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## **TRANSPORTATION AND QUALITY OF LIFE**

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### **Abstract**

Transportation is one of the key indicators used to measure the Quality of Life of people especially those living in the urban area. Many aspects of transportation are very significant as they have the power to directly influence our way of life in search for a better Quality of Life. Many Malaysians depend on private vehicle transportations to cater their daily travel needs which inevitably leads to an over infiltration of vehicles into the urban area. Automobile dependency has always been viewed as a potential threat to Malaysia's urban areas, as it contributes to the increase in traffic congestion, higher accidents rate, inefficient usage of urban land, environmental pollution, adverse economic impacts, urban sprawling and reduces the overall quality of public transportation. All these negative impacts deteriorate the quality of life of urban dwellers. This chapter will discuss Malaysia's urban transportation in general, focusing on the struggle between private and public transportation usage and the impacts of automobile dependency towards the urban dwellers' Quality of Life; as well as putting forward possible strategies and measures in an attempt to provide a balanced urban transportation system.

**Keyword:** Transportation, quality of life, auto dependency

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## **INTRODUCTION**

The usage of automobiles in Malaysia has increased drastically for the past few decades. It is revealed that the number of private cars and motorcycles per thousand population increased from 456 in 2000 to 698 in 2010 and reached a staggering 898 in 2017. The number of registered cars and motorcycles more than quadrupled from 4,067,457 in 1990 to 16,453,976 in 2008 to 26,308,952 in 2017 (JKJR, 2018). During this period, the road network system in the country undergoes significant development, where the total length and quality of the road network increases, translating into faster and safer travel.

Although many Malaysians viewed owning a private vehicle is an indicator of improvement in quality of life, the truth is that an increase in number of vehicles and its usage or in general term “automobile dependency”, has caused various problems to the urban area, such as traffic congestion, high road accidents rate, environmental pollutions, urban sprawling, reduced efficiency of public transportation, economic impact, inefficient land use, etc (Kenworthy and Laube, 1996; Rodrigue, Comtois & Slack, 2017). All these problems generated from automobile dependency have deteriorated the Quality of Life of Malaysians, especially for those living in urban areas. Various strategies have been proposed and implemented to alleviate traffic problems in urban areas but the government’s initiative of implementing these strategies are inadequate and often receive little support.

Many agreed that the current transportation system in Malaysia is in trouble of becoming over dependent on private vehicle usage while neglecting the importance of public transportation. The absence of a good public transportation system will have profound effects on the quality of life of urban dwellers especially those that are mobility impaired and underprivileged. This is because they cannot afford to own or use a private vehicle and the lack of traveling options may deprive their chances of improving their own quality of life.

The Quality of Life according to Kubani (2005) is very much associated with transportation. In our life, we all wish that we could walk or cycle to work in less than 10 minutes, living in a better environment and adequate infrastructure that allows us to travel around without the use of an automobile and spend more time with our family doing what we like. But the ugly truth is that in reality, we have to commute further and longer to work because we cannot afford to stay near our workplace because of the high housing cost. We inevitably spend more time in our car than with our family because we leave home to work early in the morning, clogged in the traffic jam and returning home late to see that the children are already asleep.

Indeed, access to affordable transport will not only enhance the quality of life of individuals but also is a mark of well-managed cities. The challenge is to strike a balance between public and private transportation. In the following sections, urban transportation will be briefly discussed with a focus on private transportation, specifically on car usage, and to review the linkages between automobile dependency

and quality of life, the competition between public and private transportation as a mode of transportation in an urban area and finally, possible strategies for a balanced urban transportation system.

## **TRANSPORTATION**

Transportation is a generic term which refers to the ability of movement between various points of origin and destinations transitory through a single or multiple point of interchange via a network in space for people, goods and information. Every single movement is connected with activities related to human social interaction such as education, employment, recreational, sports, shopping, etc. Transportation has been considered as one of the key bolsters for economic activity in modern societies (Rodrigue, Comtois & Slack, 2017).

Today, motorized transportation has dominated almost all kinds of trips made regardless of the distances of the trip, whether it is a short trip or a long-distance trip. However, some form of non-motorized transportation such as walking, cycling and pedicabs are still considered well worthy for making short distance trips. As the role of transportation becomes more significant in our daily life, it has become a necessity for the proper functioning of our modern societies that operates at a much higher pace.

Accessibility can be defined as mobility for opportunities which allows an individual the mobility to get to their desired destinations. This is why accessibility is not just about the ability of overcoming space but instead focused on the ease of how a person reaches his desired destination. On the contrary, as many trips nowadays are inevitable and many of them are just too far for walking or cycling, motorized transportation is the only practical solution. The technological transformation in the late nineteenth century had a profound impact on the transportation sector and has inevitably contributed to the changes of human lifestyles and has also become a significant influence in enhancing the quality of life (Litman, 2018).

Modes of transportation or transport modes are general terms for the different kinds of transport facilities, vehicle, infrastructure and operation that are the means by which people and freight achieve mobility. The transportation of people and freight to reach its destination may involve only a single mode or several modes, with the latter case being derived as intermodal or multimodal transport (Tsamboulas et. al. 2006). In this paper, human's mode of transportation will be given the emphasis and how it relates to quality of life. Modes of transportation are generally classified into three fundamental types, depending on the type of travel surface - land, air, and water. Land transportation comprises two major modes, roads and railways.

## **PRIVATE AND PUBLIC TRANSPORTATION IN MALAYSIA**

Public transportation in the majority of the developing countries is a vital means of transport for making journeys consisting of mostly activities related to human social

interaction such as education, employment, recreational, sports, shopping and other daily activities. Good public transportation services and facilities are essential attributes of any urban area. Public transportation also provides a certain level of freedom, accessibility, opportunity and choice for the urban poor and those who cannot afford or use private vehicles. Public transportation systems are capable of moving a large number of passengers using lesser resources such as fuel, land and environmental costs. Most people nowadays have high automobile dependency on car travel. High car dependency not only creates and exacerbates traffic congestion on urban road networks, but it also seriously undermines the role of public transportation, which has become less cost effective and efficient due to reduced usage and increasing traffic congestion (Barter, 2001). This in some way influences and encourages more people switching to private transportation the moment they can afford to do so, hence contributing to the vicious circle of increasing congestion and environmental pollution, and further reducing the effectiveness of public transportation (Tseu, 2006).

The acceptance of private vehicles as a way of commuting is often claimed for the low patronage of public transportation and only a small percentage (10-20%) of current private vehicle users show interests in giving a consideration in using public transportation in the future for commuting purposes (Moller and Thogersen, 2008). As for the urban poor who cannot afford private vehicles and are desperately in need of properly accessible and reliable transportation, such scenarios are not beneficial (Steg, 2003; Mohamad & Kiggundu, 2007). Income also plays a key factor in private vehicle ownership which can also hamper the demand of public transportation (Paulley et. al., 2006). The Kuala Lumpur Structure Plan 2020 stated that 80% of the total passenger movements in Kuala Lumpur are by private transportation compared to only 20% by public transportation. These statistics shows that private transportation can exacerbate the performance, viability and efficiency of public transportation services.

The unhindered freedom of movement that users get from private vehicles is one of the main reasons why many people wish to possess their own private vehicle. Private vehicles give the user the perception of freedom, of being more in control and able to keep their personal schedule and thus enhance autonomy (Beirao, 2007; Mohamad & Kiggundu, 2007; Gardner & Abraham, 2007). Public transportation requires the sharing of services with strangers and might be crowded during peak hours; on the contrary the private vehicle provides much better privacy and comfort for its user. In addition, private transportation has become more prominent and prevailing than public transportation because it is always accessible when required and is capable of taking the user from door to door and is able to reach dispersed locations within the road network system. As compared to private vehicles, public transportation services are routed to existing route networks either cross-city or radial designed routes, where public transport users are often bound to the routes and designated stops provided by the public transportation provider. Owning a private vehicle allows the user to provide free lifts to others. Furthermore, owning a private car especially from exotic brands and

models are widely perceived as a symbol of affluence, position and wealth in society. (Vasconcellos, 1996; Steg, 2003; Mohamad & Kiggundu, 2007).

When using a private vehicle as a mode of travel, the user must search for a parking space once the user had arrived at the destination. Parking is often scarce and usually expensive especially in the city center. The advantage of getting on public transport is being able to “Pay and Ride” in order to avoid parking problems and having the responsibility of finding suitable parking space (Corpuz, 2007). Searching for a parking space can often add extra time to the driving journey. A study that was carried out on parking behavior has shown that looking for a parking space to park may take up to 25% of the average total travel time (Axhausen et. al. 1990).

Traveling cost should also be given emphasis when discussing issues relating to private and public transportation. This is particularly relevant in recent times when a car’s running costs are rising due to high petrol prices, vehicle maintenance, insurance premiums and increasing congestion (Litman, 2006; Norhazlin and Muhammad, 2008). Clearly, traveling cost influences choice, however, lower public transportation cost will not in itself cause a shift from private transportation without the accompanying acceptable level of service and accessibility. Given the opportunity to choose, people will eventually choose the mode of traveling that best suited them, achieving an equilibrium whereby the drawbacks of the private vehicle transportation are equaled by the shortcoming of public transportation. (Kingham et al., 2001).

## **QUALITY OF LIFE AND URBAN TRANSPORTATION**

In Malaysia, owning a personal transportation has become a necessity to meet daily needs, in order to sustain the quality of life. Based on statistical data from a major international comparison of transportation in developing Asian cities which included the Klang Valley, it is indicated that Malaysian cities have reached a point in their transportations system where the challenges associated with transportation are beginning to show signs in similarity with the wealthy and developed countries. These transportation challenges that Malaysian cities are facing now are not associated with the lack of mobility, but instead the problems are generated by too much mobility, particularly by the private motorized vehicles considered as the most damaging transportation modes (Kenworthy and Laube, 1996; Barter, 2001).

These challenges include:

- i. Rapid growth in private vehicle ownership and use over other forms of transport. Increasing level of private vehicle dependency that resulted in increase of traffic volume on the road.
- ii. Increasing traffic congestion due to the higher traffic volume, which impairs the economy and public transportation.
- iii. Low level usage of public transportation.
- iv. Unfriendly streets for non-motorized vehicles and pedestrians.

- v. Local environmental impacts, for example air pollution, noise pollution and accidents.
- vi. Urban transportation investments for road and parking, acquiring a large fee on investment and budgets on both governments and individuals.

From the challenges above, we are able to deduce a vicious cycle of urban transportation in Malaysia in the context of quality of life. Malaysia is experiencing a rapid growth of vehicle ownership with the Federal Territory (Kuala Lumpur, Putrajaya and Labuan) recorded the highest number of registered vehicles with 6,525,432 followed by Johor State with 3,680,533, and Selangor with 2,975,802 registered vehicles (CEIC, 2018). The Nielsen Global Survey of Automotive Demand reported that ownership of cars is relatively low across South-East Asia with 47% of Filipino households and 46% for Indonesian households do not own a car. Malaysia on the other hand, ranks third in the world with 93% car ownership and also has the highest rate of multiple car ownership globally with 54% of households having more than one car (Star Online, 2014). These figures show a high dependency on private vehicles among Malaysians. The term 'automobile dependence' refers to a condition where there are a very high number of private car usage in urban areas which has entrenched itself into the urban system of transportation and land use (Thomson, 1977; Kenworthy et. al., 1999). The levels of automobile dependency are in fact diverse between various cities depending on a range of factors. Automobile dependency in an urban area at its most extreme form will show characteristics such as private vehicles dominating as transportation mode choice, extreme dispersal locations of origins and destinations, high level of road capacity (highways) and low spatial densities (Barter, 2001).

In Malaysia, the urban area like Kuala Lumpur has already shown a substantial momentum towards automobile dependency. Other urban areas like Penang, Johor Bahru, Ipoh, Kuching and Kota Kinabalu have also shown considerable evidence which point toward similar trends of automobile dependence, perhaps even more since these urban areas have even lower supply and usage of public transportation compared to Kuala Lumpur. Levels of private vehicles usage in Kuala Lumpur are also considerably higher than might be anticipated on the basis of income. This is due to many external factors which include government promotion and protection initiatives on the national automobile industries, subsidized fuel pump prices and traffic management policies & strategies that are not successfully implemented.

Paralleling to the trend of automobile dependency is the observed increase in the figure of road accidents and fatalities (Nor Ghani et al., 2001). From 1997 to 2017, the annual number of road accidents had jumped more than double from 215,632 to over 533,875. A total of 6,740 people died, 3,310 seriously injured and 6,539 slightly injured in 2017 (JKJR, 2018). Fatality rates are considered much lower in developed countries than in developing countries due to many factors that include mixture of heavy traffic conditions coupled with inadequate maintenance of transportation infrastructure, urban design that emphasis on motorized vehicle usage and lack of

provision for pedestrians which resulted in the conflict between the users over the use of urban space (Tseu, 2006). Accidents are a cost to our society, for example, if the breadwinner of a family is killed or disabled in a road accident, without proper financial support or contingency plan, the poverty level of the family will be drastically increased. Although these scenarios may not be as drastic in countries equipped with legal and welfare systems that look after road accident victims but in most developing countries, fatalities resulted from road accidents on the low-income groups could inevitably correspond to an economic loss (Steg and Gifford, 2005; Tseu, 2006). Therefore, there have been signs of increasing awareness among policy makers attempting to curb the rising trend because improvement in road safety normally enhances the quality of life. However, policy makers are always confronted with the difficulty of assessing the benefits against the cost of safety improvements (Nor Ghani et al., 2001).

Traffic congestion and the lack of parking spaces also are seen progressively as the foremost transport problems that are affecting the quality of life of those living in the urban settlement. Many transportation experts attribute this to “automobile dependence” which is familiar in most urban areas today. Traffic congestion has always been characterized as an urban environmental problem, other than causing delays; it also produces noise, fumes that increase health risks of road users and surrounding residents (Tiwari, 1999). Because of the high road accidents rate and environmental pollution caused by the traffic congestion, the city became less pleasant to live in and this had resulted in the decline of many inner-city residential areas moving to the surrounding suburban area, which further increased the needs to travel.

As stated previously, high automobile dependency creates traffic congestion, undermining the role of public transportation, resulting in the deterioration of the quality of public transportation. High automobile dependency and poor public transportation have significant impacts on the economy of an urban area, mostly due to the many hours of productive time lost through traffic congestion. Many sources of urban employment are less accessible due to congestion and the lack of urban spaces which is caused by high vehicle dependency. The World Bank estimates that in many countries traffic congestion resulted in a loss of 1% to 3% in gross domestic product (GDP), and in some cases as much as twice for developing countries (Gwilliam, 2002). Many employment opportunities move from the city to the outskirts to avoid such problems, which indirectly leads to more vehicle usage by the employee to go to work. The disable people who could not drive and poorer people who could not afford a vehicle living in the urban area will not be able to benefit from these employment opportunities that will enable them to go to work and get better income to improve their quality of life. A good transport system is a determining factor in the competitiveness of the urban economy and in the quality of life of the people working within the urban areas (Davis et. al., 2009).

Demand for parking space especially in urban areas intended for private vehicles escalates with the rise of private vehicle usage. Effort to meet the demand of

parking space in the urban area has created a 'locking-in' effect of high levels of private vehicle usage into the urban fabric. Provision and integration of large parking infrastructure and higher levels of parking capacity in property developments, such as shopping complexes, residential and office building, are signs of the 'locking-in' effect from high level usage of private vehicles (Barter, 2001). The 'Locking-in' effect on the urban fabric to cater for the ever-increasing automobile dependency's "demand and supply" of roads and parking space has occupied precious urban space which otherwise can be used to improve quality of life. This is especially true in the context of providing non-motorized forms of transportation such as walking and cycling. Existing pedestrian walkways in Malaysia are of poor quality and design that do not offer the sufficient levels of safety, accessibility and comfort to promote pedestrian walking. Facilities such as bicycle lanes for cyclists are non-existent. The traveling needs for the mobility-impaired such as the elderly, physically disabled and young children have also been seriously neglected which blight their quality of life.

For the past three decades, Malaysia experienced rapid urban development in the context of major urban transport investments and spending for road and parking. All this transport infrastructure investments are translated into more roads and parking facilities construction to cope with the high automobile dependency. Expansion and improvement on congested roads are only able to provide short-term benefits because the additional road capacity will be immediately filled with latent demand and peak-period vehicle trips that motorists will make as soon as the roads are uncongested. On the other hand, if the roads remained congested, motorists might reschedule their trip to avoid peak-period traffic, shift to other alternative routes, choose different modes of transportation or destination in order to avoid congestion (Litman, 2018). The "predict and provide" approach to road expansion to cater for the increasing traffic demand by providing extra road capacity is an escalating and alarming progression. There is just too much emphasis given to highways and the rising threats of becoming "automobile dependence" and having high vehicle usage being incorporated into the urban fabric.

As shown in Figure 1, the vicious cycle of high levels of automobile dependency contribute to the increase of traffic volume thus contributing to an inevitable vicious circle of increasing traffic congestion, accident rate, inefficient urban land use and environmental pollution, and creating a cycle of diminishing public transport that directly interrelates with the urban dwellers' quality of life.

## **STRATEGIES - THE KEYS FOR A BALANCED TRAFFIC SYSTEM IN URBAN AREAS**

The variety of measures that have been used to alleviate traffic problems in urban areas can generally be classified into 2 groups. The first is the integration of land use and transport planning and the second is the travel demand management instruments. The first group of measures is based on the close connection between land use activities and the number of trips generated, aimed at reducing the amount of travel such as trip lengths and trip generation. The second group of measures, on the other hand, aims to



reduce private vehicles dependency, and promote the usage of public transportation (Loo et. al., 2001).

The keys to a balanced traffic system in urban areas lies in its comprehensive and highly coordinated land transport policy, which combines strategies of integrating land use and transport planning together with travel demand management measures and promotion of public transportation usage. In this paper, land use planning, restricting private automobile and promotion of public transportation will be discussed to offer a vision of a balanced traffic system in urban areas that can directly be related to the quality of life of people living in urban areas.

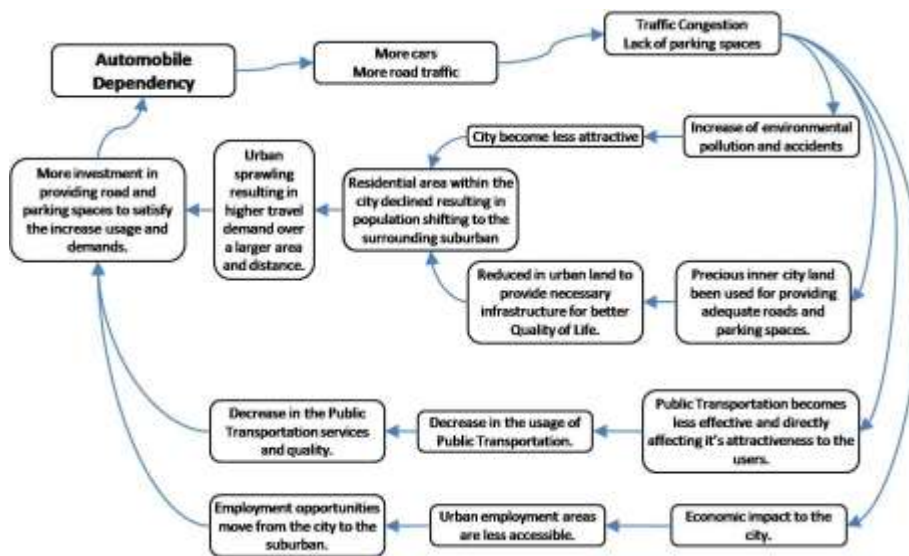


Figure 1: The Vicious Cycle of Urban Transportation in Malaysia  
*Adopted from (UITP, 2001)*

### i. Land Use Planning

Many urban areas throughout the world experience urban transportation issues which is due to the rapid growth of large cities in the developing world that has been accompanied by extreme dispersal locations of origins and destinations, which generates increase in vehicle ownership, travel distances and the number of trips. These have caused profound traffic movement within the urban area which has resulted in severe traffic congestion and other transport problems such as increased road accidents, high rate of fuel consumption, time consuming traveling, environmental pollution, low public transportation usage, etc (Vasconcellos, 1997; Loo et. al., 2001; Ghaffari and Zaly, 2008).

Therefore, in order to create a balanced traffic system in the urban area, the importance of land use planning is very apparent; this is because transportation is based on the movement of people and freight to reach the intended land use in order to satisfy our needs and objectives. As a result of that, having a holistic and comprehensive land use planning integrating with transportation planning can help solve many of the traffic problems within the urban areas (Ghaffari and Zaly, 2008).

In Malaysia, land use planning has generally been done at the local level while transportation planning has mostly been done at the regional and state levels. Transportation planning emphasizing on the automobile indicates that there is a lack of motive to have a well-coordinated land use plan as automobiles are able to create travel linkages to any development located anywhere. Transportation planning of this sort encouraged a low-density, sprawling urban development that promotes high automobile dependency and reduction in public transportation usage (Atash, 1996; Litman, 2009a; Barter, 2004; Kasipilai and Chan, 2008).

Urban land use planning policies and transportation planning ought to be restructured in order to provide for a balanced traffic system in urban areas by supporting alternative modes of transportation such as public transportation, car-sharing, walking and cycling. Transit Oriented Development (TOD) is one of the land use solutions that enhances accessibility by encouraging urban land use planning that promotes increased compactness and urban development of higher density districts within an urban area, a mixture of urban land uses and equilibrium between the locations of urban jobs and housing within an easy walk of a transit station, a radius of approximately between 400-800m (Rawal and Davadas, 2014).

In order to avoid urban sprawling and achieve good land use planning, 'Smart Growth' theory can also be applied to achieve the intended land uses within an urban area. Smart Growth is a general term for a collection of various techniques and strategies catering for land use practices intended to create a more resource efficient community that is designed to offer the most sought-after amenities economically, environmentally and socially, which is the fundamental element of better quality of life. The complementary techniques and strategies of smart growth vary depending on the needs and condition of a specific situation to improve mobility and other aspects of quality of life. The techniques and strategies of Smart Growth are mainly focused on creating a more self-contained community, encourages cluster and infill development that is both high in quality and adequate density, supporting mixed land use, diversifying transportation system that focus on reducing automobile dependency and promoting sustainable transportation and preserving valuable green area within the urban area. Smart Growth is an alternative solution towards urban sprawling; it provides a variety of benefits such as reduced per capita land consumption, reduced dispersal urban development and providing a more diversified transportation system (Litman, 2004).

Smart Growth strategies are implemented depending on each individual community's preferences and conditions. Although having the right land use planning like Smart Growth may help provide a good urban spatial dimension to help in providing a better transportation system, there is also a need to focus on restricting private vehicle usage within the urban area.

## **ii. Restricting Private Automobile**

For the past few decades, urban areas in Malaysia have shown a clear movement towards automobile dependency, the negative effects of high-level vehicle usage and ownership has prevailed over the importance of both accessibility and mobility. As shown in the vicious cycle of urban transportation of Malaysia on the previous section, the negative effects of automobile dependency has prompted the Malaysia government to look at other alternative solutions that counter automobile dependency practiced in other places to be adopted and implemented in our country (Kenworthy and Laube et al. 1999; Kasipilai and Chan, 2008; Barter, 2004).

There are numerous plausible policy measures that can be utilized in order to reduce the negative effects of private vehicle traffic. It is important to alter the usage of private vehicles with respect to the travel behavior of people, the origins and destinations of travel and the conditions of existing road traffic conditions (Gärling & Loukopoulos 2007). Policies that seek to influence the demand and travel pattern of private vehicle usage are referred to as Transportation Demand Management (TDM, also called mobility management) measures, which can be defined as a comprehensive collection of various programs, policies and strategies seeking to reduce the negative effects of automobile usage, encouraging a more efficient usage of transportation resources such as road and parking space, modes of vehicle and their capacity, funding, energy, technology etc.. TDM includes strategies that help provision of other transportation alternatives, physical changes that create land use patterns that are more accessible, urban design that is devoted to non-motorized vehicle, encourage efficient transportation usage, economic measures providing incentives and taxation that help promote travelers to alter their travel behavior, reformation on congestion or road pricing, improvement in various urban planning regulatory, overall improvement on the services of public transportation and various supporting programs (Litman, 2003; Loukopoulos, 2007).

TDM if implemented successfully will be able to provide numerous benefits, including reduction in traffic congestion, cost savings on transportation infrastructures, consumer cost savings, overall improvement of mobility for non-drivers, reduced accidents and pollution to the urban area. The negative trends of urban sprawling and automobile dependency are encouraged by the vast consumption of land and under-priced vehicle travel. By having TDM strategies implemented in the early stage of urban development, it will be able to avoid the problems that are associated with urban sprawling and automobile dependency (Kasipilai and Chan, 2008).

Based on the background and characteristics of the transportation system in Malaysia, Kasipilai and Chan (2008), have suggested various recommendation such as amendments of charges on road taxes and vehicle insurance, abolition of fuel subsidies, imposition of fuel taxes and adjustments in the bases for car taxation, congestion charging especially for the Kuala Lumpur metropolitan area and national road pricing to target towards creating a sustainable transportation system which focused on reducing automobile dependency.

With the successful implementation of Smart Growth and TDM, good land use planning and private vehicle restriction within an urban area, the final piece of the puzzle in order to create a balanced traffic system is to incorporate good and reliable public transportation.

### **iii. Promoting Public Transportation**

The incapability of public transportation in Malaysia to cope with the increase in traffic congestion in many urban areas has led to the decline of public transportation (Rasagam, 1999; Barter, 2004). A fundamental element to create a successful public transport system in the urban area is to allow public transportation to compete with the private transportation modes. Public transportation providers should adapt to a more service-led rather than a demand-led approach to attract passengers through better, more reliable service and not confined to only serving existing revealed demand but instead catering for a larger and more diverse demography. Successful public transportation systems aim to cater transportation services to the public from all social classes that include a wide variety of urban trips demanded at most times of the day. Many of the below par public transportation systems in Malaysian urban areas have clearly become a mode of last remaining option to captive passengers with no other option available (Barter, 2001).

Various strategies can be found that help promote the usage of public transportation. Experience gathered worldwide has provided public transportation planners with a collection of tried and tested strategies to improve the overall quality and performance of public transportation, which can encourage public transportation by reinstating confidence to the users.

Some of the possible strategies that can improve public transportation include setting up dedicated road space for public transportation (bus and taxi) to ramp up the traveling speed. Improving traveling speed can contribute to better reliability and more frequencies of the service especially during peak hour traffic. It also helps reduce overall traveling duration in conjunction with a shorter waiting period. Good public transportation information system is vital to provide passengers with easy to follow information regarding timetables, fares, routes, and services which unwaveringly makes public transportation more accessible.

The process of entering and exit for public transportation services can be speeded up by various ticketing methods, such as barrier-free ticketing systems, automatic fare collection systems and pre-paid smart cards that offer high performance

alternatives compared to the traditional ticketing. Implementation of "universal design" into the designs of stops, stations and public transportation vehicles which allows easy boarding for users will also help in speeding up the entering and exit process, especially for those that are mobility impaired. Good accessibility is essential especially for those with reduced mobility. Everyone will be able to benefit from the easier-to-access designs, such as low-floor buses offering near level-boarding.

Owen (2010) implied that,

“...people assume that to decrease traffic congestion, we must increase the use of public transit. That much is True. But we also assume to increase the use of transit, we have only to improve services. That part is False. No matter how wonderful we make bus or rail service, people who can't get to it won't use it and we make it very difficult to get to it...”

The obstacles in promoting public transportation are often due to the lack of determination and willpower by the government rather than technical difficulties. It is the inadequate governance by the government that is the main hindrance towards promoting public transportation (Barter, 2001). In order for the promotional strategies to be successful, it should be further supported by the land use planning of “Smart Growth” that caters for compact and transit-oriented land use planning. Transportation Demand Management can also contribute by controlling the usage of private vehicles and channel the demand for mobility towards public transportation modes.

## **CONCLUSION**

Importance of transportation is one of the key elements in the search for a “good” Quality of Life. Although there is no common definition that define what kind of transportation system will best suit the urban dwellers for them to have a better Quality of Life, it is generally accepted that it should imply good public transportation system, promote economic growth, encourage non-motorized mode of travel, better accessibility, environmentally friendly, enhance social interaction and overall better living condition.

As a developing country, Malaysia should put emphasis on the importance of how transportation can deeply influence the Quality of Life, by reducing the dependence on private vehicle usage, improving public transportation and redirecting the attention to create a better urban transportation system within the urban areas. There are already various proven strategies and measures that can be adopted into the current transportation system to help solve the transportation problems and improve the overall Quality of Life. All we need now is the united initiatives and support from both the government and public to really make it happen.

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