



REVIEW PAPER ON DESIGN OF MOVABLE DIVIDER

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Abstract: Technology is one of the precept driving forces in gift international, it's miles reworking our lives and shaping our destiny. Various new technologies are making every day existence greater comfortable in their personal ways, one such generation is cloud computing. A cloud as many blessings like safety, flexibility and fee effectiveness, because of which it could be used in lots of packages. One such software is in embedded device. In this paper we're offering an utility of public cloud incorporated which embedded structures. Traditional avenue barriers are constant to their role which makes handling of visitors difficult throughout top hours. So, to overcome this we got here up with an concept of making movable limitations. This paper targets to provide a greater efficient way of solving problems going on with the existing structures. By the use of the cloud era, we are trying to help the commuters who face issues achieving their vacation spot in an efficient manner.

Keywords: Movable divider, Low-Cost Material, Recycle Reuse Plastic, Traffic Volume, Speed Limit, Safety.

1. INTRODUCTION

Traffic is inherently chaotic and noisy. Identification of importance of traffic congestion is an crucial requirement for defining the congestion and locating suitable degree. The essential consciousness of this task is aimed at expertise the routine traffic congestion, its dimension, precautionary degree and shows a remedial measure for the identical. This report will talk the implementation of movable traffic dividers as congestion launch strategy for Pune in the site visitor's prone areas in place of conventional answer of widening the roads.

There are one of a kind kinds of Movable Road Dividers;

- Metal limitations dividers
- Zip kind movable road dividers
- Movable avenue dividers using IOT

Metal limitations are the sort of dividers which might be manufactured from iron, tide by chains to hold then in collection and to keep away from movement of individual limitations. Each barrier is connected to small wheels for the motion motive of divider. This type of dividers is operated manually so requires greater man electricity. Such sort of dividers is irresistible to climate modifications. Wear and tear of the metal boundaries is more, so high upkeep fee is needed. Zip type Movable Road dividers are combination of concrete boundaries of span 1m to 1.5 m stored in sequence and this are shifted the usage of a device known as zipper system so known as as zip type movable avenue divider. This are operated routinely so require much less man electricity. These boundaries are heavy in weight, and preliminary value for casting of concrete barrier is excessive. Time required for shifting of divider is extra approx. It requires 2 hours for a kilometre distance.

2. TRAFFIC STUDY

It may be visible from determine no 2 & 3 that the velocity of the car reduces considerably throughout the height hours. The principal drop in the value is accounted to the exceptional boom in the variety automobiles flowing. It became determined that the count of vehicles heading closer to Wagholi is as excessive as 12500 during the morning height hours. This variation in the

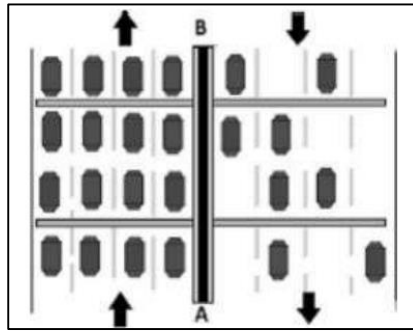


Fig-2 scenario without mtb

depend is operating as a symbolizing Factor for the vehicular delay, reduced speed, increased pollution, inefficiency in optimum utilization of the available space. Having a close look at the graph depicts the rope and rise in the average speed of the vehicles but in a definite pattern. Supposedly, lane A is considered, the average vehicular speed is high at around 7.00 hours and as the time passes, the number of vehicles passing also increases significantly showing a drip in their average vehicular speed but this pattern is observed only for some time.

Fig-2 scenario without mtb

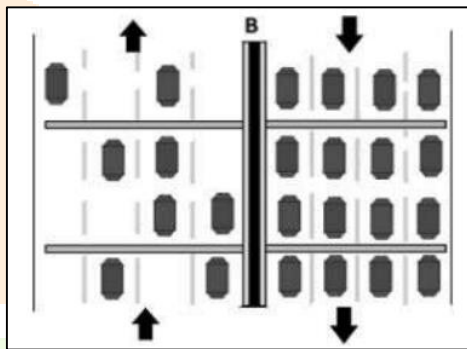


Fig-3 scenario without mtb

3. METHODOLOGY

3.1 Selection of Material for Construction

3.1.1 Component Used

1. Fibre For Divider

A Jersey barrier, or Jersey wall, is a modular concrete or plastic barrier employed to split lanes of traffic. It is designed to minimize automobile damage in cases of incidental touch even as still stopping the crossover case of a head-on collision. Jersey boundaries are also used to reroute visitors and protect pedestrians and employees at some stage in toll road creation, in addition to brief and semipermanent protections against land borne attack such as suicide automobile bombs.

2. LED Light For Signal

Traffic lights, also known as traffic signals, traffic lamps, traffic semaphore, signal lights, stop lights, robots (in South Africa and most of Africa), and traffic control signals (in technical parlance), are signalling devices positioned crossings, and other locations to control flows of traffic.

3.2 Construct A Divider

The road intersections, pedestrian The Road Zipper System is designed to create a flexible, positive traffic barrier between opposing lanes of traffic, or between motorists and construction work zones while managing congestion. The system can create additional work zone space for construction crews, and provides more lanes to the peak traffic direction to mitigate congestion and accelerate the construction process Improves safety Workers and motorists have positive barrier protection at all times. Reduces congestion Allows more lanes to be open for peak traffic by reconfiguring the roadway in real time. Speeds construction by combining or eliminating stages due to the larger work space, contractors can save months or even entire const seasons. Creates efficiencies and increases quality Dedicated haul lanes create safer, more efficient deliveries and material staging. More work zone space allows contractors to use larger, more efficient equipment, resulting in better quality repairs that last years longer. Allows for rapid stage changes Moveable barrier reconfigures the road in minutes. It can take days to reposition thousands of temporary concrete barriers.

4. APPLICATIONS

- 1) Its applicable in most of city in the Pune.
- 2) Big highways where the village in the way their type of system will helpful.
- 3) It will applicable in the cross road and traffic zone.

5. ADVANTAGES

- 1) MTD can be used effectively to change configuration of existing roadway so as to optimize the efficiency of road.
- 2) Movable divider aims to maximize the efficiency of existing road and minimize the congestion.
- 3) The movable divider can be used as a basic design of a new structure such as bridge, flyover which is used for regulation of traffic.

6. CONCLUSION

Road safety barriers increase safety on the road by ensuring a collision mechanism to protect passengers and other road traffic participants, as well as to reduce traffic problems and by keeping the vehicle in the driving lane. By using movable road divider, we enriching public demand to reduce traffic problems as well as reduce accidents and help people to enrich early they destination. To make the barrier system comply with the imposed requirements, the compatibility of barrier height and soil is important. Further research is necessary to explore the influence of the efficient of friction between different types of cars, barrier collision mechanisms, and collision consequences.

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