

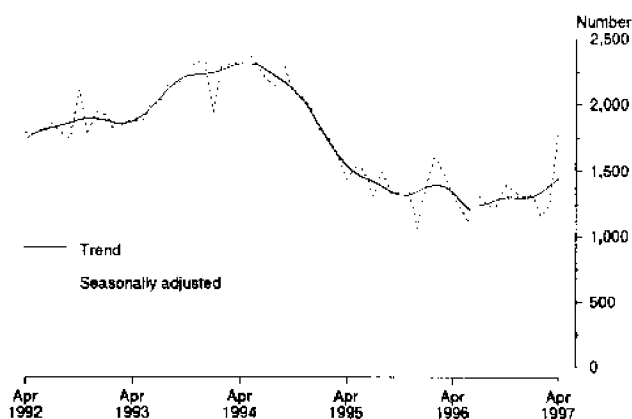
## BUILDING APPROVALS, WESTERN AUSTRALIA, APRIL 1997

### MAIN FEATURES

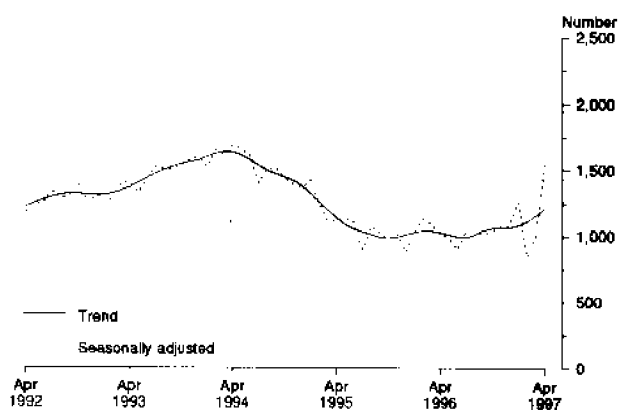
#### NUMBER OF DWELLING UNITS APPROVED

	April 1996	March 1997	April 1997	April 1996 to April 1997 change	March 1997 to April 1997 change
Original series	1,169	1,216	1,626	39.1%	33.7%
Seasonally adjusted	1,312	1,243	1,792	36.6%	44.2%
Trend estimate	1,338	1,387	1,443	7.8%	4.0%

TOTAL DWELLING UNITS APPROVED



PRIVATE SECTOR HOUSES APPROVED



#### Residential Building

- The number of dwellings approved this month rose by 410 (33.7%) to 1,626. The highest level since June 1995. The increase was widespread across the State.
- The value of new residential building approved was \$159.2 million and the value of alterations and additions to residential buildings was \$16.8 million.
- At average 1989-90 prices the value of new residential work approved for the March quarter 1997 was \$344.8 million, a decrease of 7.9% from the previous quarter and a 9.6% decrease from March quarter 1996.

#### Non-residential building

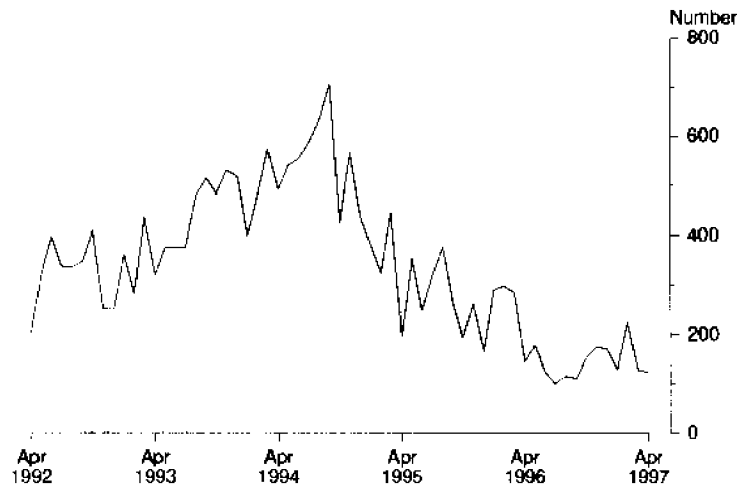
- The value of non-residential projects approved in April was \$78.8 million. There were 4 projects valued at more than \$5.0 million and 14 projects valued between \$1.0 million and \$5.0 million.
- At average 1989-90 prices the value of non-residential building work approved for the March quarter 1997 was \$256.0 million, a decrease of 22.2% from the previous quarter but a 27.0% increase from the March quarter 1996.

*From January 1997 onwards the method for the processing of government dwelling jobs has been changed. The series has been amended back to July 1996 and a series break has been made at 30 June 1996. This series break will be reviewed when further information is received and analysed.*

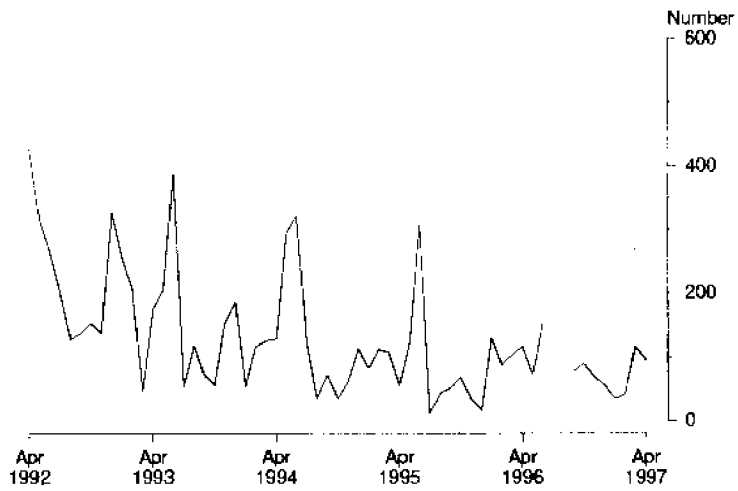
#### INQUIRIES

- for more information about statistics in this publication and the availability of related unpublished statistics, contact John Radimissis on Adelaide (08) 8237 7590 or any ABS State Office.
- for information about other ABS statistics and services please contact Information Services on Perth (09) 360 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**

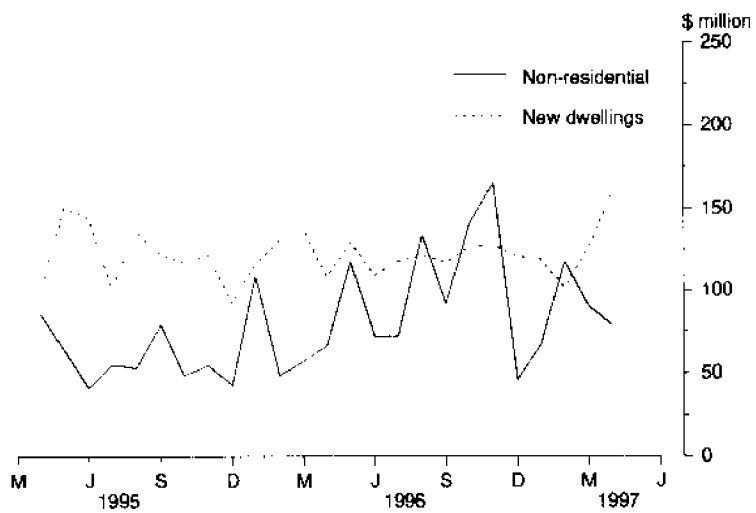


TABLE 1. NUMBER OF DWELLING UNITS APPROVED

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										
1993-94	13,899	321	14,220	4,924	929	5,853	177	18,986	1,264	20,250
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
1995-96										
July-April	6,769	125	6,894	2,124	379	2,503	71	8,964	504	9,468
1996-97										
July-April	7,393	218	7,611	1,229	165	1,394	67	8,683	389	9,072
1996—										
February	737	40	777	245	38	283	23	1,005	78	1,083
March	731	1	732	256	60	316	10	997	61	1,058
April	643	14	657	117	61	178	3	763	75	838
May	831	11	842	160	45	205	8	999	56	1,055
June	637	13	650	92	27	119	1	730	40	770
July	813	20	833	89	39	128	5	907	59	966
August	803	18	821	100	—	100	2	905	18	923
September	712	34	746	104	2	106	6	822	36	858
October	776	23	799	113	19	132	14	897	48	945
November	784	27	811	137	9	146	2	923	36	959
December	709	17	726	155	15	170	12	876	32	908
1997—										
January	647	18	665	114	5	119	6	767	23	790
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
WESTERN AUSTRALIA										
1993-94	18,966	471	19,437	5,938	1,206	7,144	195	25,085	1,691	26,776
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
1995-96										
July-April	9,869	193	10,062	2,599	474	3,073	103	12,571	667	13,238
1996-97										
July-April	10,635	471	11,106	1,437	278	1,715	92	12,158	755	12,913
1996—										
February	1,070	45	1,115	298	44	342	25	1,393	89	1,482
March	1,074	27	1,101	286	76	362	38	1,398	103	1,501
April	904	18	922	145	99	244	3	1,052	117	1,169
May	1,159	24	1,183	178	49	227	10	1,347	73	1,420
June	917	49	966	123	104	227	2	1,042	153	1,195
July	1,123	42	1,165	100	66	166	5	1,228	108	1,336
August	1,101	33	1,134	116	20	136	7	1,224	53	1,277
September	1,045	63	1,108	111	16	127	10	1,166	79	1,245
October	1,117	40	1,157	153	51	204	15	1,279	97	1,376
November	1,117	58	1,175	175	12	187	4	1,296	70	1,366
December	1,001	34	1,035	172	22	194	13	1,186	56	1,242
1997—										
January	1,003	31	1,034	130	5	135	13	1,146	36	1,182
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

(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														
1993-94	1,067.8	19.2	1,087.0	319.3	58.6	377.9	1,387.1	77.8	1,464.8	122.0	388.1	492.4	1,896.8	2,079.3
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
1995-96														
July-April	642.6	9.0	651.6	169.8	29.2	198.9	812.4	38.1	850.5	109.8	367.4	433.1	1,289.5	1,393.5
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
1996—														
February	70.4	3.2	73.7	17.9	2.1	20.0	88.3	5.3	93.7	9.9	28.2	35.5	126.5	139.1
March	67.9	0.1	67.9	25.4	4.7	30.2	93.3	4.8	98.1	11.6	26.9	41.8	131.8	151.5
April	64.2	0.9	65.0	9.1	3.2	12.3	73.2	4.1	77.4	11.4	47.7	51.6	132.3	140.4
May	80.9	0.7	81.6	10.7	2.4	13.1	91.6	3.1	94.7	9.0	96.4	109.0	196.9	212.7
June	63.9	0.9	64.8	6.1	1.5	7.5	70.0	2.4	72.3	9.4	48.9	55.2	128.2	136.9
July	76.3	1.4	77.7	6.1	1.9	8.1	82.4	3.4	85.8	10.4	49.4	57.7	141.6	153.9
August	78.9	1.3	80.2	8.7	—	8.7	87.5	1.3	88.9	13.7	44.1	67.2	145.1	169.8
September	69.4	3.8	73.2	7.4	0.1	7.5	76.8	3.9	80.7	9.4	57.3	73.9	143.5	164.0
October	74.0	1.7	75.8	10.2	0.8	11.0	84.3	2.5	86.8	11.1	94.3	120.1	189.6	218.1
November	75.4	1.7	77.1	12.0	0.5	12.5	87.4	2.2	89.6	11.7	37.4	125.7	136.6	227.0
December	73.0	1.3	74.3	15.5	1.0	16.6	88.6	2.3	90.9	12.2	28.6	29.7	129.4	132.8
1997—														
January	65.2	1.2	66.4	14.2	0.3	14.4	79.4	1.5	80.8	11.4	25.3	45.4	116.0	137.7
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
WESTERN AUSTRALIA														
1993-94	1,469.3	34.4	1,503.7	382.5	78.5	461.0	1,851.8	112.9	1,964.7	150.0	513.1	667.0	2,513.8	2,781.7
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
1995-96														
July-April	922.2	17.9	940.1	205.4	36.7	242.1	1,127.6	54.6	1,182.2	139.8	526.5	613.5	1,793.5	1,935.5
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
1996—														
February	101.3	3.8	105.1	22.8	2.7	25.5	124.1	6.5	130.6	12.4	41.3	48.6	177.7	191.6
March	100.8	3.7	104.5	27.6	6.1	33.7	128.4	9.9	138.2	14.8	35.5	56.9	178.7	210.0
April	89.5	1.4	90.9	11.2	6.1	17.3	100.7	7.5	108.1	13.6	60.8	66.5	175.1	188.2
May	111.9	2.3	114.3	12.1	2.9	15.0	124.0	5.3	129.2	11.1	103.4	117.4	238.5	257.8
June	89.7	4.3	94.0	8.0	7.3	15.3	97.7	11.6	109.3	12.0	62.1	72.1	171.6	193.4
July	104.1	3.3	107.3	6.8	4.1	10.9	110.8	7.4	118.2	13.3	63.9	72.6	187.5	204.2
August	107.5	2.8	110.4	9.7	1.4	11.1	117.2	4.2	121.4	16.2	71.7	133.4	204.4	271.0
September	101.0	7.2	108.2	7.8	1.2	9.0	108.8	8.4	117.2	12.6	74.1	91.9	195.3	221.6
October	107.4	3.6	111.0	12.1	3.7	15.9	119.5	7.3	126.9	14.3	114.6	141.0	248.2	282.1
November	107.6	5.0	112.6	14.5	0.7	15.2	122.1	5.8	127.8	14.2	54.9	165.0	191.1	307.0
December	99.3	3.1	102.4	16.7	1.3	18.1	116.0	4.4	120.5	14.0	39.0	46.4	169.1	180.8
1997—														
January	101.1	2.3	103.4	15.4	0.3	15.6	116.5	2.5	119.0	14.9	31.7	66.7	163.0	200.6
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

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

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
	<i>1996 r—</i>							
February	1,130	1,036	1,193	1,054	1,509	1,312	1,609	1,394
March	1,078	1,037	1,116	1,059	1,350	1,297	1,471	1,385
April	1,013	1,025	1,040	1,050	1,205	1,252	1,312	1,338
May	986	1,008	985	1,031	1,147	1,192	1,208	1,269
June	900	995	927	1,015	1,061	1,140	1,094	1,206
July	1,046	991	1,103	1,048	1,174	1,113	1,305	1,240
August	1,044	1,010	1,093	1,068	1,113	1,128	1,236	1,252
September	1,015	1,041	1,076	1,098	1,125	1,166	1,230	1,285
October	1,040	1,057	1,107	1,108	1,237	1,198	1,394	1,300
November	1,075	1,061	1,133	1,103	1,223	1,221	1,339	1,298
December	1,080	1,063	1,126	1,099	1,288	1,239	1,308	1,293
<i>1997 r—</i>								
January	1,258	1,080	1,221	1,114	1,333	1,261	1,319	1,304
February	843	1,111	886	1,150	1,115	1,290	1,154	1,336
March	992	1,157	1,071	1,203	1,246	1,325	1,243	1,387
April	1,537	1,290	1,607	1,263	1,563	1,361	1,792	1,443

(a) Includes Conversions, etc. See paragraphs 9-12 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.

**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							
1993-94	1,580.5	1,617.4	453.3	2,070.7	161.4	501.0	651.3	2,613.2	2,883.4
1994-95	1,356.8	1,391.9	407.6	1,799.5	160.5	559.2	701.2	2,427.5	2,661.3
1995-96	1,131.0	1,155.6	259.1	1,414.7	163.9	654.1	758.9	2,158.9	2,337.5
<i>1995</i>									
Dec. qtr.	271.3	274.9	53.2	328.1	40.6	120.3	138.3	478.2	506.9
<i>1996—</i>									
Mar. qtr.	285.2	293.7	87.7	381.3	39.7	154.3	201.6	545.8	622.6
June qtr.	293.3	301.5	44.9	346.4	37.0	212.9	240.8	571.5	624.3
Sept. qtr.	314.8	328.2	29.1	357.3	42.5	196.8	279.4	574.0	679.2
Dec. qtr.	316.2	328.0	46.3	374.3	42.8	194.9	329.2	593.0	746.3
<i>1997</i>									
Mar. qtr.	279.7	294.4	50.5	344.8	42.4	161.7	256.0	528.8	643.2

(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	1994-95	1995-96	July-April		1997		
			1995-96	1996-97	February	March	April
<b>PRIVATE SECTOR</b>							
New houses	1,319.8	1,123.8	922.2	1,041.5	78.1	98.5	137.0
New other residential buildings	366.3	225.5	205.4	130.8	20.3	14.3	13.3
<i>Total new residential building</i>	<i>1,686.1</i>	<i>1,349.2</i>	<i>1,127.6</i>	<i>1,172.3</i>	<i>98.4</i>	<i>112.8</i>	<i>150.3</i>
Alterations and additions to residential buildings	155.9	162.4	139.4	140.6	12.1	14.9	16.0
Hotels, etc.	46.9	113.3	96.2	65.9	7.5	14.7	18.7
Shops	131.8	117.5	62.8	125.2	9.6	21.6	4.8
Factories	79.5	79.5	65.1	80.3	8.5	4.5	15.5
Offices	85.1	72.8	61.0	107.6	5.7	3.0	2.3
Other business premises	90.8	107.9	81.4	92.0	10.6	6.7	13.4
Educational	30.2	43.5	38.8	34.7	2.2	4.2	2.1
Religious	5.7	4.4	3.4	4.4	—	1.4	0.5
Health	32.2	31.6	16.7	91.5	24.2	10.0	8.5
Entertainment and recreational	28.3	34.1	22.9	32.6	1.6	0.7	5.7
Miscellaneous	50.2	87.3	78.1	30.5	3.8	1.5	1.2
<i>Total non-residential building</i>	<i>580.9</i>	<i>692.0</i>	<i>526.5</i>	<i>664.8</i>	<i>73.6</i>	<i>68.3</i>	<i>72.7</i>
<b>Total</b>	<b>2,422.9</b>	<b>2,203.6</b>	<b>1,793.5</b>	<b>1,977.6</b>	<b>184.1</b>	<b>196.0</b>	<b>239.0</b>
<b>PUBLIC SECTOR</b>							
New houses	34.5	24.6	17.9	46.5	2.1	10.2	6.8
New other residential buildings	54.0	46.9	36.7	18.5	0.8	2.8	2.1
<i>Total new residential building</i>	<i>88.5</i>	<i>71.4</i>	<i>54.6</i>	<i>65.0</i>	<i>3.0</i>	<i>13.0</i>	<i>9.0</i>
Alterations and additions to residential buildings	0.2	0.5	0.4	2.9	0.2	0.1	0.8
Hotels, etc.	1.6	—	—	—	—	—	—
Shops	4.4	1.5	0.5	1.3	0.1	0.1	0.8
Factories	0.7	0.9	—	6.3	—	—	0.1
Offices	30.9	33.6	22.7	33.8	1.5	4.5	2.4
Other business premises	6.8	4.1	3.8	45.2	0.2	5.8	0.1
Educational	52.1	37.0	34.1	100.3	0.2	—	0.1
Religious	—	—	—	—	—	—	—
Health	3.8	1.2	1.2	74.1	40.2	2.5	—
Entertainment and recreational	7.7	13.9	10.5	31.7	1.3	9.0	2.0
Miscellaneous	39.3	18.8	14.2	46.2	0.6	0.1	0.7
<i>Total non-residential building</i>	<i>147.3</i>	<i>111.1</i>	<i>87.0</i>	<i>339.0</i>	<i>44.2</i>	<i>22.0</i>	<i>6.1</i>
<b>Total</b>	<b>236.1</b>	<b>183.1</b>	<b>142.0</b>	<b>406.9</b>	<b>47.3</b>	<b>35.1</b>	<b>15.8</b>
<b>TOTAL</b>							
New houses	1,354.3	1,148.3	940.1	1,088.0	80.2	108.7	143.8
New other residential buildings	420.3	272.3	242.1	149.3	21.1	17.1	15.4
<i>Total new residential building</i>	<i>1,774.6</i>	<i>1,420.7</i>	<i>1,182.2</i>	<i>1,237.3</i>	<i>101.3</i>	<i>125.8</i>	<i>159.2</i>
Alterations and additions to residential buildings	156.2	162.9	139.8	143.5	12.3	15.0	16.8
Hotels, etc.	48.5	113.3	96.2	65.9	7.5	14.7	18.7
Shops	136.2	119.0	63.3	126.5	9.7	21.7	5.6
Factories	80.3	80.4	65.1	86.7	8.5	4.5	15.6
Offices	116.0	106.5	83.7	141.4	7.2	7.6	4.7
Other business premises	97.7	112.0	85.2	137.3	10.8	12.5	13.5
Educational	82.3	80.4	72.9	135.0	2.4	4.2	2.1
Religious	5.7	4.4	3.4	4.4	—	1.4	0.5
Health	36.0	32.8	17.9	165.6	64.3	12.5	8.5
Entertainment and recreational	36.0	48.0	33.4	64.3	2.9	9.7	7.6
Miscellaneous	89.5	106.2	92.3	76.8	4.5	1.6	2.0
<i>Total non-residential building</i>	<i>728.2</i>	<i>803.1</i>	<i>613.5</i>	<i>1,093.8</i>	<i>117.8</i>	<i>90.4</i>	<i>78.8</i>
<b>Total</b>	<b>2,659.0</b>	<b>2,386.6</b>	<b>1,935.5</b>	<b>2,384.6</b>	<b>231.4</b>	<b>231.1</b>	<b>254.8</b>

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

Period	\$50,000 to less than \$200,000		\$200,000 to less than \$500,000		\$500,000 to less than \$1m		\$1m to less than \$5m		\$5m and over		Total	
	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)
<b>HOTELS, ETC.</b>												
1997 February	1	0.1	5	1.6	1	0.8	3	5.0	—	—	10	7.5
March	4	0.4	1	0.3	—	—	2	6.5	1	7.6	8	14.7
April	8	1.0	2	0.7	1	0.9	4	6.7	1	9.4	16	18.7
<b>SHOPS</b>												
1997 February	18	1.7	14	4.1	4	2.8	1	1.1	—	—	37	9.7
March	18	1.6	16	4.9	3	2.1	2	4.6	1	8.5	40	21.7
April	23	2.0	4	1.2	2	1.3	1	1.1	—	—	30	5.6
<b>FACTORIES</b>												
1997 February	10	1.2	8	2.2	3	2.3	1	2.8	—	—	22	8.5
March	7	0.8	5	1.2	—	—	2	2.5	—	—	14	4.5
April	19	2.0	8	2.7	1	0.5	1	2.4	1	8.0	30	15.6
<b>OFFICES</b>												
1997 February	16	1.4	3	0.9	5	3.9	1	1.0	—	—	25	7.2
March	19	1.7	6	1.7	1	0.6	1	3.5	—	—	27	7.6
April	17	1.5	4	1.3	1	0.8	1	1.0	—	—	23	4.7
<b>OTHER BUSINESS PREMISES</b>												
1997 February	14	1.5	12	3.7	—	—	2	5.7	—	—	28	10.8
March	22	2.0	13	4.0	3	1.8	1	4.8	—	—	39	12.5
April	21	2.3	9	3.0	1	0.7	2	2.5	1	5.0	34	13.5
<b>EDUCATIONAL</b>												
1997 February	4	0.5	1	0.2	—	—	1	1.7	—	—	6	2.4
March	1	0.2	1	0.3	—	—	1	3.7	—	—	3	4.2
April	4	0.3	—	—	1	0.6	1	1.2	—	—	6	2.1
<b>RELIGIOUS</b>												
1997 February	—	—	—	—	—	—	—	—	—	—	—	—
March	—	—	1	0.2	2	1.2	—	—	—	—	3	1.4
April	2	0.3	1	0.2	—	—	—	—	—	—	3	0.5
<b>HEALTH</b>												
1997 February	1	0.1	1	0.4	—	—	1	3.0	3	60.8	6	64.3
March	3	0.3	1	0.4	—	—	2	3.9	1	8.0	7	12.5
April	3	0.2	1	0.5	2	1.4	1	1.5	1	5.0	8	8.5
<b>ENTERTAINMENT AND RECREATIONAL</b>												
1997 February	—	—	4	1.4	1	0.5	1	1.0	—	—	6	2.9
March	2	0.2	2	0.7	—	—	1	3.3	1	5.5	6	9.7
April	6	0.6	—	—	3	2.1	3	4.9	—	—	12	7.6
<b>MISCELLANEOUS</b>												
1997 February	5	0.4	1	0.3	—	—	2	3.7	—	—	8	4.5
March	6	0.6	—	—	1	1.0	—	—	—	—	7	1.6
April	7	0.7	2	0.7	1	0.6	—	—	—	—	10	2.0
<b>TOTAL NON-RESIDENTIAL BUILDING</b>												
1997 February	69	6.9	49	14.7	14	10.3	13	25.0	3	60.8	148	117.8
March	82	7.7	46	13.7	10	6.6	12	32.8	4	29.6	154	90.4
April	110	11.0	31	10.3	13	8.9	14	21.3	4	27.4	172	78.8

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1997

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)				
<b>PERTH STATISTICAL DIVISION</b>										
Cambridge (T)	3	—	742	—	—	—	787	255	255	1,784
Claremont (T)	2	—	295	—	—	—	303	230	230	828
Cottesloe (T)	2	—	692	—	—	—	741	—	—	1,433
Mosman Park (T)	6	—	1,141	—	—	—	319	—	—	1,460
Nedlands (C)	13	—	3,029	—	—	—	1,402	133	194	4,625
Peppermint Grove (S)	—	—	—	—	—	—	—	120	120	120
Perth (C) — Inner	—	—	—	—	—	—	—	416	416	416
Perth (C) — Remainder	1	—	170	—	—	—	—	5,750	5,750	5,920
Subiaco (C)	3	—	514	—	—	—	690	—	—	1,205
Vincent (T)	4	—	269	—	—	—	379	100	100	748
<i>Central Metropolitan (SSD)</i>	<i>34</i>	<i>—</i>	<i>6,854</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>4,621</i>	<i>7,004</i>	<i>7,065</i>	<i>18,539</i>
Bassendean (T)	3	—	220	—	—	—	39	121	121	380
Bayswater (C)	23	—	2,117	2	—	100	492	1,445	1,445	4,154
Kalamunda (S)	16	—	1,372	—	—	—	691	256	356	2,419
Mundaring (S)	17	1	1,660	—	6	283	570	58	58	2,571
Swan (S)	96	—	8,574	—	22	1,100	602	1,972	2,207	12,483
<i>East Metropolitan (SSD)</i>	<i>155</i>	<i>1</i>	<i>13,943</i>	<i>2</i>	<i>28</i>	<i>1,483</i>	<i>2,393</i>	<i>3,852</i>	<i>4,188</i>	<i>22,007</i>
Stirling (C) — Central	29	—	2,556	5	—	337	329	8,505	8,505	11,726
Stirling (C) — Coastal	31	—	3,045	8	—	487	422	815	815	4,769
Stirling (C) — South-Eastern	2	2	712	—	6	330	764	1,300	1,300	3,107
Wanneroo (C) — Central Coastal	56	1	5,915	—	—	—	116	2,500	2,500	8,531
Wanneroo (C) — North-East	48	1	3,769	—	—	—	74	175	175	4,018
Wanneroo (C) — North-West	60	1	4,986	2	—	120	256	—	—	5,362
Wanneroo (C) — South-East	49	—	3,481	—	2	190	180	375	375	4,226
Wanneroo (C) — South-West	52	—	6,677	26	—	3,300	1,205	2,250	2,250	13,432
<i>North Metropolitan (SSD)</i>	<i>327</i>	<i>5</i>	<i>31,141</i>	<i>41</i>	<i>8</i>	<i>4,763</i>	<i>3,346</i>	<i>15,920</i>	<i>15,920</i>	<i>55,170</i>
Cockburn (C)	71	2	6,307	—	—	—	420	859	859	7,587
East Fremantle (T)	2	—	412	—	—	—	45	—	—	457
Fremantle (C) — Inner	—	—	—	—	—	—	10	—	—	10
Fremantle (C) — Remainder	9	2	1,378	34	—	4,500	333	700	700	6,911
Kwinana (T)	17	—	1,393	—	—	—	110	450	450	1,953
Melville (C)	49	—	6,910	—	—	—	815	155	250	7,975
Rockingham (C)	84	—	6,788	—	—	—	163	1,760	1,760	8,711
<i>South West Metropolitan (SSD)</i>	<i>232</i>	<i>4</i>	<i>23,188</i>	<i>34</i>	<i>—</i>	<i>4,500</i>	<i>1,896</i>	<i>3,924</i>	<i>4,019</i>	<i>33,602</i>
Armadale (C)	23	—	1,629	—	—	—	280	260	260	2,169
Belmont (C)	10	1	771	5	—	313	52	902	1,695	2,831
Canning (C)	73	—	5,326	—	—	—	595	7,240	7,240	13,161
Gosnells (C)	51	—	4,384	—	—	—	145	400	400	4,929
Serpentine-Jarrahdale (S)	7	—	644	—	—	—	40	—	—	684
South Perth (C)	18	2	2,848	8	—	1,093	505	1,200	1,610	6,057
Victoria Park (T)	9	—	781	—	—	—	174	1,389	1,389	2,344
<i>South East Metropolitan (SSD)</i>	<i>191</i>	<i>3</i>	<i>16,383</i>	<i>13</i>	<i>—</i>	<i>1,406</i>	<i>1,791</i>	<i>11,391</i>	<i>12,595</i>	<i>32,175</i>
<b>Total</b>	<b>939</b>	<b>13</b>	<b>91,508</b>	<b>90</b>	<b>36</b>	<b>12,152</b>	<b>14,047</b>	<b>42,891</b>	<b>43,786</b>	<b>161,492</b>

For footnote, see end of table.



TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL, 1997—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)				
<b>SOUTH WEST STATISTICAL DIVISION</b>										
Boddington (S)	2	—	337	—	—	—	—	—	—	337
Mandurah (C)	45	1	4,472	—	—	—	191	2,118	2,638	7,301
Murray (S)	8	—	870	—	—	—	59	380	380	1,309
Waroona (S)	5	—	339	—	—	—	70	—	1,280	1,689
Dale (SSD)	60	1	6,018	—	—	—	319	2,498	4,298	10,635
Bunbury (C)	21	6	2,747	—	—	—	236	370	370	3,353
Capel (S)	5	—	409	—	—	—	28	—	—	437
Collie (S)	2	—	185	—	—	—	—	—	—	185
Dardanup (S)	20	3	1,906	—	—	—	43	—	—	1,949
Donnybrook-Balingup (S)	2	—	254	—	—	—	40	—	—	294
Harvey (S)	17	1	1,908	—	—	—	135	75	75	2,118
Preston (SSD)	67	10	7,409	—	—	—	482	445	445	8,336
Augusta-Margaret River (S)	21	—	1,971	—	—	—	42	73	73	2,086
Busselton (S)	63	6	7,079	—	—	—	108	13,053	13,053	20,240
Vasse (SSD)	84	6	9,050	—	—	—	150	13,126	13,126	22,326
Boyup Brook (S)	—	—	—	—	—	—	19	—	84	103
Bridgetown-Greenbushes (S)	8	—	626	—	—	—	45	100	100	771
Manjimup (S)	6	—	498	—	—	—	38	427	427	962
Nannup (S)	2	—	159	—	—	—	—	—	—	159
Blackwood (SSD)	16	—	1,282	—	—	—	102	527	611	1,995
<b>Total</b>	<b>227</b>	<b>17</b>	<b>23,760</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1,053</b>	<b>16,595</b>	<b>18,479</b>	<b>43,292</b>
<b>LOWER GREAT SOUTHERN STATISTICAL DIVISION</b>										
Broomehill (S)	1	—	47	—	—	—	—	—	—	47
Gnowangerup (S)	—	—	—	—	—	—	—	—	—	—
Jerramungup (S)	—	—	—	—	—	—	—	—	—	—
Katanning (S)	1	—	136	—	—	—	14	—	—	150
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	—	—	—	—	—	—	—	—	—	—
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	2	—	183	—	—	—	14	—	—	197
Albany (T)	7	—	769	—	—	—	204	1,613	1,613	2,586
Albany (S)	13	—	1,833	—	—	—	55	—	—	1,888
Cranbrook (S)	—	—	—	—	—	—	—	—	—	—
Denmark (S)	9	1	815	—	—	—	10	173	223	1,049
Plantagenet (S)	3	—	267	—	—	—	—	—	—	267
King (SSD)	32	1	3,684	—	—	—	269	1,786	1,836	5,790
<b>Total</b>	<b>34</b>	<b>1</b>	<b>3,868</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>283</b>	<b>1,786</b>	<b>1,836</b>	<b>5,987</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1997—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)				
<b>UPPER GREAT SOUTHERN STATISTICAL DIVISION</b>										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	1	—	72	—	—	—	—	—	—	72
Dumbleyung (S)	—	—	—	—	—	—	70	—	—	70
Narrogin (T)	2	—	243	—	—	—	—	—	—	243
Narrogin (S)	1	—	125	—	—	—	25	—	—	150
Pingelly (S)	—	—	—	—	—	—	—	—	—	—
Wagin (S)	—	1	72	—	—	—	—	—	—	72
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	4	—	318	—	—	—	—	120	120	438
Hotham (SSD)	8	1	830	—	—	—	95	120	120	1,045
Corrigin (S)	2	—	319	—	—	—	47	—	—	366
Kondinin (S)	—	—	—	—	—	—	82	—	—	82
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	2	—	204	—	—	—	—	—	60	264
Lakes (SSD)	4	—	523	—	—	—	129	—	60	712
<b>Total</b>	<b>12</b>	<b>1</b>	<b>1,353</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>224</b>	<b>120</b>	<b>180</b>	<b>1,757</b>
<b>MIDLANDS STATISTICAL DIVISION</b>										
Chittering (S)	6	—	639	—	—	—	—	120	120	759
Dandaragan (S)	2	—	251	—	—	—	90	—	—	341
Gingin (S)	9	1	873	—	—	—	—	—	—	873
Moora (S)	1	—	100	—	—	—	—	—	—	100
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	—
Moore (SSD)	18	1	1,862	—	—	—	90	120	120	2,072
Beverley (S)	—	—	—	—	—	—	—	—	—	—
Cunderdin (S)	—	—	—	—	—	—	—	—	—	—
Dalwallinu (S)	—	—	—	—	—	—	—	—	—	—
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goomalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	—	—	—	—	—	—
Northam (T)	3	—	342	—	—	—	—	—	715	1,057
Northam (S)	5	—	286	—	—	—	—	—	—	286
Quairading (S)	1	—	55	—	—	—	—	—	—	55
Taramin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	4	—	357	—	—	—	—	—	—	357
Wongan-Ballidu (S)	—	—	—	—	—	—	—	—	—	—
Wyalkatchem (S)	—	—	—	—	—	—	—	—	—	—
York (S)	2	—	216	—	—	—	—	243	243	459
Avon (SSD)	15	—	1,256	—	—	—	—	243	958	2,214
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Keelerberrin (S)	6	—	306	—	—	—	—	—	—	306
Merredin (S)	—	—	—	—	—	—	—	—	1,047	1,047
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mukinbudin (S)	—	—	—	—	—	—	—	—	—	—
Narembeen (S)	—	—	—	—	—	—	—	—	—	—
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	—	—	—	—	—	—	—	—	—	—
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgam (S)	4	—	458	—	—	—	—	—	—	458
Campion (SSD)	10	—	764	—	—	—	—	—	1,047	1,811
<b>Total</b>	<b>43</b>	<b>1</b>	<b>3,883</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>90</b>	<b>363</b>	<b>2,125</b>	<b>6,098</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1997—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)				
<b>SOUTH EASTERN STATISTICAL DIVISION</b>										
Coolgardie (S)	1	—	75	—	—	—	20	—	—	95
Kalgoorlie/Boulder (C)	23	—	2,648	23	—	1,605	81	2,536	2,536	6,869
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	2	226	—	528	528	754
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	24	—	2,723	23	2	1,831	101	3,064	3,064	7,719
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	4	—	542	—	—	—	184	—	—	726
Ravensthorpe (S)	1	—	54	—	—	—	—	—	—	54
Johnston (SSD)	5	—	596	—	—	—	184	—	—	780
<b>Total</b>	<b>29</b>	<b>—</b>	<b>3,318</b>	<b>23</b>	<b>2</b>	<b>1,831</b>	<b>285</b>	<b>3,064</b>	<b>3,064</b>	<b>8,498</b>
<b>CENTRAL STATISTICAL DIVISION</b>										
Camarvon (S)	—	—	—	—	—	—	161	—	—	161
Exmouth (S)	15	—	1,550	—	—	—	—	—	—	1,550
Shark Bay (S)	—	—	—	2	—	230	—	—	—	230
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	15	—	1,550	2	—	230	161	—	—	1,941
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meeekatharra (S)	—	—	—	—	—	—	—	59	59	59
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	59	59	59
Camamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	24	—	—	24
Coorow (S)	1	—	99	—	—	—	—	—	—	99
Geraldton (C)	7	—	634	—	—	—	29	260	260	923
Greenough (S)	16	—	1,510	—	—	—	194	—	—	1,704
Irwin (S)	8	—	660	—	—	—	25	2,443	2,443	3,128
Mingenew (S)	—	—	—	—	—	—	—	—	—	—
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	—	—	—	—	—	—	—	—	—
Northampton (S)	3	2	560	—	—	—	—	500	500	1,060
Perenjori (S)	1	—	59	—	—	—	—	—	—	59
Three Springs (S)	—	—	—	—	—	—	—	—	—	—
Greenough River (SSD)	36	2	3,522	—	—	—	272	3,203	3,203	6,997
<b>Total</b>	<b>51</b>	<b>2</b>	<b>5,072</b>	<b>2</b>	<b>—</b>	<b>230</b>	<b>433</b>	<b>3,261</b>	<b>3,261</b>	<b>8,996</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), APRIL 1997—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)				
<b>PILBARA STATISTICAL DIVISION</b>										
East Pilbara (S)	—	1	214	—	—	—	22	120	120	356
Port Hedland (T)	33	—	3,680	8	—	880	37	4,092	4,092	8,689
De Grey (SSD)	33	1	3,894	8	—	880	59	4,212	4,212	9,045
Ashburton (S)	—	—	—	—	—	—	45	—	—	45
Roeboume (S)	19	23	5,988	2	—	324	164	—	—	6,476
Fortescue (SSD)	19	23	5,988	2	—	324	209	—	—	6,520
<b>Total</b>	<b>52</b>	<b>24</b>	<b>9,882</b>	<b>10</b>	<b>—</b>	<b>1,204</b>	<b>268</b>	<b>4,212</b>	<b>4,212</b>	<b>15,566</b>
<b>KIMBERLEY STATISTICAL DIVISION</b>										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	1	—	15	—	—	—	—	906	906	921
Ord (SSD)	1	—	15	—	—	—	—	906	906	921
Broome (S)	8	—	1,092	—	—	—	68	327	327	1,487
Derby-West Kimberley (S)	1	—	38	—	—	—	—	—	656	694
Fitzroy (SSD)	9	—	1,130	—	—	—	68	327	983	2,181
<b>Total</b>	<b>10</b>	<b>—</b>	<b>1,145</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>68</b>	<b>1,233</b>	<b>1,889</b>	<b>3,102</b>
<b>WESTERN AUSTRALIA</b>										
<b>Western Australia</b>	<b>1,397</b>	<b>59</b>	<b>143,788</b>	<b>125</b>	<b>38</b>	<b>15,417</b>	<b>16,751</b>	<b>72,725</b>	<b>78,833</b>	<b>254,789</b>

(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 1997**

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	918	3	1	7	22	952	204,486	223	430
South-West	175	10	11	11	37	244	50,807	217	443
Lower Great Southern	24	6	4	—	1	35	7,279	214	476
Upper Great Southern	6	2	3	—	2	13	2,486	207	449
Midlands	19	2	17	2	4	44	6,904	192	461
South-Eastern	4	22	2	—	1	29	5,438	194	570
Central	35	14	1	—	3	53	9,071	171	559
Pilbara	—	27	23	—	26	76	10,343	148	882
Kimberley	1	—	1	—	8	10	2,341	234	489
<b>Western Australia</b>	<b>1,182</b>	<b>86</b>	<b>63</b>	<b>20</b>	<b>104</b>	<b>1,456</b>	<b>299,155</b>	<b>214</b>	<b>457</b>

(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 1997**

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			Total		
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys			
<b>NUMBER OF DWELLING UNITS</b>										
Perth	952	54	18	72	41	13	—	54	126	1,078
South West	244	—	—	—	—	—	—	—	—	244
Lower Great Southern	35	—	—	—	—	—	—	—	—	35
Upper Great Southern	13	—	—	—	—	—	—	—	—	13
Midlands	44	—	—	—	—	—	—	—	—	44
South Eastern	29	16	—	16	9	—	—	9	25	54
Central	53	—	2	2	—	—	—	—	2	55
Pilbara	76	10	—	10	—	—	—	—	10	86
Kimberley	10	—	—	—	—	—	—	—	—	10
<b>Western Australia</b>	<b>1,456</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>50</b>	<b>13</b>	<b>—</b>	<b>63</b>	<b>163</b>	<b>1,619</b>
<b>VALUE (\$'000)</b>										
Perth	91,508	2,996	1,756	4,752	4,600	2,800	—	7,400	12,152	103,659
South West	23,760	—	—	—	—	—	—	—	—	23,760
Lower Great Southern	3,868	—	—	—	—	—	—	—	—	3,868
Upper Great Southern	1,353	—	—	—	—	—	—	—	—	1,353
Midlands	3,883	—	—	—	—	—	—	—	—	3,883
South Eastern	3,318	1,246	—	1,246	585	—	—	585	1,831	5,149
Central	5,072	—	230	230	—	—	—	—	230	5,302
Pilbara	9,882	1,204	—	1,204	—	—	—	—	1,204	11,086
Kimberley	1,145	—	—	—	—	—	—	—	—	1,145
<b>Western Australia</b>	<b>143,788</b>	<b>5,446</b>	<b>1,986</b>	<b>7,432</b>	<b>5,185</b>	<b>2,800</b>	<b>—</b>	<b>7,985</b>	<b>15,417</b>	<b>159,205</b>

(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 (06) 252 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 Ngaanyatjarraku (S) and the South Eastern Statistical Division (Lefroy SSD) now includes Ngaanyatjarraku (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:

<b>WESTERN AUSTRALIA</b>	<b>Catalogue No.</b>
Building Activity (quarterly)	8752.5
Dwelling Unit Commencements (monthly)	8741.5
<b>AUSTRALIA</b>	
Price Index of Materials Used in House Building (monthly)	6408.0
Building Approvals (monthly)	8731.0
Building Activity, Australia: Dwelling Unit Commencements, Preliminary (quarterly)	8750.0
Building Activity (quarterly)	8752.0
Engineering Construction Survey (quarterly)	8762.0
Housing Finance for Owner Occupation: Australia	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.

**P.C.KELLY**  
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).

**Information Consultancy**

Information tailored to special needs of clients or in-depth data investigations are provided by the ABS Information Consultancy Services in each of our Offices (available via the contacts below).

**Electronic Data Services**

A growing range of our data is available on electronic media. Our Telestats service delivers major economic publications ready to download into your computer on the day of release. Our 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 our electronic services, contact Information Services in any of our Offices on the numbers below.

**Bookshops and Subscriptions**

There are now over 500 titles available from the ABS Bookshops in each of our Offices. The ABS also provides a subscription mailing service through which nominated publications are provided by mail at no additional cost. (Telephone Publications Subscription Service toll free on 008 02 0608 Australia wide).

**Sales and Inquiries**

PERTH

Phone (09) 360 5140

Fax (09) 360 5955



2873150004970

ISSN 0727-2278