

## **PROJECT DESIGN PHASE-1**

[Proposed Solution]

S.NO	PARAMETER	DESCRIPTION
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"><li>• Over speeding in highways.</li><li>• Heavy <b>traffic awareness</b>.</li><li>• Parked vehicles at no parking areas.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>• Usage of IOT devices in <b>Sign boards</b> to indicate heavy traffic beforehand.</li><li>• Availability of <b>SOS and GPS</b> connectivity at selective sign boards.</li><li>• Indication of parked cars in no parking area using motion detectors in signs.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>• Using <b>IOT</b>, makes it easier to communicate within devices such that we would have less involvement of humans.</li><li>• Usage of <b>Arduino-uno</b> which is an open-source programmable board.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>• This would help customers to be aware of traffic beforehand so that they could use another route.</li><li>• Helpful for police to observe over speeding in highways and <b>to detect</b> vehicles parked in a No-parking area.</li></ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"><li>• Arduino is flexible, easy to program and inexpensive.</li><li>• <b>PIR</b> sensor is used to detect high speed and motion, <b>RF</b> transmitter is <b>SOS</b> device.</li><li>• <b>GPS</b> module using google maps is easily accessible.</li></ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"><li>• Works <b>90%</b> of all times.</li><li>• Helps in <b>abiding rules</b> to ensure road safety.</li><li>• Very effective in case of <b>emergency</b>.</li></ul>