

Ideation Phase

Define the Problem Statements

Date	23 june 2025
Team ID	LTVIP2025TMID41942
Project Name	Traffic telligence : advanced traffic volume estimation with machine learning
Maximum Marks	2 Marks

Customer Problem Statement Template:

Urban traffic congestion has become a critical issue in modern cities, leading to increased travel time, fuel consumption, air pollution, and road accidents. Traditional traffic management systems often rely on static rules and outdated data, failing to adapt to real-time conditions or provide predictive insights. There is a growing need for an intelligent traffic monitoring and control system that leverages data analytics, artificial intelligence, and IoT to optimize traffic flow, reduce congestion, and improve road safety.

Traffic Intelligence – Customer Insight Statement

Section	Content for Traffic Intelligence
I am	A daily commuter who travels to work by car or bike, often during peak hours; concerned about time and road safety.
I'm trying to	Reach my destination on time without stress or unexpected delays.
but	I face heavy traffic, long signals, unpredictable congestion, and a lack of real-time traffic updates.
because	There's no efficient traffic management system, poor infrastructure, and lack of smart coordination among signals and traffic personnel.
which makes me feel	Frustrated, anxious, and exhausted; I feel like my time is being wasted and my safety compromised.

Example: Traffic Intelligence – Visual Insight Format

Section	Traffic Intelligence Content
I am	a daily commuter
I'm trying to	reach my destination on time
But	I get stuck in unpredictable traffic jams
Because	the city lacks real-time traffic monitoring and smart signal control
Which makes me feel	frustrated and helpless

Traffic Intelligence Project – Problem Statements Table

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	a daily office commuter	reach work on time	I get stuck in traffic every day	signals are not optimized and traffic is not managed smartly	frustrated, late, and anxious

PS-2	an ambulance driver	reach the hospital quickly	I am delayed by congested roads	there's no emergency vehicle prioritization in traffic systems	helpless and worried for patients
------	---------------------	----------------------------	---------------------------------	--	-----------------------------------