

Traffic Problems in Kolhapur City and their Solutions

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Abstract: Traffic congestion is a major urban transport problem. Due to traffic congestion, there is possibility of accidents because of poor traffic management. To eliminate road accidents and to save precious human life it is essential to find proper solution for traffic congestion. In this paper traffic congestion problem in Kolhapur city is identified and studied for finding out the causes and proposed solution of it. In the recent years there has been a considerable loss due to the accidents to the precious human life and to the vehicles to some extent in Kolhapur city.

Keywords: Survey, Skill, Traffic congestion, Traffic intensity and connectivity

I. INTRODUCTION

Traffic congestion has been one of the major issues that most cities are facing. For the effective planning of kolhapur city, integrated transportation planning and traffic management are essential prerequisites. Transportation contributes to the economic, industrial, social and cultural development of any country. Transportation is vital for the economic development of any region, since every commodity produced whether it is food; clothing, industrial products or medicines need transport at all stages from production to distribution. In the production stage, transportation is required for carrying raw materials like seeds, manure, coal, steel, etc. In the distribution stage, transportation is required from the production centers viz; farms and factories to the marketing centers and later to the retailers and the consumers for distribution. The inadequate transportation facilities retard the process of socio-economic development of the country. The adequacy of transportation system of a country indicates its economic and social development.

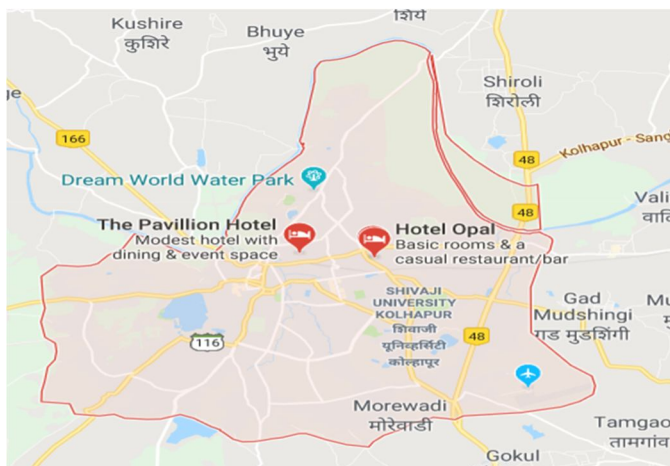


Fig. 1 Map of Kolhapur city.



Fig. 2 Aerial view of Kolhapur City.

A. Need of study

Road traffic has been growing very rapid rate in India during the past 3 decades. The number of motor vehicles has been growing at a rate around 10 percent per annum.

As a result of stiff growth of motor vehicle population, the traffic on roads has been increasing, both in terms of volume and intensity. The investment on roads have not kept pace with growth of traffic, with the result there is severe congestion on the roads. Speed are low and vehicle operating costs are high. Accident rate is also usually high. Traffic engineering measures provide a valuable tool to understand the problem and evolve suitable measure to overcome the deficiencies.

B. Scope of the Work.

- 1) To reduce the traffic congestion in Kolhapur City at various location.
- 2) To introduce and make use of new alternate routes in and around Kolhapur city.
- 3) To make the traffic flow in a uniform manner, without having any stops at an intersections.
- 4) To give drivers and passengers, a smooth and tension free and safe driving

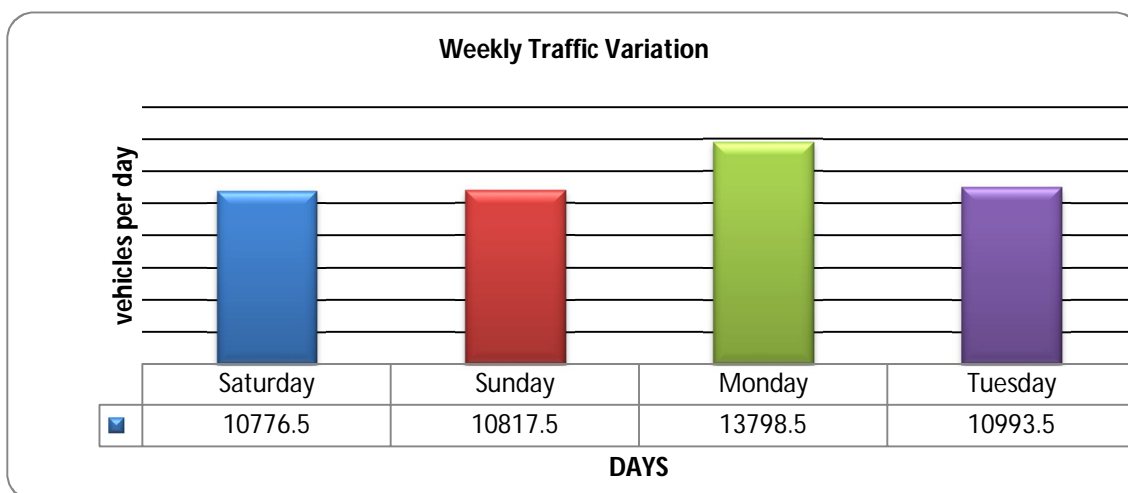
C. Objective of the Work

- 1) To identified the issues regarding traffic congestion in the study area.
- 2) To conduct the traffic volume survey at Kolhapur.
- 3) To analyze the traffic data.
- 4) To suggest the suitable traffic management measures by reducing the conflict points in the Kolhapur city.

II. ANALYSIS OF DATA

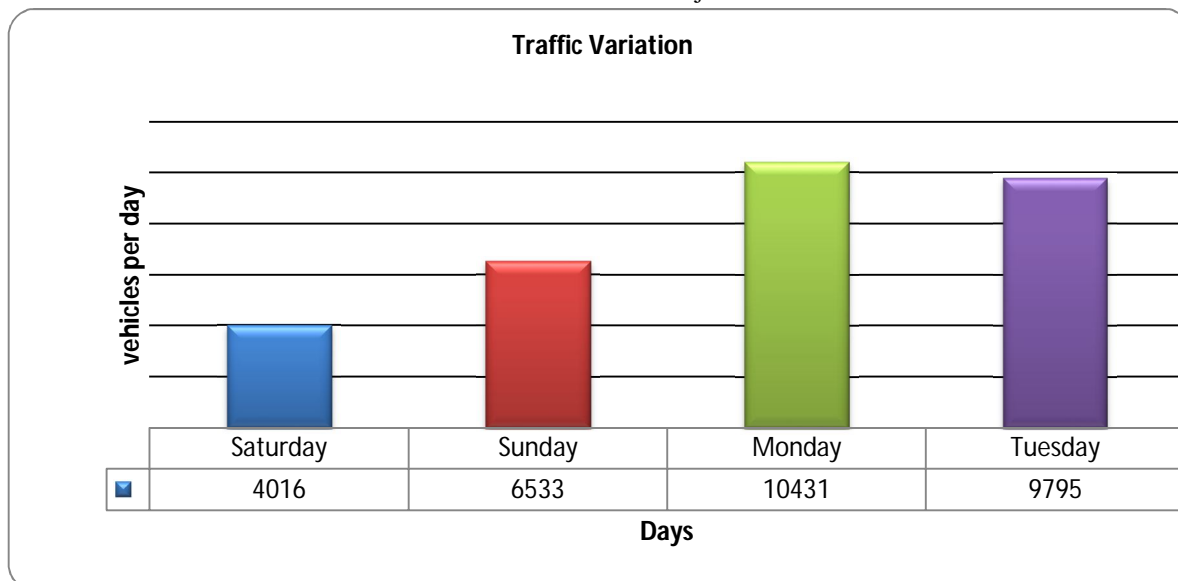
A. Traffic Volume Count

Location 1. Panyacha Khajina



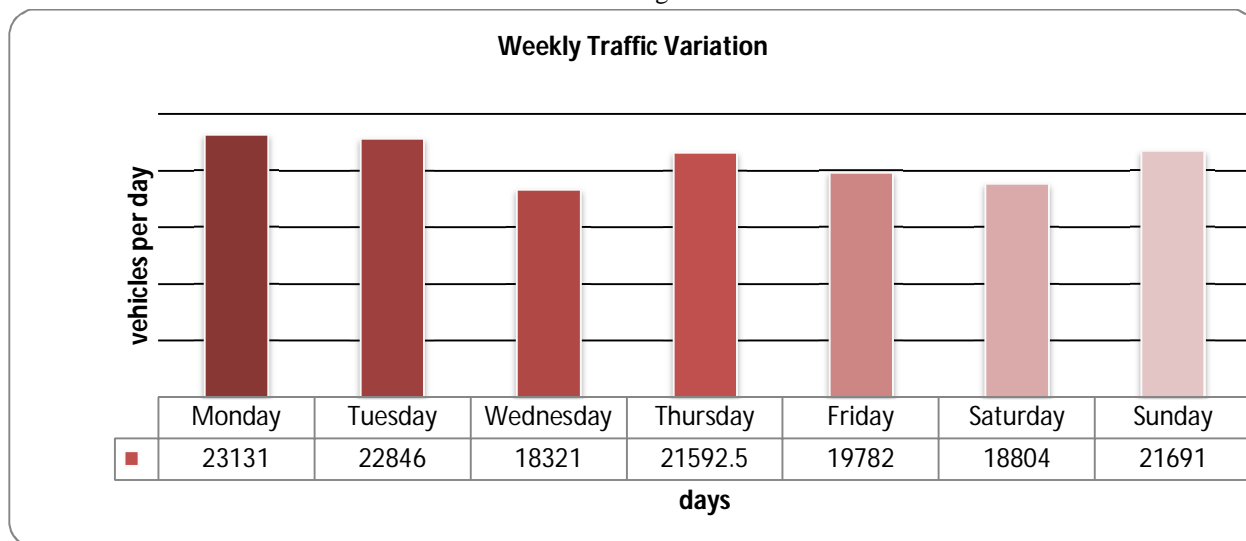
Graph 1. Traffic Variations At Panyacha Khajina

Location 2. At Shivaji Pool



Graph 2. Shivaji bridge

Location 3. Bhagava Chauk



Graph 3. Traffic variation Bhagava Chauk



Fig. 3 Traffic Congestion At Bhagava Chauk



Fig. 4 Traffic Congestion At Panyacha Khaji

III. SOLUTIONS

- 1) Provide traffic signals where necessary.
- 2) Design traffic signals where there is need of the traffic signals.
- 3) Road widening is necessary at some points.
- 4) At some points there is middle circle is provided and the radius of circle is more which causes traffic congestion hence the radius of middle circle should be reduced.
- 5) At some intersecting points vehicles crosses each other directly without any barrier hence one middle circle should be provided.
- 6) Traffic signs such as mandatory signs, informative signs, mandatory signs and regulatory signs should be provided.
- 7) Some points having school and offices due to their same starting and ending time road contain heavy traffic at same time hence there should be some lag between starting and ending time of office and school time.
- 8) Dividers should provide.
- 9) Date wise odd even parking.
- 10) Car plus scooter pooling.
- 11) Change the location of KMT bus stop towards Gokhale College.
- 12) Speed breakers should be provided.
- 13) Avoid heavy loaded vehicle entry in residential area.



IV. CONCLUSIONS

- A. The conclusion of this work is to provide congestion less traffic movement.
- B. This is done by providing the signals and by diverting the routes.
- C. This provides us less journey time with more satisfaction.
- D. This ensures safety and reduces accidents.
- E. This provides a uniform flow of traffic with no chaos and congestion

REFERANCE

- [1] Dameri, R.P.: Comparing smart and digital city: initiatives and strategies in Amsterdam and Genoa. Are they digital and/or smart? In: Dameri, R.P., Rosenthal-Sabroux, C. (eds.) SmartCity. How to Create Public and Economic Value with High Technology in Urban Space, pp. 45-88. Springer, Heidelberg (2014)
- [2] Hall, P.: Creative cities and economic development. Urban Stud. 37, 633-(2000)
- [3] Staricco, L.: Smart Mobility, opportunità e condizioni. J. Land Use Mob. Environ.
- [4] Central Road Research Institute, "Capacity of Roads in Urban Areas", Final Report of the Project Sponsored by Ministry of Surface Transport, India, 1988.
- [5] Study of the effect of traffic volume and road and road width on PCE value of vehicles using microscopic simulation V. THAMIZH ARASAN and K. KRISHNAMURTHY