

# BUILDING APPROVALS

## WESTERN AUSTRALIA

### November 1994

#### MAIN FEATURES

The number of houses approved in November 1994 increased by 7.6 per cent when compared with October 1994 and decreased by 12.8 per cent when compared with November 1993.

The number of total dwelling units approved in November 1994 increased by 13.7 per cent when compared with October 1994 and decreased by 10.0 per cent when compared with November 1993.

The provisional trend for total new dwelling approvals fell 1.5 per cent in November 1994, following a 1.5 per cent fall in October 1994. This trend will continue to fall unless there is a rise of more than 6.7 per cent in the November seasonally adjusted figure. The historical average monthly movement of this series regardless of sign is 7.5 per cent.

**NOTE:** The town of Shepperton in the Perth Statistical Division was renamed Victoria Park on the 2nd November 1994.

Comparisons with previous periods are:

#### Month to month

	<i>Nov. 1994</i>	<i>Oct. 1994</i>	<i>% change</i>	<i>Nov. 1993</i>	<i>% change</i>
Houses	1,522	1,415	+7.6	1,746	-12.8
Total dwelling units	2,124	1,868	+13.7	2,359	-10.0

#### Three month moving average

	<i>Nov. 1994</i>	<i>Oct. 1994</i>	<i>% change</i>	<i>Nov. 1993</i>	<i>% change</i>
Houses	1,532	1,580	-3.0	1,656	-7.5
Total dwelling units	2,142	2,203	-2.8	2,219	-3.5

#### Eleven months January to November

	<i>1994</i>	<i>1993</i>	<i>% change</i>	<i>1992</i>	<i>% change</i>
Houses	17,372	16,299	+6.6	14,157	+22.7
Total dwelling units	24,328	22,108	+10.0	19,494	+24.8

**PHONE INQUIRIES**

Contact Ms Diane Braskic on (09) 360 5129 for further information about statistics in this publication and the availability of related unpublished statistics. Other inquiries, including copies of publications, contact Information Services on (09) 360 5140.

**MAIL INQUIRIES**

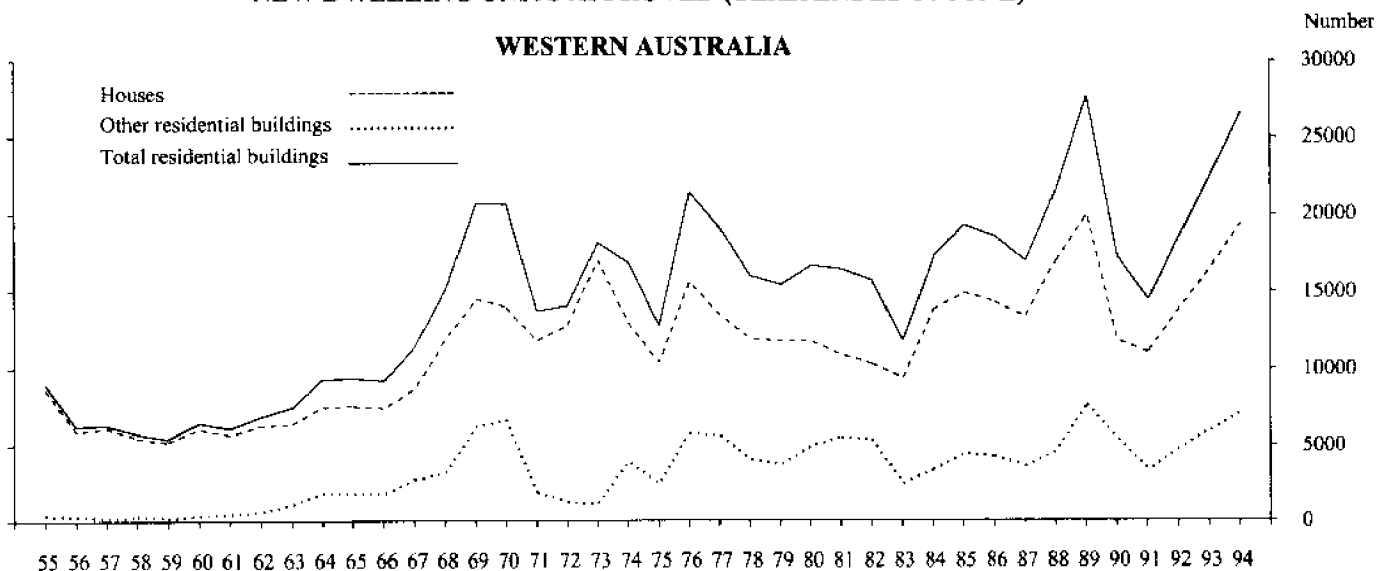
Write to Information Services, Australian Bureau of Statistics, Exchange Plaza, 2 The Esplanade, Perth WA 6000.

**ELECTRONIC SERVICES**

- on Elderlink key \*620#
- on PC-AUSSTATS phone (06) 252 6017
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**NEW DWELLING UNITS APPROVED (YEAR ENDED 30 JUNE)****WESTERN AUSTRALIA**



## Building Approvals - Western Australia

**Please note the following when comparing figures from this publication with State figures in the Australian publication.**

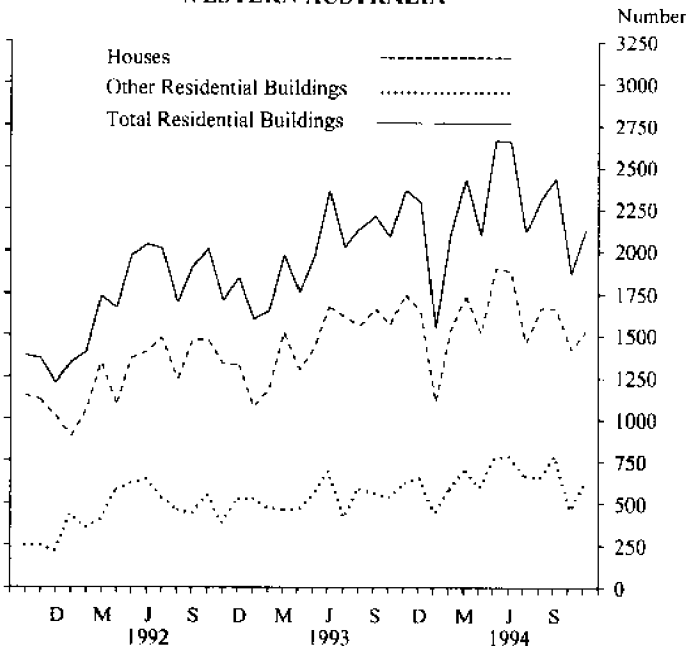
Dwelling unit approval numbers are being presented in a new manner in the Australian Building Approvals publication 8731.0. In some tables, the number of dwelling units in 8731.0 includes conversions to dwellings arising from alterations and additions to existing buildings and as part of the construction of non-residential buildings. These types of dwellings are currently excluded from total dwelling unit counts in this publication (although they are shown in the footnotes). The ABS intends to change the manner in which conversions data is presented in this publication in the near future.

If you require more information, please contact Ms Diane Braskic on (09) 360 5129.

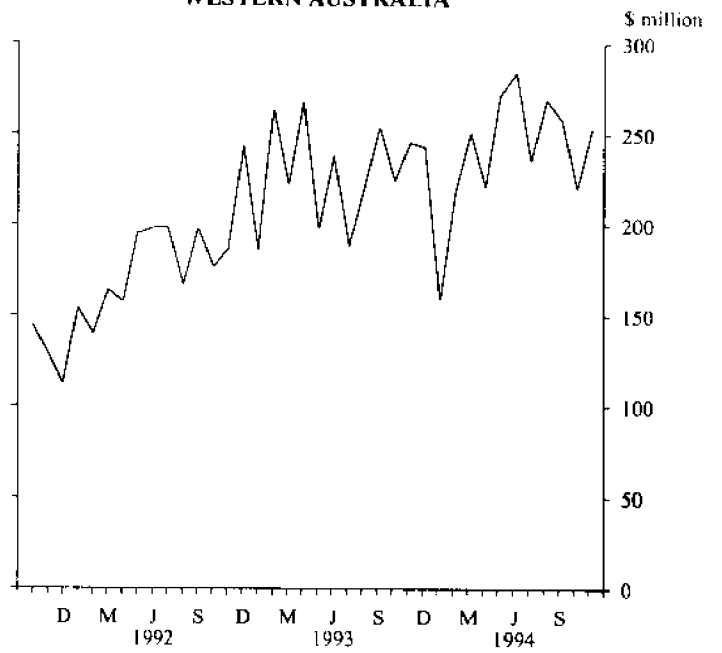
Australian Bureau of Statistics  
Western Australian Office  
January 1995



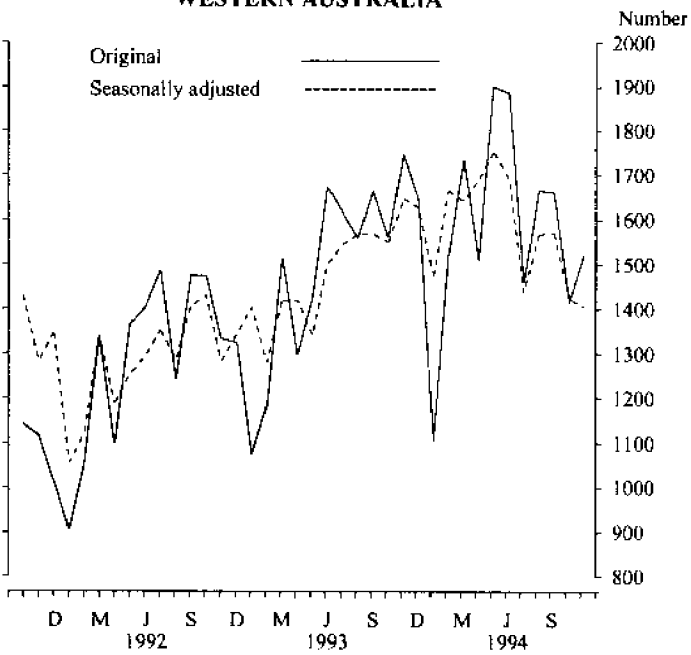
**NEW DWELLING UNITS APPROVED  
WESTERN AUSTRALIA**



**TOTAL VALUE OF BUILDING APPROVED  
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED  
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED  
WESTERN AUSTRALIA**

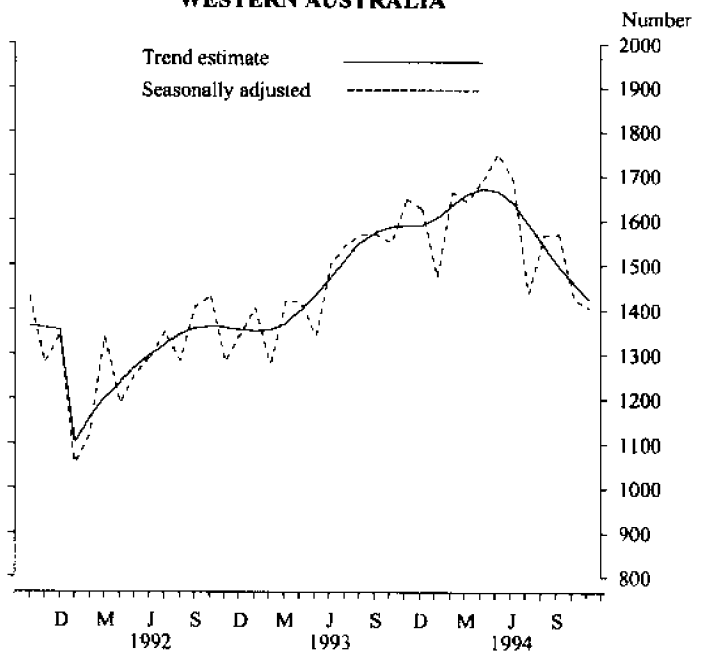


TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDING

Period	Houses			Other residential buildings			Total		
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total
<b>PERTH STATISTICAL DIVISION</b>									
1991-92	9,969	194	10,163	2,505	1,434	3,939	12,474	1,628	14,102
1992-93	11,618	285	11,903	3,448	1,540	4,988	15,066	1,825	16,891
1993-94	13,899	321	14,220	4,924	929	5,853	18,823	1,250	20,073
1993-94									
July-November	5,785	125	5,910	1,955	247	2,202	7,740	372	8,112
1994-95									
July-November	5,585	83	5,668	2,470	159	2,629	8,055	242	8,297
<i>1993</i>									
September	1,199	30	1,229	437	35	472	1,636	65	1,701
October	1,125	14	1,139	412	28	440	1,537	42	1,579
November	1,194	66	1,260	409	70	479	1,603	136	1,739
December	1,196	47	1,243	429	104	533	1,625	151	1,776
<i>1994</i>									
January	828	2	830	261	24	285	1,089	26	1,115
February	1,095	6	1,101	401	95	496	1,496	101	1,597
March	1,248	3	1,251	511	97	608	1,759	100	1,859
April	1,109	5	1,114	429	49	478	1,538	54	1,592
May	1,321	52	1,373	473	152	625	1,794	204	1,998
June	1,317	81	1,398	465	161	626	1,782	242	2,024
July	1,061	44	1,105	489	60	549	1,550	104	1,654
August	1,216	10	1,226	523	6	529	1,739	16	1,755
September	1,174		1,174	580	43	623	1,754	43	1,797
October	1,007	7	1,014	365	28	393	1,372	35	1,407
November	1,127	22	1,149	513	22	535	1,640	44	1,684
<b>WESTERN AUSTRALIA</b>									
1991-92	13,474	362	13,836	3,078	1,663	4,741	16,552	2,025	18,577
1992-93	16,036	449	16,485	4,081	1,913	5,994	20,117	2,362	22,479
1993-94	18,966	471	19,437	5,938	1,206	7,144	24,904	1,677	26,581
1993-94									
July-November	7,981	159	8,140	2,383	291	2,674	10,364	450	10,814
1994-95									
July-November	7,609	111	7,720	2,915	215	3,130	10,524	326	10,850
<i>1993—</i>									
September	1,626	36	1,662	515	35	550	2,141	71	2,212
October	1,546	15	1,561	483	42	525	2,029	57	2,086
November	1,677	69	1,746	531	82	613	2,208	151	2,359
December	1,585	60	1,645	518	126	644	2,103	186	2,289
<i>1994—</i>									
January	1,091	13	1,104	398	41	439	1,489	54	1,543
February	1,505	19	1,524	479	97	576	1,984	116	2,100
March	1,724	8	1,732	573	117	690	2,297	125	2,422
April	1,473	34	1,507	492	95	587	1,965	129	2,094
May	1,828	72	1,900	541	223	764	2,369	295	2,664
June	1,779	106	1,885	554	216	770	2,333	322	2,655
July	1,407	51	1,458	587	71	658	1,994	122	2,116
August	1,642	23	1,665	631	13	644	2,273	36	2,309
September	1,655	5	1,660	706	67	773	2,361	72	2,433
October	1,407	8	1,415	425	28	453	1,832	36	1,868
November	1,498	24	1,522	566	36	602	2,064	60	2,124

NOTE: The number of self-contained dwelling units approved as part of the construction of non-residential building and alterations and additions to existing buildings (including conversions to dwelling units) are excluded from this table. There were 25 such dwelling units approved in November 1994.

**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					
<b>PERTH STATISTICAL DIVISION</b>														
1991-92	689.9	10.5	700.4	133.3	81.9	215.2	823.2	92.4	915.6	104.8	245.3	398.5	1,172.4	1,418.8
1992-93	822.1	17.7	839.7	188.9	92.3	281.2	1,010.9	109.9	1,120.9	113.3	463.2	715.9	1,585.3	1,950.1
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
1993-94														
July-November	428.6	7.6	436.1	121.5	16.0	137.5	550.1	23.6	573.6	49.7	183.3	213.5	782.9	836.8
1994-95														
July-November	452.6	5.9	458.5	162.7	9.5	172.3	615.3	15.5	630.8	59.8	203.1	258.8	878.2	949.4
1993—														
September	85.5	2.2	87.7	28.1	2.4	30.5	113.6	4.6	118.2	9.7	56.6	57.9	179.9	185.9
October	85.5	0.8	86.3	27.1	1.8	28.9	112.6	2.6	115.2	11.3	47.0	50.7	170.9	177.2
November	89.7	3.5	93.2	25.2	4.2	29.4	114.9	7.7	122.6	10.4	35.4	43.1	160.8	176.2
December	91.6	2.7	94.4	24.9	6.3	31.2	116.5	9.0	125.5	9.8	20.7	56.4	147.0	191.8
1994														
January	64.0	0.1	64.2	15.4	1.1	16.4	79.4	1.2	80.6	8.8	23.7	27.5	111.8	116.8
February	89.4	0.4	89.8	26.0	7.6	33.6	115.5	7.9	123.4	10.4	16.2	23.9	142.1	157.8
March	95.0	0.2	95.2	39.2	5.7	44.8	134.2	5.9	140.0	12.2	32.1	40.0	178.5	192.2
April	89.7	0.3	90.0	27.3	2.6	29.9	116.9	2.9	119.8	11.3	28.8	38.9	157.0	170.0
May	104.7	3.1	107.8	29.7	9.5	39.2	134.4	12.6	147.0	10.6	49.7	50.8	194.6	208.3
June	104.8	4.7	109.5	35.3	10.0	45.3	140.1	14.7	154.9	9.3	33.6	41.4	183.0	205.6
July	89.4	3.5	92.9	32.9	3.5	36.4	122.3	7.0	129.2	10.2	41.2	42.7	173.7	182.2
August	97.6	0.7	98.4	33.7	0.4	34.0	131.3	1.1	132.4	12.9	42.2	63.0	186.4	208.2
September	91.1	—	91.1	36.3	2.7	38.9	127.4	2.7	130.0	10.9	40.6	47.2	178.9	188.2
October	80.7	0.4	81.1	25.7	1.7	27.4	106.4	2.0	108.4	12.0	41.3	47.0	159.6	167.4
November	93.8	1.4	95.1	34.2	1.4	35.5	127.9	2.7	130.7	13.8	37.8	58.9	179.6	203.4
<b>WESTERN AUSTRALIA</b>														
1991-92	931.4	23.9	955.3	166.1	96.5	262.6	1,097.5	120.4	1,217.9	124.2	306.6	504.9	1,527.0	1,847.0
1992-93	1,138.8	34.9	1,173.7	227.6	118.1	345.7	1,366.4	153.0	1,519.4	137.1	591.3	889.6	2,091.8	2,546.1
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
1993-94														
July-November	593.3	11.3	604.6	146.4	18.9	165.2	739.7	30.1	769.8	61.2	242.6	301.1	1,042.8	1,132.1
1994-95														
July-November	625.7	8.6	634.3	194.8	13.4	208.2	820.4	22.0	842.5	72.5	251.3	322.2	1,144.2	1,237.2
1993—														
September	118.4	3.0	121.4	32.3	2.4	34.7	150.6	5.4	156.1	12.7	66.7	84.8	230.1	253.7
October	116.4	0.9	117.2	31.4	2.8	34.3	147.8	3.7	151.5	14.0	53.0	58.9	214.6	224.4
November	126.5	3.7	130.3	32.6	5.0	37.5	159.1	8.7	167.8	13.0	54.0	64.9	225.6	245.7
December	121.3	3.7	125.0	31.2	8.1	39.3	152.5	11.8	164.3	11.7	25.8	67.2	190.0	243.2
1994														
January	84.8	1.3	86.0	23.5	2.4	25.9	108.2	3.7	111.9	10.4	33.1	37.4	151.6	159.6
February	122.4	1.7	124.0	30.8	7.8	38.6	153.2	9.4	162.6	13.0	31.2	42.7	197.4	218.4
March	135.3	0.8	136.1	43.5	6.7	50.2	178.7	7.5	186.3	14.8	41.5	49.7	235.0	250.7
April	119.6	3.2	122.8	32.0	6.0	38.0	151.6	9.2	160.8	13.5	35.5	46.6	200.4	220.9
May	147.0	4.9	151.9	34.5	13.9	48.4	181.5	18.8	200.4	13.4	57.4	58.7	252.3	272.4
June	145.7	7.6	153.2	40.7	14.8	55.4	186.3	22.3	208.7	12.0	46.0	63.7	244.3	284.4
July	119.4	4.0	123.3	40.1	4.4	44.4	159.4	8.3	167.8	12.7	51.5	55.0	223.6	235.5
August	132.7	2.1	134.8	41.6	0.8	42.4	174.3	2.9	177.3	14.9	54.2	77.1	243.4	269.3
September	133.1	0.5	133.6	45.0	4.3	49.2	178.1	4.8	182.8	14.0	50.9	61.9	243.0	258.7
October	113.1	0.5	113.6	30.1	1.7	31.7	143.2	2.1	145.3	14.6	48.3	60.2	206.0	220.1
November	127.4	1.6	129.0	38.0	2.3	40.4	165.4	3.9	169.3	16.3	46.4	68.0	228.1	253.6

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

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>1993</i>							
September	1,515	1,523	1,568	1,575	1,956	1,987	2,097	2,144
October	1,516	1,538	1,550	1,586	2,092	2,046	2,209	2,199
November	1,543	1,548	1,645	1,587	2,094	2,087	2,329	2,230
December	1,592	1,561	1,625	1,589	2,154	2,112	2,391	2,242
<i>1994—</i>								
January	1,517	1,589	1,475	1,607	2,046	2,133	1,941	2,251
February	1,655	1,619	1,663	1,633	2,204	2,148	2,324	2,261
March	1,599	1,637	1,640	1,657	2,059	2,155	2,309	2,271
April	1,681	1,636	1,689	1,670	2,219	2,150	2,236	2,277
May	1,679	r1,620	1,750	r1,665	2,187	r2,135	2,371	r2,275
June	1,635	r1,588	1,689	r1,638	2,164	r2,110	2,343	r2,254
July	1,358	r1,545	1,436	r1,592	1,904	r2,078	2,037	r2,213
August	1,544	r1,502	1,568	r1,543	2,080	r2,046	2,142	r2,171
September	1,564	r1,461	1,570	r1,498	2,079	r2,017	2,273	r2,136
October	1,396	r1,423	1,424	r1,459	2,008	r1,989	2,060	r2,104
November	1,340	1,391	1,406	1,424	1,916	1,969	2,050	2,072

(a) 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							
1991-92	1,052.9	1,079.9	256.1	1,336.1	140.4	298.3	491.3	1,645.9	1,967.9
1992-93	1,261.4	1,300.1	341.2	1,641.4	151.7	579.6	872.0	2,207.3	2,665.1
1993-94	1,580.5	1,617.4	453.6	2,071.0	161.4	501.5	651.9	2,613.2	2,884.3
<i>1993—</i>									
June qtr.	340.6	353.2	97.0	450.2	37.3	171.4	244.9	608.7	732.4
Sept. qtr.	381.7	389.0	92.2	481.2	37.2	132.8	173.6	631.5	692.1
Dec. qtr.	393.7	402.7	109.5	512.2	41.8	129.8	186.6	657.2	740.6
<i>1994—</i>									
Mar. qtr.	367.4	371.3	112.7	484.0	41.0	103.3	126.8	606.4	651.8
June qtr.	437.7	454.3	139.2	593.6	41.3	135.6	164.9	717.9	799.8
Sept. qtr.	398.3	405.1	133.3	538.4	43.0	152.6	189.1	717.3	770.5

(a) See paragraphs 20-25 of the Explanatory Notes. Constant price estimates are subject to revision each quarter as more up to date information on prices and commodity compositions becomes available.



**TABLE 5. VALUE OF BUILDING APPROVED, BY CLASS OF BUILDING AND OWNERSHIP**  
(\$ million)

Class of building	1992-93	1993-94	July-November		1994		
			1993-94	1994-95	September	October	November
<b>PRIVATE SECTOR</b>							
New houses	1,138.8	1,469.3	593.3	625.7	133.1	113.1	127.4
New other residential buildings	227.6	382.5	146.4	194.8	45.0	30.1	38.0
<i>Total new residential building</i>	<i>1,366.4</i>	<i>1,851.8</i>	<i>739.7</i>	<i>820.4</i>	<i>178.1</i>	<i>143.2</i>	<i>165.4</i>
Alterations and additions to residential buildings	134.1	148.9	60.5	72.4	14.0	14.6	16.2
Hotels, etc.	10.7	30.3	11.1	19.5	12.3	0.6	3.3
Shops	212.8	151.3	91.0	59.0	9.7	18.8	10.0
Factories	41.2	55.4	18.6	40.3	8.1	9.3	5.6
Offices	44.4	53.7	25.4	30.3	5.6	2.1	3.4
Other business premises	100.3	89.9	37.4	36.4	5.5	9.5	4.3
Educational	28.8	41.0	14.9	14.9	1.5	3.8	2.2
Religious	4.2	9.1	3.8	1.1	0.1	0.1	0.6
Health	79.8	28.8	13.2	17.3	0.1	2.3	5.8
Entertainment and recreational	24.4	25.7	9.0	17.7	3.0	0.7	8.1
Miscellaneous	44.7	27.9	18.1	14.7	5.2	1.1	3.1
<i>Total non-residential building</i>	<i>591.3</i>	<i>513.1</i>	<i>242.6</i>	<i>251.3</i>	<i>50.9</i>	<i>48.3</i>	<i>46.4</i>
<b>Total</b>	<b>2,091.8</b>	<b>2,513.8</b>	<b>1,042.8</b>	<b>1,144.2</b>	<b>243.0</b>	<b>206.0</b>	<b>228.1</b>
<b>PUBLIC SECTOR</b>							
New houses	34.9	34.4	11.3	8.6	0.5	0.5	1.6
New other residential buildings	118.1	78.5	18.9	13.4	4.3	1.7	2.3
<i>Total new residential building</i>	<i>153.0</i>	<i>112.9</i>	<i>30.1</i>	<i>22.0</i>	<i>4.8</i>	<i>2.1</i>	<i>3.9</i>
Alterations and additions to residential buildings	3.0	1.1	0.7	0.1	—	—	—
Hotels, etc.	0.2	—	—	—	—	—	—
Shops	2.0	1.8	1.6	1.4	—	0.7	0.3
Factories	4.6	1.3	0.8	0.1	—	—	—
Offices	67.6	27.7	5.3	7.5	3.7	0.3	1.7
Other business premises	12.2	17.4	6.6	6.5	0.3	0.3	0.1
Educational	98.6	61.0	11.3	40.7	3.6	4.7	17.0
Religious	—	—	—	—	—	—	—
Health	22.1	23.4	23.4	3.5	2.4	0.3	—
Entertainment and recreational	49.7	13.7	6.2	1.4	0.4	0.2	0.6
Miscellaneous	41.3	7.6	3.2	9.7	0.5	5.4	2.0
<i>Total non-residential building</i>	<i>298.3</i>	<i>153.9</i>	<i>58.5</i>	<i>70.9</i>	<i>11.0</i>	<i>11.9</i>	<i>21.6</i>
<b>Total</b>	<b>454.3</b>	<b>267.9</b>	<b>89.3</b>	<b>93.0</b>	<b>15.7</b>	<b>14.1</b>	<b>25.5</b>
<b>TOTAL</b>							
New houses	1,173.7	1,503.7	604.6	634.3	133.6	113.6	129.0
New other residential buildings	345.7	461.0	165.2	208.2	49.2	31.7	40.4
<i>Total new residential building</i>	<i>1,519.4</i>	<i>1,964.7</i>	<i>769.8</i>	<i>842.5</i>	<i>182.8</i>	<i>145.3</i>	<i>169.3</i>
Alterations and additions to residential buildings	137.1	150.0	61.2	72.5	14.0	14.6	16.3
Hotels, etc.	10.8	30.3	11.1	19.5	12.3	0.6	3.3
Shops	214.8	153.1	92.6	60.4	9.7	19.5	10.3
Factories	45.8	56.7	19.4	40.4	8.1	9.3	5.6
Offices	112.0	81.3	30.7	37.8	9.3	2.4	5.1
Other business premises	112.5	107.3	44.0	42.9	5.7	9.8	4.4
Educational	127.4	102.1	26.3	55.6	5.2	8.5	19.2
Religious	4.2	9.1	3.8	1.1	0.1	0.1	0.6
Health	101.9	52.2	36.5	20.8	2.5	2.6	5.8
Entertainment and recreational	74.0	39.5	15.2	19.2	3.4	0.8	8.6
Miscellaneous	86.0	35.5	21.4	24.5	5.6	6.5	5.1
<i>Total non-residential building</i>	<i>889.6</i>	<i>667.0</i>	<i>301.1</i>	<i>322.2</i>	<i>61.9</i>	<i>60.2</i>	<i>68.0</i>
<b>Total</b>	<b>2,546.1</b>	<b>2,781.7</b>	<b>1,132.1</b>	<b>1,237.2</b>	<b>258.7</b>	<b>220.1</b>	<b>253.6</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>												
1994 September	3	0.3	2	0.5	—	—	—	—	1	11.5	6	12.3
October	3	0.3	1	0.3	—	—	—	—	—	—	4	0.6
November	2	0.2	1	0.4	2	1.4	1	1.4	—	—	6	3.3
<b>SHOPS</b>												
1994 September	20	1.8	12	4.0	3	2.2	1	1.7	—	—	36	9.7
October	26	2.4	16	4.9	2	1.2	3	4.7	1	6.3	48	19.5
November	22	2.2	6	2.2	6	3.4	2	2.6	—	—	36	10.3
<b>FACTORIES</b>												
1994 September	19	2.4	15	4.5	—	—	1	1.2	—	—	35	8.1
October	14	1.6	6	1.8	1	0.5	2	5.5	—	—	23	9.3
November	22	2.7	11	2.9	—	—	—	—	—	—	33	5.6
<b>OFFICES</b>												
1994 September	21	2.4	5	1.7	2	1.6	2	3.7	—	—	30	9.3
October	9	0.8	3	1.0	1	0.7	—	—	—	—	13	2.4
November	12	1.0	6	1.8	2	1.3	1	1.0	—	—	21	5.1
<b>OTHER BUSINESS PREMISES</b>												
1994 September	16	1.6	10	2.9	2	1.2	—	—	—	—	28	5.7
October	15	1.5	7	2.0	3	1.9	3	4.5	—	—	28	9.8
November	23	2.0	6	1.8	1	0.7	—	—	—	—	30	4.4
<b>EDUCATIONAL</b>												
1994 September	8	0.9	3	0.9	2	1.4	1	1.9	—	—	14	5.2
October	4	0.6	3	1.0	3	2.4	3	4.5	—	—	13	8.5
November	3	0.3	3	0.7	3	2.1	2	6.6	1	9.5	12	19.2
<b>RELIGIOUS</b>												
1994 September	1	0.1	—	—	—	—	—	—	—	—	1	0.1
October	1	0.1	—	—	—	—	—	—	—	—	1	0.1
November	1	0.1	1	0.4	—	—	—	—	—	—	2	0.6
<b>HEALTH</b>												
1994 September	1	0.1	—	—	2	1.4	1	1.0	—	—	4	2.5
October	4	0.4	2	0.7	—	—	1	1.6	—	—	7	2.6
November	3	0.2	—	—	2	1.3	3	4.3	—	—	8	5.8
<b>ENTERTAINMENT AND RECREATIONAL</b>												
1994 September	3	0.3	1	0.2	—	—	1	2.9	—	—	5	3.4
October	7	0.6	1	0.3	—	—	—	—	—	—	8	0.8
November	5	0.5	3	0.8	1	0.7	3	6.6	—	—	12	8.6
<b>MISCELLANEOUS</b>												
1994 September	6	0.7	4	1.4	1	0.7	1	3.0	—	—	12	5.6
October	5	0.5	3	0.7	2	1.3	2	4.1	—	—	12	6.5
November	7	0.6	3	1.2	—	—	2	3.3	—	—	12	5.1
<b>TOTAL NON-RESIDENTIAL BUILDING</b>												
1994 September	98	10.4	52	16.1	12	8.5	8	15.4	1	11.5	171	61.9
October	88	8.7	42	12.5	12	8.0	14	24.7	1	6.3	157	60.2
November	100	9.8	40	12.1	17	10.8	14	25.8	1	9.5	172	68.0

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1994

Statistical local area, statistical subdivision and statistical division	New residential building						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)	5	—	915	3	—	240	714	430	430	2,299
Claremont (T)	5	—	1,133	—	—	—	404	226	226	1,763
Cottesloe (T)	1	—	236	—	—	—	135	—	—	371
Mosman Park (T)	5	—	884	2	—	180	236	—	—	1,300
Nedlands (C)	8	—	1,145	—	—	—	1,379	80	214	2,738
Peppermint Grove (S)	—	—	—	—	—	—	—	—	—	—
Perth (C) — Inner	—	—	—	—	—	—	—	790	1,090	1,090
Perth (C) — Remainder	—	—	—	53	—	3,939	265	960	3,460	7,664
Subiaco (C)	4	—	485	—	—	—	400	735	735	1,620
Victoria Park (T)	5	—	354	31	6	2,823	233	4,660	6,921	10,331
Vincent (T)	7	—	749	4	—	347	693	740	740	2,528
Central Metropolitan (SSD)	40	—	5,902	93	6	7,528	4,459	8,621	13,816	31,705
Hassenden (T)	8	—	763	—	—	—	101	180	480	1,343
Bayswater (C)	60	—	4,856	14	—	508	1,150	2,808	2,808	9,322
Kalamunda (S)	24	—	2,134	2	—	100	249	—	—	2,483
Mundaring (S)	35	—	3,007	2	—	100	181	1,370	1,670	4,957
Swan (S)	110	—	7,097	14	—	480	284	3,123	3,523	11,385
East Metropolitan (SSD)	237	—	17,857	32	—	1,188	1,965	7,481	8,481	29,491
Stirling (C) — Central	23	—	2,227	118	—	7,155	545	878	10,378	20,305
Stirling (C) — West	14	—	1,274	69	—	5,863	396	150	210	7,743
Stirling (C) — South-Eastern	3	—	201	38	—	2,410	367	860	860	3,839
Wanneroo (C)	336	—	26,136	24	—	1,513	1,366	8,973	13,118	42,133
North Metropolitan (SSD)	376	—	29,839	249	—	16,940	2,674	10,861	24,566	74,020
Cockburn (C)	80	—	7,499	10	—	593	261	2,342	2,342	10,695
East Fremantle (T)	2	—	185	—	—	—	169	95	95	449
Fremantle (C) — Inner	—	—	—	—	—	—	110	200	200	310
Fremantle (C) — Remainder	6	—	509	34	—	3,180	951	538	538	5,178
Kwinana (T)	21	—	1,310	—	—	—	46	719	719	2,074
Melville (C)	43	—	5,963	6	3	719	1,081	470	470	8,233
Rockingham (C)	125	—	8,839	14	—	544	128	—	1,182	10,693
South West Metropolitan (SSD)	277	—	24,304	64	3	5,037	2,746	4,364	5,547	37,633
Armadale (C)	36	—	3,060	—	—	—	219	81	81	3,360
Belmont (C)	13	22	2,239	—	2	123	259	680	680	3,301
Canning (C)	47	—	4,149	52	—	2,258	437	1,908	1,908	8,751
Gosnells (C)	84	—	5,642	10	11	1,278	343	1,233	1,233	8,496
Serpentine-Jarrahdale (S)	11	—	907	—	—	—	75	1,613	1,613	2,595
South Perth (C)	6	—	1,228	13	—	1,194	644	950	950	4,016
South East Metropolitan (SSD)	197	22	17,225	75	13	4,853	1,977	6,465	6,465	30,520
<b>Total</b>	<b>1,127</b>	<b>22</b>	<b>95,127</b>	<b>513</b>	<b>22</b>	<b>35,546</b>	<b>13,821</b>	<b>37,792</b>	<b>58,875</b>	<b>203,368</b>
<b>SOUTH WEST STATISTICAL DIVISION</b>										
Boddington (S)	3	—	229	—	—	—	—	—	—	229
Mandurah (C)	79	—	6,258	6	—	436	230	689	689	7,613
Murray (S)	15	—	1,714	—	—	—	47	—	—	1,761
Waroona (S)	2	—	264	—	—	—	12	—	—	276
Dale (SSD)	99	—	8,465	6	—	436	289	689	689	9,879
Bunbury (C)	15	—	1,514	19	—	1,559	136	508	786	3,995
Capel (S)	2	—	144	2	—	86	28	—	—	258
Collie (S)	1	—	49	—	—	—	—	—	—	49
Dardanup (S)	9	—	877	—	—	—	88	—	—	965
Donnybrook-Balingup (S)	—	—	—	—	—	—	—	—	—	—
Harvey (S)	34	—	3,004	—	8	512	25	80	80	3,621
Preston (SSD)	61	—	5,586	21	8	2,158	277	588	866	8,887

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1994 *continued*

Statistical local area, statistical subdivision and statistical division	New residential building						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>SOUTH WEST STATISTICAL DIVISION (continued)</b>										
Augusta-Margaret River (S)	8	—	833	2	—	80	105	50	50	1,068
Busselton (S)	26	—	2,885	2	—	215	73	490	490	3,663
Vasse (SSD)	34	—	3,718	4	—	295	178	540	540	4,731
Boyp Brook (S)	—	—	—	—	—	—	—	—	—	—
Bridgetown-Greenbushes (S)	—	—	—	—	—	—	48	—	—	48
Manjimup (S)	9	—	795	—	—	—	—	120	120	915
Nannup (S)	2	—	80	—	—	—	100	—	—	180
Blackwood (SSD)	11	—	875	—	—	—	148	120	120	1,143
<b>Total</b>	<b>205</b>	<b>—</b>	<b>18,644</b>	<b>31</b>	<b>8</b>	<b>2,889</b>	<b>892</b>	<b>1,937</b>	<b>2,215</b>	<b>24,640</b>
<b>LOWER GREAT SOUTHERN STATISTICAL DIVISION</b>										
Broomehill (S)	—	—	—	—	—	—	—	—	—	—
Gnowangerup (S)	—	—	—	—	—	—	—	—	—	—
Jerramungup (S)	5	—	383	—	—	—	30	—	—	413
Katanning (S)	1	—	60	—	—	—	38	—	—	98
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	—	—	—	—	—	—	10	—	—	10
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	1	—	28	—	—	—	—	—	—	28
Pallinup (SSD)	7	—	471	—	—	—	78	—	—	549
Albany (T)	13	—	1,398	2	—	100	46	340	340	1,884
Albany (S)	16	—	1,330	—	—	—	67	70	70	1,467
Cranbrook (S)	—	—	—	—	—	—	—	—	—	—
Denmark (S)	4	—	430	—	—	—	—	400	400	830
Plantagenet (S)	13	—	840	—	—	—	44	—	—	883
King (SSD)	46	—	3,999	2	—	100	157	810	810	5,065
<b>Total</b>	<b>53</b>	<b>—</b>	<b>4,469</b>	<b>2</b>	<b>—</b>	<b>100</b>	<b>235</b>	<b>810</b>	<b>810</b>	<b>5,614</b>
<b>UPPER GREAT SOUTHERN STATISTICAL DIVISION</b>										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	1	—	45	—	—	—	—	—	—	45
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	—
Narrogin (T)	—	—	—	—	—	—	57	60	60	117
Narrogin (S)	1	—	72	—	—	—	—	—	—	72
Pingelly (S)	—	—	—	—	—	—	—	—	—	—
Wagin (S)	—	—	—	—	—	—	—	—	—	—
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	1	—	224	—	—	—	—	—	—	224
Hotham (SSD)	3	—	341	—	—	—	57	60	60	458
Corrigin (S)	—	—	—	—	—	—	25	—	—	25
Kondinin (S)	1	—	60	—	—	—	23	—	—	83
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	—	—	—	—	—	—	32	70	70	102
Lakes (SSD)	1	—	60	—	—	—	80	70	70	210
<b>Total</b>	<b>4</b>	<b>—</b>	<b>401</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>130</b>	<b>130</b>	<b>668</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1994 *continued*

Statistical local area, statistical subdivision and statistical division	New residential building						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>MIDLANDS STATISTICAL DIVISION</b>										
Chittering (S)	3	—	127	—	—	—	—	—	—	127
Dandaragan (S)	3	—	226	—	—	—	14	—	—	240
Gingin (S)	7	—	483	—	—	—	117	—	—	600
Moora (S)	1	—	99	—	—	—	—	—	—	99
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	—
Moore (SSD)	14	—	934	—	—	—	131	—	—	1,065
Beverley (S)	—	—	—	—	—	—	—	—	—	—
Cunderdin (S)	2	—	156	—	—	—	—	—	—	156
Dalwallinu (S)	—	—	—	—	—	—	—	—	—	—
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goomalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	—	—	—	—	—	—
Northam (T)	1	—	73	6	—	400	15	280	280	768
Northam (S)	7	—	537	—	—	—	35	—	—	572
Quairading (S)	—	—	—	—	—	—	—	—	—	—
Tammin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	3	—	331	—	—	—	93	—	—	424
Wongan-Ballidu (S)	—	—	—	—	—	—	—	—	—	—
Wyalkatchem (S)	—	—	—	—	—	—	—	—	—	—
York (S)	3	—	165	—	—	—	30	—	—	195
Avon (SSD)	16	—	1,261	6	—	400	173	280	280	2,114
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Kellerberrin (S)	—	—	—	—	—	—	—	—	—	—
Merredin (S)	—	—	—	—	—	—	—	—	—	—
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mukinbudin (S)	—	—	—	—	—	—	—	—	—	—
Narembeen (S)	—	—	—	—	—	—	—	—	—	—
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	—	—	—	—	—	—	—	—	—	—
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgam (S)	2	—	104	—	—	—	35	2,150	2,150	2,288
Campion (SSD)	2	—	104	—	—	—	35	2,150	2,150	2,288
<b>Total</b>	<b>32</b>	<b>—</b>	<b>2,299</b>	<b>6</b>	<b>—</b>	<b>400</b>	<b>339</b>	<b>2,430</b>	<b>2,430</b>	<b>5,468</b>
<b>SOUTH EASTERN STATISTICAL DIVISION</b>										
Coolgardie (S)	—	—	—	—	—	—	—	70	70	70
Kalgoorlie/Boulder (C)	17	—	1,790	9	—	558	441	2,513	2,513	5,302
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	—	—	—	—	—	—
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	17	—	1,790	9	—	558	441	2,583	2,583	5,372
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	8	—	749	—	—	—	68	—	—	817
Ravensthorpe (S)	5	—	263	—	—	—	50	—	—	313
Johnston (SSD)	13	—	1,012	—	—	—	118	—	—	1,130
<b>Total</b>	<b>30</b>	<b>—</b>	<b>2,802</b>	<b>9</b>	<b>—</b>	<b>558</b>	<b>559</b>	<b>2,583</b>	<b>2,583</b>	<b>6,502</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1994—continued

Statistical local area, statistical subdivision and statistical division	New residential building						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>CENTRAL STATISTICAL DIVISION</b>										
Camaron (S)	2	—	189	—	—	—	—	—	—	189
Exmouth (S)	—	—	—	—	—	—	—	—	—	—
Shark Bay (S)	1	—	75	2	—	150	—	60	60	284
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	3	—	264	2	—	150	—	60	60	473
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meekatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	—	—	—
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	—	—	—	—
Coorow (S)	1	—	40	—	—	—	—	—	—	65
Geraldton (C)	1	—	95	3	6	716	57	255	255	1,123
Greenough (S)	16	—	1,962	—	—	—	47	—	123	2,132
Irwin (S)	1	—	100	—	—	—	15	—	—	115
Mingenew (S)	—	—	—	—	—	—	—	—	—	—
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	—	—	—	—	—	—	—	116	116
Northampton (S)	5	—	347	—	—	—	15	53	53	415
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	1	2	265	—	—	—	—	—	—	265
Greenough River (SSD)	25	2	2,809	3	6	716	158	308	546	4,230
<b>Total</b>	<b>28</b>	<b>2</b>	<b>3,073</b>	<b>5</b>	<b>6</b>	<b>866</b>	<b>158</b>	<b>367</b>	<b>606</b>	<b>4,703</b>
<b>PILBARA STATISTICAL DIVISION</b>										
Fast Pilbara (S)	—	—	—	—	—	—	—	—	—	—
Port Hedland (T)	2	—	320	—	—	—	47	50	50	417
De Grey (SSD)	2	—	320	—	—	—	47	50	50	417
Ashburton (S)	—	—	—	—	—	—	23	—	—	23
Roeboorne (S)	1	—	130	—	—	—	30	123	123	283
Fortescue (SSD)	1	—	130	—	—	—	53	123	123	306
<b>Total</b>	<b>3</b>	<b>—</b>	<b>450</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>100</b>	<b>173</b>	<b>173</b>	<b>723</b>
<b>KIMBERLEY STATISTICAL DIVISION</b>										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	4	—	374	—	—	—	25	—	—	399
Ord (SSD)	4	—	374	—	—	—	25	—	—	399
Broome (S)	12	—	1,322	—	—	—	—	175	175	1,497
Derby-West Kimberley (S)	—	—	—	—	—	—	—	—	—	—
Fitzroy (SSD)	12	—	1,322	—	—	—	—	175	175	1,497
<b>Total</b>	<b>16</b>	<b>—</b>	<b>1,696</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>25</b>	<b>175</b>	<b>175</b>	<b>1,896</b>
<b>WESTERN AUSTRALIA</b>										
Western Australia	1,498	24	128,960	566	36	40,359	16,266	46,397	67,996	253,582

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

**TABLE 8. NUMBER OF NEW HOUSES APPROVED BY MATERIAL OF OUTER WALLS, FLOOR AREA AND VALUE PER SQUARE METRE BY STATISTICAL DIVISION NOVEMBER 1994**

Statistical division	Material of outer walls					Total	Floor area (sq m)	Average floor area (sq m)	Average value per square metre (\$)
	Double brick(a)	Brick veneer	Fibre cement	Timber	Other and not stated				
Perth	1,124	—	6	11	8	1,149	251,858	219	378
South-West	173	5	13	10	4	205	47,702	233	391
Lower Great Southern	8	22	17	4	2	53	11,529	218	388
Upper Great Southern	1	—	3	—	—	4	890	223	451
Midlands	8	6	12	4	2	32	6,287	196	366
South-Eastern	8	18	2	2	—	30	6,331	211	443
Central	20	1	8	—	1	30	6,021	201	510
Pilbara	1	2	—	—	—	3	725	242	621
Kimberley	—	1	—	—	15	16	4,023	251	421
<b>Western Australia</b>	<b>1,343</b>	<b>55</b>	<b>61</b>	<b>31</b>	<b>32</b>	<b>1,522</b>	<b>335,366</b>	<b>220</b>	<b>385</b>

(a) Includes houses constructed with outer walls of stone and concrete.

**TABLE 9. NEW DWELLING UNITS APPROVED, BY TYPE AND STATISTICAL DIVISION NOVEMBER 1994**

Statistical division	Other residential building								Total residential building	
	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			
NUMBER OF DWELLING UNITS										
Perth	1,149	416	66	482	—	—	53	53	535	1,684
South West	205	37	2	39	—	—	—	—	39	244
Lower Great Southern	53	2	—	2	—	—	—	—	2	55
Upper Great Southern	4	—	—	—	—	—	—	—	—	4
Midlands	32	6	—	6	—	—	—	—	6	38
South Eastern	30	9	—	9	—	—	—	—	9	39
Central	30	9	2	11	—	—	—	—	11	41
Pilbara	3	—	—	—	—	—	—	—	—	3
Kimberley	16	—	—	—	—	—	—	—	—	16
<b>Western Australia</b>	<b>1,522</b>	<b>479</b>	<b>70</b>	<b>549</b>	<b>—</b>	<b>—</b>	<b>53</b>	<b>53</b>	<b>602</b>	<b>2,124</b>
VALUE (\$'000)										
Perth	95,127	25,590	6,018	31,608	—	—	3,939	3,939	35,546	130,673
South West	18,644	2,619	270	2,889	—	—	—	—	2,889	21,533
Lower Great Southern	4,469	100	—	100	—	—	—	—	100	4,569
Upper Great Southern	401	—	—	—	—	—	—	—	—	401
Midlands	2,299	400	—	400	—	—	—	—	400	2,699
South Eastern	2,802	558	—	558	—	—	—	—	558	3,360
Central	3,073	716	150	866	—	—	—	—	866	3,939
Pilbara	450	—	—	—	—	—	—	—	—	450
Kimberley	1,696	—	—	—	—	—	—	—	—	1,696
<b>Western Australia</b>	<b>128,960</b>	<b>29,983</b>	<b>6,438</b>	<b>36,421</b>	<b>—</b>	<b>—</b>	<b>3,939</b>	<b>3,939</b>	<b>40,359</b>	<b>169,320</b>

## EXPLANATORY NOTES

### Introduction

This publication contains monthly details of building work approved. 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.

Major building activity which takes place in areas not subject to the normal administrative approval processes (e.g. buildings on remote mine sites) is also included.

### Factors affecting comparability

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

### Scope and coverage

3. 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.

4. 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.

5. From July 1990, the statistics cover:

- (b) all approved new residential building jobs valued at \$10,000 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.

From July 1988 to June 1990, the statistics covered:

- (d) all approved new residential building jobs valued at \$5,000 or more (previously all new residential building jobs were included regardless of value);
- (e) approved alterations and additions to residential buildings valued at \$10,000 or more;
- (f) all approved non-residential building jobs valued at \$30,000 or more (previously \$10,000 or more).

These changes in scope mainly affect non-residential building data and 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

6. 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 humans.

7. A *dwelling unit* is defined as a self contained suite of rooms, including cooking and bathing facilities and intended for *long term* residential use. Units (whether self contained or not) within buildings offering institutional care, such as hospitals, or temporary accommodation, such as motels, hostels and holiday apartments, are not defined as dwelling units. The value of units of this type is included in the appropriate category of *non-residential building* approved.

8. 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* as follows:

- (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 flats, home units, townhouses, duplexes, apartment buildings, etc).

9. The number of dwelling units created by alterations and additions to existing buildings and through the construction of new *non-residential buildings* is not included in the tables but is shown as a footnote to Table 1.

10. *Values* 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, and often do, differ significantly from the completed value of the building.

### Building classification

11. *Ownership*. The ownership of a building is classified as either *public sector* or *private sector* according to the sector of the intended owner of the completed building as evident at the time of approval. Residential buildings being constructed by private sector builders under government housing authority schemes whereby the authority has contracted, or intends to contract, to purchase the buildings on or before completion, are classified as public sector.



12. *Functional classification of buildings.* A building is classified according to its intended major function. Hence a building which is ancillary to other buildings or forms a part of a group of related buildings is classified to the function of the building and not to the function of the group as a whole. An example of this can be seen in the treatment of building work approved for a factory complex. In this case a detached administration building would be classified to *offices*, a detached cafeteria building to *shops*, while factory buildings would be classified to *factories*. An exception to this rule is in the treatment of group accommodation buildings where, for example, a student accommodation building on a university campus would be classified to Educational.

13. From July 1992, an expanded functional classification of buildings based on the *Dwelling Structure Classification (DSC)* has been introduced by the ABS to provide more detailed information on residential building approvals.

14. The DSC has been developed by the ABS to provide a standard classification of the different types of dwelling structures (houses, flats, townhouses, etc.). The DSC will be implemented across all major collections of housing data in the ABS. The DSC has the same overall scope as the classification used in previous collections but provides more detail than previously available to reflect the current interest in medium to high density housing.

15. In particular, for Building Approvals, DSC allows new *other residential building* to be classified as follows:

- (a) *Semi-detached, row or terrace houses, townhouses, etc.* (dwellings having their own private grounds and no other dwellings above or below) with
  - one storey;
  - two or more storeys.
- (b) *Flats, units or apartments, etc.* (dwellings not having their own private grounds and usually sharing a common entrance, foyer or stairwell) in a building of:
  - one or two storeys;
  - three storeys;
  - four or more storeys.

16. More details on the DSC are contained in the ABS Information Paper, *Dwelling Structure Classification (DSC)* (1296.0).

#### Seasonal adjustment

17. Seasonally adjusted dwelling unit statistics are shown in Table 3. In these series, account has been taken of normal seasonal factors and 'trading day' effects (arising from the varying numbers of Sundays, Mondays, Tuesdays etc. in the month) and the effect of movement in the date of Easter which may, in successive years, affect figures for different months. Revision of figures results from annual re-analysis, details of which, together with information regarding the methods used in seasonally adjusting the series, are available on request.

18. Each of the component series shown has been seasonally adjusted independently. As a consequence, while the unadjusted components in the original series shown add to the totals, the adjusted components may not add to the adjusted totals. Further, the difference between independently seasonally adjusted series does not necessarily produce series which are optimal or even

adequate adjustments of the similarly derived original series. Thus the figures which can be derived by subtracting seasonally adjusted private sector dwelling units from the seasonally adjusted total should not be used to represent seasonally adjusted public sector dwelling units.

19. Seasonal adjustment may be carried out by various methods and the results may vary slightly according to the procedure adopted. Accordingly, seasonally adjusted statistics should not be regarded as in any way definitive. In interpreting particular seasonally adjusted statistics it is important to bear in mind the methods by which they have been derived and the limitations to which the methods used are subject.

20. 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. 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. Irregular influences that are highly volatile can make it difficult to interpret the movement of the series even after adjustment for seasonal variation.

21. The seasonally adjusted series can, however, be smoothed to reduce the impact of the irregular component in the adjusted series. This smoothed seasonally adjusted series is called a trend estimate. There are a number of ways of accomplishing this, depending on the intended uses of the trend estimate. If importance is attached to measuring the underlying change in the most recent periods, moving averages employing appropriate weighting patterns should be adopted; the choice of averaging technique will determine in part the degree of smoothness of the derived series. For example, a 23-term moving average will generally even out more of the short term fluctuation in a series (and therefore appear 'smoother') than will a 13-term moving average. However, the longer the term of the moving average the longer the time series affected by revisions resulting from more recent data. In order to ensure that the underlying trend-cycle of a series is reflected in the trend estimate, the degree of smoothness alone cannot always be used as the sole criterion in determining which moving average is appropriate.

22. Trend estimates of dwelling unit statistics are shown in Table 3. The trend estimates (often referred to as trend-cycle estimates) have been derived by applying a 13-term Henderson-weighted moving average to the series.

23. While this technique enables trend estimates for the latest period to be produced, it does result in revisions to the trend estimates for the most recent months as additional observations become available. There may also be revisions as a result of changes in the original data, and as a result of the re-estimation of the seasonal factors. Details of other trend-cycle weighting patterns can be found in *A Guide to Smoothing Time Series - Estimates of Trend* (1316.0).

#### Estimates at constant prices

24. The base year of constant price estimates of building approvals, contained in this issue, has been changed to 1989-90.

25. Periodic rebasing of constant price estimates is necessary to take account of changed price relativities and structural relationships in the economy. The choice of the base year influences the movement in the constant price series and the usefulness of such series is diminished if the relative price weights of the base year differ significantly from the price relationships in the other periods included in the series. The more remote a base year is from the current period, the less likely that its relative prices will reflect the current situation.

26. A more detailed discussion of the need for rebasing constant price estimates and factors affecting the choice of base year is contained in the information paper *Change in Base Year of Constant Price Estimates from 1984-85 to 1989-90* (5227.0) released on 10 December 1992.

27. 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).

28. Constant price estimates measure changes in value after the direct effects of price changes have been eliminated. The deflators used to revalue the current price estimates in this publication are derived from the same price data underlying the deflators compiled for the dwellings and non-dwelling construction components of the national accounts aggregate 'Gross fixed capital expenditure'.

29. 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

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

#### Perth City Council Re-structure

31. From July 1994, Perth City Council has been split. Although there are still five SLA's, only two retain the same boundaries. The new Town of Shepperton comprises the whole of the SLA previously known as Perth(C) South. The City of Perth is now comprised of two SLAs: Perth(C) Inner and Perth(C) Remainder. Perth(C) Inner boundaries have not changed. Perth(C) Remainder comprises the

majority of Perth(C) Outer. The new Town of Vincent comprises the major part of Perth(C) North and a small part of Perth(C) Outer. The new Town of Cambridge comprises the remainder of Perth(C) North as well as all of Perth(C) Wembley-Coastal. For maps showing the new SLA boundaries, please contact the relevant councils.

#### Unpublished data and related publications

32. The ABS also makes 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.

33. Users may also wish to refer to the following related publications which are available on request:

WESTERN AUSTRALIA	Catalogue No.
Building Approvals - Private Sector, Perth Statistical Division (monthly)	8732.5
Building Activity (quarterly)	8752.5
Dwelling Unit Commencements (monthly)	8741.5
<b>AUSTRALIA</b>	
Building Approvals (monthly)	8731.0
Building Activity (quarterly)	8752.0
Engineering Construction Survey (quarterly)	8762.0
Housing Finance for Owner Occupation: Australia	5609.0

34. All publications produced by the ABS are listed in *Catalogue of Publications and Products* (1101.0) which is available from any ABS Office.

#### Symbols and other usages

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

- nil, or rounded to zero
- r figure or series revised since previous issue.

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

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