# PROJECT DESIGN PHASE - I SOLUTION ARCHITECTURE

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| PROJECT TITLE | Signs with Smart Connectivity for Better Road Safety | |
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**Signs with Smart Connectivity for Better Road Safety SOLUTION ARCHITECTURE**

One of the most important factors which affect our people day-to-day in our life. It is now widely accepted that serious health losses in road traffic crashes are largely preventable and predictable – a human-made problem open to rational analysis and effective road safety management. Road traffic systems can be developed that reduce the likelihood of serious or fatal crashes occurring and minimize injury severity in the event of a crash.

In present Systems the road signs and the speed limits are Static. But the road signs can be changed in some cases. We can consider some cases when there are road diversions due to heavy traffic or due to accidents then we can change the road signs accordingly if they are digitalized. This project proposes a system that has digital signboards on which the signs can be changed dynamically. If there is rainfall then the roads will be slippery and the speed limit would be decreased. There is a web app through which you can enter the data on road diversions, accident-prone areas, and information sign boards can be entered through the web app. This data is retrieved and displayed on the signboards accordingly.

The Data Base or central control cloud transmits the information to the subcentral and traffic sensors. In traffic, the signal stand will display or indicate the digital signage, speaker, seismic sensor, water detection, image sensor, sound sensor, and IP camera.

We will be using some software to implement this project Arduino IDE, and Embedded C.

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