

ABSTRACT

Road traffic accidents have been highlighted by the study as a serious problem on many aspects of society. With the significance that roads have in the development of our society, it is timely that road traffic accidents be addressed. The major cause of road traffic accidents is carelessness of the road users as highlighted by the study. It is however important to consider the effect that the road design has on influencing road users' decisions.

The relationship between road accidents, road capacity and road geometry is one which is not linear. An increase in road capacity increases road traffic accidents up to some point beyond which they reduce due to congestion. This however applies for a road with perfect weather conditions, good drainage properties and it is operating within its design limits. The introduction of the physical conditions of road introduces another variable in understanding the relationship between traffic accidents and capacity.

A road with good geometric conditions as specified in design is likely to have good traffic standards. The specifications of this however change over time due to effect such as generated traffic. Social economic developments leads to change in the function of a road. This changes its capacity and as in our case, a change in its classification all together.

This change in classification is not always accompanied by rehabilitation of improving of the road which puts a strain on the available infrastructure. The introduction of new access points on the road undermines its integrity as they had not been factored for in the original designs. These conflicts between revised road classes and inherent road properties lead to increased user conflicts and hence increased road traffic accidents.

It goes without saying then that increased capacity on road leads to change in the function and use on a road, which consequently could lead to a change in its classification. If that is not accompanied by change in the road infrastructure, it is more likely that an increase in road traffic accidents would be experienced.