## **ABSTRACT**

Transportation plays an important role in the economic and social development of a country, especially in the era of globalization. Especially public transportation, public transportation serves to connect rural areas with urban centers, plays an important role in maintaining community mobility and supporting economic development, especially bus transportation. The technical inspection process or rampchcek on buses at the terminal is a critical step in ensuring transportation safety and security. This study discusses the stages of rampchcek and the criteria used in vehicle testing at Purabaya Terminal. The problems to be discussed in this study are: (1) What is the priority order of criteria in determining the roadworthiness of bus transportation? (2) Which bus transportation should be declared roadworthy by the Purabaya Terminal rampcheck officer? (3) How does the rampcheck inspection process compare between manual checklists and automatic checklists on bus transportation at Purabaya Terminal? This study uses the AHP (Analytical Hierarchy Process) method as an approach to improve the rampcheck decision-making process. From the results of the assessment of the level of importance of criteria in determining the roadworthiness of bus transportation produces a priority scale or weight as follows: priority I administrative elements (0.54), priority II main technical elements (0.39), and priority III supporting technical elements (0.07), from the results of the assessment of the level of importance of alternatives in determining the roadworthiness of bus transportation produces a priority scale or weight as follows: priority I bus jaya utama indo (2.12), priority II bus eka (0.64), and priority III bus sugeng rahayu (0.24). based on the results of the calculation of the AHP (Analytical Hierarchy Process) method in determining the roadworthiness of bus transportation. Jaya Utama Indo is considered the best bus transportation. Furthermore, Eka as the second bus transportation. And Sugeng Rahayu as the third bus transportation.

**Keywords**: AHP (Analytical Hierarchy Process), bus transportation, decision making, rampchcek