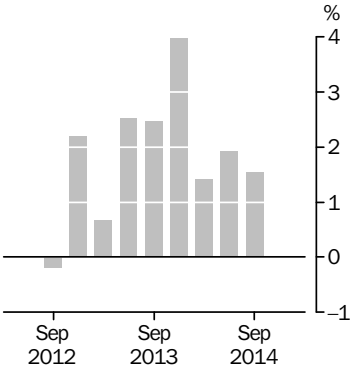
Australian Bureau of Statistics

SEPTEMBER QUARTER 2014 6416.0

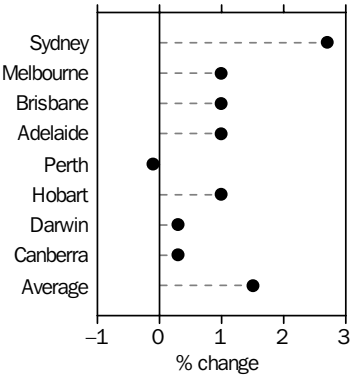
RESIDENTIAL PROPERTY PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) TUES 11 NOV 2014

Residential property prices
Weighted average of eight capital cities
Quarterly % change



Residential property prices
Quarterly % change
September quarter 2014



KEY FIGURES

RESIDENTIAL PROPERTY PRICES	*Jun Qtr 14 to Sep Qtr 14* *% change*	*Sep Qtr 13 to Sep Qtr 14* *% change*
Weighted average of eight capital cities	**1.5**	**9.1**
Sydney	2.7	14.6
Melbourne	1.0	6.9
Brisbane	1.0	6.7
Adelaide	1.0	5.6
Perth	–0.1	3.7
Hobart	1.0	4.3
Darwin	0.3	3.4
Canberra	0.3	2.4

TOTAL VALUE OF THE DWELLING STOCK	*Sep Qtr 14*
Value of dwelling stock(a) *($m)*	5 296 305.3
Mean price of residential dwellings *($'000)*	563.1
Number of residential dwellings *('000)*	9 405.1

(a) all sectors

KEY POINTS

CHANGES TO RESIDENTIAL PROPERTY PRICE INDEX

- Preliminary estimates show that the price index for residential properties for the weighted average of the eight capital cities rose 1.5% in the September quarter 2014. The index rose 9.1% through the year to the September quarter 2014.
- The capital city residential property price indexes rose in Sydney (+2.7%), Melbourne (+1.0%), Brisbane (+1.0%), Adelaide (+1.0%), Hobart (+1.0%), Canberra (+0.3%) and Darwin (+0.3%) and fell in Perth (–0.1%).
- Annually, residential property prices rose in Sydney (+14.6%), Melbourne (+6.9%), Brisbane (+6.7%), Adelaide (+5.6%), Hobart (+4.3%), Perth (+3.7), Darwin (+3.4%), and Canberra (+2.4%).

TOTAL VALUE OF THE DWELLING STOCK

- The total value of residential dwellings in Australia was $5,296,305.3m at the end of September quarter 2014, rising $99,578m over the quarter.
- The mean price of residential dwellings rose $8,300 and the number of residential dwellings rose by 37,700 in the September quarter 2014.

INQUIRIES

Inquiries about these and related statistics, contact the National Information and Referral Service on 1300 135 070. The ABS Privacy Policy outlines how the ABS will handle any personal information that you provide to us.

NOTES

FORTHCOMING ISSUES

ISSUE (Quarter)	*RELEASE DATE*
December 2014	10 February 2015
March 2015	23 June 2015
June 2015	22 September 2015
September 2015	15 December 2015

REVISIONS

Estimates for the two most recent quarters of the indexes are preliminary and subject to revision (see paragraph 26 of the Explanatory Notes).

CHANGES IN THIS ISSUE

This issue contains a Feature Article detailing the Outcomes of the ABS Residential Property Price Index Review.

ABBREVIATIONS

'000	thousand
ABS	Australian Bureau of Statistics
ADPI	Attached Dwellings Price Index
ASGC	Australian Standard Geographical Classification
ASGS	Australian Statistical Geography Standard
b	billion (one thousand million)
GCCSA	Greater Capital City Statistical Area
HPI	House Price Index
m	million
RPPI	Residential Property Price Index
SD	statistical division
SEIFA	Socio-Economic Indexes for Areas
VGs	Valuers-General

Jonathan Palmer
Acting Australian Statistician

ANALYSIS

INDEX ANALYSIS

RESIDENTIAL PROPERTY PRICE INDEXES

	RPPI	HPI	ADPI
	Jun Qtr 14 to Sep Qtr 14	*Jun Qtr 14 to Sep Qtr 14*	*Jun Qtr 14 to Sep Qtr 14*
	% change	% change	% change
Sydney	2.7	3.2	1.8
Melbourne	1.0	1.1	0.8
Brisbane	1.0	0.9	1.3
Adelaide	1.0	1.0	0.8
Perth	–0.1	–0.1	–0.2
Hobart	1.0	1.2	–0.6
Darwin	0.3	0.3	0.4
Canberra	0.3	0.4	–0.1
Eight capital cities	1.5	1.6	1.2

Notes

The discussion of individual cities is ordered in terms of their significance to the change in the RPPI for the latest quarter.

Weighted average of the eight capital cities (+1.5% RPPI)

The preliminary RPPI for the weighted average of the eight capital cities rose 1.5% in the September quarter 2014. This follows a rise of 1.9% for the June quarter 2014 (revised from +1.8%) and a rise of 1.4% for the March quarter 2014 (revised from +1.5%).

The RPPI rose 9.1% through the year to the September quarter 2014.

In the September quarter 2014 the HPI rose 1.6% and the ADPI rose 1.2%. Through the year to the September quarter 2014, the HPI rose 9.2% and the ADPI rose 8.5%.

The quarterly HPI result follows rises in the June quarter 2014 of 1.8% (revised from +1.7%) and a rise of 1.2% for the March quarter 2014 (revised from +1.4%). The ADPI result follows rises of 2.0% (revised from +1.9%) in the June 2014 quarter and 1.8% (revised from +1.5%) in the March 2014 quarters respectively.

Sydney (+2.7% RPPI)

The RPPI for Sydney rose 2.7% in the September quarter 2014. This follows rises in the June 2014 (+3.5%) and March 2014 (+2.3%) quarters. The index rose 14.6% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI rose 3.2% and the ADPI rose 1.8%.

For established houses, the rise in Sydney was broad based, with almost all segments of the market showing price rises. Strata with prices between $500,000 and $2.2m contributed most to the rise. Through the year to the September quarter 2014, the HPI rose 15.4%.

For attached dwellings, the rise in Sydney was due to rises in strata with prices between $550,000 and $650,000. Through the year to the September quarter 2014, the ADPI rose 13.2%.

Melbourne (+1.0% RPPI)

The RPPI for Melbourne rose 1.0% in the September quarter 2014. This follows rises in the June 2014 (+1.3%) and March 2014 (+0.9%) quarters. The index rose 6.9% through the year to the September quarter 2014.

Melbourne (+1.0% RPPI) continued

Over the September quarter 2014 the HPI rose 1.1% and the ADPI rose 0.8%.

For established houses, the rise in Melbourne was due to rises in strata with prices between $550,000 and $1m. Through the year to the September quarter 2014, the HPI rose 7.5%.

For attached dwellings, results showed rises in strata in the $500,000 to $600,000 range. Through the year to the September quarter 2014, the ADPI rose 5.0%.

Brisbane (+1.0% RPPI)

The RPPI for Brisbane rose 1.0% in the September quarter 2014. This follows rises in the June 2014 (+1.8%) and March 2014 (+1.3%) quarters. The index rose 6.7% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI rose 0.9% and the ADPI rose 1.3%. Through the year to the September quarter 2014, the HPI rose 6.6% and the ADPI rose 6.8%.

Adelaide (+1.0% RPPI)

The RPPI for Adelaide rose 1.0% in the September quarter 2014. This follows rises in the June 2014 (+0.5%) and March 2014 (+1.0%) quarters. The index rose 5.6% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI rose 1.0% and the ADPI rose 0.8%. Through the year to the September quarter 2014, the HPI rose 6.7% and the ADPI rose 1.3%.

Hobart (+1.0% RPPI)

The RPPI for Hobart rose 1.0% in the September quarter 2014. This follows rises in the June 2014 (+0.6%) and March 2014 (+0.4%) quarters. The index rose 4.3% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI rose 1.2% and the ADPI fell 0.6%. Through the year to the September quarter 2014, the HPI rose 4.8% and the ADPI rose 1.0%.

Canberra (+0.3% RPPI)

The RPPI for Canberra rose 0.3% in the September quarter 2014. This follows rises in the June 2014 (+0.9%) and March 2014 (+0.5%) quarters. The index rose 2.4% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI rose 0.4% and the ADPI fell 0.1%. Through the year to the September quarter 2014, the HPI rose 2.9% and the ADPI rose 1.2%.

Darwin (+0.3% RPPI)

The RPPI for Darwin rose 0.3% in the September quarter 2014. This follows rises in the June 2014 (+0.6%) and March 2014 (+1.1%) quarters. The index rose 3.4% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI rose 0.3% and the ADPI rose 0.4%. Through the year to the September quarter 2014, the HPI rose 4.2% and the ADPI rose 1.6%.

Perth (–0.1% RPPI)

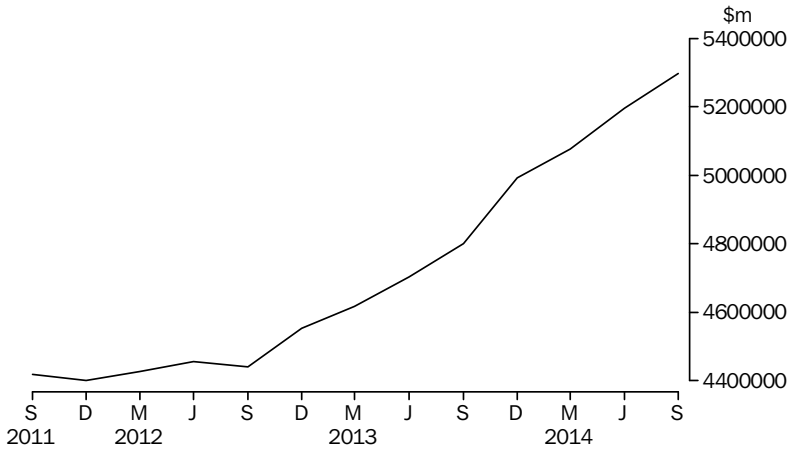
The RPPI for Perth fell 0.1% in the September quarter 2014. Perth was the only city to show a fall in prices this quarter. The fall follows rises in the June 2014 (+0.1%) and March 2014 (+0.8%) quarters. The index rose 3.7% through the year to the September quarter 2014.

Over the September quarter 2014 the HPI fell 0.1% and the ADPI fell 0.2%. Through the year to the September quarter 2014, the HPI rose 3.8% and the ADPI rose 3.2%.

TOTAL VALUE OF THE DWELLING STOCK

Quarterly Analysis

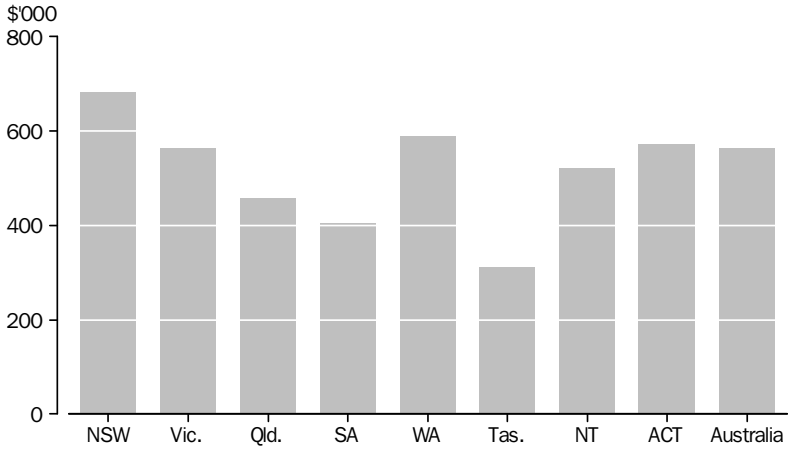
TOTAL VALUE OF DWELLING STOCK, all sectors



The preliminary estimate of the total value of residential dwellings in Australia in the September quarter 2014 was $5,296.3b (up from $5,196.7b in the June quarter 2014). Of this, $5,020.4b was owned by households.

Over the same period, the number of residential dwellings rose by 37,700 to 9,405,100. The mean price of residential dwellings rose $8,300 to $563,100.

MEAN DWELLING PRICE, States and Territories: **September quarter 2014**



The mean price of residential dwellings in NSW ($681,900) remains the highest in the country followed by WA ($588,700). The mean price in ACT ($571,000) was the third highest mean price. The lowest mean price was in Tasmania ($312,000).

OUTCOMES OF THE ABS RESIDENTIAL PROPERTY PRICE INDEX REVIEW

EXECUTIVE SUMMARY

1. On the 5th June 2014, the Acting Australian Statistician announced planned reductions to the Australian Bureau of Statistics (ABS) work program. This announcement included a Review of the Residential Property Price Indexes, with the view to discontinuing it pending identification of alternative sources to meet the Australian National Accounts and other requirements.

2. The Review has been completed following extensive consultation with a range of internal and external stakeholders.

3. The Review outcomes are:
   - The ABS will publish a core set of residential property price indexes (RPPIs). However, these indexes will be released approximately six weeks later than the current timetable resulting in the indexes no longer needing to be revised. This approach achieves cost savings for the ABS. The outputs will continue to include the House Price Index, the Attached Dwellings Price Index and the Residential Property Price Index.
   - The ABS will publish an unstratified median price and the number of dwelling transfers by capital city and rest of state.
   - The ABS will produce the total value of dwelling stock estimates and each of the required inputs to satisfy National Accounts requirements.
   - The ABS will align the timing of the calculation and release of the total value of dwelling stock estimates and the residential property price indexes with the *Australian Financial Accounts* (cat. no. 5232.0).

4. The ABS will implement the Review outcomes from the March quarter 2015 which is scheduled for release on 23 June 2015.

BACKGROUND

1. On the 5th June 2014, the Acting Australian Statistician announced planned reductions to the Australian Bureau of Statistics (ABS) work program. This announcement included a *Review of the Residential Property Price Indexes, with the view to discontinuing it pending identification of alternative sources to meet the Australian National Accounts and other requirements.*

2. This article describes the findings from the review and includes:
   - the data sources, methods and uses of the current suite of price indexes and related statistics published in *Residential Property Price Indexes, Eight Capital Cities* (cat. no. 6416.0); and
   - the methods, with supporting data sources, to produce cost effective, fit for purpose statistics to meet the Australian National Accounts and other requirements.

THE CURRENT SUITE OF OUTPUTS

3. The set of statistics published in *Residential Property Price Indexes, Eight Capital Cities* (cat.no. 6416.0) includes:
   - Residential Property Price Index, index numbers and percentage changes;
   - Established House Price Index, index numbers and percentage changes;
   - Attached Dwellings Price Index, index numbers and percentage changes;
   - Median price of capital city and rest of state transfers (unstratified);
   - Number of capital city and rest of state transfers;

THE CURRENT SUITE OF OUTPUTS *continued*

- Total value of the dwelling stock; and
- Revisions to the residential property price indexes.

THE CURRENT PROCESS TO PRODUCE THESE OUTPUTS

The Residential Property Price Indexes

4. The ABS obtains residential property transfers/sales data from State and Territory Land Titles Office or Valuers-General Office in each capital city (collectively referred to as VGs).

5. The residential sales data received from the VGs is combined into a single file, address coded and mapped onto common classifications.

6. The unit record file is used to produce the established House Price Index (HPI); Attached Dwellings Price Index (ADPI); and the aggregated Residential Property Price Index (RPPI). These indexes are produced by stratifying the past three quarter's residential sales, calculating median prices by stratum and then calculating stratum level price indexes. These stratum indexes are then weighted together to produce the suite of residential property price indexes. Indexes for quarters 't-1' and 't-2' are recalculated and revised in period 't' to account for updated sales data received from VGs. See *Residential Property Price Indexes: Concepts, Sources and Methods, 2014* (cat. no 6464.0) for further information on the index methodology.

7. The *Residential Property Price Indexes: Eight Capital Cities* (cat. no. 6416.0) publication is currently released six weeks after the end of the reference quarter.

8. Consultation with a range of users found that the ABS RPPIs are considered to be of high quality with a transparent methodology, and are valued for their independence. The indexes are directly used in a variety of policy and investment decisions, as well as modelling and macroeconomic analysis.

9. There is strong support from stakeholders for the ABS continuing to produce a core set of residential property price indexes to meet their requirements.

The Total Value of the Dwelling Stock (TVDS)

10. The ABS price indexes are an essential input to the compilation of the Total Value of the Dwelling Stock (TVDS).

11. The TVDS supports the compilation of the non-financial assets component of the Household Balance Sheet in the quarterly and annual National Accounts. The TVDS is used by the Reserve Bank of Australia (RBA) in Table E1, Household and Business Balance Sheets of the RBAs Statistical Tables.

12. The current method to produce the TVDS involves stratifying for each state and territory the dwelling stock by small areas and dwelling type and then calculating a price and quantity component for each stratum. The price and quantity components are multiplied to create a value for each stratum. These strata are aggregated to produce a TVDS for each state and territory and a total for Australia.

13. The quantities by strata of the TVDS are calculated by taking 2011 Census data of the number of dwellings as a benchmark and then adjusting this value each quarter by the number of new dwellings (additions) minus demolitions.

14. The prices by strata are calculated using two methods depending on the reference quarter. The ABS price indexes are used in the calculation of the price component of the value of dwelling stock for the two most recent quarters (i.e. quarters 't' and 't-1'). A mean price by stratum from quarter 't-2' is moved forward by the movements in the capital city level RPPIs as there are insufficient VGs observations to calculate mean prices at the stratum level in quarters 't' and 't-1'. For the third most recent quarter (i.e. quarter 't-2') the price component is directly calculated from VG's data as mean prices by strata.

Related statistics

15. The unstratified median price and a count of property transfers by capital city and rest of state are also produced from the transformed VGs data.

ALTERNATE METHODS AND DATA SOURCES TO MEET THE AUSTRALIAN NATIONAL ACCOUNTS AND OTHER REQUIREMENTS

CONTINUING TO MEET THE NATIONAL ACCOUNTS REQUIREMENTS

Alternate TVDS methods and sources

(i) Purchasing Total Value of the Dwelling Stock Data

16. No alternate aggregate TVDS data sources were identified by the Review team that fulfil the National Accounts requirements at an affordable cost.

(ii) An alternate ABS approach

17. An alternate ABS approach to produce the TVDS data for National Accounts is detailed below. This approach involves the ABS continuing to produce each of the required inputs (including a core set of price indexes) and aligning the timing of the release of the TVDS data with the *Australian National Accounts: Financial Accounts* (cat. no 5232.0).

18. There is no change to the method to produce the TVDS quantities by strata.

19. Aligning the calculation and release of the TVDS with the Financial Accounts causes a delay to the current timetable to produce the TVDS by approximately six weeks[1].

20. The change in timing to align the calculation and release of the TVDS with the Financial Accounts has an impact on the method of calculation of prices for the TVDS. This is because a greater number of dwelling transactions would be available to calculate mean prices prior to this 'new' release date.

21. Investigations by the Review Team shows delaying the calculation and release of the TVDS enables *mean* prices to be calculated directly from available data for quarters 't-2' and 't-1'. Insufficient unit records in quarter 't' results in the need for price indexes

1 Appendix 1 lists the release dates from the March quarter 2015 onwards.

to be used to estimate the price component of the value of dwelling stock for current quarter 't'. In quarter 't' a mean price by stratum from quarter 't-1' would be moved forward by the movements in the capital city level RPPIs.

22. The price indexes used to compile the TVDS in quarter 't' could, in theory, be calculated by the ABS or sourced externally.

23. Sourcing a set of residential property price indexes externally was considered as part of this Review. It was determined that the externally available indexes were not suited to ABS requirements. This followed an assessment of methodology, cost and receiving input from users. The ABS will continue to produce a core set of residential property price indexes to meet National Accounts and other requirements.

24. There is an on-going assessment of unit record data sources from which the ABS can produce the core set of residential property price indexes. Alternate data sources are currently being assessed and will be pursued where the ABS is able to produce high quality statistics at reduced cost. Any changes to the unit record data sources will be publically announced in the *Residential Property Price Indexes: Eight Capital Cities* (cat. no. 6416.0) publication.

THE WAY FORWARD

25. The Review outcomes result in the ABS producing a set of outputs that continues to meet key user needs.

26. The ABS will implement the Review outcomes from the March quarter 2015.

APPENDIX 1

NEW RELEASE DATES

Reference Period	*Release Date*
March quarter 2015	23 June 2015
June quarter 2015	22 September 2015
September quarter 2015	15 December 2015
December quarter 2015	22 March 2016

LIST OF TABLES

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RESIDENTIAL PROPERTY PRICE INDEXES

ADDITIONAL TABLES AVAILABLE ON ABS WEBSITE

1 RESIDENTIAL PROPERTY PRICE INDEX(a)

	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*	*Weighted average of eight capital cities*
					INDEX NUMBERS				
2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012–13	104.5	100.6	101.9	100.0	106.4	99.1	108.5	100.7	102.9
2013–14	p119.9	p109.6	p107.6	p104.3	p113.6	p103.1	p113.2	p102.1	p112.9
2011									
September	99.9	101.3	99.9	100.4	99.1	100.6	96.9	98.7	100.2
December	98.4	100.0	100.2	100.7	99.4	101.9	98.2	100.9	99.4
2012									
March	100.3	99.4	100.0	99.3	100.5	99.4	100.8	100.8	100.0
June	101.4	99.3	99.9	99.6	101.0	98.2	104.1	99.5	100.4
September	100.9	98.6	100.8	99.2	102.1	98.1	105.5	99.5	100.2
December	103.7	100.4	101.7	100.2	105.2	98.4	107.8	101.8	102.4
2013									
March	104.7	100.8	101.9	99.8	107.5	100.0	109.6	100.3	103.1
June	108.7	102.7	103.2	100.9	110.6	100.0	111.0	101.0	105.7
September	112.8	105.9	104.5	101.3	110.7	101.0	111.3	101.1	108.3
December	119.0	109.7	107.1	104.4	113.9	103.3	112.8	101.8	112.6
2014									
March	r121.7	r110.7	r108.5	r105.4	114.8	r103.7	114.0	r102.3	r114.2
June	p125.9	p112.1	p110.4	p105.9	p114.9	p104.3	p114.7	p103.2	p116.4
September	p129.3	p113.2	p111.5	p107.0	p114.8	p105.3	p115.1	p103.5	p118.2
					PERCENTAGE CHANGE (FROM PREVIOUS FINANCIAL YEAR)				
2011–12	–1.2	–4.4	–3.8	–3.2	–2.6	–4.5	0.2	–2.1	–2.7
2012–13	4.5	0.6	1.9	0.0	6.4	–0.9	8.5	0.7	2.9
2013–14	p14.7	p8.9	p5.6	p4.3	p6.8	p4.0	p4.3	p1.4	p9.7
					PERCENTAGE CHANGE (FROM CORRESPONDING QUARTER OF PREVIOUS YEAR)				
2012									
September	1.0	–2.7	0.9	–1.2	3.0	–2.5	8.9	0.8	0.0
December	5.4	0.4	1.5	–0.5	5.8	–3.4	9.8	0.9	3.0
2013									
March	4.4	1.4	1.9	0.5	7.0	0.6	8.7	–0.5	3.1
June	7.2	3.4	3.3	1.3	9.5	1.8	6.6	1.5	5.3
September	11.8	7.4	3.7	2.1	8.4	3.0	5.5	1.6	8.1
December	14.8	9.3	5.3	4.2	8.3	5.0	4.6	0.0	10.0
2014									
March	r16.2	r9.8	r6.5	r5.6	6.8	r3.7	4.0	r2.0	r10.8
June	p15.8	p9.2	p7.0	p5.0	p3.9	p4.3	p3.3	p2.2	p10.1
September	p14.6	p6.9	p6.7	p5.6	p3.7	p4.3	p3.4	p2.4	p9.1
					PERCENTAGE CHANGE (FROM PREVIOUS QUARTER)				
2012									
September	–0.5	–0.7	0.9	–0.4	1.1	–0.1	1.3	0.0	–0.2
December	2.8	1.8	0.9	1.0	3.0	0.3	2.2	2.3	2.2
2013									
March	1.0	0.4	0.2	–0.4	2.2	1.6	1.7	–1.5	0.7
June	3.8	1.9	1.3	1.1	2.9	0.0	1.3	0.7	2.5
September	3.8	3.1	1.3	0.4	0.1	1.0	0.3	0.1	2.5
December	5.5	3.6	2.5	3.1	2.9	2.3	1.3	0.7	4.0
2014									
March	r2.3	r0.9	r1.3	r1.0	0.8	r0.4	1.1	r0.5	r1.4
June	p3.5	p1.3	p1.8	p0.5	p0.1	p0.6	p0.6	p0.9	p1.9
September	p2.7	p1.0	p1.0	p1.0	p–0.1	p1.0	p0.3	p0.3	p1.5

p preliminary figure or series subject to revision

r revised

(a) Index reference period of each index: 2011-12 = 100.0.

2 ESTABLISHED HOUSE PRICE INDEX(a)

	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*	*Weighted average of eight capital cities*
					INDEX NUMBERS				
2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012–13	104.4	100.5	101.8	100.1	106.7	99.0	108.3	101.0	102.8
2013–14	p120.3	p110.2	p107.9	p105.1	p114.2	p103.5	p113.8	p102.3	p113.1
2011									
September	100.1	101.4	100.0	100.3	99.0	100.7	96.0	98.6	100.3
December	98.9	100.2	100.1	100.3	99.5	102.2	97.6	100.7	99.7
2012									
March	99.7	99.1	100.1	99.4	100.4	99.2	101.9	101.4	99.7
June	101.2	99.4	99.7	99.9	101.0	97.9	104.4	99.4	100.3
September	100.9	98.3	100.7	99.4	102.2	98.2	104.8	99.8	100.1
December	103.4	100.2	101.7	100.1	105.7	98.0	108.5	102.1	102.3
2013									
March	104.6	100.6	101.6	100.0	107.9	99.9	109.3	100.7	103.1
June	108.5	102.7	103.1	100.7	111.1	99.8	110.6	101.2	105.6
September	113.0	106.2	104.7	101.4	111.2	101.2	111.1	101.1	108.4
December	119.9	110.2	107.5	105.2	114.5	103.6	113.8	101.8	113.0
2014									
March	r122.0	r111.5	r108.7	r106.5	115.5	r104.2	114.7	r102.6	r114.4
June	p126.3	p113.0	p110.6	p107.1	p115.5	p104.8	p115.4	p103.6	p116.5
September	p130.4	p114.2	p111.6	p108.2	p115.4	p106.1	p115.8	p104.0	p118.4
					PERCENTAGE CHANGE (FROM PREVIOUS FINANCIAL YEAR)				
2011–12	–2.2	–4.6	–4.4	–3.3	–2.4	–5.0	1.6	–2.2	–3.3
2012–13	4.4	0.5	1.8	0.1	6.7	–1.0	8.3	1.0	2.8
2013–14	p15.2	p9.7	p6.0	p5.0	p7.0	p4.5	p5.1	p1.3	p10.0
					PERCENTAGE CHANGE (FROM CORRESPONDING QUARTER OF PREVIOUS YEAR)				
2012									
September	0.8	–3.1	0.7	–0.9	3.2	–2.5	9.2	1.2	–0.2
December	4.6	0.0	1.6	–0.2	6.2	–4.1	11.2	1.4	2.6
2013									
March	4.9	1.5	1.5	0.6	7.5	0.7	7.3	–0.7	3.4
June	7.2	3.3	3.4	0.8	10.0	1.9	5.9	1.8	5.3
September	12.0	8.0	4.0	2.0	8.8	3.1	6.0	1.3	8.3
December	16.0	10.0	5.7	5.1	8.3	5.7	4.9	–0.3	r10.5
2014									
March	r16.6	r10.8	r7.0	r6.5	7.0	r4.3	4.9	r1.9	r11.0
June	p16.4	p10.0	p7.3	p6.4	p4.0	p5.0	p4.3	p2.4	p10.3
September	p15.4	p7.5	p6.6	p6.7	p3.8	p4.8	p4.2	p2.9	p9.2
					PERCENTAGE CHANGE (FROM PREVIOUS QUARTER)				
2012									
September	–0.3	–1.1	1.0	–0.5	1.2	0.3	0.4	0.4	–0.2
December	2.5	1.9	1.0	0.7	3.4	–0.2	3.5	2.3	2.2
2013									
March	1.2	0.4	–0.1	–0.1	2.1	1.9	0.7	–1.4	0.8
June	3.7	2.1	1.5	0.7	3.0	–0.1	1.2	0.5	2.4
September	4.1	3.4	1.6	0.7	0.1	1.4	0.5	–0.1	2.7
December	6.1	3.8	2.7	3.7	3.0	2.4	2.4	0.7	4.2
2014									
March	r1.8	r1.2	r1.1	r1.2	0.9	r0.6	0.8	r0.8	r1.2
June	p3.5	p1.3	p1.7	p0.6	p0.0	p0.6	p0.6	p1.0	p1.8
September	p3.2	p1.1	p0.9	p1.0	p–0.1	p1.2	p0.3	p0.4	p1.6

p preliminary figure or series subject to revision
r revised

(a) Index reference period of each index: 2011-12 = 100.0.

3 ATTACHED DWELLINGS PRICE INDEX(a)(b)

	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*	*Weighted average of eight capital cities*
INDEX NUMBERS									
2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012–13	104.8	101.1	102.4	99.9	104.9	100.0	108.9	99.5	103.2
2013–14	p118.9	p107.7	p106.4	p100.9	p111.0	p101.1	p112.1	p101.4	p112.4
2011									
September	99.6	101.2	99.1	100.7	99.4	100.0	99.2	99.3	100.0
December	97.3	99.5	100.5	102.4	98.7	100.2	99.6	101.9	98.7
2012									
March	101.6	100.4	99.5	98.6	100.9	100.2	97.9	98.9	100.8
June	101.6	98.9	100.9	98.3	101.0	99.7	103.3	100.0	100.5
September	100.9	99.4	101.5	98.6	101.8	97.7	107.5	98.1	100.5
December	104.2	101.0	101.6	100.6	103.1	101.0	105.9	100.7	102.7
2013									
March	104.9	101.3	103.0	99.1	106.1	100.3	110.3	98.8	103.4
June	109.0	102.8	103.3	101.2	108.5	100.8	112.0	100.3	106.1
September	112.4	105.0	103.6	100.7	108.6	99.9	111.8	100.7	108.2
December	117.1	108.1	105.1	101.1	111.4	101.9	110.9	101.5	111.7
2014									
March	r121.0	r108.5	r107.6	r100.7	111.6	r100.9	112.4	r101.2	r113.7
June	p125.0	p109.3	p109.2	p101.2	p112.3	p101.5	p113.2	p102.0	p116.0
September	p127.2	p110.2	p110.6	p102.0	p112.1	p100.9	p113.6	p101.9	p117.4
PERCENTAGE CHANGE (FROM PREVIOUS FINANCIAL YEAR)									
2011–12	0.8	–3.9	–1.0	–2.4	–3.5	–1.6	–3.4	–1.4	–1.3
2012–13	4.8	1.1	2.4	–0.1	4.9	0.0	8.9	–0.5	3.2
2013–14	p13.5	p6.5	p3.9	p1.0	p5.8	p1.1	p2.9	p1.9	p8.9
PERCENTAGE CHANGE (FROM CORRESPONDING QUARTER OF PREVIOUS YEAR)									
2012									
September	1.3	–1.8	2.4	–2.1	2.4	–2.3	8.4	–1.2	0.5
December	7.1	1.5	1.1	–1.8	4.5	0.8	6.3	–1.2	4.1
2013									
March	3.2	0.9	3.5	0.5	5.2	0.1	12.7	–0.1	2.6
June	7.3	3.9	2.4	3.0	7.4	1.1	8.4	0.3	5.6
September	11.4	5.6	2.1	2.1	6.7	2.3	4.0	2.7	7.7
December	12.4	7.0	3.4	0.5	8.1	0.9	4.7	0.8	8.8
2014									
March	r15.3	r7.1	r4.5	r1.6	5.2	r0.6	1.9	r2.4	r10.0
June	p14.7	p6.3	p5.7	p0.0	p3.5	p0.7	p1.1	p1.7	p9.3
September	p13.2	p5.0	p6.8	p1.3	p3.2	p1.0	p1.6	p1.2	p8.5
PERCENTAGE CHANGE (FROM PREVIOUS QUARTER)									
2012									
September	–0.7	0.5	0.6	0.3	0.8	–2.0	4.1	–1.9	0.0
December	3.3	1.6	0.1	2.0	1.3	3.4	–1.5	2.7	2.2
2013									
March	0.7	0.3	1.4	–1.5	2.9	–0.7	4.2	–1.9	0.7
June	3.9	1.5	0.3	2.1	2.3	0.5	1.5	1.5	2.6
September	3.1	2.1	0.3	–0.5	0.1	–0.9	–0.2	0.4	2.0
December	4.2	3.0	1.4	0.4	2.6	2.0	–0.8	0.8	3.2
2014									
March	r3.3	r0.4	r2.4	r–0.4	0.2	r–1.0	1.4	r–0.3	r1.8
June	p3.3	p0.7	p1.5	p0.5	p0.6	p0.6	p0.7	p0.8	p2.0
September	p1.8	p0.8	p1.3	p0.8	p–0.2	p–0.6	p0.4	p–0.1	p1.2

p preliminary figure or series subject to revision

r revised

(a) Index reference period of each index: 2011-12 = 100.0.

(b) Attached dwellings include flats, units and apartments plus semi-detached, row and terrace houses.

4 MEDIAN PRICE (UNSTRATIFIED) OF DWELLING TRANSFERS

	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
MEDIAN PRICES OF ESTABLISHED HOUSE TRANSFERS								
2011								
September	567.0	487.0	433.0	390.0	470.0	335.0	497.0	490.0
December	533.0	495.0	430.0	385.0	480.0	337.5	515.0	500.0
2012								
March	607.5	478.0	430.0	382.0	489.5	343.0	525.0	512.5
June	r600.0	485.0	435.0	385.0	499.0	327.5	543.5	r482.5
September	585.0	480.0	435.0	386.0	495.0	315.0	540.0	r490.0
December	r640.0	r507.4	440.0	395.0	510.0	331.3	561.0	520.0
2013								
March	r615.0	486.0	r439.5	395.0	520.0	340.0	530.0	r505.0
June	650.0	500.0	444.0	395.0	529.0	330.0	540.0	510.0
September	670.0	520.0	r447.8	395.0	520.0	325.0	570.0	505.0
December	r749.0	565.0	465.0	r411.0	r552.0	r350.0	579.0	r505.0
2014								
March	702.0	529.0	465.0	410.0	555.0	360.0	580.0	535.0
June	nya	nya	nya	nya	nya	nya	nya	nya
September	nya	nya	nya	nya	nya	nya	nya	nya
MEDIAN PRICE OF ATTACHED DWELLINGS TRANSFERS(a)								
2011								
September	480.0	437.5	370.0	320.0	395.0	272.5	398.0	425.0
December	460.0	432.5	380.0	327.3	400.0	275.0	399.5	415.0
2012								
March	500.0	430.0	376.0	317.0	406.0	268.8	420.0	415.0
June	r510.0	r430.0	r381.0	315.0	400.0	275.0	435.0	416.8
September	r485.0	r425.0	r385.0	325.0	400.0	275.0	410.0	410.0
December	r515.0	r439.0	r380.0	325.0	410.0	294.0	410.5	r415.0
2013								
March	r505.0	r430.0	r385.0	325.0	430.0	r277.5	445.0	412.0
June	r525.0	r440.0	r385.0	330.0	r426.0	r282.5	450.0	415.0
September	540.0	r444.0	r384.9	r323.0	430.0	r265.0	459.8	418.0
December	r565.0	470.0	r391.0	330.0	450.0	r295.3	481.0	r426.8
2014								
March	565.0	450.0	393.0	330.0	446.0	276.8	507.6	420.0
June	nya	nya	nya	nya	nya	nya	nya	nya
September	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available
r revised

(a) Attached dwellings includes flats, units and apartments plus semi-detached, row and terrace houses.

5 NUMBER OF ESTABLISHED HOUSE AND ATTACHED DWELLING TRANSFERS(a)

	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*
	no.	no.	no.	no.	no.	no.	no.	no.
NUMBER OF ESTABLISHED HOUSE TRANSFERS								
2011–12	r45 863	r49 375	26 052	14 484	r22 761	r2 882	1 606	r4 749
2012–13	r48 089	r54 278	r31 236	r15 671	r28 461	r3 092	1 741	r4 808
2013–14	nya	nya	nya	nya	nya	nya	nya	nya
NUMBER OF ESTABLISHED HOUSE TRANSFERS								
2011								
September	11 397	11 960	6 615	3 566	5 454	680	335	1 201
December	13 950	12 819	6 447	3 566	5 784	769	425	1 214
2012								
March	9 593	11 757	6 811	3 681	5 995	751	458	1 099
June	r10 923	r12 839	6 179	3 671	r5 528	r682	388	r1 235
September	r11 441	r12 163	r7 806	r3 641	r6 091	672	432	r1 125
December	r12 315	r14 176	r7 517	r3 872	6 471	790	424	r1 233
2013								
March	r10 957	r12 507	r7 582	r3 847	r7 929	814	449	r1 120
June	r13 376	r15 432	r8 331	r4 311	r7 970	r816	436	r1 330
September	r13 907	r14 223	r9 102	r4 189	r7 941	r855	450	r1 283
December	r15 309	r16 600	r9 404	r4 441	r8 002	r821	441	r1 337
2014								
March	12 254	12 887	9 378	4 243	8 174	894	411	1 068
June	nya	nya	nya	nya	nya	nya	nya	nya
September	nya	nya	nya	nya	nya	nya	nya	nya
NUMBER OF ATTACHED DWELLING TRANSFERS								
2011–12	r41 825	r24 928	r10 558	5 180	r7 867	847	1 124	r3 437
2012–13	r39 739	r24 706	r11 321	r5 743	r9 449	r1 017	1 449	r3 238
2013–14	nya	nya	nya	nya	nya	nya	nya	nya
NUMBER OF ATTACHED DWELLING TRANSFERS								
2011								
September	10 565	6 375	2 397	1 371	1 767	217	208	871
December	13 108	6 840	2 619	1 276	1 989	177	266	896
2012								
March	7 821	5 399	2 858	1 279	2 143	242	323	816
June	r10 331	r6 314	r2 684	1 254	r1 968	211	327	r854
September	r9 491	r6 020	r2 900	r1 306	2 201	r260	422	r869
December	r9 963	r6 262	r2 763	1 395	r2 173	206	352	r836
2013								
March	r9 288	r5 560	r2 704	1 509	r2 535	r271	346	r724
June	r10 997	r6 864	r2 954	1 533	r2 540	r280	329	r809
September	r12 112	r6 329	r3 230	r1 499	2 578	r267	358	r815
December	r11 497	r7 298	r3 295	r1 573	r2 593	r290	351	r710
2014								
March	9 336	5 906	3 230	1 516	2 554	292	376	642
June	nya	nya	nya	nya	nya	nya	nya	nya
September	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available

r revised

(a) Attached dwellings includes flats, units and apartments plus semi-detached, row and terrace houses.

6 TOTAL VALUE OF DWELLING STOCK(a)(b)(c)

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
TOTAL VALUE OF RESIDENTIAL DWELLINGS *($m)*									
2011									
September	1 535 219.2	1 161 369.3	765 191.3	274 405.0	494 352.4	70 315.2	38 687.4	79 314.2	4 418 854.0
December	1 523 085.2	1 154 289.4	762 739.5	278 424.3	493 336.4	71 619.5	35 139.3	81 894.6	4 400 528.1
2012									
March	1 559 361.3	1 143 877.6	758 686.5	274 134.8	505 891.6	70 580.3	34 682.1	80 933.4	4 428 147.6
June	1 577 280.7	1 150 030.9	763 457.8	275 411.8	506 497.2	68 526.2	34 361.8	81 422.5	4 456 988.8
September	1 559 024.7	1 136 055.0	772 111.0	274 426.7	516 171.2	67 739.2	35 229.2	80 569.3	4 441 326.2
December	1 614 343.8	1 165 316.5	775 683.3	275 396.9	530 665.2	69 515.3	38 140.7	84 485.0	4 553 546.9
2013									
March	1 642 210.0	1 184 719.1	779 274.0	278 441.5	543 073.2	68 788.6	37 506.5	82 413.4	4 616 426.3
June	1 681 736.0	1 203 268.9	789 424.6	278 973.8	557 024.7	69 753.6	37 890.8	85 830.3	4 703 902.6
September	1 732 705.8	1 241 517.9	791 310.8	282 158.9	559 706.4	69 894.4	38 478.3	84 531.8	4 800 304.3
December	1 825 589.8	1 288 060.1	810 565.1	290 900.8	576 678.4	72 019.0	40 395.6	88 247.6	4 992 456.4
2014									
March	r1 865 513.0	r1 311 078.6	r825 243.2	r295 175.9	r580 309.4	r72 279.9	r40 182.4	r87 385.7	r5 077 168.2
June	p1 935 558.1	p1 333 844.5	p842 683.5	p297 488.2	p584 796.5	p72 866.6	p40 845.6	p88 644.2	p5 196 727.3
September	p1 994 152.3	p1 353 333.5	p854 995.1	p301 581.0	p587 893.8	p73 819.5	p41 206.9	p89 323.1	p5 296 305.3
MEAN PRICE OF RESIDENTIAL DWELLINGS *($'000)*									
2011									
September	540.8	512.6	428.8	379.9	524.8	305.1	522.7	547.5	490.8
December	535.3	506.6	425.7	384.3	521.4	310.0	472.5	561.5	486.9
2012									
March	547.1	500.0	422.4	377.4	532.4	304.7	464.6	553.0	488.6
June	552.2	500.2	423.2	378.1	530.4	295.2	457.3	552.2	489.9
September	544.6	491.8	426.3	375.7	537.9	291.2	466.8	543.1	486.4
December	562.2	502.0	426.4	376.1	550.8	298.0	502.3	565.0	496.8
2013									
March	570.7	508.1	427.3	379.6	561.7	294.3	491.5	546.3	502.1
June	583.0	513.8	431.0	379.3	573.7	298.0	495.0	565.4	509.8
September	599.0	527.6	430.4	382.7	573.7	298.0	500.4	552.2	518.3
December	629.2	544.7	439.0	393.5	587.5	306.5	521.2	573.4	536.9
2014									
March	r641.4	r552.3	r445.6	r398.4	r588.7	r307.1	r515.6	r564.3	r544.2
June	p663.5	p559.2	p453.2	p400.5	p589.3	p309.1	p518.9	p569.5	p554.8
September	p681.9	p564.8	p457.6	p404.6	p588.7	p312.0	p521.7	p571.0	p563.1
NUMBER OF RESIDENTIAL DWELLINGS *('000)*									
2011									
September	2 839.0	2 265.6	1 784.5	722.3	942.0	230.5	74.0	144.9	9 002.7
December	2 845.1	2 278.3	1 791.7	724.6	946.3	231.1	74.4	145.8	9 037.2
2012									
March	2 850.3	2 287.7	1 796.2	726.3	950.2	231.6	74.7	146.4	9 063.4
June	2 856.3	2 299.2	1 803.9	728.5	954.9	232.1	75.1	147.5	9 097.6
September	2 862.8	2 309.8	1 811.2	730.4	959.5	232.6	75.5	148.3	9 130.2
December	2 871.2	2 321.6	1 819.0	732.2	963.4	233.3	75.9	149.5	9 166.1
2013									
March	2 877.3	2 331.5	1 823.7	733.6	966.8	233.7	76.3	150.9	9 193.9
June	2 884.7	2 342.0	1 831.5	735.4	970.9	234.1	76.6	151.8	9 226.9
September	2 892.6	2 353.0	1 838.5	737.3	975.6	234.5	76.9	153.1	9 261.4
December	2 901.6	2 364.5	1 846.3	739.2	981.5	234.9	77.5	153.9	9 299.4
2014									
March	2 908.6	r2 373.7	r1 852.1	r740.8	r985.8	235.3	77.9	r154.9	r9 329.1
June	p2 917.1	p2 385.4	p1 859.5	p742.8	p992.3	p235.8	p78.7	p155.7	p9 367.4
September	p2 924.4	p2 396.1	p1 868.6	p745.4	p998.6	p236.6	p79.0	p156.4	p9 405.1

p preliminary figure or series subject to revision

r revised

(a) Includes land.

(b) Includes all sectors.

(c) Components in this table cannot be combined due to rounding.

7 REVISIONS TO RESIDENTIAL PROPERTY PRICE INDEX SERIES, WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES(a)(b)(c)(d)

				DIFFERENCE BETWEEN FINAL ESTIMATE AND:	
	1st estimate	*2nd estimate*	*Final estimate*	*1st estimate*	*2nd estimate*
	no.	no.	no.	pts	pts
INDEX NUMBER				INDEX POINTS	
June Quarter 2013	105.5	106.0	105.7	0.2	–0.3
September Quarter 2013	108.0	108.2	108.3	0.3	0.1
December Quarter 2013	111.9	112.4	112.6	0.7	0.2
March Quarter 2014	114.3	114.3	114.2	–0.1	–0.1
June Quarter 2014	116.4	116.4	nya	nya	nya
September Quarter 2014	118.2	nya	nya	nya	nya
ANNUAL PERCENTAGE CHANGE (B)				PERCENTAGE POINTS	
June Quarter 2013	5.1	5.6	5.3	0.2	–0.3
September Quarter 2013	7.8	8.0	8.1	0.3	0.1
December Quarter 2013	9.3	9.8	10.0	0.7	0.2
March Quarter 2014	10.9	10.9	10.8	–0.1	–0.1
June Quarter 2014	10.1	10.1	nya	nya	nya
September Quarter 2014	9.1	nya	nya	nya	nya
QUARTERLY PERCENTAGE CHANGE (C)				PERCENTAGE POINTS	
June Quarter 2013	2.3	2.8	2.5	0.2	–0.3
September Quarter 2013	1.9	2.4	2.5	0.6	0.1
December Quarter 2013	3.4	3.8	4.0	0.6	0.2
March Quarter 2014	1.7	1.5	1.4	–0.3	–0.1
June Quarter 2014	1.8	1.9	nya	nya	nya
September Quarter 2014	1.5	nya	nya	nya	nya

nya not yet available

(a) Index reference period of each index: 2011-12 = 100.0.

(b) Percentage change from corresponding quarter of previous year.

(c) Percentage change from previous quarter.

(d) Revisions to the HPI and ADPI available on the website.

EXPLANATORY NOTES

1 This publication and the associated time series spreadsheets are available on the ABS website <http://www.abs.gov.au> and contain a range of Residential Property Price Indexes (RPPIs) and related statistics. Definitions of the terms used in this publication and spreadsheets are provided in the glossary.

2 Residential property prices are of significant interest to policy makers, market analysts and researchers for a range of economic and social reasons. This is because the housing market plays an important role in the Australian economy.

3 RPPIs measure price change of the stock of residential dwellings over time. The ABS RPPIs serve the dual purpose of:

(a) a macroeconomic indicator of residential property price inflation; and
(b) supporting the compilation of the non-financial assets component of the Household Balance Sheet in the Australian System of National Accounts (ASNA).

4 The ABS has compiled a House Price Index since 1986. A significant review of the HPI occurred in 2004. Several improvements to the HPI were implemented as a result of this review and a new series (Series 1) of the HPI was introduced in the September quarter 2005 issue (with improvements applied back to the March quarter 2002). The most significant change was the introduction of a stratification approach[2] to compile the HPI. For more information on the 2004 review, see *Information Paper: Renovating the Established House Price Index, November 2005* (cat. No. 6417.0).

5 The historical series, from 1986 to 2005, continues to be available as an indicator of established house price movements over a longer period. This historical series is not directly comparable to the existing HPI series post 2002 due to the change in methodology resulting from the 2004 review.

6 The next HPI review commenced in 2007. This review refined the stratification method and updated the dwelling stock values using 2006 Census data. The 2007 review to the HPI was introduced in the December quarter 2008 issue, creating Series 2, and linked to Series 1 at the March quarter 2008.

7 The latest review commenced in 2012 and has resulted in the expansion in scope beyond the existing HPI to include attached dwellings and produce an aggregate RPPI. The dwelling stock values have also been updated using data from the 2011 Census. This third series (i.e. Series 3) was introduced in the December quarter 2013 issue and linked to Series 2 at the March quarter 2013. The index reference period for all indexes have also been updated to 2011-12 = 100 in the December quarter 2013 issue.

Price Indexes and related statistics

8 The suite of Residential Property Price Indexes (from now on referred to collectively as 'the indexes') is:

- A Residential Property Price Index (RPPI);
- An Established House Price Index (HPI); and
- An Attached Dwellings Price Index (ADPI).

9 The RPPI is an aggregation of the HPI and the ADPI and measures the price change in all residential dwellings within the eight Greater Capital City Statistical Areas (GCCSAs). Index numbers and percentage changes for the RPPI are presented in Table 1.

10 The HPI measures the price change in all established detached houses on their own block of land and is compiled for the eight GCCSAs. Index numbers and percentage changes for the HPI are presented in Table 2.

11 The ADPI measures the price change of attached dwellings within the eight GCCSAs. Dwellings in scope of the index are:

- flats, units and apartments; and
- semi-detached, row and terrace houses.

2 See paragraphs 22 - 24 for a detailed description of the index methodology, including an outline of the stratification approach.

Price Indexes and related statistics continued

12 Index numbers and percentage changes for the ADPI are presented in Table 3.

13 Estimates are also available for median price and transfer counts of established houses and attached dwellings for capital cities (Tables 4 and 5). Additional outputs for median price and transfer counts for the rest of state for established houses and attached dwellings are available in a time series spreadsheet on the ABS website.

14 The total value of all residential dwellings estimates are presented in Table 6. Values of dwellings and land are used in the compilation of the non-financial assets component of the household balance sheet published annually in the *Australian System of National Accounts* (ASNA) (cat. no. 5204.0 publication) and quarterly in the *Australian National Accounts: Financial Accounts* (cat. no. 5232.0).

15 For more detailed information on residential property price indexes and related statistics than is provided in these explanatory notes refer to *Residential Property Price Indexes: Concepts, Sources and Methods, 2014* (cat. no. 6464.0).

SCOPE AND COVERAGE

16 The scope of the RPPIs is all residential properties in the eight GCCSAs. The scope is restricted to those dwellings where the primary purpose is residential (i.e. excluding commercial properties) regardless of ownership and tenure of the occupants (i.e. including government owned properties and properties owned by private landlords).

17 The definition of dwelling structure type for the purpose of the RPPI is consistent with the ABS classifications: the *Functional Classification of Building 1999* (Revision 2011) (cat. no. 1268.0.55.001), which is used in building activity statistics; and the Dwelling Structure Classification which is used in the Census of Population and housing (refer to *Census Dictionary,2011* (cat. no. 2901.0)).

18 Dwellings in scope of the RPPI are:

- Ordinary detached house;
- House with office;
- House with flat;
- Rural residential houses (within a capital city and not part of a farming business);
- Semi-detached, row and terrace houses;
- Townhouses; and
- Flats, units and apartments.

19 The GCCSAs capture the socio-economic extent of the State/Territory capital cities for statistical purposes. For more detail please see *Australian Statistical Geography Standard (ASGS)* (Vol 1, cat. no. 1270.0.55.001). From the December quarter 2013 issue all references to capital cities are defined by the ASGS GCCSA. Historical naming conventions (i.e. Sydney rather than Greater Sydney) have been maintained in this publication. A time-series will be maintained but users should exercise caution in interpreting medians and numbers of house transfers over time as historical data will reflect capital city boundaries as previously defined. This is particularly significant for Canberra where the capital city is now defined to be the whole of the ACT.

20 Where table headings indicate the estimates relate to the rest of state or whole of state the ASGS classification is used to determine boundaries. For example, the total value of the dwelling stock relates to each state or territory.

21 Sales prices of established houses and attached dwellings are based on the exchange date of the sales. The exchange date most closely approximates the time at which the market price is determined. Exchange date information is available for all cities except Adelaide and Darwin. For these cities, a modelled exchange date is used.

INDEX METHODOLOGY AND DATA SOURCES

Methodology

22 The ABS employs a stratification approach to compile the RPPIs. The stratification approach separates the total sample of residential properties into a number of sub-samples or strata. Dwelling transactions are stratified by dwelling type, long term median price and Socio-economic Index for Areas score. Each quarter, the strata are re-valued by applying a price relative (i.e. the current period median price of the stratum compared to the previous period median price of the same stratum) to the value of the dwelling stock for that stratum to produce a current period stratum value. The current period values of each stratum are then summed to derive the current value of the total dwelling stock in the capital city. Index numbers are subsequently derived from the total values.

23 When the number of price observations available for a stratum is nil or extremely low in a quarter, a price movement for the stratum is derived using imputation methods based on price movements of other strata.

24 More information on the stratification methodology is available in *Residential Property Price Indexes: Concepts, Sources and Methods, 2014* (cat. no. 6464.0).

Data source

25 All Australian residential property sales data are provided by State and Territory Land Titles Office or Valuers General Office in each capital city (collectively referred to as VGs)[3]. Typically, several weeks elapse from the time an agreement is reached between two parties to sell/purchase a residential property and the ABS receiving the data relating to the transaction. To address this delay, the ABS supplements VGs data with mortgage lenders data to produce index series in the two most recent quarters.

Preliminary and Final Index series

26 Index series in the two most recent quarters are considered preliminary and are subject to revision. For the HPI the two most recent quarters are a combination of mortgage lenders data and VGs data (with the exception of the second most recent quarter for the NT where only VGs data is used). For the ADPI the most recent quarter uses VGs data only for the first two months of the quarter and mortgage lenders data only for the last month of the quarter (except in WA where all VGs data is used). For the second most recent quarter for the ADPI only VGs data is used. However as this data is not yet complete, the index may still be further revised.

27 Index series in the third most recent quarter following the reference period are compiled from VGs data only. These index series are considered Final and are not revised.

Weights

28 The weights underpinning the indexes are based on the total value of dwellings (including land) in scope of the indexes. The weights are updated at roughly five yearly intervals to take account of changes in the quantity (number) of dwellings. Dwelling counts are obtained from the five yearly Census of Population and Housing and are combined with mean prices calculated from VGs data to produce new weights for the indexes. The most recent weights are published in the December quarter 2013 issue.

TOTAL VALUE OF DWELLING STOCK

Methodology

29 Estimates of the Total Value of the Dwelling Stock (TVDS) are available in Table 6. The TVDS is comprised of three outputs: the mean price of residential dwellings; the number (or quantity) of residential dwellings; and the total value of residential dwellings (which is an aggregation of the price and quantity components). Dwellings in scope of the value of the dwelling stock is the same as the RPPI, however, geographic coverage is expanded to the whole of state.

30 As with the price indexes, the TVDS uses a stratification approach. Price, quantity and value information is stratified by location (based on Statistical Area Level 2 (SA2) from the ASGS) and dwelling type (established houses and attached dwellings).

3 This publication contains property sales information provided under licence from the Department of Finance and Services, Land and Property Information.

Methodology continued

31 A representative price for all dwellings in the stock is obtained from information on dwellings sold during the reference period. Price information from dwellings sold is used to represent the price of all dwellings not sold during the period. A quarterly mean dwelling price by geographic area and by dwelling type for all strata is calculated.

32 The number of residential dwellings is calculated by taking counts of dwellings from the latest Census and adjusting these counts for net additions to the stock since the last Census. These net additions are calculated by taking completions data from *Building Activity, Australia* (8752.0) and adjusting completions data by the long term realisation rate (i.e. the long term average rate at which completions result in net additions to the stock).

33 The total number of residential dwellings is calculated at the state level and pro-rated down to each SA2. As completions data are not available in time for use in compiling the most recent quarters estimates, quantity information is modelled using historical trends in the latest quarter.

34 To compile the TVDS, price and quantity data is combined in each SA2 and then aggregated up to the state/territory and national level. Information from the Census is used to further break down total value information into Household and Non-Household sector ownership.

Data source

35 Information on the price of dwellings is sourced from the same VGs dataset used to compile the indexes. The main source of data for the number of residential dwellings is the Census of Population and Housing.

Preliminary and Final series

36 To enable the timely publication of data on the value of the dwelling stock, the movements of the RPPI (at the capital city level) are used as a proxy for movements in the mean prices (at the state level) for the most recent two quarters. This results in the TVDS estimates being Preliminary in these periods and being Final in the third most recent quarter.

37 Further information on the methodology used to compile TVDS is available in *Residential Property Price Indexes: Concepts, Sources and Methods, 2014* (cat. no. 6464.0).

INTERPRETING OUTPUTS

Price indexes, unstratified medians and transfers

38 In addition to the release of stratified and weighted price indexes for each capital city, the ABS publishes, for each capital city and the rest of state, the median price of all established houses and attached dwellings transfers, and the number of established houses and attached dwellings transfers (Tables 4 and 5). Both these series are based on all available VGs residential property sales data. They are only produced for those quarters for which final index estimates are available. As the ABS receives more VGs data, the median prices and the number of houses and attached dwellings transfers are revised as necessary. The usual practice is to update the most recent eight quarters of published figures.

39 The median prices are calculated with no stratification or weighting applied. These 'raw' medians will not correspond to the published index numbers and will not produce price movements that are consistent with those numbers.

40 The number of transfers of established houses and attached dwellings provides an indication of the level of sales activity for each quarter.

Comparing Indexes to Total Value of dwelling outputs

41 Users should exercise caution in comparing price movements in the indexes and changes in the value of the dwelling stock and its components. The indexes are designed to measure the change in value of the stock of dwellings in the capital cities fixed at the last Census, whereas TVDS is designed to measure the current value of the dwelling stock in the States and Territories. As such, movements in the value of the dwelling stock

Comparing Indexes to Total Value of dwelling outputs continued

are a result of changes in the price and quantity of dwellings. Movements in the indexes represent price change only.

Comparing Medians and Means

42 Users should exercise caution when comparing the unstratified median prices published in Table 4 and the mean value of dwellings published in Table 6. The unstratified median price (for established houses and attached dwellings) of dwelling transfers over the reference period is the mid point of all properties bought/sold in the period. This means that half of all properties (in the same region and of the same dwelling type) bought/sold in the period did so at a price below the median, the other half had a price above the median. In contrast, the mean value of residential dwellings represents what the average dwelling value was in the reference period. The mean value is derived by taking the total value of residential dwellings and dividing by the estimated number of dwellings in the stock. The mean values are calculated across the whole of state and for all dwelling types, in comparison to the medians which are calculated for individual dwelling types and for the capital city and rest of state separately.

Analysis of changes in index numbers

43 Movements in indexes from one period to another can be expressed either as changes in index points or as percentage changes. The following example illustrates the method of calculating index points changes and percentage changes between any two periods:

Established Houses: Sydney index numbers (see Table 2) -

December Quarter 2012	103.4
less September Quarter 2012	100.9
equals change in index points	2.5
Percentage change	2.5/100.9 X 100 = 2.5%.

44 In this publication, percentage changes are calculated to illustrate three different kinds of movements in index numbers:

- movements between consecutive financial years (where the index numbers for financial years are simple averages of the quarterly index numbers);
- movements between corresponding quarters of consecutive years; and
- movements between consecutive quarters.

Rounding

45 The published index numbers have been rounded to one decimal place, and the percentage changes (also rounded to one decimal place) are calculated from the rounded index numbers.

46 For the total value of the dwelling stock, mean prices are calculated from unrounded figures and subsequently rounded. Therefore, estimates of the components of TVDS published in Table 6 cannot be combined to replicate the total values.

Reliability of Indexes

47 The number of price observations available to compile the indexes each quarter depends on market activity. For the smaller capital cities (Hobart, Darwin and Canberra) there are occasions when strata have low numbers of price observations. Rather than suppress publication of the series they are included as the long term trends are considered reliable. Care should be exercised when analysing the indexes quarter-to-quarter movements of the smaller capital cities.

REVISIONS

48 The process of presenting preliminary and final indexes and related statistics has been outlined in the relevant sections of these explanatory notes.

49 Once the estimates are final, revisions would only occur in exceptional circumstances, such as to correct a significant error.

DISCONTINUED SERIES

50 The September quarter 2013 was the final release of the following outputs in the *House Price Index: Eight Capital Cities* (cat. no. 6416.0) publication:

DISCONTINUED SERIES *continued*

- Project homes (Tables 3 and 4);
- Input to the house construction industry (Tables 5 and 6);
- Construction industry total hourly rates of pay (Tables 5 and 6); and
- National accounts private housing investment (Tables 5 and 6).

51 The Project Homes price index is published in *Consumer Price Index, Australia* (cat. no. 6401.0) in Tables 7 and 11 of the time series spreadsheets as a component of 'New dwelling purchase by owner-occupiers'.

52 The Input to House Construction industry is published in *Producer Price Indexes, Australia* (cat. no. 6427.0) in Table 18 of the time series spreadsheet.

53 The Construction Industry Total hourly rates of pay is published in *Wage Price Index, Australia* (cat. no. 6345.0) in Table 5b of the time series spreadsheet.

54 National Accounts Private Housing Investment will no longer be regularly published by the ABS but is available upon request.

RELATED PUBLICATIONS

55 Current publications and other products released by the ABS are listed on the ABS website <http://www.abs.gov.au>. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.

GLOSSARY

Attached dwellings	Dwellings which share a structural component with one or more other buildings. This may include walls, ceiling, floor or roofing. For example, flats, units and apartments and semi-detached, row and terrace houses.
Attached Dwellings Price Index (ADPI)	A measure of the price change of attached dwellings within the GCCSAs between two periods.
Billion	The term 'billion' means 'thousand million' in line with Australian standards.
Chain linking	The process by which an index series based on one set of weights is joined to another index series based on a different set of weights.
Dwelling	A suite or rooms contained within a building which are self-contained and intended for long-term residential use. To be self-contained the suite of rooms must possess cooking and bathing/shower facilities as building fixtures.
Established House Price Index (HPI)	A measure of the price change in all established detached houses within the eight GCCSAs between two periods.
Established houses	Detached residential dwellings on their own block of land regardless of age (i.e. including new houses sold as a house/land package as well as second hand houses).
Exchange date	The date at which the agreed market price for a dwelling is recorded.
Final series	The index for the third most recent quarter following the reference period which are considered complete and are not revised.
Greater Capital City Statistical Areas (GCCSAs)	These areas capture the socio-economic extent of the State/Territory capital cities for statistical purposes. The boundary is set to include the population who regularly socialise, shop or work within the city, but live in the small towns and rural areas surrounding the city.
Index reference period	The period for which an index is given a value of 100.0, usually a financial year. The current index reference period for the Residential Property Price Indexes is 2011-12 = 100.0.
Mean price	The average dwelling value in the reference period. It is derived by taking the total value of residential dwellings and dividing by the estimated number of dwellings in the stock.
Median price	The mid point of dwelling values in the reference period. Half of all properties bought/sold in the period did so at a price below the median, the other half had a price above the median.
Preliminary series	The indexes for the two most recent quarters of data when the datasets used are not considered complete. These series are subject to revision.
Price index	A measure of the proportionate, or percentage, changes in a set of prices over time relative to a given reference period.
Price movement	Changes in price levels between two or more periods. Movements can be expressed in money values, as price relatives, changes in index points or as percentage changes.
Re-referencing	Re-referencing is the process which sets a new index reference period for a price index.
Residential Property Price Index (RPPI)	An aggregation of the HPI and ADPI, measuring the price change in all residential dwellings within the eight GCCSAs between two periods.
Rest of State	Within each state or territory the area not defined as being part of the greater capital city.
Socio-economic Index for Areas (SEIFA)	A ranking of areas in Australia according to relative socio-economic advantage and disadvantage using information from the Census of Population and Housing. People's access to material and social resources, and their ability to participate in society is the broad definition used by the ABS to define relative socio-economic advantage and disadvantage.

Strata	The finest level of groupings based on similar characteristics. The total sample of residential dwellings is separated into groups in a way that balances homogeneity of suburbs with sufficient sales observations to construct reliable measures of price movements.
Total Value of Dwelling Stock	An estimate which combines the price of dwellings and the total number of dwellings.
Transfers	The record of sale for established houses and attached dwellings provided by the State/Territory Land Title Office or Valuers General (VGs) Office in each capital city.
Unstratified medians	The midpoint of sales data taken from the complete VGs datasets. No grouping (stratifying) or weighting is applied.

FOR MORE INFORMATION . . .

INTERNET **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

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PHONE 1300 135 070

EMAIL client.services@abs.gov.au

FAX 1300 135 211

POST Client Services, ABS, GPO Box 796, Sydney NSW 2001

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