

DESIGNING MODEL OF DATABASE AND WEB GIS APPLICATION FOR ROAD PERFORMANCE MANAGEMENT

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ABSTRACT:

Nowadays, the use of web based geographic information system has been increasingly used for the purpose of mapping an area. Web based geographic information system can be an integrated system with various data owned and will facilitate making decision for planning, maintaining and technology of information system presenting maximum information on evaluating road performances as public infrastructure facilities. Engineering model of database and web GIS application for road infrastructure management in the research done uses two approaches, namely, designing model of system and geographic information system using unified modeling language. GIS application is made based on Web by using php and MySQL database and to present the map, alovmap v 0.96 is used. The made database and web GIS application are able to present information on road condition in real time, where it will facilitate making decision for road performance improvement. The application resulted can check road conditions, road distribution pattern, contribution of an area toward road performance improvement in management system for road infrastructure facilities, so that public infrastructure management can be done effectively, efficiently, and transparently.