

## Project Design Phase-II

Solution Requirements (Functional & Non-functional)

|               |   |
|---------------|---|
| Date          | 28 June 2025  |
| Team ID       | LTVIP2025TMID40374  |
| Project Name  | TrafficTelligence: advanced traffic volume estimation with machine learning |
| Maximum Marks | 4 Marks   |

### Functional Requirements:


Following are the functional requirements of the proposed solution TrafficTelligence.

| FR No. | Functional Requirement (Epic)  | Sub Requirement (Story / Sub-Task)   |
|--------|--------------------------------|--|
| FR-1   | User Registration              | Registration through Form<br><br> - Registration through Gmail<br><br> - Registration through LinkedIn |
| FR-2   | User Confirmation              | - Confirmation via Email<br><br> - Confirmation via OTP  |
| FR-3   | Real-Time Traffic Monitoring   | - Live camera & sensor integration<br><br> - GPS data feed   |
| FR-4   | Smart Navigation & Suggestions | - AI-based route recommendation<br><br> - Congestion alerts  |

### Non-functional Requirements:

Following are the non-functional requirements of the proposed solution:

| Non-functional Requirement | Description  |
|----------------------------|--|
| Performance                | System should update traffic status every 30 seconds |



|             |  |
|-------------|--|
| Reliability | 99.9% uptime for continuous traffic data services              |
| Usability   | Simple and user-friendly UI for all age groups                 |
| Security    | End-to-end encrypted communication & secured login system      |
| Scalability | Should support thousands of users across cities simultaneously |