

Date:30.09.2023

Project ID:proj_223333_team_ 4

Project Title: Flood Monitoring & Early warning

PHASE-1

PROBLEM DEFINITION

Traffic jams are prominent in almost every urban area cross the world. Traffic management is one of the crucial things where monitoring and controlling of traffic needs to be done with real time information

DESIGN OVERVIEW

In modern society, quick mobility is one of the most basic needs. Therefore, people are able to use different transportation facilities such as automotive vehicles, subways, and bicycles.

According to the US Department of Transportation (DoT),⁴ traffic congestion may have three key sources.

- The first one is related to traffic-influencing events, such as incidents, working zones, and bad weather conditions.
- The second one is related to traffic demand, which means fluctuations in normal traffic and special events.
- The last source is the transportation infrastructure, which represents the traffic control devices and physical bottlenecks.

Objectives

- To reduce the number of accidents.
- To minimize the clash between vehicles and pedestrians.
- To control and manage the vehicles and parking.
- It helps in regulating the movement of vehicles by reducing traffic density.
- The main objective of this project is to reduce traffic congestion by increasing the traffic flow. This can be done by controlling the traffic.

7 Solutions to Reduce Traffic

1. **Respect the lanes:** Remember that there is one lane to drive fast and another lane to drive at a more normal speed. If you drive very slowly along the left lane and other vehicles have to pass you to continue, you are causing vehicle congestion and accident hazard. If you prefer to drive slower, use the right or center lane.
2. **Follow the traffic light rules:** We all know that we should stop when the red light is on, and move on when the green light is on. Therefore, the most important stage of traffic rules is to obey traffic lights.
3. **Vehicles are forbidden to stop at bus stops, garages, or forbidden places:** you must comply with traffic regulations and know that parking is prohibited at bus stops, garage doors, or pedestrian roads. And remember: Stations never occur in double rows.