

Project Design Phase
Proposed Solution Template

Date	27 June 2025
Team ID	LTVIP2025TMID42078
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Real-time traffic congestion is difficult to predict and manage, causing delays, accidents, and urban inefficiencies. Existing tools lack ML-based forecasting.
2.	Idea / Solution description	A Flask-based system that accepts time, weather, and location data and predicts traffic volume using trained ML models, visualized on an interactive map.
3.	Novelty / Uniqueness	Predictive traffic estimation (not just current), map-based visualization, integration of weather + time, offline potential, and live location use
4.	Social Impact / Customer Satisfaction	Reduces congestion, aids commuters, helps urban planners, empowers smarter navigation
5.	Business Model (Revenue Model)	Freemium model for navigation apps, APIs for government bodies, B2B partnerships with transport/logistics
6.	Scalability of the Solution	Supports map-based visualization using Leaflet.js, enabling scaling to large urban regions with clustered or region-wise predictions.