



Information sheet

Operational noise and vibration mitigation

Our commitment

When Inland Rail is operational it will generate some noise and vibration for people living and working along the railway.

Inland Rail acknowledges some residents may not have experienced rail noise and vibration before and may be understandably concerned about potential impacts. We also recognise some residents currently live next to an operating railway and want to know if Inland Rail will cause additional impacts. Inland Rail is committed to minimising these impacts.

We will provide feasible mitigation to properties which operational noise and vibration modelling predicts will exceed criteria set by state governments.

Noise and vibration mitigation process

Our approach to identifying and mitigating operational noise and vibration exceedances is outlined below. The majority of mitigation is expected to be for operational rail noise; exceedances of vibration criteria from operational railways are very rare.

Mitigation considerations

To determine the type of mitigation required, we assess what is reasonable and feasible for each property. The assessment considers:

- acoustic effectiveness;
- mitigation benefits (e.g. number of people benefitting, expected noise reduction);
- the cost effectiveness of mitigation;
- site constraints (e.g. flooding, soil type and slope); and
- the preferences of impacted property owners and/or broader community views.

The two most common types of operational noise mitigation are noise barriers, and at-property treatments.

Noise barriers are usually selected where impacted properties are grouped together on the same side of the track (e.g. in urban areas). At-property treatments are commonly used for isolated properties.



Noise and vibration modelling

Detailed noise and vibration modelling is completed during a project's environmental assessment and refined during detailed design to predict impacts from Inland Rail operations.



Impacted properties identified

Results from noise and vibration modelling are compared to state government noise and vibration criteria to identify properties eligible for mitigation.



Mitigation measures implemented

Before Inland Rail is operational, Inland Rail will fund and implement feasible and reasonable mitigation in consultation with impacted stakeholders.



Noise and vibration compliance monitoring

After Inland Rail is operating, noise and vibration compliance monitoring is undertaken by Inland Rail to validate modelling predictions and measure the effectiveness of mitigation.

Noise barriers

Noise barriers are normally constructed within the rail corridor. They can be made from a variety of materials and finishes and can incorporate designs, colours, and patterns.

To be effective, a noise barrier must block line of sight from the source of the noise (the train) to the impacted receiver (person or dwelling). Noise barriers are maintained by Australian Rail Track Corporation (ARTC) and benefit both the indoor and outdoor amenity of numerous properties – not just those that exceed the criteria. They can, however, block views, attract graffiti and cause shadowing on some properties.



At-property treatments

At-property treatments are provided to individual dwellings or buildings to protect indoor amenity.

They can include upgraded property facades (i.e. windows, doors, ventilation) or acoustic boundary fences. The types of treatments are dependent on the level of noise impact, the type of property (e.g. brick veneer, weatherboard) and the preference of property owners.

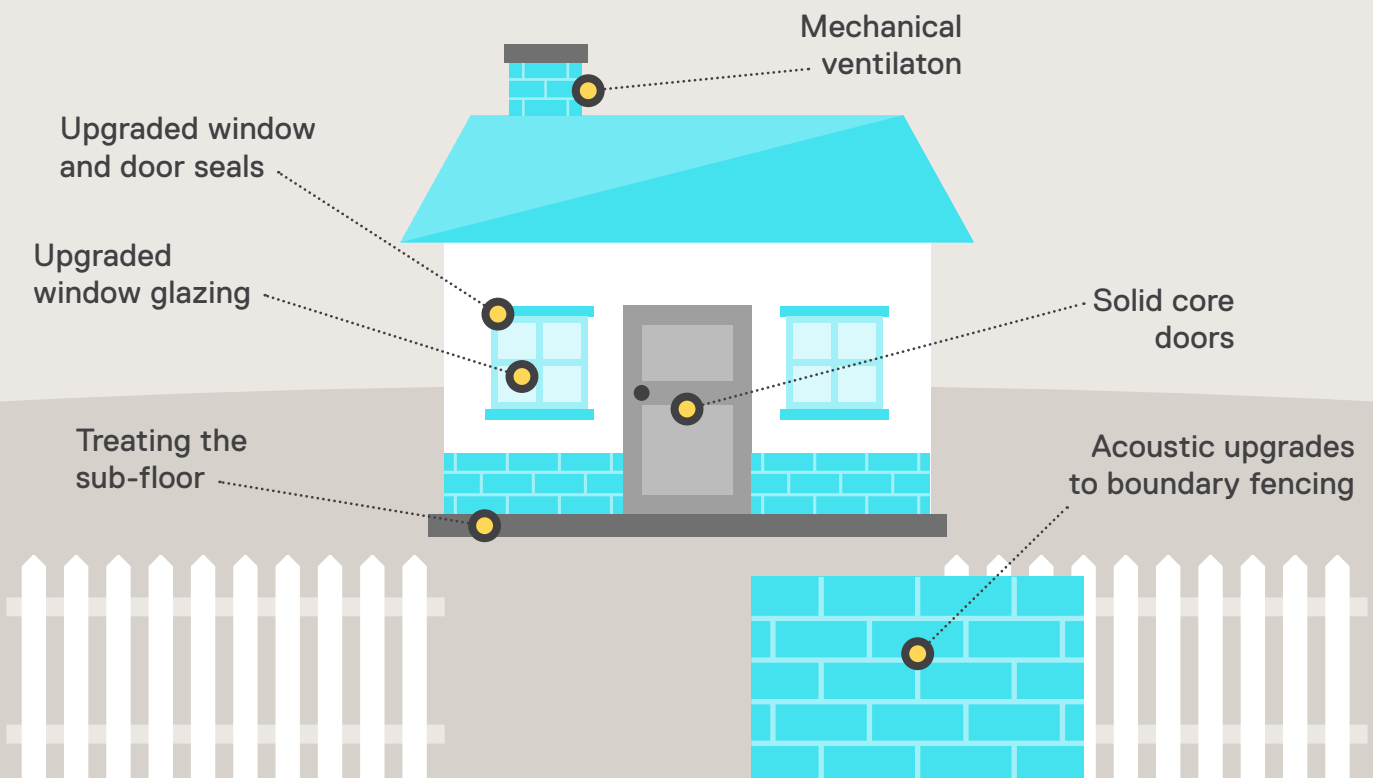
We consult individually with impacted property owners regarding at-property treatment options following project approvals, but prior to construction commencing.

Want to know more?

Operational rail noise guidelines are set by individual state governments. To find out more, visit:

- **New South Wales**
Environment Protection Authority
epa.nsw.gov.au
- **Queensland**
Department of Environment and Science
environment.des.qld.gov.au
- **Victoria**
Environment Protection Authority Victoria
epa.vic.gov.au

Example of at-property treatments



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