



WWJMRD 2019; 5(5): 85-89  
www.wwjmr.com  
International Journal  
Peer Reviewed Journal  
Refereed Journal  
Indexed Journal  
Impact Factor MJIF: 4.25  
E-ISSN: 2454-6615

**Cong Tri Tran**  
Ho Chi Minh City University  
of Transport, Ho Chi Minh  
city, Vietnam

**Hai Nam Vu**  
Ho Chi Minh City University  
of Transport, Ho Chi Minh  
city, Vietnam

**Correspondence:**  
**Cong Tri Tran**  
Ho Chi Minh City University  
of Transport, Ho Chi Minh  
city, Vietnam

## The matter relating to public transportation in Ho Chi Minh City

**Cong Tri Tran, Hai Nam Vu**

### Abstract

The traffic in Ho Chi Minh City is the sum of the many types of transport available for travel within the city and between Ho Chi Minh City and surrounding areas. Being the largest urban center and an important traffic hub of Vietnam, Ho Chi Minh City has a modern and diversified infrastructure system with many major inter-regional roads, two major highways connecting the provinces from Western and Eastern South, and many major national highways. The Trans-Asia Highway crosses the city's boundary and the North-South Railway begins and ends at Sai Gon Railway Station. The only airport in the city, Tan Son Nhat International Airport, is also the largest airport in the country. Today, the city also owns and operates a network of public buses throughout the district and is developing a metro network to meet the growing needs of its residents. Besides the advantages of socio-economic superiority to other localities in the region and the whole country, HCMC has been and will continue to face many serious problems and risk becoming obstacles. In the development of the city, the emerging problem is the capacity and quality of the urban transport system. HCMC's urban transport features are primarily land-based, and this is also the dominant mode of addressing urban transportation needs.

**Keywords:** public transportation, personal vehicle

### 1. Introduction

According to statistics, 9 months of this year, the traffic situation in Ho Chi Minh City (HCM) is quite stable. However, the city (TP) has also occurred more than 3,000 traffic accidents, killing more than 500 people, injuring nearly 2,500 people, reducing all three aspects compared to the same period last year, the number of cases, deaths, number of people injured. In particular, the number of deaths is very high, over 75 people, more than 12%. Although there is no serious congestion, the traffic congestion situation is still complicated, often at rush hours on some roads, mainly the gateway roads, radial, access roads. Cat Lai port and Tan Son Nhat airport. In 37 hotspots, 24 points have changed well. Currently in the city, the number of new registered vehicles continues to increase. On average, there are 30,000 new registrations per month. In particular, the amount of cars accounted for about 15%, a sudden increase. In addition, traffic congestion is also due to the time frame to limit trucks into the city, so after this hour, trucks will pour into the roads. In addition, the number of cars with Grab and Uber activities is also quite large, causing congestion in some roads. Traffic in the city shows that the market economy has brought about great changes, the influx of people from rural areas into urban areas has increased, and the lifestyle and behavior of urban people have changed. The dynamics of industrialization, urbanization and the trend of globalization. In the past time, the City faced many difficulties in planning, planning management as well as planning implementation, including urban transport planning. The project of the Transport Strategy and Development Institute in Ho Chi Minh City has introduced 19 measures to increase public passenger transport and 16 measures to limit personal vehicles. Specifically, the project said that the city should implement synchronized groups of solutions such as bus, fast bus, metro, public bicycles, use of fuel buses clean, buses to support people with disabilities. Disadvantages, reasonable arrangement of bus interchanges near the intersection of the main axis with the belt, information technology application, electronic ticketing system, online digital mapping.

The paper presents the matters about public transportation and the solutions for improving the planning in Ho Chi Minh city.

**Roadway:** Total road length in the city is 3,670 km with 3,800 roads (excluding rural roads) but most roads are narrow, only About 14% of the roads have a width of more than 12m so as to be able to organize passenger transportation by bus, 51% of roads with width of 7m - 12m, 35% width is less than 7m.

**About the railway:** There is only one North-South national railway in Ho Chi Minh City, there are no large urban railway.

**On inland waterway:** The network of river-way with a total length of 975.5 km of rivers and canals of all kinds with 112 routes, although the waterway network is distributed evenly throughout the city, some rivers and canals are encroached, accretion, limited by the unblocked bridges of the bridge. In addition, river-way are affected by the tidal regime with large fluctuation amplitude, so waterway transportation has not formed a continuous network and has

not exploited the advantages of water transport. Currently, water transport accounts for only a small proportion, about 4% to 6% of the city's transportation needs.

**Sea transportation:** Sea transport currently mainly connects Ho Chi Minh City with Vung Tau and the outer areas through two main channels: Luong Tau and Soai Rap lanes, which is also the main shipping lanes of the whole of southern area of foreign exchange.

In order to develop the land area, HCM City needs to develop road traffic in the northeast, southeast and southern directions with belt roads. Ho Chi Minh City also needs to build urban railways such as metro, monorail and high-rise railways, to build railways linking the national network in Loc Ninh, central and Ba Ria-Vung Tau. According to the transport development orientation, HCMC needs to build an area of transportation infrastructure that accounts for 15-25% of urban land. At present, the land area of the city is only 6% (12,579 ha) of urban land, of which more than 2% (2,300 ha) of land for the airport.



**Fig.1:** Overpass Bridge

Ho Chi Minh City is one of the most dynamic and economic cities in Vietnam. However, the process of urbanization is strong, immigrant population is rising, the infrastructure system is not synchronous, the orientation of urban planning is not really right, the weak management of the management agency Poor awareness of traffic participants ... made Ho Chi Minh City traffic worse. Traffic jams, noise, dust pollution caused by traffic vehicles have become a dread of those who have come to this city. Urban transport is like the blood vessels of the human body, blood clots mean that the body dies. Traffic jam affects the economic development, time-consuming waste of people involved in traffic, etc. How to solve the traffic situation of Ho Chi Minh City is a difficult problem of the whole society. Urban transport is not new, but why in Vietnam is the situation worse. This article only summarizes and sets out policies for reference.

**2. Traffic jam causes**

The process of urbanization and industrialization has positive and negative impacts at both national and city

levels. In addition to promoting economic growth, increasing incomes, improving access to services, creating more employment opportunities, it also has many consequences that one of the consequences is easy to see. , which is the traffic jams. Traffic congestion has been the "specialty" that large cities in developing countries create but do not want to receive. Impacts from UTGT are fast, diversified, and complex. Cities have encountered many difficulties and time, resources to be able to solve, control and achieve sustainable development for urban. Identifying the root cause of the problem to find solutions to minimize and "destroy" this "specialty" is urgent. In the framework of this article, the author presents some main causes related to planning, urban development management, vehicle development ... creating traffic jam, finding measures Overcoming negative impacts and encouraging positive impacts. After the renovation, the city's economy boomed as the biggest driving force, attracting the population of the whole country and the southern delta. Since 1986, the transportation planning mainly focused on development in the inner city. The structure of urban planning focuses, so

all activities of the city people are concentrated here. In a small space, everything is pent up there, population density soaring, making the city increasingly more crisis. Looking at map 1 we can see that centralized planning is the main reason for motorcycles with high mobility. Chinese motorcycles are flooding the market with cheap price, thus most people can buy. Moreover, the rapid increase of personal transportation. Compared the means of transport in Ho Chi Minh City in 1995 to other Southeast Asian cities, it is easy to see the number of motorized vehicles dominate. The composition of motorcycles has not decreased, while the composition of automobile components is increasing trend. As the main means of transport, the flexibility and the area occupied by the road surface is greater than the automobile, which shows that

motorbikes are currently the means of causing high traffic congestion. Around area. According to the Houtrans report, the high demand for travel among districts, such as Binh Thanh - District 1, District 6 - Binh Chanh District, District 8 - District 5, District 1 - District 5, go to work and go to school. This shows that the drivers involved in traffic congestion are the workers, students - students. The process of economic development, industrialization and modernization is the premise for urbanization. The demand for transportation (traffic demand) always increases according to the process of socio-economic development. Demand for passenger transport mainly depends on the development of population, demand for transportation of goods depends on the economic development.



**Fig.2:** Traffic jam in Ho Chi Minh city

Under current conditions, the demand for travel in urban Vietnam is solved mainly through road, so the process of expanding urban space is indispensable. The process of urbanization has attracted people from other provinces in large cities to work because of improved and diversified employment, study and living opportunities. Many functional economic zones, urban functional areas and the new urban areas are being built, which leads to the demand for transportation, the distance to travel, the demand for using high-quality means of transport, and the expansion of urban space. Invisible urban space, however, is partially limited by the travel time criterion. Right from the middle of the nineteenth century, the German urban researcher C.Ritte mentioned the measurement of space to calculate the cost of time travel. British statistician F. Ganton has introduced contingencies to determine central access over time and thus speed is one of the key conditions for urban development. In the Soviet Union, the end of the nineteenth century travel time was accepted at 25-30 minutes, until the end of the twentieth century this number was accepted at 35-40 minutes, however distance traveled (length of onion up to about 2 times. In 2005, the average travel time to work in Hanoi and Ho Chi Minh City was 18 - 20 minutes (according to the HAIDEP report) corresponding to the average distance of about 6-8km, so far the average travel

time to work has reached the threshold of 30-40 minutes corresponding to the average distance 8-10km, approaching the threshold of the major urban areas such as Malina and Jarkata is from 40 to 50 minutes, Tokyo and Osaka are from 30-40 minutes but the travel distance is not commensurate (due to current we are too dependent on individual means of transport) also means that the urban size is not adequate.

### 3. Solutions

The process of economic development, industrialization and modernization is the premise for urbanization. The demand for transportation (traffic demand) always increases according to the process of socio-economic development. Demand for passenger transport mainly depends on the development of population, demand for transportation of goods depends on the economic development. Under current conditions, the demand for travel in urban Vietnam is solved mainly through road, so the process of expanding urban space is indispensable. The process of urbanization has attracted people from other provinces in large cities to work because of improved and diversified employment, study and living opportunities. Many functional economic zones, urban functional areas and the new urban areas are being built, which leads to the

demand for transportation, the distance to travel, the demand for using high-quality means of transport, and the expansion of urban space. Invisible urban space, however, is partially limited by the travel time criterion. Right from the middle of the nineteenth century, the German urban researcher C. Ritté mentioned the measurement of space to calculate the cost of time travel. British statistician F. Ganton has introduced contingencies to determine central access over time and thus speed is one of the key conditions for urban development. In the Soviet Union, the end of the nineteenth century travel time was accepted at 25-30 minutes, until the end of the twentieth century this number was accepted at 35-40 minutes, however distance traveled (length of urban up to about 2 times).

The State accelerates the implementation of government decisions such as Urban Planning and Transport to 2025, Regional Transport Planning, Decisions on Solutions to Traffic Congestion 2011-2015. In particular, the most attention to build the public transport system, ring road. Renovating the mechanism, it is necessary to encourage

private enterprises to invest in the construction of various types of traffic. As experienced in the capital city of Tokyo (Japan), in parallel with state transportation, the private railway transport system is very high. Currently, the world is tending to evaluate and re-use of LRT, Monorail transportation because it has very high efficiency in urban areas such as low construction cost, low noise, elderly users. Passengers can travel within short distances, create a busy space in the neighborhood, can be associated with other types of traffic. In the cities transport planning by 2025, it is necessary to define the urban railway or subway. To go to work, cannot be half-hearted. In the inner city area, land stockpiles are no longer abundant, compensation rates soar to develop underground traffic, LRT trains, bicycle recovery. The inner city should develop, modify the road system; Develop a cheap car park when the State collects tax on the inner city. In suburban areas, such as Can Gio and Nha Be, it is advisable to invest in building roads to access seaports and main development axes in the master plan with infrastructure investment policy.



**Fig.3:** Stream of congestion reduction in Ho Chi Minh City

For motorcycles, they must strictly limit the importation and production; increase in motor vehicle taxation for motorcycles for individuals and companies. For cars, taxis need to have limited measures, high taxes when using. It is necessary to invest in the development of the public transport system; Construction of high-rise mobile parking, underground mining when building offices, high-rise buildings. For buses need to improve service, cheap, safe to passengers peace of mind when joining this public transport. There should be incentives for private enterprises to invest in this service. It should be clear, transparent and fair when licensing and issuing the rules of use, in the relationship between management agencies and enterprises. In order to increase the quality and quantity of passenger transportation, in the inner city, it is necessary to carry out free trial bicycle recall and change the type of means when collecting tax on cars into the inner city. At that point, the car will collect funds in the form of advertising. Reclaimed bicycles are popular in many European countries, and can

be borrowed and paid for in short distances. Street order should be rearranged, combined with the LRT model. With the same space, but in HCM City, the encroachment of the trade streets is unproductive and confusing, causing the loss of urban landscapes.

#### 4. Conclusion

Transporting Ho Chi Minh City, the city currently has 36 traffic jams frequently, can be divided into 4 areas including: Tan Son Nhat Airport (6 points); Cat Lai Port (3 points); center and gateway (14 points) and other areas (13 points). Meanwhile, the number of personal vehicles increased rapidly, causing the congestion situation to become more and more serious. By the end of 2018, the city managed more than 8.6 million vehicles, including more than 760 thousand cars and nearly 8 million motorbikes. Annual growth of cars and motorcycles is about 12% / year and 6.5% / year respectively. Besides, the density of city roads is only 2.03km / km<sup>2</sup>, the rate of land

for traffic compared to urban construction land is very low, only accounting for 8.8%. Transport infrastructure in the central area (districts 1, 3, 5, 10) has not increased in recent years. In particular, the majority of roads are narrow, only about 14% of roads have a road width of over 12m to be able to organize passenger transportation by bus, 35% of roads with roadbeds less than 7m wide are only enough for vehicles Two-wheel circulation. In order to reduce traffic congestion, it is necessary to introduce a scientific roadmap to restrict private vehicles in some downtown areas. To do so, it is necessary to re-plan the residence space and develop a modern and large public transport system (Metro, BRT, Monorail ...); At the same time, creating a space for walking and cycling streets in the center; arrangement, layout of off-shift circulation, time difference.

## References

1. <http://thuvienxaydung.net/ha-tang-ky-thuat/phuong-phap-giai-quyet-van-nan-giao-thong-tp.hcm.html>
2. <http://www.viup.vn/vn/Giai-phap-giao-thong-n107-Un-tac-giao-thong-do-thi-Nguyen-nhan-va-tim-kiem-giai-phap-tu-quy-hoach-xay-dung-d3797.html>
3. <http://www.tapchigiaothong.vn/thuc-trang-va-giai-phap-gop-phan-giam-thieu-un-tac-giao-thong-o-cac-do-thi-lon-cua-viet-nam-d17525.html>
4. <http://trian.vn/tin-tuc/xa-hoi-3567/tac-duong-o-cac-do-thi-thuc-trang-va-giai-phap-135554>
5. <http://vov.vn/tin-24h/tac-duong-o-tp-hcm-khong-con-theo-qui-luat-527545.vov>
6. <http://dangcongsan.vn/xa-hoi/thanh-pho-ho-chi-minh-huong-den-giao-thong-do-thi-hien-dai-397258.html>
7. <http://baotintuc.vn/xa-hoi/thanh-pho-ho-chi-minh-giao-thong-voi-nhung-giai-phap-quyet-liet-20120203155837646.htm>
8. <https://www.tapchikientruc.com.vn/chuyen-muc/ly-luan-phe-binh-kien-truc/quy-hoach-phat-trien-giao-thong-thanh-pho-ho-chi-minh.html>