

ROAD SAFETY ANALYSIS IN RAIPUR CITY

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Abstract Road safety is a multi- sectoral and multi-dimensional subject. It includes orderly development and management of roads, provision of safer vehicles, and a comprehensive response to accidents. It relies on modern traffic management systems and practices, improved safety standards in design, construction, operation and maintenance of roads, and production and maintenance of safer vehicles. Due to the fixed time intervals of green, orange and red signals the waiting time is more and car uses more fuel.

Key Words: safety, Design, construction, operation.

1. INTRODUCTION:

According to official statistics 141,526 persons were killed and 477,731 injured in road traffic crashes in India in 2014 (NCRB, 2015). However, this is probably an underestimate, as not all injuries are reported to the police. The actual numbers of injuries requiring hospital visits may be 2,000,000-3,000,000 persons. The basis for these estimates is given in later section. The situation in India is worsening and road traffic injuries (RTI) have been increasing over the past twenty years (Fig 1.1). This may be partly due to the increase in number of vehicles on the road but mainly due to the absence of coordinated evidence-based policy to control the problem. Fig 1.2 shows the growth of personal motor vehicles registered in India by year according to official data (Transport Research Wing, 2014). The official registration data over represent the number of vehicles in actual operation because vehicles that go off the road due to age or other reasons do not get removed from the records. This is because personal vehicle owners pay a lifetime tax when they buy a car and do not de-register their vehicles when they junk them

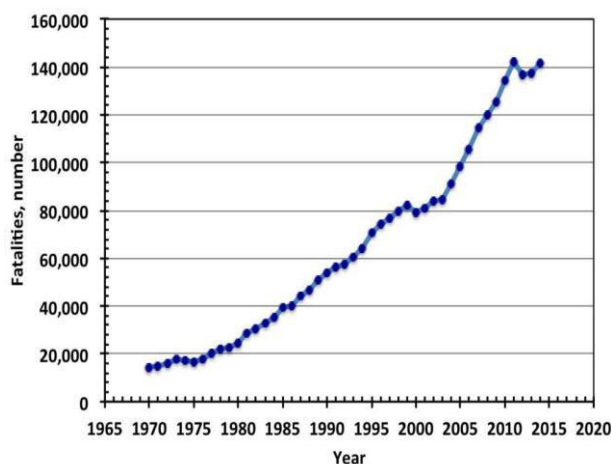


Fig 1 : Road Traffic Deaths in India 1970 through 2014 (Source: NCRB).

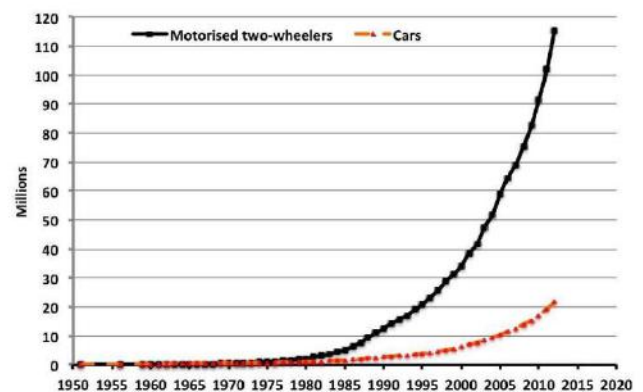


Fig 2: Cars and MTV registered in India by year (Source: TRW, 2014).

2. LITERATURE REVIEW:

Focuses on analysis of road accidents occur on NH-6, that this “Tatibandh Square to Telibandha Square” **passing through outer ring road of Raipur** which is 10 km in length surrounded by the population of Raipur on either side of road. This highway was converted to four lanes for travelling in year 2010, but it is still under developing condition.

3. METHODOLOGY:

Problems identified in three different zones has been done and photographs have been shown which indicates the cause of accidents and negligence of highway safety provision. Problem indicating pictures of NH-6 are as follows:

Zone-1: Tatibandh Square to Volkswagen showroom



Fig 3: Falling of Milestones.



Fig 4: Road Side without Barrier.



Fig 8 : Unsafe Bus-Stand



Fig 5: Unsafe Service Road



Fig 9 : Intersection of Bridge without Sign.



Fig 6: Road Turning without Sign.
Zone-2: Volkswagon showroom to Kushalpur Square



Fig 10: Intersection at Approach of Bridge.
Zone-3: Kushalpur Square to Telibandha Square



Fig 7: Road Side Growth of Plantation.



Fig 11: Road Side without Barrier.



Fig 12: Requirement of Speed Limit Sign.



Fig 13: Improper Working of Traffic Signal.



Fig 14: Improper Maintenance of Central Guard Rail.



Fig 15: Heavy Traffic due to Traffic Signal Failure.

4. CONCLUSION:

It is important to note that traffic crashes are generally caused due to some deficiency or failure of one or more elements, such as highways including traffic control, vehicle and driver. When such causes are correctly identified and countermeasures are installed, appropriate crash types are generally reduced. In the real world, safety treatments when applied without proper study to find the root cause of traffic crash problems, often lead to inappropriate or insufficient treatment. Thus traffic crashes may not reduce in some instances, and reduce measurably in others. NH-6 is getting more dangerous due to lack of safety and maintenance.

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