Public transportation optimization

Project Objectives:

With a few exceptions, the public transport systems in all countries across the world are not as effective as they should and could be. Many public transport systems are not even capable of providing the basic service of carrying people from A to B in time, let alone offering them a convenient, comfortable riding experience. It is no surprise then, that despite [an increasing number of people using public transport](https://www.apta.com/mediacenter/ptbenefits/Pages/Public-Transportation-Use-is-Growing-.aspx), very few are satisfied with the services they receive. That's because most existing public transportation systems, even those in developed countries, are not very efficient to operate or convenient to use. They experience problems like frequent delays due to maintenance and other contingencies and suboptimal allotment of vehicles to different routes, leading to crowded coaches in certain places and empty rides in others.

This mismanagement of public transportation leads to other consequences as well, impacting not just the lives of the commuters but also non-commuters. For instance, badly planning bus routes can cause blockages and bottlenecks on roads, which can make life hard for those using private vehicles. It can cause the crowding of bus stops if enough buses are not assigned to high-traffic routes

Iot sensor Design:

On the other hand, the [**GEO-VISUAL-MULTI-CAMERA (GVMC)**](https://www.plainconcepts.com/casestudy/gvmc-instant-vehicle-monitoring/)project consists of a camera system that, using **IoT Edge**, artificial intelligence, and Computer Vision, monitors the location of vehicles within a port, even if the cars do not carry external identification.Probably one of the most significant sensors of your vehicle the Coolant **Temperature Sensor (CTS)** monitors the temperature of your engine's coolant. The information is then used to regulate the systems employed in keeping your engine cool. These include components like the cooling fan etc. **Fleetx advanced sensor** and intelligent analytics provide the accurate mileage and fuel consumption of vehicle. It also detects the fuel wastage based on parameter such as idling, hard acceleration, deceleration and helps in saving huge on fuel costs.

Integration Approach:

One of the key areas where this investment has been used is fleet management. IoT-enabled fleet management systems (FMSs) allow companies to receive real-time information of their vehicles, allowing them to make more informed decisions. Receive real-time alerts on SMS/App/Email when the fuel level suddenly goes beyond the defined limits to monitor/avoid fuel theft or unnecessary filling of fuel.