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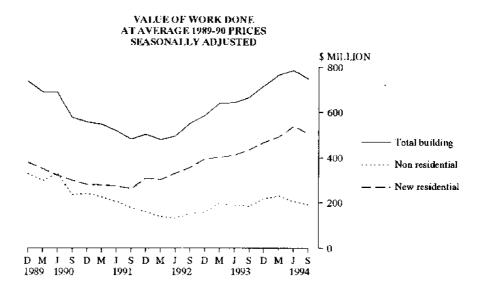
### BUILDING ACTIVITY, WESTERN AUSTRALIA SEPTEMBER QUARTER 1994

#### SUMMARY OF FINDINGS

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

	Percentage	e change on
	June quarter 1994	Sept. quarter 1993
New residential building Alterations and additions	-6.2	16.2
to residential buildings	17.5	8.5
Non-residential building	-6.2	4.9
Total building	<b>-4.5</b>	12.6

- Expressed in seasonally adjusted average 1989–90 prices the total value of building work done for the September quarter 1994 was \$750.7 million, a decrease of 4.5% from the \$786.2 million for the June quarter 1994. This is the first fall in the series after 9 successive rises.
- The value of work done on new residential building fell by 6.2% to \$506.5 million for the September quarter 1994 but was still 16.2% above the figure for the September quarter 1993.
- Work done on non-residential building was \$191.8 million for the September quarter 1994 which was a fall of 6.2% from the \$204.5 million for the June quarter 1994.



#### **INQUIRIES**

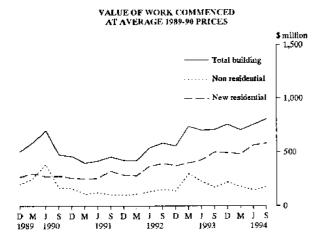
- for more information about statistics in this publication and the availability of related unpublished statistics, contact Colin Speechley on Adelaide (08) 237 7495 or any ABS State Office.
- for information about other ABS statistics and services please contact Information Services on Adelaide (08) 237 7100, call at 55 Currie Street, Adelaide, or write to Information Services. ABS. GPO Box 2272, Adelaide SA 5001.

#### SUMMARY OF FINDINGS continued

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

	Percentage	change on
	June quarter 1994	Sept. quarter 1993
New residential building Alterations and additions	3.1	16.3
to residential buildings	-2.3	20.7
Non-residential building	21.6	3.4
Total building	6.4	13.4

- Expressed in average 1989–90 prices (but not seasonally adjusted) the total value of building work commenced during the September quarter 1994 was \$805.8 million. This was an increase of \$48.4 million or 6.4% on the previous quarter.
- The value of new residential building commenced was up 3.1% from the June quarter \$566.3 million to \$583.9 million for the September quarter 1994. Residential alterations and additions decreased from \$43.6 million for the June quarter 1994 to \$42.6 million for the September quarter 1994.
- Non-residential commencements rose by \$31.8 million or 21.6% from the June quarter 1994 \$147.5 million to the September quarter 1994 value of \$179.3 million.

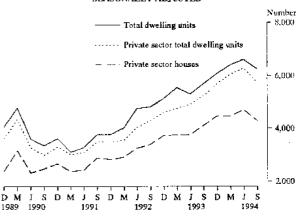


## Number of dwelling units commenced, seasonally adjusted

	Percentage	e change on
	June quarter 1994	Sept. quarter 1993
Private sector houses	-9.0	4.4
Private sector dwelling units	8.6	9.8
Total dwelling units	-5.3	9.8

- In seasonally adjusted terms the estimate of the total number of dwelling units commenced during the September quarter 1994 was 6.272 which was a decrease of 353 units or 5.3% from the June quarter 1994. It was however still the third highest quarterly figure for the last 5 years.
- Commencement of private houses fell 425 or 9.0% from the June quarter 4,714 to the 4,289 for September quarter 1994.

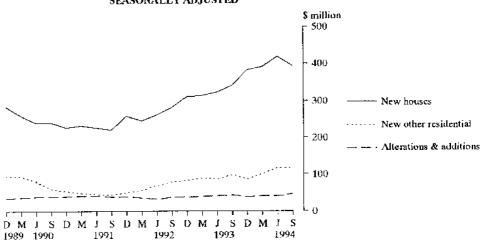
### NEW DWELLING UNITS COMMENCED SEASONALLY ADJUSTED



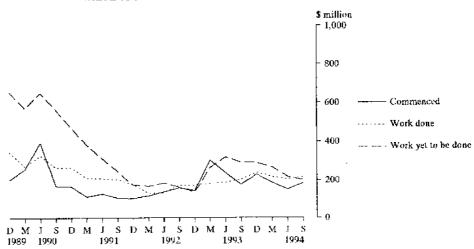
#### Original unadjusted data

- The total value of building work commenced (unadjusted at current prices) during the September quarter 1994 was \$789.7 million which represents a 8.0% increase on the previous quarter. Of this, \$564.5 million was for new residential building resulting in 6,835 dwelling units.
- The total value of work done during the September quarter rose by \$28.4 million to \$779.3 million while the value of work yet to be done on jobs under construction at the end of September 1994 rose by \$37.6 million to \$772.5 million

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



#### VALUE OF NON-RESIDENTIAL BUILDING



#### VALUE OF NON-RESIDENTIAL WORK DONE

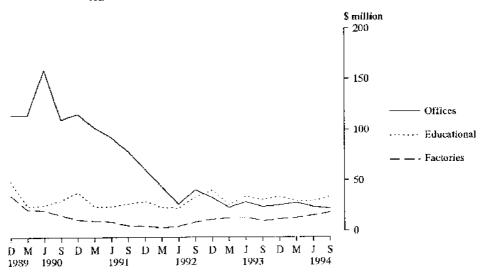


TABLE I. SUMMARY OF BUILDING ACTIVITY, WESTERN AUSTRALIA

		×	New residential building	l building								Valu	Value (Sm)						
	5		Other residential	ential	F	_						Non-reside	Non-residential building	8 1.1					
	Houses		onimings	200	10191		Alterations		:						73	Enter-			
Period	Number of dwelling units	Value (Sm)	Number of dwelling units	Vatue (Sm)	Number of dwelling units	Value (Sm)	additions to residential buildings	Horels efc.	Shops	Shaps Factories	О∰сел	Other business premises	Educa- tional	Reli- gious	Health	and recrea- tional	Miscel. Iuneous	Total	Total building
							<sup>5</sup>	COMMENCED											
1991-92	12.279	914.1	4.044	233.3	16.323	1.147.4	118.6	11.3	69.3	19.4	68.4	62.3	107.6	7.7	39.2	33.0	44.2	462.3	1,728.3
1992-93	15,011	1,134.3	5,778	341.6	20,789	1,475.9	142.9	12.8	212.8	43.7	117.8	69.0	134.7	10.0	83.1	70.3	87.9	842.1	2,460.9
1993-94 r	18,118	1,485.3	6,682	441.1	24,800	1,926.3	151.1	31.5	167.7	54.7	108.5	101.5	107.5	6.4	70.3	47.8	48.2	744.0	2,821.5
1993 June qu	3,978	312.1	1,441	86.3	5,419	398.4	38.8	2.3	69.7	10.9	26.2	23.3	32.3	1,9	28.9	24.8	15.8	236.6	673.8
Sept. qtr	4,531	361.7	1,683	106.5	6,214	468.2	32.4	6'9	33.6	6.9	14.7	22.6	22.8	9.1	29.7	13.2	22.6	177.0	9.77.6
Dec. qtr	4,449	363.9	1,512	98.6	5,961	462.5	38.9	5.8	64.1	13.2	51.9	31.6	14.1	2.4	25.1	6.9	11.3	229.4	730.9
1994 Mar. qtr	4,221	346.7	1,660	109.8	5,881	456.5	38.7	9.1	40.7	13.8	28.6	26.5	40.6	1.4	11.4	89. 89.	5.6	186.5	681.7
June qtr r	4.917	413.1	1,827	126.1	6,744	539.1	41.1	8.6	29.3	18.5	13.3	20.7	30.0	6.0	4.0	951	9.6	151.1	731.4
Sept. qtr	4,849	422.5	1,986	141.9	6,835	564.5	41.2	10.0	26.6	23.8	30.5	32.4	35.8	4.	8.7	4	8.5	184.0	789.7
		ļ				UND	UNDER CONSTRUCTION AT END OF PERIOD	OCTION A	TENDO	FPERIOD								i	
1991-92	4,795	405.1	2,539	185.4	7,334	590.5	50.5	13.2	44.2	13.3	231.2	39.7	98.4	2.4	34.7	23.7	1.7e	9.668	1,240.6
1992-93	5,395	484.7	2,831	183.7	8,226	668.4	59.4	4.0	178.3	16.9	39.7	32.9	107.8	9.3	81.3	57.1	51.0	574.6	1,302.4
1993-94 r	7,369	707.3	3,687	263.8	11,056	971.1	71.3	23.9	. 246.1	25.2	62.7	25.4	94.1	9.3	0.79	26.0	20.5	594.2	1,636.7
1993 June att	5,395	484.7	2,831	183.7	8,226	668.4	59.4	6.4	178.3	16.9	39.7	32.9	107.8	3.3	81.3	57.1	51.0	574.6	1.302,4
Sept. 4tr	6,292	569.8	2,885	196.5	9,177	766.3	53.5	10.8	187.6	13.2	30.7	41.6	117.1	3.7	108.2	55.5	48.2	9.919	1,436,4
Dec. qtr	6,500	587.7	2,912	205.2	9,412	792.9	53.5	14.2	218.7	16,5	60.7	53.4	83.2	4.0	129.6	38.5	36.1	654.9	1,501.4
1994 Mar. atr	7.096	659.4	3.314	235.1	10,410	894.4	61.8	18.2	236.7	20.1	0'99	47.4	85.7	4.2	92.4	37.1	17.9	625.6	1,581.9
June atr r	7,369	707.3	3,687	263.8	11,056	971.1	71.3	23.9	246.1	25.2	62.7	25.4	94.1	3.3	67.0	26.0	20.5	594.2	1,636.7
Sept. qtr	8,211	788.8	4,015	308.0	12,226	1,096.8	76.4	28.5	224.5	37,4	63.8	43.9	111.0	5.1	63.7	27.6	16.0	621.2	1,794.5
	!							COMPLETED	<u> </u>										
1991-92	11,539	892.7	3,377	195.5	14,916	1,088.2	139.6	21.6	516	19.1	611.6	7.76	91.6	7.1	49.1	35.4	56.4	1,081.0	2,308.9
1992-93	14,368	1,064.0	5,436	343.5	19,804		137.0	18.0	77.7	42.3	313.2	76.0	130.5	12.3	37.9	40.1	134.0	882.0	2,426.5
1993-941	16,069	1,284.3	5,770	370.3	21,839	1,654.6	143.4	14.7	106.3	46.5	87.0	110.1	123.0	6.4	95.0	78.8	76.7	744,4	2,542.5
1993 June qtr	4,206	321.2	1,749	138.4	5,955	459.6	39,4	1.1	16.3	17.6	36.0	13.9	14.6	6.4	15.7	17.4	27.2	166.1	665.1
Sept. qtr	3,609	282.0	1,627	96.3	5,236		38.6	2.5	25.9	13.1	23.5	14.1	14.5	1.3	3.1	15.0	22.6	135,5	552.5
Dec. qtr	4,240	350.7	1,485	92.5	5,725	443.2	40.2	2.9	33.5	10.0	21.7	19.8	664	1.9	60	26.4	23.2	199.1	682.5
1994 Mar. qtr	3,601	280.0		80.2	4.805		31.7	5.2	25.6	10.2	24.7	32.1	36.9	<u>L</u>	51.1	10.6	24.9	222.7	614.6
June qtr r	4,619	371.6		101.3	6,073	472.9	32.9	4.1	21.2	13.2	17.0	44.1	21.6	6.1	31.1	26.8	0.0	187.1	692.9
Sept. qtr	3,992	347.0		100.9	5,618		37.1	5.1	60.4	12.I	30.0	14.8	18.9	1.7	13.6	3.0	13.3	172.7	0.7.60

TABLE I. SUMMARY OF BUILDING ACTIVITY, WESTERN AUSTRALIA—continued

		N	New residential building	l building								Valu	Value (\$m)						
	Houses	t-	Other residential buildings	ential	Total		·					Non-residential building	ntial build	30					
Peniod	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (3m)	Number of dwelling units	Value (\$m)	Afterations and additions to residential buildings	Hotels eft.	Shops	Shops Factories	Offices	Other business premises	Educa- tional	Reli- gious	u Health	Enter- tainment and recred-	Miscel- lan eous	Total	Tota! building
						A V	VALUE OF WORK DONE DURING PERIOD	K DONE	DURING	PERIOD									
1991-92		871.8	:	227.5	:	1,099.4	127.1	15.3	65.0	17.6	210.9	63.6	101.7	7.3	30.6	30.8	100.2	642.9	1,869.4
1992-93	:	1,102.1	:	346.1	:	1,448.2	140.8	15.3	103.0	46.7	125.7	69.2	133.9	12.2	72.4	59.3	84.2	721.8	2,310.8
1993-94 г	:	1.412.1	:	411.2	:	1,823.2	149.6	21.7	249.1	50,0	101.5	6701	123.6	6.9	92.5	56.8	57.5	867.4	2,840.2
1993 June qtr	:	292.3	;	85.2	:	377.6	40.0	2.2	34.1	13.2	28.6	16.0	33.8	2.2	19.5	21.2	18.1	189.0	606.6
Sept. qir	:	327.5	:	105.4	:	432.9	37.0	2,9	541	1.6	23.9	22.5	30.6	1:1	21.1	18.6	21.3	205.9	675.9
Dec. qtr	:	355.9	:	94.2	:	450.1	37.6	6.5	61.7	11.7	25.5	32.8	33.8	2.2	29.9	16.4	18.2	238,9	726.5
1994 Mar. qtr	:	338.4	:	95.9	;	434.3	35.2	5.3	8.99	13.0	28.1	29.0	29.6	1.7	21.8	11.8	10.0	217.4	6.980
June qtr r	:	390.2	:	115.7	:	505.9	39.8	7.0	66.4	15.6	23.9	23.6	29.6	1.5	19.7	10,0	8.0	205.3	750.9
Sept. qtr	;	393.1	:	127.3	:	520.4	41.9	10.6	66.5	18.6	22.5	26.5	33.9	1.9	15.2	10.4	11.1	217.1	779.3
							VALUE OF WORK YET TO BE DONE	VORK YEI	TO BEL	ONE									
1991-92	:	214.7	:	94.0	:	308.7	19.1	6.7	25.2	7.8	24.8	19.0	47.6	2.6	20.6	12.2	16.7	183,3	511.2
1992-93	:	256.9	:	7.06	:	347.7	25.0	2.7	134.2	7.0	21.6	19.0	53.6	1.9	32.7	26.4	20.7	319.9	692.6
1993-94 r	:	354.3	:	132.0	:	486.3	31.0	13.2	60.1	6.11	30.2	13,7	39.5	1.3	20.9	17.4	5.0	217.6	734.9
1993 June qtr	:	256.9	:	90.7	:	347.7	25.0	2.7	134.2	7.0	21.6	19.0	53.6	6.1	32.7	26.4	20.7	319.9	692.6
Sept. qtr	:	296.8	:	95.2	:	391.9	20.9	6.7	116.1	9'9	12.3	19.3	8.94	2.5	41.5	21.2	19.2	292.2	705.1
Dec. qtr	:	309.7	:	102.3	:	412.0	23.5	6.5	119.0	83	38.5	18.0	29.0	2.5	42.R	14.1	12.1	290.8	726.4
1994 Mar. qtr	:	323.2	:	117.7	:	440.9	28.3	10.5	95.8	9.1	4.0.4	15.2	39.2	1.7	34.9	11.6	30 30	267.3	736.5
June qtr r	:	354.3	:	132.D	:	486.3	31.0	13.2	60.1	11.9	30.2	13.7	39.5	1.3	20.9	17.4	5.6	217.6	734.9
Sept. qtr	;	390.4	:	150.5	:	540.9	31.3	12.2	32.2	17.6	38.8	20.5	41.5	2.9	16.0	11.6	7,0	200.3	772.5

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 38 such dwelling units commenced in the September quarter 1994.

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

Hou.			The residential outling															
Number	Houses	Other residential buildings	dential 185	Total		l					Non-residential building	tial buildir			:		1	
dwelling Period units	of Value its (\$m)	Number of dwelling units	Value (Sm)	Number of dwelling units	Value (\$m)	Alterations and additions to residential buildings	Hotels erc.	Shops Fa	Factories	Offices p	Other business premises	Educa- tional	Reli-	tai tai Realth	Enter- tainment and recrea- tional I	Miscel- laneous	Total	Total huilding
						8	COMMENCED	g g										
11,921	21 889.9	2,657	153.7	14,578	1,043.6	117.9	11.1	66.9	19.3	43.6	50.0	30.3	7.7	21.1	9.3	25.9	285.2	1,446.6
L,				23,234	1,821.8	150.2	31.5	165.7	53.6	53.1	85.1	43.5	6.4	6.44	27.2	38.8	549.7	2,521.6
1993 June qu 3,879	79 304.2	1,084	66.5	4,963	370.7	37.9	2.6	6.89	10.1	12.1	17.8	6.3	1.9	9,6	3.0	8.9	141.2	549.7
				5,654	431.0	32.2	6.9 8.8	32.5	13.0	13.4	20.3	6.7	1.6	18.9	3.3	19.6	131.8	595.0
				3	Ì		ę	1	A	2	3	r S	t i	0	:	4	4	
				5,543	432.7	38.5	9.1	40.7	13.8	80.	17.9	8.6	1,4	11.4	3.0	3.6	120.5	591.7
June qtr 1 4,845 Sept, qtr 4,629	45 406.9 29 406.4	) 1,489 4 1,589	105.8 115.9	6,334 6,218	512.7 522.3	40.9 41.1	9.8 0.01	29.1 26.0	18.1 23.8	12.9 28.2	20.7	18.5 10.3	0.0 3.4	6,4 0,8	13.7 3.9	5.3	133.2 146.1	686.9 709.6
					CK12	UNDER CONSTRUCTION AT END OF PERIOD	CTION A.	T FIND OF P	ERIOD									
1991-92 4,706	97.8	1,554	126.4	6,260	524.2	50.4	13.2	42.3	13.3	19.2	35.1	14.8	4.2	16.3	4.9	14.2	177.5	752.1
1992-93 5,298				7,227	60109	56.9	6.3	177.5	12.2	17.3	21.0	13.0	3.3	62.1	16.7	23.9	353.2	1,012.1
1993-94 r 7.278	78 699.5		212.1	10,245	911.7	71.2	23.9	244.4	24.9	24.9	24.6	25.4	3.3	26.0	19.3	15.2	431.8	1,414.6
1993 June qtr 5,298	98 476.9	9 1,929	125.1	7,227	601.9	56.9	6.3	177.5	12.2	17.3	21.0	13.0	3,3	62.1	16.7	23.9	353.2	1.012.1
				8.214	7,769	53.4	10.8	185.6	12.6	21.1	29.0	17.8	3.7	78.1	8.6	30.4	398.9	1,149.8
Dec. qtr 6,362	62 576.5		158.4	8,641	735.0	53.1	14.2	216.7	16.5	19.1	36.3	20.0	0.4	85.7	14.2	23.4	450.2	1,238.2
1994 Mar. qtr 6,980	80 650.4	1 2,708	189.7	9,688	840.1	61.8	18.2	235.0	20.1	21.3	32.1	13.8	4 :	50.3	9.6	14.4	419.0	1,320,9
_				10,245	911.7	71.2	23.9	244.4	24.9	24.9	24.6	25.4	33	26.0	19.3	15.2	431.8	1,414.6
Scpt. qtr 7,965	6.5 770.0	3,145	244.1	11,110	1,014.1	76.4	28.5	222.5	37.1	31.4	38.4	30.4	5.1	30.5	21.2	10,8	455.9	1,546.3
						5	COMPLETED	ก										
				13,987	1,033.6	139.0	21.4	8.68	19.0	567.9	31.5	27.5	7.1	27.5	17.7	20.1	829.7	2,002.3
				17.519	1,265.7	135.7	18.0	75.1	42.3	54.9	70.7	34.0	12.3	17.5	16.1	34.2	375.1	1,776.5
1993-94r 15,684	84 1.254.6	6 4,403	287.7	20.087	1,542.3	140.0	14.5	105.3	41.0	45.7	82.3	30.6	4.0	91.0	24.6	48.8	490.0	2,172.2
				5,186	405.5	39.3	1.1	16.3	17.6	12.0	13.1	8.0	4.9	7.1	4.0	8.6	94.0	538.8
				4.642	342.7	36.0	2.3	25.9	96.4 4.	9.6	12.4	2.0	1.3	3.1	10.2	13.1	88.4	467.0
Dec. qtr 4,163	63 344.5	5 1,112	70.7	5,275	415.2	40.1	2.9	32.9	9.2	18.3	8.81	4.0	1.9	8,8	2.3	17.1	118.5	573.8
1994 Mar. qtr 3,4		4 930		4,418	332.7	31.1	5.2	25.4	10.2	8.3	21.6	15,3	1.2	49.1	8.0	13.9	158.1	521.9
				5,752	451.7	32.9	4.1	21.1	13.2	8.6	29.4	6.9	1.9	30.06	4.1	9,4	124.9	5.609
Sept. qtr 3,927	27 341.9	1,393	86.7	5.320	428.5	36.8	5,1	6.64	12.0	21.9	143	5.5	1.7	4.1	133	9.5	136.4	601.8

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

		2	New residential building	l building		•						Vals	Value (Sm)						
	House		Other residential	ential	Total	i 	'				; ;	Non-resid	Non-residential building	g in					
Period	Number of dwelling units	Value (Sm)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Alterations and additions to residential buildings	Hotels etc.	Shops F	Factories	Offices	Other business premises	Educa- tional	Reli-	û Fleaith	Enter- lainment and recrea- tional	Miscel- ianeous	Total	Total building
						۸۷	VALUE OF WORK DONE DURING PERIOD	RK DONE	DURING PI	ERIOD									
1991-92	:	849.7	:	178.1	:	1,027.9	126.4	15.1	63.1	17.6	130.1	40.2	30.4	7.3	18.0	10.2	27.5	359.6	1,513.9
1992-93	:	1,070.4	;	232.4	;	1,302.8	137.9	15.1	100.7	42.6	56.7	62.3	33.2	12.2	6.03	23.6	40.3	447.0	1,887.8
1993-94 r	:	1,382.3	:	327.0	:	1,709.3	147.7	21.7	246.7	48.4	54.2	84.6	34.0	6.9	60.3	20.7	40.1	617.5	2.474.5
1993 June qtr	:	282.6	:	63.0	:	345.7	38.9	2.1	33.9	11.2	12.0	12.3	8.5	2.2	16.9	5.2	7.2	111.6	496.1
Sept. qtr	;	318.9	:	74.3	;	393.2	35.9	2.9	53.9	8.9	14.3	18.9	6.2	1.1	12.7	5.5	15.0	139.1	568.2
Dec. qtr	:	349.2	:	74.8	:	424.0	37.3	6.5	5.05	11.1	13.3	25.4	9.0	2.2	20.8	6.2	12.8	167.8	629.0
1994 Mar. qtr	:	329.6	:	61.9	:	411.4	34.9	ec.	599	13.0	11.2	21.2	<b>8</b> 5	2.1	15.1	4.7	6.7	154.0	600.4
June qtr r	:	384.6	:	96.1	:	480.7	39.6	7.0	65.8	15.4	15.5	19.1	10.4	1.5	11.7	4.6	5,6	156.6	6.929
Sept. qtr	•	381.9	:	102.7	:	484.5	41.7	10.6	62.9	18.4	16.6	24.5	13.5	1.9	10.9	7.5	7.6	177.4	703.6
							VALUE OF WORK YET TO BE DONE	VORK YE	TO BE DC	)NE									
1991-92	:	209.9	:	59.6	:	269.5	19.1	6.7	23.8	7.8	12.0	18.0	7.2	2.6	12.2	2.4	3.7	96.4	385.0
1992-93	:	252.6	;	59.1	:	311.7	24.2	2.7	133.6	6.4	9.0	12.3	6.2	1.9	15.3	9.9	7.2	201.2	537.2
1993-94 r	:	350.1	:	108.7	:	458.9	30.9	13.2	6'65	11.7	8.1	13.6	15.5	1.3	8.6	13.2	7.1	153.4	643.2
1993 June qtr	:	252.6	:	59.1	:	311.7	24.2	2.7	133,6	6,4	9.0	12.3	6.2	1,9	15.3	9.9	7.2	201.2	537.2
Sept. qtr	:	291.4	;	66.2	:	357.6	20.9	6,7	1.14.6	6.3	8.1	13.8	8'9	2.5	21.7	4,8	11.8	197.0	575.5
Dec. qtr	•	303.5	:	83.1	:	386.6	23.4	6.5	118.0	න දැ	11.2	14.6	4.9	2.5	17.2	λζ. L.	9,1	199.1	609.1
1994 Mar. qtr	:	319.5	:	95.0	:	414.5	28.3	10.5	95.2	9.1	10.4	10.8	7,3	1.7	6.51	4.0	7.4	172.4	615.2
June off r	:	350.1	:	108.7	Ξ	458.9	30.9	13.2	59.9	11.7	8.1	13.6	15.5	1.3	8.6	13.2	7.1	153.4	643.2
Sept. qtr	:	381.3	:	125.3	:	506.5	31.3	12.2	32.1	17.5	20.0	17.1	12.4	2.9	7.6	10.0	4.7	136.6	674.5

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

l F			rew restachina panang	Outtering								Vatu	Value (5m)	:					
ı	House		Other residential	ntial	Total							Non-reside	Non-residential building	8 iii					
	escano.		X		tera!		Alterations								*	Enter-			
Period	Number of dwelling units	Value (Sm)	Number of dwelling units	Value (Sm)	Number of dwelling units	Value (\$m)	additions to residential buildings	Hotels etc.	Shops	Shops Factories	Offices	Other business premises	Educa- tional	Reli- gious	Health		Miscel- laneous	Total	Iotal building
	•	:					B	COMMENCED											
1001 02	350	. 70	1 207	404	1 745	103.0		ç	c		37.0	. 6	77.3		181	33.6	6.	1771	281.6
1007-02	90r		1,501	110.5	2.710	141.6	- F	4 6	† ¥	) <del>'</del>	) (A)	12.8	104.7		20.5	44.8	44.1	201.3	446.5
1993-94 r	379	29.6	1,187	75,0	1,566	104.6	1.0	}	2.0	11	55.4	16.4	64.0	1	25.4	20.6	4.	194.3	299.8
1993 June atr	g	7.0	157	20.00	456	277	~	0	80	60	14.1	5.4	26.0		19.3	21.9	7.0	95.4	124.0
in the same of the	\ <u> </u>	200	440	9 10	0.55	27.0	2 6	4.5	9 -	, v	1 -	) e	16.1		201	0.0	9 0	6.85	S 22
ocht, gri Dec. qtr	192	7.5	153	9.7	258	17.2	0.4		1.2 0.6	0.2	£9	5.2 4.2	5.7	<b> </b>	14.6	2.2	111	65.2	82.8
1994 Mar. qtr	6	6.3	247	17.5	338	23.8	0.2	)	١	I	18.8	8.7	30.7	ŀ	I	5.8	1.9	66.0	90.0
June qtr r	22	6.3	338	20.2	410	26,4	0,2	I	0.2	6.3	0.4	١	11.5		I	2.2	3,3	17.9	44.5
Sept. qrr	220	16.2	397	26.0	617	42.1	0.1	1	9.0	I	2.3	5.0	25.5	I	0.7	0.4	кі 4	37.9	80.1
					 	CND	UNDER CONSTRUCTION AT END OF PERIOD	CTION A	TENDO	PERIOD									
1991-92	68	7.3	985	59.1	1,074	66.4	0.1	1	1.80	ı	212.0	4.6	83.5	1	18,4	18.8	82.9	422.1	488.5
1992-93	7.6	7.8	902	58.6	666	999	4 4	<u>5</u> 0	8.0	4.6	22.4	11.9	8.46	1	19.2	40.4	27.1	221.4	290.3
1993-94 r	ъ	7.8	720	51.7	811	59.5	0.2	J	1.8	0.3	37.8	6.0	68.6	1	41.0	6.7	5.3	162.4	222.0
1993 June qtr	76	7.8	902	58.6	666	66.5	2.4	0.2	9.0	4.6	22.4	11.9	94.8	I	19.2	40,4	27.1	221.4	290.3
Sept. qtr	110	6.6	853	58.9	963	8.89	0.1	1	1.9	9.0	9.7	12.6	99.3	1	30.0	45.7	17,9	217.7	286.6
Dec. qtr	138	11.2	633	46,8	171	58.0	0.4	1	1.9	I	41.7	17.0	63.2	I	4.0	24.2	12.7	204.8	263.2
1994 Mar otr	911	0	606	45.3	722	5. 4.44	i	ł	-	ŀ	4	15.3	672	1	42.1	27.5	ę.,	296.6	261.0
Insector	5	2 28	720	51.7	811	2.65	0.2		62	0.3	37.8	0.9	68.6	1	41.0	6.7	5,3	162.4	222.0
Sepr. qtr	246	18.8	870	63.9	1,116	82.8	!	I	2.0	0.3	32.3	5.5	90'08	I	33.2	6.4	5.1	165.3	248.1
:							3	COMPLETED	a										
1991-92	367	23.5	\$62	31.1	979	54.6	9.0	0.2	1.6		43.8	66.2	64.1	1	21.5	17.8	36.2	251.4	306.6
1992-93	388	30.6	1,897	111.2	2,285	141.8	1.3	0.1	2.6	1	258.2	5,4	5'96	I	20.3	24.0	8766	506.9	650,0
1993-94 r	385	29.7	1.367	82.6	1,752	112.4	3.4	0.2	1.0	5.6	41.3	27.8	92.4	I	4.0	54.2	28.0	254.4	370.2
1993 June qtr	177	13,4	592	40.7	692	54.1	0.1	ì	I	1	24.0	0.9	6.3	j	8.6	13.4	18.6	72.2	126.3
Sept. qtr	86	7.6	496	28.0	594	35.7	2.7	0.0	1	4.6	13.9	1.6	12.5		İ	8,4	4.0	47.1	85.5
Dec. qtr	11	6.2	373	21.8	450	0.85	0.1		9.6	6:0	3.4	6'0	43.5	I	1.0	24.1	6.1	80.6	108.7
1994 Mat. qtr	113	8.6	274	18.9	387	27.5	5.0	I	0.3	ļ	16.5	10.5	21.7	I	1.9	2.7	11.0	64,6	92.6
June qtr r	16	7.3	224	13.9	321	21.2	0,1		1	!	4.	14.7	14.7	1	1.1	22.7	1.4	62.1	83.4
Sept. qtr	65	5.1	233	14.2	298	19.3	0.3	I	4.0	0.1	8.1	0.5	13.4		9.5	0.7	3.6	36.3	55.8

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		~	New residential building	building							:	Vatu	Vatue (\$m)						
	:		Other residential	nnal	Ę							Non-residential building	ntial build	ling					
	Houses		huiteings		Total		Alterations								•	Enter-			
Period	Number of dwelling units	Value (5m)	Number of dwelling unifs	Value (Sm)	Number of dwelling units	Value (Sm)	and additions to residential buildings	Hotels etc.	Shops	Shops Factories	Offices	Other business premises	Educa- tional	Reli- gious	Health	and recrea- tional	Miscel- laneous	Total	Total building
						Α,	VALUE OF WORK DONE DURING PERIOD	RK DONE	DURING 1	PERIOD									
1991-92	:	22.1	:	49.4		71.5	0.7	0.2	1.8		80.8	23.3	71.2	1	12.5	20.6	77.7	283.3	355.5
1992-93	: ;	31.6	;	113.7	:	145.4	2.9	0.2	2.4	4.0	6'89	6.9	100.7		12.2	35.6	43.9	274.8	423.1
1993-941	:	29.8	:	84.1	:	113,9	1.9	I	2.3	1.6	47.3	23.3	89.6	1	32.2	36.1	17.4	249.9	365.7
1000 June off		4.7		22.2	:	31.9	1.1	9	0.3	2.0	16.6	3.7	25.2	į	2.6	16.0	10.9	277.5	110.5
Sent. of	: ;	90	: ;	31.1	:	39.7	1.1	ļ	0.2	9.0	7.6	3.6	24.5	1	00 4	13.4	6.3	6.99	7.701
Dec. qtr		6.7	;	19.4	;	26.1	0.3	i	1.2	9.0	12.2	7.4	24.8		9.1	10.3	krj krj	71.1	5.79
1994 Mar oft		6	:	14.0	:	22.9	0.3	I	0.3		16.9	7.8	21.2	I	6.7	7.1	3.3	63.3	86.5
June off r	: :	5.5	;	19.7	:	25.2	0.2	1	9.0	0.1	8.5	4.6	19.2	1	8.0	5.4	2.3	48.6	74.0
Sept. qtr	:	11.3	ž	24.6	:	35.9	0.2	1	0.7	0.1	6.5	1.9	20.4	ţ	4.3	2.9	3.5	39.7	75.7
							VALUE OF WORK YET TO BE DONE	VORK YE	гтовер	ONE	:	:							!
1991-92		3.	:	34.4	:	39.3		ı	1.3	ı	12.9	1.0	40.3	ı	8.5	9.6	13.0	86.9	126.2
1992-93	:	4.3	:	31.7	:	36.0	0.8	I	9.5	9,0	12.6	6.7	47.4	I	17.4	19.8	13.5	118.7	155,4
1992-94 r	•	4.2	:	23.3	:	27.5	I	1	0.2	0.2	22.1	0.1	24.0		11.1	4,1	<del>7.</del> 7	64.2	91.7
1993 June att	:	£.3	:	31.7	:	36.0	0.8		5.0	9.0	12.6	6.7	47.4	1	17.4	19.8	13.5	118.7	155.4
Sept. alr	: :	5.4	:	29.0	:	4.4 4.4	1	ļ	1.5	0.3	4.2	5.5	40.0	1	19.9	16.4	7.5	95.2	129.6
Dec. qtr	;	6.2	i	19.2	;	25,4	0.2	ļ	6.0	t	27.3	3.4	22.7	1	25.7	80 30	6	91.8	117.3
1994 Mar. atr	;	3,7	:	22.7	:	26.4			9.0	1	30.1	4	31.8	I	0.61	7.6	1.4	94.9	121.3
June qtr r	:	4,	:	23.3	:	27.5	1	1	0.2	0.2	22.1	0.1	24.0	ļ	11.1	4,1	7.4	54.2	91.7
Sept. qtr	:	9.1	:	25.3	:	34.4	l	1	0.2	0.1	18.7	4. 4	29.0	1	8.3	1.7	2.3	63,7	1:36

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

		House	?\$			Tota	I	
	Private sector		Total		Privat sector		Total	
Period	Commenced	Completed	Commenced	Completed	Commenced	Completed	Commenced	Completed
1993 June qtr	3,767	4,114	3.833	n.a.	4.929	5,252	5,320	6.066
Sept. qtr	4,110	3,822	4,244	n.a.	5,242	5,041	5,714	5.758
Dec. qtr	4,469	3,647	4,607	n.a.	5,704	4,630	6,086	5,030
1994 Mar. qtr	4,461	3,638	4,531	n.a.	6,050	4,646	6,419	4,953
June qtr r	4,714	4,608	4,746	n.a.	6,294	5.817	6,625	6.182
Sept. qtr	4,289	4,289	4,526	n.a.	5,755	5.790	6,272	6.188

# TABLE 5. VALUE OF BUILDING WORK DONE, WESTERN AUSTRALIA SEASONALLY ADJUSTED SERIES (\$ million)

			(2 minion	<u> </u>			
	New re	esidential building		Alterations and additions to	Non-residential bu	ilding	
Period	O Houses	ther residential buildings	Total	auditions to residential huildings	Private sector	Total	Total building
1993 June qtr	293.2	88.8	383.5	37.6	119.8	196.0	618.0
Sept. qtr	311.0	100.3	407.7	39,5	129.9	189.8	642.2
Dec. qtr	351.5	88.1	441.2	34,9	151.9	227.7	695.4
1994 Mar. qtr	361.2	104.1	465.2	38.1	171.6	240.9	744.7
June gtrr	391.6	120.5	514.3	37.4	168.7	213,0	766.1
Sept. qtr	373.5	121.2	490,0	44.7	165.4	199.9	740.3

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

Period	New residential building			Alterations and	Non-residential bu		
	Houses	Other residential buildings	Total	additions to — residential buildings	Private sector	Total	Total building
1991-92	1,037,5	227.6	1.265.1	133.9	277.6	450.0	1,849.0
1992-93	1.266.1	336.9	1,603.0	158.5	530.3	825.6	2,587.1
1993-94 г	1,611.7	434.1	2,045.8	162.4	537.3	727.3	2,935.5
1993 June qtr	344_5	85.3	429.8	42.7	138.4	231.9	704.4
Sept. qtr	396.9	105.2	502.1	35.3	129.1	173.4	710.8
Dec. qtr	396.9	97.3	494.2	<b>4</b> 2.U	160.5	224.2	760.4
1994 Mar. qtr	375.2	108.0	483.2	41.5	117.7	182.2	706.9
June qtr t	442.7	123.6	566.3	43.6	130.0	147.5	757.4
Sept. qtr	444.9	139.0	583.9	42.6	142.4	179.3	805.8

<sup>(</sup>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), WESTERN AUSTRALIA ORIGINAL AND SEASONALLY ADJUSTED SERIES

			(\$ million)				
	New residential building			Alterations and	Non-residential bu		
Period	O. Houses	ther residential buildings	Total	additions to residential buildings	Private sector	Total	Total building
	."		ORIGINAL	-			
1991-92	986.1	219.6	1,205.7	143.8	344.0	614.9	1,964.4
1992-93	1.228.5	337.5	1,566.0	156.8	429.6	693.6	2.416.4
1993-94 г	1,531.2	402.0	1,933.2	162.2	594.0	834.5	2,929,9
1993 June qtr	322.3	83.6	405.9	44.1	107.7	182.5	632.5
Sept. qu	359.5	103.3	462.8	40.6	134.0	198.5	701.9
Dec. qtr	387.3	92.1	479.4	40,9	16Ì. <b>5</b>	229.9	750.2
1994 Mar. qtr	366.3	93.7	460.0	38.1	148. t	209.0	707.1
June qtr r	418.1	112.9	531.0	42.6	150.4	197.1	770.7
Sept. qtr	414.3	123.6	537.9	44.1	170.1	208.2	790.2
		SEA	SONALLY AI	DJUSTED			
1993 June qtr	323.3	87.0	412.3	41.4	115.7	189.2	644.4
Sept, qtr	341,4	98.3	435.9	43.4	125.2	182.9	666.9
Dec. qtr	382.5	86.2	469.9	38.0	146.2	219.1	718.0
199 <b>4 M</b> ar. qtr	391.0	101.8	492.7	41.3	165.0	231.7	766.6
June qtr r	419.6	117.6	539.8	40.1	162.0	204.5	786.2
Sept. qtr	393.6	117.7	506.5	47.1	158.6	191.8	750.7

<sup>(</sup>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, WESTERN AUSTRALIA

		-		•	Public sector			Total			
	Houses			Other	Other		Other			Other	
Period	Contractor- built	Other	Total	residential buildings	Total	Houses	residential buildings	Total	Houses	residential buildings	Total
<del></del>				COM	MENCED						
1991-92	9,811	2,110	11,921	2,657	14,578	358	1,387	1.745	12,279	4,044	16,323
1992-93	12,704	1,911	14,615	3,955	18,570	396	1,823	2,219	15,011	5.778	20,789
1993-94 r	15,718	2,021	17,739	5,495	23,234	379	1,187	1,566	18,118	6,682	24,800
1993 June qtr	3,388	491	3,879	1,084	4,963	99	357	456	3,978	1,441	5,419
Sept. qtr	3,878	542	4,420	1,234	5,654	111	449	560	4,531	1.583	6,214
Dec. qtr	3,722	622	4,344	1,359	5,703	105	153	258	4.449	1.512	5, <del>96</del> 1
1994 Mar. qtr	3,684	446	4,130	1,413	5,543	91	247	338	4.221	1,660	5,881
June gtr r	4,434	411	4,845	1,489	6,334	72	338	410	4.917	1,827	6.744
Sept, qtr	4,274	355	4,629	1,589	6,218	220	397	617	4,849	1.986	6,835
	<u>.</u>	ι	INDER C	ONSTRUCT	ION AT E	ND OF PI	ERIOD				
1991-92	2,800	1,906	4,706	1,554	6,260	89	985	1,074	4,795	2,539	7,334
1992-93	3,470	1,828	5,298	1,929	7.227	97	902	999	5,395	2,831	8,226
1993-94 r	5,355	1,922	7,278	2,967	10,245	91	720	811	7,369	3.687	11.056
1993 June qtr	3,470	1,828	5,298	1,929	7,227	97	902	999	5,395	2.831	8,226
Sept. qtr	4,231	1,952	6,182	2.032	8.214	110	853	963	6,292	2,885	9,177
Dec. qtr	4,352	2,010	6,362	2,279	8, <del>64</del> 1	138	633	771	6,500	2,912	9,412
1994 Mar. qtr	4,913	2,067	6,980	2,708	9.688	116	606	722	7.096	3,314	10,410
June gtr r	5,355	1,922	7,278	2,967	10.245	91	720	811	7,369	3,687	11,056
Sept. qtr	6.201	1.765	7,965	3,145	11,110	246	870	1,116	8,211	4,015	12,220
				COM	PLETED						
1991-92	9,398	1,774	11,172	2,815	13,987	367	562	929	11,539	3,377	14,910
1992-93	12,053	1,927	13,980	3,539	17,519	388	1.897	2,285	14,368	5,436	19,804
1993-94 r	13,837	1,847	15,684	4,403	20,087	385	1,367	1,752	16,069	5,770	21,839
1993 June qtr	3,470	560	4,029	1,157	5,186	1 77	592	769	4.206	1,749	5,955
Sept. qtr	3,116	394	3,511	1,131	4,642	98	496	594	3,609	1,627	5,236
Dec. qtr	3,633	531	4,163	1,112	5,275	77	373	450	4,240	1,485	5,725
1994 Mar. qtr	3,122	366	3,488	930	4,418	113	274	387	3,601	1,204	4,805
June qtr r	3,966	556	4,522	1,230	5,752	97	224	321	4,619	1,454	6,073
Sept. qfr	3,416	511	3,927	1,393	5,320	65	233	298	3,992	1,626	5,618

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

		Comm	enced		Under	constructio	n at end of pe	riod	Completed			
Period	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
		<u>-</u>			NUMBE	ER			· <b></b>			
1991-92	327	4,362	5,122	9.811	84	961	1,755	2.800	300	4,211	4,887	9,398
1991-92	732	4,604	7,367	12,704	165	831	2,474	3,470	651	4,728	6,673	12,053
1993-94	276	4,391	11,051	15,718	165	973	4.217	5,355	222	4,312	9.30 <b>3</b>	13,837
1993 June qtr	201	1,158	2,028	3,388	165	831	2,474	3.470	288	1.173	2,009	3.470
Sept, qtr	25	1,348	2,505	3,878	40	1.084	3,108	4,231	50	1.158	1,908	3,116
Dec. qtr	49	921	2,752	3,722	36	845	3,471	4,352	87	1,159	2,386	3,633
1994 Mar. qtr	51	1,061	2,572	3,684	65	1,048	3,800	4,913	47	858	2,218	3,122
June atr r	151	1.062	3,222	4,434	165	973	4.217	5,355	38	1,137	2,792	3,966
Sept. qtr	113	867	3.295	4,274	t15	1,107	4,979	<b>6,2</b> 01	101	834	2,482	3,416
					VALUE (	\$m)						
1991-92	11.8	221.1	491.6	724.5	3.1	48,8	192.3	244.2	11.0	212.6	505.0	728.5
1992-93	25.3	234.6	702.7	962.5	5.9	43.3	285.2	334.4	22.4	239.3	622.0	883.7
1993-94	9.3	231.4	1,050.0	1,290,7	5.9	51.6	479.1	536 <i>.</i> 5	7.2	225.5	869.4	1.102.1
1993 June otr	6.8	59,4	203.9	270.1	5.9	43.3	285.2	334.4	9.8	58.6	199.2	267.6
Sept. qtr	0.9	70.7	236.8	308.4	1.3	57.2	343.8	402.3	1.8	60.0	182.1	243.9
Dec. qtr	1.4	48.5	259.3	309.3	1.1	44.9	373.3	419.4	2.8	60.6	232.9	296.2
1994 Mar. qtr	1.6	56.6	241.3	299.5	2.0	56.2	419.7	477.8	1.7	45.2	196.9	243.8
June atr r	5.3	55.6	312.5	373.5	5.9	51.6	479.1	536.5	1.0	59.7	257.5	318,2
Sept. qtr	4.3	45.3	324.3	373.9	4.3	58.5	559.3	622.1	3.6	43.2	247.7	294.5

#### TABLE 10. SUMMARY OF BUILDING ACTIVITY, WESTERN AUSTRALIA RELATIVE STANDARD ERRORS (PER CENT) SEPTEMBER QUARTER 1994

			Value			
Ownership and stage of construction	Houses	Value	Total Number of dwelling	Number of		Total building
of construction	Number			varae	buildings	ounding
	PE	UVATE SECTO	OR			
Commenced	2.9	3.1	2.2	2.4	5.7	1.8
Under construction at end of period	2.6	2.7	1.9	2.1	5.4	1.4
Completed	4.6	5.0	3.4	4.0	8.3	2.9
Value of work done		2.6		2.1	5.1	1.5
Value of work yet to be done	.,	3.1		2.3	6.4	1.8
	TOTAL PRIV	ATE AND PUB	LIC SECTORS			
Commenced	2.8	3.0	2.0	2.2	5.7	1.6
Under construction at end of period	2.6	2.7	1.7	1.9	5.4	1.2
Completed	4.5	4.9	3.2	3.8	8.3	2.6
Value of work done		2.5	- 1	1.9	5.1	1.3
Value of work yet to be done	4.1	3.0		2.2	6.4	1.6

#### 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, earthworks, etc.) is excluded.
- 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 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.
  - 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, guest houses, 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.
- 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 sub-station 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.
- (1) 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

- 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 movement in the date of Easter which may, in successive years, affect figures for different quarters. Details of the methods used in seasonally adjusting the series are given in Seasonally Adjusted Indicators, Australia (1308.0).
- 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.

#### Australian Standard Geographical Classification

27. Area statistics are classified according to the Austratian Standard Geographical Classification. Figures previously published for local government areas and statistical divisions are directly comparable with this classification except for the cities of Perth, Fremantle and Stirling which are obtained by aggregating the component statistical local areas.

#### Unpublished data and related publications

- 28. 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.
- 29. 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, Western Australia (8731.5) – monthly (\$11.00)

Dwelling Unit Commencements Reported by Approving Authorities, Western Australia (8741.5) — monthly (\$11.00)

Building Activity, Australia: Dwelling Unit Commencements, Preliminary (8750.0) – quarterly (\$11.00) Engineering Construction Activity, Australia (8762.0) – quarterly (\$11.00)

30. 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
- p preliminary series subject to revision
- 31. Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

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