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IMPLEMENTING CYCLE LANE FACILITIES IN EASTERN PROVINCE IN A SUSTAINABLE MANNER



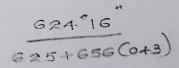
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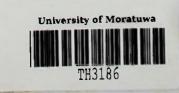
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Degree of Master in Engineering in Highway and tradic Engineering

Department of Civil Engineering

University of Moratuwa Sri Lanka







TH 3/86 + CD- CON Declaration of the Candidate and Supervisor

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ACKNOWLEDGEMENT

I am glad to present this thesis for my Master degree in Highway & Traffic Engineering, University of Moratuwa, Sri Lanka. This report consists of the details of my research findings towards implementing cycle lane facilities in Eastern Province.

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ABSTRACT

Commuting by bicycle is a sustainable transport strategy and has advantages over other modes of transport, both for the commuter and for society. The social cohesion that can bring through recreational opportunities also promotes wellbeing. A diverse range of people choose to cycle, including school-aged children, regular commuters, weekend recreational cyclists and sporting cyclists. Cycling does not emit greenhouse gas, cause air or water pollution or rely on fossil fuels. Road Development Authority (RDA) has taken a policy decision to incorporate a separate lane as cycle lane to encourage the non-motorized transport of this country. But it is observed that these bicycle lanes are not used for its intended purpose. Especially in Colombo area, there are very few bicyclists on the roads and bicycle lanes are always empty. So, it is seen that the bicycle lanes are used to overtake vehicles in wrong side, for illegal roadside parking etc. While the situation is such, Road Development Authority is planning to extend its new policy to the areas where there are higher numbers of cycle users. Trincomalee is one of the districts in Eastern province having higher numbers of cycle users and the terrain condition also well suited for cycling. More than 50% of the road users are identified as cycle users and almost 60% of car, three wheel & motorcycle trips are less than 4 kms, a distance that is easily cycled in less than 20 minutes. These data were collected during field observation. Although cycling is an option for many commuters, a considerable number of them choose to use other forms of transport. Especially school children & office staffs, they use three wheel or motorbike as transport mode. In order to underpin policies that promote commuting by bicycle, this research investigates the determinants for commuting to work, school or their other purposes and studies about the public opinion in existing road conditions to use bicycles and their concern in cycling facilities to be provided in the future road developments. A questionnaire survey was conducted among 200 road users in different part of Trincomalee district. Accordingly, it was understood that existing road conditions such as non-availability of continue route network dedicated for Cyclists, mixed traffic without proper safety measures and parking facilities discouraged the commuters to use bicycle as their transport mode and commuters in Trincomalee district are really willing to use as a sustainable transport mode for the short trips up to 4kms, if the cycle lane facility are provided with safety and comfort.

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LIST OF ABBREVIATIONS

Abbreviation Description

RDA - Road Development Authority

ADT - Average Daily Traffic

LTA - Land Transport Authority

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