

**MICROSCOPIC QUEUING STUDY AT BATU TIGA
TOLL PLAZA**

By

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Report is submitted as
the requirement for the degree of
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DECLARATION BY THE CANDIDATE

I **David Anak Empang, 2004217048** confirm that the work is my own and that appropriate credit has been given where reference has been made to the works of others.

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(8th December 2006)

DECLARATION BY THE SUPERVISOR

I confirm that I have read and checked this report and to my opinion the report is suitable in term of scope and quality required for awarding the Bachelor of Civil Engineering (Hons).

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ABSTRACT

This study was to compare the characteristics of queuing at microscopic level of analysis at the manual and electronic toll plazas. Batu Tiga Toll Plaza was selected as the study area. The tollbooth in this plaza utilizes 3 types of toll systems; namely manual, Touch 'n Go, and SmartTAG. The analysis at microscopic level was used in comparing the characteristics of queue in this study. For microscopic analysis, both arrival and service data were collected manually at KL bound as shown in APPENDIX F. The finding indicated that the queuing characteristics of Touch 'n Go tollbooth was better than SmartTAG and Manual tollbooth. In addition, it was found that the drivers spent about 15 to 35 seconds to be served at the Batu Tiga Toll Plaza. The recommendation was made based on the finding and analysis done in the study.

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