

## HAWKES BAY AIRPORT PROPOSED NOISE BOUNDARIES

MAP LEGEND	
	Proposed Outer Control Boundary
	2016 Proposed Outer Control Boundary
	Operative District Plan Airport Noise Boundary
	Airport Zone





# MAKING SOUND DECISIONS

Aircraft movements create noise, and the impact of that noise depends on many factors such as wind direction, flight path and aircraft type. Most of us around the region will hear an aircraft flying overhead at some point, but it usually causes us very little disturbance. Landing and take-off are when most aircraft noise is generated, and this can affect the Airport's immediate neighbours the most.

There are a number of factors to consider regarding aircraft noise. Currently, aircraft noise is managed via 'airport noise boundaries' within the Napier City Council District Plan. However, the existing airport noise boundary was developed in 1994 using data that is now well out of date. Hawke's Bay Airport recently engaged specialist acoustic consultants Marshall Day Acoustics to take another look at aircraft noise, so we could provide clarity to our partners, councils and the community. We also aimed to incorporate the projected increases in passenger and freight traffic and the different types of aircraft fleet we expect to see operating from Hawke's Bay Airport over the coming years into the assessment.

Using the very latest aircraft movement projections, Marshall Day developed a new noise boundary, which is referred to as the Outer Control Boundary (OCB). It is proposed that the airport is managed so that noise from aircraft operations do not exceed 55 dB Ldn (defined below) beyond the OCB.

The OCB redefines the areas that may be affected by aircraft noise now and in the future. Primarily, this extension stretches the current noise boundary to both north and south, as outlined on Panel 12.

The team involved have taken a conservative approach, including any land that is touched by the OCB in even the smallest way. This approach ensures future residential and commercial development in the identified land parcels can be progressed in a way that reflects the changing nature of the area and the exciting growth opportunities that lie ahead for the Airport and the region as a whole.

## NOISE EXPLAINED – THE TECH STUFF

Aircraft noise is assessed using a New Zealand Standard 6805 which follows international best practice. Noise exposure from aircraft is measured and predicted using the Day/Night Level (Ldn). The Ldn is obtained by summing the noise exposure energy (see diagram below) from each aircraft noise event over the whole day. Noise events that occur at night receive a 10dB penalty (10 times factor). The concept is that the 'number of events' and 'loudness of events' all contribute to the level of noise exposure.

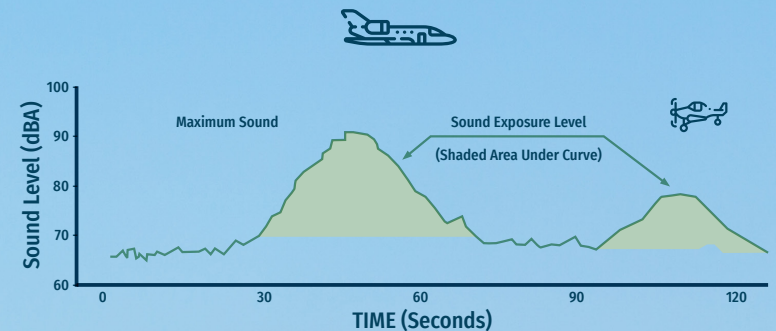
The OCB information will be included in the Napier City Council Draft District Plan and will be available for the consultation process that follows.

The key things to note about Hawke's Bay Airport's proposed noise boundary are:

- The Napier City District Planning maps will show the noise boundary
- Aircraft operations at the Airport will be managed so that the noise exposure from these operations does not exceed 55 dB Ldn beyond the OCB

The New Zealand Standard also guides the management of land use compatibility around airports. For land that is situated within the OCB, the standard recommends that:

- All new activities which are sensitive to aircraft noise are prohibited, unless the District Plan already permits, and then subject to appropriate acoustic insulation
- Alterations and additions to existing activities which are sensitive to aircraft noise should only be permitted if fitted with appropriate acoustic treatment.



Hawke's Bay Airport is proposing that the guidelines within the Standard be implemented through the District Plan in the following way. For land within the OCB:

- If the zoning already allows residential activity, then new dwellings (and alterations) require the installation of a heat pump to maintain satisfactory internal thermal conditions when the windows are closed

- If the zoning does not already permit residential activity (e.g. Rural zoned areas), then the establishment of new activities would be prohibited
- Any existing activities sensitive to aircraft noise in these zones will be allowed to continue to operate and function as they currently do.



**Napier City Council  
District Plan Team  
are here to answer  
any of your questions  
relating to the district  
plan review.**