

FLIGHT PATH CHANGES THAT MAY AFFECT YOUR SUBURB: PUBLIC CONSULTATION





INTRODUCTION

Wellington Airport is publicly consulting on potential flight path options for northerly jet departures from Wellington. The options are:

1. Maintaining the current flight paths
2. Changing the northerly route for jet departures before 7am to fly between Horokiwi and Korokoro
3. Changing the northerly route for jet departures to a similar route used before December 2022 over Newlands Ridge
4. Any other proposal raised through this engagement process.

Each option will have different benefits and drawbacks which are outlined in more detail below.



BACKGROUND

This public consultation follows changes made to flight paths for jet aircraft departing Wellington to the north in December 2022. In general, these changes have meant fewer departures over Newlands and more over Khandallah and Broadmeadows.

The changes are part of a system called Divergent Missed Approach Protection System (DMAPS). DMAPS was initiated and developed by Airways, New Zealand's air navigation service provider, and approved by Wellington Airport and the Civil Aviation Authority.

The main aim of this change was to improve safety in relation to aircraft that are unable to land for any reason, by having departing jet aircraft diverge (i.e. turn left) during climb on the flight path.

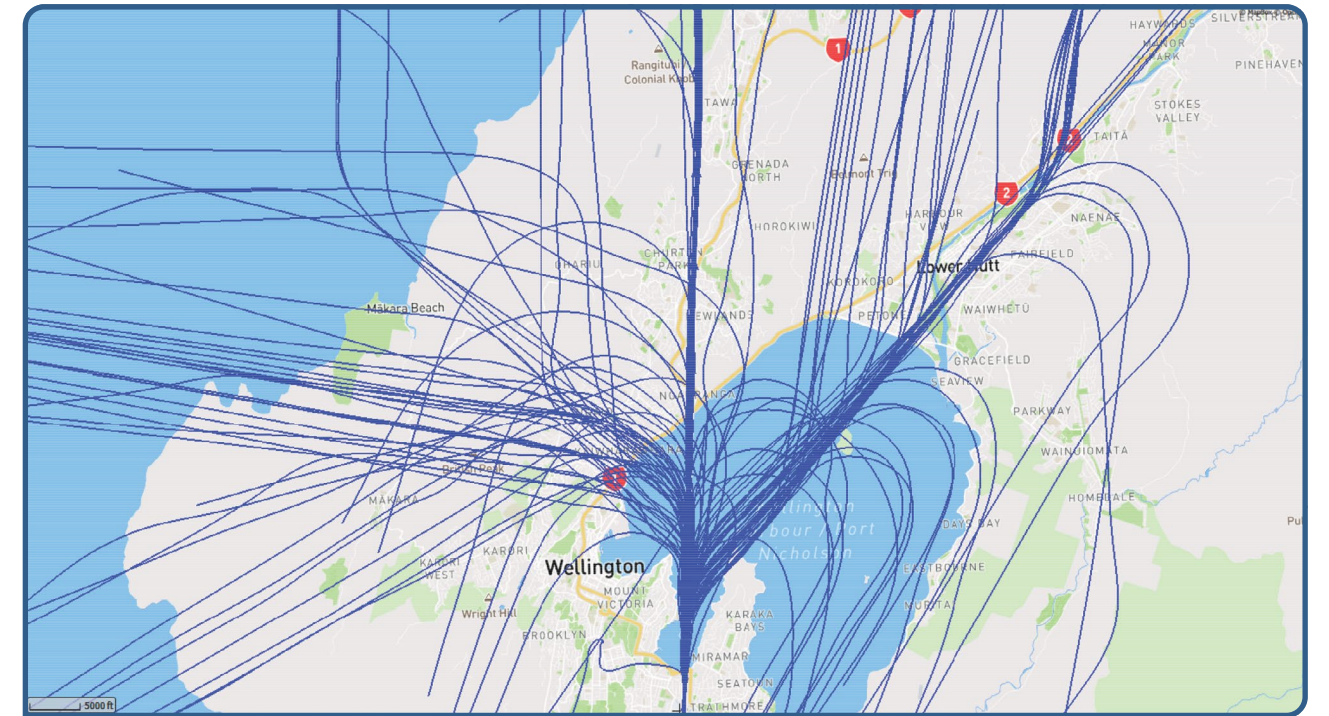
As a result, the safety, efficiency and sustainability of aircraft operations from Wellington Airport has improved. However, while this has meant reduced noise impacts for some residents, others have experienced a noise increase.

The maps on the following page illustrate the change on a typical day before and after the change. It is important to note this is a general indication and that pilots can request permission to deviate from set paths. In practice, aircraft will always fly widely over the northern suburbs, and it is unavoidable that aircraft will fly over residential areas under each option.

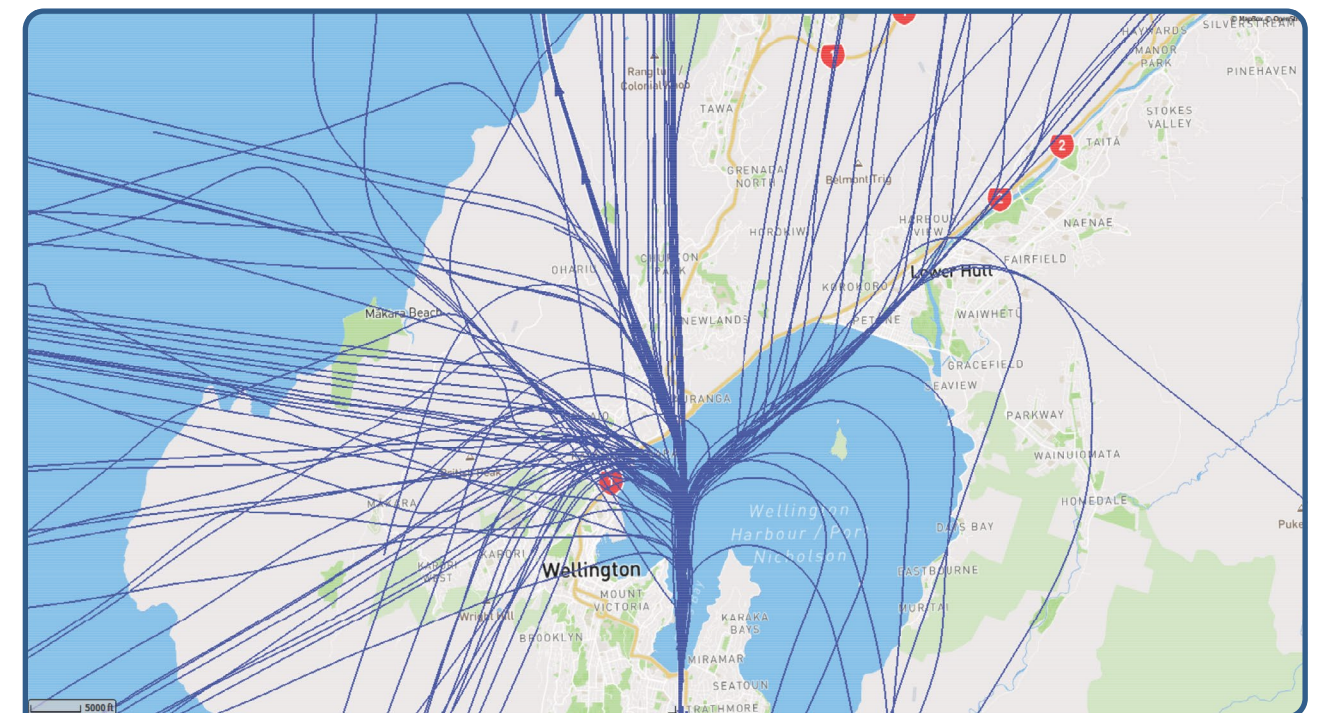
We have listened to public feedback and as a result have asked Airways, who design and maintain flight paths, to develop these alternative options for consideration.

The timing of any final change, if any, is still to be confirmed and will depend on which option is selected following consultation.

Consultation is now open and will run until 5pm Friday 11th October. Wellington Airport will carefully consider all feedback before informing Airways of our position.



Pre-DMAPS 1 September 2022



With DMAPS 1 September 2023

More detailed background information including noise monitoring reports are available at www.wellingtonairport.co.nz/dmaps.

For any queries you can contact us via email at wellingtonairport@wellingtonairport.co.nz.

HOW TO HAVE YOUR SAY

See page 11 for information on how to give your feedback.





WELLINGTON AIRPORT'S ROLE

Wellington Airport does not develop or certify flight paths. These are generally proposed by Airways and Wellington Airport is then able to approve or decline these proposals. The Director of Civil Aviation is then responsible for approving the flight paths before they can be used.

In the specific case of DMAPS, we are taking a more active role than usual given the feedback we have received from local residents. We want to ensure everyone has their say before weighing up all factors and indicating to Airways our position.

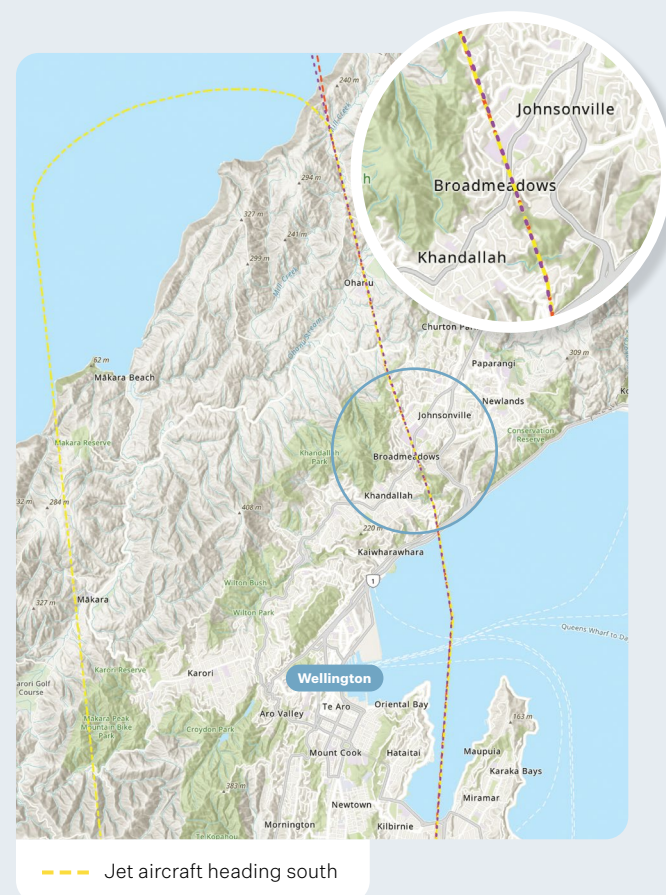
OPTION 1: MAINTAIN THE STATUS QUO

This option would continue with the current flight path for departures in a northerly wind from Wellington as shown.

From 1 December 2022 jet aircraft have flown this route, tracking slightly further to the west than before. While aircraft have always overflown these areas, it has meant an increase in the volume of flights in a narrower channel over Khandallah, Broadmeadows and western parts of Johnsonville, and a corresponding decrease in departure flights over Newlands, eastern Johnsonville and Churton Park.

It is important to note this is only for departures, not arrivals, and is used only when the wind is blowing from a northerly direction (approximately two thirds of the time).

On a day when planes are departing to the north, an average of 38 jet aircraft depart each day between the hours of 6am and 10pm. Typically these are at a height of between 3250 – 3750 feet when reaching Khandallah and around 4500 feet when crossing Johnsonville.



Benefits of this option

Safety: DMAPS provides greater assurance of separation between aircraft flying a missed approach and other departures. Pilots are able to fly a more consistent and predictable missed approach flight path, rather than relying on flying manually using visual cues to avoid terrain and uncontrolled airspace.

Efficiency: Jet aircraft heading north or to Australia are now taking a slightly more direct route. This means improvements to flight times for travellers, reduced fuel burn and costs for airlines, and reduced airborne and ground delays into Wellington (see below). An estimated 33,000 kilometres in aircraft travel distance has been saved per year.

Reduced delays: DMAPS allows air traffic controllers to safely reduce the size of the gaps required between approaching aircraft, particularly in poor weather. In the past, they would have held aircraft on the ground or in the air, or slowed them down enroute, especially during peak traffic periods.

As a result, airborne delays have reduced by an average of three per cent per flight despite a three per cent increase in traffic volume at Wellington Airport between 2022 and 2023. At the same time, ground delays have reduced by 86 per cent.

Sustainability: More direct flight paths and reduced delays means reduced fuel use and CO₂ emissions.

Noise reduction in some areas:

The suburbs of Newlands, Churton Park and east Johnsonville have experienced a reduction in aircraft noise from when this flight path was introduced.

Fewer people affected by noise overall:

Our noise analysis shows that this option affects approximately 15,000 fewer people than before DMAPS.¹

Potential downsides of this option

There have been noise impacts on some suburbs, particularly Khandallah and Broadmeadows. More than 120 people have complained to Wellington Airport and Airways, and the group Plane Sense Wellington has been advocating for residents affected.

This feedback is not universal however, reflecting that noise is subjective and experienced differently by people. It is important to note some aircraft have always overflown nearby, including most jet arrivals in a southerly wind, and this has not changed.

In response to feedback, Wellington Airport and Airways installed further noise monitoring and carried out modelling in 2023. Temporary noise monitors were placed in Khandallah, Johnsonville, Broadmeadows and Ngaio to record data on aircraft noise levels and the full report is available on our website (www.wellingtonairport.co.nz/dmaps).



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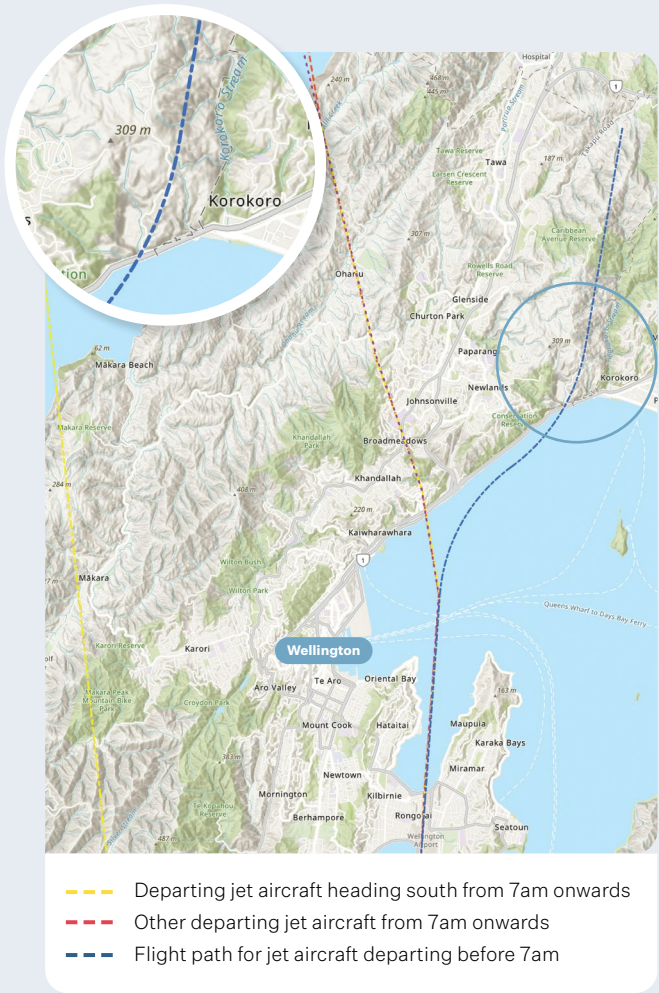
1. The full report is available on our website: www.wellingtonairport.co.nz/dmaps. See table on page 8 for an estimate of the number of people affected by noise under each option.

OPTION 2: CHANGING THE NORTHERLY ROUTE FOR JET DEPARTURES BEFORE 7AM TO FLY OVER LESS POPULATED AREAS

This option would continue with the current flight path for jet departures in a northerly wind from Wellington, with the exception of jet flights between 6am and 7am which would take a different route between Horokiwi and Korokoro. This would avoid more densely populated areas.

In a northerly wind, based on current schedules this would mean up to five flights during this time in this area.²

Deviating from the standard DMAPS flight path at this time is a possibility because there are no flights scheduled to arrive in this period, so airspace may be more flexible.



2. This number could change over time depending on the scheduling decisions of airlines.

Potential benefits of this option

Some residents in the northern suburbs have told us the early morning flights before 7am have the biggest impact and often interrupt sleep.

The 2023 noise monitoring report showed that different aircraft types have a different noise impact, and in particular early morning international Boeing 737-800 departures are noisier than most other flights.

Therefore, this option could reduce this disruption and the number of people affected while at the same time preserving the safety, efficiency and sustainability benefits of DMAPS outlined above from 7am onwards.

This change could be made relatively quickly, potentially in place early next year and more quickly than Option 3 (reverting to pre-DMAPS).

Potential downsides of this option

This new flight path could have a noise impact in Horokiwi and Korokoro, and would also involve more flights over Belmont Regional Park.

Aircraft would be at a higher altitude over these suburbs compared to altitudes flown over the Khandallah/Newlands area, and noise levels would therefore be lower. However, the change in noise levels experienced by residents would be more significant and potentially more noticeable as these areas do not currently experience much aircraft noise.

It is estimated that noise levels for a jet flight over this area could be between 68 and 73 decibels. Noise experts consider 68 decibels roughly comparable to a conversation three feet away and 73 decibels similar to a vacuum cleaner at five feet.

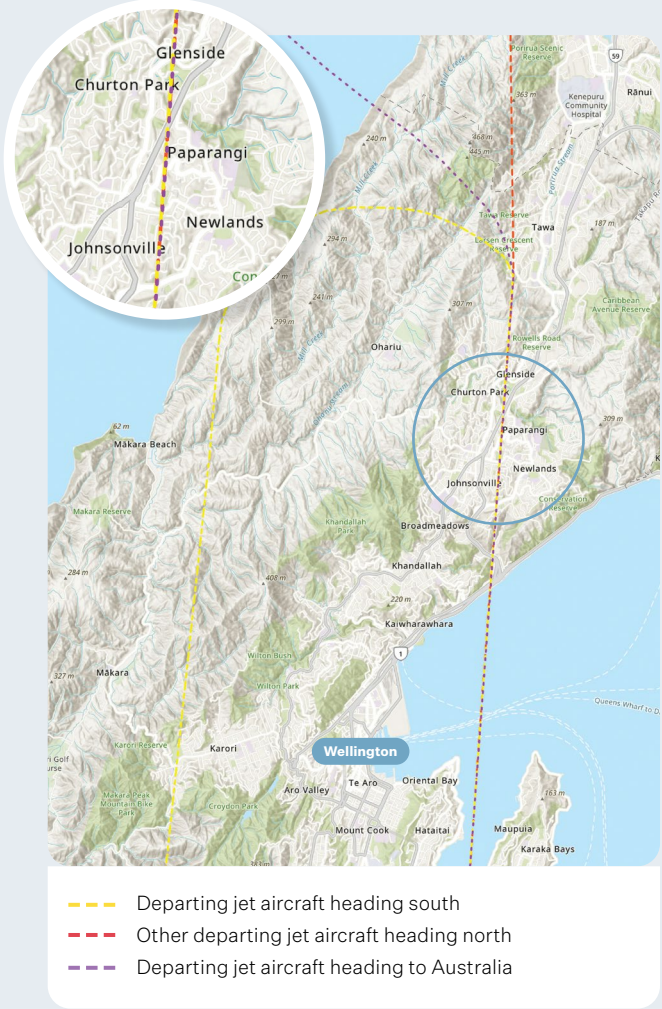
A full report on potential noise impacts for this area is available on our website at www.wellingtonairport.co.nz/dmaps.

This new flight path could also mean slightly increased travel times, fuel burn and emissions for these flights due to taking a less direct route.

OPTION 3: REVERTING TO THE NORTHERLY ROUTE FOR JET DEPARTURES USED PRIOR TO DECEMBER 2022

This would revert to broadly the previous flight paths used before DMAPS was implemented. In general, it would mean more jet departures over Newlands, parts of Johnsonville and Churton Park, and fewer over Khandallah, Broadmeadows and other parts of Johnsonville.

On a day when planes are departing to the north, approximately 38 jet aircraft on average depart each day between the hours of 6am and 10pm.³ Flights passing over Newlands would generally be at a height of 3500 to 5000 feet.



3. This number could change over time depending on the scheduling decisions of airlines.



Potential benefits of this option

This would reduce the frequency of flights and noise over Khandallah, Broadmeadows and western Johnsonville.

Potential downsides of this option

This would increase the frequency of flights and noise over Newlands, Paparangi and eastern Johnsonville.

Noise assessments show that this option would affect approximately 19 – 24% more people than the status quo, given that more people live under this previous flight path.

It would mean losing the other benefits of DMAPS outlined in Option 1, including:

Reduced safety: Pilots on a missed approach would go back to relying on flying manually using visual cues to avoid terrain and uncontrolled airspace.

Reduced efficiency: Jet aircraft heading north or to Australia would take a slightly more indirect route, increasing flight times for travellers and fuel costs for airlines.

Increased delays: DMAPS has reduced airborne and ground delays for flight operations, so it is reasonable to expect these would increase if DMAPS was reversed.

Sustainability: Taking a slightly indirect route and increased delays would mean increased fuel use and emissions.

Option 3 would also take longer to implement than Option 2. If selected, Airways will need to make amendments to the pre-December 2022 flight paths to meet regulatory requirements which will require significant redesign prior to certification and submission to the Director of CAA. Due to those requirements, it would not be possible to implement this flight path before late 2025.

NUMBER OF PEOPLE AFFECTED BY EACH OPTION

Noise modelling shows that Option 1 (status quo) would affect the fewest people in terms of flights above 65 decibels. The full report is available at www.wellingtonairport.co.nz/dmaps.

Number of flights above 65 decibels	Number of people affected		
	Option 1 (status quo)	Option 2 (6–7am)	Option 3 (pre-DMAPS)
1 – 9	58,204	60,749	65,931
10 – 19	22,316	20,756	29,570
Total	80,519	81,505	95,501

HOW WE WILL DECIDE ON OUR POSITION

Wellington Airport’s position will be based on (but not limited to) the following criteria, in no particular order:

- Feedback from stakeholders including local residents
- Data from the noise impact studies carried out by Marshall Day over the last few years
- Benefits to aircraft operations including safety, time, emissions, fuel use and cost
- Benefits to airport operations including impact on arrivals/departures capacity and delays

HOW WE ARE CONSULTING

We will be soliciting and considering views from the following groups (not an exhaustive list):

- Members of the community in the wider northern suburbs (including relevant residents’ associations and Plane Sense Wellington)
- Airlines including Air New Zealand, Qantas and Jetstar
- Airways and its subsidiary Aeropath Limited
- Wellington City Council and Greater Wellington Regional Council
- Environmental and conservation groups



TIMING

Public consultation begins on Friday 20th September and will run until 5pm Friday 11th October.

Timing for any new flight path depends on the option selected and coordination with Airways New Zealand.

Q&A

What changes were made in December 2022?

DMAPS helps to safely manage an approaching aircraft that is unable to land for any reason, including low cloud, or wind shear, and so flies what is known as a ‘missed approach’ procedure.

Under DMAPS, aircraft departing north and aircraft that miss their approach will fly on separate paths that diverge at least 30 degrees from one another.

Previously, the pilot of an aircraft that had missed its approach would have either followed the same flight path as that used by jet aircraft departing to the north, or flown a circuit manually over Wellington Harbour using visual cues, before landing at Wellington Airport or diverting to another.

Departing jet aircraft now climb on a flight path that turns slightly to the west, turboprop aircraft flight paths are virtually the same, while aircraft that miss their approach now turn slightly to the east.

As a result, most jet aircraft departing north that flew over Newlands, parts of Johnsonville and Churton Park now fly more frequently over Khandallah, Broadmeadows and other parts of Johnsonville since DMAPS was implemented in 2022.

Why were these changes made?

These changes have increased safety and efficiency by reducing complexity and uncertainty. Pilots now fly a more consistent and predictable missed approach flight path that is clear of departing jet aircraft, rather than relying on flying manually using visual cues.

DMAPS also reduce delays because they allow air traffic controllers to safely reduce the size of the gaps required between approaching aircraft, particularly in poor weather. In the past, they would have held aircraft on the ground or in the air, or slowed them down enroute, for longer – especially during peak traffic periods.

Who made the final decision on DMAPS?

DMAPS was initiated and developed by Airways, New Zealand’s air navigation service provider, and approved by Wellington Airport.

Have flight paths changed for arriving aircraft?

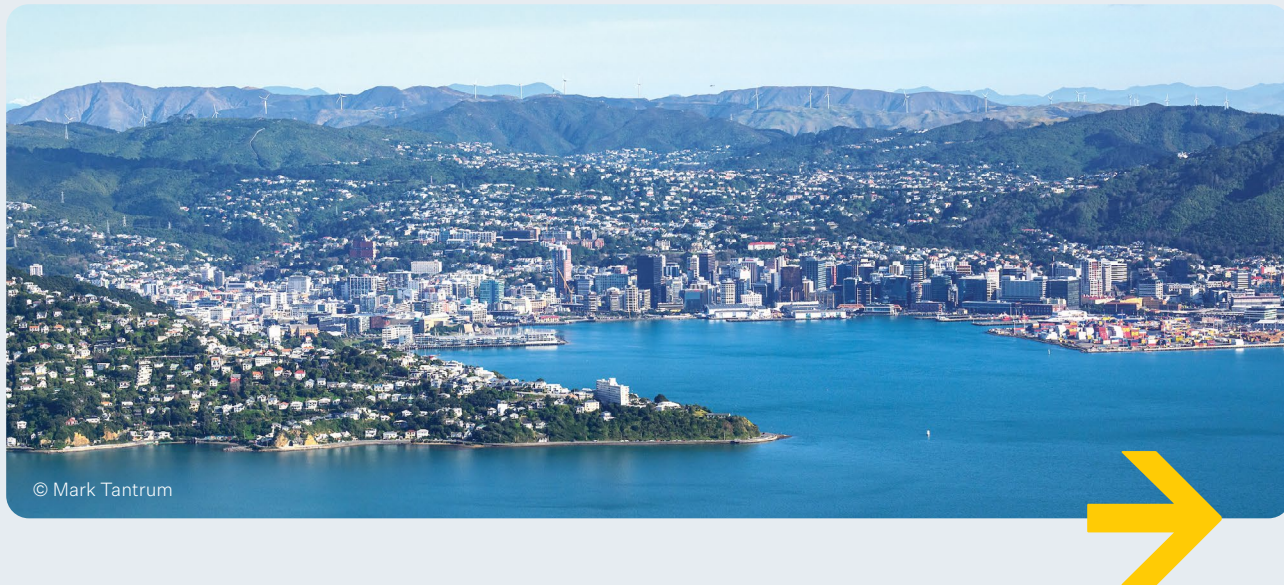
No, this has not changed for several years. The changes made in December 2022 only apply to jet aircraft departing to the north when there is a northerly wind.

Why don’t planes just take off and land to the south all the time, or over the harbour?

Aircraft are required to take off and land into the wind to increase wind flow over the wings (take-off) and reduce required speed (landing).

Aircraft taking off and landing to the north already overfly Wellington Harbour but inevitably have to overfly land at some point.





Why can't all aircraft fly over less populated areas (Option 2) all the time, rather than just before 7am?

Taking an indirect route isn't possible for all flights after 7am for safety, efficiency and environmental reasons.

This proposed route could work before 7am given there are no scheduled arrivals in that time period and therefore reduced chance of a missed approach. After that time the airspace becomes busier and more complex.

Flying longer, more indirect routes would also extend flight times, meaning increased fuel burn, cost and emissions – especially if this was required over all residential areas. Aircraft are allowed to fly over residential areas for this reason.

Why don't we revert back to the old flight path and then start consultation?

This would not remove the noise issues, but instead result in aircraft flying over other people's homes instead. We want to consult and hear feedback before considering whether to make any such change.

Is Khandallah (and other Wellington suburbs) part of a noise abatement area?

Yes, Civil Aviation Rules include a noise abatement area for Wellington covering a number of suburbs including Khandallah and Newlands. This means that aircraft in this area must meet certain conditions, including flying a minimum height of 1500 above sea level or 1000 feet above ground level (whichever is higher). Most aircraft are at least twice that height by the time they reach this area.

Why wasn't there public consultation on the December 2022 changes?

Wellington Airport is required to manage noise within its air noise boundaries which only extend to surrounding neighbourhoods – not the northern suburbs. It was determined that DMAPS would have no impact on these boundaries, which is technically the end of Wellington Airport's responsibilities.

Wellington Airport's approval role in aircraft flight path changes does not include a legal obligation to consult.

However, the airport went above and beyond their requirements by installing a noise monitor and commissioning experts to carry out a preliminary noise assessment. This found that while the change would be noticeable to some residents, it would be within reasonable limits.

It was also determined that aircraft would not be flying in areas they hadn't previously – i.e. planes have always overflown the northern suburbs to an extent.

Is there still a legal case underway on this issue?

At the time of writing, Plane Sense Wellington has served legal proceedings against a number of parties including Airways and Wellington Airport, seeking a judicial review of the December 2022 decision. Wellington Airport had previously announced this public consultation would happen anyway and we are continuing with this as planned.

➔ HOW TO MAKE A SUBMISSION

You can make a submission by completing our short online survey.

This is available by scanning the QR code, or at our website:

www.wellingtonairport.co.nz/dmaps

If preferred, you can fill out the physical form below and send to us at:
DMAPS consultation, Wellington Airport, PO Box 14175, Wellington



Name: _____

Address: _____

Which option do you prefer (please tick one):

- ☐ 1. Maintaining the current flight paths
- ☐ 2. Changing the northerly route for jet departures before 7am to fly between Horokiwi and Korokoro
- ☐ 3. Changing the northerly route for jet departures to a similar route used before December 2022 over Newlands Ridge
- ☐ 4. Another option (please outline below)

Why is that your preferred option?

Do you have any further comments or suggestions?

WELLINGTON AIRPORT

