Capacity Building Program for Leaders in Urban Transport Planning - 6

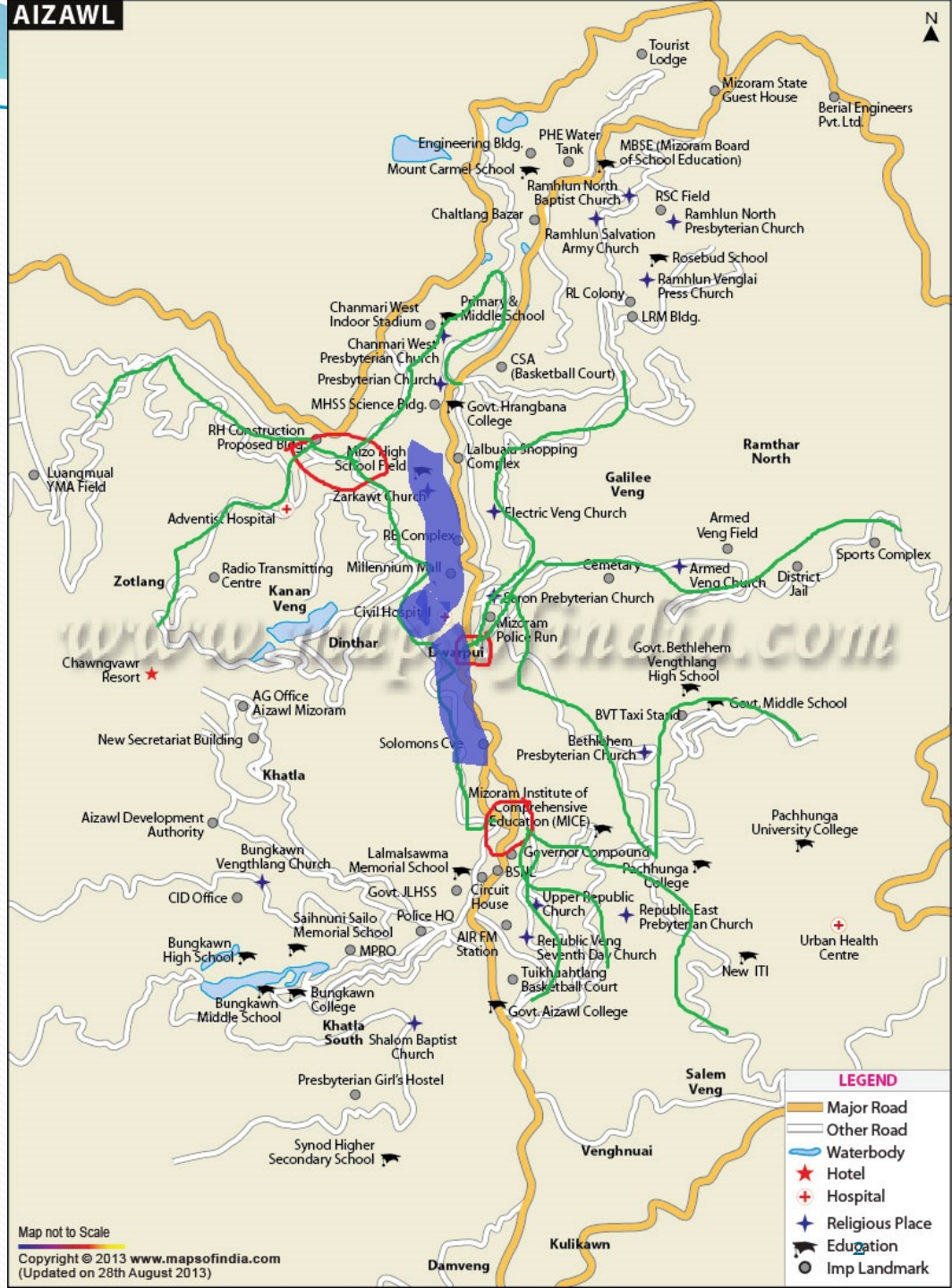
Self Study – Assignment submitted by

Mr Ramchuana & Mr R.L Zidinga

REDUCTION OF TRAFFIC PROBLEM IN AIZAWL

Present Situation

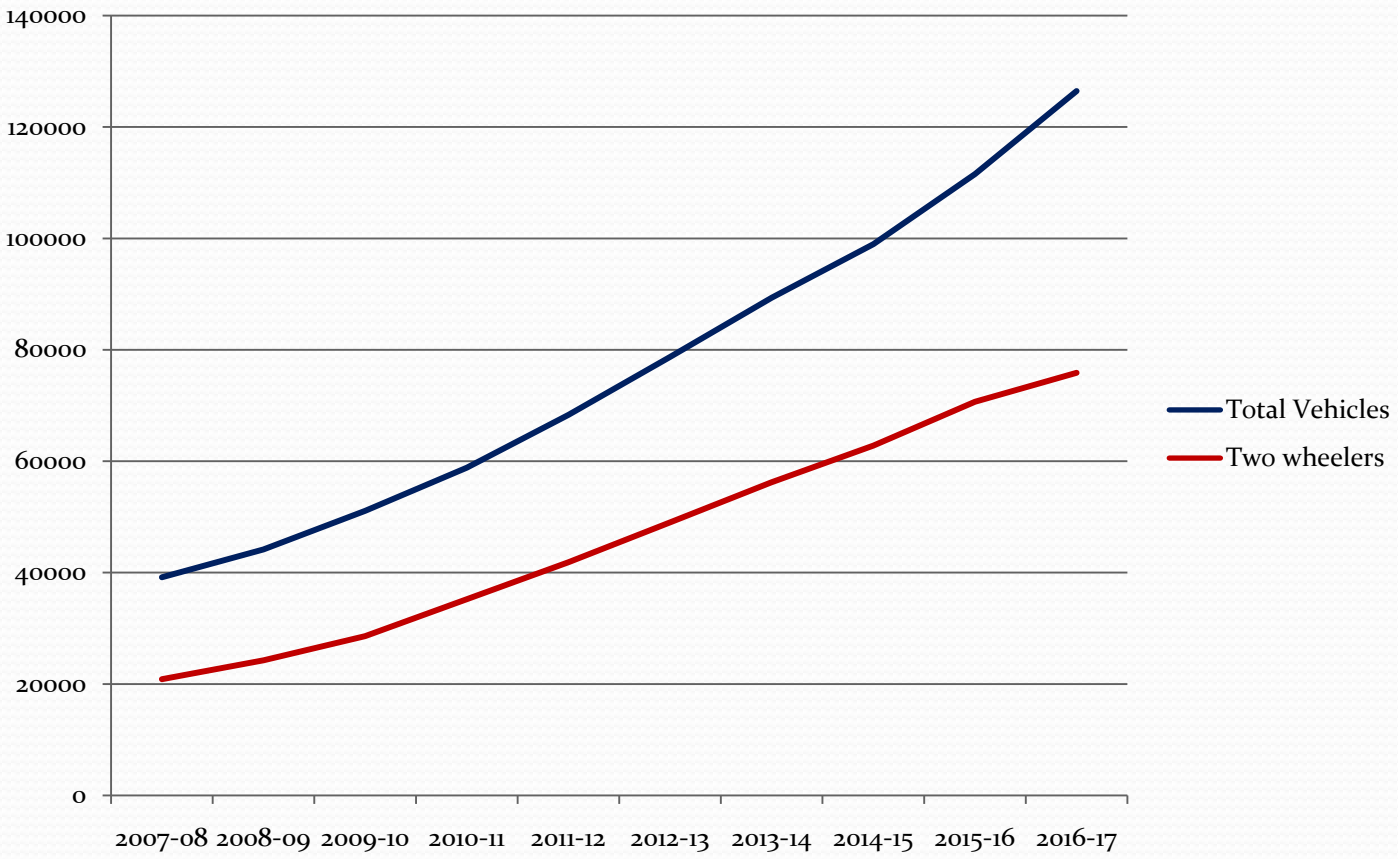
- Aizawl is an unplanned city.
- The municipal body also started functioning in 2008 only.
- All banks, shopping areas, markets along the main line
- Auditoriums



About Statistics

- Total Vehicle in Aizawl District Transport Officer(Urban),- 1,26,470
- Government vehicles - 7,494
- Average vehicle registered in a day - 29.
- No of City Buses - 261 (Out of the 261 city buses, approximately 226 buses operate everyday and 35 buses are restricted for one day as per the schedule made by the City Bus operator.)
- No of Line buses – 10
- City Bus fare - Rs 5 upto 1.0 Km and Rs 3 per every additional km.
- No of local taxis 3700
- Taxi fare -Rs 40 per km and Rs 10 per additional kilometer.
- As per traffic volume count, there are 295 private vehicles travelling towards the north and 359 private vehicles towards the south in one hour along the main spine.

Growth of vehicles in Aizawl



Major Problems

- Vehicles coming in from eastern sides and western sides to the main corridor delay traffic flow by about 35 secs per vehicle in the junction which will be 1 min at 500m before the junctions.
- Parking on the roadsides also disrupts the normal traffic flow. In the main road, about 30% are long term parking i,e, from 7;00 AM to 6;00 PM and about 40% are medium parking for about 2-5 hrs, the remaining 30% are of short term for 30 mins to 2 hrs.
- Encroachment by buildings along the roads
- Absence of proper regulatory mechanism also created lots of problems as the number of taxis increased very rapidly and became more than the city needed,
- No proper and efficient and workable public transport system put in place.
- The traffic in the city during rush hours is almost on halt.

Problems due to Parking on the road side

Major Problems (contd)

- The inefficient bus service is also one of the reasons for traffic problems. Though sufficient buses are there, buses stop for about 3 mins in their stand for dropping and picking up of passengers.
- To cover ten bus stops, one has to spend an idle time of at least half an hour.
- The public transport systems available are inefficient and very costly.
- Most people prefer to use their own vehicles including two-wheelers instead of availing the slow moving and costly public transport.

The Bright Side

- The drivers maintain strict discipline and could hardly see anyone honking their vehicles.
- The observance of strict traffic rules by the drivers hardly cause any sort of inconveniences to the people.
- Ever vigilant traffic police are also there to control the traffic flow and pull up any traffic violators.
- While the traffic is so congested in the main road running from North to South, other smaller approach roads hardly face such heavy traffic problem.

Administrative Measures to reduce the traffic

- Taxis are divided into three groups and at least one of the three groups does not ply on all working days, which means that only two-third of the taxis are in the traffic in a day.
- The state government is taking a new initiative of alternate plying of private vehicles with effect from 1st October, 2017 on experimental basis. All vehicles having last digit of registration number corresponding to the last digit of calendar date will be restricted to travel within the city road during 8:30 AM to 6:00 PM.
- In addition, all vehicle owners are insisted to have garage latest by 1st December, 2017 in order to minimize long term and night time parking of vehicles along the road.

Suggested Other Administrative Measures to reduce the traffic

- **Restriction on vehicle ownership:**

  At present, an average of 1200 new vehicles get registered in Aizawl every month, i.e. 14400 in a year. Which should be reduced to only 8000 in a year.

- **Restriction on procurement of vehicles by Government Department.**

  Out of 7,494 government vehicles registered in the capital Aizawl, at least 60% i.e. about 4500 government vehicles will be on road every day, which is a major contributor of the traffic, especially during peak hours. The state Government should ban or make certain restrictions on purchase of Government vehicles except for VIPs so that the increase rate of vehicle ownership declines slowly.

- **Redesigning the bus service system** so that the duration of the time spent by buses at their stop should be reduced to about 1 minute.

Proposed Additional Infrastructure

1. Construction of by-pass roads so that people do not have to go along the main road unless it is absolutely necessary. Construction of an elevated mono-rail along the main road is also another option.
2. Construction of multi level Car parking will also help in minimising traffic congestion caused by off-street parking along the main road.
3. Aizawl is situated in a steep hilly area, lots of stairs are constructed for moving up and down. As climbing is too tiresome, one has to use vehicles running in the narrow roads for climbing uphill. As such, introduction of long range open air escalator for climbing will also be very useful so that the use of vehicles will be reduced to a great extent.
4. Application of Integrated Traffic Control and Management System will help the ever traffic jam caused by inefficient control of traffic by traffic police.

The Possible Solution

- Out of the options submitted in the Mentoring Abstract, Sl no. 1 is considered not feasible due to high cost involved and due to the time required for implementation, which will be very long.
- The state Government has already made project for Serial no 2, construction of multilevel car parking. Aizawl Municipal Corporation is also setting up a multilevel parking in the northern side of the city.
- The alternative option available is Serial No. 3. i.e. **Construction of Open air Escalators** or any other mechanism for moving up and down.

Options Available for moving up

- **Construction of Funicular:** Since the degree of inclination is too high, this is not recommended.
- **Construction of Ropeway:** This will also not work for travelling inside the city as the height of buildings are not controlled. However, it will be useful for moving from the outskirt of the city to the some part of the city, which will reduce the plying of vehicles in the main corridor.
- **Construction of Open Air Escalators** may be the best option

Construction of Open air Escalators

- Aizawl city has only one main route running from north to south on top of the hill along the ridge. Small roads connect this main corridor and about 80 % living in the city have to use these link roads to enter into the main corridor.
- People nowadays, hardly use stairs as it is very tiresome and most people prefer to use vehicles either public or private vehicles to move up from bottom to the top, to the main road.
- If, at least, two such escalators are constructed on either sides of the city, i.e. two in the western side for instance at Chanmari West and Tuikual and two in the eastern side at Ramhlun S/Chanmari East and Venghlui, the traffic entering the main corridor will be reduced to a great extent and the delay in traffic flow in the main corridor will also be reduced considerably.

Construction of Open air Escalators

- The distance to be covered by the escalators will be about 300-800 metres with an elavation of about 200 meres.
- The main advantage of the escalator is that it does not need to be a single one but may also be a series of escalator, which will help in negotiating the elevation as it can be constructed in zigzag shape.
- The series can also be adjusted according to availability of land.
- One can stop at the end of one escalator and another may enter from the beginning of an escalator.

Construction of Open air Escalators in the Eastern side

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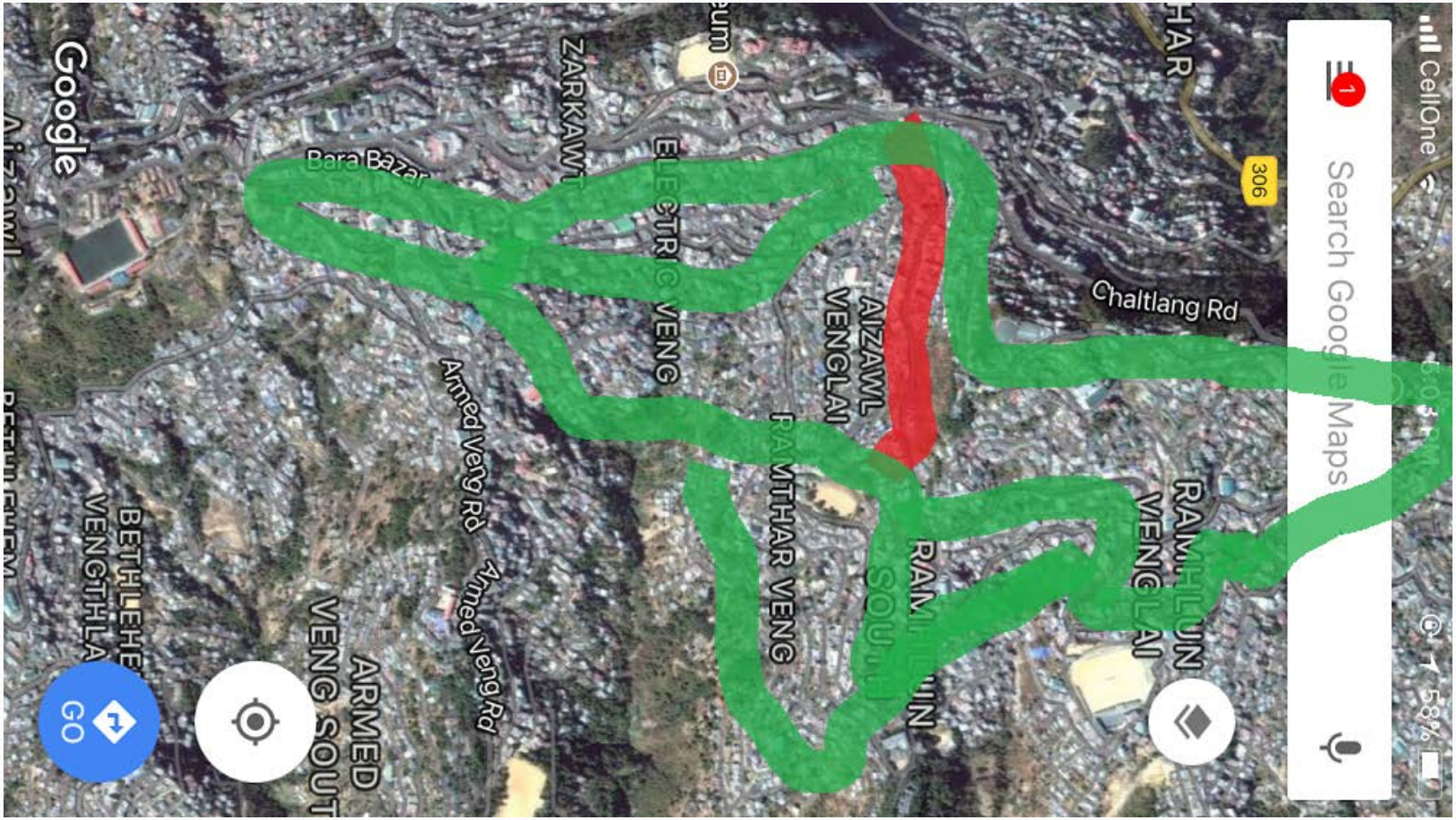

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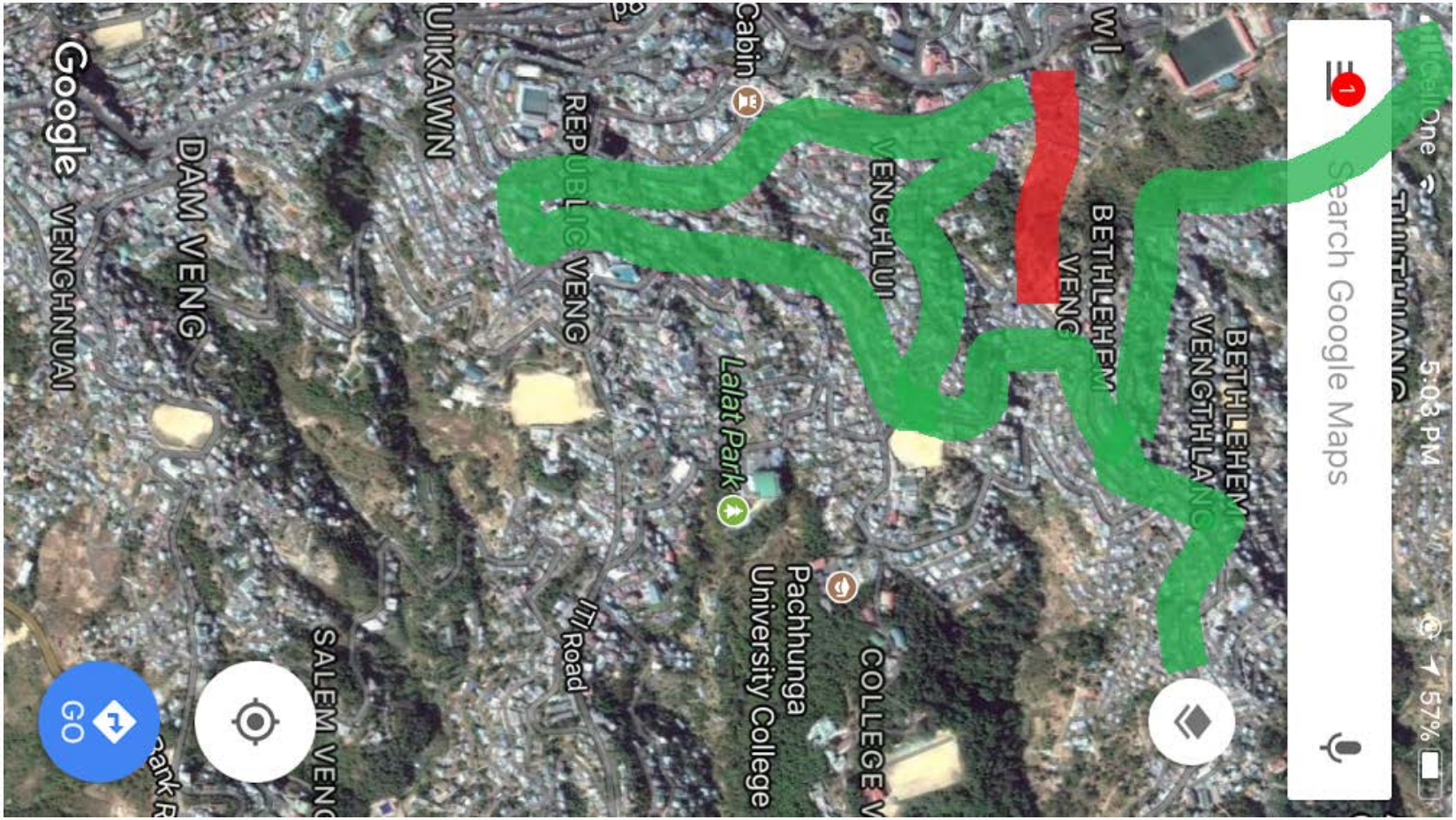

Construction of Open air Escalators in the Western side

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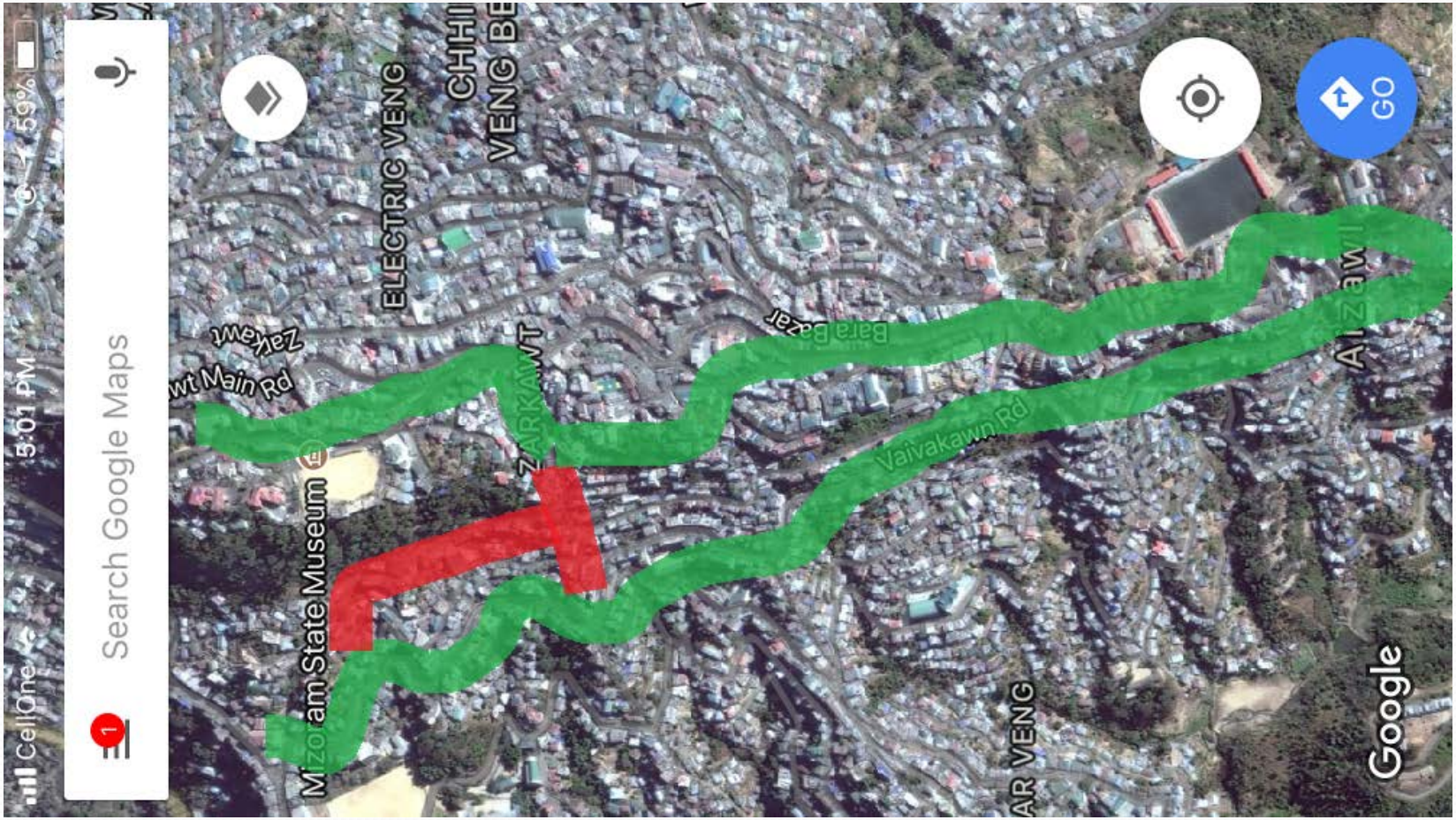
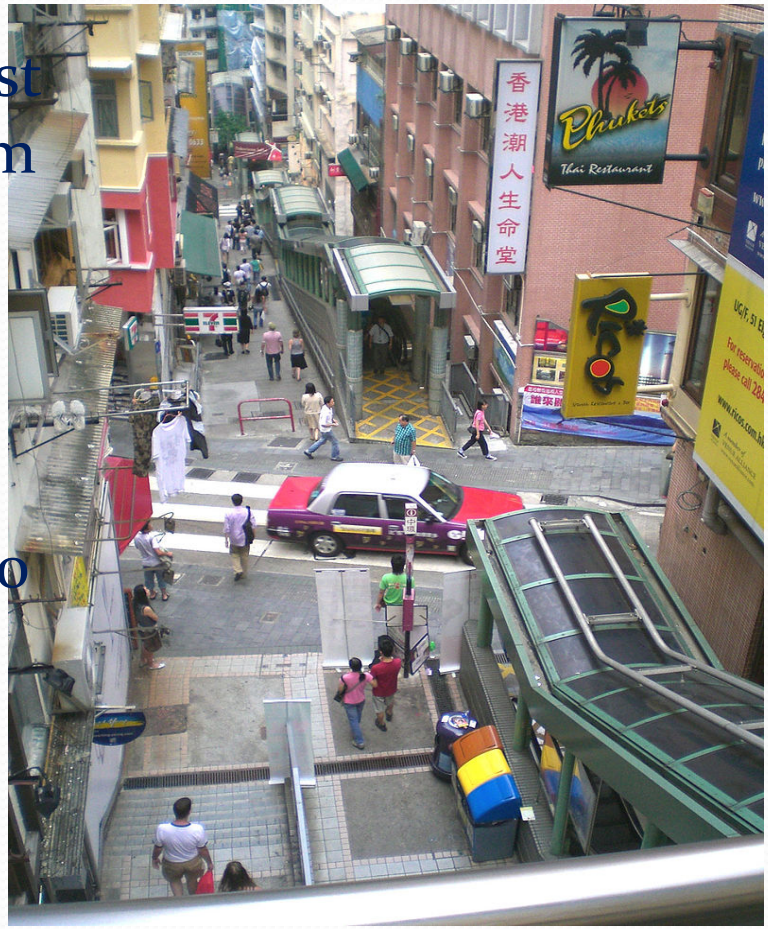


Practice in Other City

- In Hongkong, there is the longest outdoor covered escalator system in the world.
- It was engineered by French company Construction of Industrielles de la Méditerranée
- The entire system covers over 800 metres (2,600 ft) in distance and elevates over 135 metres (443 ft) from bottom to top



SURVEY FORMAT (Western Side)

1. If an escalator is built from Vaivakawn/Chamari West to Chanmari Kawn/High School field (near CM's Bungalow), will you prefer to avail the escalator instead of using public or private vehicles? Darken the circle against your answer.
   a) Yes, always O
   b) Yes, frequently O
   c) Yes, but only in extreme cases O
   d) Never O

2. If an escalator is built from Vaivakawn/Dawrpui Vengthar to t Zarkawt Kawn/Aizawl Civil Hospital. Will you prefer to avail the escalator instead of using public or private vehicles? Darken the circle against your answer.
   a) Yes, always O
   b) Yes, frequently O
   c) Yes, but only in extreme cases O
   d) Never O

- **SURVEY FORMAT (Eastern Side)**

3. If an escalator is built from Ramthar Veng/Venglai to Chanmari Kawn, will you prefer to avail the escalator instead of using public or private vehicles? Darken the circle against your answer.
   a) Yes, always O
   b) Yes, frequently O
   c) Yes, but only in extreme cases O
   d) Never O

4. If an escalator is built from Bethlehem-Venghlui to Treasury Square/DC's office, will you prefer to avail the escalator instead of using public or private vehicles? Darken the circle against your answer.
   a) Yes, always O
   b) Yes, frequently O
   c) Yes, but only in extreme cases O
   d) Never O

Thank You