

## Living with aircraft noise

This information provides an overview for people who are building or renovating or moving to a property in an area that is under a flightpath or near an airport.

Aircraft noise is common for people who live near airports or underneath flightpaths.

When managing noise impacts, prevention is always better than cure. Resolving noise problems after they occur may not always be possible and can often be difficult and costly. It is best to anticipate, avoid or manage potential noise impacts as early as possible in the planning process. Council's Development Officers assess noise impacts and how they could be managed when assessing development applications.

Adelaide Airport is located 6 kilometres west of the Central Business District. It is bounded by residential areas to the east, south and north. The majority of operations at Adelaide Airport are international and domestic regular passenger services, mostly medium to large jets. During the first quarter of 2016 there were around 25,600 operations at Adelaide Airport. A legislated curfew at Adelaide Airport limits operations between 11pm and 6am. More information about Adelaide Airport is available from the Airservices website, [www.airservicesaustralia.com](http://www.airservicesaustralia.com)

Information from noise monitors around airports is published by Airservices Australia. Before moving house or considering developing near an airport, it is worth checking on the levels of aircraft noise experienced



at or near that location. This information is available in quarterly reports on aircraft noise via the Airservices Australia website. You can also access WebTrak on the Airservices website to monitor flights over a particular address at any time during the past three months.

Every five years, major airports are required to produce Master Plans, which include forecasts for aircraft noise levels over a 20-year period. Master plans can be found on airport websites. More information about Adelaide Airport can be found at [adelaideairport.com.au](http://adelaideairport.com.au)

### Considering noise in the development process

As with many environmental considerations, noise issues are best addressed early in the development application (DA) process. The City of West Torrens provides advice that will outline assessment criteria before lodgement of an application. This advice provides applicants with

a better understanding of the requirements of developing near the airport.

### Assessment/determination process

Noise issues must be considered when a council is assessing an application, especially when that development may be sensitive to noise. Sensitive land uses include residences, schools, hospitals, places of worship and some community centres.

When a noise-sensitive development is proposed in a noisy area, an acoustic report will be required. Acoustic reports are noise impact assessments made by sound engineers. Council will consider the acoustic report during the assessment process to ensure that appropriate control measures are integrated into the development.

This report should demonstrate whether or not it is possible for a sensitive development

*Continued overleaf*



to be constructed within the requirements of AS2021 (refer next section). If an acoustic report is provided stating that it is possible for the proposal to satisfy AS 2021, the outcomes and recommendations of that report will then be conditioned as part of the Development Plan Consent. Noise mitigation often requires physical changes such as double glazing of windows, thicker insulation etc. The outcomes and recommendations will then need to be incorporated into the development's design prior to it being submitted for Building Rules Consent.

### Existing dwellings

Noise mitigation measures will not be enforced on existing dwellings unless an application is submitted to Council for the addition or alteration of the structure. When this occurs, an acoustic report will only be required for the portion of the dwelling being altered or added to.

### Australian Noise Exposure Forecast (ANEF)

The Australian Noise Exposure Forecast (ANEF) system was developed as a planning tool aimed at controlling encroachment on airports by noise-sensitive buildings. Locations are rated according to the level of noise – the higher the rating, the greater the noise level. Contours can be drawn around an airport to show the area that exceeds a certain level of noise.

Standards Australia has created AS2021, which provides an assessment of potential aircraft noise around airports based on the ANEF system. The following factors of aircraft noise are taken into account in calculating the ANEF:

- the intensity, duration, tonal content and spectrum of audible frequencies of the noise of aircraft take-offs, landings and reverse thrust after landing (the noise

generated on the airport from ground running of aircraft engines or taxiing movements is not included for practical reasons)

- the forecast frequency of aircraft types and movements on the various flightpaths
- the average daily distribution of aircraft take-offs and landing movements
- the topography of the area surrounding the airport.

History and experience have shown that aircraft noise does not stop at a contour and aircraft noise complaints are increasing from areas well outside the contour area. This is why land use planning around airports and flightpaths takes into consideration the range of noise information relevant to the local community including:

- the location of flightpaths
- numbers of aircraft and timing of aircraft movements
- the intensity of noise events from aircraft movements
- comparison to ambient noise levels.

### Noise threshold levels

The effects of noise can range from minor to very serious depending on the noise level, the duration of the noise and the sensitivity of the subject. Noise, by definition being unwanted sound, elicits a wide range of individual responses in the vicinity of airports and the reasons for these differences are largely socially-based and complex to quantify.

Further information can be found from various websites:

- [aircraftnoise.com.au](http://aircraftnoise.com.au)
- [adelaideairport.com.au](http://adelaideairport.com.au)
- [www.airservicesaustralia.com](http://www.airservicesaustralia.com)
- [westtorrens.sa.gov.au](http://westtorrens.sa.gov.au)