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Recent developments in population movement and growth in the Western Bay of Plenty

Professor Richard Bedford
Deputy Vice-Chancellor (Research) and
Convenor, Migration Research Group
University of Waikato

1. A Regional "Snapshot"

(The following statements are drawn from information contained in Statistics New Zealand's "2001 Census Snapshot 7: Internal Migration" which can be found at www.stats.govt.nz under "Census 2001").

- More than half the people living in the Bay of Plenty in 2001 had changed their places of usual residence since 1996 (higher than the average for New Zealand).
- The Bay of Plenty's net gain of people moving between regions of 8,580 between 1996 and 2001 was the second largest for any region (Canterbury had a slightly larger net gain of 8,690, while Auckland region actually lost more people than it gained (-2,360) from other parts of the country).
- The Bay of Plenty's net migration gain from Auckland between 1996 and 2001 (2,520) was the largest net migration gain recorded in any region from another region.
- The Bay of Plenty region had the largest net migration gain for the 25-64 year age group.
- The Bay of Plenty had the largest net migration gain for the 65 and over age group.
- The Bay of Plenty had the largest net internal migration gain for adults with a vocational qualification as their highest qualification.

2. Some Features of the Sub-Region's Population Growth, 1996-2001

(The following information is drawn from two sources. The figures for population growth come from Tables 1 and 1A in the “2001 Census: Regional Summary (2001) – Reference Reports” published on the Statistics New Zealand web site on 2 May. The estimates of total net migration into and out of Tauranga District and Western Bay District (i.e. the balance between people moving in from or moving out to other parts of NZ as well as overseas) between 1996 and 2001 were prepared by Statistics New Zealand. The total net migration estimates cannot be obtained directly from the Census data because we do not have information on where people who left the Bay between 1996 and 2001 for overseas destinations were living in 2001. The population numbers cited below have been rounded to the nearest 10).

2.1 Tauranga District

- Tauranga District’s population of 90,900 in 2001 had grown by 13,130 (17 %) since 1996 – the largest intercensal increase in population for any District (or City) in New Zealand. The intercensal increase in the New Zealand population during the same period was 3%. Hamilton City’s intercensal increase was 6 % while the greater Auckland urban area’s population grew by 8%.

Tauranga District’s Maori population of 14,110 in 2001 was 1,870 (15%) larger than it had been in 1996 – again the largest intercensal increase in Maori for any District or City. The intercensal increase in the Maori population for New Zealand during the same period was only 0.6 % -- a very misleading figure because of the different questions seeking information on people’s ethnicity in 1996 and 2001. Many Districts had smaller Maori populations in 2001 than they did in 1996 because of the change in the ethnicity question which makes the increase is 15% in Tauranga District’s population even more distinctive.

When the 1991 and 2001 figures for Maori population are compared, more realistic estimates of population growth can be found because the census questions on ethnicity in the two censuses are the same. Between 1991 and 2001 Tauranga District’s Maori population increased by 58% (from 8,910 to 14,110) – again the largest increase over the decade for any Territorial Local Authority (TLA) in the country. Over the same period New Zealand’s Maori population increased by 17 percent (from 434,850 to 526,280). In Hamilton City the increase in Maori population between 1991 and 2001 was 46%

(from 14,610 to 21,360) while the increase in the greater Auckland urban area was 22%.

- Tauranga District had the highest estimated total (internal plus international) net migration gain (10,500) between 1996 and 2001 of any TLA in New Zealand (including the Auckland cities with their large influxes of immigrants from overseas. Auckland actually lost more people to other parts of New Zealand between 1996 and 2001 than it gained through internal migration – see Helen Tunnah’s article “Lining up to leave Auckland” in the *New Zealand Herald* 7 May 2001, p. A2).

The estimated total net gain of 10,500 is made up of a gain through internal migration of 10,030 and a gain from overseas migration of 470. The estimated total net migration gain for Maori in Tauranga District between 1996 and 2001 is 1,290 – 1,260 from other parts of New Zealand and 30 from overseas.

- The total net migration gain of 10,500 accounted for 80% of the overall population increase of 13,100 in Tauranga District between 1996 and 2001 – a clear demonstration of the importance of migration as a driver of population growth in this part of New Zealand. It is not possible to calculate the contribution total Maori net migration (1,290) made to the overall growth in Tauranga District’s Maori population because of the understatement in overall growth caused by the use of different census questions on ethnicity in 1996 and 2001. It will be less than the 69% that is obtained when comparing the migration estimate of 1,290 with the overall increase in the District’s Maori population of 1,870 mentioned in the previous bullet point.
- Tauranga District’s population in 2001 included the following ethnic components. Note that these do not sum to the total of 90,900 because some people identify with more than one ethnic group and are therefore counted as part of each of the groups with which they identify.

European ethnicities:	76,770
Maori ethnicity:	14,110
Pacific ethnicities:	1,400
Asian ethnicities:	2,160

Tauranga District had net gains from internal migration in all of these ethnic components between 1996 and 2001. The net gains were:

European (8,810), Maori (1,190), Pacific (132), Asian (50)

2.2 Western Bay of Plenty District

- Western Bay of Plenty District's population of 38,230 in 2001 had grown by 3,260 (9%) since 1996 – about half of the percentage increase of the previous five year period (17%) but still larger than that in either Hamilton or Auckland.

Western Bay of Plenty's Maori population of 6,400 had increased by 190 (3%) since 1996 but, as noted above for Tauranga District, this is an understatement of the real increase in the Maori population because of the different ways ethnicity was measured in 1996 and 2001. The 38% increase in the District's Maori population between 1991 and 2001 (from 4,640 to 6,400) is a better guide to growth in this component of the population. This is lower than the percentage increase recorded for Tauranga District (58%) but still well above the national average of 17% and the Auckland increase of 22%.

- Western Bay of Plenty District had the 10th largest total estimated net migration gain between 1996 and 2001 (2,070), just above that for Queenstown-Lakes District and just below that for Tasman District. The 2070 total net migration gain is made up of a net gain of 2,230 from internal migration and a net loss of –160 through overseas migration.

The Maori total net migration gain is estimated to be 210 made up of 220 gained through internal migration and a net loss of 10 through overseas migration between 1996 and 2001. It is important to appreciate that these are estimates. We do not have information on Maori (or other New Zealanders) living overseas in 2001 to work out the actual flows of people into and out of the Bay between 1996 and 2001.

- Western Bay of Plenty's population in 2001 included the following ethnic components.

European ethnicities:	31,890
Maori ethnicity:	6,400

Pacific ethnicities: 540
Asian ethnicities: 540

Net migration:

European (2,340), Maori (280), Pacific (80), Asian (-24)

2.3 The Western Bay of Plenty Sub-Region (the Western Bay)

- The Western Bay's population of 129,140 in 2001 had grown by 16,400 (14.5%) between 1996 and 2001 – much faster than the growth recorded for Hamilton City or the greater Auckland urban area, and almost 5 times faster than the increase of 3% in the country's population.

The Western Bay's Maori population of 20,510 in 2001 had grown by 2,060 (11%) since 1996 and 6,960 (51%) since 1991. As noted above, the increase between 1996 and 2001 is an understatement, and the growth over the 10 years gives a better idea of increases in recent years.

- The total net migration gain to the Western Bay of 12,570 accounted for approximately 77% of the sub-region's total population growth of 16,400 between 1996 and 2001. For the sub-region as a whole, migration, especially internal migration, is the major driver of population growth.
- Estimating how migration flows might change in the future is therefore critical for the estimates of future population size and composition. Because of the declining contribution that natural increase (the balance of births over deaths) is making to population growth throughout New Zealand (see the latest statistics on births and deaths released by Statistics New Zealand on 2 May), internal and international migration will become increasingly important drivers of both regional as well as national population change in the future.

In the next section the main components of the Western's Bay's population are identified with reference to their residence status in 1996 and 2001. This analysis enables us to see how important in-migration as well as out-migration is for the sub-region's population.

3. The main components of the Western Bay's population in 2001

(The information in this section comes from a series of special tables obtained from Statistics New Zealand on migration to and from the two Districts in the Western Bay. Dr Elsie Ho, Senior Research Fellow in the Migration Research Group has extracted the data below from the base tables).

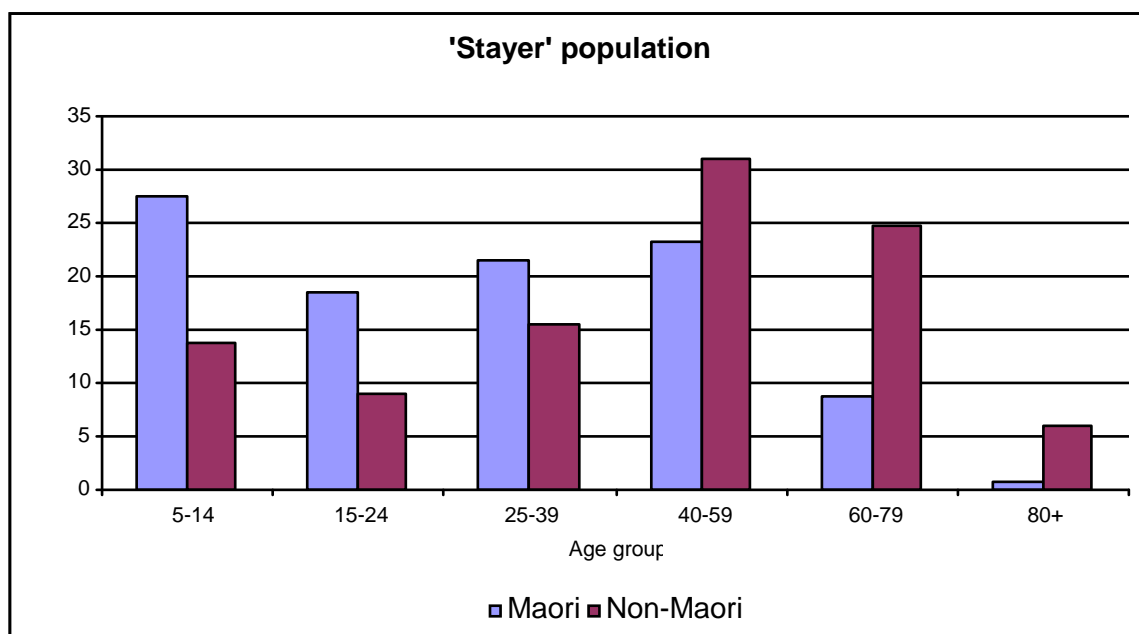
3.1 The 'stayers'

- In both Tauranga District and Western Bay of Plenty District, 58% of their populations in 2001, who were aged 5 years and over, had been living in the same District in 1996 (not necessarily the same house, but the same District). There was a slightly smaller proportion of Maori 'stayers' (54%) than non-Maori (59%).
- The age compositions of the 'stayer' Maori and non-Maori (*italics*) populations in Tauranga District (TD), Western Bay of Plenty District (WBD) and the Western Bay Sub-Region (SR) are shown in Table 1. There are major differences in the age structures of the two population components with the Maori 'stayers' being much more youthful than the non-Maori 'stayers'. Whereas 30% of the latter are aged 60 years or older, only 9.5% of Maori 'stayers' in the sub-region are in this age group. Almost half of the Maori 'stayers' are under the age of 25 years (46%) compared with 23% of non-Maori.
- There are also some differences in the age composition of the 'stayers' in the two Districts with the Western Bay of Plenty District's Maori population being slightly older than the Tauranga District's Maori 'stayers', while the converse is the case for the non-Maori population. There are slightly higher proportions of non-Maori 'stayers' in Tauranga District aged over 60 and also in the age groups 15-24 and 25-39.

Table 1: Age composition of the 'stayer' populations

Age Group	Maori			<i>Non-Maori</i>		
	TD	WBD	SR	<i>TD</i>	<i>WBD</i>	<i>SR</i>

5-14	27.5	27.3	27.5	12.9	15.9	13.7
15-24	19.2	17.1	18.5	9.3	8.8	9.1
25-39	22.1	19.8	21.4	16.3	13.3	15.4
40-59	22.9	23.8	23.3	29.7	33.6	30.9
60-79	7.7	10.8	8.7	25.0	24.4	24.8
80+	0.6	1.3	0.8	6.8	4.1	6.0
Number	7,600	3,550	11,150	45,090	18,640	63,730

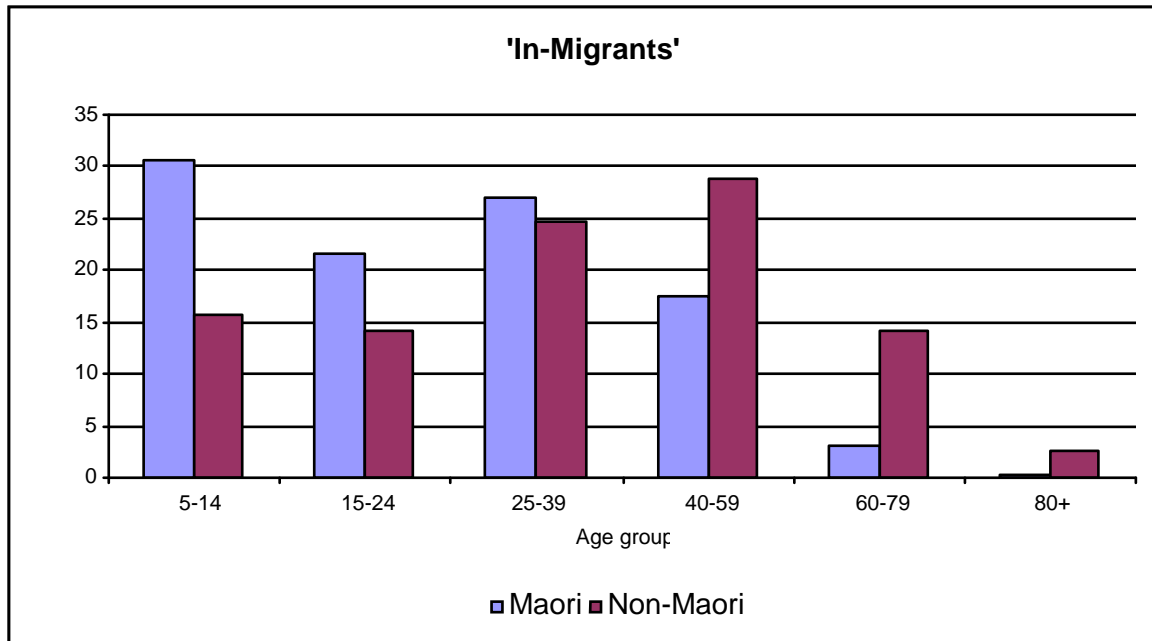


3.2 The local in-migrants

- Western Bay of Plenty District gained more people from Tauranga District (3,250) between 1996 and 2001 than Tauranga District did from Western Bay of Plenty (2,900). Eight percent of the residents in Western Bay of Plenty District in 2001 had been living in Tauranga District in 1996 while only 3% of Tauranga's population had been living in Western Bay of Plenty. The patterns and proportions for Maori and non-Maori were similar – in both cases local in-migration was larger into Western Bay of Plenty District (Table 2).

Table 2: Age composition of the local in-migrant populations

Age Group	Maori			<i>Non-Maori</i>		
	TD	WBD	SR	<i>TD</i>	<i>WBD</i>	<i>SR</i>
5-14	31.8	29.4	30.5	<i>11.4</i>	<i>19.6</i>	<i>15.7</i>
15-24	24.3	19.2	21.5	<i>19.0</i>	<i>9.7</i>	<i>14.1</i>
25-39	29.1	25.4	27.1	<i>20.8</i>	<i>28.1</i>	<i>24.7</i>
40-59	12.2	22.0	17.5	<i>27.1</i>	<i>30.2</i>	<i>28.8</i>
60-79	2.0	4.0	3.1	<i>18.9</i>	<i>9.9</i>	<i>14.1</i>
80+	0.7	0.0	0.3	<i>2.8</i>	<i>2.4</i>	<i>2.6</i>
Number	440	530	970	<i>2,470</i>	<i>2,740</i>	<i>5,210</i>



- The age compositions of the local in-migrants are shown in Table 2. In the case of Tauranga District, there were higher proportions of Maori moving in from Western Bay District in the 5-14, 15-24 and 25-39 age groups than was the case for Maori moving from Tauranga to the Western Bay. Almost a quarter of the latter were aged between 40 and 59 years compared with 12 percent of the Maori moving into Tauranga from the Western Bay.
- Amongst the non-Maori population, the age compositions of local in-migrants into Tauranga and Western Bay were quite different. There were higher proportions of 5-14, 25-39 and 40-59 year olds in the flows into Western Bay from Tauranga, while the converse was true for the age groups 15-24 and 60-79 where there were larger proportions for the flows into Tauranga from Western Bay (Table 2).
- The local in-migrant populations for both Maori and non-Maori differed from the 'stayer' populations, generally being more youthful with higher concentrations in the 5-14, 15-24 and 25-39 age groups. Local in-migrants, while comprising only a small share of the sub-region's population, are contributing to some demographic 'rejuvenation' of both Districts.

3.3 The in-migrants from other parts of New Zealand

- There were 26,000 people (20% of the 2001 population) living in the sub-region in 2001 who had been living outside of Tauranga and

Western Bay Districts in 1996. The proportion of in-migrants from other parts of New Zealand in Tauranga District's population (21%) was slightly higher than that in Western Bay of Plenty District's population (17%). The proportions for Maori were slightly higher for both Districts: 22% in the case of Tauranga and 18% in the case of the Western Bay.

- The main sources of these in-migrants are summarised in Table 3. In the case of Maori, other parts of the Bay of Plenty region (Whakatane District and Opotiki District) are much more important sources of in-migrants than for non-Maori. This is hardly surprising given the linkages between members of hapu in the Western Bay and their kin in hapu and iwi in the central and eastern Bay of Plenty. Hamilton and other parts of the Waikato region provide similar shares of Maori in-migrants to Tauranga District (23.7%) and the Western Bay of Plenty District (24.1%). A larger share of the non-Maori in-migrants (24.7%) in the Western Bay of Plenty were from other parts of the Waikato (not including Hamilton) than in Tauranga District, possibly reflecting the movement of retired farmers onto life-style blocks rather than into the urban area of Tauranga.

Table 3: Sources of the in-migrants from other parts of New Zealand

Source	Maori			<i>Non-Maori</i>		
	TD	WBD	SR	<i>TD</i>	<i>WBD</i>	<i>SR</i>
Other BOP	14.0	18.0	15.0	8.9	9.6	9.1
Hamilton	7.6	6.9	7.4	8.9	4.9	7.9
Other Waikato.	16.1	17.2	16.4	17.7	24.7	19.4
Auckland	18.8	17.7	18.5	26.6	25.8	26.4
Other Nth Is	36.9	35.2	36.5	31.3	29.0	30.7
South Island	6.6	5.0	6.2	6.7	6.1	6.5
Number	3,170	1,120	4,290	16,270	5,480	21,750

- The Auckland region is an important source of Maori as well as non-Maori in-migrants into both Districts in the Western Bay sub-region (Table 3). Over a quarter of all non-Maori internal in-migrants (26%)

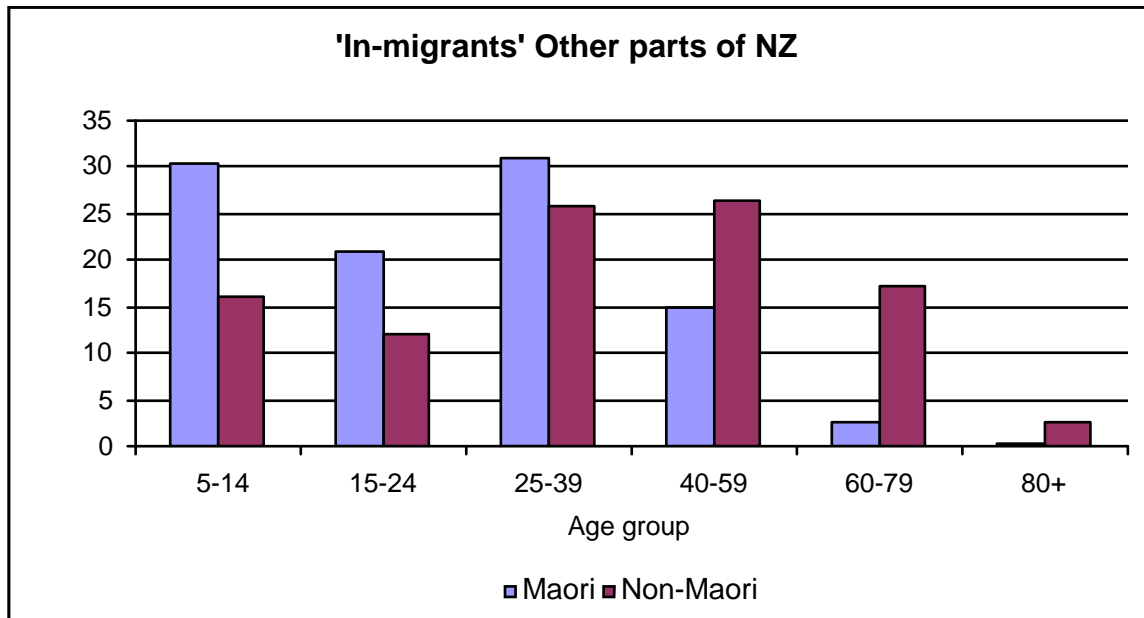
gave addresses in Auckland as their places of residence in 1996 compared with 18% of Maori. Other parts of the North Island (outside of the Bay of Plenty, Waikato and Auckland regions) contributed over a third (37%) of Maori in-migrants and 31% of non-Maori – a rather surprising finding given the perception that the Waikato and Auckland are the dominant sources of internal migrants into the sub-region. The South Island was the source of similar shares of Maori and non-Maori – just over 6% in both cases.

- The age compositions of the in-migrants from other parts of New Zealand are summarised in Table 4. These follow a similar pattern for those described above for local in-migrants – much younger migrant populations for Maori than non-Maori. The Maori in-migrants are concentrated most heavily in the 5-14 and 25-39 age groups (both with just over 30% each of all Maori who were living in other parts of New Zealand in 1996). In the case of the non-Maori, the largest concentrations (26% each) are in the 25-29 and 40-59 age groups, reflecting the older age structure of this population generally by comparison with the national Maori population.
- There are some differences in age composition of the two in-migrant populations in Tauranga District and Western Bay of Plenty. The latter region has smaller shares of Maori and non-Maori in the 15-24 year age group than Tauranga District, reflecting both the location of tertiary education facilities as well as more employment opportunities for younger people in Tauranga. Interestingly, the shares of in-migrants aged 60 years and over (20% for non-Maori and 3% for Maori) are virtually the same in the two Districts (Table 4).

Table 4: Age composition of the in-migrants from other parts of NZ

Age Group	Maori			<i>Non-Maori</i>		
	TD	WBD	SR	<i>TD</i>	<i>WBD</i>	<i>SR</i>
5-14	30.0	31.1	30.3	<i>15.3</i>	<i>18.0</i>	<i>16.0</i>
15-24	22.0	17.7	20.9	<i>13.1</i>	<i>9.1</i>	<i>12.1</i>
25-39	31.3	30.3	31.1	<i>26.9</i>	<i>22.8</i>	<i>25.9</i>
40-59	13.9	17.4	14.8	<i>25.0</i>	<i>30.1</i>	<i>26.3</i>
60-79	2.5	3.2	2.7	<i>17.1</i>	<i>17.7</i>	<i>17.2</i>

80+	0.3	0.3	0.3	2.6	2.3	2.6
Number	3,170	1,120	4,290	16,270	5,480	21,750



3.4 The out-migrants to other parts of New Zealand

- The 2001 Census recorded 13,730 people living outside the sub-region who had been usually resident in Tauranga District and Western Bay District in 1996 – the out-migrants to other parts of New Zealand. Tauranga had ‘lost’ 9,400 residents (the equivalent of 10% of the 2001 population) while Western Bay of Plenty District had lost 4,330 (the equivalent of 11% of the 2001 population). Maori out-migration (2,800) had been higher in proportional terms (14%) than non-Maori (10,910 or 10% of the 2001 total).

Table 5: Destinations of the out-migrants to other parts of NZ

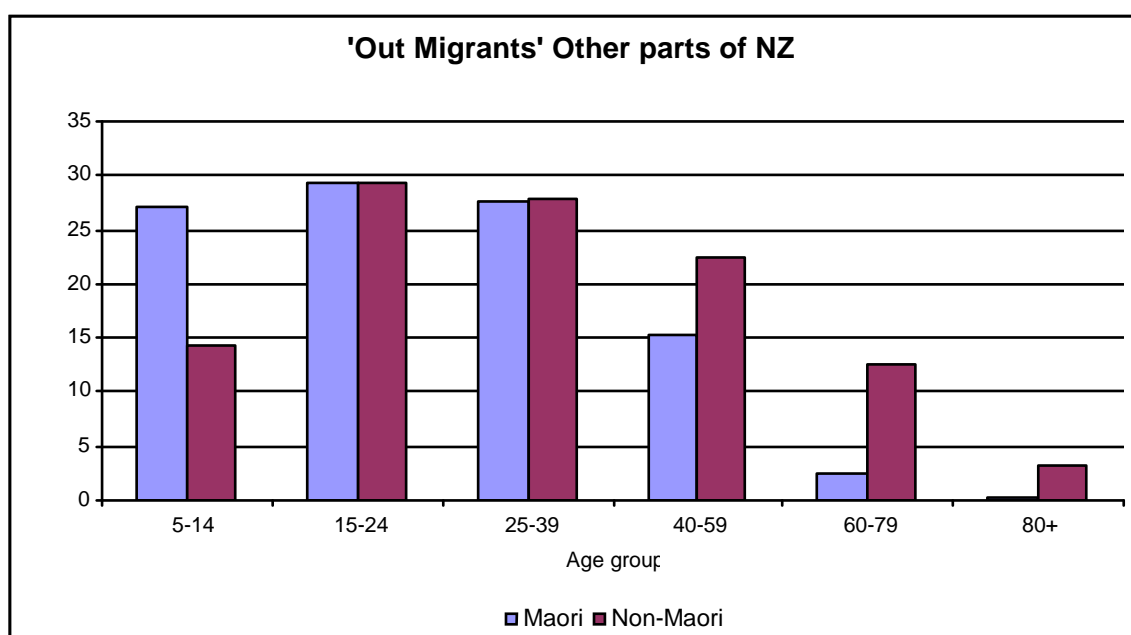
Destination	Maori			Non-Maori		
	TD	WBD	SR	TD	WBD	SR
Other BOP	13.5	18.4	14.9	7.4	10.5	8.4
Hamilton	9.6	9.8	9.7	11.1	9.9	10.7
Other Waik.	14.4	20.3	16.3	16.6	25.1	19.3

Auckland	25.2	21.3	24.0	28.6	20.2	26.0
Other Nth Is	28.7	23.6	27.1	23.9	21.8	23.3
South Island	8.8	6.6	8.1	12.3	12.6	12.4
Number	1,900	920	2,820	7,500	3,420	10,910

- The destinations of the out-migrants are summarised in Table 5. There are strong similarities with the pattern in Table 3 for sources of in-migrants. Auckland and the other North Island contain the largest shares of out-migrants, with slightly increased shares going to the South Island and to Hamilton, and slightly smaller shares to other parts of the Bay of Plenty and other Waikato than is the case for the in-migrants. Auckland figures just as prominently as a destination for Maori as well as non-Maori out-migrants – this is one of the major differences with the pattern shown in Table 3 for the in-migrants.
- The age composition of the out-migrant flows from the two Districts and the sub-region are summarised in Table 6. For the Maori population, there are almost equal shares of out-migrants in the three younger age groups, with the 15-24 year olds comprising the largest share. In the case of the non-Maori the three major groups are those which span the ages 15-24, 25-29 and 40-59 years, reflecting, in part, the older age structure of the non-Maori population.

Table 6: Age composition of the out-migrants to other parts of NZ

Age Group	Maori			Non-Maori		
	TD	WBD	SR	TD	WBD	SR
5-14	27.2	27.3	27.2	13.7	15.9	14.4
15-24	29.3	29.6	29.4	28.0	32.7	29.4
25-39	27.8	27.3	27.7	30.1	22.9	27.9
40-59	15.3	14.8	15.2	22.4	22.6	22.5
60-79	1.6	4.4	2.5	11.4	15.5	12.6
80+	0.0	0.7	0.2	3.4	3.1	3.3
Number	1,900	920	2,820	7,500	3,420	10,910



- The population exchanges between the different source and destination areas are not equal – the total numbers of in-migrants are much larger than those for out-migrants, especially for non-Maori. In general, the in-migrants coming from each source area exceed the numbers of out-migrants going to the same area as a destination. This situation results in net migration gains to all age groups in Tauranga District, and most of the age groups in the Western Bay of Plenty District. There are small net losses from the Western Bay of Plenty

District to Hamilton and with the South Island. These net gains and losses are shown in Table 7.

Table 7: Net migration gains from internal migration, 1996-2001

Source	Maori			<i>Non-Maori</i>		
	TD	WBD	SR	<i>TD</i>	<i>WBD</i>	<i>SR</i>
Other BOP	189	36	225	888	165	1,053
Hamilton	57	-12	45	621	-73	548
Other Waik.	237	9	246	1,635	480	2,115
Auckland	114	6	120	2,181	708	2,889
Other Nth Is	621	183	804	3,297	828	4,125
South Island	42	-3	39	147	-96	51
Number	1,260	220	1,480	8,770	2,010	10,780

- Out-migration from the Western Bay sub-district to other parts of New Zealand effectively halves the numerical impact of in-migration. In other words, the equivalent of half the total inflow from other parts of New Zealand is lost through a corresponding outflow to the same areas. The net gain of 10,780 non-Maori (Table 7) is just under half of the inflow of 20,750 non-Maori (Table 4) into the sub-region. The net migration figures show that Tauranga District retains a larger share of its migrant inflow than the Western Bay of Plenty District. In Tauranga District's case, the equivalent of 54% of the 16,270 in-migrants from other parts of New Zealand (Table 4) are accounted for by the net gain of 8,770 (Table 7). In the Western Bay of Plenty the relevant percentage is 37% indicating that out-migration has the effect of removing a larger share of the in-migrant flow of 5,480 non-Maori.
- In the case of the case of Maori, out-migration from the Western Bay sub-region has the effect of removing two-thirds of the numerical impact of in-migration. The net gain of 1,480 Maori (Table 7) is only 33% of the inflow of 4,290 Maori (Table 4) into the sub-region. Again, Tauranga District retains a larger share of its migrant inflow (40%) in its net migration gains than the Western Bay of Plenty (20%). The Western Bay of Plenty thus has a higher level of population turnover (or "churning" as some economists now refer to

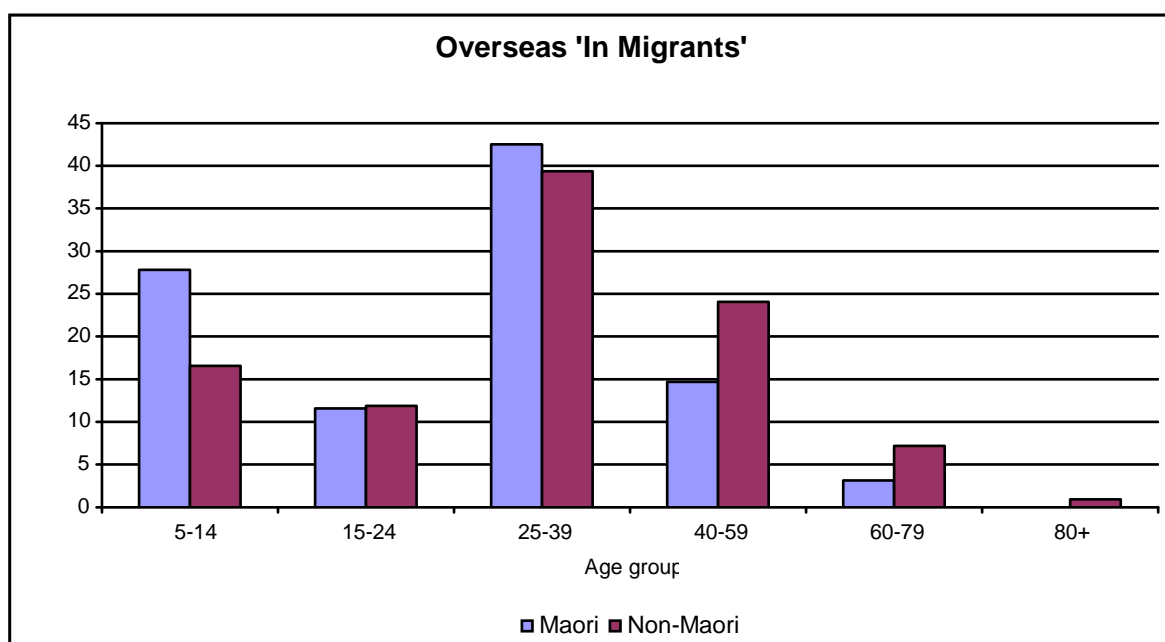
this process) than Tauranga District. Given that the age compositions of the in-migrants differ from the age compositions of the out-migrants (this can be seen by comparing the percentages in each age group in Tables 4 and 6), this “churning” has an important impact on the contribution that migration makes to population change in the sub-region. Internal migration in New Zealand is becoming more intensive as a process over time and thus “churning” is having an increasingly important impact on population change.

3.5 The overseas in-migrants

- The final component of the population resident in the Western Bay to be considered in this overview of developments between 1996 and 2001 is the overseas in-migrants – the people who were living outside New Zealand in 1996 and who moved into Tauranga District and the Western Bay of Plenty District at some stage between 1996 and 2001. There were 5,870 people in this category – 4,440 in Tauranga District and 1,430 in Western Bay of Plenty District. It is important to appreciate that these are not all “immigrants” to New Zealand – 2,130 (36%) of them had been born in New Zealand and were likely to be “return migrants”. People born in countries other than New Zealand comprised 64% (3,740) of the total, and they included 2,540 who classified themselves as European, 75 who were Maori, 105 in the Pacific ethnic category, and 940 in the Asian ethnic category. An important group of overseas-born Asians would be the international students – an increasingly significant component of Tauranga District’s immigrant student population. Over 80% of the 940 Asian recent immigrants were living in Tauranga District.
- The age composition of the overseas in-migrants is summarised in Table 8. For both the Maori and the non-Maori components there is a heavy concentration (40%) in the age group 25-39. Many of these adult Maori overseas in-migrants appear to be accompanied by children – the second largest group in both Tauranga and Western Bay of Plenty Districts is people aged 5-14. “Family” migration appears to be fairly common amongst this component. For non-Maori, the second largest group of overseas in-migrants is people aged 40-59 years. Migration of families is probably still important amongst the non-Maori, but children comprise a smaller share of their overseas in-migrants. As noted earlier, an increasingly important component of the overseas in-migrant children will be international students.

Table 8: Age composition of the overseas in-migrants

Age Group	Maori			Non-Maori		
	TD	WBD	SR	TD	WBD	SR
5-14	28.7	25.0	27.9	15.4	19.7	16.5
15-24	11.9	10.7	11.6	13.1	8.5	12.0
25-39	40.6	50.0	42.6	40.2	36.8	39.4
40-59	16.8	7.1	14.7	23.9	25.3	24.2
60-79	2.0	7.1	3.1	6.6	8.7	7.1
80+	0.0	0.0	0.0	0.7	0.9	0.8
Number	300	80	380	4,140	1,340	5,480



3.6 The importance of age structure

- This preliminary discussion of the components of the Western Bay's population in 2001 has focussed on only one important dimension of those who have moved into or out of the sub-region, or chosen to stay in the area, between 1996 and 2001. This is the dimension of age. There are many other dimensions of these population components (gender, ethnicity, education, employment status, occupation etc) that are being examined by the Migration Research

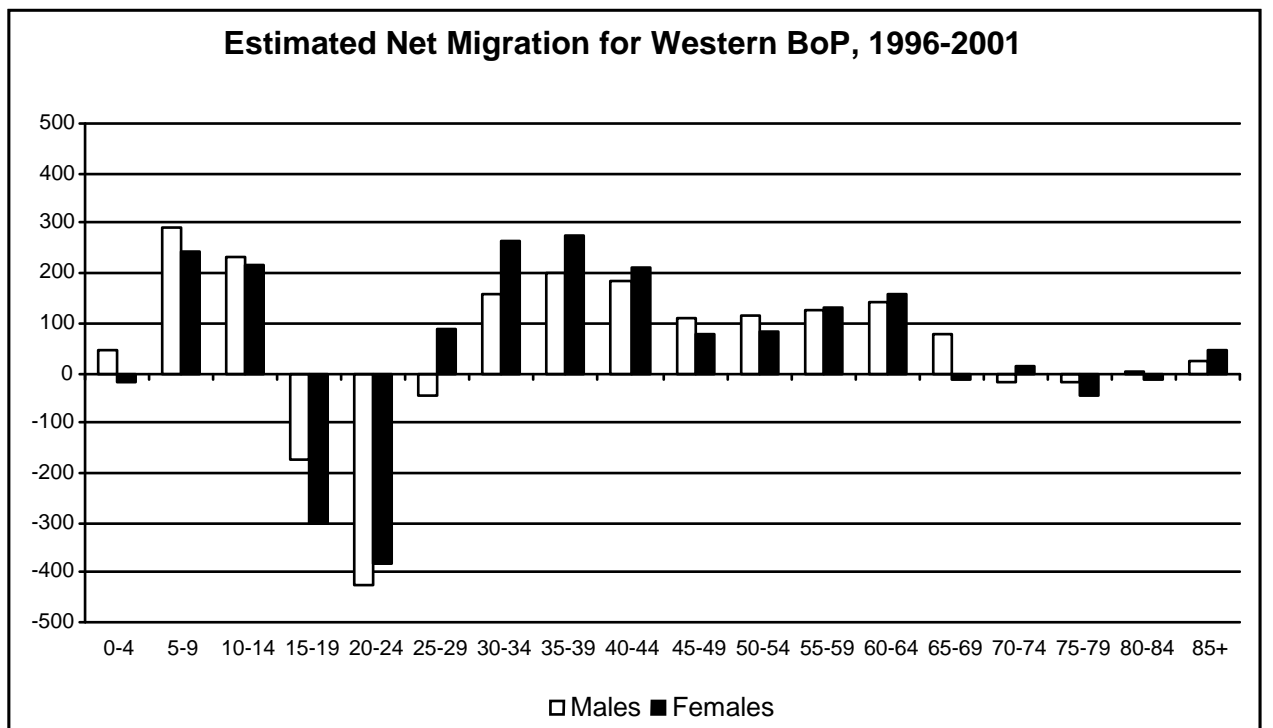
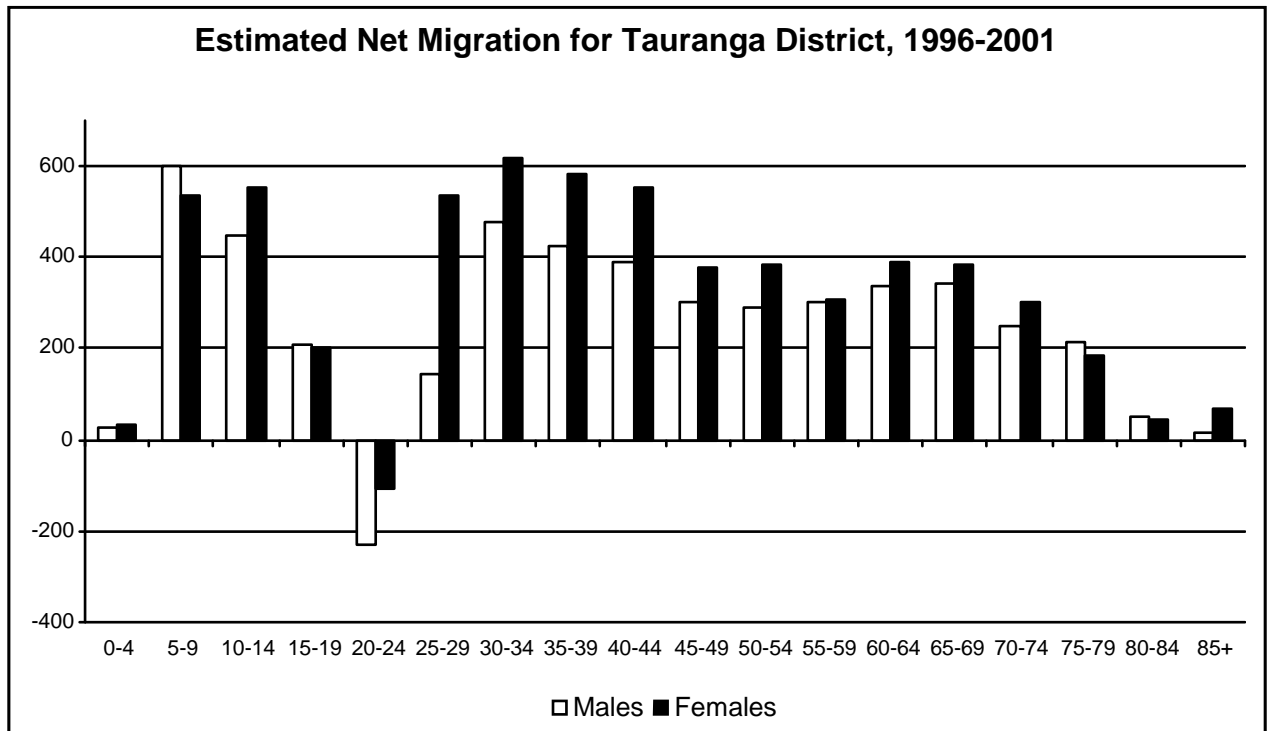
Group as part of its work on population dynamics for the Smartgrowth Project. The age dimension is one of the most critical ones for population projections, however, and this is why we have devoted so much attention to it at this stage. Before leaving the subject of population components, and moving on to a brief examination of some of our findings on the employment characteristics of these components and reasons for migration into and out of the sub-region, reference needs to be made to the overall structure of the population in the Western Bay and how this compares with the structure of the population for New Zealand as a whole.

- Two sets of diagrams will illustrate the importance of age composition when deriving population projections. The first is the age profile of the total net migration gains and losses and these are shown for Tauranga District and Western Bay District in Figure 1. Two things stand out from these profiles. Firstly, there are very significant variations, by age (and gender) in the incidence of migration. This applies in all Districts. Secondly, there are major differences in the profiles for net migration gains and losses between the two Districts. These variations need to be considered carefully when developing population projections.
- The two population pyramids shown in Figure 2 show the size of the population in each year of age from under 1 year (0) to around age 110. Males and females are shown separately on each side of these ‘pyramids’. Two things stand out immediately from these diagrams:
 - 1) The structures have some important bulges and nips in them with the 40 year olds being particularly numerous (people born in the early 1960s at the end of the ‘baby boom’) and people aged around 10 being another prominent group (people born in the early 1990s as part of what Professor Ian Pool calls the ‘baby blip’). Both of these bulges are present in the Western Bay’s population – they are a common characteristic of regional populations in New Zealand.
 - 2) The much deeper nip in the Western Bay’s population pyramid that is associated with the age group 18-24 – a combination of small birth cohorts in the 1970s and out-migration of young people. In the case of the Western Bay this is out-migration to internal as well as overseas destinations. The other thing that stands out in the Western Bay’s population is the fatter upper part of the pyramid, especially for females, and this is a function of the

in-migration of people for retirement and the longer life expectancy of women.

These irregularities in New Zealand's population structures are very marked by comparison with many other developed countries. Given the small sizes of populations in different parts of New Zealand this makes population projection a very tricky exercise, especially in regions where migration plays a major role in population dynamics. This is the case in the Western Bay, and for this reason we are approaching the projection exercise with considerable caution.

Figure 1: Estimated Net Migration, Tauranga and Western Bay of Plenty Districts, 1996-2001



Source: Statistics New Zealand

Figure 2a: Age-sex structure of the “Usually Resident” Total NZ Population, 2001

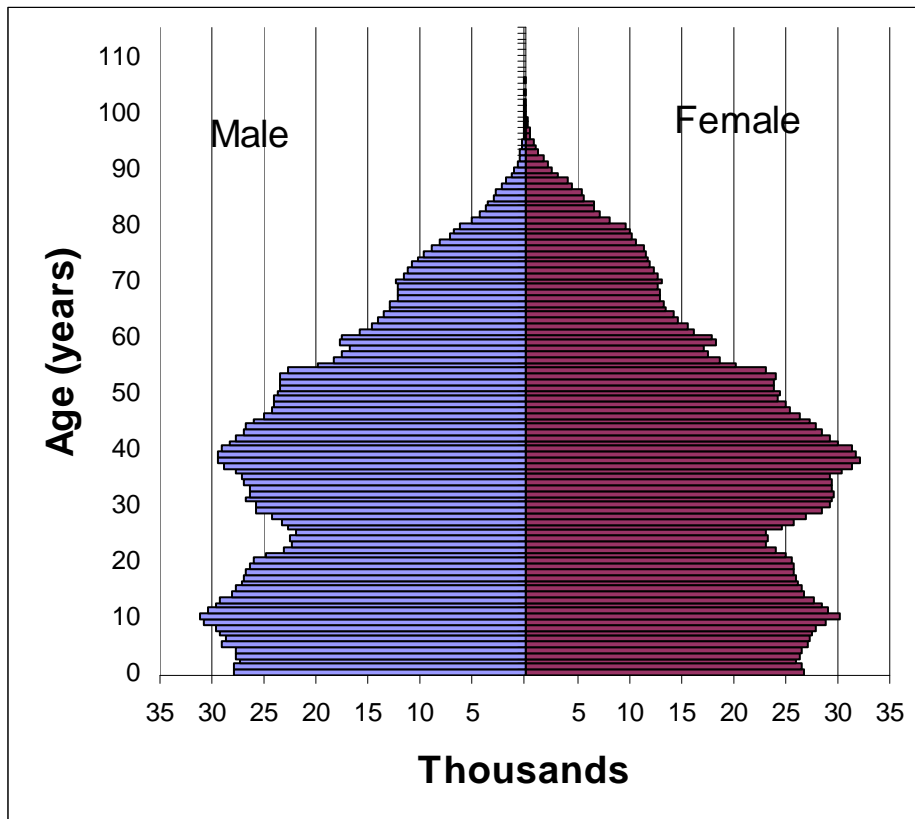
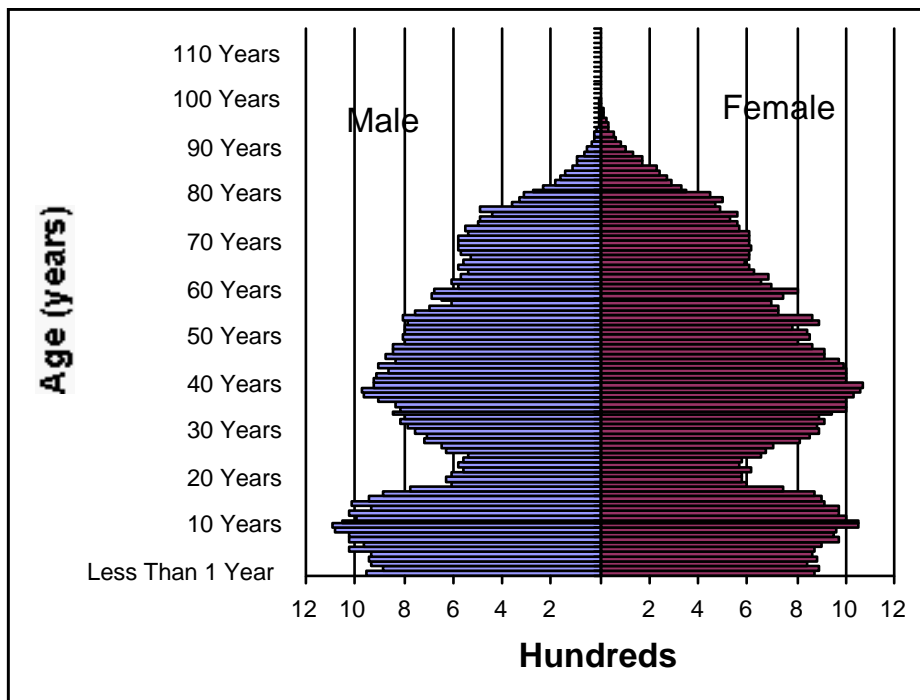


Figure 2b: Age-sex structure of the population of Western Bay of Plenty sub-region, 2001



4. *Employment Experiences of Stayers and Movers in the Western Bay*

(The following information comes from a series of special purpose census tables, prepared by Statistics New Zealand, relating to the labour force participation, work status, highest qualification gained, occupation, industry and income for the 'stayers', 'in-migrants' (including local in-migrants), 'out-migrants' and the 'overseas immigrants' in the two Districts that comprise the Western Bay of Plenty Sub-Region. The data in this section are shown for the two Districts separately for males and females and Maori and non-Maori. Dr Elsie Ho and a team of research assistants working in the Migration Research Group extracted the data. Only a preliminary summary of these data is given here).

- The populations referred to in this section are those aged 15 years and over. There were 71,200 people (8,690 Maori and 62,510 non-Maori) in this age group in Tauranga District, and 28,990 (4000 Maori and 24,990 non-Maori) in Western Bay of Plenty District. Just under two thirds of the populations aged 15 and over in the two Districts are in the 'stayer' category, with a further 31-33 percent classified as 'in-migrants' (either from the neighbouring District or from other parts of New Zealand). The 'overseas immigrant' groups comprise 5 percent of Tauranga District's population aged 15 and over, and 4 percent of this population in the Western Bay of Plenty District.

4.1 Labour force participation

- The percentages of Maori and non-Maori men and women who were employed or actively seeking employment (the population that is classified as 'in the labour force') in the two Districts in March 2001 are shown by broad age group in Table 9. These are the labour force participation rates for people in the Western Bay sub-region, and they are compared with rates for the same age groups in the total New Zealand population.
- Several patterns emerge from the data in Table 9. Firstly, there are higher rates of labour force participation in Tauranga District than in Western Bay of Plenty District amongst Maori men in all age groups shown, and in most age groups for females. In the case of non-Maori the pattern is not the same – at ages above 40 there are higher labour force participation rates for both men and women in WBD, especially amongst the older group (65-84 years). This reflects the differing employment experiences of self-employed, older people in the more

rural economy of the Western Bay compared with the more prevalent ‘retired’ older population in Tauranga District.

- In several age groups the labour force participation rate is higher in Tauranga and Western Bay of Plenty Districts than for the comparable New Zealand population. This applies for the two younger age groups of non-Maori men aged 15-24 and 15-39 in both Districts, and for Maori men in these age groups as well as 40-64 in Tauranga District. Maori men in WBD tend to have slightly lower labour force participation rates than the comparable groups in the New Zealand population as a whole. For females the patterns are more irregular with non-Maori in all age groups in Tauranga District having lower than average participation rates. In the WBD the younger groups of non-Maori tend to have lower than average rates, and the older groups higher than average rates. In all age groups Maori women in the WBD had lower rates than the New Zealand totals, with variable patterns for non-Maori. Overall, the pattern seems to be for slightly lower levels of labour force participation for Maori and non-Maori men as well as women in the sub-region by comparison with the relevant groups in the New Zealand population.

Table 9: Labour force participation rates (percentage) by broad age group

Age Group	Males			Females		
	TD	WBD	NZ	TD	WBD	NZ
<u>15-24</u>						
Maori	68.2	62.4	68.0	59.5	51.3	59.0
Non-Maori	76.7	71.5	69.4	70.7	61.9	65.8
<u>25-39</u>						
Maori	85.0	81.5	83.6	64.7	60.2	67.0
Non-Maori	91.1	91.4	90.6	72.2	71.9	73.7
<u>40-64</u>						
Maori	80.3	76.5	78.1	68.1	62.0	67.4
Non-Maori	84.9	87.1	86.0	70.1	74.8	73.2
<u>65-84</u>						
Maori	17.7	15.7	20.5	8.8	9.6	11.9
Non-Maori	11.1	26.0	18.5	4.7	12.8	7.6
<u>Total 15+</u>						

Maori	75.4	70.0	74.1	61.2	54.9	61.9
<i>Non-Maori</i>	68.1	73.1	73.9	53.6	59.9	60.0

- Labour force participation rates for the different mover-stayer groups in the population aged 15 years and over are shown in Table 10. The three migrant groups generally show higher rates than the stayer population, which is partly a function of the fact that they have younger age compositions (see previous section). In Tauranga District residents who had been living in other countries in 1996 (overseas immigrants) tended to have the highest levels of labour force participation in 2001. Maori in-migrants to the Western Bay sub-region from other parts of New Zealand had higher labour force participation rates than Maori out-migrants. This was also the case for non-Maori in WB District, but the reverse was found for non-Maori in Tauranga District. Here out-migrants had fared better in terms of labour force participation than in-migrants, both for males and females (Table 10).

Table 10: Labour force participation rates (percentage), mover and stayer groups aged 15 years and over

Group	Males		Females	
	TD	WBD	TD	WBD
<u>Maori</u>				
Stayers	74.0	68.5	61.0	54.8
In-migrants	77.0	72.5	61.4	53.9
Out-migrants	73.9	70.9	61.2	57.8
O'seas immigrants	87.1	70.0	65.0	70.0
Total residents	75.4	69.9	61.2	54.9
<u>Non-Maori</u>				
Stayers	65.6	72.1	51.3	59.2
In-migrants	71.9	75.0	57.6	61.9
Out-migrants	75.3	70.1	61.9	58.8
O'seas immigrants	76.0	76.2	61.2	58.4
Total residents	68.1	73.1	53.6	59.9

4.2 Unemployment

- At the time of the census in March 2001 there were 3,780 people in Tauranga District and 1,240 in Western bay of Plenty District who stated they were unemployed and actively seeking work. Almost a third of these were Maori – a much higher share than they have in the two Districts’ total populations (18 percent in Tauranga District and 20 percent in WBD). There were higher levels of unemployment amongst Maori males in both Districts (17%) than in the Maori population as a whole (15%). For Maori females, unemployment was marginally lower in WBD (17%) than the national average (18%), but was higher in Tauranga District (23%). Amongst the non-Maori population, both male (4.8%) and female (5.3%) unemployment in the WBD were below the national averages of 5.9% and 6.5% respectively. In Tauranga District, on the other hand, non-Maori unemployment was above the national averages – 6.4% for males and 7.9% for females.
- When the percentages of residents in the labour force who were unemployed are calculated for the different groups some interesting variations between groups and between the two Districts emerge. In the case of Tauranga District, the highest levels of unemployment amongst Maori were found in the in-migrant population; Maori who left the District seemed to do better in terms of finding employment than those coming in (Table 11). However, the Maori out-migrants from Tauranga District had higher rates of unemployment than either the stayers or the overseas immigrants. In Western Bay of Plenty District the situation was rather different – Maori in-migrants tended to do better than out-migrants but both groups had higher levels of unemployment than the stayers.
- The non-Maori overseas immigrants in Tauranga District had the highest levels of unemployment, both amongst males and females, followed by in-migrants from other parts of New Zealand (Table 11). The out-migrants had fared marginally better, although they too had significantly higher levels of unemployment than the stayers. In Western Bay of Plenty District unemployment rates were lower than those in Tauranga District for all groups in the non-Maori population except the out-migrants. This also was the case for both the total Maori and non-Maori resident populations aged 15 years and over in the two Districts – WBD had lower levels of unemployment than TD (Table 11).

Table 11: Unemployment rates (percentage) for mover and stayer groups, aged 15 years and over

Group	Males		Females	
	TD	WBD	TD	WBD
<u>Maori</u>				
Stayers	15.5	15.9	18.8	14.8
In-migrants	21.5	19.6	29.7	20.8
Out-migrants	19.5	21.9	25.5	26.0
O'seas immigrants	11.1	28.6	19.2	0.0
Total residents	17.5	17.4	22.6	16.7
<u>Non-Maori</u>				
<i>Stayers</i>	<i>4.8</i>	<i>3.7</i>	<i>6.0</i>	<i>3.9</i>
<i>In-migrants</i>	<i>8.8</i>	<i>6.5</i>	<i>10.5</i>	<i>7.4</i>
<i>Out-migrants</i>	<i>7.8</i>	<i>9.2</i>	<i>9.9</i>	<i>11.7</i>
<i>O'seas immigrants</i>	<i>10.7</i>	<i>8.6</i>	<i>14.4</i>	<i>11.1</i>
<i>Total residents</i>	<i>6.4</i>	<i>4.8</i>	<i>7.9</i>	<i>5.3</i>

Note: Unemployment rates refer to the number of people seeking work in March 2001 per 100 in the labour force.

4.3 Employment status

- When the employment status of those in the labour force who were not unemployed and seeking work is considered, some of the major differences in the economies of the two Districts become apparent. Western Bay of Plenty District, with its small town and rural populations had higher shares of those working who were either employers, self-employed or unpaid family workers than either Tauranga District or the country as a whole (Table 12). This was particularly the case for non-Maori. In the case of Tauranga District, paid employment (wage and salary workers) accounted for a much greater share of non-Maori males and females than was the case in WBD, although these shares were still below the national average. For Maori the percentages in paid employment were much closer for the two Districts, and significantly larger than those for non-Maori men and women in both Districts (Table 12). Again they were below the national averages for Maori males and females.

Table 12: Employment status (percentage) for the population aged 15 years and over

Employment Status	Males			Females		
	TD	WBD	NZ	TD	WBD	NZ
<u>Maori</u>						
Paid employee	80.2	76.8	82.0	86.4	82.5	86.9
Employer	4.1	5.7	3.8	1.9	2.8	2.1
Self-employed	9.4	9.0	8.0	5.2	6.0	4.2
Unpaid family	1.9	3.0	1.9	1.9	5.0	2.4
Not stated	4.5	5.5	4.3	4.5	3.8	4.3
<u>Non-Maori</u>						
<i>Paid employee</i>	<i>67.3</i>	<i>49.2</i>	<i>69.0</i>	<i>79.0</i>	<i>62.4</i>	<i>80.1</i>
<i>Employer</i>	<i>12.0</i>	<i>16.1</i>	<i>10.5</i>	<i>6.9</i>	<i>10.2</i>	<i>5.3</i>
<i>Self-employed</i>	<i>17.7</i>	<i>27.9</i>	<i>16.4</i>	<i>9.9</i>	<i>17.7</i>	<i>9.3</i>
<i>Unpaid family</i>	<i>1.0</i>	<i>4.7</i>	<i>1.7</i>	<i>2.0</i>	<i>7.5</i>	<i>2.9</i>
<i>Not stated</i>	<i>2.0</i>	<i>2.1</i>	<i>2.3</i>	<i>2.2</i>	<i>2.2</i>	<i>2.3</i>

- The self-employed (without employees) are a more prominent group in the labour force in the Western Bay sub-region than in New Zealand as a whole. There are some differences in the relative importance of this group in the mover-stayer categories (Table 13). Amongst both Maori and non-Maori males and females the self-employed make up a larger share of the overseas immigrant Maori and non-Maori in Tauranga District than they comprise of the other mover-stayer groups. In Western Bay of Plenty District the stayers tend to have the highest shares of self-employed followed by the in-migrants from other parts of New Zealand. The out-migrants to other parts of New Zealand have lower percentages in self-employment than most of the stayer and in-migrant groups, especially in WBD (Table 13). These differences reflect, in part, the divergent economies in the two Districts as well as some of the difficulties migrants into the region experience in finding satisfactory paid employment.

Table 13: Self-employed (percentage) in the mover and stayer groups

Group	Males		Females	
	TD	WBD	TD	WBD
<u>Maori</u>				
Stayers	9.7	10.1	5.2	6.3
In-migrants	8.5	7.4	4.4	4.8
Out-migrants	9.5	7.2	4.7	2.7
O'seas immigrants	16.7	20.0	9.5	0.0
Total residents	9.4	9.0	5.2	6.0
<u>Non-Maori</u>				
<i>Stayers</i>	<i>18.2</i>	<i>30.6</i>	<i>10.3</i>	<i>18.9</i>
<i>In-migrants</i>	<i>16.7</i>	<i>23.2</i>	<i>8.9</i>	<i>15.3</i>
<i>Out-migrants</i>	<i>15.0</i>	<i>8.3</i>	<i>18.9</i>	<i>9.7</i>
<i>O'seas immigrants</i>	<i>17.8</i>	<i>9.7</i>	<i>20.7</i>	<i>16.7</i>
<i>Total residents</i>	<i>17.7</i>	<i>27.9</i>	<i>9.9</i>	<i>17.7</i>

4.4 Highest qualification

- The population aged 15 years and over in the Western Bay sub-region has higher percentages with no qualification and with a vocational qualification than the New Zealand population as a whole, and lower percentages with school qualifications and Bachelors degrees and above (Table 14). The incidence of vocational qualifications reflects, in part, the important contribution the Bay of Plenty Polytechnic makes to vocational training in the Sub-Region. The delivery of University courses, by contrast, is small, and the share of the resident population (including students studying at tertiary institutions) with degrees is around half that found in Hamilton.
- In common with the situation found in other parts of the country (including Hamilton), the stayer populations tend to have lower percentages with qualifications at the Bachelors degree level or above, by comparison with the in- and out-migrant populations (Table 15). In general, this is the case for both the Maori and non-Maori mover-stayer groups in the Western Bay District. The non-Maori overseas immigrants, both male and female, and in both

Districts, have shares with degree qualifications that are three times those for the non-Maori stayer populations. International migration, including return migration of New Zealanders, is contributing disproportionately to the sub-region's population with a tertiary qualification.

Table 14: Highest qualification gained (percentage) for the population aged 15 years and over

Highest Qualification	Males			Females		
	TD	WBD	NZ	TD	WBD	NZ
<u>Maori</u>						
None	39.4	44.0	39.2	36.3	39.1	35.2
School	29.2	24.0	28.0	31.0	30.0	31.8
Vocational	14.0	12.8	13.2	16.0	13.9	14.7
Degree & above	3.2	2.1	3.6	3.7	3.1	4.5
NEI ¹	14.3	17.2	15.9	13.2	13.9	13.8
<u>Non-Maori</u>						
None	25.2	27.9	23.3	24.5	23.9	22.6
School	33.6	32.2	34.9	37.6	38.5	38.0
Vocational	22.7	22.4	19.8	19.7	21.1	18.0
Degree & above	7.9	6.9	12.1	6.3	5.8	10.7
NEI ¹	10.6	10.7	10.0	12.0	10.8	10.8

Note: ¹ NEI – Not elsewhere included

Table 15: Bachelors degree and above (percentage) in the mover and stayer groups aged 15 years and over

Group	Males		Females	
	TD	WBD	TD	WBD
<u>Maori</u>				
Stayers	2.3	2.2	2.8	2.5
In-migrants	5.0	1.4	5.0	3.7
Out-migrants	4.9	2.7	6.1	5.0
O'seas immigrants	3.1	0.0	7.7	9.1
Total residents	3.2	2.1	3.7	3.2
<u>Non-Maori</u>				
Stayers	6.6	5.8	4.5	4.5
In-migrants	8.9	7.9	8.4	7.2
Out-migrants	10.0	6.9	9.0	6.3
O'seas immigrants	17.4	16.2	16.7	14.7
Total residents	7.9	6.9	6.3	5.8

4.5 Occupation and industry

- The occupation and industry compositions of the Western Bay's labour force have been examined at some length by the New Zealand Institute for Economic Research as part of their work for the Smartgrowth project. It is difficult to summarise the data on these two variables in some simple, short tables, because of the range of occupations and industries. Because of their different economies, stayers and migrants into and out of the two Districts tend to have different occupational and industry profiles with higher concentrations in the primary occupations and industries in Western Bay of Plenty District's mover-stayer groups, and higher percentages in the service occupations and industries in Tauranga District.
- Maori and non-Maori also have different occupation and industry profiles with higher shares of Maori in the Western Bay sub-region in the "plant and machine operators and assemblers" and the "elementary occupations" than in the New Zealand Maori population as a whole. Amongst the non-Maori, the Western Bay sub-region has lower percentages of people in the professional, managerial, administrative and technical occupations than the national average, and higher shares in the trades and, in WBD in agriculture and forestry, than the averages for non-Maori in the country as a whole.

4.6 Personal income

- The final variable to be considered in this overview of the Western Bay of Plenty Sub-Region's population in 2001 is personal income. There has been quite a bit of reference to the sub-region having a "low income" population. In terms of the shares of Maori and non-Maori aged 15 and over in six broad income bands ranging from under \$15,000 to over \$100,000, the main differences are the smaller shares of the Western Bay's residents in the over \$50,000 categories, especially for men, and the higher shares in both Districts in the under \$30,000 categories (Table 16). Personal income in this table is only given for those who stated they had an occupation in March 2001.

- Amongst the mover-stayer groups, the stayers and overseas immigrants have higher proportions with personal incomes above \$50,000 than either the in-migrants from or the out-migrants to other parts of New Zealand. The highest proportions with incomes under \$15,000 were amongst the Maori out-migrants, especially women. Over 45% of Maori women who left the Western Bay for other parts of New Zealand between 1996 and 2001 had incomes under \$15,000, compared with 38-40% of in-migrants and stayers. Non-Maori out-migrants also had higher proportions in the under \$15,000 category (36-39%) compared with in-migrants and stayers (33-35%).

Table 16: Personal income (percentage) for the population aged 15 years and over with an occupation

Personal Income	Males			Females		
	TD	WBD	NZ	TD	WBD	NZ
<u>Maori</u>						
Under \$15,000	22.7	24.6	21.8	38.4	41.3	34.7
\$15,001-30,000	35.0	35.3	34.2	36.3	34.7	35.4
\$30,001-50,000	26.2	25.7	27.2	14.2	13.4	18.9
\$50,001-70,000	5.9	4.9	6.7	2.9	1.9	3.3
\$70,00-100,000	1.7	1.1	2.1	0.8	0.9	0.8
\$100,001 or more	1.2	1.1	1.5	0.4	0.9	0.5
Not stated	7.3	7.4	6.4	7.0	6.9	6.7
<u>Non-Maori</u>						
Under \$15,000	16.0	18.7	15.9	34.1	34.0	31.1
\$15,001-30,000	27.4	30.6	26.0	35.0	32.8	31.6
\$30,001-50,000	32.6	27.3	30.0	20.4	19.3	23.8
\$50,001-70,000	11.5	10.0	12.4	4.6	5.7	6.2
\$70,00-100,000	4.6	4.3	5.9	1.2	1.9	1.9
\$100,001 or more	3.9	4.7	5.7	0.9	1.9	1.4
Not stated	4.0	4.2	4.1	3.7	4.3	3.9

4.7 Summary

- This brief descriptive overview of employment amongst mover-stayer groups in the population of the Western Bay of Plenty has uncovered some quite marked differences in labour force participation and associated characteristics of work, qualifications and income. These differences reinforce the point that it is unwise to generalise too much about the population of the sub-region in terms of its characteristics. There are some very high levels of unemployment, especially amongst the in-migrant and out-migrant Maori populations. Levels of self-employment are quite a bit higher in the Western Bay of Plenty, both for Maori and non-Maori, than in the population as a whole, especially amongst the recent immigrants from overseas. While the Western Bay of Plenty sub-region has higher shares of its population with vocational qualifications than the national population, its shares of Maori and non-Maori with degrees and above are lower than those for New Zealand. Smaller percentages of the stayers than the migrant groups have degree qualifications. The personal income distributions

for Maori and non-Maori are skewed towards the lower income groups by comparison with the national distributions.

- The final part of this report addresses, briefly, the reasons recent migrants into and out of the Western Bay of Plenty have given for their moves. It is not possible to obtain information on reasons for migration from the census, although some assumptions can be made about the sorts of factors that influence people's decisions to move into and out of particular regions. In the next section some findings from a questionnaire survey carried out late in 2001, which did seek information on reasons for moving, are outlined.

5. *Reasons for moving into and out of the Western Bay*

(The following information is drawn from a special-purpose survey of people who moved into and out of the Western Bay sub-region over the 12 months between October 2000 and September 2001. This survey was part of the Smartgrowth Study and was carried out by Dr Jacqueline Lidgard and Dr Colin McLeay. The methodology is outlined in *Population Studies Centre Discussion Paper No. 41* (April 2001): "Researching characteristics of people moving into and out of the Western Bay of Plenty and Tauranga Districts: some methodological issues". Copies of this report can be obtained from the Population Studies Centre at the University of Waikato (attention: Mrs Bev Campbell). Dr Lidgard prepared the following summary.)

- The sample analysed from the completed questionnaires was 192 in-migrants and 99 out-migrants. The in-migrant group comprised 157 moving into Tauranga District and 35 moving into the Western Bay area. Within the out-migrant group 83 had moved from Tauranga District and 16 from Western Bay.
- The median age was 42 years for those moving into or out from Tauranga District. The groups moving into or out of the Western Bay were older with a median age around 50 years. On a gender basis, overall there were virtually equal numbers of males (147) and females (144) among the respondents.
- On an area basis there were more male than female respondents among the in-migrant population with the reverse situation, more female than male respondents, among the out-migrant population. Just over two-thirds (71 percent) of the men were part of the in-

migrant group and just under two-thirds of the women (62 percent). The out-migrant group therefore contained 38 percent of the total women respondents and 29 percent of the male respondents.

- Four broad age bands were used for much of the analysis of basic characteristics (Table 17). These were 20-34 year olds, 35-49 year olds, 50-64 year olds and the over 65 year olds. The percentage in each of these age bands is shown in the following table. (Note: four 15-19 year olds, two in-migrants and two out-migrants were removed from this age analysis).

Table 17: Respondents in Tauranga and Western Bay of Plenty Districts, by broad age group and gender (percentages)

	Tauranga^a		Western Bay		Totals	
	In	Out	In	Out	In	Out
Broad age group						
20-34 years	30.8	34.6	17.6	18.8	28	32
35-49 years	25.0	25.9	26.5	18.8	25	25
50-64	17.9	17.3	38.2	12.5	22	16
65+	26.3	22.2	17.6	50.0	25	27
Number	156	81	34	16	190	97
Male						
20-34	21.2	25.0	11.1	28.6	19	26
35-49	27.1	30.6	22.2	0.0	26	26
50-64	17.6	27.8	50.0	14.3	23	26
65+	34.1	16.7	16.7	57.1	31	23
Number	85	36	18	7	103	43
Female						
20-34	42.3	42.2	25.0	11.1	39	37
35-49	22.5	22.2	31.3	33.3	24	24
50-64	18.3	8.9	25.0	11.1	20	9
65+	16.9	26.7	18.8	44.4	17	30
Number	71	45	16	9	87	54

5.1 Ethnicity and qualifications

- The dominant ethnic group is New Zealand European. This ethnicity was selected by 80 percent of the respondents while five percent said they were New Zealand Maori and a further six percent said they were both New Zealand Maori and New Zealand European. The ethnic composition of the group is presented below in Table 18.
- The members of the respondent group were highly educated with 43 percent stating that they had some form of tertiary qualification (Table 19). Thirty-nine percent of this tertiary educated group had completed university qualifications. Only 10 percent of the group recorded that they had no qualifications.

Table 18: Ethnicity of survey group (percentages)

Ethnicity	Tauranga District		Western Bay Dist		Total	
	In	Out	In	Out	In	Out
NZ European	82.8	75.6	74.3	80.0	81.3	76.3

NZ Maori	3.2	7.3	8.6	6.7	4.2	7.2
Maori/European	4.5	0.0	11.4	0.0	5.7	0.0
Other NZer	0.0	7.3	0.0	6.7	0.0	7.2
Other	7.0	9.8	5.7	6.7	6.8	9.3
No response	2.5	0.0	0.0	0.0	2.1	0.0

Table 19: Qualifications of survey group (percentages)

Qualifications	Tauranga	District	Western	Bay Dist	Total	
	In	Out	In	Out	In	Out
None	9.6	11.0	11.4	6.7	9.9	10.3
School	22.9	19.5	25.7	33.3	23.4	21.6
Vocational	30.6	37.8	45.7	20.0	33.3	35.1
Degree & above	20.4	17.1	2.9	6.7	17.2	15.5
Other	5.7	7.3	2.9	13.3	5.2	8.2
No response	10.8	7.3	11.4	20.0	10.9	9.3
Total numbers	157	83	35	16	192	99

5.2 The in-migrants

- The question asking the reasons for moving to the Western Bay of Plenty region was divided into three sections with six choices in each section (See Population Studies Centre Discussion Paper No 41). The questions in the first section all had a financial focus, those in the second section focussed around lifestyle, while in the third section the questions centred on family and friends.

It is important to note that a high proportion of respondents recorded that some of the questions did not apply to them (Table 20). For example, in the “financial” section over two-thirds were not involved in company transfers or the beginning or relocation of a business venture. In addition, there was an 11 to 22 percent non-response rate to questions in this category. As expected, the doesn’t apply/no response rate was lower in the “lifestyle” section. When the “family” cluster of reasons is examined there was once again a relatively high doesn’t apply/no response rate.

- For those people who rated the financial questions, more job opportunities and higher wages were important to very important particularly for those moving into Tauranga District (16-20 percent) while for those moving into the Western Bay District escaping high living costs was important to extremely important for 15 percent (Table 20).

- In the “lifestyle” section the desire for a change, coastal environment and better climate all rated degrees of importance above fifty percent for those moving to Tauranga District with slightly lower percentages in these categories for those moving to the Western Bay District (Table 20).
- In the “family” section for those moving into the region, the reason that scored the highest for importance was “closer to family” while for those moving to Western Bay “education for children” was also important (Table 20).

Table 20: Reasons for moving to Western Bay of Plenty region, total in-migrants by District (percentages)

	No response		Doesn't apply		Slightly important		Important to extremely important	
	TD	WBD	TD	WBD	TD	WBD	TD	WBD
Financial								
More job opportunities	20	14	47	60	12	14	20	12
Higher wages	22	14	54	69	8	9	16	9
Company transfer	22	14	69	77	1	0	8	9
Begin new business	22	14	62	71	6	3	10	12
Relocate business	22	11	71	80	3	0	4	9
Escape high living costs	19	14	54	66	15	6	12	15
Lifestyle								
Coastal environment	13	14	18	31	13	18	56	37
Better climate	12	17	20	37	15	15	53	31
Desire for change	17	14	14	26	17	20	52	39
Larger centre	23	17	41	51	19	20	17	12
Income opportunities	20	17	44	46	12	20	24	17
Better housing	22	17	37	46	15	12	26	26
Family								
Closer to family	13	14	36	37	11	17	41	32
Closer to friends	20	17	45	57	14	20	21	6
Education for children	24	14	52	60	10	3	15	23
Desire for WBOP childhood	23	14	52	63	11	6	15	17
Parent/partner decision	22	11	50	57	8	15	21	18
Total Numbers	157	35	157	35	157	35	157	35

- Analysis by broad age group revealed that for the two younger age groups, 20-34 and 35-49 year olds, it was the “desire for a change” that was rated of most importance followed by the “coastal environment”. The 50-64 year olds rated “coastal environment” closely followed by “better climate” while for those aged 65 year olds and over “better climate” and “close to family” rated equal highest.

5.3 Out-migrants

- The questionnaire sent to the people who had moved away from the Western Bay of Plenty sub-region had a similar format to that sent to those who had moved in to the sub-region. The question asking the respondents to rate the reasons why they moved away was divided into three sections with the same headings as for the “in” migrants (financial, lifestyle and family) with suitably modified questions.
- In the financial section “poor job prospects” and “low wages” were the reasons given by the highest number for moving away from the region. Of those moving from Western Bay District “poor job prospects” was rated by a third of the group.
- Responses to the lifestyle section again emphasized the importance of the economic opportunities available in the region. Just over a third of those moving from Tauranga District cited “limited income opportunities” as an important to extremely important reason for them making the move (27 percent Western Bay District). While the desire to “live in a new area” was also an important reason for moving from both Districts “retirement” was an important reason for those moving from Western Bay District (27 percent).
- A partner’s or a parent’s decision was the most important reason in the family category for moving away from the Western Bay region (23 percent for those moving from Tauranga District 14 percent from Western Bay). While a move “further away from family” was a slightly important reason to move out of the sub-region for 19 and 13 percent respectively from Tauranga and Western Bay Districts.
- Analysis by broad age group found that for the 20-34 year olds the most important reasons for moving were “lifestyle” and “financial”. “Limited income opportunities” scored the same as “desire for a change” (45 percent) followed by “limited educational opportunities” (39 percent) and “poor job prospects” (35 percent).

- The 35-49 year olds left for “limited income opportunities” (52 percent), “poor job prospects” (39 percent) and “low wages” (35 percent). Financial reasons also topped the list for the 50-64 year olds. “Poor job prospects” (37 percent) and “poor business opportunities” (31 percent) were the most important reasons given for moving away.
- For the oldest age group it was “retirement” and “further away from family” that were of highest equal importance when they decided to move away from the Western Bay sub-region.

Table 21 Reasons why people moved away from the Western Bay of Plenty, total out-migrants by District

	No response		Doesn't apply		Slightly important		Important to extremely important	
	TD	WBD	TD	WBD	TD	WBD	TD	WBD
Financial								
Relocation of business	18	19	73	81	1	0	9	0
Company transfer	17	19	72	75	1	0	10	6
Poor economy in region	21	19	59	63	11	6	9	12
Wages too low	19	19	54	69	5	6	22	16
Job loss	19	19	64	81	5	0	12	0
Poor job prospects	19	19	45	50	10	0	26	31
Poor business opportunities	20	19	54	69	9	0	17	12
Lifestyle								
Desire to live in new area	18	19	34	25	19	31	29	25
Limited educational opportunities	23	25	48	44	10	25	19	6
Retirement	17	7	73	56	3	6	7	31
Limited income opportunities	22	27	36	33	8	13	34	27
Poor climate	19	19	60	69	14	6	7	6
Housing too expensive	21	19	46	50	12	12	21	19

Family								
Further from family	16	13	46	63	19	13	19	13
For children to grow up in another region	22	19	57	63	11	19	10	0
Parent/partner decision	19	19	55	69	2	0	23	12
Children's education	22	19	57	75	7	0	14	6
Total number	83	16	83	16	83	16	83	16

5.4 Occupation and employment of in- and out-migrants

- Table 22 summarises the occupation/employment distribution of the in- and out-migrants. In the 20-34 year age group “Service and sales” was the occupation of 28 percent of the “in” migrants while 26 percent of the “out” migrants were “students”. For the 35-49 year age group a quarter of the “in” migrant group were in the “legislator/administrative/manager” occupational group while 21 percent of the “out” migrants were in “sales and service”.
- Both older age groups had the highest percentages in the “retired” category – 50-64 year age group 22 and 25 percent and the over 65 year old age group 83 and 88 percent respectively. It is important to note that in spite of the fact that this region is considered to be a “retirement mecca” there is a slightly higher percentage in this category moving out.

Table 22: Occupation by Broad Age Group (percentage)

Occupation	20-34 years		35-49 years		50-64 years		65+ years	
	In	Out	In	Out	In	Out	In	Out
Legislators/admin/manager	13.0	6.5	25.0	16.7	14.6	12.5	0.0	0.0
Professionals	16.7	16.1	8.3	16.7	12.2	118.8	6.4	3.8
Technicians & associated	7.4	6.5	8.3	4.2	2.4	6.3	0.0	0.0
Clerks	0.0	0.0	2.1	0.0	2.1	0.0	0.0	0.0
Service/sales	27.8	16.1	16.7	20.8	17.1	6.3	4.3	0.0
Agriculture/fishery	3.7	6.5	4.2	0.0	0.0	0.0	2.1	0.0
Trades Workers	1.9	12.9	6.3	8.3	2.4	12.5	0.0	0.0
Plant and machine op	3.7	0.0	8.3	4.2	2.4	6.3	0.0	0.0
Elementary	0.0	3.2	0.0	0.0	7.3	0.0	0.0	0.0
Student	3.7	25.8	2.1	8.3	0.0	0.0	0.0	0.0
Homemaker	13.0	3.2	6.3	8.3	2.4	0.0	0.0	0.0
Unemployed	3.7	3.2	8.3	4.2	2.4	6.3	2.1	0.0

Retired	0.0	0.0	0.0	0.0	22.0	25.0	76.6	88.5
Self-employed	5.6	0.0	2.1	8.3	7.3	6.3	0.0	4.1
No response	0.0	0.0	2.1	0.0	4.9	0.0	8.5	3.8
Total Numbers	54	31	48	24	41	16	47	26

5.5 Source of income

- Although the largest single source of income for the respondents was wages or salary this was the case for less than half of the respondents. Forty-five percent were wage or salary earners while for 10 percent self-employment was their major source of income. As over a quarter were in the “retired” category it was not surprising to find that a third of the respondents were dependent on Government support as their major source of income (Table 23). This figure rose to almost two-thirds of the group in the case of people who had left the Western Bay District.
- There was a wide range in income levels reported (Table 23). In addition, it should be noted that the no response rate was relatively high for this question reinforcing the perception that many people are reluctant to disclose income level in surveys.

Table 23: Income, main source and broad level (percentage)

	Tauranga In	District Out	WesternBay In	District Out	Total In	Total Out
Income source						
Wages/salary	45.9	45.1	45.7	26.7	45.8	42.3
Self-employed	11.5	9.8	8.6	0.0	10.9	8.2
Govt Support	30.6	32.9	37.1	60.0	31.8	37.1
Other	4.5	3.7	5.7	0.0	4.7	3.1
No source	2.5	1.2	0.0	0.0	2.1	1.0
No response	3.2	1.2	0.0	13.3	2.6	3.1
Income level						
Zero	1.3	0.0	0.0	0.0	1.0	0.0
0-5,000	2.5	4.9	2.9	0.0	2.6	4.1
5001-10,000	7.0	11.0	5.7	13.3	6.8	11.3
10,001-15,000	10.2	9.8	17.1	20.0	11.5	11.3
15,001-20,000	12.7	14.6	5.7	13.3	11.5	14.4
20,001-25,000	8.9	9.8	11.4	13.3	9.4	10.3
25,001-30,000	10.8	4.9	11.4	6.7	10.9	5.2
30,001-40,000	10.8	12.2	5.7	6.7	9.9	11.3
40,001-50,000	7.0	4.9	25.7	0.0	10.4	4.1
50,001-70,000	7.6	7.3	0.0	6.7	6.3	7.2
70,001-100,000	7.0	3.7	0.0	0.0	5.7	3.1

100,001+	3.8	2.4	5.7	0.0	4.2	2.1
No response	10.2	14.6	8.6	20.0	9.9	15.5
Total numbers	157	83	35	16	192	99

5.6 Summary

- The survey highlighted the fact that across all age groups that had moved into the Western Bay Sub-region the major positive attribute of the region was the coastal environment and the quality of life the region offered.
- Lower wage rates and poor job prospects were seen as the downside of the move. As a woman in her early thirties wrote:

Both my husband and I took a wage drop when we moved. I have talked with a few different people who have just moved within the last year and the general feeling is that wages are a lot lower here than in other parts of New Zealand. Tauranga is being called '\$10 Tauranga'".

- Amongst the group who had moved away low wages and poor job prospects in the sub-region were a major concern.
- It should be noted that the proportions of people moving out of the region in the retired category were similar to the proportions of people in this category moving in.

6 *Conclusion*

- This presentation has focused on population movement into and out of the Western Bay of Plenty sub-region because any attempt to project the future population of the Districts and sub-region as a whole necessitates a very good understanding of both the characteristics of different mover-stayer groups as well as the factors underpinning migration behaviour in these groups. Population movement in the next 50 years will affect the population of the Western Bay much more profoundly than it has been in the past 50 years. Projections for this population into the next 50 years must be based on a sound evidence base relating to population movement. This presentation is part of that evidence base.

Richard Bedford
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