SUMMARY

Adhi Nuryadi, Department of Urban and Regional Planning, Faculty of Engineering, University of Brawijaya, Agustus 2016, *Study of Mode Choice Buses and Trains on the Movement Commuters Sidoarjo – Surabaya* Dosen Pembimbing: Aris Subagyo ST., MT dan Dadang Meru Utomo ST., MURP

Surabaya is a major growth center which has the function of heterogeneous activities so as to make Surabaya as an orientation center activity of the population living in the surrounding areas such as the Sidoarjo region. Motives for moving are economic motives. These motives as rational economic considerations which have two main hopes are hopes to get a job and hopes to mendapakan higher income.

In this study, Surabaya rapid development has an impact on increased interaction between Sidoarjo and Surabaya. Sidoarjo region functions as a place for living area makes the choice for people to live in Sidoarjo, but remained active in the area of Surabaya. Surabaya rapid development has an impact on increased interaction between Sidoarjo and Surabaya.

The main purpose we can see the pattern of movement of commuters in the Sidoarjo to Surabaya have a high volume, especially at peak hours causing congestion problems it is visible from the degree of saturation and the level of service on the route Sidoarjo - Surabaya. Therefore, there needs to be a study of commuters Sidoarjo - Surabaya, modal choice models of buses and trains as well as the probability of user switching modes of private vehicles to public transport. This study used analysis of Customer Satisfaction Index (CSI) and minimum service standards public transportation modes to determine the level of satisfaction and service modes multinomial logit regression analysis to determine the probability model of modal choice and modal choice.

The results showed that regression analysis of multinomial logit can known election model modal commuter train to the variables that affect the variable comfort, affordability, lounge facilities, security facilities, income and distance and to model modal choice buses for the variables that affect the affordability, lounge facilities, facility of parking spaces, education, car ownership and travel time it is known probability modal choice commuter rail 78.5% and the probability of election bus modes by 52.5% against the mode of private vehicles cars if their scenario of maximizing the variables - variables effect of each model produced. From the results it can be concluded that the probability of commuters prefer to move to the mode of public transport commuter train because the probability value closer to the value of 100%.

Keywords: Commuters, Customers Satisfaction Index, Multinomial Logit Regression, Mode Choice, Probability