ABSTRACT

Population density has an impact to the increase of communities' mobility in order to fulfill their needs. Thus, it leads to the increase of the transportation facilities and energy needs. The high of communities' mobility causes the occurance of transportation issues such as congestion, air pollution, and traffic accident. Semarang as the capital city of Central Java Province has a population density of 4.269 per square kilometer in 2015, by the population growth reaches of 0,87% per year. Due to high population density, communities' mobility will also be increasing. Government arranged the policy related to traffic and public transportation in the Law Number 22 Year 2009. According to article 158 paragraph 1, the government of Semarang City has guaranteed the availability of road-based transportation in Urban Areas by providing public transportation namely Bus Rapid Transit (BRT) Trans Semarang.

This research aims to analyze communities' preference in terms of price, convenience, reliability, accessibility, and safety toward the possibility of Bus Rapid Transit (BRT) Trans and Non BRT transportation modes selection. This research uses primary and secondary data. Primary data is obtained from 100 respondents by Purposive Sampling. Secondary data is obtained from BPS Jawa Tengah, BAPPEDA, and Dinas Perhubungan Semarang city. Binary Logistic Regression model is applied to determine the effect of independent variable towards dependent variable of BRT Trans and Non BRT transportation modes selection.

The result of this research indicated that BRT Trans modes and Non BRT transportation modes selection in Semarang City are dominated by 82 respondents of BRT Trans Semarang users and 18 respondents of Non BRT users. BRT Trans and Non BRT transportation modes selection are affected by the factor of price, convenience, reliability, accessibility, and safety.

Keywords : Modes selection, Bus Rapid Transit (BRT) Trans Semarang, Binary Logistic Regression.