

Evaluation of Flexible Pavement Distresses due to Undesirable Commercial Vehicles Activity

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ABSTRACT

A study was carried out to evaluate the flexible pavement distresses for cracking and potholes in the parking area with and without commercial activity. Infrastructures such as parking areas are commonly used for another activity rather than for car park only. For example, fresh market, ceremony, and concert. This Study focusing on open space parking area as the gaps between other researchers that studied on highways or road network. The chosen of site location were divide into two categories which are urban area, Kuantan city and the educational area, Universiti Malaysia Pahang, Gambang. The aim is to study the severity level of distresses appeared on parking area. Therefore, the main objective is determining the most severe area of distresses by visual observation and performing the image software analysis to analyze the severity level of distresses with the guideline in collecting data based on national guidelines, published by the Public Works Department. Besides, performing Image Interpretation Group (IIG) as the method to classified the severity level by using Gwyddion Software. The data shows, 5 sample distresses for potholes were founded and 7 sample for cracking was collected at each site area. For the conclusion, parking area with commercial activity at urban area recorded the high number distresses and classified as the worst condition among the other site of parking area..

KEYWORDS: Pavement Distresses, Cracking, Potholes, Image Analysis

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