

# **BUILDING ACTIVITY**

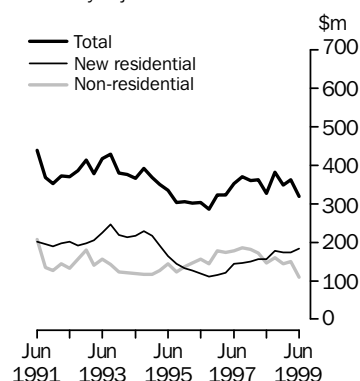
**SOUTH AUSTRALIA**

EMBARGO: 11:30AM (CANBERRA TIME) WED 27 OCT 1999

## **Value of work done**

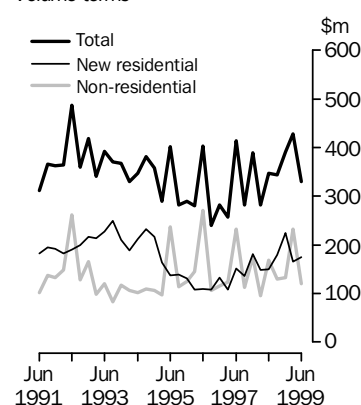
Volume terms

Seasonally adjusted



## **Value of work commenced**

Volume terms



- For further information about these and related statistics, contact Roger Mables on Adelaide 08 8237 7494, or Client Services in any ABS office as shown on the back cover of this publication.

## **JUNE QTR KEY FIGURES**

<b>SEASONALLY ADJUSTED</b>	<b>Jun qtr 99</b>	<b>Mar qtr 99 to Jun qtr 99 % change</b>	<b>Jun qtr 98 to Jun qtr 99 % change</b>
Value of work done(a) (\$m)	319.3	-11.8	-2.5
New residential building (\$m)	183.5	5.5	18.3
Alterations and additions(b) (\$m)	32.5	-11.8	7.3
Non-residential building (\$m)	108.4	-27.2	-26.0
Total dwelling units commenced (no.)	1 930	8.2	17.3
New private sector houses (no.)	1 609	12.1	19.2

(a) Chain volume measures, reference year 1997-98. (b) To residential buildings.

## **JUNE QTR KEY POINTS**

### **VALUE OF WORK DONE, VOLUME TERMS**

- In seasonally adjusted terms, total building work done fell by 11.8% in the June quarter to \$319.3m.
- The fall was due mainly to a decrease in work done on non-residential building, down by 27.2% to \$108.4m, the lowest level for the series.
- Work done on new residential building rose by 5.5% to \$183.5m. While new houses were up by 2.4%, new other residential buildings were up by 39.0% to \$35.7m, the highest since the December quarter 1994.

### **VALUE OF WORK COMMENCED, VOLUME TERMS**

- Total building work commenced fell by 23.0% to \$329.5m. The previous quarter had been the highest since the June quarter 1992.
- The fall was due to a decrease of 48.2% in non-residential commencements to \$120.0m. This follows the high level of commencements in the Shops and Educational categories in the March quarter.
- New residential building increased by 5.4% to \$173.9m. An increase of 24.2% in new house commencements was partly offset by a fall of 62.1% in new other residential building.

### **NUMBER OF DWELLING UNITS COMMENCED**

- In seasonally adjusted terms, the total number of dwelling units commenced rose by 8.2% to 1,930. This was the most since the March quarter 1995.

### **VALUE OF WORK YET TO BE DONE**

- Work yet to be done on jobs under construction at the end of June 1999 rose by 1.7% to \$451.9m. This was 1.31 times the value of work done for the quarter (0.88 for residential building and 2.13 for non-residential).

## NOTES

### FORTHCOMING ISSUES

ISSUE (Quarter)

RELEASE DATE

September 1999

2 February 2000

December 1999

3 May 2000

.....

### CHANGES IN THIS ISSUE

Improvements have been made to the price indexes used to derive volume estimates in buildings, resulting in minor revisions to non-residential building growth rates in this issue.

Quarterly chain volume data incorporate a new base year, 1997–98, which has resulted in revisions to growth rates, small in most cases, for the latest year. The revised base year has also resulted in revisions to levels, but not growth rates, for some earlier periods (see paragraph 26 of the Explanatory Notes).

.....

### BUILDING CLASSIFICATION REVIEW

For information about the building classification review see *Building Approvals, Australia* (Cat. no. 8731.0) July 1999 issue, page 26.

.....

### SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
n.a.	not available
RSE	relative standard error
SE	standard error
..	not applicable
—	nil or rounded to zero

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Ian Crettenden  
Regional Director  
South Australia

# LIST OF TABLES

Page

## CHAIN VOLUME ESTIMATES

1	Value of building work commenced, original	4
2	Value of building work done, original, seasonally adjusted	4

## SEASONALLY ADJUSTED

3	Value of building work done	5
4	Number of dwelling units commenced and completed	5

## PRIVATE AND PUBLIC SECTOR

5	Number and value of building commenced	6
6	Value of non-residential building commenced	7
7	Number and value of building under construction	8
8	Value of non-residential building under construction	9
9	Number and value of building completed	10
10	Value of non-residential building completed	11
11	Value of building work done	12
12	Value of non-residential building work done	13
13	Value of building work yet to be done	14
14	Value of non-residential building work yet to be done	15

## RELATIVE STANDARD ERRORS

15	Summary of building activity	16
----	------------------------------	----

**TABLE 1. VALUE OF BUILDING WORK COMMENCED, CHAIN VOLUME MEASURES(a)**  
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential building	Total		Private sector	Total	
1996-97	450.3	48.2	498.8	118.6	429.1	576.4	1,193.2
1997-98	540.8	74.0	614.8	134.5	426.3	550.6	1,299.9
1998-99	603.5	138.5	742.1	134.3	394.6	615.1	1,491.5
1998 Mar. qtr	132.7	15.3	148.1	38.3	68.0	95.0	281.6
June qtr	135.0	14.6	149.6	29.7	133.8	168.3	347.8
Sept. qtr	148.2	31.1	179.3	34.0	88.8	130.0	343.3
Dec. qtr	166.0	57.9	223.9	33.4	93.5	133.2	390.5
1999 Mar. qtr	129.0	35.9	165.0	31.3	143.3	231.9	428.2
June qtr	160.3	13.6	173.9	35.6	69.0	120.0	329.5

(a) Reference year for chain volume measures is 1997-98. See paragraphs 25 and 26 of the Explanatory Notes.

**TABLE 2. VALUE OF BUILDING WORK DONE, CHAIN VOLUME MEASURES(a)**  
(\$ million)

(\$ million)							
	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
Period	Houses	Other residential building	Total		Private sector	Total	
ORIGINAL							
1996-97	437.7	52.8	490.5	121.8	450.7	673.2	1,284.6
1997-98	535.6	69.8	605.5	131.5	538.9	685.0	1,422.1
1998-99	589.7	119.1	708.8	141.9	409.3	561.6	1,412.2
1998 Mar. qtr	130.8	17.1	147.9	30.8	118.9	148.9	327.8
June qtr	136.4	18.9	155.3	30.5	111.7	150.7	336.5
Sept. qtr	151.2	24.6	175.8	38.6	134.4	161.7	376.0
Dec. qtr	149.9	33.8	183.7	38.9	120.2	158.7	381.3
1999 Mar. qtr	138.7	26.7	165.4	31.8	86.3	129.2	326.4
June qtr	149.9	34.0	183.9	32.6	68.4	112.0	328.5
SEASONALLY ADJUSTED							
1998 Mar. qtr	137.2	16.6	155.6	35.6	143.3	172.3	363.2
June qtr	135.5	20.0	155.1	30.3	102.7	146.4	327.5
Sept. qtr	153.7	24.5	178.2	38.8	135.3	159.5	382.3
Dec. qtr	141.7	33.1	173.0	33.7	107.0	144.8	348.6
1999 Mar. qtr	145.4	25.7	174.0	36.9	104.0	149.0	362.1
June qtr	148.9	35.7	183.5	32.5	63.0	108.4	319.3

(a) Reference year for chain volume measures is 1997-98. See paragraphs 25 to 27 of the Explanatory Notes.

**TABLE 3. VALUE OF BUILDING WORK DONE: SEASONALLY ADJUSTED SERIES**  
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential building	Total		Private sector	Total	
1998 Mar. qtr	139.3	16.6	157.8	36.4	144.7	172.5	366.5
June qtr	138.5	20.2	158.3	31.1	104.2	147.2	332.4
Sept. qtr	158.5	25.1	183.5	40.2	137.4	161.0	390.6
Dec. qtr	146.6	34.2	178.8	35.0	109.0	146.7	357.7
1999 Mar. qtr	152.0	26.7	181.5	38.6	106.3	151.6	374.3
June qtr	158.2	37.7	194.6	34.6	67.0	113.1	336.9

**TABLE 4. NUMBER OF DWELLING UNITS COMMENCED AND COMPLETED: SEASONALLY ADJUSTED SERIES**

Period	New houses				Total dwelling units (includes conversions etc)			
	Private sector		Total		Private sector		Total	
	Commenced	Completed (a)	Commenced	Completed (a)	Commenced	Completed (a)	Commenced	Completed (a)
1998 Mar. qtr	1,563	n.a.	1,588	n.a.	1,724	n.a.	1,788	n.a.
June qtr	1,350	n.a.	1,432	n.a.	1,582	n.a.	1,645	n.a.
Sept. qtr	1,504	n.a.	1,503	n.a.	1,845	n.a.	1,906	n.a.
Dec. qtr	1,536	n.a.	1,620	n.a.	1,755	n.a.	1,798	n.a.
1999 Mar. qtr	1,435	n.a.	1,465	n.a.	1,719	n.a.	1,784	n.a.
June qtr	1,609	n.a.	1,704	n.a.	1,867	n.a.	1,930	n.a.

(a) Seasonally adjusted estimates for the number of dwelling units completed are suspended following strong evidence of a recent and sudden change to the seasonal pattern. Seasonally adjusted estimates will be reinstated as soon as the new seasonal pattern can be identified.

**TABLE 5. NUMBER AND VALUE OF BUILDING COMMENCED: ORIGINAL**

Period	Number of dwelling units				Value (\$m)						
	New houses	New other residential building	Conversions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-residential building	Total building
PRIVATE SECTOR											
1996-97	5,057	647	23	5,727	444.9	46.7	491.6	114.8	606.5	423.4	1,029.8
1997-98	5,628	720	89	6,437	525.5	72.4	597.9	133.2	731.0	426.4	1,157.4
1998-99	6,091	1,039	55	7,186	612.7	140.6	753.3	137.3	890.6	400.1	1,290.7
1998 Mar. qtr	1,409	141	67	1,617	132.6	15.1	147.7	38.6	186.3	68.1	254.4
June qtr	1,334	149	7	1,490	133.6	14.5	148.0	30.4	178.4	134.5	312.9
Sept. qtr	1,563	332	32	1,927	149.4	31.5	180.9	34.4	215.3	89.5	304.8
Dec. qtr	1,644	244	3	1,891	167.7	58.0	225.7	33.7	259.4	94.6	354.0
1999 Mar. qtr	1,293	302	16	1,612	132.0	37.0	169.0	32.5	201.6	145.6	347.2
June qtr	1,591	161	4	1,756	163.6	14.1	177.7	36.7	214.4	70.4	284.7
PUBLIC SECTOR											
1996-97	55	4	3	62	4.4	0.3	4.7	2.1	6.7	145.4	152.1
1997-98	195	21	—	216	15.2	1.6	16.8	1.4	18.2	124.3	142.5
1998-99	205	23	2	230	16.3	1.7	18.0	2.3	20.3	223.7	244.0
1998 Mar. qtr	27	4	—	31	2.1	0.3	2.3	0.1	2.5	27.0	29.5
June qtr	63	5	—	68	4.5	0.3	4.8	—	4.9	34.7	39.5
Sept. qtr	47	4	2	53	3.5	0.3	3.8	0.6	4.4	41.5	45.9
Dec. qtr	55	19	—	74	4.0	1.5	5.4	0.5	5.9	40.2	46.1
1999 Mar. qtr	33	—	—	33	2.6	—	2.6	0.2	2.7	89.9	92.7
June qtr	70	—	—	70	6.2	—	6.2	1.0	7.3	52.0	59.2
TOTAL											
1996-97	5,112	651	26	5,789	449.3	47.0	496.3	116.9	613.2	568.7	1,181.9
1997-98	5,823	741	89	6,653	540.7	74.0	614.7	134.5	749.2	550.7	1,299.9
1998-99	6,296	1,062	57	7,416	629.0	142.3	771.3	139.7	910.9	623.7	1,534.7
1998 Mar. qtr	1,436	145	67	1,648	134.7	15.4	150.1	38.7	188.8	95.2	284.0
June qtr	1,397	154	7	1,558	138.1	14.8	152.9	30.4	183.3	169.1	352.4
Sept. qtr	1,610	336	34	1,980	152.9	31.7	184.7	35.0	219.6	131.1	350.7
Dec. qtr	1,699	263	3	1,965	171.7	59.4	231.1	34.3	265.4	134.8	400.2
1999 Mar. qtr	1,326	302	16	1,645	134.5	37.0	171.6	32.7	204.3	235.5	439.8
June qtr	1,661	161	4	1,826	169.8	14.1	183.9	37.7	221.6	122.3	344.0

**TABLE 6. VALUE OF NON-RESIDENTIAL BUILDING COMMENCED: ORIGINAL**  
(\$ million)

<i>Period</i>	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
<b>PRIVATE SECTOR</b>											
1996-97	37.3	91.1	40.6	53.2	79.8	17.3	1.0	40.4	27.5	35.2	423.4
1997-98	9.5	89.7	44.5	78.0	96.9	16.8	7.0	19.4	49.9	14.7	426.4
1998-99	24.3	127.0	42.4	46.8	69.5	25.9	2.1	23.4	30.6	7.8	400.1
1998 Mar. qtr	3.0	17.8	10.5	4.5	9.6	3.5	0.5	4.8	10.7	3.3	68.1
June qtr	1.9	23.3	4.9	7.4	67.3	3.4	0.6	4.9	14.7	6.1	134.5
Sept. qtr	15.4	13.1	23.2	10.7	12.0	7.6	0.2	2.0	2.2	3.0	89.5
Dec. qtr	4.9	21.4	11.6	17.3	20.7	3.4	0.8	11.0	2.8	0.7	94.6
1999 Mar. qtr	0.5	74.7	2.9	6.4	18.9	9.5	0.7	7.1	23.0	1.8	145.6
June qtr	3.5	17.8	4.7	12.4	17.9	5.5	0.4	3.3	2.6	2.3	70.4
<b>PUBLIC SECTOR</b>											
1996-97	0.9	2.3	1.9	33.8	9.6	48.8	1.1	11.1	22.3	13.5	145.4
1997-98	0.5	2.8	0.5	18.1	3.9	51.1	—	25.7	13.3	8.4	124.3
1998-99	1.0	2.3	0.9	14.2	21.4	116.2	—	36.4	13.2	17.9	223.7
1998 Mar. qtr	—	1.2	0.1	2.8	0.7	13.0	—	4.5	0.9	3.9	27.0
June qtr	—	0.2	0.1	9.2	1.0	12.6	—	1.6	7.7	2.3	34.7
Sept. qtr	0.3	0.6	0.1	2.4	7.8	18.6	—	6.6	3.3	1.7	41.5
Dec. qtr	0.7	1.2	—	2.9	5.2	21.6	—	6.3	2.0	0.5	40.2
1999 Mar. qtr	—	0.6	0.5	4.4	0.3	64.0	—	1.0	4.0	15.2	89.9
June qtr	—	—	0.3	4.5	8.1	12.0	—	22.6	3.9	0.5	52.0
<b>TOTAL</b>											
1996-97	38.2	93.4	42.5	87.0	89.3	66.1	2.1	51.5	49.8	48.7	568.7
1997-98	10.0	92.4	45.0	96.1	100.7	67.9	7.0	45.1	63.2	23.2	550.7
1998-99	25.3	129.4	43.3	61.1	91.0	142.2	2.1	59.9	43.8	25.7	623.7
1998 Mar. qtr	3.0	19.0	10.6	7.3	10.2	16.5	0.5	9.3	11.6	7.2	95.2
June qtr	1.9	23.5	5.0	16.6	68.3	16.0	0.6	6.6	22.4	8.4	169.1
Sept. qtr	15.7	13.7	23.4	13.2	19.8	26.2	0.2	8.6	5.5	4.7	131.1
Dec. qtr	5.6	22.6	11.6	20.2	25.9	25.0	0.8	17.2	4.8	1.2	134.8
1999 Mar. qtr	0.5	75.3	3.4	10.8	19.2	73.5	0.7	8.1	27.1	17.0	235.5
June qtr	3.5	17.8	4.9	16.9	26.1	17.5	0.4	25.9	6.4	2.8	122.3

TABLE 7. NUMBER AND VALUE OF BUILDING UNDER CONSTRUCTION AT END OF PERIOD: ORIGINAL

	Number of dwelling units				Value (\$m)						
	New houses	New other residential building	Conversions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-residential building	Total building
PRIVATE SECTOR											
1996-97	2,181	427	37	2,645	215.3	35.0	250.3	47.9	298.2	424.7	723.0
1997-98	2,191	471	75	2,737	239.8	53.7	293.5	62.9	356.4	319.1	675.5
1998-99	2,334	560	5	2,899	264.7	96.4	361.1	55.7	416.9	230.0	646.9
1998 Mar. qtr	2,214	462	75	2,751	229.1	49.3	278.4	55.5	333.9	283.4	617.3
June qtr	2,191	471	75	2,737	239.8	53.7	293.5	62.9	356.4	319.1	675.5
Sept. qtr	2,241	647	74	2,962	244.0	72.8	316.8	64.2	381.0	345.9	726.9
Dec. qtr	2,282	629	5	2,916	246.3	105.9	352.2	50.4	402.6	275.0	677.6
1999 Mar. qtr	2,105	658	20	2,783	235.5	109.7	345.2	47.9	393.2	260.6	653.7
June qtr	2,334	560	5	2,899	264.7	96.4	361.1	55.7	416.9	230.0	646.9
PUBLIC SECTOR											
1996-97	18	13	—	31	1.7	1.0	2.7	0.3	3.0	117.7	120.7
1997-98	92	5	—	97	6.3	0.3	6.7	—	6.7	75.8	82.5
1998-99	103	13	—	116	8.5	1.1	9.7	0.5	10.1	174.1	184.2
1998 Mar. qtr	61	15	—	76	4.5	1.1	5.6	0.1	5.7	77.1	82.8
June qtr	92	5	—	97	6.3	0.3	6.7	—	6.7	75.8	82.5
Sept. qtr	79	4	—	83	5.6	0.3	5.8	0.2	6.0	82.0	88.0
Dec. qtr	51	21	—	72	3.8	1.6	5.4	0.3	5.7	95.0	100.6
1999 Mar. qtr	54	13	—	67	3.8	1.1	5.0	0.1	5.1	140.3	145.3
June qtr	103	13	—	116	8.5	1.1	9.7	0.5	10.1	174.1	184.2
TOTAL											
1996-97	2,199	440	37	2,676	217.0	36.0	253.0	48.2	301.2	542.4	843.7
1997-98	2,283	476	75	2,834	246.1	54.0	300.1	62.9	363.1	394.9	757.9
1998-99	2,437	573	5	3,015	273.3	97.5	370.8	56.2	427.0	404.0	831.1
1998 Mar. qtr	2,275	477	75	2,827	233.6	50.4	284.0	55.6	339.6	360.5	700.1
June qtr	2,283	476	75	2,834	246.1	54.0	300.1	62.9	363.1	394.9	757.9
Sept. qtr	2,320	651	74	3,045	249.6	73.0	322.6	64.3	387.0	428.0	814.9
Dec. qtr	2,333	650	5	2,988	250.0	107.5	357.6	50.7	408.2	370.0	778.2
1999 Mar. qtr	2,159	671	20	2,850	239.3	110.9	350.2	48.0	398.2	400.8	799.0
June qtr	2,437	573	5	3,015	273.3	97.5	370.8	56.2	427.0	404.0	831.1



**TABLE 8. VALUE OF NON-RESIDENTIAL BUILDING UNDER CONSTRUCTION AT END OF PERIOD: ORIGINAL  
(\$ million)**

	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
<b>PRIVATE SECTOR</b>											
1996-97	33.6	143.7	30.1	16.1	67.4	10.7	1.3	55.8	26.8	39.1	424.7
1997-98	5.2	67.5	24.6	51.4	71.6	7.0	7.1	46.5	29.8	8.3	319.1
1998-99	23.1	86.6	11.3	14.5	28.7	10.5	1.7	17.9	31.2	4.4	230.0
1998 Mar. qtr	34.3	65.4	31.6	50.1	15.0	11.1	5.4	48.9	15.9	5.5	283.4
June qtr	5.2	67.5	24.6	51.4	71.6	7.0	7.1	46.5	29.8	8.3	319.1
Sept. qtr	19.1	58.6	41.3	57.1	69.9	11.9	5.5	43.9	28.8	10.0	345.9
Dec. qtr	21.0	54.9	52.5	11.4	49.8	11.7	6.1	51.2	11.3	5.0	275.0
1999 Mar. qtr	20.4	115.4	30.2	8.8	21.0	10.9	2.1	18.6	30.1	2.9	260.6
June qtr	23.1	86.6	11.3	14.5	28.7	10.5	1.7	17.9	31.2	4.4	230.0
<b>PUBLIC SECTOR</b>											
1996-97	—	0.7	—	26.3	1.6	29.0	1.1	9.3	14.3	35.4	117.7
1997-98	—	1.2	—	8.3	1.0	30.7	—	23.2	6.8	4.6	75.8
1998-99	—	—	0.3	7.1	8.3	104.7	—	33.6	5.0	15.1	174.1
1998 Mar. qtr	0.4	1.2	—	8.3	0.3	30.9	—	26.3	0.6	9.1	77.1
June qtr	—	1.2	—	8.3	1.0	30.7	—	23.2	6.8	4.6	75.8
Sept. qtr	—	1.2	—	4.6	8.6	36.7	—	15.6	10.2	5.1	82.0
Dec. qtr	—	1.1	—	4.7	13.5	46.8	—	18.5	5.5	4.8	95.0
1999 Mar. qtr	—	—	0.5	5.9	2.4	98.4	—	12.6	4.8	15.5	140.3
June qtr	—	—	0.3	7.1	8.3	104.7	—	33.6	5.0	15.1	174.1
<b>TOTAL</b>											
1996-97	33.6	144.3	30.1	42.5	69.0	39.7	2.4	65.1	41.1	74.5	542.4
1997-98	5.2	68.7	24.6	59.7	72.6	37.7	7.1	69.7	36.6	12.9	394.9
1998-99	23.1	86.6	11.6	21.6	37.0	115.2	1.7	51.5	36.2	19.5	404.0
1998 Mar. qtr	34.8	66.6	31.6	58.3	15.3	42.1	5.4	75.3	16.5	14.6	360.5
June qtr	5.2	68.7	24.6	59.7	72.6	37.7	7.1	69.7	36.6	12.9	394.9
Sept. qtr	19.1	59.8	41.3	61.6	78.5	48.6	5.5	59.4	39.0	15.1	428.0
Dec. qtr	21.0	56.0	52.5	16.1	63.3	58.6	6.1	69.7	16.8	9.8	370.0
1999 Mar. qtr	20.4	115.4	30.7	14.8	23.4	109.4	2.1	31.2	35.0	18.5	400.8
June qtr	23.1	86.6	11.6	21.6	37.0	115.2	1.7	51.5	36.2	19.5	404.0

**TABLE 9. NUMBER AND VALUE OF BUILDING COMPLETED: ORIGINAL**

TABLE 9. NUMBER AND VALUE OF BUILDING COMPLETED: ORIGINAL											
Period	Number of dwelling units				Value (\$m)						
	New houses	New other residential building	Conversions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to	Total residential building	Total non-residential building	Total building
								residential buildings			
PRIVATE SECTOR											
1996-97	4,551	648	10	5,209	408.9	52.9	461.8	121.9	583.7	328.2	911.8
1997-98	5,572	676	46	6,294	504.1	57.7	561.8	123.3	685.1	571.2	1,256.3
1998-99	5,928	868	125	6,922	599.4	98.7	698.1	151.4	849.6	505.3	1,354.9
1998 Mar. qtr	1,210	140	4	1,354	112.2	14.2	126.4	26.9	153.3	81.7	235.0
June qtr	1,352	140	7	1,499	125.3	10.7	136.0	24.5	160.5	110.1	270.6
Sept. qtr	1,507	156	33	1,696	148.1	13.0	161.1	35.6	196.7	68.2	264.9
Dec. qtr	1,594	180	72	1,846	168.4	21.8	190.2	49.0	239.1	174.9	414.1
1999 Mar. qtr	1,471	273	1	1,745	145.1	34.9	180.1	36.5	216.5	161.3	377.8
June qtr	1,356	259	19	1,635	137.8	29.0	166.8	30.4	197.2	101.0	298.1
PUBLIC SECTOR											
1996-97	73	2	3	78	5.1	0.1	5.3	1.8	7.0	256.2	263.2
1997-98	121	29	—	150	10.6	2.3	12.9	1.7	14.6	172.8	187.4
1998-99	194	17	2	213	14.2	1.0	15.2	1.8	16.9	134.0	151.0
1998 Mar. qtr	27	8	—	35	2.4	0.6	3.0	—	3.0	42.5	45.5
June qtr	32	15	—	47	2.8	1.1	3.8	0.1	4.0	37.9	41.9
Sept. qtr	60	5	2	67	4.4	0.3	4.7	0.4	5.2	38.6	43.7
Dec. qtr	83	4	—	87	5.7	0.2	5.9	0.4	6.3	28.4	34.6
1999 Mar. qtr	30	8	—	38	2.5	0.5	2.9	0.3	3.2	46.1	49.4
June qtr	21	—	—	21	1.6	—	1.6	0.7	2.3	21.0	23.2
TOTAL											
1996-97	4,624	650	13	5,287	414.1	53.0	467.1	123.6	590.7	584.3	1,175.0
1997-98	5,693	705	46	6,444	514.7	59.9	574.7	125.0	699.7	744.0	1,443.7
1998-99	6,122	885	127	7,135	613.6	99.7	713.3	153.2	866.5	639.4	1,505.9
1998 Mar. qtr	1,237	148	4	1,389	114.5	14.8	129.3	26.9	156.3	124.3	280.5
June qtr	1,384	155	7	1,546	128.1	11.8	139.8	24.6	164.4	148.0	312.5
Sept. qtr	1,567	161	35	1,763	152.4	13.4	165.8	36.1	201.9	106.7	308.6
Dec. qtr	1,677	184	72	1,933	174.1	22.0	196.1	49.3	245.4	203.3	448.7
1999 Mar. qtr	1,501	281	1	1,783	147.6	35.4	183.0	36.7	219.7	207.4	427.1
June qtr	1,377	259	19	1,656	139.4	29.0	168.4	31.0	199.4	122.0	321.4

**TABLE 10. VALUE OF NON-RESIDENTIAL BUILDING COMPLETED: ORIGINAL**  
(\$ million)

<i>Period</i>	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
<b>PRIVATE SECTOR</b>											
1996-97	12.8	58.6	21.0	52.8	87.6	14.2	0.6	44.0	24.2	12.3	328.2
1997-98	40.4	184.9	58.1	43.5	90.8	20.7	2.5	33.2	50.8	46.4	571.2
1998-99	7.1	111.2	59.0	84.5	117.7	22.8	8.3	52.9	29.9	11.8	505.3
1998 Mar. qtr	2.4	13.7	20.5	8.1	9.9	3.2	0.6	2.2	17.7	3.4	81.7
June qtr	31.1	25.8	17.8	6.2	10.9	8.0	—	6.1	0.8	3.3	110.1
Sept. qtr	1.4	22.8	8.1	4.9	15.5	3.0	2.6	5.0	3.4	1.4	68.2
Dec. qtr	2.9	27.5	2.1	63.9	44.4	3.7	0.1	4.1	20.5	5.6	174.9
1999 Mar. qtr	1.9	14.9	25.5	8.8	47.2	10.2	4.8	39.7	4.3	4.0	161.3
June qtr	0.8	46.0	23.3	6.8	10.7	6.0	0.8	4.0	1.8	0.8	101.0
<b>PUBLIC SECTOR</b>											
1996-97	0.9	8.3	2.6	81.5	23.7	111.2	—	13.0	10.1	4.8	256.2
1997-98	0.5	2.3	0.5	38.7	4.4	51.6	0.9	13.3	20.5	40.2	172.8
1998-99	1.0	3.5	0.6	17.6	14.5	45.7	—	27.2	16.6	7.4	134.0
1998 Mar. qtr	—	0.8	0.1	12.5	0.5	16.9	—	1.0	6.3	4.4	42.5
June qtr	0.4	0.2	0.1	9.1	0.3	13.0	—	6.3	1.6	6.9	37.9
Sept. qtr	0.3	0.6	0.1	7.9	0.2	12.7	—	14.3	1.4	1.0	38.6
Dec. qtr	0.7	1.3	—	2.7	0.3	12.8	—	3.3	6.4	0.9	28.4
1999 Mar. qtr	—	1.7	—	3.4	11.7	13.0	—	6.9	5.1	4.4	46.1
June qtr	—	—	0.5	3.6	2.3	7.2	—	2.7	3.7	1.1	21.0
<b>TOTAL</b>											
1996-97	13.7	67.0	23.6	134.3	111.3	125.4	0.6	57.0	34.3	17.1	584.3
1997-98	40.9	187.2	58.6	82.1	95.3	72.3	3.4	46.5	71.2	86.7	744.0
1998-99	8.1	114.8	59.6	102.1	132.2	68.5	8.3	80.1	46.5	19.3	639.4
1998 Mar. qtr	2.4	14.5	20.6	20.6	10.4	20.1	0.6	3.2	24.0	7.9	124.3
June qtr	31.6	26.0	17.9	15.3	11.2	21.0	—	12.5	2.4	10.2	148.0
Sept. qtr	1.7	23.4	8.2	12.8	15.7	15.7	2.6	19.3	4.8	2.5	106.7
Dec. qtr	3.6	28.8	2.1	66.6	44.7	16.5	0.1	7.5	26.9	6.5	203.3
1999 Mar. qtr	1.9	16.6	25.5	12.2	58.8	23.2	4.8	46.6	9.4	8.4	207.4
June qtr	0.8	46.0	23.7	10.5	13.0	13.1	0.8	6.7	5.4	1.9	122.0

**TABLE 11. VALUE OF BUILDING WORK DONE: ORIGINAL**  
(\$ million)

<i>Period</i>	<i>New houses</i>	<i>New other residential building</i>	<i>New residential building</i>	<i>Alterations and additions to residential buildings</i>	<i>Total residential building</i>	<i>Total non-residential building</i>	<i>Total building</i>
<b>PRIVATE SECTOR</b>							
1996-97	433.9	51.3	485.2	120.4	605.6	444.2	1,049.8
1997-98	522.9	67.5	590.4	130.0	720.4	538.9	1,259.3
1998-99	599.7	121.6	721.4	146.0	867.4	416.6	1,284.0
1998 Mar. qtr	130.5	16.9	147.4	31.3	178.6	119.1	297.7
June qtr	135.9	18.6	154.5	31.1	185.6	112.3	297.9
Sept. qtr	150.9	24.9	175.8	39.2	215.0	135.5	350.5
Dec. qtr	151.4	34.2	185.6	39.9	225.5	121.5	347.0
1999 Mar. qtr	142.4	27.1	169.5	33.1	202.6	87.5	290.1
June qtr	155.1	35.3	190.4	33.8	224.3	72.2	296.4
<b>PUBLIC SECTOR</b>							
1996-97	5.0	0.2	5.2	1.9	7.1	219.0	226.1
1997-98	12.8	2.2	15.0	1.6	16.6	146.1	162.7
1998-99	15.3	1.6	16.9	1.9	18.8	154.3	173.0
1998 Mar. qtr	2.4	0.2	2.6	0.1	2.7	30.1	32.8
June qtr	3.5	0.5	4.0	—	4.1	39.1	43.2
Sept. qtr	5.0	0.1	5.1	0.6	5.7	27.4	33.1
Dec. qtr	3.7	0.5	4.2	0.4	4.6	38.9	43.5
1999 Mar. qtr	2.5	0.5	3.0	0.2	3.2	43.6	46.7
June qtr	4.2	0.4	4.5	0.8	5.3	44.3	49.6
<b>TOTAL</b>							
1996-97	438.9	51.6	490.4	122.3	612.7	663.2	1,275.9
1997-98	535.7	69.8	605.4	131.6	737.0	685.0	1,422.0
1998-99	615.0	123.2	738.2	147.9	886.1	570.9	1,457.0
1998 Mar. qtr	132.8	17.1	149.9	31.4	181.3	149.2	330.4
June qtr	139.4	19.1	158.5	31.2	189.7	151.5	341.1
Sept. qtr	155.8	25.1	180.9	39.8	220.7	162.9	383.6
Dec. qtr	155.1	34.8	189.9	40.3	230.1	160.4	390.6
1999 Mar. qtr	144.9	27.6	172.5	33.2	205.7	131.1	336.8
June qtr	159.2	35.7	195.0	34.6	229.6	116.5	346.1

**TABLE 12. VALUE OF NON-RESIDENTIAL BUILDING WORK DONE: ORIGINAL**  
(\$ million)

<i>Period</i>	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
<b>PRIVATE SECTOR</b>											
1996-97	13.1	117.8	23.5	59.0	100.4	15.0	0.8	49.5	26.4	38.6	444.2
1997-98	35.0	161.2	68.2	56.5	74.1	20.2	7.8	43.8	51.1	20.9	538.9
1998-99	24.4	76.1	44.5	66.4	103.7	21.9	2.9	29.3	36.8	10.7	416.6
1998 Mar. qtr	8.4	36.1	22.5	11.4	12.5	5.3	1.9	12.7	4.7	3.5	119.1
June qtr	3.0	26.4	9.8	16.6	29.5	4.9	2.4	8.5	6.9	4.4	112.3
Sept. qtr	4.8	22.0	15.8	20.6	40.0	4.8	1.8	11.8	11.2	2.7	135.5
Dec. qtr	7.1	22.1	9.5	29.2	31.1	4.9	0.1	7.3	7.6	2.6	121.5
1999 Mar. qtr	6.7	14.4	13.1	8.3	16.2	8.9	0.4	6.1	9.7	3.7	87.5
June qtr	5.8	17.5	6.1	8.3	16.4	3.4	0.5	4.1	8.3	1.8	72.2
<b>PUBLIC SECTOR</b>											
1996-97	0.9	6.8	2.5	57.1	16.0	77.6	0.5	11.6	18.2	27.8	219.0
1997-98	0.5	3.1	0.5	26.5	4.2	53.5	0.4	28.6	14.3	14.4	146.1
1998-99	1.0	2.5	0.8	18.0	15.6	69.4	—	20.0	15.4	11.6	154.3
1998 Mar. qtr	0.2	0.7	0.1	4.7	0.6	12.0	—	9.7	1.1	1.1	30.1
June qtr	0.2	1.0	0.1	5.5	0.5	16.9	—	7.8	4.5	2.7	39.1
Sept. qtr	0.3	0.7	0.1	7.7	2.0	8.0	—	2.3	4.3	1.9	27.4
Dec. qtr	0.7	0.6	—	3.4	6.1	16.4	—	4.9	4.9	2.1	38.9
1999 Mar. qtr	—	1.2	0.4	2.7	5.6	22.7	—	6.1	2.4	2.4	43.6
June qtr	—	—	0.2	4.2	1.9	22.3	—	6.7	3.8	5.3	44.3
<b>TOTAL</b>											
1996-97	14.0	124.6	26.0	116.1	116.5	92.6	1.3	61.1	44.6	66.5	663.2
1997-98	35.5	164.4	68.7	83.0	78.3	73.7	8.1	72.5	65.4	35.3	685.0
1998-99	25.4	78.6	45.3	84.4	119.3	91.3	2.9	49.3	52.1	22.3	570.9
1998 Mar. qtr	8.6	36.8	22.6	16.1	13.1	17.3	1.9	22.3	5.8	4.5	149.2
June qtr	3.2	27.4	9.8	22.1	30.0	21.8	2.4	16.3	11.3	7.1	151.5
Sept. qtr	5.1	22.7	15.9	28.3	42.0	12.8	1.8	14.1	15.4	4.6	162.9
Dec. qtr	7.8	22.8	9.5	32.6	37.2	21.2	0.1	12.2	12.4	4.6	160.4
1999 Mar. qtr	6.7	15.6	13.5	11.0	21.8	31.6	0.4	12.2	12.1	6.0	131.1
June qtr	5.8	17.5	6.3	12.5	18.3	25.7	0.5	10.8	12.2	7.0	116.5

**TABLE 13. VALUE OF BUILDING WORK YET TO BE DONE AT END OF PERIOD: ORIGINAL**  
(\$ million)

	<i>New houses</i>	<i>New other residential building</i>	<i>New residential building</i>	<i>Alterations and additions to residential buildings</i>	<i>Total residential building</i>	<i>Total non-resi- dential building</i>	<i>Total building</i>
<b>PRIVATE SECTOR</b>							
1996-97	95.1	16.0	111.1	19.2	130.2	216.1	346.3
1997-98	102.0	24.9	126.9	27.7	154.5	143.2	297.7
1998-99	127.4	44.9	172.3	25.9	198.2	142.3	340.6
1998 Mar. qtr	101.6	28.4	129.9	26.8	156.8	109.4	266.2
June qtr	102.0	24.9	126.9	27.7	154.5	143.2	297.7
Sept. qtr	103.5	32.0	135.5	25.3	160.9	102.5	263.3
Dec. qtr	123.4	52.9	176.3	20.6	197.0	84.8	281.8
1999 Mar. qtr	115.4	64.6	180.0	21.6	201.6	144.1	345.7
June qtr	127.4	44.9	172.3	25.9	198.2	142.3	340.6
<b>PUBLIC SECTOR</b>							
1996-97	0.8	0.6	1.5	0.2	1.7	42.9	44.6
1997-98	3.3	—	3.3	—	3.3	28.3	31.7
1998-99	4.4	0.2	4.5	0.3	4.9	106.4	111.3
1998 Mar. qtr	2.2	0.3	2.4	—	2.5	30.9	33.4
June qtr	3.3	—	3.3	—	3.3	28.3	31.7
Sept. qtr	1.9	0.1	2.1	0.1	2.1	45.7	47.8
Dec. qtr	2.2	1.1	3.2	0.2	3.4	48.1	51.5
1999 Mar. qtr	2.2	0.5	2.8	0.1	2.9	95.9	98.8
June qtr	4.4	0.2	4.5	0.3	4.9	106.4	111.3
<b>TOTAL</b>							
1996-97	95.9	16.6	112.5	19.4	131.9	259.0	390.9
1997-98	105.3	24.9	130.2	27.7	157.8	171.5	329.4
1998-99	131.8	45.0	176.8	26.3	203.1	248.7	451.9
1998 Mar. qtr	103.8	28.6	132.4	26.9	159.2	140.3	299.5
June qtr	105.3	24.9	130.2	27.7	157.8	171.5	329.4
Sept. qtr	105.4	32.2	137.6	25.4	163.0	148.2	311.2
Dec. qtr	125.5	54.0	179.6	20.8	200.4	132.9	333.3
1999 Mar. qtr	117.7	65.1	182.8	21.7	204.5	240.0	444.5
June qtr	131.8	45.0	176.8	26.3	203.1	248.7	451.9

**TABLE 14. VALUE OF NON-RESIDENTIAL BUILDING WORK YET TO BE DONE AT END OF PERIOD: ORIGINAL**  
(\$ million)

	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
PRIVATE SECTOR											
1996-97	26.0	68.8	22.4	4.7	23.6	6.0	0.6	36.9	17.9	9.2	216.1
1997-98	3.0	16.6	6.8	26.8	44.5	2.8	1.1	17.2	20.5	3.9	143.2
1998-99	3.5	70.6	8.0	8.1	15.5	7.2	1.2	12.2	15.0	1.2	142.3
1998 Mar. qtr	3.9	15.0	5.7	35.9	6.6	3.7	1.8	21.8	12.7	2.2	109.4
June qtr	3.0	16.6	6.8	26.8	44.5	2.8	1.1	17.2	20.5	3.9	143.2
Sept. qtr	13.4	8.4	15.7	16.9	18.1	5.8	0.3	7.8	11.7	4.3	102.5
Dec. qtr	11.2	9.9	19.5	5.9	11.3	4.5	1.0	11.9	7.1	2.4	84.8
1999 Mar. qtr	5.8	70.9	9.7	3.9	13.5	5.0	1.2	12.9	20.5	0.7	144.1
June qtr	3.5	70.6	8.0	8.1	15.5	7.2	1.2	12.2	15.0	1.2	142.3
PUBLIC SECTOR											
1996-97	—	0.6	—	11.2	1.0	11.9	0.6	4.9	4.4	8.3	42.9
1997-98	—	0.2	—	5.4	0.7	11.7	—	3.4	3.7	3.3	28.3
1998-99	—	—	0.1	3.8	6.8	62.1	—	20.9	3.2	9.6	106.4
1998 Mar. qtr	0.2	1.0	—	1.7	0.1	15.8	—	8.0	0.5	3.6	30.9
June qtr	—	0.2	—	5.4	0.7	11.7	—	3.4	3.7	3.3	28.3
Sept. qtr	—	—	—	1.8	6.5	22.5	—	7.7	4.3	2.9	45.7
Dec. qtr	—	0.6	—	1.3	5.6	28.9	—	9.1	1.2	1.4	48.1
1999 Mar. qtr	—	—	—	3.1	0.6	70.9	—	3.9	3.2	14.2	95.9
June qtr	—	—	0.1	3.8	6.8	62.1	—	20.9	3.2	9.6	106.4
TOTAL											
1996-97	26.0	69.4	22.4	15.9	24.6	17.9	1.3	41.8	22.2	17.5	259.0
1997-98	3.0	16.8	6.8	32.2	45.2	14.5	1.1	20.6	24.2	7.2	171.5
1998-99	3.5	70.6	8.0	11.8	22.3	69.2	1.2	33.1	18.2	10.8	248.7
1998 Mar. qtr	4.1	16.0	5.7	37.6	6.7	19.6	1.8	29.8	13.1	5.8	140.3
June qtr	3.0	16.8	6.8	32.2	45.2	14.5	1.1	20.6	24.2	7.2	171.5
Sept. qtr	13.4	8.5	15.7	18.7	24.6	28.3	0.3	15.5	16.0	7.2	148.2
Dec. qtr	11.2	10.5	19.5	7.2	16.9	33.4	1.0	21.0	8.3	3.8	132.9
1999 Mar. qtr	5.8	70.9	9.7	7.0	14.1	75.9	1.2	16.9	23.7	14.9	240.0
June qtr	3.5	70.6	8.0	11.8	22.3	69.2	1.2	33.1	18.2	10.8	248.7

**TABLE 15. BUILDING ACTIVITY RELATIVE STANDARD ERRORS, JUNE QUARTER 1999**  
(Percentage)

(Percentage)						
Ownership and stage of construction	New residential building				Value	
	Houses		Total		Alterations and additions to residential buildings	Total building
	Number	Value	Number of dwelling units	Value		
TOTAL PRIVATE AND PUBLIC SECTORS						
Commenced	3.2	3.0	2.9	2.8	6.1	1.7
Under construction at end of period	3.0	3.0	2.4	2.2	6.1	1.0
Completed	4.7	4.9	4.0	4.1	7.3	2.3
Value of work done	..	2.7	..	2.3	5.0	1.4
Value of work yet to be done	..	3.4	..	2.5	6.8	1.1



## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication contains detailed results from the quarterly Building Activity Survey. Each issue includes revisions to the previous quarter. Therefore data for the latest quarter should be considered to be preliminary only.

**2** The statistics are compiled on the basis of returns collected from builders and other individuals and organisations engaged in building activity. The quarterly survey consists of two components:

- a sample survey of private sector house building activity involving new house construction or alterations and additions valued at \$10,000 or more to houses; and
- a complete enumeration of jobs involving construction of new residential buildings other than private sector houses, all alterations and additions to residential buildings (other than private sector houses) with an approval value of \$10,000 or more, and all non-residential building jobs with an approval value of \$50,000 or more.

**3** From the September quarter 1990, only non-residential building jobs (both new and alterations and additions) with an approval value of \$50,000 (previously \$30,000) or more are included in the survey.

**4** The use of sample survey techniques in the Building Activity Survey means that reliable estimates of private sector house building activity, including alterations and additions to houses, are generally only available at the State, Territory and Australia levels. The Northern Territory has been completely enumerated since the June quarter 1991 and small area data are available on request. Also, data for regions below State and Territory level are available from the building approvals series compiled by the ABS and based on information reported by local government and other reporting authorities.

### SCOPE AND COVERAGE

**5** The statistics relate to *building* activity which includes construction of new buildings and alterations and additions to existing buildings. Construction activity not defined as building (e.g. construction of roads, bridges, railways, earthworks etc.) is excluded.

**6** Building jobs included in each quarter in the Building Activity Survey comprise those jobs selected in previous quarters which have not been completed (or commenced) by the end of the previous quarter and those jobs newly selected in the current quarter. The population list from which jobs are selected for inclusion comprises all approved building jobs which were notified to the ABS (refer paragraph 2) up to but not including the last month of the reference quarter (e.g. up to the end of August in respect of the September quarter survey). This introduces a lag to the statistics in respect of those jobs notified *and* commenced in the last month of the reference quarter (e.g. for the month of September in respect of the September quarter survey). For example, jobs which were notified as approved in the month of June and which actually commenced in that month are shown as commencements in the September quarter. Similarly, building jobs which were notified in the month of September and which actually commenced in that month are shown as commencements in the December quarter.

## DEFINITIONS

**7** A *building* is defined as a rigid, fixed and permanent structure which has a roof. Its intended purpose is primarily to house people, plant, machinery, vehicles, goods or livestock. An integral feature of a building's design, to satisfy its intended use, is the provision for regular access by persons.

**8** A *dwelling unit* is defined as a self-contained suite of rooms, including cooking and bathing facilities and intended for *long-term* residential use. Units (whether self-contained or not) within buildings offering institutional care, such as hospitals, or temporary accommodation such as motels, hostels and holiday apartments, are not defined as dwelling units. The value of units of this type is included in the appropriate category of non-residential building.

**9** A *residential building* is defined as a building predominantly consisting of one or more dwelling units. Residential buildings can be either *houses* or *other residential buildings*.

- A *house* is defined as a detached building predominantly used for long-term residential purposes and consisting of only one dwelling unit. Thus, detached 'granny flats' and detached dwelling units (such as caretakers' residences) associated with non-residential buildings are defined as houses for the purpose of these statistics.

- An *other residential building* is defined as a building which is predominantly used for long-term residential purposes and which contains (or has attached to it) more than one dwelling unit (e.g. includes townhouses, duplexes, apartment buildings, etc.).

**10** From the June quarter 1996 issue of this publication, the number of dwelling units created as part of alterations and additions to, or conversions of, existing residential or non-residential buildings, and as part of the construction of non-residential building, is shown separately in tables 5, 7, and 9 under the heading of 'Conversions, etc.', and is included in the total number of dwelling units shown in these tables. Previously, such dwellings were only included as a footnote.

**11** In addition, the seasonally adjusted estimates for the total number of dwelling units commenced and completed, shown in table 4, include these conversions, etc. Previously, only dwelling units created as part of the construction of new residential buildings were included in these estimates.

**12** *Commenced*. A building job is regarded as commenced when the first physical building activity has been performed on site in the form of materials fixed in place and/or labour expended (this includes site preparation but excludes delivery of building materials, the drawing of plans and specifications and the construction of non-building infrastructures, such as roads).

**13** *Under construction*. A building job is regarded as being under construction at the end of a period if it has been commenced but has not been completed, and work on it has not been abandoned.

**14** *Completed*. A building job is defined as completed when building activity has progressed to the stage where the building can fulfil its intended function. In practice, the ABS regards buildings as completed when notified as such by respondents to the survey.

### VALUATION OF BUILDINGS JOBS

**15** The value series in this publication are derived from estimates reported on survey returns as follows:

- *Value of building commenced or under construction* represents the anticipated completion value based, where practicable, on estimated market or contract price of building jobs excluding the value of land and landscaping. Site preparation costs are included. Where jobs proceed over several quarters, the anticipated completion value reported on the return for the first (commencement) quarter may be amended on returns for subsequent (under construction) quarters as the job nears completion.
- *Value of building completed* represents the actual completion value based, where practicable, on the market or contract price of jobs including site preparation costs but excluding the value of land and landscaping.
- *Value of building work done during the period* represents the estimated value of building work actually carried out during the quarter on jobs which have commenced.
- *Value of building work yet to be done* represents the difference between the anticipated completion value and the estimated value of work done on jobs up to the end of the period.

### BUILDING CLASSIFICATION

**16** *Ownership*. The ownership of a building is classified as either *public sector* or *private sector* according to the sector of the intended owner of the completed building as evident at the time of approval. Residential buildings being constructed by private sector builders under government housing authority schemes whereby the authority has contracted, or intends to contract, to purchase the buildings on or before completion, are classified as public sector.

**17** *Functional classification of buildings*. A building is classified according to its intended major function. Hence, a building which is ancillary to other buildings or forms a part of a group of related buildings is classified to the function of the building and not to the function of the group as a whole. An example of this can be seen in the treatment of building work approved for a factory complex. In this case a detached administration building would be classified to Offices, a detached cafeteria building to Shops, while factory buildings would be classified to Factories. An exception to this rule is the treatment of group accommodation buildings where, for example, a student accommodation building on a university campus would be classified to Educational.

**18** Examples of the types of buildings included under each main functional heading are shown in the following list:

- *Houses*. Includes cottages, bungalows, detached caretakers'/managers' cottages, rectories.
- *Other residential buildings*. Includes blocks of flats, home units, attached townhouses, villa units, terrace houses, semi-detached houses, maisonettes.
- *Hotels, etc.* Includes motels, hostels, boarding houses, guest houses, holiday apartment buildings.
- *Shops*. Includes retail shops, restaurants, cafes, taverns, dry cleaners, laundromats, hair salons, shopping arcades.

## EXPLANATORY NOTES *continued*

### BUILDING CLASSIFICATION *continued*

- *Factories*. Includes paper mills, oil refinery buildings, brickworks, foundries, powerhouses, manufacturing laboratories, workshops as part of a manufacturing process.
- *Offices*. Includes banks, post offices, council chambers, head and regional offices.
- *Other business premises*. Includes warehouses, storage depots, service stations, transport depots and terminals, car parks, electricity substation buildings, pumping station buildings, telephone exchanges, mail sorting centres, broadcasting stations, film studios.
- *Educational*. Includes schools, colleges, universities, kindergartens, libraries, museums, art galleries, research and teaching laboratories, theological colleges.
- *Religious*. Includes churches, chapels, temples.
- *Health*. Includes hospitals, nursing homes, surgeries, clinics, medical centres.
- *Entertainment and recreational*. Includes clubs, theatres, cinemas, public halls, gymnasiums, grandstands, squash courts, sports and recreation centres;
- *Miscellaneous*. Includes law courts, homes for the aged (where medical care is not provided as a normal service), orphanages, gaols, barracks, mine buildings, glasshouses, livestock sheds, shearing sheds, fruit and skin drying sheds, public toilets, and ambulance, fire and police stations.

### RELIABILITY OF THE ESTIMATES

**19** Since the figures for private sector house building activity (including alterations and additions to private sector houses) are derived from information obtained from a sample of approved building jobs, they are subject to sampling error; that is, they may differ from the figures that would have been obtained if information for all approved jobs for the relevant period had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of approved jobs was included. There are about two chances in three that a sample estimate will differ by less than one SE from the figure that would have been obtained if all approved jobs had been included, and about nineteen chances in twenty that the difference will be less than two SEs. Another measure of sampling variability is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate to which it refers. The RSEs of estimates provide an indication of the percentage errors likely to have occurred due to sampling, and are shown in table 15.

**20** An example of the use of RSEs is as follows. Assume that the estimate of the number of new private sector houses commenced during the latest quarter is 2,000 (for actual estimate see table 5) and that the associated RSE is 2.5 per cent (for actual percentage see table 15). There would then be about two chances in three that the number which would have been obtained if information had been collected about all approved private sector house jobs would have been within the range 1,950 to 2,050 (2.5 per cent of 2,000 is 50) and about nineteen chances in twenty that the number would have been within the range 1,900 to 2,100.

## EXPLANATORY NOTES *continued*

### RELIABILITY OF THE ESTIMATES *continued*

**21** The imprecision due to sampling variability, which is measured by the RSE, should not be confused with inaccuracies that may occur because of inadequacies in the source of building approval information, imperfections in reporting by respondents, and errors made in the coding and processing of data. Inaccuracies of this kind are referred to as non-sampling error, and may occur in any enumeration whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by the careful design of questionnaires, efforts to obtain responses for all selected jobs, and efficient operating procedures.

### SEASONAL ADJUSTMENT

**22** Seasonally adjusted building statistics are shown in tables 2–4. In the seasonally adjusted series, account has been taken of normal seasonal factors and the effect of movement in the date of Easter which may, in successive years, affect figures for different quarters. Further information about seasonal adjustment can be obtained from the Assistant Director of Time Series Analysis on Canberra 02 6252 6345.

**23** Since seasonally adjusted statistics reflect both irregular and trend movements, an upward or downward movement in a seasonally adjusted series does not necessarily indicate a change of trend. Particular care should therefore be taken in interpreting individual quarter to quarter movements. Each of the component series shown has been seasonally adjusted independently. As a consequence, while the unadjusted components in the original series shown add to the totals, the adjusted components may not add to the adjusted totals. Further, the difference between independently seasonally adjusted series does not necessarily produce series which are optimal or even adequate adjustments of the similarly derived original series. Thus the figures which can be derived by subtracting seasonally adjusted private sector dwelling units from the seasonally adjusted total should not be used to represent seasonally adjusted public sector dwelling units.

**24** As happens with all seasonally adjusted series, the seasonal factors are reviewed annually to take account of each additional year's data. For the Building Activity Survey, the results of the latest review are shown in the December quarter issue each year.

### CHAIN VOLUME MEASURES

**25** Chain volume estimates of the value of commencements and work done are shown in tables 1 and 2. While current price estimates of the value of commencements and work done reflect both price and volume changes, chain volume estimates measure changes in value after the direct effects of price changes have been eliminated and therefore only reflect volume changes. The deflators used to revalue the current price estimates in this publication are derived from the same price data underlying the deflators compiled for the dwellings and new other building components of the national accounts aggregate 'Gross fixed capital formation'.

**26** The chain volume measures of commencements and work done appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in a chosen reference year (currently 1997–98). The reference year will be updated annually in the June quarter publication. Each year's data in the value of commencements and work done series are based on the prices of the previous year, except for the quarters of the latest incomplete year which are based upon the current reference year (i.e. 1997–98). Comparability with previous years is achieved by linking (or chaining) the series together to form a continuous time series. Further information on the nature and concepts of chain volume measures is contained in the *ABS Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts* (Cat. no. 5248.0).

**27** The factors used to seasonally adjust the chain volume measures are identical to those used to adjust the corresponding current price series.

## ACKNOWLEDGMENT

**28** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

## UNPUBLISHED DATA AND RELATED PUBLICATIONS

**29** The ABS can also make available certain building approvals and activity data which are not published. Where it is not practicable to provide the required information by telephone, it can be provided via fax, photocopy, computer printout, floppy disk and email. A charge may be made for providing unpublished information in these forms. Inquiries should be made to Information Inquiries on Adelaide 08 8237 7400 or any ABS State office.

**30** Users may also wish to refer to the following building and construction publications which are available on request:

*Building Activity, Australia* (Cat. no. 8752.0) — issued quarterly

*Building Activity, Australia: Building Work Done, Preliminary*  
(Cat. no. 8755.0) — issued quarterly

*Building Activity, Australia: Dwelling Unit Commencements, Preliminary*  
(Cat. no. 8750.0) — issued quarterly

*Building Approvals, Australia* (Cat. no. 8731.0) — issued monthly

*Building Approvals, South Australia* (Cat. no. 8731.4) — issued monthly

*Engineering Construction Activity, Australia* (Cat. no. 8762.0) —  
issued quarterly

*Housing Finance for Owner Occupation, Australia* (Cat. no. 5609.0) —  
issued monthly

**31** Current publications produced by the ABS are listed in the *Catalogue of Publications and Products* (Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.



## SELF-HELP ACCESS TO STATISTICS

<i>CPI INFOLINE</i>	For current and historical Consumer Price Index data, call 1902 981 074 (call cost 75c per minute).
<i>DIAL-A-STATISTIC</i>	For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 75c per minute).
<i>INTERNET</i>	<a href="http://www.abs.gov.au">www.abs.gov.au</a>
<i>LIBRARY</i>	A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require.

## WHY NOT SUBSCRIBE?

<i>PHONE</i>	+61 1300 366 323
<i>FAX</i>	+61 03 9615 7848

## CONSULTANCY SERVICES

ABS offers consultancy services on a user pays basis to help you access published and unpublished data. Data that is already published and can be provided within 5 minutes is free of charge. Statistical methodological services are also available. Please contact:

<i>INQUIRIES</i>	<i>City</i>	<i>By phone</i>	<i>By fax</i>
	Canberra	02 6252 6627	02 6207 0282
	Sydney	02 9268 4611	02 9268 4668
	Melbourne	03 9615 7755	03 9615 7798
	Brisbane	07 3222 6351	07 3222 6283
	Perth	08 9360 5140	08 9360 5955
	Adelaide	08 8237 7400	08 8237 7566
	Hobart	03 6222 5800	03 6222 5995
	Darwin	08 8943 2111	08 8981 1218

*POST* Client Services, ABS, PO Box 10, Belconnen ACT 2616

*EMAIL* [client.services@abs.gov.au](mailto:client.services@abs.gov.au)



2875240006994  
ISSN 0726-1896

RRP \$16.50