

Before the Independent Hearings Panel
at Rolleston

under: the Resource Management Act 1991

in the matter of: Submissions and further submissions in relation to the
proposed Selwyn District Plan

and: Strategic Directions Proposal

and: **Christchurch International Airport Limited**
Submitter DPR-0371

Statement of Evidence of Philip Osborne (Economics)

Dated: 23 July 2021

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STATEMENT OF EVIDENCE OF PHILIP OSBORNE

INTRODUCTION

- 1 My name is Philip Mark Osborne. I am an economic consultant for the company Property Economics Ltd ("PEL"), based in Auckland. The company provides property development, land use research and impact assessment services to both the private and public sectors throughout New Zealand.
- 2 My academic qualifications include Bachelor of Arts (History/Economics), Masters in Commerce, and a Masters in Planning Practice, from Auckland University. I have provisionally completed my doctoral thesis in developmental economics.
- 3 I have 18 years' experience providing economic advice for both local government throughout New Zealand and central government agencies. Areas of advice relevant to this evidence have included the potential economic impacts of public projects as well as the economic impacts in relation to industrial, commercial and residential land use issues and their influence on economic well-being.
- 4 I also provide consultancy services to a number of large private sector clients in respect of a wide range of property issues, including economic impact assessments, commercial and industrial market assessments, and forecasting market growth and land requirements across all property sectors.
- 5 I am familiar with the submission made by Christchurch International Airport Limited (CIAL) (submitter number DPR-0371) on 11 December 2020 and the economics issues discussed in that submission.
- 6 It is my understanding that in relation to Selwyn Councils proposed Strategic Directions chapter CIAL seeks: *'that objectives and policies highlighting the significance of strategic infrastructure (specifically identifying the airport) and providing for its protection from incompatible land uses / reverse sensitivity effects are set in the Strategic Directions chapter in the proposed Plan'*

CODE OF CONDUCT

- 7 Although this is not an Environment Court hearing, I note that in preparing my evidence I have reviewed the code of conduct for expert witnesses contained in part 7 of the Environment Court Practice Note 2014. I have complied with it in preparing my evidence. I confirm that the issues addressed in this statement of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

ECONOMIC SIGNIFICANCE OF CHRISTCHURCH INTERNATIONAL AIRPORT

- 8 Christchurch International Airport (CIA) is the second largest airport in New Zealand and represents nationally and strategically significant infrastructure supporting national accessibility for passengers and business that supports economic well-being well beyond the borders of the Canterbury Region.
- 9 In order to have regard to the benefits of facilitating the efficient operation of CIA and its need for identification within the Selwyn PDP, it is necessary to recognise the significance that its operation has to the regional economy. CIA fulfils an extremely important and unique role for the Canterbury regional community. It serves not only as a significant employer for the region but also as a conduit for visitors and commerce into the region.
- 10 In assessing the significance of CIA, it is important to distinguish between the types of impacts the Airport's presence and operations has on the regional economy. There are essentially four categories of impacts and benefits attributable to this facility:
 - Direct Benefits: economic impacts (benefits) derived from the actual spending/expenses incurred through the operations of CIA;
 - Indirect Benefits: increased activity brought about by those firms and their employees, who supply CIA and its operations;
 - Induced Benefits: are measured in terms of the additional income that will be spent in the area due to increased business activity through those directly or indirectly employed through CIA operations; and
 - Catalytic Benefits: activity that is facilitated by CIA operations such as tourism and trade (businesses operating through imports or exports). This is the likely overall impact on the regional economy of not having CIA present.

Freight

- 11 Given the expansion of high value goods in a modern economy, the influence of an efficient, competitive international airport is as crucial as a modern seaport or an efficient roading network. Due to the importance of airports and their economic significance, the ownership of national airports has until recent times (primarily post-1980) often been held in the public's hands. The previous public ownership is important because it illustrates: 1. Recognition of airports' significant economic contribution and 2. Recognition of operational 'externalities', that the 'public good' generated by airports far outweighs its own operational costs and benefits. The increasing need for efficiencies has resulted in continued privatisation of the industry.
- 12 CIA plays a fundamental role in the shipping of goods from a much wider area and therefore is critical to the economic and social well-being of all residents within the South Island. The presence and efficient operation of this airport enables the Canterbury region as a whole, and the districts that make up this area, to maintain a competitive environment for economic development as well as enhancing residents' quality of life through access to these services.

- 13 CIA is responsible for transporting over \$1.6b of cargo a year to other ports. The importance of CIA is further emphasised by the fact that the average value per tonne for this cargo is 15% higher than that of Auckland International Airport and 12 times greater than the average tonne of cargo exported internationally through Lyttelton Harbour.
- 14 This in itself has huge positive flow-on effects through the rest of Canterbury's economy with 'off' airport jobs such as storage and transportation directly linked to these volumes. The ability of CIA to move these large valuable cargos is vital for Canterbury, and in fact the South Island to remain competitive in the location of large, high value exporters and manufacturers.
- 15 Conversely, the aforementioned numbers show if CIA had its ability to export large volumes of cargo on or offshore either reduced or removed altogether, the direct and indirect economic costs to the Canterbury Region and the wider South Island economy would be considerable and sustained.

Passengers

- 16 In the year prior to COVID-19, CIA catered for nearly 7 million passengers with this figure now expected to increase by nearly 30% to 9 million passengers per annum by 2031.
- 17 Visitors originating at the Airport bring with them over \$1b to the region with significant flow on effects from this spending. Although it is difficult to assess how far reaching the economic impacts are for the presence of the Airport, it is clear that the current and future functionality of CIA is key to not only the Canterbury economy but to that of the whole South Island.
- 18 The 'off' airport benefits to the region relate to those generated by activities that do not take place at the Airport itself. Over 50% of visitors to the Canterbury Region arrive via CIA (as measured by Tourism Research Council NZ).

Employment

- 19 As an entity, Christchurch Airport directly employs over 200 people more recently generating \$187m in revenue. While this alone would identify the business among Canterbury's largest business contributors, the economic activity facilitated makes it one of the largest single contributing strategic assets in the South Island.
- 20 Additionally, over 7,000 EC's¹ are accommodated within the Airport campus, making it one of, if not, the largest employment centres in the South Island.

¹ Statistic New Zealand Employment Count

Contribution to regional and district prosperity and economic wellbeing

- 21 With growth in both passenger and freight, the number of commercial aircraft movements is expected to grow materially over the next 10 years. The reliability and ability for CIA to meet future growth demands is key to attracting and locating to the region many national and international businesses that would not otherwise situate themselves in Canterbury. It is not only imperative that the ability for CIA to grow efficiently is protected, but that such certainty is expressed to the market. Given the pivotal role CIA plays in the regional economy even a small level of risk, or uncertainty in terms of efficient ongoing operation and development would likely derogate from investment.
- 22 Facilitating and safeguarding potential growth at CIA is not just in the interests of CIA, but has a vital flow-on benefit to the whole community. The key to this activity is that it is for the most part unique and unlikely to be replicated by the market elsewhere.
- 23 In 2012 it was estimated that CIA contributed \$2.13b to the regional economy, by 2017 this figure had risen to \$2.62b. Over the next 3 years (the pre-COVID-19 year ended March 2020) with growth passenger numbers as well as a continued regional growth in higher value-added production, this figure is estimated at \$3.02b per annum. To place this figure into context, the largest contributing sector to the regional economy, manufacturing, generated \$4.1b over this year (with the only other sector contributing more being Construction at \$3.3b). It is also important to note that both of these sectors remain reliant of the facilitation of the Airport both for associated inputs and overall demand generation.
- 24 The contribution to GDP from CIA supports 28,625 jobs (ECs) within the region, constituting over 10% of Canterbury's employment. In terms of its wider economic significance CIA contributes \$4.76b (7%) to South Island GDP.
- 25 It is estimated that with the proportional increase in freight and the increased passenger numbers the contribution to regional GDP made by CIA has the potential to exceed \$3.87b by 2031.
- 26 Airports have always represented significant economic assets in any economy, from large cities to smaller tourist dependent locations. In more recent times however, they have widened their scope, driving the fundamental competitiveness of localities for essential business activity. A study in 2012³ by the Air Transport Action Group ("ATAG") found that 25% of all companies' sales are dependent on air transport, while 70% of businesses reported that serving a bigger market is a key benefit of using air services. With \$3 trillion dollars of economic activity (GDP) generated by this industry globally the competition is fierce.
- 27 On top of the significant direct, indirect and induced economic impacts CIA has on the region there are two key benefits that are gaining increased prominence: Connectivity and Productivity. A recent international survey has shown that 18% of businesses reported a lack of good air links had affected their location decisions with 59% choosing alternative locations and 23% choosing not to make an investment. While a study undertaken by Oxford Economics⁴ indicated a clear relationship between connectivity and productivity. It was estimated that a 10% increase in connectivity would lead to a 0.07% increase in annual GDP.

- 28 Growth in the Selwyn District economy has outstripped the national average for the last 10 years. With GDP of \$2.9b per annum (2020), the local economy is experiencing some fundamental shifts.
- 29 The economy of Selwyn District is inherently dependent on access to larger markets. With a significant proportion of GDP (47%) dependent on exports (compared to a national average of 27%), the agricultural sector in the district still dominates the economic landscape. However, over more recent times proportional growth has occurred in the tertiary and high-value sectors of the economy. Tourism, although still representing a nominal proportion of GDP, saw a 12.3% increase to March 2020 (twice that of the national average). Over the past 10 years manufacturing has seen a 120% increase in production and represents the largest contribution to growth in the economy.
- 30 As this economy grows and transitions from a primarily agriculturally based market, the reliance and access provided by CIA will become increasingly vital to the district's economic well-being.
- 31 In summary the contribution made by the Christchurch Airport to the local economy includes:
- A regional contribution of over \$3b per annum
 - Growth over the past 9 years of over nearly \$1b to regional GDP
 - In 2020 the Airport created over 28,000 regional jobs
 - Over \$1.5b worth of goods were transported through CIA
 - Over \$1b worth of tourism spend was generated through the Airport, supporting over 9,000 jobs
 - 50% of visitors to Canterbury arrive via the Airport
 - CIA contributes \$4.76b to the South Island economy
 - The Airport accommodates 7,000 workers within its campus
 - CIA directly employs over 200 workers generating \$187m in revenue per annum supporting a further 500 local jobs
 - With expected proportional growth the Airport is expected to contribute 3.87b regionally per annum by 2031. With growth expectations in high value-added sectors in the region this growth could reach \$4.6b within the same period.

² "Making Sense of the Numbers, Christchurch International Airport Economic impact assessment" Berl, December 2017

³ Aviation Benefits Beyond Borders, Air Transport Action Group (ATAG), March 2012

⁴ Oxford Economics, Economic Benefits from Air Transport, 2011

Reverse Sensitivity and Noise Contours

- 32 The potential risk to the Canterbury economy lies in the ability of Christchurch Airport to remain and improve its competitiveness. Without this the value generated by this economic conduit is likely to diminish over time. As the level of relative competitiveness in the Airport market grows, the economic well-being of the Canterbury, and in fact the South Island, community relies on the viable options available to the Airport to continue to attract business.
- 33 A key consideration for CIA is the avoidance of noise sensitive activities within the aircraft noise contours. CIA's current and future economic contribution to the regional economy is based on its ability to operate and develop efficiently and with certainty. In order for this to occur, the proposed Selwyn District Plan must clearly provide for the comparative importance and sensitivity of CIA's operations in relation to other activities that would seek to locate within these contours, as well as other such activities that may result in a material conflict with CIA operations.
- 34 International research has identified noise as the greatest environmental concern to airport operations. The risk of restricting fundamental operations, inhibiting development and costly litigation is high with regard to noise sensitive activities and the intensification of these activities is likely to simply increase this risk to the regional economy.
- 35 As with any land use restriction, there is a countervailing economic cost to consider. In this case this relates to the restrictions placed on land where some activities may result in reverse sensitivity for the Airport, thereby impacted upon airport operations and its economic contribution. In assessing the potential balance of effects, firstly it is important to recognise the crucial and substantial economic significance of the Airport, identified above. Although impacts on passenger and freight operations do not result in the same economic costs, on average a decrease of 1% in airport operations is likely to result in a decrease of approximately \$43m per annum to the South Island. However, the subsequent lack of certainty resulting in the market has the potential to increase these impacts as future business decisions and the competitive nature of the Airport is affected.
- 36 Alternatively, recognition of land use restrictions, such as noise contours could reduce the productive value of land, reducing its intensification potential. However, this will only represent a community cost if alternative locations do not exist, or these alternatives represent less valuable outcomes to the community.
- 37 While, in some cases, it is both prudent and economically viable to manage or mitigate conflicts between activities, the necessity to avoid some conflicts is evident in their potential damage to the economy. In the case of the intensification of noise sensitive activities within CIA noise contours, the risk for damage is significant while the benefits to the community of intensification can often be realised elsewhere.
- 38 Importantly for the regional economy, it is fundamental to the market that it has confidence in the Airport's ability to fulfil its role efficiently and effectively, not just now but in the future. The reliability and ability for the Airport to meet future growth demands is key to the locating of many national and international businesses that would not otherwise situate themselves in Canterbury. It is crucial to the regional economy that the Christchurch Airport remains a competitive option providing solid air links for the regional economy.

Bird Strike

- 39 I understand that the potential costs of bird damage can be significant, including:
- 39.1 down-time for the inspection and repair of aircraft;
 - 39.2 aborted flights;
 - 39.3 rescheduling of aircraft passengers and air cargo;
 - 39.4 transfer of passengers to alternative means of transport;
 - 39.5 overnight accommodation at the expense of the aircraft operator; and
 - 39.6 the deleterious effects on schedules of connecting flights.
- 40 The level of risk associated with bird strike is a crucial concern to the Airport and subsequently the environment in which it operates. With the loss worldwide of at least 231 lives and 60 aircraft (Thorpe 2003)⁵ the costs associated with these events are significant.
- 41 Obviously, there are catastrophic losses associated with bird strike but there are also real economic concerns with the risk and level of bird strike to the efficient operation of an airport, airlines and thus the economy. While only 35% of bird strikes result in damage to aircraft, these actual damages account for only a small proportion of the economic loss associated with the event. Rather, precautionary and real delays and cancellations form the majority of this economic loss for Airports and Airlines.
- 42 In 2000 it was estimated that the total cost of repairs internationally for bird strike damage was approximately US\$141m per annum with the cost of delays estimated at US\$1.12b per annum⁶.
- 43 When estimating the average cost per 'bird strike' at comparable 2020 New Zealand dollars, this equates to a cost of over \$80,000 per strike. This is the real cost to airlines and airports associated with these strikes and not only impact upon the total cost of operation, but the risk of these strikes could preclude the patronage of some airports as they pose to big a financial and accident risk.
- 44 The costs associated with these strikes do not end with the airlines or airports. Delays and cancellations impact upon the ability for an economy to operate effectively and efficiently. Given the highly competitive nature of airports as facilitators of business any perceived or real impact upon the ability of CIA to meet schedules will ultimately impact upon the competitiveness of Canterbury as a business location.
- 45 As previously outlined in the above evidence the efficient operation of CIA has direct impacts upon the regional economy. The economic losses incurred through these events are likely to be exasperated throughout the economy by the interruption of goods deliveries and the certainties required in a competitive market for logistic chains. For the regional economy, this cost could run into the millions of dollars annually.

⁵ Thorpe, J. 2003. Fatalities and destroyed civil aircraft due to bird strikes 1912 – 2003

- 46 The ability for CIA to operate efficiently with surrounding activities is crucial to its contribution to the regional economy. It is therefore important that management of conflicting activities is dealt with to maximise this strategic asset and sustain and develop the overall impacts upon the region's economic wellbeing

Dated: 23 July 2021

Philip Mark Osborne

⁶ Allan, John. 2000. 'The Costs of Bird Strikes and Bird Strike Prevention'