



Report to:
Infratil

A REJUVENATED WHENUAPAI AIRPORT

**- A FOCUS FOR NORTH/WEST AUCKLAND'S BALANCED
GROWTH AND ECONOMIC DEVELOPMENT**

BERL #4178

Prepared by

**Kel Sanderson
John Cook
Mark Goodchild**

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Business and Economic Research Ltd

Level 5, 108 The Terrace
PO Box 10-277
Wellington
New Zealand
phone: +64 4 470 5550
fax: +64 4 473 3276
web-site: www.berl.co.nz
e-mail: innovate@berl.co.nz

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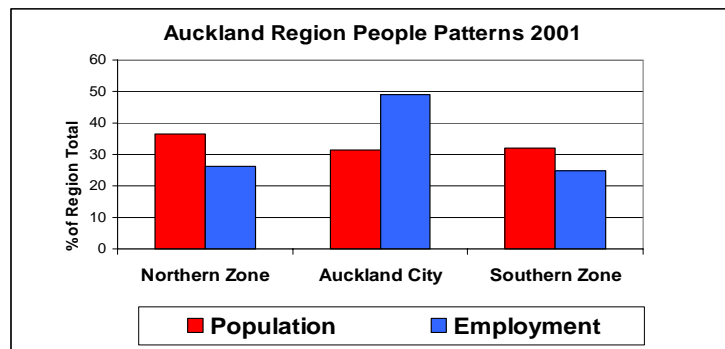
1	EXECUTIVE SUMMARY	2
1.1	Auckland Region's Growth Challenges the West and North	2
1.2	The Shape and Impact of Whenuapai Rejuvenated.....	3
1.3	Whenuapai Airport – A Stimulus to Northern Growth and a Balanced Region....	4
2	Auckland Region's Growth Challenges the West and North	5
2.1	The People Shape of Auckland Region 2001	5
2.2	Population and Growth in Auckland Region to 2050.....	7
3	The Shape and Impact of Whenuapai Rejuvenated	10
3.1	Budget Airline Increase in Trans-Tasman Inbound Visitors	10
3.2	Economic Impact of Additional Inbound Trans-Tasman Visitors.....	14
3.3	Community Benefits of Increased Recreation and Tourism.....	15
3.4	Cheaper Outbound Travel by New Zealand Residents.....	16
3.5	Impact of the Whenuapai Airport Operation.....	18
3.6	Future Activity Generated by the Rejuvenated Airport.....	19
3.7	Overall Economic Impact.....	19
4	Whenuapai Airport – A Stimulus to Northern Growth and a Balanced Region	21
4.1	Growth Factors in the Northern Zone	21
4.2	Changes in Local Industry.....	25
4.3	Opportunities for Employment Growth in the Northern Zone	30
5	Appendix	31

1 EXECUTIVE SUMMARY

This report explores the opportunities to generate benefits in the Auckland Region and the country by rejuvenating Whenuapai Airport as a base for a budget airline operating Trans-Tasman and domestic services. It is necessary to understand the present and future shape of Auckland Region relative to the location and hinterland of Whenuapai.

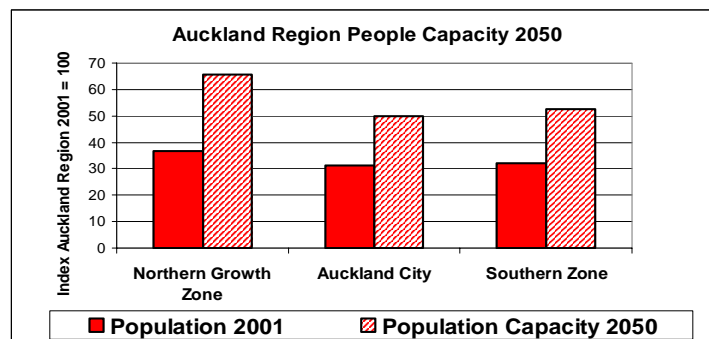
1.1 Auckland Region's Growth Challenges the West and North

- The population distribution amongst the three zones in Auckland Region is quite different from the employment distribution. The three zones identified are the Northern Zone (Waitakere City and North Shore City), Auckland City, and the Southern Zone of Manukau City. As shown in the graph, the Northern Zone has about 37% of the Region's population, but only 25% of the Region's employment.



The Northern Zone and Southern Zone are thus dormitories for people working in Auckland City. In Waitakere the mis-match between residential population and employment is the most marked, and research undertaken in 1999 by Waitakere City found that 60% of their residents travel outside the city daily to work.

- The Auckland Regional Growth Strategy (ARGS) shows that the majority of the additional capacity for population growth between 2001 and 2050 is in the Northern Zone, and this Zone should properly be called the 'Northern Growth Zone'.



The areas for urban expansion stretch from Henderson in a line through Westgate, Albany to Long Bay. In addition the Northern Growth Zone consists of future urban growth nodes, designated at Kumeu and Orewa. The map shows this pattern.

The present People Patterns of 2001 generate large travel flows from dormitories North and South causing congestion and gridlock on the Auckland City isthmus and main routes eg to Auckland Airport at Mangere. The challenge to the Northern Growth Zone in future is to generate employment in step with the population increase, and thus take future pressure off the cross-regional transport infrastructure.

- Whenuapai airbase is located at the focal point of the Waitakere and North Shore present urban centres, and the future urban areas and growth nodes in the Northern Growth Zone.

1.2 The Shape and Impact of Whenuapai Rejuvenated

- Whenuapai airbase is a facility capable of handling jets that can operate on main trunk domestic and Trans-Tasman services. At present Whenuapai is grossly underutilised as a base for a few RNZAF transport aircraft and even that use is likely to decline. A budget airline based at Whenuapai would rejuvenate it as Whenuapai Airport, and it would then be a major asset for the nation and the region. It would retain operational capability available in the northern North Island for military RNZAF use without the military shouldering the full cost. It would improve the range and options of air services complementary and yet contestable with Auckland Airport for the growing Auckland Region.
- The main immediate economic impacts of a rejuvenated Whenuapai Airport would be additional Trans-Tasman visitors brought in by the budget airline. Even a moderate market response to the budget airline would bring visitors to stimulate the regional and local tourism industry and generate increased employment in tourism of 1,000 Fulltime Equivalent (FTE) jobs in the region, and 2,500 FTEs nationally. This would be additional regional GDP of \$50 million per annum, and national GDP of about \$100 million per annum. In 10 years time, the expected expansion of tourist markets would increase these impacts by 50% to 100%.
- At the local community level the further benefit is that the rejuvenated Whenuapai Airport/airline business node would directly employ about an additional 400 FTEs, and with multipliers there will be 800 FTE jobs created initially. These are additional to the employment generated from increased tourism estimated above. Within 10 years this core operation could be expected to at least double as passengers and services increase.
- The rejuvenated Whenuapai Airport would significantly improve the options and accessibility of air services available to the residents and businesses throughout the upper North Island, and particularly those in Waitakere City and North Shore City. This air access would improve the lifestyle and business environment in the Northern Growth Zone.

1.3 Whenuapai Airport – A Stimulus to Northern Growth and a Balanced Region

- The challenge to the Northern Growth Zone is to generate employment of quality jobs which will stimulate further business growth. The Albany basin has been designated for high-tech business growth, with excellent education facilities already in the Zone. Communications businesses etc. are starting to move out of Auckland City to North Shore which indicates that smart business is moving north.
- From 1996 to 2001, employment increased by 55,000 FTEs in the Auckland Region. Of these, 25,000 FTEs were in the Northern and Southern Zones in the people-servicing industries of retail, hospitality, personal services, recreation and social services where most industry average incomes are about \$22,000 per annum per FTE. A further 24,000 FTEs in the Region were in business services which provide higher income jobs, with an industry-wide average of \$45,000 per annum per FTE. However 17,000, or 71% of these business services jobs were in Auckland City.
- The main potential and focus for future employment and business growth in the Northern Growth Zone should be in the Business Services industry. This industry is particularly attractive as it improves the production environment for other businesses.
- Many types of Business Services require ready access to the various air transport services. The rejuvenation of Whenuapai Airport with a budget carrier, giving immediate access to air travel and courier / parcel / freight capacity would provide a major stimulus to business service enterprises to locate in the Northern Growth Zone, with good road access to Whenuapai Airport.
- The logistics, freight forwarding and distribution industries will also be stimulated to further growth by a rejuvenated Whenuapai Airport. These are also attractive industries as they generate middle-income technical jobs, and add to the effectiveness of business services.
- With business services, logistics, tourism, recreation and other desirable industries growing and lifting the game in the whole Northern Growth Zone, this would balance and perhaps reverse the congestion flow into the isthmus for work. In turn this would allow better future access across the isthmus and thus throughout the region for enjoyment of the attractions of the greater Auckland region for Aucklanders and visitors alike.
- Some investment is required, but these benefits come through rejuvenating an underutilised facility at Whenuapai into a valuable regional and national asset.

2 AUCKLAND REGION'S GROWTH CHALLENGES THE WEST AND NORTH

This report explores the opportunities to generate benefits by rejuvenating Whenuapai Airport, as a base for a budget airline operating Trans-Tasman and domestic services. It is necessary first to assess the present and future likely nature of the Auckland Region especially as relates to the location and hinterland of Whenuapai.

The Big Picture in the regional sense is the 50-Year Growth Challenge which Auckland region has set; the resulting shape of Auckland, and the implications and opportunities for population and industry growth in the West and North of the region. The Auckland Regional Growth Strategy 2050 (ARGS) posed the challenge to the region as: *How is the Auckland Region going to manage a doubling in population over the next 50 years? Can we keep the best of what we have now and improve the things that are not so good?*

The major challenge is to reduce congestion on the isthmus from cross-town travel, including key traffic flows from home to work, and/or to Auckland Airport at Mangere.

2.1 The People Shape of Auckland Region 2001

For the purpose of assessing the shape of the Auckland Region as it relates to the location and immediate hinterland of Whenuapai, it is convenient to consider Auckland region as divided into three zones: the Northern Zone contains Whenuapai and includes Rodney County, Waitakere City and North Shore City. Auckland City is a zone, and the Southern Zone is Manakau City, Papakura and Franklin County.

Table 2.1 Auckland Region Population Distribution 1996-2001

Area	Census Population			
	1996 ('000)	2001 ('000)	5 Yr Growth 1996-01 %	Population Distribution 2001
Rodney	66	76	15.2%	
North Shore City	172	185	7.6%	
Waitakere City	156	168	7.7%	
<i>Northern Zone</i>	<i>394</i>	<i>429</i>	<i>8.9%</i>	37
Auckland City	346	367	6.1%	31
Manukau City	254	283	11.4%	
Papakura	40	41	2.5%	
Franklin	48	51	6.3%	
<i>Southern Zone</i>	<i>342</i>	<i>375</i>	<i>9.6%</i>	32
Auckland Region	1,082	1,171	8.2%	100

Source: *Census of Population 2001*, Statistics NZ.

This table shows that at Census 1996 the population was reasonably evenly distributed as between the Northern Zone, the Southern Zone and Auckland City. (In fact the ratio

was Northern 36: Auckland City 32: Southern 32.) Population grew more strongly in the Northern and Southern Zones than in Auckland City, and so by 2001, the ratio was Northern 37 : Auckland City 31 : Southern Zone 32.

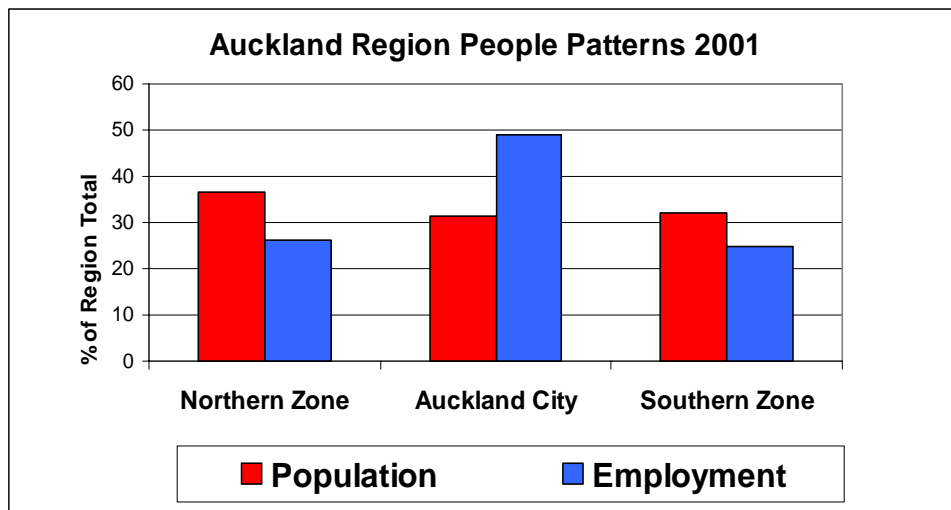
On the other hand, the employment distribution pattern is quite different as shown in the following table.

Table 2.2 Auckland Region Employment Distribution 1996-2001

Area	EMPLOYMENT FullTime Equivalents FTEs			
	1996	2001	5 Yr Growth 1996-01	Employment Distribution
	('000)	('000)	('000)	2001
North Shore City	76,734	92,079	15,345	
Waitakere City	38,154	41,730	3,577	
<i>Northern Zone</i>	<i>114,888</i>	<i>133,809</i>	<i>18,922</i>	26
Auckland City	228,992	250,371	21,379	49
<i>Southern Zone</i>	<i>111,837</i>	<i>126,893</i>	<i>15,056</i>	25
Auckland Region	455,717	511,073	55,356	100

Source: Statistics NZ and BERL Regional Database

The employment in the region is dominantly concentrated in Auckland City, with about 50% of the employment for the whole region. The relationship between the distribution of population and of employment around the region is best seen in a simple bar chart.



These tables and chart show quite clearly the pattern for people from the northern zone especially, and to a lesser extent the southern zone to travel to the Auckland City daily for work.

Waitakere City has had some concern as to the level of employment in the City and carried out research in 1999 which found that..

*nearly 60% of Waitakere's labour force travel out of the city each day for paid work in other parts of the region.*¹ In other words Waitakere City is largely a dormitory for the Auckland City workforce.

This situation has improved only slightly since 1996 as the population pattern is about the same, and the employment pattern which in 1996 was in the ratios of Northern 25: Southern 25: Auckland 50, by 2001 was still Northern 26: Southern 25: Auckland 49.

2.2 Population and Growth in Auckland Region to 2050

The Auckland Regional Growth Strategy document outlines a number of principles for evaluating alternatives for regional growth to 2050. These included that they:

- Enable a range and quality of business locations to accommodate employment growth, such as; industrial areas near motorway/rapid transit interchanges, a variety of mixed use, sub-regional or town centres for offices and services outside the CBD.
- Enable a good local, cross-region, inter-region and international transport network, including passenger transport for ease of movement of goods and services, business traffic and commuter traffic.

One key feature of the of the Growth Concept is that the effects of growth are managed by promoting compact urban environments – where most future growth is expected to take place within the existing metropolitan area. Implementation of this Growth Concept anticipated in the Auckland Regional Growth Strategy envisages development in the following areas:

North

Urban growth in the north would be focussed broadly in four areas – around Orewa, in the remaining North Shore greenfields (eg Albany), in existing North Shore communities and in some rural towns such as Warkworth and Wellsford.

West

In the west, intensification would be focussed within two development corridors – the existing western rapid transit corridor (from Mt Eden through Avondale, New Lynn and Glen Eden to Henderson) and a proposed Henderson to Westgate corridor. The North West Motorway is the other major artery connecting Westgate to the CBD and port. The western sector would eventually have three sub-regional centres at New Lynn, Henderson and Westgate.

¹ Waitakere Local Employment Co-ordination Group (1999:8), *Waitakere City: Strategic Employment Issues*, Waitakere City Council – Te Taio o Waitakere, Waipareira Ave, West Auckland.

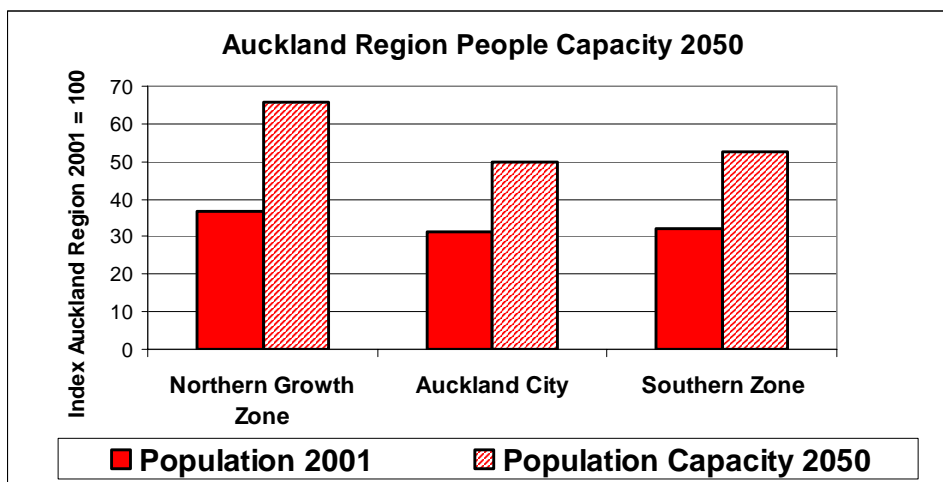
The Strategy determined in detail the capacity for additional population in each Territorial Local Authority area. The capacity was determined for Extra Existing Metropolitan Capacity, for Extra Existing Rural Capacity, Additional Infill Existing Urban Growth, and Additional Future Urban Growth. The total of these capacities for additional population was found for the period 1996 to 2050, and in the table below, these have been updated to show the capacity for additional population from 2001 to 2050.

Table 2.3 Auckland Region Population Capacity Available 2001 to 2050

Area	Census Population			Population Growth 2001-50 To Reach ARGS Capacity		
	1996 ('000)	2001 ('000)	5 Yr Growth 1996-01 %	Number Increase ('000)	Percent Increase %	5 Yr Growth Rates (Ave) %
Rodney	66	76	15.2%	101	133%	8.8%
North Shore City	172	185	7.6%	107	58%	4.7%
Waitakere City	156	168	7.7%	135	80%	6.1%
<i>Northern Growth Zone</i>	394	429	8.9%	343	80%	6.1%
Auckland City	346	367	6.1%	216	59%	4.8%
Manukau City	254	283	11.4%	149	53%	4.4%
Papakura	40	41	2.5%	53	129%	8.6%
Franklin	48	51	6.3%	40	78%	6.0%
<i>Southern Zone</i>	342	375	9.6%	242	65%	5.2%
Auckland Region	1,082	1,171	8.2%	801	68%	5.3%

Sources: *Census of Population 2001*, Statistics NZ; and *ARGS 2050*, Regional Growth Forum.

The table shows that the region as a whole has been found to have an acceptable capacity to increase the population by 68% on the 2001 population. The Northern Zone has the capacity to grow by 80% on average, and in fact the Northern Zone has about 45% of the total capacity for growth between 2001 and 2050. The distribution of population growth capacity is shown in the chart.



The additional capacity for population growth is concentrated in the north, the ratios of this capacity for population growth being Northern 45: Southern 30: Auckland City 25. This means that the opportunity is for the West and North to enjoy 45% of the total population growth in the region.

This area with the main capacity for population increase stretches from Henderson, with considerable capacity for infill, up to the northeast in a development frontier from Westgate through Greenhithe and Albany to Long Bay. At the focal point of this growth push northwards is Whenuapai, slightly ahead of the future urban boundary. Further north again are the urban islands to be developed at Kumeu, Orewa and Whangaparaoa Peninsula all joined together by the area of countryside living, stretching from Dairy Flat to Whenuapai.

The area of West Auckland and North Shore is clearly the main area designated for urban growth and can be called the Northern Growth Zone.

The Regional Growth Strategy also envisages major employment development in the Albany Basin, Silverdale and Westgate, all of which are within the northern growth zone, in Whenuapai's immediate hinterland.

If the region as a whole is to reduce the cross-region travel and gridlock pressure, the challenge to the Northern Growth Zone is to generate employment faster than their population growth. This will start to reduce and eventually possibly reverse some of the cross-isthmus traffic flow, easing pressure on the gridlock. It will keep the best of, and even enhance the Waitakere and North Shore lifestyles, and improve some of the things that are not so good in the overall region.

3 THE SHAPE AND IMPACT OF WHENUAPAI REJUVENATED

Whenuapai was the international and domestic airport for Auckland until the development of the AIAL facility at Mangere. Since that time Whenuapai has remained a military airbase, but even that function may reduce with the general concentration of RNZAF air operations on Ohakea airbase in the Manawatu.

Whenuapai is an asset of the nation, a major infrastructure asset that is grossly underutilised. With little additional investment the asset could be rejuvenated as a base for a budget commercial airline to operate Trans-Tasman and domestic services.

A rejuvenated Whenuapai could generate benefits at a number of levels. Nationally the airport would provide services complementary and yet contestable with Auckland Airport and their operators. It would also enable the RNZAF to retain operational capability in the northern North Island without shouldering the full cost of maintaining Whenuapai airbase.

Within the Auckland region a rejuvenated Whenuapai Airport would provide a focus for emphasis on economic and business development in the Northern Growth Zone.

A preliminary analysis has been undertaken of the potential economic and employment benefits generated by the development of budget airline operations in the northern growth zone. The economic impact assessment has been evaluated on the basis of generating additional economic activity within the national and regional economies. For this reason analysis has been restricted to the added value generated by additional passenger volumes from international origin countries, as spending from New Zealand travellers is assumed to be diverted from spending on other economic activity in New Zealand.

The economic benefits have been assessed at both the national and regional level.

3.1 Budget Airline Increase in Trans-Tasman Inbound Visitors

There is ample evidence that low cost carriers stimulate additional demand for travel, either by attracting new passengers, or increasing travel frequency of existing passengers.

Analysis of Trans-Tasman air traffic volumes after the introduction of the “no frills” carrier Freedom Air gave a clear indication of latent price sensitive demand for air travel. Having the option of using a regional airport for Trans-Tasman services was also enthusiastically endorsed by ‘local’ passengers, rather than have to make a lengthy and often expensive trip to the main gateway airports.

Trans-Tasman links have been maintained from regional/provincial airports but the national carrier has not strongly promoted its budget subsidiary “Freedom Air” at the expense of mainstream, full service operations. The national carrier has announced and

intention in future to operate its budget subsidiary on some city-pair routes but there remains a competitive opportunity on the Tasman sector.

There is a similar situation for domestic operations. With the demise of Ansett New Zealand, the national carrier has exploited its monopoly position, with some trunk route competition from QANTAS. However, Air New Zealand has acknowledged its vulnerability to competition by its proposed repositioning as a “budget” operation on domestic routes. Whether this repositioning extends to fare reductions or is merely a cost cutting device to restore margins has yet to be seen.

3.1.1 Overseas Budget Airline Operations

The evidence is that budget airline operations generate additional business for air travel. Examples from Ryanair on selected routes are indicative of this potential.

- Glasgow-Dublin route: In 1993 there were 100,000 passengers pa; from 1998 onwards with the introduction of Ryanair there have been 400,000 passengers pa, of which 200,000 on Ryanair, and 200,000 passengers pa on all other airlines.
- Glasgow-Paris: 1996-98 increasing 40,000 to 50,000 passengers pa. Ryanair entered in 1998, and by 2001 Ryanair had 125,000 passengers pa, and the total of all other airlines was 115,000 passengers pa.
- London-Pisa 1997 to 2000 increased 63% after Ryanair entered.
- London-Venice 1997 to 2000 increased 93% after Ryanair entered.

These figures indicate that not only have budget airlines achieved a high rate of increase in their own passengers, but that they also stimulate more traffic on other carriers.

The further benefit that is generated from the introduction of budget operations such as Ryanair is the revenue flows to secondary airports in a catchment outside the immediate area of often more congested principal airports. In Amsterdam, the city airport has a thriving business in commuter air traffic while Schipol continues to grow as a major regional hub (planning for the 5th runway was completed some years ago, though implementation delayed due to the consultation process).

New Zealand has a similar geographic profile to Europe with relatively short distances between population centres. This is conducive to effective budget airline schedules.

In Canada a budget operator West Jet published their two-year market stimulation growth rates for their entry period 1996 to 1998. Traffic on about one-third of their routes increased by 60% to 75%; on another third traffic increased in the range 120% to 155%, and on the top third of routes traffic increased by 265% to 450%.

The introduction of Virgin Blue's budget operations in Australia has shown a similar effect to the introduction of Ryanair operations in Europe. On the Brisbane-Sydney and Melbourne-Sydney sectors the first four months of Virgin Blue operations have seen passenger numbers up 40% and 22% respectively, whereas the Adelaide runs, without Virgin recorded no increase. Both Sydney and Melbourne have a number of commercial airports, used intensively for commuter flights, serving their populations. The Sydney-Melbourne sector is consequently a mature high-volume sector with active price and market competition.

3.1.2 Present Trans Tasman Visitor Volumes

Analysis of the economic impact of a budget airline operation has been evaluated on the basis of generating additional economic activity within the national and regional economies. For this reason analysis has been restricted to the added value generated by additional passenger volumes from international origin countries.

There will as well be increased passenger movements of New Zealanders travelling Trans-Tasman, and travelling domestically within New Zealand. However, from an economic impact viewpoint, the economic activity, or spending on this travel is considered to be diverted from elsewhere in New Zealand, and accordingly is not counted as additional economic impact.

Trans-Tasman traffic in international visitors is the principal source of additional economic benefit. Australian residents (many of them born in New Zealand but now living in Australia) are the main target. In addition there is a substantial number of residents from outside Australia, visiting Australia who would be potential customers for budget Trans Tasman operations. The main targets here are visitors from the UK, North America and from mainland and overseas Chinese.

The following table 3.1 indicates the relative volumes of Trans Tasman arrivals into Auckland currently occurring.

Table 3.1: Trans Tasman Visitor Arrivals

Origin Country of Residence	Arrivals in Auckland June 2001 Year	Arrivals in Auckland December 2001 Year
Australia	350,000	360,000
United Kingdom	52,000	53,000
Northern Europe	8,200	8,500
North America	44,000	41,000
China PRC	20,400	25,000
Overseas Chinese	12,000	10,500

Source: Migration data, Statistics New Zealand

The events of 11 September disrupted the typical flow of visitors into New Zealand. As flights within and through the US were cancelled or disrupted for some months many visitors opted for, or were forced to transit Asia and Australia on their visit to New Zealand. Despite a marked reduction of airline travel worldwide in the three months post 11/9 the numbers flying into the Auckland gateway were hardly affected. Comments made by tour operators indicate that visitor volumes would have been substantially higher if the airlines had not slashed seat capacity on Pacific and some Asian sectors. Many operators reported having to cancel tours to New Zealand due to their inability to secure long-haul seat capacity for European and American clients.

The table shows there were 350,000 to 360,000 Australian residents presently flying Trans-Tasman to Auckland, and this number would be increased substantially as additional price-sensitive travellers responded to the availability of budget airline seats to New Zealand through Whenuapai. Additional to these Australian residents there were 130,000 visitors from the main source countries for trips to Australia as well as New Zealand. People in these flows at present travelling to Australia only would be targets for a budget airline, flying across from Australian gateways. (These 130,000 from the main source countries represent close to half of the 255,000 total overseas non-Australians who travel Trans-Tasman to New Zealand.) Of the Australian residents flying Trans-Tasman to Auckland about 315,000 were from the main gateways of Sydney, Melbourne and Brisbane.

3.1.3 Assessment of Trans Tasman Visitor Increase Stimulated by Budget Airline

On the basis of the evidence from other countries, we assess that the entry of a strong, independent budget carrier on the main Trans-Tasman routes to and from Auckland could be expected to give a market stimulation by 20% to 40% additional to present passengers in the main market segments, namely of the passengers normally resident in Australia.

For visitors to Australia from other countries, who would make up the target market for a budget airline we assess that the market stimulation would be 10% to 20% increase to the present flow.

3.1.4 Domestic Travel by Overseas Budget Airline Visitors

Once visitors from certain overseas origin markets are in New Zealand, there is an opportunity to market budget airline options for side trips. The target markets for such sales are those typically staying with friends and relatives (VFR) in the Auckland region.

The additional potential passenger business from these sources is estimated to be in the range of 40,000 passenger movements (20,000 visitors) in the course of a year. Such business is additional to rather than a diversion within the economy, and is captured in the contribution to the national economy below.

3.2 Economic Impact of Additional Inbound Trans-Tasman Visitors

The economic impact assessment has been evaluated on the basis of generating additional economic activity within the national and regional economies. For this reason analysis has been restricted to the added value generated by additional passenger volumes from international origin countries.

Economic impact assessment has been estimated at both the national and Auckland regional level. The details of the assessments are in Appendix Table A.1 and Table A.2. The following Table 3.2 summarises the estimated additional level of economic activity (added value) and employment (FTEs) generated directly by the introduction of budget Trans Tasman airline operations.

Table 3.2: Market Impact Estimates

Market Assumption	Value Added \$m Per Annum	Additional Employment (FTEs)
National		
Low market response	\$61m	1,245
Moderate market response	\$122m	2,490
Auckland regional		
Low market response	\$29m	600
Moderate market response	\$58m	1,190

Source: BERL analysis

The specific measurable economic benefits of Whenuapai with a Budget airline include the increased economic activity from the increased tourists arriving on Trans-Tasman flights. The operation of an international budget airline is expected to carry in about an additional 100,000 Australian residents per annum and 20,000 other nationality tourists per annum. (This is additional to the number coming through existing ports.).

Landing in Whenuapai, these tourists would increase demand for tourist activities in the region and particularly in Waitakere City and North Shore. Stronger demand is expected for tourist attractions including wineries, café society, quality art, craft and design, and the regional cultural, sporting, recreation and nature tourism activities and attractions. Even a moderate response to the operation of the budget airline, increasing tourism at the regional level would generate increased employment of 1,000 FTEs, and additional regional GDP of about \$50 million per annum. At the national level employment up to 2,500 FTEs would be generated and GDP of about \$100 million per annum.

In 10 years time this benefit due to the additional visitors brought in by the budget airline is expected to increase employment by over 1,500 FTEs, and regional GDP by \$100 million per annum. At national level, employment increase would be up to 4,000 FTEs, and GDP increases of about \$200 million per annum.

The other benefits to those in the region, and in fact the northern North Island will be close access to a full range of budget air travel options to domestic and Trans-Tasman destinations.

3.3 Community Benefits of Increased Recreation and Tourism

The increased Trans-Tasman visitors, and domestic market visitors will provide a broad-based demand for present attractions, activities and facilities for recreation and tourism in the North and West of Auckland, and also to the region as a whole. This will be a sound benefit to the community increasing the viability of existing facilities, and also is likely to result in new attractions and facilities being developed.

3.3.1 Existing Recreation and Tourism Facilities

The Waitakere and Upper Harbour area at present provide a diverse range of outdoor and cultural recreation facilities. These include:

- Waitakere Ranges Regional Parkland; tramping, orienteering, camping, beach and coastal walks and day trip opportunities.
- West Coast beaches; Muriwai, Piha, Karekare, Bethells (Te Henga) – some of the best surfing sites in the country.
- Wine country; winery tours, vineyard restaurants, cultural events.
- Upper harbour water sports: sailing, fishing, swimming, kayaking, nature tours.
- Golf courses and country clubs; Titirangi Championship golf course and public courses.
- Lopdell House, Titirangi village; theatre, art and craft galleries, a focus for cultural events.

The upper harbour provides a safe haven for a range of water sport activities for learners as well as experienced practitioners. The waterway is sailable as far as Riverhead. The Whenuapai environs provide direct access to the upper harbour.

The Western sector is not well catered for by golfing facilities. The championship Titirangi course (with closed membership) is complemented by only public two courses:

- Huapai Golf Course: on the Coatesville-Riverhead Highway to the west of Brigham Creek Road.
- Swanson, Redwood Park Country Club: west of Swanson village on Route 24.

The number of public golf courses in the west is in contrast to that of North Shore with three courses (Albany, Takapuna and Pupuke, Forest Hill Road) and an additional three courses on the Whangaparaoa Peninsula including Gulf Harbour.

Development of additional golf facilities associated with walk and bike trails, picnic areas and recreation facilities to cater for the increasing resident population in the Westgate and Greenhithe areas is an option in the Whenuapai environs.

3.3.2 Potential for Wine Tourism and More ...

The western sector has considerable potential as a regional destination for visitors from elsewhere in New Zealand as well as the targeted Trans Tasman international visitor. At present the area is under-utilised as a destination.

Activities undertaken by international visitors while in New Zealand are monitored through the IVS survey. Most of the top activities recorded in the Auckland region such as Sky Tower visit, Americas Cup Village etc. take place in Auckland city. However, the Waitakere area has substantial recreation and tourism resources enjoyed by their resident populations that are under utilised by international and domestic tourists from other regions, and one attraction is the vineyards. Waitakere city is the home base for some of the countries best-known wine labels.

In the past year (December Year 2001) over 90,000 visitors to New Zealand as a whole were estimated to have visited a vineyard or taken a wine tour. This compares with 87,000 visiting Kelly Tarlton, 116,000 having visited a casino and an estimated 96,000 visiting the tourist icon Milford Sound. However, for overseas visitors, in evaluating the top 15 activities undertaken in the Auckland area, visits to vineyards do not feature. There is clearly an opportunity for Waitakere City going begging. With the Whenuapai Airport operating, the wine trail will become a very available attraction to overseas visitors. Wine trails provide revenues from a range of tourist services.

The Waitakere ranges, besides their importance as a water catchment, provide a broad range of recreational and tourism activity options within close proximity to the city and even closer to a Whenuapai base.

Spending by international and domestic tourists has been analysed on the base of purpose of visit motivators: vacation/holiday, visit friends and relatives (VFR), business and other. The spending analysis is applied to the visitor mix anticipated in the airport development scenarios.

3.4 Cheaper Outbound Travel by New Zealand Residents

Outbound travel by New Zealand residents has increased significantly over the past two decades, from a crude travel rate of 14 trips per 100 population in 1980 to 31 trips per

100 population in 2000. The Auckland region generates a higher incidence of outbound travel per capita than other regions of the country.

Australia is the prime destination for outbound travel recording 52% of total departures in the past five years. The following table outlines the number of outbound trips made by New Zealand residents in the past few years. Note that in the aftermath of 11 September outbound visitor volumes were reduced as occurred in other countries around the world.

Table 3.3 Outbound Travel by NZ Residents 1999 to 2002

December Years	Trips to Australia	Trips to Rest of World	Total Trips	Share of Trips to Australia
	(000)	(000)	(000)	%
1999	620	565	1185	52.3
2000	685	598	1283	53.4
2001	676	611	1287	52.5
May Yr 2002	654	613	1267	51.6

Source: Migration data, Statistics New Zealand

Trans Tasman trips made by New Zealand residents has been increasing at an average 4-5% through much of the 1990s. Forecast numbers to Australia for the coming decade, outlined in the following table 3.3 are derived from the McDermott Fairgray projections (base year 1999) prepared for the Tourism Research Council. The growth rates to 2006, the final year for the forecasts, have been extended for a further 6 years to 2012.

Table 3.4: Forecast Trans Tasman Travel by New Zealand Residents

December Year	Forecast Trips	Actual Trips	57% Share from Auckland Region
	(‘000)	(‘000)	(‘000)
2000	673	685	390
2002	726	654 (May 2002)	373
2006	848		483
2012	950		542

Source: Migration data, Statistics NZ and Tourism Research Council

Estimates of the number of trips to Australia originating through the Auckland gateway are assumed at 57%, the relative proportion over the past few years.

The total number of city pair sectors forecast for the Trans Tasman generated by outward travel by New Zealand residents out of an Auckland gateway over the coming decade are anticipated to grow from the current level of 750,000 to somewhere in the region of 1,100,000 by Year 2012, an increase of about 50%.

3.5 Impact of the Whenuapai Airport Operation

The specific shape of the airport/airline business node at a rejuvenated Whenuapai will depend upon the details of the services launched by the budget airline, however it is possible to give order-of-magnitude estimates of the scale of the operation. Our investigation of the budget airline stimulation to the Trans-Tasman market indicates that inbound overseas visitors could be expected to increase by 75,000 to 150,000 per annum. As these visitors also leave, this is a total of up to 300,000 passengers through the airport. New Zealand traveller numbers are expected to also be nearly this large and so a reasonable capacity for the airport for Trans-Tasman passenger movements would be 500,000 per annum in the first instance.

On the domestic market, the potential for market stimulation is more difficult to find precedent for, and we believe that the presumption by the airport operators is reasonable, namely that domestic passengers are expected to total 1,500,000 per annum. There is certainly a strong commercial market in the Auckland region and to the north. Household incomes in the hinterland of Whenuapai also indicate significant potential increases in demand for domestic flights at competitive fares.

The additional capacity and services necessary for the Whenuapai Airport to be expanded from its present military operation to additionally handle about 500,000 passengers Trans-Tasman, and 1,500,000 domestic passengers would require additional staff. The main additional functions are the airport company itself; airport visitor servicing companies especially taxis, buses, café and retail; airline ground and air staff; and government agencies. By our estimation, the additional staffing needed to run Whenuapai and services for 2 million passenger movements would be 400 Fulltime Equivalent jobs (FTEs). The assumptions made in this estimation are shown in the Appendix on Table A.3.

Estimation of the multipliers for each industry involved indicates that additional employment created for suppliers to the airport-based businesses would amount to 250 FTEs, mostly locally within the region. And the spending of the incomes from these total of 650 additional FTE employees would generate a further 170 FTEs, again mostly locally within the region.

The operation of a rejuvenated Whenuapai Airport in a multi-functional role and handling around 2 million passengers per annum, mainly as the base for a sound,

independent budget airline would thus initially create a total of over 800 additional FTE jobs in the economy. These are additional to the jobs created in tourism as estimated above.

Within 10 years this core operation could be expected to expand to employ at least 800 directly and a total of 1,600 in the regional economy.

These estimates do not take into account the potential economic impacts of complementary development within the airport precinct of service operations, such as freight forwarding, regional distribution centres, express parcel operations and the like.

3.6 Future Activity Generated by the Rejuvenated Airport

The direct impacts anticipated to flow from the development of a budget airline operation based in Whenuapai have been outlined above. In a longer term dynamic, the potential to grow that economic base as a development node are considered to have considerable potential.

Development of a distribution/storage park to service and promote the use of the airport facility would on first observation, not encounter any planning objection which may accompany residential use. Development of adjacent land for regional and eventually national distribution facilities would provide a downstream impetus for associated and complementary service development.

The process of service relocation that is already evident in Auckland, with companies seeking to attract long stay staff has resulted in major companies moving out of the CBD, and the hinterland of Whenuapai would have added attraction with local air access.

Of equal importance is the requirement of many professional, technical and service centre operations to provide a just in time maintenance or trouble shooting service to branches and operations within their regional area. Whenuapai would provide a cost effective logistics base for those companies intent on servicing their hinterland. The precedent is evident in Europe where companies are providing skilled and highly skilled service delivery people to their clients. This cannot be effectively managed through the road network beyond a 150km radius. Air connections are critical to this service delivery mode.

3.7 Overall Economic Impact

The estimate for the direct economic impact of the additional inbound overseas visitors to the region is for this to generate additional employment up to about 1,200 FTEs. As well the expansion of the operation of the airport itself will generate employment of an additional 800 plus FTE jobs. The overall impact at the Auckland regional level is thus estimated at employment of over 2,000 FTE jobs. The additional spending by the

inbound visitors will also directly generate increased regional GDP of up to \$58 million per annum.

At a national level, the employment increase could exceed 3,300 FTE jobs, and to put this in perspective this is about 10% of the annual increase in jobs in the whole of New Zealand. The expenditure by the additional inbound overseas visitors will directly increase national GDP by up to \$122 million per annum in the first instance.

Within ten years these impacts are expected to have doubled. If the traffic increases achieved by budget airlines overseas are repeated here, and if growth and economic development in Auckland region continues this could be a significant underestimate.

As well as these economic benefits, the community lifestyle will receive a significant lift. The very close regional access to air travel and courier / parcel / freight capacity will increase the attraction of Waitakere and North Shore as well as the Airport precinct expanding into a significant node of up-market transport functions.

Importantly this facility will lift the prime attribute of Waitakere / North Shore from one of industrial base and dormitory for Central Auckland, to being a valued alternative location for nationwide and Trans-Tasman businesses supplying a range of business services. This can provide the focus for wider and deeper generation of industry and employment as detailed in the following section.

4 WHENUAPAI AIRPORT – A STIMULUS TO NORTHERN GROWTH AND A BALANCED REGION

Whenuapai is at the convergence of the north-bound growth momentum of urban expansion of the whole Auckland region.

The challenge to the Northern Growth Zone is to generate employment, of quality jobs which will stimulate further business growth - smart jobs on the Knowledge Wave in existing and new industries. Albany basin is already designated for high-tech business growth, and there are a lot of conditions in the Northern Growth Zone to stimulate growth in these types of jobs and industries.

This section will look at some key factors which can provide the base for development in the Northern Zone, look at the ways a rejuvenated Whenuapai Airport can combine with these factors to stimulate growth, and the effects on the balance of use of the growing regional infrastructure.

4.1 Growth Factors in the Northern Zone

Four key factors which will provide the base to enable the Northern Zone to grow and generate employment are the present momentum of population growth; present employment and income levels; the education base for smart industries; and improvements to transport infrastructure.

4.1.1 Population Growth Momentum

The Auckland region has been the principal recipient of population growth within New Zealand over the past 20 years. The reasons for this include the fact that Auckland already has a large share, 30% of the nation's population; up to 70% of new migrants settle in Auckland region yet 65% of the population increase in the last two decades was from natural increase. By Census 2001, the total population of the Auckland region was 1.17 million an increase of 8.2% on the previous five years.

The Northern Growth Zone, immediate hinterland for Whenuapai Airport Waitakere City, North Shore City and the southern fringes of Rodney County. In the 5 years 1996 to 2001 population growth in this zone was 8.9% which was ahead of the average population growth rate for the Auckland region. (See Table 2.3 above.) This growth in five years is also a lower percentage increase than would be needed each five years to achieve the population capacity by 2050 outlined in the "Auckland Regional Growth Strategy 2050"(ARGS). That document shows capacity for an 80% increase in the resident population of Waitakere City between 2001 and 2050, and an increase of some 60% in North Shore City over the same period. Rodney County, which increasingly appeals as a life-style and retirement area, is anticipated to more than double in the coming 50-year period.

With the present growth momentum and changes in migration flows, BERL considers these population growth forecasts to be conservative, and the population capacity estimates could be achieved much sooner than 2050.

Growth at this higher level will have significant downstream impacts on the creation of business activity within the northern growth zone and underpin the development of additional business infrastructure, particularly in the transport sector. Growth in retail activity will be boosted by the sharp hike in population growth rates, in turn generating business opportunities within the zone.

Intra-regional business activity north of the bridge can be expected to grow disproportionately ahead of population growth.

The rejuvenation of Whenuapai Airport to expand the infrastructure base will assist in providing a new dimension and growth node for economic activity and development within the northern growth zone that is entirely consistent with regional growth strategies as outlined in the ARGS.

4.1.2 Income and Employment

As at Census 2001, both Waitakere City and North Shore City had median incomes higher than the national average, and more importantly had a significantly higher proportion of their resident populations in the middle-income range (\$20 – \$50,000).

Table 4.1: Northern Growth Zone Income Distribution

2001 Census Data	Incomes of those 15 Years +			
	Median Income (\$)	\$0-\$20,000 (%)	\$20-\$50,000 (%)	\$50,000+ (%)
Waitakere City	\$20,800	48.7%	40.6%	10.7%
North Shore City	\$23,300	45.3%	37.4%	17.3%
New Zealand	\$18,500	52.8%	35.7%	11.5%

Source: Census of Population 2001, Statistics NZ

An examination of age group distributions indicates that Waitakere has probably the highest incidence of economically active residents within the Auckland region. Waitakere city is thus a middle-income area with a high proportion of its residents in the economically active age groups and bringing up families. Economic and infrastructure development activity directed to this area can be anticipated to have high flow-on factors.

The relatively large proportion of middle and upper incomes in the Northern Growth Zone also indicates a capable workforce for smart industry growth, and also that this hinterland is likely to provide strong market support to a budget airline operation, contributing to success of the rejuvenated airport.

4.1.3 Education and Training

The northern growth zone is well provided with education and training facilities.

Unitech and Massey University have growing campuses within the zone. Both establishments are focussed on providing training for real jobs in the industrial and technical arena, such as food processing, construction and architectural skills, industrial design, IT, logistics and service skills etc.

Technical training in the health sciences is also a feature of the area, based at the North Shore campus, for nurse, medical technician and support staff training.

These educational institutions are one reason why the Albany basin has been designated for future high-tech industry development. The fact that strong communications businesses etc are starting to move out of the central Auckland City onto the North Shore are signs that this development is beginning.

4.1.4 Transport Development Planned for the Northern Zone

The transport infrastructure servicing the northern growth zone is less developed than that in the southern industrial sub-region. Transport route development planned and scheduled for construction by Transfund for the national highway network, and by the regional authority for the arterial road system are detailed below.

Whenuapai is close to one of the major arterial corridors, the upper harbour crossing, linking the vibrant commercial and industrial Albany Basin zone and North Shore with Waitakere city. Westgate at the current terminus for the Northwest Motorway is a designated development area. The congestion at present evident at the motorway terminus has been given priority for further infrastructure development.

Scheduled capital investment by Transfund within the growth zone over the coming 10-year period includes the following lists.

2000 – 2004

- Northwest Motorway (SH16) extension to Brigham Creek Road (extends congestion up the line to a new terminus)
- Extension of SH20 to Mt Roskill
- Lane expansion on the Upper Harbour Crossing (SH18) duplication of bridge capacity to allow 4 lane flows. Completion of Hobsonville deviation.

The locations of the projects are shown on the map following.

2005 – 2009

- Northwest Motorway widening to 8 lanes and 6 lanes at terminus.
- Completion of SH20 connector from Mt Roskill to the Avondale road network.

(Brigham Creek Road mentioned in the first item links SH16 with Upper Harbour Drive (SH18) and borders the Whenuapai airbase.)

The Whenuapai airbase lies a short distance to the north of Upper Harbour Drive, the main connector road, linking the Auckland regions' western and northern sectors across the upper Waitemata Harbour. A realignment of SH18 as a motorway extension to run parallel to Upper Harbour Drive has been planned. Development of Whenuapai airbase could be the critical factor in ensuring this additional harbour crossing is both justified and implemented.

Traffic growth within the Auckland region is running significantly ahead of economic and population growth. Car use has been growing at 4% per annum but traffic growth on major arterials and the motorway network has been increasing at a faster rate again. The development of the airport facility at Whenuapai will generate traffic and business directed to the "growth facility" taking at least some future pressure off the transport corridors across the isthmus.

4.2 Changes in Local Industry

In Section 2 we showed that the Northern Zone and the Southern Zone are to some extent dormitories for people who work in Auckland City. One result of this is that in Waitakere City about 60% of their people leave the city daily to go to work. There are some business developments and re-locations which indicate a trend towards employment growth in the Northern Growth Zone. The recent changes in industry employment across the region also indicate opportunities for growth of some key industries in the Zone.

4.2.1 Business Development and Re-location in Auckland Region

The employment situation in Waitakere City is reminiscent of that in North Shore twenty years ago when half the working population travelled outside the city for their employment. Commercial development beginning along the northern link route similar to that of the North Shore over the past two decades will provide the base for expanded commercial, industrial and distribution sector employment.

Within the past decade there has been a significant shift of business and commercial activity within each of the areas in the Region. One of the more evident examples of this trend has been the relocation of professional service groups such as engineering, design and IT organisations from the CBD to the periphery in such areas as Newmarket and North Shore.

On a wider perspective, the technical and business service industries are finding it increasingly difficult to recruit middle level staff for CBD locations. Several, such as Clear, took the step of relocating to the North Shore where they knew they would be able to retain key staff and recruit skilled staff. The shorter drive to work, being closer to children's schools and shopping facilities are a powerful incentive. This trend in locating major service organisations closer to the residential areas that will be the source of permanent staff can be anticipated to continue.

North Shore and the Albany Basin have been the main focus of service centre relocations in the immediate past. The past and present the pattern of job growth by industry indicates the present performance and the potential for business services-based employment growth in the Northern Growth Zone.

4.2.2 Recent Industry Employment Changes

Between 1996 and 2001 there was FTE job growth of 55,350 in the Auckland Region. Of these 21,400 were in the Auckland City, 19,000 in Northern Growth Zone, and 15,000 in the Southern Zone. This indicates some catch-up in share of employment by the Northern Zone because in 1996 employment in that Zone was only one-half of that in Auckland City.

The Auckland region industry employment patterns in 1996, in 2001, and the changes in employment between 1996 and 2001 are shown in Tables 4.2, 4.3 and 4.4 below.

The important differences in employment by industry in the Zones was that Northern Zone and Southern Zone had high relative levels of job growth in the social services (education, health, community services); and in private and recreational services. These Zones also had particularly high relative increases in the distributive sector (retail, hospitality, transport and communications industries). These are mainly population-generated jobs, rather than business-generated jobs.

All Zones had a reduction in manufacturing, especially Auckland City where manufacturing employment dropped over 8,000 FTEs or 24%.

Table 4.2: Auckland Region Employment by Industry 1996 (FTEs)						
	North Shore	Waitakere	Northern Zone	Auckland City	South Auckland	TOTAL
Agriculture	3,737	969	4,706	327	6,854	11,887
Services to Agriculture; Hunting and Trapping	206	50	256	50	540	846
Forestry and Logging	125	28	153	238	72	463
Commercial Fishing	194	24	218	237	65	520
Mining	88	18	106	110	315	531
PRIMARY	4,350	1,089	5,439	962	7,846	14,247
Food, Beverage and Tobacco	893	1,040	1,933	5,459	5,624	13,016
Textile, Clothing, Footwear & Leather Mfg	1,467	2,045	3,512	4,705	2,368	10,585
Wood and Paper Product Manufacturing	952	1,227	2,179	2,480	1,960	6,619
Printing, Publishing and Recorded Media	1,790	441	2,231	6,642	1,367	10,240
Petroleum, Coal, Chemical & Assoc Prod Mfg	1,829	920	2,749	4,770	2,981	10,500
Non-Metallic Mineral Product Manufacturing	387	299	686	1,633	574	2,893
Metal Product Manufacturing	1,435	895	2,330	5,229	5,708	13,267
Machinery and Equipment Manufacturing	2,362	1,305	3,667	7,725	6,695	18,087
Other Manufacturing	1,414	986	2,400	3,513	1,860	7,773
<i>All Manufacturing</i>	<i>12,529</i>	<i>9,158</i>	<i>21,687</i>	<i>42,156</i>	<i>29,137</i>	<i>92,980</i>
Electricity and Gas Supply	190	95	285	850	140	1,275
Water Supply, Sewerage and Drainage Services	67	44	111	213	245	569
General Construction	3,533	1,653	5,186	3,993	3,500	12,679
Construction Trade Services	4,165	2,870	7,035	6,855	4,245	18,135
SECONDARY	20,484	13,820	34,305	54,067	37,267	125,639
Basic Material Wholesaling	1,551	561	2,112	4,565	1,863	8,540
Machinery and Motor Vehicle Wholesaling	2,135	652	2,787	10,375	3,368	16,530
Personal and Household Good Wholesaling	4,144	1,010	5,154	13,240	4,299	22,693
Food Retailing	3,765	2,060	5,825	5,740	4,905	16,470
Personal and Household Good Retailing	4,735	2,283	7,018	11,795	5,802	24,615
Motor Vehicle Retailing and Services	2,606	1,633	4,239	5,843	3,217	13,299
Accommodation, Cafes and Restaurants	2,435	1,025	3,460	9,450	3,130	16,040
Road transport	1,280	1,028	2,308	3,911	3,360	9,579
Other transport; Services to Transport; Storage	526	165	691	7,585	6,212	14,488
Communication Services	1,110	425	1,535	6,220	1,380	9,135
DISTRIBUTIVE	24,287	10,842	35,129	78,724	37,536	151,389
Finance	1,113	540	1,653	6,955	1,634	10,242
Insurance	576	101	677	2,396	195	3,268
Services to Finance and Insurance	579	125	704	2,990	270	3,964
Property Services	2,733	955	3,688	6,407	2,730	12,825
Business Services	6,907	2,154	9,061	32,653	5,759	47,473
<i>All Business Services</i>	<i>11,908</i>	<i>3,875</i>	<i>15,783</i>	<i>51,401</i>	<i>10,588</i>	<i>77,772</i>
Government Administration	1,310	875	2,185	5,070	2,165	9,420
Defence	2,790	1,600	4,390	270	85	4,745
Education	3,941	2,765	6,706	12,897	7,719	27,322
Health Services	3,302	1,313	4,615	11,058	4,371	20,044
Community Services	810	340	1,150	1,880	768	3,798
<i>All Social Services</i>	<i>12,153</i>	<i>6,893</i>	<i>19,046</i>	<i>31,175</i>	<i>15,108</i>	<i>65,329</i>
Motion Picture, Radio and Television Services	221	89	310	2,960	143	3,413
Libraries, Museums and the Arts	450	166	616	1,920	233	2,769
Sport and Recreation	708	271	979	1,832	1,039	3,850
Personal Services	1,355	699	2,054	3,435	1,300	6,789
Other Services	819	409	1,227	2,481	722	4,430
<i>Private Households Employing Staff</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>35</i>	<i>55</i>	<i>90</i>
<i>All Private, Recreational Services</i>	<i>3,552</i>	<i>1,634</i>	<i>5,186</i>	<i>12,663</i>	<i>3,492</i>	<i>21,341</i>
SERVICES	27,613	12,402	40,015	95,239	29,188	164,442
TOTAL	76,734	38,154	114,888	228,992	111,837	455,717

Source: Statistics NZ and BERL Regional Database

Table 4.3: Auckland Region Employment by Industry 2001 (FTEs)						
	North Shore	Waitakere	Northern Zone	Auckland City	South Auckland	TOTAL
Agriculture	3,068	812	3,880	410	6,043	10,333
Services to Agriculture; Hunting and Trapping	254	65	319	63	728	1,110
Forestry and Logging	280	18	298	118	178	594
Commercial Fishing	162	18	180	150	71	401
Mining	120	15	135	83	231	449
PRIMARY	3,884	928	4,812	824	7,251	12,887
Food, Beverage and Tobacco	986	897	1,883	4,130	6,128	12,141
Textile, Clothing, Footwear & Leather Mfg	1,063	1,382	2,445	3,493	1,648	7,586
Wood and Paper Product Manufacturing	843	896	1,739	1,626	2,174	5,539
Printing, Publishing and Recorded Media	1,990	516	2,506	5,448	1,320	9,274
Petroleum, Coal, Chemical & Assoc Prod Mfg	1,556	1,152	2,708	3,684	2,877	9,269
Non-Metallic Mineral Product Manufacturing	399	235	634	1,343	835	2,812
Metal Product Manufacturing	1,826	771	2,597	4,793	4,950	12,340
Machinery and Equipment Manufacturing	2,436	1,922	4,358	6,346	6,541	17,245
Other Manufacturing	1,276	903	2,179	3,105	1,695	6,979
<i>All Manufacturing</i>	<i>12,375</i>	<i>8,674</i>	<i>21,049</i>	<i>33,968</i>	<i>28,168</i>	<i>83,185</i>
Electricity and Gas Supply	250	12	262	606	170	1,038
Water Supply, Sewerage and Drainage Services	48	15	63	315	238	616
General Construction	4,429	1,589	6,018	4,558	4,241	14,817
Construction Trade Services	5,384	3,650	9,034	8,105	5,523	22,662
SECONDARY	22,486	13,940	36,426	47,552	38,340	122,318
Basic Material Wholesaling	1,865	654	2,519	3,905	2,534	8,958
Machinery and Motor Vehicle Wholesaling	3,120	644	3,764	10,440	4,094	18,298
Personal and Household Good Wholesaling	4,413	1,140	5,553	14,310	4,701	24,564
Food Retailing	3,960	2,295	6,255	6,635	4,744	17,634
Personal and Household Good Retailing	5,591	2,724	8,315	11,075	7,038	26,428
Motor Vehicle Retailing and Services	2,936	1,619	4,555	5,839	4,019	14,413
Accommodation, Cafes and Restaurants	3,065	1,050	4,115	11,340	4,525	19,980
Road transport	1,424	1,180	2,604	3,160	3,811	9,575
Other transport; Services to Transport; Storage	924	229	1,153	7,492	6,986	15,631
Communication Services	2,865	435	3,300	6,330	1,547	11,177
DISTRIBUTIVE	30,163	11,970	42,133	80,526	43,999	166,658
Finance	899	387	1,286	7,405	931	9,622
Insurance	912	38	950	2,560	100	3,610
Services to Finance and Insurance	1,126	143	1,269	3,620	344	5,233
Property Services	2,571	964	3,535	6,241	2,907	12,683
Business Services	9,884	3,206	13,090	48,525	9,012	70,627
<i>All Business Services</i>	<i>15,392</i>	<i>4,738</i>	<i>20,130</i>	<i>68,351</i>	<i>13,294</i>	<i>101,775</i>
Government Administration	1,215	685	1,900	4,310	2,303	8,513
Defence	2,040	1,420	3,460	110	0	3,570
Education	4,880	2,955	7,835	14,210	7,958	30,003
Health Services	5,037	1,655	6,692	13,470	6,109	26,271
Community Services	2,085	1,010	3,095	4,120	2,730	9,945
<i>All Social Services</i>	<i>15,257</i>	<i>7,725</i>	<i>22,982</i>	<i>36,220</i>	<i>19,100</i>	<i>78,302</i>
Motion Picture, Radio and Television Services	289	184	473	3,580	132	4,185
Libraries, Museums and the Arts	614	252	866	2,235	339	3,440
Sport and Recreation	1,048	360	1,408	2,703	1,115	5,226
Personal Services	1,527	873	2,400	3,655	1,650	7,705
Other Services	1,419	751	2,170	4,710	1,673	8,553
<i>Private Households Employing Staff</i>	<i>0</i>	<i>9</i>	<i>9</i>	<i>15</i>	<i>0</i>	<i>24</i>
<i>All Private, Recreational Services</i>	<i>4,897</i>	<i>2,429</i>	<i>7,326</i>	<i>16,898</i>	<i>4,909</i>	<i>29,133</i>
SERVICES	35,546	14,892	50,438	121,469	37,303	209,210
TOTAL	92,079	41,730	133,809	250,371	126,893	511,073

Source: Statistics NZ and BERL Regional Database

Table 4.4: Auckland Region Industrial Employment Change 1996 - 2001 (FTEs)						
	North Shore	Waitakere	Northern Zone	Auckland City	South Auckland	TOTAL
Agriculture	-668	-157	-826	83	-811	-1,554
Services to Agriculture; Hunting and Trapping	48	15	63	13	188	264
Forestry and Logging	155	-10	145	-120	106	131
Commercial Fishing	-32	-6	-38	-87	6	-119
Mining	32	-3	29	-27	-84	-82
PRIMARY	-465	-161	-627	-138	-595	-1,360
Food, Beverage and Tobacco	93	-143	-50	-1,329	504	-875
Textile, Clothing, Footwear & Leather Mfg	-404	-663	-1,067	-1,212	-720	-2,999
Wood and Paper Product Manufacturing	-109	-331	-440	-854	214	-1,080
Printing, Publishing and Recorded Media	200	75	275	-1,194	-47	-966
Petroleum, Coal, Chemical & Assoc Prod Mfg	-273	232	-41	-1,086	-104	-1,231
Non-Metallic Mineral Product Manufacturing	12	-64	-52	-290	261	-81
Metal Product Manufacturing	391	-124	267	-436	-758	-927
Machinery and Equipment Manufacturing	74	617	691	-1,379	-154	-842
Other Manufacturing	-138	-83	-221	-408	-165	-794
<i>All Manufacturing</i>	<i>-154</i>	<i>-484</i>	<i>-638</i>	<i>-8,188</i>	<i>-969</i>	<i>-9,795</i>
Electricity and Gas Supply	60	-83	-23	-244	30	-237
Water Supply, Sewerage and Drainage Services	-19	-29	-48	102	-7	47
General Construction	896	-64	832	565	741	2,138
Construction Trade Services	1,219	780	1,999	1,250	1,278	4,527
SECONDARY	2,002	120	2,121	-6,515	1,073	-3,321
Basic Material Wholesaling	314	93	407	-660	671	418
Machinery and Motor Vehicle Wholesaling	985	-8	977	65	726	1,768
Personal and Household Good Wholesaling	269	130	399	1,070	402	1,871
Food Retailing	195	235	430	895	-161	1,164
Personal and Household Good Retailing	856	441	1,297	-720	1,236	1,813
Motor Vehicle Retailing and Services	330	-14	316	-4	802	1,114
Accommodation, Cafes and Restaurants	630	25	655	1,890	1,395	3,940
Road transport	144	152	296	-751	451	-4
Other transport; Services to Transport; Storage	398	64	462	-93	774	1,143
Communication Services	1,755	10	1,765	110	167	2,042
DISTRIBUTIVE	5,876	1,128	7,004	1,802	6,463	15,269
Finance	-214	-153	-367	450	-703	-620
Insurance	336	-63	273	164	-95	342
Services to Finance and Insurance	547	18	565	630	74	1,269
Property Services	-162	9	-153	-166	177	-142
Business Services	2,977	1,052	4,029	15,872	3,253	23,154
<i>All Business Services</i>	<i>3,484</i>	<i>863</i>	<i>4,347</i>	<i>16,950</i>	<i>2,706</i>	<i>24,003</i>
Government Administration	-95	-190	-285	-760	138	-907
Defence	-750	-180	-930	-160	-85	-1,175
Education	939	190	1,129	1,313	239	2,681
Health Services	1,735	342	2,077	2,412	1,738	6,227
Community Services	1,275	670	1,945	2,240	1,962	6,147
<i>All Social Services</i>	<i>3,104</i>	<i>832</i>	<i>3,936</i>	<i>5,045</i>	<i>3,992</i>	<i>12,973</i>
Motion Picture, Radio and Television Services	68	95	163	620	-11	772
Libraries, Museums and the Arts	164	86	250	315	106	671
Sport and Recreation	340	89	429	871	76	1,376
Personal Services	172	174	346	220	350	916
Other Services	600	342	943	2,229	951	4,123
<i>Private Households Employing Staff</i>	<i>0</i>	<i>9</i>	<i>9</i>	<i>-20</i>	<i>-55</i>	<i>-66</i>
<i>All Private, Recreational Services</i>	<i>1,345</i>	<i>795</i>	<i>2,140</i>	<i>4,235</i>	<i>1,417</i>	<i>7,792</i>
SERVICES	7,933	2,490	10,423	31,275	12,107	44,768
TOTAL	15,345	3,577	18,922	21,379	15,056	55,356

Source: Statistics NZ and BERL Regional Database

The largest single increase in employment was an increase of 17,000 FTEs in business services in Auckland City, which is 71% of the increase in that industry. There was growth of only 4,300 in business services in Northern Zone (mostly in North Shore City), and 2,700 in the Southern Zone.

4.3 Opportunities for Employment Growth in the Northern Zone

The main area where there is a potential for the Northern Growth Zone to target higher employment growth is in the business services industry. This industry is particularly attractive as expanded business services improve the production environment for other businesses. They also provide higher income jobs, with an industry-wide average of \$45,000 per annum per FTE, compared with the service-based industries of retail, hospitality, personal services and recreation where the industry averages are about \$22,000 per annum per FTE.

The business services industry is such a big factor in Auckland growth that had the Northern Growth Zone attracted one-half of the new jobs in the region, namely 12,000 jobs instead of the 4,300 it actually attracted then the overall spread of job growth would have been in the ratios Northern Growth Zone 50: Southern Zone 25: Central City 25.

Lifting the business services functions in the Northern Growth Zone is the key to economic transformation, prosperity and sustainable future growth of population, employment and industry in the Zone. The rejuvenation of Whenuapai Airport with a budget carrier, giving immediate access to air travel and courier / parcel / freight capacity would provide a major stimulus to business service enterprises to locate in the Northern Growth Zone with good road access to Whenuapai Airport.

The likely development of a logistics node around Whenuapai Airport would involve a strong set of industries with middle-income, technical jobs- an expansion of the present pattern of jobs and incomes in the Northern Growth Zone.

As well as these industries, the zone would also receive a major boost to tourism, recreation, accommodation and cultural attractions with the increased Trans-Tasman visitor flow generated by the budget airline based at Whenuapai.

With business services, logistics, tourism, recreation and other desirable industries leading the way to a broad expansion of employment in the whole Northern Growth Zone, this would balance and perhaps reverse the congestion flow into the isthmus for employment. In turn this would allow better access across the isthmus and thus throughout the region for enjoyment of the attractions of the greater Auckland region for Aucklanders and visitors alike.

The result would be a much better functionality and efficiency on the expanding quality regional infrastructure framework.

5 APPENDIX

TABLE A.1: ESTIMATION OF ADDITIONAL REGIONAL BENEFIT FROM TRANS-TASMAN VISITORS

Potential Net Benefits on a Per Annum Basis	Expansion of Market (%)	Overseas Passenger Arrivals (No)	Total Visitor Days (No)	Average Spend/Day (\$)	Total Expenditure (\$m)	Total Value Added (GDP) (\$m)	Total Employment (FTEs) (No)
Base Case Australian Residents							
Business	0%	95,562	1,450	290	139	58	1,193
VFR	0%	145,112	690	46	100	42	862
Holiday	0%	74,326	420	168	31	13	269
Total	0%	315,000	857	0	270	114	0
Base Case Non- Australian Residents							
Business	0%	39,438	262,637	\$290	\$76	\$32	656
VFR	0%	59,888	1,025,040	\$46	\$90	\$38	777
Holiday	0%	30,674	451,528	\$168	\$76	\$32	653
Total	0%	130,000	1,739,205	\$139	\$242	\$102	2,086
Gain with Budget Airline:	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>
Low Australian Market Response							
Business	23%	22,050	110,250	\$290	\$32	\$13	275
VFR	17%	25,200	378,000	\$46	\$17	\$7	150
Holiday	21%	15,750	55,125	\$168	\$9	\$4	80
Total	20%	63,000	543,375	\$108	\$59	\$25	505
Moderate Australian Market Response							
Business	46%	44,100	220,500	\$290	\$64	\$27	551
VFR	35%	50,400	756,000	\$46	\$35	\$15	300
Holiday	42%	31,500	110,250	\$168	\$19	\$8	160
Total	40%	126,000	1,086,750	\$108	\$117	\$49	1,010
Low Non-Australian Market Response							
Business	3%	2,600	13,000	\$290	\$4	\$2	32
VFR	4%	5,850	87,750	\$46	\$4	\$2	35
Holiday	6%	4,550	15,925	\$168	\$3	\$1	23
Total	10%	13,000	116,675	\$90	\$10	\$4	90
Moderate Non-Aust. Market Response							
Business	5%	5,200	26,000	\$290	\$8	\$3	65
VFR	8%	11,700	175,500	\$46	\$8	\$3	70
Holiday	12%	9,100	31,850	\$168	\$5	\$2	46
Total	20%	26,000	233,350	\$90	\$21	\$9	181
TOTAL Low Market Response		76,000	660,050		\$69	\$29	595
TOTAL Moderate Market Response		152,000	1,320,100		\$138	\$58	1,190

Source: Statistics New Zealand; BERL research, calculations

TABLE A.2: ESTIMATION OF ADDITIONAL NATIONAL BENEFIT FROM TRANS TASMAN VISITORS

Potential Net Benefits on a Per Annum Basis	Expansion of Market (%)	Overseas Passenger Arrivals (No)	Total Visitor Days (No)	Average Spend/Day (\$)	Total Expenditure (\$m)	Total Value Added (GDP) (\$m)	Total Employment (FTEs) (No)
Base Case Australian Residents							
Business	0%	95,562	1,450	290	139	58	1,193
VFR	0%	145,112	690	46	100	42	862
Holiday	0%	74,326	420	168	31	13	269
Total	0%	315,000	857	0	270	114	0
Base Case Non- Australian Residents							
Business	0%	39,438	262,637	\$290	\$76	\$32	656
VFR	0%	59,888	1,025,040	\$46	\$90	\$38	777
Holiday	0%	30,674	451,528	\$168	\$76	\$32	653
Total	0%	130,000	1,739,205	\$139	\$242	\$102	2,086
Gain with Budget Airline:	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>	<i>(net gain)</i>
Low Australian Market Response							
Business	23%	22,050	110,250	\$290	\$32	\$13	275
VFR	17%	25,200	378,000	\$46	\$17	\$7	150
Holiday	21%	15,750	55,125	\$168	\$9	\$4	80
Total	20%	63,000	543,375	\$108	\$59	\$25	505
Moderate Australian Market Response							
Business	46%	44,100	220,500	\$290	\$64	\$27	551
VFR	35%	50,400	756,000	\$46	\$35	\$15	300
Holiday	42%	31,500	110,250	\$168	\$19	\$8	160
Total	40%	126,000	1,086,750	\$108	\$117	\$49	1,010
Low Non-Australian Market Response							
Business	3%	2,600	13,000	\$290	\$4	\$2	32
VFR	4%	5,850	87,750	\$46	\$4	\$2	35
Holiday	6%	4,550	15,925	\$168	\$3	\$1	23
Total	10%	13,000	116,675	\$90	\$10	\$4	90
Moderate Non-Aust. Market Response							
Business	5%	5,200	26,000	\$290	\$8	\$3	65
VFR	8%	11,700	175,500	\$46	\$8	\$3	70
Holiday	12%	9,100	31,850	\$168	\$5	\$2	46
Total	20%	26,000	233,350	\$90	\$21	\$9	181
TOTAL Low Market Response		76,000	660,050		\$69	\$29	595
TOTAL Moderate Market Response		152,000	1,320,100		\$138	\$58	1,190

Source: Statistics New Zealand; BERL research, calculations

TABLE A.3:EMPLOYMENT IMPACT OF AIRPORT OPERATION INCLUDING AIRLINE STAFF

Activity	Additional Direct Employment (FTEs)	Industry Multipliers Type IB	Additional Direct + Indirect Employment (FTEs)	Industry Multipliers Type II	Additional Direct + Indirect + Induced Employment (FTEs)
<i>Airport Co</i>	45	1.60	72	2.00	90
Airline Servicing Coys					
Oil Coys	5	1.59	8	2.02	10
Other Airline Servicing	25	1.60	40	2.00	50
Freight Coys	25	1.60	40	2.00	50
<i>Airline Servicing Coys</i>	55		88		110
Airport Visitor Servicing Coys					
Retail	30	1.59	48	2.02	61
Catering	10	1.64	16	2.01	20
Taxis & Buses	75	1.60	120	2.00	150
Car Parks	0	1.60	0	2.00	0
Rental Cars	15	1.60	24	2.00	30
<i>Airport Visitor Servicing Coys</i>	130		208		261
<i>Government Agencies</i>	30	1.47	44	2.04	61
<i>Airlines</i>	150	1.60	240	2.00	300
TOTAL	410		652		822