

Appendix 25 – Banks Peninsula - Population Projections

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Draft Residential Chapter 14 Section 32 – Appendix 25

Population and Household Projections Main Summary Points

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August 2014

Population Projections

The following commentary is based on Statistics New Zealand Area Unit population projections, 2006(base)-2031 (December 2012 update). Figures should therefore be used as guideline and not as absolute numbers. The census information base will be updated by mid 2015. Attachments A to D include resident population, population and household projections information. Summary points from this information are as follows:

- The total population for Banks Peninsula is projected to reach around 9,500 by 2031 based on medium population projections (refer to Attachment A). This is an increase of 9% (approximately 800 people) for the whole of Banks Peninsula between 2011 and 2031.¹
- Almost three quarters of the increased population is expected to occur in three area units: Diamond Harbour (250 people), Little River (160 people) and Lyttelton (160 people).
- Akaroa and Port Levy are projected to experience little or negative population growth, with only plus and minus 10 people respectively.
- It is expected that any growth in the Akaroa and Akaroa Harbour area units will happen outside of Akaroa and in the other townships in the Harbour.
- Statistics New Zealand: Area unit population projections by age and sex, for selected territorial authority areas, 2006(base)-2031 (December 2012 update). Medium Projections
- These projections have as a base the estimated resident population of each area at 30 June 2006 (refer to Attachment B). This population was based on the census usually resident population count of each area at 7 March 2006 and adjusted for:
 - a. net census undercount
 - b. residents temporarily overseas on census night
 - c. births, deaths and net migration between census night (7 March 2006) and 30 June 2006.

It is noted that population projections used for the 2015 LTP and the LURP use adjusted population projections based on the above SNZ medium projection. While doing this work we found a problem with the Market Economics Christchurch growth model in the Banks Peninsula area, which we are trying to get fixed. This appears to have affected the 2013 base figures rather than the growth after 2013. It is generally considered that in Banks Peninsula the Market Economics Household growth model should be consistent with the SNZ population projections.

Household Projections

- Statistics New Zealand does not produce household projections at Area unit level. For household projections at this spatial scale we are currently using the Market Economics Christchurch Household growth model which was developed for the UDS partners post earthquake, which as mentioned above has some problems with the 2013 base numbers. However the growth seems reasonable.

¹ Note if you look at the range from the low and high projections it is possible that the population could change between -400 and 2000 people over this period.

- Attachment C provides a summary of the number of Occupied and Unoccupied dwelling in the Banks Peninsula area units from the 2013 census data.
- At 2013 there were 3642 occupied dwellings (equivalent to households) and 2100 unoccupied dwellings in Banks Peninsula. Generally unoccupied dwellings on the peninsula are holiday homes, however in 2013 there was an increase in unoccupied dwellings in Lyttelton presumably due to earthquake damaged properties.
- In 2001 and 2006 censuses unoccupied dwellings made up 34% of all dwellings. But in area units in the Akaroa Harbour this has been consistently around 60%.
- The total number of households for Banks Peninsula is projected increase by around 580 by 2031. This is an approximate growth rate of 14% (refer to Attachment D – refer to green highlighted figures taken from Household Projections Market Economics table).
- By 2031, the main areas of growth are projected to be in Diamond Harbour, Lyttelton and Little River (Attachment D Market Economic figures need to be updated for Little River).

Holiday Homes

- Data regarding holiday homes is to be updated in September 2014.
- The 2009 LTCCP holiday home projections showed that between 2013 and 2041 there would be an increase of around 200 holiday homes in the Banks Peninsula. Most of this was evenly shared between Akaroa and the Akaroa Harbour area units with the Diamond Harbour area unit losing holiday homes to permanent dwellings over time. Between now and 2031 this growth is likely to be around 140 additional holiday homes. However these projections may be on the high side as they were produced in the early to mid 2000s before the global economic crisis. The economic crisis and should a long term economic downturn continue, the growth in holiday homes is likely to be significantly affected.

Attachment A:

1. Area unit population projections by age and sex, for selected territorial authority areas, 2006(base)-2031 (December 2012 update). Medium projections.

Area unit population projections by age and sex, for selected territorial authority areas, 2006(base)-2031 (December 2012 update). Medium Projections								
Source: Statistics New Zealand http://nzdotstat.stats.govt.nz/wbos/Index.aspx								
	2006	2011	2016	2021	2026	2031	2011- 2031 # Growth	2011- 2031 % Growth
Akaroa	590	590	590	600	600	600	10	2%
Akaroa Harbour	760	860	880	910	930	940	80	9%
Banks Peninsula Eastern Bays	410	440	450	470	490	510	70	16%
Diamond Harbour	1,440	1,510	1,570	1,630	1,700	1,760	250	17%
Governors Bay	900	940	960	980	1,000	1,010	70	7%
Inlet-Port Lyttelton	10	10	10	10	10	10	0	0%
Little River	1,060	1,130	1,170	1,210	1,250	1,290	160	14%
Lyttelton	3,190	3,080	3,090	3,130	3,190	3,240	160	5%
Port Levy	100	90	90	90	80	80	-10	-11%
Total	8,460	8,650	8,810	9,030	9,250	9,440	790	9%
Population Change Between Periods		190	160	220	220	190		

2. Area unit population projections by age and sex, for selected territorial authority areas, 2006(base)-2031 (December 2012 update). Low and High projections (as a comparison to medium projections)

Series - Low

	2006	2011	2016	2021	2026	2031		
Akaroa	590	580	570	550	540	520	-60	-10%
Akaroa Harbour	760	850	850	840	830	810	-40	-5%
Banks Peninsula Eastern Bays	410	430	440	440	450	460	30	7%
Diamond Harbour	1,440	1,490	1,510	1,520	1,540	1,540	50	3%
Governors Bay	900	930	920	910	890	880	-50	-5%
Inlet-Port Lyttelton	10	10	10	10	10	10	0	0%
Little River	1,060	1,120	1,120	1,120	1,120	1,100	-20	-2%
Lyttelton	3,190	3,040	2,950	2,890	2,820	2,740	-300	-10%
Port Levy	100	90	80	70	60	60	-30	-33%
Total	8,460	8,540	8,450	8,350	8,260	8,120	-420	-5%

Series - High

	2006	2011	2016	2021	2026	2031		
Akaroa	590	600	620	640	660	680	80	13%
Akaroa Harbour	760	870	920	980	1,030	1,080	210	24%
Banks Peninsula Eastern Bays	410	440	470	500	530	560	120	27%
Diamond Harbour	1,440	1,530	1,620	1,730	1,860	1,990	460	30%
Governors Bay	900	960	1,000	1,040	1,100	1,150	190	20%
Inlet-Port Lyttelton	10	10	10	10	10	10	0	0%
Little River	1,060	1,140	1,210	1,300	1,390	1,490	350	31%
Lyttelton	3,190	3,130	3,230	3,380	3,560	3,770	640	20%
Port Levy	100	100	100	100	100	110	10	10%
Total	8,460	8,780	9,180	9,680	10,240	10,840	2,060	23%

Attachment B: Changes in the usually resident population between 2001 and 2013

Usually Resident Population by Area Unit

Source: Statistics New Zealand, Census of Population and Dwellings 2001, 2006 and 2013

Area Unit Name	2001 Pop	2006 Pop	2013 Pop	2001 to 2006 #	2001 to 2013 #	2006 to 2013 #	2001 to 2006 %	2001 to 2013 %	2006 to 2013 %
Akaroa	576	567	624	-9	48	57	-2%	8%	10%
Akaroa Harbour	681	735	777	54	96	42	8%	14%	6%
Banks Peninsula Eastern Bays	411	396	459	-15	48	63	-4%	12%	16%
Diamond Harbour	1,266	1,389	1,467	123	201	78	10%	16%	6%
Governors Bay	795	870	870	75	75	0	9%	9%	0%
Little River	957	1,026	1,101	69	144	75	7%	15%	7%
Lyttelton	3,042	3,072	2,859	30	-183	-213	1%	-6%	-7%
Port Levy	84	93	78	9	-6	-15	11%	-7%	-16%
Total	7,812	8,148	8,235	336	423	87	4%	5%	1%

Attachment C: Statistics New Zealand Changes in occupied and unoccupied dwellings between 2001 and 2013

Unoccupied Dwellings

Area Unit Name	2001	2006	2013	2001 to 2006 #	2001 to 2013 #	2006 to 2013 #	2001 to 2006 %	2001 to 2013 %	2006 to 2013 %
Akaroa	516	564	567	48	51	3	9%	10%	1%
Akaroa Harbour	465	459	531	-6	66	72	-1%	14%	16%
Banks Peninsula Eastern Bays	207	147	183	-60	-24	36	-29%	-12%	24%
Diamond Harbour	294	366	333	72	39	-33	24%	13%	-9%
Governors Bay	39	36	57	-3	18	21	-8%	46%	58%
Little River	84	105	114	21	30	9	25%	36%	9%
Lyttelton	123	114	258	-9	135	144	-7%	110%	126%
Port Levy	33	42	57	9	24	15	27%	73%	36%
Total Banks Peninsula	1,761	1,833	2,100	72	339	267	4%	19%	15%

Unoccupied as percentage of total occupied and unoccupied

Area Unit Name	2001	2006	2013
Akaroa	61%	64%	62%
Akaroa Harbour	60%	57%	59%
Banks Peninsula Eastern Bays	56%	47%	48%
Diamond Harbour	35%	38%	33%
Governors Bay	12%	10%	15%
Little River	18%	20%	20%
Lyttelton	9%	8%	17%
Port Levy	46%	50%	58%
Total Banks Peninsula	34%	34%	37%

Occupied Dwellings

Area Unit Name	2001	2006	2013	2001 to 2006 #	2001 to 2013 #	2006 to 2013 #	2001 to 2006 %	2001 to 2013 %	2006 to 2013 %
Akaroa	324	315	342	-9	18	27	-3%	6%	9%
Akaroa Harbour	315	342	372	27	57	30	9%	18%	9%
Banks Peninsula Eastern Bays	162	168	198	6	36	30	4%	22%	18%
Diamond Harbour	555	603	669	48	114	66	9%	21%	11%
Governors Bay	294	321	336	27	42	15	9%	14%	5%
Little River	384	420	465	36	81	45	9%	21%	11%
Lyttelton	1,275	1,326	1,218	51	-57	-108	4%	-4%	-8%
Port Levy	39	42	42	3	3	0	8%	8%	0%
Total Banks Peninsula	3,348	3,537	3,642	189	294	105	6%	9%	3%

2013 CensusCount Households	Difference Occupied dwellings and HHS
294	48
333	39
183	15
648	21
333	3
456	9
1191	27
36	6

Total Occupied and Unoccupied

Area Unit Name	2001	2006	2013	2001 to 2006 #	2001 to 2013 #	2006 to 2013 #	2001 to 2006 %	2001 to 2013 %	2006 to 2013 %
Akaroa	840	879	909	39	69	30	5%	8%	3%
Akaroa Harbour	780	801	903	21	123	102	3%	16%	13%
Banks Peninsula Eastern Bays	369	315	381	-54	12	66	-15%	3%	21%
Diamond Harbour	849	969	1,002	120	153	33	14%	18%	3%
Governors Bay	333	357	393	24	60	36	7%	18%	10%
Little River	468	525	579	57	111	54	12%	24%	10%
Lyttelton	1,398	1,440	1,476	42	78	36	3%	6%	3%
Port Levy	72	84	99	12	27	15	17%	38%	18%
Total Banks Peninsula	5,109	5,370	5,742	261	633	372	5%	12%	7%

Attachment D: Christchurch City Council 2009-2019 LTCCP Population Growth Model 6 August 2008 based on Market Economics Model

Household Projections Growth Model																						
Source: Christchurch City Council, 2009-2019 LTCCP Population Growth Model 6th August 2008																						
\\ccity.biz\fileserver\sharedresources\SPG - STRATEGY AND PLANNING\Data and Analysis\5_Projections\2012 Post Earthquake Scenarios\Christchurch2012PostEarthquakeAreaUnitHouseholdQuickScenario.xls																						
AreaUnitDescription	2006	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2026	2028	2031	2036	2041		basis of 2028 population count			
Akaroa	303	311	312	313	314	315	316	316	316	316	316	316	317	318	319	321	322	6	0			
Akaroa Harbour	349	377	381	385	389	393	397	400	402	405	408	411	426	431	440	454	468	55	3			
Banks Peninsula Eastern Bays	173	173	173	173	172	172	172	172	171	171	171	171	172	172	172	173	173	-1	0			
Diamond Harbour	635	699	704	709	716	722	726	740	754	768	782	794	862	876	897	934	965	188	7			
Governors Bay	340	363	365	366	368	369	369	374	379	385	390	395	421	426	434	448	459	68	3			
Little River	450	482	490	498	506	514	522	527	533	540	546	552	582	594	612	643	673	114	6			
Lyttelton	1,409	1,498	1,499	1,503	1,506	1,509	1,512	1,522	1,532	1,542	1,552	1,560	1,616	1,627	1,644	1,679	1,702	141	6			
Port Levy	46	45	45	45	45	47	47	47	46	46	46	46	46	47	47	47	48	2	0			
Total	3,705	3,948	###	3,992	4,016	4,041	4,061	4,097	4,134	4,173	4,211	4,244	4,442	4,491	###	###	4,810	573	25			
Household Projections Market Economics																						
Source: Market Economics: Christchurch Household Growth Model - 26 March 2014 LURP based Version.																						
\\ccity.biz\fileserver\SharedResources\SPG - STRATEGY AND PLANNING\Data and Analysis\5_Projections\2013 LURP Projections\26March2014 LURP Scenarios\Christchurch\Waimakariri\Selwyn\2006AUHouseholds_26March2014 LURP.xls																						
2006 Area Units Name	2006HH	2011 Pre-Quake	2013H H	2014H H	2015H H	2016H H	2017H H	2018H H	2019H H	2020 HH	2021H H	2022 HH	2026	2028 HH	2031	2036	2041H H	change 2013 to 2031	% change 2013 to 2031	basis of 2026 population count	basis of 2031 population count	basis of 2036 population count
Akaroa	280	262	418	413	411	410	410	410	410	410	410	410	414	416	422	433	444	4	1%	1	2	2
Akaroa Harbour	330	329	421	421	420	419	417	417	417	417	417	418	432	439	475	534	594	54	13%	4	12	12
Banks Peninsula Eastern Bays	160	154	176	176	175	174	175	175	176	179	182	182	191	195	179	153	126	3	2%	2	-5	-5
Diamond Harbour	635	679	958	964	965	971	995	1,013	1,032	1,051	1,068	1,086	1,143	1,172	1,197	1,240	1,282	239	25%	14	8	8
Governors Bay	340	353	396	393	390	389	397	404	411	418	424	432	453	464	473	487	501	77	19%	5	3	3
Little River	440	430	280	280	280	278	278	278	278	278	278	278	308	323	342	373	405	62	22%	8	6	6
Lyttelton	1409	1453	1452	1456	1458	1453	1461	1472	1485	1495	1507	1520	1556	1574	1594	1628	1662	142	10%	9	7	7
Port Levy	50	46	42	42	42	41	41	41	42	42	42	42	42	42	42	43	43	0	1%	0	0	0
Total	3,644	3,706	-	4,143	4,145	4,141	4,135	4,174	4,210	4,251	4,290	4,328	4,539	4,625	###	4,891	5,057	582	14%	43	33	33
Difference between Market Economics and Growth model projections															582	14%						
2006 Area Units Name	2006HH	2011 Pre-Quake	2013H H	2014H H	2015H H	2016H H	2017H H	2018H H	2019H H	2020 HH	2021H H	2022 HH	2026	2028 HH	2031	2036	2041H H					
Akaroa	23	49	-105	-99	-96	-94	-94	-94	-94	-94	-94	-94	-97	-98	-104	-113	-122					
Akaroa Harbour	19	48	-36	-32	-27	-22	-17	-15	-12	-9	-6	-6	-6	-8	-35	-81	-126					
Banks Peninsula Eastern Bays	13	19	-3	-4	-3	-2	-3	-4	-5	-8	-11	-11	-19	-23	-7	20	47					
Diamond Harbour	0	20	-249	-248	-243	-245	-255	-259	-264	-269	-274	-274	-281	-296	-300	-306	-317					
Governors Bay	-	10	-30	-25	-21	-20	-23	-25	-26	-28	-29	-29	-	32	-38	-39	-42					
Little River	10	52	218	226	234	244	249	255	262	268	274	274	274	271	270	269	268					
Lyttelton	0	45	51	50	51	59	61	60	57	57	53	53	60	53	50	51	40					
Port Levy	-4	-1	3	3	5	6	6	5	4	4	4	4	4	5	5	5	5					
Total	60	242	-151	-129	-100	-74	-77	-76	-78	-79	-84	-84	-97	-134	-160	-193	-247					

Note: figures in red are taken from MapInfo Table
 \\ccity.biz\fileserver\SharedResources\1\SPG - STRATEGY AND PLANNING\Data and Analysis\5_Projections\CCC Projections for 2009 LTCCP\HH_Pop_Projections_AU_06082008_U pdated_120109.TAB

Attachment E – Banks Peninsula Census Area Units

