

**Table S3.** Non-acoustical parameters and their association with the binary annoyance variable generated by GEE analyses.

Non-acoustical parameters	Description	Estimate (SE)	p value	OR	OR 95% CI [lower, upper]	QIC
Residential satisfaction [13-65]	Thirteen items that asked for satisfaction with the following aspects of the residential area ("1 = not at all" to "5 = extremely"): the residential area in general, the visual appearance, the neighbors, the air quality, the connection to public transport, proximity to the workplace, the quiet of the residential area, the shopping opportunities, the recreation and relaxation opportunities, and the loudness of road traffic, railway traffic, air traffic, and neighbors	-0.061 (0.029)	0.037	0.940	0.888, 0.996	215.900
General perception of loudness in the residential area [1-4]	One item ("1 = very loud" to "not loud at all"): "How loud do you perceive the residential area you live in?"	1.434 (0.370)	<0.001	4.197	2.032, 8.669	203.063
Subjective sleep quality [0-60]	Six 100 mm long visual analogue scales asking for difficulties in falling asleep (easy – difficult), calmness of sleep (calm – restless), sleep duration (too short – too long), restoration (high – low), sleep depth (sound – shallow), and body movements (little – much) [25]	-0.117 (0.024)	<0.001	0.889	0.848, 0.932	194.367
General adaptation to chronic road traffic noise exposure noise [1-5]	One item ("1 = not at all" to "5 = extremely"): "How well can you adapt to road traffic noise in general?"	-0.596 (0.233)	0.011	0.551	0.349, 0.870	211.964
Assessment of road transport [3-15]	Three items ("1 = not at all" to "5 = extremely"): "Do you consider road transport as..." "..."necessary?", "...acceptable?", "...economically important?"	-0.261 (0.077)	0.001	0.770	0.662, 0.896	206.914
Concerns about harmful effects of road transport [6-30]	Six items ("1 = not at all" to "5 = extremely"): "Do you consider road transport as..." "...dangerous for residents?", "...harmful to health of residents?", "...harmful to air quality?", "...harmful to the climate?", "...harmful to your own health?", and the feeling of threat by a nearby accident	0.098 (0.047)	0.036	1.103	1.006, 1.209	215.927
Subjectively perceived noise load in the previous night [1-5]	One item ("1 = not at all" to "5 = extremely"): "Thinking about the last night, when you are at home, how intensely did you hear the road traffic noise?"	3.381 (0.723)	<0.001	29.402	7.132, 121.210	112.834
Long-term annoyance due to road traffic noise in general [1-5]	One item ("1 = not at all" to "5 = extremely"): "Thinking about the last 12 months, when you are at home, how much did noise from the following noise source bother, disturb, or annoy you?" "...road transport in general" [24]	0.917 (0.320)	0.004	2.502	1.337, 4.682	207.544

Table S3. (continued)

Non-acoustical parameters	Description	Estimate (SE)	p value	OR	OR 95% CI [lower, upper]	QIC
Long-term annoyance due to noise by passenger car transport [1-5]	One item ("1 = not at all" to "5 = extremely"): "Thinking about the last 12 months, when you are at home, how much did noise from the following noise source bother, disturb, or annoy you?" "...passenger car transport" [24]	0.610 (0.273)	0.025	1.840	1.078, 3.140	214.713
Long-term annoyance due to noise by heavy vehicles [1-5]	One item ("1 = not at all" to "5 = extremely"): "Thinking about the last 12 months, when you are at home, how much did noise from the following noise source bother, disturb, or annoy you?" "...heavy vehicles (truck, transporter, etc.)" [24]	0.636 (0.198)	0.001	1.890	1.283, 2.783	208.105
Activity disturbances due to road traffic noise [12-60]	Twelve items referring to the past 12 months that asked for disturbance and annoyance due to road traffic noise during the following situations inside and outside, respectively ("1 = not at all" to "5 = extremely"): communication, mental activity, physical activity, relaxation, social meeting as well as for dinner inside and watching TV inside	0.124 (0.041)	0.002	1.132	1.046, 1.226	206.138
Sleep disturbances [3-15]	Three items referring to the past 12 months that asked for disturbance and annoyance due to road traffic noise during the following situations ("1 = not at all" to "5 = extremely"): falling asleep, sleep in the first half of the night, and sleep in the second half of the night	0.469 (0.115)	<0.001	1.598	1.274, 2.004	192.845