

**A STUDY ON SCHOOL LOCATION DETERMINATION AND SUITABILITY USING
ANALYTICAL HIERARCHY PROCESS (AHP) IN GEOGRAPHICAL INFORMATION
SYSTEM (GIS) APPROACH.**



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MAY 2013

Contents

1.	Letter of Report Submission 1	
2.	Letter of Offer (Research Grant)	2
3.	Acknowledgements	3
4.	Enhanced Research Title and Objectives	4
5.	Report	5
5.1	Proposed Executive Summary	5
5.2	Enhanced Executive Summary	6
5.3	Introduction	7
5.3.1	Aim and Objectives of Research	8
5.3.2	Study Area	8
5.4	Brief Literature Review	9
5.4.1	Educational Facility	9
5.4.2	Criteria for School Site/Location Selection	10
5.4.3	Locating Potential School Site/Location using ArcView GIS	13
5.4.4	GIS Application for School Mapping	14
5.4.5	Criteria for Finding New School Site/Location	16
5.5	Methodology	18
5.6	Results and Discussion	20
5.7	Conclusion and Recommendation	27
5.8	References/Bibliography	27
6	Research Outcomes	29
7	Appendix	30

2. Letter of Offer (Research Grant)



Rujukan Kami : 600-RMI/ST/DANA 5/3/Dst (150/2009)
Tarikh : 20 Januari 2010

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KELULUSAN PERMOHONAN DANA KECEMERLANGAN FASA 03/2009
TAJUK PROJEK : A STUDY ON NEW SCHOOL LOCATION DETERMINATION
USING GEOGRAPHICAL INFORMATION SYSTEM (GIS) APPROACH

Dengan segala hormatnya perkara di atas adalah dirujuk.

Dengan sukacitanya, Institut Pengurusan Penyelidikan (RMI) mengucapkan tahniah kepada tuan kerana telah berjaya ditawarkan Geran Dana Kecemerlangan bagi projek penyelidikan tersebut tertakluk kepada syarat-syarat dalam lampiran.

Tempoh projek penyelidikan ini ialah dua (2) tahun, iaitu bermula 01 Januari 2010 hingga 31 Disember 2011. Peruntukan yang diluluskan ialah sebanyak RM8,000.00 sahaja bagi Kategori D. Tuan diminta mengemukakan kertas cadangan penyelidikan beserta bajet yang baru seperti yang dicadangkan dan bersesuaian dengan jumlah kelulusan yang telah diluluskan.

Sekian, harap maklum dan terima kasih.

"SELAMAT MENJALANKAN PENYELIDIKAN DENGAN JAYANYA"

Yang benar


MUSTAFAR KAMAL HAMZAH
Ketua INFOREC
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Bahagian Perancangan : 603-5544 2100/2753/3757
Bahagian Inovasi : 603-5544 2750/2747

Bahagian Penerbitan : 603-5544 1425/3344 2747
Bahagian Sokongan ICT : 603-5544 3067/2104/3521 1461
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5. Report

5.1 Proposed Executive Summary

The proposed project is focuses on determination of school location for secondary school covering district of Perlis State. The Perlis State has seen an increase in population over the last twenty years. With the increased number of population, the time is right for a suitability study in order to determine the location for a new school in this state.

The overall aim of this research study is to evaluate and propose the most suitable criteria for new school location determination by using GIS and other related approach. The specific objectives are i) to study the existing criteria for new school location determination at PPD (Pejabat Pendidikan Daerah)/MOE (Ministry of Education) level; ii) to revise and propose a new most suitable criteria for new school location determination, iii) develop, simulate and evaluate a proposed model of most suitable new school location with the implementation of the most suitable criteria by using GIS approach. It is expected that result/outcome from this research study will be able in helping PPD/MOE in preparing a comprehensive departmental paper work or proposal of new school establishment for submission to the Department of State Education (JPN) and Ministry of Education (MOE). Suggested or proposed method could reduce stages that involved in determining new school establishment (location determination) and other related useful information such as insufficient number of teachers by option, classes and distances between existing school and housing area.

5.2 Enhanced Executive Summary

The proposed project is focuses on determination of school location for secondary school covering district of Perlis State. The National Education System at school level under the government education institution category consists of preschool, primary, secondary and post-secondary education. Ministry of education has many departments and division with a lot of aim, objective and task to produce Malaysian citizens who will be knowledgeable and competent, possess high moral standards, responsible and capable of achieving high level of personal well-being for harmony and betterment of the family, the society and nation contribution. This research is focus on i). The suitability study of existing school distribution/location and ii). The determination of most suitable criteria for new school location determination by using AHP (Analytical Hierarchy Process) in GIS approach. Perhaps with the increments number of population nowadays, this is the right time for a school suitability location determination study in order to determine i). The Most Suitable, ii). Suitable and iii). Less Suitable location for existing and new school in Perlis State. The use of AHP (Analytical Hierarchy Process) in GIS approach was implemented and the results show that the most, suitable and less suitable has been successfully presented for Perlis Indera Kayangan.