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To Study Traffic Problems and Violation of Traffic Rules and **Regulations in Kolhapur City**

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Abstract - In Maharashtra, Kolhapur was rapidly developing city after Nagpur, that's why road transport was increased in the recent years but at some level facilities have not developed at the same rate. The lag of this development has resulted in increased strain on the existing road and infrastructure. The increased stress on road creates lot of problems. The rate of road accident has been increasing in the last couple of years. The reasons are also the same, i.e. Increase in the volume of traffic, insufficient carriageway, poor traffic control, and lack of public awareness etc. As there is no possibility of reducing the traffic flow, the major solution of this problem is providing additional facilities, modifying and redefining the services and providing modern and enough road designs.

Key Words: Black spots, PCU, Accident, Carriageway,

1. INTRODUCTION

The transportation service has great impact on GDP of our country. To enhance this parameter, transportation in our country within all cities must be safe and transportation facilities and infrastructure must be adequate.

Reduction in the rate of accident was major key point for safe transportation for this the major step must be taken. When we select study area for reduction of accident on that zone the history of that road accident was helpful for identifying the abnormal condition of road.

Perhaps, for the redefining of the solution and enhancement of road traffic, the various road data collection is very important factor for that road improvement.

On the basis of existing data, i.e. accidental data, volume data, existing dimensions of road was taken into account for the enhancement.

2. METHODOLOGY

There are various methods used for collection of data related to accident, violation of traffic rules and regulations but we preferred the methods are given below:

2.1 IDENTIFICATION OF BLACK SPOTS:

Location of the point or node that experiences an abnormal accident is considered as Black spot.

The other method which is used to identify hazardous location is called as critical crash rate method. If the accident rate was higher in a particular location than the other locations then it is known as black spots.

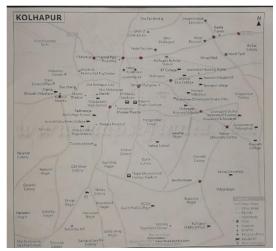


Fig1- Kolhapur city Black spots on map

2.2 ACCIDENT FREQUENCY:

It will rank the location by the number of crashes i.e. number of highest crashes was ranked first and so on. This method does not take into account the differing amounts of traffic at each location.

3. DATA COLLECTION:

The volume of traffic was collected on a 2.9 km long street. The total road has three intersections. The data was collected at intersection point. The data was converted into PCU factor (Passenger Car Unit).

Sr. no.	Intersection	Name	PCU Value
1.	Morning	Kolhapur Gate to city	3191
	Evening	City	3861
	Morning	Kolhapur city to out	4363
	Evening		5041
2.	Morning	Honda showroom	4995
	Evening		6700



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3.	Morning	Market yard	12101
	Evening		13205
4.	Morning	Lishan Hotel	13374
	Evening		13682



Fig-2: Tavade Hotel Area (Kolhapur Gate)



Fig-3: Lishan Hotel

3.1 Accidental data from various police stations:

Sr	Police	Number	Fatal	Major	Minor	Total
No.	Station	of places				
		of				
		Accidents				
1.	Juna	16	9	17	18	42
	Rajwada					
2.	Lakshmipuri	10	7	28	6	41
3.	Rajarampuri	12	7	28	6	41
4.	Shahupuri	27	23	24	18	65

3.2 Commercial Vehicle Traffic Volume data from Market Yard:

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SR. NO	VEHICLE	NOS.
1	HEAVY TRUCK	383
2	MEDIUM TRUCK	784
3	SMALL TRUCK	277
4	TOTAL	1444

4. CONCLUSIONS

In our study we concluded some problems which are enlisted below:

- 1. Central area suffered from inadequate circulation
- 2. Intermixing of traffic
- 3. Misuse of road space and narrow width
- 4. Lack of traffic regulations and enforcement
- 5. Parking problems

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