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## **A Study of Urban Road Traffic Noise at Jalan Persiaran, Section 9 and Jalan Akuatik and Jalan Persiaran Sukan, Section 13, Shah Alam**

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### **Structured Abstract**

**Background:** Malaysia's economic development and the attainment of its 2020 developed nation goal depend heavily on transportation (Haron et al., 2019). These studies also predict a strong demand for transportation and a large number of new urban areas, which might lead to a rise in vehicle traffic, traffic jams, and noise pollution from nearby vehicles. This implies the likelihood of future traffic noise-related concerns getting worse. Nowadays, major urban stressors affecting the Global Health Burden include environmental air and noise pollution.

**Methods:** Measurements must be taken at all strategic places typical of the affected receptors. The measurement location must not be within 3.5 metres of any sound reflecting surface or other extraneous sources. The measurement site must be at least 3.5 metres distant from other sound reflecting buildings.

**Results:** Results showed that the first objective to determine the traffic noise was found to be high especially in Jalan Persiaran at Section 9. In second objective to determine traffic volume shows that the car traffic was the most prevalent means of transportation along the selected routes in both districts. The last objective is to analyse the relationship between traffic noise exposure and traffic volume was found to have a very strong relationship for Section 9. However, the interpretation was found from medium too strong for Section 13.

**Conclusion:** In summary, the noise level in both study areas has been measured and recorded using Sound Level Meter (SLM). Subsequently, noise level in Section 9 during weekday was found very high compared to others.

**Keywords:** Urban traffic noise, Noise measurement, Sound pressure level ( $L_p$ ), Department of Environmental (DOE), Sound level meter (SLM).

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