

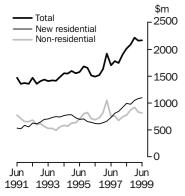
# **BUILDING ACTIVITY**

VICTORIA

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

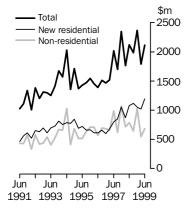
#### Value of work done

Volume terms Seasonally adjusted



#### Value of work commenced

Volume terms



 For further information about these and related statistics, contact Roger Mableson 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

SEASONALLY ADJUSTED	Jun qtr 99	Mar qtr 99 to Jun qtr 99 % change	Jun qtr 98 to Jun qtr 99 % change
Value of work done(a) (\$m)	2 165.6	0.3	7.5
New residential building (\$m)	1 099.7	1.4	10.7
Alterations and additions(b) (\$m)	244.3	0.1	1.6
Non-residential building (\$m)	820.2	-1.1	5.5
Total dwelling units commenced (no.)	10 306	6.7	10.3
New private sector houses (no.)	7 857	15.0	10.4

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

### JUNE OTR KEY POINTS

### VALUE OF WORK DONE, VOLUME TERMS

- In seasonally adjusted terms, total building work done rose marginally (by 0.3%) in the June quarter to \$2,165.6m. This was 7.5% above the level for the previous June quarter.
- Work done on new residential building rose by 1.4% to \$1,099.7m, a high for this series. New houses rose by 3.4% to the highest level for 10 years. New other residential buildings fell by 5.2% following a fall of 2.9% in the March quarter, but the December quarter 1998 was the high for the series.
- Work done on non-residential building fell by 1.1% to \$820.2m following a 9.9% fall in the March quarter.

### VALUE OF WORK COMMENCED, VOLUME TERMS

- Total building work commenced rose by 18.4% to \$2,115.6m, approximately the same level as a year earlier.
- New residential building commenced rose by 17.1% to \$1,196.4m. This level is a new high for the series and double the level for the recent low in the December quarter 1996. New house commencements rose by 22.0% to the highest level for 10 years.
- Non-residential building commenced rose by 23.9% to \$680.1m, following a fall of 46.6% in the March quarter.

## NUMBER OF DWELLING UNITS COMMENCED

■ In seasonally adjusted terms, the total number of dwelling units commenced rose by 6.7% to 10,306, with new private sector houses up by 15.0%.

### VALUE OF WORK YET TO BE DONE

■ Work yet to be done on jobs under construction at the end of June 1999 rose by 0.9% to \$2,821.9m. This was 1.25 times the value of work done for the quarter (1.11 for residential building and 1.48 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

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.

Zia ABBASI Regional Director Victoria

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

	New re	sidential building		Alterations and	Non-residential b	uilding	
Period	Oi Houses	her residential building	Total	additions to residential buildings	Private sector	Total	Total building
1996-97	2,088.0	644.5	2,730.9	766.1	2,076.5	3,020.8	6,509.9
1997-98	3,004.5	846.0	3,850.4	891.0	2,607.8	3,189.9	7,931.4
1998-99	3,434.0	955.9	4,389.9	963.7	2,008.1	2,898.9	8,252.4
1998 Mar. qtr	659.6	208.8	867.8	186.6	570.9	712.0	1,766.4
June qtr	869.7	209.8	1,080.1	251.6	667.4	786.3	2,119.2
Sept. qtr	858.8	259.6	1,118.4	220.4	494.1	642.0	1,980.8
Dec. qtr	866.9	186.9	1,053.8	287.6	626.4	1,027.8	2,369.1
1999 Mar. qtr	769.4	251.9	1,021.3	216.6	370.8	549.0	1,786.9
June qtr	938.9	257.5	1,196.4	239.1	516.8	680.1	2,115.6

<sup>(</sup>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)

			(2 mmon	)			
	New re	sidential building		Alterations and additions to	Non-residential b	uilding	
	Oi	her residential		residential	Private		Total
Period	Houses	building Total		buildings	sector	Total	building
			ORIGINA	L			
1996-97	2,003.6	645.7	2,646.9	780.9	2,630.1	3,348.9	6,766.4
1997-98	2,808.4	760.2	3,568.6	911.4	2,240.3	2,960.4	7,440.5
1998-99	3,297.8	913.8	4,211.4	977.0	2,639.8	3,439.1	8,627.6
1998 Mar. qtr	666.6	172.2	839.0	212.9	512.7	685.8	1,737.6
June qtr	773.2	218.9	991.9	249.3	615.9	777.0	2,018.2
Sept. qtr	801.5	210.1	1,011.5	226.5	710.4	880.7	2,118.7
Dec. qtr	867.5	247.6	1,115.1	277.7	776.7	986.5	2,379.4
1999 Mar. qtr	766.9	220.9	987.8	219.3	557.6	757.8	1,964.9
June qtr	861.9	235.2	1,097.0	253.5	595.1	814.1	2,164.6
		SEA	SONALLY AI	DJUSTED			
1998 Mar. qtr	728.6	190.6	919.9	236.8	565.5	748.3	1,906.1
June qtr	777.8	215.8	993.0	240.4	608.0	777.8	2,014.0
Sept. qtr	789.8	190.0	980.2	235.3	694.8	869.4	2,084.8
Dec. qtr	800.5	250.3	1,046.8	253.4	737.6	920.1	2,218.0
1999 Mar. qtr	839.4	243.0	1,084.8	244.0	617.0	829.3	2,159.1
June qtr	868.1	230.4	1,099.7	244.3	590.3	820.2	2,165.6

<sup>(</sup>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)

	New re	sidential building		Alterations and	Non-residential bu	ilding	
Period	Ot Houses	her residential building	Total	additions to — residential buildings	Private sector	Total	Total building
1998 Mar. qtr	731.6	191.9	924.5	237.1	570.6	756.4	1,918.9
June qtr	781.4	220.5	1,001.7	240.8	619.3	793.7	2,038.4
Sept. qtr	795.0	194.4	989.8	236.2	706.0	884.5	2,110.3
Dec. qtr	809.3	257.5	1,061.5	255.5	757.0	945.2	2,260.0
1999 Mar. qtr	860.0	252.5	1,113.4	249.4	636.1	855.7	2,219.5
June qtr	904.0	241.5	1,145.2	253.8	612.5	851.7	2,252.1

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

		New hor	uses	Total dwelling units (includes conversions etc)					
	Private sector		Total		Privato sector		Total		
Period	Commenced	Completed	Commenced	Completed	Commenced	Completed	Commenced	Completed	
1998 Mar. qtr	6,403	5,756	6,532	5,827	8,416	7,627	8,709	7,799	
June qtr	7,116	6,306	7,208	6,425	9,082	8,539	9,346	8,749	
Sept. qtr	7,007	6,927	7,177	7,032	9,371	8,387	9,662	8,595	
Dec. qtr	6,819	6,028	7,016	6,118	9,007	7,958	9,289	8,147	
1999 Mar. qtr	6,831	6,119	7,023	6,344	9,360	7,863	9,659	8,294	
June qtr	7,857	6,837	7,954	7,004	10,110	9,506	10,306	9,776	

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

		Number of dw	elling units					Value (\$m)			
Period	New houses	New other residential building	Con- versions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-resi- dential building	Total building
				PRI	IVATE SE	CTOR					
1996-97	18,395	5,636	1,118	25,150	2,048.9	592.2	2,641.1	727.7	3,368.8	2,005.6	5,374.4
1997-98	25,701	7,060	1,317	34,078	2,978.5	812.1	3,790.7	833.6	4,624.3	2,607.8	7,232.2
1998-99	28,512	7,799	1,543	37,854	3,447.6	955.9	4,403.5	951.4	5,354.8	2,066.8	7,421.6
1998 Mar. qtr	5,901	1,774	148	7,823	649.3	199.3	848.6	168.5	1,017.2	574.1	1,591.3
June qtr	7,092	1,734	471	9,297	864.7	202.0	1,066.8	231.1	1,297.9	675.5	1,973.4
Sept. qtr	7,164	1,905	298	9,368	846.1	256.9	1,103.0	213.1	1,316.2	502.8	1,819.0
Dec. qtr	7,214	1,592	632	9,438	861.0	185.4	1,046.4	282.3	1,328.7	642.5	1,971.2
1999 Mar. qtr	6,302	2,038	355	8,695	770.7	250.9	1,021.7	212.3	1,234.0	383.2	1,617.2
June qtr	7,832	2,264	258	10,353	969.8	262.6	1,232.4	243.6	1,475.9	538.3	2,014.2
				PU	BLIC SEC	CTOR					
1996-97	257	411	13	681	24.4	26.7	51.1	33.2	84.3	912.3	996.7
1997-98	303	538	23	864	26.0	33.8	59.8	57.5	117.3	581.9	699.2
1998-99	653	386	24	1,063	55.0	25.8	80.8	35.9	116.7	916.5	1,033.2
1998 Mar. qtr	133	150	21	304	11.6	10.7	22.3	18.5	40.8	142.0	182.8
June qtr	73	160	2	235	6.7	10.1	16.8	20.7	37.5	120.4	157.8
Sept. qtr	198	95	1	294	16.3	6.7	23.0	8.7	31.7	150.6	182.3
Dec. qtr	185	90	21	296	14.4	5.6	20.0	8.7	28.7	411.8	440.5
1999 Mar. qtr	192	121	_	313	16.5	8.6	25.1	11.5	36.6	184.1	220.7
June qtr	78	80	2	160	7.8	4.9	12.7	7.0	19.7	170.1	189.8
					TOTAL	,					
1996-97	18,652	6,047	1,131	25,831	2,073.3	618.9	2,692.2	761.0	3,453.1	2,917.9	6,371.1
1997-98	26,004	7,598	1,340	34,942	3,004.5	846.0	3,850.5	891.1	4,741.6	3,189.8	7,931.4
1998-99	29,165	8,185	1,567	38,917	3,502.6	981.7	4,484.3	987.3	5,471.5	2,983.3	8,454.8
1998 Mar. qtr	6,034	1,924	169	8,127	660.9	210.0	870.9	187.0	1,057.9	716.1	1,774.0
June qtr	7,165	1,894	473	9,532	871.4	212.2	1,083.5	251.9	1,335.4	795.9	2,131.3
Sept. qtr	7,362	2,000	299	9,662	862.4	263.6	1,126.0	221.9	1,347.9	653.4	2,001.3
Dec. qtr	7,399	1,682	653	9,734	875.4	191.0	1,066.4	291.0	1,357.4	1,054.3	2,411.7
1999 Mar. qtr	6,494	2,159	355	9,008	787.2	259.6	1,046.8	223.8	1,270.6	567.3	1,837.9
June qtr	7,910	2,344	260	10,513	977.6	267.5	1,245.1	250.6	1,495.6	708.3	2,204.0

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

					(ф инино	11)					
Period	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertain- ment and recreational	Miscel- laneous	Total non-resi- dential building
				PR	IVATE SE	CTOR					
1996-97	258.3	325.9	323.4	356.4	294.5	79.4	11.9	136.8	73.3	145.7	2,005.6
1997-98	138.9	591.1	238.5	379.0	500.2	127.6	18.3	112.7	410.9	90.6	2,607.8
1998-99	170.0	414.4	259.1	328.3	387.0	134.3	18.7	110.9	191.6	52.4	2,066.8
1998 Mar. qtr	41.1	132.8	54.1	80.3	158.5	23.7	2.7	37.4	8.8	34.6	574.1
June qtr	20.2	258.8	44.6	115.4	119.0	50.9	2.8	25.8	13.2	24.7	675.5
Sept. qtr	12.5	108.7	52.3	90.1	124.0	49.5	3.6	10.4	39.0	12.7	502.8
Dec. qtr	90.1	114.9	79.6	102.3	116.4	40.6	5.7	54.3	25.6	12.9	642.5
1999 Mar. qtr	24.5	73.5	62.3	64.9	58.6	24.7	5.5	21.3	33.0	14.8	383.2
June qtr	42.8	117.3	64.8	71.0	88.0	19.6	3.9	24.9	94.0	12.0	538.3
				PU	UBLIC SEC	CTOR					
1996-97	1.7	22.4	20.4	152.2	11.9	330.9	_	166.7	39.2	166.9	912.3
1997-98	1.7	7.4	3.2	49.6	131.9	143.2	_	137.5	42.7	64.7	581.9
1998-99	6.5	28.3	5.1	97.3	61.2	327.9	0.8	104.3	210.8	74.3	916.5
1998 Mar. qtr	0.2	1.4	_	11.5	49.5	42.0	_	5.2	10.5	21.7	142.0
June qtr	1.5	0.6	0.5	3.7	7.1	28.5	_	41.8	11.0	25.7	120.4
Sept. qtr	0.3	2.6	2.6	12.4	7.2	83.1	_	16.3	14.0	12.0	150.6
Dec. qtr	0.3	22.8	0.3	33.9	27.5	134.9	_	40.8	124.4	26.6	411.8
1999 Mar. qtr	4.7	1.8	2.1	33.4	22.8	73.5	_	19.9	5.0	21.0	184.1
June qtr	1.1	1.0	0.1	17.6	3.8	36.3	0.8	27.4	67.3	14.6	170.1
					TOTAL	_					
1996-97	260.0	348.2	343.8	508.5	306.4	410.3	11.9	303.6	112.4	312.6	2,917.9
1997-98	140.6	598.5	241.8	428.6	632.1	270.9	18.3	250.2	453.5	155.3	3,189.8
1998-99	176.4	442.7	264.2	425.6	448.3	462.2	19.5	215.2	402.4	126.7	2,983.3
1998 Mar. qtr	41.4	134.1	54.1	91.8	208.0	65.7	2.7	42.6	19.4	56.2	716.1
June qtr	21.7	259.4	45.0	119.2	126.1	79.4	2.8	67.7	24.2	50.4	795.9
Sept. qtr	12.9	111.3	54.9	102.5	131.1	132.6	3.6	26.7	53.0	24.7	653.4
Dec. qtr	90.4	137.8	79.9	136.2	144.0	175.6	5.7	95.1	150.1	39.5	1,054.3
1999 Mar. qtr	29.3	75.3	64.4	98.3	81.4	98.2	5.5	41.1	38.0	35.8	567.3
June qtr	43.9	118.4	64.9	88.6	91.8	55.9	4.7	52.2	161.3	26.6	708.3

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

		Number of dw	elling units		$Value\ (\$m)$						
	New houses	New other residential building	Con- versions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-resi- dential building	Total building
				PR	IVATE SE	CTOR					
1996-97	8,826	3,920	1,024	13,770	1,076.9	469.6	1,546.5	351.5	1,898.0	2,271.0	4,169.0
1997-98	12,226	4,826	702	17,754	1,577.1	663.6	2,240.8	393.3	2,634.1	2,131.7	4,765.8
1998-99	14,721	5,972	926	21,619	1,948.8	847.8	2,796.6	444.8	3,241.3	2,015.6	5,256.9
1998 Mar. qtr	11,320	4,538	579	16,437	1,399.3	607.3	2,006.6	347.7	2,354.4	1,862.9	4,217.2
June qtr	12,226	4,826	702	17,754	1,577.1	663.6	2,240.8	393.3	2,634.1	2,131.7	4,765.8
Sept. qtr	12,469	5,079	781	18,329	1,632.2	749.9	2,382.2	397.1	2,779.3	2,130.3	4,909.5
Dec. qtr	12,820	4,903	1,122	18,845	1,661.8	725.5	2,387.4	436.5	2,823.8	2,110.1	4,933.9
1999 Mar. qtr	13,538	5,511	1,184	20,233	1,782.4	819.7	2,602.1	456.3	3,058.4	1,979.5	5,037.9
June qtr	14,721	5,972	926	21,619	1,948.8	847.8	2,796.6	444.8	3,241.3	2,015.6	5,256.9
				PU	BLIC SEC	CTOR					
1996-97	111	231	4	346	13.0	22.8	35.8	7.0	42.8	749.7	792.6
1997-98	142	322	23	487	11.8	21.5	33.3	19.1	52.4	724.4	776.8
1998-99	214	225	4	443	19.4	15.1	34.5	9.7	44.2	1,015.6	1,059.8
1998 Mar. qtr	192	268	21	481	16.1	17.3	33.4	18.8	52.3	708.0	760.3
June qtr	142	322	23	487	11.8	21.5	33.3	19.1	52.4	724.4	776.8
Sept. qtr	271	325	3	599	22.1	22.5	44.6	15.0	59.6	787.4	847.1
Dec. qtr	307	272	23	602	23.8	19.4	43.2	14.1	57.3	1,018.3	1,075.6
1999 Mar. qtr	308	241	23	572	25.3	16.9	42.2	15.1	57.2	992.7	1,050.0
June qtr	214	225	4	443	19.4	15.1	34.5	9.7	44.2	1,015.6	1,059.8
					TOTAL	,					
1996-97	8,937	4,151	1,028	14,116	1,089.9	492.4	1,582.3	358.5	1,940.8	3,020.8	4,961.6
1997-98	12,368	5,148	725	18,241	1,588.9	685.2	2,274.1	412.4	2,686.5	2,856.2	5,542.6
1998-99	14,935	6,197	930	22,062	1,968.2	862.8	2,831.0	454.5	3,285.5	3,031.2	6,316.7
1998 Mar. qtr	11,512	4,806	600	16,918	1,415.4	624.7	2,040.0	366.6	2,406.6	2,570.9	4,977.5
June qtr	12,368	5,148	725	18,241	1,588.9	685.2	2,274.1	412.4	2,686.5	2,856.2	5,542.6
Sept. qtr	12,740	5,404	784	18,928	1,654.4	772.4	2,426.8	412.1	2,838.9	2,917.7	5,756.6
Dec. qtr	13,127	5,175	1,145	19,447	1,685.7	744.9	2,430.6	450.5	2,881.1	3,128.4	6,009.6
1999 Mar. qtr	13,846	5,752	1,207	20,805	1,807.7	836.6	2,644.3	471.4	3,115.6	2,972.2	6,087.8
June qtr	14,935	6,197	930	22,062	1,968.2	862.8	2,831.0	454.5	3,285.5	3,031.2	6,316.7
June qu	14,733	0,177	930	22,002	1,700.2	002.0	2,031.0	454.5	3,203.3	3,031.2	0,310.7

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

					(ф ининон	,					
	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertain- ment and recreational	Miscel- laneous	Total non-resi- dential building
				PR	IVATE SEC	CTOR					
1996-97	417.1	272.7	214.6	168.0	195.2	31.0	11.3	109.0	740.0	112.2	2,271.0
1997-98	411.1	399.9	141.3	206.5	315.3	59.9	10.5	136.7	385.3	65.1	2,131.7
1998-99	481.4	407.1	123.4	116.8	176.4	65.6	13.6	88.1	492.9	50.2	2,015.6
1998 Mar. qtr	421.5	204.3	157.0	165.0	279.8	35.3	12.0	124.3	395.3	68.4	1,862.9
June qtr	411.1	399.9	141.3	206.5	315.3	59.9	10.5	136.7	385.3	65.1	2,131.7
Sept. qtr	386.7	454.4	121.1	199.2	308.8	99.2	9.5	79.4	410.3	61.7	2,130.3
Dec. qtr	443.1	400.5	134.4	209.6	264.0	86.6	10.3	104.7	411.6	45.3	2,110.1
1999 Mar. qtr	458.6	380.5	136.2	149.4	184.5	80.1	12.8	103.2	422.9	51.1	1,979.5
June qtr	481.4	407.1	123.4	116.8	176.4	65.6	13.6	88.1	492.9	50.2	2,015.6
				PU	JBLIC SEC	TOR					
1996-97	1.1	11.9	0.3	65.5	51.5	279.0	_	127.2	66.4	146.9	749.7
1997-98	0.7	6.7	0.5	35.1	106.7	260.3	_	143.2	22.1	149.1	724.4
1998-99	5.9	22.6	0.1	67.2	118.0	397.6	0.8	133.0	183.7	86.6	1,015.6
1998 Mar. qtr	0.1	6.1	0.5	43.5	112.8	272.1	_	120.6	20.5	131.8	708.0
June qtr	0.7	6.7	0.5	35.1	106.7	260.3	_	143.2	22.1	149.1	724.4
Sept. qtr	0.6	6.6	3.0	38.0	110.4	321.1	_	131.0	30.5	146.2	787.4
Dec. qtr	0.6	26.8	0.3	43.4	98.5	402.6	_	152.7	132.8	160.7	1,018.3
1999 Mar. qtr	4.9	22.3	2.0	54.4	117.6	442.3	_	140.5	132.4	76.4	992.7
June qtr	5.9	22.6	0.1	67.2	118.0	397.6	0.8	133.0	183.7	86.6	1,015.6
					TOTAL						
1996-97	418.2	284.6	214.9	233.4	246.7	310.0	11.3	236.2	806.4	259.1	3,020.8
1997-98	411.8	406.6	141.9	241.6	422.0	320.2	10.5	279.8	407.4	214.3	2,856.2
1998-99	487.3	429.8	123.5	184.0	294.4	463.2	14.4	221.1	676.6	136.8	3,031.2
1998 Mar. qtr	421.6	210.4	157.6	208.5	392.6	307.4	12.0	244.8	415.8	200.2	2,570.9
June qtr	411.8	406.6	141.9	241.6	422.0	320.2	10.5	279.8	407.4	214.3	2,856.2
Sept. qtr	387.3	461.0	124.2	237.1	419.2	420.3	9.5	210.4	440.7	207.9	2,917.7
Dec. qtr	443.7	427.2	134.7	253.1	362.5	489.2	10.3	257.4	544.4	205.9	3,128.4
1999 Mar. qtr	463.5	402.8	138.2	203.8	302.2	522.4	12.8	243.7	555.3	127.5	2,972.2
June qtr	487.3	429.8	123.5	184.0	294.4	463.2	14.4	221.1	676.6	136.8	3,031.2

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TABLE 9. NUMBER AND VALUE OF BUILDING COMPLETED: ORIGINAL

		Number of dwe	elling units					Value (\$m)			
Period	New houses	New other residential building	Con- versions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-resi- dential building	Total building
				PRI	VATE SE	CTOR					
1996-97	17,330	4,758	1,178	23,266	1,933.5	592.2	2,525.7	728.9	3,254.6	2,063.0	5,317.7
1997-98	22,153	6,095	1,554	29,802	2,504.1	645.9	3,150.0	820.9	3,970.9	2,865.6	6,836.5
1998-99	25,876	6,436	1,317	33,629	3,112.6	792.1	3,904.6	944.2	4,848.8	2,364.0	7,212.8
1998 Mar. qtr	5,197	1,167	634	6,998	555.4	119.9	675.2	217.5	892.8	466.8	1,359.6
June qtr	6,116	1,455	344	7,915	696.9	157.1	853.9	196.1	1,050.0	424.7	1,474.7
Sept. qtr	6,883	1,623	219	8,725	807.4	179.9	987.3	224.6	1,211.9	561.7	1,773.6
Dec. qtr	6,846	1,763	290	8,899	840.8	218.9	1,059.7	249.8	1,309.4	709.9	2,019.3
1999 Mar. qtr	5,519	1,407	293	7,219	663.3	165.9	829.2	205.1	1,034.4	546.2	1,580.6
June qtr	6,628	1,643	515	8,786	801.1	227.3	1,028.5	264.7	1,293.1	546.2	1,839.3
				PU	BLIC SEC	TOR					
1996-97	283	969	37	1,289	22.5	69.4	91.9	39.5	131.4	644.8	776.2
1997-98	272	447	4	723	27.2	36.4	63.6	45.7	109.3	626.6	735.9
1998-99	569	468	43	1,080	46.1	31.4	77.6	45.2	122.7	659.0	781.7
1998 Mar. qtr	45	53	_	98	3.6	2.3	6.0	10.2	16.1	209.9	226.1
June qtr	123	106	_	229	11.1	5.5	16.6	20.6	37.2	100.1	137.3
Sept. qtr	68	77	21	166	5.5	5.1	10.6	12.2	22.8	96.3	119.1
Dec. qtr	149	143	1	293	12.1	8.4	20.5	9.8	30.3	179.4	209.7
1999 Mar. qtr	180	152	_	332	14.7	11.2	25.9	10.7	36.6	212.3	249.0
June qtr	172	96	21	289	13.8	6.7	20.5	12.5	33.0	170.9	203.9
					TOTAL						
1996-97	17,613	5,727	1,215	24,555	1,956.0	661.6	2,617.6	768.5	3,386.1	2,707.8	6,093.8
1997-98	22,425	6,542	1,558	30,525	2,531.3	682.2	3,213.6	866.6	4,080.2	3,492.2	7,572.4
1998-99	26,445	6,904	1,360	34,709	3,158.7	823.5	3,982.2	989.4	4,971.6	3,023.0	7,994.6
1998 Mar. qtr	5,242	1,220	634	7,096	559.0	122.2	681.2	227.7	908.9	676.8	1,585.7
June qtr	6,239	1,561	344	8,144	708.0	162.5	870.5	216.7	1,087.2	524.8	1,612.1
Sept. qtr	6,951	1,700	240	8,891	812.8	185.1	997.9	236.8	1,234.7	658.0	1,892.7
Dec. qtr	6,995	1,906	291	9,192	852.9	227.2	1,080.2	259.6	1,339.7	889.3	2,229.1
1999 Mar. qtr	5,699	1,559	293	7,551	678.0	177.1	855.2	215.9	1,071.0	758.5	1,829.5
June qtr	6,800	1,739	536	9,075	814.9	234.0	1,049.0	277.2	1,326.1	717.1	2,043.2

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

Period	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertain- ment and recreational	Miscel- laneous	Total non-resi- dential building
				PR	IVATE SEC	CTOR					
1996-97	298.7	353.8	275.1	263.4	420.1	94.6	13.3	114.8	111.6	117.6	2,063.0
1997-98	151.8	461.9	335.3	367.0	401.1	103.5	18.5	87.2	785.0	154.1	2,865.6
1998-99	129.6	463.4	287.6	455.6	556.3	132.4	16.7	166.8	86.1	69.5	2,364.0
1998 Mar. qtr	77.4	92.6	60.9	61.3	74.6	45.6	4.0	16.9	9.8	23.8	466.8
June qtr	21.2	67.3	66.7	78.3	88.6	27.2	4.2	18.2	23.9	29.1	424.7
Sept. qtr	38.3	85.6	76.9	98.9	147.9	9.8	4.6	68.5	14.8	16.3	561.7
Dec. qtr	41.4	176.5	67.0	110.6	167.5	54.0	4.9	31.5	26.9	29.6	709.9
1999 Mar. qtr	22.3	94.3	63.7	132.8	142.7	33.7	3.1	24.4	20.0	9.1	546.2
June qtr	27.6	106.9	80.1	113.3	98.1	34.9	4.1	42.3	24.3	14.5	546.2
				PU	JBLIC SEC	TOR					
1996-97	0.5	11.0	20.6	140.6	9.5	247.4	_	79.8	57.4	78.1	644.8
1997-98	2.2	12.7	3.0	82.5	74.4	179.7	_	120.9	88.5	62.6	626.6
1998-99	1.2	13.6	5.6	66.6	45.8	195.9	_	136.0	49.3	144.8	659.0
1998 Mar. qtr	0.2	7.1	1.0	24.3	3.1	85.5	_	80.0	6.2	2.6	209.9
June qtr	0.8	0.1	0.5	13.4	12.8	40.4	_	14.2	9.6	8.3	100.1
Sept. qtr	0.5	3.2	0.1	9.5	3.6	23.4	_	35.2	5.3	15.6	96.3
Dec. qtr	0.3	3.4	3.1	29.1	34.9	53.4	_	20.1	22.2	13.0	179.4
1999 Mar. qtr	0.4	6.3	0.5	22.8	3.8	35.5	_	32.2	5.5	105.4	212.3
June qtr	0.1	0.7	2.0	5.3	3.6	83.7	_	48.5	16.3	10.7	170.9
					TOTAL						
1996-97	299.2	364.8	295.6	404.0	429.5	342.0	13.3	194.6	169.0	195.7	2,707.8
1997-98	154.0	474.7	338.4	449.4	475.5	283.2	18.5	208.2	873.6	216.8	3,492.2
1998-99	130.8	477.0	293.3	522.3	602.1	328.4	16.7	302.8	135.4	214.3	3,023.0
1998 Mar. qtr	77.5	99.6	61.9	85.6	77.7	131.1	4.0	96.8	16.0	26.4	676.8
June qtr	22.1	67.4	67.2	91.8	101.4	67.6	4.2	32.4	33.5	37.4	524.8
Sept. qtr	38.7	88.8	77.0	108.3	151.5	33.2	4.6	103.7	20.2	32.0	658.0
Dec. qtr	41.7	179.9	70.0	139.6	202.4	107.3	4.9	51.6	49.1	42.6	889.3
1999 Mar. qtr	22.7	100.6	64.1	155.6	146.6	69.2	3.1	56.6	25.5	114.5	758.5
June qtr	27.7	107.6	82.1	118.6	101.7	118.6	4.1	90.9	40.6	25.2	717.1

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

			(\$ million	1)			
Period	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-resi- dential building	Total building
			PRIVATE SE	CTOR			
1996-97	1,964.4	567.8	2,532.1	738.6	3.270.7	2,553.4	5.824.1
1997-98	2,783.4	732.1	3,515.5	861.3	4,376.8	2,240.2	6,617.0
1998-99	3,312.8	909.4	4,222.1	953.4	5,175.5	2,720.2	7,895.7
1998 Mar. qtr	659.3	166.5	825.8	198.0	1,023.8	517.2	1,541.0
June qtr	767.4	216.1	983.5	230.3	1,213.8	628.2	1,842.0
Sept. qtr	795.1	204.0	999.1	215.8	1,214.9	723.6	1,938.5
Dec. qtr	863.0	246.1	1,109.1	270.4	1,379.5	799.7	2,179.1
1999 Mar. qtr	768.9	220.8	989.7	214.2	1,203.9	577.0	1,780.9
June qtr	885.8	238.4	1,124.2	253.0	1,377.3	619.9	1,997.2
			PUBLIC SEC	CTOR			
1996-97	24.4	53.6	78.1	36.7	114.8	699.0	813.8
1997-98	25.0	28.1	53.1	50.2	103.3	720.2	823.5
1998-99	50.2	30.2	80.4	42.8	123.2	824.7	947.9
1998 Mar. qtr	8.5	6.8	15.3	15.4	30.6	175.0	205.6
June qtr	7.9	7.0	14.9	19.7	34.5	164.6	199.1
Sept. qtr	10.5	10.0	20.4	11.9	32.3	173.5	205.8
Dec. qtr	12.9	7.1	20.0	10.0	30.0	216.0	246.1
1999 Mar. qtr	16.0	7.0	23.0	10.3	33.2	207.1	240.3
June qtr	10.9	6.1	17.0	10.7	27.7	228.1	255.7
			TOTAL				
1996-97	1,988.8	621.4	2,610.2	775.3	3,385.5	3,252.4	6,637.8
1997-98	2,808.4	760.2	3,568.6	911.5	4,480.1	2,960.4	7,440.5
1998-99	3,363.0	939.5	4,302.5	996.2	5,298.7	3,544.8	8,843.6
1998 Mar. qtr	667.9	173.2	841.1	213.3	1,054.4	692.2	1,746.6
June qtr	775.2	223.1	998.3	249.9	1,248.3	792.8	2,041.1
Sept. qtr	805.5	214.0	1,019.5	227.7	1,247.2	897.1	2,144.3
Dec. qtr	875.9	253.2	1,129.1	280.4	1,409.5	1,015.7	2,425.2
1999 Mar. qtr	784.9	227.8	1,012.7	224.4	1,237.1	784.1	2,021.2
June qtr	896.7	244.6	1,141.2	263.7	1,404.9	848.0	2,252.9

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

					(2 mino	n)					
Period	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertain- ment and recreational	Miscel- laneous	Total non-resi- dential building
				PR	IVATE SE	ECTOR					
1996-97	249.0	423.4	342.7	334.5	383.8	79.9	12.6	94.1	478.3	155.2	2,553.4
1997-98	198.7	425.3	296.0	342.9	445.7	109.0	19.4	138.8	166.8	97.6	2,240.2
1998-99	231.6	617.3	264.4	439.6	491.6	153.2	16.4	134.7	295.9	75.4	2,720.2
1998 Mar. qtr	45.4	79.8	75.6	77.3	111.5	33.0	4.2	29.5	36.1	24.8	517.2
June qtr	55.1	133.4	63.1	98.6	130.9	21.2	4.5	51.0	45.2	25.3	628.2
Sept. qtr	54.3	178.5	51.6	123.0	157.9	35.1	3.8	30.7	64.7	24.1	723.6
Dec. qtr	62.0	173.1	69.3	148.9	152.1	52.9	5.4	33.8	79.3	23.0	799.7
1999 Mar. qtr	64.5	108.2	75.9	86.7	90.8	36.6	3.7	34.4	62.9	13.2	577.0
June qtr	50.9	157.5	67.6	80.9	90.8	28.5	3.6	35.9	89.0	15.2	619.9
				PU	JBLIC SE	CTOR					
1996-97	0.8	14.7	20.5	136.5	39.3	216.7	_	108.5	92.5	69.4	699.0
1997-98	2.3	14.8	3.0	80.3	81.1	242.4	_	151.4	40.8	104.1	720.2
1998-99	5.3	10.7	5.6	62.4	70.5	315.5	0.5	136.8	94.5	123.0	824.7
1998 Mar. qtr	0.2	3.9	_	16.0	25.2	62.0	_	38.3	9.0	20.5	175.0
June qtr	1.2	0.7	0.5	7.3	23.8	44.3	_	40.1	11.0	35.7	164.6
Sept. qtr	0.6	3.6	2.1	10.1	16.8	63.2	_	31.6	13.5	31.9	173.5
Dec. qtr	0.1	1.6	1.0	12.9	23.0	83.0	_	37.3	23.1	33.9	216.0
1999 Mar. qtr	1.2	3.4	2.2	19.7	13.7	85.3	_	32.5	18.5	30.8	207.1
June qtr	3.4	2.0	0.3	19.7	17.1	84.0	0.5	35.4	39.3	26.4	228.1
					TOTAI						
1996-97	249.8	438.1	363.2	470.9	423.2	296.6	12.6	202.6	570.7	224.6	3,252.4
1997-98	201.0	440.1	299.0	423.2	526.8	351.5	19.4	290.3	207.6	201.7	2,960.4
1998-99	237.0	628.0	270.0	501.9	562.1	468.6	16.9	271.5	390.4	198.5	3,544.8
1998 Mar. qtr	45.6	83.6	75.6	93.3	136.7	95.1	4.2	67.8	45.0	45.3	692.2
June qtr	56.3	134.1	63.5	105.9	154.6	65.5	4.5	91.1	56.2	61.0	792.8
Sept. qtr	54.8	182.1	53.7	133.0	174.7	98.3	3.8	62.3	78.2	56.0	897.1
Dec. qtr	62.1	174.7	70.4	161.8	175.1	135.9	5.4	71.1	102.4	56.9	1,015.7
1999 Mar. qtr	65.7	111.6	78.0	106.5	104.5	121.9	3.7	66.8	81.4	44.0	784.1
June qtr	54.3	159.5	67.8	100.6	107.9	112.5	4.0	71.3	128.3	41.6	848.0

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

			(\$ million	1)			
	New	New other residential	New residential	Alterations and additions to residential	Total residential	Total non-resi- dential	Total
	houses	building	building	buildings	building	building	building
			PRIVATE SE	CTOR			
1996-97	516.4	237.7	754.1	143.3	897.4	767.3	1.664.7
1997-98	745.2	347.5	1,092.7	146.7	1,239.4	1,264.4	2,503.8
1998-99	922.0	425.2	1,347.1	193.1	1,540.2	800.3	2,340.6
1998 Mar. qtr	635.8	349.1	984.9	134.5	1,119.4	1,196.7	2,316.1
June qtr	745.2	347.5	1,092.7	146.7	1,239.4	1,264.4	2,503.8
Sept. qtr	812.7	413.3	1,226.0	162.2	1,388.2	1,106.3	2,494.5
Dec. qtr	822.5	362.1	1,184.6	181.8	1,366.4	997.6	2,364.0
1999 Mar. qtr	839.9	401.7	1,241.7	193.0	1,434.7	837.6	2,272.3
June qtr	922.0	425.2	1,347.1	193.1	1,540.2	800.3	2,340.6
			PUBLIC SEC	CTOR			
1996-97	5.3	6.3	11.6	3.4	15.0	454.4	469.5
1997-98	6.4	13.3	19.7	10.9	30.6	333.3	364.0
1998-99	10.1	8.5	18.6	3.9	22.5	458.9	481.4
1998 Mar. qtr	7.4	10.7	18.1	9.7	27.8	381.4	409.2
June qtr	6.4	13.3	19.7	10.9	30.6	333.3	364.0
Sept. qtr	11.7	9.9	21.6	7.2	28.7	319.2	348.0
Dec. qtr	12.6	8.1	20.7	6.0	26.7	513.6	540.2
1999 Mar. qtr	13.0	9.8	22.8	7.4	30.2	493.2	523.4
June qtr	10.1	8.5	18.6	3.9	22.5	458.9	481.4
			TOTAL	,			
1996-97	521.7	244.0	765.7	146.7	912.4	1,221.8	2,134.2
1997-98	751.5	360.8	1,112.4	157.6	1,270.0	1,597.8	2,867.7
1998-99	932.1	433.7	1,365.8	197.0	1,562.8	1,259.2	2,821.9
1998 Mar. qtr	643.2	359.8	1,003.0	144.2	1,147.2	1,578.1	2,725.3
June qtr	751.5	360.8	1,112.4	157.6	1,270.0	1,597.8	2,867.7
Sept. qtr	824.4	423.1	1,247.6	169.4	1,417.0	1,425.5	2,842.5
Dec. qtr	835.1	370.2	1,205.3	187.8	1,393.1	1,511.1	2,904.2
1999 Mar. qtr	853.0	411.5	1,264.5	200.4	1,464.9	1,330.8	2,795.7
June qtr	932.1	433.7	1,365.8	197.0	1,562.8	1,259.2	2,821.9

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

					(\$ millio	n)					
	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertain- ment and recreational	Miscel- laneous	Total non-resi- dential building
				PR	IVATE SE	CTOR					
1996-97	352.4	96.3	76.4	44.3	51.1	20.0	5.8	64.2	30.3	26.6	767.3
1997-98	300.5	260.5	44.1	107.4	125.3	43.2	4.2	48.1	295.0	36.1	1,264.4
1998-99	269.3	114.3	50.3	38.1	51.2	28.3	7.6	31.6	194.2	15.4	800.3
1998 Mar. qtr	343.8	130.8	54.8	86.1	132.0	12.6	6.0	68.5	326.4	35.5	1,196.7
June qtr	300.5	260.5	44.1	107.4	125.3	43.2	4.2	48.1	295.0	36.1	1,264.4
Sept. qtr	260.0	222.2	49.4	80.2	109.1	57.3	4.0	28.6	270.3	25.1	1,106.3
Dec. qtr	296.5	172.1	60.8	52.3	79.5	45.8	4.4	51.7	219.2	15.3	997.6
1999 Mar. qtr	269.8	138.3	50.3	38.4	52.0	36.4	6.2	40.2	188.9	17.1	837.6
June qtr	269.3	114.3	50.3	38.1	51.2	28.3	7.6	31.6	194.2	15.4	800.3
				PU	JBLIC SE	CTOR					
1996-97	0.8	7.8	0.2	33.1	8.4	207.3	_	75.9	8.4	112.5	454.4
1997-98	0.3	0.6	0.4	4.9	56.9	123.6	_	61.6	11.8	73.3	333.3
1998-99	1.4	19.4	_	41.3	43.4	141.3	0.4	50.7	128.3	32.6	458.9
1998 Mar. qtr	0.1	0.6	0.4	7.2	73.9	139.4	_	64.9	11.6	83.3	381.4
June qtr	0.3	0.6	0.4	4.9	56.9	123.6	_	61.6	11.8	73.3	333.3
Sept. qtr	0.1	_	0.9	7.2	47.4	144.5	_	53.1	12.0	54.0	319.2
Dec. qtr	0.3	22.0	0.2	28.9	47.3	196.4	_	57.4	113.5	47.7	513.6
1999 Mar. qtr	3.8	20.4	0.2	42.9	56.6	186.2	_	45.0	100.1	38.0	493.2
June qtr	1.4	19.4	_	41.3	43.4	141.3	0.4	50.7	128.3	32.6	458.9
					TOTAI	_					
1996-97	353.3	104.1	76.6	77.4	59.6	227.2	5.8	140.1	38.6	139.1	1,221.8
1997-98	300.8	261.1	44.5	112.3	182.2	166.8	4.2	109.7	306.8	109.3	1,597.8
1998-99	270.8	133.8	50.4	79.4	94.6	169.6	8.0	82.3	322.5	48.0	1,259.2
1998 Mar. qtr	343.9	131.5	55.2	93.4	206.0	152.0	6.0	133.4	337.9	118.9	1,578.1
June qtr	300.8	261.1	44.5	112.3	182.2	166.8	4.2	109.7	306.8	109.3	1,597.8
Sept. qtr	260.1	222.2	50.3	87.4	156.5	201.8	4.0	81.6	282.3	79.2	1,425.5
Dec. qtr	296.8	194.1	61.0	81.2	126.8	242.1	4.4	109.1	332.7	63.0	1,511.1
1999 Mar. qtr	273.6	158.7	50.5	81.3	108.6	222.6	6.2	85.2	288.9	55.1	1,330.8
June qtr	270.8	133.8	50.4	79.4	94.6	169.6	8.0	82.3	322.5	48.0	1,259.2

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

		New residential building					
Ownership and stage of construction		Value	Total Number of dwelling units Value		Alterations and additions to residential buildings	Total building	
	TOTAL PRIVA	ATE AND PUBI	LIC SECTORS				
		• •	2.7	2.2	4.1		
Commenced	3.4	2.9	2.7	2.3	4.1	1.4	
Commenced Under construction at end of period	3.4 2.9	2.9 2.6	2.7	1.8	3.9	1.4 0.9	
Under construction at end of period							
	2.9	2.6	2.0	1.8	3.9	0.9	

### 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;
- 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 bouse 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 regarded as completed when building activity has progressed to the stage when 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 BUILDING 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 up to the
  end of the period on jobs commenced but not completed.

### **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.
- 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.

### BUILDING CLASSIFICATION continued

- 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.
- **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, 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*.

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- **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 Melbourne 03 9615 7755 or any ABS State office.
- **30** Users may also wish to refer to the following 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
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