## Broadhectare study 2013 profile Brisbane City

#### Introduction

The preliminary estimated resident population of Brisbane City (hereafter referred to as Brisbane) at 30 June 2012 was 1,110,500 persons (Source: ABS 3218.0). This is expected to increase to between 1,224,100 (low series) and 1,267,400 (high series) persons by 2021, representing population growth over the 2012–2021 period of between 113,600 (low series) and 156,900 (high series) (Source: Queensland Government Population Projections, 2013 edition).

To accommodate future population growth in Brisbane, the emphasis is on facilitating infill development. As such, broadhectare land supply represents a smaller proportion of overall residential development potential in Brisbane compared to other local government areas.



#### Land stock

The total area of broadhectare land available in Brisbane for residential development is 1,950 hectares, representing only a very small percentage of the total land area (Tables 1 and 2). In addition to broadhectare land, residential development will occur on parcels below the study threshold of 2,500 square metres. For Brisbane, this would include land within infill areas which includes the Priority Development Areas of Bowen Hills, Fitzgibbon, Northshore Hamilton and Woolloongabba.

Broadhectare land is defined as the amount of unconstrained residential land under the current planning scheme including existing residential developments approved by council. For this study, land parcels are excluded that yield less than three dwellings.

Broadhectare land can be further classified as follows:

- urban residential broadhectare land 1,950 hectares
- rural residential broadhectare land 0 hectares.

The broadhectare study refers to 'rural residential' development as yielding three dwellings or less per hectare, or as otherwise described in the planning scheme. Whilst development at 'standard urban density' and 'higher density' is classified as yielding between 4 to 20 dwellings and greater than 20 dwellings per hectare respectively.

#### Table 1 Brisbane land use profile

Land use category	Area	% of total
Suitable for urban residential broadhectare development	1,950 ha	0.01%
Suitable for rural residential broadhectare development	0 ha	<0.01%
Assumed existing urban residential use	22,923 ha	17.11%
Assumed existing rural residential use	11,272 ha	8.41%
Roads, watercourses and railway casements	18,769 ha	14.01%
Rural/Green/Open space	65,721 ha	49.05%
Balance area <sup>(a)</sup>	13,365 ha	9.97%

(a) Includes all land uses other than residential.



#### **Dwelling yields**

Table 2 shows 'theoretical dwelling yield' (the potential number of dwellings that could be constructed based on the identified land stock) and 'expected dwelling yield' (which takes into account factors affecting development of land such as ownership and land fragmentation).

Table 2	Brisbane	broadhectare	stock	and	dwelling	yield	(a)	
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_	Br	oadhectare stock	(hectares)		Theoretical	Expected dwelling yield (dwellings) <sup>(c)</sup>			gs) <sup>(c)</sup>
Timeframe	Higher density	Standard urban density	Rural density	Total stock	dwelling yield (dwellings) <sup>(b)</sup>	Higher density	Standard urban density	Rural density	Total dwellings
0-<2 years	32	204	0	236	5,625	2,949	2,676	0	5,625
2–<5 years	89	260	0	349	8,318	4,787	3,155	0	7,942
5-<10 years	157	278	0	434	18,974	14,990	3,200	0	18,190
10+ years	194	666	0	860	21,336	11,085	7,110	0	18,195
Not specified	39	33	0	71	7,099	6,611	397	0	7,008
Total	511	1,439	0	1,950	61,352	40,422	16,539	0	56,961

(a) Components may not sum exactly to totals due to rounding.

(b) Yield if all broadhectare stock is developed irrespective of ownership and/or fragmentation.

(c) Yield has been reduced to account for likelihood of development due to factors such as ownership and fragmentation.

The main points from Table 2 are:

- Broadhectare land is likely to yield approximately 57,000 dwellings.
- Development at higher density accounts for over 70 per cent of the total expected dwelling yield.
- An additional 4,400 dwellings could be added to supply based on the theoretical yield.

#### Stock composition

The broadhectare stock in Brisbane is contained primarily within land parcels less than 1.2 hectares in area (Table 3). For all broadhectare parcels, the difference between the overall parcel area (2,763 hectares) and the area available for development (1,950 hectares) indicates that some parcels are affected by physical or environmental constraints. The main points from Table 3 include:

- Residential stock is contained within 1,804 land parcels.
- Parcels less than or equal to 1.2 hectares account for over 68 per cent of all parcels.
- Future rural residential development is unlikely.
- Parcels sized 10 hectares or more account for only 5 per cent of the expected total dwelling yield from broadhectare land.

Parcel size	Land	Total area	Broadhect	tare area (hectar	es)	Expected dwelling yield (number)		
categories (hectares)	parcels (number)	of parcels (hectares)	Urban residential <sup>(b)</sup>	Rural residential	Total stock	Urban residential <sup>(b)</sup>	Rural residential	Total dwellings
<= 1.2	1228	919	767	0	767	23,223	0	23,223
1.3–2.0	376	600	455	0	455	14,019	0	14,019
2.1–4.9	141	461	332	0	332	10,134	0	10,134
5.0-9.9	42	281	178	0	178	6,714	0	6,714
10.0+	17	502	218	0	218	2,871	0	2,871
Total	1,804	2,763	1,950	0	1,950	56,960	0	56,960

#### Table 3 Brisbane broadhectare stock composition (a)

(a) Components may not sum exactly to totals due to rounding.

(b) Includes dwellings at higher and standard urban densities.

#### **Population capacity**

Average household size for occupied private dwellings in Brisbane at the time of the 2011 Census was 2.8 and 1.7 persons for houses and attached dwellings respectively. Table 4 shows a range of possible population yields for the total identified broadhectare stock in each density category by a range of household sizes. The current household sizes at the time of the 2011 Census are highlighted.

The main finding from Table 4 is that, depending on average household size, land from broadhectare development could accommodate between 92,200 and 137,800 people. Further development in existing residential areas, where the parcel size is less than 2,500 square metres could also accommodate additional population.

Table 4	Brisbane	population	yields bas	ed on a rang	e of household	sizes (persons) (a)
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Number of	Household size (average persons per household)					
dwellings	2.4	2.6	2.8	3.0	3.2	
		Pos	ssible population yi	eld		
0	0	0	0	0	0	
16,539	39,693	43,000	46,308	49,616	52,923	
	Household size (average persons per household)					
	1.3	1.5	1.7	1.9	2.1	
		Pos	ssible population yi	eld		
40,422	52,549	60,633	68,717	76,802	84,886	
56,961	92,241	103,633	115,025	126,417	137,809	
	dwellings 0 16,539 40,422	dwellings 2.4   0 0   16,539 39,693   1.3 40,422	dwellings 2.4 2.6   0 0 0   16,539 39,693 43,000   Household size 1.3 1.5   40,422 52,549 60,633	dwellings 2.4 2.6 2.8   Possible population yi Possible population yi Possible population yi   0 0 0 0   16,539 39,693 43,000 46,308   Household size (average persons   1.3 1.5 1.7   Possible population yi   40,422 52,549 60,633 68,717	dwellings 2.4 2.6 2.8 3.0   Possible population yield 0	

(a) Count of all persons enumerated in the dwelling on census night, including visitors from inside Australia. Excludes usual residents who were temporarily absent on census night.

#### Total potential dwelling yield

Land ownership and fragmentation of land are potential constraints to residential development, and adjustments have been made to the broadhectare stock by applying potential development rates to land parcels. Furthermore, existing vacant residential land stock below 2,500 square metres has been added to the broadhectare supply. Broadhectare residential land supply based on these components indicates a total potential dwelling yield of approximately 59,800 dwellings (See Table 5).

It is important to note that this dwelling yield does not include dwellings that would have been achieved through infill and redevelopment of smaller parcels below the broadhectare model threshold.

#### **Dwelling demand**

To give an overall indication of future dwelling demand, three scenarios of dwelling projections have been used based on the Queensland Government's population projection series — low, medium and high. Figure 1 and Table 5 show, based on these scenarios, the number of dwellings required to 2036. Evidently, not all future dwelling demand will be met through development of broadhectare land as increasingly the emphasis will be towards infill and redevelopment.



#### Figure 1 Brisbane dwelling projections

(d) Estimate of vacant residential parcels at September 2013.

(e) Supply of residential lots.

### Government Statistician

Table 5 also shows that developed land parcels that are vacant account for approximately five per cent of the total potential dwelling yield from broadhectare land.

#### Table 5 Brisbane broadhectare supply scenarios

	Demand for residential lots	Supply	i	
Dwelling production scenario <sup>(a)</sup>	Dwellings required to 2036 <sup>(b)</sup>	Broadhectare dwelling yield <sup>(c)</sup>	Existing vacant land parcels <sup>(d)</sup>	Total potential dwellings <sup>(e)</sup>
Low trend	132,212	56,961	2,844	59,805
Medium trend	147,641	56,961	2,844	59,805
High trend	162,556	56,961	2,844	59,805

(a) Based on dwelling projection levels produced in 2013.

(b) Dwellings required to 2036 based on Government Statistician

dwelling projections.

(c) Adjusted to take into account the propensity of development.

#### **Conclusion — Brisbane City**

The study has estimated that the total area of broadhectare land available for residential development is 1,950 hectares. If this land were fully developed it has the potential to yield approximately 57,000 dwellings and accommodate 115,000 people, using current average household sizes.

To accommodate future population growth in Brisbane, the emphasis is on facilitating infill development. As such, broadhectare land supply contributes a smaller proportion of overall residential development potential in Brisbane compared to other local government areas.



# Broadhectare study 2013 - Brisbane City



Great state. Great opportunity.





#### Other map features



Local government boundaries



Priority Development Areas

#### Notes

This map indicates the areas which are suitable and potentially available for residential development. This map does not commit cound to approve developments within these identified areas or within the indicated timeframes. These maps form part of the Broadhectare Study and are to be read in conjunction with the main text of the profile.

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This edition of the Broadhectare Study was based on the Digital Cadastral Database, September 2013.

Government Statistician Queensland Treasury and Trade www.oesr.qld.gov.au



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