

UNIVERSITI TEKNOLOGI MARA

**GIS-BASED OF ROAD
INFRASTRUCTURE MANAGEMENT
SYSTEM IN BANGSAR, KUALA
LUMPUR**

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Thesis submitted in fulfillment
of the requirements for the degree of
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AUTHOR 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

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 development and economic growth of a nation is closely related to its available transportation system. The road infrastructure is very important in a good and efficient road transport infrastructure facilities will promote industrial and socio-economic development. To provide safety and comfort to road users, a comprehensive road maintenance schedule must be formulated and adopted to ensure those roads are in good condition at all times. Preventive maintenance works, such as road rehabilitation will help to reduce the major road repairs and expenditure. Prior to this, a good database, gathered through GIS will be necessary in order to ensure maintenance is done effectively. Geographic Information System (GIS) is said to be one of the useful tools that can be utilized to manage database in road maintenance engineering. This system is capable of storing, managing, analyzing, computing and displaying all forms of geographical data for road maintenance works. The 3 dimensional visual is efficient in order to view the graphic view of the road infrastructure. It will increase the maintenance quality in order to make the management system of road infrastructure is very efficient.

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