

<CODS_T208>

Theme: Preventing road accidents in India

<u>Problem Statement:</u> "If you cant change the drivers change the roads" – Most cities in India are developing today at a tremendous pace and to keep going at this pace what we need is a workforce who can reach their workplace fast and without much hardship. Over the last 10 years we have moved from ambassadors to electric cars, the cars are changing so why not the roads. Thus build an application that gathers data about the traffic conditions of a road and suggests the most feasible design for the road in question.

Abstract for solution:

- → The application would collect data about the environmental conditions of the area also would conduct terrain analysis on the area. It would count if the area were densely populated where there would be lots of footfall or isolated where you might not need a sidewalk.
- → It would analyse the kind of traffic conditions on the road at various points of the day and the number of pedestrians on the road. To see how busy or empty a road is in a day and consolidate that data for several days to get a clear picture.
- → After getting these data the software would compile this and out of a broad category of types it would try to fit the road into the category.
- → The application would also collect data on the driving patters of cars and on creating this data the application will run on the given model of the road and try to analyse the various kinds of accidents that can take place.
- → Based on these data the application will make variations to the design and model the perfect design for the road that is safest.
- → Most roads in India are prebuilt and so this application can also be used to improving them as analysing the main cause of accidents and traffic congestions and suggest methods to improve them such as adding signals or prohibiting entry of heavy vehicles or even increasing the width of the road etc.