



## REVIEW PAPER ON DESIGN OF MOVABLE DIVIDER

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**Abstract:** From the definition of transportation planning, we discover that “Transportation making plans is the sphere worried with transportation facilities (usually streets, highways, sidewalks, bike lanes and public delivery traces).” Under this area site visitors quantity survey plays a essential function to determine the prevailing condition and to forecast the future circumstance of traffic quantity. Traffic quantity studies are carried out to determine the wide variety, moves, and classifications of roadway motors at given region. These information can help discover vital flow time periods, determine the impact of large motors or pedestrians on vehicular site visitors waft, or document site visitors quantity trends. It additionally creates scopes for Flow fluctuation on distinct approaches at a junction, Proportions of motors in traffic stream, Effectiveness of a traffic control measure, planning visitors operation and manage of current facility, Designing intersection, signal timings, channelization, Structural design of pavements, geometric design and street way capability..

**Keywords:** Road condition, Traffic Volume, Population, Number of users, Accidental study, Traffic Control.

### 1. INTRODUCTION

Only now did I apprehend the reciprocal dating which exists among manufacturing power and the country wide system of transportation, and that the only can by no means broaden to its fullest without the opposite. - Frie This quote describes almost everything about importance of transportation. Transportation is wearing civilization to a brighter future. Now an afternoon’s transportation is one of the most burning issues in each territory of the world. Every country is coming near otherwise in keeping with their needs and fixing their transportations troubles inside their abilities. In designing buildings, we want to decide loads coming to the shape to calculate reinforcement to be provided for safe functioning of the structure. Here in transportation volume serves the identical purpose. For planning, designing and operation of transportation device the first and foremost requirement is extent. Volume is truly the quantity of motors passing a phase of a roadway. Expressing visitors quantity as quantity of motors passing a given phase of road or traffic lane per unit time will be inappropriate when several types of automobiles with broadly varying static and dynamic characteristics arecomprised inside the site visitors.

### 2 TYPES OF ROADS

The street is a paved manner or a course or a thoroughfare which drives you to attain your vacation spot thru motors. Roads are categorized primarily based on unique standards, each amongst them is in addition categorised into distinctive styles of roads. In this submit, I give a short description of every and every type and terms which you often concentrate when a person talks about roads. Roads are in the main labeled as follows :

#### 1) Classification Based on Speed and Accessibility:

##### o Freeways

Freeways are extensive roads designed for fast-transferring cars to journey long distances with better speeds. These are typically designed in four lanes, lanes in each path. Traffic movement on freeways is continuous and unhindered due to the fact there are not any railway or road intersections and no indicators.

##### o Expressways

Expressways are one of the superior sorts of access-managed roadways wherein the entry and go out of the freeway are absolutely controlled by means of ramps.

##### o Highways

2) Highways join villages to cities or towns to cities or state to country or the roads connect the country capital to the country wide capital are known as highways. Highways are the roads run through the duration and breadth of the united states of America

#### 3) Nagpur Road Classifications:

o Nagpur is a metropolis named in India. Nagpur class is observed in predominant parts of the arena. Let’s discuss the one of a kind types of roads based totally on Nagpur type

- **National Highways**
    - National highways run for the duration of the length and breadth of the usa. These roads join state capital towns to the country wide capital town. A minimum of lanes, one for every path is furnished for National highways and those two lanes are divided by a strip of boulders.
    - The minimum pace of 80Kmph should be maintained on National highways. They are typically labelled with numbers NH1, NH70
  - **State Highways**
    - State Highways connects the crucial cities of the nation to the kingdom capital city. State highways provide get right of entry to to attach National highways. They also are related to the nation highways of the neighbouring states.
    - A minimal of two lanes are furnished but they will or might not divided with a strip of boulders
  - **District Roads**
    - District roads deliver get entry to to connect with the State highways. District roads connect the crucial cities of the district and they are also related with the neighbouring district roads.
    - There are two exclusive varieties of district roads
  - **Village Or Rural Roads**
    - Village roads are the roads in villages. These roads lead to the nearest town and also connects to the important areas of the villages like temples, churches etc. Village roads are also connected to the neighbouring villages.
- 4) **Classification based on Carriageway**
- **Paved Roads**
    - The roads which are designed with a hard pavement course such as Cement concrete, Bituminous and WBM are called Paved roads.
  - **Unpaved Roads**
    - The roads which are not designed with a hard pavement such as Kankar, Earthen or Murram are called unpaved roads.
- 5) **Classification based on Topography**  
Roads are classified into two types considering topography they are Hilly roads and Plain roads.
- **Hilly Roads.**
  - **Plain Area Roads**
- 6) **Classification based on Traffic Volume:**  
This classification based on the number of vehicles passing through a specific route.
- **Low Traffic Road**
  - **Medium Traffic Road**
  - **High Traffic Road**
- 7) **Classification based on Traffic Type:**
- **Cycle Tracks**
  - **Pedestrian Tracks**
  - **Motorways**

### 3. TRAFFIC VOLUME STUDY

A piece of statistic from the Pune Traffic Police web site illustrates the magnitude of the problem: While length of roads in Wagholi increased two times between 1951 and 2018, the population increased 5.4 times and the number of vehicles a whopping 43 times.

	1951	2018	Increase No. of Times
Road Length (kms)	837	1900	2.27
Population	29.9	160	5.35
No. of Vehicles	35000	15.03 lakhs	42.94

In the process of the field study of transportation there are n numerous problems arising due to the unethical traffic conditions. There are mainly 6 stations requiring immediate aid to the traffic snarls. The main road arriving from Awhalwadi phata towards Kesnand phata has a religiously importance. The Wagheshwar Mandir arrives at this location. Where a mass number of people flow in Due to the public transportation system and decrease road width the pedestrian traffic has a tendency of refusing use of footpaths provided and using the roads for continece and fast movement. This further increases the problem of traffic congestion thus leading to tremendous wastage of time, energy, fuel and likewise money. The V-shaped cutting of roads at the Gokul Halwai Junction also faces the problem of heavy traffic chaos due to the reducing road width due to two main reasons, namely sudden increase in traffic and occupancy of the Hawkers. A provision for parking is being made nearby which in turn creates more problem of congestion for the entrance and exit of vehicles.

Type of Vehicle	No. of Vehicle	Type of Vehicle	% Of Vehicle
Heavy Vehicle	200	Heavy Vehicle	4%

Auto Rickshaw	250	Auto Rickshaw	5%
Two Wheelers	300	Two Wheelers	60%
Car/Van	1300	Car/Van	26%
Bus	250	Bus	5%

The coping with of the visitors for sustained drift for the duration of the years in one of the maximum faced demanding situations within the discipline of town planning. A city that has deliberate a few years ago has its personal disadvantageous outcomes. Pune city being one of the oldest city civilizations, the improvement plan followed historic. Thus, it is now going through the problem of visitors.

**4. TRAFFIC MINIMIZATION**

Type of Vehicle	No. of Vehicle
Business	1850
Shopping/Tourists	2250
Crossing	1000

Type of Vehicle	% Of Vehicle
Business	37%
Shopping/Tourists	45%
Crossing	20%

Traffic obstacles preserve vehicles within their roadway and save you them from colliding with risky barriers such as boulders, sign supports, trees, bridge abutments, buildings, walls, and huge hurricane drains, or from traversing steep (non-recoverable) slopes or entering deep water. They also are set up within medians of divided highways to save you errant cars from entering the opposing carriageway of site visitors and assist to lessen head-on collisions. Some of these limitations, designed to be struck from both aspect, are known as median barriers. Traffic boundaries can also be used to guard prone regions like college yards, pedestrian zones, and fuel tanks from errant vehicles. While boundaries are usually designed to minimize injury to automobile occupants, injuries do occur in collisions with traffic barriers. Where feasible, it's miles most effective to do away with, relocate or modify a chance, in place of protect it with a barrier. To make certain they may be safe and powerful, site visitors obstacles go through significant simulated and complete-scale crash checking out before they're accredited for trendy use. While crash checking out can not reflect each capacity manner of impact, testing packages are designed to decide the performance limits of site visitors limitations and offer an adequate level of safety to street customers.

**5. ADVANTAGES**

- o Increase the efficiency and life of roads.
- o Reduces traffic volume at a particular section.
- o Provide better means for development of infrastructures.
- o Provide better means to utilize other roads in case of special events in the city.
- o Provide estimate of no vehicles against no of persons.

**6. DISADVANTAGES**

- o Cost: This option utilizes a low number of very expensive sensors. Municipalities must maintain camera networks, and analysis of the data can be labour-intensive.
- o Limited access: It's illegal for municipalities to give access to data without consent unless costly de-identification techniques are applied. These techniques typically reduce the usability of the data.
- o Limited coverage: Information is only available where cameras have been placed.
- o Accuracy: Cameras may lose accuracy in heavy storms or other extreme conditions.
- o Limited data richness: It's difficult to get any information beyond speed and location.

**7. CONCLUSION**

Based on our end result, we acquired that the automobile/taxi are the bulk of the automobile on the vicinity. The 2d maximum avenue users could be the bikes, observe by pedal. Moreover, long length hours of observations must be performing with the intention to have a higher knowledge of the visitors extent at the junction. In end, our targets of the have a look at are carried out.

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