

**A METHODOLOGY FOR  
DESIGN OF PEDESTRIAN CROSSING FACILITIES IN  
SRI LANKA**

**MASTER OF ENGINEERING IN HIGHWAY & TRAFFIC  
ENGINEERING**

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Sri Lanka

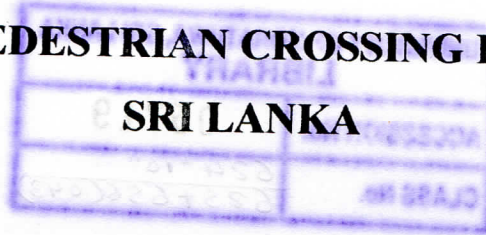
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**A METHODOLOGY FOR  
DESIGN OF PEDESTRIAN CROSSING FACILITIES IN**



**By  
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**Supervised by  
Professor A.S.Kumarage**

The Dissertation 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 Engineering in Highway & Traffic Engineering.

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## DECLARATION

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations"

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## ABSTRACT

Pedestrian accommodation should be an integral part of the design of any transport infrastructure project. It can be defined as walkways and pedestrian crossings. Pedestrian have a right to cross roads safely. Therefore road designers have a professional responsibility to plan, design and provide safe walking and crossing facilities.

Recent accident studies identified that pedestrian comprise a significant proportion of serious injuries and fatalities while they were crossing the road without using a marked pedestrian crossing. As the majority of pedestrian accident occur while crossing a road, the need of safe and efficient pedestrian crossing facilities could be the most important pedestrian safety factor.

Sight distance, Level of Service and delay to pedestrian are major terms to be considered with warrants prior to installation of pedestrian crossing at a location of road being considered.

Some time there would be additional delay and hazard by introducing crossing where it is not needed or is not suitable.

Pedestrian characteristics and travel behaviour in the form of relationships among parameters such as speed, density, flow and space of pedestrian need to be identified by conducting further pedestrian surveys such as flow and travel time etc.

Design of a pedestrian crossing requires a basic understanding of related human characteristics and capabilities which are dependent on age, physical and mental condition of pedestrians, who are expected to use the crossing at that particular location.

So the main aim of this study is to develop a guideline to assist in determining the appropriate crossing facility for a given location of a road based on the sight distance, Level of Service, delay to pedestrians and vehicles, pedestrian speed, density, flow and space in addition to the warrants.





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