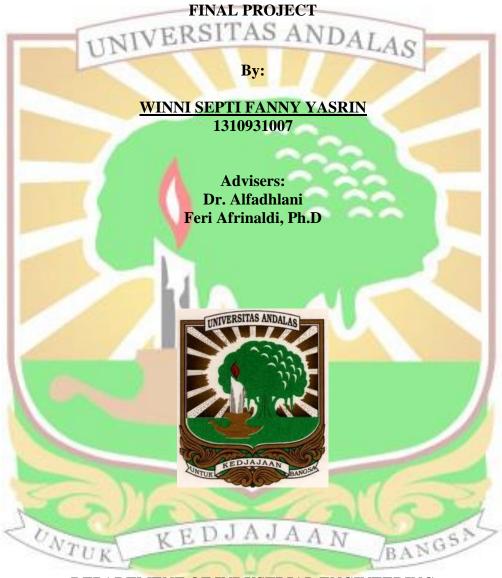
## AN EVALUATION ON RSUP DR M DJAMIL PADANG PARKING LOT CAPACITY



DEPARTMENT OF INDUSTRIAL ENGINEERING FACULTY OF ENGINEERING UNIVERSITAS ANDALAS PADANG

2018

## ABSTRACT

Parking is an element that can not be separated from a facility or a building, including hospitals. M Djamil is one of the health facilities located in Padang City. As a government and central hospital (RSUP), M Djamil should have an adequate parking space in accordance to the standard design of parking facilities. Based on preliminary survey that has been done, can be seen many vehicles being parked not in appropriate place, which can be disrupting the traffic. This research will be conducted to study the cause of the problem and give suggestion for improvement on parking facility at RSUP M. Djamil.

This research started by calculating the existing capacity of parking facility at RSUP Dr. M Djamil. The condition for car and motorcycle parking lot is considerably different. Car parking lot has parking line while motorcycle parking lot doesn't. This made the calculation for existing capacity in car parking lot was based on direct counting on the line, while for motocycle parking lot, there was no parking line, so the calculation was based on the standard size. The next step was calculating the demand based on a one week observation. The capacity would then be compared to the demand on parking area for both motorcycle and car.

The calculation of existing capacity resulted on the number of parking spaces that currently provided by RSUP Dr M Djamil. There are 319 spaces for car and 551 spaces for motorcycle. While the maximum demand for car is 453 spaces and for motorcycle is 1038 spaces. The current parking layout condition hasn't met the standard yet. So, the design of parking layout developed in this study was based on the standard. There are two improvement suggestions proposed on this study, the first is additional parking lot which refers to the deficiency calculation based on demand-capacity comparison, for this suggestion there is one parking pattern for motorcycle and four parking patterns for car. These parking patterns for car have something to do with the parking angle. There are 4 angles which each of the angle has its own advantage(s) and disadvantage(s). In conclusion, the the wider the parking angle, the more convenient the driver would be, but it also gave the less parking space, viceversa. The hospital can choose to which angle that can be suitable to be used based on hospital's consideration and priority. The second suggestion has something to do with managerial regulation, which is aiming to delimit vehicles that park in the hospital parking area. This can be done by providing mass transportation for employee, or by applying escalating parking price to avoid long-term parking.

KEDJAJAAN

BANGSA

Keywords: Hospital, Parking, Transportation