

# Improving the management of state highway traffic noise in New Zealand\*

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## ABSTRACT

Transit New Zealand (Transit) is the Crown Entity responsible for state highways - the strategic roads and motorways that are about 12% (10,894 km) of all New Zealand's roads. The state highway network carries about half of the 36 billion vehicle kilometres travelled on New Zealand roads every year. The management of noise from the state highway network requires a variety of approaches to reflect Transit's duties under the Resource Management Act 1991, the Land Transport Management Act 2003 and the New Zealand Transport Strategy.

Transit currently has three distinct approaches for managing noise around the state highway network. These are:

- Noise Guidelines for the Management of Road Traffic Noise
- Environmental Plan (Noise Improvement Programme)
- Reverse Sensitivity Policy and Guidelines.

These approaches manage noise in three different situations, i.e. new or improved roads (the Guidelines), existing roads (the Environmental Plan) and new land use activities close to state highways (the Reverse Sensitivity Policy and Guidelines). Following the commitments made in the Environmental Plan issued in November 2004, Transit has recently commenced a project aimed at developing new state highway noise management policy and associated supporting guidance. The project has a deadline of June 2007 and is intended to:

- Review current Transit policy and practice for managing operational, planning, construction and maintenance noise issues throughout the state highway network; and
- Develop comprehensive Noise Management Policy and Guidance for all state highways.

As part of the project, Transit are facilitating this workshop. The theme of the workshop is 'Improving the management of state highway traffic noise'. The workshop will provide an opportunity for conference delegates to discuss, debate and identify the actions that are necessary to deliver this vision. In particular Transit will be seeking feedback from the acoustical community on the following issues:

- What are the potential implications of changing the current noise descriptors and criteria used to describe traffic noise in New Zealand, e.g. replacing the current descriptor  $L_{eq(24hrs)}$  with an alternative such as  $L_{dn}$ ?
- What kind of approaches could be considered to offer the best practicable options to ensure that traffic noise does not exceed an unreasonable level? In particular in determining traffic noise mitigation solutions, would there be merit in adopting the concepts of reasonableness and feasibility?
- What kind of management tools and guidance are needed to improve how traffic noise policy is implemented in New Zealand? E.g. is there value in mapping network-wide traffic noise levels? Given funding constraints, how do we prioritise where and how to improve the noise environment around an existing road network? What mechanisms could be used to improve how technical noise information is communicated to 'lay' persons?

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