**Paper No: PU-SOE-CSE-03**

**A Novel Approach on Transport Information System for Pre-Defined Routes Using Traffic Estimation Framework and Open Layer JS**

D.C. Kiruthikkaa, S. Pavalarajanb, **C Kalaiarasanc**

a. Assistant Professor, RVSTC, Coimbatore

b. Professor, PSNACET, Dindigul

c. Associate Dean, Presidency University, Bangalore

**Abstract**

The need for effective transportation is a must for a country like India with multiple states and languages. But due to the complex system of public transport effective services was not considered a priority earlier. When we come to a new place, a hurdle to reach your designated place due to a lack of information on public transport is higher. This is a nationwide problem. The manual timekeeping methodology also became obsolete by the growth of public transport and with a growing population. Indian public bus transport has a huge number of 112 thousand buses with the annual growth of 5percent. To make a tracking and monitoring system for this amount of buses is completely a burden for the budget makers. The present-day GPS tracking systems need at least a twenty-five thousand rupees system per bus. This is not going to possible for present-day Indian scenario. So, we came up with a software-based vehicle tracking in pre-defined routes. This is done using various kinds of collectors with mobile applications and sensors. The role of kinematics is kept higher here than the GPS sensor data. Open-source mapping API is used to give the end-users a visualized outlook. This kind of software system reduces the economic burden for the monitoring and estimation process with 90 percent accuracy in the simulation stages.

**Keywords:**

Open Layer JS, Vehicle Tracking, Traffic Estimation, GPS, Public Transport

**Publication Details:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Journal Name** | **Vol.** | **Month & Year** | **Page No.** | **Publisher** | **Scimago Ranking** |
| International Journal of Engineering & Technology | 8(3) | Aug. 2019 | 230-239 | [Engg Journals Publications](https://www.scimagojr.com/journalsearch.php?q=Engg%20Journals%20Publications&tip=pub) | Q4 |