

# A Review on the Traffic Volume and Study Analysis on Different Roads of Meerut City

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**Abstract:** Traffic engineering is the application of engineering principles and techniques to the safe and efficient flow of people and products on highways. The safe and timely movement of people and products is based on traffic flow, which is inextricably linked to traffic characteristics. Volume, speed, and density are the three primary factors of a traffic flow. The present road infrastructure cannot meet the city's future demands in the absence of comprehensive city planning and traffic management. Because of changes in the economy of middle-class households, pedestrian and car traffic have grown dramatically in the recent decade. The current work investigates traffic characteristics in the city of MEERUT at a single high-traffic intersection. The emphasis in this work was on traffic volume, and the research was carried out using primary traffic flow surveys from Delhi to Meerut in Meerut city. Manual approaches are used to study traffic flow. A traffic survey is carried out to have a better knowledge of the current state of traffic flow at the intersection. Our renowned course co-coordinators of the course CE452 presented a calculation of Passenger Car Units (PCUs) for various vehicle kinds. An attempt had been made to study traffic patterns throughout various time periods using data collecting. The features of the traffic flow also influence traffic control at that intersection. As a consequence, the findings of this study are useful in regulating traffic at the intersection and in recommending some corrective steps to improve traffic safety in the region. Based on the results of the work, corrective actions such as enlarging the road, altering it from four to six lanes, or providing additional public transportation may be proposed.

**Keywords:** Traffic volume.

## 1. Introduction

The investigation and analysis of traffic flow during peak hours, traffic congestion, determining level of service, and providing acceptable solution to minimise congestion and increase level of service are the goals of this project. Meerut, with a population of 17.2 lakhs, is a fast-urbanising metropolis. The growing population has resulted in a massive rise in vehicle ownership, resulting in high motorization rates. This growth in vehicular population, congestion, and dangerous traffic conditions has led in traffic congestions, delays, accidents, the environment, noise pollution, air pollution, and many other problems. Traffic volume studies are carried out in order to count the number of cars in the research region. The data acquired is important for identifying the heavy traffic flow analysed and the number of vehicle movements studied. The

information gathered from surveys will be utilised to analyse traffic volume, passenger car unit (PCU), congestion, peak hour factor and directional distribution, volume capacity ratio, and accident instances.

The current study is being conducted with the following goals in mind:

- Measure traffic volumes and take note of other traffic features (e.g. flow composition, flow fluctuations etc.).
- Calculating hourly volume in terms of passenger car equivalents (PCE) To identify the vehicle composition in a traffic flow.
- To identify solutions by comparing the results to conventional design service volumes.
- To investigate the causes of traffic accidents and provide solutions.

## 2. Literature Review

1) *Assessment of traffic congestion in Pabna Town by Md. Tufajjal Hossain, Md. Kamrul Hasan*

The objective of this review study is traffic congestion in Pabna. Pabna is an ancient town in Bangladesh. As a result, many service facilities, such as a university, medical college, medical hospitals, and commercial activities, have been centred in the town. As a result, the town's population is growing by the day. The town's traffic congestion investigation revealed that auto-rickshaws, cycle rickshaws, bicycles, and motor cycles are the most common modes of transportation, and traffic flow is most heavy in the morning, noon, and evening. The beginning and conclusion of office hours for employment and working time for various professionals, schooling hours, shopping hours, festivals and seasonal variations, and so on all have an impact on the town's traffic flow. One way traffic flow is one of the possible solutions given by this review article for congestion. Furthermore, it has been noticed that the majority of the town's economic activity take place inside a fairly small region in comparison to its entire area. As a result, growth centres should be built in several significant sites across the town in order to limit trip generation towards the town's downtown.

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### 2) *Analysis of the Impacts of Open Residential Communities on Road Traffic*

Based on AHP with China's continued urbanisation, the number of private automobiles in metropolitan areas has increased significantly, resulting in more severe traffic congestion. The urban road network is extensive yet sparse, which may quickly lead to congestion. To address this issue, the State Council proposed the concept of "open residential community" in 2016, which is to connect the roads within the residential community with external roads in order to densify the road networks and increase the area of branch roads, thereby alleviating urban road traffic pressure. Fuzzy Theory, Zahiua Yang, this paper first establishes an evaluation indicator system for road traffic using a number of factors such as traffic density, traffic delay time, number of intersection conflicts, road congestion rate, and road accessibility based on the analytic hierarchy process (AHP) theory, and then builds a fuzzy comprehensive evaluation model to study the impacts of open residential communities on the traffic capacity of surrounding roads. Then, using the assessment indication system and model described above, this work applies VISSIM traffic simulation technology to replicate the residential neighbourhood for testing. Finally, it compares and analyses the test data using the grey relational algorithm, and comes to the following conclusions: for residential communities with a large area and a large traffic volume, as well as those with a small area and a large traffic volume, the surrounding road traffic is significantly reduced, and traffic pressure is greatly alleviated; the effect comes second for those with a large area and a small traffic volume; and for those with a small area and a small traffic volume, the effect comes third.

### 3) *Traffic volume Analysis of Newly Developing semi-urban Road, S. Venkatcharyulu, V. Mallikarjunareddy*

The preceding study was carried out and evaluated for traffic from Miyapur to Nizampet (Hyderabad, India). When examining stream composition flow, it is discovered that the percentage of volume of 2-wheelers is roughly 62-65 percent of overall vehicle volume. Local folks in this area are the primary supplier of 2-wheelers. It is also noticed that the amount of private automobiles on this route is insufficient when compared to the volume of public vehicles. The average peak hour factor (PHF) for traffic flow towards Nizampet in the morning peak hours is roughly 0.943, while the maximum PHF for the same over the entire week is 0.970. Similarly, the average PHF for traffic flow towards Miyapur in the morning is 0.963, with the maximum PHF for the whole week being 0.981. In the evenings, the average PHFs for traffic flow towards Nizampet and Miyapur are 0.964 and 0.947, respectively. For the whole week, the greatest PHFs are 0.971 and 0.974 for traffic flow towards Miyapur and Nizampet, respectively. We can observe from the preceding data that the PHF for the entire morning and evening are approximately 0.97, which is more than 0.95, indicating considerable traffic during peak hours. According to the volume data, the traffic flow towards Nizampet is quite strong on Friday and Saturday evenings compared to other days.

### 4) *The association of rainfall and other weather variables with road traffic volume in Melbourne, Australia, Ian Simmonds*

This study found that rainfall in the winter and spring had the biggest impact on traffic flow, indicating that there appears to be a cool-wet season effect. On wet days, traffic volume is generally reduced. Volume and rainfall quantity have a negative connection. When evaluating the quantity of rainfall, the higher the amount of rainfall, the greater the decrease. This is true for both everyday and nocturnal situations. On wet days in the winter and spring, traffic volume reduces by 1.35 and 2.11 percent, respectively. The decrease rises to 2–3 percent in the 2–10 mm range, with the highest reduction of 3.43 percent in the 2–5 mm class in spring.

### 5) *Interpretable machine learning approach in estimating traffic volume on low-volume roadways, Subasish Dasaloannis Tsapakisb*

Many transportation research disciplines rely on traffic volume data analysis, including highway safety improvement and design, countermeasure determination, trip model calibration and validation, pavement design, and air quality compliance. However, AADT data for higher functional classes are more freely accessible, and only a tiny fraction of low-volume routes has correct AADT data. Because low-volume routes account for a substantial section of the U.S. transportation network, additional research into traffic volume forecast on these roads is required. This study's key contribution was the creation of a robust interpretable machine learning framework that can be used to estimate AADT; this framework may be used by other researchers and practitioners. The results of this study suggest that machine learning algorithms outperform traditional linear regression models. Furthermore, the study team discovered that population and job density are the greatest predictors of all three low-volume highway classifications in Vermont. In this study, the best suited machine learning model (random forest) outperforms the statistical models in terms of R<sup>2</sup> values. When compared to regression model results, the best fit random forest model dramatically improved AADT accuracy for low-volume highways, from 0.45 to 0.77. The partial dependent graphs created for variable combinations show distinct clusters with estimated AADT values. The top five choice rules for three functional types of highways were produced in this study. The best fit estimates and created criteria from the current study might improve the prediction power of SPF development for Vermont's low-volume highways and hence the decision-making process.

### 6) *Traffic Volume Study of Kalaburagi, Karnataka Shreeshail A Policepatil, Vishal, Roopa, Suresh, Shrishail, S. K. Inganakal*

The research was carried out at Saradar Vallabhai Patel Circle (SVP Circle) in Kalaburagi. The approach used is the hand count method. The following are the key findings derived from this research:

Light vehicles (cars, Jeeps, etc.) accounted for 35-37 percent of total vehicle traffic on Central Bus Stand Road, Station Road, and Market Road.

The proportion of three-wheelers on the station road is unusually high, accounting for around 54% of all vehicles on

the route.

The percentage of two-wheelers on PDA engineering college road is quite high, around 86 percent, and 53 percent on court road.

The percentage of public transportation has to be increased.

The PCU value of a vehicle varies dramatically with variations in traffic volume

#### 7) *Visualization and Analysis of Traffic Flow and Congestion in India, Tsotomu Tsuboi*

This is the first real traffic congestion analysis in India, and it introduces novel traffic flow analysis techniques such as: (1) collecting over a month of recent traffic data in a major Indian city, (2) defining traffic congestion from occupancy parameters based on traffic flow theory and observation data, and (3) identifying traffic congestion location using geographical special analysis (GIS). With the help of these three combination analyses, one may determine the most crowded location in the city and quantify the congestion situation. This research will be valuable to other countries dealing with comparable difficulties. Other causes of traffic congestion include infrastructure concerns and a lack of parking space. In India, a sustainable traffic management system should be implemented.

#### 8) *Dependencies between Demographic Urbanization and the Agglomeration Road Traffic Volumes: Evidence from Poland by Maciej Kruszyna*

Forecasting changes in traffic volumes at the core's periphery and interior is possible thanks to an examination of the rise in the number of dwellings and occupants. If the average occupancy of a private vehicle is known, the model can calculate the number of individuals moving by automobile via the core's perimeter. The aforementioned factors are critical in urban mobility planning, selecting investment tasks, and attempting to balance transportation in agglomerations. The suggested approach was evaluated for parameters that produced the best correlation findings. Other parameter settings yielded good (but not as great) correlation as well. As a result, the method should allow for the evaluation of other parameters, such as morning or daily (rather than just rush-hour) agglomeration traffic.

The model was developed and tested in two agglomerations of around one million people each, with their centres dominating neighbouring communes. This dominance ignores the impact of economic disparities between these communes on the transportation model. Such distinctions might be important if the core's effect is equivalent to that of certain adjacent communes.

#### 9) *Traffic Survey Analysis: Implications for Road Transport Planning in Nigeria, Umar Obafemi Salisu and Olukayode O. Oyesiku*

The study investigated the significance and necessity of conducting a traffic volume survey on major highways in Nigeria, with a particular focus on three prominent highways in Ogun State (Lagos-Ibadan, Sagamu-Benin, and Abeokuta-Lagos) that are more or less vital links for national and regional accessibility and connectivity. Surprisingly, the study's key findings indicated that car/SUV traffic accounted for the majority of vehicle traffic on the chosen roadways. This

suggests that the car/SUV vehicle type is possibly the most dominating traffic on Nigerian roads as a result of failed government and private sector investment in traditional public transportation systems, along with a weak policy and a bad intermodal system.

Furthermore, this analysis found no statistically significant variance in incoming and outward traffic flow, confirming that the observed variation is due to poor physical condition along road corridors, as well as rush-to-avoid-longer travel time and wasteful expenditure along traffic routes. The nature of road transport planning and highway maintenance in Nigeria has remained major challenges, encouraging never-ending quagmires of road transport and traffic across the country due to the obvious neglect of a traffic volume survey and the total decline in the provision and maintenance of basic infrastructural facilities such as traffic management devices vis-à-vis control, monitoring, and priority devices; road lighting; night visibility mechanism.

which this study identified as agents for a high-quality physical state of road networks, confirming the clustered character of traffic bottlenecks on Nigerian roads. Based on these findings, the study recommends a total redress of traffic volume survey and road transport planning along road corridors; installation of automated traffic count devices, including permanent count devices and videotaping devices, along major traffic corridors; periodic maintenance of road networks with quality facilities, installation of modern (automated and manual) traffic management devices along road corridors; and prompt road improvement and expansion with a focus on sustainability. Furthermore, research units should be adopted for an efficient, safe, and high-quality road transportation system in Nigeria and other nations with comparable traffic problems.

#### 10) *Traffic Analysis and Road Accidents: A Case Study of Hyderabad using GIS by M. Bhagyaiah and B. Shrinagesh*

Many developing countries throughout the world have been touched by globalisation. India is one of those countries that benefited the most. Increased economic activity increased people's spending levels across the country. This paved the way for an expansion in travel and transportation. The rise in automobiles over the previous ten years has put a lot of strain on the existing roadways, resulting in traffic accidents. It is predicted that there has been a 202 percent increase in two-wheeler vehicles and a 286 percent increase in four-wheeler vehicles since 2001, despite no road extension. Accidents involving motor vehicles are a major source of death, disability, and the need for emergency medical treatment. Every year, more than one million people are killed and 20–50 million are wounded in road accidents across the world.

Over the last few years, there has been an increase in the number of vehicle accidents in Hyderabad. GIS aids in the identification of accident hotspots as well as the analysis of the trend of road accidents in Hyderabad. Finally, the police database and media accounts give information about the volume and kind of deaths caused by road traffic accidents. The limitations of the police database, which is the legal source of information on fatalities resulting from road traffic crashes,

point to the need for a stronger road traffic crash surveillance system in order to collect reliable, accurate, and adequate data on road traffic crashes and the resulting fatalities and injuries.

This might then be used to develop successful intervention techniques to improve city traffic safety. More work is required to get a thorough understanding of the many components of road traffic collisions, and the recommendations for improved surveillance might serve as a first step toward decreasing fatalities and injuries caused by road crashes in the long run.

*11) Effect of road width and traffic volume on vehicular interactions in heterogeneous traffic by Karuppanagounder Krishnamurthy and Venkatachalam Thamizh Arasan*

The validation findings of the heterogeneous traffic flow simulation model show that the model is capable of reproducing heterogeneous traffic flow on mid-block parts of urban roadways to a high degree of satisfaction. The speed-flow relationships created using the simulation model for 7.5- and 11.0-m-wide road areas are found to match the well-established trend of the speed-flow curves, confirming the model's validity. The PCU estimations obtained through simulation for various types of cars in heterogeneous traffic over a wide variety of traffic volume levels show that the PCU value fluctuates dramatically with changes in traffic volume.

Thus, for the traffic condition considered for this study, there is a reason to treat the PCU value for a vehicle type as a dynamic quantity rather than a constant. It was discovered that, due to the complex nature of interaction between vehicles under the heterogeneous traffic condition, the PCU value of vehicles increases with increases in traffic volume at low volume levels, whereas at higher volume conditions, the PCU value decreases with increases in traffic volume. The findings of the simulation experiment to investigate the influence of road width on PCU values show that for every vehicle type in heterogeneous traffic, the PCU value increases as the width of the road space grows.

The comparison of the flow of cars-only traffic and the PCU equivalent of heterogeneous traffic on 7.5- and 11.0-m-wide road spaces to determine the correctness of the PCU estimates suggests that the estimates are fairly accurate.

*12) Impact of institutional distribution on traffic congestion: a statistical study of traffic congestion in Shillong city, Gitumoni Rajbongshi Shillong Commerce College, Meghalaya, India*

This report attempted to investigate the nature of traffic flow in Shillong. It also attempted to investigate the effect of locational dispersion on traffic congestion. The findings revealed that the flow of traffic is concentrated in areas with the greatest number of institutions surrounding them. The alternative hypothesis is also supported by the results of the Chi-square test. It was discovered that the estimated value is more than the critical threshold in all cases, implying that misallocation of government offices and institutions across these selected places causes variance in the incidence of traffic congestion.

Measures to alleviate traffic congestion have also been investigated. The majority of respondents advocated for institutional measures such as the imposition of strict penalties for illegal parking and overtaking vehicles within the city, proper traffic management and planning for the appropriate

location of schools and offices, and the implementation of supply-side measures such as road widening, the construction of 4-lane highways wherever possible, flyovers to discourage roadside parking, road expansion, better road infrastructure, and so on. Furthermore, transfer of offices and other institutions to the outskirts with increased connection, as well as relocating of residential quarters in newly moved respective institutions, might be a significant non-technological policy alternative for diverting congestion in a sustainable manner. The following policy proposals are based on an examination of

1. Steps should be taken to reallocate institutions, along with residences, to the city outskirts in order to divert traffic to less congested locations and reduce the concentration of institutions in a specific area;

2. Steps should be taken to ensure that institutions provide bus services to their employees and students in order to reduce vehicle pressure on the roads. Also, the public transit system might be enhanced to limit the number of vehicles on the road at any one moment;

3. Proper parking facilities should be provided to prevent automobiles from stopping wherever on the roadside and to control it.

*13) Analysis of Congestion using Advanced Traffic Instruments – A Case Study of Chandigarh (India) by Ankit Bansal, Tripta Goyal, Har Amrit Singh Sandhu*

The current study was carried out to analyse the traffic characteristics of Chandigarh's V-2 roads, namely Madhya Marg, Purv Marg, Dakshin Marg, Himalaya Marg, Jan Marg, and Udyog Path, using automated and advanced instruments such as Metro Count for traffic volume analysis and Radar Gun for traffic speed analysis. According to the findings of the study, the following conclusions have been reached:

Mid-block counts show that V-2 roads often have very high PCU, and the volume/capacity (V/C) ratio is currently less than one for all V-2 roads, but as traffic increases, they may soon reach saturation.

Various speed percentiles for different vehicle compositions have been examined, and the average 85th percentile speed (speed limit) for all classes of vehicles has been determined to be 55.5 km/h for Madhya Marg, 59.8 km/h for Purv Marg, 61.4 km/h for Dakshin Marg, 53.5 km/h for Himalaya Marg, 60.7 km/h for Jan Marg, and 53.5 km/h for Udyog Path, indicating that there is a considerable.

*14) Critical Assessment of Road Capacities on Urban Roads – Mumbai Case-Study by Rajesh Gajjar and Divya Mohandas*

To critically examine the present capacity potential of important roads in Mumbai, a comparison analysis was undertaken for the maximum Road capacity values given as per IRC 106-1990 the realistic capacity value on-site for urban roadways. Based on our research, it was discovered that the volume per lane on numerous key roads in Mumbai exceeds the IRC stipulated capabilities by 5% to 70%. Interestingly, despite the high level of traffic, no serious congestion concerns were discovered on these roadways. Some of the causes that might be related to this improved capability are as follows:

1. Science and technology
2. Improved Roads

### 3. Road Familiarity

#### 4. Traffic characteristics in cities

##### 15) *Traffic Flow Modeling and Study of Traffic Congestion by Babitha Elizabeth Philip, Jaseela K. H*

Congestion in traffic is a critical societal issue that requires particular attention. In this research, a model is designed to significantly reduce traffic congestion. For the study, several samples were chosen, and a traffic survey was carried out. The survey data was evaluated to determine if the selected samples were congested or not, and so the samples were finalized. A traffic congestion study was carried out. There was a discussion on the broad causes, impacts, and solutions to traffic congestion. The approach was created as a response to traffic congestion and to provide effective traffic circulation. This work develops the model for a straight connection.

##### 16) *Traffic Volume Time-Series Analysis According to the Type of Road Use by Satish Sharma*

Forecasting hourly and daily traffic volumes is critical for short-term highway facility scheduling. 8 Intelligent transportation systems also require short-term traffic forecasts for vehicle guiding. 1,7 Researchers have created a range of models for specific applications such as anticipating traffic on metropolitan arterial roadways or at border crossings. Short-term traffic forecasting will be an essential problem for all sorts of roadways, from commuter to recreational, as new technologies emerge. A thorough time-series study of various types of roadways may give important insights and ideas for future research.

In this study, time series analysis was used to estimate the following day's traffic volume using the past 13 daily traffic volumes for distinct road groupings. To simplify the research, PTC sites with comparable traffic characteristics were grouped together. Different route groupings were created using hierarchical grouping approaches. The findings were compared using autoregression analysis and time-delay neural networks. Autoregression methods were outperformed by neural network models.

When compared to autoregression, the neural network technique resulted in lower average, maximum, 50th, 85th, and 95th percentile errors for all road categories. Prediction errors were greater on mostly recreational routes than on commuter and long-distance roads. The fact that commuter and long-distance traffic patterns are significantly more stable than leisure traffic patterns supports this conclusion. The mistakes for various PTCs within the same group were comparable.

##### 17) *Traffic congestion study with a reality approach - A review G. B. Ramesh Kumar, K. R. Priyarakshitha*

When compared to vehicles and cars, the number of cyclists travelling is higher. When compared to buses, there are more vehicles and cars. As a result, as the number of buses grows, so does the reliance on public transportation. This will result in a reduction in the number of personal automobiles. As a result, traffic congestion is alleviated, and free flow of traffic is possible. It improves a road user's comfort. We have decided that if the number of buses could be increased, the traffic system would become more efficient. As a result, major changes in public transit are advised. Improving road routes and

infrastructure, as well as providing traffic signals. The appropriate ideas are adapted based on the road structure.

##### 18) *Analysis of Traffic Congestion for a Corridor in Visakhapatnam R. Srikanth, D. Preethi*

The number of cars at Maddilapalem towards Kommadi is lowered to 16238 in the evening compared to 16413 in the morning, whilst the number of vehicles at Maddilapalem towards RTC complex is increased to 16188 in the morning compared to 18038 in the evening.

- The delay is greater from Maddilapalem to Complex than from Maddilapalem to Kommadi. As there will be traffic merging from three points, namely from the highway to the complex (right turn traffic), from the highway to the complex crossing Andhra university, and from the highway to the complex crossing Andhra university. The wait length at Hanumanthawaka junction is less than at Maddilapalem junction because it has a vehicle triggered signal system, which aids in the regulation of delay at such sites.
- The flow is higher in the morning and lower in the evening towards the Kommadi junction, as well as in the direction of the complex.
- As the length of the wait grows, so does the amount of fuel consumed.
- It finds that the delay may be measured using the traffic volume and geometric parameters evaluated.
- At some sites, the delay is determined by geometrics such as curves.
- Among the several possibilities studied for improving this corridor, the construction of a flyover and two vehicular underpasses, one at Maddilapalem and the other at Kommadi junctions, is planned to alleviate traffic congestion at five important crossroads.

##### 19) *Analysis of Speed Parameters of Mixed Traffic Flow on the Sections of Arterial Streets (Jalandhar and Chandigarh Cities) By Peerzada Mosir Shah and Niharika Gupta*

The current study examines the impact of traffic composition on the speed distribution curve on a multilane split urban highway stretch under mixed traffic conditions. It demonstrates that the speed data may or may not follow the normal distribution curve due to the variety and percentage of slower vehicles in the traffic stream such as 3-wheelers, cycles, and cycle rickshaws. The greater the proportion of slow-moving vehicles, such as auto rickshaws and bikes, the less likely it is that speed data would follow the normal distribution curve. A second peak in the speed distribution curve is detected as a result of the increased number of slow-moving cars in the traffic stream.

##### 20) *Analysis of traffic growth on a rural highway: A case study from India, Ramjit Nandakumar, Mithun Mohan*

The Speed Spread Ratio (SSR) proposed in this study can give useful information on the normalcy of speed data. In this study, it is determined that speed data on an urban road would follow a normal distribution as long as SSR is between 0.89 and 1.16. When SSR is less than 0.89 or greater than 1.16, the speed data shows two peaks. The second peak occurs when there is a higher proportion of slow-moving cars or pedal cycles in the

traffic stream.

Traffic increase is a critical factor in the optimal development of future road networks. Accurate traffic growth estimation is critical for transportation planning, traffic control implementation, pavement designs, environmental impact studies, and other highway development demands. The goal of this study was to create traffic forecasting models for individual and combination vehicle types, such as CJV, LCV, MULTI AXLE, and BUS/TRUCK, in order to anticipate Average Daily Traffic in the  $n$ th year. Data obtained from the Paliyekkara toll plaza in southern India were utilised to build a link between traffic increase and the factors that influence it. The major data obtained comprises a volume count of different sorts of vehicles travelling through the toll booth during a 10-day period, both unclassified and classified from the year 2013 to 2018.

To prevent seasonal fluctuations in ADT, data for the month of December was utilised in the simulation. Primary data from several months from 2013 to 2018 were collected. This research took into account some of the most important elements influencing the rise in traffic volume. However, there are several additional elements that may have an influence on traffic increase, and this may produce better models. Furthermore, the suggested approach is developed and tested using data from a single site. Because the parameters studied are not limited to one region, the approach might be tested for application to other routes in India and internationally. This might be taken into account in future studies.

### 3. Conclusion

This paper presented a review on traffic volume and study analysis on different roads.

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