## UNIVERSITI TEKNOLOGI MARA

# THE ANALYSIS RATE OF NOISE POLLUTION AT SELECTED SCHOOL SURROUNDING AREAS GEORGETOWN, PULAU PINANG BY USING GEOGRAPHICAL INFORMATION SYSTEM(GIS)

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#### **AUTHOR'S DECLARATION**

I declare that the work in this thesis/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 nonacademic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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#### ABSTRACT

The rise in the amount of motor vehicles on the highway, particularly in the population is a significant contributor to noise pollution especially in areas such as Georgetown, Pulau Pinang. This research aimed to study the sampling, documenting and spatially analyzing noise pollution at selected school surrounding area Georgetown, Pulau Pinang by using GIS software. The objective one of this study is to identify the noise level pollution in Georgetown by using spatial analysis. For the second and third objective, to determine the noise level pollution using Noise Dose formula based on standard guideline and determined the noise pollution level of each of study case under recommendation of the authorities. In this study, GIS are using for complete the objective and process the data collection. The expected outcome is produce the mapping interpolation distance weight (IDW) and show the data under recommendation of the authorities.

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