GEO-EYE



RESEARCH ARTICLE



GOPEN ACCESS

Received: 10.01.2018 **Accepted:** 23.05.2018 **Published:** 10.06.2018

Citation: Kumar RS. (2018). Road traffic sub-division-wise accidents in Mysore city. Geo-Eye. 7(1): 15-17. ht tps://doi.org/10.53989/bu.ge.v7i1.4

Funding: None

Competing Interests: None

Copyright: © 2018 Kumar. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Published By Bangalore University, Bengaluru, Karnataka

ISSN

Print: 2347-4246 Electronic: XXXX-XXXX

Road traffic sub-division-wise accidents in Mysore city

R Shiva Kumar¹

1 Guest Faculty, Department of Geography, Jnanabharathi Campus, Bangalore University, Bengaluru

Abstract

This research paper mainly focuses the road traffic Sub-division-wise accidents in Mysore City in the year of 2013. the methodology used in this study with the help of detailed accident data of 2013 collected from Krishnaraja, Devaraja, and Narasimaraja Traffic Police Stations. There are 902 total accidents that occurred in the year 2013, there are 141 deaths and many of them injured. For plotting the exact location of accident spots mainly used Global Positioning System (GPS) points of each accident. Arc GIS 10.3 software technology used for maps and analysis of three main sub-division-wise accidents spots in Mysore city. The result shows that compared to KR Sub Division and Devaraja Sub Division, the NR Sub Division is the highest number of (446) road traffic accident occurred in the year of 2013.

Keywords: Sub-division-wise; road traffic accident; global positioning system; GIS

Introduction

The state-wise comparison of accidents Maharashtra has reported extreme (62,770) accidental deaths out of 4,00,517 such deaths in the country during the year of 2013 and it accounted for nearly onesixth (15.7%) of total accidental deaths reported in the country. Uttar Pradesh, the most crowded state in the country with a populace share of 16.9%, on the other hand, has accounted for 8.2% of accidental deaths in the country. The other states having a larger percentage share in total accidental deaths were Madhya Pradesh (9.4%), Tamil Nadu (8.3%), and Andhra Pradesh (7.8%). However, Gujarat (6.6%), Rajasthan (6.2%), Karnataka (5.6%), and West Bengal (5.5%) have also reported important shares of deaths due to accidents during 2013.same as it is in this paper also trying to the comparison of three subdivision wise i.e.

Krishnarajasagar sub-division, Narasimaraja sub-division, and Devaraja subdivision analysis of Road Traffic Accidents in Mysore city in the year of 2013

Study Area

Mysore city is the most tourism magnetism palace city and the second-largest city in the state of Karnataka. Mysore has located 135 km from Bangalore, the state capital. It is the headquarters of the Mysore district and the Mysore division and lies about 146 km (91 mi) southwest of Bangalore, the capital of the state. The city is spread across an area of 128.42 sq. km (50 sq mi) and is situated at the base of the Chamundi Hills. Mysore city is located at 76°39'E and 76°42'E longitude and 12°18'N and12°30'N latitude and has an average altitude of 770 meters (2,526 ft). It is located in the southern region of



the state of Karnataka. Mysore city has 65 wards and the total population is 8,85,416 (census of India, 2011). The existing two-lane road linking Mysore to the state capital Bangalore has been upgraded to a four-lane highway. National Highway 212, and State Highways 17, 33, 88 passes through Mysore connecting it to nearby cities.

Objective

Identification of road traffic sub-division-wise accidents in Mysore city 2013.

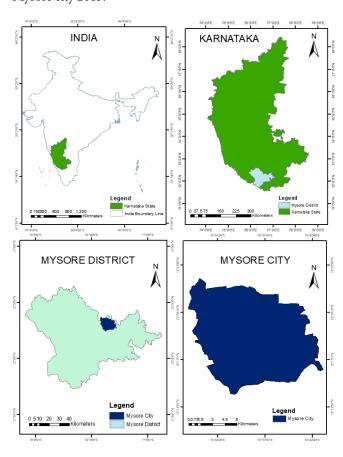


Fig. 1. Study area map of Mysore city

Result and Discussion

Map 2 illustrates Accident spots in Mysore city in 2013. The Mysore City has three Traffic Sub-divisions namely N.R. Sub-Division (including V.V. Mohalla Traffic Police Station), K.R Sub-Division (including Kuvempunagar Traffic Police Station), and Deveraja Sub-Division (including Lashkar Traffic Police Station).

The sub-division-wise accidents have been presented in Map 3.The Mysore city traffic police limits area having 149 sq. Kilo meter. This three Sub-Division divided in different Numbers of Square Kilometers i.e.NR Sub Division 57 Sq.

Km, KR Sub Division 59 Sq. Km, and Devaraja Sub Division having 33 Sq. Km in Mysore city.

In this accident data, we can observe many of the vehicles i.e. two-wheeler, three-wheeler, four-wheeler, and six-wheeler have been involved. The major accidents occurred in National Highway 212, State Highways of 17, 33, 88, and Ring road in Mysore city.

Table 1. Details of sub-division-wise accidents in Mysore city in the year 2013

	7	
Divisions	Number of accidents	Area in Sq. Km
NR Sub Division	446	57
KR Sub Division	273	59
Devaraja Sub	183	33
Division		
Total	902	149

Source: Traffic police stations

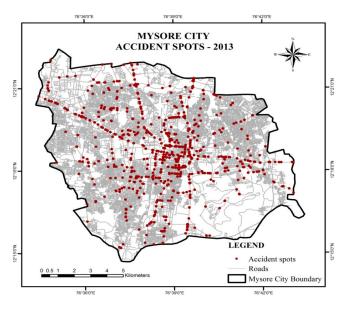


Fig. 2. Accident spots in Mysore city in the year 2013.

The N.R. Sub-Division has the highest number of accidents in the year 2013 as compared to other Sub-Divisions as it has several junctions in the major roads with a higher density of vehicles. There are 446 accidents occurred in the N.R. Sub-division, 273 accidents in the K.R. Sub-division, and 183 accidents in Devaraja sub-division in the year 2013.



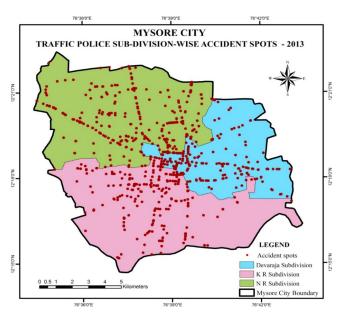


Fig. 3. Sub-division wise accidents in Mysore city in the year 2013

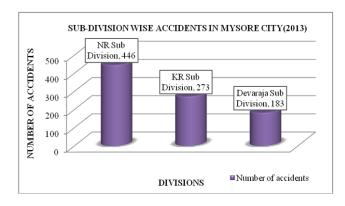


Fig. 4. Number of accidents of sub divisions in Mysore city (2013)

Conclusion

To sum up, the Mysore city traffic police limits area having 149 sq. Kilo meter got 902 road traffic accidents in three subdivision of N.R. Sub-Division, K.R. Sub-division, Devaraja sub-division. In the daytime due to the overcrowding population for commercial and business purposes in the core of the city got a huge accident occurred. The main reasons for this accident are breaking the traffic rules, without helmet traveling, crossing the traffic signals, etc. N.R. Sub-Division got more accident considering that passing National High 212, Hunsur to Mysore and State Highway 17, Bangalore to Mysore, then the main industrial area ring road. To maintain the more traffic road accidents in Mysore city need to make five more sub-divisions and adopt new sub-ways and traffic light signals in more traffic circle or junction, then only we can see the fewer road accidents in palace city of Mysore.

References

- Road Accidents in India. Transport Research Wing, M/o Road Transport & Highways. 2013.
- Accidental Deaths and Suicides in India. National Crime Records Bureau, Ministry of Home Affairs. 2013.
- 3) Akgüngör AP. Road traffic accidents and safety programme in Turkey. *International Journal of Injury Control and Safety Promotion*. 2007;14(2):119–121. Available from: https://dx.doi.org/10.1080/17457300701371961.
- 4) Atubi, Augustus O. Road Traffic Accidents in Warri and Environs: A Ten-Year Survey. *Afrrev Ijah*. 2012;1(2).
- 5) Deshpande N, Chanda I, Arkatkar S. Accident Mapping and Analysis Using Geographical Information Systems. *International Journal of Earth Sciences and Engineering*. 2011;p. 342.
- Ghosh SK, Parida M, Uraon JK. Traffic accident analysis for Dehradun city using GIS. ITPJ. 2004;p. 40–54.
- Hirasawa M, Asano M. Development of traffic accident analysis system usingGIS. In: and others, editor. Proceedings of the Eastern Asia Society for Transportation Studies;vol. 4. 2003;p. 1193–1199.
- Kumar V, Bansal R. Analysis of Road Accident in Hisar Tehsil. IJRE. 2016:05.
- Bhavani K, Ramaswamy L. Socio Economic Status, Dietary Pattern and Nutritional Status of Teenage Pregnant Girls Belonging to Rural Areas of Vellore and Dharmapuri Districts. FoodSci: Indian Journal of Research in Food Science and Nutrition. 2015;2(1):5–5. Available from: https://dx.doi.org/10.15613/fijrfn/2015/v2i1/80072.
- Zhao J, Deng W. Traffic Accidents on Expressways: New Threat to China. Taylor and Francis. Retrieved October 02, 2016. 2012.
- 11) Rao SNV, Rani DK, Rao SRK. Analysis of Road Accidents on National Highway-5: An Indian Scenario. *International Journal of Civil Engineering Research*;1(1):45–54.
- Selvasofia ASD, Arulraj GP. Accident and traffic analysis using GIS. Biomedical Research. Retrieved August 19, 2016. 2016.
- 13) Vaishali G. Accident Analysis of Bangalore city, Working Paper 2, Centre for Road Safety, Central Institute of Road Transport, Pune. 2001.

