

## PROJECT DEVELOPMENT DELIVERY OF SPRINT-4

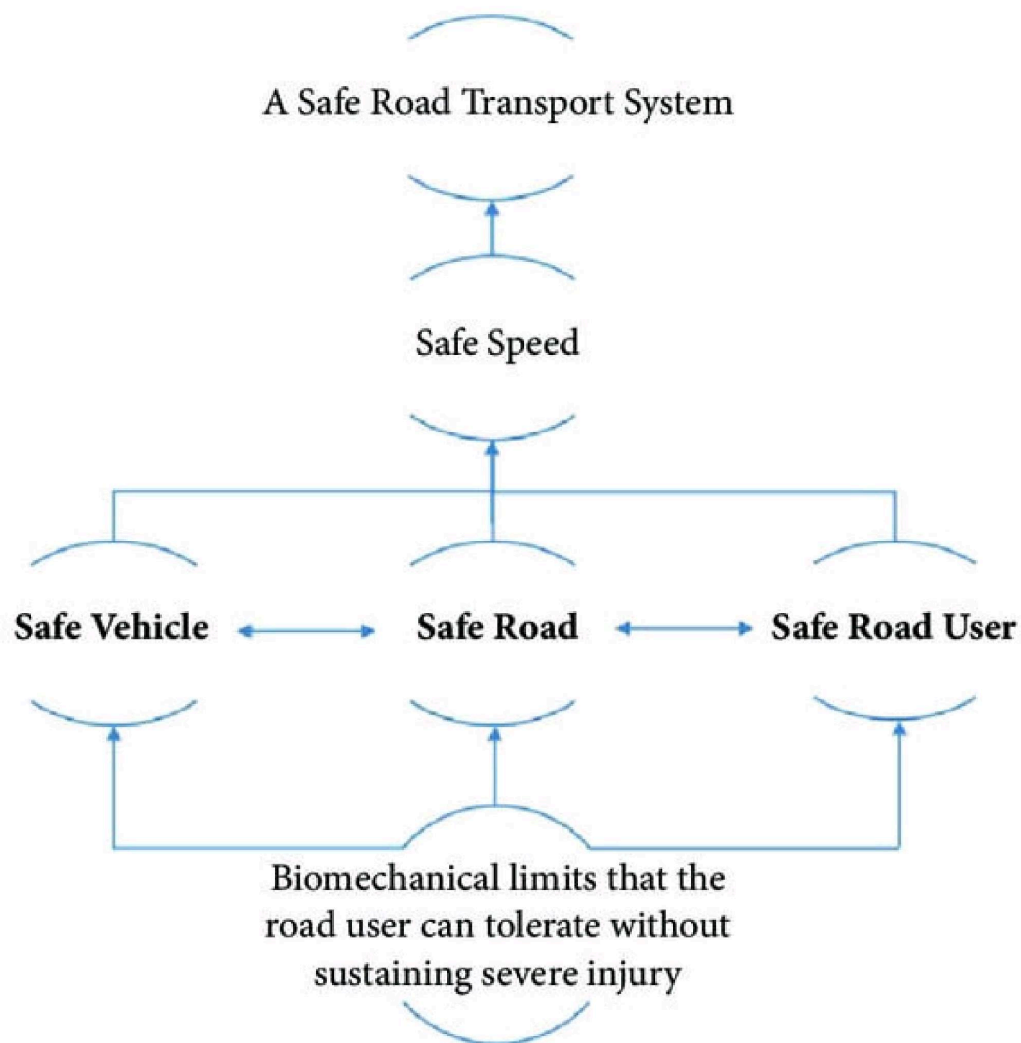
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**AN introduction to IOT based road safety deduction and monitoring system :**

### **The Safe System Approach**

The Safe System (SS) approach to transport networks originated with the "Safe Road Transport System" model developed by the Swedish Transport Agency. In its essence, the approach migrates from the view that accidents are largely and automatically the driver's fault to a view that identifies and evaluates the true causes for accidents. Through the categorization of safety into the safety of three elements (vehicle, road, and road user), SS minimizes fatalities and injuries by controlling speeds and facilitating prompt emergency response. The model has been widely adopted since its introduction and is currently motivated by the WHO as a basis for road safety planning, policy-making, and enforcement.

An illustration of the model is provided in Figure 1. A central emphasis is given to speed in the SS approach as it is the strongest and most fundamental variable in the outcome of fatality. The fragility of the human body makes it unlikely to survive an uncushioned impact at a speed of more than 30 km/h, with lower speeds resulting in either death or serious injury [3, 4]. The objective of the SS approach is that the three model elements should be designed and monitored to proactively prevent deadly speeds from happening and allow for a reduced emergency response time in the event of an accident.



#### Contribution

illustrates elements of assessing road safety. It can be seen in the figure that the scope of consideration in the SS approach is medium-to-long term, facilitating by design, systemic actions that are made to ensure the safety of the road network. While the use of "data monitoring systems" is motivated in [4] and can be utilized for shorter term scopes, the general emphasis is maintained at the medium-to long term reaction cycles.

