
THE DEVELOPMENT OF MANAGEMENT INFORMATION SYSTEM FOR TRAFFIC SIGN MAINTENANCE IN THE CITY OF KEDIRI

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ABSTRACT

Due to its limited funds, human resource, equipments and information technology, the Local Office of Transportation of the City of Kediri, acting as the traffic signs administrator, significantly requires a qualified Management Information System, in order to provide eligible information about the traffic signs and roads, as well as to provide a responsive and precise proposal on traffic signs maintenance.

This study was carried out through traffic signs inventorying that includes the availability, the need, the condition and the proposal on dealing with the traffic signs and roads, as well as by analyzing the performance of 75 road sections in the city of Kediri (64,480 km length) according to Indonesian Road Capacity Manual (MKJI-97). Then the survey results and analysis were applied into the software computer program to build the Management Information System of Traffic Signs and Roads (SIM-RRJ) for the city of Kediri. The program was designed in two display forms: table display supported with Microsoft Access 200 and map display supported with ArcCiew GIS 3.3 program.

In the table display, SIM-RRJ of the city of Kediri presents various conditions: 665 good, 78 average, 33 damaged, 399 in-existed, and 3 misplaced traffic signs. The table also presents management proposal that consists of maintenance, replacement, evaluation and additional traffic signs. Based on the MKJI-1997, roads performance with poor category includes: Jl. Brigjen Katamso with 1.09 v/c ratio, Jl. Joyoboyo 1.20, Jl. Dhoho 1.30, Jl. DI Panjaitan 1.06, and Jl. HOS Cokroaminoto 1.49. The map display under the SIM-RRJ of the city of Kediri presents the traffic point locations and road sections completed with supporting remarks. As the advantages, SIM-RRJ of the city of Kediri is user friendly, capable for inputting, editing, searching, updating, and report printing. It is also useful for ensuring the continuity and the management planning of traffic signs for the next 5 years, which are the years of 2007, 2008, 2009, 2010, and 2011.

Keywords : Information System Program, Maintenance, Traffic Signs and Road Sections