



# Current Practice and Future Perspectives of the Economic Valuation of Transportation Noise in the EU

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**ABSTRACT:** In order to perform cost-benefit analyses of action plans to be constructed under the new EU Environmental Noise Directive to reduce noise and maintain environmental noise quality where it is good, the EC and individual Member Countries need to establish interim economic values for noise from different transportation modes and industrial noise. The paper provides an updated overview and evaluation of valuation techniques, empirical noise valuation studies worldwide and the potential for transfer of noise values across countries. An analysis of Stated Preference (SP) studies on road traffic noise suggests an interim EU-wide economic value of 23.5 euro/dBA./household/year. Interim values for noise from aircrafts and railways are possible to establish due to a very small number of studies. In order to refine and improve the transferability of this estimate, the Damage Function Approach should be applied to value welfare loss from noise annoyance; implying a great need for new SP studies. These studies should be constructed to provide values for endpoints of exposure- response functions for different annoyance levels, defined according to the current international standard. We also need to establish values for: i) annoyance from low noise levels and multiple noise sources, ii) health impacts from noise; and iii) the effect of being exposed to multiple environmental impacts including noise.