Project Design Phase
Proposed Solution Template

Date	21 June 2025
Team ID	**LTVIP2025TMID45739**
Project Name	**TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning**
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Urban areas face severe traffic congestion due to poor real-time monitoring, static signal control, and lack of predictive traffic management systems. This leads to longer commute times, increased fuel consumption, and delayed emergency responses.
2.	Idea / Solution description	Traffic Telligence is an AI-powered traffic intelligence platform that collects and analyzes real-time data from sensors, CCTV, and GPS. It dynamically adjusts signal timings, predicts congestion, provides route recommendations, and offers a centralized dashboard for authorities to manage traffic effectively.
3.	Novelty / Uniqueness	Unlike static systems, Traffic Telligence uses machine learning and real-time data analytics to proactively manage traffic. It adapts to peak hours, detects unusual traffic build-up, and integrates with existing infrastructure, making it cost-effective and scalable.
4.	Social Impact / Customer Satisfaction	Reduces daily commuter stress, improves emergency response time, lowers emissions from idling vehicles, and enhances the overall urban living experience. It empowers city authorities with better control, leading to higher public satisfaction.
5.	Business Model (Revenue Model)	B2G (Business to Government) SaaS model. Revenue generated through annual subscription fees, tiered based on city size and traffic data volume. Optional add-ons include citizen-facing mobile apps and analytics reports.
6.	Scalability of the Solution	Designed to scale from small towns to large metropolitan cities. Modular architecture allows phased deployment. Cloud-based backend ensures support for growing data and user demand across regions.