

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

Date	19 September 2022
Team ID	PNT2022TMID10209
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>▪ The actual problem is that drivers are unable to know whether the road conditions is safe to travel or not.</li><li>▪ Hence there will be a need of guidance data for providing safety and to avoid travelling inconvenience to reach destination.</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.</li><li>▪ Rain drop sensor to indicate the accumulation of rain has occurred.</li><li>▪ And also collecting information from the local peoples and decision made by controller, who controls display manually(Manpower).</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>▪ Voice indicators are placed in near, the display board location adjusted to that traffic signal area. It will indicate the road dangers to the public as it senses the nearby vehicles.</li><li>▪ Speed limit changes according to the weather condition using rain drop sensor.</li></ul>

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>▪ Large number of accidents may be minimized by replacing smart signs instead of static signs.</li> <li>▪ Obvious information only displayed.</li> <li>▪ Reports severity.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Sign changes dynamically depending upon the upcoming events.</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>▪ Systematic reduces manpower.</li> <li>▪ The systems can be used in public and private sectors which gives good revenue.</li> <li>▪ This type of system is helpful for education and medical institutions.</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> </ul>