

**BUILDING ACTIVITY, SOUTH AUSTRALIA  
DECEMBER QUARTER 1993**

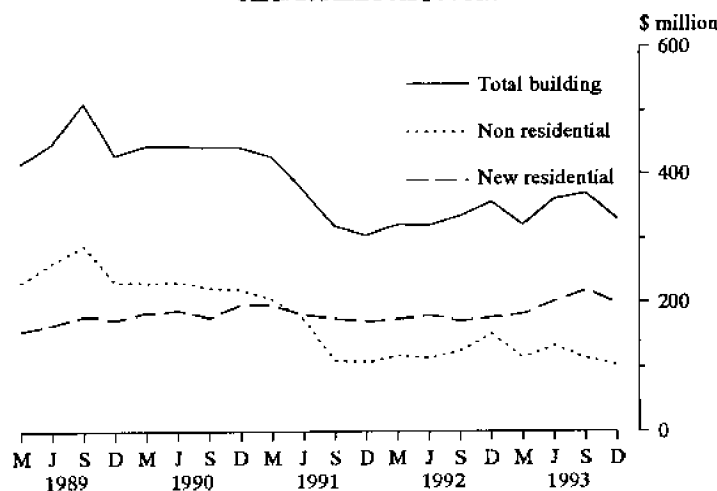
**SUMMARY OF FINDINGS**

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

	Percentage change on	
	Sept. quarter 1993	Dec. quarter 1992
New residential building	-9.9	12.0
Alterations and additions to residential buildings	2.0	3.0
Non-residential building	-9.1	-32.2
<b>Total building</b>	<b>-11.2</b>	<b>-7.6</b>

- Expressed in seasonally adjusted, average 1989-90 prices the total value of building work done for the December quarter 1993 was \$329.6 million which was 11.2% lower than the nine-quarter high recorded for the September quarter (\$371.1 million). The value of new residential building work done fell to \$197.6 million after four successive increases. This was 9.9% lower than the previous figure but still 12.0% higher than the \$176.5 million recorded for the December quarter 1992.
- For non-residential building the value of work done fell by 9.1% to be \$103.1 million for the December quarter 1993. This was the lowest level recorded since this statistical series began with the September quarter 1980.

**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- for more information about statistics in this publication and the availability of related unpublished statistics, contact Colin Speechley on Adelaide (08) 237 7495 or any ABS State Office.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.

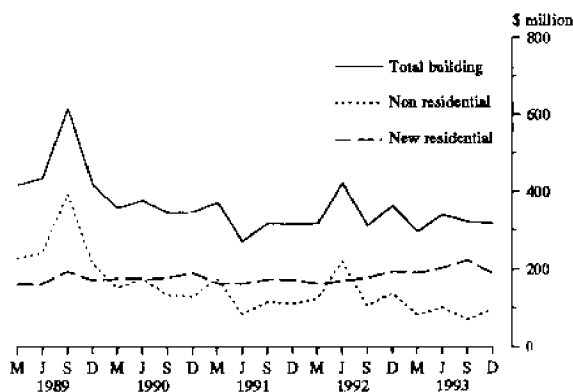
## SUMMARY OF INDICES

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

	Percentage change on	
	Sept. quarter 1993	Dec. quarter 1992
New residential building	-15.5	-2.9
Alterations and additions to residential buildings	12.5	6.9
Non-residential building	37.9	-30.7
<b>Total building</b>	<b>-1.4</b>	<b>-12.8</b>

- Expressed in average 1989-90 prices but not seasonally adjusted, the total value of building work commenced during the December quarter 1993 was \$317.9 million which was only slightly less than the figure for the previous quarter.
- The value of non-residential work rose \$26.6 million from the series low recorded for the September quarter to be \$96.7 million for December. This rise, together with an increase in the value of commencements of residential alterations and additions, counteracted most of the 15.5% fall which took the value of commencements of new residential buildings down to \$188.7 million from the nine-year high recorded for the September quarter.

VALUE OF WORK COMMENCED AT AVERAGE 1989-90 PRICES

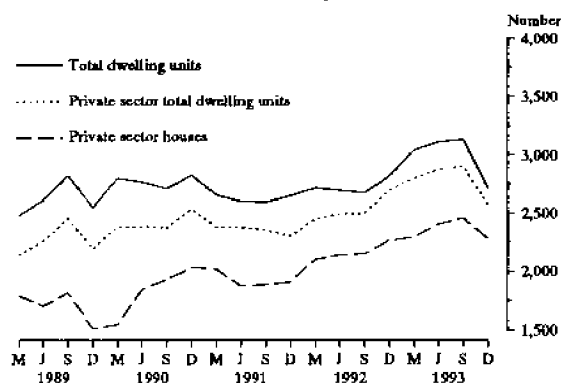


## Number of dwelling units commenced, seasonally adjusted

	Percentage change on	
	Sept. quarter 1993	Dec. quarter 1992
Private sector houses	-7.5	0.4
Private sector dwelling units	-11.7	-4.9
<b>Total dwelling units</b>	<b>-13.5</b>	<b>-3.9</b>

- In seasonally adjusted terms the estimate of the total number of dwelling units commenced during the December quarter 1993 was 2,710 which was 13.5% less than for the September quarter. This fall came after increases for the 4 previous quarters.
- Commencements of private sector houses and private sector dwelling units also both fell, but this was after having risen for each of the previous nine and seven quarters respectively. The respective estimates for the December quarter 1993 were 2,277 and 2,570.

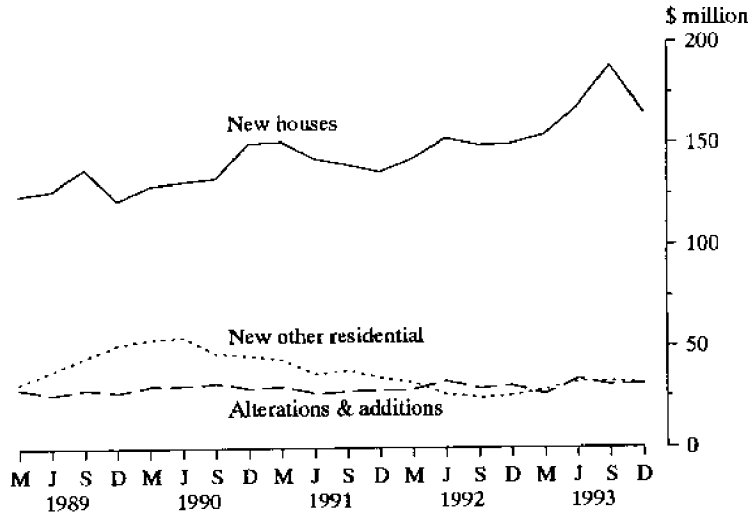
NEW DWELLING UNITS COMMENCED SEASONALLY ADJUSTED



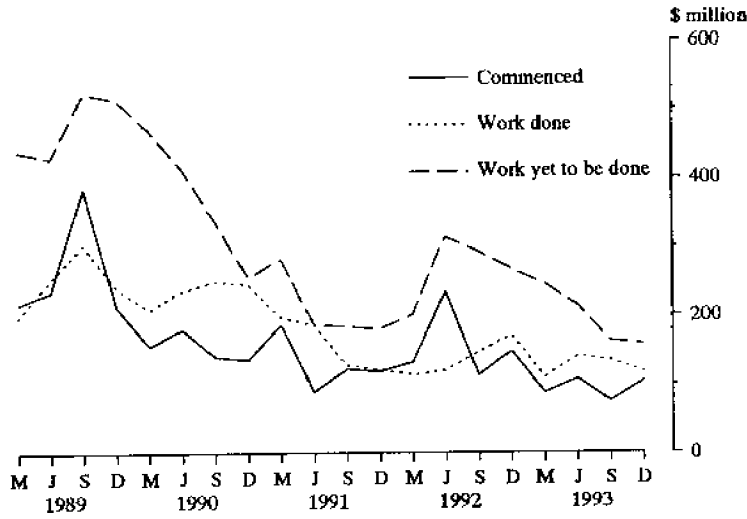
## Original unadjusted data

- The total value of building work commenced (unadjusted, at current prices) during the December quarter 1993 was \$345.5 million. Of this, \$205.3 million was for new residential building resulting in 2,793 dwelling units.
- The total value of work done during the December quarter was \$376.5 million while the value of work yet to be done on jobs under construction at the end of the quarter was \$349.2 million.

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



**VALUE OF NON-RESIDENTIAL BUILDING**



**VALUE OF NON-RESIDENTIAL WORK DONE**

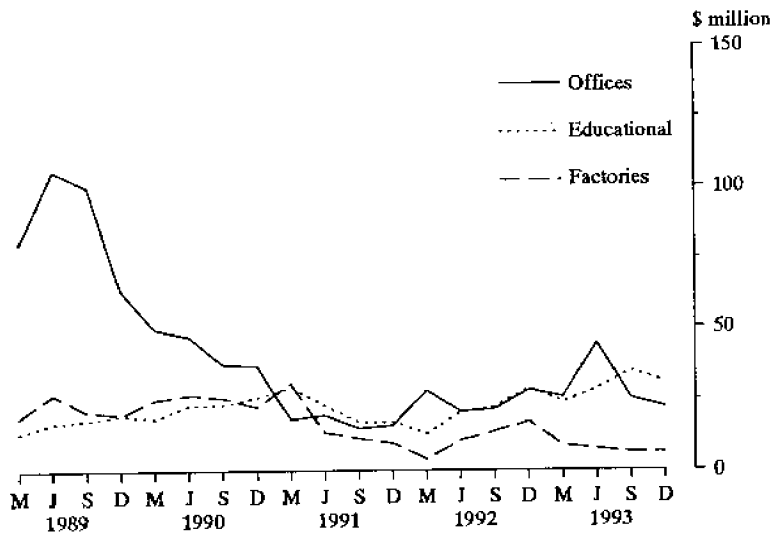


TABLE I. SUMMARY OF BUILDING ACTIVITY, SOUTH AUSTRALIA

Period	New residential building				Non-residential building										Total building				
	Houses				Other residential buildings				Total							Total 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 (\$m)	Hotels etc.	Shops	Factories	Offices	Business premises	Educational	Religious			Health	Recreational	Miscellaneous
COMMENCED																			
1990-91	8,177	580.7	2,644	146.8	10,821	727.5	118.2	15.0	103.4	75.4	90.4	72.9	90.1	5.0	32.8	29.4	39.5	553.9	1,399.6
1991-92	8,344	599.7	2,327	127.5	10,671	727.2	125.1	12.8	51.1	47.8	117.8	102.0	92.3	6.4	86.1	56.7	34.7	607.8	1,460.2
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	13.5	35.8	458.7	1,397.2
1992 Sept. qtr	2,353	165.2	442	24.8	2,795	190.0	27.9	1.1	36.6	6.8	16.4	23.1	20.4	0.5	3.6	2.4	3.0	113.9	331.9
Dec. qtr	2,356	174.4	551	32.0	2,907	206.4	32.3	2.2	6.4	5.4	43.8	8.0	47.4	2.9	14.5	5.0	12.7	148.2	386.9
1993 Mar. qtr	2,204	160.1	766	43.3	2,910	203.4	23.9	0.4	5.9	5.5	12.8	6.5	40.6	1.6	3.2	3.9	7.9	88.1	315.5
June qtr	2,504	185.6	520	30.7	3,024	216.3	38.2	1.7	4.9	5.3	26.8	15.8	9.2	1.1	29.0	2.4	12.2	108.4	363.0
Sept. qtr	2,776	208.5	478	29.9	3,254	238.4	30.9	1.5	11.2	4.2	13.2	10.3	15.3	0.4	8.3	4.1	6.7	75.3	344.5
Dec. qtr	2,388	179.5	405	25.8	2,793	205.3	35.9	2.2	15.6	6.6	10.4	8.7	30.9	0.6	15.7	5.5	8.1	104.3	345.5
UNDER CONSTRUCTION AT END OF PERIOD																			
1990-91	3,004	248.6	1,288	75.2	4,292	323.9	52.1	4.7	371.4	39.6	29.3	29.4	82.4	3.3	79.4	13.7	51.7	704.8	1,080.8
1991-92	2,891	236.3	921	53.1	3,812	289.4	57.6	9.0	45.3	42.8	78.9	73.0	81.5	5.2	93.9	38.7	49.5	517.8	864.8
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	13.7	64.5	498.6	919.3
1992 Sept. qtr	3,320	267.6	933	53.8	4,253	321.5	58.4	7.5	69.9	45.7	91.7	75.7	90.3	3.3	95.9	37.5	45.8	563.3	943.2
Dec. qtr	3,153	256.6	1,054	62.2	4,207	318.8	54.2	5.4	28.5	45.9	123.6	54.9	125.5	5.4	80.5	36.2	55.5	561.5	934.5
1993 Mar. qtr	3,212	260.2	1,210	75.7	4,422	335.8	51.3	4.4	15.9	31.8	122.6	48.6	152.7	5.9	79.4	19.7	55.6	536.7	923.8
June qtr	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	13.7	64.5	498.6	919.3
Sept. qtr	3,811	311.5	1,123	73.8	4,934	385.3	55.8	4.3	10.3	28.0	61.5	59.0	136.1	5.0	95.9	11.5	43.1	454.9	896.0
Dec. qtr	3,764	310.5	890	60.9	4,654	371.4	54.9	4.1	15.2	7.7	65.6	16.1	127.7	3.8	105.3	12.7	46.4	404.7	831.0
COMPLETED																			
1990-91	8,308	595.7	3,538	212.5	11,846	808.2	128.0	76.3	60.9	120.5	223.4	124.6	72.2	4.9	53.3	90.0	41.4	867.4	1,803.7
1991-92	8,432	616.0	2,670	149.6	11,102	765.6	121.5	8.6	378.9	44.9	63.7	59.5	91.3	5.3	71.0	32.1	38.3	793.7	1,680.9
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	40.4	19.1	480.3	1,355.3
1992 Sept. qtr	1,917	136.3	430	24.3	2,347	160.6	28.5	2.9	13.0	6.5	9.5	20.6	13.4	2.4	1.7	3.6	3.1	74.6	263.8
Dec. qtr	2,507	185.2	420	23.8	2,927	208.0	37.8	4.2	46.5	5.8	14.3	23.6	12.4	1.0	29.4	6.0	4.1	147.3	394.1
1993 Mar. qtr	2,139	158.0	546	30.0	2,685	188.0	27.6	1.3	18.6	19.2	13.3	10.9	15.0	1.2	1.3	21.5	8.3	110.7	326.2
June qtr	2,146	158.2	542	32.2	2,688	190.4	33.0	2.4	7.7	4.2	73.3	10.9	20.3	1.8	14.1	9.3	3.7	147.7	371.1
Sept. qtr	2,528	188.4	510	31.5	3,038	219.9	32.2	0.7	13.8	8.9	27.2	7.9	22.9	0.9	8.1	6.4	30.5	127.2	379.4
Dec. qtr	2,430	182.5	632	39.4	3,062	221.9	37.1	2.5	10.7	26.7	11.9	52.2	38.5	1.9	8.6	4.2	6.1	163.5	422.4

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

Period	New residential building				Non-residential building											Total building			
	Houses		Other residential buildings		Total		Alterations and additions to residential buildings					Other business premises					Emer-tainment and recreational		Total
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Shops	Factories	Offices	Educa-tional	Reli-gious	Health	Miscel-laneous	Health	recrea-tional		Miscel-laneous		
	VALUE OF WORK DONE DURING PERIOD																		
1990-91	..	600.2	..	182.1	..	782.3	122.0	42.7	257.3	91.5	111.2	100.8	100.8	4.8	56.6	68.0	42.9	876.6	1,780.8
1991-92	..	607.5	..	141.0	..	748.5	125.1	9.1	89.4	34.9	79.1	68.3	67.5	7.1	52.6	37.1	38.9	484.1	1,357.6
1992-93	..	660.9	..	119.7	..	780.6	127.1	8.6	62.6	46.6	119.7	82.1	103.7	4.6	65.8	34.7	42.4	570.9	1,478.6
1992 Sept. qtr	..	160.8	..	23.9	..	184.7	30.9	3.0	26.0	13.7	21.5	25.2	22.2	0.8	16.1	9.5	9.2	147.2	362.8
Dec. qtr	..	166.3	..	28.5	..	194.8	34.7	2.4	21.2	17.0	28.1	25.0	29.0	1.3	21.0	10.8	15.7	171.4	400.9
1993 Mar. qtr	..	157.2	..	32.2	..	189.4	25.6	0.5	10.6	8.6	25.8	13.4	23.9	1.5	11.9	7.9	7.2	111.3	326.3
June qtr	..	176.6	..	35.2	..	211.8	35.9	2.7	4.8	7.4	44.5	18.5	28.6	1.0	16.8	6.5	10.2	140.9	388.7
Sept. qtr	..	203.8	..	31.9	..	235.7	32.3	1.3	11.2	6.2	25.1	18.3	34.7	1.9	18.6	4.7	12.7	134.7	402.8
Dec. qtr	..	187.3	..	34.9	..	222.1	36.5	2.5	11.1	6.2	22.0	12.7	30.7	0.9	19.1	4.4	8.3	117.8	376.5
	VALUE OF WORK YET TO BE DONE																		
1990-91	..	107.5	..	37.5	..	145.0	22.4	1.8	30.7	12.8	16.0	14.7	29.3	1.4	28.7	5.5	26.5	187.3	354.7
1991-92	..	105.0	..	25.8	..	130.8	24.4	5.6	14.1	26.1	50.3	49.6	54.6	1.5	61.6	25.4	24.4	313.2	468.3
1992-93	..	136.8	..	39.0	..	175.8	23.1	2.6	4.9	5.0	37.1	14.2	70.8	3.3	53.6	6.1	16.2	213.7	412.6
1992 Sept. qtr	..	112.0	..	27.0	..	139.0	22.8	4.0	25.6	21.9	51.1	47.7	52.6	1.2	55.0	18.4	14.6	292.0	453.8
Dec. qtr	..	120.5	..	30.7	..	151.2	21.7	3.7	9.6	10.9	69.2	25.4	71.7	2.9	47.9	12.3	12.6	266.4	439.3
1993 Mar. qtr	..	125.0	..	42.7	..	167.8	20.8	3.6	5.0	7.5	55.8	16.9	89.9	3.2	40.1	9.3	13.8	245.1	433.6
June qtr	..	136.8	..	39.0	..	175.8	23.1	2.6	4.9	5.0	37.1	14.2	70.8	3.3	53.6	6.1	16.2	213.7	412.6
Sept. qtr	..	144.6	..	37.7	..	182.3	22.8	2.6	4.9	3.3	25.6	9.3	53.2	2.0	43.5	5.6	12.6	162.7	367.7
Dec. qtr	..	139.1	..	29.4	..	168.5	22.4	2.5	9.5	3.5	19.7	5.8	52.6	1.8	42.5	6.6	13.7	158.2	349.2

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 3 such dwelling units commenced in the December quarter 1993.

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

Period	New residential building										Non-residential building																																							
	Houses					Other residential buildings					Total					Alterations and additions to residential buildings etc.					Other business premises					Educational					Health					Entertainment and recreational					Miscellaneous					Total building				
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Value (\$m)	Number of dwelling units	Value (\$m)	Hotels etc.	Shops	Factories	Offices	Business premises	Educational	Religious	Health	Entertainment and recreational	Miscellaneous	Total building																														
COMMENCED																																																		
1990-91	7,863	562.7	1,810	106.2	9,673	668.9	117.5	100.5	61.9	66.7	42.3	21.0	5.0	25.1	18.7	13.3	367.0	1,153.4																																
1991-92	8,036	584.1	1,572	91.9	9,608	676.0	124.1	46.8	46.4	94.9	45.7	18.7	6.4	35.5	30.5	7.4	344.5	1,144.6																																
1992-93	9,122	668.6	1,759	109.8	10,881	778.4	119.7	41.6	19.6	33.5	36.1	19.3	6.1	25.3	7.0	11.9	205.5	1,103.6																																
1992 Sept. qr	2,293	162.4	288	18.4	2,581	180.8	27.8	1.1	26.4	4.6	6.4	9.0	0.5	3.2	1.1	2.6	64.9	273.6																																
Dec. qr	2,325	172.9	477	28.9	2,802	201.8	32.3	2.2	6.0	5.4	13.3	1.3	2.9	14.1	3.9	0.8	56.5	290.5																																
1993 Mar. qr	2,136	156.5	568	36.3	2,704	192.8	23.6	0.4	4.7	5.3	7.7	5.6	1.6	2.8	1.6	2.5	37.8	254.1																																
June qr	2,369	176.8	426	26.2	2,795	203.0	36.0	1.5	4.5	4.4	6.2	13.7	3.3	5.2	0.5	5.9	46.3	285.3																																
Sept. qr	2,611	199.0	376	24.4	2,987	223.3	30.9	1.2	10.9	4.2	6.3	5.6	5.0	4.3	1.8	2.7	42.6	296.8																																
Dec. qr	2,329	174.9	338	21.2	2,667	196.1	35.9	1.6	14.6	4.2	6.6	7.7	4.1	0.6	4.7	2.6	60.5	292.5																																
UNDER CONSTRUCTION AT END OF PERIOD																																																		
1990-91	2,850	240.1	850	53.2	3,700	293.3	51.4	3.1	369.1	30.6	23.0	14.0	9.7	3.3	31.4	7.3	502.6	847.3																																
1991-92	2,740	229.2	569	36.0	3,309	265.2	57.5	8.9	45.3	42.8	67.6	22.4	11.3	5.2	34.8	13.9	4.6	256.8	579.5																															
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																															
1992 Sept. qr	3,191	261.5	624	40.4	3,815	301.9	58.3	7.4	62.1	43.5	72.9	19.7	16.6	3.3	36.8	11.5	6.5	280.2	640.4																															
Dec. qr	3,069	252.4	794	50.7	3,863	303.1	54.2	5.4	20.4	45.9	82.0	14.6	11.9	5.4	36.6	9.4	3.6	235.3	592.7																															
1993 Mar. qr	3,100	254.4	920	61.6	4,020	315.9	50.9	4.4	15.5	31.8	80.0	10.8	10.7	5.9	35.2	8.2	3.4	206.0	572.9																															
June qr	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																															
Sept. qr	3,571	298.2	897	61.9	4,468	360.1	55.6	4.2	10.0	27.1	30.5	15.3	9.8	5.0	28.1	8.5	8.9	147.5	563.2																															
Dec. qr	3,611	301.2	743	51.9	4,354	353.1	54.7	4.1	14.0	6.2	34.8	14.8	9.3	3.8	35.3	11.0	8.5	141.9	549.7																															
COMPLETED																																																		
1990-91	7,892	572.4	2,458	161.9	10,350	734.3	125.3	74.5	60.4	95.4	192.6	85.7	19.8	4.9	32.5	36.2	17.4	619.4	1,479.0																															
1991-92	8,121	598.9	1,829	109.0	9,950	707.9	119.9	6.4	372.3	34.2	45.6	35.9	16.9	5.3	32.3	24.3	13.1	586.3	1,414.0																															
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																															
1992 Sept. qr	1,835	132.5	233	14.3	2,068	146.8	28.4	2.9	10.6	6.5	6.4	12.7	3.5	2.4	1.2	3.6	0.7	50.5	225.7																															
Dec. qr	2,431	181.8	297	18.7	2,728	200.5	37.7	4.0	46.4	3.4	6.5	11.1	5.6	1.0	13.8	5.7	3.7	101.2	339.4																															
1993 Mar. qr	2,099	156.1	438	25.5	2,537	181.6	27.5	1.3	9.7	19.0	9.0	7.7	6.0	1.2	1.1	2.8	2.8	60.6	269.7																															
June qr	2,074	154.0	406	26.0	2,480	179.9	30.9	2.4	7.3	4.2	52.9	9.8	3.7	1.8	10.6	1.3	2.4	96.3	307.1																															
Sept. qr	2,428	181.9	386	25.5	2,814	207.5	31.9	0.3	13.5	8.9	9.7	5.0	5.4	0.9	7.0	0.7	0.8	52.4	291.8																															
Dec. qr	2,284	173.8	486	31.9	2,770	205.7	37.1	1.9	10.6	24.9	7.7	8.3	4.6	1.9	7.1	2.0	2.7	71.7	314.4																															

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

Period	New residential building										Non-residential building																																												
	Houses					Other residential buildings					Total					Alterations and additions to residential buildings					Other business premises					Educational					Religious					Health					Entertainment and recreational					Miscellaneous					Total building				
	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)	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertainment and recreational	Miscellaneous	Total building																																
VALUE OF WORK DONE DURING PERIOD																																																							
1990-91	..	578.3	..	135.3	..	713.6	119.9	40.9	256.1	68.5	85.2	69.1	21.0	4.8	31.8	30.4	14.1	621.9	1,455.4																																				
1991-92	..	591.5	..	101.9	..	693.4	123.8	7.6	83.5	30.2	60.2	39.0	15.5	7.1	33.7	22.5	10.9	310.3	1,127.5																																				
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																																				
1992 Sept. qtr	..	157.5	..	17.0	..	174.6	30.8	3.0	20.1	12.7	15.4	11.8	7.2	0.8	9.9	4.5	2.8	88.1	293.5																																				
Dec. qtr	..	163.3	..	22.6	..	185.9	34.7	2.3	18.5	15.6	20.6	9.1	4.9	1.3	12.8	4.2	2.3	91.5	312.1																																				
1993 Mar. qtr	..	155.0	..	27.7	..	182.7	25.3	0.5	7.4	8.4	16.9	4.5	4.5	1.5	8.1	2.7	1.4	56.0	264.1																																				
June qtr	..	171.3	..	29.2	..	200.6	33.8	2.6	4.7	7.3	17.8	10.3	4.1	1.0	9.9	1.5	3.1	62.3	296.6																																				
Sept. qtr	..	197.3	..	26.7	..	224.0	32.2	0.9	10.8	5.6	14.6	9.5	3.9	1.9	8.6	1.2	2.7	59.7	315.9																																				
Dec. qtr	..	178.5	..	29.1	..	207.6	36.5	1.9	10.1	4.3	11.4	7.6	4.4	0.9	7.8	3.5	2.4	54.3	298.4																																				
VALUE OF WORK YET TO BE DONE																																																							
1990-91	..	103.4	..	26.0	..	129.4	22.1	0.9	49.0	9.9	12.8	5.3	3.7	1.4	17.6	1.8	6.5	108.9	260.4																																				
1991-92	..	101.3	..	17.6	..	118.8	24.3	5.5	14.1	26.1	42.9	10.7	6.7	1.5	19.5	10.1	2.3	139.4	282.5																																				
1992-93	..	130.1	..	32.9	..	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																																				
1992 Sept. qtr	..	108.7	..	19.2	..	127.9	22.8	3.9	21.3	20.6	39.1	9.0	8.3	1.2	18.7	6.7	2.1	130.9	281.6																																				
Dec. qtr	..	118.7	..	25.7	..	144.3	21.7	3.7	7.6	10.9	34.1	5.8	4.7	2.9	19.6	6.2	0.6	96.1	262.2																																				
1993 Mar. qtr	..	121.8	..	35.1	..	156.9	20.6	3.6	4.9	7.5	24.2	5.4	4.9	3.2	15.0	5.1	1.8	75.5	253.1																																				
June qtr	..	130.1	..	32.9	..	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																																				
Sept. qtr	..	134.9	..	31.3	..	166.2	22.7	2.5	4.8	3.1	4.8	5.0	5.2	2.0	7.0	4.7	4.8	43.8	232.7																																				
Dec. qtr	..	133.6	..	24.0	..	157.6	22.4	2.4	9.3	2.8	5.4	5.1	4.8	1.8	13.4	5.8	4.7	55.6	235.6																																				

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

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	Recreation and entertainment	Miscellaneous	Total building		
COMMENCED																				
1990-91	314	18.0	834	40.6	1,148	58.6	0.7	2.6	2.9	13.5	23.6	30.7	69.1	—	7.6	10.7	26.3	186.9	246.2	
1991-92	308	15.6	755	35.7	1,063	51.2	1.0	0.6	4.3	1.4	22.9	56.3	73.6	—	50.6	26.3	27.3	263.4	315.6	
1992-93	294	16.7	460	21.1	754	37.8	2.7	0.3	12.2	3.4	66.3	17.3	98.4	—	25.0	6.5	23.9	253.3	293.7	
1992 Sept. qtr	60	2.8	154	6.4	214	9.2	0.1	—	10.2	2.3	10.0	13.0	11.4	—	0.4	1.3	0.4	49.0	58.3	
Dec. qtr	31	1.5	74	3.1	105	4.6	—	0.1	0.4	—	30.5	1.3	46.1	—	0.3	1.1	11.9	91.8	96.4	
1993 Mar. qtr	68	3.6	138	7.1	206	10.7	0.4	—	1.2	0.2	5.1	0.9	34.9	—	0.4	2.3	5.3	50.4	61.4	
June qtr	135	8.8	94	4.5	229	13.3	2.2	0.2	0.4	0.9	20.7	2.1	5.9	—	23.8	1.8	6.3	62.1	77.6	
Sept. qtr	165	9.5	102	5.5	267	15.0	—	0.3	0.2	—	6.9	4.7	10.3	—	4.0	2.3	4.0	32.7	47.7	
Dec. qtr	59	4.6	67	4.6	126	9.2	—	0.5	1.0	2.4	3.8	1.0	26.9	—	1.8	0.8	5.6	43.8	53.1	
UNDER CONSTRUCTION AT END OF PERIOD																				
1990-91	154	8.5	438	22.0	592	30.5	0.7	1.6	2.3	8.9	6.3	15.4	72.7	—	48.0	6.4	40.6	202.2	233.5	
1991-92	151	7.0	352	17.1	503	24.2	0.1	0.1	—	—	11.3	50.7	70.2	—	59.1	24.8	44.8	261.0	285.3	
1992-93	175	10.4	248	12.3	423	22.7	0.5	0.2	0.3	0.8	41.7	38.9	131.8	—	64.8	6.3	57.6	342.5	365.7	
1992 Sept. qtr	129	6.1	309	13.5	438	19.6	0.1	0.1	7.8	2.3	18.8	56.1	73.7	—	59.1	26.0	39.3	283.2	302.8	
Dec. qtr	84	4.2	260	11.5	344	15.7	—	—	8.1	—	41.6	40.3	113.6	—	43.9	26.8	51.9	326.1	341.8	
1993 Mar. qtr	112	5.8	290	14.1	402	19.9	0.4	—	0.4	—	42.6	37.8	142.0	—	44.2	11.5	52.3	330.7	350.9	
June qtr	175	10.4	248	12.3	423	22.7	0.5	0.2	0.3	0.8	41.7	38.9	131.8	—	64.8	6.3	57.6	342.5	365.7	
Sept. qtr	240	13.4	226	11.8	466	25.2	0.2	0.1	0.3	0.8	31.1	43.7	126.3	—	67.8	3.0	34.2	307.4	332.8	
Dec. qtr	153	9.3	147	9.0	300	18.3	0.3	0.1	1.2	1.5	30.8	1.3	118.4	—	70.0	1.7	37.9	262.8	281.3	
COMPLETED																				
1990-91	416	23.3	1,080	50.7	1,496	74.0	2.7	1.8	0.5	25.1	30.8	38.9	52.4	—	20.8	53.8	24.0	248.1	324.8	
1991-92	311	17.2	841	40.6	1,152	57.8	1.7	2.2	6.6	10.7	18.2	23.6	74.4	—	38.7	7.9	25.3	207.4	266.9	
1992-93	270	13.4	564	25.9	834	39.3	2.3	0.2	11.9	2.7	35.6	24.8	40.2	—	19.8	27.1	9.5	171.7	213.2	
1992 Sept. qtr	82	3.8	197	10.0	279	13.8	0.1	—	2.4	—	3.1	7.9	7.9	—	0.4	0.1	2.4	24.1	38.1	
Dec. qtr	76	3.4	123	5.1	199	8.5	0.1	0.2	0.1	2.4	7.8	12.5	6.8	—	15.6	0.3	0.4	46.1	54.7	
1993 Mar. qtr	40	2.0	108	4.5	148	6.5	—	—	8.9	0.2	4.3	3.3	9.0	—	0.2	18.7	5.4	50.0	56.5	
June qtr	72	4.2	136	6.3	208	10.5	2.1	—	0.4	0.1	20.4	1.1	16.6	—	3.5	8.0	1.3	51.4	63.9	
Sept. qtr	100	6.5	124	6.0	224	12.5	0.3	0.4	0.2	—	17.5	2.9	17.4	—	1.1	5.6	29.7	74.8	87.6	
Dec. qtr	146	8.7	146	7.5	292	16.2	—	0.6	0.2	1.8	4.2	43.9	33.9	—	1.5	2.2	3.5	91.9	108.0	



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

Period	New residential building										Non-residential building																								
	Houses					Other residential buildings					Total					Alterations and additions to residential buildings					Shops, Factories, Offices, business premises, Educational, Religious, Health, recreational and Entertainment					Miscellaneous					Total building				
	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 (\$m)	Hotels etc.	Shops	Factories	Offices	business premises	Educational	Religious	Health	recreational	Entertainment	Miscellaneous	Total														
VALUE OF WORK DONE DURING PERIOD																																			
1990-91	..	21.9	..	46.8	..	68.6	..	2.1	1.9	1.2	23.0	26.0	31.7	79.8	..	24.7	37.6	..	28.9	254.8	325.5														
1991-92	..	16.1	..	39.0	..	55.1	..	1.3	1.5	6.0	4.7	18.9	29.3	52.0	..	18.9	14.6	..	27.9	173.8	230.2														
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														
1992 Sept. qtr	..	3.2	..	6.9	..	10.1	..	0.1	..	5.9	1.0	6.1	13.4	15.0	..	6.3	5.0	..	6.5	59.1	69.3														
Dec. qtr	..	3.0	..	5.8	..	8.9	..	..	0.1	2.7	1.4	7.4	15.8	24.0	..	8.3	6.6	..	13.4	79.9	88.8														
1993 Mar. qtr	..	2.2	..	4.5	..	6.7	..	0.2	..	3.1	0.2	8.8	8.9	19.4	..	3.7	5.2	..	5.8	55.3	62.2														
June qtr	..	5.3	..	5.9	..	11.2	..	2.2	0.1	0.1	0.1	26.6	8.2	24.5	..	6.9	5.0	..	7.2	78.7	92.1														
Sept. qtr	..	6.5	..	5.3	..	11.8	..	0.1	0.4	0.4	0.5	10.5	8.9	30.8	..	9.9	3.5	..	10.0	75.0	86.9														
Dec. qtr	..	8.8	..	5.7	..	14.5	..	0.1	0.6	0.9	1.9	10.7	5.1	26.2	..	11.2	0.9	..	5.9	63.5	78.0														
VALUE OF WORK YET TO BE DONE																																			
1990-91	..	4.1	..	11.5	..	15.6	..	0.2	0.9	1.6	3.0	3.2	9.4	25.6	..	11.1	3.7	..	20.0	78.4	94.3														
1991-92	..	3.8	..	8.2	..	12.0	..	..	0.1	..	..	7.4	38.9	47.9	..	42.1	15.3	..	22.0	173.8	185.8														
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														
1992 Sept. qtr	..	3.4	..	7.7	..	11.1	..	..	0.1	4.3	1.3	12.0	38.8	44.3	..	36.3	11.6	..	12.5	161.1	172.2														
Dec. qtr	..	1.8	..	5.0	..	6.8	..	..	..	2.0	..	35.2	19.6	67.0	..	28.4	6.1	..	12.0	170.3	177.1														
1993 Mar. qtr	..	3.2	..	7.6	..	10.8	..	0.2	..	0.1	..	31.6	11.5	85.0	..	25.1	4.3	..	12.1	169.6	180.6														
June qtr	..	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														
Sept. qtr	..	9.7	..	6.4	..	16.1	..	0.1	0.1	0.1	0.2	20.9	4.3	48.0	..	36.6	0.9	..	7.8	118.9	135.1														
Dec. qtr	..	5.5	..	5.4	..	10.9	..	0.1	0.1	0.2	0.7	14.2	0.7	47.8	..	29.1	0.8	..	9.0	102.6	113.6														

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

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Commenced	Completed	Commenced	Completed	Commenced	Completed	Commenced	Completed
1992 Sept. qtr	2,158	1,778	2,219	1,862	2,504	2,076	2,677	2,399
Dec. qtr	2,269	2,302	2,296	2,349	2,701	2,583	2,820	2,740
1993 Mar. qtr	2,297	2,250	2,361	2,324	2,807	2,666	3,045	2,898
June qtr	2,407	2,121	2,553	2,187	2,880	2,490	3,112	2,619
Sept. qtr r	2,462	2,348	2,620	2,450	2,909	2,826	3,132	3,106
Dec. qtr	2,277	2,163	2,333	2,279	2,570	2,624	2,710	2,871

**TABLE 5. VALUE OF BUILDING WORK DONE, SOUTH AUSTRALIA  
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	
1992 Sept. qtr	159.3	26.1	184.0	31.0	87.3	136.0	360.4
Dec. qtr	159.8	27.8	188.7	32.2	86.4	165.0	383.7
1993 Mar. qtr	163.6	30.5	193.7	27.7	61.2	123.2	344.3
June qtr	178.7	35.0	214.6	35.6	61.0	144.6	388.0
Sept. qtr r	201.8	35.0	235.2	32.8	59.7	124.3	400.9
Dec. qtr	180.0	34.0	215.3	33.9	51.1	113.5	360.3

**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	
1990-91	558.2	139.6	697.8	113.4	349.7	528.2	1,339.4
1991-92	562.7	119.5	682.2	117.6	325.4	574.2	1,374.0
1992-93	645.2	122.4	767.6	115.7	193.2	431.1	1,314.4
1992 Sept. qtr	155.5	23.2	178.7	26.5	61.2	107.4	312.6
Dec. qtr	164.4	30.0	194.4	30.4	53.2	139.6	364.4
1993 Mar. qtr	150.5	40.6	191.1	22.7	35.5	82.8	296.6
June qtr	174.8	28.6	203.4	36.1	43.3	101.3	340.8
Sept. qtr r	195.6	27.7	223.3	28.9	39.7	70.1	322.3
Dec. qtr	164.8	23.9	188.7	32.5	56.1	96.7	317.9

(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	
<b>ORIGINAL</b>							
1990-91	577.2	171.9	749.1	117.5	583.8	822.8	1,689.4
1991-92	570.3	130.0	700.3	117.6	286.1	446.4	1,264.3
1992-93	621.0	110.4	731.4	119.4	274.1	525.3	1,376.1
1992 Sept. qtr	150.5	22.1	172.6	28.9	81.0	135.4	336.9
Dec. qtr	156.1	26.1	182.2	32.6	84.3	157.9	372.7
1993 Mar. qtr	148.1	29.8	177.9	24.0	51.6	102.5	304.4
June qtr	166.3	32.4	198.7	33.9	57.2	129.5	362.1
Sept. qtr r	190.3	29.4	219.7	30.2	54.5	122.9	372.8
Dec. qtr	172.0	31.8	203.8	33.6	49.3	107.0	344.4
<b>SEASONALLY ADJUSTED</b>							
1992 Sept. qtr	149.1	24.2	171.9	29.0	80.3	125.1	334.7
Dec. qtr	149.9	25.5	176.5	30.3	79.6	152.0	356.7
1993 Mar. qtr	154.1	28.2	182.0	26.0	56.4	113.5	321.2
June qtr	168.2	32.3	201.3	33.6	56.0	132.9	361.5
Sept. qtr r	188.5	32.2	219.2	30.6	54.5	113.4	371.1
Dec. qtr	165.3	31.0	197.6	31.2	46.4	103.1	329.6

(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**

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								
<b>COMMENCED</b>											
1990-91	6,788	1,075	7,863	1,810	9,673	314	834	1,148	8,177	2,644	10,821
1991-92	6,723	1,313	8,036	1,572	9,608	308	755	1,063	8,344	2,327	10,671
1992-93	7,502	1,620	9,122	1,759	10,881	294	460	754	9,416	2,219	11,635
1992 Sept. qtr	1,956	337	2,293	288	2,581	60	154	214	2,353	442	2,795
Dec. qtr	1,863	461	2,325	477	2,802	31	74	105	2,356	551	2,907
1993 Mar. qtr	1,692	444	2,136	568	2,704	68	138	206	2,204	706	2,910
June qtr	1,991	378	2,369	426	2,795	135	94	229	2,504	520	3,024
Sept. qtr	2,225	386	2,611	376	2,987	165	102	267	2,776	478	3,254
Dec. qtr	1,985	345	2,329	338	2,667	59	67	126	2,388	405	2,793
<b>UNDER CONSTRUCTION AT END OF PERIOD</b>											
1990-91	1,781	1,068	2,850	850	3,700	154	438	592	3,004	1,288	4,292
1991-92	1,663	1,077	2,740	569	3,309	151	352	503	2,891	921	3,812
1992-93	2,206	1,183	3,388	914	4,302	175	248	423	3,563	1,162	4,725
1992 Sept. qtr	2,035	1,156	3,191	624	3,815	129	309	438	3,320	933	4,253
Dec. qtr	1,899	1,170	3,069	794	3,863	84	260	344	3,153	1,054	4,207
1993 Mar. qtr	1,903	1,198	3,100	920	4,020	112	290	402	3,212	1,210	4,422
June qtr	2,206	1,183	3,388	914	4,302	175	248	423	3,563	1,162	4,725
Sept. qtr	2,340	1,232	3,571	897	4,468	240	226	466	3,811	1,123	4,934
Dec. qtr	2,363	1,248	3,611	743	4,354	153	147	300	3,764	890	4,654
<b>COMPLETED</b>											
1990-91	6,753	1,139	7,892	2,458	10,350	416	1,080	1,496	8,308	3,538	11,846
1991-92	6,835	1,286	8,121	1,829	9,950	311	841	1,152	8,432	2,670	11,102
1992-93	6,943	1,495	8,438	1,374	9,812	270	564	834	8,708	1,938	10,646
1992 Sept. qtr	1,573	261	1,835	233	2,068	82	197	279	1,917	430	2,347
Dec. qtr	1,998	433	2,431	297	2,728	76	123	199	2,507	420	2,927
1993 Mar. qtr	1,698	401	2,099	438	2,537	40	108	148	2,139	546	2,685
June qtr	1,674	401	2,074	406	2,480	72	136	208	2,146	542	2,688
Sept. qtr	2,078	350	2,428	386	2,814	100	124	224	2,528	510	3,038
Dec. qtr	1,961	323	2,284	486	2,770	146	146	292	2,430	632	3,062

**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>												
1990-91	504	2,405	3,879	6,788	79	487	1,216	1,781	530	2,463	3,760	6,753
1991-92	307	2,084	4,332	6,723	30	485	1,147	1,663	365	2,068	4,402	6,835
1992-93	261	2,430	4,811	7,502	31	564	1,611	2,206	282	2,358	4,303	6,943
1992 Sept. qtr	75	684	1,197	1,956	25	624	1,386	2,035	80	535	958	1,573
Dec. qtr	55	517	1,292	1,863	17	462	1,420	1,899	73	683	1,243	1,998
1993 Mar. qtr	76	578	1,038	1,692	39	512	1,351	1,903	67	548	1,083	1,698
June qtr	55	651	1,284	1,991	31	564	1,611	2,206	62	592	1,019	1,674
Sept. qtr	104	686	1,435	2,225	72	622	1,645	2,340	55	670	1,353	2,078
Dec. qtr	55	631	1,298	1,985	45	665	1,653	2,363	83	587	1,291	1,961
<b>VALUE (\$m)</b>												
1990-91	17.3	119.8	337.4	474.5	2.5	24.3	119.5	146.3	18.4	123.3	339.6	481.3
1991-92	10.5	105.6	368.0	484.0	1.0	24.7	110.4	136.1	12.5	104.8	377.2	494.5
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
1992 Sept. qtr	2.6	34.4	101.4	138.4	0.9	31.6	132.3	164.8	2.7	27.1	80.4	110.2
Dec. qtr	1.8	26.4	109.6	137.7	0.6	23.9	133.3	157.9	2.4	34.3	108.5	145.2
1993 Mar. qtr	2.6	29.3	91.1	123.0	1.3	26.3	131.0	158.7	2.4	27.6	93.1	123.1
June qtr	1.7	33.5	111.2	146.4	1.0	29.0	150.7	180.8	2.0	30.3	90.6	122.9
Sept. qtr	3.6	35.2	127.3	166.0	2.6	32.0	161.8	196.4	1.8	34.7	115.8	152.3
Dec. qtr	1.9	33.2	107.7	142.8	1.5	34.8	158.3	194.7	2.9	30.3	112.2	145.5

**TABLE 10. SUMMARY OF BUILDING ACTIVITY, SOUTH AUSTRALIA  
RELATIVE STANDARD ERRORS (PER CENT)  
DECEMBER QUARTER 1993**

Ownership and stage of construction	New residential building				Alterations and additions to residential buildings	Total building
	Houses		Total			
	Number	Value	Number of dwelling units	Value		
<b>PRIVATE SECTOR</b>						
Commenced	2.9	3.1	2.6	2.8	7.7	2.1
Under construction at end of period	2.9	3.0	2.4	2.6	7.2	1.8
Completed	4.2	4.5	3.4	3.8	8.6	2.7
Value of work done	..	2.7	..	2.3	5.8	1.7
Value of work yet to be done	..	3.7	..	3.1	9.8	2.3
<b>TOTAL PRIVATE AND PUBLIC SECTORS</b>						
Commenced	2.9	3.0	2.4	2.6	7.7	1.8
Under construction at end of period	2.8	2.9	2.3	2.5	7.2	1.2
Completed	3.9	4.3	3.1	3.5	8.6	2.0
Value of work done	..	2.5	..	2.1	5.8	1.4
Value of work yet to be done	..	3.6	..	2.9	9.8	1.5

## EXPLANATORY NOTES

## Introduction

This publication contains detailed results from the quarterly Building Activity Survey.

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. From the September quarter 1990, only non-residential building jobs (both new and alterations and additions) with an approval value of \$50,000 or more are included in the survey. For the September quarter 1985 to June quarter 1990, the cut-off for inclusion was \$30,000 or more and prior to that 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, earthworks, 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 townhouses, 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 on building jobs up to the end of the period.

### 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. Details of the methods used in seasonally adjusting the series are given in *Seasonally Adjusted Indicators, Australia* (1308.0).

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. For details of what further information is available and its cost, please telephone this publication's contact officer (shown on the front page).

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

*Building Approvals, Australia* (8731.0) – monthly (\$13.50)

*Building Approvals, South Australia* (8731.4) – monthly (\$11.00)

*Dwelling Unit Commencements Reported by Approving Authorities, South Australia* (8741.4) – monthly (\$11.00)

*Building Activity, Australia : Dwelling Unit Commencements, Preliminary* (8750.0) – quarterly (\$11.00)

*Building Activity, Australia* (8752.0) – quarterly (\$14.50)

*Engineering Construction Activity, Australia* (8762.0) – quarterly (\$11.00)

*Construction Activity at Constant Prices, Australia* (8782.0) – quarterly (\$11.00)

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 *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications 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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