Heretaunga Plains Urban Development Study Phase 2 Technical Analysis

Demographic and Economic Growth Outlook 2015-2045

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For

Napier City Council/ Hastings District Council/ Hawkes Bay Regional Council

Contents

1.0 Introduction

1.1 This report provides an analysis of the long-term demographic and economic ‘environment’ expected to prevail in the Heretaunga Plains area over the forecast period 2015-2045.

1.2 The report is one of a number of specialist studies that have been jointly commissioned by the Napier City, Hastings District and Hawkes Bay Regional Councils, as part of the Phase 2 research process associated with the Heretaunga Plains urban development study.

1.3 The specific matters that were requested to be addressed by the report are as follows:

i) The long-term demographic, household, economic and employment growth outlook for the Napier-Hastings area.

ii) The key Central Government policy, social, economic, business, infrastructural and other factors considered most likely to influence the long-term socio-economic outlook for Napier-Hastings.

iii) The assessed impact of the forecast growth outlook for future land uptake/demand in the area.

Item ii) above is incorporated within the analysis in Item i), whilst Item iii) is considered separately.

2.0 Methodology

2.1 The main points to note in terms of the broad approach taken to the analysis in relation to the matters identified in Section 1.3 above, are as follows:

2.1.1 In the main, the study catchment (hereafter referred to in the report as the ‘study area’) used for the analysis comprises the Heretaunga Plains component of the combined Napier-Hastings Local Government districts. This includes the main Napier and Hastings urban areas (the latter also including Havelock North and Clive) as well as fringe rural and coastal settlements. On a Census Area Unit (CAU) basis, the study area fully or almost fully excludes the CAUs of Tutira, Puketitiri, Whanawhana, Sherenden-Puketapu and Tangoio, and partly excludes the CAUs of Maraekakaho, Poukawa and Waimarama.

2.1.2 As noted earlier, the study period for the analysis is the long-term period 2015-2045. The Census periods covering this interval, that is, the five-year periods beginning in 2006 and finishing in 2046, have been used in the analysis as reference points for the demographic and economic projections. Actual results for the current 2009 June year and projection results for the 2011 Census year are also included in the relevant tables in the report, to provide a base and context for the projection period figures.

2.1.3 As requested in the brief for the study, the report includes projection results at the Census Area Unit (CAU) level. The population figures are based on the household growth projections. These projections are considered to be very robust, based as they are on long-term historical household development trends in the study area, SNZ household growth projections, past urban growth development studies undertaken for both the Napier and Hastings districts, and the current views of both Councils with respect to the level and location of future greenfields and infill housing. The key advantage of the CAU profile of the demographic and economic projections in the report is that it provides an important locational perspective to potential future urban growth in the study area, in addition to just quantifying the expected total additional housing, population and employment growth in the study area over the projection period.

2.1.4 Consistent with the urban development focus of the study, the broad sectors covered in the report include the residential, industrial and commercial sectors. The demographic aspect of the analysis is particularly relevant to the residential sector, whilst the economic analysis is closely linked to the industrial and commercial sectors.

2.1.5 *Projection Indicators*- there are some important points to note about the nature of the projection indicators used in the report analysis, as follows:

2.1.6 Population refers to the usually resident population of the study area, in June of the reference year. Two different population indicators are referred to in the report, namely, SNZ population estimates and the Agency's population projections. The household projections are based on SNZ's estimate for household numbers in the study area in 2009. It should be noted that the projected population increase in the study area over 2015-2045 is not related solely to the projected increase in household numbers over the period-it is also a reflection of the projected trends in the average household occupancy rate (number of persons per household) across all of the study area CAUs. It is also noted that across the study area as a whole, the occupancy rate has been gradually falling over time, for a number of social and housing reasons.

2.1.7 The Statistics New Zealand Census and Business Demography survey definition of the Employment indicator is used in the report, that is, employment refers to the number of people working one hour or more per week. Consequently, it should be noted that population (in particular, the working-age 15+ age range) is only one of the factors influencing the level of employment in the study area; others are the level of part-time/ seasonal work and work migration into the area from locations outside the area. In support of this situation, it is noted that over the 2001-2006 Census period for example, total employment in the combined Napier-Hastings area increased by 8559 or 14%, whilst the 15+ population rose by 5334 or 5.8%. Also, at the 2006 Census, part-time employment accounted for approximately 25% of total employment in Napier-Hastings.

2.1.8 The approaches used to prepare the projections provided in the report are detailed in the main body of the analysis. The key points to note in this methodology section of the report with regard to the approaches used are as follows:

i) Statistics New Zealand (hereafter referred to in the report as SNZ) demographic projections are used extensively in the analysis as base reference points in the development of final projection figures. A review of historical demographic results for the study area indicates that the results have generally fallen within the SNZ projection range, which is expected given the historical long-term moderate demographic growth experience of the area.

ii) However, a range of relevant information, including the SNZ projections and also individual Council projections, are taken into account in the report analysis in preparing the projections

iii) As noted earlier, the projection results reported in the analysis also cover the period 2009-2015, in order to provide an historical 2015-2045 growth context for the different projection indicators being considered.

iv) The report includes a range of existing demographic and economic profile analysis in order to provide further context for the long-term projection results

v) As the current SNZ sub-national demographic projections end in Year 2031, their national Medium scenario population projections for the period 2031-2045 are used in the report for preparing the study area population and household projections for that period

vi) The report uses a range of statistical, tabular and graphical analysis to explain projection results

2.1.9 The main information sources used for the report include:

- Relevant urban growth documentation and projection information provided by the respective local Councils
- Statistics New Zealand population, household and business estimates/ projections for the Napier-Hastings area, and historical building consent data
- Hawke's Bay industry growth forecasts produced in early 2009 by Infometrics economic consultancy in Wellington for the Venture Hawke's Bay regional development organisation
- Relevant documentation provided by the Population Studies Centre of the University of Waikato.

Discussions were also held with staff representatives of the Centre, local valuation companies and the population projections division of Statistics NZ, based in Christchurch.

3.0 Population Growth Outlook

Key Findings
• Slowing rate of national population growth • HB not projected to be a strong population growth area as a whole • Study area population projected to grow along midpoint of the SNZ Medium-High projection, which also sees the population fall slightly from Year 2036 • Overall population growth of 8255 or 6.3%, driven by natural increase • Projected 68% increase in the 65+ population; other age-group populations fall • Maori population projected to grow by 25% • Growth within the study area projected to be strongest under the two different housing options presented, for the Meeanee, Frimley, Karamu and Havelock North CAUs; population decline in established parts of the main urban areas • Napier-Hastings is a relatively low income area and has a significant degree of socio-economic deprivation

3.1 **National Context**

The latest population projections for the country as a whole from SNZ, covering the period 2006-2061, indicate that the total national population is expected to grow by a further 240,000 or 5.6% between now and 2015. Over the period 2015-2045, the national population is projected to increase by a further 846,000 or 19%. However, the rate of intercensal population growth is expected to fall gradually from around 4% at the start of the projection period to 1.7% by the end of the period. This outlook reflects Statistics New Zealand's 'Series 5' Medium projection scenario, which is the recommended 'middle ground' track.

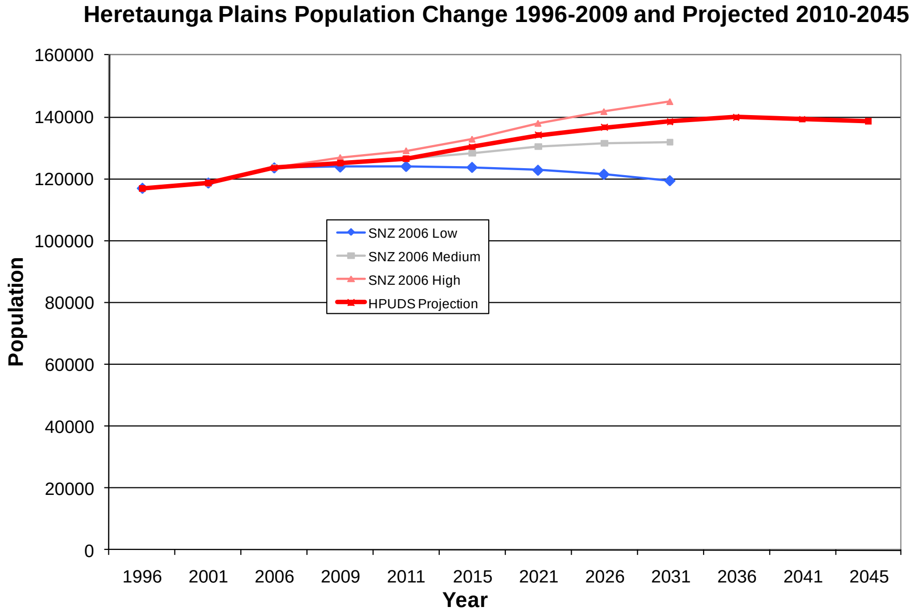
With this scenario, intercensal natural population increase (births minus deaths) falls steadily from around 132,000 at the start of the projection period to 38,000 at the end of the period. This is primarily due to the projected steady increase in the number of deaths alongside relative stability in birth numbers. The Series 5 scenario also incorporates a constant net population migration gain (of overseas residents) for each five-year period of 50,000. This factor is projected to account for a gradually increasing proportion of future population increase in New Zealand, from 25% in 2015 to 56% in 2045.

According to SNZ, regional population growth in the country over the 2006-2031 period is projected to be strongest for, in order, Auckland, Bay of Plenty, Waikato, Canterbury, Tasman, Wellington and Northland. Hawke's Bay's projected growth rate gives it a ranking of 10th amongst the 16 regional areas in the country.

3.2 **Heretaunga Plains Study Area**

3.2.1 **Figure 1** indicates the historical Census year population trend over the 1996-2009 period for the study area based on New Zealand district-level population estimates, the projection for the 2011 Census year based on Statistics New Zealand annual population estimates since 2006 (measured against projected population growth over 2006-2011) and the projected population growth figures for 2015-2045 (HPUDs Projection). The latter were calculated taking into account Statistics New Zealand district-level population projections for the 2006-2031 period, SNZ's national population projections for the 2036-2046 interval, and individual local Council population projections for LTCCP (Long Term Council Community Plan) long-term planning purposes.

Figure 1: Heretaunga Plains Population Change 1996-2009 and Projected 2010-2045



3.2.2 The trend projection for the study area in Figure 1 is based on projected population results for the full Napier-Hastings district which are approximately half-way between the latest SNZ Medium and High projections. This reflects the area's overall population growth experience since 2006. The graph also shows the SNZ 2006 Census based Low/Medium/High projections for the study area. The study area population is projected to increase slightly over the next two years, increase steadily over 2011-2021, increase further but al a lesser rate over 2021-2036 and then fall gradually from that point.

3.2.3 **Table 1** below details the population results for the study area, from the 1996 Census year.

Table 1: Heretaunga Plains Population Change 1996-2046

Census Year	Resident Population	Census Period Change #	Census Period Change %
1996	116,973	-	-
2001	118,685	1,712	1.5
2006	123,615	4,930	4.2
2011	126,505	2,890	2.3
2015	130,320	-	-
2016	131,274	4,769	3.8
2021	134,125	2,851	2.2
2026	136,644	2,519	1.9
2031	138,451	1,807	1.3
2036	139,876	1,425	1.0
2041	139,242	-634	-0.5
2045	138,575	-	-
2046	138,399	-843	-0.6
2015-2045	-	*8,255*	*6.3*

At the beginning of the projection period (Year 2015), the study area population is projected to stand at 130,320, 5,225 or 4.2% up on the current figure. Over the 2015-2045 period, the population is projected to increase by a further 8,255 or 6.3%, reaching 138,575. However, the period from Year 2036 is expected to see an overall population decline of 1,301 or 0.9%. Over the full projection interval, both the intercensal numerical and percentage population changes steadily fall and turn negative after Year 2036.

3.2.4 *Population Change Factors*

The two fundamental population change factors are natural population increase (births minus deaths) and total net migration (which comprises both internal migration or the movement within the country of New Zealand residents, and external migration or population movements between New Zealand and overseas countries). Both types of migration cover long-term or permanent population relocations. Net migration refers to the balance of internal and external migration. The SNZ local authority district level population projections underpinning the population projection results for the study area for the 2015-2045 period indicate steadily falling natural population increase along with a projected constant level of zero net migration (halfway between the Medium and High projection scenarios) for the various Census intervals.

In light of the demographic history of the Napier-Hastings area over the past decade, which has in fact seen a significant level of natural population increase alongside overall net migration loss, the SNZ net migration projections in particular need to be treated with due caution. However, it is noted that over the period, the net migration loss level has been relatively small compared to the size of the natural population increase gain. Over the ten-year period, the total net migration loss comprised an internal net migration gain of 3,601 and an external net migration loss of 4851. It is further noted that the Hawkes Bay region currently accounts for less than 2% of total external permanent/long-term arrivals into New Zealand, on an annual basis.

3.2.5 *Age-Group Populations*

Table 2 indicates the projected changing age-group profile of the study area population, over the projection period. The figures are based on SNZ projections for the full Napier and Hastings districts. Currently, the 0-14 age-group accounts for approximately 22% of the total population, the 15-39 group 30%, 40-64 group 33% and the 65+ age-group 15%. By Year 2015, the proportions for these groups are projected at 21%, 29%, 33% and 17% respectively. By Year 2045, the respective proportions are 0-14 years 18%, 15-39 years 26%, 40-64 years 29% and 65 years plus 27%. Thus, the projection period sees an approximate 15,000 or 68% increase in the 65+ population, with this age-group's total population share increasing from around 17%, to 26%. The population of the other age-groups fall noticeably over the period.

Table 2: Heretaunga Plains Projected Age-Group Population Growth 2009-2045

Age-Group	Year						Change 2015-2045	
	2009		2015		2045			
	Popn	% of Total	Popn	% of Total	Popn	% of Total	Popn	%
0-14	37,988	22.4	27,969	21.5	25,678	18.5	-2,291	-8.2
15-39	37,983	30.4	37,774	29.0	36,701	26.5	-1,073	-2.8
40-64	41,511	33.2	43,862	32.9	39,732	28.7	-3,130	-7.3
65+	17,613	14.0	21,715	16.6	36,464	26.3	+14,749	+67.9
TOTAL	125,095	-	130,320	-	138,575	-	+8,255	+6.3

3.2.6 ***Ethnicity***

Table 3 indicates the broad ethnicity profile of the study area population at the current time, in 2015 and at the end of the projection period. The figures in the table are based on SNZ Census and projection results for the period 2006-2031, for the Napier-Hastings area.

Table 3: Heretaunga Plains Ethnicity Profile 2009-2045

Year	European/Other		Maori		Asian/Pacific		Total Population
	#	% of Total	#	% of Total	#	% of Total	
2009	89,318	71.4	27,646	22.1	8,131	6.5	125,095
2015	90,722	69.6	29,887	22.9	9,711	7.5	130,320
2045	83,145	60.6	37,371	27.0	18,059	12.4	138,575

As the table indicates, the population of the European/Other ('Other' excludes Maori, Asian and Pacific People ethnicities) ethnic group is projected to increase slightly on the present level by Year 2015 but then fall by some 7,600 or 8.4% over the following 30 years. At the same time, this group's share of the total Heretaunga Plains population falls from some 71% to 61%. The Maori population of the area is projected to increase by some 7,500 or 25% over 2015-2045, with this group's share of the total population increasing at the same time from 23% to 27%. The population of the combined Asian/Pacific Peoples ethnic group is projected to increase by some 8,350 or 86% and the group's total population share from 7.5% to 12.4%.

The projected increases in the Maori and Pacific Peoples populations is likely to have significant implications in terms of the provision of more culturally appropriate housing options for these communities.

3.2.7 ***Census Area Unit Populations***

Table 4(a) and 4(b) on Pages 7 and 8 provide two sets of population projection results on a CAU basis for the Heretaunga Plains study area for the 2015-2045 projection period. Both sets of projections are based on the CAU household projections contained in Tables 7(a) and 7(b) of the report.

The household projections were applied to the average household occupancy rates (number of persons per household) projected for the 2015-2045 interval on the basis of the historical Census year trend in these rates over 1996-2006.

Tables 4(a) and 7(a) are based on the traditional broad 'greenfield'/ 'infill' approach to new housing development, whilst Tables 4(b) and 7(b) are based on an 'intensification'/'brownfields' approach to new housing development. The latter approach is, in turn, based on the report prepared for this HPUDS project by Mr Craig Batchelar of Boffa Miskell into 'brownfields' housing development potential in the study area. Further comment on the housing implications of his analysis is made in Section 4 of this report.

The household projections were applied to the average household occupancy rates (number of persons per household) projected for the 2015-2045 interval on the basis of the historical Census year trend in these rates over 1996-2006.

In **Table 4(a)**, the CAUs with the projected largest population increases over 2015-2045 are Meeanee, Twyford, Frimley, Karamu and the combined Havelock North CAUs. The CAUs with the projected largest population declines over the period are the combined Taradale CAUs, Greenmeadows, combined Tamatea CAUs, Marewa, combined Onekawa CAUs, Taradale South, Onekawa South, Akina, Mahora, Mayfair and Flaxmere East. In **Table 4(b)**, with the housing intensification option**,** the CAUs with the largest population gains over 2015-2045 are the Meeanee, Irongate, Frimley, Ahuriri, Karamu, and Havelock North CAUs.

3.2.8 *Socio-Economic Characteristics*

3.2.8.1 An important factor to take into account in considering future residential/urban development requirements in the Heretaunga Plains area is the underlying socio-economic profile of the area. The impact of this aspect on, in particular, housing affordability, should be taken into consideration in the process of formulating future urban development policies for the area.

3.2.8.2 **Table 5** presents results for the 1996-2006 Census period for the Napier/Hastings/Hawke's Bay area (in comparison to the national results) for a number of different income-related indicators.

Table 5: Comparative Hawke's Bay/NZ Socio-Economic Profiles 1996-2006

Indicator	Napier	Hastings	Hawke's Bay	New Zealand
Median Personal Income ($)				
1996	**14,400**	**14,100**	**14,200**	**15,600**
2001	**16,900**	**16,600**	**16,700**	**18,500**
2006	**22,700**	**22,600**	**22,600**	**24,400**
Median Household Income ($)				
1996	**30,000**	**29,700**	**29,700**	**34,700**
2001	**32,800**	**34,100**	**33,400**	**39,600**
2006	**43,400**	**45,800**	**44,200**	**51,400**
% of Households with Annual Total Income Under $30,000				
1996	**43.3**	**41.9**	**42.9**	**36.7**
2001	**38.8**	**36.1**	**37.2**	**32.3**
2006	**29.5**	**27.0**	**28.2**	**24.5**
% of Population with Low Incomes				
1996	**26.5**	**29.7**	**29.1**	**20.5**
2001	**23.7**	**24.9**	**24.6**	**19.0**
2006	**19.9**	**20.0**	**20.4**	**14.3**
Median Hourly Earnings ($)				
1998	**-**	**-**	**15.10**	**15.50**
2003	**-**	**-**	**15.60**	**16.50**
2007	**-**	**-**	**16.00**	**18.00**
Unemployment Rate %				
1996	**8.4**	**7.5**	**8.0**	**7.7**
2001	**7.8**	**7.6**	**7.7**	**7.5**
2006	**4.8**	**4.5**	**4.6**	**5.1**

Table 4(a): Heretaunga Plains Population Projections 2015-2045 (Based on traditional Greenfield-Infill new housing development option-see Table 7(a))

Census Area Unit	2009 Estimate ESL	Projected Projection									Change #
		2011	2015	2016	2021	2026	2031	2036	2041	2045	2015-45
Bay View	1811	1895	1900	1900	1850	1860	1870	1885	1825	1845	-55
Poraiti	1167	1620	2125	2250	2775	2830	2885	2915	2850	2875	750
Meeanee	1277	1425	2120	2295	3265	4590	5725	6045	5890	5940	3820
Awatoto	372	380	380	380	390	405	415	430	415	425	45
Twyford	1076	1060	1030	1020	1040	1060	1415	1795	1890	2035	1005
Karamu	1106	1200	1440	1500	1620	1730	1890	2375	2470	2685	1245
Whakatu	865	850	825	820	805	815	790	790	770	770	-55
Clive	1660	1685	1710	1715	1690	1740	1795	1805	1750	1760	50
Haumoana	2253	2290	2350	2365	2325	2400	2450	2525	2550	2590	240
Brookvale	543	575	595	600	610	670	685	685	675	675	80
Irongate	593	620	765	800	890	1010	1150	1160	1135	1145	380
Longlands South	966	1010	1050	1060	1100	1160	1190	1190	1160	1160	110
Tangoio	36	40	40	40	45	50	80	80	80	95	55
Eskdale	614	635	675	685	750	850	875	890	865	875	200
Sherenden-Puketapu	102	110	125	130	160	180	190	190	205	215	90
Omahu	433	430	420	420	420	460	460	460	455	455	35
Waiohiki	352	380	370	365	360	395	390	400	395	405	35
Pakowhai	583	575	545	535	530	575	570	585	595	605	60
Maraekakaho	491	500	535	545	615	700	755	785	770	780	245
Bridge Pa	1137	1055	1020	1010	1020	1080	1110	1125	1100	1110	90
Poukawa	555	580	610	620	670	730	755	755	745	755	145
Pakipaki	684	715	715	715	700	755	750	775	755	765	50
Waimarama	563	615	710	730	800	880	965	995	985	995	285
Tutira	0	0	0	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0	0	0	0
Westshore	1086	1095	1115	1120	1145	1100	1120	1130	1140	1150	35
Ahuriri	845	870	955	975	1040	1050	1060	1070	1080	1090	135
Onekawa Central	1298	1300	1330	1340	1380	1330	1340	1355	1300	1310	-20
Onekawa West	161	185	230	240	265	270	280	300	290	290	60
Onekawa South	4627	4570	4620	4630	4525	4550	4390	4295	4345	4235	-385
Marewa	4848	4840	4910	4930	5015	4875	4710	4535	4370	4410	-500
Maraenui	3651	3680	3735	3750	3665	3680	3695	3830	3760	3610	-125
Hospital Hill	2776	2870	2940	2960	2875	2885	2900	2920	2830	2855	-85
Bluff Hill	2716	2780	2895	2925	2850	2865	2875	2900	2805	2835	-60
Nelson Park	2414	2360	2355	2355	2290	2310	2330	2355	2385	2405	50
Mclean Park	2505	2520	2570	2580	2505	2520	2530	2555	2475	2490	-80
Tamatea North	2495	2480	2380	2355	2275	2185	2195	2205	2130	2145	-235
Tamatea South	2645	2605	2495	2470	2385	2290	2300	2310	2230	2245	-250
Greenmeadows	6367	6415	6640	6695	6290	6705	6470	6330	6400	6190	-450
Taradale North	5090	5265	5465	5515	5735	5700	5545	5395	5460	5300	-165
Taradale South	5552	5480	5535	5550	5380	5640	5455	5290	5355	5200	-335
Pirimai	3581	3585	3680	3705	3650	3725	3840	3950	3840	3750	70
Mahora	3993	3955	3910	3900	3940	3875	3900	3765	3775	3665	-245
St Leonards	2897	2900	2930	2940	2975	2900	2920	2935	2945	2955	25
Frimley	1690	1745	2055	2135	2590	2975	3360	3430	3480	3500	1445
Raureka	4335	4335	4470	4505	4580	4470	4330	4370	4395	4270	-200
Mayfair	4376	4345	4325	4320	4400	4315	4175	4200	4215	4085	-240
Parkvale	3128	3215	3375	3415	3470	3370	3380	3405	3450	3330	-45
Hastings Central	2998	2945	2975	2980	3035	2950	2970	3000	3020	3030	55
Akina	4426	4425	4565	4600	4665	4550	4380	4395	4405	4260	-305
Woolwich	50	40	40	40	40	50	50	60	60	70	30
Camberley	2052	2060	2070	2070	2115	2090	2105	2105	2115	2115	45
Kingsley-Chatham	3138	3195	3290	3315	3350	3310	3330	3330	3350	3350	60
Lochain	3108	3130	3120	3115	3170	3135	3150	3170	3170	3180	60
Flaxmere East	4023	4040	4125	4145	4190	4130	4030	4030	4045	3940	-185
Anderson Park	1519	1560	1590	1600	1625	1595	1605	1620	1635	1645	55
Iona	2957	3105	3050	3035	3125	3025	3050	3060	3070	3080	30
Havelock Hills	825	840	815	810	890	850	835	835	810	810	-5
Te Mata	3420	3300	3380	3400	3655	3675	3830	3895	3915	3935	555
Havelock North Central	3229	3180	3230	3240	3360	3365	3500	3520	3530	3540	310
Te Mata Hills	1016	1045	1100	1115	1290	1355	1360	1385	1335	1345	245
Total Study Area	**125095**	**126505**	**130320**	**131274**	**134125**	**136644**	**138451**	**139876**	**139242**	**138575**	**8255**

Table 4(b): Heretaunga Plains Population Projections 2015-2045 (Based on new housing development 'brownfields' intensification option-see Table 7(b).

Census Area Unit	2009 Estimate ESL	Projected Population								Change #
		2011	2015	2021	2026	2031	2036	2041	2045	2015-45
Bay View	1811	1815	1880	1850	1865	1865	1885	1860	1840	-40
Poraiti	1167	2000	2195	2795	2855	2890	2930	2890	2880	685
Meeanee	1277	1525	2135	2330	3595	4715	5135	5080	5025	2890
Awatoto	372	370	370	390	410	415	430	425	425	55
Twyford	1076	1005	1000	990	1005	1010	1025	1010	1000	0
Karamu	1106	1275	1450	1600	1800	1880	2285	2620	2715	1265
Whakatu	865	870	915	835	820	800	795	785	780	-135
Clive	1660	1665	1710	1720	1750	1760	1795	1770	1760	50
Haumoana	2253	2260	2345	2355	2430	2440	2475	2480	2510	165
Brookvale	543	550	595	620	650	680	690	685	685	90
Irongate	593	595	680	880	1235	1650	2160	2160	2170	1490
Longlands South	966	980	1065	1105	1165	1170	1190	1170	1170	105
Tangoio	36	40	50	70	80	80	80	90	90	40
Eskdale	614	620	680	740	855	860	875	875	875	195
Sherenden-Puketapu	102	105	120	145	180	185	190	200	215	95
Omahu	433	425	425	420	450	460	460	465	465	40
Waiohiki	352	355	365	360	400	400	405	410	410	45
Pakowhai	583	545	540	520	550	560	575	580	595	55
Maraekakaho	491	495	535	600	715	720	770	770	780	245
Bridge Pa	1137	1010	1000	1025	1090	1100	1125	1115	1115	115
Poukawa	555	570	620	670	735	740	760	760	760	140
Pakipaki	684	690	720	700	760	760	765	750	750	30
Waimarama	563	570	705	785	930	940	995	990	990	285
Tutira	0	0	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0	0	0
Westshore	1086	1100	1125	1160	1150	1150	1200	1210	1240	115
Ahuriri	845	920	970	1205	1500	1630	1860	2280	2310	1340
Onekawa Central	1298	1300	1335	1375	1350	1340	1355	1325	1325	-10
Onekawa West	161	170	245	265	280	280	300	300	300	55
Onekawa South	4627	4605	4600	4555	4500	4400	4300	4150	4150	-450
Marewa	4848	4850	4900	5045	5000	4650	4560	4400	4390	-510
Maraenui	3651	3660	3750	3670	3685	3695	3830	3670	3505	-245
Hospital Hill	2776	2930	2955	2945	3000	3000	3115	3165	3215	260
Bluff Hill	2716	2720	2920	2840	2870	2875	2890	2800	2795	-125
Nelson Park	2414	2350	2350	2310	2340	2350	2365	2370	2400	50
Mclean Park	2505	2510	2570	2510	2520	2530	2565	2500	2485	-85
Tamatea North	2495	2400	2360	2280	2200	2190	2205	2130	2120	-240
Tamatea South	2645	2500	2475	2390	2350	2300	2310	2260	2220	-255
Greenmeadows	6367	6400	6600	6315	6400	6600	6300	6175	6050	-550
Taradale North	5090	5200	5500	5760	5715	5535	5360	5250	5200	-300
Taradale South	5552	5450	5400	5405	5550	5600	5240	5150	5100	-300
Pirimai	3581	3600	3695	3700	3720	3875	3900	3700	3645	-50
Mahora	3993	3900	3890	3970	3800	3800	3750	3700	3635	-255
St Leonards	2897	2905	2930	2980	2950	2920	2935	2940	2970	40
Frimley	1690	1750	2065	2625	3100	3450	3460	3470	3500	1435
Raureka	4335	4400	4490	4610	4400	4360	4355	4300	4220	-270
Mayfair	4376	4350	4325	4430	4200	4200	4190	4120	4055	-270
Parkvale	3128	3200	3385	3505	3500	3440	3450	3450	3345	-40
Hastings Central	2998	2970	2960	3070	3050	3020	3030	3135	3140	180
Akina	4426	4500	4590	4675	4480	4440	4370	4360	4225	-365
Woolwich	50	40	40	40	50	50	60	70	70	30
Camberley	2052	2055	2075	2115	2100	2090	2105	2125	2130	55
Kingsley-Chatham	3138	3200	3300	3350	3340	3320	3330	3350	3360	60
Lochain	3108	3110	3120	3170	3160	3160	3170	3170	3180	60
Flaxmere East	4023	4100	4150	4195	4050	4000	4030	4020	3925	-225
Anderson Park	1519	1560	1600	1625	1620	1615	1620	1640	1645	45
Iona	2957	2985	3030	3125	3050	3040	3050	3080	3085	55
Havelock Hills	825	820	815	890	850	845	840	830	820	5
Te Mata	3420	3410	3395	3750	3800	3825	3850	3900	3905	510
Havelock North Central	3229	3220	3210	3450	3350	3455	3465	3470	3555	345
Te Mata Hills	1016	1030	1100	1315	1339	1341	1367	1337	1355	255
Total Study Area	**125077**	**126505**	**130320**	**134125**	**136644**	**138451**	**139876**	**139242**	**138575**	**8255**

3.2.8.3 The results in Table 5 on Page 7 indicate a number of relevant points, as follows:

- In virtually all indicator cases, Hawkes Bay is below the national average
- For a number of the indicators, the gap between Hawkes Bay and the national situation increased over the monitoring period
- At the same time, the indicator situation within the region improved significantly over the period
- Both the districts and the region continue to have significant income level issues.

3.2.8.4 In June 2009, a total of some 10,545 Napier-Hastings residents were in receipt of a Government benefit, excluding superannuation. This figure comprised unemployment benefit 12%, domestic purposes benefit 42%, sickness benefit 18% and invalids benefit 28%. The above number represents approximately 15% of the 18-64 population in the area.

3.2.8.5 *Socio-Economic Deprivation*

Following each Census, the University of Otago's School of Public Health updates its Index of national and sub-national socio-economic deprivation, based on inter-Census trend results for local areas for a number of deprivation measures such as income, employment, communications access, transport social support, qualifications, home ownership and living space. **Table 6** on Page 11 lists the Napier-Hastings CAUs in the Study Area and their respective Index of Deprivation Decile levels and decile calculation results/scores.

Points to note from the table are as follows:

- The table provides an indication of the varying levels and geographical spread of socio-economic deprivation in the study area
- CAUs with decile numbers (on a scale of 1-10) closer to 1 and lower Index values (ranging in the Napier-Hastings case from 883-1252) have the lowest levels of relative socio-economic deprivation and vice versa for those CAUs with decile results closer to 10 and higher Index values
- Of the 62 different CAUs in the study area, 24 or 39% had a decile rating under 5 (i.e. relatively less deprived) with 28 or 45% of the CAUs having a rating above 5 (relatively more deprived).
- On a population basis though, only 30% of the study area population live within those CAUs that are relatively less deprived; 10% of the population live the decile 5 CAUs and 60% live in the relatively more deprived parts of the study area. Decile ratings 9 and 10 (i.e. the most deprived categories) accounted for approximately one-third of the population
- The least deprived areas at the time of the 2006 Census were Poraiti, Brookvale, Longlands South, Tangoio, Sherenden-Puketapu, Waiohiki, Whanawhana and all the Havelock North CAUs (excluding Anderson Park). The most deprived were Onekawa South, Marewa, Maraenui, Raureka, Hastings Central, Akina, the general Flaxmere area and Anderson Park (in Havelock North)
- It should be noted that socio-economic deprivation can vary significantly within a particular CAU itself.

Table 6: Napier-Hastings Socio-Economic Deprivation Results 2006 Census

Census Area Unit (CAU)	Decile Group (1=Least Deprived 10=Most Deprived)	Deprivation Score
Bay View	5	958
Poraiti	1	903
Meeanee	3	939
Awatoto	7	998
Twyford	4	950
Karamu	5	973
Whakatu	8	1026
Clive	5	960
Haumoana	5	965
Brookvale	2	919
Irongate	4	948
Longlands South	2	921
Tangoio	2	928
Eskdale	4	948
Sherenden-Puketapu	2	919
Omahu	8	1044
Waiohiki	2	925
Pakowhai	6	997
Maraekakaho	3	929
Bridge Pa	6	986
Poukawa	4	955
Pakipaki	5	961
Waimarama	4	956
Tutira	6	980
Puketitiri	3	937
Whanawhana	2	914
Westshore	5	966
Ahuriri	7	1010
Onekawa Central	6	993
Onekawa West	7	1013
Onekawa South	10	1127
Marewa	9	1100
Maraenui	10	1252
Hospital Hill	4	957
Bluff Hill	5	959
Nelson Park	8	1028
McLean Park	8	1040
Tamatea North	8	1029
Tamatea South	7	1005
Greenmeadows	4	946
Taradale North	3	935
Taradale South	4	957
Pirimai	7	1007
Mahora	8	1053
St Leonards	8	1039
Frimley	5	968
Raureka	9	1060
Mayfair	8	1053
Parkvale	6	989
Hastings Central	9	1062
Akina	9	1057
Woolwich	6	990
Camberley	10	1244
Kingsley-Chatham	10	1204
Lochain	10	1143
Flaxmere East	10	1141
Anderson Park	9	1068
Iona	2	924
Havelock Hills	1	893
Te Mata	2	922
Havelock North Central	1	907
Te Mata Hills	1	883

3.2.9 The Hawkes Bay Healthy Housing Coalition report of July 2008, entitled ‘Hawkes Bay Healthy Housing Profile’, comments that “it now takes 71.2% of one median income to pay the mortgage on a median priced house, compared with 37.8% five years ago. Any more than 30% is generally cited as the affordability threshold-affecting one in four New Zealanders” (Executive Summary of report)

3.2.10 ***Conclusion***

The analysis provided in this section indicates that the Heretaunga Plains area is expected to record further although slowing population growth for a large part of the projection period. However, there will be some noticeable changes within the population base of the area, such as the significant growth of the 65+ and Maori populations. The relatively low income and considerable socio-economic deprivation of the area need to be taken into consideration, in future urban development planning for the area.

4.0 Housing Growth Outlook

Key Findings

- Projected 8014 or approx. 16% increase in total study area household numbers over the period
- Household growth largest numerically across the two different housing development options discussed in the report for Meeanee, Havelock North, Ahuriri, Frimley, Irongate and Karamu
- Approximate profile of the projected total household growth is urban-greenfield 45%, infill/brownfields 40-45% and rural-residential/lifestyle 10-15%
- Falling household occupancy ratio propels household growth significantly in advance of population growth
- Continued changes in the housing profile-15% increase in 'couple without children' families, 20% fall in two-parent families and 29% increase in sole-person households
- Wide range of factors will continue to collectively influence new household formation in the study area

4.1 **Tables 7(a) and 7(b) on** Pages 14 and 15 present the assessed household growth projections for the study area as a whole and the various CAUs within the area, for the 2015-2045 projection period, based on the two alternative projected new housing development scenarios discussed previously on Pages 6 and 7 of the report .

4.2 The projection calculations take into account the following factors:

- Statistics New Zealand base household estimates for the area in 2006
- New residential dwelling units consented to from 2006 to the present time
- Historical CAU shares of total new housing development
- Statistics New Zealand household projections for the total study area for the period 2006-2031
- The study area's household growth track since 2006 in comparison to the SNZ projections
- Respective local Council household growth projections for LTCCP planning purposes, including desired ratios of greenfield, infill, rural residential/lifestyle and other forms of housing
- Current Council policy and longer-term planning for future residential development areas within the Heretaunga Plains catchment.
- Projected study area population growth over the 2031-2045 period (based on projected national population growth over the period) and projected household occupancy rates for the interval
- The Boffa Miskill report on 'brownfields' new housing development potential in Napier-Hastings (in respect of the findings of this report, only the moderate and high potential development areas were taken into account-in Table 7(b) and then only the low base housing potential numbers. These are also assumed in the analysis to apply from the start of the 2015-2045 projection period.

4.3 It is emphasised that the underlying projections reflect as far as possible current Council policy or thinking on the location of future new residential subdivision developments in particular within the study area, over the longer-term. Future issues relating to, for example, infrastructural provision or the availability of new infill housing sites could significantly alter the pattern of new housing development shown in the projections.

4.4 The salient points to note from **Table 7 (a)** are as follows:

- The total number of households in the study area is projected to increase by 8,014 or 15.7% over the 2015-2045 period
- It is emphasised again, as noted in Section 2.1.6, that there is only a partial relationship in the analysis between the additional household growth projection and the additional population growth projection figure indicated in Section 3. This is due to the fact that the population projection takes into account the historical trend over all the study area CAUs in the average household occupancy rates. It is noted that SNZ is projecting additional household growth for the combined Napier-Hastings districts of 7250 over 2016-2031 and additional population growth of 7550
- Within the study area, the CAUs projected to record the largest increase in household numbers over the period are, in order, Meeanee (including the Te Awa Estates development already underway), combined Havelock North CAUs, Irongate, Frimley, Taradale North/South CAUs, Karamu, Greenmeadows, Poraiti and Pirimai.

4.5 With regard to **Table 7(b)**, the CAUs projected to record the largest increase in household numbers over 2015-2045 are, in order, Meeanee, Ahuriri, Havelock North CAUs, Frimley, Irongate, Karamu and Taradale CAUs.

4.6 On a CAU basis, the approximate division of the new housing growth projected for 2015-2045 with the Table 7(a) housing development option is ‘Greenfield' sub-division 45%, infill housing 45% and rural-residential/lifestyle 10%. With the Table 7(b) figures, the profile is ‘Greenfield' 45%, infill/brownfields 40% and rural-residential/lifestyle 15%. The breakdown of infill and brownfields housing is the former 381 or 37% and the latter 643 or 63%.

Table 7(a): Heretaunga Plains Household Projections 2015-2045 (Traditional 'greenfield'/'infill' new housing development option)

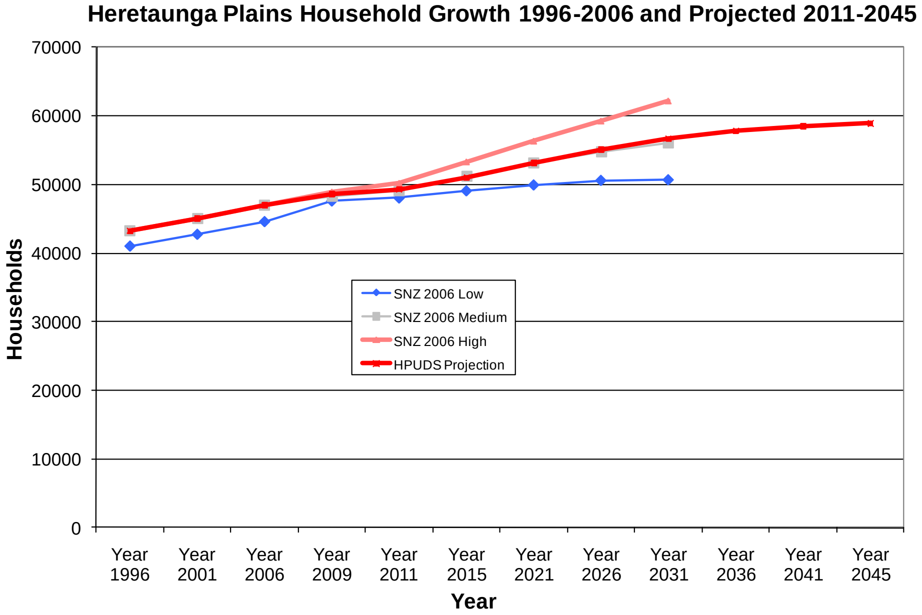
Census Area Unit	Estimated Households	Projected Households								Change #
	Jun-09	2011	2015	2021	2026	2031	2036	2041	2045	2015-45
Bay View	738	750	760	770	775	780	785	795	800	40
Poraiti	472	650	715	895	930	930	940	950	955	240
Meeanee	506	550	770	1210	1700	2120	2325	2355	2370	1600
Awatoto	141	145	150	155	155	160	165	165	170	20
Twyford	416	420	425	430	435	440	445	450	455	30
Karamu	441	460	525	600	640	700	880	950	1015	490
Whakatu	297	300	310	310	325	330	330	335	335	25
Clive	618	625	640	650	670	690	695	700	705	65
Haumoana	892	900	910	930	960	980	1010	1020	1035	125
Brookvale	208	210	220	225	240	245	245	250	250	30
Irongate	214	220	250	335	385	585	750	830	880	630
Longlands South	358	360	370	380	400	410	410	415	415	45
Tangoio	14	15	20	25	25	30	30	30	35	15
Eskdale	255	260	275	300	340	350	355	360	365	90
Sherenden-Puketapu	37	40	45	55	60	65	65	70	70	25
Omahu	135	140	145	150	165	170	170	175	175	30
Waiohiki	135	140	145	150	165	170	175	180	185	40
Pakowhai	213	215	220	230	250	260	265	270	275	55
Maraekakaho	176	180	195	220	250	270	280	285	290	95
Bridge Pa	297	300	325	340	360	370	375	380	385	60
Poukawa	204	210	225	240	260	270	270	275	280	55
Pakipaki	245	250	260	270	290	300	310	315	320	60
Waimarama	213	215	255	285	315	345	355	365	365	110
Tutira	0	0	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0	0	0
Westshore	521	530	540	545	550	560	565	570	575	35
Ahuriri	434	460	490	520	525	530	535	540	545	55
Onekawa Central	562	570	585	600	605	610	615	620	625	40
Onekawa West	138	150	160	165	170	175	175	180	180	20
Onekawa South	1676	1680	1710	1740	1750	1755	1790	1810	1820	110
Marewa	1994	2005	2050	2090	2120	2140	2160	2185	2200	150
Maraenui	1125	1130	1140	1145	1150	1155	1160	1175	1185	45
Hospital Hill	1211	1220	1235	1250	1255	1260	1270	1285	1295	60
Bluff Hill	1188	1195	1220	1240	1245	1250	1260	1275	1285	65
Nelson Park	1001	1010	1025	1040	1050	1060	1070	1085	1090	65
Mclean Park	1050	1060	1075	1090	1095	1100	1110	1125	1130	55
Tamatea North	1021	1025	1030	1035	1040	1045	1050	1065	1070	40
Tamatea South	1072	1075	1080	1085	1090	1095	1100	1115	1120	40
Greenmeadows	2714	2740	2790	2860	2900	2940	3000	3035	3055	265
Taradale North	2212	2245	2305	2390	2470	2520	2570	2600	2620	315
Taradale South	2223	2240	2280	2340	2435	2480	2520	2550	2570	290
Pirimai	1386	1400	1425	1460	1490	1535	1580	1600	1610	185
Mahora	1426	1430	1445	1460	1490	1500	1505	1510	1515	70
St Leonards	1199	1205	1225	1240	1260	1270	1275	1280	1285	60
Frimley	667	710	830	1035	1240	1400	1430	1450	1455	625
Raureka	1582	1585	1610	1635	1655	1665	1680	1690	1690	80
Mayfair	1592	1595	1605	1630	1660	1670	1680	1685	1690	85
Parkvale	1339	1360	1415	1445	1465	1470	1480	1500	1495	80
Hastings Central	1380	1385	1415	1445	1475	1485	1500	1510	1510	95
Akina	1799	1805	1840	1865	1895	1905	1910	1915	1920	80
Woolwich	43	45	50	55	60	70	70	70	70	20
Camberley	681	685	695	705	720	725	725	730	730	35
Kingsley-Chatham	869	880	895	905	920	925	925	930	930	35
Lochain	860	860	870	880	895	900	905	905	910	40
Flaxmere East	1250	1250	1260	1270	1290	1300	1300	1305	1305	45
Anderson Park	560	565	575	580	590	595	600	605	610	35
Iona	1185	1195	1215	1250	1260	1270	1275	1280	1285	70
Havelock Hills	315	320	330	370	370	380	380	385	385	55
Te Mata	1335	1350	1480	1590	1670	1740	1770	1780	1785	305
Havelock North Centra	1343	1350	1400	1460	1530	1590	1600	1605	1610	210
Te Mata Hills	425	430	462	560	590	620	630	635	640	178
Total Study Area	**48603**	**49295**	**50911**	**53130**	**55070**	**56660**	**57800**	**58505**	**58925**	**8014**

Table 7(b): Heretaunga Plains Housing Growth Projections 2015-2045 (Based on new housing development 'Brownfields' intensification option)

Census Area Unit	Estimated Households	Projected Households								Change #
	Jun-09	2011	2015	2021	2026	2031	2036	2041	2045	2015-45
Bay View	738	750	760	770	775	780	785	790	795	35
Poraiti	472	650	715	900	920	940	945	950	955	240
Meeanee	506	550	770	860	1330	1750	1975	1995	2000	1230
Awatoto	141	145	150	155	155	160	165	165	165	15
Twyford	416	420	425	430	435	440	445	450	450	25
Karamu	441	460	525	590	650	700	845	900	1040	515
Whakatu	297	300	310	320	325	330	330	335	335	25
Clive	618	625	640	660	670	680	690	695	700	60
Haumoana	892	900	910	940	970	980	990	995	1000	90
Brookvale	208	210	220	230	240	245	245	250	250	30
Irongate	214	220	250	325	385	595	770	790	800	550
Longlands South	358	360	370	380	400	405	410	415	415	45
Tangoio	14	15	20	25	25	30	30	30	30	10
Eskdale	255	260	275	295	340	345	350	355	360	85
Sherenden-Puketapu	37	40	45	50	60	65	65	70	70	25
Omahu	135	140	145	150	165	170	170	175	175	30
Waiohiki	135	140	145	150	165	170	175	180	180	35
Pakowhai	213	215	220	225	250	255	260	265	265	45
Maraekakaho	176	180	195	215	250	260	275	280	285	90
Bridge Pa	297	300	325	340	360	370	375	380	380	55
Poukawa	204	210	225	240	260	270	270	275	280	55
Pakipaki	245	250	260	270	290	300	305	310	310	50
Waimarama	213	215	255	280	330	340	355	360	365	110
Tutira	0	0	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0	0	0
Westshore	521	530	540	550	570	580	600	610	615	75
Ahuriri	434	460	490	600	710	820	930	1075	1150	660
Onekawa Central	562	570	585	595	605	610	615	620	625	40
Onekawa West	138	150	160	165	170	175	175	180	180	20
Onekawa South	1676	1680	1710	1750	1760	1770	1790	1795	1800	90
Marewa	1994	2005	2050	2100	2140	2160	2170	2185	2190	140
Maraenui	1125	1130	1140	1145	1150	1155	1160	1165	1165	25
Hospital Hill	1211	1220	1235	1280	1300	1340	1355	1425	1455	220
Bluff Hill	1188	1195	1220	1235	1245	1250	1255	1260	1265	45
Nelson Park	1001	1010	1025	1050	1060	1070	1075	1080	1085	60
Mclean Park	1050	1060	1075	1090	1095	1100	1115	1120	1125	50
Tamatea North	1021	1025	1030	1035	1040	1045	1050	1055	1055	25
Tamatea South	1072	1075	1080	1085	1090	1095	1100	1105	1105	25
Greenmeadows	2714	2740	2790	2870	2920	2950	2980	2995	3000	210
Taradale North	2212	2245	2305	2400	2480	2500	2550	2555	2560	255
Taradale South	2223	2240	2280	2350	2450	2480	2495	2510	2520	240
Pirimai	1386	1400	1425	1480	1500	1540	1560	1575	1580	155
Mahora	1426	1430	1445	1470	1480	1490	1500	1505	1510	65
St Leonards	1199	1205	1225	1240	1250	1270	1275	1280	1285	60
Frimley	667	710	830	1050	1300	1420	1440	1450	1455	625
Raureka	1582	1585	1610	1645	1660	1665	1675	1680	1685	75
Mayfair	1592	1595	1605	1640	1650	1660	1675	1680	1685	80
Parkvale	1339	1360	1415	1460	1480	1490	1500	1510	1515	100
Hastings Central	1380	1385	1415	1460	1480	1500	1515	1560	1565	150
Akina	1799	1805	1840	1870	1880	1890	1900	1910	1915	75
Woolwich	43	45	50	55	60	70	70	70	70	20
Camberley	681	685	695	705	715	720	725	730	730	35
Kingsley-Chatham	869	880	895	905	915	920	925	930	930	35
Lochain	860	860	870	880	890	900	905	905	905	35
Flaxmere East	1250	1250	1260	1270	1280	1290	1300	1305	1305	45
Anderson Park	560	565	575	580	590	595	600	605	605	30
Iona	1185	1195	1215	1250	1260	1265	1270	1275	1280	65
Havelock Hills	315	320	330	370	370	375	380	385	385	55
Te Mata	1335	1350	1480	1630	1675	1740	1750	1765	1770	290
Havelock North Central	1343	1350	1400	1500	1520	1570	1575	1605	1610	210
Te Mata Hills	425	430	461	570	580	610	620	635	640	179
Total Study Area	**48603**	**49295**	**50911**	**53130**	**55070**	**56660**	**57800**	**58505**	**58925**	**8014**

4.7 **Figure 2** indicates the long-term trend in total new housing growth in the study area from Year 2006, with the projected figures from Year 2011 (including for the projection period 2015-2045). SNZ's household growth projections are also shown in the graph. The study area projection for 2015-2031 closely follows the SNZ Medium projections. After that point, the number of households continues to increase but at a diminishing rate.

Figure 2:



4.8 Over 2015-2045, the population of the study area is projected to increase by 6.3%, whilst total household numbers are projected to increase by 15.7%. This represents a continuation of the historical situation in the area which has seen, for example, the population increase since 1996 by 7% and the number of households by 12.1%. The trend for a considerably higher rate of household growth than population growth can be attributed primarily to the falling household occupancy ratio (from 2.70 persons per household in 1996 to 2.57 in 2009). This can be traced, in turn, to such factors as the ageing population, increasing life expectancy and changes in marital status. Over 2015-2045, the household occupancy ratio for the study area is projected to fall further from 2.55 to 2.35.

4.9 During 2016-2031, SNZ is projecting the following changes in the Napier-Hastings housing profile:

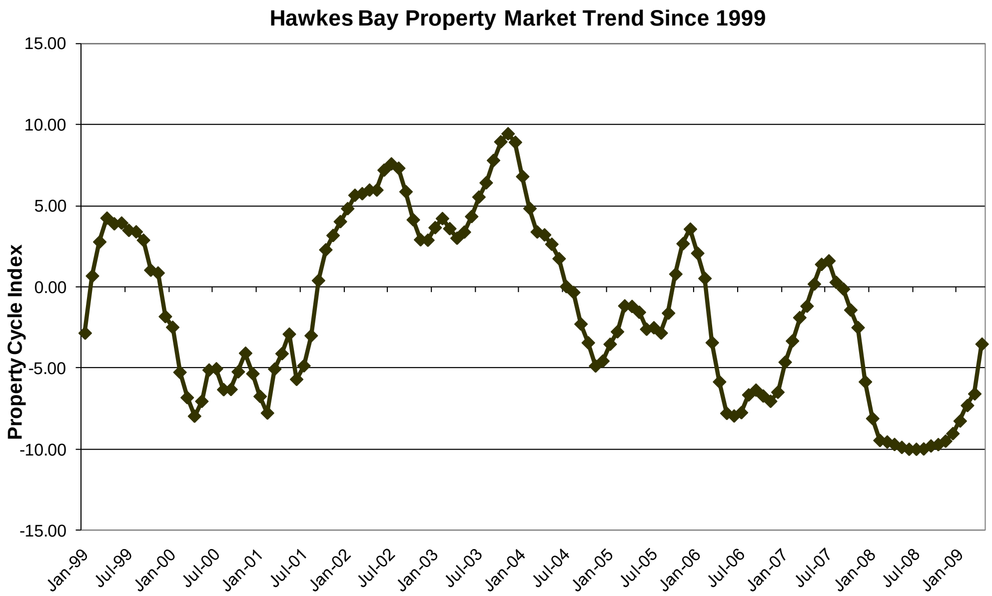
- A 15% increase in the number of 'couple without children' families
- 20% decrease in the number of two-parent families
- 4% increase in the number of single-parent families
- 2% increase in the number of family based households
- 29% increase in the number of single-person households

All these changes reinforce the projected trend over the period of decreasing household size, and the associated need to provide residential accommodation that addresses this trend effectively.

4.10 In addition to the population and socio-economic factors considered in Section 3, the points made in Sections 4.6 and 4.7 above and the economic matters covered later in Section 5, other factors that will collectively also continue to influence household formation to varying degrees in the study area over the projection period include:

- Central Government policies that impact on underlying housing affordability-fiscal and monetary policy, superannuation, accommodation supplement, income support, benefit payments, subsidisation (e.g. home-heating, insulation upgrading and energy-use efficiency) and rate rebates
- National financial and credit conditions
- Central Government policies impacting on the supply side of the housing market, for example, resource management legislation, land provision for housing and housing quality e.g. warmth and insulation
- Central Government policies impacting on particular housing sectors, such as first-home buyers and the retirement population
- Local Government policies impacting directly on the local housing market-district planning requirements, resource management policies, land provision for new housing, building costs and building requirements
- Local housing market conditions- as **Figure 3** below indicates, the local housing market is very cyclical and this situation is expected to continue over the longer-term
- Changing housing preferences, such as smaller sections and houses, new residences and clustered housing (e.g. retirement villages and gated communities).
- Changes in the level of home ownership due to such factors as housing affordability, housing costs, housing supply limitations, community/social changes and the availability of alternative housing options e.g. rental apartments and retirement village dwellings (licences to occupy). Since the 1996 Census, the level of home ownership in Napier-Hastings has fallen from 71.3% (NZ 70.6%) to 68.2% (NZ 66.9%).

Figure 3:



4.11 Conclusion

The 2015-2045 period is expected to see further overall household growth in the study area well in excess of projected population growth, driven primarily by factors causing an ongoing lowering in average household occupancy levels in the area and also promoting additional household formation.

5.0 Economic and Employment Outlook 2015-2045

Key Findings

- Key industries in the study area will continue to include primary production and processing, commercial business services (including visitor industry servicing) and wholesale/retail trade
- These activities plus construction, education and health services should also continue to be the leading employing industries
- Strongest GDP growth over the period forecast for construction, education, tourism/hospitality services, cultural/recreational services, transport/storage, public administration and business services
- Total employment forecast to increase by approximately 18% over 2015-2045
- Key growth influences in the longer-term include the region's natural resource base, world importance of food, continued ability to 'add value', impact of international market and exchange rate fluctuations on the area's export performance, climatic factors, access to seasonal and skilled labour, science and technological application, quality infrastructure, and population and household growth
- Forecast 21% growth in total commercial sector employment and 15% growth in industrial employment

5.1 This section indicates the broad economic environment that is anticipated to exist in the Napier/Hastings/Hawke's Bay area, during the 2015-2045 projection period. The population and household results presented earlier in the report are also part of the economic context for the projection period.

5.2 Economic Profile

Table 8 below details the historical (Year 2000), current (2009) and forecast (Years 2010-2045) industry profile of the combined Napier-Hastings Local Government districts (larger than the study area), in GDP (Gross Domestic Product) and employment terms. The base information for the analysis is sourced from Infometrics national economic consultancy in Wellington. The results for 2015 are based on the industry growth forecasts prepared earlier this year by Infometrics for the Venture Hawke's Bay regional development organisation, whilst the Year 2045 forecasts are sourced from the Company's other long-term economic modelling results for the region.

Table 8: Napier-Hastings Industry Profile 2009-2045

Industry	Year 2000		Year 2009		Year 2015		Year 2045	
	GDP ($M)	Employ-ment	GDP ($M)	Employ-ment	GDP ($M)	Employ-ment	GDP ($M)	Employ-ment
Primary Production	375	7,829	681	9,204	814	9,934	1,480	10,210
Processing	556	4,816	615	5,064	709	5,293	1,258	5,992
Manufacturing	217	2,560	230	3,027	256	3,055	444	3,743
Construction	102	3,210	141	5,662	140	5,386	296	6,214
Wholesale/ Retail Trade	315	9,827	424	12,350	484	13,220	888	15,479
Tourism-Hospitality Services	41	2,589	49	3,631	57	4,090	111	4,615
Transport/Storage	93	2,181	116	2,353	136	2,467	259	3,056

Industry	Year 2000		Year 2009		Year 2015		Year 2045	
	GDP ($M)	Employ-ment	GDP ($M)	Employ-ment	GDP ($M)	Employ-ment	GDP ($M)	Employ-ment
Communication Services	55	535	110	545	162	678	296	859
Business Services	336	6,050	559	8,838	640	9,360	1,184	10,841
Government Services	114	1,301	167	1,564	179	1,665	333	2,512
Education	103	4,208	117	5,253	147	5,598	296	6,667
Health & Community Services	171	5,598	226	7,166	261	7,934	481	10,399
Cult/Rec Services	15	976	25	1,290	23	1,218	44	1,747
Personal/Other Services	80	2,185	98	2,839	113	3,192	200	3,671
TOTAL	**2,573**	**53,865**	**3,558**	**68,786**	**4,121**	**73,090**	**7,570**	**86,005**

The points to note from the table are as follows:

- At the present time, the largest industries in the study area in GDP terms are, in order, primary production, primary commodity processing, business services and wholesale/retail trade. Primary commodity production and processing accounts for 36% of total area GDP. When other industry activities servicing the rural sector are taken into account, the overall GDP contribution of the sector is in excess of 40%.
- In employment terms, the largest industries in the region are currently, in order, wholesaling-retailing, primary production, business services, health and community services, education services, construction and primary commodity processing. Together, primary production and commodity processing account for 21% of total industry employment in the Napier-Hastings area.
- By Year 2015, total industry real GDP in Napier-Hastings is forecast to be some 16% above its current level, with employment being up some 6%. Industries forecast to grow most over 2009-2015 in GDP terms are, in order, education services, primary production and processing, transport-storage and tourism-hospitality services. Industries forecast to grow most in employment terms are, in order, communication services, tourism-hospitality services, personal/household services, health and community services, and education services.

5.3 Projection Period

- **Over the 2015-2045 projection period**:
  - Napier-Hastings real industry-based GDP is forecast to increase by 84%, compared to the 60% gain over the 2000-2015 period.
  - The basic underlying industry GDP profile of the area is forecast to remain as it is at present, that is, led by the primary production and processing, business service, wholesale-retail trade, health-community service and manufacturing industries. This outlook (particularly in relation to primary production and processing) reflects strongly the underlying natural resource base of the region, the primary production specialisation of the HB area, the accompanying well-developed physical and services infrastructure, the increasing standard of living in some of the larger population countries (e.g. China and India) and the increased demand for goods and services along with this, and the forecast continuing high importance of food production generally from a world perspective. It is noted that according to Infometrics economic consultancy (Wellington) figures, the contribution of the primary production sector to total Hawkes Bay all-industry GDP

has in fact risen in real terms from 14.8% in 1997/98 to 17.2% in 2008/09. At the same time, the sector's total industry employment contribution has remained practically unchanged. Thus, whilst there may be changes within the sector over the forecast period (such as, growth within some industries and decline within others, or reduced commodity exporting and increased value-added processing, in response to changing production and market conditions), the underlying major regional economic importance of the sector is forecast to continue during the long-term planning horizon.

- GDP growth is forecast to be strongest for construction services, education, tourism-hospitality services, cultural and recreational services, transport-storage, public administration and business services.
- Total employment is forecast to grow by some 18%, compared to 36% over the 2000-2015 period. The relationship between projected population and employment growth over the 2015-2045 period is further discussed in Section 2.1.7 of the report.
- The broad industry employment profile of the area is forecast to remain similar to the present situation, that is, with primary production and processing, wholesale-retail trade, business services, health/community services, education and construction being the leading employing industries.

5.4 Growth Drivers and Influences

The analysis in Sections 5.2 and 5.3 above raises a number of points concerning the underlying influencers and drivers of economic and employment growth in the study area over the long-term projection period 2015-2045. The points include:

(i) The underlying natural resource base and strengths of the area should ensure a continuation of its major primary production and processing specialisation, and related support servicing, as well as its important visitor sector

(ii) The international market importance of 'food' should also ensure the region's continued important specialisations in this sector

(iii) The area's major primary commodity export orientation means that it will remain prone though to fluctuating international market and exchange rate conditions, which will significantly impact the range and timing of primary production and related processing carried on in the area

(iv) Changing climatic conditions will also continue to significantly impact the activities of the primary sector

(v) Ongoing access to appropriately skilled labour, the necessary seasonal workforce, science and technology applications, and an efficient and effective transport/communications infrastructure (including the Port of Napier's services) will continue to be critical to the overall performance of the local economy and increasing the level of 'added value' from its production base

(vi) The forecast demographic growth, changing population characteristics and general economic growth over the projection period, should assist the economic performance of the broad services sector over the period.

5.5 Future Growth Opportunities

Key specific future business and economic development opportunities in the general Hawkes Bay area are seen as including agribusiness, boutique food processing, road freight services, infrastructure construction and support, health and aged care, tourism, wine, and farm services and equipment manufacturing. Note again that a number of these activities are related to the primary production sector.

5.6 Projected Industrial and Commercial Growth

5.6.1 **Tables 9(a) and 9(b)** on Pages 23 and 24 provide sector employment growth results for the 2015-2045 projection period, for both the study area as a whole and also the CAUs within the area. The projection results are provided for both the industrial and commercial sectors. The industrial sector is defined as including those activities normally located in industrial zones – manufacturing, construction, warehousing, transport and storage. The commercial sector is defined as including those service activities usually located in commercial and other business 'zones' – public utilities, retailing, tourism/hospitality services, communications, business services, the public sector, education, health and community services.

5.6.2 The employment projections provided in the tables were derived using the following approach:

(i) Historical Statistics New Zealand business demography data and trends for work-based employment within CAUs, provided the basis for preparing the projections.

(ii) The Infometrics Hawke's Bay industry employment projections prepared for Venture Hawke's Bay earlier this year, referred to in Section 5.2, were then used to establish the study area employment totals for the projection periods. The employment totals were then allocated amongst the various CAUs on the basis of trends in their respective employment shares during the 2000-2009 period.

(iii) A number of adjustments were then made to the CAU projection results established in (ii) above, in light of potential new business developments occurring over the long-term projection period. The developments include, for example, industrial land expansion in Hastings district, further retail development in the Hastings CBD, further business development in the Ahuriri area of Napier and the possible establishment of a new business park on the Western side of the Napier-Hastings expressway adjacent to the Onekawa/Pandora industrial areas.

(iv) The key results to note from the tables are as follows:

- With respect to commercial-services employment, the parts of the study area projected to record the most noticeable numerical employment gains include Bay View, Karamu, Whakatu, Bridge Pa, Ahuriri, Onekawa West, Bluff Hill (including Port of Napier and the northern side of the Napier CBD area), Greenmeadows, Nelson Park (including much of the Napier CBD), Taradale, Mahora, St Leonards, Frimley, Hastings Central, Camberley, Iona and Te Mata
- With respect to industrial employment, the parts of the study area projected to record the most noticeable numerical employment gains include Poraiti (in which the possible new industrial park would be located), Awatoto, Twyford, Karamu, Bridge Pa, Onekawa West, Hastings Central and Woolwich

Table 9(a): Heretaunga Plains Total Commercial/Services Employment Projections 2015-2045

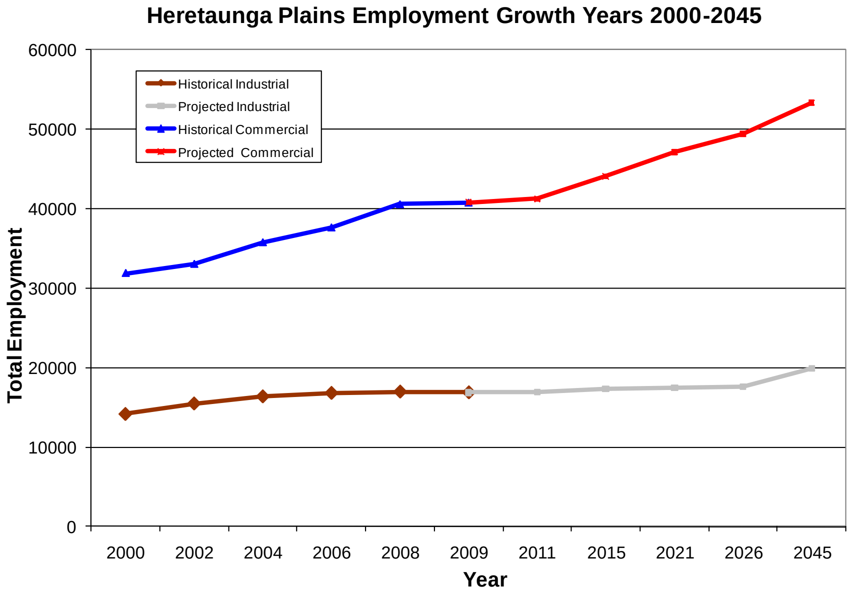
Census Area Unit	Year 2009 Estimate	Services Employment Projections						Change
		Year 2011	2015	2016	2021	2026	2045	# 2015-45
Bay View	510	515	550	560	590	620	665	115
Poraiti	145	145	155	160	165	170	185	30
Meeanee	122	125	130	135	140	150	165	35
Awatoto	65	65	70	70	75	80	95	25
Twyford	341	340	355	360	370	390	395	40
Karamu	413	420	430	470	500	530	595	165
Whakatu	1135	1145	1195	1200	1250	1300	1395	200
Clive	322	325	350	360	380	400	425	75
Haumoana	271	275	295	300	315	330	350	55
Brookvale	320	320	340	350	370	390	415	75
Irongate	62	65	70	85	100	115	125	55
Longlands South	121	120	130	130	135	140	145	15
Tangoio	5	5	5	5	5	5	5	0
Eskdale	15	15	15	20	20	20	20	5
Sherenden-Puketapu	5	5	5	5	5	5	5	0
Omahu	15	15	15	15	15	15	15	0
Waiohiki	33	35	40	40	40	40	45	5
Pakowhai	188	190	205	205	210	215	225	20
Maraekakaho	40	40	40	45	45	50	50	10
Bridge Pa	695	700	760	765	805	845	905	145
Poukawa	85	85	95	95	100	100	110	15
Pakipaki	113	115	125	125	130	135	140	15
Waimarama	10	10	10	15	15	20	25	15
Tutira	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0
Westshore	112	110	120	120	125	130	140	20
Ahuriri	914	925	995	1005	1055	1105	1295	300
Onekawa Central	272	275	295	300	315	330	350	55
Onekawa West	2724	2795	2960	3000	3200	3410	3995	1035
Onekawa South	319	320	340	350	370	390	415	75
Marewa	565	575	600	600	630	650	695	95
Maraenui	138	140	150	150	160	170	180	30
Hospital Hill	651	660	710	715	750	785	845	135
Bluff Hill	1669	1680	1805	1830	1925	2020	2185	380
Nelson Park	5937	5995	6420	6530	6830	7180	7625	1205
Mclean Park	392	395	420	430	450	470	500	80
Tamatea North	303	305	325	330	345	360	385	60
Tamatea South	195	195	210	210	220	230	245	35
Greenmeadows	676	685	730	745	785	825	885	155
Taradale North	1194	1200	1295	1310	1375	1440	1550	255
Taradale South	1283	1290	1385	1405	1475	1545	1665	280
Pirimai	422	425	455	460	485	510	545	90
Mahora	583	590	630	640	675	710	760	130
St Leonards	1118	1125	1215	1230	1295	1360	1465	250
Frimley	517	525	560	570	600	630	675	115
Raureka	195	195	210	210	220	230	245	35
Mayfair	432	435	465	475	500	525	560	95
Parkvale	346	350	375	380	400	420	450	75
Hastings Central	7604	7680	8220	8360	8780	9150	9850	1630
Akina	344	345	370	375	395	415	445	75
Woolwich	401	405	435	440	465	490	525	90
Camberley	2572	2600	2785	2835	2980	3115	3300	515
Kingsley-Chatham	529	535	570	580	610	640	685	115
Lochain	144	145	155	160	170	180	190	35
Flaxmere East	424	425	455	460	485	510	545	90
Anderson Park	140	140	150	150	160	170	180	30
Iona	676	680	730	745	785	825	885	155
Havelock Hills	33	35	40	40	40	40	45	5
Te Mata	1401	1410	1520	1535	1615	1695	1825	305
Havelock North Central	401	405	435	440	465	490	525	90
Te Mata Hills	175	175	185	190	200	210	220	35
Total Study Area	**40829**	**41246**	**44,105**	**44820**	**47115**	**49420**	**53375**	**9270**

Table 9(b): Heretaunga Plains Projected Total Industrial Employment 2015-2045

Census Area Unit	Year 2009 Estimate	Industrial Employment Projections						Change
		Year 2011	2015	2016	2021	2026	2045	#
								2015-45
Bay View	291	300	300	300	300	300	330	30
Poraiti	91	92	100	110	140	190	500	400
Meeanee	198	195	205	205	205	205	205	0
Awatoto	531	530	540	540	550	550	650	110
Twyford	241	260	290	295	320	320	470	180
Karamu	782	785	790	805	830	830	1000	210
Whakatu	1202	1200	1225	1225	1240	1240	1300	75
Clive	54	55	55	55	55	55	60	5
Haumoana	66	66	65	65	65	65	105	40
Brookvale	138	140	145	145	145	145	160	15
Irongate	206	205	210	210	210	215	220	10
Longlands South	85	85	95	95	95	95	120	25
Tangoio	1	1	1	1	1	1	2	1
Eskdale	354	356	360	360	360	360	380	20
Sherenden-Puketapu	4	4	4	4	4	4	4	0
Omahu	6	5	5	5	5	5	5	0
Waiohiki	55	60	65	65	65	65	65	0
Pakowhai	33	35	35	35	35	35	45	10
Maraekakaho	52	50	55	55	55	55	60	5
Bridge Pa	329	325	335	340	340	345	525	190
Poukawa	35	35	35	35	35	35	40	5
Pakipaki	187	188	195	200	200	205	230	35
Waimarama	7	5	5	5	5	5	10	5
Tutira	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0
Westshore	18	20	20	20	20	20	20	0
Ahuriri	231	230	235	235	235	235	250	15
Onekawa Central	25	25	25	25	25	25	25	0
Onekawa West	3485	3450	3555	3560	3560	3580	4200	645
Onekawa South	29	30	30	30	30	30	30	0
Marewa	79	80	80	80	80	80	80	0
Maraenui	12	10	10	10	10	10	10	0
Hospital Hill	206	205	210	210	210	210	210	0
Bluff Hill	183	180	190	190	190	190	210	20
Nelson Park	347	345	355	355	355	355	380	25
Mclean Park	56	56	55	55	55	55	55	0
Tamatea North	30	30	30	30	30	30	30	0
Tamatea South	27	25	30	30	30	30	30	0
Greenmeadows	200	200	205	205	205	205	210	5
Taradale North	167	168	170	170	170	170	180	10
Taradale South	148	145	150	150	150	150	160	10
Pirimai	31	31	30	30	30	30	30	0
Mahora	349	345	355	350	350	360	380	25
St Leonards	144	145	150	150	150	150	160	10
Frimley	199	195	205	205	205	205	205	0
Raureka	178	175	185	185	185	185	200	15
Mayfair	160	160	165	165	165	165	190	25
Parkvale	117	115	120	120	120	120	120	0
Hastings Central	2218	2200	2265	2265	2265	2270	2405	140
Akina	57	55	60	60	60	60	60	0
Woolwich	1397	1400	1425	1425	1430	1460	1600	175
Camberley	477	470	485	485	485	485	520	35
Kingsley-Chatham	597	600	605	610	610	610	640	35
Lochain	6	5	5	5	5	5	10	5
Flaxmere East	15	15	15	15	15	15	20	5
Anderson Park	40	40	40	40	40	40	40	0
Iona	114	115	120	120	120	120	125	5
Havelock Hills	27	25	30	30	30	30	30	0
Te Mata	478	475	485	485	490	490	515	30
Havelock North Central	36	36	35	35	35	35	35	0
Te Mata Hills	47	45	50	50	50	50	50	0
Total Study Area	**16876**	**16959**	**17,295**	**17340**	**17455**	**17585**	**19901**	**2606**

(v) **Figure 4** indicates the historical and projected trends in study area employment for the two sectors. Flat employment growth is forecast for the commercial sector until 2011, from which time steady employment growth resumes. Slow overall employment growth is forecast for the industrial sector until Year 2026, from which time there is a noticeable pick-up in the indicator.

Figure 4:



5.7 Conclusion

Whilst a generally positive long-term economic environment is forecast for the study area, particularly for the primary production and commercial –services sectors, nevertheless, due cognisance does need to be given to the threat to this scenario of adverse external changes impacting on the local economy, such as international market , exchange rate and climatic volatility.

6.0 Land Uptake

Key Findings

- Total land area impact of the projected new housing growth in the study area over 2015-2045 is estimated at 1880 hectares
- Total estimated floor-space impact of the forecast economic and employment growth over the projection period is the commercial sector- 700,000m^2 and the industrial sector 900,000m^2

6.1 This section briefly indicates the assessed land uptake implication of the household and employment projections for the study area presented earlier in the report.

6.2 **Residential Land**

The total land area impact of the projected growth in new residential housing in the Heretaunga Plains area has been estimated at 1880 hectares, comprising rural-residential/lifestyle 1500ha, urban-greenfields sub-division 260 hectares and infill/ brownfields housing 120ha.

The identification of the extent of the three new housing categories was based on the results in Tables 7(a) and 7(b), in particular the CAU breakdown of the long-term housing growth in the study area. The analysis indicates that over the 2015-2045 period, rural-residential/lifestyle developments are expected to account for some 12.5% (approx. 1000 dwellings) of total new housing growth in the study area, new urban-greenfields development 45% (approx. 3610 dwellings) and infill/ brownfields development 42.5% (approx. 3405 dwellings).

The ratios used in order to derive the total land area impact of the three housing development categories were as follows:

- *Rural residential/lifestyle*: 1.5ha per individual housing development
- *Urban Greenfield*: 13.75ha sites per hectare
- *Infill housing*: 300-400m^2 sites (mid-point of 350m^2 used)

6.3 **Industrial and Commercial Land**

Based on the employment results provided in Tables 9/10, information provided by local valuation companies on estimated building floor-space per employee for a range of commercial and industrial activity, SNZ historical building consent floor-space figures for the two sectors and the results of a sectoral floor-space analysis carried out for the Hastings District Council in 2008, the following floor-space results have been conservatively calculated for the study area for the 2015-2045 projection interval:

- *Commercial-services*: 700,000m^2
- *Industrial*: 900,000m^2

The actual land area implication of this additional demand will depend on the extent to which the demand is met by the opportunity to utilise an existing building (either vacant space or an addition to) or the construction of separate new premises.

It is noted that over the 10-year period 2000-2009 (March year-end), the total amount of new building floor-space approved for the Napier-Hastings area was commercial/services 328,535m^2 and industrial 317, 607m^2.

6.4 Conclusion

The projected growth over the 2015-2045 period within the residential, commercial and industrial sectors will have significant land area and floor-space impacts within the Heretaunga Plains boundary. This will also need to be taken into account by the future urban development study for the area.