INTRODUCTION

Road accidents are one of the major causes of death, injury and disability in all over the world both in developed and developing countries. With a broad estimate, in every one minute, two people are killed and 95 people are severely injured or permanently disabled in traffic accidents worldwide. Traffic accident related deaths and injuries result in not only substantial economic losses but also serious physical and mental sufferings.[1] Developing countries are much more affected from traffic than developed countries. According to the World Health Organization (WHO) statistics, 75 Per cent of deaths resulted from traffic accidents occurring in developing countries, although they own only 32 Per cent of the motor vehicles in the world.

While the annual fatality per 10,000 vehicles ranges from 20 to 200 in low or middle income countries, it varies between 1.5 and 5 in industrialized countries. The estimated global economic cost of traffic accidents is $518 billion per year. The share of the developing countries is $100 billion which accounts for 1 to 3 Per cent of their gross national product. Road traffic crashes occur on all continents and in every country of the world. Every year they take the lives of more than a million people and incapacitate many millions more. Pedestrians, users of non-motorized vehicles--including bicycles, rickshaws, carts and motor cyclists in low--income and middle--income countries carry a large proportion of the global burden of road traffic death and serious injury.[1]

India's record in road deaths has risen to at least 14 deaths per hour in 2008 against 13 the previous year. The total annual deaths due to road accidents have crossed 1.18 lakhs, according to the latest report of National Crime Records Bureau (NCRB). While trucks/lorries and two-wheelers were responsible for over 40 Per cent deaths, the rush during afternoon and evening hours were the most fatal phases. Traffic experts are alarmed over the shooting trend of fatalities on roads between 2003 and 2008, and progressive states having a significant share of road fatalities. While the toll was only 84,430 in 2003, it crossed 1.18 lakhs in 2008, an increase of nearly 40 Per cent in RAJASTHAN, reported 12 Percent respectively of total road accident deaths in the country. In India, statistics on road accidents indicate over 1,30,000 deaths and 5,00,000 injuries occur annually. [2]

Rajasthan State is blessed with literacy rate, better health care, and higher density of population distribution and connectivity of roads to all villages. Road accidents are considered to be the third major cause of death in the state. Vehicles become weapons of mass destruction in Ajmer. Road traffic accidents are a human tragedy. They involve high human sufferings and socio-economic costs in terms of premature deaths, injuries, loss of productivity etc.[2]

The various causes of road accidents are:

- Drivers - Over speeding, rash driving, violation of rules, failure to understand signs, Fatigue etc.
- Pedestrian - Carelessness, illiteracy, crossing at wrong places, moving on carriage way.
- Passengers - Projecting their body outside vehicle, by talking to drivers, alighting & boarding vehicle from side travelling on footboards, catching a running bus etc.
- Road Users - Excessive speed and rash driving, violation of traffic rules, failure to perceive traffic situation or sign or signal in adequate time, carelessness, fatigue, alcohol, sleep etc.
- Vehicle - Defects such as failure of brakes, steering system, tyre burst, lighting system, overloading, projecting etc.
- Road Condition - Skidding road surface, pot holes, ruts, merging of rural roads with highways, diversion etc.
- Road design - Defective geometric design like inadequate sight distance, inadequate width of shoulders, improper curve design, improper traffic control devices and improper lighting.
- Weather conditions - Fog, snow, heavy rainfall, wind storms, hail storms etc.
- Environmental factors - Unfavorable weather conditions like mist, snow, smoke and heavy rainfall which restrict normal visibility and makes driving unsafe.
- Other causes - Improper location of advertisement boards, gate of level crossing not closed when required etc.
II. ACCIDENTAL ANALYSIS OF CITY AJMER

Fig 1 Clock Tower Police Station Reported Accidents

Fig 1 shows the graphical statistics of accidents in the Clock Tower Police station which occurred from year 2011 to 2017, an approx average of 10 people suffered from accidents in this area every year.

Fig 2 Alwar Gate Police Station Reported Accidents

Fig 2 shows the graphical statistics of accidents in the Alwar Gate Police station which occurred from year 2011 to 2017, an approx average of around 35 people suffered from accidents in this area every year.

Fig 3 Adarsh Nagar Police Station Reported Accidents

Fig 3 shows the graphical statistics of accidents in the Adarsh Nagar Police station which occurred from year 2011 to 2017, an approx average of around 55 people suffered from accidents in this area every year.

Fig 4 Ramgarh Police Station Reported Accidents

Fig 4 shows the graphical statistics of accidents in the RamGanj Police station which occurred from year 2011 to 2017, an approx average of around 30 people suffered from accidents in this area every year.

Fig 5 Kotwali Police Station Reported Accidents

Fig 5 shows the graphical statistics of accidents in the Kotwali Police station which occurred from year 2011 to 2017, an approx average of around 15 people suffered from accidents in this area every year.

Fig 6 Civil Lines Police Station Reported Accidents

Fig 6 shows the graphical statistics of accidents in the Kotwali Police station which occurred from year 2011 to 2017, an approx average of around 15 people suffered from accidents in this area every year.
Fig 7 shows the graphical statistics of accidents in the ChrishchiyanGanj Police station which occurred from year 2011 to 2017, an approx average of around 55 people suffered from accidents in this area every year.

Fig 8 shows the graphical statistics of accidents in the Ganj Police station which occurred from year 2011 to 2017, an approx average of around 20 people suffered from accidents in this area every year.

Fig 8 shows the graphical statistics of accidents in the Dargah Police station which occurred from year 2011 to 2017, an approx average of around 1 person suffered from accidents in this area every year. No it’s a no vehicle zone.

III. OTHER ISSUES IN AJMER

According to the census (2011), the average decadal growth rate of Ajmer between 1991-2000 was 20.5% and by 2001-2011 the growth rate was 14%. It’s important to remark that exceptional growth rate during 1991-2001 was because of extended municipal boundaries of Ajmer Municipal Corporation. The projected population of Ajmer by 2020 is 6,20,155.

- Except from the resident population, the city has a high migrating population (about. approximately 4000 tourists per day).
- There is tremendous rise in tourist traffic goes up to 30,000 during Urs Fair.
- Different educational institutes and workplaces also generate transit population into the city.

3.1 Density of Population

Ajmer is a low density city with a highly dense inner core, with population density of over 5,000 persons/sq.km. The Anasagar zone consisting of Anasagar area, Vaishali Nagar and Chaurasiyawas have the lowest density of less than 2,000 persons/sq.km. While the gross average density of the city is 5,750 persons/sq.km.

3.2 Traffic problem

Ajmer city comprises of 455 km of roads of which, only 57 percent are Surfaced Roads. Apart from this, 11 percent of roads are WBM and 32 percent constitutes earthen roads. The station Road, which is very often very busy and is highly congested. It is one of the major sites, which is highly accident-prone. The traffic include high degree of pedestrian traffic also. The City is lacking an organized Public Transport System, which has led to the growth of Intermediate Public Transport(private vehicles) like Auto.
rickshaws, minibuses, Cabs, tempos etc.

These problems give rise to multiple problems like:

- Inadequate space for pedestrians
- No proper parking facilities
- Ineffective traffic control

3.3 Waste management problem

The city badly requires effective Solid Waste Management which is not the part of Swach Bharat Abhiyan but is one of the key elements for Smart city development programme. According to the JNNURM —The total waste generation for the ULB is estimated for base year (2006) and future upto 2021on a waste generation rate of approximately 250 gms/capita/day (based on CPEEOH norms). The waste generation rate can be expected to grow higher than 250 gms/capita/day as the city population increases and there are enhanced levels of consumption. The city is spotted with dustbins and garbage all around it.

IV. CONCLUSION

Ajmer City is expanding rapidly, and to categorize it as a smart city and reduce the accidental deaths and injuries, it is required to take some major steps in direction of the road planning and management and also some new development projects like flyovers, under passes are also required for the same.

REFERENCES

[2] Department of Transportation Planning and Engineering, School of Civil Engineering, National Technical University of Athens, 5, Iroon Polytechniou St., 15773 Zografou Campus, Greece, Journal of Transportation Engineering of Road safety audit on a major freeway: implementing safety improvements