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The Matter and Solution for Reducing the Traffic Congestion and Traffic Jam In Vietnamese - Big Cities

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Abstract

One of the indispensable activities of people today is to participate in traffic. Society is growing and people's needs are becoming increasingly essential. Therefore, traffic has become a terrible congestion and is one of the hot issues of the world, especially in Vietnam. The economic and social harm of traffic jams is very big. Probably, no one can quantify it with specific figures (estimates of damage in 2007 in Ho Chi Minh City is about 14,000 billion). Traffic congestion has affected all aspects of social life (economics, transportation, education ...) and all people, even the people present in the affected area, to the indirect objects Other (regardless of space and time). In the age of "globalization", traffic jams in Ho Chi Minh City may affect the production and business activities of many companies in the United States, Japan, Britain, Australia and Argentina for many days, many months and years. Traffic jams are a pressing issue in society, especially in large cities such as Ho Chi Minh City, Hanoi ... so the traffic jams are and will be an urgent task. And the importance of the transportation industry.

Keywords: urban traffic, traffic jam, traffic congestion

Introduction

The economic and social harm of traffic jams is enormous, perhaps no one can quantify it with specific figures (estimated damage in 2007 in Ho Chi Minh City is about 14,000 billion copper). Under current economic conditions, the living standard of the people is increasing, the proportion of cars is increasing, if not quickly implement reasonable solutions for transport infrastructure development, the state of congestion. It will become increasingly serious, which will upset daily routines and severely affect the health of the community, particularly as a national problem, constraining capital inflows and obstructing them. It is the development process of the country. There are many reasons for traffic jams. In Ho Chi Minh City, the majority of cases are due to sudden increase in traffic volume while poor transport infrastructure (narrow roads and pavements, inadequate traffic, etc.). In addition, in recent years, the warming of the Earth has caused torrential rains and tides to soar, flooding in many areas, crippling traffic and causing many rounds of traffic jams. Very serious. For the Vietnamese society today, no one is unfamiliar with the current state of traffic jams. It gradually becomes a familiar image, which every day is a matter of course, inevitably and no one has come up with solutions to thoroughly solve this problem. During peak hours of 4-5pm, when you are out on the street, you will be horrified by the horns of thousands of motorcycles, hundreds of cars and many other vehicles. The wide road seems to be overloaded, not enough to accommodate people and vehicles in the traffic, so people and cars are so unequivocally straight to the sidewalk, then tied together without landing. I do not care that I just made a new source of traffic jams. At every intersection, traffic lights, such as disabled, even when there is a policeman in the direction of the road, the vehicle drivers to solve the congestion still have the motor batter from one side to the other, what is uncultured and unconscious? Vehicles passing by, cars going along, cars going down, cars going backwards, cars also emit loud horn, feeling out of the way at that time is a battlefield of animals. In spite of all the rules of traffic safety regulations that justify their purpose.

This is just one of the many signs that often cause traffic jams. There are a lot of pictures,

other bad actions that just steps to the road, especially in peak hours, you will be "eye contemplation" terrible. What is the cause of traffic jams? This is indeed true and I believe it can be said in a series. First, there are people pouring too much traffic leading to congestion and when jams, people do not need to know what the traffic rules are. Everyone wears a hat, everyone is strong and goes home first. As mentioned above, they are ready to take the car onto the sidewalk - one way to get around, get things done, in time, quickly get home without taking care of others. Whoever says something, say who. Whistles whistle, our way, what we do. That is the motto and also the general psychology of all people involved in traffic jams. This is the most common cause of traffic jams. The next cause also contributes to the "social destructive" this is the traffic lights at the intersection, the fall has broken many days that no one cared for. That is the favorable conditions and even the reason for people to move freely at their own will. Imagine, just in a crossroads, but all four sides go to the same mass to go straight, in a crossroads where the four all together to go straight forward, turn left, back Turn right, you can rush to each other at the same time, no traffic jams is strange. No traffic lights, thus people do not comply, but the big crossroads are full of light, people are not ready to obey-what a chaotic chain. The turbulent nature of the traffic has also become a terrible mess. But it cannot be said that the cause of traffic jams is also due to the authorities contribute a small part. Sometimes, during peak hours, the "valuable" appearance of police officers "liberated the battlefield", then the broken lamp posts, the unfinished construction works are suddenly canceled. For several months, due to reasons that were completely unreasonable for several months after being repaired, the public was again. But much of it is due to the consciousness of people and people directly involved in traffic. There is a deeper reason, that in recent years, rural people to over-urbanize to live, find jobs also cause many annoyances, social frustration and typically cause the situation. Traffic jams. As said, traffic jams are now a social problem so the harm that it causes is not small and no less. Traffic jam is the most common cause and contributes the most to pollution, destruction of the environment. At peak time, not only the ears are beaten by the car horn. The horrible lungs, the two precious lungs of each person stand at the risk of infection very high, because even with a mask cover up, we still need to breathe and do so. How to avoid the inhalation of so many toxic smokes from the hood of motorcycles, cars and other means? It is a well-rounded cycle, the more we discharge, the more we breathe, and so on, we ruin our lives. Even knowing that the rush hour is when everyone's gone, school to return home after a hard working day, so everyone is tense and angry. Then get on the road to traffic jams, so it's easy to get in the wrong direction just to get home, get out of the car, smoke and snores. But not everyone knows that the consequences of these actions are unpredictable, it easily causes traffic accidents for many people, including you and also can take life again. So quit speculating that you are tired, irritable about something, just hoping to get home quickly, regardless of traffic rules, to cause unpredictable actions and jobs that lead to consequences, extremely unfortunate. Remember: Life is priceless. It's a slow minute, not a lifetime loss. The traffic jam and congestion is shown in Figure 1.



Fig.1: The traffic jam and congestion in Ho Chi Minh City [1]

Traffic jams are an urgent matter, requiring quick solutions to tackle this problem in a timely manner. Let us not be in charge of criticizing the authorities, but first look at ourselves. Every participant in the traffic must have the sense of voluntarily abide by all regulations and rules on traffic safety for right and good; Those who do not directly control the means of transportation should remind the operator to abide by the rules, do not see people crossing over, or to borrow late hours ... in spite of everything they want to do. On the other hand, the authorities should also pay more attention to the real life of the people, do not "forget" the broken lampposts, broken rituals or works are under construction the building materials are so unmistakably tucked under the road. In addition, countries should have a very good and practical rule: Anyone who violates, regardless of whether the offense, big or small, is a financial hit. In our country should be so strict punishment of the violation including accidental. At peak times, functional agencies should also mobilize more police officers to stand at more intersections to control and quickly resolve traffic congestion. However, it is impossible not to mention a desirable work of the Vietnamese, a mandatory rule for motorcycle riders - the main means of transportation in Vietnam, since December/2007: On the road, joining traffic is to wear a helmet. Most Vietnamese have complied with this regulation and as a result, traffic has improved somewhat, traffic accidents in the past two years have also been considerably reduced.

The causes resulting in traffic jam

Traffic volume

Traffic on many roads is always high. During peak hours, all types of transport (from the modern to the rudimentary, from small to large) are jammed on the road as "mortar wedge", especially on the roads and junctions. Main. If traffic jams occur, traffic jams and traffic jams can occur. Thanks to high economic growth, the proportion of cars in the car is increasing. With the current economic growth rate, in the coming years, traffic volumes will continue to rise and the risk of traffic jams will be even more severe.

The composition of the vehicle

Composition of the car is very complex. Depending on the regulations on organization of traffic, on the streets, the composition of the line is very diverse. For normal streets (without specific traffic regulations), motorcycles often account for a very high proportion (50-80%), the proportion of bicycles and rudimentary vehicles is also very high (3- ten %). Many vehicles with different sizes and

speeds running on one lane (4 lanes) cause many dangerous situations and often interfere with one another's mobility. During peak hours, only negligence, traffic jams and accidents can occur immediately and cause traffic jams. With the development process, the composition of the vehicle is increasingly uniform, gradually reducing the two-wheel vehicle, rudimentary vehicles and gradually increase the automobile (Resolution 32 of the Government will make this trend change faster). Due to the large size of the cars compared to two-wheelers and rudimentary vehicles, in the coming years, the risk of traffic jams will be worse.

The traffic system

Traffic system is overloaded. The original plan of Ho Chi Minh City was implemented on a scale of about 2 million people and in the process of development, the functional departments did not adjust the plan properly (currently about 9 million of which over 2 million people are staying), making transportation infrastructure become too weak. The street network, especially the central area, has narrow characteristics (main street ≤ 4 lanes and street ≤ 2 lanes), traffic density is quite high (about 10-20 nodes // km²), the average distance between the nodes is quite short (about 200-300m), so the travel of the vehicles is difficult because they have to constantly increase, reduce the gas continuously and speed the car is often very low. In the process of urbanization, the construction of many office buildings in the central districts (District 1, District 3) has increased the travel demand of businessmen and traders, the expansion of the city also increasing the demand for travel between areas, but the transport system has not been expanded properly (especially the main roads) ... The overload of the road system is the cause of traffic jams often occur at the intersections during peak hours.

In the past few years, the transportation system has grown very slowly compared to the growth rate of cars and population. Without proper attention, in the coming years, overloading will be exacerbated. In order to meet the development requirements, it is necessary to build boulevards of reasonable size in the central areas and offices, commercial centers, hospitals, schools and commercial ports. Roads in the neighborhood should also be upgraded to meet the increasing demand for automobiles.

Static traffic

Due to the inadequacy of planning, the static transport system has become very weak. Due to its architectural features (street-side townhouses covered with road surface), dense construction density (including areas in the alley), very narrow sidewalks, very few parks ... It's very difficult. In order to meet the demand for parking (about 3.6 million individual vehicles in 2007, excluding the current cars), the city needs to have a well-developed static transport system. However, in reality, the wharf system only meets part of the requirements for temporary stopping and stopping of transport means (interprovincial). It is possible for people to send their personal vehicles (day and night). Parking on the sidewalk (in the day) is a violation of traffic laws, hindering pedestrians and parking in the home (at night) is unsafe and very dangerous (in terms of fire). In addition, such parking is only possible for two-wheelers, while for cars it is extremely difficult, especially for large cars. The inadequacies of the static transport system cause

the vehicle to ramp up (on the sidewalk and roadbed), making the road more overloaded resulting in traffic jams. The trend toward higher automation is indispensable. Without proper attention, over the next few years, indiscriminate parking will be a serious social problem, making traffic jams even more serious. To meet the requirements of development, the system of yards and yards should be arranged reasonably (convenient, safe and reasonable for each area). This requirement is required first in the downtown areas, where population density is very crowded.

The pavement

Due to the inadequacy of planning, the pavement system has shown many limitations. Most of the streets have sidewalks but the width is usually very narrow (mostly 3-6m), especially the street without sidewalks. On the sidewalk there are many green trees with many diverse sizes and countless electric poles, signs ... occupy most of the width of the sidewalk. Because of lack of investment, the sidewalks are often uneven (mosaic in each street), pavement material is also diverse (stone, gravel, concrete, brick ...). In places where there are no green trees and electricity pylons, people often encroach as places for sale, parking ... Most sidewalks do not have walking paths, if any, they are very narrow and discontinuous. Most pedestrians are required to use a part of the roadway to travel (which is for motorized vehicles) so it is very dangerous to have traffic accidents. Poor sidewalks are responsible for slowing down the development of the public transportation system and causing the demand for personal vehicles to rise sharply ... and inevitably causing the traffic jams complicated. .

Without proper attention, pavement and pedestrian systems cannot meet development requirements and in the coming years, traffic jams will be more serious.

In order to meet the development requirements, pavements should be large enough to provide technical infrastructure (electricity, water, optical fiber, etc.), trees for trees (filtering out air pollution and reducing noise impacts), noise, pedestrian lanes and lanes for residential activities.

Crossing the road

Due to the inadequacy of planning, the pedestrian crossing system has become very obsolete and does not guarantee traffic safety. The weakness of the traffic system is the lack of an over-the-counter (high or high) crossing. The use of pedestrian crossing the road, while the traffic is very high and the sense of obeying the traffic rules is very poor, so traffic accidents always stalking, especially for the elderly, children, people with cardiovascular disease ... In fact, for large roads (≥ 4 lanes) and high traffic, ordinary people walking across the road is very difficult. An unsafe pedestrian crossing is the reason for the slowdown in the development of public transportation, resulting in a sharp increase in the demand for private vehicles ... and therefore the traffic congestion has taken hold, complex variables.

Without proper attention, the pedestrian crossing system cannot meet development requirements and traffic congestion will become increasingly serious. To meet the development requirements, the pedestrian crossing system needs to ensure pedestrian safety. It is necessary to build crossing paths that are different from those at wide roads and large traffic volumes.

The water drainage system

Due to the inadequacies of planning, the drainage system has also become very weak. Most of the sewers are built asynchronously (inadequate in size and drainage capacity ...). During storm and tide days, the weakness of the drainage system causes flooding in many streets, causing traffic congestion and polluting the environment. In the past time, flood prevention has not yet brought about effective solutions to the floods. In the increasingly urbanization, the city has become more and more widespread. In the new urban areas (suburbs), the rivers and canals in the suburbs have been increasingly narrowed. The risk of flooding due to rainstorm and tides will increase. There are many cases of traffic jams due to heavy rain or high tides breaking the dykes (overflowing or breaking dykes) flooding in many areas. The weakness of the drainage system is the cause of the traffic jams complicated more complicated.

Without timely upgrading of the drainage system, in the coming years, flooding and traffic congestion will be extremely serious.

In order to meet the development requirements, the drainage system must ensure drainage in a timely manner and the dike system is capable of preventing flood tides from flooding low-lying areas.

In general, the traffic has been increasing, the trend of automobileization is getting higher and the transport infrastructure has become too weak, traffic congestion is getting worse ... is a reality. The investment in upgrading will be very expensive but this is a must do, as soon as possible. With the huge workload, it can be done quickly, so in order to prevent traffic jams effectively, it is necessary to carry out many solutions in which priority must be given to implementation of solutions.

The solutions for reducing traffic jam

The amount of traffic increases while traffic is not expanding, just like a small room in which the user has filled up his personal belongings and wants to keep adding them. When it comes to traffic jams, some people say it's because of poor road infrastructure that does not meet demand, because of the narrow streets. However, through many news reports, I noticed that not only was the 4-lane road jammed, but many 6-8 lanes were still jams. So, the inner city street planning how many lane roads are supposed to be wide enough to not be jams. Just as a person who buys a small house, they want a very comfortable home that they buy a lot of stuff and stuff. They are still satisfied with their property, although they are a little cramped, they will find ways to turn around to live with it. Traffic is no different than a room, it is small, you have to turn to live in harmony with it, not to throw the neighbors beat that small house that built a bigger house when they do not have financial secure. How big is it enough? The answer is answered depending on the point of view, depending on the purpose of each person. If only large enough to run out of congestion during peak hours, wasted at low hours leading to speeding cars, night storms, robberies ... should be pouring funds to clear the ground and expand paved road or not. What solution to help a small house, still full facilities but instead of living in a narrow space, now will have another space, more spacious but also only with that area. That is, we will have to

rearrange old, unused, or obsolete objects, objects, and boxes and put them into another dimension. Similarly, we will also rearrange traffic facilities on regular routes that cause congestion. The flow principle should be applied and shown in Figure 2.

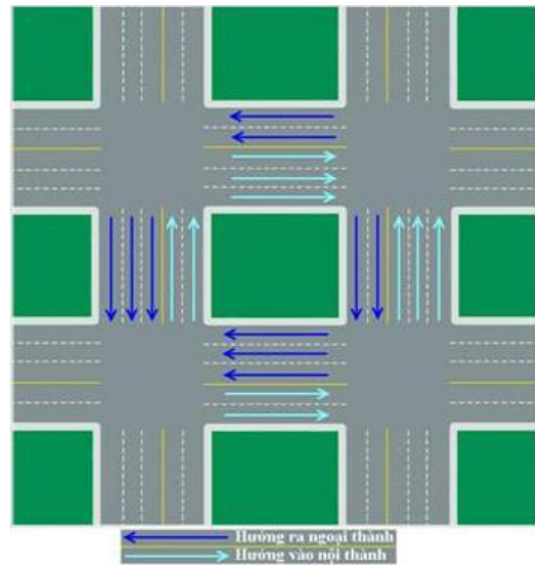


Fig. 2: The flow principle [4]

Traffic on roads is similar to the flow of water on a stream, which can be called traffic flow. When the flow is flowing, if there are obstructions on the road, the flow will shrink, the more obstructions, the more narrow the flow, leading to poor flow, if the obstructions are too much and too big will lead to block the line. Thus, our task is to clear the flow.

For car accidents

Requiring the police to use the method of shooting cameras and taking pictures then car to the margins. When dealing with accidents, it is advisable to combine some functional police officers to disperse or punish those who are curious.

Signal loss - intersections without lights - junction.

In addition to the traffic rules, traffic jams or traffic jams must stop the vehicle from looking at the two sides and then go on to the next stop.

Compulsory driving from the alley must turn right and only allowed to turn at the intersection or at the permitted point. At small intersections, the lights turn left and blue only when the direction of traffic is the same from green to red - this means that when the green light turns left turn vehicles, only when the green light from the turn signal is present. It also means that the opposite vehicle to stop the red lights will improve the situation of congestion. Small two-way intersections should arrange young volunteers at peak hours, forcing people not to encroach on the fruit.

Taxi - bus

During peak hours, only 1 lanes are required and only 1 lanes are allowed. In addition to the law: do not stop at the intersection. This means that when the green light but in front of traffic jam, all cars still have to wait, not the tailgate at the intersection.

School - work - hospital

Forcing parents to park the car outward and park on the sidewalk in the meantime is necessary. The vehicles were forced out of the school and turned only at the intersection.

For cars: compulsory parking 100m from school - hospital – office, pedestrians from the office - from school - the hospital is only crossing the road at the intersection during peak hours. The street vendor must be 200 meters away from school - office - factory at peak hours. It is mandatory that only 1 lane of cars run during peak hours, which will force motorists to use more motorcycles and should double the fine of the offending vehicles - especially taxis, which will solve a lot. Junction point.

Conclusion

Traffic congestion is still complicated and points of danger of congestion tend to increase in densely populated areas, key traffic routes, main urban roads, etc. Influence urban transport, especially on the occasion of New Year holidays, when the major events. In order to contribute to overcoming traffic congestion in urban areas, it is necessary to have a drastic and synchronous rollout of the whole political system, in which the functional branches (Transport, Public Works Security, Construction ...) is the core force that needs to implement synchronous solutions as well as long-term solutions with the primary goal is to quickly overcome and minimize prolonged congestion, To meet basic demands of people's travel in a convenient and safe way.

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