# THE RELEVANCE OF TRANSIT-ORIENTED DEVELOPMENT FOR TRANSIT STATION COMMUNITY IN MALAYSIA

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A dissertation submitted in partial fulfilment of the requirements for the award of the degree of Master of Science (Urban Design)

Faculty of Built Environment Universiti Teknologi Malaysia

JANUARY 2013

Specially dedicated to:

My lovely parents, Ab Rahman Abdullah & Noor'Aine Ismail,

Respected mentor, Syed Zainol Abidin Idid,

Dearest siblings, family and friends,

and Salome Ghodsi Moghaddam

#### ACKNOWLEDGEMENT

In the name of Allah SWT, the most gracious and most merciful, and Prophet Mohammad SAW. Firstly, Alhamdulillah to Allah the Almighty for His grace and bless in the completion of this dissertation. A deep gratitude goes to my supervisor for this dissertation, Professor Syed Zainol Abidin Idid for his effort, dedication and sincere guidance during my education days in Universiti Teknologi Malaysia. An appreciation to all Msc. Urban Design lecturers, Dr. Dilshan Remaz Ossen, Mr. Chau Loon Wai, Prof. Rahim and Dr. Mohd Hisyam Bin Rasidi for their endless effort and guide. Special appreciation is for my fellow colleagues especially Salome Ghodsi Moghaddam and Nur Suhaida Azemi for the never ending support, favour, understanding and kindness that they offer to me. Education is a lifetime process, having these wonderful people support and guide is a bless from Allah SWT and a priceless gift from Him along my learning curve. Finally, a million gratitude to my beloved family for their continuous support and also for those who involved directly or indirectly towards the completion of this dissertation.

#### ABSTRACT

Transportation has become a crucial element to be considered for most development in city centre today. Although Transit-Oriented Development (TOD) seems as a decent solution for population growth and related urban issues, however how much does it really provide benefit to the community within the station area. This study will discuss and explore the relevance of Transit-Oriented Development towards communities within the transit station area with the idea of creating liveable and livelier urban living environment in Malaysia context. The study will explore the theoretical aspect of Transit-Oriented Development and Transit Station Community concept by indentifying the related guiding principle and approach for further understanding on this topic. The study carries out through descriptive method through content analysis on related documents to identify the prevalent issues and current planning direction within Greater Kuala Lumpur/ Klang Valley region which related to TOD. The study and analysis found several important consideration for TOD project such as each station area have its own distinctiveness, every participant in the project have their own end result expectation and high density residential environment is different from the nature of conventional residential area. The study conclude that TOD is a possible solution for urban growth in Kuala Lumpur, however every party should understand and limit their expectation based on its capability. In addition, integration between jurisdiction, developers and community itself is high needed with several consideration on local aspect and details during planning and design stage in order to ensure the successful of the development.

#### **ABSTRAK**

Pengangkutan menjadi suatu elemen penting bagi kebanyakan pembangunan dikawasan pusat bandar pada masa kini. Walaupun Pembangunan Berteraskan Transit (Transit Oriented Development - TOD) merupakan suatu penyelesaian bagi peningkatan populasi dan isu di kawasan bandar, namun persoalan mengenai manfaatnya terhadap komuniti di sekitar kawasan station transit masih menjadi persoalan. Kajian ini membincangkan dan menerokai sejauh mana relevannya TOD terhadap komuniti disekitar kawasan stesen transit dengan tujuan mewujudkan persekitaran sesuai didiami dan meriah didalam konteks Malaysia. Kajian ini juga akan menerokai aspek teoritikal mengenai TOD dan konsep Komuniti Stesen Transit dengan mengenalpasti prinsip dan pendekatan berkaitan bagi pemahaman lebih di dalam topik ini. Kaedah diskriptif melalui analisa kandungan dokumen berkaitan digunakan bagi mengenalpasti isu berbangkit dan halatuju perancangan di dalam wilayah "Greater Kuala Lumpur/Klang Valley" yang berkaitan dengan TOD. Analisa kajian menemui beberapa pertimbangan penting bagi projek TOD seperti keunikkan tersendiri setiap kawasan stesen, setiap pihak yang terlibat mepunyai jangkaan tersendiri terhadap hasil projek dan persekitaran bagi perumahan berkepadatan tinggi berbeza dengan cara hidup di kawasan perumahan konvensional. Kesimpulan kajian ini mendapati bahawa TOD adalah penyelesaian berkesan bagi peningkatan populasi di Kuala Lumpur, namun setiap pihak perlulah faham dan membataskan jangkaan mereka berdasarkan keupayaannya. Selain itu, integrasi diantara pihak berkuasa, pemaju dan komuniti sangat diperlukan serta penekanan beberapa aspek tempatan serta perincian harus dipertimbangkan di peringkat perancangan dan rekabentuk bagi memastikan keberkesanan pembangunan yang dijalankan.

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#### LIST OF ABBREVIATIONS

AM hour - Average morning peak hour between 0700 to 0900

BRT - Bus Rapid Transit

BTP - Bus Transformation Plan
CBD - Central Business District

CDL - Commercial Driver's License

DBKL - Dewan Bandaraya Kuala Lumpur (Kuala Lumpur City Hall)

EPP - Entry Points Projects

GDP - Gross Domestic Product

GIS - Geographic Information System

GKL/KV - Greater Kuala Lumpur and Klang Valley

GTP - Government Transformation Programme

KL - Kuala Lumpur

KLCP - Kuala Lumpur City Plan

KLIA - Kuala Lumpur International Airport

KTM - Keretapi Tanah Melayu

KTMB - Keretapi Tanah Melayu Berhad

KV - Klang Valley

LPT - Land Public Transport

LPTMP - Land Public Transport Master Plan

LRT - Light Rail (or Rapid) Transit

LUP - Land Use Plan

MRR - Middle Ring Road

MRT - Mass Rail (or Rapid) Transit

NKEA - National Key Economic Areas

PPHPD - Peak Passenger per Hour per Direction

P&R - Park and Ride

SPAD - Suruhanjaya Pengangkutan Awam Darat / Land Public

**Transport Commission** 

TDM - Travel Demand Management

TDMP - Travel Demand Management Plan

TOD - Transit Oriented Developments

TPZ - Transit Planning Zone

TTP - Taxi Transformation Plan

URDP - Urban Rail Development Plan

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Introduction

Human are what they built! Did human aware of the changes that they made to the environment in the end change them? Human become more self centred by ignoring their main obligation as human and lost much human value in themselves. These attitudes and mentality are due to lack of understanding upon the significant between human and environment relationship, which obviously mould by current lifestyles, culture and environment. As Gehl once said, "first we shape the city, then it shape us".

As population growth, the demand for residential development in the city centre and its surrounding rises. This situation creates pressure to the existing development in the city which later encourage urban sprawl and created more suburban area. As more low density residential development occur, city becomes segregated and form more mono-functional landuse pattern. As density increased, it creates demand for peoples to commute from home to work, shopping area and even recreation. As recent public transportation seem not reliable, it build a high dependability of automobile, especially in city centre.

To accommodate the growth of urban population rises in urban issues, Transit-Oriented Development seems as a potential solution in an urban context. It is expected to help in reducing a great amount of dependability on private vehicle and encourage public transportation and walking as a lifestyle in a city. With less private vehicle usage, streets can again play a big role to promote public realm and creates life in the city. As transit station become nodes which connect places in the city, adjacent area to the transit station creates high opportunity for commercial and public services since its ability to act as a magnet to attract people. By the presence of people, the place actually is a potential to community building which in the end will become the guardian to the place and help to sustain its liveliness and liveability.

However, creating high density residential within a transit station area is still yet to be successfully implemented, in Malaysian context especially. Development trend seems to be more interested in low density residential as in most suburban area. The other challenge is to provide affordable houses within the transit station where most of the area consist of high land value. However, by having enough residential unit alone is not a guarantee mould the culture, it should be enlighten with good quality environment and opportunity for people to mix and express themselves. As Rapoport (1977) once claimed, "Houses are not simply structures, but both expression and moulders of culture".

Even if the transit community concept is possible to be implemented, the biggest challenge to the concept is creating healthy and strong community. Community attachment to the place is also the crucial aspect as it help to generate and sustain community building for the place. Davis through The Urban Design Compendium in 2001 mentioned, "One of the key aspects of urban design is places for people. For places to be well used and well loved, they must be safe, comfortable, varied and attractive. They also need to be distinctive, and offer variety, choice and fun. Vibrant places offer opportunities for meeting people; playing in the street and watching the world go by".

This dissertation is intended as an introductory study towards understanding of implication and compatibility of Transit-Oriented Development towards Transit Station Community and in local context. It offers some analysis and insights on the subject discussed which related to Transit Oriented Development, placemaking and community building within transit station area.

#### 1.2 Problem Statement

Transit station community concept seems as a potential solution for transportation issues in urban centre and population growh. Transit station community concept encompasses both transit-oriented development and community building. Generally, the land area in the immediate vicinity of a transit station generally offers an excellent opportunity for transit oriented development and it also offer a range of commercial and public services in pedestrian friendly setting.

Regardless to its benefit and potential, it is crucial to be realistic in analysing the actual outcome of recent Transit-Oriented Development initiatives with transit station communities. Several cases have proven that the implementation of transit community concept is still far from achieving its primary planning target which is providing sufficient community benefit, to the local people especially. Recent lacking in community attachment to the place is also as important as to ensure the smoothness of the transportation efficiency.

Compatibility between Transit station community concept with local planning and policy should never be ignored and wisely synthesize, as it might be an excellent solution to transportation and placeness issues in urban centre.

# 1.3 Research Aim and Objective

The aim of the research is exploring the potential and suitability of Transit-Oriented Development towards Transit Community in Malaysia context and its effectiveness to improve transportation efficiency and creating good living environment for community. The following objectives are formulated in order to achieve the aim of the study;

 To analyze the compatibility of transit community in Transit-Oriented Development to the key aspect of a liveable community environment and current planning strategy in Malaysia which related to transit oriented development.

- ii. To identify the implication of Transit-Oriented Development towards transit community term of its benefit to the people, way of travel and aspect of place.
- iii. To recommend supporting effort in Transit-Oriented Development towards creating good urban living environment, high efficiency in transportation and community benefit.

# 1.4 Research Question

Based on the problem statement and background of study, the following research questions are formulated in order to answers the above research objectives;

- i. How does Transit-Oriented Development contribute to create community benefit or encourage relationship between human and environment within transit station area?
- ii. What does Transit-Oriented Development offer to create better living environment for transit station community as compared to conventional suburban residential scheme development?
- iii. What approach can be offer from Transit-Oriented Development to encourage transit ridership, improve public transportation efficiency/reliability and reduce public dependability on automobile within transit station community area?

## 1.5 Scope of Study

The focus of the study is arguing the possibility of application of Transit Community Concept in Malaysian context and understanding the actual current planning scenario in Malaysia which related to transit oriented development.

The primary focus is identifying the theoretical aspect of transit community concept and related guiding principles. By these understanding, it might help to synthesize the actual potential of adapting the concept in local climate, environment and lifestyle. Focus will also be given to determine some examples of best practise in other developed countries and analyse the main factor that makes transit community concept successful in transit oriented development and community building.

It is also crucial to identify and understand the current planning direction in Malaysia and analyze weather the concept is really suits with local planning policy or even help to improve it. With a consideration to the current issues in transit oriented development such as gentrification and even community feedback, a recommendation will be proposed at the end of the study in order to help to make Transit community concept as a realistic approach in Malaysian context especially.

#### 1.6 Research Significant

This dissertation can shows and explore the success of Transit community concept as an effective urban design approach to accommodate public transportation issues and creating attractive, pleasant and sustainable urban environment for living. It emphasis on transit oriented development, placemaking and community building provide a balance between creating good design and fulfilling people's needs. Other significances including the following;

i. The study will enrich the literature on the implication of Transit-Oriented Development on Transit Station Community and can be referred by those interested in this topic. It can also be valuable resources for local authority and municipality interest, student and others.

- ii. Seeking possibility to new approach of creating responsive, pleasant, high quality urban living environment which also help to reduce dependability to vehicle, increase transportation efficiency and promotes walkability within urban context.
- iii. The study will provide an insight on the successful model of Transit-Oriented Development on Transit Station Community which can help enhance the urban environment and transportation efficiency.

## 1.7 Expected Outcome

The study on Transit Community Concept as an effective approach to accommodate the needs of transportation in urban centre which at the same time encourage community building for current development. The understanding of related principles and how the actual approach contributes to the creation of high quality and liveable urban environment might be benefited for those interested in transit planning, community building and even placemaking.

In the end, it is expected that final strategy and outline recommended in this dissertation might be a reliable resources and good literature to the people in the built environment profession as well as the researches, students and public. Best practices of Transit Community Concept in most developed countries are expected to be well considered as a practical approach in urban design and planning in local context towards creating healthier community and liveable urban area.

## 1.8 Research Design

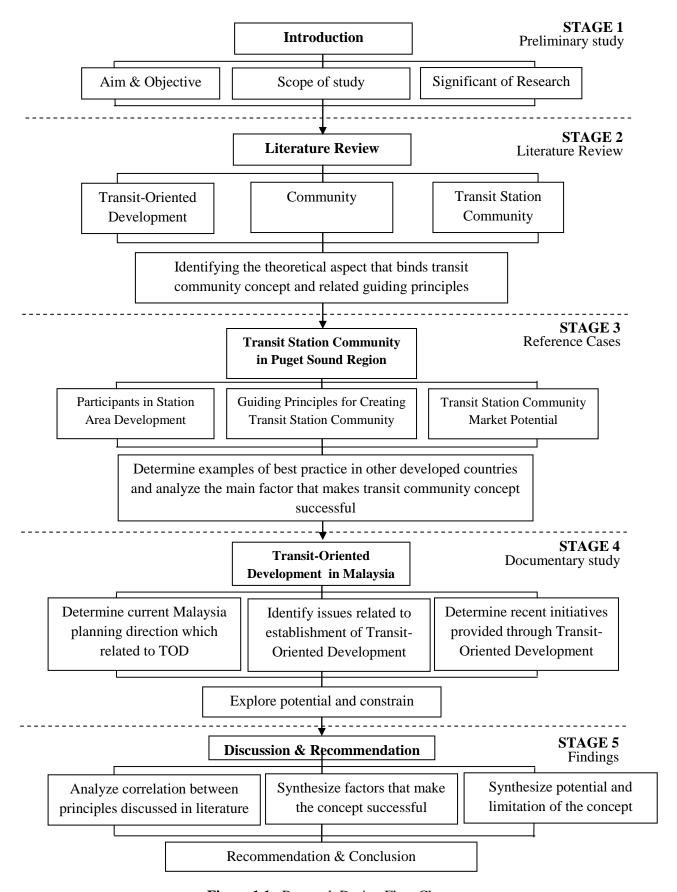


Figure 1.1: Research Design Flow Chart

# 1.9 Chapter Outlines

This dissertation is organized into five main chapters. The purpose and the outline for each chapter are as follow:

## i. Chapter 1: Introduction.

The purpose of this chapter is to give brief introduction on the dissertation topic and the framework of the study. The chapter explained the background of the issue, aim and objectives, the significance and expected contribution of the study, the scope and limitation of study, research methodology and approach.

# ii. Chapter 2: Literature Review on Transit Community Concept

The purpose of this chapter is to understand the concept of and guiding principles which related to Transit Station Community and Transit-Oriented Development. In addition, a studies on theories related to urban community will be further discussed because is it considered as important aspect to the successful of Transit Station Community Concept.

# iii. Chapter 3: Reference case on Transit Station Community Concept

This chapter present some example cases of cities which have been successful in creating high quality urban environment through Transit Community Concept. Different cities might offer different approach towards the same concept where in the end it might help to provide various option and alternatives to improve its guiding principles. iv. Chapter 4: Discussion on the local planning & policy related to transit oriented development and issues related to Transit Community Concept.

The purpose of this chapter is to determine the current direction in planning and policy in Malaysia which related to Transit oriented development. The basis of the study is to determine the direction and related approach/initiatives which might be suited to the current planning or as an excellent improvement to it.

Recent issues which related to Transit Oriented Development will also being discussed on this chapter in order to see the common flaw in the implementation stage and analyze it as future improvement to the concept.

# v. Chapter 5: Discussion, Conclusion and Recommendation

The purpose of this chapter is to provide overall summary of approach in Transit-Oriented Development as effective approach for urban development for Transit Station Community. The characteristic that contribute to the successfulness of the concept will be reviewed and highlighted again to conclude the discussion and findings.

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Note: Arranged alphabetically according to author's name.