

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	26 June 2025
Team ID	LTVIP2025TMID32460
Project Name	Traffic Telligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	4Marks

**Functional Requirements**

FR No.	Functional Requirement (Epic)	Sub-Requirement (Story / Sub-Task)
FR-1	User Input Interface	Input through HTML form Input of time, date, and location
FR-2	Traffic Volume Prediction	Real-time prediction using ML model Display of prediction output
FR-3	Data Visualization	Graphs and charts of traffic trends Interactive dashboard
FR-4	Model Integration & Deployment	Backend Flask integration Deploy model to cloud/server
FR-5	Admin Reporting	Export predictions as PDF/Excel Historical trend analysis

**Non-Functional Requirements**

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be clean, intuitive, and easy to use for all user types.
NFR-2	Security	Data inputs and outputs must be secured using HTTPS and input validation.
NFR-3	Reliability	The model should produce consistent and accurate

		predictions across use cases.
NFR-4	Performance	Prediction results should be returned within 2 seconds after user input.
NFR-5	Availability	The system should be available 24/7 with minimal downtime.
NFR-6	Scalability	The solution should scale to handle high user volume and integrate new datasets.