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ANALYTICAL STUDY OF A ROAD TRAFFIC CONFLICT AT THE T-JUNCTION OF UNIVERSITY OF BENIN MAIN GATE

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Abstract

Due to constant occurring of fetal accident at the University of Benin main gate, there is need to carry out analytical study on T-junction traffic system to prevent various accident from occurring also from claiming life's. The analytical method used for measuring traffic conflict approach is a suitable means to conduct a study of traffic safety; the analyses conducted include identification and classification of traffic conflict, volume data at the intersection, this study was carried out for the period 6weeks from Monday to Friday. The daily collection was divided into two sections, morning peak from 7am to 9am and afternoon peak from 3pm to 5pm. Four observers were positioned in different location for the morning and afternoon peak hour each in other to obtain the data for the analysis. One way ANOVA was used to analyze the difference in the volumes of traffic at all locations and shows that there were no significant difference in the volumes of traf ic except on holiday's period where the dif erence was clearly seen. Developed models show that linear relationships are significantly appropriate to explain the relation between traffic conflict and traffic volume with coefficient of determination ranging between 0.47 and 0.76. Cross- merge and mergemerge accurate conflicts were reduced after temporal installment of drums to stop commercial drivers from packing at the intersection. In order to enhance traffic safety the study proposes suitable traffic Conflict Technique (TCT), such as marking the minor road, providing safety indicator, such as signs and signals legible enough for operators, zebra crossing, effective control of commercial drivers.

Author Keywords

Measures of Traffic Conflicts (MTC), Traffic Conflict Technique (TCT), Safety indicator, Micro-simulation

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