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A Survey on Issues in Public Transport Management System

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Abstract: ***In developing countries, people prefer public transport more often due to its less and affordable cost. In populated countries, due to insufficient public transport system, there was lack of attention to the maintenance of the vehicles. The chaos is caused due to the volition of the rules by the consumers and lack of maintenance of the vehicles due to more demand of this kind of transport system. This paper enclosed a survey on public transport management system which focuses the death and accident rate due to the improper maintenance and volition of rules. And also, provides solution for the encountered problems.***
Keywords: Public transport, survey, issues, accidents.

I. INTRODUCTION

Public transport is the most commonly used way of transport all over the world, especially in densely populated and developing countries because of its cheap cost. This paper mainly concentrates on some objectives which are mentioned below

A. The accidents caused by the public transport due to the over load of the vehicles.
B. Time consumed for the identification of the people involved in the accidents.
C. Loss due to the rules breaking or inappropriate activities.
D. Poor performance of public transport system.

Road injuries are predictable and preventable. There were few techniques that have been already used for reducing death or injuries caused by the transport system. The evidences for effective interventions are in depth, as well as implementation of legislation on speed management and avoiding alcohol consumption, promotion of seatbelt and helmet utilization and safer style and use of roads and vehicles. Although there are so many inventions for different sectors to prevent damage the inventions to prevent the damage in the transport system are low so, this paper surveys on all the prevailing problems publicly transport systems. People prefer Public transport to travel to different places most commonly because of its cheap cost and safety. Most of the people don't know the way to some places; if they know the name of the place where they need to reach then it is easy to travel in public transport. The people of teenage (13-19) most commonly use Public transport, as shown in Fig.1. This is because at their age, driving the two or four wheeler is a difficult one and not safe for them. Public transport helps most of the physically challenged people and the old age people too. Transportation is the major and main part in transporting things from one place to another. There are different types of transportation say for example, Land transportation, Air transportation, Rail Transportation, Water transportation and Space Transportation.

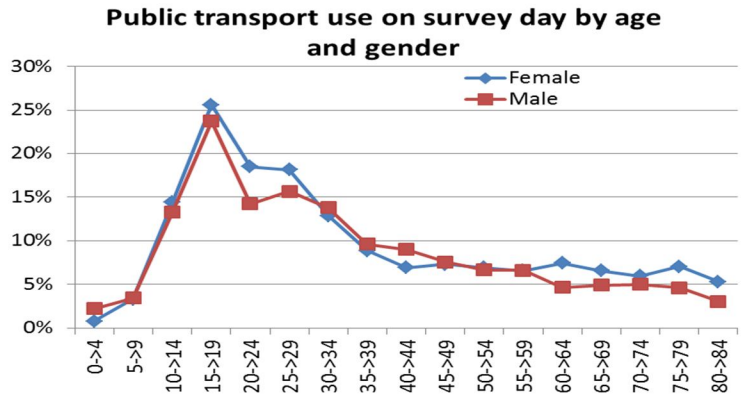

Fig.1 Public transportation usage by different age people.

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Land transportation: The land transportation carries resources over long, medium, and short distances from locations to alternative locations victimizes the road routes by vehicle which is similar to that of land transportation. Some examples are lorry, vans, 2 wheelers, unmanned combat vehicles; military robot; joint light-weight military science vehicle (JLTV), utility vehicle, white goods truck etc. Air transportation: product carried through plane merchandise most typically. The transport carries resources over long, and short distances from locations to completely different locations victimization air routes by aircrafts, charter flights, planes or others. Water transportation: significant product is carried through containers and is transported through water ways in which. The water transportation carries resources over long distances from locations to various locations exploitation maritime routes composed of oceans, coasts, seas, lakes, rivers, and canals of ships, or similar routes.

Rail Transportation: Rail transport carries resources over long, medium, and short distances road of wheeled vehicles running on rail track or railway. Examples: Trains, metro, subway, rail technology train, aerodynamic lift train, intercity trains. Space Transportation: This transportation carries resources from locations to various locations by suborbital and orbital flights at interva0ls the upper atmosphere and conjointly the realm by Hall electrical propulsion or similar. There are so much good about the Public transport but due to some irresponsible acts the implementation of the Public to a quality extreme is stopped or been slowed down. We need to improve the transportation facility to a good extend and we can do it, as shown in Fig. 2.

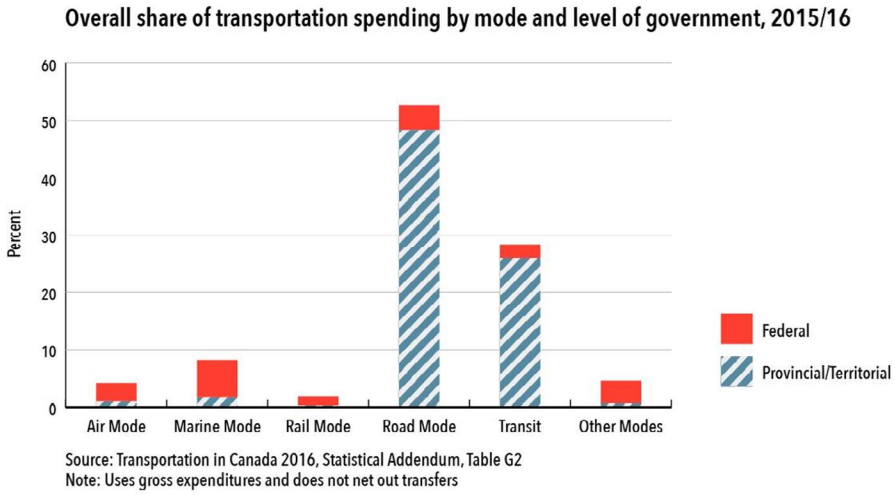

Fig. 2 Overall usage of different transportation

II. SURVEY ON EXISTING ISSUES

Trinh Tu Anh and Trinh Thuy Anh (2007) specified the important analysis of bus safety and bus accidents. They had focused on unsafe activities of transportation companies based on over speed and ineligible running. They designed three key issue teams namely bus safety in infrastructure, busman behavior and operational safety. In the 1st of six months in 2006, bus accident state of affairs was quite serious. It had been a pair of times higher compared to an equivalent amount of last time. The magnitude relation of bus accidents accounted for 6.6% of traffic accidents. The important point is that bus accidents did lots of damages to the motor cycles and motor drivers [1]. Fatality contribute 15.5 percent in 2005, 16.9 percent in 2006 and 14.49 percent in 2007, i.e., 15 person had died out of a hundred accidental victims in 2005 and this rate is being redoubled by the following year. The rate of accident is increasing in proportional to the rise of population and vehicle [3].

A. Views On Accident Caused Due To Overload

Carrying more passengers than capacity by bus has been a problem state [4]. Some transportation medium squeeze people in the spaces between the seats [4]. The road safety problem in developing countries is much worse than the official statistics projects because of widespread of underreporting road accident deaths [3]. Around three-fourths of the annual Rs.550 billion loss from road accidents was attributed to the unorganized truck transport industry. The foundation said over 92,500 people were killed each year in road accidents in the country coming under the wheels of the overloaded vehicles The vehicle will be less stable, difficult to steer and take longer to stop. Vehicles react differently when the maximum weights which they are designed to carry are exceeded. Overloaded vehicles can cause the treys to overheat and wear rapidly which increases the chance of premature, dangerous and expensive failure or blow-outs.

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B. Views On Accident Caused Due To Distraction

Distracted driving, it is that the act of driving whereas engaged in another activities like feeding snacks, texting, talking on phone will create the driver distracted from his work [2]. Provides the statistics that shows that over 37th of drivers have admitted to causation or receiving text messages whereas driving and 18 percent admit doing this frequently.

Driver distraction poses a big safety drawback within the personal and transport sector drawing the interest of many researchers. A study funded by the aortic aneurysm Foundation known the main sources of non-public vehicle distraction contributive to crashes, developed taxonomy of driver distractions, and examined the potential consequences of those distractions on driving performance [4]. In 1998, quite 85 Percent of deaths and 90 Percent of incapacity adjusted life years lost worldwide attributable to road traffic accidents occurred in developing countries [3], as shown in Fig. 3 which provides a statics that, a densely geographical region would have bigger variety of passengers and better external sources of distraction attributable to a lot of request stops, different road users or pedestrians, work zone activities, and toll booths etc., [7].

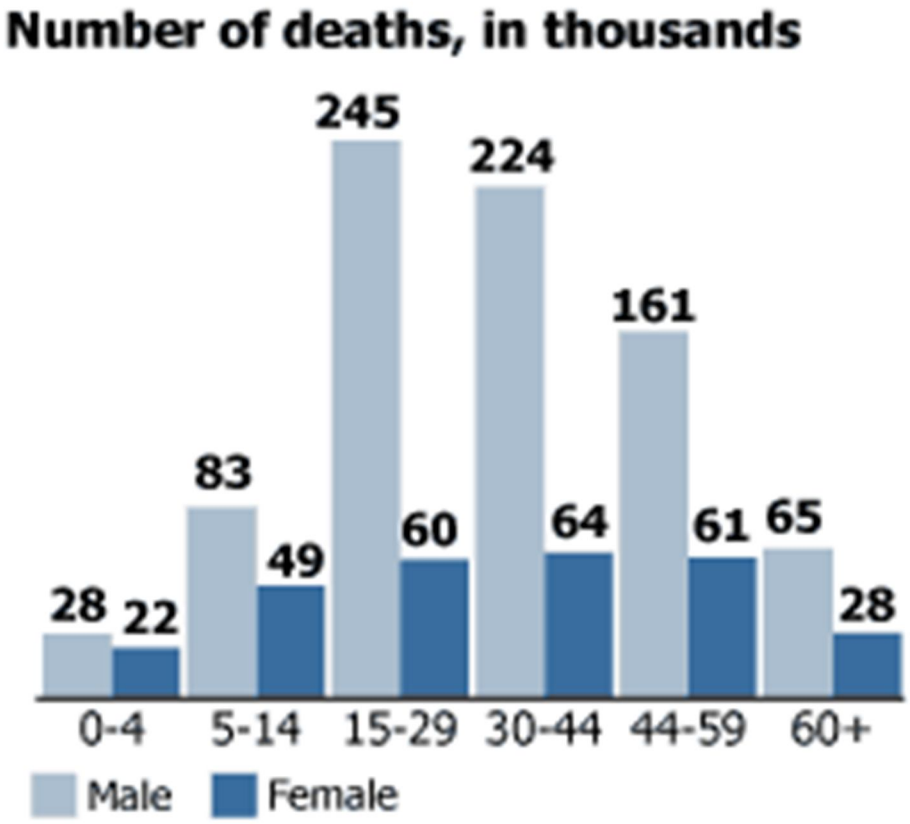

Fig. 3 Percentage of deaths in accidents (Source: *WHO Global Burden of Disease Project*, Version 1, 2002).

C. Accident Rates By Authors

An calculable 1.2 million people everywhere the planet area unit killed in road accidents every year and as several as 50 million area unit wounded [3]. Projections indicate that these figures can be enlarged by regarding 65percent over the next 20 years if it's not controlled. The distraction or causes of the accident area unit divided into 5 specific human causes were identified: improper lookout (18–23 percent), excessive speed (8–17 percent), basic cognitive process (10–15 percent), improper maneuver (5–13 percent), and internal distraction (6–9 percent) [2].

In 2015, 50 Million deaths and, Some Cities accounted for a share of 22.1 percent in total road accidents at intervals the country, 11.3 percent in total persons killed in road accidents and 16.4 percent in total persons injured in road accidents. Mumbai had the simplest vary of road accidents (23,468) whereas town had the simplest range of deaths (1622) thanks to road accidents. Accident severity in terms of proportion share of fifty Million Cities was 14.9 percent in 2015 as against 15 percent in 2014 [9], as shown in Fig. 4.

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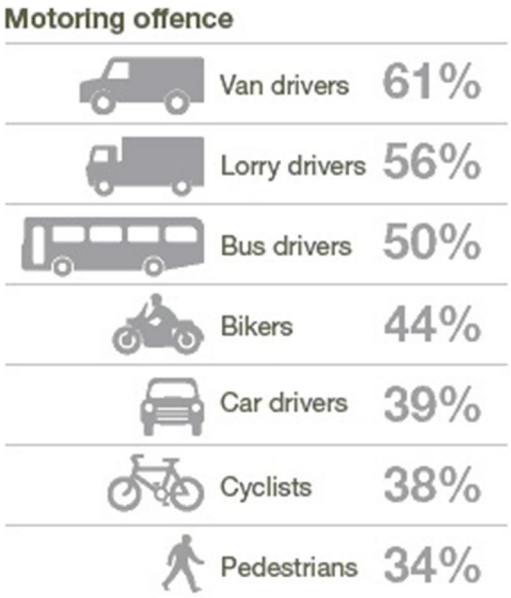

Fig. 4 Offence by different Transportation medium

D. Accident Caused Due To Non Professional Drivers

Maximum 65percent drivers have sensible information, got their driving coaching from none therefore referred to as "ostaad", i.e., guru or master that positively indicate that drivers haven't any institutional formal coaching for driving rather drive with exploit the expertise and talent solely by following their ostaad (Driver). As a result, they are not well familiar with formal traffic rules and laws required for driving within the roads [3], as shown in Fig. 5.

Fig. 5 Percentage of the practice and training of drivers

E. Accident Caused Due To Continues Driving

It is evident that concerning 52 drivers drive in every day but eight hours, about 12-tone system driver's drive in every day additional than12 hours. Attributable to durable of driving they feel fatigue and regularly involve in accident from exhaust in driving. The drivers perpetually attempt to drive most trips per day for profit maximization; result drivers run with high speed and face the road accidents [3], as shown in Fig. 6.

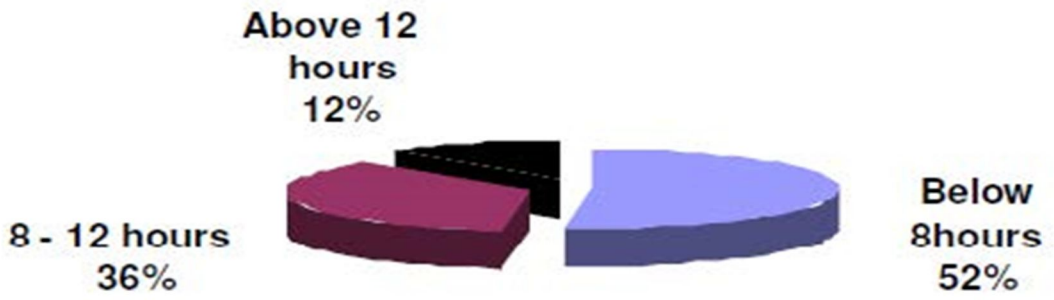

Fig. 6 Percentage of Drivers driving duration each day.

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Due to continuous driving the driver get drowsy and losses the control of the vehicle and which ends up in serious accident. There is a great scientific reason that one should not drive without having a good sleep. You can drive without having food but not without out having rest because that's going to cause serious problem which may lead to loss of lives.

III. CONCLUSION AND FUTURE SCOPE

From the survey, it could be noticed that there are so many accidental deaths and injuries were caused by the distraction of the public transport drivers. Deaths attributable to road accidents in 2009 were reportable to be 126,896 and in 2010 it exaggerated to 133,938 that is around 5.5 percent over and higher than the previous year's deaths and still keep on growing till date. The study captured data of overall driving behavior in crashes and varied incidents, it had been not designed to conduct in-depth, and on-scene investigations of crashes that unit necessary to work out the factors associated with pre-crash events. Crash-avoidance technology continues to be introduced, and knowledge is required to gauge these systems, furthermore as establish priorities among investments in rising technologies. This survey provides scope to automate the bus transport and ticket collection system so that the accident caused due to the over load of the bus and distraction of the bus drivers can be reduced. The consumers can be provided with smart card which consists of their identification details and also act as a prepaid card. So, even if accident occurs, consumers' informationcan be easily identified which will be useful to provide necessary remedies.

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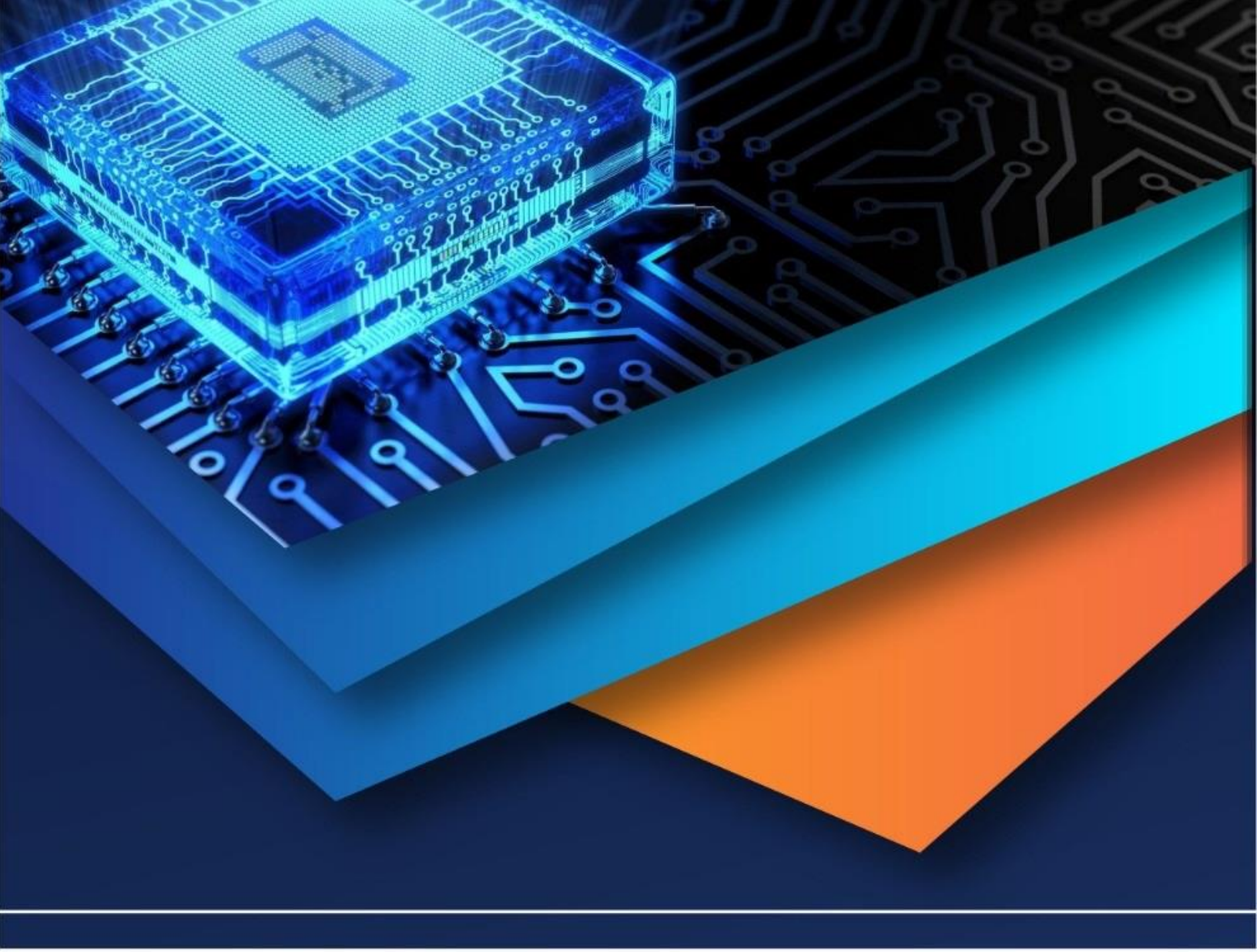

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