INFORMATION SHEET October 2020





When planning a new highway, we know the potential increase in noise is a concern for communities.

Noise issues can be a consequence of both vehicles using the road, and construction and maintenance activities.

We aim to be a good neighbour and we take our social and environmental responsibility seriously. For all Waka Kotahi projects, acoustic specialists measure and predict noise throughout the project to inform the design team. Our processes are based on the independent standards produced by Standards New Zealand (NZS6806 and NZS6803) and are also informed by lessons learnt on recent projects.

Potential effects of construction and operation of the road are assessed taking into consideration the existing environment and other performance standards, including international literature.

Noise and the design process

Waka Kotahi considers potential noise effects when making key design decisions. These include the elevation of the road, interchange format and type of road surfacing. In addition, consideration of elements such as planted noise bunds, appropriate bridge joint selections and avoiding audible rumble strips in locations near houses.

Our guidelines set out how traffic noise is assessed and, where required, the approach for determining appropriate mitigation.

Mitigation is prioritised where individual houses are exposed to higher noise levels, or in more dense areas where multiple houses will benefit from the mitigation. In a quiet rural environment, we recognise noise effects can continue a considerable distance away from the new highway.

WHY IS NOISE AN ISSUE?

When not adequately addressed, transport noise and vibration can cause a range of impacts on people and communities. These range from adverse health effects and sleep disturbance to annoyance and interference with daytime activities such as work, study and domestic living. In this information sheet, we outline how we work in order to manage these effects.





Timeline of the next steps

TRAFFIC NOISE - ASSESSMENT, APPROVALS, DESIGN AND VERIFICATION

During the selection of the preferred corridor and the draft preferred alignment, noise was one of the factors considered along with other environmental and social impacts, the ability to implement and the fit with the project objectives.



Noise assessment

FROM EARLY
2021
Preliminary design
of new highway

- Initial noise assessments (including field measurements) and other specialist assessments inform design.
- Confirmation of preferred alignment.

Noise assessments and mitigation options

- Noise modelling based on traffic 10-20 years after the road opens.
- Noise effects assessment engagement begins with identified property owners exposed to higher noise levels or those with mitigation adjacent to their property.
- Mitigation options assessment and identification of preferred options.



Design development

MID-2022
NOR and consent applications

Notice of requirement (NOR) for highway designation and consent application considerations include:

- Assessment of noise effects and preferred noise mitigation options.
- Submissions and evidence provided by the public.
- Expert advice by acoustics specialists.
- Designation conditions will include recommended mitigations.



Detailed design and construction

2023-29
Detailed design and construction

In line with designation conditions:

- Detailed mitigation design.
- Construction of final noise mitigation design.

POST CONSTRUCTION Compliance verification

Verification that the new highway complies with approvals.



