CHAPTER 1

INTRODUCTION

1.1 BACKGROUND STUDY

According to Malaysian Road Transport Act 1987, “parking” means the bringing of a motor vehicle to a stationary position, and causing it to wait for any purpose other than that of immediately taking up or setting down persons, goods or luggage; whereas “parking place” means a place set apart as a place at which motor vehicles or any specified class or description of motor vehicles may be parked.

There are certain criteria taken into consideration in designing an effective and practical car park, which includes the purpose of building which it serves, the current and projections of future traffic volumes, and the amount of land available. However, the rapid development enjoyed by Malaysian cities in recent years has caused the increase in traffic amount, which in turn, increases the demand for car park as well. The problem is obvious especially in popular crowd-drawing areas such as shopping malls, commercial areas, office lots, places of worship, hospitals and etc. Due to inefficient parking systems and inadequate car park, consequences such as illegal parking at vacant land, on the road kerb or by the roadside, double parking, and even internal traffic jams had developed.

The lack of car park is also a common problem in Malaysian government hospitals. News reports depicting the seriousness of this problem are often featured on the mainstream media. This study will focus on the lack of car park in Tengku Ampuan Afzan Hospital (HTAA) at Kuantan. Located at Jalan Tanah Puteh, HTAA sits on a land area of
40.1 acres, and is the general hospital serving the general population of Kuantan district, with a capacity of 793 beds. The lack of parking spaces in HTAA is not a new problem, and it has been highlighted on the press for a couple of times.

1.2 PROBLEM STATEMENT

HTAA has been suffering from the issue of insufficient car parking spaces for a long time. Due to the fact that it provides the most comprehensive healthcare services to the general public of Kuantan, and supporting services for the rural hospitals in Pahang as a whole, its accident and emergency (A&E) unit is operating twenty-four hours per day and seven days per week, whereas its outpatient department operates at office hours, which is from 8am to 5pm on weekdays. Hence, there are visitors coming to and leaving the hospital at any time of the day.

The car parking lots in HTAA are shared among the visitors as well as the staffs. Since most of the parking lots have been taken up by the employees at HTAA, there are not plenty left for the use of general public. The numbers of patients and visitors of HTAA has been increasing from year to year, however the number parking lots remains the same all these while. This had caused the problem of insufficient parking lots to get worse in recent years.

While the problem remains unsolved till this day, it has developed consequences which may affect the level of service experienced by the visitors to the hospital. Problems of double parking, illegal parking by the road kerb or vacant space at the hospital compound, and internal traffic jams are common scene in HTAA. Due to insufficient parking lots available, cars are plying around the compound of HTAA in search of vacant parking lots. Internal traffic jams will occur when the amount of cars moving around HTAA has reached the capacity of the internal roads. Sometimes it had obstruct the movements of ambulance entering and exiting HTAA, causing delay to occur in dealing with emergencies. The problem gets worsen in weekends, due to the increase in the number of visitors.
1.3 RESEARCH OBJECTIVES

The objectives of this study are:

1. To assess the supply and demand of the car parking system in HTAA.
2. To study the parking parameters, including the parking accumulations, parking durations, parking turnover, and parking occupancy in HTAA.
3. To identify the number of illegally-parked vehicles within and out of HTAA’s compound.
4. To suggest improvements to the ongoing car park problem in HTAA.

1.4 SCOPE OF STUDY

The study will be carried out at the compound of HTAA. The scope of study will cover the traffic flow and parking flow behaviors in HTAA. The traffic flow data is needed to understand the amount of traffic entering and exiting HTAA, whereas the parking flow behaviors data studies the average amount of time spent by visitors to utilize the car park. The data will be used to propose a better parking systems and alternatives which can accommodate and regulate the amount of traffic in HTAA, so as to solve the parking woes which haunted HTAA for a long time.