

Chapter C4

Aircraft Noise and Vibration



Summary of key findings:

Some residents to the north and south of the new runway will experience increased noise impacts during the day and evening periods. These impacts have been reduced as much as possible through the preliminary airspace design's careful prediction of airport operations.

Operational controls have been designed to reduce noise impacts for residents and other sensitive land uses as much as possible.

By 2026, when the new runway system opens, between approximately 5,040 and 8,560 dwellings are predicted to be newly affected by aircraft noise (described by N70 day and evening of five or more).

The operation of M3R is forecast to significantly decrease the number of dwellings exposed to night-time noise (described by N60 of five or more) when compared to the no-build scenario, by between approximately 15,550 (Option 2) and 24,795 dwellings (Option 1) in 2026.

The predicted noise impacts are generally consistent with the noise contours included in the 2018 (current) and 2022 (proposed) Master Plans. The contours are generally less significant than those in the Melbourne Airport Environs Overlay, with the exception of the area south of the new north-south runway.

Variations in meteorological conditions influence runway usage, operating modes and noise contours. This is examined in the assessment and the potential variation is described within typical busy day and seasonal variation noise contours, which capture peak usage of the north-south parallel runways and the existing east-west runway.