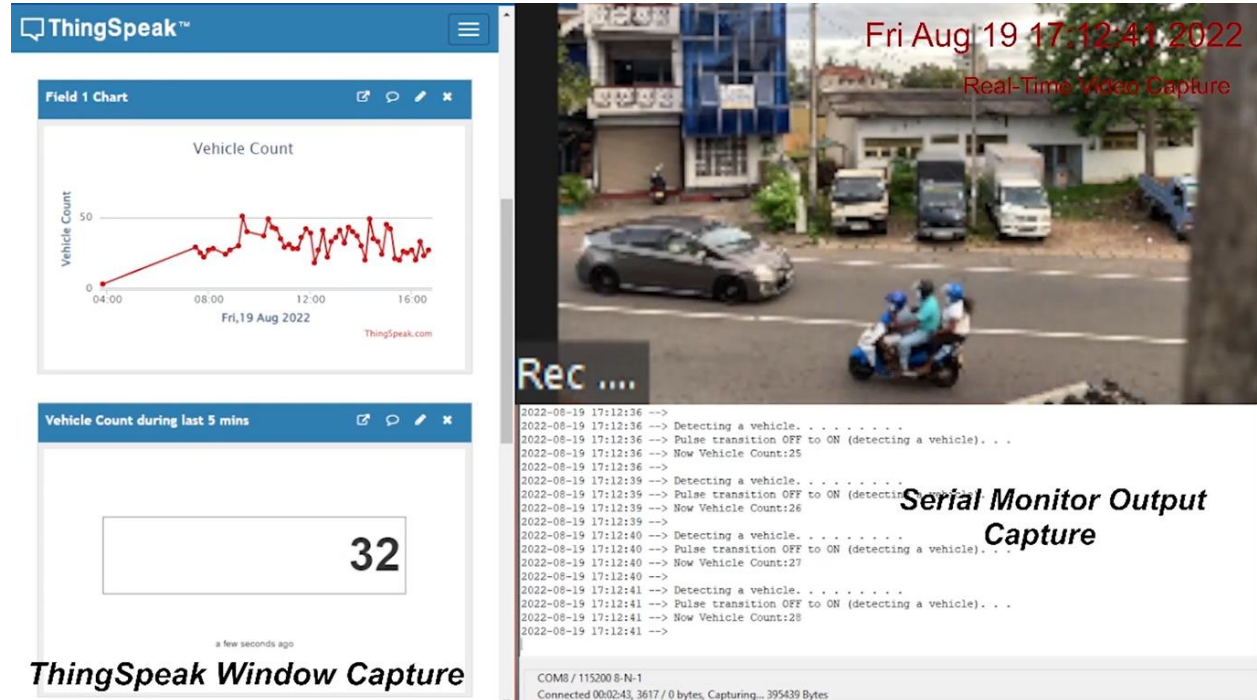# Planning, design and operations of transportation systems

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- In recent years, many traffic engineering researchers have focused on image processing technology for detecting, tracking, and classifying vehicles. The possible mitigating options for traffic congestions in Colombo is being investigated using the short-term traffic characteristics forecasting. In this study, an automated image processing mechanism using neural network is proposed to develop for detecting the congestion levels in road traffic by processing video camera image feeds.

On street parking in Colombo

- Overcrowding in parking lots near high-demand locations is common in any urban main road, where parking demand often exceeds supply and parking spaces are distributed unevenly. This study aims to develop an effective roadside parking control methodology and strategy using the case study area of Galle Road Corridor in Colombo, Sri Lanka.
- Current transportation system relies heavily on fossil fuels, making it a less sustainable sector. Therefore, automobile manufacturers are looking at ways to make vehicles more sustainable. Currently, electric vehicles (EVs) have gained attention as the EV technology has matured to support customer requirements and manufacturers are competing to develop different EVs. Since three-wheelers are the second largest category in the Sri Lankan vehicle fleet, and used as a paratransit mode, significant potential exists for improvement. Therefore, this study looks at the feasibility of introducing electric three-wheelers in Sri Lankan context as a para transit mode.