

Contents

Click on any item below to go to that page

- 2 Why have a Master Plan?
- 5 Help us shape tomorrow
- 6 Queenstown Airport today
- 8 Our Master Plan guiding principles
- 10 Why is demand forecasting an important first step?
- 11 What does the demand forecasting tell us?
- 12 What are the potential economic benefits to the region?
- 13 What are the current economic benefits?
- 13 What's the right number?
- 15 What about general aviation and private jets?
- 17 What are the constraints to growth?
- 18 What's the right balance?
- 19 What infrastructure do we need to consider for the airport?
- 20 What are the options for meeting demand?
- 22 Should we extend the runway to accommodate larger aircraft?
- 23 Why we are not extending the runway
- 24 What are the viable options for Queenstown Airport?
- 26 Option 1: Expand the existing terminal
- 28 Option 2: Build a new terminal to the south
- 30 Option 3: Build a new terminal to the north
- 32 What about future transport needs?
- 34 What about noise?
- 36 New airport should we move the airport?
- 39 Dual airport what about Wanaka Airport?
- 40 Summary

Why have a Master Plan?

Global air travel is growing rapidly and we have a key role to play in how this growth is managed across our region. Queenstown Airport has seen unprecedented growth over the past 5 years and annual passenger arrivals and departures have increased from 600,000 to close to 2 million since 2005. So how do we plan for growth? What is sustainable for the airport and for our community?

ABOUT QUEENSTOWN AIRPORT

As New Zealand's fourth busiest airport by passenger numbers, Queenstown Airport is considered a strategic national asset with a vital role to play in the region's growth and prosperity. It's the air gateway to the lower South Island for nearly 2 million residents, visitors and businesses each year, connecting our region to key cities across New Zealand and east coast Australia.

The airport plays an important role in the local economy, supporting a thriving tourism industry as well as providing business and employment opportunities on site with 60 tenant businesses and 700 staff.

Queenstown Airport Corporation is responsible for the management of Queenstown Airport. The company is owned:

- 75.01% by Queenstown Lakes District Council
- 24.99% by Auckland International Airport Ltd

PLANNING AHEAD

To support the long term growth of our region and its continued attractiveness as a place to live, work and play, we need to provide sustainable air connectivity and a world-class airport experience. We also need to be a good neighbour with a strong social, economic and environmental focus.

Having a Master Plan is crucial to help us forecast the speed of growth and consequent infrastructure requirements over the next 30 years. Our Master Plan will also help others in the region with their own planning for infrastructure, accommodation, tourism, business and alternative developments.

THE PROCESS

We approached this exercise with an open mind and a clean sheet approach which didn't restrict our thinking to the airport we have today, or our current facilities.

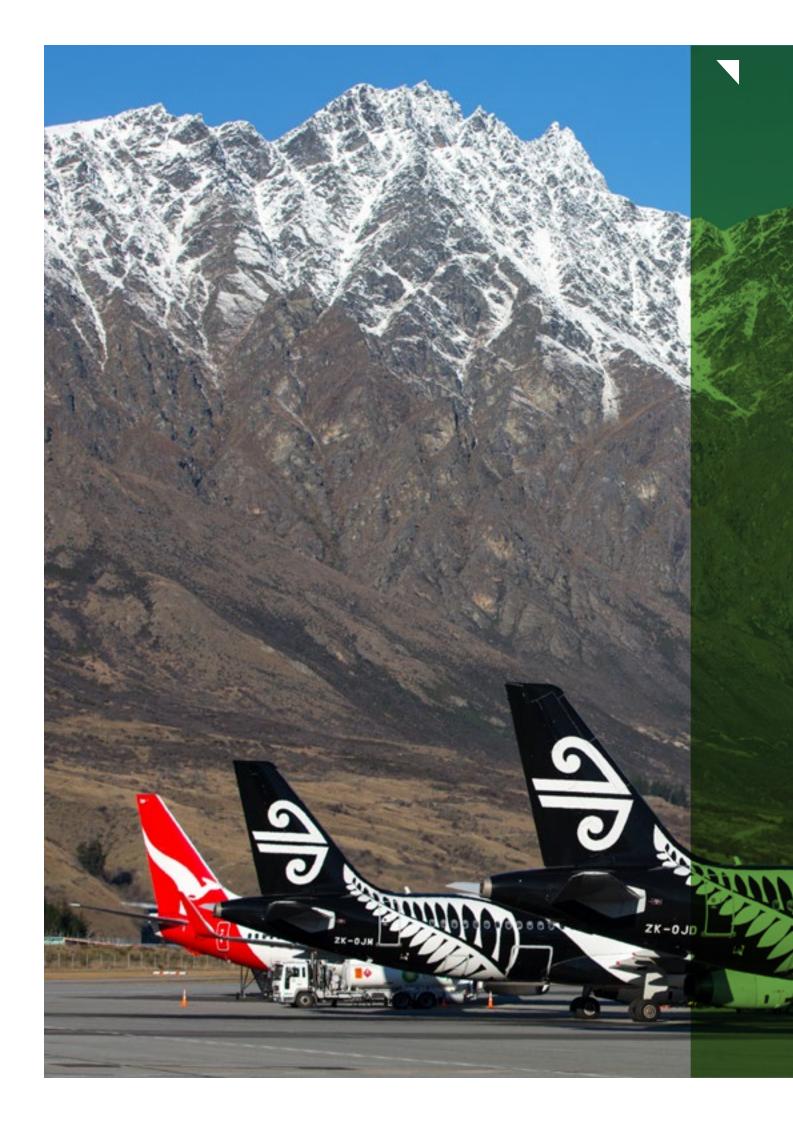
Instead, we looked at potential demand forecasts and the different options we have for accommodating this growth.



- How much growth is sustainable?
- Should we move the airport?
- What impact will growth have on our community and region?

We now have options to share with the community and our stakeholders.





Help us shape tomorrow

This document lays out a range of options for how the airport could develop. Each option will have different benefits and potential impacts on the community and the regional economy. We're keen to see what you think so that together we can decide on the airport's future.

We're gathering views through community visits around the region as well as via our website.

That way we can be sure we're talking to locals and businesses based in our region, as well as people who have holiday homes here and are regular visitors.

We want an end result which is sustainable, adaptable, affordable and memorable - in other words an asset we are all proud of.

Your views will help us shape our tomorrow and we will take them into account when we finalise our Master Plan.

Developing our Master Plan has brought up a number of questions. Here are a few we have thought about.

- What growth can our region accommodate and what demand do we want to accommodate?
- What are the environmental and community impacts of delivering this growth?
- How much growth can we facilitate at our existing airport?
- How can we grow the airport to meet the forecast demand?
- What are our options for meeting this demand elsewhere?

How you can help us shape tomorrow

Read the information provided in this guide and on our website

Provide your feedback via our website queenstownairport. co.nz/masterplan

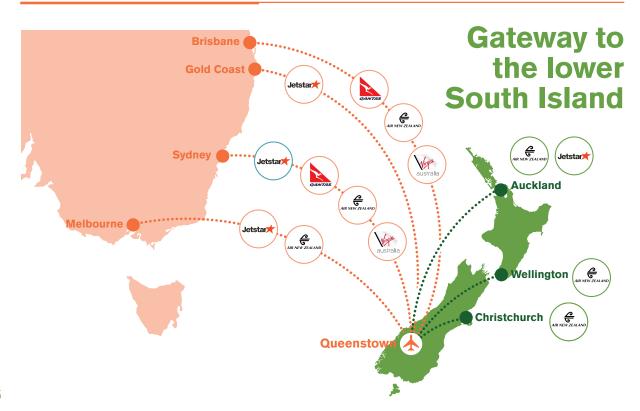
Talk to us at our community
Fly-In visits around the region
– we'll let you know when
we're coming to your area.

Become involved through tourism, business or resident groups to bring us a collective view on what's important.

How do we look today?

Queenstown is the fourth busiest airport by passenger numbers in New Zealand and is the gateway to the lower South Island.





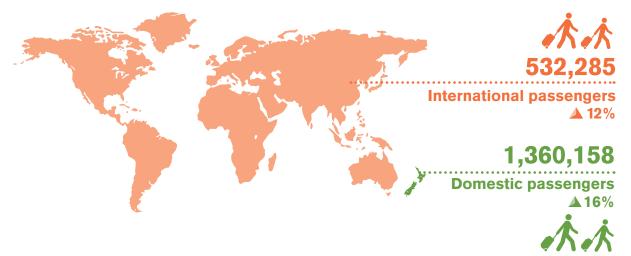
Total aircraft landings

1 July 2016 - 30 June 2017 compared to previous year



Total passenger movements 1.89m ▲ 15%

1 July 2016 - 30 June 2017 compared to previous year



Passenger numbers explained

Airports report passengers and aircraft as "movements".

- Passenger movements count both arrivals and departures i.e. 1 passenger is counted as 2 movements – their arrival and then their departure. This means that the actual number of visitors/ residents arriving into the region via the airport is approximately half the number of passengers.
- Domestic passenger numbers include international visitors travelling on domestic flights.



Our Master Plan guiding principles

We have adopted four principles to help guide our thinking:

1

SUSTAINABLE

Support a safe, commercially-focused, environmentally-conscious and community-orientated business.

2

ADAPTABLE

Allow for staged growth and innovative solutions aligned to visitor and community needs.

3

AFFORDABLE

Recognise the economic challenges and opportunities associated with growth.

4

MEMORABLE

Provide our visitors with an exceptional service experience representing the best of the region and a sense of place.



Why is demand forecasting an important first step?

Accurate demand forecasting is essential to develop a Master Plan. It helps us consider key questions like how many more passengers and aircraft movements do we need to plan for and when? It also raises questions, such as how much more volume do we want to accommodate, regardless of demand, and can our wider community and infrastructure accommodate this growth?

BUILDING A ROBUST FORECAST

To forecast demand we consulted globally recognised experts who provide aviation forecasts and route analysis to airlines and airports around the world.

We also took into account potential demand for helicopters, small aircraft and private jets.

This analysis helped us get an informed longterm view of where aircraft and passenger traffic will come from between 2016 and 2045, the frequency of flights and passenger numbers and what this might mean for airport infrastructure i.e. terminal size, car parking etc.

APPROACH

The demand forecasting took into account practical considerations at the airport, such as our operating hours of 6am to 10pm and current runway length.

We optimised airline schedules to Queenstown using software which builds itineraries based on worldwide published airline schedules. The demand forecasts are based on itineraries that allow for minimum connection times and known passenger preferences and behaviours.



We want to strike a balance between growth for the airport and regional economy with the effects of increased passenger numbers on the community. We have evaluated the demand forecast with this in mind.

What does the demand forecasting tell us?

Here are the snapshots for commercial airline passengers and aircraft. These include potential demand from domestic and international travellers.



Our demand forecasting tells us that by 2025, passenger movements could reach 3.2 million (around 1.6 million visitors/residents).

This means in peak season on a peak day:



1,580 international passengers coming and going



1,150 domestic passengers coming and going



13 aircraft movements at peak hour

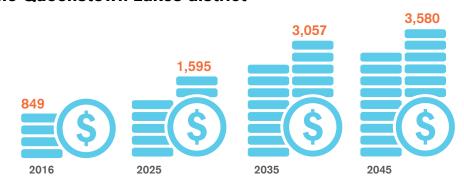


The number of flights increases and spreads across the airport's operating hours with the busiest time of day continuing to be between 14:30 and 16:00.

What are the potential economic benefits to the region?

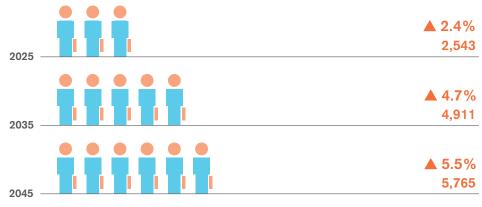
Based on demand, the potential benefits are:

Tourism spend (\$ millions) by Queenstown Airport passengers in the Queenstown Lakes district



Source: Queenstown Airport

Employment in Otago region (increase in jobs from 2015)



Source: New Zealand Institute of Economic Research (NZIER)

Impact on Otago Gross Domestic Product (\$ millions) (increase in GDP from 2015)



What are the current economic benefits?





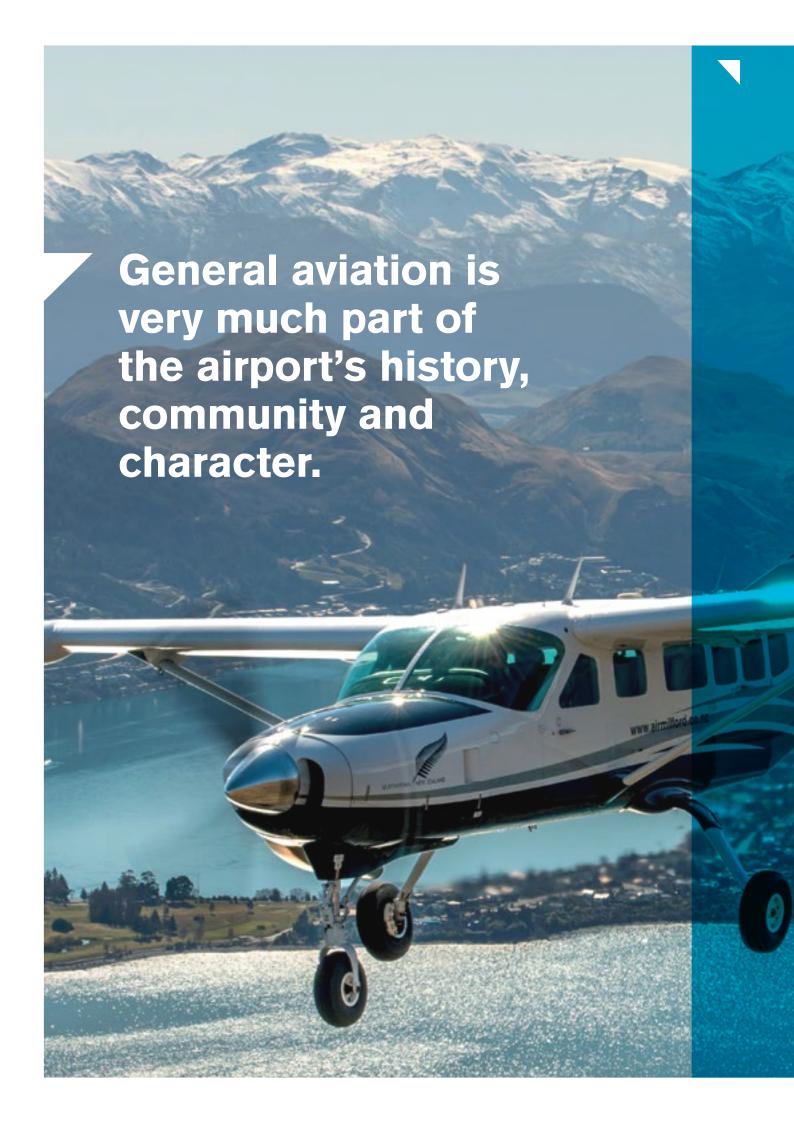


What's the right number?



While our analysis shows potential demand of around 7 million passenger movements (3.5 million visitors/residents) each year by 2045, we believe about 5 million passenger movements (2.5 million visitors/residents) per year is more sustainable for Queenstown Airport.





What about general aviation and private jets?

The Master Plan options ensure that the airfield design continues to support general aviation (GA) operations for small aircraft, helicopters and private jets, with potential for shared facilities.

Our thinking needed to take general aviation trends into account:

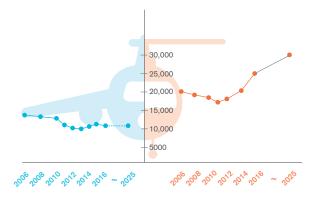
Fixed wing operators are tending to scale up their fleet to larger, modern, more efficient aircraft in order to accommodate more passengers.

Helicopter fleets are likely to expand in numbers, rather than aircraft size.

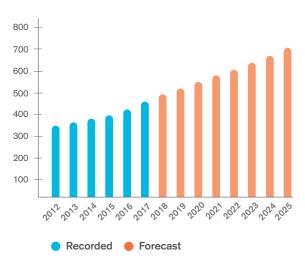
Helicopter movements have trended upwards while fixed wing aircraft movements have trended slightly downwards over the past 10 years.

The attractiveness of the region is stimulating demand in the private jet market and the larger aircraft coming on stream have the ability to fly longer distances. This is making Queenstown directly accessible from Australia, Asia and the United States for private jets.

Annual fixed wing & helicopter movements



Private jet movements





What are the constraints to growth?

A sustainable airport has to take into account financial, social and environmental considerations so we serve the needs of travellers and our community, operate profitably and return dividends to our shareholders, and mitigate our environmental impacts as far as possible.

LAND

- Additional property would be required beyond the airport's current landholdings to allow for either new terminal development and/or related facilities to be developed.
- The use of any landholdings is governed by either the airport's designation or its underlying zoning which would need to be varied to accommodate airport activities.

NOISE

- The District Plan identifies noise boundaries which protect the operational capability of the airport while managing effects from aircraft noise on the community.
- We call these the Air Noise Boundary (ANB) and the Outer Control Boundary (OCB).
 The Airport must be managed so that the noise from aircraft operations does not exceed 65 dB Ldn beyond the ANB, and 55 dB Ldn beyond the OCB.
- Hours of operation to remain unchanged from 6am to 10pm.
- If monitored noise nears the airport's currently consented levels, a plan change would be required to update the noise boundaries.

DESTINATION INFRASTRUCTURE

- Current visitor and worker accommodation and transport issues need to be addressed.
- Regional infrastructure needs to keep pace with forecast population and visitor growth.
- A long-term master plan for the district is a critical success factor and needs to be developed in a collaborative way.

COMMUNITY SUPPORT

Our business success and growth are closely linked to New Zealand's tourism and visitor industry.

In turn, the industry depends on the airport to provide sustainable air connectivity and a world-class visitor experience to help it achieve its goals.

We play an important role in supporting these goals, but it is just as important to us that the wider community supports what we are doing and want the opportunities that growth can bring.

What's the right balance?

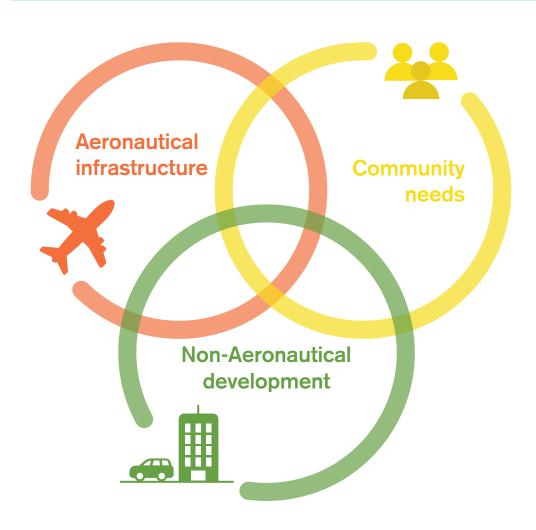
How do the Master Plan options look, feel, sound and cost?

For our customers

For our stakeholders

For our airport and local communities

For our wider region and nation



What infrastructure do we need to consider for the airport?



AVIATION

Airfield

- $\cdot \ Runways$
- · Taxiways
- · Apron
- · Runway End Safety Area (RESA)
- · Boundary fencing & security
- · Airfield & apron lighting
- · General aviation / private jet operations & facilities
- · Aircraft maintenance
- · Rescue Fire
- $\cdot \ \text{Air Traffic Control} \\$
- · Airlines & ground handlers
- $\cdot \ Cargo \ operations$
- · Aviation refuelling
- · Airline catering
- · Aircraft engineering
- · Snow clearing & de-icing
- · Utilities

2 TERMINAL

Customer facilities and services

- · Infodesk, first aid, family facilities
- · Toilets, lockers, trolleys
- · Gate/ airline lounges
- · Retail
- · ATMs & currency exchange
- · Food & beverage
- · Check-in area
- · Arrivals hall, baggage carousels
- · Rental car kiosks
- · Technology Flight Information Displays, Wi-Fi
- · Safety & security

Passenger security / facilitation

- · Passport control (Customs)
- · Biosecurity (MPI)
- · Security screening & airfield security (AVSEC)
- · NZ Police
- · CCTV

3 SURFACE TRANSPORT

Ground transport & car parking

- · Safe access & egress
- · Public parking
- · Rental car pick up and drop off
- · Public pick up and drop off areas
- · Shuttles
- · Public transport
- · Coaches
- · Taxis
- · Luxury transport
- · Staff parking

What are the options for meeting demand?

We have taken a clean sheet approach to consider what options are available to accommodate the forecast growth.

We looked at:

QUEENSTOWN AIRPORT

Develop existing Queenstown site

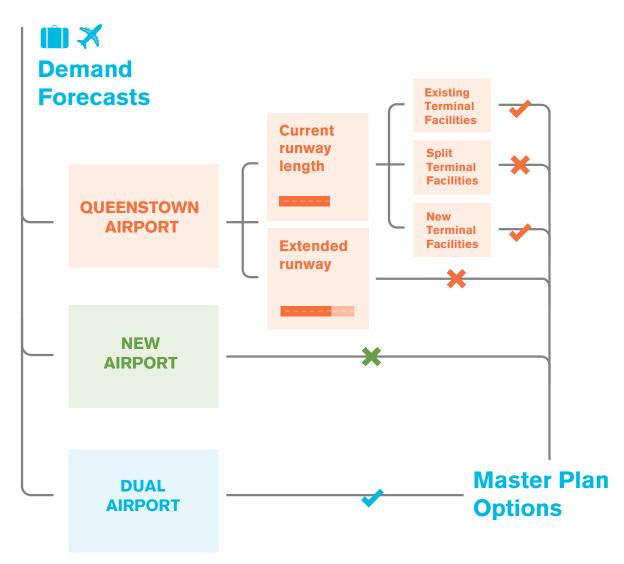
- Extend runway to accommodate wide-body aircraft
- Build full or partial heavy parallel taxiway
- Expand existing terminal facilities
- Develop split terminal facilities (existing terminal + new terminal)
- Relocate & develop new single terminal

NEW AIRPORT

Relocate or supplement Queenstown site

DUAL AIRPORT

Develop Queenstown and Wanaka airports





Should we extend the runway to accommodate larger aircraft?

Growing demand from passengers needs to be met with growing capacity from airlines. As part of our planning, we looked at whether using larger aircraft was a good way to accommodate growth. To do this, the runway would need to be extended.

Services to and from Queenstown are currently provided by narrow-body jets such as the Boeing 737 and Airbus 320. These aircraft can service all major New Zealand destinations as well as the east coast of Australia.

Aircraft are classified by codes which relate to the runway length needed for safe take-off and landing, and the wing span of the aircraft. This also influences how many aircraft can sit alongside the terminal. For example, Boeing 737s and the Airbus 320s are classified as Code C or narrow-body aircraft and need a minimum runway length of approximately 1,800m.

We looked at what we would need to accommodate wide-body (Code E) aircraft such as the Boeing 777X or 787 or the Airbus A350. They would offer the advantage of opening up new longer haul non-stop markets as well as more capacity per flight for passengers. These aircraft require a minimum runway length of 2,600 metres.





Wide-body aircraft

Narrow-body aircraft



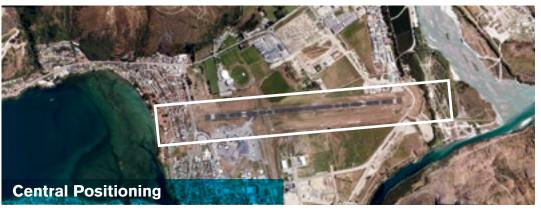
The Master Plan options assume maintaining a narrow-body jet operation and no change to the runway length and type of aircraft servicing Queenstown.

Why we are not going to extend the runway

Based on environmental, economic and social impacts, Queenstown Airport's runway (outlined in white below) will not be extended during the 30-year period to accommodate wide-body aircraft. We do not believe that this would be consistent with the sustainable development of the airport.







QUEENSTOWN AIRPORT

What are the viable options for Queenstown Airport?

Taking into account airport requirements and community needs, we have come up with three options to grow Queenstown Airport. Any of these options would require further aeronautical, operational and safety assessments.

Expand the existing terminal

up to 3.2m passenger movements (1.6m visitors/residents) per annum

Build a new terminal to the south of the runway

up to 5.1m passenger movements (2.5m visitors/residents) per annum

Build a new terminal to the north of the runway

up to 5.1m passenger movements (2.5m visitors/residents) per annum

ALL OPTIONS ASSUME:

- Current consented operating hours (6am to 10pm)
- Current runway length
- No wide-body aircraft
- No more than 5.1 million passenger movements
 (2.5 million visitors/residents) per annum to 2045





Further expansion would be needed to accommodate potential forecast growth of 3.2 million passenger movements (1.6 million visitors/residents) per annum.

SUMMARY OF DEVELOPMENT

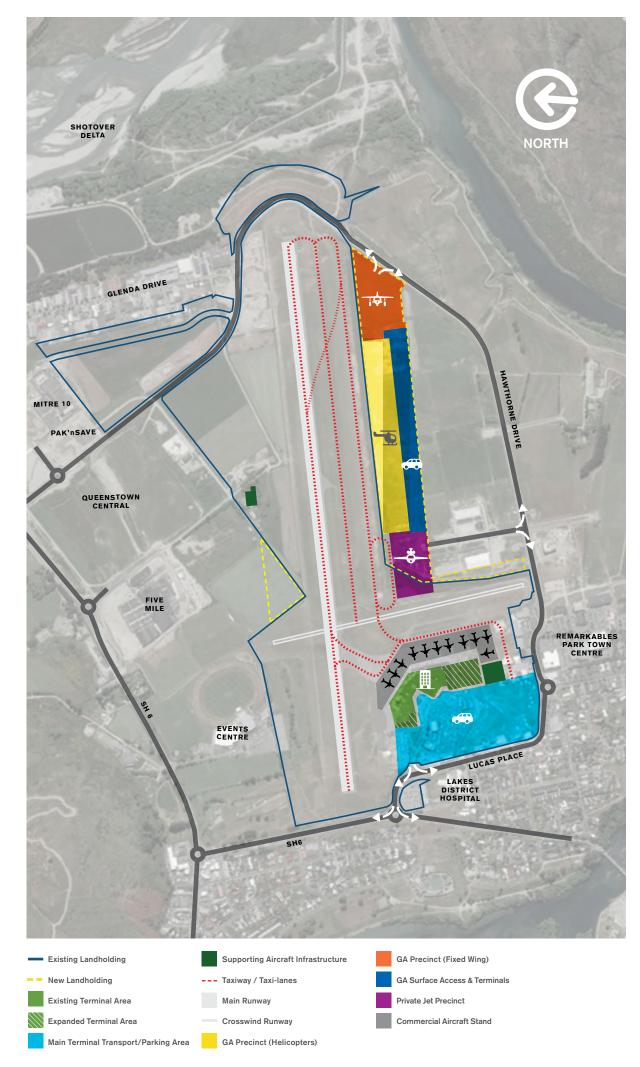
Expansion of existing terminal footprint

11 aircraft stands

New partial heavy parallel taxiway

Purchase of additional land for general aviation and helicopter precincts

Customer parking adjacent to terminal





Should we build a new terminal? It has its advantages. This enables us to develop a facility to grow beyond 3.2 million passengers per annum. It also offers the memorable visitor experience we are aiming for, coupled with operating efficiencies which add to that experience.

SUMMARY OF DEVELOPMENT

New terminal to the south of the runway

13 aircraft stands

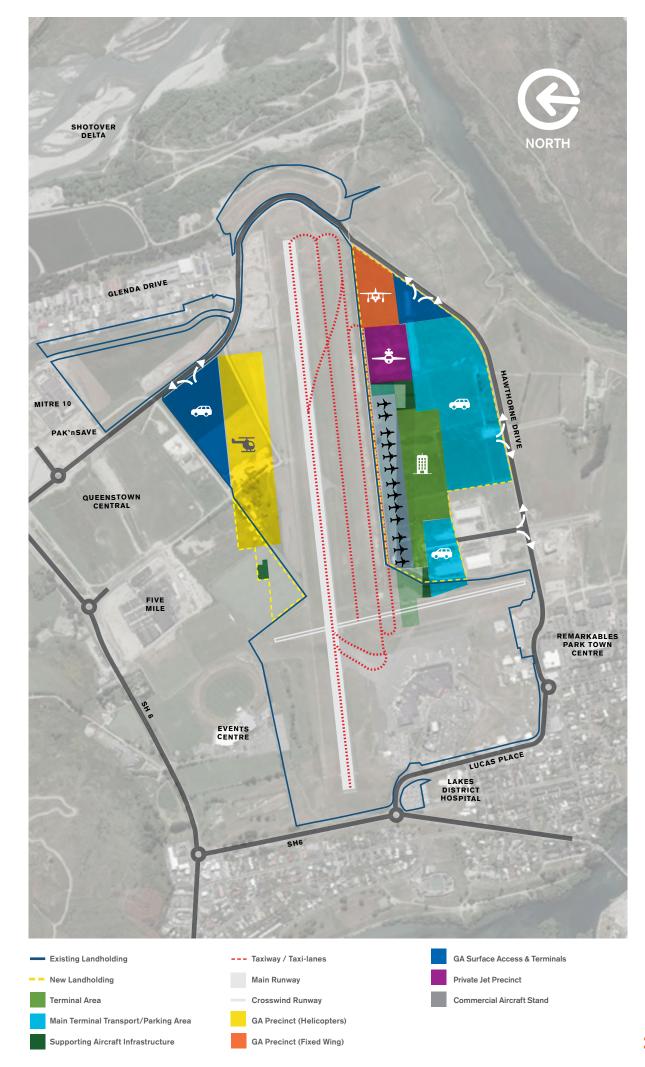
New partial heavy parallel taxiway

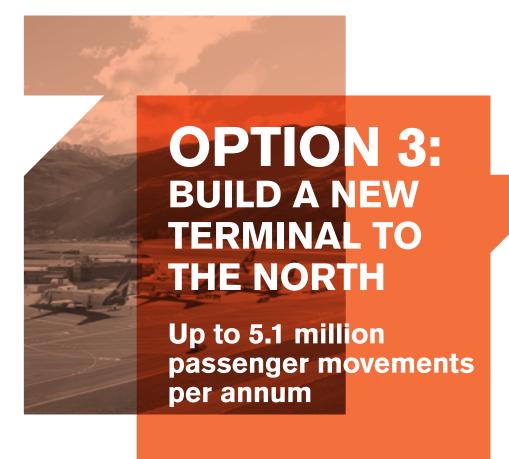
Purchase of further land in addition to Option 1

Helicopter precinct located to the north

Fixed wing precinct located to the south, adjacent to main terminal

Customer parking adjacent to terminal





SUMMARY OF DEVELOPMENT

New terminal to the north of the runway

13 aircraft stands

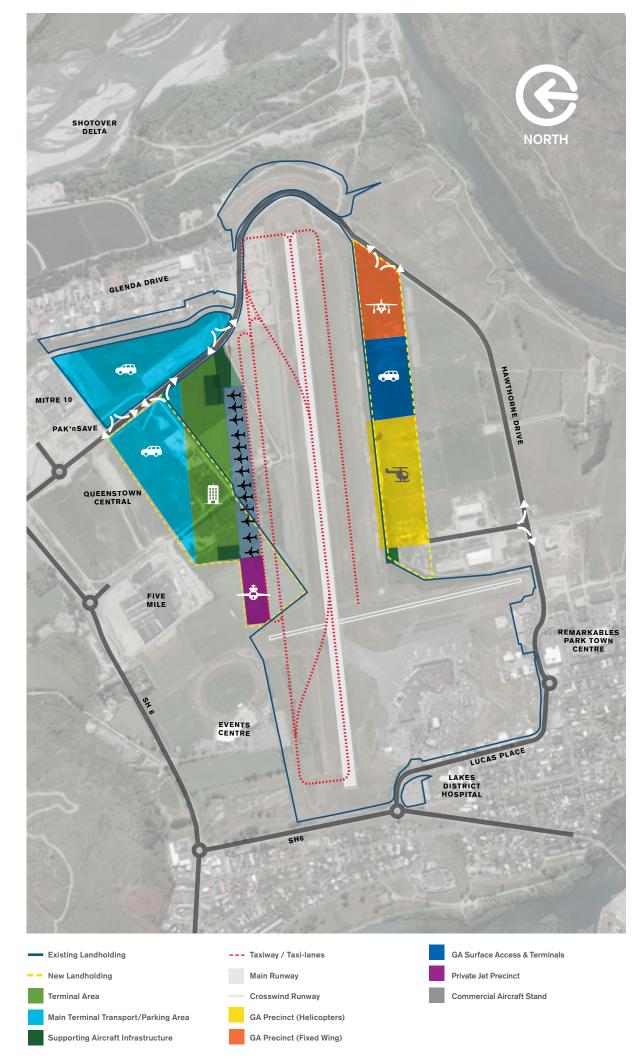
New partial heavy parallel taxiway

Additional taxiway for general aviation and private jets

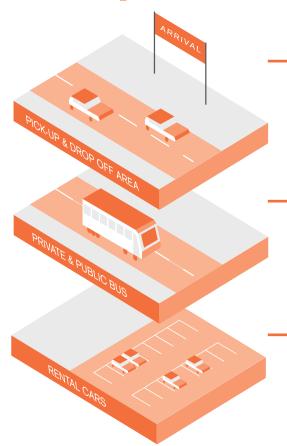
Purchase of additional land to the north

Purchase additional land to accommodate general aviation and helicopter precincts to the south

Customer parking adjacent to terminal



What about future transport needs?



Pick-up/drop-off and taxi activity accounts for approximately 36% of passenger movements so there is strong demand for convenient kerbside arrangements.

Bus use is roughly split evenly between private bus (shuttle and coach) and public bus services.

Currently 1/3 of all passengers using the airport arrive or leave in rental cars.

PLANNING THE FUTURE

Transport to and from the airport is an integral part of the customer experience.

We have improved traffic flow and continue to develop a range of parking facilities to meet demand, both now and in the future, that respond to community needs.

Enhanced options for arriving and departing passengers now include free pick-up and drop-off areas, dedicated coach and shuttle transfer areas, and a Park and Ride facility.

Broader planning of roading infrastructure and public transport is being considered by the Queenstown Lakes District Council, the Otago Regional Council and the New Zealand Transport Agency.

Together, we've formed the Transport Governance Group and are working to deliver a series of initiatives to provide transport solutions in the short, medium and long term future.

TECHNOLOGY AND BEHAVIOUR SHIFTS

We are closely monitoring technology and customer behaviour shifts to ensure that we are adaptable to different modes of transport - either by land or water - and that our infrastructure is adaptable and affordable to meet changing needs.

These changes will be considered as part of the detailed design of the final Master Plan option.

MULTI-STOREY CAR PARKING

Multi-storey car parks are not off the table but looking ahead at transport, technology and potential customer behaviour shifts over the next 10-20 years, we would prefer to keep surface car parking in order to remain flexible.



What about noise?

The District Plan identifies aircraft noise contours which protect the operational capability of the airport while managing the effects from aircraft noise on the community.

These contours are shown on the District Plan maps as the Air Noise Boundary and Outer Control Boundary. The airport is managed so that noise from aircraft operations does not exceed 65 dB Ldn beyond the Air Noise Boundary and 55 dB Ldn beyond the Outer Control Boundary.

In 2008, we reviewed and updated the location of the aircraft noise contours to provide for the then projected growth in passenger numbers and associated aircraft operations until the year 2037.

Since then, both the region and the airport have experienced a period of unprecedented growth. We anticipate that the boundaries will be reached earlier than 2037.

NEXT STEPS

We are currently doing more work to understand when the existing contours are likely to be reached and what effect the passenger demand forecasts will have on the future location of the aircraft noise boundaries. If the results show that projected aircraft operations are likely to exceed the existing noise contours ahead of time, then we would need to apply for a District Plan change to accommodate future forecast demand.

This would involve public consultation, with plenty of opportunities for people to tell us what they think before we formally lodge an application.

For more information about what we're doing to manage the impact of aircraft noise on the community please visit our website **queenstownairport.co.nz/noise**



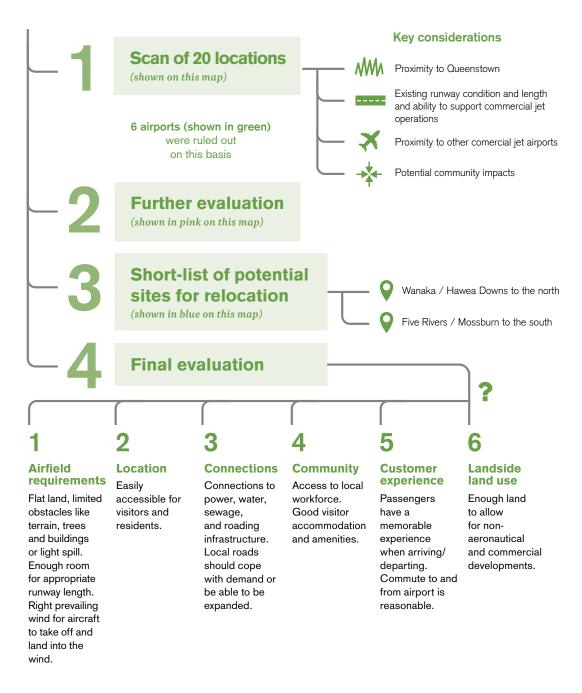
Once we have a better understanding of what the latest passenger demand forecasts mean for the airport's noise contours we'll come back to you and begin a more in-depth discussion.

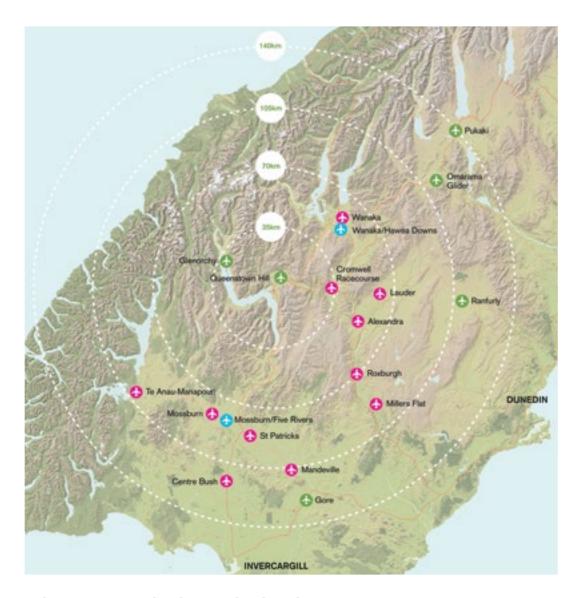


NEW AIRPORT

Should we move the airport?

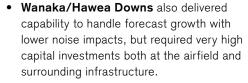
Moving to a new site has been evaluated. Airports have a number of functional requirements, so we took these into account. A siting study showed that moving the airport was not optimal. Here's the process we went through:





HOW DID THE SHORT-LIST STACK UP?

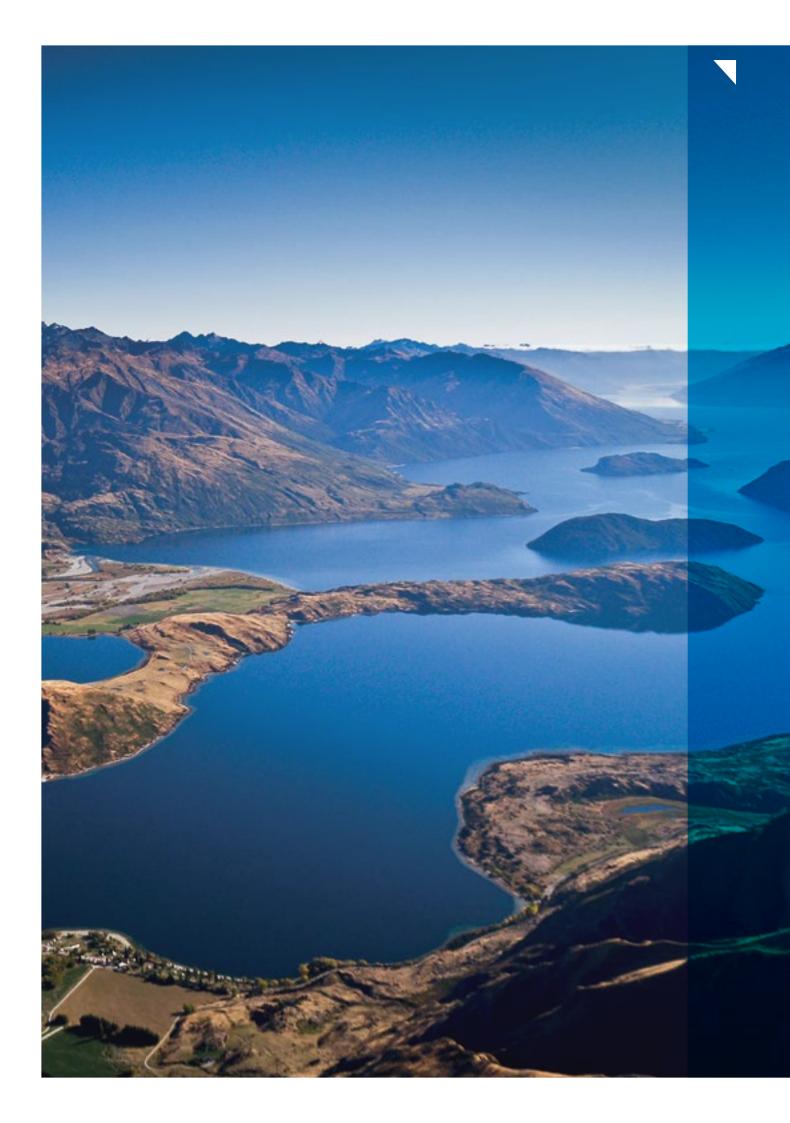
• Mossburn/Five Rivers delivered the lowest noise impact on the community and was assessed as being capable of meeting forecast growth. However, it would require a very high capital investment and significant infrastructural development. The distance and roading infrastructure for the volume of traffic to and from Queenstown were also negative factors.



Travel time and customer experience were also factors. The Wanaka/Hawea Downs option was not entirely ruled out but the development of Queenstown Airport and a dual airport model were considered more viable and were taken forward for further consideration.



On balance, relocation of the existing airport was ruled out for a number of reasons. These included capital costs, associated roading and other infrastructure requirements, accessibility for customers and workers, as well as environmental impacts.



DUAL AIRPORT

What about Wanaka Airport?

Wanaka Airport complements Queenstown Airport and vice versa. They are both important to the regional tourism industry and the broader economy.

The Queenstown Airport Master Plan options do not include future development plans for Wanaka Airport.

They were prepared ahead of the Queenstown Lakes District Council's decision in April 2017 to grant QAC a long-term lease for Wanaka Airport. However, Wanaka was identified as a complementary airport in our siting study.

We will be talking to the community about the development of Wanaka Airport once the long-term lease is finalised with QLDC.

However, we are interested in hearing any feedback related to Queenstown Airport's Master Plan options and Wanaka Airport's potential future role.



We see Wanaka as a key element of a "one airport business, two complementary airports" approach to support economic growth across the region.

Summary

Based on our work so far, here's where we're at:

Growth is set to continue - Queenstown Airport passenger numbers tripled from 2005 to 2016, and could almost double by 2025.

Working with leading aviation forecast experts, we have developed a robust 30-year passenger demand forecast which shows potential demand to the region (2025 = 3.2m, 2035 = 6.0m, 2045 = 7.1m).

Growth is driven by the attractiveness of the destination and our role is to help facilitate that growth to bring benefits to local/regional/national economies and the communities we serve. But we're all in this together - as a community, what growth can we accommodate and what do we want to accommodate?

We feel that about 5 million passenger movements (2.5 million visitors/residents) per annum over 30 years could be sustainable but want to test that with our stakeholders and communities.

As part of the Master Planning process, a range of options has been researched on how demand could be met. Taking into account airport requirements and community needs, 3 options have been developed for Queenstown Airport:

- Expanding existing terminal facilities
- . Relocating and developing new single terminal to the south of the runway
- Relocating and developing new single terminal to the north of the runway

Other decisions we have made for Queenstown Airport as part of the Master Planning process are:

- We will look to progress plans to build a parallel heavy taxiway
- We will remain a narrow-body aircraft airport and will not extend the runway
- We will maintain our consented operating hours (6:00am 10:00pm)
- General aviation and private jet operations will continue to be a key part of Queenstown Airport
- Various models and sources to fund the future development of the airport will be evaluated

New airport option - based on the results of the siting study, there are no plans to move the airport to a new site.

Dual airport option - we intend to pursue the dual complementary airport model with Queenstown and Wanaka airports. Once the long term lease is finalised with QLDC, we will work with the community on future development plans for Wanaka Airport.



Tell us what you think

After considerable research and engagement with key stakeholders a range of options has been created for the staged development of Queenstown Airport through to 2045. All of the options have different benefits and potential impacts on the communities we serve and the regional economy.

The next stage of the Master Plan process is taking our thinking to date and seeking community views on what a sustainable future looks like and how the airport can achieve the best balance of social, environmental and economic benefits.

We'd love to hear what you think about:

The airport's forecasts

The options we have developed

The opportunities you see presented by this Master Plan

Any concerns you have

Any questions you'd like answered

We look forward to hearing from you

Have your say:

Provide your feedback via our website queenstownairport.co.nz/masterplan

Talk to us at our community Fly-In visits around the region – we'll let you know when we're coming to your area.

Become involved through tourism, business or resident groups to bring us a collective view on what's important.

