

ABSTRACT

THE INFLUENCE OF ZONA RESOLUTION SYTEM AND NETWORK IN ORIGIN DESTINATION OF ESTIMATION MATRICES OF PRIVATE TRANSPORTATION AND PUBLIC TRANSPORTATION IN BANDAR LAMPUNG

By

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Movement needed is describing of amount movement potential from one area/certain zona. The patter of journey in one transportation system usually described in current shape (vehicle, people or goods) that move from the origin location to the journey, in one study area and in one certain period. The current of journey/movement is stated by origin journey matrices (MAT), where the certain of cell, present the amount of journey from every origin to every journey in time unit and every transportation. The method to get MAT can be grouped into two main parts, there are: conventional method and method based on the current traffic data (usually called unconventional method).

Conventional method need big survey, expensive cost, the long time process, need many employees and distrub current traffic happen. Beside that MAT estimation method based on current traffic data which include unconventional method group (MKT) is one estimation method, that is effective enough and economical because the main data that needed is cheap current traffic, available and easy to get. So, MAT estimation method by using current traffic data become useful to be used.

The purpose of this research to know the deep of zona system and network to MAT accuration level which produced by 4 (four) scenario resolution zona test and network. More detail zona and network, will be better the model that is produced. But the consequent, deeper of zona resolution and network need big cost and time.

In this research, needed method that used is gravity model (GR) combined by Multinomial Logit. While estimation method that used is the smallest kuadrat estimation (KT) and the route choise technic using equilibrium assignment method. Statistic test indicator by using coefisien determination (R^2) by compare

MAT model to MAT prior and compare the volume of current traffic model to the volume of current traffic survey. This research is focus on two modas, there are private transportation and public transportation (bus). The model which done is computation by helping of EMME/2 programe.

The result of research show (1) comparison the current of private transportation scunder by statistic coefisien determination test (R^2). So, the highest value of R^2 happen on scenario test II (stabil network, changes zona) is 0,31544 and the lowest value of R^2 happen on scenario test I (stabil network and zona) is 0,27267, (2) comparison the current of private transportation model to the current of private transportation scunder by statistic coefisien determination test (R^2), so the highest value of R^2 happen on scenario III test (the changes network, stabil zona) is 0,241696 and the lowest value of R^2 happen on scenario I test (stabil network and zona) is 0,01012, (3) there are many alternatives for the highest resolution, so the behaviour using private transportation, (4) on scenario III test (changes network, stabil zona) has the highest value R^2 on bus, the possibility when increasing network it lost of mix traffic. When the network is changed, so the behaviour move to the public transportation, (5) it needs restitution the road hierarki and the function of road as usual and it need to do travel behavior, because the wrong behaviour can destroy the model.

Kata Kunci: Gravity, Equilibrium Assignment, Traffic Count, Zona, Network