ABSTRACT

STUDY OF OPTIMIZATION PARKING FACILITY IN FACULTY OF MEDICAL (FK) AND FACULTY OF MATHEMATICS AND NATURAL SCIENCES (FMIPA) IN UNIVERSITY OF LAMPUNG

by

ROLAN ARDEKA PUTRA

University of Lampung (Unila) is the only public university in Lampung. Unila contained of eight faculties. Each faculty has its own parking area that serves as one of the supporting facilities all student activities on campus Unila. The purpose of this study is to determine whether the already existing parking capacity has met users need in Unila parking, especially in FK and FMIPA, as well as trying to find a solution to the handling of parking problems in both the Faculty.

This study consisted of two phases, which collects data required parking, such as license plate numbers of vehicles, to enter and exit the vehicle, and then analyze it with some formula that is used as a parameter conclusion. This study uses several parameters that are used as a reference conclusion and settlement of the problem, namely the accumulation of vehicle parking, parking index, duration of parking, parking capacity, as well as parking turnover rate (PTO). From the calculation results will be concluded and related solutions in both the Faculty.

From the analysis, the accumulated value obtained in FK largest car park as many as 125 vehicles, while the majority of motor vehicle accumulation of 190. In calculating the capacity of the car park at FK obtained the largest parking capacity as many as 414 vehicles, while for most motor vehicle parking capacity that is equal to 1552 kendaraan. In parking index calculation index values obtained for the vehicle's biggest car park as many as 137%, while the largest motor vehicle as much as 48.96%. At the turn of the calculation in the FK-level parking for automobiles obtained maximum value of 3.15, while in a motor vehicle obtained maximum parking turnover rate of 1.2. Then for Faculty accumulation values obtained in FK largest car park as many as 60 vehicles, while the majority of motor vehicle accumulation of 457. From calculations conclude that the motor vehicle parking area at FK still can accommodate vehicle parking. While in the car vehicles in the parking area of the existing CF can not accommodate parking of vehicles. Later in the Science Faculty motorcycle parking area also still be able to accommodate the parking of vehicles, whereas the existing car parking area can no longer accommodate neatly parked vehicles. As a solution to the problem of the parking lot, then made plans car parking area
at the Science Faculty and car parking area FK plan that can accommodate vehicles parked cars on both the faculties.

Keywords: FK, FMIPA, parking index, parking duration, parking capacity, PTO