A Study to Examine Problem of Traffic in Urban Areas

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Abstract **- Overcrowding and traffic delay have been recurring concerns in all areas of the country. The key explanation is that, due to the distance and the constraint of prices, the transportation growth is slow in contrast with the rise in the number of vehicles. As traffic on the website is non-lane as well as chaotic, separate styles of cars are largely uncommon. Under complex conditions of travel, metropolitan area highways. This particular paper studies the traffic scenario in areas that are urbanized as well as the policy measures are undertaken to conquer the situations.**

Index Terms **- Traffic, problem, urban, roads.**

I.INTRODUCTION

Most of the city's streets are built for traffic levels only. Delay, pollution, and injuries are the eventual consequence. In certain cases, traffic can be regulated, administrative interventions enforced, and maintenance strategies introduced to optimize commercial usage of the streets can solve the resulting ills. Traffic management systems require signals from traffic and regulation measures include speed limitation, parking, car size and so on. The third of the traffic engineer's steps is classified as measures of traffic control. The steps are often included in the TSM."

The main strategy in transport management initiatives is to maintain the current road pattern as far as possible, but to change the movement structure in certain roads so that the method is utilized more efficiently. "Minor improvements are also unavoidable to the traffic lanes, intersections etc. Which are included in the control steps. The basic goal is to adjust the pattern of traffic on current roads in order to reduce the confrontation between cars and foot.

II.TRAFFIC THEORY AND ITS CONTROL

Like many other disciplines, traffic theory attempts to explain and improve a physical phenomenon. Automobile travel and its relevant issues including road disorder are the phenomena covered by traffic theory. Any notable scholars laid the groundwork for the perception of automotive travel in the middle of the twentieth century. Traffic theory continued the pattern of other physical sciences and several physicists who went into the area to introduce the models of traffic. The theory of traffic explains and demonstrates the primary traffic movement models and relevant traffic dynamics such as traffic disputes, route and traffic assignment conflicts and traffic management. The application of these different models is discussed both in terms of how the road networks have changed over the years and how improved application of these models will accelerate the efficient usage of the Smart Transport Framework (ITS).

The main objective of traffic theory is to determine the relation between the three components. They are:

- How the system has to be dimensioned in order to achieve a given quality of service with the given system?
- The quality of service experienced by a user i.e. the traffic participants in a given system with given traffic load.
- How big can the traffic load be without deteriorating the quality of services?

III. NATURE OF TRAFFIC PROBLEM IN CITIES

Two of the most significant characteristics of contemporary society are urbanism and industrialization. Industrialization has rendered it possible to profit from economies of scale, group multiple factories together and bring many individuals, raw materials and equipment into contact. With the existing high level of technology, innovation and knowledge, urbanization is imminent on a large

scale. Urbanization provides exchange, transportation and manufacturing with the requisite infrastructure. It also offers a higher quality of life in schooling, health care, leisure and other academic programs. Urbanization attracts the excess workforce and uses it to handle the varied resources necessary for the life of towns and communities.

Figure 1: Condition of Traffic in Urban area

India is still one of the countries having a low degree of urbanization. Nations estimate show that 47 percent of the world population line in urban areas. Looking at the growth of urbanization in other Asian countries, it is seen that countries like China and Indonesia started with low levels of urbanization in the 1950s, but the degree of urbanization there is now 32 and 41 percent respectively. Thus, India is also poised for a big jump in the degree of urbanization over the next few decades. Traffic engineers and transport planners have to meet this challenge. Demand on land is that as cities are increasing. The need for housing and workplace space is becoming urgent. Office buildings appear to cluster in the middle of the city to overtake current suburban areas. High-rise towers, with great expenditure, are rising to host the bureau. The homes start getting driven out to the city limits, raising the separation between the offices and the household. This causes the need to transport citizens from the outer edge to the inner center in significant numbers. Adequate to the needs of the region, the current transport network is overwhelmed and inadequate to satisfy the newly generated transport demand." The failure to satisfy the high demand of the transport network also results in the redistribution of operations, where soil remains inexpensive and transport capability exists for each movement of individuals and commodities.

Traffic Growth

The private automobile is the most flexible humanly built transport vehicles. It allows the commuter to ride as you wish and frees him from being exposed to stiff bus transportation schedules. It is easy and relaxing. Indeed, it is a sign of rank in modern culture. Its virtues draw the urban higher-income community. Nearly every household owns a vehicle in most developing countries. The owners should conceive about the family's second vehicle. With respect to the future, a modern form of transportation that can seriously contend with motor cars is impossible to see. Although the ongoing oil crisis has offered the automotive industry a big lift, nothing will displace the car from the sovereignty of the pedestal. The inevitability of the motor vehicle on the lane must also be taken into consideration. A variety of reasons will affect the rise in the number of motor vehicles. The rise in family incomes is primarily among them. There would also be major considerations such as vehicle costs, fuel rates, insurance rates, tax levels, transit demand, etc. Taking into account the world pattern, the development of urban traffic in developed countries in the coming years can be assumed to be very rapid.

Urban Traffic Conditions Difficulties Nature

The most serious effect of increasing urbanization and accelerated growth in traffic is the severe congestion on the streets. The condition results in concentrated traffic demand, both in time and space. This situation was never met with the current road infrastructure that developed through the centuries. The very benefit for the motor car, namely that it appears impossible to harvest the potential to provide door-to-door operation. You cannot pause the car to go down at your own discretion. In certain parts of the community, parking in a convenient location is almost difficult. Too many constraints hinder the loading and unloading of materials by commercial vehicles. Delays and time costs stem from congestion. Frustration and delays are liable for driver tension. The rise in road injuries, which annually impact human life, have become an unintended effect of the increase in traffic. The pedestrians are the casualties of numerous incidents. Another community of children and the elderly are harshly disciplined.

The following are some measures to meet the situation exacerbated by the worsening conditions of traffic in the cities:

a. Transportation Studies Needed
b. Land Use and City Planning Controls
c. Promotion of Public Transport
d. Traffic Restraint Measures
e. Fiscal measures such as road pricing and entry charges
f. Restriction on parking
g. Staggering of Office Hours

Urban Transportation

Public transit offers individuals and products in towns with connectivity and versatility. The urban transit structure is categorized into numerous components including transport by public (collective), private, non-motorized "(pedestrian, bicycle) and freight transport. For productive economic development and enhanced quality of life, successful urban transport networks are important. Urban transit gives links to main facilities and social events. In order to guarantee the mobility of their clients, staff and vendors, company operations depend on urban transit networks. The programs of community transport include vital social and economic services like relaxation journeys, work trips and visits to different organizations. Another study that transit connectivity is one of the major variables that directly influence urban transport efficacy satisfies the criteria for accessibility inside cities.

Road Accidents and Injuries

Today 3,000 people are killed on the highways of the nation, with 30,000 being critically wounded. The fatalities and accidents occur primarily on foot, bicycle, bus and infants. The vulnerable are overwhelmingly impacted by traffic injuries. Car ownership is increasing by more than 20 per cent a year in metropolitan cities such as Kolkata, Delhi and Mumbai, with little attempt to develop road connectivity. In the region, where car growth in high-polluting diesel and two-stroke engine automobiles is highest, developments in automobile, engine and fuel technology are less important. Transport technology represents an obstacle to automobile and human travel. The partial definition of modernization is that drive traffic is just congested, poisoned by air and congested traffic. In metropolitan areas, the average speed at peak periods is about 17km-1 apart from some deaths in the major business districts (CBD). Walking and riding fatality rates are high at 66- and 55-times during peaks hours.

IV.SUGGESTION FOR IMPROVING TRAFFIC CONDITIONS IN URBAN CITIES

Some suggestions are given to improve the problem and condition of traffic in urban area is providing as given: -

1. The regulation of traffic congestion on a cost-effective base can involve road transport policies. Excessive congestion imposes direct and indirect burden on travelers and urban dwellers.
2. Poorly managed, ill-equipped roads typically end in a chain reaction, impact and prevention of collapsed roads. Bumpy trip slow traffic pain triggers man hour loss. The expense of repairs, car injuries, the lack of living and land would also be raised. Hence a separate urban body should take care of the free flow of day-to-day traffic.
3. Road safety can be ensured by regulating the movement of heavy load vehicles, paying immediate attention to the problem of bad visibility, muddy, slippery roads etc.
4. The deteriorating condition of the roads and the non- functioning of most of the available facilities attest to the level of repair of roads by government agencies charged with the responsibility of road maintenance. Negligence and dereliction of duty by the concerned authorities should be made accountable.
5. Congestion is one of the most prevalent transport problems in large urban agglomerations. The supply of road infrastructures should keep up with the growth of mobility of vehicle population and traffic.
6. Vehicles involved in accidents or mechanical failures should be removed as quickly as possible from the road. Since accident on average account for greater chance of congestion, an emergency mechanism should be in place to take care of the accident site for free flow of traffic.
7. Replacement of fossil fuels is a method to minimize pollution of biodiesel, methanol, gasoline, battery-powered cars, LPG, natural gas etc. in particular of slow-motion vehicles.

8. Strong engine overloads contribute to higher fuel usage and pollution, meaning that a minimum fee or weight should be established, and load fines can be levied above this. Regulatory intervention would deter overly heavy emission cars and the inability to comply with traffic and other legislation.
9. Maintenance of cars is a responsible driver for higher emissions and will help ensure sufficient maintenance of vehicles and reduce the emissions of old automobiles.
10. Powerful 'ROADS & ROAD USERS ACT' for successful tracking of all highway, road and road operations must be available. Adequate space should be given on either side of the roads for the free movement of pedestrians and cyclists.
11. Efforts should be taken to allow only the fit vehicles to ply on road and not condemn one. All the vehicles should keep the head light, indicators and horn in perfect condition in order to avoid accidents and to ensure free flow of traffic.
12. Vehicles licensed for one reason do not conduct other work without the road department's prior approval.
13. The link between road transport, community development and public health players should be proper.
14. To have access to information regarding the importance to public health of a large variety of transportation options and to prevent harm to health.
15. Priority for transport types with lower risk of health, reduced noise, low risk of injuries, higher physical exercise per unit of ride.
16. Public transit, cycling and walking, and integration between all types, should become a focus in urban space.

V. CONCLUSION

If everybody thinks with regards to this particular trouble & understand. The way to understand to genuine issue and turn into aware concerning it, the trouble is going to be tending to reduce. Traffic rules and applying policies are subsequently, the specialized road users' private businesses. Introduction of Engineering, Education and Regulation in the urban regions by implementation 3E's road safety rules (EEE). Road computer users really should follow the queue inside lane. Zigzag driving needs to be stayed away from. If they transfer right, the overcrowding and delay would be minimized in the Urban Area. Alternative routes for 2 wheelers have to be proposed as they push their vehicle in zigzag fashion at varying speeds on the major roads of the metropolitan city. It is also necessary to enforce the above recommendations and issue authority/engineer can prepare on the basis of restricted restrictions.

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