EVALUATION OF ROAD TRAFFIC NOISE POLLUTION
IN QUETTA (Pakistan) CITY

H. U. KHAN, SHOIBULLAH KHAN, SYED IMRAN ALI
Department of Physics,
Balochistan University of Information Technology Engineering
and Management Sciences, Quetta. Pakistan.

Abstract

Pakistan, like other developing countries, is facing the growing problem of traffic noise pollution of the modern world. It is a notable problem of urban areas of the country including Quetta city. The basic cause of this problem is the tremendous increase in traffic volume and lack of proper town planning. This study is the first proper attempt to evaluate the traffic noise level in Quetta city. To estimate the level of road traffic noise, the technique which is employed a “regular grid over a map”. This technique generated 60 observation locations across the city covering almost the whole city. The different zones are classified on the standards of US Department of Housing and Urban Development. The measuring points generated so have been divided into four categories depending upon the activities carried out in that region. It is observed that mixed area i.e. “commercial and residential” was at high risk, where the $L_{\text{max}}$ is 93.1 dB and the statistical analysis reveals the fact that the 77.1% of the locations in residential areas are higher than the standards set by the local authority. Noise map is also designed for future use and the better understanding of the traffic noise in Quetta city. It is concluded that most of the population of the city is significantly exposed to the high noise level due to the unmitigated traffic noise.

Key words: Noise, Expose, Residential, Traffics, Measurement