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**THE SUSTAINABILITY AND LONG-TERM IMPACT OF ROAD
MARKING PRACTICES IN PREVENTING ROAD ACCIDENTS**

DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE AWARD OF
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DECLARATION

"I declared that this dissertation is the result of my own research and that all sources are acknowledged in the references"

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ABSTRACT

The road marking system is a critical traffic safety facility that controls traffic flow, provides essential information, and enhances the safety of both vehicles and pedestrians. Road markings influence driving behaviour, which in turn affects road safety. Autonomous vehicles further increase the importance of precise and durable road markings. This research aims to propose handling efforts to improve road marking in Perak. The research objectives are to investigate the sustainability of road marking, determine their impact on traffic accidents, and propose strategies to improve road marking practices. The study employs a quantitative methodology, distributing 134 set of questionnaires to respondents and analysing 116 set questionnaires returned by using SPSS Version 27. The findings indicate that the sustainability of road marking in Perak is significant, with respondents agreeing that current road markings contribute to transportation safety and efficiency. Additionally, inadequate or faded road markings are found to contribute to driver confusion and increase the risk of accidents. Proposed improvements include enhanced collaboration between road authorities and technology innovators to improve the durability and visibility of road markings. These results underscore the critical role of road markings in traffic safety and highlight the need for ongoing maintenance and technological advancements to reduce traffic accidents.

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