

**PAVEMENT DISTRESS IDENTIFICATION ALONG JALAN
PERMATANG PAUH, PULAU PINANG**

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ABSTRACT

This study practice about to the identifying flexible pavement distress along the jalan Permatang Pauh, Pulau Pinang. The objectives of this study are to get detail information related to the type, severity level of existing distress collected by doing a survey and relationship between traffic volume and pavement distress. From the result, it show that there are small percentage of lorries and busses that using this road. Where the percentage for lorry is 3.6%, the percentage of bus is 0.4% and the percentage of trailer that using that road is 0.38%. It can be conclude that there is no relationship between road distress and heavy vehicle (lorry, bus and trailer) at the peak hours of 5.00pm to 6.00pm. From the pavement distress observation along Jalan Permatang Pauh, the result show that the most type of distress is edge, where most of the stations have this kind of distress. The edge type distresses are caused by the improper drainage system.

The collected data is then used to determine needed maintenance activities on the network and a project level. Thus, the proper pavement treatment options cannot be accurately selected unless the types and the root causes of pavement distress are known and understood. The selection of the preferred alternative, in contrast, is typically based on the optimization of the benefits to costs ratio of each of the selected alternatives.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Nowadays, Malaysia has a road network which totals about 70 000 kilometers in length. The growing demand on highway over that past couple of decades, has led to a dramatic increase in need to rehabilitate our existing pavement. This rehabilitation technique is not new in European country, but even though is much more needed due to economical situation; it will take quit to apply in Asian countries (Jhatical, 2006). It is forecast that within the next 10 to 20 years. There will be fewer new road constructions and the focus will be on upgrading the existing network as well as on maintenance. Numerous techniques exist for road maintenance. The maintenance practice varies from agency to agency depending on the available skills, tools and management strategies (JKR Malaysia). Therefore, infrastructure condition and improvement are costly, and funds and recourses are limited. In order to develop an infrastructure system in a way which best meets the involving demands, maintenances strategy is required to improve a quality of road and able to reduce a high cost of maintenance (JKR Malaysia). This is important for road safety and contributes toward accidents fatality.