

Queenstown Airport Economic Impact Assessment

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Executive Summary

Queenstown International Airport is an important link in the economies of Queenstown and Otago. The Airport acts as a gateway to central Otago, and facilitates access and economic activity both in the local and broader regional economies.

The focus of activity facilitated by the Airport is tourism. Whereas airports in Auckland and Wellington cater for large numbers of business travellers, Queenstown's attraction is predominantly to holiday-makers. Domestic flights dominate movements at Queenstown Airport, although a large proportion of these domestic services are taken up by international visitors, meaning that Queenstown is facilitating additional economic contributions to the local and national economies.

For the year ended June 2007, QIA handled some 653,000 passenger movements, up from 628,000 in 2006 (4% growth). Passengers on international flights increased 22%, and those on domestic flights increased 3%. The strong international growth saw 2,300 international passenger movements per week through the airport over the peak Winter period (July-September), with the Airport proving a very convenient access point for Australians to access the Queenstown and Wanaka snow-sports offerings.

Despite recent growth, only 6% of all flights (and 8% of passengers) arriving at QIA are on international flights, and potential exists for continued growth. Recent trends have shown that QIA was the port of entry for 1.1% of all international visitor arrivals into New Zealand in 2007, up from 0.9% in 2006, and 0.4% in 2004.

For the year ending June 2007, QACL's airport operations generated \$2.0m in Gross Output, which translates into a direct impact on the Otago Region economy of \$1.1 million in value added (GDP), of which 99% is attributable to the Airport's concrete runway, and 1% to the grass runways. Nationally the \$2.0m of gross output generates total value added of \$2.5m, and sustains employment equivalent to 32 full time workers for a year.

International passengers using QIA created \$120.1m in direct gross output in the Queenstown economy, and \$50.8m in direct value added. In total, including indirect and induced impacts, the gross output created was \$256.8m, resulting in \$111.4m of value added and 1,886 FTE years of employment. The total New Zealand economy benefitted from international tourism facilitated by QIA to the tune of \$352.1m gross output, and \$151.5m in value added.

Domestic passengers using QIA created \$46.8m in direct gross output, and \$22.2m in direct value added. In total, including indirect and induced impacts, the gross output created by domestic passengers was \$102.5m, resulting in \$46.5m of value added, and 779 FTE years of employment.

Further value is added by the activity stimulated by QIA in the travel agency industry, although at around \$150,000 this is much smaller than the value added by tourist spend. In total the investment returns on business travel facilitated by QIA generates around \$700,000 in direct GDP in the Queenstown economy. However, once the flow on effects are incorporated, this increases to be equivalent to \$1.8m in regional GDP sustaining employment equivalent to some 24 full time jobs.

Overall the airport facilitated and directly generated gross output in the Otago Regional economy of some \$368m. This included a contribution to regional Gross Domestic Product of \$162m sustaining the employment equivalent of 2,717 full time workers annually. At the national level, the airport facilitated some \$357m in total gross output and some \$154m in GDP sustaining the equivalent of 2,377 full time workers annually.

1 Introduction

1.1 Background

This report documents the economic significance of Queenstown International Airport (QIA) in the Queenstown District, Otago Region and national economies for the year ended June 2007. This is the first such economic impact report to have been completed for Queenstown Airport Corporation Limited (QACL),

Airports around the world have been shown to play an increasingly important role in the economic life of regions and nations. Their impacts are far larger than simply the contribution of the companies that own and run them extending to the benefits of facilitating air services to regional and national businesses and to residents. The wider benefits of transport to economic growth have long been recognised, globally:

“It is difficult to conceive of vigorous economic growth which can create jobs and wealth without an efficient transport system that allows full advantage to be taken of the international market and globalised trade”¹

Airports are essential infrastructure that generate wide ranging social and economic benefits to regions. Effectively they generate returns to a wide group of stakeholders including direct shareholders and the wider business sector and society in general. The speed, connectivity and convenience of air travel is a major factor promoting leisure travel, freight activity and business, all of which are facilitated by QIA. International tourism is New Zealand's largest foreign exchange earner and Queenstown's tourism is heavily reliant on air transport facilitated by QIA, which also improves access for domestic tourists.

1.2 Objectives

A clear understanding of the economic significance of QIA is vital for commercial organisations and government policy makers alike. Commercial entities need to be aware of potential opportunities from the expanding air transport sector. Policy makers need to be aware of the implications of directions or policy which may impact positively or negatively on QIA's size and efficiency, and to understand the consequences for the regional and

¹ Transport White Paper, European Commission

national economies. This report seeks to provide that understanding in an authoritative and rigorous manner.

In response to strong growth in air travel to Queenstown, QIA has continued to expand operations and improve capacity and efficiency to service growth in international and domestic air travel. This is particularly important due to strong recent growth in visitor numbers and expected continuing growth of Queenstown as a tourist destination.

The outlook for the tourism sector is strong. The most recent tourism forecasts for the Queenstown Regional Tourism Organisation (RTO) project average annual growth in visitor numbers of 2.8% over the next 6 years. This is expected to raise international visitor arrivals to New Zealand from 2.4m to 3.1m. For Queenstown this would mean growth in international arrivals from 888,500 in 2006 to 1.2m by 2013, and growth in domestic visitors from 452,000 to 470,000 over the same period.

1.3 Current Airport Performance

Queenstown International Airport has just finished a major redevelopment that was undertaken to 'future-proof' the airport's capacity to accommodate expected continuing growth in passenger numbers. The development comprised a new check-in terminal, new domestic and international arrivals areas, departure lounges and retail space and additional car-parking. This development was planned so that additional expansion can be integrated as required in response to future growth.

Work airside included the construction of two new aircraft stands, extending the runways and rebuilding the aprons. Future runway expansion opportunities are limited due to the presence of the Shotover River on the Airport's eastern boundary. The Airport is soon to test the process of obtaining the consents necessary to expand in this direction to meet extended Runway Emergency Safety Area (RESA) requirements. These RESA requirements will require the landing strip to be extended by 90m by 2011.

In summary, for the year to June 30 2007:

- QIA handled some 653,000 passenger movements, up from 628,000 in 2006 (4% growth). This included a significant increase in the number of international visitors arriving into Queenstown, with these numbers up 22%. Domestic arrivals were up 3%.

- The Airport attracted 2,300 international passenger movements per week through the airport over the peak Winter period (July-September). Direct flights from Sydney, Brisbane and Melbourne are attracting a growing snow-sports market at this time of the year. This Winter peak represents 60% of international passenger movements in only one quarter of the year. Domestic traffic is much more evenly spread throughout the year.
- Of passengers travelling to or from QIA on international flights in 2007:
 - 79% of overseas residents were on holiday, with the next most common purposes identified being attending conferences (8%).
 - NZ residents were travelling for a much broader range of reasons, with 39% on holiday, 31% visiting family and friends, and 22% on business.
 - The purpose of travel is quite stable, with 2007 reasons for travel remaining similar to those recorded in 2002.
- QIA processed some 8,200 aircraft movements, with 94% being domestic flights. The number of international flights increased by 22% on steady passenger loading, and domestic flights decreased 1% (mainly due to weather diversions), on increased load of 3%.
- QIA was the port of entry for 1.1% of all international visitor arrivals into New Zealand, up from 0.9% in 2006, and 0.4% in 2004.

2 Approach and Methodology

This is the first Economic Impact Assessment undertaken for QIA, however the methodology employed for this report is consistent with a methodology developed by Market Economics Ltd and McDermott Fairgray Group over twenty years for Auckland International Airport Limited.

The methods used in this study are tested and proven, and are employed globally by organisations looking to understand the economic impact of airports on regional and national economies, and more broadly by organisations seeking to understand a wide range of sectoral growth and change. At a local level, these approaches have been applied for local governments and central government agencies as well as infrastructure providers and private companies. They have been tested through significant peer review both academically and through industry review, and the approaches and findings have undergone scrutiny in the Environment Court and High Court.

2.1 Economic Impact Channels

Queenstown International Airport impacts on the Otago Region and New Zealand economies in two main ways – through airport-related businesses that are either wholly or partially dependent on airport operations, and through activities that are facilitated by airport operations.

2.1.1 Airport Related Businesses

There are four major identifiable types of business that are directly affected by the existence of Queenstown International Airport:

- i. Businesses which are located at the airport to service airport users and associated businesses. These activities include the airport itself, airlines; businesses servicing the airlines with fuel, catering, aircraft maintenance, security and ground handling; freight forwarders and transportation businesses serving the needs of tourists, including rental car operators, ground transport, retail and restaurant outlets, banks and leisure sector operators. Together, these businesses are generally located within or near the airport, and together are identifiable as an area of commercial activity or an "airport business complex".
- ii. Businesses in the tourism industry, many of whose international and domestic customers enter or exit through QIA. These include accommodation, transport, recreation and entertainment, retail, restaurant

and other businesses, within Queenstown, and further afield to the rest of Otago and the South Island.

- iii. Businesses whose staff travel through the airport on their way to international or domestic appointments, and to whom air travel is a vital part of business. For larger airports, facilitating or enabling this travel is a particularly important function of an airport, in terms of its contribution to domestic economic activity. Frequently this facilitation role has been excluded from airport impact studies, because the impact on the economy is difficult to measure. However, this effect is considered too significant to exclude, and the economic impact has been estimated for this analysis.
- iv. All other businesses which are indirectly affected by the activities of the above businesses. The tourism industry, for example, purchases inputs from other industries, which in turn depend on inputs from still more industries throughout the economy. All industries directly and indirectly associated with the airport provide employment and pay wages, and this household income is then spent on the consumption of goods and services.

This study has assessed the economic role of each of these groups of businesses, and has placed the activities, impacts and role of the airport within the context of the regional and national economies. The flow-on effects of an airport in the economy occur through the generation of **indirect** and **induced** impacts.

These effects have been estimated through the application of an Otago Region Input-Output Model. This model has specific multipliers for the Otago Region, and is designed to trace economic impacts through the regional economy. It is important to note that for a region such as Otago, a significant portion of the goods sold within the region are not produced within the region. This means that increases in expenditure within the region actually generate economic impacts elsewhere. The Input Output models account for these characteristics in the estimation of local impacts.

2.1.2 Airport Related Activities

In addition to the effects of its own expenditure, Queenstown International Airport impacts on the economy by facilitating the movement of people and freight. There are six major travel and freight markets that collectively generate this impact:

- i. **International Travellers to New Zealand.** International visitors enter New Zealand and spend on all aspects of the travel and leisure sector. Their direct

impact is calculated from the amount they spend on goods and services while in Queenstown, and elsewhere in New Zealand.

- ii. **New Zealanders Travelling Overseas.** New Zealanders travelling from this country have a mixed impact, directing some expenditure into the regional economy through the purchase of air travel with its associated commissions, and contributing to expenditure by the airline industry. However, in travelling internationally they direct some of their spending to overseas economies, and it is lost to the regional (and national) economy. This study assumes that the small portion of New Zealanders travelling overseas via Queenstown International Airport would still travel, but by alternative routes, therefore the outflow of spend is a constant.
- iii. **Domestic Visitors to Queenstown.** While in the Queenstown region, visitors from elsewhere in New Zealand spend on goods and services from the travel and **leisure** sector. Their direct impact is measured from the amount spent while in Queenstown, whether on leisure or business trips.
- iv. **Domestic Travellers from Queenstown.** Queenstown residents travelling use air transport for business or leisure purposes like outbound New Zealanders, they contribute to the regional economy through travel agency commissions, and by stimulating additional expenditure by airlines, but their expenditure elsewhere in the country does little to stimulate activity in the Queenstown economy. Again, for identifying the contribution to the economy, it is assumed that if there were no air services the travel would still occur, by other modes.
- v. **Business Travellers to Queenstown.** Business travellers have two effects – first there is the impact of their expenditure while in Queenstown. Second, **international** and domestic business travellers stimulate activity in the regional economy by selling or purchasing goods and services as a result of their visit.
- vi. **Queenstown Business Travellers.** Queenstown workers who travel by air for business reasons leave through the airport to make sales or purchases, or otherwise improve the operation of their business. In addition to expenditure impacts (though commissions and airline activity), a share of their business activity is related to the airport.

2.2 Approach to Assessment of Economic Effects

This assessment of the airport's economic significance considers the total impacts of business activity associated with the existence of Queenstown International Airport. It includes the impact of business activity that benefits from the presence of the airport, not

simply the impacts of activities that are direct results of the airport and airline operations. This study makes a distinction between those impacts **directly** generated by the operation of the airport as an entity in the economy and those effects **facilitated** by the presence of the airport.

2.2.1 Airport versus No Airport

Approaches differ in identifying the economic impacts of airports. Some studies have compared an "airport versus no airport" scenario to show the economic impacts of activity which occurs because an airport is there, less the estimated impacts from activity if there were no airport.

That approach is not used here, because the Queenstown economy and the airport have evolved together over a long period, with the airport helping Queenstown develop into the tourism destination it is today, and it is not possible to revisit business investment and location decisions taken in the knowledge Queenstown does not have an airport. Instead the focus is on all activity which depends on or is facilitated by the airport, irrespective of whether they would still operate in Queenstown or New Zealand if the airport was not there. Although many businesses rely heavily on an airport, it is clearly not the case that closure of the airport would necessarily lead to the closure or relocation of the affected industries, especially in the short term. For example, tourists wishing to visit the region would choose a different mode of transport to get to the area, possibly decreasing visitor numbers and the economic activity they sustain, but not necessarily resulting in business closures.

In the medium term it may be that tourism businesses, or businesses supplying the tourism industry relocate out of the region to other locations near airport which are more convenient and cost-effective. If this occurred, it could be expected that resources in the region would shift into activities where air travel is less important. While one cannot attribute all the output of these relocating activities to an airport, the purpose of this analysis is to show the scale of economic activity that is, to some extent, airport dependent. This approach is in line with the majority of international studies (primarily in North America and Europe) viewed as part of the literature review carried out for this study.

2.2.2 Limits to Airport Capacity

The issue of airport capacity is of greater relevance than the issue of what would happen if the airport closed. The size and capacity of the Queenstown International Airport to handle

travellers and provide supporting services affects the size and growth of the Queenstown economy.

Internationally, airports face restrictions on their growth as a result of noise management and other policies, or limits on airport capacity caused by shortages of space, both in terms of terminal space and runway area. Therefore, one direct application for an economic impact study such as this is to show the economic effects of differing airport capacities and the implications of land use, noise and other policies that may affect airport operations. This is of particular importance in the context of Queenstown International Airport's expansion to keep pace with increasing demand.

2.2.3 Approach for this Study

Some studies focus only on the direct role of an airport and airport-dependent businesses to measure economic impacts. This limits the analysis to the direct and downstream effects of the air service operation and businesses dependent on an airport, and does not consider the wider benefits to an economy arising from travellers and trade-dependent industries.

The key role of an airport is to facilitate air travel for business and leisure purposes, and the movement of freight (which is negligible in Queenstown, other than post), to meet the needs of consumers and industry. Therefore the range of impacts and benefits of such activity are also in some way dependent on, or at least associated with, the existence of an airport. The approach adopted in this study is to consider the role of the airport more widely, in order to identify its total significance in the regional and national economies. This is consistent with the approach taken in assessments of Auckland International Airport impacts.

2.3 Economic Modelling

This study utilises 123 Sector Otago Region and New Zealand economic models developed by Market Economics Ltd to trace the impacts of Queenstown International Airport operations by sector. They are based on inter-industry transaction tables produced by Statistics New Zealand, which measure sales and purchases between sectors of the economy at the national level.

The national models are regionalised using the GRIT process and updated using Statistics New Zealand's Business Directory information on sectoral employment and numbers of businesses.

Input-output tables identify primary inputs, intermediate demands and final demands. **Primary inputs** are any production expenses that are not paid to other businesses. This includes compensation of employees, taxation, subsidies, consumption of fixed capital and imports. **Final demand** is output that is *not* sold to other businesses, and includes household consumption, services provided to central and local government, exports and gross fixed capital formation. **Intermediate demand** is output that *is* sold to other businesses, i.e. business to business transactions. The national input-output table mimics economic activity in New Zealand. For example, tourists arriving in New Zealand spend money in tourism related sectors such as accommodation and restaurants. The input-output table shows how the resulting increase in activity in the accommodation and restaurants sector affects activity in other sectors which provide intermediate inputs into accommodation and restaurants (such as the wholesale and retail trade sector supplying foodstuffs and furnishings), and how much is consumed as final demand.

A major component of the input-output model is the derivation of multipliers. These are summary measures of the economic interdependence between industries and final demand. The contribution of an industry to an economy is not limited to the value it creates directly - an increase in final demand for an industry has repercussions throughout the whole economy, causing increases in output beyond the initial change in demand. This is known as the **multiplier effect**.

2.4 Measures of Economic Activity

The Economic Models generated in this study have been used to estimate multipliers for sectors that are affected by Queenstown International Airport freight, passenger and service operations. Visitors to the airport (commonly those meeting or farewelling passengers) have been considered insofar as they spend money at the airport. However, any expenditure outside the airport complex has not been taken into account. Two types of multipliers have been used.

Type I Multiplier

Estimates the **direct** and **indirect effects** of demand by a particular sector. **Indirect impacts** result from an industry stimulating the creation of further demand through the purchases that it makes in other sectors of the economy. For example, QACL purchases electricity from the electricity generating sector causing their output to increase (more wages paid, more profits taken and more purchases from their suppliers). Each of these transactions generates a degree of value added in the economy, measured through the multiplier.

Type II Multiplier

Estimates the **direct, indirect and induced effects** of demand by a particular sector. **Induced impacts** arise from the increased demand for goods and services made by households who have received increased income as a result of the direct and indirect effects. QACL pays wages and salaries to staff, as do its suppliers. These workers then spend money in the economy generating a further round of impacts.

Multipliers have been measured for total output, value added (contribution to regional Gross Domestic Product GDP), and employment. The latter two tend to be most frequently used because they best represent the "true" value of the impact. Value added is the principal measure of economic activity, and is estimated as operating surplus, wages and salaries paid to staff and working proprietors, depreciation, taxes and subsidies. Employment impacts are measured by total full time equivalents (FTE) sustained. In essence, the higher the multiplier the more far-reaching the local value added and employment benefits are likely to be from an increase in demand.

2.4.1 Direct, Indirect and Induced Effects

In this report the following distinctions are made between direct, indirect and induced impacts:

- The direct impact refers to the direct contribution made by a particular industry, e.g. the direct employment impact of the Air Transport industry equates to the total employment in the Air Transport industry.
- The indirect impact refers to the difference between the direct and indirect impacts as calculated by applying a Type I multiplier and the direct impact.
- The induced impact refers to the difference between the direct and indirect impacts as calculated by applying a Type I multiplier and the direct, indirect and induced impacts as calculated by applying a Type II multiplier.

2.4.2 Globalisation Effects

Globalisation has two significant effects on the Queenstown economy in relation to this study. Firstly, the relationship between demand and origin of goods produced to meet that demand and, more importantly, increases in the scale and nature of global tourism.

Economy Changes

It is important to understand how changes in the New Zealand economy (as a result of changes in how New Zealand interacts with the rest of the world) change the scale of flow on effects likely to be felt as a result of growth and change in the local economy.

Over time the New Zealand economy has become more open and integrated with the rest of the world's economy. This means that over time a greater proportion of goods used in the New Zealand economy are sourced from overseas. This means that as demand increases within the local economy, the economic impacts are split between the local economy and the economy where the goods being consumed, were manufactured.

Global Tourism

Over the past 20 years international visitors coming to New Zealand have almost tripled in number, and Queenstown has emerged as New Zealand's preeminent tourist destination, in terms of image and identity, if not actual tourism numbers. International tourism is now more common than ever, and air travel serves as the main mode of transport to facilitate international passenger movements. Although Queenstown Airport has only limited direct air access to international markets (through the east coast of Australia), the Airport facilitates the attraction of a wide range of international visitors to central Otago through domestic air routes.

2.5 Information Sources

Queenstown Airport Corporation Ltd (QACL) provided detailed passenger and aircraft movements, for the year to June 2007. District and national employment data by sector was obtained from the 2006 Business Directory (BD 2006), produced by Statistics NZ on an annual basis.

Tourism and travel statistics were sourced from the Domestic Tourist Survey (DTS). This study is carried out by AC Nielsen Research for the Ministry of Tourism and covers the 2007 calendar year. Expenditure details are also provided in the DTS. A range of statistics from the International Visitor Survey (IVS) have been used. The IVS, also conducted by AC Nielsen

on behalf of the Ministry of Tourism, was used to identify the origins, travel characteristics and spending patterns of air travellers both arriving and departing from Queenstown International Airport. IVS data for the year ending June 2007 has been used in this study.

Other statistics, relating to the air services and airport related sectors were gathered by directly surveying airport dependent and related businesses.

2.6 Report Structure

The structure of this report reflects the major impact channels through which Queenstown International Airport affects the regional and national economies.

- In Section 3, the impact of the Airport itself is examined. This identifies total output associated with the airport operation and other businesses based on the airport, and examines the net impact on the economy.
- Section 4 examines international and domestic passenger flows and their subsequent expenditure patterns and resulting impacts. Travel agent margins and the flow-on benefits of business travel are also included in this section.
- The overall economic impact is summarised in Section 5. The distinction is also made between impacts that are attributable solely to the airport and airport operations, and associated impacts that are only facilitated by the airport's presence.

3 Airport Impacts

3.1 Scope

This section looks at the economic impact of the Airport. There are around 45 businesses located in the airport complex. These businesses include the airport itself, airline operations, transport and storage facilities, retail stores, car hire outlets and restaurants.

This area captures a significant portion of international visitor expenditure (retailing, café and restaurant, car hire and other land transport spend) and airport related business spend, through freight forwarders, storage, customs and so on. These components of spend are calculated as part of the tourism and business related impact reported below. This means that the figures for the geographically defined areas, such as the Airport or the wider Airport Business Zone, are not necessarily additive to spend calculated by major spending or impact group, such as airline passengers or traders (exporters and importers). This would lead to double counting.

3.2 QACL Activity

The QACL output measured in this section includes operational turnover and capital investments by the Airport. This was achieved by analysing financial data provided by the Airport from financial accounts for the year ended 30 June 2007. The data was coded into 123 sectors and then run through a series of multiplier analyses. The aggregated results are shown below in Table 3.1.

In total for the year ending June 2007, QACL's airport operations generated \$2.0m in Gross Output. This translates into a direct impact on the Otago Region economy of \$1.1 million in value added (GDP), and total value added of \$2.0m once the indirect and induced effects are accounted for (Table 3.1). Nationally the \$2.0m of gross output generates total value added of \$2.5m, and sustains employment equivalent to 32 full time workers for a year.

Table 3.1: Economic Impact of Airport Expenditure (YE June 2007)

	Otago Region	New Zealand
Direct		
Gross Output (\$m)	2.0	2.0
Value Added (\$m)	1.1	1.1
Employment (FTEs)	16	16
Indirect		
Gross Output (\$m)	1.1	1.6
Value Added (\$m)	0.5	0.7
Employment (FTEs)	6	8
Induced		
Gross Output (\$m)	1.0	1.6
Value Added (\$m)	0.5	0.8
Employment (FTEs)	5	8
Total		
Gross Output (\$m)	4.1	5.2
Value Added (\$m)	2.0	2.5
Employment (FTEs)	27	32

3.3 Airport Businesses

The Airport is a significant employment node, with a total of 377 employees. A range of businesses locate at the Airport to meet the needs of businesses located at and people passing through the Airport (Table 3.2). The air transport sector dominates in output terms, however the retail sector (including cafes and restaurants) is the largest sector in employment terms, employing around 200 employees. The manufacturing and construction sectors employ around 30 employees.

It is important to note that the majority of this turnover and the impacts that flow from it are already captured within the total airport impact summary presented in Table 3.1, so is not additional. A proportion of the activity in Table 3.2 is not necessarily dependent on the airport for its operation, and would still occur somewhere within the Queenstown economy even without the presence of the Airport.

Table 3.2: Gross Output of Airport Located Businesses (YE June 2007)

Sector	Employment (ECs)	Gross Output (\$m)
Air transport	124	\$ 37
Retail and cafes/restaurants	199	\$ 34
Mfg and construction	30	\$ 6
Other	24	\$ 3
Total	377	\$ 81

4 Passenger Impacts

Economic impacts associated with passenger flows are key to the national and regional economies. While QIA does not generate these impacts directly, it facilitates the movement of tourists and other visitors, and therefore the creation of economic activity in the national and regional economy. This section discusses the method used to calculate the facilitated economic activity from people movements that is attributable to the Queenstown International Airport. The facilitated economic activity calculated includes International visitor spend and NZ resident spend on travel.

While Queenstown Airport can only accommodate short-haul international air traffic due to constraints on runway length, economic activity in Otago is facilitated by the Airport's ability to move passengers on both domestic and international routes.

4.1 Methodology

The spend by international and domestic visitors that is facilitated by the airport was calculated by first estimating the number of visitors moving through the Airport. There are three types of visitors who move through the Airport, those who arrive and depart through the airport, those who only arrive and those who only depart from QIA. The first of the three types must be treated differently to the other two, as the entire spend by visitors who arrive *and* depart through QIA (whether on international or domestic flights) can be attributed to the Airport's operation, but only 50% of spend of the spend by passengers for whom QIA is their port of arrival or departure (but not both) can be attributed to QIA.

The number of visitors passing through QIA (that is tourists using air transport to enter or leave Queenstown) was assessed using the mode segmentation function in the Ministry of Tourism's Tourism Flows Model (TFM), and travel patterns data supplied by the Ministry of Tourism. The TFM data gave the share of tourists by international and domestic origin, and was then pro-rated up to match QIA data on passenger numbers to give an estimate of the number of NZ and overseas residents passing through Queenstown Airport.

Data provided by the Ministry of Tourism came from the Domestic Tourism Survey (DTS), International Visitor Survey (IVS), and International Visitor Arrivals (IVA) datasets. These allowed us to calculate the average length of stay in Queenstown Lakes District and the average spend per night of passengers arriving in Queenstown via QIA. From this total spend amount the total direct economic impact can be established. The average length of

stay in Queenstown Lakes District (which includes Queenstown and Wanaka) by visitors who travel through QIA was 7.9 nights for international, and 3.1 nights for domestic.

International and domestic visitor numbers were combined with national and regional spend averages to create a spend distribution by sector. This distribution allocates spend into seven categories; accommodation, hospitality, retail, transport, entertainment, gambling and a catchall ('other').

This total spend needs to be adjusted to account for the fact that not all spend by these tourists is facilitated by QIA. For example, only half of the spend of tourists who fly in to Queenstown, but rent a car and drive to Christchurch to fly home is facilitated by QIA, and the half by Christchurch. There is a lack of data available on what proportion of QIA passengers travel one or both ways through the Airport, as the limited market size gives survey data a very high margin of error, and other data is not collected at a sufficiently detailed level to inform the assessment. For this reason it has been assumed that 80% of all passengers passing through Queenstown Airport will fly into and out of the Airport on their trip, and the other 20% will use the Airport either only on arrival, or only on departure from Queenstown, and will use a different airport and the other end of their trip.

The total spend facilitated by the Airport is then put through the input-output model to obtain the resulting economic impacts this level of spending activity generates, all of which is facilitated by Queenstown Airport. Note however that the total spend facilitated does not all translate into direct gross output as some spend in the retail sector is supporting overseas-made goods.

4.2 International Passengers

4.2.1 International Traveller Numbers

In 2007, there were 394,000 international passenger movements through QIA, or the equivalent of 197,000 individual travellers. International visitors made up the majority of all passengers passing through the Airport (60%), and with significantly higher average spend per visitor night the contribute 74% of the total contribution to the Queenstown economy. International visitors that passed through QIA spent \$150m in the Queenstown economy, resulting in direct gross output of \$120.1m.

Table 4.1: International Passengers Detail (YE June 2007)

Type of Visit	Visitors using QIA	Average Spend per Visit (\$)	Total Spend (\$m)	Spend Facilitated by QIA (\$m)	Direct Gross Output (\$m)
Day	12,000	\$ 53	\$ 0.6		
Overnight	185,000	\$ 810	\$ 149.9		
Total	196,900	\$ 863	\$ 150.5	\$ 135.5	\$ 120.1

4.2.2 International Visitor Spend

The international visitor spend facilitated in the Otago Region and New Zealand was calculated using visitor nights and spend data from the Ministry of Tourism's IVS. Data from the IVS and DTS show that 22% of international visitors and 29% of domestic visitors to Queenstown were people arriving, or leaving, or arriving and leaving through QIA. Passengers arriving in Queenstown by air tend to stay in the District for longer than the average tourist, contributing more per person to the Queenstown economy. Therefore it is estimated that the Airport facilitates 34% of total spend by international visitors in Queenstown, and 43% of spend by domestic visitors. In the absence of any data to the contrary, it has been assumed that the average spend per night is similar between travellers that use the airport and those who do not.

4.2.3 Economic Impacts of International Passengers

The resulting economic impact of the facilitated international tourist spend was then calculated using input-output multipliers and the direct economic activity calculated in Table 4.2. As described above, the economic impact looks to trace the effect of direct spend on the regional and national economies. International passengers using QIA created \$120.1m in direct gross output, and \$50.8m in direct value added. In total, including indirect and induced impacts, the gross output created was \$256.8m, resulting in \$111.4m of value added, and 1,886 FTE years of employment.

Table 4.2: Economic Impact of International Passengers (YE June 2007)

	Otago Region	New Zealand
Direct		
Gross Output (\$m)	120.1	129.2
Value Added (\$m)	50.8	53.3
Employment (FTEs)	1,179	1,217
Indirect		
Gross Output (\$m)	79.7	123.3
Value Added (\$m)	32.4	50.8
Employment (FTEs)	405	618
Induced		
Gross Output (\$m)	57.0	99.5
Value Added (\$m)	28.2	47.4
Employment (FTEs)	302	510
Total		
Gross Output (\$m)	256.8	352.1
Value Added (\$m)	111.4	151.5
Employment (FTEs)	1,886	2,345

4.3 Domestic Passengers

In 2007, there were 258,000 domestic passenger movements through QIA, or the equivalent of 129,000 individual travellers. Domestic visitors made up just under 40% of total airport passengers, and most domestic visitors were staying at least one night in Queenstown – only 6% of domestic air travellers were on day trips to Queenstown.

The average length of stay by domestic visitors who travel through QIA is 3.1 days, per information sourced from the Ministry of Tourism’s Domestic travel Survey.

4.3.1 Domestic Traveller Numbers

The number of domestic travellers through QIA was obtained from the Ministry of Tourism’s Tourism Flows model (TFM). The TFM data provides the number of domestic day and overnight trips by New Zealand resident visitors by air to and from Queenstown. It is assumed that all trips are return, which means the total amount of equivalent visitors through QIA is equal to the total number of trips divided by two.

It is important to note that the Domestic Tourism Survey data and the TFM both provide estimates of the number of visitors through the Airport, but that estimates are marginally

different due to the methods used in their compilation. The differences are minor, and have negligible impact for the purposes of this report.

Table 4.3: Domestic Passengers Detail (YE June 2007)

Type of Visit	Visitors using QIA	Average Spend per Visit (\$)	Total Spend (\$m)	Spend Facilitated by QIA (\$m)	Direct Gross Output (\$m)
Day	8,500	\$ 61	\$ 0.5		
Overnight	120,700	\$ 445	\$ 53.7		
Total	129,200	\$ 506	\$ 54.3	\$ 48.8	\$ 48.8

4.3.2 Domestic Visitor Spend

The DTS provides data on the expenditure by New Zealand residents who use QIA. The survey collects the total spend by the respondent on a trip away from home, although each trip may include a number of regions, so the exact amount of spend in each region cannot be calculated using the DTS. Instead, spend in the Otago Region by people passing through QIA was estimated using the number of trips, nights and days by region and average spend per day.

These calculations yield total spend by purpose for New Zealand resident QIA customers in the Otago Region. These totals were then distributed across expenditure category types using national spend by category, purpose and trip length (day or night). The results below exclude spend on air travel which is dealt with in the next section.

In total, domestic visitors moving through QIA spent some \$54.3m in the region. The largest components are \$10.2m spent on food and beverages, \$11.4m on other retail, and \$10.1 on accommodation. Detailed tables of international and domestic tourist expenditure disaggregated by spend type are contained within Appendix 2.

4.3.3 Economic Impacts of Domestic Passengers

The actual economic impact of the facilitated New Zealand resident domestic traveller spend was then calculated using IO multipliers and the direct economic activity calculated above.

As with other categories, this involved coding expenditure by broad tourism sector to the input output model sectors and applying the value added ratios and multipliers as

appropriate. As part of the process, the value of goods sold is removed from the amount spent in the retail sector and sheeted home to the sectors that produced the goods. This includes the import sector (both international and inter-regional), as many of the goods are not likely to be manufactured locally (with the exception of food and beverages, arts and crafts etc). This leaves a residual amount to flow through the retail sector, equivalent to the retail gross margin.

Domestic passengers using QIA created \$48.8m in direct gross output (effectively \$54.3m, less the value of imported goods). Of this, a total of \$22.2m equates to direct value added. In total, once all of the flow-on effects are incorporated, the gross output facilitated by the airport was \$102.5m, resulting in \$46.5m of value added, and sustaining employment equivalent to 779 full time workers for a year.

Table 4.4: Economic Impact of Domestic Passengers (YE June 2007)

	Otago Region
Direct	
Gross Output (\$m)	48.8
Value Added (\$m)	22.2
Employment (FTEs)	499
Indirect	
Gross Output (\$m)	29.9
Value Added (\$m)	12.6
Employment (FTEs)	154
Induced	
Gross Output (\$m)	23.7
Value Added (\$m)	11.7
Employment (FTEs)	126
Total	
Gross Output (\$m)	102.5
Value Added (\$m)	46.5
Employment (FTEs)	779

4.4 Travel Agent Margins

The Airport facilitates the operation of travel agents within Queenstown and the rest of Otago to a lesser extent. The service provided by travel agents within Queenstown adds value to the economy. The measurement of this value is estimated by the commission which would be charged on most tickets purchased within New Zealand. The following section estimates travel agent fees for travel through the QIA by New Zealand residents, both for national and international travel.

4.4.1 Method

The travel agent business which is facilitated by the airport was calculated as the sum of the agent's fees from New Zealand residents flying through the airport. This includes all travellers by purpose, both domestic and international. The fees have been calculated by estimating the spend on tickets and taking a portion as agent fees. This was done by combining a weighted average ticket price and an estimate of the total number of trips booked through travel agents.

It must be noted that this calculation may under count the actual fees charged by domestic travel agents on travel through QIA. The estimate excludes the value of accommodation or package deals which may have been booked through domestic travel agents. Finally, the direct effects were distributed to regions and then converted into value added terms.

The weighted average ticket price was calculated for domestic travel by averaging main trunk destination return ticket prices to and from Queenstown for immediate travel or travel booked 6 months in advance. This was weighted by an estimate of the distribution of Queenstown travellers by destination. The weighted average return ticket price was estimated to be \$392.50. The international weighted average ticket price was estimated using return ticket prices from Australia to Queenstown, and was set at \$900.

4.4.2 Travel Agent Fees

The travel agent fees facilitated by the airport was then estimated by combining weighted averages and the number of tickets sold by travel agents to obtain a total ticket spend by New Zealand residents moving through the QIA. The number of tickets sold by travel agents was estimated using sales data quoted by Air New Zealand². The facilitated effect was derived by applying the industries standard fee (of 4%).

4.4.3 Results

In total approximately \$40,150 in travel agency fees for New Zealanders flying out of Queenstown on international flights are attributable to QIA. In the absence of any data on Queenstown residents outbound via QIA on domestic flights, we have estimated the travel agent fees for domestic flights based on the relationship between domestic and

² 23 April 2007 *Air New Zealand Public Affairs* "this year they (online sales) are expected to exceed \$1 billion dollars". Given that 2006 ticket sales were \$3.1bn (YE Financial report), we assume that direct airline sales account for at least a third of the market. Therefore, two thirds of tickets sold will have an associated travel agent fee.

international flights from the study for Auckland International Airport. This indicated that domestic flights generated around four times more fees than international tickets. If this relationship holds for Queenstown, the fees generated will be in the range of \$160,000 to \$200,000.

Once run through the IO model, this generates an additional total value added of \$150,000, and sustains employment equivalent to two full time workers annually.

4.5 Investment Return on Business Travel

Airports not only facilitate the movement of people, they facilitate the economic activity that moving business people around the country and world generates. This section estimates the return from that investment on business travel by firms. A rational firm would only invest in travel if it predicts some benefit or return from doing so. The amount of return which will be attributable to the business trips financed by New Zealand firms depends on many variables. The calculation below takes a conservative approach and assumes that business expects at least the same return as current investments.

4.5.1 Method

The return from business travel was calculated by taking the number of business trips and applying spend averages for airfares and other travel costs (e.g. accommodation, food). An assumption on the effect of the travel had to be made to take into account return from investment on travel. A firm will invest in travel only if it believes that it will receive some return. The timing and the probability of success will affect the average return. This report takes a conservative approach, the revenue facilitated by business trips is set at 11.6% higher than the business travel expenditure.

The numbers of New Zealand resident business departures is collected by Statistics New Zealand. Almost all of the business travellers through the airport will return through the airport. This means the departure data gives a close proxy of the number of equivalent business visitors. The DTS provides information on domestic air trips by purpose, this gives the number of Queenstown business trips to other regions and other regions business trips through Queenstown Airport.

The Survey of returned travellers gives an average spend per business visitor night overseas and the average number of nights. Combining this average spend data with airfares data we can calculate the amount spent by New Zealand businesses on international travel through

the Queenstown Airport. The spend by Domestic business travellers was calculated as being 50% of the value for international travellers. This is consistent with findings for Auckland International Airport.

4.5.2 Additional Return on Investment

The additional revenue generated by the business travel through the airport equates to the expenditure plus a return. The return was set at the national average return on expenditure as collected in the Annual Enterprise Survey. The average additional revenue collected before tax is 11.6%.

In total 374 business travellers were identified as flying out of Queenstown. These travellers spent some \$337,000 on airfares to Australia, and approximately \$823,000 on other expenses. This means that in order to ensure the business travel was profitable they must have generated a return of at least \$134,000, giving a total international return on investment of some \$1.29m for year ended June 2007. On this basis it is estimated that domestic business would generate an additional \$650,000 return on investment.

Table 4.5: Value of Business Return by Business Travellers Through QIA

	Spend (\$'000)	
International Business		
Airfares	\$	337
Other Travel Expenses	\$	823
Gross Return	\$	134
Total	\$	1,294
Domestic Business	\$	647

4.5.3 Results

The actual economic impact of the facilitated business revenue was then calculated using IO multipliers and the direct economic activity calculated above. This has been estimated for international business and domestic business below. It is not possible to assess in which sectors the business people originated within the Queenstown economy, therefore it has been necessary to prorate the additional activity across the Queenstown economy in proportion to the levels of output from each sector. Sectors with a focus on meeting household or tourist needs have been excluded from this assessment as have government sectors.

This leaves key productive sectors with the potential to generate business trip activity. Multipliers from these sectors are used to estimate flow on effects of the returns on revenue earned.

In total business returns generated by business travel through QIA contributed around \$1.9m in gross output, and \$700,000 in value added to the Queenstown economy. However, once the flow on effects are incorporated, this increases to be equivalent to \$1.8m in regional GDP sustaining employment equivalent to some 24 full time jobs.

Table 4.6: Value of Business Return by Business Travellers Through QIA

	Otago Region
Direct	
Gross Output (\$m)	1.9
Value Added (\$m)	0.7
Employment (FTEs)	10
Indirect	
Gross Output (\$m)	1.6
Value Added (\$m)	0.7
Employment (FTEs)	9
Induced	
Gross Output (\$m)	0.9
Value Added (\$m)	0.4
Employment (FTEs)	5
Total	
Gross Output (\$m)	4.4
Value Added (\$m)	1.8
Employment (FTEs)	24

5 Total Economic Impacts

This section summarises the combined economic impact of Queenstown International Airport on the Otago and New Zealand economies generated from activities within the airport, and through the airport's facilitated effects in other sectors.

Queenstown Airport plays a significant role in both the Queenstown and Otago economies. It is an important tourist gateway into the wider Otago Region. It is also vital to attracting Australian ski tourists during the important Winter season.

At a regional level the airport is playing an increasingly important role. The number of international flights going in to Queenstown continues to grow, facilitating increased spending in the District and Region. Queenstown International Airport now facilitates around \$173m of direct and indirect value added per year, and over 2,700 full time equivalent employees (Table 5.1). Economic activity facilitated by the airport now accounts for nearly 2.5% of total regional GDP.

Given that the Queenstown Airport has no freight component and does not play a significant role in facilitating travel throughout the rest of the country for international travellers, the majority of its impacts are contained within the Otago Region. Queenstown Airport as a business generates total gross output equivalent to its annual turnover (\$2.0m). The actions of purchasing goods and services throughout the regional economy generates total GDP of \$2.0m sustaining some 27 full time equivalent workers annually.

The balance of the impact arises from passenger activity primarily from within the Queenstown area, with a small proportion facilitated in other areas (rest of Otago Region and Canterbury Region predominantly). Direct expenditure of \$171m translates to total GDP contribution of \$160m once the flow-on effects are incorporated. In total, passenger activity sustains the employment equivalent of 2,690 full time workers.

At the national level the impacts are slightly less. This is due to the neutral impact domestic tourism activity has at the national level. This is because it does not necessarily represent "new" spend in the national economy, it is assumed that if it wasn't spent in Queenstown the money would be spent elsewhere in the national economy. Therefore it cannot be said that the airport facilitates impacts associated with that volume of spend.

Table 5.1: Queenstown International Airport EIA Summary (2007)

	Direct (Airport) Impact	Facilitated (Passenger) Impact	Total Direct and Facilitated Impact
Otago Region			
Output (\$m)	\$ 2.0	\$ 171.1	\$ 173.1
Direct Value Added (\$m)	\$ 1.1	\$ 73.7	\$ 74.8
Total Gross Output (\$m)	\$ 4.1	\$ 364.1	\$ 368.2
Total Value Added (\$m)	\$ 2.0	\$ 159.8	\$ 161.8
Employment (FTEs)	27	2,690	2,717
% of Otago Region Economy	0.0%	2.4%	2.5%
New Zealand			
Output (\$m)	\$ 2.0	\$ 131.4	\$ 133.4
Direct Value Added (\$m)	\$ 1.1	\$ 54.1	\$ 55.2
Total Gross Output (\$m)	\$ 5.2	\$ 356.8	\$ 362.0
Total Value Added (\$m)	\$ 2.5	\$ 153.3	\$ 155.9
Employment (FTEs)	32	2,370	2,402
% of NZ Economy	0.0%	0.1%	0.1%

5.1 Impacts by Runway Type

There are two separate components to Queenstown’s airside operations – those centred on the concrete runway, and those focussed on the grass airfield. The former handles all interprovincial and international flights, together with a limited number of movements from smaller planes. The grass airfield is used solely by smaller planes and helicopters, including those belonging to charter companies, scenic flight operators and individuals. Hence, the bulk of economic impact facilitated by the airport is facilitated by the concrete runway – this section provides an indication of what this proportion is.

To provide QACL with some indication of the relative economic activity facilitated by the concrete compared to the grass runway, we have identified what share of total economic activity is facilitated by each component. This analysis takes all spend that can be sheeted home to one or the other component, which leaves a small amount of total spend facilitated by the airport that is not able to be allocated to one or the other. For example, all airside expenses have been split pro-rata based on passenger numbers carried between the concrete and grass landing strips, but all costs from the Airport’s Property Division (maintenance of buildings, carparking and landscaping, cleaning and professional services etc) have been allocated to the “Shared’ category.

In total for the year ending June 2007, the total gross output facilitated by the Airport was \$171.6m, of which 99% was facilitated by the concrete runway (\$170.1m), and only \$1.4m

by the grass runways. Direct value added was also dominated by the concrete runway (99%) as was direct and total employment. It is clear that the concrete runway at Queenstown Airport facilitates a vast majority of the total economic impact created by the Airport, and that the limited class of users of the grass runways results in only a small economic impact, predominantly from scenic flights.

Table 5.2: Economic Impact by Runway Type (YE June 2007)

	Concrete Runway	Grass Runway	Shared	Total
Direct				
Gross Output (\$m)	170.1	1.4	1.5	171.6
Value Added (\$m)	73.4	0.5	0.8	73.9
Employment (FTEs)	1,686	5	13	1,691
Indirect				
Gross Output (\$m)	110.9	0.8	0.7	111.7
Value Added (\$m)	45.5	0.4	0.3	45.8
Employment (FTEs)	567	4	4	571
Induced				
Gross Output (\$m)	81.4	0.5	0.7	81.9
Value Added (\$m)	40.3	0.3	0.4	40.5
Employment (FTEs)	431	3	4	434
Total				
Gross Output (\$m)	362.4	2.8	2.9	365.2
Value Added (\$m)	159.2	1.1	1.5	160.3
Employment (FTEs)	2,684	12	21	2,696

6 Conclusion

Queenstown International Airport is an important link in the economies of Queenstown and Otago. The Airport acts as a gateway to central Otago, and facilitates access and economic activity both in the local and broader regional economies.

The focus of activity facilitated by the Airport is tourism. Whereas airports in Auckland and Wellington cater for large numbers of business travellers, Queenstown's attraction is predominantly to holiday-makers. Domestic flights dominate movements at Queenstown Airport, although a large proportion of these domestic services are taken up by international visitors, meaning that Queenstown is facilitating additional economic contributions to the local and national economies.

For the year ended June 2007, QIA handled some 653,000 passenger movements, up from 628,000 in 2006 (4% growth). Passengers on international flights increased 22%, and those on domestic flights grew 3%. The strong international growth saw 2,300 international passenger movements per week through the airport over the peak Winter period (July-September), with the Airport proving a very convenient access point for Australians to access the Queenstown and Wanaka snow-sports offerings.

Despite recent growth, only 6% of all flights (and 8% of passengers) arriving at QIA are international flights, and potential exists for continued growth. Recent trends have shown that QIA was the port of entry for 1.1% of all international visitor arrivals into New Zealand in 2007, up from 0.9% in 2006, and 0.4% in 2004.

For the year ending June 2007, QACL's airport operations generated \$2.0m in Gross Output which translates into a direct impact on the Otago Region economy of \$1.1 million in value added (GDP), of which 99% is attributable to the Airport's concrete runway, and 1% to the grass runways. Nationally the \$2.0m of gross output generates total value added of \$2.5m, and sustains employment equivalent to 32 full time workers for a year.

International passengers using QIA created \$120.1m in direct gross output, and \$50.8m in direct value added. In total, including indirect and induced impacts, the gross output created was \$256.8m, resulting in \$111.4m of value added and 1,886 FTE years of employment. Domestic passengers using QIA created \$48.8m in direct gross output, and \$22.2m in direct value added. In total, including indirect and induced impacts, the gross

output created by domestic passengers was \$102.5m, resulting in \$46.5m of value added, and 779 FTE years of employment.

Overall the Airport facilitated and directly generated gross output in the Otago Regional economy of some \$368m. This included a contribution to regional Gross Domestic Product of \$162m sustaining the employment equivalent of 2,717 full time workers annually. At the national level, the Airport facilitated some \$357m in total gross output and some \$154m in GDP sustaining the equivalent of 2,377 full time workers annually.

Appendix 1: Multiplier Methodology

Multiplier analysis (also known as input-output analysis) is the most commonly used modelling technique for measuring total economic impacts. Direct, indirect and induced impacts are estimated using multipliers derived from regional and national economic models, which are standard input-output models. Multiplier analysis is based on the interdependence of the various industries that make up the economy. Market transactions (for both primary inputs and intermediate goods) relating to a particular industry are measured, and the resulting expenditures tracked as they move through the economy. Any change in the level of output in one industry will result in changes in other industries because of this interdependence. This flow-on effect is estimated using multipliers, which are ratios of direct, indirect and induced changes in output.

One of the assets of multiplier analysis is that the results it provides are easy to identify and digest, and relatively easy to use once input-output tables are available for a particular region. However, multiplier analysis is not without its limitations, despite being widely applied in New Zealand and around the world. The most common limitations relate to the historical nature of multipliers which are typically calculated from input-output tables from surveys undertaken 2-3 years previously. Therefore, they may not accurately reflect the relationships between sectors in the current economy.

The multipliers used in this study are based on Statistics New Zealand 1994/95 input-output tables, the latest available, and updated to 2004/05 by Market Economics Ltd. The current size and structure of the Otago economy has been estimated according to 2004/05 employment statistics and output per FTE, by sector, multiplied by current levels of employment by sector. Economic relationships are assumed to still be similar to those existing in 2004/05. This assumption is acceptable during periods of stability but can be inaccurate during periods of major structural changes. However, the employment and activity statistics for Otago suggest relative stability in the structure of the regional economy since 1994/95, with most of the change arising from growth rather than structural change. Detailed discussion on the uses and limitations of multipliers is contained in Butcher, "Regional Income, Output and Employment Multipliers", 1985.

Measures of Economic Impact

Value added measures all payments to factors of production (land, labour and capital), and excludes all purchases of intermediate inputs. It broadly equates with gross domestic product (GDP) as a measure of economic activity on the national level, and gross regional product on the regional level. Components of value added include compensation of

employees (salary and wages), operating surplus (company profits), consumption of fixed capital (depreciation), and taxes less subsidies.

Employment is measured in full-time equivalent years (FTE-years), This is the number of full-time employees and working proprietors, plus half the number of part-time employees and working proprietors, on an annual basis. Full-time refers to persons working 30 hours or more per week. Hence, one FTE-year can consist of twelve full-time jobs for one month, or 2 part-time jobs for one year. This provides a measure of labour demand associated with the Port's existence. Note that additional FTE-years do not necessarily require that additional persons be actually employed. It may mean existing employees or proprietors work longer hours.

Appendix 2: Detailed Tourist Expenditure

	Total Int. Tourist Spend \$000	Domestic Tourists Spend			Total Tourist Spend \$000
		Overnight \$000	Day \$000	Total \$000	
Tourism Characteristic Products					
Accommodation	\$ 30,494	\$ 8,803	\$ -	\$ 8,803	\$ 39,298
Food and beverage	\$ 28,367	\$ 4,850	\$ 54	\$ 4,904	\$ 33,271
Road, rail and water transport	\$ 4,019	\$ 2,029	\$ 25	\$ 2,054	\$ 6,072
Air Passenger transport	\$ 23,273	\$ 4,341	\$ 56	\$ 4,397	\$ 27,670
Other Travel Activity	\$ 6,004	\$ 4,391	\$ 59	\$ 4,449	\$ 10,454
Travel agency services	\$ 600	\$ 439	\$ 9	\$ 448	\$ 1,048
Air Passenger transport	\$ 3,603	\$ 2,635	\$ 50	\$ 2,684	\$ 6,287
Accommodation	\$ 1,801	\$ 1,317	\$ -	\$ 1,317	\$ 3,119
Motor vehicle hire/rental	\$ 5,650	\$ 589	\$ 7	\$ 596	\$ 6,246
Imputed rent of holiday homes	\$ -	\$ -	\$ -	\$ -	\$ -
Libraries, musuems etc	\$ 1,797	\$ 227	\$ 2	\$ 230	\$ 2,026
Other sport and rec	\$ 4,645	\$ 1,904	\$ 21	\$ 1,924	\$ 6,570
Tourism related products					
Retail - alcohol	\$ 1,773	\$ 824	\$ 9	\$ 833	\$ 2,606
Retail - clothing & footwear	\$ 5,484	\$ 1,596	\$ 17	\$ 1,613	\$ 7,098
Retail - food, beverage etc	\$ 5,461	\$ 5,261	\$ 57	\$ 5,319	\$ 10,779
Retail - fuel etc	\$ 4,751	\$ 7,747	\$ 87	\$ 7,834	\$ 12,585
Retail - pharmaceuticals	\$ 1,324	\$ 441	\$ 5	\$ 446	\$ 1,770
Retail - consumer durables	\$ 993	\$ 5,703	\$ 62	\$ 5,764	\$ 6,757
Retail other	\$ 14,420	\$ 2,731	\$ 30	\$ 2,761	\$ 17,181
Finalcial services	\$ 50	\$ 26	\$ 0	\$ 27	\$ 76
General insurance	\$ 71	\$ 39	\$ 0	\$ 40	\$ 111
Socail-health related services	\$ -	\$ 132	\$ 1	\$ 134	\$ 134
Gambling services	\$ 319	\$ 127	\$ 1	\$ 128	\$ 447
Education services	\$ 3,971	\$ -	\$ -	\$ -	\$ 3,971
Other tourism and personal services	\$ 7,659	\$ 1,979	\$ 24	\$ 2,002	\$ 9,662
Total	\$ 150,525	\$ 53,741	\$ 517	\$ 54,258	\$ 204,782