

## BUILDING ACTIVITY, SOUTH AUSTRALIA DECEMBER QUARTER 1995

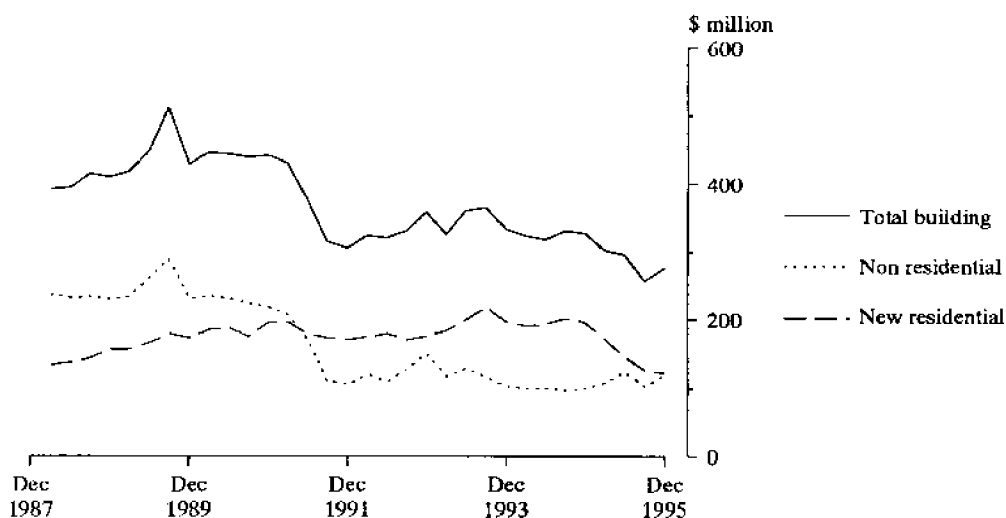
### SUMMARY OF FINDINGS

#### Value of building work done at average 1989-90 prices, seasonally adjusted

	% change on	
	Sept. quarter 1995	Dec. quarter 1994
New residential building	-3.2	-37.6
Alterations and additions to residential buildings	16.5	11.2
Non-residential building	15.0	18.1
<b>Total building</b>	<b>7.6</b>	<b>-15.7</b>

- In seasonally adjusted average 1989-90 prices, the total value of building work done rose 7.6 % in the December quarter 1995 to \$275.8 million but is 15.7% down on the December quarter of 1994.
- Non-residential building rose this quarter by 15.0% to \$118.9 million. This compares with an 18.1% or \$18.2 million increase from the 1994 December Quarter.
- Work done on new residential building fell by 3.2% to \$122.1 million this quarter and is 37.6% down on the 1994 December quarter.
- New other residential building fell 15.8% this quarter to \$17 million. In comparison this is a 44.4% fall from the December 1994 quarter figure of \$30.6 million.

#### VALUE OF WORK DONE AT AVERAGE 1989-90 PRICES SEASONALLY ADJUSTED



#### INQUIRIES

- for more information about statistics in this publication and the availability of related unpublished statistics, contact Rex Porter on Adelaide (08) 237 7496 or any ABS State Office.
- for information about other ABS statistics and services please contact Information Services on Adelaide (08) 237 7100, call at 55 Currie Street, Adelaide, or write to Information Services, ABS, GPO Box 2272, Adelaide SA 5001.

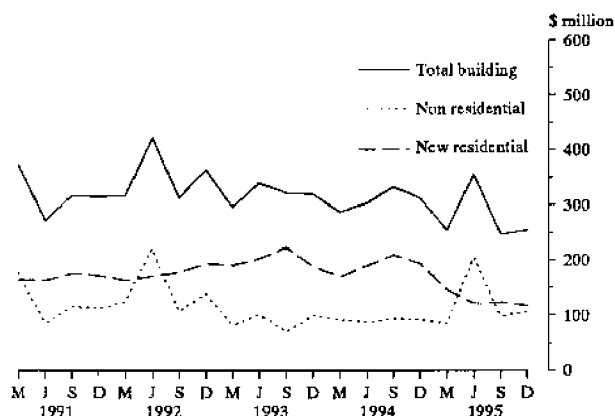
## SUMMARY OF FINDINGS – continued

## Value of building work commenced at average 1989–90 prices

	% change on	
	Sept. quarter 1995	Dec. quarter 1994
New residential building	-5.0	-39.5
Alterations and additions to residential buildings	16.1	6.9
Non-residential building	8.0	16.4
<b>Total building</b>	<b>2.3</b>	<b>-19.1</b>

- In average 1989–90 prices, the total value of all building work commenced during the quarter rose from last quarter by 2.3% to \$253.4 million, however it was still 19.1% down on the December quarter of the previous year.
- The value of building work commenced for non-residential building, grew by 8% to \$106.6 million. This is up 16.4% since the December 1994 quarter.
- New residential buildings fell this quarter by 5.0% and is 39.5% down on the December quarter 1994.

VALUE OF WORK COMMENCED AT AVERAGE 1989-90 PRICES

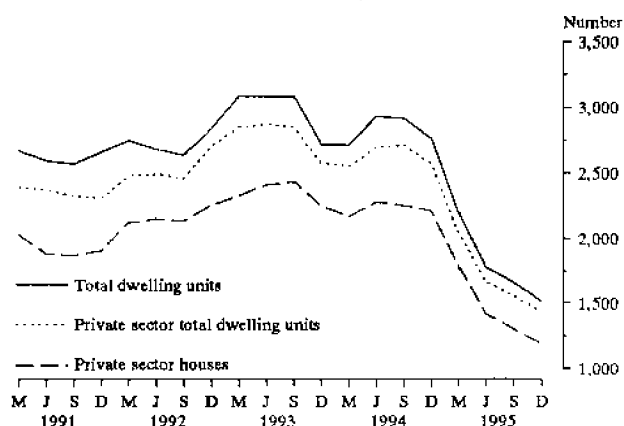


## Number of dwelling units commenced, seasonally adjusted

	% change on	
	Sept. quarter 1995	Dec. quarter 1994
Private sector houses	-9.0	-46.4
Private sector dwelling units	-7.8	-44.2
<b>Total dwelling units</b>	<b>-8.8</b>	<b>-45.0</b>

- In seasonally adjusted terms, the estimate of the total number of dwelling units commenced during the quarter continued its fall by 8.8% to 1,519.
- Within the private sector, house commencements continued to fall to 1,188, down 9% on the September quarter. Total dwelling unit commencements also fell 7.8% to 1,437.

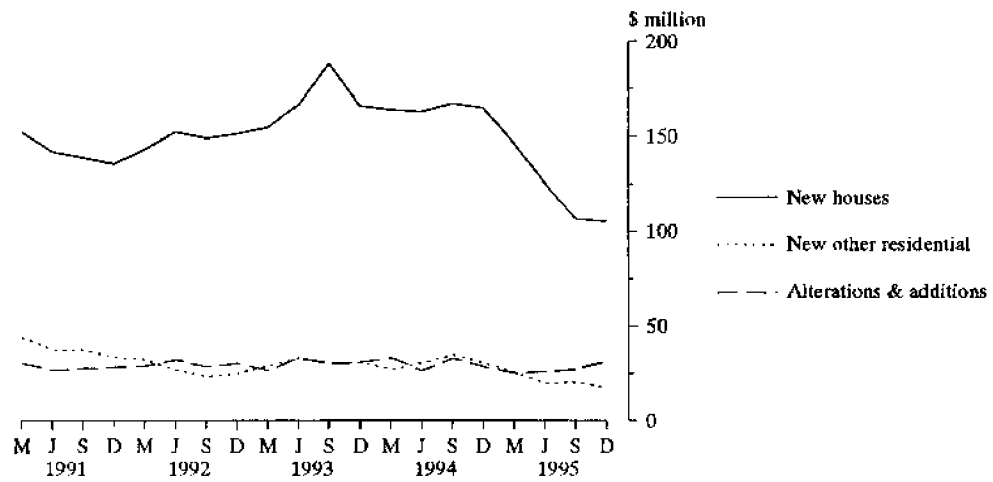
NEW DWELLING UNITS COMMENCED SEASONALLY ADJUSTED



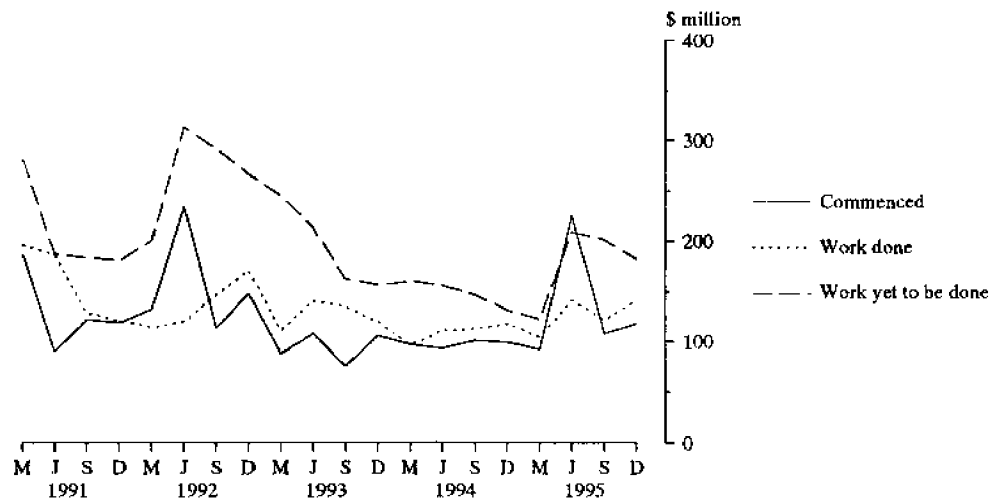
## Original data

- The total value of all building work done during the December quarter 1995 rose by 9.2% to \$327.1 million. This was due to increases in work done in non-residential building, 16.5%, and residential alterations and additions, 26.4%.
- The total value of all building work commenced during the quarter increased by 2.0%. Compared to the December quarter last year the value of work done fell by 18.9% to \$285.8 million.
- The total number of dwelling units commenced fell by 11.5% to 1,557.
- Work yet to be done on jobs under construction at the end of the quarter was down 8.8% to \$307.9 million. This represents 0.94 times the work done during the period.

**VALUE OF RESIDENTIAL WORK DONE  
AT AVERAGE 1989-90 PRICES  
SEASONALLY ADJUSTED**



**VALUE OF NON-RESIDENTIAL BUILDING**



**VALUE OF NON-RESIDENTIAL WORK DONE**

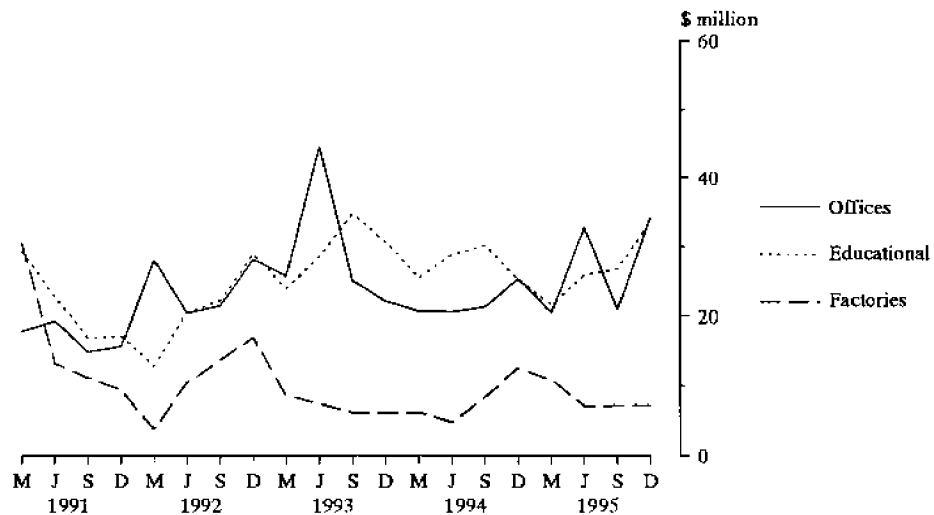


TABLE 1. SUMMARY OF BUILDING ACTIVITY, SOUTH AUSTRALIA

Period	New residential building					Value (\$m)									
	Houses					Other residential buildings					Total				
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Alterations and additions to residential buildings	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertainment and recreational
COMMENCED															
1992-93	9,416	685.3	2,219	130.9	11,635	816.2	122.4	5.4	53.8	22.9	99.8	53.4	117.6	6.1	50.3
1993-94	9,590	726.8	1,891	118.4	11,481	845.3	126.5	7.4	41.9	24.8	66.2	31.6	99.2	1.9	53.5
1994-95	8,210	657.0	1,525	108.4	9,735	765.5	125.3	4.9	70.1	31.1	129.0	71.6	133.8	3.6	26.9
1994 Sept. qtr	2,526	197.4	557	38.2	3,083	235.6	34.3	1.6	26.4	7.6	12.7	4.6	36.3	1.6	3.8
Dec. qtr	2,435	193.2	399	27.9	2,834	221.1	31.8	0.8	7.5	11.7	30.9	13.5	12.9	1.4	6.8
1995 Mar. qtr	1,735	140.3	329	27.6	2,064	167.9	26.4	0.7	19.0	5.9	15.8	23.1	7.9	0.1	8.0
June qtr	1,512	126.1	240	14.7	1,752	140.9	32.8	1.9	17.2	5.8	69.6	30.3	76.6	0.5	8.2
Sept. qtr	1,504	124.4	256	18.1	1,760	142.4	29.4	0.7	11.2	3.5	17.2	29.3	13.4	0.9	10.5
Dec. qtr	1,290	113.6	267	20.9	1,557	134.5	33.7	0.6	13.1	9.9	41.7	12.2	19.8	0.3	12.1
Total															
UNDER CONSTRUCTION AT END OF PERIOD															
1992-93	3,563	289.5	1,162	74.9	4,725	364.4	56.4	3.7	12.8	32.5	75.1	53.6	141.8	5.3	95.5
1993-94	3,231	271.1	1,064	70.4	4,295	341.5	54.9	5.6	20.5	12.6	54.5	10.7	128.2	2.6	102.8
1994-95	2,301	215.7	564	43.2	2,865	258.9	52.5	3.3	45.2	12.3	71.7	28.0	142.6	4.2	18.7
1994 Sept. qtr	3,483	298.2	1,065	73.5	4,548	371.7	54.3	3.8	25.5	20.3	45.5	11.7	138.3	4.0	96.5
Dec. qtr	3,132	276.1	842	59.2	3,974	335.3	43.7	3.5	24.4	17.0	35.2	18.0	129.4	3.9	67.9
1995 Mar. qtr	2,867	262.7	765	59.6	3,632	322.3	48.7	3.6	37.7	14.5	41.9	28.0	118.9	4.0	16.9
June qtr	2,301	215.7	564	43.2	2,865	258.9	52.5	3.3	45.2	12.3	71.7	28.0	142.6	4.2	18.7
Sept. qtr	2,245	211.2	536	41.6	2,781	252.8	51.7	1.7	37.8	7.9	68.6	44.5	140.3	4.1	24.4
Dec. qtr	2,067	201.8	474	35.9	2,541	237.7	50.0	1.5	11.8	11.6	86.8	44.1	145.3	3.1	31.4
Total															
COMPLETED															
1992-93	8,708	637.7	1,938	110.4	10,646	748.1	126.9	10.8	85.8	35.8	110.4	66.0	59.1	6.4	46.5
1993-94	9,903	750.4	1,974	126.0	11,877	876.5	131.9	5.4	35.7	44.0	95.6	77.2	119.3	5.0	50.4
1994-95	9,042	717.2	1,999	139.5	11,041	856.7	130.1	7.3	49.0	37.0	110.9	52.5	119.4	2.0	113.2
1994 Sept. qtr	2,266	172.6	554	36.1	2,820	208.7	36.3	3.3	21.5	1.2	21.8	3.6	25.3	0.2	10.3
Dec. qtr	2,745	215.4	600	43.0	3,345	258.4	43.0	1.1	8.9	18.9	38.7	7.7	21.7	1.5	35.6
1995 Mar. qtr	1,986	157.4	406	28.0	2,392	185.4	22.1	0.6	5.9	8.5	9.3	12.7	19.5	—	60.8
June qtr	2,045	171.8	439	32.5	2,484	204.3	28.6	2.2	12.7	8.4	41.1	28.3	52.8	0.3	6.5
Sept. qtr	1,559	131.4	284	20.7	1,843	152.0	31.3	2.4	21.0	9.4	19.5	13.6	16.5	1.2	4.8
Dec. qtr	1,453	126.9	329	26.5	1,782	153.5	37.7	0.6	39.5	6.5	23.6	13.5	18.1	1.1	5.2
Total															
Total building															
1992-93															
1993-94															
1994-95															
1994 Sept. qtr															
Dec. qtr															
1995 Mar. qtr															
June qtr															
Sept. qtr															
Dec. qtr															
Total															

TABLE 1. SUMMARY OF BUILDING ACTIVITY, SOUTH AUSTRALIA—continued

Period	New residential building				Value (\$m)									
	Non-residential building				Value (\$m)									
	Houses	Other residential buildings	Total	Alterations and additions to residential buildings	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Recreational	Total
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)
VALUE OF WORK DONE DURING PERIOD														
1992-93	..	660.9	..	119.7	..	780.6	121.1	8.6	62.6	46.6	119.7	4.6	65.8	34.7
1993-94	..	746.4	..	129.8	..	876.3	132.0	6.9	41.5	23.4	88.6	42.3	82.7	17.9
1994-95	..	693.6	..	122.8	..	816.4	129.4	6.9	62.9	39.0	99.9	60.0	46.7	20.0
1994 Sept. qtr	..	193.5	..	37.3	..	230.8	37.4	2.6	13.6	8.4	21.3	6.2	17.1	4.3
Dec. qtr	..	195.7	..	35.7	..	231.4	35.6	0.9	12.5	12.7	25.4	12.2	14.6	4.1
1995 Mar. qtr	..	159.5	..	28.4	..	187.9	25.1	0.8	17.7	10.8	20.5	11.6	7.7	4.6
June qtr	..	144.8	..	21.5	..	166.3	31.2	2.6	19.2	7.1	32.8	30.0	7.3	7.1
Sept. qtr	..	124.5	..	22.1	..	146.6	31.4	1.5	21.3	7.2	21.0	21.0	5.8	6.1
Dec. qtr	..	125.4	..	20.2	..	145.6	39.7	0.7	17.8	7.2	34.2	21.6	8.9	5.2
VALUE OF WORK YET TO BE DONE														
1992-93	..	136.8	..	39.0	..	175.8	23.1	2.6	4.9	5.0	37.1	14.2	53.6	6.1
1993-94	..	124.9	..	31.1	..	156.0	21.9	3.3	6.8	5.9	23.7	6.5	28.5	6.1
1994-95	..	95.4	..	21.7	..	117.1	20.6	1.3	17.9	3.7	51.9	16.5	11.0	6.5
1994 Sept. qtr	..	132.1	..	33.0	..	165.1	20.3	2.2	19.7	6.5	15.2	4.9	15.4	3.9
Dec. qtr	..	130.5	..	27.0	..	157.5	17.4	2.0	15.1	9.5	18.1	6.8	7.8	6.8
1995 Mar. qtr	..	115.1	..	27.0	..	142.1	19.3	1.9	16.8	4.7	13.7	17.9	10.0	5.9
June qtr	..	95.4	..	21.7	..	117.1	20.6	1.3	17.9	3.7	51.9	16.5	11.0	6.5
Sept. qtr	..	98.1	..	18.6	..	116.6	19.8	0.8	10.2	1.6	47.2	25.5	15.6	4.3
Dec. qtr	..	90.3	..	19.2	..	109.5	16.0	0.6	5.9	4.5	54.9	17.1	18.9	3.6

NOTE: The number of self-contained dwelling units commenced as part of the construction of non-residential building and alterations and additions to existing buildings (including conversions to dwelling units) are excluded from this table. There were 28 such dwelling units commenced in the December quarter 1995.

TABLE 2. SUMMARY OF PRIVATE SECTOR BUILDING ACTIVITY, SOUTH AUSTRALIA

New residential building							Value (\$m)												
Houses			Other residential buildings		Total		Non-residential building												
															Enter- tainment and recrea- tional				
Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Alterations and additions to residential buildings	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Miscellaneous	Total building			
COMMENCED																			
1992-93	9,122	668.6	1,759	109.8	10,881	778.4	119.7	5.2	41.6	19.6	33.5	36.1	19.3	6.1	25.3	7.0	11.9	205.5	1,103.6
1993-94	9,159	700.2	1,534	97.7	10,693	797.9	125.0	5.5	39.5	22.3	35.9	24.1	18.3	1.9	35.6	10.8	16.1	209.9	1,132.8
1994-95	7,745	625.4	1,339	98.0	9,084	723.4	122.2	4.6	66.3	25.6	36.2	59.3	17.4	3.6	16.2	11.3	11.2	251.6	1,097.2
1994 Sept. qtr	2,413	190.4	442	31.9	2,855	222.3	33.9	1.6	26.3	7.0	4.6	4.3	6.6	1.6	2.6	1.7	0.7	57.0	313.2
Dec. qtr	2,303	184.8	367	26.0	2,670	210.8	30.7	0.8	7.3	6.9	10.1	12.6	2.2	1.4	4.8	5.3	1.3	52.8	294.3
1995 Mar. qtr	1,631	132.7	303	26.2	1,934	158.9	26.1	0.6	15.8	5.9	5.8	19.8	2.0	0.1	1.6	1.3	2.4	55.6	240.5
June qtr	1,396	117.5	227	13.9	1,623	131.4	31.5	1.6	16.8	5.8	15.6	22.5	6.6	0.5	7.2	3.0	6.8	86.3	249.1
Sept. qtr	1,398	116.9	242	17.2	1,640	134.1	28.9	0.7	10.6	3.4	9.9	28.2	7.4	0.9	3.8	1.9	2.8	69.5	232.5
Dec. qtr	1,237	109.4	252	19.8	1,489	129.2	33.6	0.6	13.0	8.9	33.6	9.4	4.6	0.3	7.6	3.7	1.9	83.6	246.4
UNDER CONSTRUCTION AT END OF PERIOD																			
1992-93	3,388	279.1	914	62.6	4,302	341.7	55.9	3.5	12.5	31.7	33.4	14.7	10.1	5.3	30.7	7.4	6.9	156.1	553.7
1993-94	3,033	259.2	834	56.8	3,867	316.0	54.0	5.6	20.5	12.6	18.4	9.2	10.5	2.6	26.1	6.1	14.8	126.4	496.4
1994-95	2,202	208.3	523	40.9	2,725	249.1	51.6	3.0	42.3	9.2	13.9	20.2	5.5	4.2	10.5	9.2	14.9	132.8	433.4
1994 Sept. qtr	3,303	287.0	872	62.6	4,175	349.6	53.5	3.8	25.4	19.7	6.3	11.2	13.0	4.0	21.5	4.8	15.9	125.5	528.6
Dec. qtr	2,993	267.6	704	51.9	3,697	319.5	43.2	3.5	24.3	11.6	9.3	17.7	5.9	3.9	15.6	7.7	16.2	115.5	478.3
1995 Mar. qtr	2,728	253.0	677	54.7	3,405	307.7	48.5	3.6	34.7	9.5	10.6	26.0	4.2	4.0	8.1	6.8	15.4	122.7	478.9
June qtr	2,202	208.3	523	40.9	2,725	249.1	51.6	3.0	42.3	9.2	13.9	20.2	5.5	4.2	10.5	9.2	14.9	132.8	433.4
Sept. qtr	2,129	203.4	515	40.3	2,644	243.7	51.4	1.7	36.8	7.9	7.1	37.6	11.2	4.1	13.6	3.8	8.6	132.4	427.5
Dec. qtr	1,993	196.2	453	34.4	2,446	230.6	49.9	1.5	11.1	10.6	32.3	35.0	10.8	3.1	16.9	5.3	8.1	134.8	415.2
COMPLETED																			
1992-93	8,438	624.4	1,374	84.5	9,812	708.8	124.5	10.7	73.9	33.1	74.8	41.2	18.8	6.4	26.7	13.3	9.6	308.6	1,142.0
1993-94	9,495	725.4	1,599	106.5	11,094	831.9	130.8	3.3	32.9	40.8	59.2	29.2	17.9	5.0	41.3	12.1	8.2	249.9	1,212.6
1994-95	8,478	681.0	1,624	117.8	10,102	798.9	126.9	7.1	48.2	34.7	41.0	46.5	23.0	2.0	33.9	6.5	13.9	257.0	1,182.7
1994 Sept. qtr	2,135	165.0	402	27.0	2,537	192.0	35.8	3.3	21.4	1.2	16.9	2.4	4.1	0.2	7.2	1.0	2.6	60.2	288.0
Dec. qtr	2,572	204.1	513	37.5	3,085	241.6	41.6	1.1	8.8	18.9	7.2	6.7	9.6	1.5	11.0	2.6	1.1	68.3	351.5
1995 Mar. qtr	1,882	151.2	330	24.2	2,212	175.4	21.5	0.5	5.7	8.2	4.7	11.1	3.8	—	10.9	2.2	3.1	50.3	247.1
June qtr	1,889	160.8	379	29.1	2,268	189.9	28.1	2.2	12.3	6.4	12.3	26.4	5.5	0.3	4.8	0.7	7.2	78.2	296.1
Sept. qtr	1,470	124.4	250	18.8	1,720	143.2	30.3	2.2	18.4	5.8	15.7	11.6	1.9	1.2	0.7	7.7	8.9	73.9	247.3
Dec. qtr	1,358	120.5	314	25.6	1,672	146.2	37.3	0.6	39.2	6.4	8.1	12.9	4.9	1.1	4.4	2.4	2.6	82.6	266.0

**TABLE 2. SUMMARY OF PRIVATE SECTOR BUILDING ACTIVITY, SOUTH AUSTRALIA—continued**

New residential building										Value (\$m)																											
Houses					Other residential buildings					Total					Non-residential building																						
Number of dwelling units		Value (\$m)		Number of dwelling units		Value (\$m)		Number of dwelling units		Value (\$m)		Alterations and additions to residential buildings		Hotels etc.		Shops		Factories		Offices		Other business premises		Educational		Religious		Health		Entertainment and recreational		Miscellaneous		Total		Total building	
VALUE OF WORK DONE DURING PERIOD																																					
1992-93		647.2		..		96.6		..		743.8		124.5		8.4		50.7		43.8		70.8		35.7		20.8		4.6		40.7		12.9		9.6		297.9		1,166.3	
1993-94		719.1		..		109.7		..		828.9		130.7		4.8		38.8		20.1		46.7		26.8		18.2		4.3		35.5		12.0		10.4		217.7		1,177.2	
1994-95		659.6		..		106.5		..		766.1		126.6		6.7		60.0		33.7		42.0		53.4		19.4		3.2		24.2		11.1		17.9		271.6		1,164.3	
1994 Sept. qtr		185.6		..		29.7		..		215.3		37.1		2.6		13.4		8.3		11.7		5.4		6.0		1.2		8.8		1.9		4.5		63.7		316.1	
Dec. qtr		183.3		..		30.7		..		216.0		34.1		0.9		12.4		11.4		6.5		11.1		5.2		0.8		8.4		2.4		3.7		63.0		313.1	
1995 Mar. qtr		153.3		..		26.2		..		179.5		24.7		0.7		16.6		8.2		7.8		9.2		3.0		0.4		2.8		3.4		5.0		57.2		261.4	
June qtr		135.3		..		20.0		..		155.3		30.7		2.4		17.6		5.8		15.9		27.7		5.3		0.8		4.2		3.4		4.7		87.8		273.7	
Sept. qtr		117.9		..		20.9		..		138.8		30.2		1.3		20.1		6.5		10.0		18.6		4.4		0.8		2.6		3.6		4.8		72.7		241.7	
Dec. qtr		119.1		..		19.5		..		138.5		39.6		0.7		17.6		6.8		22.8		18.7		5.6		1.2		4.7		3.4		3.4		84.9		263.0	
VALUE OF WORK YET TO BE DONE																																					
1992-93		130.1		..		37.9		..		163.0		22.9		2.4		4.6		4.2		12.6		8.8		3.9		3.3		11.1		4.1		4.6		59.6		245.5	
1993-94		118.9		..		24.2		..		143.1		21.5		3.3		6.8		5.9		10.3		5.7		4.9		1.2		12.4		4.9		10.4		65.8		230.4	
1994-95		91.8		..		20.7		..		112.4		19.8		1.1		16.9		3.6		4.8		10.0		3.2		1.6		6.4		3.5		6.5		57.7		189.9	
1994 Sept. qtr		127.0		..		27.4		..		154.4		19.9		2.2		19.7		6.0		3.4		4.7		5.5		1.6		6.1		2.8		9.6		61.5		235.8	
Dec. qtr		127.3		..		24.5		..		151.8		17.3		2.0		15.0		5.4		7.0		6.7		2.8		2.2		2.9		5.8		7.3		57.0		226.1	
1995 Mar. qtr		110.6		..		25.3		..		135.8		19.3		1.9		14.6		3.3		5.1		17.0		1.9		1.9		3.4		3.8		4.6		57.5		212.6	
June qtr		91.8		..		20.7		..		112.4		19.8		1.1		16.9		3.6		4.8		10.0		3.2		1.6		6.4		3.5		6.5		57.7		189.9	
Sept. qtr		93.5		..		18.0		..		111.5		19.7		0.8		9.8		1.6		3.7		20.4		6.4		1.9		7.6		2.2		4.3		58.8		190.1	
Dec. qtr		87.9		..		18.2		..		106.1		16.0		0.6		5.6		3.9		14.2		12.0		5.4		0.8		10.6		2.8		3.0		58.9		181.0	

TABLE 3. SUMMARY OF PUBLIC SECTOR BUILDING ACTIVITY, SOUTH AUSTRALIA

New residential building										Value (\$m)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Number of dwelling units					Value (\$m)					Number of dwelling units					Value (\$m)					Alterations and additions to residential buildings					Hotels etc.					Shops					Factories					Offices					Other business premises					Educational					Religious					Health					Recreational					Miscellaneous					Total building																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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TABLE 3. SUMMARY OF PUBLIC SECTOR BUILDING ACTIVITY, SOUTH AUSTRALIA—continued

Period	New residential building										Non-residential building									
	Houses					Other residential buildings					Total					Value (\$m)				
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Alterations and additions to residential buildings	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Enter-tainment and recrea-tional	Miscel-laneous	Total	Total building	
VALUE OF WORK DONE DURING PERIOD																				
1992-93	..	13.7	..	23.1	..	36.9	2.5	0.2	11.9	2.8	49.0	46.4	82.9	—	25.1	21.8	32.8	273.0	312.3	
1993-94	..	27.3	..	20.1	..	47.4	1.4	2.1	2.7	3.2	41.9	15.6	101.5	—	47.2	5.9	24.3	244.4	293.2	
1994-95	..	34.0	..	16.3	..	50.3	2.8	0.2	2.8	5.3	58.0	6.6	83.5	—	22.5	9.0	17.5	205.3	258.4	
1994 Sept. qtr	..	7.9	..	7.6	..	15.5	0.3	—	0.1	0.1	9.6	0.8	24.2	—	8.3	2.4	4.2	49.8	65.6	
Dec. qtr	..	10.4	..	5.0	..	15.4	1.4	—	0.1	1.2	18.8	1.1	20.0	—	6.2	1.7	5.7	54.8	71.6	
1995 Mar. qtr	..	6.2	..	2.2	..	8.4	0.5	0.1	1.1	2.6	12.6	2.4	18.6	—	4.9	1.2	3.6	47.2	56.0	
June qtr	..	9.5	..	1.5	..	11.0	0.6	0.1	1.5	1.3	16.9	2.3	20.6	—	3.1	3.7	3.9	53.5	65.1	
Sept. qtr	..	6.6	..	1.2	..	7.8	1.1	0.2	1.2	0.6	11.0	2.5	22.5	—	3.2	2.6	5.4	49.0	58.0	
Dec. qtr	..	6.3	..	0.8	..	7.1	0.1	—	0.2	0.4	11.4	2.8	28.0	—	4.2	1.8	8.0	56.9	64.1	
VALUE OF WORK YET TO BE DONE																				
1992-93	..	6.7	..	6.1	..	12.9	0.2	0.2	0.3	0.8	24.4	5.4	66.9	—	42.5	2.1	11.5	154.1	167.1	
1993-94	..	6.0	..	6.9	..	12.9	0.4	..	..	..	13.4	0.8	52.7	—	16.2	1.2	6.3	90.4	103.7	
1994-95	..	3.7	..	1.0	..	4.7	0.8	0.2	1.0	0.1	47.0	6.5	84.9	—	4.6	3.0	4.1	151.4	156.8	
1994 Sept. qtr	..	5.0	..	5.6	..	10.7	0.5	—	..	0.5	11.8	0.2	57.3	—	9.3	1.1	5.2	85.4	96.5	
Dec. qtr	..	3.1	..	2.5	..	5.7	0.2	..	..	4.1	11.2	0.1	47.6	—	4.9	1.0	5.6	74.5	80.3	
1995 Mar. qtr	..	4.5	..	1.7	..	6.2	..	—	2.1	1.4	8.6	0.9	35.9	—	6.5	2.1	7.2	64.8	71.0	
June qtr	..	3.7	..	1.0	..	4.7	0.8	0.2	1.0	0.1	47.0	6.5	84.9	—	4.6	3.0	4.1	151.4	156.8	
Sept. qtr	..	4.5	..	0.6	..	5.1	..	—	0.4	..	43.6	5.1	69.1	—	8.0	2.0	14.2	142.5	147.7	
Dec. qtr	..	2.4	..	1.0	..	3.3	..	—	0.3	0.6	40.7	5.1	59.6	—	8.4	0.9	7.9	123.5	126.9	

**TABLE 4. NUMBER OF DWELLING UNITS BY STAGE OF CONSTRUCTION, SOUTH AUSTRALIA  
SEASONALLY ADJUSTED SERIES (a)**

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Commenced	Completed (b)	Commenced	Completed (b)	Commenced	Completed (b)	Commenced	Completed (b)
1994 Sept. qtr	2,254	n.a.	2,351	n.a.	2,718	n.a.	2,921	n.a.
Dec. qtr	2,216	n.a.	2,359	n.a.	2,577	n.a.	2,763	n.a.
1995 Mar. qtr	1,796	n.a.	1,914	n.a.	2,057	n.a.	2,203	n.a.
June qtr	1,423	n.a.	1,533	n.a.	1,670	n.a.	1,785	n.a.
Sept. qtr	1,306	n.a.	1,400	n.a.	1,559	n.a.	1,666	n.a.
Dec. qtr	1,188	n.a.	1,248	n.a.	1,437	n.a.	1,519	n.a.

(a) Series have been revised due to annual re-analysis of seasonal adjustment factors. (b) 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 clearly identified.

**TABLE 5. VALUE OF BUILDING WORK DONE, SOUTH AUSTRALIA  
SEASONALLY ADJUSTED SERIES (a)**  
(\$ million)

(\$ million)							
Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential buildings	Total		Private sector	Total	
1994 Sept. qtr	190.5	38.4	228.0	37.5	60.8	107.5	372.5
Dec. qtr	188.5	33.9	222.8	32.7	58.7	111.5	369.4
1995 Mar. qtr	168.5	28.1	196.8	28.9	65.9	119.4	342.6
June qtr	144.9	22.2	167.3	29.9	86.8	138.8	336.6
Sept. qtr	122.5	22.7	144.7	31.4	69.1	116.1	291.8
Dec. qtr	120.8	19.2	140.1	36.4	79.2	134.0	314.0

(a) Series have been revised due to annual re-analysis of seasonal adjustment factors.

**TABLE 6. VALUE OF BUILDING WORK COMMENCED, AT AVERAGE 1989-90 PRICES (a), SOUTH AUSTRALIA**  
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential buildings	Total		Private sector	Total	
1992-93	644.9	122.4	767.3	115.7	193.2	431.2	1,314.2
1993-94	661.7	109.7	771.4	114.2	195.1	346.8	1,232.4
1994-95	572.1	98.7	670.8	109.1	231.0	475.5	1,255.4
1994 Sept. qtr	173.7	35.0	208.7	30.3	52.7	94.1	333.1
Dec. qtr	168.6	25.4	194.0	27.6	48.6	91.6	313.2
1995 Mar. qtr	121.1	25.1	146.2	22.8	51.0	84.5	253.5
June qtr	108.7	13.2	121.9	28.4	78.7	205.3	355.6
Sept. qtr	107.4	16.1	123.5	25.4	63.2	98.7	247.6
Dec. qtr	98.6	18.7	117.3	29.5	75.8	106.6	253.4

(a) See paragraphs 24 and 25 of the Explanatory Notes. Constant price estimates are subject to revision each quarter as more up to date information on prices and commodity compositions becomes available.

**TABLE 7. VALUE OF BUILDING WORK DONE, AT AVERAGE 1989-90 PRICES (a), SOUTH AUSTRALIA**  
ORIGINAL AND SEASONALLY ADJUSTED SERIES  
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential buildings	Total		Private sector	Total	
	ORIGINAL						
1992-93	620.8	110.4	731.2	119.4	274.1	525.3	1,375.9
1993-94	680.9	118.4	799.3	120.4	197.9	420.1	1,339.8
1994-95	604.5	110.8	715.3	112.8	244.7	429.7	1,257.8
1994 Sept. qtr	169.8	33.8	203.6	32.9	57.7	102.8	339.3
Dec. qtr	171.1	32.2	203.3	31.0	56.9	106.4	340.7
1995 Mar. qtr	138.4	25.6	164.0	21.8	51.5	94.0	279.8
June qtr	125.2	19.2	144.4	27.1	78.6	126.5	298.0
Sept. qtr	108.1	19.7	127.8	27.2	64.7	108.3	263.3
Dec. qtr	109.0	17.9	126.9	34.5	75.3	125.8	287.2
SEASONALLY ADJUSTED							
1994 Sept. qtr	167.2	34.8	201.1	33.0	55.0	97.3	331.1
Dec. qtr	164.8	30.6	195.8	28.5	53.1	100.7	327.1
1995 Mar. qtr	146.2	25.3	171.8	25.0	59.3	107.6	302.0
June qtr	125.3	19.8	145.3	25.9	77.7	124.3	296.1
Sept. qtr	106.4	20.2	126.2	27.2	61.5	103.4	256.4
Dec. qtr	105.0	17.0	122.1	31.7	70.2	118.9	275.8

(a) See paragraphs 24 to 26 of the Explanatory Notes. Constant price estimates are subject to revision each quarter as more up to date information on prices and commodity compositions becomes available.

TABLE 8. NUMBER OF DWELLING UNITS BY OWNERSHIP,  
CLASS OF BUILDER AND STAGE OF CONSTRUCTION,  
SOUTH AUSTRALIA

SOUTH AUSTRALIA

Period	Private sector					Public sector			Total		
	Houses			Other residential buildings	Total	Houses	Other residential buildings	Total	Houses	Other residential buildings	Total
	Contractor-built	Other	Total								
COMMENCED											
1992-93	7,502	1,620	9,122	1,759	10,881	294	460	754	9,416	2,219	11,635
1993-94	8,041	1,117	9,159	1,534	10,693	431	357	788	9,590	1,891	11,481
1994-95	6,831	914	7,745	1,339	9,084	465	186	651	8,210	1,525	9,735
1994 Sept. qtr	2,193	220	2,413	442	2,855	113	115	228	2,526	557	3,083
Dec. qtr	2,048	256	2,303	367	2,670	132	32	164	2,435	399	2,834
1995 Mar. qtr	1,358	273	1,631	303	1,934	104	26	130	1,735	329	2,064
June qtr	1,231	165	1,396	227	1,623	116	13	129	1,512	240	1,752
Sept. qtr r	1,224	174	1,398	242	1,640	106	14	120	1,504	256	1,760
Dec. qtr	962	275	1,237	252	1,489	53	15	68	1,290	267	1,557
UNDER CONSTRUCTION AT END OF PERIOD											
1992-93	2,206	1,183	3,388	914	4,302	175	248	423	3,563	1,162	4,725
1993-94	2,053	980	3,033	834	3,867	198	230	428	3,231	1,064	4,295
1994-95	1,363	838	2,202	523	2,725	99	41	140	2,301	564	2,865
1994 Sept. qtr	2,396	906	3,303	872	4,175	180	193	373	3,483	1,065	4,548
Dec. qtr	2,086	907	2,993	704	3,697	139	138	277	3,132	842	3,974
1995 Mar. qtr	1,813	915	2,728	677	3,405	139	88	227	2,867	765	3,632
June qtr	1,363	838	2,202	523	2,725	99	41	140	2,301	564	2,865
Sept. qtr r	1,331	798	2,129	515	2,644	116	21	137	2,245	536	2,781
Dec. qtr	1,199	795	1,993	453	2,446	74	21	95	2,067	474	2,541
COMPLETED											
1992-93	6,943	1,495	8,438	1,374	9,812	270	564	834	8,708	1,938	10,646
1993-94	8,197	1,298	9,495	1,599	11,094	408	375	783	9,903	1,974	11,877
1994-95	7,463	1,015	8,478	1,624	10,102	564	375	939	9,042	1,999	11,041
1994 Sept. qtr	1,864	271	2,135	402	2,537	131	152	283	2,266	554	2,820
Dec. qtr	2,311	261	2,572	513	3,085	173	87	260	2,745	600	3,345
1995 Mar. qtr	1,641	241	1,882	330	2,212	104	76	180	1,986	406	2,392
June qtr	1,647	241	1,889	379	2,268	156	60	216	2,045	439	2,484
Sept. qtr r	1,263	207	1,470	250	1,720	89	34	123	1,559	284	1,843
Dec. qtr	1,093	264	1,358	314	1,672	95	15	110	1,453	329	1,782

**TABLE 9. NUMBER AND VALUE OF NEW HOUSES BUILT BY CONTRACT BUILDERS FOR PRIVATE OWNERSHIP, BY COMPLETION VALUE RANGE AND STAGE OF CONSTRUCTION SOUTH AUSTRALIA**

Period	Commenced				Under construction at end of period				Completed			
	Less than \$40,000	\$40,000 to \$59,999	\$60,000 and over	Total	Less than \$40,000	\$40,000 to \$59,999	\$60,000 and over	Total	Less than \$40,000	\$40,000 to \$59,999	\$60,000 and over	Total
<b>NUMBER</b>												
1992-93	261	2,430	4,811	7,502	31	564	1,611	2,206	282	2,358	4,303	6,943
1993-94	256	2,366	5,420	8,041	46	462	1,544	2,053	233	2,523	5,441	8,197
1994-95	220	1,428	5,183	6,831	21	258	1,085	1,363	273	1,552	5,639	7,463
1994 Sept. qtr	83	422	1,689	2,193	53	381	1,962	2,396	76	461	1,327	1,864
Dec. qtr	83	505	1,460	2,048	67	363	1,656	2,086	97	498	1,717	2,311
1995 Mar. qtr	34	254	1,070	1,358	21	292	1,500	1,813	81	345	1,216	1,641
June qtr	21	248	963	1,231	21	258	1,085	1,363	21	248	1,379	1,647
Sept. qtr	20	282	922	1,224	14	203	1,115	1,331	20	364	878	1,263
Dec. qtr	27	138	797	962	27	155	1,016	1,199	14	172	908	1,093
<b>VALUE (\$m)</b>												
1992-93	8.7	123.5	413.2	545.5	1.0	29.0	150.7	180.8	9.5	119.3	372.7	501.4
1993-94	8.6	122.3	476.1	607.0	1.7	23.7	150.7	176.0	7.6	130.4	478.5	616.6
1994-95	7.0	73.3	470.4	550.8	0.7	13.1	120.5	134.3	9.0	79.8	508.7	597.6
1994 Sept. qtr	2.6	21.8	146.5	171.0	1.8	19.7	184.1	205.6	2.5	23.7	118.6	144.7
Dec. qtr	2.7	25.4	135.1	163.2	2.2	18.7	165.5	186.3	3.4	25.4	152.3	181.1
1995 Mar. qtr	1.0	13.2	98.1	112.3	0.7	14.6	155.6	170.9	2.4	18.3	112.0	132.8
June qtr	0.7	12.9	90.7	104.2	0.7	13.1	120.5	134.3	0.7	12.4	125.9	139.0
Sept. qtr	0.8	14.6	88.4	103.7	0.5	10.4	122.2	133.1	0.7	18.9	87.4	107.0
Dec. qtr	0.9	7.0	78.8	86.8	0.9	8.0	116.5	125.4	0.4	8.6	87.9	97.0

**TABLE 10. SUMMARY OF BUILDING ACTIVITY, SOUTH AUSTRALIA  
RELATIVE STANDARD ERRORS (PER CENT)  
DECEMBER QUARTER 1995**

DECEMBER-QUARTER 1955

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		
PRIVATE SECTOR						
Commenced	4.4	4.6	3.6	3.9	7.9	2.3
Under construction at end of period	4.4	4.2	3.6	3.5	7.9	2.2
Completed	5.5	5.7	4.5	4.7	9.2	2.9
Value of work done	..	3.9	..	3.3	6.6	2.0
Value of work yet to be done	..	5.0	..	4.2	10.0	2.6
TOTAL PRIVATE AND PUBLIC SECTORS						
Commenced	4.2	4.4	3.5	3.7	7.9	2.0
Under construction at end of period	4.2	4.0	3.4	3.4	7.9	1.4
Completed	5.2	5.4	4.2	4.5	9.1	2.4
Value of work done	..	3.7	..	3.2	6.6	1.6
Value of work yet to be done	..	4.9	..	4.0	10.0	1.5

## EXPLANATORY NOTES

## Introduction

This publication contains detailed results from the quarterly Building Activity Survey. Users should note that data for the latest quarter is subject to revision.

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) 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.
- (b) 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. Prior to the September quarter 1990, the cut-off for inclusion of non-residential building jobs (both new and alterations and additions) was \$30,000 or more and prior to the September quarter 1985 it was \$10,000 or more. Care should be taken in interpreting data for specific classes of non-residential building.

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 available only at the State/Territory and Australia levels with the exception of the Northern Territory. However, dwelling unit commencement data for regions below State level are shown in the monthly series of dwelling unit commencements compiled by State offices of the ABS. Data from this series, unlike those compiled from the Building Activity Survey, are based on information reported by local and other government 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, earth-works, etc.) is excluded.

6. Building jobs included in each quarter in the Building Activity Survey comprise those building jobs selected in previous quarters which have not been completed (or commenced) by the end of the previous quarter and those building jobs newly selected in the current quarter. The population list from which building jobs are selected for inclusion comprises all approved building jobs which were notified to the ABS 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 building 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, building 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) 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.

(b) 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 town-houses, duplexes, apartment buildings, etc.).

10. The number of dwelling units created by alterations and additions to existing buildings, and through the construction of new non-residential buildings, is not included in the tables but is shown as a footnote to Table 1.

11. *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).

12. *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.

13. *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

14. The value series in this publication are derived from estimates reported on survey returns as follows.

- (a) *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 building 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.

- (b) *Value of building completed* represents the actual completion value based, where practicable, on the market or contract price of building jobs including site preparation costs but excluding the value of land and landscaping.
- (c) *Value of building work done during the period* represents the estimated value of building work actually carried out during the quarter on building jobs which have commenced.
- (d) *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 building jobs commenced but not completed.

### Building classification

15. *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.

16. *Builder type.* Houses are classified according to the type of builder as follows.

- (a) *Contractor-built houses* are those constructed by a private recognised building contractor, either under contract, or in anticipation of sale or rental.
- (b) *Houses built by other than contract builders* are those constructed by an owner (other than a recognised building contractor) or under the owner's direction, without the services of a single contractor responsible for the whole job. Houses built by businesses (other than recognised building contractors) and public sector organisations are also included in this category.

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.

- (a) *Houses.* Includes cottages, bungalows, detached caretakers'/managers' cottages, rectories.
- (b) *Other residential buildings.* Includes blocks of flats, home units, attached townhouses, villa units, terrace houses, semi-detached houses, maisonettes.
- (c) *Hotels, etc.* Includes motels, hostels, boarding houses, guesthouses, holiday apartment buildings.

- (d) *Shops.* Includes retail shops, restaurants, cafes, taverns, dry cleaners, laundromats, hair salons, shopping arcades.
- (e) *Factories.* Includes paper mills, oil refinery buildings, brickworks, foundries, powerhouses, manufacturing laboratories, workshops as part of a manufacturing process.
- (f) *Offices.* Includes banks, post offices, council chambers, head and regional offices.
- (g) *Other business premises.* Includes warehouses, storage depots, service stations, transport depots and terminals, electricity substation buildings, pumping station buildings, telephone exchanges, mail sorting centres, broadcasting stations, film studios.
- (h) *Educational.* Includes schools, colleges, kindergartens, libraries, museums, art galleries, research and teaching laboratories, theological colleges.
- (i) *Religious.* Includes churches, chapels, temples.
- (j) *Health.* Includes hospitals, nursing homes, surgeries, clinics, medical centres.
- (k) *Entertainment and recreational.* Includes clubs, theatres, cinemas, public halls, gymnasiums, grandstands, squash courts, sports and recreation centres.
- (l) *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) 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*, 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 standard error 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 standard errors. Another measure of sampling variability is the *relative standard error*, which is obtained by expressing the standard error as a percentage of the estimate to which it refers. The relative standard errors of estimates provide an indication of the percentage errors likely to have occurred due to sampling, and are shown in Table 10.

20. An example of the use of relative standard errors 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 2) and that the associated relative standard error is 2.5 per cent (for actual percentage see Table 10). 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 relative standard error, 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 building jobs, and efficient operating procedures.

#### Seasonal adjustment

22. Seasonally adjusted building statistics are shown in Tables 4, 5 and 7. In the seasonally adjusted series, account has been taken of normal seasonal factors and trading day effects (arising from the varying numbers of Sundays, Mondays, Tuesdays, etc. in the quarter) and the effect of the movement in the date of Easter which may, in successive years, affect figures for different quarters. In this publication (i.e. the December quarter issue) the seasonally adjusted series have been revised as a result of the annual re-analysis of seasonal factors. Further information about seasonal adjustment can be obtained from the Assistant Director of Time Series Analysis, Canberra, on (06) 252 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.

#### Estimates at constant prices

24. Estimates of the value of commencements and work done at average 1989-90 prices are shown in Tables 6 and 7. Constant price estimates measure changes in value after the direct effects of price changes have been eliminated. 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 non-dwelling construction components of the national accounts aggregate 'Gross fixed capital expenditure'.

25. Estimates at constant prices are subject to a number of approximations and assumptions. Further information on the nature and concepts of constant price estimates is contained in Chapter 4 of *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

26. The factors used to seasonally adjust the constant price series are identical to those used to adjust the corresponding current price series.

#### Unpublished data and related publications

27. 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, data can be provided in the following forms: microfiche, photocopy, computer printout, floppy disk and clerically extracted tabulation. Inquiries should be made to the contact shown at the front of this publication.

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

*Building Approvals, Australia* (8731.0) – issued monthly  
*Building Approvals, South Australia* (8731.4) – issued monthly  
*Dwelling Unit Commencements Reported by Approving Authorities, South Australia* (8741.4) – issued monthly  
*Building Activity, Australia: Dwelling Unit Commencements, Preliminary* (8750.0) – issued quarterly  
*Building and Construction Activity, Australia* (8754.0) – issued quarterly

29. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

#### Symbols and other usages

.. not applicable  
 — nil or rounded to zero  
 r figure or series revised since previous issue

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

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