

ABSTRACT

*School area needs a calm environment and far from noise. But in some schools that placed nearby the street which is its traffic densely may caused traffic noise that interfered comfortable of study. This research takes the problem of junior high school 30 padang that placed at andalas street since that school was placed at crowded traffic. In this case, motorcycles were dominating the caus of the traffic noise. The monitoring placed on side of street and in school area. The research did one day in working time during 10 hours from 08.00 a.m-18.00 p.m. Noise sample data is taken by using Sound Level Meter (SLM) meanwhile traffic volume was counted manually by surveyor and velocity data by using Speed Gun. From the analysis, get vehicle volume Vs noise point A got volume influence toward noise only influence **17,4 %** with similarity linear $Y = 0,004x + 99,23$ with determination coefisien $R^2 = 0,174$ whereas in point B volume influence toward noise **38,3 %** with similarity linear $Y = 0,005x + 78,97$ with determination coefisien $R^2 = 0,383$. Analysis heavy vehicle percentage toward noise point A got influence heavy vehicle percentage toward noise **36,4 %** with similarity linear $Y = 0,378x + 91,93$ with determination coefisien value $R^2 = 0,364$ whereas in point B the influence heavy vehicle percentage toward noise **16,7 %** with similarity linear $Y = 0,412x + 90,77$ with determination coefisien $R^2 = 0,167$. And velocity analisis Vs noise point A got influence of velocity toward noisy only effected **27,5 %** with similarity linear $Y = 0,560x + 67,98$ with determination coefisien $R^2 = 0,275$ whereas in point B the influence of velocity toward noise **35,1 %***

with similarity linear $Y = 0,914x + 123,8$ with determination coefisien $R^2 = 0,351$.

Key words: noise, traffic volume, sound level meter, noise level