

ABSTRACT

ANALYSIS OF STREET NETWORK ABILITY ON LAMPUNG PROVINCE USING TRANSPORTATION MODELLING

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Lampung Province with Bandar Lampung as its capital city has area that has potention and focus on land development. On the purpose of future transportation service requirement accomodation, traffic network and public transportation development are needed, it is needed to connect all transportation modes. With limited budget of Lampung Province, this kind of development needs reference, so it can have integrated planning. The purpose of this reasearch are to recognise the movement pattern and the effect of wisdom application that relates to transportation network on Lampung Province, and to recognise the effect of development planning on transportation network with scenario of jetty, Sumatera Toll, railway, airport, and Sunda Strait Bridge.

Domain of the research are province street and national street in Lampung Province, those have 131 street segments. And this modelling has 40 internal zone and 3 eksternal zone on Lampung Province. Data of Origin Destination Matrix on 2009, which used in this reasearch are secondary data that obtain from daily survey data with Furness Method to get the sum of movement on wisdom application planning. Data analysis in this research uses SATURN program and makes the pre condition and post revitalisation as an emphasis.

The result of the research are (1) Amount of movement patterns show a continous movement pattern of people from Palembang to Java Island and vice versa on 2014 is 8 million passengers for a year and from Bengkulu to Java Island and vice versa is 0,7 million passengers for a year, (2) All of scenarios increase street performance, especially after railway and Sumatera Toll development. After railway development, value of VCR changes from 0,83 to 0,45 on Simpang Asahan-Simpang Mesuji D. And the effect of Sumatera Toll development is value of VCR changes from 1,29 to 0,45 on Simpang Terbanggi Besar-Bandar Jaya, (3) Development of street network planning on traffic network and public transportation, railway, acrossing network, sea network, and air network on Lampung Province are needed.

Keyword : street ability, origin destination matrix, movement pattern, Lampung Province