

Project Design Phase-I
Proposed Solution Template

Date	20 September 2022
Team ID	PNT2022TMID04551
Project Name	Project - Signs with Smart Connectivityfor 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)	<ul style="list-style-type: none">• In static signboard ,the road sign and the speed limits are stated but they cannot be changed,but ifthey are digitalized by using API app, they can be changed accordingly due to some cases like accidents ,heavy traffic,weather.• Signs with smart connectivity for better road safety is designed for speed control,safety improvements and indicate theweather update.
2.	Idea / Solution description	<ul style="list-style-type: none">• The weather details are obtained from the API. app. Using these details, the speed limit will be updated automatically in accordance with the weather conditions.If there is rainfall then the roads will be slippery ,so the signs will show reduced speed limit in order to avoid accidents.• In order to avoid heavy traffic routes, the drivers will be intimated in advance so that they can diversion and change the route.

3.	Novelty / Uniqueness	<ul style="list-style-type: none"> • The unique light enhancing and anti glare lens frameworks offer maximum visibility even under very low light conditions. • It gives more detailed information to the road drivers about the traffic, accidents, weather, etc., • It reduces the collision risks due to heavy traffic and results in
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		reduced air pollution which is caused by the CO2 emission by vehicles.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • Alternate routes will be displayed if there is heavy traffic, so the customer can reach the destination before the expected time. • Smart signs can assist in optimizing traffic flow and can create a sustainable environment within the cities.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • It can be used in cities in where heavy traffic occurs frequently and accident zones in order to avoid road blocks. • Selling this product to the government at a low cost, so there will be less accidents and the public will be aware of the traffic or accidents in the particular road.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Smart signs adapts to changing traffic conditions in real time. • In the future, if any update is required either on the hardware or software side, it can be easily implemented. • It can be used along with driverless cars in the future.