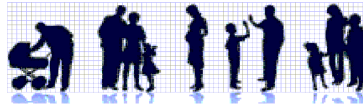


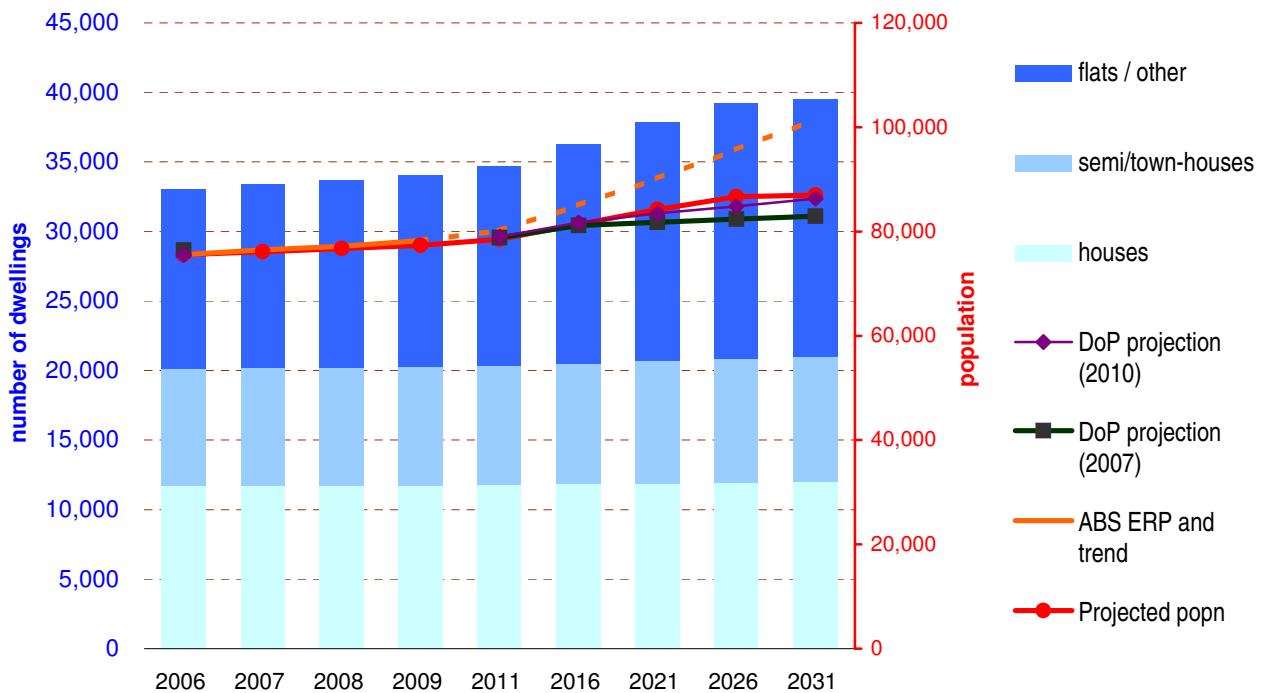
COMMUNITY PROJECTOR 2010



Marrickville LGA

2011 to 2031

Marrickville LGA population & dwelling growth



The Community Projector calculates future populations for each suburb in Marrickville LGA using projections of building activity and dwelling occupancies, adding the results for every suburb to get an overall projection. The assumptions underlying these projections are detailed in this report; they are based on the trends over 2001–2006, adjusted to reflect more recent data and local knowledge.

The chart shows the projected number of dwellings in Marrickville LGA from 2006 to 2031, and the resident population that results. These projections are not predictions; they are the result of development scenarios described in this report.

Executive summary

Dwellings

Over the period 2011 to 2031, it is projected that Marrickville LGA will have 4,798 more dwellings, consisting:

- 201 more houses,
- 473 more semis / townhouses,
- 4,124 more flats and units.

Projected types of dwellings	2006	2011	2031	change	change %
houses	11,714	11,774	11,975	+ 201	up 2%
semi/town-houses	8,435	8,555	9,028	+ 473	up 6%
flats / other	12,916	14,346	18,470	+ 4,124	up 29%
All dwellings	33,065	34,675	39,473	+ 4,798	up 14%

In terms of dwelling size (number of bedrooms), there will be:

- 1,090 more dwellings with 0-1 bedrooms,
- 2,165 more dwellings with 2 bedrooms,
- 1,193 more dwellings with 3 bedrooms, and
- 350 more dwellings with 4+ bedrooms.

Projected sizes of dwellings	2006	2011	2031	change	change %
0-1 BR dwellings	5,101	5,539	6,630	+ 1,090	up 20%
2 BR dwellings	14,332	15,122	17,287	+ 2,165	up 14%
3 BR dwellings	10,083	10,379	11,572	+ 1,193	up 11%
4+ BR dwellings	3,550	3,634	3,984	+ 350	up 10%
All dwellings	35,071	34,675	39,473	+ 4,798	up 14%

Occupied dwellings

Over 2011 to 2031, it is assumed that vacancy rates in Marrickville LGA will rise by 0.1%.

Vacancy rates for:

- houses will fall by 0.0%.
- semis/townhouses will rise by 0.0%.
- flats/units will rise by 0.0%.

Assumed vacancy rates	2006	2011	2031	difference
houses	5.7%	5.7%	5.7%	dn 0%
semi/town-houses	6.3%	6.3%	6.3%	up 0%
flats / other	8.1%	8.1%	8.1%	dn 0%
All dwellings	6.8%	6.8%	7.0%	up 0%

These vacancy rates and dwelling changes mean that Marrickville LGA will gain 4,426 occupied dwellings over the period, consisting:

- 193 more houses,
- 440 more semis / townhouses,
- 3,793 more flats and units.

Projected occupied dwgs	2006	2011	2031	change	change %
houses	30,817	11,100	11,293	193	up 2%
semi/town-houses	7,907	8,019	8,459	440	up 5%
flats / other	11,867	13,181	16,974	3,793	up 29%
All dwellings	30,817	32,300	36,726	4,426	up 14%

Occupancy rates

Over the period, it is assumed that the average occupancy rate (residents per dwelling) will fall by -0.02 persons per dwelling, from 2.38 persons per dwelling to 2.36. This means that a fix stock of dwellings would hold fewer residents in 2031 than in 2011.

For different types of dwellings, it is projected that the average occupancy rates will:

- rise by 0.00 persons per house,
- rise by 0.04 persons per townhouse,
- rise by 0.02 persons per flat.

Projected persons / dwg	2006	2011	2031	change	change %
houses	2.86	2.86	2.86	+ .00	up 0%
semi/town-houses	2.44	2.46	2.50	+ .04	up 2%
flats / other	1.92	1.93	1.95	+ .02	up 1%
All dwellings	2.39	2.38	2.36	(.02)	dn 1%

Note that the overall occupancy rate can change by less than for any particular type of dwelling if the fastest growing type is flats / units, which have the lowest occupancy rate.

Population

The projected population in private dwellings is calculated by multiplying the number of dwellings by the occupancy rate, for each type of dwelling, and adding the projected population in institutions (eg boarding houses, nursing homes).

From 2011 to 2031, the population is projected to rise by 8,511 or 11%, from 78,482 to 86,993 (an average of 0.5% p.a.). Over 2006 to 2009, the estimated resident population rose by 1.2%. The population in private dwellings would rise by 9,678, from 76,896 to 86,574.

By dwelling type, the additional population will consist of :

- 570 more persons in houses,
- 1,438 more persons in townhouses,
- 7,670 more persons in flats/units,
- 1,167 fewer persons in institutions.

Projected population	2006	2011	2031	change	change %
in houses	31,569	31,720	32,290	570	up 2%
in town-houses	19,297	19,741	21,179	1,438	up 7%
in flats / other	22,813	25,435	33,105	7,670	up 30%
in institutions	1,875	1,586	419	(1,167)	dn 74%
Total	73,679	78,482	86,993	8,511	up 11%

Bedrooms

The projected number of occupied dwellings of different size (by bedrooms) is calculated from Census data and projections for the composition of dwellings (ie the proportions with 1, 2, 3 or 4+ bedrooms).

Marrickville LGA is projected to have 4,426 more occupied dwellings in 2031 than in 2011, with:

- 1,006 more 0-1 BR dwellings,
- 1,991 more 2-BR dwellings,
- 1,105 more 3-BR dwellings,
- 324 more 4+BR dwellings.

Occ'd dwellings by size (BRs)	2006	2011	2031	change	change %
0-1 BR dwellings	4,701	5,104	6,110	1,006	up 20%
2 BR dwellings	13,312	14,039	16,029	1,991	up 14%
3 BR dwellings	9,467	9,742	10,847	1,105	up 11%
4+ BR dwellings	3,337	3,415	3,739	324	up 9%
All dwellings	30,817	32,300	36,726	4,426	up 14%

The number of bedrooms in occupied dwellings is calculated by multiplying the number of dwellings of each size by their number of bedrooms (assuming 4.3 bedrooms in dwellings with 4+ bedrooms). From 2011 to 2031, it is projected that the number of bedrooms in occupied dwellings will rise by 9,695 or 13%.

It is projected there will be:

- 1,006 more bedrooms in 0-1 BR dwellings,
- 3,981 more bedrooms in 2-BR dwellings,
- 3,316 more bedrooms in 3-BR dwellings,
- 1,392 more bedrooms in 4+BR dwellings.

Bedrooms in occ'd dwellings	2006	2011	2031	change	change %
0-1 BR dwellings	4,783	5,104	6,110	1,006	up 20%
2 BR dwellings	26,916	28,077	32,059	3,981	up 14%
3 BR dwellings	28,562	29,227	32,542	3,316	up 11%
4+ BR dwellings	14,415	14,685	16,077	1,392	up 9%
All dwellings	74,676	77,093	86,788	9,695	up 13%

The distribution of the projected population among dwellings of different size (ie bedroom numbers) is shown below.

It is projected there will be:

- 1,265 more residents in 0-1 BR dwellings,
- 3,893 more residents in 2-BR dwellings,
- 3,277 more residents in 3-BR dwellings,
- 1,243 more residents in 4+BR dwellings.

Population in dwellings	2006	2011	2031	change	change %
0-1 BR dwellings	6,428	6,963	8,228	1,265	up 18%
2 BR dwellings	27,785	29,305	33,197	3,893	up 13%
3 BR dwellings	26,901	27,753	31,030	3,277	up 12%
4+ BR dwellings	12,566	12,875	14,118	1,243	up 10%
All dwellings	73,679	76,896	86,574	9,678	up 13%

From the population and number of bedrooms in dwellings of different sizes, the bedroom occupancy (persons per bedroom, in occupied dwellings) can be calculated. Over 2011 to 2031, bedroom occupancy is projected to rise from 1.00 to 1.00, or by 0.0%.

Bedroom occupancy	2006	2011	2031	change	change %
0-1 BR dwellings	1.37	1.36	1.35	(.02)	dn 1.3%
2 BR dwellings	1.04	1.04	1.04	(.01)	dn 0.8%
3 BR dwellings	0.95	0.95	0.95	+ .00	up 0.4%
4+ BR dwellings	0.88	0.88	0.88	+ .00	up 0.2%
All dwellings	0.99	1.00	1.00	+ .00	up 0.0%

Contribution of new dwellings

The contribution of the additional dwellings to the costs caused by an increasing population can be calculated in this way.

The number of dwellings of each type/size is shown in Table C1, as calculated in Table B8 for the start and end of the planning period.

C1. Dwellings	2011					2031				
	0-1 BR	2 BR	3 BR	4+BR	total	0-1 BR	2 BR	3 BR	4+BR	total
houses	195	2,833	6,100	2,645	11,774	199	2,881	6,205	2,690	11,975
semi/town-houses	544	4,108	3,202	700	8,555	705	4,063	3,521	739	9,028
flats / other	4,800	8,181	1,077	288	14,346	5,726	10,343	1,847	554	18,470
Marrickville	5,539	15,122	10,379	3,634	34,675	6,630	17,287	11,572	3,984	39,473

The number of occupied dwellings of each type/size is shown below, calculated in Table B10 for the start and end of the planning period by applying the vacancy rates shown in Table 2.

C2. Occupied dwellings	2011					2031				
	0-1 BR	2 BR	3 BR	4+BR	total	0-1 BR	2 BR	3 BR	4+BR	total
houses	184	2,671	5,751	2,494	11,100	187	2,717	5,851	2,537	11,293
semi/town-houses	510	3,851	3,001	656	8,019	661	3,807	3,299	693	8,459
flats / other	4,410	7,517	990	265	13,181	5,262	9,505	1,697	509	16,974
Marrickville	5,104	14,039	9,742	3,415	32,300	6,110	16,029	10,847	3,739	36,726

The occupancy rate of the occupied dwellings (residents per dwelling) is shown in Table C3 for each type/size, as calculated in Table B20 for the start and end of the planning period.

C3. Dwelling occupancy	Persons per dwelling, 2011					Persons per dwelling, 2031				
	0-1 BR	2 BR	3 BR	4+BR	average	0-1 BR	2 BR	3 BR	4+BR	average
houses	1.40	2.11	2.85	3.79	2.86	1.41	2.11	2.85	3.79	2.86
semi/town-houses	1.53	2.10	2.82	3.66	2.46	1.55	2.13	2.86	3.72	2.50
flats / other	1.34	2.07	2.95	3.83	1.93	1.32	2.03	2.90	3.76	1.95
Marrickville	1.36	2.09	2.85	3.77	2.38	1.35	2.07	2.86	3.78	2.36

The number of residents per occupied dwellings is shown below for each type/size, calculated by multiplying the number of occupied dwellings (C2) by the occupancy rate (C3).

C4. Population in dwellings	2011					2031				
	0-1 BR	2 BR	3 BR	4+BR	total	0-1 BR	2 BR	3 BR	4+BR	total
houses	259	5,634	16,372	9,455	31,720	263	5,736	16,666	9,625	32,290
semi/town-houses	780	8,094	8,462	2,406	19,741	1,027	8,127	9,448	2,578	21,179
flats / other	5,924	15,576	2,920	1,015	25,435	6,938	19,335	4,916	1,916	33,105
Marrickville	6,963	29,305	27,753	12,875	76,896	8,228	33,197	31,030	14,118	86,574

The change in number of residents, and the extra occupied dwellings, over the planning period are shown below for each type/size, by subtracting the start year numbers from the end year numbers, in tables C4 and C2.

Over 2011 to 2031, the population will rise by 9,678 and the occupied dwellings will increase by 4,426.

C5. Changes in pop'n & dwellings	Change in population, 2011 to 2031					Extra occ'd dwellings, 2011 to 2031				
	0-1 BR	2 BR	3 BR	4+BR	total	0-1 BR	2 BR	3 BR	4+BR	total
houses	5	101	294	170	570	3	46	100	43	193
semi/town-houses	247	33	986	172	1,438	151	(44)	298	36	440
flats / other	1,014	3,758	1,996	901	7,670	852	1,989	708	245	3,793
Marrickville	1,265	3,893	3,277	1,243	9,678	1,006	1,991	1,105	324	4,426
% of flats each size						22%	52%	19%	6%	100%

The number of residents in the extra dwellings at the end of the planning period is calculated by multiplying the number of extra occupied dwellings from table C5 by the end occupancy in table C3. If the number of extra dwellings is negative (ie there is a net loss), the extra population is taken as nil.

In this scenario, the 4,426 extra dwellings will hold 9,910 residents, which is more than the total population change across Marrickville LGA.

The right side of the table calculates the proportion of the total population change attributable to each dwelling type and size. As the extra dwelling have more people than the total population growth, 100% of the growth is attributed to them, distributed according to their population.

C6. Population in extra dwellings	Population in extra dwellings, 2031					% extra population in extra dwgs, 2011 to 2031				
	0-1 BR	2 BR	3 BR	4+BR	total	0-1 BR	2 BR	3 BR	4+BR	average
houses	4	98	284	164	550	0%	1%	3%	2%	6%
semi/town-houses	235		852	134	1,221	2%	0%	9%	1%	12%
flats / other	1,123	4,045	2,050	920	8,138	11%	41%	21%	9%	82%
Marrickville	1,362	4,143	3,187	1,218	9,910	14%	42%	32%	12%	100%

The total number of extra dwellings by size and type is calculated below, by subtracting the start and end year numbers in table C1. In all there were 4,798 more dwellings.

In the right side of the table, the proportion of population growth attributable to the each extra dwelling is calculated, in parts per million per dwelling. The apportionment per dwelling is calculated by dividing the extra population share in each size and type of dwelling (from Table C6) by the number of extra dwellings. If the extra dwellings are negative (ie net demolitions), the apportionment is zero.

Another way of viewing the results is as the dollar contribution per dwelling that would have to be made towards a cost of \$1 million attributable to population growth.

Note that the while the share per dwelling increases with dwelling size, it is fairly consistent for every size of dwelling across the different dwelling types. In most situations, the average apportionment for each size of dwelling (regardless of type) is the fairest assessment, since the variations across dwelling types are smaller than the possible differences between the households who will inhabit the dwellings.

C7. Apportionment of growth	Extra dwellings, 2011 to 2031					proportion of growth per dwg, parts per million				
	0-1 BR	2 BR	3 BR	4+BR	total	0-1 BR	2 BR	3 BR	4+BR	average
houses	3	48	104	45	201	136	204	275	367	276
semi/town-houses	161	(46)	319	39	473	147		270	350	261
flats / other	926	2,162	770	266	4,124	122	189	269	349	199
Marrickville	1,090	2,165	1,193	350	4,798	126	193	270	351	208

Table C8 allows the testing of a set of contribution rates, towards a hypothetical cost of \$1 million attributable to population growth across the LGA. It calculates the contributions that flow from applying nominated contribution rates (parts per million) for different types and sizes of dwellings, which are set in the yellow cells.

In this table, selected contribution rates can be set different type and sizes of dwellings, in the yellow cells. The default rate is the average for each size of dwelling, the lower row of table C7, but these can be altered. The right side of the table calculates the contribution that will be generated at these rates, on the projected scenario.

Here, the table shows that contribution rates averaging \$126 for bedsits / one-bedroom dwellings, \$193 for 2-bedroom dwellings, \$270 for 3-bedroom dwellings, and \$351 for 4+bedroom dwellings, would raise a total of \$1,008,953. This contributes 101% towards a \$1 million cost, while the extra population in these dwellings amounts to 100% of the growth.

C8. Setting of contributions	contribution / dwelling (parts per million)					Contribution at average apportionment				
	0-1 BR	2 BR	3 BR	4+BR	average	0-1 BR	2 BR	3 BR	4+BR	total
houses	126	193	270	351	267	420	9,334	28,119	15,850	53,723
semi/town-houses	126	193	270	351	235	20,328		86,071	13,592	119,992
flats / other	126	193	270	351	203	116,629	417,327	207,915	93,367	835,238
Marrickville	126	193	270	351	208	137,378	426,661	322,105	122,810	1,008,953

1. Projections for Marrickville LGA	2006	2007	2008	2009	2011	2016	2021	2026	2031	change 2011-2031
ABS ERP and trend	75,546	76,494	77,141	78,271	80,142	85,018	90,190	95,677	101,498	trend=1.2%
DoP projection (2007)	76,420				78,790	81,150	81,770	82,400	82,930	+4,140
DoP projection (2010)	75,500				79,000	81,700	83,500	84,800	86,300	+7,300
Population	75,554	76,140	76,721	77,310	78,482	81,379	84,209	86,643	86,993	+8,511
in houses	31,569	31,598	31,625	31,657	31,720	31,884	32,030	32,158	32,290	+570
in semi/town-houses	19,297	19,386	19,475	19,562	19,741	20,138	20,516	20,880	21,179	+1,438
in flats / units / other	22,813	23,336	23,863	24,388	25,435	28,067	30,662	32,900	33,105	+7,670
in institutions	1,875	1,820	1,758	1,703	1,586	1,290	1,001	705	419	(1,167)
Dwellings by type	33,065	33,387	33,709	34,031	34,675	36,284	37,851	39,209	39,473	+4,798
houses	11,714	11,726	11,738	11,750	11,774	11,833	11,885	11,930	11,975	+201
semi/town-houses	8,435	8,459	8,483	8,507	8,555	8,675	8,795	8,915	9,028	+473
flats / other	12,916	13,202	13,488	13,774	14,346	15,776	17,171	18,364	18,470	+4,124
Vacancy rates	6.8%	6.8%	6.8%	6.8%	6.8%	6.9%	6.9%	7.0%	7.0%	up 0.1%
houses	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	dn 0.0%
semi/town-houses	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	up 0.0%
flats / other	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	dn 0.0%
Occupied dwellings	30,817	31,114	31,410	31,707	32,300	33,783	35,227	36,479	36,726	+4,426
houses	11,043	11,055	11,066	11,077	11,100	11,156	11,206	11,249	11,293	+193
semi/town-houses	7,907	7,929	7,952	7,974	8,019	8,131	8,242	8,354	8,459	+440
flats / other	11,867	12,130	12,393	12,656	13,181	14,496	15,779	16,876	16,974	+3,793
Occupancy rates	2.39	2.39	2.39	2.38	2.38	2.37	2.36	2.36	2.36	dn 0.02
occupied houses	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	up 0.00
occup'd semi/town-houses	2.44	2.44	2.45	2.45	2.46	2.48	2.49	2.50	2.50	up 0.04
occupied flats / other	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.95	1.95	up 0.02
Dwellings by size	33,065	33,387	33,709	34,031	34,675	36,284	37,851	39,209	39,473	+4,798
0-1 BR dwellings	5,101	5,190	5,278	5,366	5,539	5,961	6,355	6,668	6,630	+1,090
2 BR dwellings	14,332	14,491	14,649	14,807	15,122	15,904	16,654	17,281	17,287	+2,165
3 BR dwellings	10,083	10,140	10,199	10,258	10,379	10,695	11,022	11,345	11,572	+1,193
4+BR dwellings	3,550	3,566	3,582	3,599	3,634	3,725	3,820	3,915	3,984	+350
Occupied dwellings	30,817	31,114	31,410	31,707	32,300	33,783	35,227	36,479	36,726	+4,426
0-1 BR dwellings	4,701	4,783	4,864	4,945	5,104	5,493	5,855	6,144	6,110	+1,006
2 BR dwellings	13,312	13,458	13,604	13,749	14,039	14,757	15,447	16,023	16,029	+1,991
3 BR dwellings	9,467	9,521	9,575	9,630	9,742	10,034	10,337	10,636	10,847	+1,105
4+BR dwellings	3,337	3,352	3,368	3,383	3,415	3,499	3,588	3,676	3,739	+324
Bedrooms	79,276	79,926	80,578	81,232	82,547	85,868	89,156	92,101	93,051	+10,503
in 0-1 BR dwellings	5,101	5,190	5,278	5,366	5,539	5,961	6,355	6,668	6,630	+1,090
in 2 BR dwellings	28,664	28,981	29,298	29,614	30,245	31,807	33,309	34,561	34,574	+4,330
in 3 BR dwellings	30,248	30,421	30,597	30,775	31,138	32,084	33,066	34,035	34,717	+3,579
in 4+BR dwellings	15,263	15,333	15,404	15,477	15,625	16,016	16,427	16,837	17,129	+1,505
Bedrooms in occ'd dwgs	74,076	74,676	75,277	75,880	77,093	80,156	83,187	85,905	86,788	+9,695
0-1 BR dwellings	4,701	4,783	4,864	4,945	5,104	5,493	5,855	6,144	6,110	+1,006
2 BR dwellings	26,624	26,916	27,207	27,498	28,077	29,514	30,894	32,046	32,059	+3,981
3 BR dwellings	28,401	28,562	28,725	28,890	29,227	30,102	31,012	31,909	32,542	+3,316
4+BR dwellings	14,350	14,415	14,480	14,547	14,685	15,046	15,426	15,805	16,077	+1,392
Occupancy per dwelling	2.39	2.39	2.39	2.38	2.38	2.37	2.36	2.36	2.36	-0.02
in 0-1 BR dwellings	1.37	1.37	1.37	1.37	1.36	1.36	1.36	1.35	1.35	-0.02
in 2 BR dwellings	2.09	2.09	2.09	2.09	2.09	2.09	2.08	2.08	2.07	-0.02
in 3 BR dwellings	2.84	2.84	2.84	2.85	2.85	2.85	2.86	2.86	2.86	0.01
in 4+BR dwellings	3.77	3.77	3.77	3.77	3.77	3.77	3.78	3.78	3.78	0.01
Residents in priv dwgs	73,679	74,320	74,963	75,607	76,896	80,089	83,208	85,938	86,574	+9,678
in 0-1 BR dwellings	6,428	6,537	6,646	6,753	6,963	7,471	7,943	8,311	8,228	+1,265
in 2 BR dwellings	27,785	28,091	28,398	28,702	29,305	30,773	32,168	33,305	33,197	+3,893
in 3 BR dwellings	26,901	27,067	27,234	27,405	27,753	28,640	29,549	30,436	31,030	+3,277
in 4+BR dwellings	12,566	12,625	12,685	12,748	12,875	13,206	13,549	13,887	14,118	+1,243
Bedroom occupancy	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	up 0.00
in 0-1 BR dwellings	1.37	1.37	1.37	1.37	1.36	1.36	1.36	1.35	1.35	dn 0.02
in 2 BR dwellings	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	dn 0.01
in 3 BR dwellings	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	up 0.00
in 4+BR dwellings	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	up 0.00

The data in this table is generated by running the model for all the future years shown in the column titles (these can be altered to any you prefer). The assumptions can be altered on the following pages. The ABS population or other forecast is entered from other data sources.

This table is based on assumptions shown in later tables