

Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID24018
Project Name	Signs with smart connectivity for better road safety
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In existing system the road signs and the speed limits are static. But the road signs can be changed in some cases .We can consider some case when there are some road diversions due to heavy traffic and due to weather and due to fatal condition then we can changes the road sign accordingly if they are digitalized. Smart road safety system offer significant opportunities to save lives.
2.	Idea / Solution description	<p>Detection of congestion and reduction of traffic : Traffic control unit gets information from the sensors and the peripherals and helps to identify congestion of traffic. Based on the detection ,the system performs an operation to reduce traffic .</p> <p>Safety from road accidents: Due to the deployment of this system, the chances of road accidents can be minimized .</p> <p>Reduction in pollution: Due to the good management of traffic flow, pollution can be reduced.</p>
3.	Novelty / Uniqueness	<p>We handle,</p> <p>Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.</p> <p>OpenWeatherMap is an online service that provides global weather data, forecasts and historical weather data for any geographical location.</p>
4.	Social Impact / Customer Satisfaction	Greater traffic safety – by reducing congestion and the chances of accidents.

		Environmental safety – by reducing emissions. Reduced fuel consumption Time saving Reducing health related issues due to stress caused by traffic Reduced fatality or injury ,long term physical injury.
5.	Business Model (Revenue Model)	To reduce road deaths and injuries by supporting and encouraging partnerships between the motor industry and related companies, traffic engineers, the police, public health authorities and road safety professionals to promote the safe design and use of vehicles and roads by sharing knowledge and innovation.
6.	Scalability of the Solution	With the support and partnership with the govt and motor industry ,road safety can be improvised and new innovations related to road safety will be arrived .