rights, goods and services, and the **inability to participate in the normal relationships and activities**, available to the majority of people in a society, whether in economic, social, cultural or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole.”

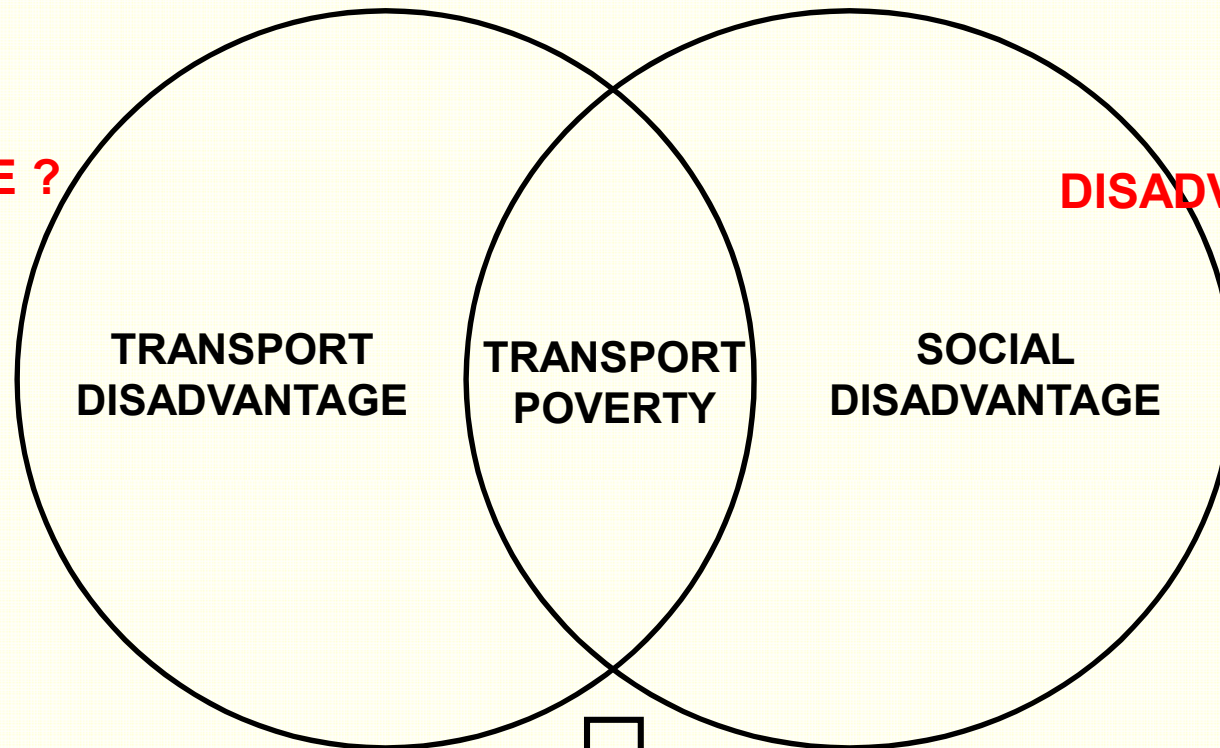
(Levitas e al.,2007:9)

# Social Exclusion

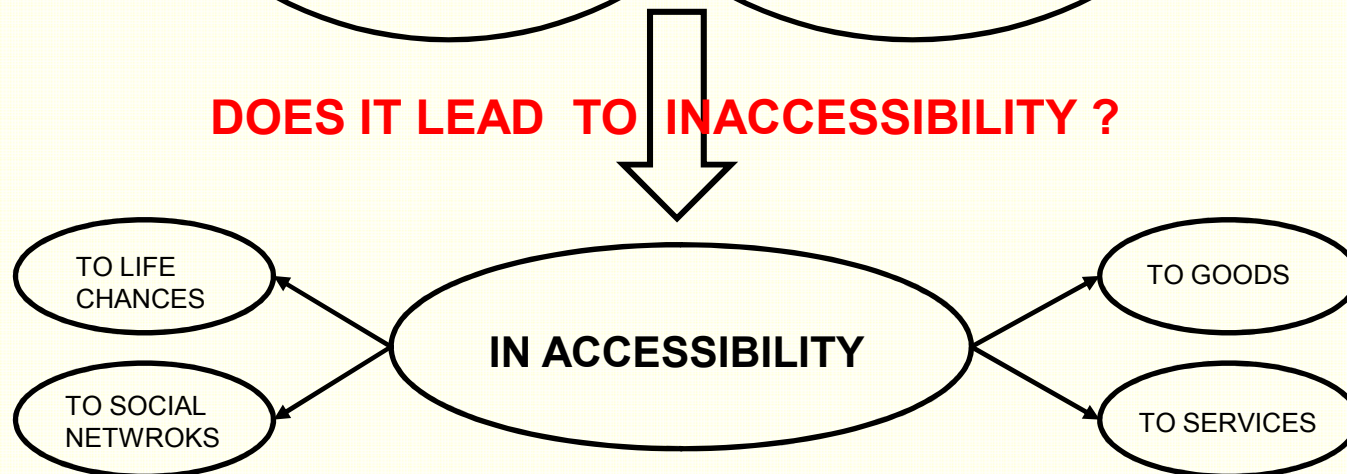


**TYPES OF  
TRANSPORT  
DISADVANTAGE ?**

**TYPES OF  
SOCIAL  
DISADVANTAGE ?**



**DOES IT LEAD TO INACCESSIBILITY ?**



# Types of Transport Disadvantage

Low access to private vehicles and public transit services

Affordability Issues

Legacy of apartheid and housing location of lower income group

Over reliance on walking resulting in high exposure to traffic

Lucas, 2011 (South Africa)

Low access to private vehicles and public transit services

Affordability Issues

Housing location of LIG

Over reliance on walking resulting in high exposure to traffic

Porter, 2002 (UK)

In-accessible design of buses/trains/stations

Location of Bus stops

Unpredictable Long wait

Customer care and travel information

Hine & Mitchell, 2001 (Scotland)

Lack of ownership of car is TA.

Blacks & Hispanics own less car than white people.

No car equal less access to public transport and other key facilities

Clifton and Lucas, 2004 (USA)

Suburban and regional areas, where distance is a major barrier to socio-economic activities.

Driving cessation for older citizens.

Currie and Delbsoc, 2007 (Australia)

# Understanding TRANSPORT POVERTY

## Mobility Poverty

A systemic lack of (usually motorized) transport that generates difficulties in moving, often (but not always) connected to a lack of services or infrastructures.

Moore et al, 2013

## Accessibility Poverty

The difficulty of reaching certain key activities - such as employment, education, healthcare services, shops and so on - at reasonable time, ease and cost

Department for Transport, 2014;  
SEU,2003

## Transport Affordability

The lack of individual/ household resources to afford transportation options, typically with reference to the car (in developed countries) and/or public transport

Carruthers *et al.*, 2005; Litman, 2015; Serebrisky *et al.*, 2009

Source : Lucas et al. (2016).



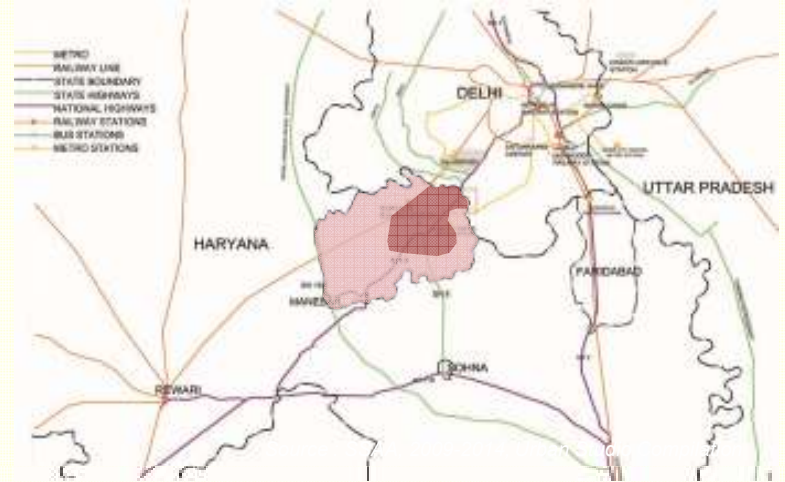
# Gurgaon

**LOCATION** : It is situated 30 km from Delhi. It comes under the National Capital Region

**AREA** : 732 sq km

It was under Municipal Council till 2008, Municipal Corporation of Gurgaon (MCG) formed in 2008. Officers appointed in 2011.

**POPULATION** : 1.5 million in 2011.  
Increase of **73.93%** from 2001





Source : [http://www.caravanmagazine.in/wp-content/uploads/files/udit\\_kulshrestha\\_for-caravan\\_belair-8521\\_0.jpg](http://www.caravanmagazine.in/wp-content/uploads/files/udit_kulshrestha_for-caravan_belair-8521_0.jpg)

Gururani states, the city is an exercise in ***‘flexible planning’*** that ***‘accommodated the desires of the wealthy and political elites’*** .

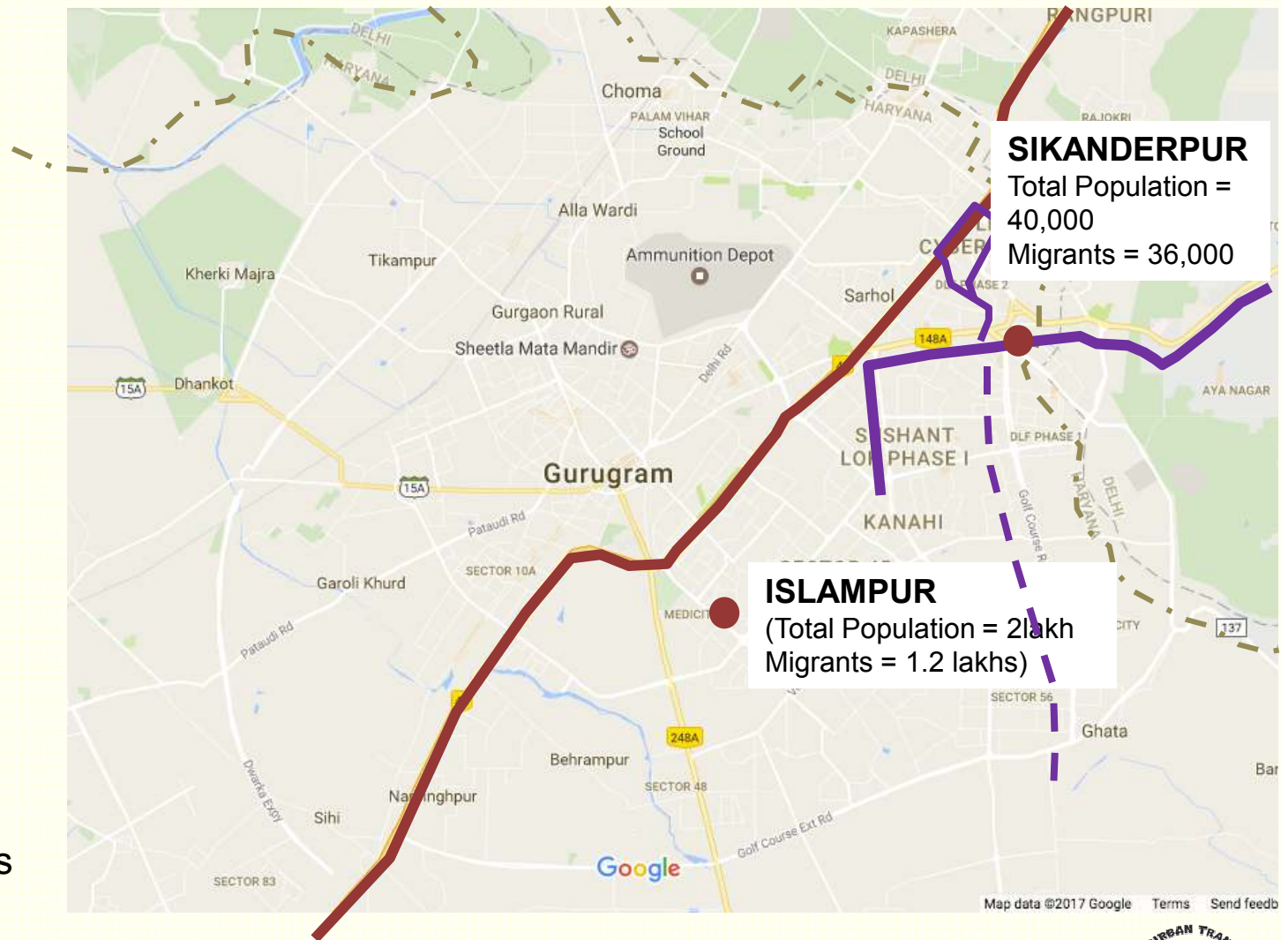







Informal estimates state that **1 million Migrant Workers** in Gurgaon have not been accounted for in the 2011 census. (Agrasar, 2013)



# Site Location



-  NH 8
-  Metro Line
-  Urban Villages

# Sikanderpur



# Islampur

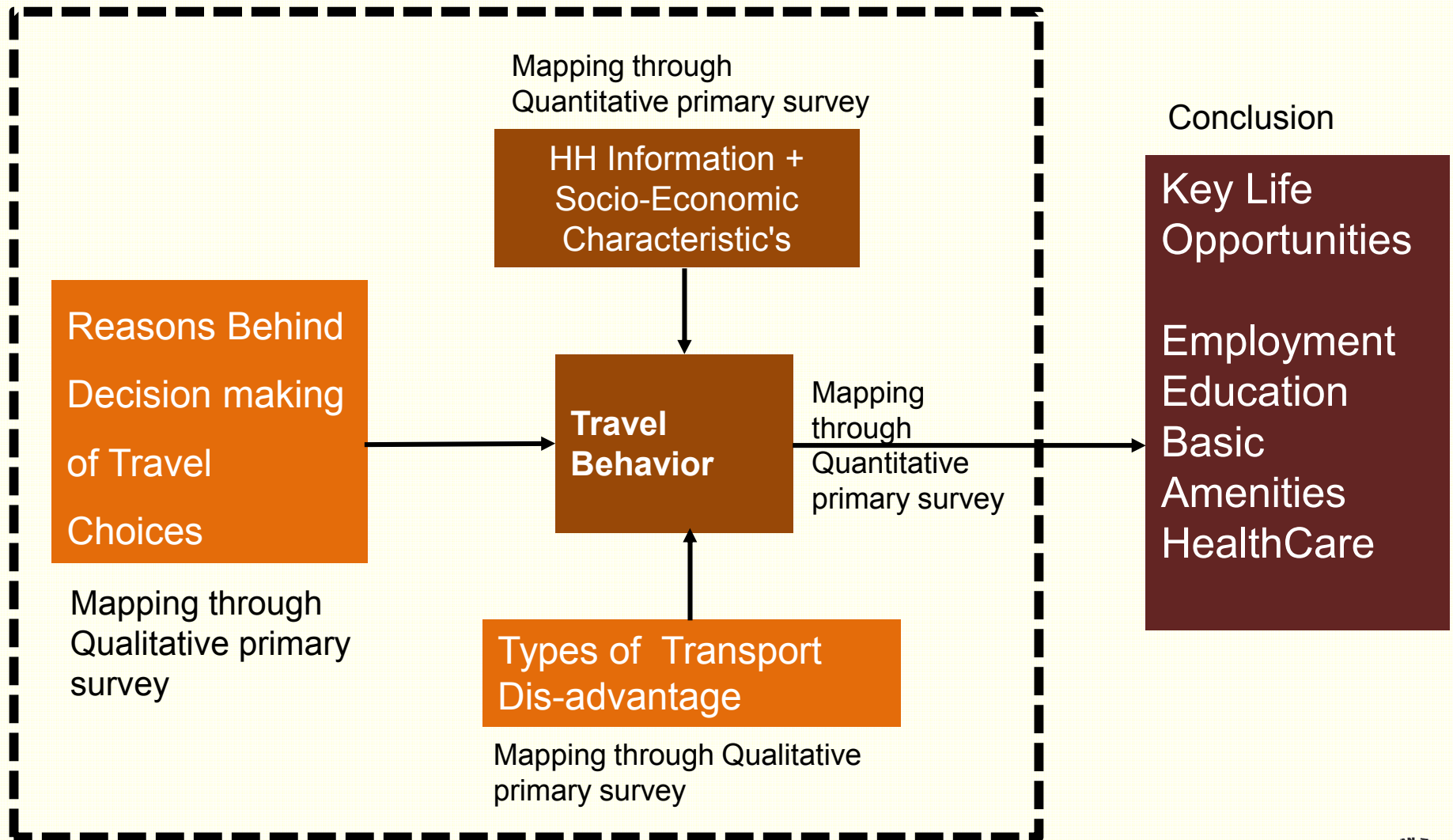


# Objectives

- To document the Household information & Socio-Economic Characteristic's of residents of Sikanderpur and Islampur Village.
- To understand the travel behavior of residents of Sikanderpur and Islampur Village.
- To understand the types of transport dis-advantage faced by the residents of Sikanderpur and Islampur.
- To understand the reason behind decision making of their travel choices



# Methodology



# Data Collection

**87** HH Surveyed

**44** HH in Sikanderpur | **43** HH in Islampur

**326** people's demographic information

**242** people's Travel Diary

**582** Number of trips

# Socio Economic Characteristics

	Sikanderpur	Islampur
<b>Household by income size (%)</b>		
Rs 7k-10 k	20	14
<b>Rs 10 k- 20k</b>	<b>48</b>	<b>58</b>
Rs 20k - 30k	11	26
Rs 30k - 40k	14	2
Rs 40 k >	7	-
<b>Average Household Size</b>	3.84	4.02
<b>Literacy Rate</b>	87.20	65.50
<b>Primary Occupation</b>		
<b>Salaried employment ( regular waged)</b>	<b>29</b>	<b>15.8</b>
<b>Domestic worker at a fixed rate</b>	<b>6.5</b>	<b>25.7</b>
Casual labour ( daily wage employment)	5.2	10.5
Self employed	5.2	1.2
<b>Students (attending educational institute)</b>	<b>29.7</b>	<b>24</b>
Unemployed ( seeking work)	6.5	2.9
House Managers ( Unpaid domestic work)	9.7	3.5

# Summary of Travel Behavior

Mode Choice – **85%** of people are NMT users

Trip Purpose – **98%** of trips are work and education

Travel Length - **72%** of people travel a distance of < 2.5 km

Travel Time - **81%** of travel time is < 30 mins

Travel Cost - **92.3%** people spend Rs 0 for their travel

# The Dis-advantaged Commuter

## **Mobility Disadvantage**

Lack of adequate public transport

Lack of vehicle ownership

Overcrowding

Rash driving

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## **Transport Affordability**

Monopoly of private player  
hence, no regulated fares

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## **Accessibility Disadvantage**

Unsafe pedestrian pathways  
and intersections

# Mobility Disadvantage

## Lack of vehicle Ownership

	Walk	Cycle	Shared Auto	Public Bus Service	Metro/ Rapid Metro	Private Auto	Aggregator services	Private Vehicle
<b>7K-10K</b>	91%	7%						2%
<b>10K-20K</b>	84%	5%	6%			3%		2%
<b>20K-30K</b>	81%	9%	4%	1%	3%			2%
<b>30K &gt;</b>	51%		15%	4%	6%	9%	5%	10%
<b>Grand Total</b>	80%	5%	6%	1%	2%	3%	1%	3%
	<b>Non-Motorised = 85%</b>		<b>Shared IPT + PT = 9%</b>				<b>Private IPT = 4%</b>	<b>Private Vehicle = 3%</b>

# Mobility Disadvantage

## Lack of adequate Public Transport

Bus service currently being provided by Haryana State Transport Department.

**7 Bus routes** are operational

Frequency – 10-15 mins



Source

<http://hartrans.gov.in/docs/citybus.pdf>

# Mobility Disadvantage

## Lack of adequate Public Transport

*“The bus charges Rs 5 and Shared auto Rs10. I **mostly prefer to go by bus, but I always must wait for at least 15-20 mins.** I usually wait for it. But, then even after waiting for 20 mins, I don’t get a bus then I must take the Chakkda. It’s a necessity or else I will reach late for my work. **I end up taking the bus only 2-3 times a week, rest of the days I have to take a chakkda.**”*

– *Rajeev, Salaried employee (works as office boy), 20, Islampur*



# Mobility Disadvantage

## Overcrowding in Shared Autos and Public Bus Service

*“My office is in Sec 56, and every day is a struggle. If I leave home at 8:15 am, then I get a seat, but if I leave home at 8:30 am then **I struggle to find a place.** Most of the times, I would **be sitting on the backside or on the side of the drivers, hanging by the post** and it’s the **same story for public buses.** It gets very crowded in the bus, *Bahut hee buri halat hote hai madame*”.*

Raju, 24 years, Salaried employee, Sikanderpur

*“I used to take shared auto till HUDA city centre. The shared autos especially during the morning time are very difficult to get. There are **always too many men in them and sometimes these men also stare at me and make me uncomfortable.** From the last six months I have been **taking the metro till HUDA, it is more expensive and takes a bit longer but at least it’s safe and on time. I don’t mind paying this extra price**”.*

- Priya, 19 years a college student living in Sikanderpur

# Mobility Disadvantage

## Rash driving by Shared auto and e-rickshaw drivers

*“Most of us do not have our own vehicle have to rely on the Chakkda’s. **It’s the only option for us** and every day is a challenge. I feel I am **risking my life every single day** when I am travelling in the auto. From Cyber hub to Sikanderpur metro station junction, it’s a one-way route. The Chakkda’s and recently the e-rickshaws **need to take a longer route. To avoid that they come from the wrong side.** My A few days ago, my auto banged into another e-rickshaw and everyone in the e-rickshaw got hurt. I am honestly scared for my life every day, **but this is how things are. One needs to accept it. We can’t just sit at home because of this.**”*

- Shanti, 42 years, Sikanderpur

# Transport Affordability

## Monopoly of private player hence, no regulated fares

*“We rarely go out anywhere. The **auto drivers have a monopoly. They charge flat Rs 50 (base fare) for going into Sikanderpur village. They can charge you even Rs 80 or Rs 100**, if you want to go a bit far away. That depends on the distance. My kids always ask me to take them to the mall. But it is very expensive. The distance to mall is less than a kilometre, but still they charge us Rs 50. The fare increases, with the distance. **I want to take my kids out every week, but because it is expensive, we only go out once in a month.**”*

*- Madhumita, (mother of two kids, House Manager), 35, Sikanderpur.*

# Transport Affordability

*I have been jobless for the last 5 months. I am looking for **work somewhere nearby** only. I do not want to go anywhere **where I have to use an auto**. I am looking for work only in areas **where I can walk to work**. I will earn Rs 5000 – Rs 6000 a month. My son earns Rs 8,000. **I cant afford to pay for transport also in this. It is too expensive for me.***

*- Rama, 42 years, two sons, un-employed , Islampur*

# Transport Affordability

## Travel Cost

Monthly HH Income vs Daily Travel Expenditure

	0	Rs 10- Rs 30	Rs 30-60	> Rs 60
7K-10K	99%	1%		
10K-20K	94%	2%	4%	
20K-30K	95%	1%	2%	1%
> 30K	75%	9%	12%	4%
Grand Total	<b>92.3%</b>	<b>2.4%</b>	<b>3.9%</b>	<b>0.9%</b>

# Transport Affordability

## Trip Length

	0-1 km	1-2.5 km	2.5-5 km	5-10 km	>10km
7K-10K	61% (54)	27% (24)	5% (4)	7% (6)	
10K-20K	45% (131)	28% (82)	16% (46)	9% (26)	2% (6)
20K-30K	58% (72)	10% (12)	24% (30)	7% (9)	2% (2)
> 30K	32% (24)	26% (20)	26% (20)	8% (6)	8% (6)
Grand Total	<b>48%</b>	<b>24%</b>	<b>17%</b>	<b>8%</b>	<b>2%</b>

**72%**

# Accessibility Disadvantage

## Unsafe pedestrian pathways and intersections

*“Her biggest fear is crossing of the roads. The major road that she crosses is the Golf course road. It has no pedestrian crossing. (Agar mujhe, crossing pe par karna hota hai toh ghoomna padta hai. Mai toh beech main se hee sadak paar kar lete hoon.) If I have to cross the road safely, then I have to walk an extra 700m for it. Hence, I cross from the middle only. It usually takes me only 15 mins to reach Mega Mall, but maximum time goes in crossing of road, because I must look if traffic is coming or not. Because of this, it takes me 30-40 mins to reach the destination.”*

Savita, 36, mother of 3 children, Sikanderpur

# Accessibility Disadvantage

## Unsafe pedestrian pathways and intersections





# Accessibility Disadvantage

## Trip Length by Travel Time

Travel Time	Trip Length				
	0-1 km	1-2.5 km	2.5-5 km	5-10 km	> 10 km
<b>Islampur</b>					
0-10 mins	98% (165)		2% (4)		
10-30 mins	<b>28% (32)</b>	53% (60)	12% (14)	7% (8)	
30-60 mins			96% (44)	4% (2)	
> 60 mins				100% (6)	
<b>Sikanderpur</b>					
0-10 mins	97% (56)	3% (2)			
10-30 mins	<b>21% (28)</b>	55% (72)	18% (23)	6% (8)	
30-60 mins		<b>9% (4)</b>	31% (14)	51% (23)	9% (4)
> 60 mins			9% (1)		91% (10)
Grand Total	48.4%	23.8%	17.2%	8.1%	2.4%

# Conclusion

- People refrain from making travel choices that will entail spending on Motorized transit.
- People have access to their daily needs. They can survive in the city, but access to better opportunities and certain desires is restricted due to lack of efficient transport systems in both the villages, especially in case of education or recreation
- Residents of Sikanderpur, due to availability of various modes travel farther than the residents of Islampur
- There is restricted mobility for both males and females for any travel during night in both the villages.
- The people are highly vulnerable to road accidents due to lack of safe pedestrian path-ways and rash driving by motorized modes.

# Recommendations & Way Forward

**Safe Pedestrian Pathways and road crossings**

**Improve the Built environment**

**Increase Public Transport**

**Regularisation of the IPT**

**Public Bike Share**