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### “ANALYSIS ON URBAN TRAFFIC MANEGMENT SYSTEM USING WIRELESS SENSOR

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#### Abstract

The number of vehicle increase on road day by day , Also the before set the signal time on the circuntance but time of signal automatically increase the large traffic vehicle then the clear the traffic. The manually control of traffic police are not seen during particular distance . Thats why we used the wireless sensor network . our moto is that signal away from 50m distance can fetch easily with help of wireless sensor network .WSN are also provide the four side rode means square . Without traffic police we can easily help the traffic signalling when it can automatically in increase time , Three side are empty without traffic and reaminging one side are having traffic then that time it can also detect the signalling . Traffic signal are automatically running without traffic are not . This problem are solve in our project with help of WSN.

**Keyword :** *Signal ,Traffic, Sensor ,Road etc.*

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#### 1. INTRODUCTION

Traffic research has the goal to optimize traffic flow of people and goods. As the number of road users constantly increases, and resources provided by current infrastructures are limited, intelligent control of traffic will become a very important issue in the future. t. Avoiding traffic jams for example is thought to be beneficial to both environment and economy, but improved traffic-flow may also lead to an increase in demand There are several models for traffic simulation. In our research we focus on optimization of traffic light controller in a city using IR sensor and

such as ambulances, firefighters and police cars, possibly causing a loss of lives, damage or destruction of property,

and increased fuel costs, pollution and congestion. ution for the design and development of a good deal of traffic control system application

## 1.1 LITERATURE REVIEW

**Kapileswar Nellore \* and Gerhard P. Hancke**

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Due to this, road jamming and traffic correlated pollution have increased with the associated adverse societal and financial effect on different markets worldwide. A static control system may block emergency vehicles due to traffic jams wireless sensor network (WSN) have gained increasing attention in traffic detection

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Over the years, there has been a sudden increase in the number of vehicles on the road. Traffic congestion is a growing problem everyone faces in their daily life. Manual control of traffic by traffic police has not proved to be efficient Also the predefined set time for the signal at all circumstances (low and high traffic density)

has not solved this problem.

## 1.2 OBJECTIVE

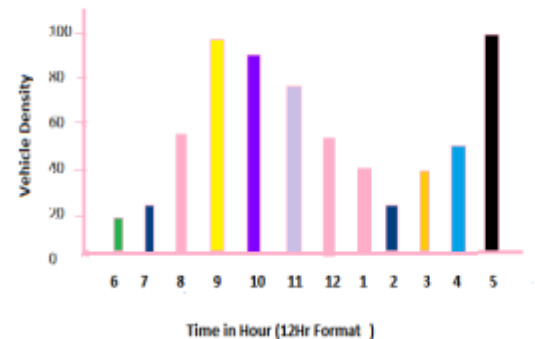
The main objective of traffic management using sensor in following below:

1. The traffic control system should be fast in taking decision
2. The system has to detected road traffics.
3. The reduce the traffic congestion .
4. A smart city system traffic reduce time.
5. To provide suggestion for modification of IR sensor.

## 2. METHODOLOGY

An intersection is define as the general are where two or More highway join or cross within which are included the roadway and road side facility traffic moment in the area in which chhatrapati shivaji square nagpur are selected of north direction .

We started collating data of traffic intensity on each road i.e traffic volume data and right hand turning left hand turning for each hours for the day. We collect the data 15 day from data we short out the pick hours in which the traffic intensity was greater than other hours of day . After the finally we decide the IR sensor are proved for Chhatrapati shivaji square nagpur. Firstly we observed that the desing of high -way road construction then we anylize the traffic of vehicle . This process done into 15 days . after 15 days we decide the we can provide the sensor network by making to traffic solution. And it is easy to used in any way .



## 3. CONCLUSION

WSN Provide the sensor which can help the solved the traffic problem, it can also solved time duration of signalling it can automatically manage the signalling time . If the traffic are accure then it also give the particular time for passing the traffic vehicle otherwise it can allows the next way to the pass vehicle.

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