



## SRI RAMAKRISHNA ENGINEERING COLLEGE

[Educational Service : SNR Sons Charitable Trust]

[Autonomous Institution, Accredited by NAAC with 'A' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

VATTAMALAIPALAYAM, N.G.G.O. COLONY POST, COIMBATORE – 641 022



### A NATIONAL LEVEL COLLABORATIVE INDIAN MAPPING EVENTS

#### IITB-ISRO-AICTE MAPATHON

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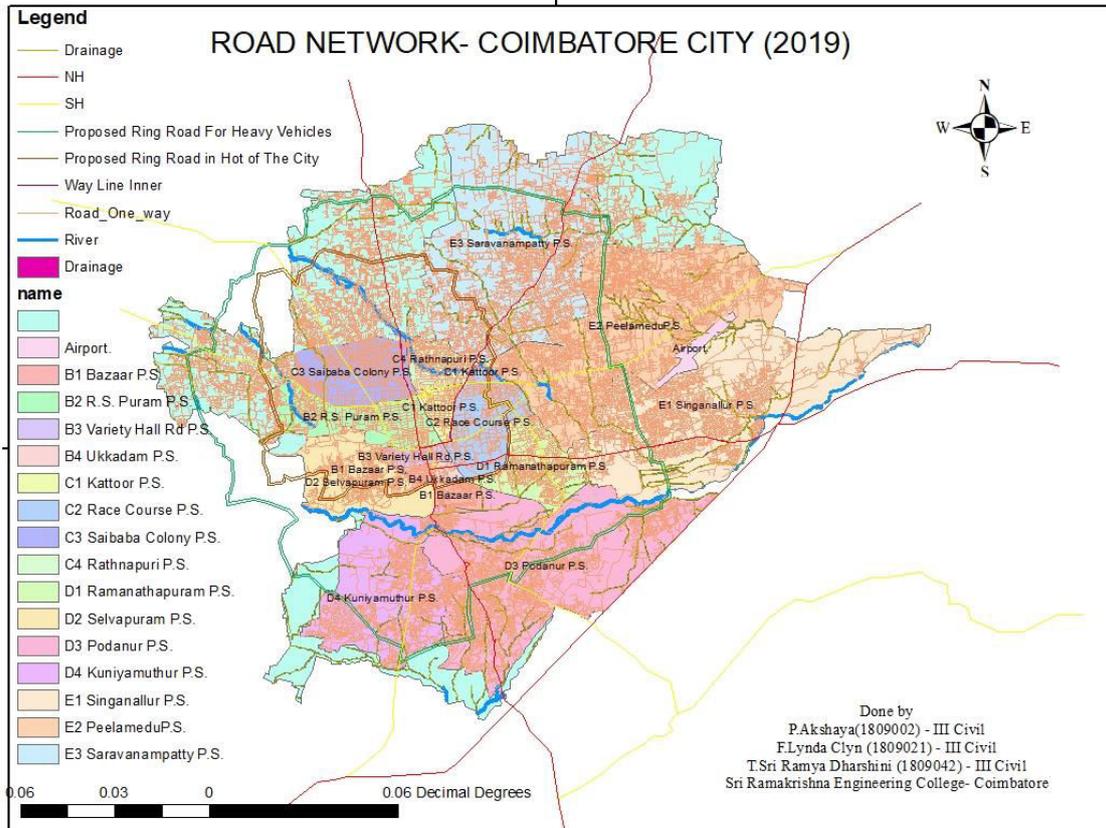
##### ABSTRACT

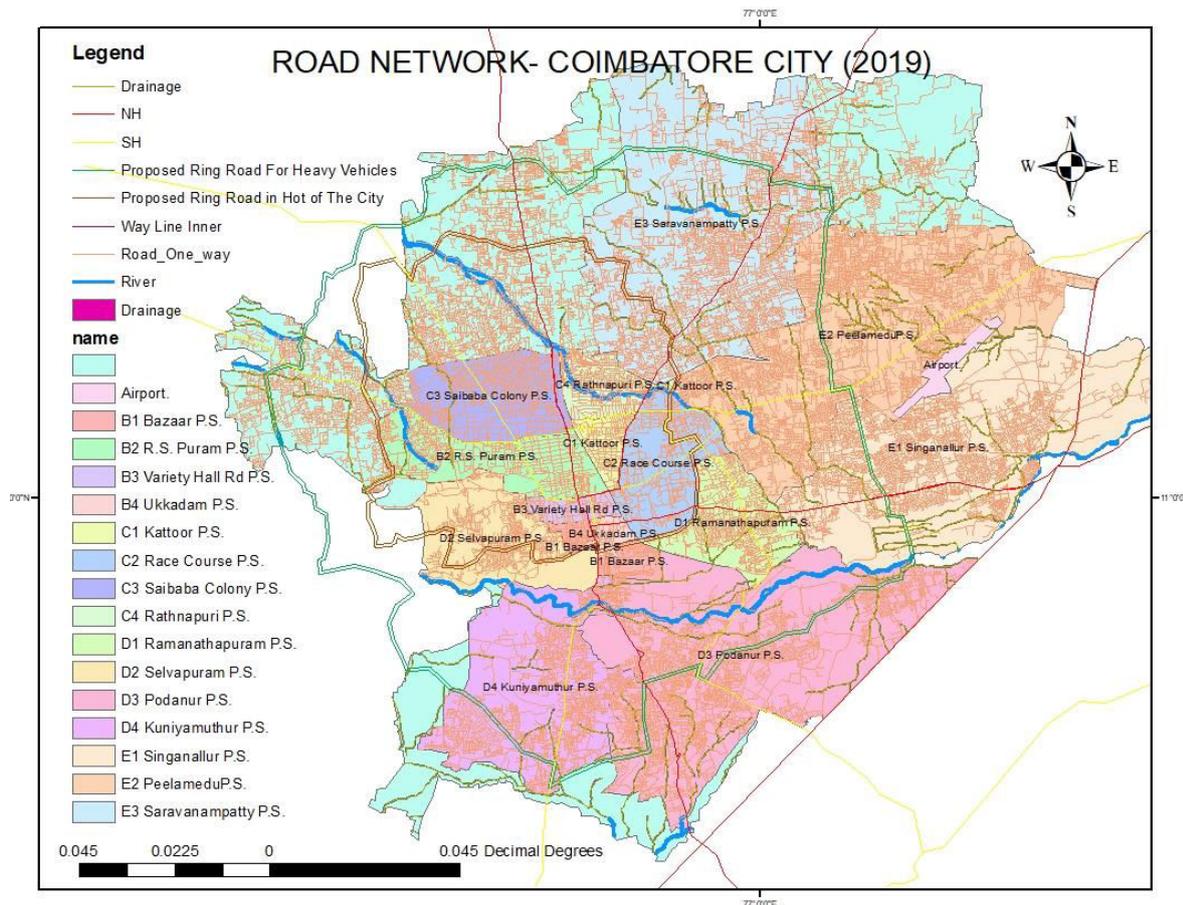
During the past few years, there has been high growth of demand for road transportation .The volume of road traffic has increased continuously over years due to the increase in the vehicle population, buying power, rented cab services, increasing economy activities and urbanisation. Road accidents and traffic congestion impose a burden on the society. Reducing the traffic congestion and road accidents are very important for efficient road transportation. With the increase in population in Coimbatore, the number of vehicles also increased. An effort has been made to study the traffic volume of Avinashi Road NH47, Trichy Road, NH81, Sathy Road NH209, Mettupalayam Road NH67 and Other Corporations Road . The vehicle population in Coimbatore has increased at an alarming rate. In the year 2014-15, around 27100 two wheelers, 4800 cars and 1800 other transport vehicles have been registered. In the year 2015-16, 33000 two wheelers, 6700 cars and 3040 other vehicles have been registered. The increase in the percentage comes to 20%, 40%, 40% respectively during the years 2014-15, 2015-16. Coimbatore has a large number of floating population. The

traffic on its roads has increased so much that it often becomes very difficult to cross a road. During the peak hours of the day, we find an unending stream of buses, trucks, cars, tempos, scooters, motor-cycles and cycles are seen in many roads. Most of the drivers of the vehicles do not observe traffic rules. Other than this, accident data opinion survey was also carried to know the problems faced by the pedestrians. After analysing all the data, remedial measures such as widening of road, removal/ relocation of bus stops, implementation of speed breakers and introduction of manned and unmanned traffic signals are suggested in the study area. An overall analysis was carried out to determine the effects of introducing the remedial measures. It is found that the traffic congestion can be reduced if the remedial measures are implemented.

## **INTRODUCTION**

Transportation plays a vital role in everyday life. Traffic congestion not only affects the nation's economy but also has a physiological effect on the road users. In addition, congestion will increase pollution and accelerates the process of global warming. With the rapid growth of urban traffic, the capacity of the roads have reached the saturation limit and traffic congestion has become in stable. Identifying the frequently congested road sections, estimating their influence on the entire road network, improving the connectivity and accessibility of the whole road network through local traffic reformation, have become important issues to transportation planners and managers. Traffic congestion can be characterized by the decrease in speed, the increase in travel time and the increase of vehicle's queue on the road. In addition, traffic congestion happens when the road demand exceeds the road capacity. Establishing an effective traffic congestion analysis and monitoring the evolvement of congestion state and making appropriate suggestions will provide strong support to transportation management and planning.

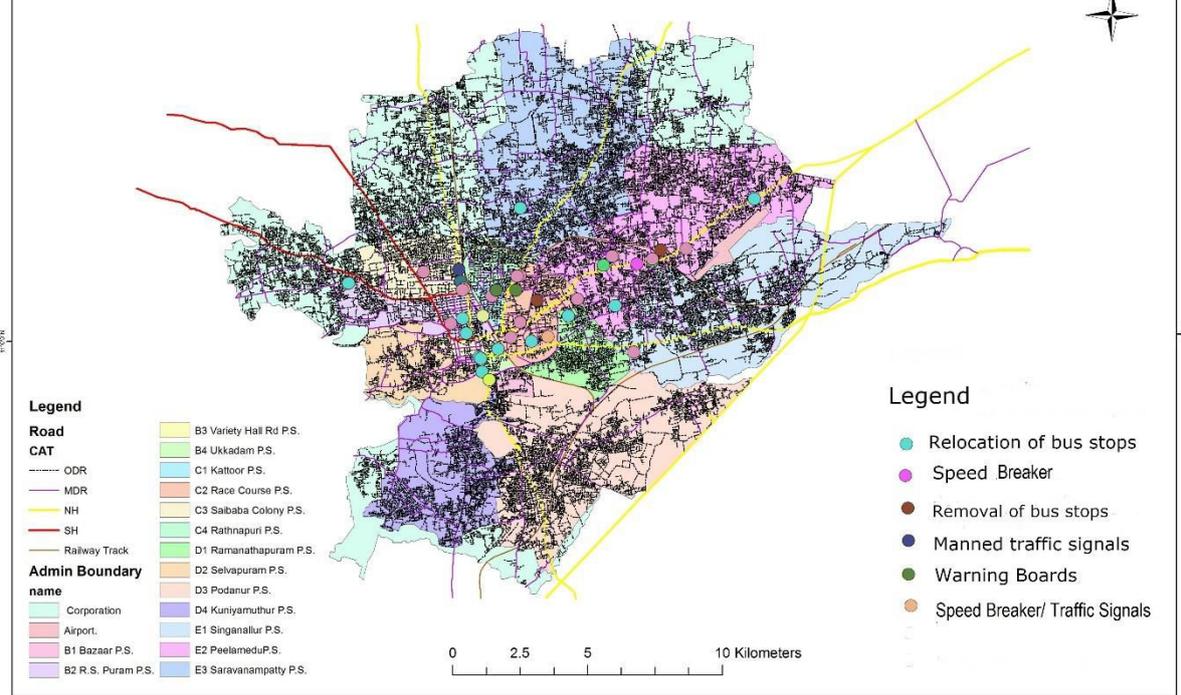




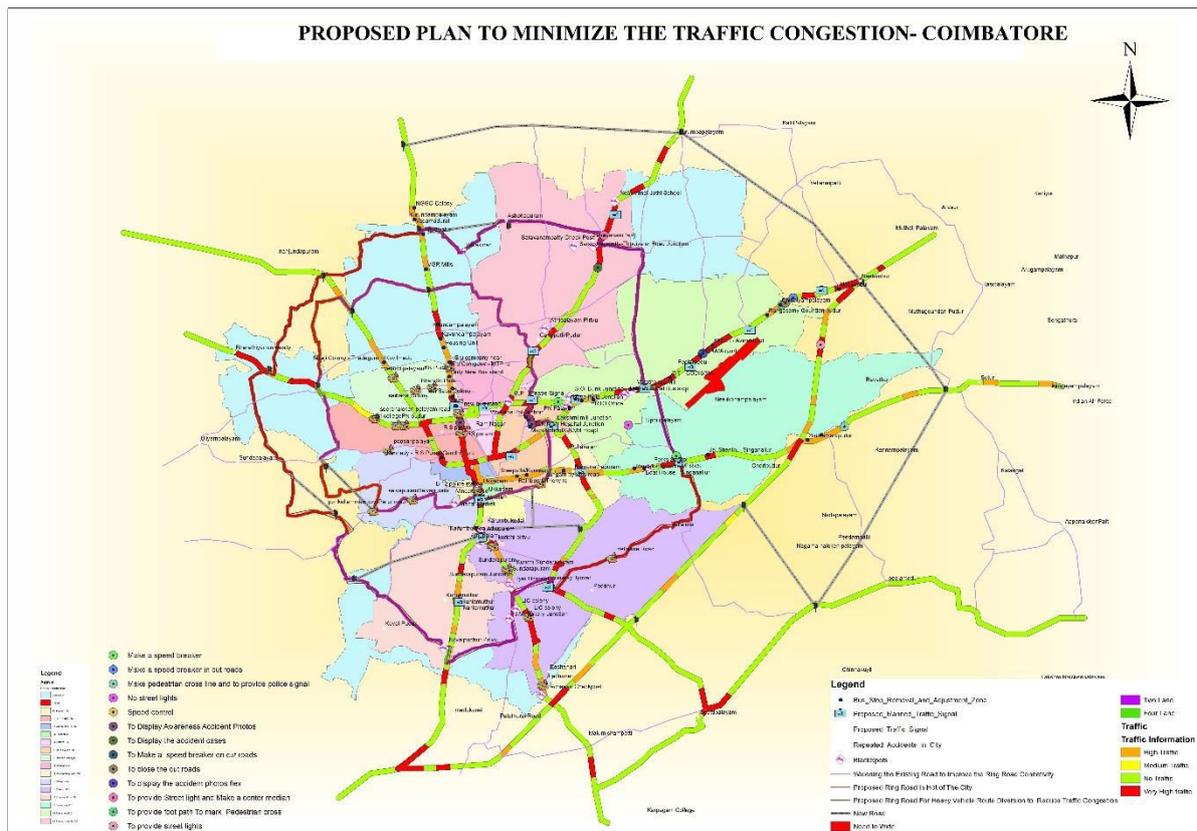
## CONCLUSION:

Effective management of traffic flow will ensure safe and secured the traffic movement. The population of Coimbatore is increasing due to the presence of major educational and industrial institutions. As a result recently the population in the city rose. Existing city road network is not adequate to the needs of the increasing traffic volume. There are so many road intersections in Coimbatore city road network. There are no separate lanes for slow moving vehicles as due to which the problems like traffic congestion delay and road accidents occur at the major road intersection in Coimbatore city. The accident locations and suggested some possible alternative or corrective measures were given to improve the transportation system in these locations, from which the decision maker can select suitable measure for the location. The method is found to be effective in identifying the black spots, provided sufficient secondary data is available.

# SUGGESTIONS FOR REDUCING HOT SPOTS



# PROPOSED PLAN TO MINIMIZE THE TRAFFIC CONGESTION- COIMBATORE





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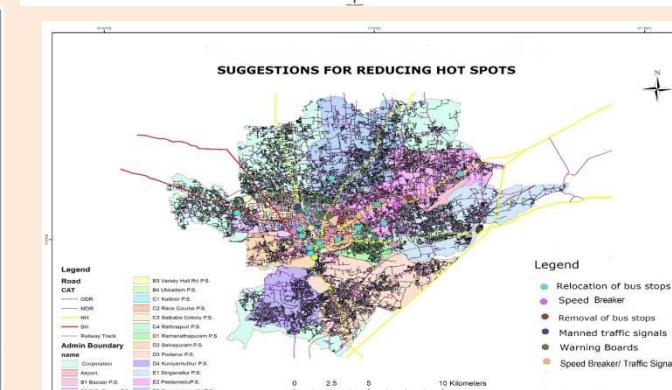
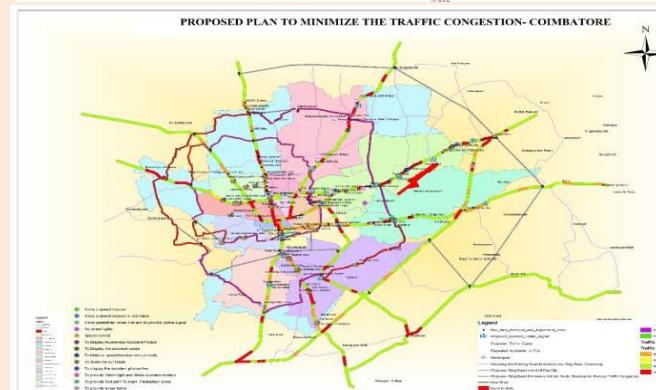
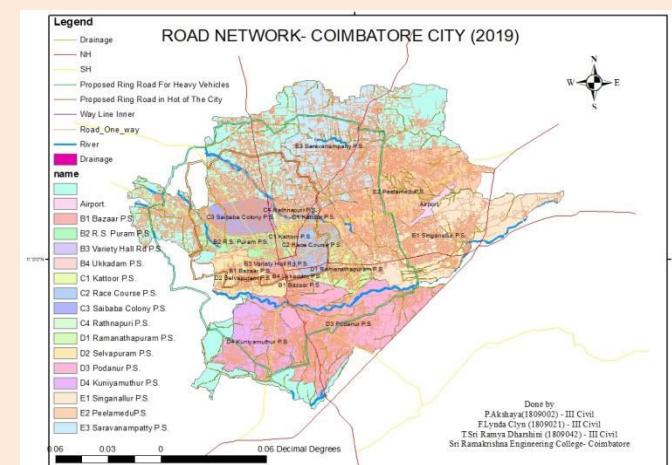
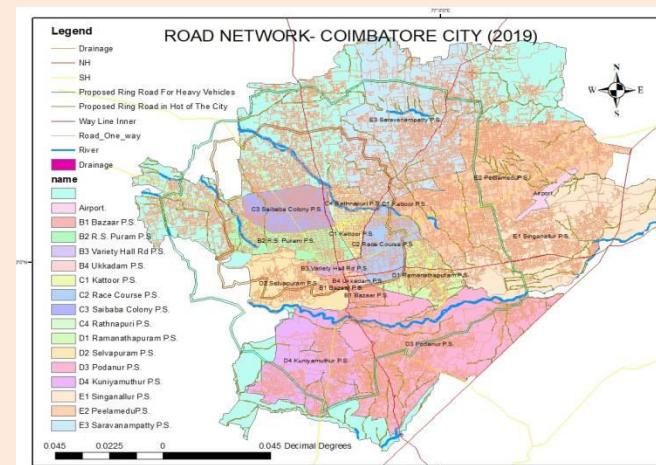


## A NATIONAL LEVEL COLLABORATIVE INDIAN MAPPING EVENTS IITB-ISRO-AICTE MAPATHON

# ROAD NETWORKS IN COIMBATORE DISTRICT

### Abstract

During the past few years, there has been high growth of demand for road transportation. The volume of road traffic has increased continuously over years due to the increase in the vehicle population, buying power, rented cab services, increasing economy activities and urbanisation. Road accidents and traffic congestion impose a burden on the society. Reducing the traffic congestion and road accidents are very important for efficient road transportation. With the increase in population in Coimbatore, the number of vehicles also increased. An effort has been made to study the traffic volume of Avinashi Road NH47, Trichy Road, NH81, Sathy Road NH209, Mettupalayam Road NH67 and Other Corporations Road. The vehicle population in Coimbatore has increased at an alarming rate. In the year 2014-15, around 27100 two wheelers, 4800 cars and 1800 other transport vehicles have been registered. In the year 2015-16, 33000 two wheelers, 6700 cars and 3040 other vehicles have been registered. The increase in the percentage comes to 20%, 40%, 40% respectively during the years 2014-15, 2015-16. Coimbatore has a large number of floating population. The traffic on its roads has increased so much that it often becomes very difficult to cross a road. During the peak hours of the day, we find an unending stream of buses, trucks, cars, tempos, scooters, motor-cycles and cycles are seen in many roads. Most of the drivers of the vehicles do not observe traffic rules. Other than this, accident data opinion survey was also carried to know the problems faced by the pedestrians. After analysing all the data, remedial measures such as widening of road, removal/relocation of bus stops, implementation of speed breakers and introduction of manned and unmanned traffic signals are suggested in the study area. An overall analysis was carried out to determine the effects of introducing the remedial measures. It is found that the traffic congestion can be reduced if the remedial measures are implemented.



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- HIGHLIGHTS:**
- ✓ Suggestions for reducing hotspots
  - ✓ Proposed plan to minimize the traffic congestion - Coimbatore