There are many discussions about the concept of a livable city and this has lead to the existence of the ranking system. Economic Intelligence Unit (EIU) is one of the organizations which promotes the liveability criteria. Despite all criteria chosen, walkable environment is one of the elements that could promote a city to be liveable. This paper will discuss the role of walkable environment in making Kuala Lumpur a liveable city and how the citizens this concept is applied in their daily lives.

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Keywords: Liveable city; walkable; Sustainable transportation.

INTRODUCTION

Two million people were recorded to be living in Kuala Lumpur city by the end of the year 2010. The attraction of the city centre is due to the economic activities that results in an increase in job opportunities. This situation has given impact on the quality of life and the movement pattern (Mohd Said. H, 2011). The Malaysian Physical Plan (MPP, 2002) has recorded
that the highest energy consumption in Malaysian city is derived from the transportation and industrial sector which is almost 40% each. This shows how unsustainable the city is as it becomes the biggest contributor towards pollution and low quality environment.

The Malaysian Automotive Association (2010) reported that the number of registered vehicles had increased from the year 2000 to 2009 for up to 63%. This shows how the demand of using cars or private vehicle is impossible to be stopped. It also implies that the general public has no intention to walk in the city to do their activities.

Table 1: Total Number of Registered Vehicles for Malaysia in the Year 1990-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>2000</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of vehicle registered in Malaysia</td>
<td>165,861</td>
<td>343,173</td>
<td>536,905</td>
</tr>
</tbody>
</table>


Kuala Lumpur had ranked number 78th in the Liveable city Index by EIU in 2011 and ranked up one place, which is 77th place in 2012 (Lee, 2012), and 74th place for the best place to live in Mercer Studies for Quality of Live out of 120 cities listed. Achieving more cities that are liveable is one of the aims of the Malaysian Government. In order for Kuala Lumpur to be listed among the top 10 most liveable cities in the world, there is a huge gap of requirements to be fulfilled the requirement that will make Kuala Lumpur at the same level as Melbourne, Vancouver and any other top liveable cities.

Kuala Lumpur is targeted by the Government to be ranked among the top liveable cities in the world as it is now best known for its tourist attractions, hence the need to enhance its image as a liveable city or a city with quality. Apart from improving public transportation system, encouraging the citizen to walk would help the city to be more sustainable by improving its quality of life.
WALKABLE IN ORDER TO BE LIVEABLE

LITERATURE REVIEW

The Oxford Dictionary (2010) refers to liveable as ‘fit to live in’. Heylen K (2006) explains that the term livability is an umbrella to a variety of meanings, which depends both on the objects of measurement and the perspective of those making the measurement. She added that most researchers agree that livability refers to the environment from the perspective of the individual and also includes a subjective evaluation of the quality of the place.

EIU (2011) defines liveability as one of the aspects that could contribute to a high quality of living. This is because high quality of life affects citizens’ lifestyle, health condition and shows stability of the environment. The majority of the city centres in the world faced challenges in keeping the city safe and at the same time find ways to upgrade the residents’ health condition, economic stability as well as providing excellent transportation system and network. Thus this makes liveability a subject that is discussed at a global scale. The Centres for Liveable Cities Singapore’s (2011) definition of liveability is that ‘city through a good planning, provides a vibrant, attractive and secure environment for people to live, work and play and encompasses good governance, a competitive economy, high quality of living and environmental sustainability’.

Liveability is a part of the sustainable concept in which one of its concerns is the transportation sector such as promoting a walkable environment (VTPI, 2010). Other than that, a liveable city promotes quality of access and linkages in the neighbourhoods, town centre and urban areas. Liveable city puts emphasis on sustainability of transportation which is to reduce noise and air pollution as well as encouraging residents to walk (Lennard, 2008).

The current trend in many developing countries is that the personal vehicle is a popular mode of transportation. Developing cities like Jakarta has 98% of personal vehicle usage alone in 2010; rather than the use of public transportation (Jakarta Local Government, 2011). This contradicts with developed city like Singapore where more than 90% of their residents are satisfied in using public transportation and 69.1% agree that the public transportation system has improved in 2011 (Land Transport Authority, 2011).
Walkability and walkable are often discussed together but the real definition is not clear. The term ‘ability’ is defined as the “fact that somebody or something is able to do something” (Oxford University Press Dictionary, 2011). Walkability and walkable is also considered as a measure that something is ‘Walking-Friendly’. Llewelyn-Davies posts that walkability is defined by the level of pedestrians’ comfort and safety such as the existence of casual surveillance, spaces between pedestrians and vehicles as well as high quality connected pedestrian pathways (in Shuhana et al., 2004). This statement is supported by Steve A. (2005) who stated that walkability is the extent to which walking is readily available as safe, connected, accessible, and pleasant mode of transport.

Wheeler (2004) stresses that the physical planning must reflect on the human scale, transportation system, climate change, natural change, networks, water flow, park and greenway without manipulating the natural resources. Thus it is important that the physical development in the city be integrated with the functions that will facilitate the local community to carry on their daily activities efficiently. In addition, the physical development must be able to use resources efficiently in order to achieve a sustainable-oriented urban design. A sustainable city is one that encourages its community to walk in a safe, continuous and pleasant pedestrian network in the city. Cities like Kuala Lumpur have difficulties in encouraging walking activities as the design of the city itself is still not pedestrian friendly as well as not having an efficient public transportation system.

The current trend for cities is to change the urban form to encourage walkability by having buildings that are designed to define the streets as well as having squares adjacent to building pavilions (1996; 1998 in Carmona et al., 2003). The trend is to encourage a more permeable and legible urban pattern. The higher the permeability and legibility, the more continuity and connectivity the city offers in terms of walkability. Human scale activities are encouraged especially at the street level in order to attract people to walk in the city centres. Large blocks are to be discouraged in the city as they attract high traffic volume that destroys the connectivity needed to be a walkable city.
A city should also provide connecting street networks and improve the pedestrian-friendly street design (Stephen, 2004). He added that the pedestrian-friendly street design will improve the sense of place and sense of community of the area. Shimitz and Scully (2006) noted that a pedestrian-friendly street design may help biological health and the ways they have changed the lifestyle by walking therefore improving their quality of life. This shows that in order to create a walkable environment, it is important to consider better and well managed streetscapes furniture with strong character so that the pedestrians will enjoy and be able to walk comfortably in any part of the city. Therefore, planners or architects need to find ways to create a space that is convenient and make the citizens enjoy walking within acceptable distance and thus making the city more liveable.

Creating a walkable environment is included in the transportation section of existing development plans where the emphasis is to focus on public transport as the primary spine, supported by pedestrian-friendly street networks. The Government Transportation Plan Program’s (GTP 2010) mission is to encourage a more walkable environment in the future. This is aligned to the purpose of creating a livable city with walkable environment as being one of the elements in creating the liveability of a place.

RESEARCH METHODOLOGY

This research is using both qualitative and quantitative approach in order to gather data. The research use a questionnaire survey of 400 users of Kuala Lumpur City Centre, which is based on a stratified multistage cluster sampling strategy where the choice of respondents is based on a simple random sampling technique. The users and the respondents may or may not live in the city centre but use it as a place of work, shopping and leisure. This is supported by a field observation of the central planning area based on the response from the questionnaire survey. The questionnaires were distributed in several nodes of pedestrianized area in five zones located within the central planning area of the city such as Bukit Bintang, Tuanku Abdul Rahman Road, Raja Laut Road, Kampung Baru and central market. The observation survey consists of qualitative approach that includes ‘the elements of walkability and the character of walkable environment’. The current conditions using photographic recording and mapping of types,
location and the pedestrian elements provided in all zones were also recorded. The data needed for this research is the streets’ users, uses and activities, and the type of activity and its location.

This research however limited only to the area of Kuala Lumpur City centre as it has been identified as the major pedestrianized area in the city (Dolbani, 2000). This research is also limited to assessing the factors that makes resident choose to walk in the city centre rather than assessing the walkability from the criteria for walkable environment. Thus, this limitation means that it is the perception of the pedestrians that is being analyzed rather than the attributes of the environmental aspects in creating a walkable environment.

Resident’s Perception of the Walkability Character of Kuala Lumpur City Centre

Figure 1 shows that, the majority of the respondents (71% of the total response) are working inside the city centre of Kuala Lumpur. This result shows that there is a movement pattern from inside and to the outside of the city centre. The role of the city centre is an activity centre that fulfills the needs in terms of economics and entertainment. It is observed that the majority of the citizens who live outside the city centre and works in the city are busy traveling during the peak hours between 7 am to 9 am in the morning and 5-7 pm in the evening. During these hours, it is observed that there are congestions at all zones with all types of vehicles. It is also observed that the majority travel by their own private vehicles as the citizens’ housing areas are located around 40-45 minutes driving distance to their place of work.

Figure 1: Respondent Working Area

Source: Independent study
Figure 2 shows that 66% agree that they prefer to use their own vehicles while 62% of respondents claim that walking in the city only make them feel tired, so they choose not to walk in the city no matter how convenient the place is. From the survey, it was found that only 26% of the respondents agreed that walking will make them socialize with other pedestrians. From the respondents’ point of view, the city centre is seen as a place for them to go to work and not as a place for them to interact. This perception is not desirable if we are to encourage the creation of public realm by injecting some life and activities to the city centre. It could also be that the city centre fails to provide an environment that encourages social interaction to happen here.

![Figure 2: Why Citizens Think it is a Problem Walk in the City Centre](source: Independent study)

Promoting walkable lifestyle can be done by improving or adding the walkable elements. Figure 3 shows that the majority of the respondents (53%) agree that pedestrian walkways are the most important element that is needed to encourage walking activities in the city of Kuala Lumpur. Only certain areas in Kuala Lumpur city are comfortable and with wide walkways being provided, and others depend on the remaining width of the streets to be turned into walkways. Destinations that the area lead to is also important in creating the environment as explained earlier, where a place with high amount of users need better quality walkways for the citizens to use the places frequently. Based on observation, lots of movements that require walking happen in the Kuala Lumpur shopping district, which is

Shamsuddin, S., et.al.
along Jalan Imbi, Jalan Bukit Bintang and Jalan Ampang and these three roads contain the main shopping complexes such as Suria Kuala Lumpur City Centre (KLCC), Pavilion and Sungai Wang Plaza in Bukit Bintang and also Times Square at Jalan Imbi. Within this area it only takes 5-15 minutes to walk from one place to another.

![Pie chart: Elements to Encourage Walking Activities](image)

**Figure 3: Elements to Encourage Walking Activities**

Source: Independent study.

**SUMMARY**

The importance of creating a walkable environment would help to create a sustainable environment and as well as a place that is liveable. Full support from the local and non-government organization is needed to ensure that Malaysian cities could achieve the top rank in the Most Liveable Cities ranking. The research shows that transportation is becoming an issue that needs to be addressed quickly to develop a sustainable environment. This research shows that Kuala Lumpur city lacks some of the criteria that encourage people to walk in the city centre. It is difficult to solve these problems because many areas in the Malaysian cities were built before the policies were made. Thus it is now a challenge to architects, planners and the government to plan new areas and at the same time enhance the existing areas. Nevertheless, the lack of awareness among the citizens about the sustainable environment has also become a problem. It is anticipated that by changing the design of the city centre’s environment, it may indirectly force the citizens to walk instead of using vehicular transportation in the city centre. It is suggested that further research is needed to assess the
effectiveness of the policies in encouraging people to walk in the city center as this may influence why there is still an unwillingness to walk among the citizens.

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REFERENCES

Bin Ji (2006). General Director of the International Department of Chinese People’s Association for Friendship with Foreign Countries (CPAFFC) and People’s Deputy. The Livable City – The Chinese Perspective and A plan for Beijing, on 9th May 2006.


Melbourne City Research (2006). *The global City Concept – an examination of the concept and how it applies to Melbourne*. City Hall of Melbourne, (Chapter 1).

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