Abstract

"To realize the value of one second, ask the person who has survived an accident."

Transportation plays a key role in development of a country. Travel, mainly road travel is inevitable to any individual. With at least 13 people dying every hour on Indian roads, India had topped the global list of deaths in road accidents (global status report, WHO).
Roads are the key access to many places. Places situated over the mountain ranges are sometimes accessible only by roads. Thus ghat roads play an important role in the road transport system. In Ghat roads, the major accident prone zones are U-turns where the approach of vehicles in opposite direction is almost invisible which results in fatal accidents. Besides prevention, the acknowledgement of accidents is a major problem due to poor communication facilities.

India doesn't have a scientific traffic engineering which forms the basis of road safety improvement. Though many conventional methods were implemented, they proved largely unsuccessful. We propose a scientific approach to this problem. Our proposal to prevent this phenomenon is to detect the vehicles approaching the turn by using sensors and to warn the vehicles in opposite direction. To detect the occurred accidents in time, we use electronic toll systems.

Reference

- Global Status Report, WHO. Regarding the statistics of deaths occurring in India due to road accidents.
- National Highways Authority of India (NHAI). On the number of accidents and deaths seen in India from the past three decades. (www.nhai.org).

Index Terms

Electronics
Sensors

Key words

Transportation

Scientific traffic engineering

Electronic toll systems