

BUILDING APPROVALS

WESTERN AUSTRALIA

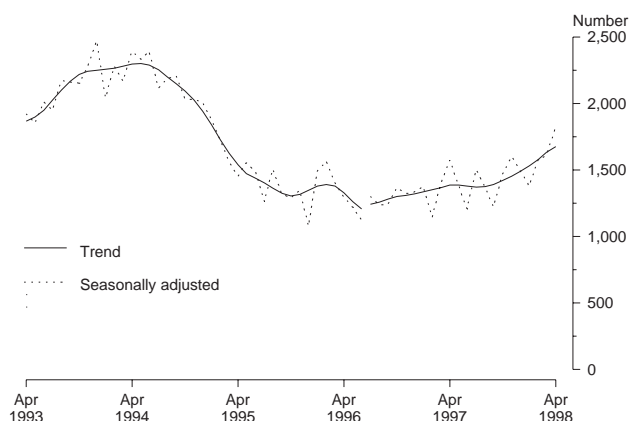
EMBARGO: 11.30AM (CANBERRA TIME) TUES 9 JUNE 1998

MAIN FEATURES

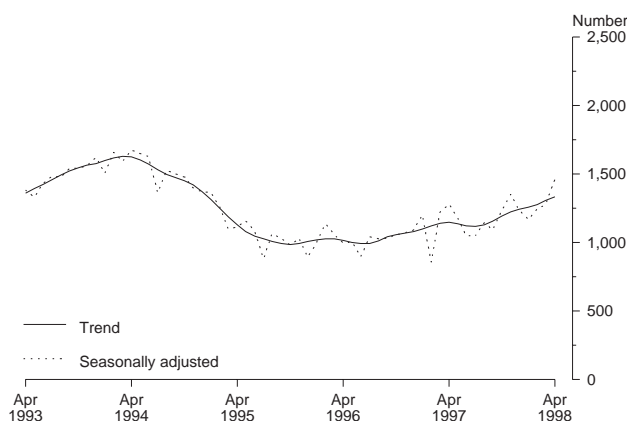
NUMBER OF DWELLING UNITS APPROVED

	April 1997	March 1998	April 1998	April 1997 to April 1998 change	March 1998 to April 1998 change
Original series	1,626	1,747	1,576	-3.1%	-9.8%
Seasonally adjusted	1,577	1,613	1,821	15.5%	12.9%
Trend estimate	1,387	1,635	1,677	20.9%	2.6%

TOTAL DWELLING UNITS APPROVED



PRIVATE SECTOR HOUSES APPROVED



Residential building

- The trend for the total number of dwelling units approved increased by 2.6% in April and is 20.9% higher than April 1997. Growth will continue unless the seasonally adjusted estimate falls by more than 23.0% in May.
- The trend for the number of private sector houses increased 1.9% in April and is 16.2% higher than a year ago.
- In original terms, there were 1,576 dwelling units approved in April, a decrease of 171 (9.8%) on March.
- The value of new residential building approved was \$163.3 million and the value of alterations and additions to residential buildings was \$12.4 million.

- In terms of average 1989–90 prices the value of new residential building approved in the March quarter fell by 2.1% to \$431.0 million. It is, however, 25.0% higher than for the March quarter 1997.

Non-residential building

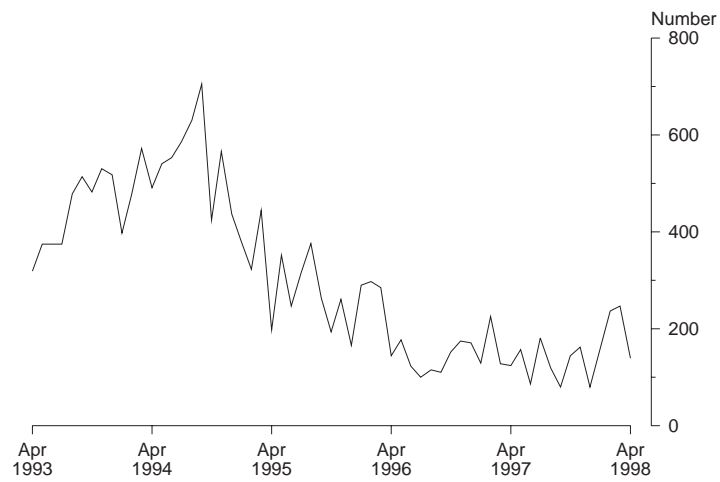
- The value of non-residential building approved in April was \$42.3 million. Other business premises accounted for \$9.6 million, followed by Shops (\$7.4 million) and Educational (\$6.7 million), of which one job accounted for \$5.6 million.
- There was one job valued at \$5 million and over and five jobs valued between \$1 million and \$5 million.
- In terms of average 1989–90 prices the value of non-residential building approved in the March quarter fell by 24.4% to \$169.7 million. It is 33.4% below the level of the March quarter 1997.

Please note that changes will be made to the content and presentation of the next issue of this publication to more closely align it with *Building Approvals, Australia* (Cat. no. 8731.0)

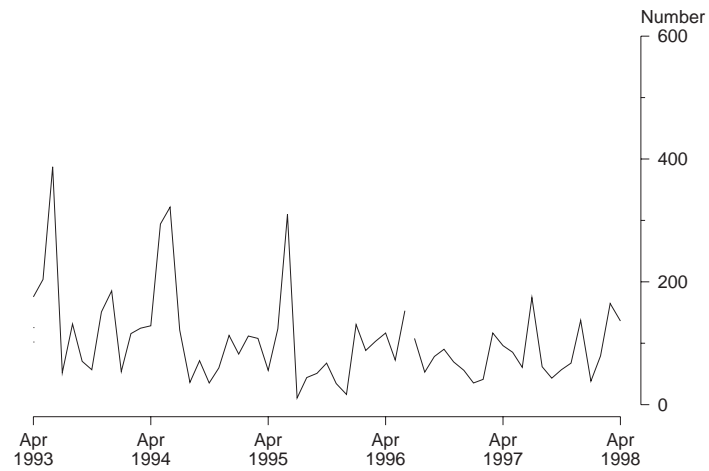
INQUIRIES

- for more information about statistics in this publication and the availability of related unpublished statistics, contact Merv Leaker on Adelaide (08) 8237 7585 or any ABS State Office.
- for information about other ABS statistics and services please contact Information Services on Perth (08) 9360 5140, call at 2 The Esplanade, Perth or write to Information Services, ABS, GPO Box K881, Perth WA, 6001.

NEW OTHER RESIDENTIAL BUILDINGS APPROVED PRIVATE SECTOR



TOTAL DWELLING UNITS APPROVED PUBLIC SECTOR



VALUE OF BUILDING WORK APPROVED

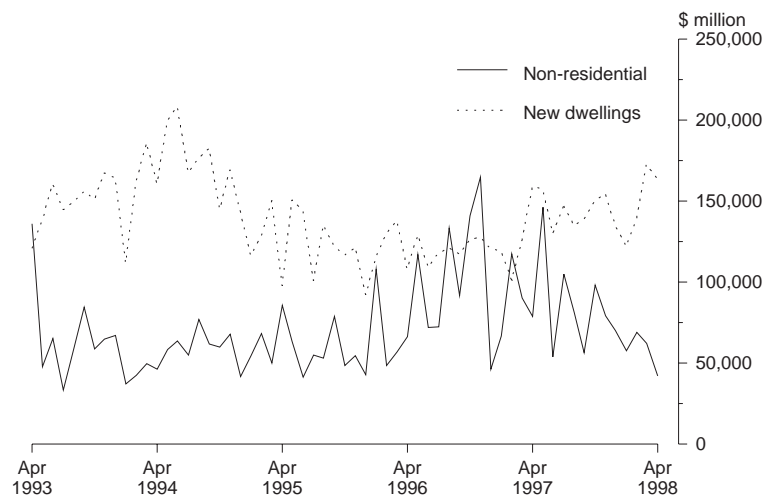


TABLE 1. NUMBER OF DWELLING UNITS APPROVED

Period	New houses			New other residential buildings			Conversions, etc.	Total (a)		
	Private sector	Public sector	Total	Private sector	Public sector	Total		Private sector	Public sector	Total
PERTH STATISTICAL DIVISION										
1994-95	11,238	255	11,493	4,430	509	4,939	98	15,765	765	16,530
1995-96	8,237	149	8,386	2,376	451	2,827	80	10,693	600	11,293
1996-97	9,106	261	9,367	1,434	192	1,626	67	10,601	459	11,060
1996-97										
July-April	7,393	218	7,611	1,229	165	1,394	67	8,683	389	9,072
1997-98										
July-April	8,294	265	8,559	1,188	383	1,571	83	9,565	648	10,213
1997—										
February	538	24	562	222	4	226	5	765	28	793
March	672	24	696	105	36	141	11	788	60	848
April	939	13	952	90	36	126	4	1,033	49	1,082
May	929	20	949	139	27	166	—	1,068	47	1,115
June	784	23	807	66	—	66	—	850	23	873
July	762	51	813	150	24	174	24	936	75	1,011
August	808	20	828	101	4	105	10	919	24	943
September	813	14	827	74	14	88	17	904	28	932
October	836	6	842	115	38	153	1	952	44	996
November	913	35	948	96	21	117	2	1,011	56	1,067
December	824	22	846	63	76	139	25	912	98	1,010
1998—										
January	668	22	690	124	16	140	—	792	38	830
February	786	30	816	175	17	192	1	962	47	1,009
March	961	17	978	201	130	331	2	1,164	147	1,311
April	923	48	971	89	43	132	1	1,013	91	1,104
WESTERN AUSTRALIA										
1994-95	15,783	424	16,207	5,297	808	6,105	115	21,194	1,233	22,427
1995-96	11,945	266	12,211	2,900	627	3,527	115	14,960	893	15,853
1996-97	13,068	565	13,633	1,682	331	2,013	97	14,841	902	15,743
1996-97										
July-April	10,635	471	11,106	1,437	278	1,715	92	12,158	755	12,913
1997-98										
July-April	11,993	503	12,496	1,558	462	2,020	99	13,650	965	14,615
1997—										
February	773	30	803	226	12	238	6	1,005	42	1,047
March	958	81	1,039	129	36	165	12	1,099	117	1,216
April	1,397	59	1,456	125	38	163	7	1,529	97	1,626
May	1,327	49	1,376	158	37	195	5	1,490	86	1,576
June	1,106	45	1,151	87	16	103	—	1,193	61	1,254
July	1,149	134	1,283	182	41	223	25	1,356	175	1,531
August	1,175	50	1,225	120	12	132	16	1,311	62	1,373
September	1,186	30	1,216	81	14	95	17	1,284	44	1,328
October	1,304	19	1,323	145	38	183	2	1,451	57	1,508
November	1,308	47	1,355	163	21	184	2	1,473	68	1,541
December	1,167	47	1,214	80	91	171	27	1,274	138	1,412
1998—										
January	953	23	976	162	16	178	1	1,116	39	1,155
February	1,126	39	1,165	237	41	278	1	1,364	80	1,444
March	1,330	33	1,363	248	132	380	4	1,582	165	1,747
April	1,295	81	1,376	140	56	196	4	1,439	137	1,576

(a) Includes Conversions, etc. See paragraphs 9-11 of the Explanatory Notes.

TABLE 2. VALUE OF BUILDING APPROVED
(\$ million)

Period	New residential building									Alterations and additions to residential buildings	Non-residential building		Total building	
	Houses			Other residential buildings			Total				Private sector	Total	Private sector	Total
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total					
PERTH STATISTICAL DIVISION														
1994-95	928.5	17.9	946.4	302.5	31.6	334.1	1,231.0	49.5	1,280.6	126.1	438.5	555.5	1,795.5	1,962.2
1995-96	787.4	10.6	798.0	186.5	33.0	219.6	973.9	43.6	1,017.6	128.2	512.8	597.3	1,614.7	1,743.1
1996-97	903.3	20.1	923.3	136.1	11.1	147.2	1,039.4	31.2	1,070.6	139.5	542.5	779.9	1,718.7	1,990.0
1996-97 July-April	727.0	16.9	743.9	116.8	9.6	126.4	843.8	26.5	870.3	116.5	466.5	661.7	1,425.0	1,648.5
1997-98 July-April	865.4	19.1	884.6	102.7	22.3	125.0	968.1	41.5	1,009.6	126.5	411.8	519.0	1,505.9	1,655.0
1997—														
February	55.0	1.6	56.6	19.8	0.3	20.1	74.9	1.9	76.7	9.8	31.5	35.5	116.2	122.0
March	69.3	1.8	71.1	12.6	2.8	15.4	81.8	4.6	86.5	12.6	56.4	62.6	150.8	161.7
April	90.5	1.0	91.5	10.2	1.9	12.2	100.7	2.9	103.7	14.0	42.1	43.8	156.4	161.5
May	93.7	1.3	95.0	13.1	1.5	14.6	106.8	2.8	109.7	11.3	48.8	89.8	166.7	210.8
June	82.5	1.8	84.4	6.2	—	6.2	88.8	1.8	90.6	11.8	27.2	28.4	127.0	130.8
July	78.3	4.2	82.6	12.0	1.4	13.3	90.3	5.6	95.9	12.6	53.9	87.5	156.8	196.0
August	82.3	1.9	84.2	7.6	0.3	7.9	89.9	2.2	92.0	12.4	30.5	55.2	132.8	159.7
September	86.8	1.1	87.9	7.7	2.1	9.7	94.5	3.1	97.6	12.8	41.8	42.2	149.0	152.6
October	84.6	0.4	85.0	10.5	2.0	12.5	95.1	2.4	97.5	13.7	52.2	70.9	160.9	182.1
November	94.9	2.0	96.9	7.8	1.2	9.0	102.7	3.2	105.9	12.7	56.9	61.6	172.2	180.2
December	84.9	1.4	86.3	5.1	3.8	8.9	90.0	5.2	95.2	13.1	40.9	48.9	143.8	157.2
1998—														
January	72.3	1.4	73.6	12.1	1.0	13.2	84.4	2.4	86.8	12.0	37.4	47.7	133.8	146.6
February	81.5	2.3	83.8	11.7	0.9	12.7	93.2	3.2	96.4	13.4	36.2	41.2	142.7	151.0
March	102.2	1.5	103.7	18.1	6.8	24.9	120.2	8.4	128.6	13.6	41.7	42.1	175.6	184.3
April	97.6	3.0	100.6	10.2	2.8	13.0	107.8	5.8	113.6	10.2	20.3	21.5	138.2	145.3
WESTERN AUSTRALIA														
1994-95	1,319.8	34.5	1,354.3	366.3	54.0	420.3	1,686.1	88.5	1,774.6	156.2	580.9	728.2	2,422.9	2,659.0
1995-96	1,123.8	24.6	1,148.3	225.5	46.9	272.3	1,349.2	71.4	1,420.7	162.9	692.0	803.1	2,203.6	2,386.6
1996-97	1,294.2	54.9	1,349.1	153.8	21.8	175.7	1,448.0	76.8	1,524.7	172.7	774.3	1,204.4	2,391.0	2,901.8
1996-97 July-April	1,041.5	46.5	1,088.0	130.8	18.5	149.3	1,172.3	65.0	1,237.3	143.5	664.8	1,003.8	1,977.6	2,384.6
1997-98 July-April	1,254.2	45.2	1,299.4	131.4	28.7	160.1	1,385.6	73.9	1,459.5	157.1	569.7	722.6	2,111.6	2,339.2
1997—														
February	78.1	2.1	80.2	20.3	0.8	21.1	98.4	3.0	101.3	12.3	73.6	117.8	184.1	231.4
March	98.5	10.2	108.7	14.3	2.8	17.1	112.8	13.0	125.8	15.0	68.3	90.4	196.0	231.1
April	137.0	6.8	143.8	13.3	2.1	15.4	150.3	9.0	159.2	16.8	72.7	78.8	239.0	254.8
May	135.8	4.7	140.5	14.7	2.1	16.8	150.5	6.8	157.3	15.2	63.1	146.4	228.4	318.9
June	116.8	3.8	120.6	8.4	1.2	9.6	125.2	5.0	130.2	14.1	46.3	54.1	184.9	198.4
July	118.2	11.6	129.8	14.7	2.7	17.4	133.0	14.3	147.2	16.0	71.2	105.3	220.2	268.5
August	119.6	5.4	125.1	9.0	0.9	10.0	128.7	6.4	135.0	15.7	51.8	81.4	196.2	232.1
September	126.1	2.9	129.0	8.3	2.1	10.3	134.4	4.9	139.3	15.8	54.3	56.5	204.4	211.7
October	134.4	2.1	136.4	12.2	2.0	14.2	146.6	4.0	150.6	18.4	64.6	98.3	229.5	267.2
November	138.4	3.8	142.2	11.2	1.2	12.4	149.6	5.0	154.6	16.2	70.5	79.4	236.3	250.2
December	119.2	4.3	123.4	6.9	4.8	11.7	126.1	9.1	135.2	16.2	57.3	70.3	199.4	221.6
1998—														
January	103.7	1.5	105.1	16.2	1.0	17.2	119.8	2.5	122.3	13.8	46.3	57.6	179.9	193.7
February	117.2	3.4	120.6	15.8	2.8	18.6	132.9	6.3	139.2	16.5	59.8	69.1	209.1	224.8
March	140.4	3.3	143.7	22.0	7.1	29.1	162.4	10.4	172.8	16.2	60.2	62.4	238.7	251.4
April	137.1	7.0	144.1	15.1	4.1	19.1	152.2	11.1	163.3	12.4	33.7	42.3	198.0	218.0

**TABLE 3. NUMBER OF DWELLING UNITS (a) APPROVED
SEASONALLY ADJUSTED AND TREND ESTIMATES (b)(c)**

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate
1997—								
February	858	1,124	891	1,167	1,102	1,285	1,146	1,352
March	1,224	1,142	1,286	1,188	1,301	1,304	1,406	1,371
April	1,281	1,148	1,347	1,203	1,488	1,311	1,577	1,387
May	1,184	1,139	1,227	1,204	1,325	1,302	1,387	1,389
June	1,052	1,124	1,075	1,196	1,183	1,285	1,208	1,379
July	1,051	1,119	1,218	1,192	1,295	1,274	1,506	1,373
August	1,145	1,130	1,211	1,199	1,270	1,275	1,374	1,376
September	1,094	1,158	1,121	1,219	1,163	1,292	1,226	1,394
October	1,236	1,196	1,274	1,247	1,399	1,322	1,474	1,424
November	1,353	1,226	1,403	1,269	1,509	1,356	1,604	1,457
December	1,239	1,244	1,290	1,282	1,318	1,387	1,503	1,490
1998—								
January	1,170	1,259	1,202	1,300	1,322	1,424	1,380	1,533
February	1,248	1,280	1,290	1,326	1,495	1,467	1,580	1,582
March	1,280	1,309	1,304	1,359	1,467	1,516	1,613	1,635
April	1,460	1,334	1,551	1,389	1,695	1,554	1,821	1,677

(a) Includes Conversions, etc. See paragraphs 9-11 of the Explanatory Notes. (b) Seasonally adjusted series smoothed by application of a 13-term Henderson moving average. Trend estimates for the most recent months are provisional and can be revised as data for additional months become available. See Explanatory Notes for a more detailed explanation. (c) Series have been revised due to annual re-analysis of seasonal adjustment factors.

**TABLE 4. VALUE OF BUILDING APPROVED AT AVERAGE 1989-90 PRICES (a)
(\$ million)**

Period	New residential building				Alterations and additions to residential buildings	Non-residential building		Total building	
	Houses		Other residential buildings	Total		Private sector	Total	Private sector	Total
	Private sector	Total							
1994-95	1,356.3	1,391.5	407.6	1,799.0	160.5	559.2	701.2	2,427.5	2,660.7
1995-96	1,131.1	1,155.7	259.1	1,414.9	163.9	654.1	758.9	2,158.9	2,337.6
1996-97	1,303.9	1,359.2	164.5	1,523.8	174.1	719.5	1,118.9	2,331.8	2,816.8
1996— Dec. qtr.	316.2	328.0	46.2	374.3	42.8	194.4	328.3	592.4	745.4
1997— Mar. qtr.	279.7	294.4	50.3	344.7	42.4	160.9	254.7	527.8	641.8
June qtr.	393.2	408.6	38.8	447.4	46.4	167.5	256.8	637.6	750.7
Sept. qtr.	367.2	387.3	34.8	422.1	47.9	161.8	221.9	605.0	691.9
Dec. qtr.	395.1	405.3	35.1	440.3	51.1	174.1	224.4	646.4	715.8
1998— Mar. qtr	363.9	372.0	59.0	431.0	46.7	149.2	169.7	606.4	647.5

(a) See paragraphs 16-26 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 5. VALUE OF BUILDING APPROVED, BY CLASS OF BUILDING AND OWNERSHIP
(\$ million)

Class of building	(\$ million)				1998		
	1995-96	1996-97	July-April		February	March	April
			1996-97	1997-98			
PRIVATE SECTOR							
New houses	1,123.8	1,294.2	1,041.5	1,254.2	117.2	140.4	137.1
New other residential buildings	225.5	153.8	130.8	131.4	15.8	22.0	15.1
Total new residential building	1,349.2	1,448.0	1,172.3	1,385.6	132.9	162.4	152.2
Alterations and additions to residential buildings	162.4	168.7	140.6	156.3	16.3	16.1	12.2
Hotels, etc.	113.3	75.4	65.9	45.3	7.0	7.6	4.1
Shops	117.5	162.7	125.2	123.8	8.0	18.8	7.4
Factories	79.5	96.2	80.3	74.9	10.1	9.0	5.8
Offices	72.8	117.2	107.6	67.7	4.5	2.2	3.1
Other business premises	107.9	113.6	92.0	119.1	9.0	16.5	9.5
Educational	43.5	38.8	34.7	30.3	2.5	1.0	1.1
Religious	4.4	5.2	4.4	7.7	1.0	0.3	—
Health	31.6	96.1	91.5	49.6	12.7	0.9	1.7
Entertainment and recreational	34.1	36.6	32.6	32.7	4.5	3.3	0.5
Miscellaneous	87.3	32.5	30.5	18.7	0.6	0.7	0.4
Total non-residential building	692.0	774.3	664.8	569.7	59.8	60.2	33.7
Total	2,203.6	2,391.0	1,977.6	2,111.6	209.1	238.7	198.0
PUBLIC SECTOR							
New houses	24.6	54.9	46.5	45.2	3.4	3.3	7.0
New other residential buildings	46.9	21.8	18.5	28.7	2.8	7.1	4.1
Total new residential building	71.4	76.8	65.0	73.9	6.3	10.4	11.1
Alterations and additions to residential buildings	0.5	3.9	2.9	0.8	0.1	0.1	0.3
Hotels, etc.	—	—	—	1.4	0.7	—	—
Shops	1.5	1.5	1.3	0.6	—	—	—
Factories	0.9	6.4	6.3	2.0	—	—	—
Offices	33.6	39.2	33.8	40.1	0.4	—	1.1
Other business premises	4.1	46.8	45.2	7.9	3.2	0.1	0.1
Educational	37.0	113.2	100.3	61.3	—	—	5.7
Religious	—	0.2	—	—	—	—	—
Health	1.2	118.4	74.1	14.1	—	—	—
Entertainment and recreational	13.9	55.7	31.7	9.7	1.1	1.3	1.5
Miscellaneous	18.8	48.8	46.2	15.9	3.9	0.9	0.2
Total non-residential building	111.1	430.1	339.0	152.9	9.3	2.3	8.6
Total	183.1	510.8	406.9	227.6	15.7	12.8	20.0
TOTAL							
New houses	1,148.3	1,349.1	1,088.0	1,299.4	120.6	143.7	144.1
New other residential buildings	272.3	175.7	149.3	160.1	18.6	29.1	19.1
Total new residential building	1,420.7	1,524.7	1,237.3	1,459.5	139.2	172.8	163.3
Alterations and additions to residential buildings	162.9	172.7	143.5	157.1	16.5	16.2	12.4
Hotels, etc.	113.3	75.4	65.9	46.7	7.7	7.6	4.1
Shops	119.0	164.2	126.5	124.4	8.0	18.8	7.4
Factories	80.4	102.6	86.7	76.9	10.1	9.0	5.8
Offices	106.5	156.4	141.4	107.8	4.9	2.2	4.2
Other business premises	112.0	160.4	137.3	126.9	12.2	16.6	9.6
Educational	80.4	152.0	135.0	91.5	2.5	1.0	6.7
Religious	4.4	5.4	4.4	7.7	1.0	0.3	—
Health	32.8	214.5	165.6	63.7	12.7	0.9	1.7
Entertainment and recreational	48.0	92.2	64.3	42.4	5.6	4.6	2.0
Miscellaneous	106.2	81.3	76.8	34.6	4.4	1.6	0.6
Total non-residential building	803.1	1,204.4	1,003.8	722.6	69.1	62.4	42.3
Total	2,386.6	2,901.8	2,384.6	2,339.2	224.8	251.4	218.0

**TABLE 6. NON-RESIDENTIAL BUILDING JOBS APPROVED, BY CLASS OF BUILDING
AND VALUE SIZE GROUPS**

<i>Period</i>	<i>\$50,000 to less than \$200,000</i>		<i>\$200,000 to less than \$500,000</i>		<i>\$500,000 to less than \$1m</i>		<i>\$1m to less than \$5m</i>		<i>\$5m and over</i>		<i>Total</i>	
	<i>No.</i>	<i>Value (\$m)</i>	<i>No.</i>	<i>Value (\$m)</i>	<i>No.</i>	<i>Value (\$m)</i>	<i>No.</i>	<i>Value (\$m)</i>	<i>No.</i>	<i>Value (\$m)</i>	<i>No.</i>	<i>Value (\$m)</i>
HOTELS, ETC.												
1998 February	5	0.6	1	0.5	3	2.2	2	4.4	—	—	11	7.7
March	4	0.4	1	0.2	1	0.5	2	6.5	—	—	8	7.6
April	8	0.7	13	3.4	—	—	—	—	—	—	21	4.1
SHOPS												
1998 February	22	2.0	10	3.4	2	1.5	1	1.2	—	—	35	8.0
March	21	1.6	6	1.5	3	2.3	2	2.9	2	10.6	34	18.8
April	22	2.1	5	1.5	1	0.8	1	3.1	—	—	29	7.4
FACTORIES												
1998 February	11	1.3	6	1.8	1	0.8	2	6.3	—	—	20	10.1
March	9	1.0	9	2.4	2	1.3	1	4.3	—	—	21	9.0
April	12	1.4	9	2.4	3	2.1	—	—	—	—	24	5.8
OFFICES												
1998 February	15	1.4	4	1.3	2	1.3	1	1.0	—	—	22	4.9
March	8	0.6	2	0.9	1	0.7	—	—	—	—	11	2.2
April	15	1.3	3	0.7	1	0.5	1	1.6	—	—	20	4.2
OTHER BUSINESS PREMISES												
1998 February	15	1.5	8	2.5	1	0.7	3	7.5	—	—	27	12.2
March	15	1.5	8	2.3	—	—	5	12.8	—	—	28	16.6
April	20	2.1	7	2.2	4	2.3	2	3.0	—	—	33	9.6
EDUCATIONAL												
1998 February	2	0.1	3	1.1	—	—	1	1.3	—	—	6	2.5
March	4	0.4	2	0.6	—	—	—	—	—	—	6	1.0
April	3	0.3	1	0.3	1	0.5	—	—	1	5.6	6	6.7
RELIGIOUS												
1998 February	1	0.1	1	0.2	1	0.8	—	—	—	—	3	1.0
March	1	0.1	1	0.2	—	—	—	—	—	—	2	0.3
April	—	—	—	—	—	—	—	—	—	—	—	—
HEALTH												
1998 February	—	—	—	—	—	—	2	6.9	1	5.8	3	12.7
March	1	0.1	1	0.2	1	0.5	—	—	—	—	3	0.9
April	—	—	—	—	1	0.7	1	1.0	—	—	2	1.7
ENTERTAINMENT AND RECREATIONAL												
1998 February	6	0.5	3	1.0	2	1.2	2	3.0	—	—	13	5.6
March	2	0.2	7	2.6	1	0.9	1	1.0	—	—	11	4.6
April	2	0.2	3	1.0	1	0.8	—	—	—	—	6	2.0
MISCELLANEOUS												
1998 February	2	0.1	3	0.7	—	—	1	3.6	—	—	6	4.4
March	3	0.2	2	0.6	1	0.7	—	—	—	—	6	1.6
April	2	0.2	2	0.4	—	—	—	—	—	—	4	0.6
TOTAL NON-RESIDENTIAL BUILDING												
1998 February	79	7.5	39	12.4	12	8.4	15	35.1	1	5.8	146	69.1
March	68	5.9	39	11.6	10	6.9	11	27.5	2	10.6	130	62.4
April	84	8.3	43	12.0	12	7.7	5	8.7	1	5.6	145	42.3

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1998

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
PERTH STATISTICAL DIVISION										
Cambridge (T)	12	—	2,002	5	—	288	560	180	180	3,030
Claremont (T)	1	—	290	—	—	—	113	520	520	923
Cottesloe (T)	5	—	1,881	—	—	—	150	—	—	2,031
Mosman Park (T)	3	—	700	—	—	—	653	—	—	1,353
Nedlands (C)	11	—	2,304	—	—	—	1,605	—	—	3,909
Peppermint Grove (S)	—	—	—	—	—	—	40	—	—	40
Perth (C) — Inner	—	—	—	—	—	—	—	617	1,157	1,157
Perth (C) — Remainder	3	—	794	11	—	1,973	—	359	359	3,126
Subiaco (C)	7	—	1,013	—	—	—	203	—	—	1,217
Vincent (T)	9	—	1,378	2	—	210	218	—	—	1,805
Central Metropolitan (SSD)	51	—	10,363	18	—	2,471	3,541	1,676	2,216	18,591
Bassendean (T)	4	—	324	—	—	—	117	295	295	736
Bayswater (C)	10	—	1,125	—	—	—	385	225	225	1,736
Kalamunda (S)	19	—	2,122	—	—	—	186	175	498	2,805
Mundaring (S)	24	—	2,330	—	—	—	224	70	70	2,624
Swan (S)	116	8	10,476	4	3	443	77	4,662	4,812	15,808
East Metropolitan (SSD)	173	8	16,378	4	3	443	989	5,427	5,900	23,710
Stirling (C) — Central	41	1	3,860	25	12	2,455	329	1,000	1,000	7,643
Stirling (C) — Coastal	31	1	3,456	6	4	785	476	280	280	4,997
Stirling (C) — South-Eastern	10	26	2,560	2	—	200	699	—	50	3,509
Wanneroo (C) — Central Coastal	66	—	7,151	6	—	685	202	70	70	8,108
Wanneroo (C) — North-East	40	1	3,690	—	—	—	70	50	50	3,810
Wanneroo (C) — North-West	70	—	6,809	—	—	—	—	—	—	6,809
Wanneroo (C) — South-East	32	—	2,714	—	—	—	89	1,175	1,175	3,978
Wanneroo (C) — South-West	20	—	2,990	2	—	162	700	300	300	4,152
North Metropolitan (SSD)	310	29	33,230	41	16	4,287	2,565	2,875	2,925	43,007
Cockburn (C)	55	—	5,238	—	—	—	199	2,610	2,610	8,047
East Fremantle (T)	—	—	—	—	—	—	421	—	—	421
Fremantle (C) — Inner	—	—	—	—	—	—	—	—	—	—
Fremantle (C) — Remainder	9	—	1,162	12	—	1,264	389	270	270	3,085
Kwinana (T)	11	—	788	—	—	—	32	660	660	1,480
Melville (C)	37	—	6,282	—	—	—	715	930	930	7,927
Rockingham (C)	65	7	5,979	—	—	—	290	3,684	3,684	9,953
South West Metropolitan (SSD)	177	7	19,449	12	—	1,264	2,046	8,154	8,154	30,914
Armadale (C)	15	—	1,539	—	—	—	80	—	—	1,619
Belmont (C)	36	—	3,504	5	—	328	62	110	110	4,003
Canning (C)	46	3	4,073	—	17	905	133	1,626	1,626	6,736
Gosnells (C)	81	—	7,758	—	—	—	290	140	298	8,347
Serpentine-Jarrahdale (S)	9	—	1,205	—	—	—	108	300	300	1,613
South Perth (C)	15	—	2,094	6	—	2,600	205	—	—	4,898
Victoria Park (T)	10	1	1,027	3	7	697	168	—	—	1,892
South East Metropolitan (SSD)	212	4	21,199	14	24	4,530	1,045	2,176	2,334	29,108
Total	923	48	100,620	89	43	12,995	10,186	20,308	21,529	145,329

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1998—continued

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		Total building (\$'000)
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
SOUTH WEST STATISTICAL DIVISION										
Boddington (S)	1	—	40	—	—	—	60	—	—	100
Mandurah (C)	38	1	4,641	—	—	—	127	307	307	5,075
Murray (S)	10	2	1,156	—	—	—	16	—	—	1,172
Waroona (S)	2	—	192	—	—	—	42	148	148	382
Dale (SSD)	51	3	6,029	—	—	—	245	455	455	6,729
Bunbury (C)	12	1	1,514	—	—	—	132	1,147	1,147	2,793
Capel (S)	4	—	493	—	—	—	40	58	58	591
Collie (S)	7	—	687	—	—	—	—	—	—	687
Dardanup (S)	26	—	2,089	—	—	—	17	73	73	2,179
Donnybrook-Balingup (S)	1	—	79	—	—	—	25	—	—	104
Harvey (S)	22	—	2,119	—	—	—	—	466	466	2,585
Preston (SSD)	72	1	6,981	—	—	—	214	1,744	1,744	8,940
Augusta-Margaret River (S)	8	—	730	—	—	—	41	380	380	1,151
Busselton (S)	47	—	5,858	—	—	—	207	5,094	5,094	11,159
Vasse (SSD)	55	—	6,588	—	—	—	248	5,474	5,474	12,309
Boyup Brook (S)	2	—	144	—	—	—	—	—	—	144
Bridgetown-Greenbushes (S)	4	—	408	—	—	—	—	—	—	408
Manjimup (S)	5	—	469	—	—	—	127	250	250	846
Nannup (S)	—	—	—	—	—	—	30	120	120	150
Blackwood (SSD)	11	—	1,021	—	—	—	157	370	370	1,548
Total	189	4	20,620	—	—	—	864	8,043	8,043	29,526
LOWER GREAT SOUTHERN STATISTICAL DIVISION										
Broomehill (S)	—	—	—	—	—	—	—	—	—	—
Gnowangerup (S)	4	—	324	—	—	—	23	—	—	346
Jerramungup (S)	1	—	41	—	—	—	—	50	50	91
Katanning (S)	—	7	545	—	—	—	20	—	—	565
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	—	—	—	—	—	—	—	—	—	—
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	5	7	909	—	—	—	43	50	50	1,002
Albany (T)	6	—	702	—	—	—	25	—	210	936
Albany (S)	19	—	1,778	—	—	—	153	464	464	2,395
Cranbrook (S)	4	—	254	—	—	—	18	—	—	272
Denmark (S)	3	—	263	—	—	—	15	—	—	278
Plantagenet (S)	6	—	435	—	—	—	—	143	143	578
King (SSD)	38	—	3,433	—	—	—	210	607	817	4,460
Total	43	7	4,342	—	—	—	253	657	867	5,462

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1998—continued

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
UPPER GREAT SOUTHERN STATISTICAL DIVISION										
Brookton (S)	1	—	154	—	—	—	20	—	—	174
Cuballing (S)	—	—	—	—	—	—	—	—	—	—
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	—
Narrogin (T)	—	—	—	—	—	—	—	—	—	—
Narrogin (S)	—	—	—	—	—	—	—	—	—	—
Pingelly (S)	3	1	471	—	—	—	75	—	—	546
Wagin (S)	—	—	—	—	—	—	—	—	—	—
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	—	—	—	—	6	429	—	—	—	429
Hotham (SSD)	4	1	624	—	6	429	95	—	—	1,148
Corrigin (S)	—	—	—	—	—	—	—	—	—	—
Kondinin (S)	—	—	—	—	—	—	—	—	—	—
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	3	—	244	8	—	725	—	—	—	969
Lakes (SSD)	3	—	244	8	—	725	—	—	—	969
Total	7	1	868	8	6	1,154	95	—	—	2,117
MIDLANDS STATISTICAL DIVISION										
Chittering (S)	4	—	769	—	—	—	—	—	—	769
Dandaragan (S)	4	—	354	—	—	—	18	—	—	371
Gingin (S)	8	—	641	—	—	—	15	—	—	656
Moora (S)	—	—	—	—	—	—	—	—	—	—
Victoria Plains (S)	4	—	501	—	—	—	18	—	—	519
Moore (SSD)	20	—	2,265	—	—	—	51	—	—	2,315
Beverley (S)	6	—	391	—	—	—	23	—	—	414
Cunderdin (S)	—	—	—	—	—	—	—	—	—	—
Dalwallinu (S)	2	2	361	—	2	215	—	—	—	576
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goomalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	3	302	—	—	—	302
Northam (T)	1	—	33	—	—	—	—	—	—	33
Northam (S)	2	—	145	—	—	—	—	—	—	145
Quairading (S)	—	—	—	—	—	—	—	—	—	—
Tammin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	6	—	617	—	—	—	20	—	—	638
Wongan-Ballidu (S)	—	—	—	—	—	—	23	—	—	23
Wyalkatchem (S)	—	—	—	—	—	—	—	—	—	—
York (S)	2	—	165	—	—	—	43	—	118	326
Avon (SSD)	19	2	1,713	—	5	517	109	—	118	2,457
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Kellerberrin (S)	—	—	—	—	—	—	—	—	—	—
Merredin (S)	3	—	282	—	—	—	25	—	—	307
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mukinbudin (S)	3	—	281	—	—	—	—	—	—	281
Narembeen (S)	—	—	—	—	—	—	—	—	—	—
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	1	—	98	—	—	—	—	—	—	98
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgarn (S)	—	—	—	—	—	—	—	—	—	—
Campion (SSD)	7	—	661	—	—	—	25	—	—	686
Total	46	2	4,639	—	5	517	184	—	118	5,458

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1998—continued

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
SOUTH EASTERN STATISTICAL DIVISION										
Coolgardie (S)	—	—	—	—	—	—	—	—	—	—
Kalgoorlie/Boulder (C)	17	—	2,216	11	—	762	213	605	1,405	4,596
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	6	—	360	—	57	57	417
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	17	—	2,216	17	—	1,122	213	662	1,462	5,012
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	8	—	827	—	—	—	81	50	50	958
Ravensthorpe (S)	—	—	—	—	—	—	—	—	—	—
Johnston (SSD)	8	—	827	—	—	—	81	50	50	958
Total	25	—	3,043	17	—	1,122	294	712	1,512	5,971
CENTRAL STATISTICAL DIVISION										
Carnarvon (S)	—	—	—	—	—	—	—	313	313	313
Exmouth (S)	—	—	—	—	—	—	—	—	—	—
Shark Bay (S)	2	—	69	2	—	263	—	—	—	332
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	2	—	69	2	—	263	—	313	313	645
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meekatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	—	—	—
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	—	—	—	—
Coorow (S)	—	—	—	—	—	—	—	—	—	—
Geraldton (C)	6	—	793	—	—	—	101	531	531	1,425
Greenough (S)	19	—	2,480	—	—	—	73	—	—	2,553
Irwin (S)	6	—	548	—	—	—	21	—	—	569
Mingenew (S)	—	—	—	—	—	—	—	—	—	—
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	4	612	—	—	—	144	—	—	756
Northampton (S)	—	—	—	—	—	—	—	—	—	—
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	1	—	190	—	—	—	—	—	—	190
Greenough River (SSD)	32	4	4,623	—	—	—	338	531	531	5,492
Total	34	4	4,692	2	—	263	338	844	844	6,137

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1998—continued

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		Total building (\$'000)
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
PILBARA STATISTICAL DIVISION										
East Pilbara (S)	1	—	100	—	—	—	60	590	590	750
Port Hedland (T)	3	—	417	24	—	2,760	34	1,600	7,200	10,411
De Grey (SSD)	4	—	517	24	—	2,760	94	2,190	7,790	11,161
Ashburton (S)	—	—	—	—	—	—	—	—	—	—
Roebourne (S)	11	9	2,052	—	2	329	42	260	599	3,022
Fortescue (SSD)	11	9	2,052	—	2	329	42	260	599	3,022
Total	15	9	2,569	24	2	3,089	136	2,450	8,389	14,183
KIMBERLEY STATISTICAL DIVISION										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	4	—	526	—	—	—	—	—	—	526
Ord (SSD)	4	—	526	—	—	—	—	—	—	526
Broome (S)	9	3	1,602	—	—	—	90	410	500	2,192
Derby-West Kimberley (S)	—	3	600	—	—	—	10	280	480	1,090
Fitzroy (SSD)	9	6	2,202	—	—	—	100	690	980	3,282
Total	13	6	2,728	—	—	—	100	690	980	3,808
WESTERN AUSTRALIA										
Western Australia	1,295	81	144,120	140	56	19,140	12,449	33,703	42,281	217,991

(a) City councils are marked (C), Town councils (T), Shire councils (S), and Statistical Subdivisions (SSD). (b) Excludes Conversions, etc.

**TABLE 8. NUMBER OF NEW HOUSES (a) APPROVED BY MATERIAL OF OUTER WALLS, FLOOR AREA AND VALUE PER SQUARE METRE BY STATISTICAL DIVISION
APRIL 1998**

Statistical division	Material of outer walls					Total	Floor area (sq m)	Average floor area (sq m)	Average value per square metre (\$)
	Double brick(b)	Brick veneer	Fibre cement	Timber	Other and not stated				
Perth	860	1	2	4	103	971	205,240	229	451
South-West	158	8	3	8	16	193	39,117	233	437
Lower Great Southern	19	6	12	1	12	50	7,969	185	476
Upper Great Southern	2	2	1	—	3	8	1,194	199	571
Midlands	15	6	9	3	15	48	9,096	207	482
South-Eastern	7	14	2	1	1	25	2,231	279	371
Central	27	—	2	—	9	38	8,645	228	543
Pilbara	—	11	—	—	13	24	1,453	104	837
Kimberley	—	—	—	1	18	19	3,236	202	736
Western Australia	1,088	48	31	18	190	1,376	278,181	226	459

(a) Excludes Conversions, etc. (b) Includes houses constructed with outer walls of stone and concrete,

**TABLE 9. NEW DWELLING UNITS (a) APPROVED, BY TYPE AND STATISTICAL DIVISION
APRIL 1998**

Statistical division	New other residential building									Total new residential building
	New houses	Semi-detached, row or terrace houses, townhouses etc. of			Flats, units or apartments in a building of					
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys	Total	Total	
NUMBER OF DWELLING UNITS										
Perth	971	79	42	121	—	5	6	11	132	1,103
South West	193	—	—	—	—	—	—	—	—	193
Lower Great Southern	50	—	—	—	—	—	—	—	—	50
Upper Great Southern	8	14	—	14	—	—	—	—	14	22
Midlands	48	5	—	5	—	—	—	—	5	53
South Eastern	25	11	—	11	6	—	—	6	17	42
Central	38	—	2	2	—	—	—	—	2	40
Pilbara	24	26	—	26	—	—	—	—	26	50
Kimberley	19	—	—	—	—	—	—	—	—	19
Western Australia	1,376	135	44	179	6	5	6	17	196	1,572
VALUE (\$'000)										
Perth	100,620	5,160	4,435	9,595	—	800	2,600	3,400	12,995	113,615
South West	20,620	—	—	—	—	—	—	—	—	20,620
Lower Great Southern	4,342	—	—	—	—	—	—	—	—	4,342
Upper Great Southern	868	1,154	—	1,154	—	—	—	—	1,154	2,022
Midlands	4,639	517	—	517	—	—	—	—	517	5,156
South Eastern	3,043	762	—	762	360	—	—	360	1,122	4,165
Central	4,692	—	263	263	—	—	—	—	263	4,955
Pilbara	2,569	3,089	—	3,089	—	—	—	—	3,089	5,658
Kimberley	2,728	—	—	—	—	—	—	—	—	2,728
Western Australia	144,120	10,682	4,698	15,380	360	800	2,600	3,760	19,140	163,260

(a) Excludes Conversions, etc.

EXPLANATORY NOTES

Introduction

This publication contains monthly details of building work approved.

Factors affecting comparability

2. For purposes of comparison, it should be noted that statistics of building approvals are affected from month to month by large projects (e.g. blocks of flats, multi storey office buildings) approved in particular months and also by the administrative arrangements of government authorities.

Scope and Coverage

3. Statistics of building work approved are compiled from:

- (a) permits issued by local government authorities in areas subject to building control by those authorities;
- (b) approvals issued by the Rural Housing Authority in areas not subject to building control by local government authorities;
- (c) contracts let or day labour work authorised by Commonwealth, State, semi-government and local government authorities;
- (d) major building activity which takes place in areas not subject to the normal administrative approval processes (e.g. buildings on remote mine sites).

4. 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 from this publication, but can be found in the ABS publication *Engineering Construction Survey* (8762.0).

5. In relation to work carried out on existing buildings, the statistics include details of non-structural renovation and refurbishment work and the installation of integral building fixtures for which building approval was obtained.

6. From July 1990, the statistics cover:

- (a) all approved new residential building jobs valued at \$10,000 or more (previously \$5,000 or more);
- (b) approved alterations and additions to residential buildings valued at \$10,000 or more;
- (c) all approved non-residential building jobs valued at \$50,000 or more (previously \$30,000 or more).

These changes in coverage do not have a statistically significant effect on broad building approvals aggregate data. However, care should be taken in interpreting data for specific classes of non-residential building.

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 buildings* approved.

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 caretaker's 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. From the January 1995 issue of this publication, the number of dwelling units approved as part of alterations and additions to, or conversions of, existing residential or non-residential buildings and as part of the construction of non-residential building is shown separately in Table 1 under the heading of 'Conversions, etc.', and is included in the total number of dwelling units shown in these tables. Previously, such dwellings were only included as a footnote.

11. In addition, from the January 1995 issue, the seasonally adjusted and trend estimates for the number of dwelling units approved, shown in Table 3, include these conversions etc. Previously, only dwelling units approved as part of the construction of new residential buildings were included in these estimates.

12. The value of new residential building approved continues to exclude the value of dwelling units approved as part of alterations and additions to, or conversions of, existing residential or non-residential buildings and as part of the construction of non-residential building. Approved building work represented by these conversions, etc. jobs continues to be included in the value of alterations and additions to residential buildings or in the value of non-residential building as appropriate.

13. *Value* data are derived by aggregation of the estimated value (when completed) of building work (excluding value of land and landscaping but including site preparation) as reported on approval documents. For 'houses', these estimates are usually a reliable indicator of the completed value of the building. However, for 'other residential buildings' and 'non-residential buildings' these estimates can differ significantly from the completed value of the building.

Building Classification

14. *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.

15. *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 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 e.g. a student accommodation building on a university campus would be classified to Educational.

Seasonal Adjustment

16. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series may be more clearly recognised.

17. Table 3 shows seasonally adjusted estimates for both private and total dwellings. For the four series shown, account has been taken of normal seasonal factors and 'trading day' effects (arising from the varying numbers of Sundays, Mondays, Tuesdays etc. in the month) and the effect of movement in the date of Easter which may, in successive years, affect figures for different months.

18. Seasonal adjustment procedures do not aim to remove the irregular or non-seasonal influences which may be present in any particular month, such as the effect of the approval of large projects or as a consequence of the administrative arrangements of approving authorities. These irregular influences that are highly volatile can make it difficult to interpret the movement of the series even after adjustment for seasonal variation.

19. Most of the component series have been seasonally adjusted independently. Therefore, 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 optimum 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.

20. As happens with all seasonally adjusted series, the seasonal factors are reviewed annually to take account of each additional year's data. For Building Approvals, the results of the latest review are shown in the July issue each year. Further information about seasonal adjustment can be obtained from the Assistant Director of Time Series Analysis, Canberra, on (02) 6252 6345.

Trend Estimates

21. Seasonally adjusted series can be smoothed to reduce the impact of the irregular component in the adjusted

series. This smoothed seasonally adjusted series is called a trend estimate.

22. Table 3 shows trend estimates for both private and total dwellings. These are obtained by applying a 13-term Henderson-weighted moving average to all months of the respective seasonally adjusted series except the last six months. Trend series are created for the last six months by applying surrogates of the Henderson moving average to the seasonally adjusted time series. For further information, see *A Guide to Interpreting Time Series - Monitoring 'Trends': an Overview* (1348.0).

23. While the smoothing technique described in paragraphs 21 and 22 enables trend estimates to be produced for the latest few months, it does result in revisions to the trend estimates as new data become available. Generally, revisions become smaller over time and, after three months, usually have a negligible impact on the series. Revisions to the original data and re-analysis of seasonal factors may also lead to revisions to the trend.

Estimates at Constant Prices

24. Estimates of the quarterly value of building approvals at average 1989-90 prices are presented in Table 4. (Note: monthly value data at constant prices are not available.)

25. 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 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'.

26. 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).

Australian Standard Geographical Classification (ASGC)

27. Area statistics are now being classified to the Australian Standard Geographical Classification, 1996 Edition (1216.0), effective from 1 July 1996, and ASGC terminology has been adopted in the presentation of building statistics:

(a) The Central Metropolitan SSD (Perth SD) now excludes the SLA of Victoria Park (T) and the South East Metropolitan SSD (Perth SD) now includes Victoria Park (T);

(b) The Central Statistical Division (Carnegie SSD) now excludes the SLA of Ngaanyatjaraku (S) and the South Eastern Statistical Division (Lefroy SSD) now includes Ngaanyatjaraku (S);

(c) The existing SLA of Wanneroo (C) has been split into five smaller SLAs. These new SLAs are: Wanneroo (C) - Central Coastal, Wanneroo (C) - North-East, Wanneroo (C) - North-West, Wanneroo (C) - South-East and Wanneroo (C) - South-West;

(d) There have been minor changes to the boundaries of the SLAs within the LGA of Stirling (C). This resulted in Stirling (C) - West being renamed Stirling (C) - Coastal.

Unpublished Data and Related Publications

28. The ABS can also make available certain building approvals 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 and clerically extracted tabulation. A charge may be made for providing unpublished information in these forms.

29. Other ABS publications which may be of interest include:

WESTERN AUSTRALIA	Catalogue No.
<i>Building Activity</i> (quarterly)	8752.5
<i>Dwelling Unit Commencements</i> (monthly)	8741.5
AUSTRALIA	
<i>Price Index of Materials Used in House Building</i> (monthly)	6408.0
<i>Building Approvals</i> (monthly)	8731.0
<i>Building Activity, Australia: Dwelling Unit Commencements, Preliminary</i> (quarterly)	8750.0
<i>Building Activity</i> (quarterly)	8752.0
<i>Engineering Construction Survey</i> (quarterly)	8762.0
<i>Housing Finance for Owner Occupation: Australia</i>	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 *Release Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

Symbols and Other Usages

31. The following symbols, where shown in columns of figures or elsewhere in tables, mean:

- nil or rounded to zero (including null cells)
- r figure or series revised since previous issue.
- n.a. not available

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

Colin Nagle
Regional Director, Western Australia

For more information...

The ABS publishes a wide range of information on Australia's economic and social conditions. Details are available in the *Catalogue of Publications and Products* is available from the WA Office of the ABS (see below for contact details).

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