## **UNIVERSITI TEKNOLOGI MARA**

# GIS APPLICATION OF BICYCLE ROUTE PLANNING IN KUALA TERENGGANU, TERENGGANU

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Thesis submitted in fulfillment of the requirements for the degree of **Bachelor Science of Geomatics** 

Faculty of Architecture, Planning and Surveying

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### **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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#### ABSTRACT

Basically, cycle lanes designated specifically for use by cyclists from which motorized traffic generally excluded. However, at the moment, documentation in relation to the provisioning or planning status of bicycle infrastructure is still incomplete and does not get enough attention in Malaysia. There are several factors rises while conducting this research which are the safety issues involves cyclist and the condition of traffic at the study area act as the main research background. Second, the intensity of road accident including the number cyclist involved, frequent locations and how the intensity of accidents can be patterned. All the elements act as an important input as to generate the best cycling route network according to the parameter or criteria and the suitability of route to provide path for cyclist in Kuala Terengganu, Terengganu. It is specifically studies in this district because involving tourism as in this area has various places which become tourist attraction. This research is based on the traffic investigation form to identify the safety issues as well as the cyclist accident data which has been analyzed to evaluate and determine the intensity of cyclist accidents pattern. The research of the study will provide special routes that facilitate them to move and could reduce risk of accidents. The results of the study also suggested to produce a thematic map with an information about the name of the road and the nearer tourist destination. It is hope that the study can contribute to the improvement of urban planning for cycle lane and facilities in Kuala Terengganu.

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