

Noise Action Plan for Brisbane

Departures over land to the north and west from the new runway

Package 3, preferred option 1.1

This preferred option proposes changes to the departure paths for jets taking off over land from the new runway during the daytime hours (6am to 10pm) when the wind is blowing from the south (see **Figure 1**, below). These paths would also connect from the legacy runway at night (10pm to 6am). We are continuing to investigate options to reduce the impact of the initial section of these departures on runway aligned communities also subject to arrivals.

All options for Package 3 of the Noise Action Plan for Brisbane, which aims to reduce the concentration of flights over the most affected communities, are outlined in the *Phase 6 Overview*.

This preferred option aims to:

• reduce concentration of noise impacts by adjusting later sections of the departure paths to avoid arrival paths used when the wind is from the north, tracking over less densely populated areas.

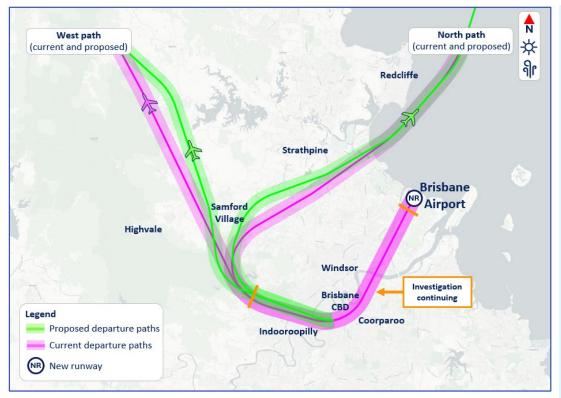


Figure 1: Current (pink) and proposed (green) north and west departure paths (only daytime shown), with 1km buffers either side from the new runway. The section of flight path between the two (orange) lines requires further investigation and consultation.

Naming of departure paths

In aviation, departure paths are referred to by waypoint names. A waypoint is a geographical location used to define a point on a flight path. They typically take the form of a five-letter capitalised word.

In this information sheet, the flight paths are referred to by the direction that planes are flying in. Some community members may be more familiar with their waypoint names.

West path = WACKO North path = BIXAD



Preferred option

This preferred option has one key change proposal:

1. Moving later sections of the departure paths away from arrivals, tracking over less densely populated areas

This change proposal is explained below.

Move later sections of departure paths

The initial concept presented in August 2024 considered an early split of the north and west departure paths to reduce flight concentration after aircraft turn to track to the north and west.

What the community told us

- Splitting the paths earlier would not significantly reduce disruption in some of the areas most affected by flights departing over land to the north and west.
- Separating departure and arrival paths would result in more significant noise improvements for areas that experience concentrated operations.

The preferred option proposes:

- introducing only a slightly earlier split to the north and west departure paths
- shifting the later sections of the west path so it is better separated from arrival paths which are used when the wind is from the north (arrival paths are shown in <u>Arrivals over</u> <u>land from the north and west</u>, preferred option 3, also currently being engaged on)
- shifting the later sections of both departure paths so they fly over fewer people (see **Figure 2**, right).

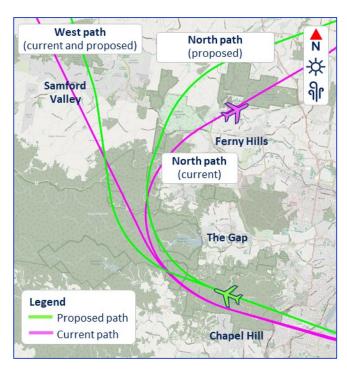


Figure 2: Close up of later sections of the current (pink) and proposed option (green) departure paths

Update on investigation of initial departure options

We engaged on an initial concept in August 2024 to offset the departure paths immediately after take-off from the new runway over land to the north and west when winds are from the south. The concept aimed to reduce flights over communities also affected by the arrival paths to the new runway, when winds are from the north, which cannot be moved.

What the community told us

- Many residents supported offsetting the initial departure path to reduce flight concentration in runway aligned areas
- Some felt the proposed offset didn't move the initial departure path far enough to make a noticeable difference to noise.
- Others raised concerns that planes would cross residential areas sooner after take-off than they do now.

Investigation of alternatives

Opportunities to create a greater separation of the new runway initial departure path and the runway aligned arrival path were investigated, including options to continue straight over industrial land to the Brisbane River and then turn right earlier than the current alignment. Regardless of the degree of the turn however, all options resulted in aircraft flying over the more densely populated inner-city, resulting in a far greater number of people potentially affected.

While it is acknowledged that noise sharing may require impacts to new or more densely populated areas to enable noise to be shared more widely, reducing the number of people impacted by aircraft operations remains a central goal of the Noise Action Plan for Brisbane.

As a result, the concept of offsetting departure flight paths from the arrival flight paths is still being investigated, including review of various alignment options, and engagement with government agencies.

Comparison of key metrics

Please refer to the <u>Phase 6 Overview</u> for general information on key metrics. Most metrics on this information sheet apply only to the proposed area of change, not the full length of the departure paths from runway to waypoint, as initial sections are still under investigation.

How often are the flight paths used?

	Average number of flights each day	Highest number of flights each day	
North departure path (daytime)	41	74	
West departure path (daytime)	15	38	

Table 1: Average daily and peak daily flight numbers for the departure paths

Number of people overflown

	Population overflown (current flight paths)	Population overflown (preferred option)	Difference
North departure path	98,400	85,200	↓ 13,000
West departure path	47,600	42,400	↓ 5100

Table 2: Comparison of population overflown within 1km either side of the current and proposed departure paths

Aircraft altitudes



Figure 2: Current (pink) and proposed (green) north and west departure paths (only daytime shown), with 1km buffers either side

Length of the departure paths

Shorter flight paths can generally be expected to reduce fuel consumption and CO₂ emissions. Additional information about aircraft emissions can be found in the *Environmental Impact Assessment: Departures over land.*

	Flight path length (NM) (current flight paths)	Flight path length (NM) (preferred option)	Difference
North departure path	61	61	No change
West departure path	25	25	No change

Table 3: Lengths of current and proposed departure paths

Noise impacts: population numbers

The data for this table is based on modelling of the noise contours from take-off, not just the area of change.

		Population counts in +60dB noise contours	Difference: proposed vs current	Population counts in +70dB noise contours	Difference: proposed vs current
North departure path	Current	194,900	↓ 1100	16,000	No change
	Proposed	193,800		16,000	
West departure path	Current	194,900	↓ 1100	16,000	No change
	Proposed	193,800		16,000	No change

Table 4: Comparison of population numbers in areas +60dB and +70dB

More information

- <u>Brisbane Baseline Model</u> use interactive maps to look up addresses, zoom in, compare current and proposed flight paths including modelled noise contours, and watch videos of all the options in this round of engagement
- Information sheet for initial concept for <u>Daytime departures over land to the north and west</u> from previous engagement PDF (1.22MB)
- Preferred Options Environmental Impact Assessment: Departures over land note, this a detailed technical document
- <u>Phase 6 Overview</u> a summary of all options in this round of engagement and methodology for producing key metrics

Next steps

Airservices Australia is seeking community feedback on the preferred option for *Departure paths over land from the new runway* (preferred option 1.1). Your input will help determine how these change proposals should move forward to final design and implementation.

Key questions for community feedback

Please give us your feedback using the <u>online survey</u>. If you prefer to provide feedback via email or mail, we encourage you to structure your responses using these key questions:

- 1. On a scale of 1 (very poorly) to 5 (very well), how well do you think the change proposal meets the aim of this preferred option as outlined on page 1 of this information sheet?
 - Move later sections of departure paths

- 2
- 3

5

- 2. Please explain your rating what are the main benefits and/or drawbacks of these change proposals that influenced your score?
- 3. Do you have any other feedback on this preferred option?

Feedback closes Sunday 17 August 2025

Contact us:

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