VALUE EVALUATION OF TOLL ROAD CONDITIONS WITH PAVEMENT CONDITION SURVEY (PCS) METHOD AND FALLING WEIGHT DEFLECTOMETER (FWD) METHOD

Elisa Putri 41117310066

Lecturer's Name

Muhammad Isradi, ST, MT

Civil Engineering Department, Faculty of Engineering

Mercu Buana University, Bekasi

ABSTRACT

Road as main transportation facility, have an important function as connected between a distric. With increasing of traffic load, road service level can cause to be reduced. The road that experienced by overloading because continuous burned by the volume of traffic larger than planned, will decrease the tructure power of road pavement.

This research aims to evaluate the value of pavement conditions on the Cipali Toll Road section with the Pavement Condition Survey (PCS) method and the Falling Weight Deflectometer (FWD) method, comparing the results of the two methods and calculating the amount of costs incurred to repair road damage. This study uses descriptive analysis method, namely by describing and describing sample data in accordance with the results of the survey in the field. The analysis used uses primary data taken from the assessment of PCS surveys in the field and deflection data as a result of testing the Falling Weight Deflectometer.

The results of the PCS method on the Cipali Toll Road section obtained an average value of more than 0.33. The deflection value in lane 1B is 1,246 mm and in lane 1A is 739 mm. The solution proposed for selecting the type of treatment is the reconstruction of CTRB with a total cost of Rp. 74,797,691,436,000.

Keywords: PCS, FWD, deflection