



اُونِيُوَرَسِيْتِي تِي كُونُوَلُو كِي مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA

**UNIVERSITI TEKNOLOGI MARA**

**COMMUNITY CONTRIBUTING  
FACTORS TOWARDS SUSTAINABLE  
MOBILITY IN RESIDENTIAL  
NEIGHBOURHOOD**

**NURAIN BINTI MOHD TALMIZI**

**Msc**

**April 2018**

## **ABSTRACT**

This purpose of this research is to evaluate the factors contributing to community behaviour towards neighbourhood's sustainable mobility. A typical residential neighbourhood located in Section 7, Shah Alam is selected as a case study for the research. A total of one hundred and thirty-five completed questionnaires were collected from respondents from three residential types in the study area. Factor Analysis, specifically inferential analysis was employed to evaluate 15 items involved in measuring the three variables of intention, of which 5 items were excluded from the list due to their factor loading below 0.5. The first variable is Neighbourhood Street Connectivity (NSC) with five items; the second Neighbourhood Safety of Crime (NSoC) with three items and third is Neighbourhood Safety of Traffic (NSoT) with two items. Meanwhile, analysis was also conducted on nineteen items in measuring the three behaviour variables, where again nine items were excluded from the list due to their factor loading score of below 0.5. These variables and their associated items are Neighbourhood Security (NS) which has four items; Neighbourhood Infrastructure (NI) with three items; and Neighbourhood Aesthetic (NA) also with three items. The percentage of total variance were 75.0% for intention and 60.23% for behaviour, while the result of the Kaiser-Meyer-Olkin value for intention and behaviour were 0.76, and 0.64 respectively. Based on the results of the research, a conceptual framework depicting the intention and behaviour on community towards sustainable mobility in residential neighbourhood has been developed as the main outcome and contribution of this research.

## ACKNOWLEDGEMENT

Assalamu'alaikum

Alhamdulillah, all praise to Allah the Almighty for giving me the strength, health and perseverance to complete this thesis. This rewarding experience cannot be achieved with HIS blessings. I have a number of important people to thank for their assistance and guidance throughout my journey to accomplish this exceptional milestone in my life.

First and foremost, I am deeply indebted to my supervisor, Associate Professor TPr. Dr. Hj. Halmi Zainol for his continuous assistance in expanding my knowledge and experience in this research field. I am also very grateful to my co-supervisor, Dr. Suharto Teriman, who has provided with kindness and the much needed instructional support. I would also like to thank him for sharing his deep interest in my research.

My sincere gratitude goes to both my parents, and for their continuous moral and emotional support, and their extraordinary patience and encouragement to make this journey a success. I am also indebted to my siblings, who have been a great source of encouragement every step of the way.

Last but not least, I am forever grateful to all individuals I did not mention but who had contributed in one way or another to the successful completion of my thesis. I would not be to complete my study without your assistance and encouragement. Million thanks to all of you.

Wassalam

# TABLE OF CONTENTS

	<b>Page</b>
<b>CONFIRMATION BY PANEL OF EXAMINERS</b>	<b>ii</b>
<b>AUTHOR'S DECLARATION</b>	<b>iii</b>
<b>ABSTRACT</b>	<b>iv</b>
<b>ACKNOWLEDGEMENT</b>	<b>v</b>
<b>TABLE OF CONTENTS</b>	<b>vi</b>
<b>LIST OF TABLES</b>	<b>x</b>
<b>LIST OF FIGURES</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xii</b>
<b>CHAPTER ONE: INTRODUCTION</b>	<b>1</b>
1.1 Background of Research	1
1.2 Problem Statement	1
1.3 Research Questions	4
1.4 Research Aim	4
1.5 Research Objectives	4
1.6 Significance of the Research	4
1.7 Scope of the Research	6
1.8 Limitation of the Research	6
1.9 Organization of Research Process	6
<b>CHAPTER TWO: LITERATURE REVIEW</b>	<b>8</b>
2.1 Introduction	8
2.2 Definition of Terms	9
2.2.1 Definition of Neighbourhood	9
2.2.2 Definition of Sustainable Mobility	11
2.2.3 Definition of Intention	13
2.2.4 Definition of Behaviour	14
2.3 Community Intention	15
2.4 Community Behaviour	15

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Research

Human mobility behaviour and patterns are associated with urban form characteristics, socio-economic and planning strategies (Aditjandra et al., 2012). These include factors such as settlement size, land-use mix, land-use density, street layout, and amount of green environments. According to Hunecke, Tull and Baumer (2002), socio demographic, activities, accessibility of transport modes, and transport policy are among the influencing elements of individual or community on sustainable mobility behaviour. However, individual factors such as socio-demographic characteristics, attitudes (behaviour), and preferences could also contribute significantly on the association between built environment and travel behaviour (Haybatollahi, 2015).

Mobility has a direct relationship with accessibility, where the desire (intention) to increase accessibility would ultimately increase personal travel demand. Residential neighbourhood is synonymous with people engaging with their daily lives and performing various activities including walking and commuting using motorised transportation. Residents walk or travel for various reasons, and such mobility in residential neighbourhoods is related to the various aspects of a person's physical environment and behaviour (Basile, Broman & Robert, 2011). Hence it is important to incorporate these differences of neighbourhood mobility behaviour into planning processes in order to influence the demand side of transport towards more sustainable, non-motorised transportation option (Litman, 2011).

### 1.2 Problem Statement

The built environment influences travel behaviour by determining the total number of potential activities (i.e., employment, shopping, entertainment, etc.) available; the relative distribution of those activities and, thus, travel distances; and the relative travel costs implicit in traversing those distances by various modes. In such case, human psychology came into action whereby the use of private cars has