

APPENDIX 6(a)

WIAL'S COMMENTS ON HISTORIC AND FORECAST PASSENGER ACTIVITY LEVELS AT WELLINGTON AIRPORT (INCORPORATING TOURISM FUTURES INTERNATIONAL STUDY – MARCH 2001) (APPENDIX 6(b))

1 Introduction

The commentary below draws primarily from two pieces of analysis. These are

- ◆ Leigh Fisher Associates (LFA) – Traffic Capacity Forum – Aviation Demand Study 1997
- ◆ Tourism Futures International (TFI) – Aviation Activity Forecasts – March 2001

The LFA document was commissioned by the aviation industry (airlines, airports and Airways NZ) in response to growing concern over the costs of delay, in particular at Wellington airport. Its particular focus was on passenger growth and the implications for aircraft movements and mix of aircraft particularly in the peak hour.

The TFI document was commissioned by WIAL as an input to its annual planning round and forthcoming pricing consultation with airlines. The focus is slightly different in that it examines the likely mix of aircraft to meet forecast demand and peak hour stand demand, but addresses issue such as likely tonnage, seats etc that prospective form an input to WIAL's current pricing structure.

2 Historic and forecast passenger mix

The table below extracted from the Leigh Fisher report supplemented by later results shows the mix and absolute levels of domestic and international passengers, and their relative growth since 1980.

	Int pax	Av. Annual change	Dom. Pax	Av. Annual change	Total pax	% share int. pax
1981	166,500		1,437,200		1,603,700	10.4%
1982	140,700	-15.5%	1,390,900	-3.2%	1,531,600	9.2%
1983	128,500	-8.7%	1,392,100	0.1%	1,520,600	8.5%
1984	119,300	-7.2%	1,610,800	15.7%	1,730,100	6.9%
1985	132,100	10.7%	1,730,200	7.4%	1,862,300	7.1%
1986	182,700	38.3%	1,843,300	6.5%	2,026,000	9.0%
1987	222,700	21.9%	2,047,700	11.1%	2,270,400	9.8%
1988	260,300	16.9%	2,212,400	8.0%	2,472,700	10.5%
1989	234,100	-10.1%	2,236,100	1.1%	2,470,200	9.5%
1990	246,000	5.1%	2,273,000	1.7%	2,519,000	9.8%
1991	189,228	-23.1%	2,354,433	3.6%	2,543,661	7.4%
1992	207,085	9.4%	2,484,546	5.5%	2,691,631	7.7%
1993	232,190	12.1%	2,658,916	7.0%	2,891,106	8.0%
1994	251,729	8.4%	2,833,801	6.6%	3,085,530	8.2%
1995	279,422	11.0%	2,978,166	5.1%	3,257,588	8.6%
1996	318,274	13.9%	2,940,476	-1.3%	3,258,750	9.8%
1997	344,314	8.2%	2,961,528	0.7%	3,305,842	10.4%

1998	372,886	8.3%	3,123,204	5.5%	3,496,090	10.7%
1999	436,522	17.1%	3,119,843	-0.1%	3,556,365	12.3%
2000	444,553	1.8%	3,168,398	1.6%	3,612,951	12.3%

Note: The figures will not fully reconcile with CIP statistics because they are for different yearly intervals and the 1999 figure is annualised.

On average international passengers have increased by 5.2% per annum since 1981, domestic passengers by 4.1%. International passengers make up 12% of the total numbers.

By contrast with the latest information in CIP Appendix 1 show for the other airports

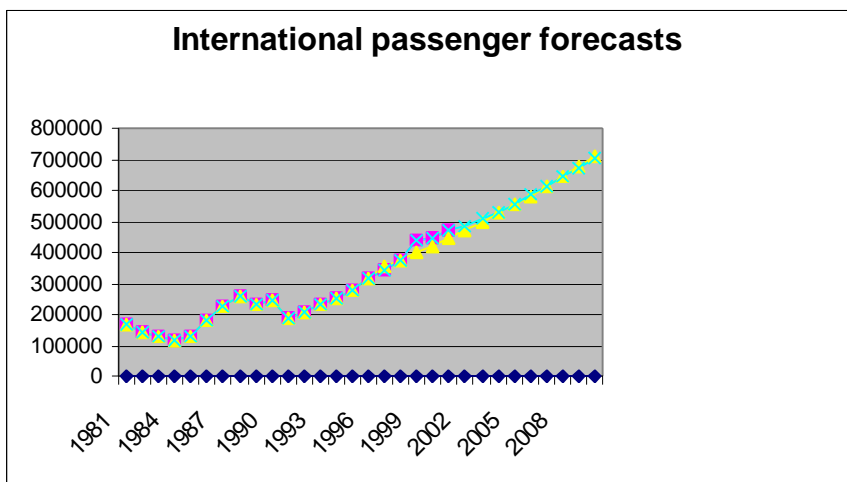
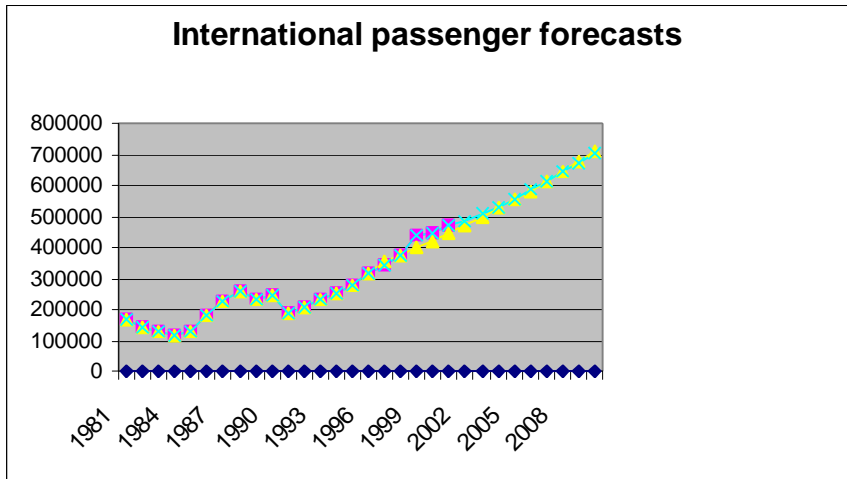
	Auckland	Christchurch	Wellington
Int pax – 2000	4,799,236	1,066,495	444,553
Dom pax – 2000	3,206,806	3,017,888	3,168,398
Share int pax	60%	26%	12%

The significance of these figures are threefold

- ◆ The airfield asset base to serve these volumes would be different, in light of both CIAL and AIAL serving long-haul destinations with larger (heavier) jet aircraft.
- ◆ The cost structure would be higher, in that items such as level of rescue fire coverage etc are dependent on aircraft size parameters and the overall size of the airfield (based on response times)
- ◆ Because the aircraft used are heavier, and the volumes greater, the per unit cost (normally MCTOW) ought to be lower.

3 Forecast passenger growth

Historic growth and both TFI 2001 forecast and LFA 1997 forecast are shown in the graphs below.



What the figures show is that over the next 10 years WIAL's expectation is that passenger growth rates will track the LFA forecasts at rates marginally below the average growth rates over the past 20 years. The slowing in growth rates reflects the tight commercial environment the airlines are operating in Australasia, and the perhaps leap in growth brought about when Ansett NZ entered the market in 1986.

WIAL also expects international passenger growth rates to be higher than domestic growth such that by 2010 international passengers will make up around 14% of total numbers.

4 Aircraft activity - annual

What the analysis above does not disclose is a fundamental change in the current and forecast future pattern of aircraft movements at WIA which goes to the heart of commercial arrangements between WIAL and carrier. The changes are:

- ◆ The shift towards smaller jets (B737) on the trans-Tasman sector
- ◆ The substitution of turbo-prop aircraft for jets in the "trunk"

When pricing is on a MCTOW basis, which is an industry norm for the airfield assets, the commercial impact is quite severe.

This is demonstrated in the tables below

4.1 International services

LFA forecasts

	1997	2000	2005	2010
Passengers	344 ,314	421,000	556,000	711,000
230 seat (B767)	1,853	874	1,200	1,800
110 seat type (B737)	872	3,726	4,800	5,400
150 seat type (A320)	0	0	0	0
Total movements	2,725	4,600	6,000	7,200
Total landed MCTOW (000kg)	192,930	190,440	252,000	324,000
Total landed seats	261,055	305,440	402,000	504,000
Load factor	66%	69%	69%	70%
MCTOW per arriving passenger (000kg)	1.12	0.90	0.91	0.91

TFI forecasts – note 2000 are actual results – source tables 4.1, 4.2, 4.5 and 4.6 – Tourism Futures Report in Appendix 6B

	1997	2000	2005	2010
Passengers	344 ,314	444,553	557,000	705,000
230 seat (B767)	1,853	398	151	363
110 seat type (B737)	872	4,362	3,658	3,565
150 seat type (A320)	0	0	1,853	2,893
Total movements	2,725	4,760	5,662	6,821
Total landed MCTOW (000kg)	192,930	166,680	192,000	245,000
Total landed seats	261,055	285,680	366,000	462,000
Load factor	66%	78%	77%	77%
MCTOW per arriving passenger (000kg)	1.12	0.75	0.68	0.68

The decisions airlines make about aircraft mix have a major impact on the airfield business.

Comparing LFA with TFI for the year 2010 the impact is.

Difference in forecast pax numbers	(6,000)	(1%)
Difference in forecast movements	(378)	(5%)
Difference in forecast seats	(42,000)	(8%)
Difference in forecast MCTOW (000kg)	(79,000)	(24%)

In other words for a 1% decrease in forecast passenger numbers airlines can have, through its fleet planning can reduce forecast MCTOW by 24%

Given TFI figures are only a forecast, the actual result in 2000 versus LFA forecast is also instructive

Difference in forecast pax numbers	23,553	5%
Difference in forecast movements	160	3%
Difference in forecast seats	(19,760)	(6%)
Difference in forecast MCTOW (000kg)	(23,760)	(12%)

What these tables demonstrate is the vulnerability of an airport to fleet mix and marketing decisions of an airline. These decisions have little to do with the airfield charging regime.

In the 2010 example above the airfield land, infrastructure and safety service assets required would at a minimum be the same for both scenarios notwithstanding, applying current charges, there is a decrease in airfield revenues of around \$1m under the TFI forecast.

Under the TFI forecast in 2010 there is potentially greater prospect of further gates being required to cater for peak demand.

4.2 Domestic services

A similar picture emerges for domestic services, although somewhat exaggerated because of the impact in 2000-2001 of the Ansett pilot dispute. In addition the calculations of landed MCTOW and seats are based on a blended rate between different types of aircraft so are not as precise as those – calculated for international.

4.3 Implications for the airfield business

The tables above demonstrate that given similar forecasts of passenger volumes, airlines can and do have a significant impact on the airfield business by virtue of their fleet mix decisions, that are made for a variety of reasons, with airfield charges being a minor component.

In WIAL's case the switch from B767 to B737 aircraft on the trans-Tasman, and from BAE146/B737 to ATR72/DHC8 on the trunk routes has severely impacted WIAL's revenue.

Charges are traditionally MCTOW based for airfield because this appears a reasonable proxy for the amount of infrastructure used, and the type of services required. This is more so on the runway/movement area but less apparent on the apron.

The costs of the airfield business are largely fixed, (land and infrastructure) or stepped. There are few truly variable costs, whereas the tables above show that revenue is truly variable.

The in the airfield business, commercial influence lies with the airlines, not the airport.

5 Conclusions

Airlines have demonstrated at WIA the ability to substantially change their fleet mix and improve load factors in the face of similar passenger demand profiles,

The costs of the airfield business cannot be varied in response to this change in demand profile.