

BUILDING ACTIVITY, WESTERN AUSTRALIA SEPTEMBER QUARTER 1993

SUMMARY OF FINDINGS

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

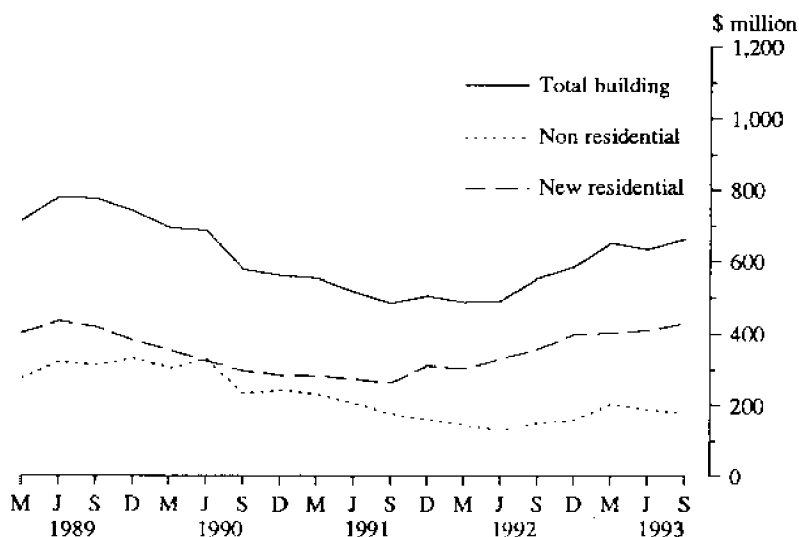
- The table below summarises the changes in the value of building work done (seasonally adjusted, at average 1989–90 prices) by comparing the levels for the September quarter 1993 with those for the previous quarter and for the same quarter last year.

VALUE OF BUILDING WORK DONE

	Percentage change on	
	June quarter 1993	Sept. quarter 1992
New residential building	4.9	20.8
Alterations and additions to residential buildings	4.9	14.9
Non-residential building	-4.9	18.4
Total building	4.4	20.0

- Expressed in seasonally adjusted, average 1989–90 prices the total value of building work done for the September quarter 1993 was \$663.4 million which was 4.4% higher than the June quarter figure and the highest level since the June quarter 1990 (\$687.1 million). The \$430.5 million recorded for new residential building work done was 4.9% higher than the previous quarter's figure, the highest level since the June quarter 1989 and the 6th consecutive rise in this statistical series.
- The value of non-residential building work done fell by 4.9% to \$178.9 million. This was still 18.4% higher than the figure for the September quarter 1992. The value of work done on alterations and additions to residential buildings rose by 4.9% to \$43.1 million. This was the fifth consecutive rise and the highest level reached since the 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- for more information about statistics in this publication and the availability of related unpublished statistics, contact Colin Speechley on Adelaide (08) 237 7670 or any ABS State Office.
- for information about other ABS statistics and services please refer to the back of this publication.

SUMMARY OF FINDINGS – continued

Value of building work commenced at average 1989–90 prices

- The table below summarises the changes in the value of building work commenced (unadjusted, at average 1989–90 prices) by comparing the levels for the September quarter 1993 with those for the previous quarter and for the same quarter last year.

VALUE OF BUILDING WORK COMMENCED

	Percentage change on	
	June quarter 1993	Sept. quarter 1992
New residential building	15.9	25.7
Alterations and additions to residential buildings	-17.1	-2.5
Non-residential building	-28.5	7.5
Total building	-0.7	19.2

Number of dwelling units commenced, seasonally adjusted

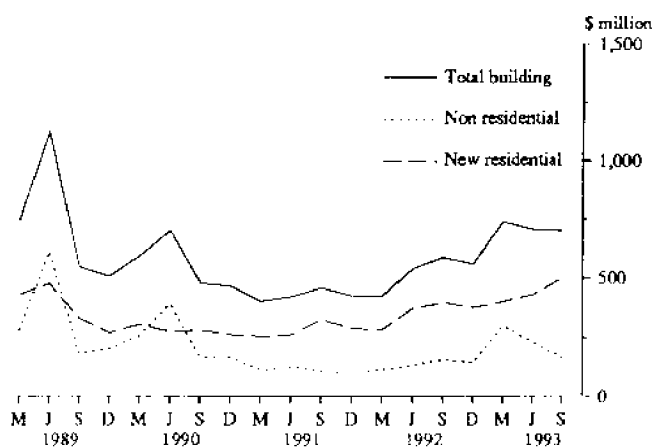
- The table below summarises the changes in the numbers of dwelling units commenced (seasonally adjusted) by comparing the numbers for the September quarter 1993 with those for the previous quarter and for the same quarter last year.

NUMBER OF DWELLING UNITS COMMENCED

	Percentage change on	
	June quarter 1993	Sept. quarter 1992
Private sector houses	12.1	21.1
Total dwelling units	9.9	18.3

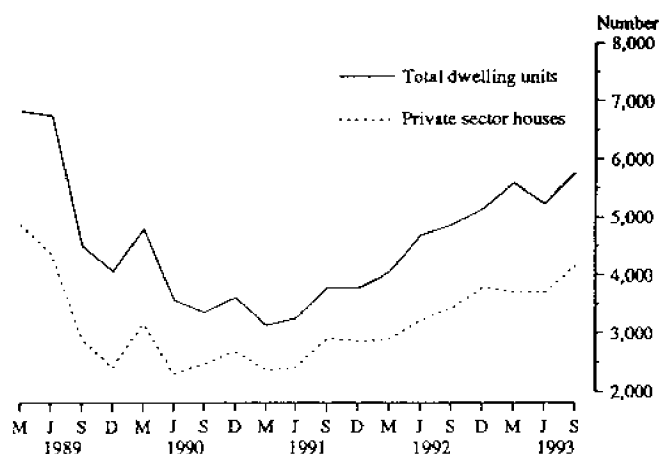
- Expressed in average 1989–90 prices but not seasonally adjusted, the total value of building work commenced during the September quarter 1993 was \$699.7 million which was not significantly different from the June quarter figure of \$704.8 million. It was however 19.2% higher than the September quarter figure for the previous year.
- The steady figure for total commencements resulted from a \$66.2 million drop in the value of non-residential commencements together with a fall in commencements of residential alterations and additions just outweighing a 15.9% rise in the value of new residential commencements. The September quarter 1993 figure of \$498.6 million for the value of new residential commencements was the highest since the statistical series began with the September quarter 1969.

VALUE OF BUILDING WORK COMMENCED AT AVERAGE 1989-90 PRICES



- In seasonally adjusted terms the estimate of the total number of dwelling units commenced during the September quarter 1993 was 5,756 which was 9.9% higher than the June quarter figure and the highest level since the June quarter 1989.
- At 4,150 the estimate of private sector houses commenced was 12.1% higher than the figure recorded for the June quarter 1993 and the highest level since the June quarter 1989 figure of 4,363.

NEW DWELLING UNITS COMMENCED SEASONALLY ADJUSTED



Original unadjusted data

- The total value of building work commenced (unadjusted, at current prices) during the September quarter 1993 was \$666.2 million. Of this, \$464.6 million was for new residential building resulting in 6,189 dwelling units.
- The total value of work done during the September quarter was \$670.7 million and the value of work yet to be done on jobs under construction at the end of the quarter was \$697.9 million.

TABLE 1. SUMMARY OF BUILDING ACTIVITY, WESTERN AUSTRALIA

Period	New residential building										Non-residential building										Total 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	Hôtels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health	Entertainment and recreational	Miscellaneous	Total			
COMMENCED																					
1990:91	10,319	784.2	3,059	206.3	13,378	990.5	131.8	23.9	77.4	36.5	159.7	58.9	88.3	7.0	22.7	34.6	65.9	574.9	1,697.2		
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 r	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		
1992 June qtr	3,477	260.2	1,386	79.4	4,863	339.6	29.1	2.9	31.5	9.3	24.7	14.2	27.6	2.8	15.9	5.4	3.0	137.4	506.0		
Sept. qtr	3,677	276.2	1,555	86.5	5,232	362.6	32.4	4.2	28.1	7.6	31.2	11.8	31.2	6.8	7.9	9.2	19.8	157.7	552.8		
Dec. qtr	3,704	266.9	1,324	76.6	5,028	343.5	36.5	3.8	13.7	11.2	42.1	15.1	18.9	0.5	1.0	15.8	22.2	144.3	524.3		
1993 Mar. qtr	3,651	279.1	1,458	92.3	5,109	371.4	35.1	2.0	101.4	14.0	18.2	18.9	52.3	0.8	45.4	20.5	30.1	303.5	710.0		
June qtr	3,978	312.1	1,441	86.3	5,419	398.4	38.8	2.7	69.7	10.9	26.2	23.3	32.3	1.9	28.9	24.8	15.8	236.6	673.8		
Sept. qtr	4,506	358.0	1,683	106.7	6,189	464.6	32.4	4.8	33.5	9.3	14.7	17.1	22.8	1.6	29.7	13.2	22.5	169.1	666.2		
UNDER CONSTRUCTION AT END OF PERIOD																					
1990:91	4,115	372.1	1,881	144.1	5,996	516.2	66.5	26.3	82.7	13.3	733.0	69.6	79.9	3.7	42.4	24.9	98.5	1,174.3	1,757.0		
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	4.2	34.7	23.7	97.1	599.6	1,240.6		
1992:93 r	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		
1992 June qtr	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	4.2	34.7	23.7	97.1	599.6	1,240.6		
Sept. qtr	5,516	480.2	3,065	219.8	8,581	699.9	52.5	13.3	55.7	15.5	242.2	36.8	102.2	10.2	37.1	25.4	91.5	630.0	1,382.4		
Dec. qtr	5,197	437.6	2,922	215.2	8,119	652.8	54.6	6.1	31.8	21.2	250.5	33.3	81.1	7.6	26.3	35.6	47.6	541.0	1,248.3		
1993 Mar. qtr	5,630	489.2	3,166	239.9	8,796	729.1	58.3	4.7	124.9	23.4	49.2	23.6	88.1	6.6	67.1	47.3	61.6	496.6	1,284.0		
June qtr	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. qtr	6,307	571.6	2,966	200.8	9,273	772.5	54.2	8.7	187.8	13.3	30.9	36.4	117.1	4.0	108.2	55.5	45.6	607.4	1,434.1		
COMPLETED																					
1990:91	11,385	904.3	3,959	240.6	15,344	1,144.9	143.5	13.8	98.9	59.3	203.1	112.5	117.5	5.6	24.7	48.5	77.5	761.4	2,049.8		
1991:92	11,539	892.7	3,377	195.5	14,916	1,088.2	139.6	21.6	91.5	19.1	611.6	97.7	91.6	7.1	49.1	35.4	56.4	1,081.0	2,308.9		
1992:93 r	14,368	1,064.0	5,436	343.5	19,804	1,407.5	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		
1992 June qtr	2,933	219.2	916	54.0	3,849	273.2	32.4	1.0	7.9	2.4	103.7	28.6	5.9	1.4	8.6	2.6	17.6	179.6	485.2		
Sept. qtr	2,942	202.6	1,015	53.8	3,957	256.4	31.7	2.7	15.8	5.4	18.7	14.8	26.1	0.9	5.1	7.5	24.6	121.6	409.8		
Dec. qtr	4,011	311.9	1,467	83.7	5,478	395.6	34.9	10.6	37.0	7.1	34.6	18.5	41.3	3.0	12.1	6.2	66.0	236.4	667.0		
1993 Mar. qtr	3,208	228.2	1,205	67.7	4,413	295.9	30.9	3.6	8.6	12.3	223.9	28.8	48.4	2.0	5.0	9.0	16.2	357.8	684.6		
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	3,569	276.8	1,546	92.2	5,115	369.1	37.8	2.5	25.6	13.0	23.4	13.9	14.5	1.0	3.1	15.0	25.1	136.9	543.9		

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

Period	New residential building				Non-residential building										Total building				
	Houses				Other residential buildings		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	Hôtels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious		Health	Entertainment and recreational	Miscellaneous	Total
VALUE OF WORK DONE DURING PERIOD																			
1990-91	..	857.4	..	212.3	..	1,069.7	147.5	19.1	93.8	45.5	420.6	92.4	116.9	6.2	40.7	38.8	72.9	946.7	2,163.9
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 r	..	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
1992 June qtr	..	229.9	..	68.9	..	298.8	30.0	4.2	19.9	4.4	26.6	17.1	22.2	1.6	10.8	8.2	17.7	132.8	461.5
Sept. qtr	..	263.5	..	85.8	..	349.3	31.1	5.6	28.6	8.8	40.8	17.0	33.6	3.0	11.2	10.8	14.6	174.2	554.6
Dec. qtr	..	281.3	..	91.1	..	372.4	36.8	4.4	22.9	11.6	32.9	18.9	40.4	3.3	8.1	9.6	22.2	174.2	583.4
1993 Mar. qtr	..	265.0	..	83.9	..	348.9	32.9	2.9	17.4	13.1	23.3	17.3	26.1	3.7	33.8	17.6	29.3	184.4	566.3
June qtr r	..	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. qtr	..	326.0	..	103.9	..	429.8	36.7	2.8	54.0	9.7	24.3	20.7	30.6	1.0	21.1	18.5	21.2	204.1	670.7
VALUE OF WORK YET TO BE DONE																			
1990-91	..	160.0	..	84.2	..	244.2	22.6	10.5	36.9	6.3	126.0	14.7	39.2	2.3	9.9	8.9	58.6	313.2	580.0
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 r	..	256.9	..	90.7	..	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
1992 June qtr	..	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
Sept. qtr	..	229.3	..	96.4	..	325.6	21.8	3.9	23.9	6.6	14.6	13.9	43.9	6.5	17.0	10.6	21.5	162.4	509.8
Dec. qtr	..	217.4	..	84.4	..	301.8	21.9	2.8	14.2	7.9	24.5	10.0	23.7	3.7	10.2	17.3	21.4	135.7	459.4
1993 Mar. qtr	..	232.3	..	93.1	..	325.4	24.5	2.2	98.6	9.3	23.8	11.8	53.1	1.1	22.3	20.4	22.2	264.6	614.5
June qtr r	..	256.9	..	90.7	..	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
Sept. qtr	..	295.0	..	96.3	..	391.3	21.1	4.7	115.2	6.6	12.0	15.6	46.8	2.5	41.5	21.3	19.2	285.5	697.9

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 56 such dwelling units commenced in the September quarter 1993.

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

Period	New residential building										Non-residential building										Total 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	Entertainment and recreational	Miscellaneous	Total			
COMMENCED																					
1990-91	9,971	761.7	2,453	172.7	12,424	934.5	130.9	23.8	75.9	36.5	123.2	41.6	29.5	7.0	14.4	15.7	22.7	390.3	1,455.7		
1991-92	11,921	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		
1992-93 r	14,615	1,103.2	3,955	231.1	18,570	1,334.3	139.1	12.6	211.3	39.0	49.6	56.1	30.0	10.0	63.0	25.5	43.9	540.9	2,014.4		
1992 June qtr	3,385	253.1	696	41.3	4,081	294.3	29.0	2.9	29.5	9.3	17.1	13.7	7.1	2.8	14.5	2.9	0.8	100.6	423.9		
Sept. qtr	3,628	272.1	988	54.9	4,616	327.0	32.3	4.2	27.3	7.6	12.9	11.6	7.3	6.8	7.5	4.6	16.4	106.3	465.6		
Dec. qtr	3,628	258.7	973	56.3	4,601	315.0	35.7	3.8	13.7	11.2	15.6	14.1	9.8	0.5	1.0	10.6	13.3	93.5	444.2		
1993 Mar. qtr	3,479	268.2	910	53.4	4,389	321.6	33.3	2.0	101.4	10.1	8.9	12.6	6.7	0.8	44.9	7.3	5.3	200.0	554.9		
June qtr r	3,879	304.2	1,084	66.5	4,963	370.7	37.9	2.6	68.9	10.1	12.1	17.8	6.3	1.9	9.6	3.0	8.9	141.2	549.7		
Sept. qtr	4,395	348.3	1,226	78.6	5,621	427.0	32.3	4.8	32.3	8.7	13.4	14.8	6.7	1.6	18.9	3.3	19.5	123.9	583.1		
UNDER CONSTRUCTION AT END OF PERIOD																					
1990-91	4,017	365.6	1,721	133.8	5,738	499.4	66.5	26.3	81.6	13.3	502.4	16.3	11.8	3.7	22.2	12.3	8.9	698.8	1,264.7		
1991-92	4,706	397.8	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 r	5,298	476.9	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		
1992 June qtr	4,706	397.8	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		
Sept. qtr	5,458	474.9	1,826	145.4	7,284	620.2	52.5	13.3	55.1	15.5	14.3	36.2	15.9	10.2	21.5	6.0	19.0	206.9	879.7		
Dec. qtr	5,144	431.5	1,910	150.2	7,054	581.7	54.0	6.0	31.4	21.2	15.1	32.2	15.8	7.6	18.9	12.2	27.9	188.3	823.9		
1993 Mar. qtr	5,455	475.9	2,020	160.1	7,475	636.1	56.7	4.7	124.9	19.5	17.0	16.3	12.8	6.6	59.3	16.3	23.2	300.5	993.2		
June qtr r	5,298	476.9	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		
Sept. qtr	6,196	561.6	2,048	138.6	8,244	700.3	54.1	8.7	185.9	12.7	21.2	23.7	17.8	4.0	78.1	9.8	27.0	388.9	1,143.3		
COMPLETED																					
1990-91	10,929	872.5	2,949	185.1	13,878	1,057.7	142.3	13.5	97.1	59.3	175.7	101.4	31.3	5.6	17.1	24.4	16.7	542.1	1,742.1		
1991-92	11,172	869.2	2,815	164.4	13,987	1,033.6	139.0	21.4	89.8	19.0	567.9	31.5	27.5	7.1	27.5	17.7	20.1	829.7	2,002.3		
1992-93 r	13,980	1,033.4	3,539	232.3	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		
1992 June qtr	2,852	213.7	700	42.4	3,552	256.0	32.4	1.0	7.5	2.4	92.6	7.0	1.9	1.4	8.3	1.6	6.2	129.8	418.2		
Sept. qtr	2,862	196.5	702	37.3	3,564	233.9	31.6	2.7	13.9	5.4	16.5	10.8	6.2	0.9	2.3	3.5	11.6	73.7	339.2		
Dec. qtr	3,930	304.6	889	53.7	4,819	358.3	34.7	10.6	36.7	7.1	15.0	18.0	10.1	3.0	3.6	5.0	4.1	113.3	506.3		
1993 Mar. qtr	3,158	224.4	791	43.7	3,949	268.1	30.1	3.6	8.2	12.3	11.3	28.7	9.7	2.0	4.6	3.6	9.9	94.0	392.2		
June qtr r	4,029	307.9	1,157	97.6	5,186	405.5	39.3	1.1	16.3	17.6	12.0	13.1	8.0	6.4	7.1	4.0	8.6	94.0	538.8		
Sept. qtr	3,472	269.3	1,107	67.0	4,579	336.3	35.2	2.3	25.5	8.3	9.5	12.3	2.0	1.0	3.1	10.2	16.4	90.6	462.1		

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

Period	New residential building			Non-residential building											Total 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	Entertainment and recreational	Miscellaneous	Total		
VALUE OF WORK DONE DURING PERIOD																					
1990-91	..	829.9	..	169.0	..	998.9	146.5	18.9	93.1	45.5	295.8	55.1	30.5	6.2	19.7	18.5	17.9	60.1	1,746.6		
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 r	..	1,070.4	..	232.4	..	1,302.8	137.9	15.1	100.7	42.6	56.7	62.3	33.2	12.2	60.3	23.6	40.3	447.0	1,887.8		
1992 June-qr	..	225.1	..	47.5	..	272.6	29.9	4.2	19.2	4.4	14.0	13.4	3.7	1.6	4.7	1.8	4.9	71.9	374.3		
Sept. qr	..	256.8	..	52.2	..	309.0	31.0	5.6	27.1	8.8	18.2	16.2	7.5	3.0	5.4	5.4	7.0	104.2	444.2		
Dec. qr	..	274.7	..	61.7	..	336.4	36.3	4.4	22.4	11.6	14.8	18.6	10.0	3.3	5.3	5.5	13.6	109.6	482.3		
1993 Mar. qr	..	256.4	..	55.5	..	311.8	31.7	2.9	17.3	11.1	11.7	15.1	7.1	3.7	32.7	7.5	12.5	121.7	465.2		
June qr r	..	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. qr	..	317.3	..	74.2	..	391.5	35.6	2.8	53.5	8.9	14.6	17.1	6.2	1.0	12.7	5.1	14.9	136.9	564.0		
VALUE OF WORK YET TO BE DONE																					
1990-91	..	157.2	..	80.3	..	237.5	22.6	10.5	36.1	6.3	57.4	8.0	7.1	2.3	8.6	2.4	5.7	144.4	404.5		
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 r	..	252.6	..	59.1	..	311.7	24.2	2.7	133.6	6.4	9.0	12.3	6.2	1.9	15.3	6.6	7.2	201.2	537.2		
1992 June-qr	..	208.9	..	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		
Sept. qr	..	227.1	..	63.7	..	290.8	21.8	3.9	23.4	6.6	6.1	13.7	7.0	6.5	14.3	1.7	13.1	96.2	408.8		
Dec. qr	..	213.7	..	60.6	..	274.2	21.6	2.8	14.2	7.9	7.1	9.1	6.9	3.7	10.0	7.3	12.4	81.4	377.2		
1993 Mar. qr	..	226.2	..	59.0	..	285.2	23.5	2.2	98.6	7.4	8.7	6.8	6.5	1.1	22.3	7.5	5.1	166.0	474.7		
June qr r	..	252.6	..	59.1	..	311.7	24.2	2.7	133.6	6.4	9.0	12.3	6.2	1.9	15.3	6.6	7.2	201.2	537.2		
Sept. qr	..	289.6	..	65.5	..	355.1	21.0	4.7	114.1	6.3	7.9	10.2	6.8	2.5	21.7	4.8	11.8	190.7	566.8		

TABLE 3. SUMMARY OF PUBLIC SECTOR BUILDING ACTIVITY, WESTERN 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	Entertainment and recreational	Miscellaneous	Total		
COMMENCED																				
1990-91	348	22.5	606	33.6	954	56.1	0.9	0.1	1.5	—	36.5	17.2	58.8	—	8.3	18.8	43.2	184.6	241.5	
1991-92	358	24.3	1,387	79.6	1,745	103.9	0.7	0.2	2.4	—	24.9	12.3	77.3	—	18.1	23.8	18.3	177.1	281.6	
1992-93 r	396	31.1	1,823	110.5	2,219	141.6	3.7	0.2	1.5	4.6	68.2	12.8	104.7	—	20.1	44.8	44.1	301.2	446.5	
1992 June qtr	92	7.1	690	38.2	782	45.2	0.1	—	2.0	—	7.6	0.5	20.5	—	1.5	2.4	2.3	36.8	82.1	
Sept. qtr	49	4.1	567	31.6	616	35.6	0.1	—	0.7	—	18.3	0.1	23.9	—	0.4	4.6	3.3	51.5	87.2	
Dec. qtr	76	8.2	351	20.2	427	28.5	0.8	0.1	—	—	26.4	1.0	9.2	—	—	5.2	9.0	50.9	80.1	
1993 Mar. qtr	172	10.9	548	38.8	720	49.8	1.9	—	—	3.9	9.4	6.3	45.6	—	0.5	13.1	24.8	103.5	155.2	
June qtr r	99	7.9	357	19.8	456	27.7	1.0	0.2	0.8	0.7	14.1	5.4	26.0	—	19.3	21.9	7.0	95.4	124.0	
Sept. qtr	111	9.6	457	28.0	568	37.7	0.2	—	1.2	0.6	1.3	2.3	16.1	—	10.8	9.9	3.0	45.2	83.0	
UNDER CONSTRUCTION AT END OF PERIOD																				
1990-91	98	6.6	160	10.2	258	16.8	—	—	1.1	—	230.6	53.2	68.1	—	20.2	12.7	89.6	475.5	492.3	
1991-92	89	7.3	985	59.1	1,074	66.4	0.1	—	1.8	—	212.0	4.6	83.5	—	18.4	18.8	82.9	422.1	488.5	
1992-93 r	97	7.8	902	58.6	999	66.5	2.4	0.2	0.8	4.6	22.4	11.9	94.8	—	19.2	40.4	27.1	221.4	290.3	
1992 June qtr	89	7.3	985	59.1	1,074	66.4	0.1	—	1.8	—	212.0	4.6	83.5	—	18.4	18.8	82.9	422.1	488.5	
Sept. qtr	58	5.3	1,239	74.4	1,297	79.7	—	—	0.6	—	228.0	0.6	86.3	—	15.6	19.4	72.5	423.0	502.8	
Dec. qtr	53	6.1	1,012	64.9	1,065	71.1	0.6	0.1	0.4	—	235.4	1.1	65.3	—	7.3	23.4	19.7	352.8	424.4	
1993 Mar. qtr	175	13.3	1,146	79.8	1,321	93.1	1.6	—	—	3.9	32.2	7.4	75.3	—	7.9	31.0	38.4	196.1	290.7	
June qtr r	97	7.8	902	58.6	999	66.5	2.4	0.2	0.8	4.6	22.4	11.9	94.8	—	19.2	40.4	27.1	221.4	290.3	
Sept. qtr	111	10.0	918	62.2	1,029	72.2	0.1	—	1.9	0.6	9.7	12.6	99.3	—	30.0	45.7	18.6	218.5	290.8	
COMPLETED																				
1990-91	456	31.7	1,010	55.5	1,466	87.2	1.2	0.2	1.7	—	27.5	11.0	86.3	—	7.7	24.1	60.8	219.3	307.7	
1991-92	367	23.5	562	31.1	929	54.6	0.6	0.2	1.6	—	43.8	66.2	64.1	—	21.5	17.8	36.2	251.4	306.6	
1992-93 r	388	30.6	1,897	111.2	2,285	141.8	1.3	0.1	2.6	—	258.2	5.4	96.5	—	20.3	24.0	99.8	506.9	650.0	
1992 June qtr	81	5.6	216	11.6	297	17.2	—	—	0.4	—	11.1	21.6	4.0	—	0.3	1.0	11.5	49.8	67.1	
Sept. qtr	80	6.1	313	16.5	393	22.6	0.1	—	1.9	—	2.2	4.0	20.0	—	2.8	4.0	13.0	47.9	70.6	
Dec. qtr	81	7.4	578	30.0	659	37.4	0.2	—	0.3	—	19.5	0.5	31.2	—	8.5	1.2	61.9	123.0	160.6	
1993 Mar. qtr	50	3.8	414	24.0	464	27.8	0.9	0.1	0.4	—	212.5	0.1	38.7	—	0.4	5.4	6.3	263.8	292.4	
June qtr r	177	13.4	592	40.7	769	54.1	0.1	—	—	—	24.0	0.9	6.7	—	8.6	13.4	18.6	72.2	126.3	
Sept. qtr	97	7.5	439	25.2	536	32.8	2.7	0.2	—	4.6	13.9	1.6	12.5	—	—	4.8	8.7	46.4	81.8	

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

Period	New residential building				Non-residential building											Total building			
	Houses				Other residential buildings			Total											
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Alterations and additions to residential buildings	Hotels etc.	Shops	Factories	Offices	Other business premises	Educational	Religious	Health		Entertainment and recreational	Miscellaneous	Total
VALUE OF WORK DONE DURING PERIOD																			
1990-91	..	27.4	..	43.3	..	70.8	1.0	0.2	0.7	—	124.7	37.3	86.4	—	20.9	20.2	55.1	345.5	417.3
1991-92	..	22.1	..	49.4	..	71.5	0.7	0.2	1.8	—	80.8	23.3	71.2	—	12.5	20.6	72.7	283.3	355.5
1992-93 r	..	31.6	..	113.7	..	145.4	2.9	0.2	2.4	4.0	68.9	6.9	100.7	—	12.2	35.6	43.9	274.8	423.1
1992 June qtr	..	4.8	..	21.4	..	26.2	0.1	—	0.7	—	12.6	3.7	18.5	—	6.1	6.4	12.8	60.9	87.1
Sept. qtr	..	6.7	..	33.6	..	40.3	0.1	—	1.6	—	22.6	0.8	26.1	—	5.8	5.5	7.6	70.0	110.4
Dec. qtr	..	6.6	..	29.4	..	36.0	0.5	—	0.5	—	18.1	0.3	30.4	—	2.7	4.1	8.6	64.6	101.1
1993 Mar. qtr	..	8.6	..	28.5	..	37.1	1.2	—	—	2.0	11.6	2.2	18.9	—	1.1	10.1	16.8	62.8	101.1
June qtr r	..	9.7	..	22.2	..	31.9	1.1	0.1	0.3	2.0	16.6	3.7	25.2	—	2.6	16.0	10.9	77.5	110.5
Sept. qtr	..	8.6	..	29.7	..	38.3	1.1	—	0.5	0.8	9.7	3.6	24.5	—	8.4	13.4	6.3	67.3	106.7
VALUE OF WORK YET TO BE DONE																			
1990-91	..	2.7	..	3.9	..	6.6	—	—	0.8	—	68.6	6.7	32.0	—	1.3	6.5	52.9	168.8	175.5
1991-92	..	4.8	..	34.4	..	39.3	—	—	1.3	—	12.9	1.0	40.3	—	8.5	9.8	13.0	86.9	126.2
1992-93 r	..	4.3	..	31.7	..	36.0	0.8	—	0.5	0.6	12.6	6.7	47.4	—	17.4	19.8	13.5	118.7	155.4
1992 June qtr	..	4.8	..	34.4	..	39.3	—	—	1.3	—	12.9	1.0	40.3	—	8.5	9.8	13.0	86.9	126.2
Sept. qtr	..	2.2	..	32.6	..	34.8	—	—	0.5	—	8.5	0.2	36.9	—	2.7	8.9	8.4	66.1	101.0
Dec. qtr	..	3.8	..	23.8	..	27.5	0.3	—	—	—	17.3	0.9	16.8	—	0.2	10.0	8.9	54.3	82.2
1993 Mar. qtr	..	6.1	..	34.1	..	40.2	1.0	—	—	1.9	15.1	5.0	46.5	—	—	12.9	17.1	98.6	139.8
June qtr r	..	4.3	..	31.7	..	36.0	0.8	—	0.5	0.6	12.6	6.7	47.4	—	17.4	19.8	13.5	118.7	155.4
Sept. qtr	..	5.4	..	30.8	..	36.2	—	—	1.2	0.3	4.1	5.5	40.0	—	19.9	16.4	7.4	94.8	131.1

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

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Commenced	Completed	Commenced	Completed	Commenced	Completed	Commenced	Completed
1992 June qtr	3,229	2,990	3,275	n.a.	4,013	3,676	4,702	3,954
Sept. qtr	3,427	3,010	3,502	n.a.	4,305	3,784	4,865	4,264
Dec. qtr	3,792	3,504	3,890	n.a.	4,670	4,245	5,148	4,873
1993 Mar. qtr	3,714	3,245	3,899	n.a.	4,743	4,127	5,591	4,532
June qtr r	3,702	4,223	3,746	n.a.	4,881	5,364	5,238	6,116
Sept. qtr	4,150	3,655	4,290	n.a.	5,245	4,866	5,756	5,516

TABLE 5. VALUE OF BUILDING WORK DONE, WESTERN 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 June qtr	229.2	71.7	302.0	27.9	74.1	136.9	463.8
Sept. qtr	246.3	82.3	327.2	33.2	97.5	158.5	527.4
Dec. qtr	283.8	84.4	367.5	34.5	102.2	165.5	557.9
1993 Mar. qtr	283.0	91.7	375.3	35.7	137.1	209.8	624.2
June qtr r	291.6	88.6	381.7	37.2	115.0	194.9	609.4
Sept. qtr	304.4	99.6	402.3	39.2	128.2	185.7	638.3

TABLE 6. VALUE OF BUILDING WORK COMMENCED, AT AVERAGE 1989-90 PRICES (a), WESTERN 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	855.2	202.4	1,057.6	144.7	381.7	561.9	1,764.2
1991-92	1,036.7	227.6	1,264.3	133.9	277.6	450.0	1,848.2
1992-93 r	1,266.4	337.0	1,603.4	158.5	530.3	825.6	2,587.5
1992 June qtr	295.7	77.7	373.4	32.8	98.1	134.0	540.2
Sept. qtr	311.7	84.9	396.6	36.3	103.9	154.2	587.1
Dec. qtr	299.5	75.5	375.0	40.7	91.7	141.6	557.3
1993 Mar. qtr	310.4	91.2	401.6	38.8	196.3	297.9	738.3
June qtr r	344.8	85.4	430.2	42.7	138.4	231.9	704.8
Sept. qtr	393.2	105.4	498.6	35.4	121.4	165.7	699.7

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

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential buildings	Total		Private sector	Total	
ORIGINAL							
1990-91	929.8	207.4	1,137.2	160.4	579.9	913.0	2,210.6
1991-92	986.1	219.6	1,205.7	143.8	344.0	614.9	1,964.4
1992-93 r	1,229.5	337.5	1,567.0	157.0	429.6	693.6	2,417.6
1992 June qtr	260.6	66.6	327.2	34.0	68.7	126.9	488.1
Sept. qtr	297.4	83.0	380.4	35.1	99.3	166.0	581.5
Dec. qtr	315.0	88.6	403.6	41.2	105.1	167.0	611.8
1993 Mar. qtr	294.8	82.3	377.1	36.6	117.5	178.1	591.8
June qtr r	322.3	83.6	405.9	44.1	107.7	182.5	632.5
Sept. qtr	358.2	101.8	460.0	40.3	131.9	196.7	697.0
SEASONALLY ADJUSTED							
1992 June qtr	259.8	69.3	330.8	31.7	70.8	130.9	490.6
Sept. qtr	278.0	79.6	356.3	37.5	92.9	151.1	553.0
Dec. qtr	317.9	82.1	398.3	38.6	98.0	158.6	585.1
1993 Mar. qtr	314.9	89.9	405.6	39.7	132.4	202.6	652.4
June qtr r	321.5	86.9	410.4	41.1	111.0	188.2	635.4
Sept. qtr	334.5	97.6	430.5	43.1	123.5	178.9	663.4

(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

Period	Private sector			Public sector			Total				
	Houses			Other residential buildings	Total	Houses	Other residential buildings	Total	Houses	Other residential buildings	Total
	Contractor-built	Other	Total								
COMMENCED											
1990-91	8,287	1,684	9,971	2,453	12,424	348	606	954	10,319	3,059	13,378
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 r	12,704	1,911	14,615	3,955	18,570	396	1,823	2,219	15,011	5,778	20,789
1992 June qtr	2,780	605	3,385	696	4,081	92	690	782	3,477	1,386	4,863
Sept. qtr	3,192	436	3,628	988	4,616	49	567	616	3,677	1,555	5,232
Dec. qtr	3,133	495	3,628	973	4,601	76	351	427	3,704	1,324	5,028
1993 Mar. qtr	2,990	489	3,479	910	4,389	172	548	720	3,651	1,458	5,109
June qtr r	3,388	491	3,879	1,084	4,963	99	357	456	3,978	1,441	5,419
Sept. qtr	3,853	542	4,395	1,226	5,621	111	457	568	4,506	1,683	6,189
UNDER CONSTRUCTION AT END OF PERIOD											
1990-91	2,410	1,607	4,017	1,721	5,738	98	160	258	4,115	1,881	5,996
1991-92	2,800	1,906	4,706	1,554	6,260	89	985	1,074	4,795	2,539	7,334
1992-93 r	3,470	1,828	5,298	1,929	7,227	97	902	999	5,395	2,831	8,226
1992 June qtr	2,800	1,906	4,706	1,554	6,260	89	985	1,074	4,795	2,539	7,334
Sept. qtr	3,611	1,847	5,458	1,826	7,284	58	1,239	1,297	5,516	3,065	8,581
Dec. qtr	3,337	1,807	5,144	1,910	7,054	53	1,012	1,065	5,197	2,922	8,119
1993 Mar. qtr	3,558	1,897	5,455	2,020	7,475	175	1,146	1,321	5,630	3,166	8,796
June qtr r	3,470	1,828	5,298	1,929	7,227	97	902	999	5,395	2,831	8,226
Sept. qtr	4,220	1,976	6,196	2,048	8,244	111	918	1,029	6,307	2,966	9,273
COMPLETED											
1990-91	8,730	2,200	10,929	2,949	13,878	456	1,010	1,466	11,385	3,959	15,344
1991-92	9,398	1,774	11,172	2,815	13,987	367	562	929	11,539	3,377	14,916
1992-93 r	12,053	1,927	13,980	3,539	17,519	388	1,897	2,285	14,368	5,436	19,804
1992 June qtr	2,396	456	2,852	700	3,552	81	216	297	2,933	916	3,849
Sept. qtr	2,407	455	2,862	702	3,564	80	313	393	2,942	1,015	3,957
Dec. qtr	3,406	524	3,930	889	4,819	81	578	659	4,011	1,467	5,478
1993 Mar. qtr	2,769	389	3,158	791	3,949	50	414	464	3,208	1,205	4,413
June qtr r	3,470	560	4,029	1,157	5,186	177	592	769	4,206	1,749	5,955
Sept. qtr	3,090	382	3,472	1,107	4,579	97	439	536	3,569	1,546	5,115

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

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
NUMBER												
1990-91	395	3,727	4,165	8,287	83	808	1,519	2,410	407	3,743	4,579	8,730
1991-92	327	4,362	5,122	9,811	84	961	1,755	2,800	300	4,211	4,887	9,398
1992-93	732	4,604	7,367	12,704	165	831	2,474	3,470	651	4,728	6,673	12,053
1992 June qtr	116	1,184	1,480	2,780	84	961	1,755	2,800	93	1,066	1,238	2,396
Sept. qtr	104	1,264	1,824	3,192	95	1,160	2,356	3,611	128	1,056	1,223	2,407
Dec. qtr	187	1,299	1,647	3,133	177	1,047	2,113	3,337	59	1,435	1,913	3,406
1993 Mar. qtr	239	884	1,868	2,990	240	878	2,439	3,558	176	1,065	1,529	2,769
June qtr r	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	2,480	3,853	27	1,084	3,110	4,220	50	1,158	1,881	3,090
VALUE (\$m)												
1990-91	13.7	187.5	426.4	627.6	3.0	40.3	194.7	237.9	13.8	188.3	509.3	711.4
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
1992 June qtr	4.1	60.0	141.3	205.4	3.1	48.8	192.3	244.2	3.2	53.5	124.0	180.8
Sept. qtr	3.7	64.7	169.1	237.4	3.3	59.2	257.3	319.8	4.6	53.6	106.6	164.8
Dec. qtr	6.5	66.4	150.5	223.4	6.0	53.9	230.2	290.1	2.1	72.9	181.6	256.5
1993 Mar. qtr	8.3	44.1	179.2	231.6	8.4	44.2	275.3	328.0	5.9	54.2	134.6	194.8
June qtr r	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	232.9	304.5	0.9	57.2	344.4	402.5	1.8	60.0	178.3	240.1

TABLE 10. SUMMARY OF BUILDING ACTIVITY, WESTERN AUSTRALIA
RELATIVE STANDARD ERRORS (PER CENT)
SEPTEMBER QUARTER 1993

Ownership and stage of construction	New residential building				Value	
	Houses		Total		Alterations and additions to residential buildings	Total building
	Number	Value	Number of dwelling units	Value		
PRIVATE SECTOR						
Commenced	2.9	3.1	2.3	2.6	6.3	1.9
Under construction at end of period	3.1	3.2	2.3	2.5	6.7	1.6
Completed	4.5	5.2	3.4	4.2	9.9	3.1
Value of work done	..	3.0	..	2.4	5.6	1.7
Value of work yet to be done	..	3.7	..	3.0	8.2	1.9
TOTAL PRIVATE AND PUBLIC SECTORS						
Commenced	2.9	3.0	2.1	2.4	6.3	1.7
Under construction at end of period	3.0	3.1	2.1	2.3	6.7	1.3
Completed	4.4	5.1	3.0	3.8	9.2	2.7
Value of work done	..	2.9	..	2.2	5.4	1.4
Value of work yet to be done	..	3.6	..	2.7	8.1	1.6

**TABLE II - VALUE OF NON-RESIDENTIAL BUILDING COMPLETED AND UNDER CONSTRUCTION
BY STATISTICAL LOCAL AREAS AND STATISTICAL DIVISIONS
(\$'000)**

Statistical division Statistical local area (a)	Completed during period			Under construction at end of period
	Year ended June 1993 (r)	Quarter ended June 1993 (r)	Quarter ended September 1993p	Quarter ended September 1993p
PERTH STATISTICAL DIVISION				
Arncliffe (C)	6,294	559	258	7,482
Bassendean (T)	2,004	604	1,900	1,561
Bayswater (C)	7,267	1,221	490	89,647
Belmont (C)	10,160	6,144	2,773	3,225
Canning (C)	36,721	4,863	6,727	15,896
Claremont (T)	6,715	523	921	368
Cockburn (C)	28,910	10,358	1,767	10,514
Cottesloe (T)	670	—	165	715
East Fremantle (T)	395	115	—	8,008
Fremantle (C) - Inner	2,977	305	380	3,136
Fremantle (C) - Remainder	13,450	2,223	2,200	11,207
Fremantle (C) - Total	16,427	2,528	2,580	14,343
Gosnells (C)	8,821	2,456	711	7,920
Kalamunda (S)	6,125	1,260	2,804	1,881
Kwinana (T)	7,399	1,385	2,821	204
Melville (C)	27,054	12,255	4,467	58,497
Mosman Park (T)	789	140	—	7,184
Mundaring (S)	6,214	932	300	1,013
Nedlands (C)	11,946	8,545	340	12,482
Peppermint Grove (S)	—	—	622	—
Perth (C) - Inner	305,938	7,530	2,930	25,241
Perth (C) - North	2,704	2,117	—	5,305
Perth (C) - Outer	26,195	2,836	5,948	13,389
Perth (C) - South	24,299	5,763	91	31,608
Perth (C) - Wembley-Coastal	11,738	6,650	81	168
Perth (C) - Total	370,874	24,896	9,050	75,711
Rockingham (C)	15,270	4,510	3,567	36,171
Serpentine-Jarrahdale (S)	3,950	470	85	800
South Perth (C)	4,928	947	1,230	6,702
Stirling (C) - Central	29,295	10,325	6,173	2,153
Stirling (C) - West	26,832	3,258	3,141	17,140
Stirling (C) - South-Eastern	2,169	600	—	6,294
Stirling (C) - Total	58,296	14,183	9,314	25,587
Subiaco (C)	6,018	1,956	6,137	20,450
Swan (S)	52,332	22,414	19,644	21,075
Wanneroo (C)	70,617	16,104	18,994	103,849
Total	766,196	139,365	97,667	531,286
SOUTH-WEST STATISTICAL DIVISION				
Augusta-Margaret River (S)	1,993	345	545	2,363
Boddington (S) (b)	—	—	—	30
Boyup Brook (S)	—	—	—	617
Bridgetown-Greenbushes (S)	917	—	392	617
Bunbury (C)	6,363	1,955	4,041	2,584
Busselton (S)	7,592	740	456	7,022
Capel (S)	502	409	—	—
Collie (S)	98	—	—	965
Dardanup (S)	432	—	193	737
Donnybrook-Balingup (S)	517	64	175	1,200
Harvey (S)	3,729	229	2,718	1,677
Mandurah (C)	6,526	175	1,690	4,381
Manjimup (S)	1,081	230	181	1,366
Murray (S)	595	173	—	520
Nannup (S)	545	195	—	81
Waroona (S)	4,510	3,500	—	—
Total (b)	35,399	8,014	10,390	23,543

TABLE 11 - VALUE OF NON-RESIDENTIAL BUILDING COMPLETED AND UNDER CONSTRUCTION
BY STATISTICAL LOCAL AREAS AND STATISTICAL DIVISIONS - *continued*
(\$'000)

Statistical division Statistical local area (a)	Completed during period			Under construction at end of period
	Year ended June 1993 (r)	Quarter ended June 1993 (r)	Quarter ended September 1993p	Quarter ended September 1993p
LOWER GREAT SOUTHERN STATISTICAL DIVISION				
Albany (T)	8,235	4,886	2,832	2,105
Albany (S)	1,725	355	—	2,962
Broomehill (S)	—	—	—	—
Cranbrook (S)	—	—	—	—
Denmark (S)	1,180	—	85	1,066
Gnowangerup (S)	—	—	—	100
Jerramungup (S)	225	—	—	785
Katanning (S)	162	—	—	—
Kent (S)	—	—	—	—
Kojonup (S)	—	—	—	150
Plantagenet (S)	889	100	—	217
Tambellup (S)	—	—	—	395
Woodanilling (S)	—	—	—	—
Total	12,416	5,340	2,917	7,781
UPPER GREAT SOUTHERN STATISTICAL DIVISION				
Brookton (S)	—	—	—	370
Corrigin (S)	—	—	—	—
Cuballing (S)	—	—	—	—
Dumbleyung (S)	—	—	—	—
Kondinin (S)	848	—	—	281
Kulin (S)	—	—	—	—
Lake Grace (S)	—	—	—	—
Narrogin (T)	950	212	250	1,030
Narrogin (S)	—	—	—	—
Pingelly (S)	—	—	—	—
Wagin (S)	84	—	—	—
Wandering (S)	—	—	—	—
West Arthur (S)	—	—	—	—
Wickepin (S)	—	—	—	400
Williams (S)	155	—	—	—
Total (b)	2,037	212	250	2,081
MIDLANDS STATISTICAL DIVISION				
Beverley (S)	—	—	—	135
Bruce Rock (S)	—	—	—	—
Chittering (S)	334	180	—	1,150
Cunderdin (S)	60	60	—	—
Dalwallinu (S)	—	—	—	—
Dandaragan (S)	113	—	—	852
Dowerin (S)	—	—	—	—
Gingin (S)	55	—	190	300
Goornalling (S)	—	—	—	—
Kellerberrin (S)	—	—	—	—
Koorda (S)	—	—	—	—
Merredin (S)	204	—	178	55
Moorra (S)	420	—	—	—
Mount Marshall (S)	—	—	—	—
Mukinbudin (S)	390	302	—	—
Narembeen (S)	—	—	—	—
Northam (T)	732	527	450	600
Northam (S)	641	95	82	2,679
Nungarin (S)	—	—	—	—
Quairading (S)	—	—	—	—
Tammin (S)	—	—	—	—
Toodyay (S)	212	212	180	180
Trayning (S)	—	—	—	—
Victoria Plains (S)	—	—	—	100
Westonia (S)	—	—	—	—
Wongan-Ballidu (S)	915	—	439	—
Wyalkatchem (S)	—	—	—	—
Yilgarn (S)	220	—	—	—
York (S)	50	—	—	—
Total	4,346	1,376	1,520	6,051

TABLE 11 – VALUE OF NON-RESIDENTIAL BUILDING COMPLETED AND UNDER CONSTRUCTION
BY STATISTICAL LOCAL AREAS AND STATISTICAL DIVISIONS – *continued*
(\$'000)

Statistical division Statistical local area (a)	Completed during period			Under construction at end of period
	Year ended June 1993 (r)	Quarter ended June 1993 (r)	Quarter ended September 1993p	Quarter ended September 1993p
SOUTH-EASTERN STATISTICAL DIVISION				
Coolgardie (S)	189	—	—	—
Dundas (S)	—	—	88	—
Esperance (S)	1,834	494	278	1,010
Kalgoorlie-Boulder (C)	9,912	2,346	3,127	13,104
Laverton (S)	—	—	—	—
Leonora (S)	1,797	1,747	206	1,473
Menzies (S)	—	—	—	—
Ravensthorpe (S)	1,432	192	—	—
Total	15,164	4,779	3,700	15,587
CENTRAL STATISTICAL DIVISION				
Camamah (S)	228	228	—	—
Camarvon (S)	1,111	102	518	1,769
Chapman Valley (S)	113	—	104	—
Coorow (S)	130	—	—	130
Cue (S)	—	—	—	99
Exmouth (S)	240	180	—	101
Geraldton (C)	4,914	1,837	1,996	3,465
Greenough (S)	1,887	1,067	53	—
Irwin (S)	535	—	650	—
Meekatharra (S)	1,591	—	56	—
Mingenew (S)	—	—	—	—
Morawa (S)	1,815	—	—	—
Mount Magnet (S)	—	—	—	—
Mullewa (S)	186	—	—	—
Murchison (S)	—	—	—	186
Ngaanyatjarraku (S) (c)	—	—	—	—
Northampton (S)	151	100	120	125
Perenjori (S)	—	—	—	—
Sandstone (S)	—	—	—	—
Shark Bay (S)	200	—	—	137
Three Springs (S)	—	—	—	—
Upper Gascoyne (S)	—	—	—	—
Wiluna (S) (c)	171	—	3,419	1,871
Yalgoo (S)	—	—	—	—
Total	13,271	3,514	6,916	7,882
PILBARA STATISTICAL DIVISION				
Ashburton (S)	2,283	—	—	1,099
East Pilbara (S)	1,703	322	209	5,316
Port Hedland (T)	6,993	306	227	1,921
Roebourne (S)	12,279	1,176	10,253	330
Total	23,258	1,804	10,689	8,666
KIMBERLEY STATISTICAL DIVISION				
Broome (S)	2,339	1,257	1,414	1,474
Derby-West Kimberley (S)	1,920	95	530	1,117
Halls Creek (S)	707	—	—	1,321
Wyndham-East Kimberley (S)	4,917	386	948	630
Total	9,883	1,738	2,892	4,542
STATE SUMMARY				
Statistical division –				
Perth	766,196	139,365	97,667	531,286
South-West	35,399	8,014	10,390	23,543
Lower Great Southern	12,416	5,340	2,917	7,781
Upper Great Southern	2,037	212	250	2,081
Midlands	4,346	1,376	1,520	6,051
South-Eastern	15,164	4,779	3,700	15,587
Central	13,271	3,514	6,916	7,882
Pilbara	23,258	1,804	10,689	8,666
Kimberley	9,883	1,738	2,892	4,542
WESTERN AUSTRALIA	881,970	166,143	136,940	607,420

(a) City councils are marked (C), Town councils (T) and Shire councils (S). (b) From 1 July 1993, Boddington (S) is part of the South-West Statistical Division. Formerly part of the Upper Great Southern Statistical Division. (c) From 1 July 1993, Ngaanyatjarraku is a new Shire council. Formerly part of Wiluna (S).

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 (previously \$30,000) or more are included in the survey. The impact of these changes is relatively small at the Total Western Australia level, however, care should be taken in interpreting data for specific classes of non-residential building. The ABS will continue to periodically review the cut-offs for both residential and non-residential building activity to take account of inflation in future years.

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 level. However, dwelling unit commencement data for regions below State level are shown in the monthly series of dwelling unit commencements (Catalogue No. 8741.5). 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 (i.e. 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 (i.e. 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 where the building can fulfil its intended function. In practice, the ABS regards buildings as completed when notified as such by respondents to the survey.

Valuation of 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 *private sector* or *public 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, 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, power houses, 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 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.
- (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 number 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).

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 component 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 Australian 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. A charge may be made for providing unpublished information in these forms.

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

Western Australia	Catalogue No.
<i>Building Approvals</i> (monthly)	8731.5
<i>Building Approvals - Private Sector, Perth Statistical Division</i> (monthly)	8732.5
<i>Dwelling Unit Commencements Reported by Approving Authorities</i> (monthly)	8741.5
Australia	Catalogue No.
<i>Building Approvals</i> (monthly)	8731.0
<i>Building Activity: Dwelling Unit Commencements, Preliminary</i> (quarterly)	8750.0
<i>Building Activity</i> (quarterly)	8752.0
<i>Engineering Construction Activity</i> (quarterly)	8762.0
<i>Housing Finance for Owner Occupation</i> (monthly)	5609.0

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.

P.C. KELLY
Deputy Commonwealth Statistician
and Government Statist





For more information ...

The ABS publishes a wide range of statistics and other information on Australia's economic and social conditions. Details of what is available in various publications and other products can be found in the *ABS Catalogue of Publications and Products* available at all ABS Offices.

Information Consultancy Service

Information tailored to special needs of clients can be obtained from the Information Consultancy Service available at ABS Offices (see Information Inquiries below for contact details).

National Dial-a-Statistic Line

0055 86 400

(Steadycorn P/L: premium rate 25c/21.4 secs.)

This number gives you 24 hour access, 365 days a year for a range of statistics.

Electronic Data Services

A wide range of ABS data are available on electronic media. Selections of most frequently requested statistics are available, updated daily, on DISCOVERY (Key *656#). The ABS PC TELESTATS service delivers major economic indicator main features ready to download into personal computers on the day of release. The PC AUSSTATS service enables on-line access to a data base of thousands of up-to-date time series. Selected datasets are also available on diskette or CD-ROM. For more details on electronic data services available, contact Information Services in any of the ABS Offices (see Information Inquiries below for contact details).

Bookshops and Subscriptions

There are over 500 titles of various publications available from ABS Bookshops in all ABS Offices (see Bookshop Sales below for contact details). The ABS also provides a subscription service through which nominated publications are provided by mail on a regular basis at no additional cost (telephone Publications Subscription Service toll free on 008 02 06 08 Australia wide).

Sales and Inquiries

Hyatt Centre, 30 Terrace Road, East Perth



Regional Offices

SYDNEY
MELBOURNE
BRISBANE
PERTH
ADELAIDE
HOBART
CANBERRA
DARWIN

Information Inquiries

(02) 268 4611
(03) 615 7000
(07) 222 6351
(09) 323 5140
(08) 237 7100
(002) 205 800
(06) 207 0315
(089) 432 111

Bookshop Sales

(02) 268 4620
(03) 615 7829
(07) 222 6350
(09) 323 5307
(08) 237 7582
(002) 205 800
(06) 207 0326
(089) 432 111

National Office

ACT

(06) 252 6007

008 02 06 08



Information Services, ABS, GPO Box K881, Perth, 6001

