

# Tracking System and Issues in Public Transport: A Review

C Rathnasiri<sup>1#</sup> and B Hettige<sup>1</sup>

<sup>1</sup>Department of Computer Engineering, Faculty of Computing,  
General Sir John Kotelawala Defence University, Sri Lanka

# 37-ce-5977@kdu.ac.lk

In Sri Lanka, the general public uses static timetables for public transit. However, the timetables with appropriate alignment are not occurring for several reasons, including traffic congestion, poor road conditions, and a lack of technological or human resources. It is crucial to have a means for tracking a user's location in a transit system so that they may spend less time waiting. The globe has seen a lot of studies on location tracking and surveillance. In recent years, certain commercial tracking systems allow the installation of costly devices to track private cars. Currently there is no reliable way to determine the real-time position of a bus or train. This study concentrated on using widely available infrastructure and technology to construct a location monitoring system for the public transportation industry. This system enables location tracking consisting of web application and a mobile application. The bus or train timetables and real locations can be viewed by the general public using an interface provided by the system's central web application. In addition to providing location data, it also forecasts arrival and destination times by comparing historical data with the most recent real-time data. Master data may be managed using the main web application's administrative interface. Through this system, it is anticipated that travellers would be helped to make better travel selections by providing them with the necessary information. Additionally, relevant authorities can utilize system data to assist choices to improve bus and train services.

**Keywords:** *global positioning system, GMS system, display service, SMS tracking*