ABSTRACT

Even though the road development authorities are trying to keep pace with the developmental activities of the city, the threshold has been reached and new solutions to control the traffic congestion has to be taken. No sooner will the state of roads in Mysore be like the highly congested roads of Bangalore the neighbouring city. If appropriate measures are not taken at the right time, it will be a never ending problem, as roads cannot be widened at a later stage. The traffic congestion is presently concentrated near the market places, schools, colleges and government offices at peak hours. The total numbers of vehicles in the year 2003-04 were only 10,912, which had increased to 60,100 in the year 2015-16. The present research focused on the development of roads and its networks and the growth of vehicles registered within the city. Based on the data collected from the Mysore City Traffic Police department, the questionnaire survey and the GPS crowd-sourced data from Google databases, the traffic congestions within the city limits were mapped and analyzed for five different timings, 06.00am, 10.00am, 02.00pm, 06.00pm and 10.00pm on both the weekdays and weekends. The accident data for the year 2013 were collected from all the Traffic Police stations and due to some space constraint, some of the stations had already destroyed the data pertaining to the solved cases prior to the year 2013. Hence, only an years data was used for the analysis. The location of all the accidents for the year 2013 were plotted on the map based on different time periods (06.00am to 10.00am, 10.00am to 02.00pm, 02.00pm to 06.00pm, 06.00 pm to 10.00pm and 10.00pm to 06.00am), types of vehicles involved and gender of the occupants involved in the accidents. The fatalities due to road accidents were also mapped to identify the locations with high severity of accidents. The kernel density for the accidents was analyzed for the highest number of occurrences per square kilometres of distances. The road accidents in the city is showing an increasing trend which is at an alarming state. If proper action is taken at the moment, the number of occurrences can be reduced. Several measures are suggested in the last chapter that can be followed to reduce the issues related to congestion and accidents. The use of GIS by the traffic police department can also help them monitor and manage the traffic congestions, study the incidences and reduce the fatalities by accidents.