

An aerial photograph of Queenstown, New Zealand, showing the town and surrounding greenery. Overlaid on the image are several concentric, semi-transparent grey circles that radiate from a central point in the town, representing noise contours. The text is centered over the town area.

Noise in Central Queenstown

discussion document

What's the problem?

Central Queenstown is an internationally recognised destination that forms the commercial, social and cultural heart of the Wakatipu Basin. But what makes Queenstown so vibrant can also create conflict. One of the most common causes of conflict is noise.

Noise is part of the environment. Every activity makes it. But it can have negative impacts on health and amenity, that's why noise is part of the consent process and covered by the Resource Management Act.

Historically, central Queenstown has enjoyed a relatively low intensity of use. This has reduced the amount of conflict over noise related issues. Increasing development pressure and more intensive use of the town centre has resulted in changes. The future of the town centre is reliant on its continued role as a strong focal point for commercial, social and cultural activities. It needs to preserve the look and feel of a vibrant, pleasant and enjoyable place to be,

To do this the Queenstown Lakes District Council is investigating the need to change the way the District Plan deals with noise in the Queenstown town centre. This document is about hearing from the community about noise.

What do you think should be happening in the town centre?

What should it look and feel and importantly, sound like?

What kind of activities should it cater for?

Why do we have a problem?

More things happening in the town centre has changed the noise environment. Other things also have influence; like technological, social and law changes. Changing social trends, including the increasing popularity of outdoor dining and a general increase in activity levels later at night and in the early hours of the morning, have also brought change.

Increasing use of amplified music and a shift towards heavier bass music has increased the level of noise an activity can make and resulted in noise that is harder to manage.

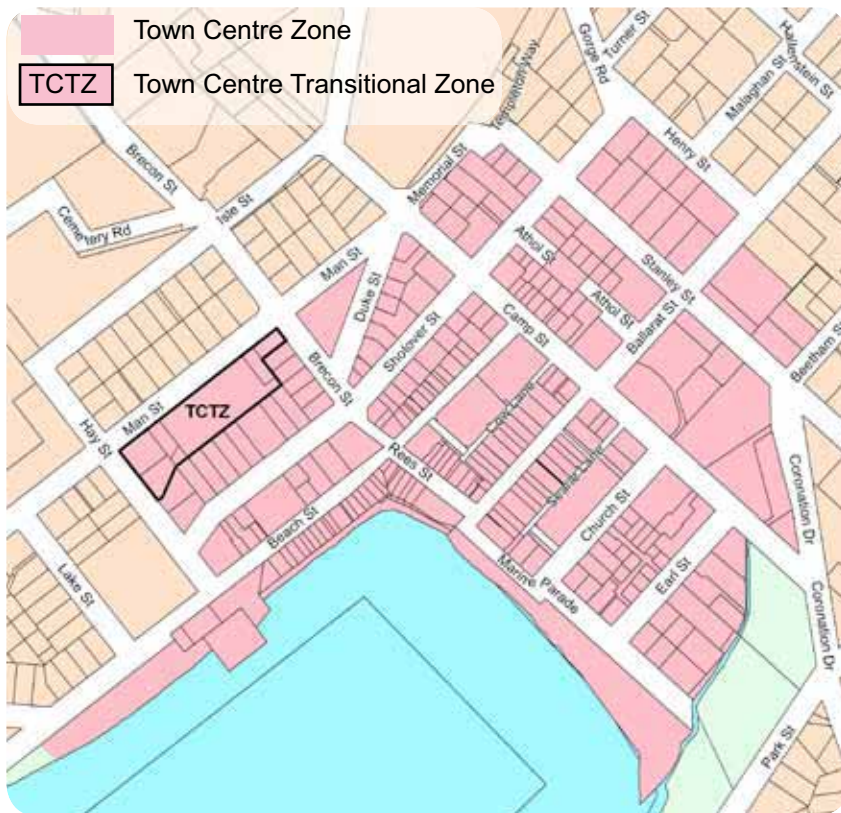
Changes to rules like the Smokefree Environments Act put smokers outside of bars and restaurants, adding to outdoor noise.



Like many parts of New Zealand, Queenstown has experienced an increase in the number of people who live in the town centre. Combined with central tourist accommodation, this means there are more people in town trying to sleep through the increasing level of noise. Although the World Health Organisation standards indicate that 'mixed-use' environments may not be suitable for residential activity, some people are more accepting of noise than others.

Where is central Queenstown?

In the District Plan it's the area shown below in pink, but noise reaches beyond the town centre too.



How do we deal with noise now?

This section helps clarify the existing situation, what 'town centre' means, existing noise controls and issues today.

How do we control noise?

The Resource Management Act says the management of noise is the Council's job. This is generally managed under the District Plan. The District Plan identifies different noise levels for different areas. The Act also puts a responsibility onto the landowner to avoid 'unreasonable noise'.

Noise limits

Noise limits are normally set around neighbouring activities, community health and the look and feel of the location. It is complicated. Noise limits depend on many factors such as the time of day, the purpose of the area, the nature of activities to be protected, the type of noise source, and climatic, social and economic factors.

This approach works well when the activities in these areas are similar or create a similar atmosphere. However mixed use areas, such as the Queenstown town centre, are the focus for quite diverse activities that in many cases produce or want different levels of noise.

Town centre activities

The District Plan provides for commercial activities in town centres and anticipates the location of hospitality-related businesses like restaurants and bars. As the focus of community and commercial activity, town centres are active and noisy environments. However, the Plan also makes specific provision for activities that are sensitive to noise in the town centre zone, such as residential and visitor accommodation.

This has the potential to result in 'reverse sensitivity' issues, where new noise sensitive activities conflict with the noise of existing activities.

Our noise rules in the town centre are based on a standard approach but compared with other town centres the noise limits allowed, particularly at night, are low.

Our noise rules also do not require noise sensitive activities, such as homes or hotels, to insulate their properties to protect people inside from high noise levels.

Town centre noise

Currently the District Plan uses two types of noise limit within the town centre. One is an average noise value when measured over a 10 minute period (dBA L10). More restrictive noise limits at night are intended to reduce sleep disturbance.

The other is a maximum noise level to address loud events of a much shorter duration (Lmax).

Plan Change 27A to the District Plan sought to update these limits to reflect the National Standard for noise measurement by changing dBA L10 to dBA L_{EQ} (15 min) and Lmax to L_{AFmax}, which reflects advances in best practice on how to measure noise. Plan Change 27A has been adopted by Council but is currently under appeal.

Activities in the majority of the town centre need to stay inside these noise limits. The limit changes from day to night time and also applies to the 'spill over' of noise into the area next to the Town Centre zone.

A survey of 13 other town centres (see table) revealed the 50 dBA night-time noise limit in Queenstown town centre was more stringent than most other urban areas identified (and comparable only with Napier) whilst the maximum permitted noise limit in Queenstown is the lowest of all these areas.



District	Zone/Area	Day	Night	L _{AFmax} (night)	Night hours
Queenstown	Town Centre	60 dB	50 dB	70 dB L _{AFmax}	2200-0800
Dunedin	'Red' noise area	60 dB	60 dB	75 dB L _{AFmax}	2100-0700
Invercargill	City centre/business	65 dB	65 dB	85/80 dB L _{AFmax}	2200-0700
Christchurch	Central city	57 dB	49 dB	75 dB L _{AFmax}	2200-0700
	Entertainment precinct	60 dB		-	-
Nelson	Inner city	65 dB	55 dB	75 dB L _{AFmax}	2200-0700
Wellington	Central area	60 dB		85 dB L _{AFmax}	-
Hutt City	Central commercial	65 dB		-	-
Hastings	Commercial	55 dB	55 dB	80 dB L _{AFmax}	1900-0700
Napier	Inner city/Art deco	60 dB	50 dB	80 dB L _{AFmax}	2200-0700
Rotorua	Commercial	60 dB	65 dB	75 dB L _{AFmax}	2200-0700
Tauranga	Business	65 dB	65 dB	85 dB L _{AFmax}	2200-0700
Hamilton	City centre	45 dB inside residences		-	-
Auckland	Central area	65 dB	60 dB 70 dB @ 63Hz 65 dB @ 125Hz	75 dB L _{AFmax}	2300-0700

What do these noise limits actually mean?

The World Health Organisation (WHO) has developed guideline values for noise based on the number of people affected and degree of annoyance experienced at a particular noise level. These guidelines indicate that during the daytime few people are seriously annoyed by moderate noise levels.

People anticipate some areas to be more noisy and are generally more tolerant of noise in these areas. But they may also be more sensitive to noise in other areas or at particular times, such as night time.

The WHO recommends a low noise limit inside bedrooms to prevent sleep disturbance. However, if external noise requires windows to be closed to achieve an acceptable internal noise level, an alternative form of internal ventilation may be required.

The impact of noise may also be more obvious at particular times. A high background noise level may largely mask noise that would otherwise be disturbing. For example, the reduction in traffic noise in the evening can make the sounds of music or people talking outdoors more obvious.

The following description outlines the degree to which people may notice a change in noise level:

- A change in noise level of 1 to 2 dB is not discernible;
- A change in noise level of 3 to 4 dB is just detectable;
- A change in noise level of 5 to 8 dB is regarded as noticeable;
- An increase in noise level of 10 dB sounds subjectively about 'twice as loud'.

A similar effect can occur with particular types of noise. While double glazing can reduce the impact of higher frequency noise, it is less effective in dealing with low frequencies, such as bass music. The bass can become more prominent when other noise is reduced.



Issues with our current noise rules

The New Zealand Standard for environmental noise recognises defining noise limits in town centre is a challenge, especially in areas with mixed uses. This standard also indicates we need to think about extended daytime or evening hours in town centre zones and additional rules should apply to new and refurbished residential units to reduce noise disturbance for occupants.

We anticipate diverse activities in the town centre

Our District Plan provides for both noise generating activities such as cafes and bars and noise sensitive activities such as residential accommodation in relatively close proximity. Conflict over noise issues can affect both the viability of our town centre hospitality activities and the amenity of people living in the town centre. Our plan's rules could be clearer regarding the nature of activities we anticipate in the town centre. They could also be clearer about how noise affects the environment, how the impacts of loud noise can be reduced and whose responsibility this is. This means the existing rules are not likely to manage future noise issues.

Activities in the town centre have changed

Noise is now more of an issue as more people have chosen to live in the town centre, the number of licenced premises has increased and the trend towards outdoor entertaining has increased in popularity. The extension of operating hours for bars and night clubs and the growth of bass-dominated sound systems have also contributed to these issues.

The town centre has become a noisier place

Our existing noise limits have become difficult to monitor and enforce as the background noise level of activity in the town centre now often exceeds these levels. It is anticipated that traffic and general town centre activity noise will continue to increase as the town becomes busier and our District Plan noise limits will become further out of step with these changes.

Is the existing noise limit appropriate?

The existing noise limit is too low for some of the activities we anticipate to occur in this area, particularly if we anticipate outdoor dining and drinking in the later part of the evening. Restaurant and bar owners have indicated there is a high level of demand for outdoor activity in the evenings due to both our long summer evenings and also the requirements of smoke-free legislation.

A bar or restaurant with a relatively quiet outdoor area could potentially operate within the daytime noise limit however, a noise limit of 50 dB generally precludes any outside activity at bars at night. Music entertainment inside bars would exceed the 50 dB limit unless there is enhanced sound insulation, including using door lobbies and avoiding large areas of standard thickness glazing.

Mitigating the effects of noise

Growth in living in the town centre in recent years has given rise to reverse sensitivity and compatibility issues, where residents or visitors complain about noise. Acoustic insulation and ventilation are becoming increasingly necessary if acceptable internal noise levels for residential activities or visitor accommodation are to be achieved. However, there is no requirement for new developments to meet this standard. This increases the likelihood of conflict between town centre activities.

Festivals and events

Queenstown's town centre has an established tradition of holding large public events, such as Winter Festival, Jazz Festival and New Year's Eve celebrations.

Our planning provisions do not effectively deal with entertainment at this scale. Perhaps the rules should ensure the adequate assessment of the effects of these activities and their continued success.



Summary of issues

- High levels of background noise that cannot be controlled through planning instruments.
- Commercial activities exceeding noise standards or creating adverse noise characteristics.
- Noise sensitive activities establishing in areas where higher noise levels are expected.
- Lack of appreciation of how noisy town centres really are by some new residents.
- Inadequate noise insulation for noise sensitive activities.
- Reverse sensitivity, where sensitive activities locating near lawfully established and complying commercial activities seek to limit their operation.
- Noise control limits set too low to differentiate background noise.
- Seasonal changes in activity levels.

Have your say

The Council is interested in your feedback on this issue. Please use the form overleaf to let us know what you think. Or if you prefer, email us with your thoughts at services@qldc.govt.nz with 'Queenstown Noise Management' in the subject line.



Have your say

Name _____

Phone _____

Email _____

Address _____

1 Do you think the town centre should continue to be home to a diverse mix of uses? Yes No

Comment

2 What kind of activities do you think it is most important for our town centre to cater for?
 Hospitality uses Residential uses Other activities

Comment

3 Is it appropriate that the town centre becomes a noisier place to enable it to become more vibrant? Yes No

Comment

4 Should we limit the location of new noise sensitive activities in the town centre? Yes No

Comment

5 Do you think that new activities that may be affected by noise in the town centre should take steps to reduce their sensitivity to noise (i.e. insulate)? Yes No

Comment

6 Should we increase the noise limit in the CBD so we can distinguish between noise generated by activities and the background noise? Yes No

Comment

7 What other methods can we use to address noise issues?

Comment

Feel free to attach additional pages if required.

Feedback should be with the Council by Friday 4 February.

Mail to Queenstown Town Centre Strategy, Private Bag 50072, Queenstown 9348, Freepost 191078.

Or email services@qldc.govt.nz with 'Queenstown Noise Management' in the subject line.