Project Design Phase
Proposed Solution Template

Date	27 JUNE 2025
Team ID	LTVIP2025TMID59882
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(Problem to be solved)	Traditional traffic volume estimation methods (like manual counts and loop detectors) are outdated, expensive, non-scalable, and lack real-time adaptability.
2.	Idea / Solution description	Develop a machine learning-based system that uses real-time GPS, historical traffic data, and weather inputs to predict traffic volume with high accuracy and responsiveness.
3.	Novelty / Uniqueness	- Uses dynamic, real-time data integration - Employs advanced ML techniques like LSTM for time-series forecasting - Reduces infrastructure dependency.
4.	Social Impact / Customer Satisfaction	- Reduces urban congestion and pollution - Saves commuter time and fuel - Enables smarter city planning - Increases public satisfaction with smoother traffic flow.
5.	Business Model (Revenue Model)	- B2G (Business to Government) licensing model for municipalities - Subscription-based model for private logistics or ride-hailing firms - API access charges
6.	Scalability of the Solution	- Highly scalable across cities and regions - Easily trainable on new datasets - Minimal additional infrastructure needed for expansion