



SAFE AND EFFICIENT PEDESTRIAN CONTROL MECHANISM



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S.H.DAMITH

This thesis was submitted to the Department of Civil Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Science.

Supervised By

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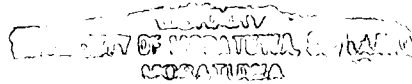
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MASTER OF SCIENCE



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DECLARATION

I, Sella Hewage Damith, here by declare that the content of this thesis is the output of original research work carried out over a period of 15 months at the Department of Civil Engineering, University of Moratuwa, Sri Lanka. Whenever the work done by others was used, it was mentioned appropriately as a reference.



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ABSTRACT

Pedestrians are legitimate users of the transportation system and they should, therefore, be able to use this system safely and without unreasonable delay. Pedestrians have a right to cross roads safely, Planners and Engineers, therefore, have a professional responsibility to plan, design, and provide safe crossing facilities.

Major findings of recent accident studies have identified that pedestrians comprise a significant proportion of serious injuries and fatalities. Furthermore it has found that one half of pedestrian fatalities have occurred while the pedestrian was crossing the road but not on a marked pedestrian crossing. As the majority of pedestrian accidents occur while crossing a road, the need of safe and efficient pedestrian crossing facilities could arguably be the most important pedestrian safety factor.

Generally, the cost of installation and maintenance of pedestrian crossing needs to be balanced against associated benefits such as time saving and safety. Therefore, installation of pedestrian crossing at a location of a road is being considered, delay is one of the major term that should be considered and it will be significantly differ upon the type of crossing introduced to a particular location. Some time there would be additional delay by introducing crossing where it is not needed or inappropriate

In Sri Lanka, the practice of deciding where to install pedestrian crossing considerably differs from other countries, and engineers have been got to use their judgment arbitrarily and sometimes influenced by political or public pressure in reaching decisions,

Goal of this study is, to prepare a background to develop set of guidelines to assist in determining the appropriate crossing facility for a given location of a road, based on the relationship between pedestrian and vehicle flow and their delays. These relationships help to develop a more efficient pedestrian crossing facility that minimizes total delay for both pedestrians and vehicles.

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I dedicate this thesis to my mother.

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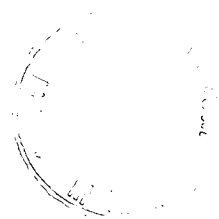
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