



# Kolkata Needs to Think beyond cars - Part 2

This infographic aims to answer the concern of bicycles slowing down traffic speed.

Validated by ground data, the findings show if Kolkata Police's claims that cycles are slowing down traffic speed, holds any ground. Findings have been drawn from two studies - Vehicular Count Survey and Speed Mapping Survey



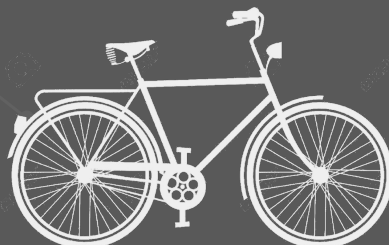
**Vehicular Count Survey**



**Speed Mapping Survey**

Two primary reasons cited by Kolkata Police justifying cycle restrictions in Kolkata  
(only city to have cycle restrictions in India)

1. Cycles pose a **safety hazard** on the roads



2. Cycles slow down the traffic by being a slow moving vehicle **creating congestion**



2.

# Vehicular Count Survey: What is the vehicular composition in Kolkata?

1

Vehicular Count Data is based on **8 major roads** for peak hour traffic (**9-11 AM**) and a comparative study has been carried out with data collected in 2013 and 2020 during the period November - January

Ultadanga

Ballygunge

Rajabazar

Dhakuria

Sealdah

Hazra

Esplanade

Park Circus



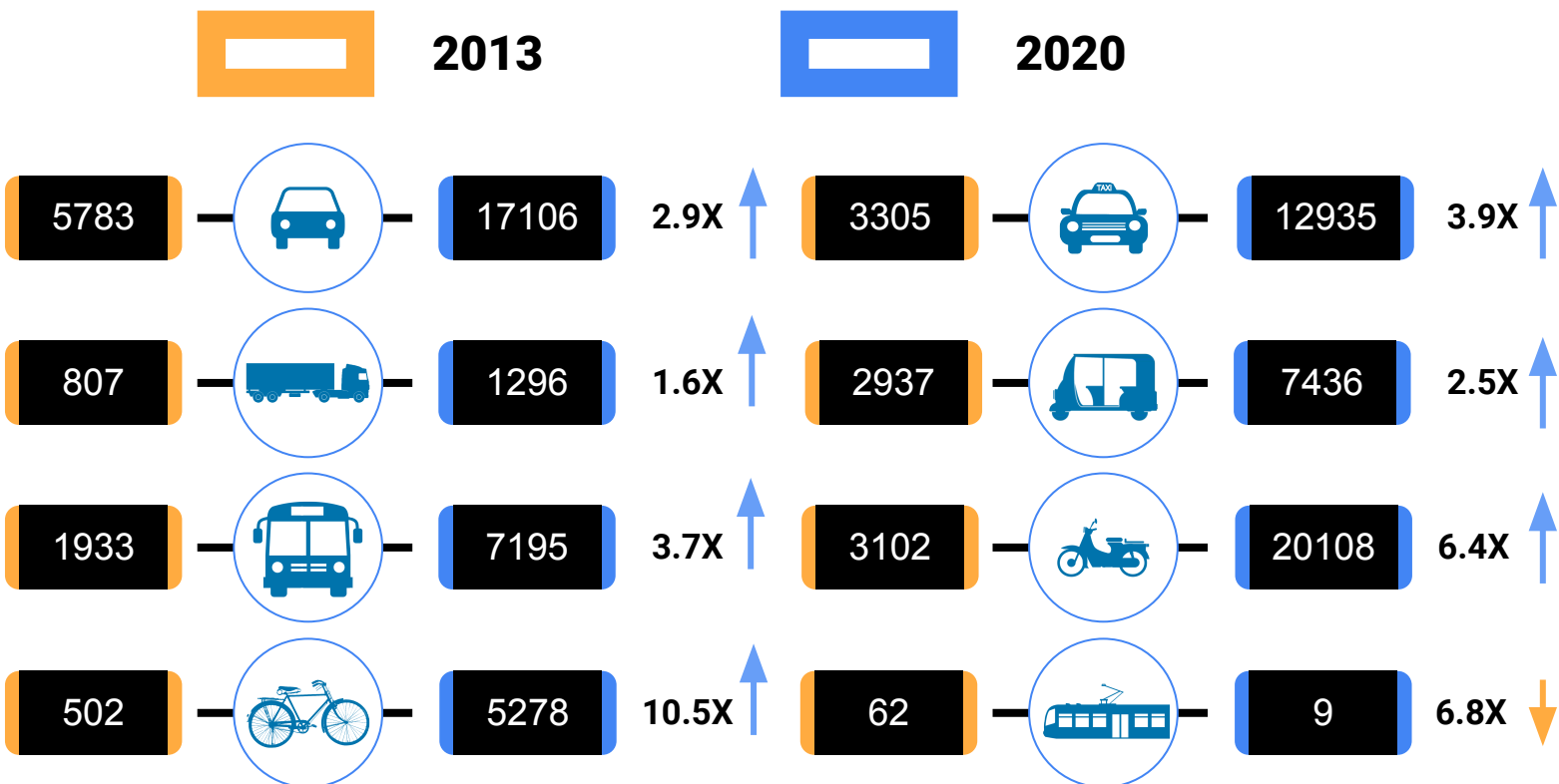
Two set of Primary Surveys were conducted in **3 time phases**

Manual vehicular count undertaken by field staff



Image and video capture

## CHANGES IN VEHICULAR COMPOSITION ACROSS KOLKATA BETWEEN 2013 AND 2020



## SO WHAT DOES THE ABOVE DATA MEAN ?



There has been a **3X** increase each for cars and taxis and almost **8X** increase in motorcycles between 2013 and 2020, making up 69% of the total share on the road



Trams saw a decrease in numbers by almost **7X**



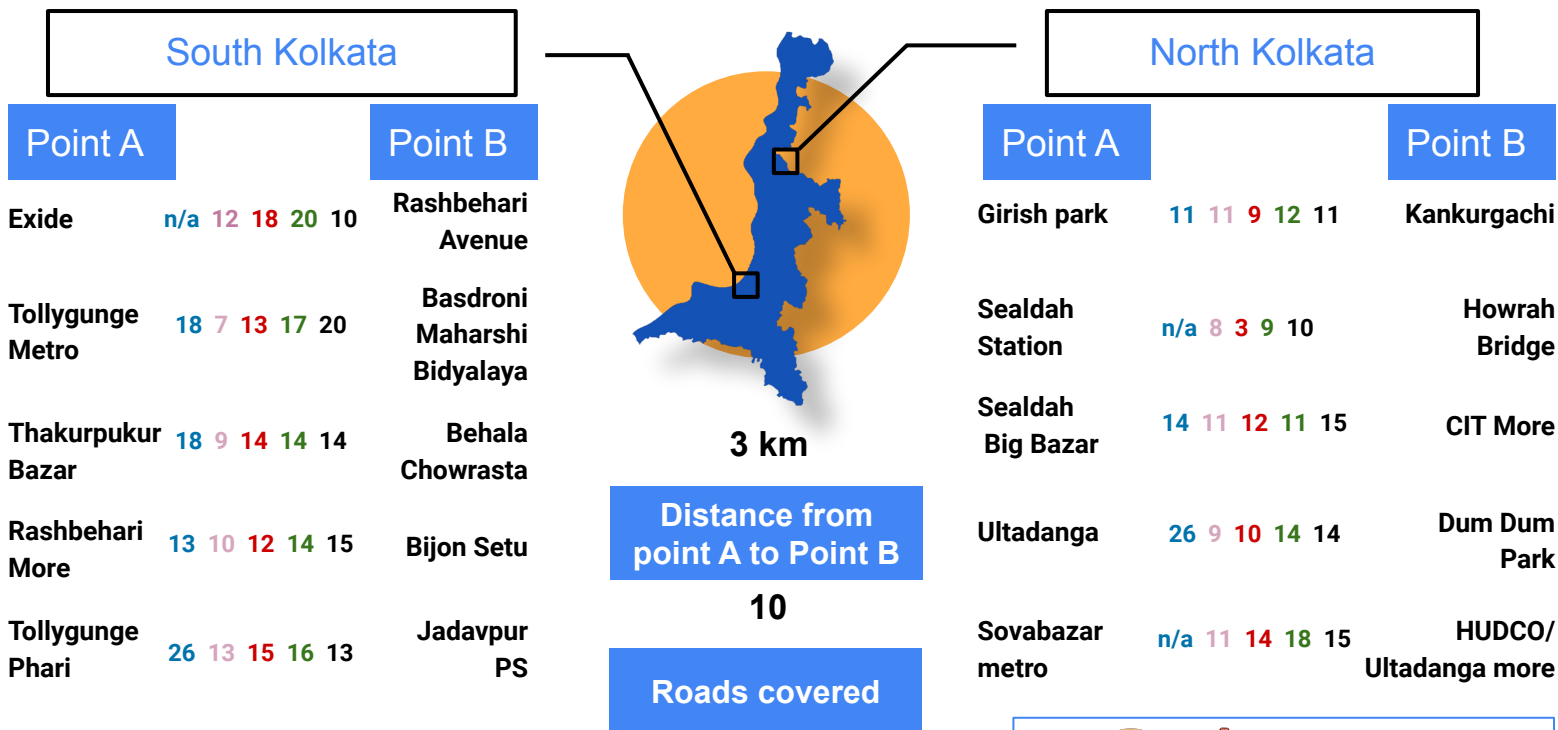
Although cycle share has increased by 10.5 X, yet cycles form only 7% of the total transport share.

# Speed Mapping Survey: Are cycles really slow moving?

2

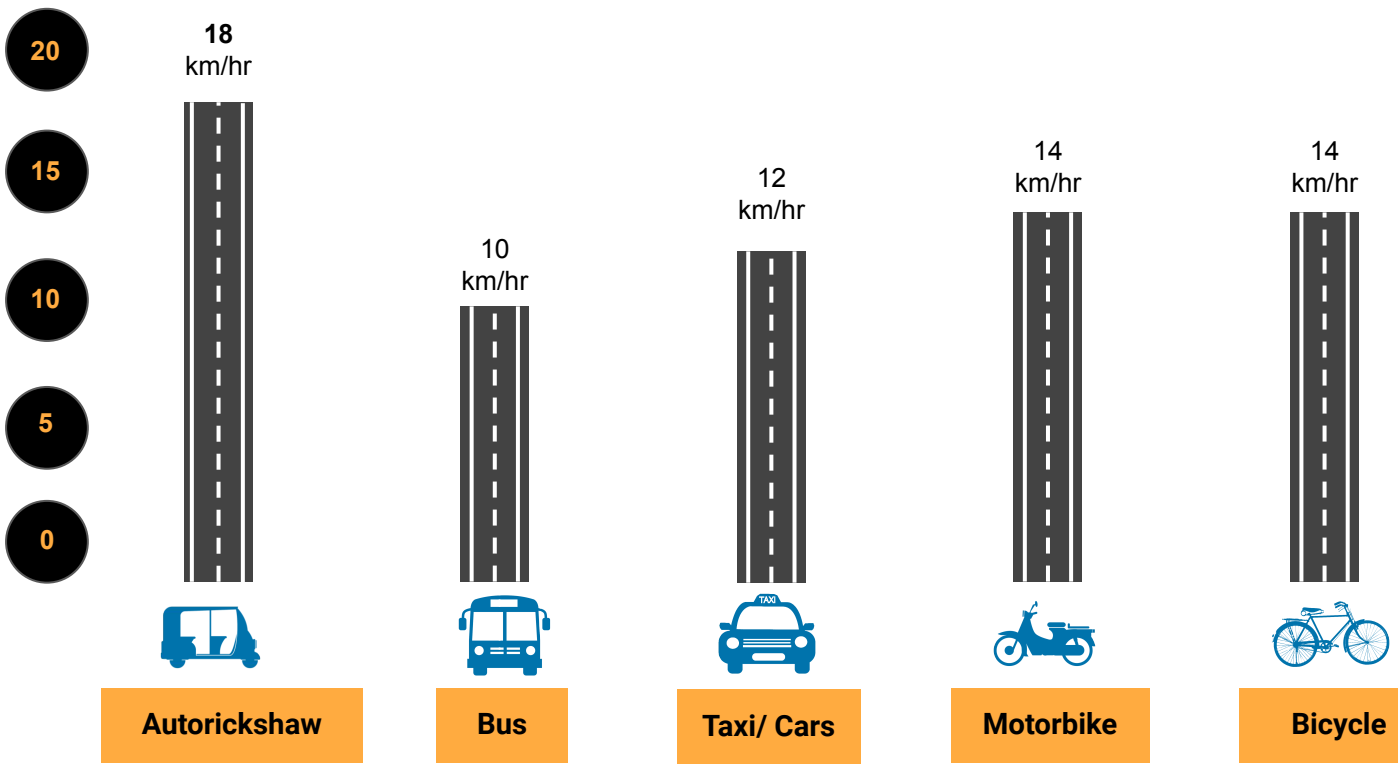
A speed mapping exercise was done across **10 major roads** from one point to another covering a constant distance of 3 km. The exercise was done to **determine if cycle is indeed as slow** as the officials are claiming it to be.

**Methodology:** Time taken to commute between one point to another was recorded using a mobile timer and an android app (Strava). Speed was calculated from time and distance.



Auto Bus Taxi/Car Motorcycle Cycle  
 Speed in KM/hr

## AVERAGE SPEED DATA





# WHY CYCLING SHOULD BE MADE THE CENTRE OF MOBILITY PLANNING IN KOLKATA?

3KM = 14 min



The average trip length in Kolkata is about **3 kilometers (CSE, 2018)**. A cycle can easily cover this distance **within 14 minutes** which is equivalent to a car.

14 - 18 km / hr



=



The average speed of a cycle is **equivalent to a motorbike** and almost **16% higher than cars**.

Speed of traffic in Kolkata is **10-18 km/ hour**. Our analysis proved that cycles can easily match this speed.

## WAY FORWARD

2



Cycle share has **increased 10.5 times** in 2020 from 2013. However, it is still far less compared to cars. Despite cycle restrictions, public demand for cycling has been on the rise because of the several benefits of cycling.

Cycles form only **7% of the transport share** while cars, taxis and motorcycles taken together account for 69%. Hence, it is evident cycles cannot slow down traffic speed

Cycles can easily match up and be faster than most other forms of transport and Kolkata's traffic speed which is 10-18 km/ hour. Hence, cycles are more effective than cars and other mobility options.

Cycles form an important component of mobility and are an environment friendly and healthy replacement for motor-vehicle and need to be actively promoted