Temporal evolution of the noise levels in the city of Valdivia, Chile

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Dynamic noise assessment and the development of common methodologies between different countries are the current trends in urban environmental noise studies. The development of common and precise methods will allow a better comparison of the acoustic situation of cities located in different countries. Dynamic noise assessment will provide more information on the trend and variability of noise levels. This information may be important in determining the effectiveness of corrective measures or in influencing negative health effects. These European trends are also being considered in the studies being carried out in Chile. The city of Valdivia is an example of the evolution of different urban noise assessment methodologies in recent decades. In 2002, the first noise map of Valdivia was made using the grid method. Subsequently, other urban noise assessment methodologies have been used based on the typology of urban roads and calculation methods. This study compiles the results obtained in the studies carried out from 2002 to the present with the aim of analyzing the temporal evolution of the acoustic situation of the city of Valdivia. The sound levels recorded in the main urban access and exit routes of the city (Category 1), did not present significant differences in the different years analyzed. However, in the rest of the types of urban roads, noise levels have decreased in recent years © Proceedings of the 26th International Congress on Sound and Vibration, ICSV 2019. All rights reserved.

Noise assessment methodologies

Noise maps

Road traffic

Urban noise

Noise pollution

Underground structures
Corrective measures
Environmental noise
Noise assessments
Noise map
Precise method
Road traffic
Temporal evolution
Urban noise
Acoustic noise