



**6th UNDERGRADUATE  
SEMINAR ON BUILT  
ENVIRONMENT  
AND TECHNOLOGY  
(USBET) 2023**

**SUSTAINABLE BUILT  
ENVIRONMENT**

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# e-Proceeding

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# IMPLEMENTATION OF WALKABILITY CITY CONCEPT IN PEKAN IPOH, PERAK: SAFETY, DESIGN AND CONNECTIVITY PERSPECTIVE.

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## ABSTRACT

*The research aims to examine the level of comfort for walking activities of the users and users involved. In addition, this study tries to identify the user's perception of pedestrians as one of the routes for users to use more often than vehicles. The main factor of increasing use of pedestrian is safety, design and connectivity perspective. To identify the implementation of principle walkability applied, study the factor affecting walkability for user, and benefit of walkability to health, socioeconomic and environment the study area. This study was approached by quantitative methods and analysis which will involve two types of surveys that will be used to gather information and data. Based on early observation in Pekan Ipoh, the safety of pedestrian users is not guaranteed which will give effects of safety to users of pedestrians. In the study area, the pedestrians especially on the main road do not have fences or walls that can protect users. In addition, lacking and poor maintenance also creates an unpleasant feeling for users. The results found that the implementation of the walkability city concept in the Malaysian found that the people want a comprehensive pedestrian that benefits users to develop and control this concept. It is critical to guarantee that social interaction are protected by implementing walkability principles and standards in order to establish a safe and successful walkable area.*

**Keywords:** Walkability, local people, pekan Ipoh, user's perception

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## **INTRODUCTION**

Walking is a means of experiencing and interacting with the local environment and wider society in a way not possible when using other forms of transport, particularly motor transport. Purposeful walkway planning to provide convenience to visitors move to destination safely and comfortable. In addition, it is also intended for overcome the problem of congestion occur due to the increase in number high vehicle from time to time while in cities. The need for route preparation pedestrians are important for facilitate the movement of traffic. The problem of the lack of a dedicated pedestrian route legs to move along with path on the sidewalk of the building that has been become increasingly narrow, causing pedestrians have to using the vehicle route further causing conflict between pedestrians and motor vehicles. The effects of the conflict often occur accidents involving pedestrians. From here arises the awareness of the importance of providing footpaths feet to facilitate visitors in the city centre moves alongside avoid congestion, accidents and other problems between road users.

## **LITERATURE REVIEW**

The town of Ipoh is synonymous with a city known for its economic progress, infrastructure and being a place where tourists come to visit. Ipoh town became the city that ran the car free day program to implement the agenda to encourage users to use the infrastructure provided such as pedestrian walkways for their use.

### **Definition of Walkability**

According to Baobeid (2021), walkability is a crucial aspect of the built and social environment, affecting physical activity, energy balance, and health. Physically, there are several elements of walkable that negatively impact pedestrians, while socially, well-planned walkable areas enhance user interaction. Both physical and social attributes can complement each other in assessing walkability, ensuring a healthy and enjoyable environment for all users. Adopting walkability as an urban solution reduces conceptual and practical inconsistencies between individual objectives represented in the desire to have and utilise private vehicles and the need to minimise transportation-based consumption.

### **Principle of Walkability**

In fact, a number of principles for walkability that must be fulfilled before it is allowable to implement in an area. Among them create fine-grained pedestrian circulation, orient buildings to street and open spaces, organize uses to support public activity, address the human scale with building and landscape details, provide clear, continuous pedestrian access and build complete street.

## Factor Affecting Walkability

- **Urban design.**

People's decision to walk is influenced by a variety of factors, including distance, value, and perception. Urban design excellence may be used to gauge how people perceive their surroundings. The specific element of urban design related to urban morphology can be defined include long lengths which usually have short block lengths with a system of highly connected thoroughfares, local streets, and alleys. Also, the factor of building height and street enclosure creates a sense of design element that helps create the experience of being in a city and in a place that is comfortable for pedestrians (*World Bank, 2009*)

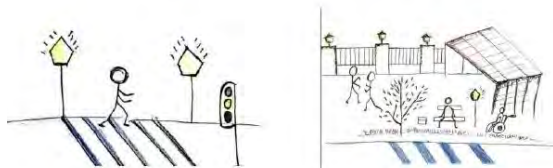
- **Physical environment factor**

Walkability is influenced by a number of variables, including the mix of land uses, the connectivity of the roads, the soil, transparency, proximity of the buildings, and the variety of destinations nearby. Key infrastructure elements also include mass transit, the presence and quality of sidewalks, limitations to moving traffic (such as on-street parking or bike lanes), pedestrian crossings, aesthetics, nearby local destinations, the quality of the air, shade and daylight during the right season, street furniture, amount of traffic and speed.

## Aspect of Walkability

- **Safety**

Walking safety is determined by several factors, including perceived and actual crime and perceived and actual traffic safety. Both are concerned with possible harm to the individual. While safety is inextricably linked to other aspects of the walkable environment, it needs its own section since a lack of safety is a significant barrier to walking.



**Figure 1: The Street**

#### a) Street Design

Sidewalks and safe crossings are crucial components of street design. Appropriate vehicle speeds, trees, and other elements also contribute to pedestrian safety.

#### b) Safety from crime and crashes

How much crime is there in the area? How many car accidents occur on the road? Is the roadway lighting adequate? Individual safety is critical in creating a walkable city in order to avoid unwelcome incidents.

- **Design**

The walkability of the design encourages movement by being walkable. If we want to encourage walking, we need to know what makes people walk. There are many ways to create an attractive design for a place to be a focal point in encouraging more pedestrian use. Among them are:-

a) Imageability is the aspect of a location that identifies it as unique, recognisable, and unforgettable. When certain physical components and their arrangement attract attention, inspire sentiments, and leave a lasting impression, a location has high imageability.

b) Enclosure refers to the degree to which buildings, walls, trees, and other vertical components visibly define streets and other public places.

c) Human scale refers to the size, texture, and articulation of physical things that link to the size and proportions of people, as well as the pace at which humans move.

d) The extent to which people can see or perceive things and activity particularly human activity beyond the boundary of a roadway is referred to as transparency.

e) The visual richness of a location is referred to as its complexity. The variety of a place's physical environment determines its complexity.

f) Effective traffic reducing is another important method for providing safe walking surroundings.

- **Connectivity**

It is insufficient to enhance street activity without giving the convenience of walking on the streets. People should also be allowed to stroll along the street without being hindered by motor traffic. Two of the most significant aspects



of a road are the smooth and collision-free flow of people and vehicles, as well as road accessibility within the road network. Brambilla (1975) highlight the necessity of public and uninterrupted pedestrian mobility, stating "Mobility is crucial; it is the life blood that allows the dynamic exchange and integration of discontinuous activities and services."

## **METHODOLOGY**

This study research is approached by quantitative methods and analysis which will involve two types of surveys that will be used to gather information and data. Based on early observation In Pekan Ipoh, the safety of pedestrian users is not guaranteed which will give effects of safety to users of pedestrians. The data depended on the numerical form, which information from the respondents on their experiences and opinions.

## **ANALYSIS & FINDINGS**

The pedestrians especially on the main road do not have fences or walls that can protect users. In addition, lacking and poor maintenance also creates an unpleasant feeling for users. The results found that the implementation of the walkability city concept in the Malaysian found that the people want a comprehensive pedestrian that benefits users to develop and control this concept. It is critical to guarantee that social interaction are protected by implementing walkability principles and standards in order to establish a safe and successful walkable area.

## **CONCLUSION**

The walkability city concept, which emphasises connection, design, and safety, may be concluded to be one of the crucial components that must be offered in order to encourage use of walkers. A literature review was done based on the problem in order to fully describe the aim of the study. These aspects also explain how important the role is in creating needs and comfort for pedestrians. In terms of safety which guarantees the condition of pedestrians, design that affects the use of pedestrians and connectivity that makes it easier for users.

This bounces back from the research area's perspective. Walking is the best alternative in the city or neighbourhood, according to the research. This study attempts to measure the level of comfort for walking activities of the users and participants, the community will also benefit through it.

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Sekian, terima kasih.

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**SITI BASRIYAH SHAIK BAHARUDIN**  
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*nar*

*Setuju.*

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