

Managing Aircraft Noise Introduction

Christchurch International Airport Limited (CIAL) manages aircraft noise in order to:

- » Reduce the effects of noise on local residents
- » Maintain high standards of residential amenity
- » Prevent imposition of a curfew which would restrict 24/7 operations

How does Christchurch Airport manage aircraft noise?

1. Noise reduction at source – discouraging use of older noisier aircraft
 2. Noise minimisation procedures – adherence to recommended flight paths and flight procedures
 3. Land use planning – utilising appropriate noise contours to discourage noise sensitive development within areas affected by aircraft noise
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Noise contours

Christchurch Airport's noise contours

Christchurch Airport's noise contours have been calculated to incorporate:

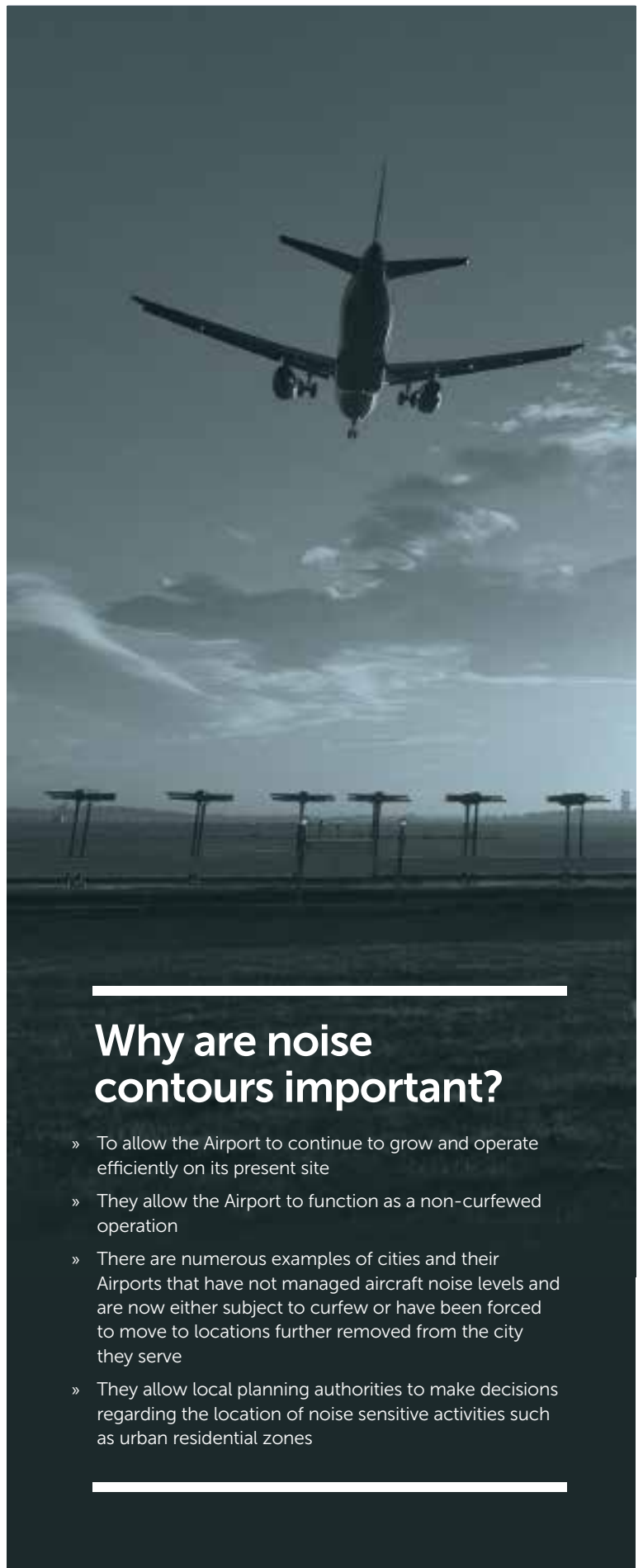
- » Introduction of quieter aircraft such as B737-300's, A320's and B777;
- » Technological advances in air traffic control systems;
- » An anticipated increase in daily day and night aircraft movements;
- » The need to use both runways simultaneously (SimOps) during peak periods, due to the expected increase in demand; and
- » The restriction on the use of the SE runway for take offs over the city.

The contours reflect the latest version of the US Federal Aviation Authority's Integrated Noise Model (INM) – a best practice industry standard.

To ensure that there is a consistent approach taken between local and regional authorities, CIAL has requested that these contours are adopted in the Regional Policy Statement (RPS). This is presently being reviewed.

Noise contours protect the future of the Airport and the local economy

- » The location of Christchurch Airport relative to the city is a major benefit to the region
- » South Islanders benefit from low fares and frequent trans-Tasman services due to the Airport's current non-curfewed status
- » Economic benefits – CIAL contributed \$1.8 billion to the Canterbury economy in 2010
- » The CIAL campus employs approximately 6,000 Full-time equivalent workers (FTEs)
- » Many businesses rely on the fast and efficient delivery of mail, documents and products on overnight freight flights. Curfews on aircraft operations would put these services at risk



Why are noise contours important?

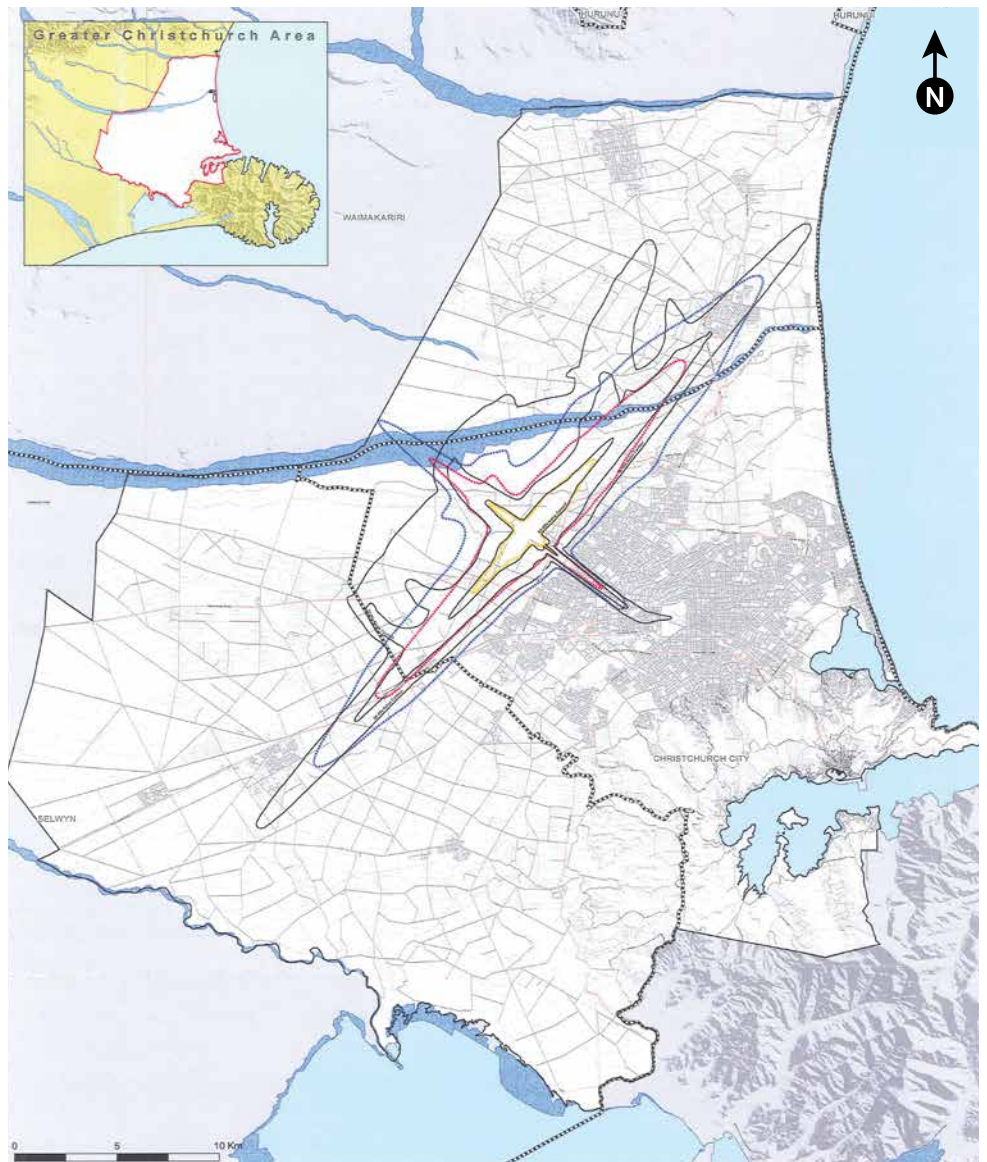
- » To allow the Airport to continue to grow and operate efficiently on its present site
- » They allow the Airport to function as a non-curfewed operation
- » There are numerous examples of cities and their Airports that have not managed aircraft noise levels and are now either subject to curfew or have been forced to move to locations further removed from the city they serve
- » They allow local planning authorities to make decisions regarding the location of noise sensitive activities such as urban residential zones

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Noise contours

Christchurch Airport existing and proposed noise contours

-  Greater Christchurch Boundary
-  Territorial Authority Boundaries
- Christchurch International Airport Proposed Noise Countours (Case A)**
-  50 dBA
-  55 dBA
-  65 dBA
-  Existing Contour

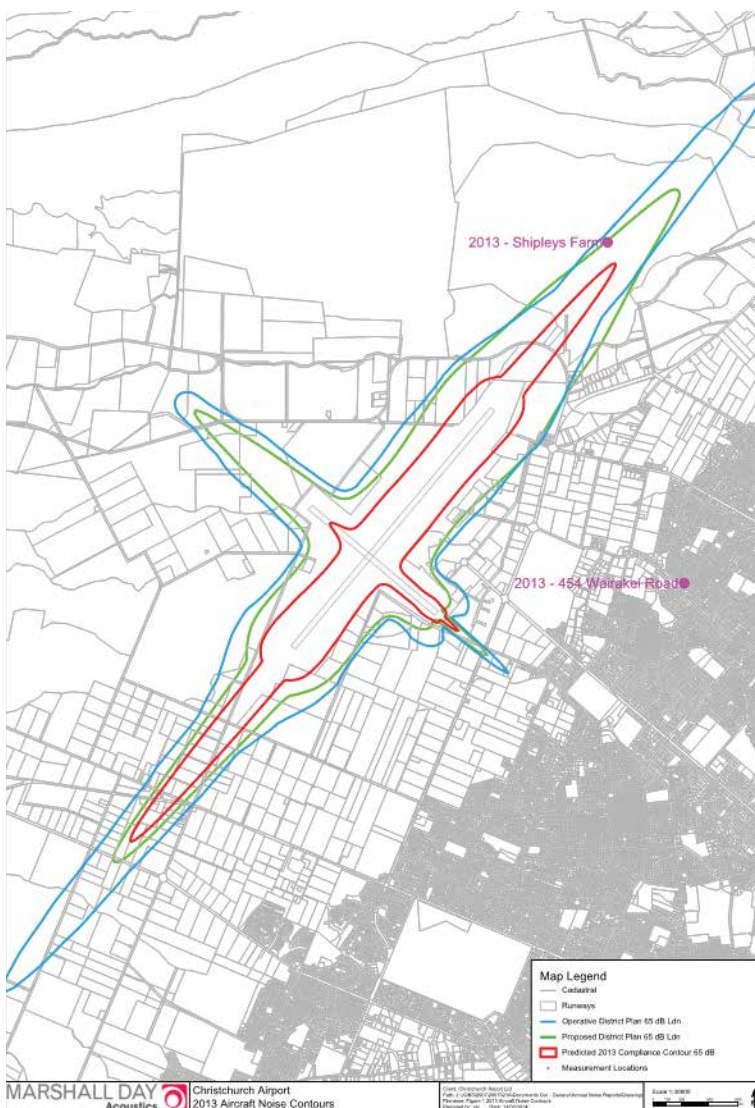


For a more detailed map, please contact CIAL.

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Noise rules

Christchurch Airport – compliance with Christchurch City Plan (noise rules)



Noise rules relating to the Christchurch City Plan (Part 11, Rule 1.2.4.2) require CIAL to present annual calculated noise contours and associated monitoring results which assesses compliance with the City Plan noise standard for aircraft operations at the Airport. The City Plan also requires that CIAL manages noise from aircraft operations ensuring that noise does not exceed 65 dBA Ldn contours outside the Airport noise contour shown in the City Plan (demonstrated by the blue contour line on the left).

AIRCRAFT OPERATIONS MEANS:

- » Landing and take-off of aircraft at Christchurch International Airport;
- » Aircraft flying along any flight path associated with a landing or take-off at Christchurch International Airport;

THE FOLLOWING ACTIVITIES ARE EXCLUDED FROM THE DEFINITION OF AIRCRAFT OPERATIONS:

- » Aircraft operating in an emergency for medical or national/ civil defence reasons;
- » Air shows;
- » Military operations not associated with the Antarctic programme;
- » Aircraft using the Airport as an alternative to a scheduled Airport elsewhere;
- » Aircraft taxiing; and
- » Aircraft engine testing.

Exceedance by up to 1 dBA of the noise limit is permitted provided CIAL demonstrates at the request of, and to the satisfaction of, the Council that any such exceedance is due to atypical weather patterns.

The Christchurch Airport 65 dBA Ldn District Plan noise contour crosses over the three local authorities of Waimakariri, Selwyn and Christchurch City. In 2011 a new set of District Plan contours were made operative for both Selwyn and Waimakariri districts. Meanwhile, the Christchurch City District Plan contains the old noise contours. Noise contours have been calculated and in-field monitoring has carried for the calendar year of 2013, demonstrate that noise from aircraft operations at Christchurch International Airport complies with the Waimakariri, Selwyn and Christchurch City District Plan 65 dBA Ldn noise contour limit.