

<b>Source of noise</b>	<b>Type of noise</b>	<b>The response of communities to noise</b>	<b>Noise mitigation strategy that the aviation industry can adapt</b>	<b>Relevant and transferable case study</b>
Roads (Biggest sector for noise complaints)	Constant noise predominant over discrete noise.	Road noise has localised impact and affects certain communities. The response varies throughout the communities – it relates to non-acoustical factors (like the amount of person's time spent at home, etc.)	Modification/disruption of noise propagation pathways, and those that can be applied at the receptor. Community engagement.	Hong Kong Housing Authority Receptor-based mitigation can be an effective solution for densely populated environments where options for source- or pathway-based mitigation options are limited. Estimated reduction range – from 3 to 10 dB(A).
Railway (Second sector for noise complaints)	Predictable frequency, short-time noise events.	People are less resistant to railways in their communities compared to highways and airports because of positive/environmentally friendly image.	Rail companies invest a lot in communication and engagement with the residents. They set dialogue forums, which transmits openness and trust.	VR simulation shows the effects of a new type of brakes. The simulations created awareness and enthusiasm to reduce the primary source of railway noise from existing rolling stock.
Construction	The localised impact that usually includes a visual component.	The complaints of the communities are typically directed to construction contractor or responsible authorities.	Active community engagement is often a key factor in the successful management of construction noise.	London good practice guidance on noise control for construction and demolition sites: <ul style="list-style-type: none"> <li>• community liaison plan and a complaints procedure;</li> <li>• regular meetings with the local community and regulator;</li> <li>• newsletters and email communications websites to</li> </ul>



				share information about the construction project and any noise issue.
Wind turbines	Localised impact, visual components.	People perceive that, like the airport, the wind turbines should be further from the communities (when roads and railways are necessary to have close by).	Effective reduction of noise is related to mitigation at source, effective land use planning and operational restrictions, the latter being similar to the aviation sector. Engagement process plays a significant role and should start as soon as possible when design choices are still being made (more engagement equals more positive image).	Alternative conceptual intervention to provide to local communities, in addition to noise abatement measures, a <i>share of the economic benefit</i> generated by the infrastructure responsible for the noise impact.
Leisure & domestic sector	Constant noise, but also predictable.		The restriction of working hours, the insulation of buildings and spaces, and the immediate reaction to community noise guidelines' infringement.	Active and passive noise control devices are useful in soundproofing people's living environments (the restriction of hours, the insulation of buildings and spaces, and the immediate reaction to the infringement of community noise guidelines).

