



**CENTRE OF STUDIES FOR LANDSCAPE ARCHITECTURE  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITI TEKNOLOGI MARA**

**ACTIVE MOBILITY | MINIMIZING LOW CARBON IMPACT  
VIA ACTIVE MOBILITY AT SECTION 14 FOR SHAH ALAM  
COMMUNITY**

This academic project is submitted in partial fulfilment of the  
requirement for the Bachelor of Landscape Architecture (Hons)

**AZAM FIKRI BIN AMINNUDIN  
2019317015**

**JULY 2019**

## ACKNOWLEDGEMENTS

In the name of Allah the most Gracious the most Merciful

First of all, I would like to say Alhamdulillah, thanks to Allah because with His permission and blessing, I did succeed to complete my thesis since the day one I started to write. Next, I would love to give some appreciation to the official and unofficial person who were always with me through my thick and thin journey.

I would love to mention Lar. Dr. Nurhayati Binti Abd. Malek for being thesis coordinator for this semester. Keep giving us motivations, guidance, knowledges, and even positive encouragements. Those were help me a lot to keep doing this thesis until completely finish.

Then, I would like to dedicate my thanks to my thesis supervisor, En. Zainuddin Bin Ab Rahman for always give his best in guiding me finishing this thesis. From the day one until my last day writing this study, he is the one who always try to help and want to serve as best as he can. Next, I would love to thanks my seniors; Muhammad Faidhi Ishak who always give good advices, tips, and encouragements. Also Muhammad Zaidie Bin Masri and En. Mohd. Zahid Bin Mohd. Salleh who helped me giving extra information regarding my site study and site issues. He is the one who correct me if I was wrong. He always make sure that I am on the righ track.

Then, I would like to dedicate my thanks to the official parties and unofficial parties that would like to cooperate nice and seriously during the completion of the thesis. The related parties include the Majlis Bandaraya Shah Alam (MBSA) with Landscape Department and also Town Planning Department. The contribution of the resident also help me a lot of during my inventory and analysis stage, and this also helps me ease the data collection and to analyse it accurately.

Last but not least, my special thanks to my dearest parents; En. Aminnudin Bin Mohammed Zain and . who are always give me support and motivation and made me more confident to go through this semester. And also I would like to give appreciation to all my Zeagost friends, who are always encourage to compete each other to give the best product by the end of the semester.

## ABSTRACT

Nowadays, Shah Alam city centre has become one of the most busiest among other cities in Malaysia. Hence, the state economy is well generated because the number of people that came into the city centre are increasing day by day. The city development also increasing from time to time. More building were built. More job opportunities were opens. That was a very good news in term of economy.

Yet, most of people have no awareness regarding to the risk that they brought when enter the city centre. They released a lot of carbon from their own private vehicle. There are several studies shown that Shah Alam is among the city that released carbon the most due to car dependent.

There are some good initiatives from the Majlis Bandaraya Shah Alam by linking some connectivity of cycling and pedestrian lane but there are still a lot that need to be taken into consideration to encourage people use the facilities. The other one was the development of Light Rail Transit (LRT3) that can connect city centre to the other site context. When this development is fully completed, a lot more of people will come and the future is in risk if there are nothing improvement been made to control the carbon emission or even reduce it.

Hence, this study is about to reduce the carbon emission by encouraging people to do active mobility by either cycling or walking. So, there are some studies need to be done to make this project successful.

## Table of Content

<b>CHAPTER ONE INTRODUCTION TO TOPIC</b>	<b>10</b>
1.1 BACKGROUND OF STUDY	10
1.2 PREVALENT ISSUE	11
1.3 AIM AND OBJECTIVE	11
1.4 DEFINITION OF TERMINOLOGY	12
1.5 SIGNIFICANCE OF STUDY	12
1.6 SCOPE OF STUDY	13
1.7 RESEARCH METHODOLOGY	14
1.7.1 Identification of site issue	15
1.7.2 Identification of site study	15
1.7.3 Preliminary Study	15
1.7.4 Inventory Analysis	16
1.7.5 Result synthesis	17
1.7.6 Design solution and proposals	17
1.8 CHAPTER SUMMARY	18
 <b>CHAPTER TWO INVENTORY ANALYSIS</b>	 <b>20</b>
2.1 INTRODUCTION	20
2.2 ACTIVE MOBILITY	20
2.2.1 What is Active Mobility	20
2.2.2 Types of Active Mobility	21
2.2.3 Reasons for Doing Active Mobility	21
2.2.4 Factors That Encourage Active Mobility	21
2.3 COMMUNITY	21
2.3.1 Definition of Community	21
2.3.2 Who is the Community	22
2.3.3 Where Do the Community Go?	22
2.4 INCLUSIVE CONNECTIVITY	23

## CHAPTER ONE

### INTRODUCTION TO TOPIC

#### 1.1 BACKGROUND OF STUDY

Statistic showed that most city are having carbon emission problem. This issue has been a major source of environmental pollution for the past 30 years. The urbanization, industrialization and traffic systems growth are causing more air pollution problem in the city creating an uncomfortable atmosphere to live in. (Azhari, Mohamed, & Latif, 2016). Based on the early findings, most of the countries in European, even Asian have injected active mobility approach as the solution to carbon emission issue.(Erik Stigell, 2018).

Active mobility which is usually divided into two transportation mode categories; walking and cycling. This is an approach to utilize physical energy into individuals' routine. Either formal or exercise activity, active mobility requires less time and motivation especially in compact urban setting (Erik Stigell, 2018).

The example of compact urban city that apply active mobility; Singapore. Their support for cycling was measured, focusing primarily on facilitating first-and-last-mile journeys between homes and public transport nodes (NUS, 2018).

“We have to recognise that given our land constraints, it is not feasible to provide a comprehensive set of dedicated cycling tracks or cycle lanes island-wide. We have to ask ourselves if this is the best way to make full use of our very limited road space. The issue is not whether cyclists have a place in our public transport system, but how do we allocate space amongst competing users that will best make use of our very limited land”, said Minister of State for Transport of Singapore. (NUS, 2018)

By making facilities as priority, the city decrease noise pollution and the emissions of greenhouse gases. Active mobility does not pose any major road safety threats to other road users and it contributes to a more calm and inclusive urban environment. It provides individuals with low cost mobility over short to medium distances in cities and, in combination with public transport, also over longer distances. (Institute, 2014)