

An aerial photograph of Redland City, Queensland, Australia. The image shows a coastal town with a mix of residential housing, commercial buildings, and green spaces. A large body of water, likely Moreton Bay, is visible in the background with a small island in the distance. The sky is blue with scattered white clouds.

Redland City Land Supply Review

Independent Review of Redland City Land Supply

November 2012

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Executive Summary

BACKGROUND

The Redland City Urban Land Availability Study was originally undertaken in 2007 and formed a key input into the Redlands Local Growth Management Strategy, a requirement under the now superseded SEQ Regional Plan 2006-2026.

As a key input to the review of the Redland Planning Scheme (RPS) and Redlands 2015 project and to align the Study with the new timeframe (i.e. 2009-2031) Redland City Council has updated the study (The Study). As a result of The Study, Urbis have been engaged by Redland City Council to provide an independent review to test key assumptions made within The Study.

SUMMARY OF THE STUDY FINDINGS

The table below indicates the forecast supply (as per The Study) of residential land within Redland City Council and ranks the supply by total quantity.

Dwelling Yield by Land Use Type

REDLAND CITY COUNCIL

Executive Summary Table 1

Zone Category	Lot Size	Total Area (ha)	Dwellings	Population	% of Population	Influence on Supply
City						
Urban Residential (excludes Kinross,SET)	>1500m2	419	4,086	11,033	27%	●
Medium Density Residential (excludes MDR1,Kinross,SET)	>1,200m2	75	2,799	4,759	11%	●
SMBI Residential inc SR1			2,000	4,200	10%	●
Medium Density Residential - MDR1		29	1,777	3,021	7%	●
Major Centre		67	1,704	2,897	7%	●
Small Vacant Parcels (1 dwelling each)			1,051	2,838	7%	●
Kinross Road UR		67	1,002	2,705	7%	●
Double Jump Road Area			1,175	2,538	6%	●
South East Thornlands UR		45	679	1,832	4%	●
South East Thornlands MDR (incl MDR4)		19	821	1,396	3%	●
Urban Residential (with existing dwelling)	>800m2 and <1500m2		500	1,350	3%	●
Kinross Road MDR (incl MDR5)		13	588	999	2%	●
Medium Density Residential (excludes MDR1,Kinross,SET)	>700m2 and <1200m2	53	552	938	2%	●
Urban Residential (vacant)	>800m2 and <1500m2		240	648	2%	●
Low Density Residential	>4,000 m2	50	174	470	1%	●
Park Residential	>12,000m2	68	68	184	0%	●
Bunker Road EUC Land			37	100	0%	●
Neighbourhood Centre		2	36	61	0%	●
Investigation Zone			0	0	0%	●
Redland (S) Bal						
Dunwich EUC Land			291	629	2%	●
Point Lookout EUC Land			0	0	0%	●
Constrained Land Analysis						
Constrained UR > 1500 m2 (refer note below)		-25	-243	-656	-2%	●
Constrained MDR > 1200 m2 (refer note below)		-8	-301	-511	-1%	●
Total		874	19,037	41,432	100%	

● Influence on supply greater than 10%
 ● Influence on supply greater than 5% and less than 10%
 ● Influence on supply less than 5%
 Source: Redland City Council Land Supply Analysis; Urbis

The single biggest contributor to land supply over the forecast period is Urban Residential land larger than 1,500m² (excluding Kinross and South East Thornlands). With a just over a quarter of future supply, this category forms a vital part of future supply within Redland City.

KEY DEMOGRAPHIC TRENDS AND CONSTRAINTS ANALYSIS

- Household sizes adopted within the study are typically in line with current household sizes. Average household size for separate houses at 2.7 people per household is slightly below the current Redland City Council average. Over the forecast period it is anticipated the average household size for detached dwellings will decrease as the average family formation changes within Redland City.

KOALA HABITAT

Based on our analysis of the policy context, the various levels of koala habitat protection may have the following implications for residential land supply in Redland City:

- Any development application properly made prior to 31 May 2010 will not be affected by the *South-East Queensland Koala State Planning Regulatory Provisions*;
- Existing approvals are not affected by the *South-East Queensland Koala State Planning Regulatory Provisions*;
- Through the development of the new Redland Planning Scheme, effect will be given to State Planning Policy 2/10 – Koala Conservation in South-East Queensland which will ensure koala conservation is included within the planning scheme and contributes to a net increase in koala habitat in South-East Queensland;
- The listing of the koala as a threatened species (vulnerable) under the EPBC has the potential to impact on residential land supply, by impacting on both existing approvals and on future development of residential land through a more complex and costly approval process;
- Existing approvals in areas identified as comprising koala habitat, unless subject to a previous referral under the EPBC Act, will need to consider whether the proposed action will impact on koalas and their habitat; and
- Future development in areas identified as comprising koala habitat will require consideration against the EPBC act to determine whether the proposal is a Controlled Action under the EPBC Act and any approvals that may be required.

Many of these policies are new and not yet fully tested however, the implications of all this likely means that development of land affected by these various constraints will be more expensive to develop and carry a higher risk – this in turn may discourage take up of these opportunities. For the purposes of this study mapped koala habitats have been identified and removed from supply where appropriate.

DEVELOPMENT CONSIDERATIONS AND TRENDS

- Between 2001 and 2011, new detached housing sales within Redland City Council have averaged 1,108 per annum. Sales peaked at 2,083 dwellings in 2003 and more recently experienced their lowest levels in over 10 years with 464 new dwelling sales in 2011. This recent market softening is in line with current market conditions.
- Dwelling approvals within different parts of Redland have varied significantly with the type of product that has been approved and the quantum. The major centre areas of Cleveland and Capalaba have a comparatively high level of semi-detached and attached approvals whilst the more suburban areas of Redland Bay, Wellington Point and Alexandra Hills have a relatively low level of non-detached approvals.
- Development within the SMBI is currently tracking at around 100 lots per annum. Going forward Urbis believe this rate of development will not change significantly based on the current planning framework.
- Development yields could potentially be pushed higher within the MDR1 Cleveland land. It has proved difficult to sell medium density product within the Capalaba MDR1 land, an indication of the lack of commerciality within the area currently. With price growth we would expect this equation to improve, however for the purposes of this assessment we have assumed a relatively low level of take-up of MDR1 land within Capalaba initially.
- Referring to the long term average, demand has existed for around 50 new units/townhouses per annum within Capalaba and Cleveland, whilst Victoria point has historically recorded around 15 per annum. In recent times this average has declined, highlighting the current difficulty in converting higher density residential product.

- Going forward, we would expect demand for attached and semi-detached product within these three centres to initially return to the long term average before increasing.
- Following discussions with council and for the purposes of this assessment we have assumed the Kinross and South East Thornlands Master Plan areas will come on line in 2013. We have also assumed the areas will take an additional 2 years to develop semi-detached and attached product.
- Future supply within Redland City is split almost half and half between detached product (54%) and non-detached product (46%). However, over the last 10 years dwelling growth within Redland City Council has been dominated by detached product. Going forward we would expect demand for attached and semi-detached product to increase within the area in line with the housing requirements of an ageing population.
- Over the last twenty years lots between 700 and 799 sq.m has represented the largest single proportion of sales, ranging between 27% and 37% of total sales. In recent years this proportion has been at the lower end of this range, whilst lots between 500 and 599 sq.m have grown as a proportion of total sales.
- The current economic conditions have seen an increased focus on housing affordability. By introducing lower lot sizes and increasing housing diversity within Redland City the opportunity exists to encourage younger families, a key demographic for employment growth.

SUMMARY OF KEY FINDINGS

Private Detached and Semi-detached Dwelling¹ Forecasts

REDLAND CITY COUNCIL

Executive Summary Table 2

	Actual			Forecast			
	2001	2006	2011	2016	2021	2026	2031
Redland (C)							
Detached Dwellings	35,068	39,605	43,630	46,361	49,016	51,602	53,674
Attached and Semi-Detached Dwellings	5,063	6,089	6,503	7,475	9,175	11,672	14,506
Total	40,131	45,694	50,133	53,836	58,191	63,273	68,180
Average Annual Growth (%)							
	2001-06	2006-11	2011-16	2016-21	2021-26	2026-31	
Redland (C)							
Detached Dwellings	2.5%	2.0%	1.2%	1.1%	1.0%	0.8%	
Attached and Semi-Detached Dwellings	3.8%	1.3%	2.8%	4.2%	4.9%	4.4%	
Occupied Private Dwellings	2.6%	1.9%	1.4%	1.6%	1.7%	1.5%	
Average Annual Growth (No.)							
	2001-06	2006-11	2011-16	2016-21	2021-26	2026-31	
Redland (C)							
Detached Dwellings	907	805	546	531	517	415	
Attached and Semi-Detached Dwellings	205	83	194	340	499	567	
Occupied Private Dwellings	1,113	888	741	871	1,016	981	

¹ Does not include vacant or other dwellings

Source: Census of Population and Housing 2006, 2011; Urbis

- Growth is forecast to increase between 2016 and 2031 as a result of improved market conditions and the introduction of new projects within Redland (i.e. Kinross and South East Thornlands). As the development opportunities for Urban Residential land become scarcer, growth may be constrained.
- Demand for attached and semi-detached dwellings will increase significantly over the forecast period and contribute significantly to accommodate the future Redland population.
- If we apply the forecast dwelling growth mix to the current dwelling mix we can determine the forecast dwelling structure. As shown in Chart 6.1 the forecast mix of occupied dwellings for Redland City moves from an 87% (detached), 13% (semi-detached and attached) split in 2011 to a 79%

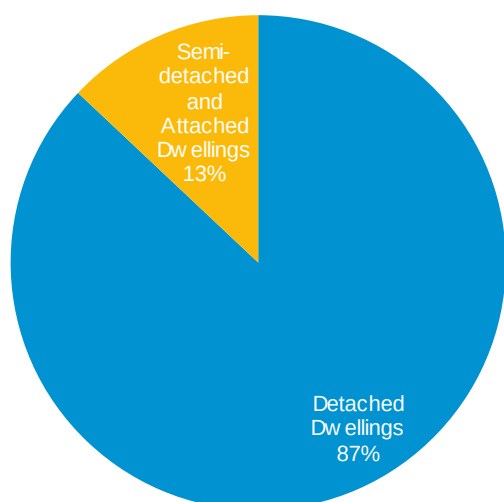
(detached), 21% (semi-detached and attached) split by 2031. Despite the forecast future attached product within Redland City, by 2031 the area will remain as an area dominated by detached housing.

Historic and Forecast Dwelling Structure, 2011 & 2031

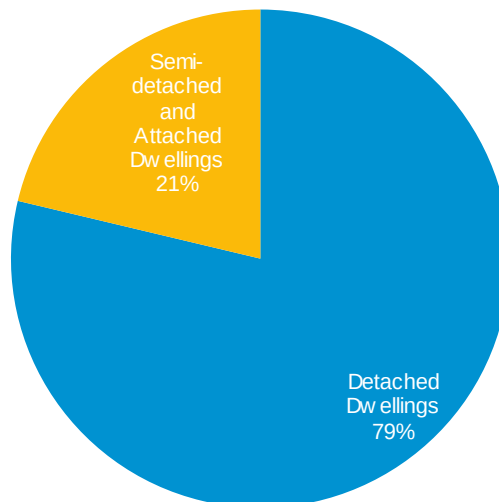
REDLAND CITY

EXECUTIVE SUMMARY CHART 1

Current Dwelling Structure (2011)



Forecast Dwelling Structure (2031)



Source: ABS Census of Population and Housing 2011, Redland City Council; Urbis

Population Forecasts

REDLAND CITY COUNCIL, 1991-2031

Executive Summary Table 3

	Historic Population	Detached Dwellings		Attached Dwellings		Total Population	Avg. Annual	
		Dwellings	Additional Population	Dwellings	Additional Population		No.	%
1991	82,818					82,818		
1996	103,082					103,082	4,053	4.5%
2001	117,252					117,252	2,834	2.6%
2006	131,210					131,210	2,792	2.3%
2011	144,936					144,936	2,745	2.0%
2016		2,731	7,073	972	1,653	153,662	1,745	1.2%
2021		2,655	6,869	1,700	2,889	163,421	1,952	1.2%
2026		2,586	6,681	2,497	4,244	174,346	2,185	1.3%
2031		2,073	5,296	2,834	4,818	184,460	2,023	1.1%

¹ This assumes all future dwellings will not be vacant with the exception of SMI future development

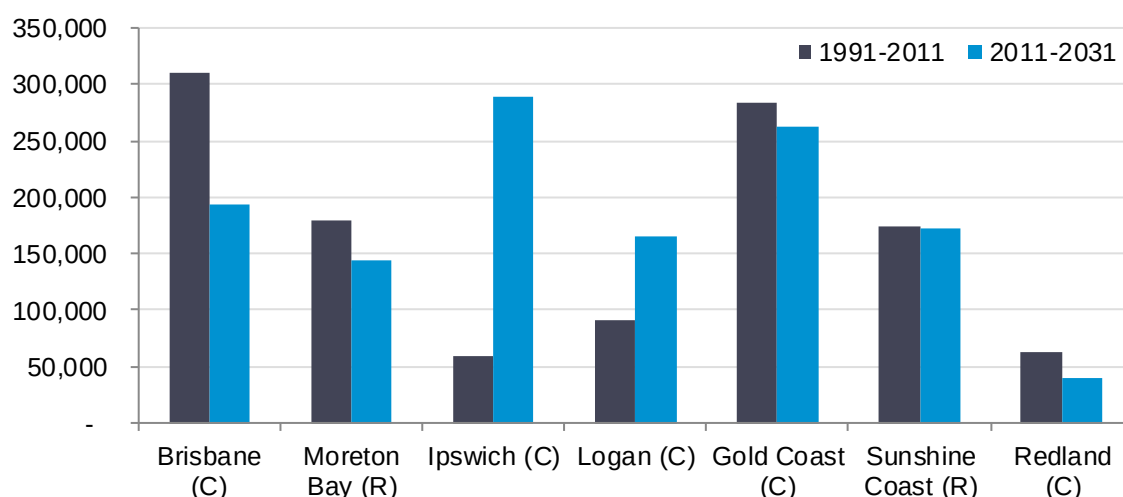
Source: Urbis

- By applying average household figures to forecast occupied private dwellings we can forecast population growth. In line with dwelling growth, the strongest growth period in Redland is forecast to occur between 2021 and 2026.
- It is interesting to note that population growth between 1991 and 2011 was 62,118 people, whilst forecast growth at almost 40,000 residents between 2011 and 2031 represents around 64% of the last 20 years growth.

Historic and Forecast Growth in Population, 1991-2031

LOCAL GOVERNMENT AREAS

EXECUTIVE SUMMARY CHART 2



Source: Queensland Government population projections, 2011 edition; Urbis

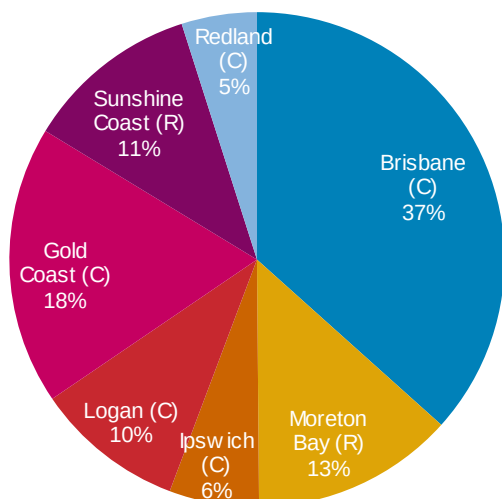
- Between 1991 and 2011, Redland City grew by just over 62,000 residents. Going forward Redland is forecast to receive almost 40,000 residents between 2011 and 2031. This decline in forecast growth is in line with other established council areas such as Brisbane, Moreton Bay, Gold Coast and the Sunshine Coast. In line with Brisbane and the Gold Coast, Redland City's forecast population and dwelling growth is reflective of an ageing demographic and increased constraints on land supply. As a result, Redland City is forecast to receive a lower rate of population growth than historically.

Historic and Forecast Growth in Population, 1991-2031

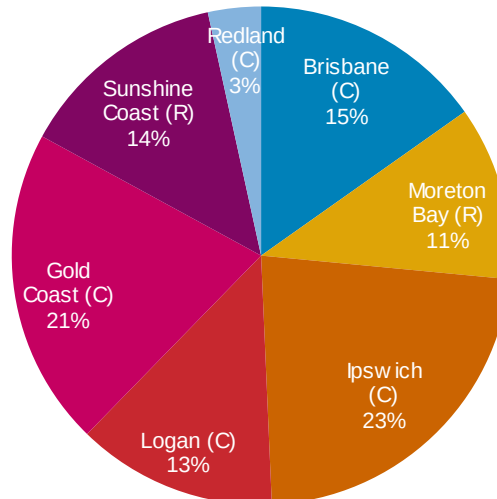
SELECTED LOCAL GOVERNMENT AREAS

EXECUTIVE SUMMARY CHART 3

Current Share of Population (2011)



Forecast Share of Growth (2011-31)



Source: Queensland Government population projections, 2011 edition; Urbis

The future supply and demand of residential land within Redland City has been analysed by land use category within this review. The key findings from the study are summarised in the following tables and described as follows:

- At a macro-economic level across the Redlands there is estimated to be sufficient dwelling supply to accommodate around 40,000 additional residents. This broadly equates to the estimated population growth over the next 20 years.
- Current supply of urban residential land (>1,500sqm) is forecast to significantly diminish by 2026. This will focus future demand on the new development areas of South East Thornlands, Kinross Road, Double Jump Rd and the existing urban residential lots between 800 sq.m and 1,500 sq.m (approximately 820ha post 2031) which can provide detached land supply beyond 2031 be it at lower levels than has historically been the case.
- The supply of detached and attached dwelling product will influence the rate and type of population growth in the Redlands over the life of the planning scheme.
- Reduced levels of supply of detached land post 2026 will encourage increased levels of medium and higher density development which is sufficiently catered for in the next 20 years and beyond.
- Future demand for higher density dwellings will also be driven by infrastructure development, amenity, centre development, and the retiree demographic.
- Cleveland followed by Victoria Point have the strongest fundamentals for higher density dwelling development whilst Capalaba has been commercially challenging. State Government infrastructure provisions will act as a catalyst for higher density dwellings e.g. whilst Capalaba is not expected to see a significant increase in higher density dwelling development prior to the State Government extension of the Eastern Busway to Capalaba.
- Redland will require a variety of dwelling options over the life of the planning scheme:
 - Historically the majority of Redland's dwelling growth has been in the form of detached houses. As the population ages we envisage a transition to a higher proportion of attached dwellings.
 - It is anticipated that detached dwelling supply will be freed up as the ageing Baby Boomer generation move out of large scale properties into smaller, more manageable dwellings. However it will also be necessary to supply newer forms of detached dwellings to attract younger families
 - A competitive strength of the Redland Local Government Area is its amenity. The ability to leverage this natural amenity is vital in achieving increasing levels of medium and higher density development going forward. Currently projects within the Cleveland MDR1 category are achieving higher levels of net density. We have assumed that yields of 180 dwellings per hectare are more in line with current and future yields.

Currently the market is volatile with many global factors affecting housing sentiment. It is difficult to forecast when the local housing market will recover and therefore for the purposes of this analysis we have adopted two scenarios in which timing of recovery is altered. It should be noted that the population and dwelling forecasts shown in Table 2 and 3 of the executive summary relate to Scenario 1 only. The scenarios are as follows:

Scenario 1 – The first scenario assumes the market recovers to average take-up rates around 2015.

Scenario 2 – Assumes that recovery is significantly slower and dwelling demand does not experience historically average levels until closer to 2020. This has the ability to impact on total required supply and in turn slow population growth.

Each scenario is shown in the following tables. The key points to note are as follows.

- Under scenario 1, total dwelling demand over the forecast period at 18,047 total dwellings is expected to consist of 56% detached dwellings and 44% attached dwellings.
- Under scenario 2 the take-up rate of residential land is expected to recover slowly and demand around 17,000 dwellings made up of 57% of detached residential dwellings and 43% of attached residential dwellings.

Future Net Demand by Dwelling Type - SCENARIO 1

REDLAND CITY COUNCIL

EXECUTIVE SUMMARY TABLE 4

Zone Category	Lot Size	Available (Dwellings) ²	Demand ¹				Total Demand	% of Supply Forecast to be Developed by 2031
		2011-16	2016-21	2021-26	2026-31			
DETACHED RESIDENTIAL LAND								
Mt Cotton		597	428	169	0	0	597	100%
Remaining Suburbs		<u>3,490</u>	<u>1,149</u>	<u>1,084</u>	<u>913</u>	<u>344</u>	<u>3,490</u>	<u>95%</u>
Urban Residential (excludes Kinross, SET)	>1500m2	4,086	1,577	1,253	913	344	4,087	96%
SMBI Residential inc SR1 ²		2,000	500	500	500	500	2,000	n.a. ²
Small Vacant Parcels (1 dwelling each)		1,051	263	263	263	263	1,051	100%
Kinross Road UR		1,002	100	220	311	371	1,002	100%
Double Jump Road Area		540	0	16	173	189	378	70%
South East Thornlands UR		679	88	163	224	204	679	100%
Urban Residential (with existing dwelling) ²	>800m2 and <1500m2	500	125	125	125	125	500	n.a. ²
Urban Residential (vacant) ²	>800m2 and <1500m2	240	60	60	60	60	240	n.a. ²
Low Density Residential	>4,000 m2	174	44	44	44	44	174	100%
Park Residential	>12,000m2	68	17	17	17	17	68	100%
Dunwich EUC Land		134	18	18	18	18	72	54%
Bunker Road EUC Land		37	0	37	0	0	37	100%
Constrained UR > 1500 m ²		<u>-243</u>	<u>-61</u>	<u>-61</u>	<u>-61</u>	<u>-61</u>	<u>-243</u>	n.a.
Total Detached Dwellings		n.a.	2,731	2,655	2,586	2,073	10,044	n.a.
MEDIUM DENSITY RESIDENTIAL LAND								
Medium Density Residential (excludes MDR1, Kinross, SET)	>1,200m2	2,799	548	636	760	855	2,800	100%
Medium Density Residential - MDR1		1,993	178	502	617	643	1,941	97%
Major Centre		1,704	116	227	514	651	1,508	88%
South East Thornlands MDR (incl MDR4)		821	49	119	181	218	567	69%
Kinross Road MDR (incl MDR5)		588	0	79	141	165	385	66%
Medium Density Residential (excludes MDR1, Kinross, SET) >700m2 and <1200m2		552	138	138	138	138	552	100%
Double Jump Road Investigation (Attached/semi-detached)		634	0	19	203	222	444	70%
Neighbourhood Centre		36	0	36	0	0	36	100%
Dunwich EUC Land (Attached - Semi-detached)		157	18	18	18	18	72	46%
Constrained MDR > 1200 m ²		<u>-301</u>	<u>-75</u>	<u>-75</u>	<u>-75</u>	<u>-75</u>	<u>-301</u>	100%
Total Attached Dwellings		<u>8,984</u>	<u>972</u>	<u>1,700</u>	<u>2,497</u>	<u>2,834</u>	<u>8,003</u>	89%
Total		n.a.	3,703	4,355	5,082	4,907	18,047	n.a.
% of Detached Dwellings			74%	61%	51%	42%	56%	
% of Attached Dwellings			26%	39%	49%	58%	44%	
Average Per Annum Growth			741	871	1,016	981	902	

¹ Excludes Vacant Dwellings

² SMBI and Urban Residential Land 800-1500 sq.m does not include all available supply within this category and is reflective of demand only.

Source: Redland City Council Land Supply Analysis; Urbis

Future Net Demand by Dwelling Type - SCENARIO 2

REDLAND CITY COUNCIL

EXECUTIVE SUMMARY TABLE 5

Zone Category	Lot Size	Available	Demand ¹				Total	% of Supply
		(Dwellings) ²	2011-16	2016-21	2021-26	2026-31	Demand	Forecast to be Developed by 2031
<u>DETACHED RESIDENTIAL LAND</u>								
Mt Cotton		597	428	169	0	0	597	100%
Remaining Suburbs		3,490	661	867	913	709	3,150	90%
Urban Residential (excludes Kinross,SET)	>1500m2	4,086	1,089	1,036	913	709	3,747	92%
SMBI Residential inc SR1 ²		2,000	500	500	500	500	2,000	n.a. ²
Small Vacant Parcels (1 dwelling each)		1,051	263	263	263	263	1,051	100%
Kinross Road UR		1,002	100	220	311	371	1,002	100%
Double Jump Road Area		540	0	16	173	189	378	70%
South East Thomlands UR		679	88	163	224	204	679	100%
Urban Residential (with existing dwelling) ²	>800m2 and <1500m2	500	125	125	125	125	500	n.a. ²
Urban Residential (vacant) ²	>800m2 and <1500m2	240	60	60	60	60	240	n.a. ²
Low Density Residential	>4,000 m2	174	44	44	44	44	174	100%
Park Residential	>12,000m2	68	17	17	17	17	68	100%
Dunwich EUC Land		134	18	18	18	18	72	54%
Bunker Road EUC Land		37	0	22	15	0	37	100%
Constrained UR > 1500 m ²		-243	-61	-61	-61	-61	-243	n.a.
Total Detached Dwellings		n.a.	2,243	2,424	2,600	2,438	9,704	n.a.
<u>MEDIUM DENSITY RESIDENTIAL LAND</u>								
Medium Density Residential (excludes MDR1,Kinross,SET)	>1,200m2	2,799	482	587	658	713	2,440	87%
Medium Density Residential - MDR1		1,993	105	417	569	624	1,714	86%
Major Centre		1,704	68	188	514	651	1,421	83%
South East Thomlands MDR (incl MDR4)		821	49	119	181	218	567	69%
Kinross Road MDR (incl MDR5)		588	0	79	141	165	385	66%
Medium Density Residential (excludes MDR1,Kinross,SET)>700m2 and <1200m2		552	138	138	138	138	552	100%
Double Jump Road Investigation (Attached/semi-detached)		634	0	19	203	222	444	70%
Neighbourhood Centre		36	0	36	0	0	36	100%
Dunwich EUC Land (Attached - Semi-detached)		157	18	18	18	18	72	46%
Constrained MDR > 1200 m ²		-301	-75	-75	-75	-75	-301	100%
Total Attached Dwellings		8,984	785	1,526	2,346	2,672	7,330	82%
Total		n.a.	3,028	3,949	4,947	5,110	17,034	n.a.
% of Detached Dwellings			74%	61%	53%	48%	57%	
% of Attached Dwellings			26%	39%	47%	52%	43%	
Average Per Annum Growth			606	790	989	1,022	852	

¹ Excludes Vacant Dwellings

² SMBI and Urban Residential Land 800-1500 sq.m does not include all available supply within this category and is reflective of demand only.

Source: Redland City Council Land Supply Analysis; Urbis

- Based on the above analysis we can conclude that there is sufficient residential zoned land for the life of the next planning scheme assuming the housing choices of the forecast population match the proposed housing supply. Whilst the land supply within urban residential zoned parcels 800–1,500sq.m (additional 820ha) provides additional supply post 2031, on-going monitoring of dwelling take-up by land supply category is necessary to inform the revision of the next planning scheme and future residential land supply requirements.
- Council has advised that the State Government has committed funding over three years to undertake strategic land use planning investigations on North Stradbroke Island/Minjerriba. The investigations will be undertaken in accordance with the Land Use Agreement between the State Government and the Quandamooka People of North Stradbroke Island and relate to a significant area of the Island identified within a land bank. As a result of this investigation, an increase in the supply of residential land is likely to result.
- A vacancy rate of approximately 15% exists on NSI. This is due to a higher tourist accommodation housing type being provided in the three township locations. As residential land supply is provided in line with the strategic land use planning study being undertaken by the State Government in partnership with the Quandamooka People and Council, this vacancy rate may impact on the housing density and resident population able to be accommodated.

In summary, The Study identifies a number of land supply options each with their own demand and supply factors. As a result of this review we have identified the following recommendations.

- Current supply of residential land in the Redlands can cater to forecast demand for the next 20 years.

- Towards the end of this period land for detached dwelling development is forecast to diminish. To mitigate against potential shortfalls in detached dwelling supply, increased density targets could extend this form of dwelling supply.
- The Redlands is forecast to have strong growth in persons aged 65+ years. This will necessitate an increase in the supply of medium density dwellings particularly in the form of retirement villages. To attract younger generations of residents to the Redlands it will be necessary to provide a range of dwelling types including detached, semi-detached, and high density dwellings
- Where attached product can be achieved currently (i.e. Cleveland), encourage density and leverage from natural amenity.
- Ongoing monitoring of residential land supply and demand factors to ensure land supply continually reflects market demand and requirements. This will alert council as to whether there is a need to investigate additional residential land supply.

1 Background and Structure

The Redland City Urban Land Availability Study was originally undertaken in 2007 and formed a key input into the Local Growth Management Strategy, a requirement under the now superseded SEQ Regional Plan 2006-2026.

As a key input to the review of the RPS and Redlands 2015 project and to align the Study with the new timeframe (i.e. 2009-2031) Redland City Council has updated the original Land Availability Study. Redland City Council has engaged Urbis to provide an independent review of this Study and to test some key assumptions made within the Study. The Study review will form a key input into the preparation of the new Redlands Planning Scheme and target the following objectives:

- Provide an independent and informed review of the updated Study to improve the robustness of the underlying assumptions;
- Form a key input into the preparation of strategic land use proposals to guide development of the strategic framework for the new SPA compliant RPS;
- Review the demand side assumptions of the Study related to the market take-up for each residential category to 2031;
- Review the average assumptions for dwelling density for each of the residential land categories;
- Provide an assessment of the key analysis of the SEQ Koala Conservation State Planning Regulatory Provisions and SEQ Koala Habitat Values Mapping 2010 and Redland Planning Scheme Overlays impact on residential development;
- Provide a set of revised assumptions for demand and supply factors influencing residential development in the City for 2026 and 2031;
- Provide revised dwelling and population planning figures for the City broken down into five year forecasts to 2031 (i.e. 2016, 2021, 2026 and 2031).

1.1 APPROACH AND REPORT STRUCTURE

The following report analyses the key assumptions made within the Study regarding dwelling density and the take up of residential land. Whilst the Study focused on providing a summary for the supply of land we will focus this review more from the demand perspective. We have reviewed recent housing and demographic trends in addition to reviewing koala conservation areas.

It is important to note this report relies upon data provided by Redland City Council and the focus of this review is to review yield and timing assumptions over the forecast period. We have assumed the land supply within the Study is suitable for development. Specifically we have relied upon the land use, area and zoning information provided by Redland City Council.

It is also important to note that this assessment measures potential dwelling output and therefore an allowance has not been given for future vacant dwellings within this supply with the exception of the Southern Moreton Bay Islands (SMBI).

The report is structured as follows:

Section 1 – Outlines the background of the study and key objectives

Section 2 – Reviews the key findings of The Study

Section 3 – Reviews the Koala Conservation policy as it affects Redland City residential land supply

Section 4 – Analyses recent demand and demographic trends as they relate to housing demand within Redland City

Section 5 – Reviews and tests the key assumptions made within specific land use categories

Section 6 – Reviews resultant population and dwelling forecasts for Redland City

Section 7 – Provides a summary of key findings

1.2 REPORT LIMITATIONS

As the report involves projections, it can be affected by a number of unforeseen variables. It represents for the party to whom it is addressed, the various estimates of Urbis Pty Ltd but no assurance is given by Urbis Pty Ltd that the projections will be achieved.

The assessment undertaken has been done on the basis of information available at this time. Our assessment may be impacted by changes to this information or by market factors which cannot be foreseen at this stage. Urbis Pty Ltd will not accept liability or responsibility to any third party relying on information provided in this advice.

2 2012 Redland Land Supply Key Findings

As mentioned previously, the updated Residential Land Availability Study (referred to as “The Study”) has estimated that just over 19,000 additional future residential dwellings will be provided within existing residential zoned areas and a future Greenfield area (Victoria Point Local Development Area) in the City. There is capacity for additional dwellings to be provided and this figure has been estimated based on land supply, estimated market take-up rates and estimated dwelling densities.

The following table ranks the land use zonings within the study by the quantum of future dwellings they are expected to deliver. By ranking the precincts by dwelling supply it is possible to determine the significant influences on supply and focus the direction of this review.

Dwelling Yield by Land Use Type

REDLAND CITY COUNCIL

TABLE 2.1

Zone Category	Lot Size	Total Area (ha)	Dwellings	Population	% of Population	Influence on Supply ¹
City						
Urban Residential (excludes Kinross,SET)	>1500m2	419	4,086	11,033	27%	●
Medium Density Residential (excludes MDR1,Kinross,SET)	>1,200m2	75	2,799	4,759	11%	●
SMBI Residential inc SR1			2,000	4,200	10%	●
Medium Density Residential - MDR1		29	1,777	3,021	7%	●
Major Centre		67	1,704	2,897	7%	●
Small Vacant Parcels (1 dwelling each)			1,051	2,838	7%	●
Kinross Road UR		67	1,002	2,705	7%	●
Double Jump Road Area			1,175	2,538	6%	●
South East Thornlands UR		45	679	1,832	4%	●
South East Thornlands MDR (incl MDR4)		19	821	1,396	3%	●
Urban Residential (with existing dwelling)	>800m2 and <1500m2		500	1,350	3%	●
Kinross Road MDR (incl MDR5)		13	588	999	2%	●
Medium Density Residential (excludes MDR1,Kinross,SET)	>700m2 and <1200m2	53	552	938	2%	●
Urban Residential (vacant)	>800m2 and <1500m2		240	648	2%	●
Low Density Residential	>4,000 m2	50	174	470	1%	●
Park Residential	>12,000m2	68	68	184	0%	●
Bunker Road EUC Land			37	100	0%	●
Neighbourhood Centre		2	36	61	0%	●
Investigation Zone			0	0	0%	●
Redland (S) Bal						
Dunwich EUC Land			291	629	2%	●
Point Lookout EUC Land			0	0	0%	●
Constrained Land Analysis						
Constrained UR > 1500 m ²		-25	-243	-656	-2%	●
Constrained MDR > 1200 m ²		-8	-301	-511	-1%	●
Total		874	19,037	41,432	100%	

● Influence on supply greater than 10%

● Influence on supply greater than 5% and less than 10%

● Influence on supply less than 5%

Source: Redland City Council Land Supply Analysis; Urbis

Almost a third of the forecast population growth (27%) is expected to be housed within existing urban residential land (excluding Kinross Road and South East Thornlands (SET)). The second largest category of land supply within Redland City is medium density residential (excluding MDR1, Kinross and SET).

Continued development within the SMBI will contribute around 2,000 new dwellings over the forecast period and house an additional 4,200 residents.

MDR1 zoned land and Major Centre land is forecast to provide 1,777 dwellings and 1,704 dwellings over the forecast period.

The future development areas of South East Thornlands, Kinross Road and Double Jump Road are expected to provide dwellings to house a combined 23% of future population growth within Redland City. In total, urban residential land (inclusive of Kinross Road and South East Thornlands) accounts for approximately 50% of future dwelling supply. The following sections will review the key assumptions behind these land supply categories.

3 Constrained Land Analysis

3.1 KOALA CONSERVATION REVIEW

The Study outlines the following land that has the potential to be affected by Koala Conservation. This section reviews the background, policy context and implications for Redland City residential land.

Koala Conservation

REDLAND CITY COUNCIL

TABLE 3.1

	Area (ha)	Affected	Net Developable	Comments
Mt Cotton Land	53	0	53	Based on prior development commitments, not affected
Redland Remainder	19	19	0	
Total	72		53	

Source: Redland City Council; Urbis

3.2 POLICY CONTEXT

The Redland area is recognised as containing some of the most valuable koala habitat in Queensland and therefore it is important to consider the impact of Koala values to the supply to residential dwellings. There are a number of Local, State and Commonwealth overlays and listings which seek to manage the impacts of development on koala populations within the Redland City Council area. The applicable overlays and listings include:

- Redland Planning Scheme Habitat Protection Overlay;
- South-East Queensland Koala State Planning Regulatory Provisions (SPRP) and South East Queensland Koala State Planning Policy (SPP);
- Listing of the koala as a vulnerable species under the Environment Protection and Biodiversity Conservation Act (as at 27 April 2012).

The availability of land to be developed for residential purposes is affected by each of the above overlays in different ways. The following discussion does not seek to provide analysis of what land may be suitable to be developed given this work would involve on-the-ground assessments by suitability qualified persons. The discussion instead provides an analysis of the impact of the various policy overlays and EPBC listing on existing approvals for residential development and also provides an outline of the potential impacts on future supply.

3.3 EXTENT OF KOALA HABITAT

Within the City a total area of 72ha of residential zoned land contains high and medium value bushland koala habitat as categorised by the Koala SPRP (SEQ Koala Habitat Values Mapping). Of this, 19ha is located across the City in various locations. 53.0 ha is located in Mt Cotton, all of which is in an existing approved residential development.

3.4 REVIEW OF POLICY CONTEXT

3.4.1 REDLAND PLANNING SCHEME HABITAT PROTECTION OVERLAY

The Redland Planning Scheme contains the Habitat Protection Overlay, which seeks to protect and provide for the long-term management and enhancement of environmental values throughout the City. One of the outcomes sought by this overlay is the protection of koala habitat by maximising the protection of koala habitat trees and other valuable features. Whilst this overlay is relevant in the assessment of development applications, it is acknowledged that the SPRP now provides additional stronger protections which are also required to be considered during development assessment.

3.4.2 STATE PLANNING POLICY 2/10

State Planning Policy 2/10 – Koala conservation in South-East Queensland is used to inform land use planning decisions made by Local and State Governments, including where a Council prepares a new Planning Scheme as is currently being undertaken by Redland City Council.

The Study has reviewed the SEQ Koala Habitat Values Mapping under the SPP and found that 72ha of residential zoned land is mapped as high or medium value koala habitat. The Study removed 19ha of this residential land from supply considerations. The balance 53ha has been maintained as future supply recognising it is subject to a development commitment (Mount Cotton). It should be noted that since 2011 some of the 53ha in Mount Cotton has been developed.

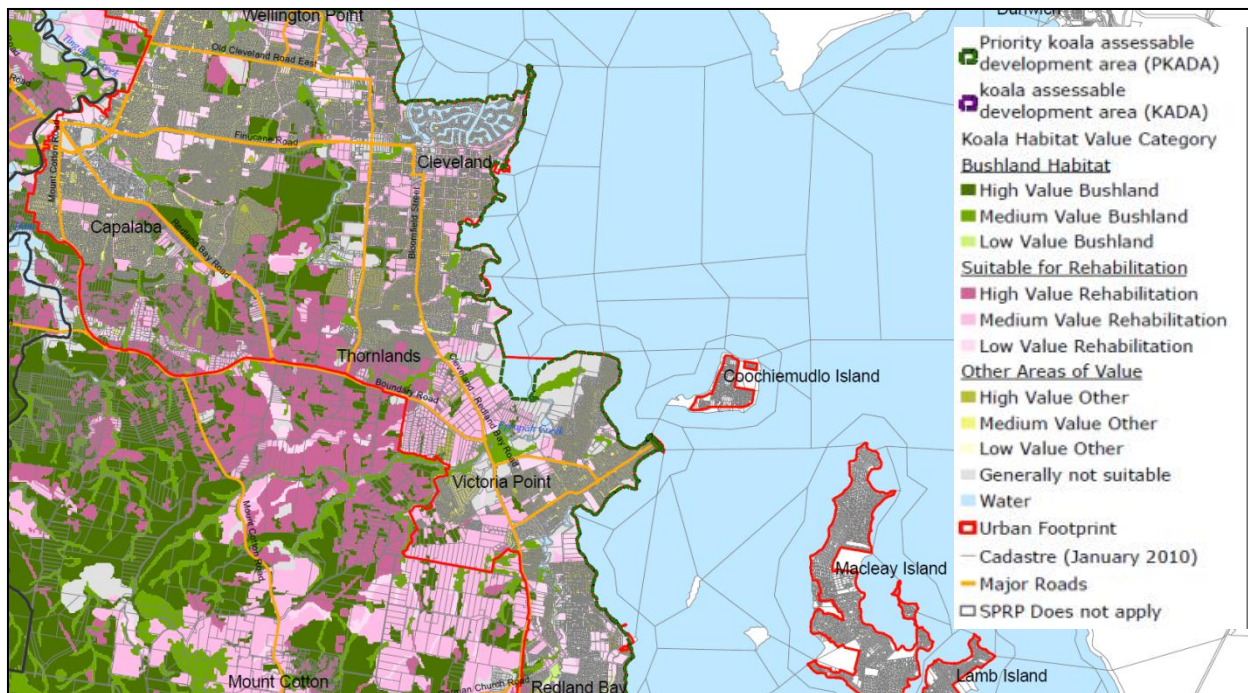
In addition, the Kinross Road Structure Plan was prepared in accordance with the SPP. As such, no implications arise. Similarly, the South-east Thornlands Structure Plan provided for the protection of koala habitat as a key planning consideration and is unlikely to be impacted by the SPP.

The future residential yield expected for the Double Jump area has been reduced in light of the need to protect koala habitat in the area and will also not be impacted by the SPP.

3.4.3 SOUTH-EAST QUEENSLAND KOALA STATE PLANNING REGULATORY PROVISIONS

The *South-East Queensland Koala State Planning Regulatory Provisions* (SPRP) regulate development where land is identified as comprising koala habitat on the associated SPRP maps. The entire mainland of Redland is identified as a Priority Koala Assessable Development Area as well as comprising areas identified as Bushland Habitat and Identified Koala Broadhectare Areas at South-East Thornlands and Kinross Road. **Figure 1** below provides an example of the extent of areas within Redlands affected by the SPRP.

Figure 1 – SPRP Koala Habitat Map



Development within the various areas identified in the SPRP requires compliance with specific criteria outlined in the relevant section of the SPRP, along with consideration against the Habitat Protection Overlay from the Redland Planning Scheme. The ability of individual areas and developments within these areas to accommodate residential development will be subject to detailed assessment during the development assessment process to determine what will be required to comply with SPRP and overlays and what impact this will have on the availability of residential land.

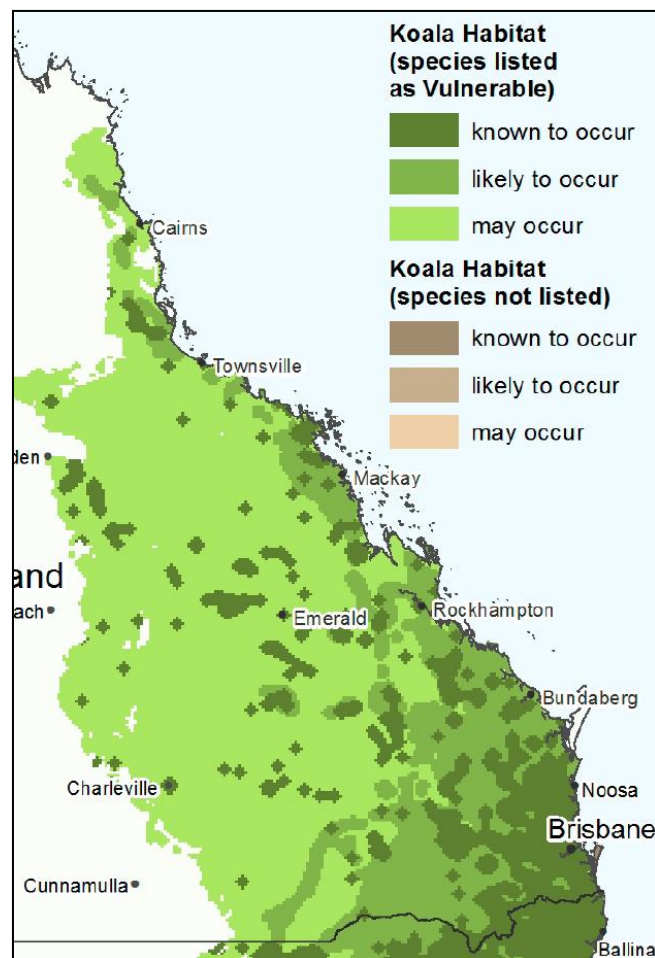
However an important consideration for the supply of residential land is included within Section 1.3 of the SPRP which outlines the instances where the SPRP does not apply. Included within the exemption is a *development application that was properly made before the day these state planning regulatory provisions commenced*. Therefore, the SPRP will not have any impact on the supply of residential land where the development application for a project was properly made prior to 31 May 2010, such as the case with the approval in Mount Cotton. It is noted however that this exemption may be affected by the EPBC listing of the koala as a vulnerable species, which is discussed below. It is also noted that the study has removed residential zoned land identified as High and Medium Value Koala Habitat.

3.4.4 EPBC LISTING OF THE KOALA AS A VULNERABLE SPECIES

The Commonwealth Department of Sustainability, Environment Water, Population and Communities (SEWPAC) listed the koala as a threatened species (vulnerable) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 2 May 2012. Threatened species are one of the eight matters of national environmental significance and therefore consideration of impacts are now required in accordance with the EPBC Act. This will add a further layer of regulatory assessment to development which has the potential to impact on koala populations and habitat.

The listing relates to koalas within Queensland, New South Wales and Victoria, with South-East Queensland specifically nominated as comprising areas where koalas are known to occur (see **Figure 2** below).

Figure 2 – EPBC Koala Distribution Map



At the present time, the SEWPAC has not released formal referral guidelines to assist in determining where an action requires referral. Therefore currently proponents are required to consider the Interim Koala Referral Advice to determine whether their action requires referral to SEWPAC. The process for determining whether an approval is required and the formal assessment process is outlined as follows:

1. The Protected Matters Search Tool is consulted to allow a proponent to determine whether an activity may impact upon the koala;
2. If the search indicates that it is likely that koalas exist in the area and the action may impact on koalas, koala surveys may need to be undertaken to determine whether the action may have a significant impact on the species in accordance with *Significant Impact Guidelines 1.1 – Matters of Environmental Significance*;
3. The action is then referred to the Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) to determine whether it constitutes a Controlled Action under the EPBC Act.
4. If the proposal is not determined to be a Controlled Action, no further Commonwealth Approval is required provided the activity is carried out in accordance with the information submitted in the referral.
5. If the proposal is determined to be a controlled action, approval through a variety of processes will be required in accordance with the EPBC Act. The timeframes and approval processes will differ significantly depending upon the impact the proposed action may have on the species and the process which the SEWPAC applies to the assessment.

Therefore a development proposal identified as being a Controlled Action will require some type of approval under the EPBC Act. In Queensland, certain assessment processes have been accredited by

the SEWPAC to avoid the duplication of Commonwealth and State Assessments. However it is noted that these include the environmental impact assessment process under the *Sustainable Planning Act 2009*, *Environmental Protection Act 1994* and *State Development and Public Works Organisation Act 1971* which are generally not used for residential development projects. There is no accreditation of other State and Local Assessment processes, such as a development application, however a case-by case accreditation can be requested for individual projects.

For projects which have previously been referred to SEWPAC and a decision made by the Minister (for example, that the proposal does not have a significant impact on a MNES), the EPBC Act contains a protection provision, which provides certainty that a subsequent listing event (for example, a new listing of a threatened species, such as happened with the koala) has no effect on the decision that has already been made.

Importantly, where a decision has been made to approve a project under State and Local legislation, and a referral was not made to DSEWPC, the project now may be required to be assessed using the process outlined above. This may, depending on the impact of the proposal on koala habitat, have a significant impact on the development which was previously approved.

Certain actions are exempt from the requirement of assessment and approval under the EPBC Act. These include lawful continuations of land use that commenced before 16 July 2000, or actions that were legally authorised before 16 July 2000. Therefore the residential development which was approved in Mount Cotton during the mid-1990s is not affected by the EPBC Act.

3.5 IMPLICATIONS FOR RESIDENTIAL LAND IN REDLANDS

Based on the above policy context, the various levels of koala habitat protection may have the following implications for residential land supply in Redlands:

- Any development application properly made prior to 31 May 2010 will not be affected by the *South-East Queensland Koala State Planning Regulatory Provisions*;
- Existing approvals are not affected by the *South-East Queensland Koala State Planning Regulatory Provisions*
- Through the development of the new Redland Planning Scheme, effect will be given to State Planning Policy 2/10 – Koala Conservation in South-East Queensland which will ensure koala conservation is included within the planning scheme and contributes to a net increase in koala habitat in South-East Queensland;
- The listing of the koala as a threatened species (vulnerable) under the EPBC has the potential to impact on residential land supply, by impacting on both existing approvals and on future development of residential land through a more complex and costly approval process;
- Existing approvals in areas identified as comprising koala habitat, unless subject to a previous referral under the EPBC Act, will need to consider whether the proposed action will impact on koalas and their habitat;
- Future development in areas identified as comprising koala habitat will require consideration against the EPBC act to determine whether the proposal is a Controlled Action under the EPBC Act and any approvals that may be required;
- Many of these policies are new and not yet fully tested however, the implications of all this likely means that development of land affected by these various constraints will be more expensive to develop and carry a higher risk – this in turn may discourage take up of these opportunities; and
- Having reviewed the implications for Koala Habitat Land, Urbis believe the assumptions regarding developable land adopted within the Study are sound.

4 Housing and Market Trends

From the outset it is important to analyse the historical dwelling growth within Redland City Council and understand the recent demand. Between 2006 and 2011 4,659 new dwellings were approved averaging 932 dwellings per annum over the last 5 years (ABS Census of Population and Housing, 2006 & 2011). If we simply take this recent demand for dwellings and project it forward over the next 20 years we can see that demand exists for around 18,640 dwellings.

Considering Redland is seen to have had a relatively subdued residential development period over the last five years for various reasons (i.e. GFC), we would imagine that 932 dwellings per annum may be considered to be at the lower end of dwelling demand going forward.

This section reviews some of the recent demographic and housing demand trends for Redland City including changes in household size and changing dwelling preferences.

4.1.1 HOUSEHOLD SIZE

For the purposes of this review, we have identified the assumptions made within the study by dwelling type and compared these to census figures. The following table reviews key household size assumptions made within the study.

Household Size Assumptions, Occupied Private Dwellings

REDLAND CITY COUNCIL

TABLE 4.1

Household Size	
Urban Residential	2.7
Medium Density Residential	1.7
Southern Moreton Bay Islands	2.1

Source: Redland City Council; Urbis

Key assumptions include:

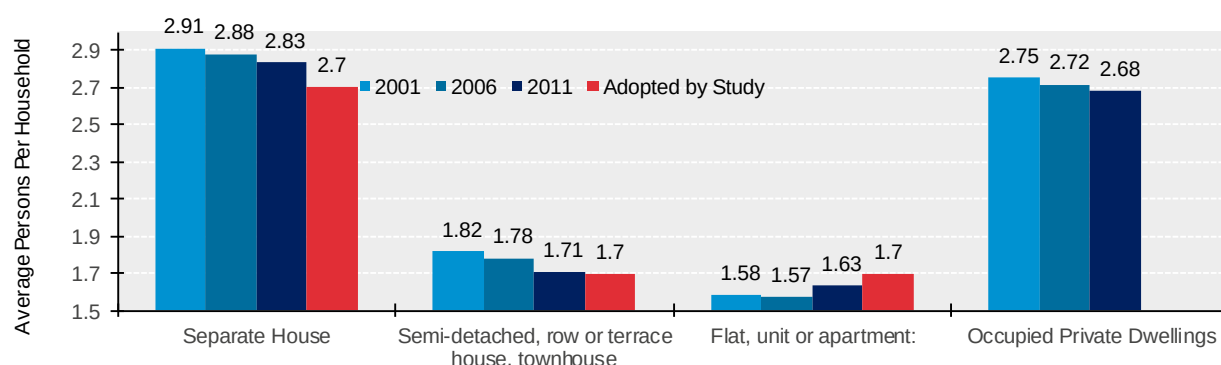
- Urban residential is assumed to consist of detached dwellings at a household size of 2.7 persons.
- Medium density residential is assumed to consist of a blend of semi-detached and apartment product and within the study is assumed to have an average household size of 1.7 persons.
- Due to the unique nature of the SMBI product, the average household size equates to 2.1 persons per dwelling.

To test these assumptions we have reviewed the latest data from the 2011 Census of Population and Housing. The following chart compares average household sizes by dwelling type and compares it to the study assumptions.

Household Size by Occupied Private Dwelling Type

REDLAND CITY COUNCIL

CHART 4.1



Source : ABS Census of Population and Housing; Urbis

Household sizes adopted within the study are typically in line with current household sizes. Average household size for separate houses at 2.7 people per household is slightly below the current Redland City Council average. Going forward the average household size within Redland City will be expected to shrink as the population ages increasing the volume of couple and lone person households.

4.2 DEMAND BY LOT SIZE

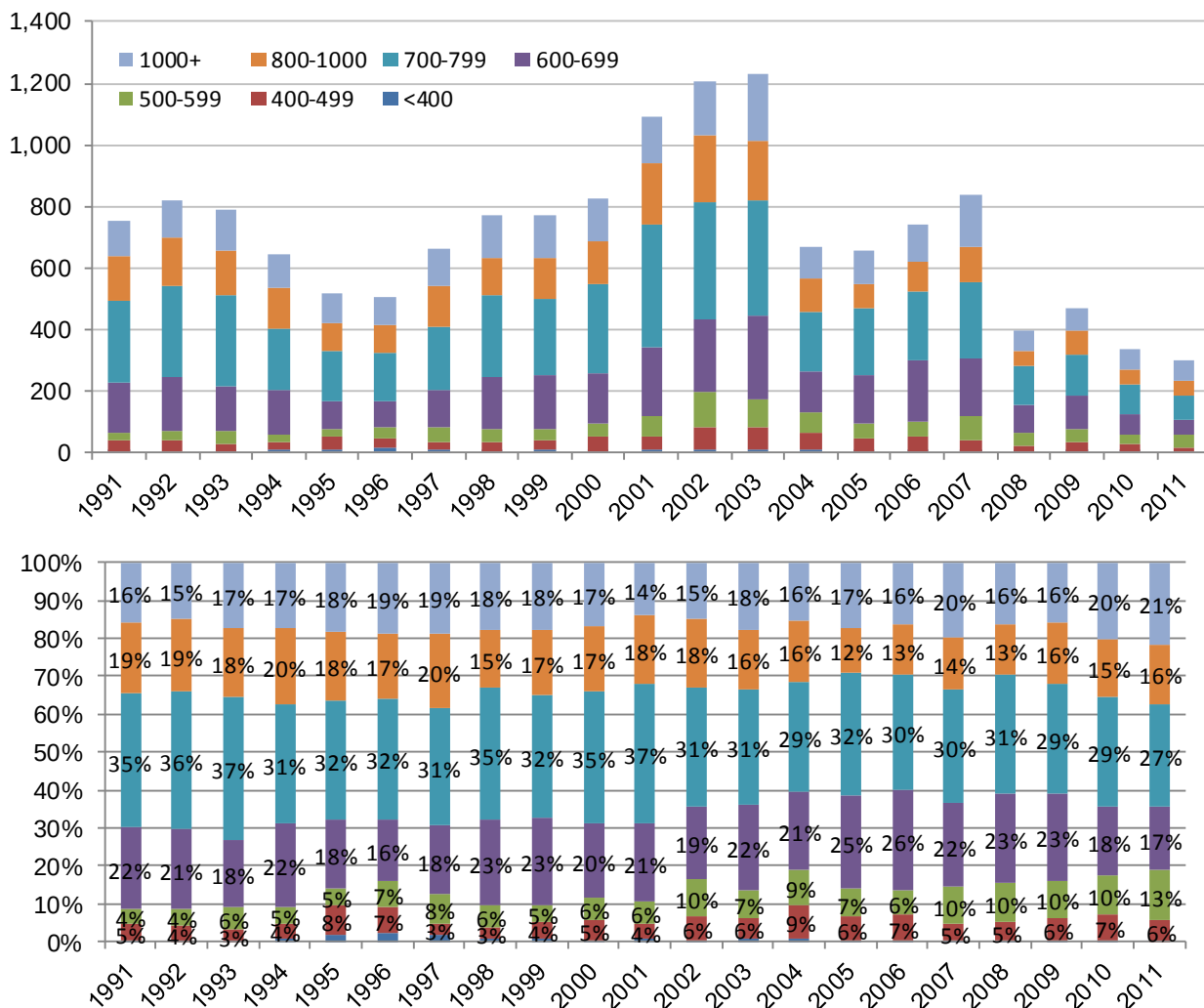
Additionally we have assessed the take up of new urban residential land by land size over the last 20 years to identify any emerging trends within Redland City. The following chart displays new house sales by lot size, by year. The following points can be deduced from the chart:

- Over the last twenty years lots between 700 and 799 sq.m have represented the largest single proportion of sales, ranging between 27% and 37% of total sales. In recent years this proportion has been at the lower end of this range, whilst lots between 500 and 599 sq.m have grown as a proportion of total sales.
- The current economic conditions have seen an increased focus on housing affordability. By introducing smaller lot sizes and increasing housing diversity within Redlands housing affordability has improved for younger families and workers. Opportunity exists to encourage younger families, a key demographic for employment growth.

New House Transactions, By Lot Size (m²)

REDLAND CITY COUNCIL, 1991-2011

CHART 4.2



Source: RP Data; Urbis

4.3 DETACHED AND OTHER DWELLINGS

For the purposes of this assessment we have assumed dwellings with an average household size of 2.7 are considered to be detached houses, whilst dwellings with an average household size of 1.7 have been assumed to be either semi-detached or attached dwellings.

The 19,037 dwelling capacity identified in the updated Redland Land Study reflects a dwelling profile where nearly half (45%) are either semi-detached or attached. The following section reviews the future supply and compares to historic dwelling approvals and actual development numbers. The following table shows the split between the future supply of dwellings.

2031 Estimated take-up by Dwelling Type

REDLAND CITY COUNCIL

TABLE 4.2

Zone Category	Dwellings	Population	Average Household Size	Classification	Urban Residential (Detached)	Med. Density Residential (Attached)
City						
Urban Residential (excludes Kinross,SET)	4,086	11,033	2.7	UR	4,086	0
Medium Density Residential (excludes MDR1,Kinross,SET)	2,799	4,759	1.7	MDR	0	2,799
SMBI Residential inc SR1	2,000	4,200	2.1	UR	2,000	0
Medium Density Residential - MDR1	1,777	3,021	1.7	MDR	0	1,777
Major Centre	1,704	2,897	1.7	MDR	0	1,704
Small Vacant Parcels (1 dwelling each)	1,051	2,838	2.7	UR	1,051	0
Kinross Road UR	1,002	2,705	2.7	UR	1,002	0
Double Jump Road Area	1,175	2,538	(2.7/1.7)	Mixed	540	634
South East Thornlands UR	679	1,832	2.7	UR	679	0
South East Thornlands MDR (incl MDR4)	821	1,396	1.7	MDR	0	821
Urban Residential (with existing dwelling)	500	1,350	2.7	UR	500	0
Kinross Road MDR (incl MDR5)	588	999	1.7	MDR	0	588
Medium Density Residential (excludes MDR1,Kinross,SET)	552	938	1.7	MDR	0	552
Urban Residential (vacant)	240	648	2.7	UR	240	0
Low Density Residential	174	470	2.7	UR	174	0
Park Residential	68	184	2.7	UR	68	0
Bunker Road EUC Land	37	100	2.7	UR	37	0
Neighbourhood Centre	36	61	1.7	MDR	0	36
Investigation Zone	0	0				
Redland (S) Bal						
Dunwich EUC Land	291	629	(2.7/1.7)	Mixed	134	157
Point Lookout EUC Land	0	0				
Constrained Land Analysis						
Constrained UR > 1500 m ²	-243	-656	2.7	UR	-243	0
Constrained MDR > 1200 m ²	-301	-511	1.7	MDR	0	-301
Total	19,037	41,432			10,268	8,768
% of Dwellings					53.9%	46.1%

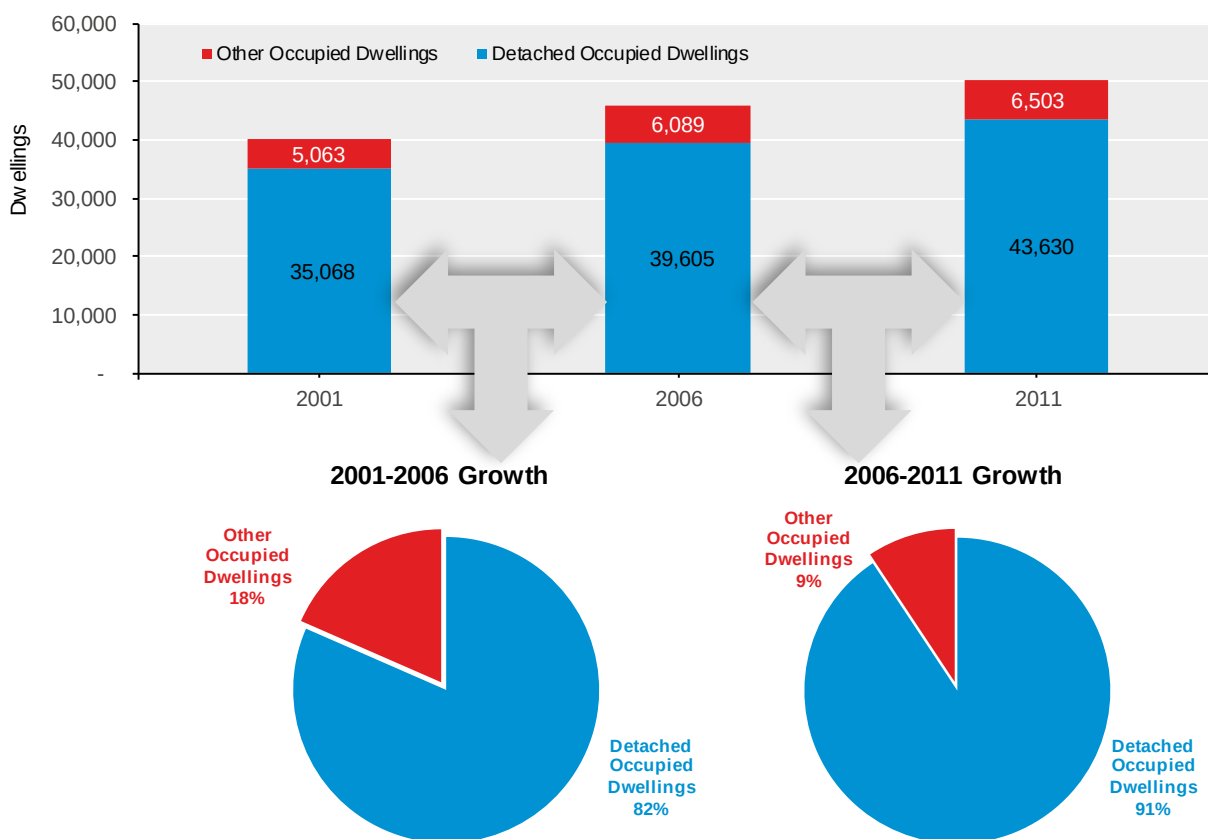
Source: Redland City Council Land Supply Analysis; Urbis

As the table above shows, future supply within Redland City Council is split almost half and half between detached product (53.9%) and non-detached product (46.1%). The following analysis examines how the forecast dwelling supply potential aligns with the estimated dwelling demand.

Redland City Council Dwelling Breakdown

REDLAND CITY COUNCIL 2001-2011

CHART 4.3



1. Other Occupied Dwellings include Semi-detached, row or terrace house and flat unit or apartment

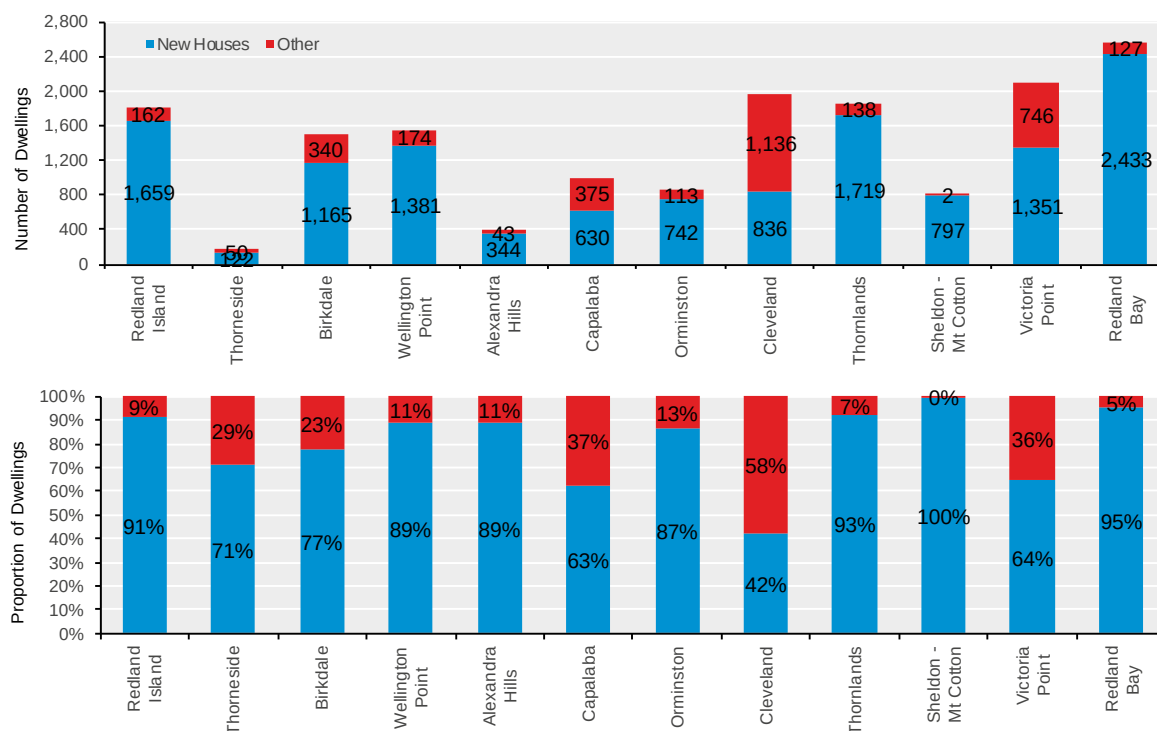
Source : ABS Census of Population and Housing; Urbis

Over the last 10 years dwelling growth within Redland City Council has been dominated by detached product. This reflects both market demand for detached dwellings and constraints to the development of semi-detached and attached dwellings, notably the viability of developing higher density dwellings. Going forward we would expect the demand for medium density to increase within Redland City, however this will be a gradual process.

New Dwelling Approvals by SA2¹

REDLAND CITY COUNCIL - 1996/97 - 2011/12

CHART 4.4



¹ New Dwelling Approvals are calculated on the nearest fit Census Collector Districts

Source : ABS Building Approvals; Urbis

Dwelling approvals within different parts of Redland City have varied significantly with the type of product that has been approved and the quantum. The major centre areas of Cleveland and Capalaba have a comparatively high level of semi-detached and attached approvals whilst the more suburban areas of Redland Bay, Wellington Point and Alexandra Hills have a relatively higher proportion of detached approvals.

5 Land Supply Review

The estimated dwelling capacity for the updated Redland Land Study is sensitive to the assumptions used throughout the Study. This section reviews the key assumptions made within the Study for Urban residential and medium residential land. For the purposes of this assessment all area calculations and lot categorisation are assumed to be correct and therefore we have adopted the findings from the Study for this review.

5.1 METHODOLOGY

In order to test proposed development yields reported within the Study, we have analysed recently approved subdivisions and unit developments to review likely achievable yields. We have reviewed this information for both Urban Residential and Medium Density Residential Land within Redland City Council. In undertaking our analysis we have utilised the following sources:

- Cordell Connect Construction Database – Tracks approved projects as well as deferred and abandoned projects.
- Redland City Councils PD Online – Tracks current projects going through the approval process.
- Completed projects – Analysis of recently completed projects will ascertain if developers are achieving the prescribed yields.

To test the development assumptions regarding take-up we have utilised historic new house and unit sales for Redland City as well as Census information from the 2006 and 2011 Census of Population and Housing.

5.2 RESIDENTIAL LAND – DETACHED DWELLINGS

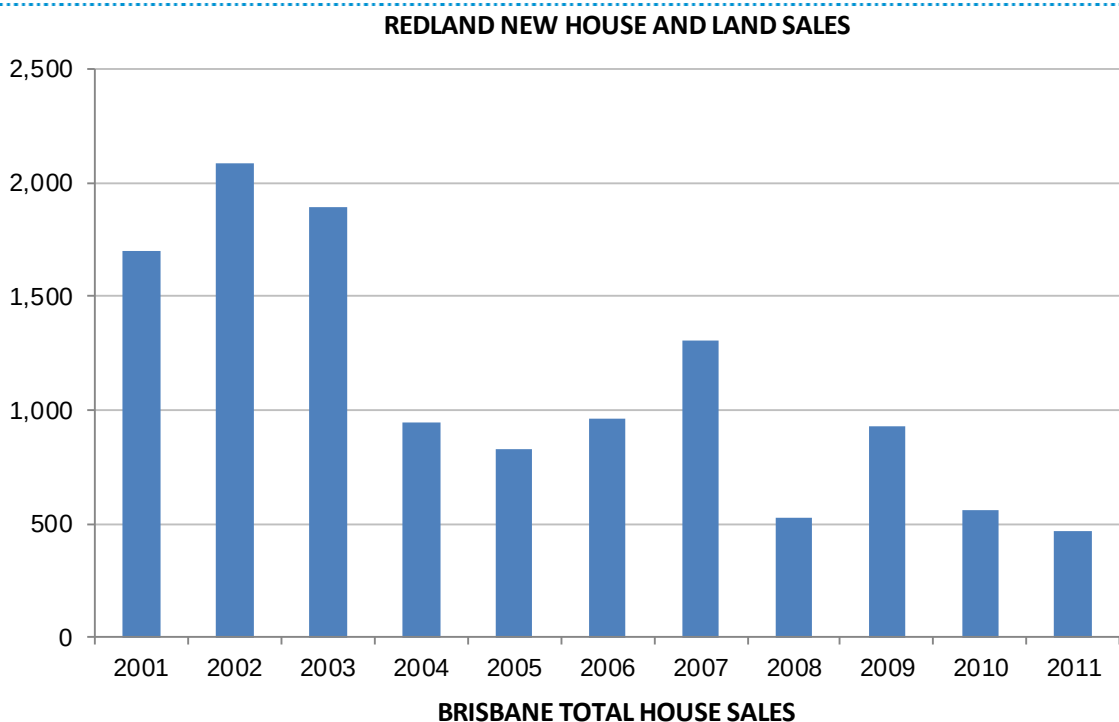
5.2.1 HISTORIC HOUSING SALES

Initially we have undertaken an historic analysis of new housing sales for Redland City. Between 2001 and 2011, new housing sales within Redland City Council have averaged 1,108 per annum. Sales peaked at 2,083 dwellings in 2002 and more recently experienced their lowest levels in over 10 years with 464 new dwelling sales in 2011. This recent market softening is in line with current market conditions as is shown by the Brisbane total housing sales chart. It is important to note that this data tracks house and land sales as well as vacant land sales.

Market Movements - House and Land Market

REDLAND CITY COUNCIL AND BRISBANE CITY COUNCIL, 2001-2011

CHART 5.1



Source: RP Data; Urbis

5.2.2 URBAN RESIDENTIAL >1,500M² (EXCLUDES KINROSS ROAD AND SET)

The key assumptions made within the study for Urban Residential zoned land above 1,500m² are outlined in the table below.

Urban Residential Land >1,500m², Key Assumptions

REDLAND CITY COUNCIL

TABLE 5.1

	Theoretical Density	% Developed By 2031
1500-2500m ²	10.5	85%
2500-5000m ²	11.5	85%
5000m ² -1 ha	12.5	100%
1-5 ha	12.5	100%
5-10 ha	12.5	100%
10 ha +	12.5	100%

Source: Redland City Council; Urbis

DENSITY

The table below reviews recently completed and planned residential sub-divisions within suburban areas of Redland City.

Typically, smaller residential sub-divisions (i.e. <5ha) are achieving average yields of just over 10 dwellings per hectare whilst larger developments range from 8.5 to 12.6 dwellings per hectare. Not surprisingly, development within the Mount Cotton region is typically lower yielding than other parts of Redland City.

Whilst recent development yields have averaged less than the 12.5 dwellings per hectare assumed within the study, this is reasonable given the emerging trend of smaller lot living and the ongoing affordability challenges. For the purposes of this review the average yield assumptions made within the study are supported. The additional 15% of land in the remaining two smallest land categories are expected not to be developed over the forecast period. It is assumed a proportion of land owners within these categories will choose not to develop land further and would prefer to remain as larger house sites.

Urban Residential, Residential Subdivision

REDLAND SHIRE, 2012

TABLE 5.2

Project Title	Suburb	Project Status	Lot Size	Dwelling Increase	Dwellings /Ha
5,000m²-1ha					
PAUL STREET	BIRKDALE	Complete	9,208	10	10.9
1-5ha					
COMO STREET	ORMISTON	Possible	13,744	11	8.0
LUDMILLA PLACE	ALEXANDRA HILLS	Complete	16,500	21	12.7
CARINYAN DRIVE	BIRKDALE	Complete	21,817	24	11.0
BANDIERA STREET	BIRKDALE	Complete	22,534	24	10.7
KING STREET	THORNLANDS	Complete	25,555	23	9.0
MORETON ROAD	THORNLANDS	Possible	29,470	27	9.2
HARDWOOD PLACE	MOUNT COTTON	Complete	40,500	32	7.9
COLLINS STREET	REDLAND BAY	Deferred	40,954	50	12.2
DUNCAN STREET	WELLINGTON POINT	Complete	49,000	52	10.6
Weighted Average			28,897	29.3	10.2
5-10ha					
HEINEMANN ROAD	MOUNT COTTON	Complete	69,816	59	8.5
MT COTTON ROAD	MOUNT COTTON	Complete	72,162	70	9.7
BUNKER ROAD	VICTORIA POINT	Complete	93,924	118	12.6
Weighted Average			78,634	82.3	10.5

Source : Cordells; Redland City Council; Urbis

PROPORTION DEVELOPED

To better understand the underlying demand for urban residential land within Redland historically, we have analysed new detached housing sales for the last 20 years to determine current trends within the region. The following table shows historic sales for Mt Cotton and the remaining suburbs (excluding SMI).

New Detached Housing and Vacant Land Sales

REDLAND CITY COUNCIL, 1991-2011

TABLE 5.3

	Mount Cotton		Remaining Mainland Suburbs	
1991	7		1,402	
1992	11		1,513	
1993	10		1,396	
1994	43		1,365	
1995	57		990	
1996	43		1,057	
1997	60		1,069	
1998	32		1,166	
1999	34		1,285	
2000	21		998	
2001	30		1,333	
2002	52		1,666	
2003	67		1,276	
2004	20		626	
2005	30		698	
2006	62		769	
2007	111		872	
2008	60		346	
2009	205		636	
2010	121		383	
2011	127		282	
Grand Total	1,203		21,128	
Last 5 Year Average	125		504	
Last 10 Year Average	86		755	
Last 15 Year Average	69		894	
Last 20 Year Average	60		986	

Source: RP Data; Urbis

Key points to note include:

- Take up of urban residential dwellings within Mount Cotton is not expected to change significantly. As there are no significant changes to employment or transport infrastructure planned for Mt Cotton we have analysed new detached housing sales for Mount Cotton to understand the average demand for product within the suburb. It follows that for the purposes of this assessment we will assume the longer term 10 year average for Mount Cotton at 86 dwellings per annum.
- Demand for detached product in the remaining Redland suburbs (excluding SMI) has been between 280 to over 1,600 per annum. Recently, demand for detached product within Redland has dropped significantly from the long term average. Going forward we would expect this to recover slowly, before reaching average levels during the 2015-2020 period.

5.2.3 SMBI RESIDENTIAL INCL SR1

Within the Study, assumptions regarding the development of SMBI land have been based on Council's monitoring of new dwelling approvals over the last 10 years. The study reviewed the average annual approvals of SMBI residential land and made particular note of the high vacancy on the islands. The following table outlines the key assumptions made within the study.

Southern Moreton Bay Island (SMBI) Residential Zone

REDLAND CITY COUNCIL

TABLE 5.4

	Dwellings Per Annum	New Dwellings 2011-2031
New Dwellings Development Rate	120-160	2400-3200
Vacant New Dwellings	20-60	400-1200
New Occupied Private Dwellings	100	2,000

Source: Redland City Council; Urbis

To test the relative assumptions, Urbis have analysed census data for the Islands over the last 5 years. As shown in the following table, there has been an average of 140 additional dwellings between the census periods. Of these, 95 per annum have been occupied.

PRIVATE DWELLINGS GROWTH, SMBI

SMBI DWELLINGS

TABLE 5.5

	2006		2011		Per Annum Growth 2006-2011			
	Occupied	Vacant	Occupied	Vacant	Occupied	%	Vacant	%
Russell Island	830	312	1,075	413	49	71%	20	29%
Macleay Island	913	346	1,102	439	38	67%	19	33%
Lamb Island	179	86	202	114	4.6	45%	5.6	55%
Karragarra Island	70	50	86	55	3.2	76%	1	24%
Total SMBI	1,992	794	2,465	1,021	95	68%	45	32%

Source: ABS Census of Population and Housing 2006 & 2011; Urbis

We conclude from this analysis that the assumptions made within the Study regarding residential development within the SMBI are in line with current demand. Going forward Urbis believe this rate of development will not change significantly without major transport infrastructure investment. For the purposes of this assessment we have not changed this take up over the forecast period and remains at 100 occupied dwellings per annum.

5.2.4 URBAN RESIDENTIAL ZONE 800-1,500M²

Council's City Planning and Environment Group have undertaken an historical analysis of one into two reconfigurations within this category. The analysis found that a total of 37 additional dwellings were added to supply per annum as a result of one into two reconfigurations. Going forward Urbis believe this will remain largely unchanged over the forecast period and the historical analysis undertaken is the most accurate method to test this development type. For the purposes of this analysis we have assumed an additional 37 dwellings per annum.

5.2.5 KINROSS ROAD AND SOUTH EAST THORNLANDS URBAN RESIDENTIAL

Two major contributors to future residential land supply are the Kinross Road and South East Thornlands master plan areas. The following table outlines the key assumptions made for both areas.

Kinross Road & SET Structure Plan Area

REDLAND CITY COUNCIL

TABLE 5.6

	% Developed (2011-2031)	Dwellings (Dwelling/Ha)
Urban Residential	100%	15
Medium Density Residential (incl MDR4 & MDR5)	100%	44

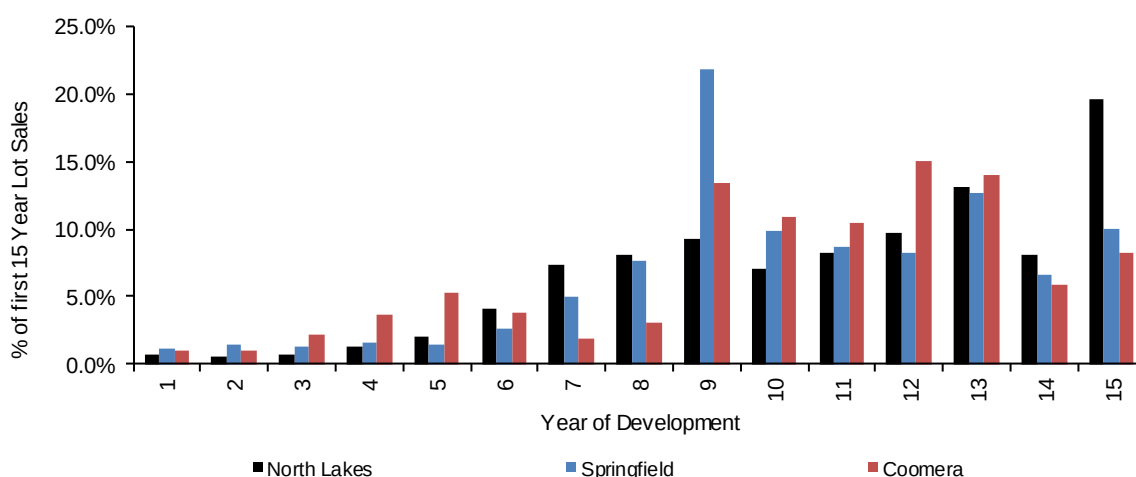
Source: Redland City Council; Urbis

After consultation with the Council's City Planning and Environment Group, and recent approvals within Kinross and South East Thornlands we have assumed that each development will start by 2013. Like any master planned area, take-up of product will be limited in the initial stages before experiencing higher levels of take-up once the development has access to key infrastructure. In the later stages of development take-up rates typically ease as product becomes scarce.

Lot Sales for the First 15 Years of Development

NORTH LAKES, SPRINGFIELD & COOMERA

CHART 5.2



Source : RP Data; Urbis

From our experience of analysing new master planned developments, the following can be ascertained.

- With the establishment of all master planned areas there appears to be a lead in period of slow sale rates of between 2 and 5 years. This seems to be reflective of how removed the development is from existing transport, retail and community infrastructure. Not surprisingly the development of community facilities including essential retail services is a major catalyst for increased take up rates.
- Residential development, like most business activities is impacted by economic cycles. Analysis of the major development areas within SEQ indicates that these cycles tend to range from 5 to 8 years
- As an area becomes a recognised residential location take up rates improve. By eliminating risk for investors through the establishment of a critical population mass and creation of demand, initially through affordability for owners and investors, take up rates improve.
- As with any investment, there is a balance between risk and return. Until a development establishes critical mass and critical facilities, the investor market will represent a comparatively low proportion of the overall market.

Whilst these insights relate to typically larger master planned areas, the development dynamics are similar. For the purposes of this assessment we have assumed a relatively slow take up initially before peaking around 2020.

5.3 MEDIUM DENSITY RESIDENTIAL

This section of the report reviews key assumptions made for future medium density product within Redland. As assumptions regarding each land use are specific to that particular product, we have reviewed each land use separately.

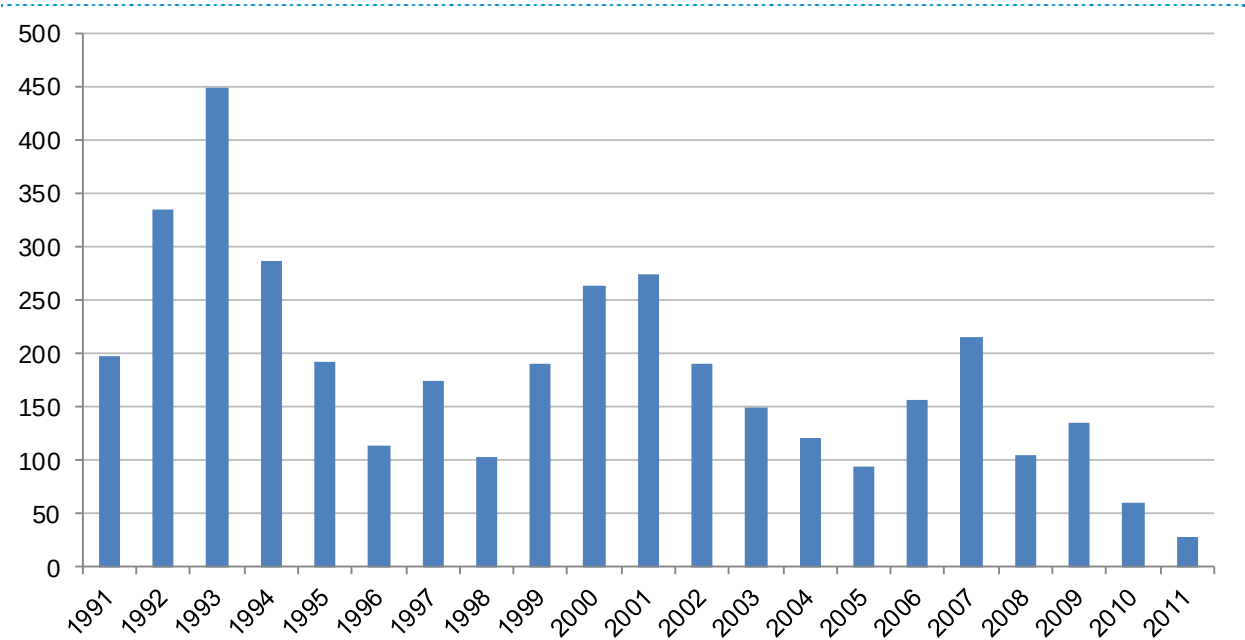
5.3.1 UNIT SALES

The following chart shows historic new unit sales within Redland City over the last 20 years. It should be noted that sales are not recorded until settlement has taken place. For this reason, recent history (i.e. 2011) could be understated as medium density product typically settles once construction is complete. Nevertheless, recent trends in unit demand have significantly decreased from earlier periods.

New Unit Sales

REDLAND CITY COUNCIL, 1991-2011

CHART 5.3



Source: RP Data; Urbis

Recently, multi-level unit development within outer suburban markets have become increasingly difficult to build. Access to finance for small to mid-tier developers is currently challenging and therefore require a substantial proportion of pre-sales before construction can start. Achieving the necessary price points to become profitable is difficult to achieve currently.

The following table outlines the demand for new unit and semi-detached product over the last 20 years by suburb.

Historically, Capalaba and Cleveland have accounted for more than half of the new unit sales within Redland. Alternatively Thornlands (in which South East Thornlands and Kinross Master Planned Areas are located) has achieved an average of between 5 and 6 sales per annum. This shows us that Thornlands is a relatively unestablished unit market and could potentially take time to establish itself within the market.

Going forward we can expect new unit sales within Thornlands to increase significantly as available stock comes online. However it would be difficult to imagine Thornlands achieving a higher rate of sale than what Capalaba or Cleveland has achieved in the last 20 years due to its relative lack of facilities when compared to the primary activity centres.

Average New Unit Sales

REDLAND CITY COUNCIL, 1991-2011

TABLE 5.7

	5 Year Avg. 2006-2011	10 Year Avg. 2001-2011	15 Year Avg. 1996-2011	20 Year Avg. 1991-2011	Total	
					No.	% Share
ALEXANDRA HILLS	2	4	4	5	96	3%
AMITY	2	2	2	2	40	1%
AMITY POINT	n/a	2	2	2	30	1%
BIRKDALE	12	9	8	14	274	8%
CAPALABA	32	34	35	47	930	26%
CLEVELAND	34	34	44	47	939	26%
COOCHIEMUDLO ISLAND	1	1	1	1	20	1%
DUNWICH	n/a	n/a	n/a	1	20	1%
LAMB ISLAND	n/a	1	1	1	20	1%
MACLEAY ISLAND	n/a	1	1	1	20	1%
ORMISTON	4	6	12	16	327	9%
POINT LOOKOUT	5	12	10	9	186	5%
REDLAND BAY	4	8	7	7	130	4%
RUSSELL ISLAND	1	1	1	1	20	1%
THORNESIDE	3	6	9	19	378	10%
THORNLANDS	6	5	5	5	98	3%
VICTORIA POINT	7	9	15	13	257	7%
WELLINGTON POINT	3	6	10	11	226	6%
Grand Total	109	126	151	182	3,640	100%

Source: RP Data; Urbis

5.3.2 MEDIUM DENSITY RESIDENTIAL >1,200M² (EXCLUDES MDR1, KINROSS, SET)

Development assumptions for Medium Density Residential Land is outlined in the table below.

Medium Density Residential Land >1,200m², Key Assumptions

REDLAND CITY COUNCIL

TABLE 5.8

	Theoretical Density	% Developed by 2031
1200-1500 m ²	30.0	85%
1500-2000 m ²	35.0	85%
2000-3000 m ²	40.0	100%
3000-5000 m ²	44.0	100%
5000 m ² -1 ha	44.0	100%
1-5 ha	44.0	100%
5 ha +	44.0	100%

Source: Redland City Council; Urbis

DENSITY

By reviewing the findings of the yield analysis against recently completed and proposed projects the initial insights would suggest councils yield assumptions are potentially slightly conservative.

Smaller blocks have the potential to utilise significant proportions of the site and typically not required to develop road or open space infrastructure. Therefore this allows sites to be developed more efficiently than larger sites.

Medium Density Residential >1200m²

REDLAND SHIRE, 2012

TABLE 5.9

Project Title	Suburb	Project Status	Dwelling Type	Height	Lot Size	Dwelling Yield	Dwellings/Ha
1200-1500 m²							
MASTERS AVENUE UNITS	VICTORIA POINT	Finished	UNITS	3	1,224	8	65.4
VICTOR STREET UNITS	BIRKDALE	Firm	UNITS	2	1,354	6	44.3
NORTH STREET UNITS	CLEVELAND	Deferred	UNITS	3	1,378	10	72.6
SHORE STREET EAST UNITS	CLEVELAND	Firm	UNITS	5	1,442	20	138.7
Weighted Average				3.3	1,350	11	81.5
1500-2000 m²							
OSTEND COURT DUPLEXES	CLEVELAND	Commenced	DUPLEXES	2	1,602	8	49.9
SURMAN STREET APARTMENTS	BIRKDALE	Firm	APARTMENTS	n/a	1,676	8	47.7
REDLAND SOCIAL HOUSING UNITS NBESP PROJECT	BIRKDALE	Firm	UNITS	n/a	1,702	27	158.6
MOUNT COTTON ROAD TOWNHOUSES	CAPALABA	Firm	TOWNHOUSES	2	1,711	8	46.8
KEITH STREET TOWNHOUSES	CAPALABA	Possible	DUPLEXES/HOUSES	2	1,719	8	46.5
COLBURN AVENUE LOW COST HOUSING UNITS	VICTORIA POINT	Firm	UNITS	3	1,849	16	86.5
MICHELLE COURT TOWNHOUSES	CLEVELAND	Possible	TOWNHOUSES	2	1,876	10	53.3
VALANTINE ROAD DUPLEXES & HOUSE	BIRKDALE	Deferred	DUPLEXES/HOUSE	2	1,950	9	46.2
Weighted Average				2.2	1,761	12	66.7
2,000-3,000 m²							
FREETH STREET UNITS	ORMISTON	Commenced	UNITS	2	2,023	10	49.4
ALEXANDRA HILLS SOCIAL RENTAL HOUSING	ALEXANDRA HILLS	Firm	UNITS	n/a	2,023	12	59.3
MOUNT COTTON ROAD UNITS	CAPALABA	Firm	UNITS	2	2,402	11	45.8
Weighted Average				2.0	2,149	11	51.2
3,000-5,000 m²							
OLD CLEVELAND ROAD AFFORDABLE HOUSING	CAPALABA	Firm	UNITS	2	3,258	16	49.1
ISLAND STREET UNITS	CLEVELAND	Deferred	UNITS	3	3,294	24	72.9
THORNESIDE ROAD UNITS	THORNESIDE	Firm	UNITS	2	3,415	15	43.9
BAILEY ROAD UNITS	BIRKDALE	Finished	TOWNHOUSES	3	4,550	21	46.2
BAINBRIDGE STREET TOWNHOUSES	ORMISTON	Possible	TOWNHOUSES	2	4,745	16	33.7
Weighted Average				2.4	3,852	18	47.8

Source : Cordells; Urbis

5.3.3 MEDIUM DENSITY RESIDENTIAL – MDR1

THE STUDY ASSUMPTIONS

The following table outlines the major assumptions made for MDR1 land within the Study.

Medium Density Residential 1 (MDR1)

REDLAND CITY COUNCIL

TABLE 5.10

	% Developed (2011-2031)	Dwellings (Dwelling/Ha)
Capalaba	35%	150
Cleveland	42%	150
Redland Bay	42%	150
Coochiemudlo Island	100%	44

Source: Redland City Council; Urbis

YIELD AND TAKE-UP

We have reviewed recently completed and proposed projects within MDR1 zoned land within Capalaba and Cleveland to understand achievable yields. The key points to note include:

- Considering the majority of road and open space infrastructure has already been developed around MDR1 land, dwelling yields on a per hectare basis can be comparably higher on a gross measure than new development areas.
- From the table below we can ascertain that the achievable yield of 150 dwellings per hectare is potentially underestimating the opportunity within Cleveland.
- It has proved difficult to sell Capalaba property, an indication of the lack of commerciality within the area currently. With price growth we would expect this equation to improve, however for the purposes of this assessment we have assumed a relatively low level of take-up of MDR1 land within Capalaba over the forecast period.
- In time Redland Bay will become commercially viable to develop medium density product through leveraging the natural amenity.
- A yield of 44 dwellings per hectare within Coochiemudlo Island typically reflects a semi-detached product. Urbis believe this to be appropriate for the Island.
- Total medium density sales for Cleveland and Capalaba have average around 93 dwellings per annum over the last 20 years. Land within MDR1 land is currently being developed within Cleveland, whilst Capalaba, as mentioned previously is finding it difficult to achieve the required density. Over time we would expect demand for higher density living to increase within Cleveland, whilst Capalaba will find it slow.

Medium Density Residential 1

REDLAND SHIRE, 2012

TABLE 5.11

Project Title	Suburb	Dwelling Type	Height	Lot Size	Dwelling Yield	Dwellings/ Ha
CLEVELAND - MDR1 LAND						
18-20 TAYLOR STREET	CLEVELAND	UNITS	5	1,214	29	239
ON SHORE - FITZROY ST	CLEVELAND	UNITS	6	1,599	31	194
WATERS EDGE ON CLEVELAND	CLEVELAND	UNITS	5	3,039	41	135
SHORE LINE VIEW	CLEVELAND	UNITS	6	3,042	48	158
TAYLOR CRESCENT UNITS	CLEVELAND	UNITS	6	2,494	72	289
WHARF STREET UNITS	CLEVELAND	UNITS	4	2,236	36	161
Weighted Average			5	2,271	43	189
CAPALABA - MDR1 LAND						
56 MOUNT COTTON ROAD	CAPALABA	UNITS	6	13,700	271	198

Source : Cordells; Urbis

5.3.4 MAJOR CENTRES

Major centre development includes lands within Capalaba, Cleveland and Victoria Point. The significant assumptions made are outlined in the following table.

Major Centres

REDLAND CITY COUNCIL

TABLE 5.12

	% Developed (2011-2031)	Dwellings (Dwelling/Ha)
Capalaba	30%	100
Cleveland	40%	100
Victoria Point	10%	75

Source: Redland City Council; Urbis

In order to encourage density around the Capalaba Major Centre Zone, redevelopment of the existing retail hierarchy and significant public transport infrastructure upgrades are required. As mentioned within the Study, public transport infrastructure upgrades are planned for Capalaba by 2020-26.

The following table outlines the historic take up of new units within Capalaba, Cleveland and Victoria Point. This take-up reflects new units and townhouse sales within these suburbs. It is important to note that units and townhouses that are under contract that have not yet settled will not be included within this analysis and therefore the 5 year average has the potential to be slightly understated. It is also important to note that these sales represent total unit and townhouse sales for each suburb and therefore represent the entire attached and semi-detached market for these suburbs. Currently limited data for Major Centre zoned sales will be available due to the emerging nature of these residential precincts.

Average New Unit Sales

MAJOR CENTRE SUBURBS, 1991-2011

TABLE 5.13

	5 Year Avg. 2006-2011	10 Year Avg. 2001-2011	15 Year Avg. 1996-2011	20 Year Avg. 1991-2011	Total No.
CAPALABA	32	34	35	47	930
CLEVELAND	34	34	44	47	939
VICTORIA POINT	7	9	15	13	257
Grand Total	109	126	151	182	3,640

Source: RP Data; Urbis

Referring to the long term average demand has existed for around 50 new units/townhouses per annum within Capalaba and Cleveland, whilst Victoria point has historically recorded around 15 per annum. In recent times this average has declined, highlighting the current difficulty in converting higher density residential product.

Going forward, we would expect demand for attached product within these three centres to initially return to the long term average before increasing. It is noted that demand within Capalaba and Cleveland should increase with the implementation of the Capalaba and Cleveland Master Plan's.

The Master Plan's provide a strategy to guide the sustainable development of the centre over the next 20 years. The primary objectives of the plans are to leverage from the existing infrastructure and supplement these with a range of new initiatives to activate and facilitate development. We would expect that demand for denser living around these centres will follow as residents seek changes in living options.

Typically residents will move into higher density living due to the following factors:

- Improvement in amenity – Residents are prepared to pay similar prices to detached living if amenities (i.e. views) are improved.

- **Affordability** – To ease affordability pressures, residents typically seek higher density, lower cost housing. This driver obviously requires medium density housing to be a lower cost alternative than detached housing. In some areas of Redland City, this is not the case.
- **Convenience** – Higher density living is often located within close proximity to major employment and transport nodes and offers residents convenience and the ability to lower commuting times. With much of the workforce currently leaving Redland City to undertake employment in other areas, the convenience equation is not an issue currently for Redland City residents.
- **Maintenance** – A lower maintenance option is often linked to an ageing population.

Going forward, Redland City Major Centre zoned land possess some of these attributes. Cleveland and Victoria Point have the natural amenity in which it can leverage, whilst Capalaba relies on other factors to drive demand. Currently the price point between detached living and new unit living within Capalaba is too similar and significant demand may not be driven until this equation improves.

5.3.5 MDR <1,200SQ.M

The Study outlines the following key assumptions for Medium Density Residential Land above 700 sq.m and below 1,200 sq.m.

Medium Density Residential >700sq.m and <1200sq.m

REDLAND CITY COUNCIL

TABLE 5.14

	% Developed (2011-2031)	Dwellings (Dwelling/Ha)	Dwellings
Medium Density Residential >700m2 and <1200m2	35%	30	552

Source: Redland City Council; Urbis

YIELD

To determine an appropriate yield for MDR land between 700 and 1,200 sq.m we have reviewed recent projects undertaken within Redland City.

Medium Density Residential <1200m²

REDLAND SHIRE, 2012

TABLE 5.15

Project Title	Suburb	Project Status	Dwelling Type	Height	Lot Size	Dwelling Yield	Dwellings /Ha	Net Dwelling ¹ Yield
MOORE STREET UNITS	VICTORIA POINT	Deferred	UNITS	2	804	4.0	50	37
BOND STREET TOWNHOUSES	CLEVELAND	Firm	TOWNHOUSES	1	809	4.0	49	37
BOND STREET UNITS	CLEVELAND	Firm	UNITS	2	809	4.0	49	37
MOORE STREET UNITS	VICTORIA POINT	Firm	UNITS	2	809	4.0	49	37
ROBERTS STREET TOWNHOUSES	WELLINGTON POINT	Deferred	TOWNHOUSES	2	810	4.0	49	37
OAKLANDS DRIVE UNITS	ALEXANDRA HILLS	Possible	UNITS	2	920	4.0	43	33
FREETH STREET TOWNHOUSES	ORMISTON	Possible	TOWNHOUSES	2	1,012	6.0	59	49
VALANTINE ROAD TOWNHOUSES	BIRKDALE	Possible	UNITS	2	1,064	5.0	47	38
FERNBOURNE ROAD APARTMENTS	WELLINGTON POINT	Firm	APARTMENTS	n/a	1,159	6.0	52	43
Weighted Average				1.9	911	4.6	50	39

¹ Assumes the demolition of one dwelling per site

Source: Cordells; Urbis

Current projects being built on medium density residential land are achieving an average of around 50 dwellings per hectare. Assuming that an existing dwelling is currently on the development site, this land use achieves an average of 39 additional dwellings per hectare. Comparing this to the estimated 30 net dwellings per hectare outlined within the Study we can conclude that the Study assumption is conservative. For the purposes of this study however we believe this is the correct approach for this land use type and have therefore not altered this assumption.

6 Population and Dwelling Forecasts

By adopting the findings from the above review we can determine the population and dwelling forecasts for Redland City by 5 year periods. The following table shows dwelling forecasts by detached and attached/semi-detached dwellings for occupied private dwellings. It is important to note that this assessment does not include vacant or other dwellings.

Private Detached and Semi-detached Dwelling¹ Forecasts

REDLAND CITY COUNCIL

TABLE 6.1

		<u>Actual</u>			<u>Forecast</u>		
	<u>2001</u>	<u>2006</u>	<u>2011</u>	<u>2016</u>	<u>2021</u>	<u>2026</u>	<u>2031</u>
Redland (C)							
Detached Dwellings	35,068	39,605	43,630	46,361	49,016	51,602	53,674
Attached and Semi-Detached Dwellings	5,063	6,089	6,503	7,475	9,175	11,672	14,506
Total	40,131	45,694	50,133	53,836	58,191	63,273	68,180
Average Annual Growth (%)							
	<u>2001-06</u>	<u>2006-11</u>	<u>2011-16</u>	<u>2016-21</u>	<u>2021-26</u>	<u>2026-31</u>	
Redland (C)							
Detached Dwellings		2.5%	2.0%	1.2%	1.1%	1.0%	0.8%
Attached and Semi-Detached Dwellings		3.8%	1.3%	2.8%	4.2%	4.9%	4.4%
Occupied Private Dwellings		2.6%	1.9%	1.4%	1.6%	1.7%	1.5%
Average Annual Growth (No.)							
	<u>2001-06</u>	<u>2006-11</u>	<u>2011-16</u>	<u>2016-21</u>	<u>2021-26</u>	<u>2026-31</u>	
Redland (C)							
Detached Dwellings		907	805	546	531	517	415
Attached and Semi-Detached Dwellings		205	83	194	340	499	567
Occupied Private Dwellings		1,113	888	741	871	1,016	981

¹ Does not include vacant or other dwellings

Source: Census of Population and Housing 2006, 2011; Urbis

Growth is forecast to increase between 2016 and 2021 as a result of improved market conditions and the introduction of new projects within Redland (i.e. Kinross and South East Thornlands). As the development opportunities for Urban Residential land become scarcer, growth may be constrained.

Demand for attached and semi-detached dwellings is forecast to increase significantly over the forecast period and contribute in accommodating the future Redland population.

If we apply the forecast dwelling growth mix to the current dwelling mix we can determine the forecast dwelling structure. As shown in Chart 6.1 the forecast mix of occupied dwellings for Redland City moves from an 87% (detached), 13% (semi-detached and attached) split in 2011 to a 79% (detached), 21% (semi-detached and attached) split by 2031.

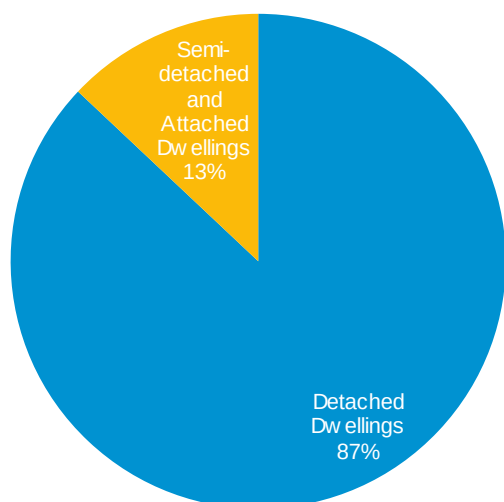
Despite the forecast future attached product within Redland City, by 2031 the area will remain as an area dominated by detached housing.

Historic and Forecast Dwelling Structure, 2011 & 2031

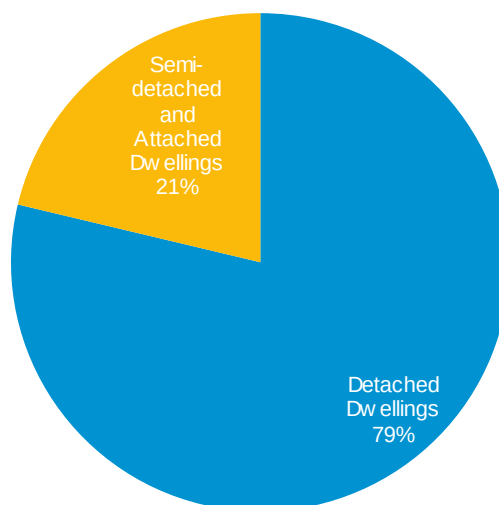
REDLAND CITY

CHART 6.1

Current Dwelling Structure (2011)



Forecast Dwelling Structure (2031)



Source: ABS Census of Population and Housing 2011, Redland City Council; Urbis

By applying average household figures to forecast occupied private dwellings we can forecast population growth. In line with dwelling growth, the strongest growth period in Redland is forecast to occur between 2016 and 2021.

Population Forecasts

REDLAND CITY COUNCIL, 1991-2031

TABLE 6.2

	Historic Population	Detached Dwellings		Attached Dwellings		Total Population	Avg. Annual	
		Dwellings	Additional Population	Dwellings	Additional Population		No.	%
1991	82,818					82,818		
1996	103,082					103,082	4,053	4.5%
2001	117,252					117,252	2,834	2.6%
2006	131,210					131,210	2,792	2.3%
2011	144,936					144,936	2,745	2.0%
2016		2,731	7,073	972	1,653	153,662	1,745	1.2%
2021		2,655	6,869	1,700	2,889	163,421	1,952	1.2%
2026		2,586	6,681	2,497	4,244	174,346	2,185	1.3%
2031		2,073	5,296	2,834	4,818	184,460	2,023	1.1%

1 This assumes all future dwellings will not be vacant with the exception of SMI future development

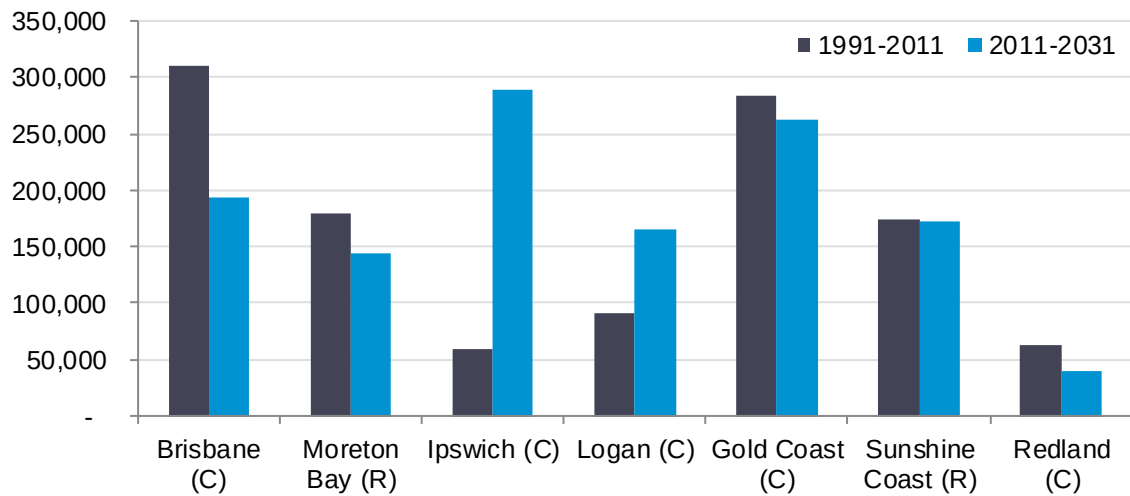
Source: Urbis

It is interesting to note that population growth between 1991 and 2011 was 62,118 people, whilst forecast growth at 39,524 between 2011 and 2031 represents around 64% of the last 20 years growth. If we compare this to other regions within South East Queensland we can see that the growth areas of Ipswich, Logan and the Gold Coast are accommodating the majority of future growth within the region.

Historic and Forecast Growth in Population, 1991-2031

LOCAL GOVERNMENT AREAS

CHART 6.2



Source: Queensland Government population projections, 2011 edition; Urbis

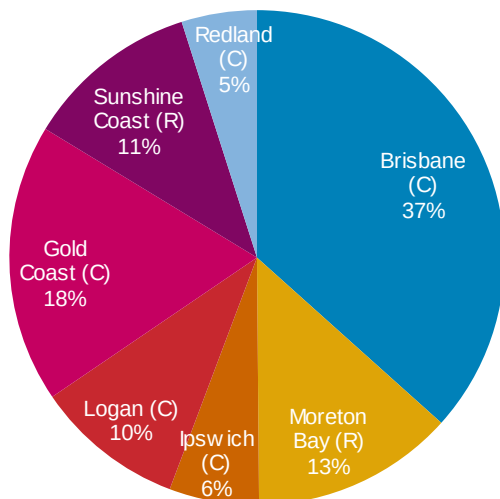
Between 1991 and 2011, Redland City grew by just over 62,000 residents. Going forward Redland is forecast to receive almost 40,000 residents between 2011 and 2031. This decline in forecast growth is in line with other established council areas such as Brisbane, Moreton Bay, Gold Coast and the Sunshine Coast. In line with Brisbane and the Gold Coast, Redland City's forecast population and dwelling growth is reflective of an ageing demographic and increased constraints on land supply. As a result, Redland City is forecast to receive a lower rate of population growth than historically.

Historic and Forecast Growth in Population, 1991-2031

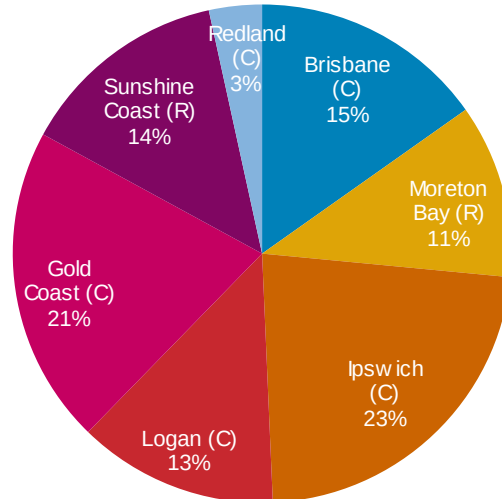
SELECTED LOCAL GOVERNMENT AREAS

CHART 6.3

Current Share of Population (2011)



Forecast Share of Growth (2011-31)



Source: Queensland Government population projections, 2011 edition; Urbis

Redland (3%), Brisbane (15%) and Moreton Bay (11%) are all forecast to receive a lower share of population growth than what they currently represent within the region, reflective of increasing land supply constraints.

7 Key Findings and Recommendations

The future supply and demand of residential land within Redland City has been analysed by land use category within this review. The key findings from the study are summarised in the following tables and described as follows:

- At a macro-economic level across the Redlands there is estimated to be sufficient dwelling supply to accommodate around 40,000 additional residents. This broadly equates to the estimated population growth over the next 20 years.
- Current supply of urban residential land (>1,500sqm) is forecast to significantly diminish by 2026. This will focus future demand on the new development areas of South East Thornlands, Kinross Road, Double Jump Rd and the existing urban residential lots between 800 sq.m and 1,500 sq.m (approximately 820ha post 2031) which can provide detached land supply beyond 2031 be it at lower levels than has historically been the case.
- The supply of detached and attached dwelling product will influence the rate and type of population growth in the Redlands over the life of the planning scheme.
- Reduced levels of supply of detached land post 2026 will encourage increased levels of medium and higher density development which is sufficiently catered for in the next 20 years and beyond.
- Future demand for higher density dwellings will also be driven by infrastructure development, amenity, centre development, and the retiree demographic.
- It should be noted that despite the quantum of forecast future attached product within Redland City, by 2031 the area will still have a dominance of detached housing.
- Cleveland followed by Victoria Point have the strongest fundamentals for higher density dwelling development whilst Capalaba has been commercially challenging. State Government infrastructure provisions will act as a catalyst for higher density dwellings e.g. whilst Capalaba is not expected to see a significant increase in higher density dwelling development prior to the State Government extension of the Eastern Busway to Capalaba.
- Redland will require a variety of dwelling options over the life of the planning scheme:
 - Historically the majority of Redland's dwelling growth has been in the form of detached houses. As the population ages we envisage a transition to a higher proportion of attached dwellings.
 - It is anticipated that detached dwelling supply will be freed up as the ageing Baby Boomer generation move out of large scale properties into smaller, more manageable dwellings. However it will also be necessary to supply newer forms of detached dwellings to attract younger families
 - A competitive strength of the Redland Local Government Area is its amenity. The ability to leverage this natural amenity is vital in achieving increasing levels of medium and higher density development going forward. Currently projects within the Cleveland MDR1 category are achieving higher levels of net density. We have assumed that yields of 180 dwellings per hectare are more in line with current and future yields.

Currently the market is volatile with many global factors affecting housing sentiment. It is difficult to forecast when the local housing market will recover and therefore for the purposes of this analysis we have adopted two scenarios in which timing of recovery is altered. It should be noted that the population and dwelling forecasts shown in Table 6.1 and 6.2 of section 6 relate to Scenario 1 only. The scenarios are as follows:

Scenario 1 – The first scenario assumes the market recovers to average take-up rates around 2015.

Scenario 2 – Assumes that recovery is significantly slower and dwelling demand does not experience historically average levels until closer to 2020. This has the ability to impact on total required supply and in turn slow population growth.

Each scenario is shown in the following tables. The key points to note are as follows.

- Under scenario 1, total dwelling demand over the forecast period at 18,047 total dwellings is expected to consist of 56% detached dwellings and 44% attached dwellings.
- Under scenario 2 the take-up rate of residential land is expected to recover slowly and demand around 17,000 dwellings made up of 57% of detached residential dwellings and 43% of attached residential dwellings.

Future Net Demand by Dwelling Type - SCENARIO 1

REDLAND CITY COUNCIL

TABLE 7.1

Zone Category	Lot Size	Available (Dwellings) ²	2011-16	2016-21	Demand ¹ 2021-26	2026-31	Total Demand	% of Supply Forecast to be Developed by 2031
DETACHED RESIDENTIAL LAND								
Mt Cotton		597	428	169	0	0	597	100%
Remaining Suburbs		<u>3,490</u>	<u>1,149</u>	<u>1,084</u>	<u>913</u>	<u>344</u>	<u>3,490</u>	<u>95%</u>
Urban Residential (excludes Kinross, SET)	>1500m2	4,086	1,577	1,253	913	344	4,087	96%
SMBI Residential inc SR1 ²		2,000	500	500	500	500	2,000	n.a. ²
Small Vacant Parcels (1 dwelling each)		1,051	263	263	263	263	1,051	100%
Kinross Road UR		1,002	100	220	311	371	1,002	100%
Double Jump Road Area		540	0	16	173	189	378	70%
South East Thornlands UR		679	88	163	224	204	679	100%
Urban Residential (with existing dwelling) ²	>800m2 and <1500m2	500	125	125	125	125	500	n.a. ²
Urban Residential (vacant) ²	>800m2 and <1500m2	240	60	60	60	60	240	n.a. ²
Low Density Residential	>4,000 m2	174	44	44	44	44	174	100%
Park Residential	>12,000m2	68	17	17	17	17	68	100%
Dunwich EUC Land		134	18	18	18	18	72	54%
Bunker Road EUC Land		37	0	37	0	0	37	100%
Constrained UR > 1500 m ²		<u>-243</u>	<u>-61</u>	<u>-61</u>	<u>-61</u>	<u>-61</u>	<u>-243</u>	n.a.
Total Detached Dwellings		n.a.	2,731	2,655	2,586	2,073	10,044	n.a.
MEDIUM DENSITY RESIDENTIAL LAND								
Medium Density Residential (excludes MDR1, Kinross, SET)	>1,200m2	2,799	548	636	760	855	2,800	100%
Medium Density Residential - MDR1		1,993	178	502	617	643	1,941	97%
Major Centre		1,704	116	227	514	651	1,508	88%
South East Thornlands MDR (incl MDR4)		821	49	119	181	218	567	69%
Kinross Road MDR (incl MDR5)		588	0	79	141	165	385	66%
Medium Density Residential (excludes MDR1, Kinross, SET) >700m2 and <1200m2		552	138	138	138	138	552	100%
Double Jump Road Investigation (Attached/semi-detached)		634	0	19	203	222	444	70%
Neighbourhood Centre		36	0	36	0	0	36	100%
Dunwich EUC Land (Attached - Semi-detached)		157	18	18	18	18	72	46%
Constrained MDR > 1200 m ²		<u>-301</u>	<u>-75</u>	<u>-75</u>	<u>-75</u>	<u>-75</u>	<u>-301</u>	100%
Total Attached Dwellings		8,984	972	1,700	2,497	2,834	8,003	89%
Total		n.a.	3,703	4,355	5,082	4,907	18,047	n.a.
% of Detached Dwellings			74%	61%	51%	42%	56%	
% of Attached Dwellings			26%	39%	49%	58%	44%	
Average Per Annum Growth			741	871	1,016	981	902	

¹ Excludes Vacant Dwellings

² SMBI and Urban Residential Land 800-1500 sq.m does not include all available supply within this category and is reflective of demand only.

Source: Redland City Council Land Supply Analysis; Urbis

Future Net Demand by Dwelling Type - SCENARIO 2

REDLAND CITY COUNCIL

TABLE 7.2

Zone Category	Lot Size	Available (Dwellings) ²	2011-16	Demand ¹ 2016-21	2021-26	2026-31	Total Demand	% of Supply Forecast to be Developed by 2031
DETACHED RESIDENTIAL LAND								
Mt Cotton		597	428	169	0	0	597	100%
Remaining Suburbs		<u>3,490</u>	<u>661</u>	<u>867</u>	<u>913</u>	<u>709</u>	<u>3,150</u>	90%
Urban Residential (excludes Kinross, SET)	>1500m2	4,086	1,089	1,036	913	709	3,747	92%
SMBI Residential inc SR1 ²		2,000	500	500	500	500	2,000	n.a. ²
Small Vacant Parcels (1 dwelling each)		1,051	263	263	263	263	1,051	100%
Kinross Road UR		1,002	100	220	311	371	1,002	100%
Double Jump Road Area		540	0	16	173	189	378	70%
South East Thornlands UR		679	88	163	224	204	679	100%
Urban Residential (with existing dwelling) ²	>800m2 and <1500m2	500	125	125	125	125	500	n.a. ²
Urban Residential (vacant) ²	>800m2 and <1500m2	240	60	60	60	60	240	n.a. ²
Low Density Residential	>4,000 m2	174	44	44	44	44	174	100%
Park Residential	>12,000m2	68	17	17	17	17	68	100%
Dunwich EUC Land		134	18	18	18	18	72	54%
Bunker Road EUC Land		37	0	22	15	0	37	100%
Constrained UR > 1500 m ²		<u>-243</u>	<u>-61</u>	<u>-61</u>	<u>-61</u>	<u>-61</u>	<u>-243</u>	n.a.
Total Detached Dwellings		n.a.	2,243	2,424	2,600	2,438	9,704	n.a.
MEDIUM DENSITY RESIDENTIAL LAND								
Medium Density Residential (excludes MDR1, Kinross, SET)	>1,200m2	2,799	482	587	658	713	2,440	87%
Medium Density Residential - MDR1		1,993	105	417	569	624	1,714	86%
Major Centre		1,704	68	188	514	651	1,421	83%
South East Thornlands MDR (incl MDR4)		821	49	119	181	218	567	69%
Kinross Road MDR (incl MDR5)		588	0	79	141	165	385	66%
Medium Density Residential (excludes MDR1, Kinross, SET) >700m2 and <1200m2		552	138	138	138	138	552	100%
Double Jump Road Investigation (Attached/semi-detached)		634	0	19	203	222	444	70%
Neighbourhood Centre		36	0	36	0	0	36	100%
Dunwich EUC Land (Attached - Semi-detached)		157	18	18	18	18	72	46%
Constrained MDR > 1200 m ²		<u>-301</u>	<u>-75</u>	<u>-75</u>	<u>-75</u>	<u>-75</u>	<u>-301</u>	100%
Total Attached Dwellings		8,984	785	1,526	2,346	2,672	7,330	82%
Total		n.a.	3,028	3,949	4,947	5,110	17,034	n.a.
% of Detached Dwellings			74%	61%	53%	48%	57%	
% of Attached Dwellings			26%	39%	47%	52%	43%	
Average Per Annum Growth			606	790	989	1,022	852	

¹ Excludes Vacant Dwellings

² SMBI and Urban Residential Land 800-1500 sq.m does not include all available supply within this category and is reflective of demand only.

Source: Redland City Council Land Supply Analysis; Urbis

- Based on the above analysis we can conclude that there is sufficient residential zoned land for the life of the next planning scheme assuming the housing choices of the forecast population match the proposed housing supply. Whilst the land supply within urban residential zoned parcels 800–1,500sq.m (additional 820ha) provides additional supply post 2031, on-going monitoring of dwelling take-up by land supply category is necessary to inform the revision of the next planning scheme and future residential land supply requirements.
- Council has advised that the State Government has committed funding over three years to undertake strategic land use planning investigations on North Stradbroke Island/Minjerriba. The investigations will be undertaken in accordance with the Land Use Agreement between the State Government and the Quandamooka People of North Stradbroke Island and relate to a significant area of the Island identified within a land bank. As a result of this investigation, an increase in the supply of residential land is likely to result.
- A vacancy rate of approximately 15% exists on NSI. This is due to a higher tourist accommodation housing type being provided in the three township locations. As residential land supply is provided in line with the strategic land use planning study being undertaken by the State Government in partnership with the Quandamooka People and Council, this vacancy rate may impact on the housing density and resident population able to be accommodated.

In summary, The Study identifies a number of land supply options each with their own demand and supply factors. As a result of this review we have identified the following recommendations.

- Current supply of residential land in the Redlands can cater to forecast demand for the next 20 years.

- Towards the end of this period land for detached dwelling development is forecast to diminish. To mitigate against potential shortfalls in detached dwelling supply, increased density targets could extend this form of dwelling supply.
- The Redlands is forecast to have strong growth in persons aged 65+ years. This will necessitate an increase in the supply of medium density dwellings particularly in the form of retirement villages. To attract younger generations of residents to the Redlands it will be necessary to provide a range of dwelling types including detached, semi-detached, and high density dwellings
- Where attached product can be achieved currently (i.e. Cleveland), encourage density and leverage from natural amenity.
- Ongoing monitoring of residential land supply and demand factors to ensure land supply continually reflects market demand and requirements. This will alert council as to whether there is a need to investigate additional residential land supply.

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