

**Project Design Phase-I**  
**Proposed Solution**

Date	24 September 2022
Team ID	PNT2022TMID16025
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)	<ul style="list-style-type: none"><li>Drivers are unable to ascertain the condition of safety on the roads.</li><li>Therefore they need guidance on the condition of the roads to travel safely.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>This problem can be overcome by introducing the GPRS Module, IR Sensor with Camera to sense the traffic intensity even in dark areas. Rain drop sensor to indicate the accumulation of rain has occurred.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>Changing the location of the display location of the digital sign board according to the conditions of the road.</li><li>Speed limit changes according to the Environmental conditions using rain drop sensor.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>Potential to reduce the number of road accidents on highways thus saving lives.</li><li>Reporting severity of the problem on the road.</li><li>Sign changes dynamically depending upon the upcoming events.</li></ul>

5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>▪ Reduction of manpower.</li> <li>▪ As the number of highways increase there will be potential of installing smart systems.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>▪ User friendly interface.</li> <li>▪ Accessibility of data is easy from source.</li> <li>▪ Precise information in sign boards can be easily captured.</li> <li>▪ Potential in reducing insurance claims.</li> </ul>