

Vic Roads - Traffic Noise Reduction Policy

Statement of Policy:

Road traffic noise is a significant environmental problem, particularly in residential areas. VicRoads is committed to taking whatever steps it can to reduce the overall level of traffic noise, and to limit the effect of traffic noise on nearby residents when new or improved roads are opened to traffic. It will achieve this by:

- seeking to reduce noise emitted by vehicles and road surfaces;
- encouraging compatible land use next to major roads;
- limiting traffic noise from new arterial roads and roads upgraded to carry significantly more traffic;
- retrofitting noise barriers on older freeways.

Detailed Requirements and Performance Standards:

Reducing noise emissions at source:

VicRoads will seek to reduce noise emitted by vehicles and road surfaces by:

- supporting more stringent noise standards in Australian Design Rules for motor vehicles;
- using quieter pavement surfaces, where practicable on freeways and major arterial roads through residential areas;
- promoting and supporting measures that reduce engine brake noise.

Encouraging compatible land use:

VicRoads will encourage compatible land use next to major roads by:

- working with Planning Authorities to ensure that wherever possible, permitted land use beside busy roads is relatively insensitive to noise;
- encouraging the development of building regulations which will take into account both the noise level outside and the type of activity proposed inside the building.

Limiting noise next to new or improved roads:

Where arterial roads and freeways are built on new alignments, or where existing arterial roads or freeways are widened by two or more lanes and buildings previously protected from traffic noise are exposed by removal of buildings required for widening, the traffic noise level will be limited to the objectives set out below or the level that would have prevailed if the road improvements had not occurred, whichever is the greater.

- **Category A:** - For residential dwellings, aged persons homes, hospitals, motels, caravan parks and other buildings of a residential nature, the noise level objective will be **63 dB(A) L10 (18hr)** measured between 6 am and midnight,
- **Category B:** - For schools, kindergartens libraries and other noise-sensitive community buildings the noise level objective will be **63 dB(A) L10 (12hr)** measured between 6 am and 6 pm,
- Where the noise level adjacent to **Category A or B** buildings prior to road improvements is less than **50 dB(A) L10 (18hr)**, consideration will be given to limiting the noise level increase to **12 dB(A)**.

VicRoads will endeavour to comply with these noise level objectives using the most cost effective technology. The approach taken to controlling noise will include but not be limited to:

- the “whole of life” attenuation performance and the practicability of the measures,
- a combination of noise barriers and other measures such as open graded asphalt, barriers on bridge parapets and crash barriers, etc.,
- off-reservation attenuation measures to be undertaken, subject to practicability testing, and agreement with key stakeholders.

In addition, VicRoads will:

- consult with Councils and affected local communities on the need for and type of protection (if necessary) for small areas of passive open space;
- implement appropriate traffic management measures, if necessary, to ensure that night time noise levels are not excessively high.

Noise abatement program - Retrofitting

The principle of this part of the Policy is that all eligible projects under the policy are to be included within the noise retrofitting program and acceptable treatment methods are to ensure that the most cost effective approach over the life cycle of the project is considered.

The following key elements to the Noise Abatement Program – Retrofitting apply:

- VicRoads will continue to retrofit barriers to freeways and arterial roads that have previously been eligible for noise attenuation works,
- The retrofitting program will apply through out Victoria,
- The trigger for considering retrofitting will be when the traffic noise levels exceed **68 dB(A)L10 (18hr)**,
- A target noise level of less than **68 dB(A)L10 (18hr)** should be maintained after the attenuation works,
- When determining what measures can be employed to achieve the retrofitting target noise objective, consideration should be given to the “whole of life” attenuation performance and the practicability of the measures,
- The noise reduction may be achieved by a combination of noise barriers and other measures such as open graded asphalt, barriers on bridge parapets and crash barriers, etc.,
- Off-reservation attenuation measures may be undertaken, subject to practicability testing, and agreement with key stakeholders,
- Noise retrofitting works will be undertaken as funds permit, and will only apply to **Category A and B** buildings.

Exceptions to this Policy

There are a limited number of situations where expenditure of public monies on noise attenuation is not considered to be justified. Accordingly, VicRoads will not take action to protect existing or future development in the following circumstances:

- **Category A** or **Category B** buildings, as defined above, where such land use is defined as a non-conforming use in the relevant planning scheme.
- new buildings or subdivisions abutting any existing road under the control of VicRoads.
- new buildings or subdivisions abutting any road zone shown on any planning scheme for a new road or a road widening.
- buildings or subdivisions abutting any proposed road zone where the planning approval for the subdivision, was obtained after the commencement of the exhibition period to set aside land for a future road in the relevant planning scheme.

Definitions of terms used to describe traffic noise

Due to its nature traffic noise varies from instant to instant. Statistical terms have evolved to describe its level using a single number value.

dB: This is the abbreviation used for decibel which is the measure of sound pressure level.

dB(A): The (A) denotes that the sound pressure level has been "A" weighted so that the scale approximates the response of the human ear. The ear is less sensitive to high and low frequency sounds than it is to sounds in the midrange. Most community noise is measured in "A" weighted decibels.

L10dB(A): This is the noise level in dB(A) exceeded for 10% of a specified time period. For a one hour period the level would be exceeded for 6 minutes but would be less for the remaining 54 minutes.

L10 (18hr)dB(A): This is the standard traffic noise descriptor used in Australia. It is the arithmetic average of the hourly L10 levels between 6 am and 12 midnight.