DETERMINING THE TRAFFIC SAFETY MANAGEMENT CRITERIA IN HIGHWAY MAINTENANCE WORKS FROM ROAD USERS' PERSPECTIVE

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ABSTRACT

Road traffic injuries are a major public health problem and a leading cause of death, injury and disability around the world. Each year nearly 1.2 million people die and millions more are injured or disabled as a result of road crashes, mostly in the urban areas of developing countries. Better plans, transparent process, and public support are some of the benefits that road managers can obtain by educating and involving the general public. This research examines the perception of highway users towards the installation of the traffic safety equipments during the road maintenance works. Besides that, the research will also determine the traffic safety management criteria in ensuring the traffic control signs and equipments are meeting the highway users' needs. The respondents are consisting of highway users from Ipoh to Kuala Lumpur. A survey will be conducted by researcher on the installation of traffic safety equipment applicable on highway maintenance work towards the perception of highway user according to homogeneity factors that classified also into two categories which are 'age and gender of the drivers' and 'type of vehicle'. Questionnaire was produce to identify the overall perception of highway user towards the installation of traffic safety equipment that used during maintenance work progress. In addition, the traffic safety management criteria will be determined in ensuring the traffic control signs and equipments are meeting the highway users' needs. The researcher found that the overall perceptions of the respondents stated the installation of the traffic safety equipments during the road maintenance works progress is at below average level. In term of traffic safety management criteria it must have criteria like all the traffic safety equipment should be more brighter and easy to see from long distance, will instruct drivers to follow a path away from where work is being done and concessionaire should aware their equipment in good condition and should do routine maintenance. From the analysis have been carried out, the result shows that the management should improves the safety in work zones from the perception of respondents were analysed and discussed.

CHAPTER 1-INTRODUCTION

1.0 Background of Research

Handling traffic in work zones is challenging because the work activity presents an abnormal and often disruptive environment to the highway users. Highway users accustomed to a clear, unobstructed roadway are required to recognize and avoid closed lanes, workers in or near the roadway, and a variety of fixed object hazards. The maintenance activities or construction activities may also present an interesting view to many highway users that can divert their attention from the driving task. Traffic safety is a major issue at work zones. When the traveling path of the highway users is occupied with maintenance activity or work activity, conflict arises between the requirements of the construction workers and the desires of the traveling public. Work sites create potential hazards because they confront the highway users with unexpected and sometimes confusing situations, create obstructions which the highway users may run into, divert the highway users attention from the driving task and expose the maintenance or construction workers to the moving traffic. This research will determine the traffic safety management criteria in highway maintenance works from road users' perspective in order to come to a conclusion on what are the traffic safety management criteria in ensuring the traffic control signs and equipments are meeting the highway users' needs.

1.1 Research Questions

- 1. What are highway users' expectations through the installation of the traffic safety equipments? Are they satisfied with the equipments provided?
- 2. Has highway users' journey's been affected by the installation of traffic safety equipment at work zones area?
- 3. What are the traffic safety management criteria in ensuring the traffic control signs and equipments are meeting the highway users' needs?