

Before a Hearings Panel
Appointed by the Otago Regional Council

under: the Resource Management Act 1991

in the matter of: submissions and further submissions in relation to the
Proposed Otago Regional Policy Statement 2021
(excluding parts determined to be a freshwater planning
instrument)

and: **Christchurch International Airport Limited**
Submitter 0307

Statement of Evidence of Rhys Boswell

Dated: 23 November 2022

Reference: JM Appleyard (jo.appleyard@chapmantripp.com)
AM Lee (annabelle.lee@chapmantripp.com)

chapmantripp.com
T +64 3 353 4130
F +64 3 365 4587

PO Box 2510
Christchurch 8140
New Zealand

Auckland
Wellington
Christchurch



STATEMENT OF EVIDENCE OF RHYS BOSWELL

INTRODUCTION

- 1 My full name is Rhys Duncan Boswell.
- 2 I am the Project Lead Planning and Sustainability at Christchurch International Airport Limited (*CIAL*). I have held this role since March 2021.
- 3 I have been employed by *CIAL* in a variety of management and planning roles including General Manager, Strategy and Sustainability since March 2000.
- 4 My qualifications include a Bachelor of Arts and a Master of Regional and Resource Planning from the University of Otago.
- 5 I have been authorised by *CIAL* to provide evidence on its behalf in relation to the Proposed Otago Regional Policy Statement 2021 (*pORPS*).

SCOPE OF EVIDENCE

- 6 My evidence will deal with the following:
 - 6.1 an overview of *CIAL*;
 - 6.2 an overview of the demand for new airport infrastructure in the Otago region, specifically in Central Otago;
 - 6.3 the implications of a changed and changing climate; and
 - 6.4 *CIAL*'s involvement in the *pORPS* to date.

OVERVIEW OF CHRISTCHURCH INTERNATIONAL AIRPORT LIMITED

- 7 *CIAL* is the owner of a significant and strategic landholding in the Otago region. It owns approximately 750ha in Tarras, Central Otago. *CIAL* purchased this land in 2020 with the intention of assessing the feasibility of building a new sustainable airport to serve the fast-growing Central Otago region. When I refer to "Central Otago" I am referring to the Central Otago and Queenstown Lakes Districts, which have been identified as the primary catchment area for a new airport.
- 8 Outside of the Otago region, *CIAL* owns and operates Christchurch International Airport (*Christchurch Airport*). Christchurch Airport is the largest airport in the South Island and the second-largest in the country. It connects Canterbury and the wider South Island to

destinations in New Zealand, Australia, Asia and the Pacific and beyond. Accordingly it has district, regional and national economic and social significance.

- 9 Over 7,000 people are employed on the Christchurch Airport campus in full-time, part-time or casual roles, making it the largest single centre of employment in the South Island. CIAL is actively championing a sustainable future, with its overarching approach to sustainability best captured by the Māori concept of Kaitiakitanga, which refers to guardianship, conservation and the connection humans have with the natural world. Christchurch Airport was the first in the world to receive the highest carbon certification an airport can achieve (Airports Carbon Accreditation Level 4). Innovation is also a core driver of growth, performance and value for CIAL.
- 10 CIAL is a portfolio business that has a strong proven performance in planning, developing and operating long lived transport infrastructure assets that serve the people of the South Island. With that in mind, CIAL continues to embark on new infrastructure projects with a long-term vision and focus to support social and economic outcomes. Of particular importance, this includes exploring the prospect of a new airport for Central Otago, where there are identified capacity constraints on existing airport infrastructure.

SUMMARY OF EVIDENCE

- 11 In summary, as outlined in detail in my evidence:
 - 11.1 Within Otago, the Central Otago region is fast-growing both in terms of its resident population and domestic and international visitors;
 - 11.2 It is conceivable, if not inevitable, that over time the existing airport infrastructure in the Otago region servicing Central Otago will not meet forecast demand for air capacity and connectivity;
 - 11.3 New airport infrastructure is a potential solution to meet the shortfall in capacity;
 - 11.4 Issues of demand and appropriateness would obviously be scrutinised in detail in relation to a proposal for new airport infrastructure through the relevant planning processes, however the planning framework must allow for such scrutiny of a particular proposal;
 - 11.5 The pORPS, as the overarching planning document for the Otago region, should enable proper consideration of potential

new infrastructure of regional significance which may be planned or built in the lifetime of the pORPS in order to meet the region's social and economic needs, and not foreclose on opportunities before consideration can be given;

- 11.6 In particular, this should include infrastructure solutions that allow for future needs, that anticipate climate change effects, and that enable the deployment of low carbon aviation; and
- 11.7 The definition of "*Regionally Significant Infrastructure*" in the pORPS should therefore refer non-exhaustively to 'airports and aerodromes', rather than only listing existing airports/aerodromes as notified.

DEMAND FOR AIRPORT INFRASTRUCTURE IN CENTRAL OTAGO

- 12 Every region needs good infrastructure to function well and enjoy social and economic prosperity, now and into the future. Within the Otago region, Central Otago is one of New Zealand's fastest growing areas and the existing airport infrastructure is unlikely to meet Central Otago's air capacity and connectivity needs within the lifetime of the pORPS. New airport infrastructure is a potential solution to meet that shortfall.
- 13 The next sections of my evidence set out the various factors illustrating the demand for additional airport infrastructure in the region and how that need might best be met by new airport infrastructure. I note that there may be varying views on how best to address this demand, however ultimately the key point for CIAL is that the pORPS, and the wider planning framework, should not foreclose on new opportunities before they can be properly considered.
- 14 As outlined above, when I refer to "Central Otago" I am referring to the Central Otago and Queenstown Lakes Districts, which have been identified as the primary catchment area for a new airport.

Central Otago is one of the fastest growing areas in New Zealand, its residents are travellers and it has many visitors

- 15 Central Otago grew by an average of 3.6% per annum over the last 25 years and is forecast to grow by around 1.3% – 1.8% per annum over the next 25 years.¹ This makes it the second fastest growing area in the country behind Canterbury’s Selwyn District.

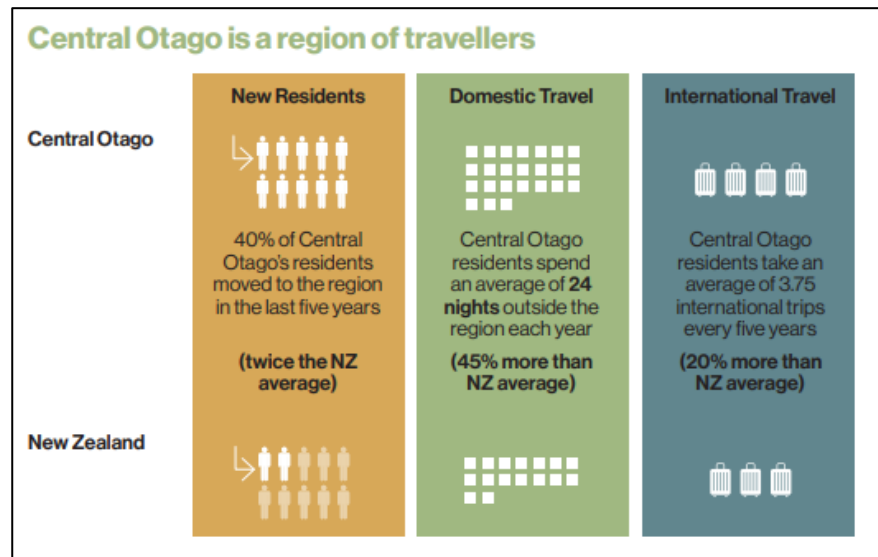


Figure 1 Central Otago domestic population and travel patterns

- 16 **Figure 1** above outlines statistics about the domestic population and travel patterns of Central Otago residents.² In particular, 40% of Central Otago residents have moved to the region in the last five years, which is twice the national average. New residents often maintain strong connections with their home region or country, driving demand for travel.
- 17 These attributes, together with the area’s geographic remoteness, mean that demand for air connectivity among Central Otago residents is high and growing at a significant rate. As outlined in **Figure 1** above, the average Central Otago resident takes around 45% more domestic trips and 20% more international trips each year than the average New Zealander.³
- 18 While Central Otago is one of the fastest growing areas in New Zealand and its residents are travellers, air connectivity needs far exceed what its resident population could sustain due to the

¹ Based on Statistics NZ medium-high series projections (2018).

² The 'Central Otago region', comprising Queenstown Lakes District and Central Otago District, has been identified as the primary catchment area for a new airport. International data sourced from Statistics NZ, domestic data sourced from Fresh Info mobility data.

³ International data sourced from Statistics NZ, domestic data sourced from Fresh Info mobility data.

demand for air services generated by domestic and international visitors. 90% of passengers arriving in Central Otago on domestic and international flights in 2019 were visitors to the area.⁴

The vitality of Central Otago’s economy depends on the efficient movement of people and products

- 19 Many of Central Otago’s key sectors of employment require high-quality transport connections to operate successfully. Some examples include:
- 19.1 Wine producers and fruit and vegetable growers rely on travellers (e.g. backpackers) for their seasonal workforce. The wine industry also relies on visitors as customers, with around 22% of international visitors going to a winery when visiting New Zealand.⁵
 - 19.2 Exporters of premium fresh foods, like stone fruit and seafood, rely on airfreight to get their products to overseas markets in a timely way.
 - 19.3 The visitor economy relies on the efficient movement of visitors, staff and supplies in and out of the region. Visitors that arrived in Central Otago by air spent \$1.55B in the region (40% of all visitor expenditure) in 2019.⁶
 - 19.4 Growing sectors like screen production, technology and education rely on the efficient movement of people and equipment in and out of the region.
- 20 Efficient air connectivity will help enable these and other sectors of the Central Otago economy to grow and thrive, providing employment opportunities for current and future generations.

High-quality air connectivity is an important driver of social and economic wellbeing

- 21 Access to affordable, convenient air travel underpins many aspects of amenity that communities value. Below are some examples of positive social and economic outcomes that are enabled by high-quality air connectivity.
- 22 Social outcomes:
- 22.1 more job options;

⁴ Data sourced from International Travel and Migration Data (Stats NZ); Domestic Mobility Data (Fresh Info); Domestic Travel Survey (Fresh Info & AA).

⁵ Deloitte, Wine industry benchmarking and insights, December 2017, p 5.

⁶ Data sourced from International Visitor Survey (MBIE); Monthly Regional tourism Estimates (MBIE); Domestic Travel Survey (Fresh Info & AA).

- 22.2 easy to see friends and family;
 - 22.3 convenient access to healthcare and education;
 - 22.4 convenient access to leisure and work opportunities; and
 - 22.5 high-quality infrastructure and social amenity.
- 23 Economic outcomes:
- 23.1 access to high-value freight markets;
 - 23.2 ability to attract and retain talent;
 - 23.3 opportunities to grow new and existing businesses;
 - 23.4 dispersal of investment and tourism across the region; and
 - 23.5 a diverse and resilient economy.

Central Otago will outgrow its air capacity in the short-medium term

- 24 While difficult to predict with certainty, air passenger volumes in and out of Central Otago are widely expected to return to pre-Covid levels within the next 2-5 years, if not before. **Figure 2** below shows that in the short period since late July 2022, when New Zealand's pandemic border restrictions were removed, passenger movements at Queenstown Airport have returned to around pre-pandemic levels.
- 25 Queenstown Airport Corporation (QAC) is forecasting 38% growth in passenger movements between 2019 and 2032, when approximately 3.2 million passengers are expected to use Queenstown Airport.⁷ This means the area's existing airport infrastructure faces increased demand over the next 10 years and beyond. In fact, the demand to the area may be higher as airports that Queenstown Airport directly connects to are forecasting 65% growth over the same period.⁸ QAC has noted that passenger numbers and aircraft movements growing faster than forecasted could result in airport infrastructure not being provided at the right size and at the right time.⁹
- 26 Queenstown Airport faces infrastructure and noise constraints that may prevent it from scaling to accommodate this increased demand. QAC has indicated that Queenstown Airport does not have enough

⁷ QAC Strategic Plan, FY23-FY32, pp 13, 17.

⁸ Long-term forecasts produced by Brisbane, Auckland, Christchurch, Melbourne, and Sydney Airports.

⁹ QAC Strategic Plan, FY23-FY32, p 11.

space within its current airfield and terminal infrastructure to accommodate expected future passenger demand.¹⁰ QAC has indicated that Queenstown Airport terminal infrastructure can facilitate up to 2.2 million total passenger movements before the passenger experience is adversely impacted.¹¹ Significant investment is required to meet the forecast increase from 2.2 million to 3.2 million passengers.

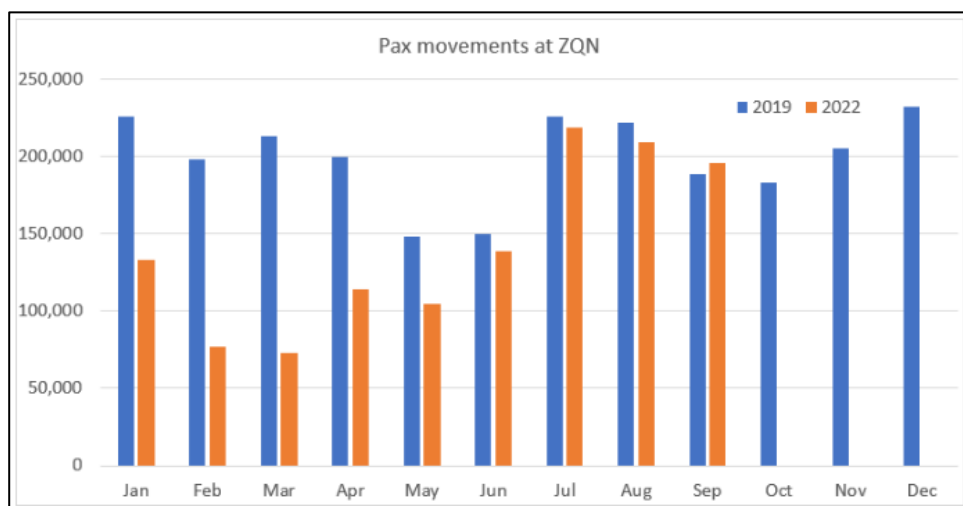


Figure 2 Queenstown Airport Passenger Movements by Month

Queenstown Airport is subject to noise restrictions that limit the number of scheduled aircraft movements that it operates each year. In 2018, QAC predicted that this limit would be reached by around 2022.¹² QAC has more recently indicated that demand over the next 10 years can be met within the existing noise boundaries, although this relies on changing fleet types, scheduling restrictions, significant terminal redevelopment and potential on-ground interventions.¹³ Long term demand beyond 2032 is not addressed in current public information.

Alternatives for capacity within Otago Region

- 27 For completeness, it should be considered whether Central Otago's future aviation infrastructure needs can be met by increased use of existing airports in the lower South Island, including Dunedin and Invercargill Airports. This strategy would require the Central Otago area to be serviced by airports that are between two- and three-hours' drive from the centre of Central Otago's population. It also

¹⁰ Queenstown Airport Master Plan Options Report, 2017. See also QAC Strategic Plan, FY23-FY32, pp 47-49.

¹¹ QAC Strategic Plan, FY23-FY32, p 17.

¹² See NZ Airports Association Resource Library – "Queenstown Airport begins public consultation on changes to air noise boundaries".

¹³ QAC Strategic Plan, FY23-FY32, pp 31-33.

requires the use of airports that have been identified as being vulnerable to inundation from climate change.¹⁴

- 28 In 2018 QAC proposed the development of Wānaka Airport as a potential solution to the capacity constraints Queenstown Airport is facing. Subsequently those plans have been challenged and we understand that there are currently no plans to upgrade infrastructure at Wānaka to the level required to meet predicted demand or the fleet mix operated by airlines into Central Otago.¹⁵
- 29 In addition, a new airport would be designed and built with specific infrastructure to cater for low carbon aviation. This would be difficult to cater for at existing airports without significant investment, and available land.

Implications for Central Otago

- 30 If the demand outlined above is not met in Central Otago, air capacity constraints will impact the movement of people and products in and out of Central Otago.
- 31 Specifically, a shortage of air capacity and connectivity is likely to result in:
- 31.1 reduced choice: it will become harder to secure seats or freight slots at the times and days people want;
 - 31.2 longer journey times: some people will need to drive or send freight to other airports further away to access flights;
 - 31.3 increased cost: prices are likely to rise as competition for seats and freight capacity increases;
 - 31.4 higher emissions: CO² emissions are likely to grow as a result of increased driving and over-flying;¹⁶ and
 - 31.5 higher capital costs and embodied emissions associated with upgrading of existing airport assets and land transport networks to connect over-flight passengers to central Otago.

¹⁴ International Centre for Aviation Organisation, Climate Resilient Airports – available at <https://www.ncl.ac.uk/press/articles/archive/2021/01/coastalairports/>. See also NIWA and Reserve Bank publications on this topic.

¹⁵ QAC Strategic Plan, FY23-FY32, p 44.

¹⁶ Over-flying occurs when air passengers fly over their point of origin or destination. For example, a Central Otago resident who takes a flight from Dunedin Airport to Australia will fly back over Central Otago, covering some of the same ground twice.

- 32 Central Otago residents are more likely to be disadvantaged by a supply shortage than visitors, who often book earlier and have a higher willingness to pay for travel.
- 33 The further infrastructure is located from its need, the greater both the impact of constraints and dilution of benefits.

Can air capacity constraints be used to manage demand?

- 34 Demand for access to Central Otago will continue to grow even if air capacity is constrained, due to its strong visitor offering and forecast population growth. Doing nothing about air capacity constraints is not an effective demand management strategy. It will cause congestion and inefficient travel patterns. These problems can be avoided by taking a proactive approach to managing growth that ensures the right infrastructure is in place to support it, which underpins CIAL's approach towards the assessment of new airport infrastructure in Central Otago.
- 35 From a supply and demand perspective alone, Central Otago will need further airport infrastructure, at some point in the future. Accordingly, it is vital that the higher order planning framework for the Otago region enables the development of new strategic infrastructure in suitable and appropriate locations. As a planning document with a decade-long vision, the pORPS should anticipate community needs in the future and establish a framework to guide future development to meet those needs.

IMPLICATIONS OF A CHANGED AND CHANGING CLIMATE

Airports must be resilient to climate change impacts

- 36 The International Centre for Aviation Organisation (ICAO) report 'Climate Resilient Airports' has identified nine primary climate impacts that might impact airports including sea level rise; storm surge; increased storm intensity; changes in temperature; increased/decreased precipitation; changing icing conditions; changing winds; desertification (soil erosion); and changes in biodiversity.
- 37 These climate factors will impact airport infrastructure and operations, and the impacts to one airport may be extended to others due to the interdependencies of aviation networks. To build resilience, airports must identify the potential climate risks they face and take actions to minimise the impacts. Airport operators may also wish to consider how the effects of climate impacts could propagate through the local, national and wider aviation networks.
- 38 Of particular note in the New Zealand context is research by the National Institute of Water and Atmospheric Research, as part of the Deep South National Science Challenge, indicating that 30cm of sea-level rise (which it stated is foreseeable in the next 30 years) may

expose \$18.49 billion worth of New Zealand buildings, 2,000km of roads, 4,000km of water pipelines, 1,600km² of agricultural land and 14 airports.¹⁷

- 39 Given their elevation relative to sea level of both Dunedin (1.2m) and Invercargill (1.5m) Airports, it would be prudent for strategic planning instruments to contemplate, or at the very least not preclude, a range of climate change adaptation pathways, which may necessarily include the development of new airport infrastructure.
- 40 As outlined above, and as part of a long-term transition vision, CIAL is investigating the establishment of a new airport in Central Otago. Noting that at present New Zealand is committing to reducing greenhouse gas emissions and creating a low-emissions economy, it is CIAL's hypothesis that:
- 40.1 the embodied emissions of constructing an airport will be achieved within New Zealand's national framework for emissions targets, as is expected to become a legal obligation for new infrastructure projects;
 - 40.2 a new airport could become a node in an infrastructure network facilitating sustainable aviation;
 - 40.3 aviation from a new airport could save emissions otherwise incurred by road freight journeys to Christchurch or other parts of the South Island; and
 - 40.4 a new airport could stimulate the local economy, benefit the wider region, and fulfil the objectives of a transition to a low emission, highly connected economy and community.
- 41 These are the kinds of questions CIAL are investigating - exploring infrastructure solutions that allow for future needs, that anticipate climate change effects, and that enable the deployment of low carbon aviation.

CIAL'S INVOLVEMENT IN PROPOSED OTAGO REGIONAL POLICY STATEMENT

- 42 CIAL is generally supportive of the pORPS subject to amendments sought in its submission and presented through evidence. The context for CIAL's involvement in the pORPS is obviously its interest in exploring the prospect of new airport infrastructure to meet the Otago region's air capacity and connectivity needs.

¹⁷ National Institute of Water and Atmospheric Research (NIWA): Coastal Flooding Exposure Under Future Sea-level Rise for New Zealand.

- 43 CIAL’s submission sought, amongst other things, that the pORPS encourage and support the development of new infrastructure projects to provide for the region’s infrastructure needs in the future.
- 44 However, somewhat unusually and without a clear rationale, the part of the definition within the pORPS for Regionally Significant Infrastructure addressing airport infrastructure is limited to a list of existing airports and airfields. This approach is in stark contrast to the more enabling approach taken with the remainder of Regionally Significant Infrastructure.
- 45 CIAL considers it critical that the definition accounts for potential new infrastructure of regional significance which may be planned or built in the lifetime of the pORPS.
- 46 CIAL is concerned that a new airport required in the future, which would provide the same or more social and economic benefits as other regionally significant infrastructure listed in the definition, would not be captured by “regionally significant infrastructure”, nor any of the objectives and policies that relate to it.
- 47 The task of planning for and delivering a low emissions future for New Zealand is challenging enough without it being made increasingly difficult when national, regional and district planning frameworks do not actively enable the bold thinking and investment that will be essential to ultimate success. New Zealand is a signatory to binding international agreements (including the International Civil Aviation Organisation, Airports Council International, and United Nations) that require our country take meaningful steps to reduce aviation emissions to net zero by 2050. For its part, CIAL proposes to contribute to these efforts by delivering a strong, sustainable aviation network for the region’s communities.

Dated: 23 November 2022

Rhys Boswell