

See below the 12 most important Road Safety Suggestions applicable for developing countries like India, where a good percentage of road accidents are taking place.

Conditions in such countries shall be kept in mind while evaluating the suggestions. These points may be applicable for developed nation.

1. Standby mode of traffic signals during nights and on holidays is to be reviewed and discontinued.

The current practice of keeping the traffic signals in standby mode during nights and on holidays is to be reviewed and discontinued, at important junctions, at least . This practice of yellow traffic signal light blinking all the time, is causing a lot of fatal road accidents in major junctions as vehicles from all directions have a tendency to assume that no vehicles are coming from the other directions, during the off peak periods like Sundays, holidays and night.

Probably there is nothing wrong in the method practiced nationally / internationally. But this method is not suited for us, because of the immature behavior of our road users. Somebody may argue that it is not wise to use normal signals during night & holidays as it is a wastage of time, as one has to unnecessarily wait for signal when there are no vehicles in the road. I would suggest a more frequent switching of signals with less time gap, during night & holidays, to reduce unnecessary wait. Another argument is that people will have a tendency to jump the signal, if normal signalling is used during night & holidays. But it is to be noted that, if people are jumping red signal, it will be with some caution. On the other hand, if yellow blinking signal is used, there is a tendency to cross the signal, without any caution, during night & holidays. Signal jumping has to addressed with centrally monitored cameras, at major junctions, at least.

2. Scientific construction of Medians / Road dividers.

A lot of fatal accidents involving medians / dividers are happening in the country. Sometimes the accidents are because of non visibility of medians. Construction, size, shape, painting etc. of medians are to be scientifically studied and necessary corrections are to be implemented. I would suggest the use of easily breakable bricks for the construction of medians, at least at the ends. Concrete should not be used for

construction of medians/dividers. Easily breaking bricks will absorb a portion of the impact, in case of crash and reduce fatalities. Another idea is to keep the medians very brittle and short in height at the ends. The height should increase gradually to normal height. This will help to minimise the intensity of the crash, as the driver will get a chance to apply brake, before a major crash. An example of the scenario is an accident caused by non seeing of the median, because the driver slept or some other reason.

Fluorescent paints shall be considered for painting the medians / road dividers.

Growth of plants and trees on medians is resulting in loss of visibility. This may cause road accidents, especially near U-Turn. Top of medians should be cemented to prevent growth of plants and trees. (One can find many such spots in Edappally - Vyttila - Aroor route in Kochi.)

3. Renovation of narrow parts of important roads and junctions.

Time lost in traffic congestion in narrow parts of important roads and under developed junctions is a major cause for over speed and the resulting accidents. Renovation of such narrow parts of important roads and junctions will help to reduce traffic congestion and thereby reduce road accidents. Short term projects by local authorities / Public Works / National Highway authorities using low budget shall be taken up for solving such bottlenecks rather than waiting for big budget projects. Sometimes, relocation of an electric post / telephone post, shifting of an unauthorised shop, demolition of an unauthorised construction etc. can make a big difference. Obstructions on road side caused by unauthorised construction and road side sales should be eliminated completely. At junctions, ensure that the vehicles towards left only enter the left track.

4. Mass Transportation Systems are to be implemented in major and upcoming cities.

Means of mass transportation shall be promoted and implemented in major and upcoming cities. Money should not be a constraint for this. Identify the suitable mode of mass transportation for each city, whether it is Mono Rail, Metro Rail, Suburban train and try to implement at the earliest. Do not waste time by discussing its feasibility, financial viability

etc. Do not wait until the cities reach Metropolitan status. Implement mass transportation systems as early as possible in upcoming cities, as hundreds of lives can be saved, every year, in each city. Savings in life also to be considered while evaluating the financial viability of such projects. For example if Kochi metro can save 500 lives per year, Rs. 250 Crores to Rs. 500 Crores shall be considered as annual savings due to savings in life. (# See remark at the end). Savings in depleting fossil fuel, time, reduction in pollution, reduction in diseases due to reduction in pollution etc. also should be considered while evaluating mass transportation systems. Mass Transportation projects should be unaffected by controversies , allegations and arguments for political mileage. Governments should take a tough stand against such elements so that the projects shall be completed as per schedule and without cost escalation.

5. Helmet should be made mandatory for both the riders.

Helmet should be made mandatory by law in all states for all the riders including pillion riders. Ensure that all Helmet users are fixing the Chin strap of Helmet, otherwise it will not help in case of an accident. Ensure that only good quality Helmets meeting BIS specifications are available in the market. Road side sale of non standard helmets should be banned. Non use of chin strap, wearing of non standard helmet etc. should be treated as non wearing of helmet.

6. Impart safety awareness to children when they are small kids.

Most important point regarding awareness is that safety awareness should start from childhood. If safety is imparted in childhood, safety will be a habit.

I don't mean that we should teach children road safety rules, just tell them about the need for us to be careful while on the road, tell them with special and personal emphasis that they should not drive at high speed when they grow up. These points are to be told, when they are in the age group of 3 to 7 or so. At this age, they will listen and accept what parents say and will be permanently written to their memory. If you tell a teenager about road safety or general safety, nobody will bother to listen.

Parents should not allow children to play video / computer games involving racing as it will inculcate racing habit and will result in adverse character formation.

Cinema , TV Serials, advertisements involving over speed, racing, highly risky riding / driving etc. should be watched by children with parental guidance. Parents of kids should take these instances as an opportunity to impart safety awareness.

7. Advertisements involving dangerous, highly risky riding / driving should be banned.

Advertisements by automobile companies which include scenes of dangerous and risky riding / driving should be banned by the Government. (Eg. Bajaj Pulsar ad available at <http://www.youtube.com/watch?v=caOlnhi5e8c>). Youngsters are likely to imitate the same. Small kids watching such advertisements are likely to dream that “I will also do like this when I grow up” and many of them will do this for sure when they grow up, may be during teenage. Statutory warnings will not help. It may be noted that small kids cannot read such warnings!!!. Parents are not likely to read it out to them or advice them properly.

Such advertisements will result in irreparable character formation regarding riding and driving in children and may cause accidents in future, when they grow up.

In India, at least 5 crore children will be watching such advertisements everyday. If 0.1 percentage of the children watching the advertisements is misled and creating one accident in future, 50,000 accidents will happen!!! At least 5000 death will happen per year !!!

It is wise to ban such advertisements to save thousands of lives per year, I firmly believe.

8. Black color should be discouraged for Cars, two / three wheel vehicles and Cycles.

Black vehicles are more likely to be involved in accidents because of its low visibility. Also, black vehicles consume more fuel to maintain the air conditioner cooling, as black color absorbs more heat from atmosphere. Hence black vehicles, especially cars and motor cycles should be discouraged by educating people about the higher crash risk and higher fuel consumption. If future production of black vehicle can be banned, well and good.

Black color should not be used for cycles also. Black colored cycles are more likely to be involved in accidents, when used under low light conditions or when used by immature children. Drunkard, careless, safety unaware cyclists who enter the main road suddenly can cause accidents. Some of these accidents could be averted, if the color of the cycle were yellow or other easily visible shade. Default color for Cycles should be changed to Yellow / Orange. If fluorescent paints can be used for cycles, it will be ideal. Public should be educated about this point so that people will automatically prefer bright colored / fluorescent painted cycles . Automobile and cycle manufacturers should be asked to stop producing black and dark vehicles. Bright colored / **fluorescent painted vehicles should be produced instead.**

9. Use bright colored dress and uniform for school children.

Bright colored dresses should be promoted for Children. Dark and dull colors should not be the prominent shade of school uniforms. All schools should be asked to change to bright colored uniform as early as possible. This should be implemented slowly with a notice of one or two years, without causing any financial burden for the parents. Public also should be educated not to use dark shades for dresses.

In India, more than 10 crore school children will be walking on footpath less roads , crossing the road daily, mostly unaccompanied by parents / care takers. If bright colored uniform is implemented, it may help to avert many accidents, daily, especially under low light conditions, I believe. For example, during misty atmosphere, while returning home late in the evening, after tuition / special classes, going carelessly by cycle. Children have the habit of riding cycle in non linear way / "S" shape. Bright color of dress will add visibility and help to avert some of the accidents as drivers / riders coming across can apply brake few fraction of seconds earlier.

10. Permanent contracts for regular maintenance of all the roads.

Potholes are another major cause for road accidents. If a pothole is repaired in time it can save a life !!! Hence all the roads in the country should be maintained properly. Permanent contracts should be in place for maintaining all the roads in good condition 24 hours a day, 365 days an year. Round the clock Call Centers shall be set up for public to report potholes in all types of roads including PWD Roads, National Highways, Panchayath / Corporation / Municipal Roads and local Roads. (Existing call center in Kerala takes care of PWD roads only). Potholes reported at call centers should be repaired within 1 to 8 hour time or at the most 24 hours time. Each second is important, a delay of a second in repairing a pothole can cost many lives. As mentioned earlier there has to be an existing contract for such works, all over the country, for all types of roads, throughout the year. New contracts shall be issued prior to the expiry of existing contracts. Otherwise, existing contracts shall be valid until new contracts are awarded. Procedural delays in estimation, inviting quotation, identifying lowest bid, awarding Work Order etc. by government officials should not cost human lives. Monetary loss of a life is more than Rs. 1 Crore.

(# See remark at the end). Delay in identifying the lowest bidder may cost more than a crore !!!

11. Video Camera Surveillance systems to be implemented.

Video cameras should be installed at regular intervals in state highways, national highways , important / busy road and should be centrally monitored. All traffic violations, especially over speed, rash driving, non wearing of helmet / seat belt , using mobile while driving etc., should be penalised. (A project is already started in Kerala.)

12. Drunken Driving

Drunken driving should be firmly dealt with. License of drunken drivers and riders should be cancelled immediately.

Calculation of monetary loss for the family of a person killed in road accident (Example for a

road accident victim from INDIA. Indian currency used in calculations).

Average daily wage for ordinary workers like masons, painters, carpenters is in the range of 500 to 700. Assuming 300 days of work per year annual earning of such workers will be around Rs. 1.5 lakhs to 2.1 lakhs. Average annual earnings of government employees, IT professionals, Doctors, Engineers, Advocates etc will be in the range of Rs. 5 lakhs to Rs. 10 lakhs or more. Let us assume that on an average average, annual earnings of an individual is Rs. 3 lakhs. Now, let us assume that the average age of a person killed in road accidents is 35. He will have more than 25 years of productive years. This works out to a loss of Rs. 75 lakhs. (Rs. 3 lakh X 25 years) If loss of pension for another 20 years is also calculated, **monitory loss for the family will be more than Rs. ONE CRORE !!!** Emotional loss of the family is much more this.

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