Preliminary aeronautical assessment

September 2021

Hi All,

As we've mentioned before, we're committed to sharing what we learn as we explore the potential for a new airport to serve Central Otago.

Today we're sharing the findings of a preliminary aeronautical assessment which has been undertaken with aviation consultancy Airbiz, with the support of a range of technical specialists.

The key finding is that the site is able to support an airfield with a single runway of at least 2.2 kilometres, although more detailed analysis is required.

This is an important first step – but only a first step - in confirming the site is suitable for an airport.

Now we know it is likely to be, we have the confidence to proceed with more detailed analysis.

There is a lot of information in the assessment, so we'd suggest taking some time to read it and digest its findings. You are more than welcome to get in touch if you'd like to discuss it with us.

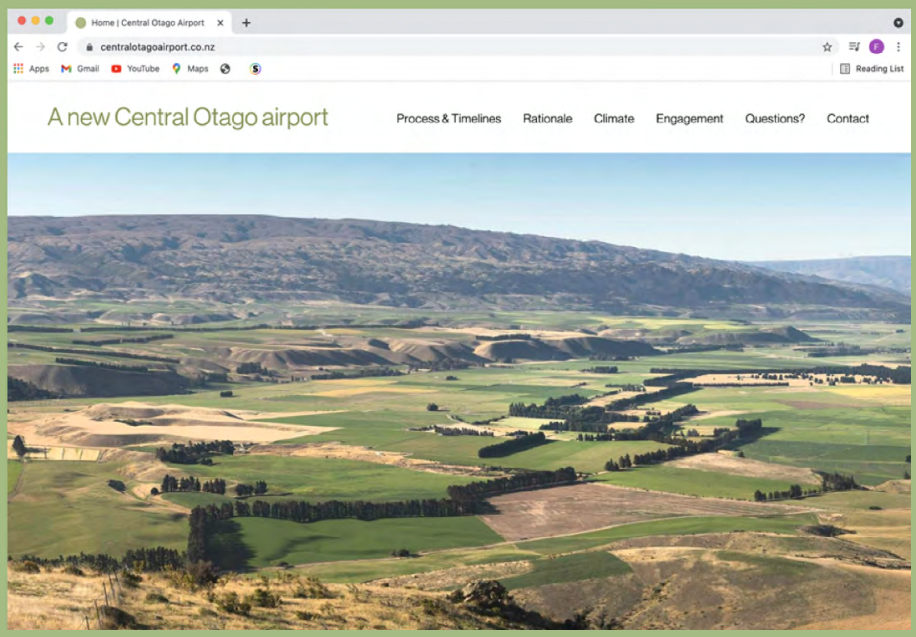
Please remember this is just the beginning of a whole tranche of analysis and any airport on our site is a long way from reality.

You can email the project team at any time via central@christchurchairport.co.nz

Kind regards,
Michael Singleton
Project Director

The best place for accurate information on the project is our website:

Our project website can be found at centralotagoairport.co.nz.



One runway – two potential alignments

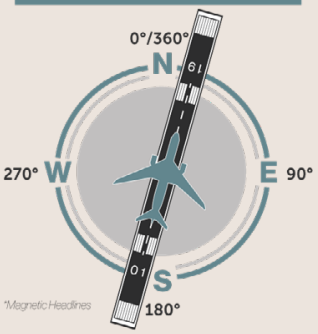
Runway alignment is determined by a range of factors including site geography and boundary, surrounding terrain and meteorological conditions.

The preliminary aeronautical assessment has identified two potential runway alignments.

Both options enable the safe and efficient operation of various aircraft types – including new generation narrow and widebody jets, freight, turboprop and smaller passenger aircraft.

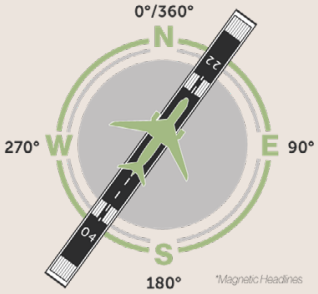
Hawea Valley - Lake Dunstan Alignment Option

RWY 01/19



Lindis Valley - Lake Dunstan Alignment Option

RWY 04/22



The preliminary analysis shows both options enable a runway length of 2.2km. They may also accommodate a longer runway (of up to 3km) but more detailed analysis is required to establish how local terrain influences this.

A 2.2km runway would be able to serve all of New Zealand's domestic routes and short haul international operations such as trans-Tasman and parts of the Pacific.

A longer runway would create more opportunity for Central Otago because it enables businesses and people to connect with more destinations.

The preliminary assessment has found the alignments enable aircraft to connect to existing flightpaths and have comparable emissions profiles.

Noise impacts are yet to be technically analysed in detail. However, the assessment contains illustrations of the expected noise profile from a single aircraft movement on both alignments.

These show the area that would be most impacted by aircraft noise has a very small population. That does not, in any way, lower our commitment to identifying the impacts and finding solutions.

Key findings

- The site is suitable for compliant and safe aeronautical operations by typical scheduled aircraft types operating in New Zealand.
- Flight tracks can be designed to and from the site and the initial assessment indicates that efficient aircraft operating gradients can be designed.
- Preliminary weather data for the site indicates local conditions are suitable for scheduled aircraft operations with northerly wind conditions. Visibility data indicates generally good operating conditions.
- Integration of new flight tracks into the existing airspace environment will need to be carefully planned but is achievable.
- Considering topographical and wind conditions, there are two potential alignment options for a single runway on the site.
- Both runway alignment options perform comparably in terms of carbon emissions.
- A runway length in the order of 2,200m is achievable and possibly a longer runway length between 2,500m and 3,000m.
- More work needs to be done to refine the runway options and airspace planning to ensure aircraft can operate in the most environmentally and operationally efficient way possible.
- The site is suitable for the key aircraft types expected to operate scheduled aviation services within New Zealand and on likely international routes now and in the future.

Download a copy of the preliminary aeronautical assessment's findings here.

What's next?

The project is in the Planning and Validation phase gathering a wide plethora of information.

The next phase of technical analysis will focus on more detailed assessments of flight paths, airspace integration, aircraft performance, wind shear, environmental performance and noise impacts.

In addition, we have to establish how to design an airport that would secure the necessary approvals and warrant the level of investment required to create it.

We're also working with the MetService to develop a weather station which will gather site-specific data.

Once our multiple workstreams are completed, we will be able to make an informed decision on whether to take the project into the next phase – getting the required operational and planning approvals.

At this stage, we expect that decision will be made in 2023.

Please feel free to share this and invite others to sign up for future Project Updates. It is important people have access to trusted information.

Sign Up

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You can email the team at any time via central@christchurchairport.co.nz.