

# BUILDING APPROVALS

## WESTERN AUSTRALIA

### November 1993

#### MAIN FEATURES

The number of houses approved in November 1993 increased by 11.9 per cent when compared with October 1993 and increased by 31.1 per cent when compared with November 1992.

Trend estimates for houses in November 1993 are still indicating growth although the rate of growth is slowing.

The number of total dwelling units approved in November 1993 increased by 13.6 per cent when compared with October 1993 and increased by 38.7 per cent when compared with November 1992.

Comparisons with previous periods are:

#### Month to month

	<i>Nov. 1993</i>	<i>Oct. 1993</i>	<i>% change</i>	<i>Nov. 1992</i>	<i>% change</i>
Houses	1,746	1,561	+11.9	1,332	+31.1
Total dwelling units	2,370	2,086	+13.6	1,709	+38.7

#### Three month moving average

	<i>Nov. 1993</i>	<i>Oct. 1993</i>	<i>% change</i>	<i>Nov. 1992</i>	<i>% change</i>
Houses	1,656	1,594	+3.9	1,426	+16.1
Total dwelling units	2,223	2,144	+3.7	1,877	+18.4

#### Eleven months January to November

	<i>1993</i>	<i>1992</i>	<i>% change</i>	<i>1991</i>	<i>% change</i>
Houses	16,299	14,157	+15.1	11,328	+43.9
Total dwelling units	22,119	19,494	+13.5	14,498	+52.6

**PHONE INQUIRIES**

Contact Mr Ron Surr on (09) 323 5260 for further information about statistics in this publication and the availability of related unpublished statistics.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) 323 5140.

**MAIL INQUIRIES**

Write to Information Services, Australian Bureau of Statistics, Hyatt Centre, 30 Terrace Road, East Perth WA 6004.

**ELECTRONIC SERVICES**

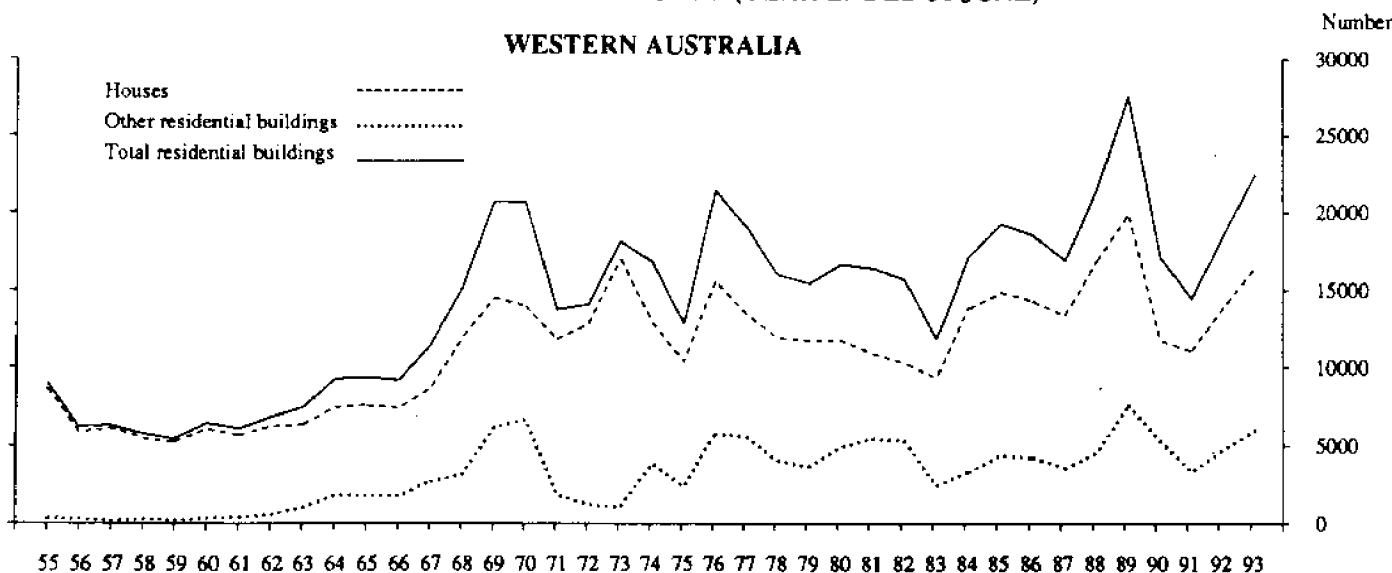
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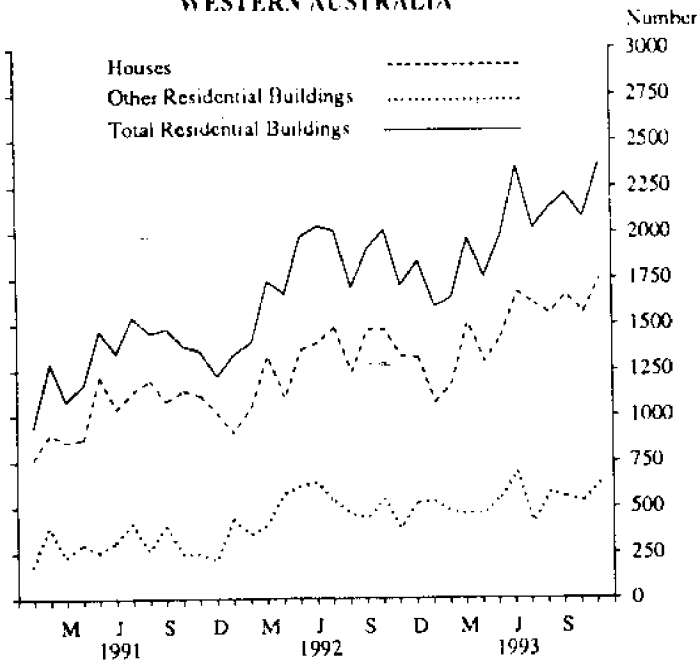
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**NEW DWELLING UNITS APPROVED (YEAR ENDED 30 JUNE)**

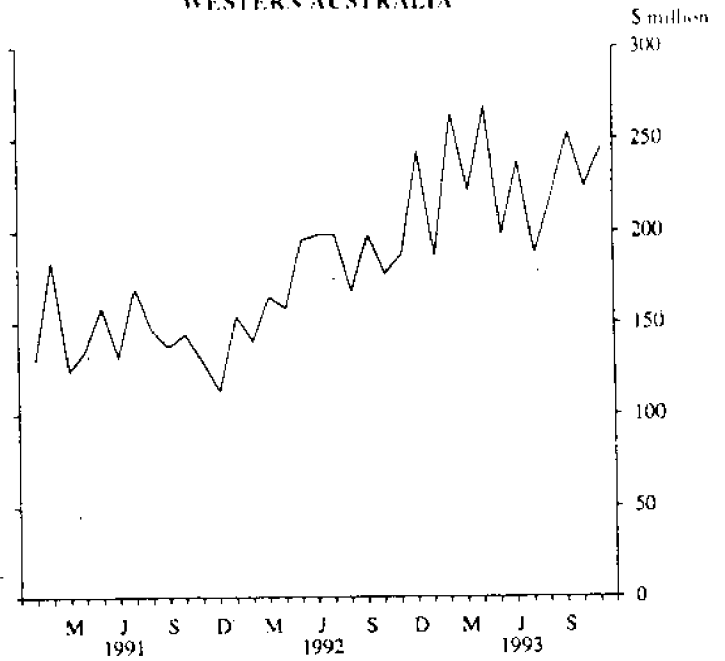
**WESTERN AUSTRALIA**



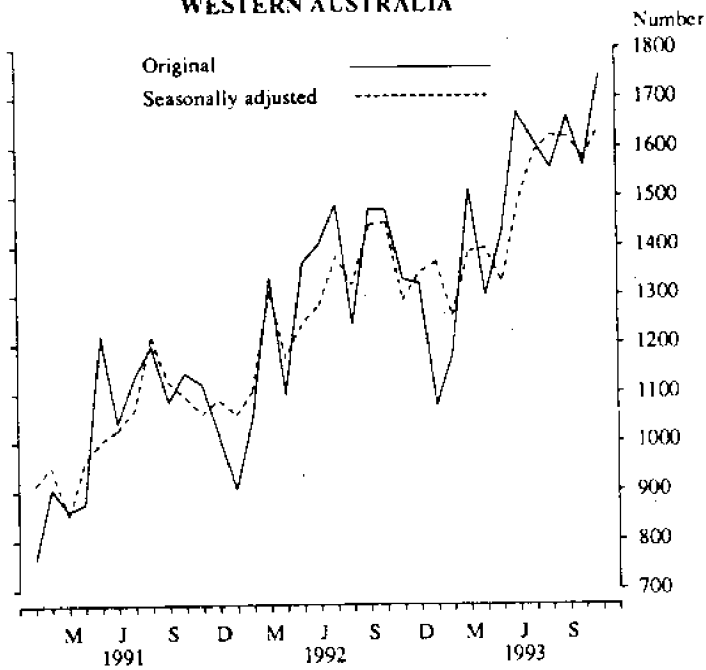
**NEW DWELLING UNITS APPROVED  
WESTERN AUSTRALIA**



**TOTAL VALUE OF BUILDING APPROVED  
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED  
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED  
WESTERN AUSTRALIA**

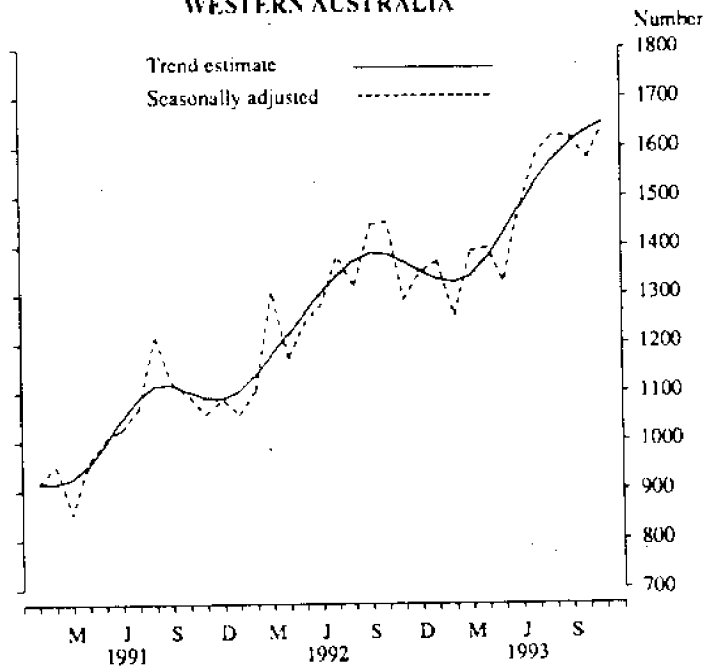


TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDING

Period	Houses			Other residential buildings			Total		
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total
PERTH STATISTICAL DIVISION									
1990-91	7,492	158	7,650	2,194	391	2,585	9,686	549	10,235
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
1992-93									
July-November	5,095	47	5,142	1,471	591	2,062	6,566	638	7,204
1993-94									
July-November	5,785	125	5,910	1,955	247	2,202	7,740	372	8,112
1992—									
September	1,052	29	1,081	320	78	398	1,372	107	1,479
October	1,039	3	1,042	340	115	455	1,379	118	1,497
November	971	11	982	206	123	329	1,177	134	1,311
December	938	46	984	215	234	449	1,153	280	1,433
1993—									
January	701	65	766	318	145	463	1,019	210	1,229
February	819	23	842	253	125	378	1,072	148	1,220
March	1,046	5	1,051	339	11	350	1,385	16	1,401
April	873	19	892	277	125	402	1,150	144	1,294
May	1,040	24	1,064	306	64	370	1,346	88	1,434
June	1,106	56	1,162	269	245	514	1,375	301	1,676
July	1,166	3	1,169	326	31	357	1,492	34	1,526
August	1,101	12	1,113	371	83	454	1,472	95	1,567
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
WESTERN AUSTRALIA									
1990-91	10,776	317	11,093	2,733	620	3,353	13,509	937	14,446
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
1992-93									
July-November	6,905	98	7,003	1,681	660	2,341	8,586	758	9,344
1993-94									
July-November	7,981	159	8,140	2,383	291	2,674	10,364	450	10,814
1992—									
September	1,422	52	1,474	348	86	434	1,770	138	1,908
October	1,454	19	1,473	408	133	541	1,862	152	2,014
November	1,319	13	1,332	252	125	377	1,571	138	1,709
December	1,263	60	1,323	251	267	518	1,514	327	1,841
1993—									
January	978	95	1,073	362	160	522	1,340	255	1,595
February	1,155	25	1,180	283	182	465	1,438	207	1,645
March	1,489	24	1,513	435	23	458	1,924	47	1,971
April	1,261	36	1,297	319	140	459	1,580	176	1,756
May	1,392	34	1,426	375	170	545	1,767	204	1,971
June	1,593	77	1,670	375	311	686	1,968	388	2,356
July	1,595	18	1,613	375	34	409	1,970	52	2,022
August	1,537	21	1,558	479	98	577	2,016	119	2,135
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

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 11 such dwelling units approved in November 1993.

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														
1990-91	566.3	9.3	575.6	144.3	20.5	164.8	710.6	29.8	740.4	104.9	417.8	769.5	1,232.7	1,614.8
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
1992-93 July-November	349.8	3.1	353.0	79.6	32.8	112.4	429.5	35.9	465.4	45.1	131.4	200.5	605.9	710.9
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
1992— September	70.0	2.0	72.0	19.1	4.3	23.4	89.2	6.2	95.4	9.0	31.6	40.5	129.7	144.8
October	71.6	0.2	71.8	17.4	6.2	23.6	89.0	6.4	95.4	11.5	24.8	26.8	125.1	133.6
November	66.5	0.8	67.3	11.1	7.0	18.0	77.6	7.7	85.3	8.2	22.8	51.3	108.6	144.8
December	68.8	2.5	71.3	11.8	13.7	25.5	80.6	16.1	96.8	9.8	70.4	98.9	160.9	205.5
1993— January	47.4	3.9	51.3	18.9	9.4	28.2	66.3	13.3	79.6	9.7	17.5	57.1	92.4	146.4
February	60.4	1.5	61.9	13.0	11.9	24.8	73.4	13.4	86.7	8.3	108.8	130.8	190.4	225.8
March	74.5	0.3	74.8	17.9	0.6	18.5	92.4	0.9	93.3	12.6	25.4	58.2	129.6	164.0
April	65.7	1.0	66.7	13.7	7.2	20.9	79.4	8.2	87.7	8.8	62.0	88.0	150.2	184.5
May	77.3	1.5	78.8	18.1	3.5	21.6	95.4	5.0	100.4	10.0	13.9	33.3	119.3	143.7
June	78.0	3.8	81.9	15.9	13.3	29.2	93.9	17.1	111.0	9.1	33.6	49.1	136.6	169.2
July	87.3	0.2	87.5	20.4	1.4	21.8	107.7	1.5	109.3	9.1	15.4	22.1	132.2	140.5
August	80.5	0.9	81.4	20.6	6.2	26.8	101.1	7.2	108.3	9.1	28.9	39.7	139.1	157.0
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
WESTERN AUSTRALIA														
1990-91	804.7	21.4	826.2	174.2	34.1	208.3	979.0	55.5	1,034.4	126.2	505.9	894.4	1,610.1	2,055.0
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
1992-93 July-November	476.5	9.7	486.3	91.9	37.9	129.9	568.5	47.7	616.1	54.7	170.4	256.1	793.4	926.9
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
1992— September	96.2	5.4	101.6	20.6	4.8	25.4	116.8	10.2	127.0	11.0	47.0	59.8	174.7	197.7
October	100.4	1.7	102.1	20.9	7.6	28.5	121.3	9.3	130.6	13.5	28.3	32.6	163.0	176.7
November	90.1	1.1	91.3	13.6	7.2	20.8	103.8	8.3	112.1	10.0	31.6	65.1	145.4	187.2
December	92.1	3.5	95.6	13.8	15.9	29.7	105.9	19.5	125.3	12.0	74.3	106.3	191.6	243.6
1993— January	67.5	6.1	73.6	21.7	10.3	32.0	89.1	16.4	105.5	11.2	21.6	69.6	120.6	186.3
February	84.1	1.6	85.7	14.8	16.3	31.1	98.8	17.9	116.8	10.4	112.9	135.9	222.2	263.1
March	108.1	2.4	110.5	23.4	1.5	24.9	131.5	3.9	135.4	14.7	37.2	71.9	182.6	222.1
April	93.7	2.7	96.3	16.4	8.2	24.6	110.1	10.9	121.0	10.7	104.5	136.3	225.1	268.0
May	103.3	2.5	105.8	22.6	10.3	32.9	125.8	12.8	138.6	11.6	22.3	48.0	159.7	198.3
June	113.7	6.3	120.0	23.0	17.7	40.7	136.7	24.0	160.7	11.7	48.1	65.4	196.5	237.8
July	118.6	1.6	120.2	22.9	1.6	24.5	141.5	3.2	144.7	10.5	21.9	33.6	173.9	188.7
August	113.4	2.1	115.5	27.2	7.1	34.3	140.6	9.1	149.8	11.0	47.0	58.9	198.5	219.7
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

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
	1992—							
September	1,372	1,354	1,443	1,385	1,597	1,685	1,783	1,878
October	1,438	1,341	1,448	1,382	1,905	1,682	2,086	1,907
November	1,254	1,315	1,288	1,366	1,568	1,666	1,800	1,920
December	1,262	1,293	1,345	1,347	1,589	1,650	2,045	1,907
1993—								
January	1,290	1,280	1,367	1,331	1,692	1,642	1,909	1,880
February	1,230	1,282	1,256	1,325	1,562	1,644	1,698	1,846
March	1,340	1,303	1,388	1,338	1,724	1,660	1,871	1,826
April	1,413	1,343	1,395	1,374	1,735	1,693	1,828	1,833
May	1,292	1,396	1,325	1,424	1,695	1,742	1,809	1,870
June	1,416	1,451	1,483	1,480	1,758	1,800	2,045	1,931
July	1,565	1,501	1,588	1,534	1,853	1,870	1,865	2,007
August	1,579	1,539	1,623	1,577	1,999	1,942	2,183	2,083
September	1,592	1,565	1,620	1,609	1,999	2,010	2,145	2,158
October	1,568	1,580	1,577	1,632	2,131	2,068	2,197	2,228
November	1,523	1,590	1,642	1,649	2,067	2,114	2,351	2,288

(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							
1990-91	884.2	907.7	204.4	1,112.1	138.4	495.1	875.0	1,681.3	2,125.5
1991-92	1,052.4	1,079.3	256.1	1,335.5	140.3	298.3	491.3	1,645.5	1,967.2
1992-93	1,261.4	1,300.1	341.3	1,641.5	151.7	579.6	872.0	2,207.3	2,665.2
1992—									
June qtr.	288.6	298.3	99.4	397.7	33.7	109.8	151.4	479.5	582.8
Sept. qtr.	320.3	328.0	79.2	407.2	34.9	108.0	154.8	518.2	596.9
Dec. qtr.	314.7	321.8	78.0	399.8	39.5	131.7	200.0	530.8	639.3
1993—									
Mar. qtr.	285.9	297.1	87.0	384.2	40.0	168.5	272.2	549.7	696.4
June qtr.	340.6	353.2	97.1	450.3	37.3	171.4	244.9	608.7	732.5
Sept. qtr.	381.7	389.0	92.3	481.3	37.2	132.8	173.6	631.5	692.2

(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	1991-92	1992-93	July-November		1993		
			1992-93	1991-94	September	October	November
PRIVATE SECTOR							
New houses	931.4	1,138.8	476.5	593.3	118.4	116.4	126.5
New other residential buildings	166.1	227.6	91.9	146.4	32.3	31.4	32.6
<i>Total new residential building</i>	<i>1,097.5</i>	<i>1,366.4</i>	<i>568.5</i>	<i>739.7</i>	<i>150.6</i>	<i>147.8</i>	<i>159.1</i>
Alterations and additions to residential buildings	122.9	134.1	54.5	60.5	12.7	13.9	12.6
Hotels, etc.	14.6	10.7	6.8	11.1	1.0	1.5	3.4
Shops	84.2	212.8	38.1	91.0	40.1	27.6	6.2
Factories	21.0	41.2	17.9	18.6	2.5	4.7	5.3
Offices	40.7	44.4	24.3	25.4	4.4	4.6	6.8
Other business premises	49.6	100.3	24.8	37.4	4.0	6.8	17.7
Educational	27.2	28.8	14.3	14.9	3.1	1.8	5.6
Religious	11.1	4.2	1.7	3.8	1.1	0.1	0.6
Health	22.9	79.8	4.7	13.2	4.0	2.5	3.8
Entertainment and recreational	8.7	24.4	15.0	9.0	1.8	2.2	2.6
Miscellaneous	26.6	44.7	23.0	18.1	4.7	1.2	1.9
<i>Total non-residential building</i>	<i>306.6</i>	<i>591.3</i>	<i>170.4</i>	<i>242.6</i>	<i>66.7</i>	<i>53.0</i>	<i>54.0</i>
<b>Total</b>	<b>1,527.0</b>	<b>2,091.8</b>	<b>793.4</b>	<b>1,042.8</b>	<b>230.1</b>	<b>214.6</b>	<b>225.6</b>
PUBLIC SECTOR							
New houses	23.9	34.9	9.7	11.3	3.0	0.9	3.7
New other residential buildings	96.5	118.1	37.9	18.9	2.4	2.8	5.0
<i>Total new residential building</i>	<i>120.4</i>	<i>153.0</i>	<i>47.7</i>	<i>30.1</i>	<i>5.4</i>	<i>3.7</i>	<i>8.7</i>
Alterations and additions to residential buildings	1.3	3.0	0.2	0.7	—	0.1	0.5
Hotels, etc.	0.2	0.2	0.1	—	—	—	—
Shops	2.2	2.0	0.7	1.6	0.5	—	—
Factories	0.1	4.6	—	0.8	—	—	0.2
Offices	28.7	67.6	43.9	5.3	0.7	1.3	2.2
Other business premises	12.6	12.2	1.1	6.6	0.6	0.9	3.3
Educational	94.5	98.6	16.5	11.3	0.8	2.4	2.7
Religious	—	—	—	—	—	—	—
Health	17.9	22.1	0.9	23.4	14.6	—	—
Entertainment and recreational	24.2	49.7	10.5	6.2	0.5	0.6	1.8
Miscellaneous	18.0	41.3	12.0	3.2	0.5	0.6	0.8
<i>Total non-residential building</i>	<i>198.3</i>	<i>298.3</i>	<i>85.7</i>	<i>58.5</i>	<i>18.1</i>	<i>5.9</i>	<i>10.9</i>
<b>Total</b>	<b>320.0</b>	<b>454.3</b>	<b>133.6</b>	<b>89.3</b>	<b>23.6</b>	<b>9.7</b>	<b>20.0</b>
TOTAL							
New houses	955.3	1,173.7	486.3	604.6	121.4	117.2	130.3
New other residential buildings	262.6	345.7	129.9	165.2	34.7	34.3	37.5
<i>Total new residential building</i>	<i>1,217.9</i>	<i>1,519.4</i>	<i>616.1</i>	<i>769.8</i>	<i>156.1</i>	<i>151.5</i>	<i>167.8</i>
Alterations and additions to residential buildings	124.2	137.1	54.7	61.2	12.7	14.0	13.0
Hotels, etc.	14.8	10.8	6.8	11.1	1.0	1.5	3.4
Shops	86.4	214.8	38.8	92.6	40.6	27.6	6.2
Factories	21.1	45.8	17.9	19.4	2.5	4.7	5.5
Offices	69.4	112.0	68.2	30.7	5.1	5.9	9.0
Other business premises	62.1	112.5	25.9	44.0	4.6	7.6	21.0
Educational	121.6	127.4	30.8	26.3	3.9	4.3	8.3
Religious	11.1	4.2	1.7	3.8	1.1	0.1	0.6
Health	40.8	101.9	5.6	36.5	18.6	2.5	3.8
Entertainment and recreational	33.0	74.0	25.5	15.2	2.2	2.8	4.4
Miscellaneous	44.6	86.0	34.9	21.4	5.2	1.9	2.7
<i>Total non-residential building</i>	<i>504.9</i>	<i>889.6</i>	<i>256.1</i>	<i>301.1</i>	<i>84.8</i>	<i>58.9</i>	<i>64.9</i>
<b>Total</b>	<b>1,847.0</b>	<b>2,546.1</b>	<b>926.9</b>	<b>1,132.1</b>	<b>253.7</b>	<b>224.4</b>	<b>245.7</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)
HOTELS, ETC.												
1993 September	3	0.3	—	—	1	0.7	—	—	—	—	4	1.0
October	5	0.5	1	0.2	1	0.8	—	—	—	7	1.5	
November	2	0.2	3	1.0	—	—	1	2.3	—	6	3.4	
SHOPS												
1993 September	13	1.5	3	1.1	3	2.3	2	4.7	2	31.0	23	40.6
October	22	2.3	5	1.6	2	1.3	1	1.1	1	21.4	31	27.6
November	20	1.7	8	2.4	1	1.0	1	1.1	—	—	30	6.2
FACTORIES												
1993 September	14	1.4	3	1.1	—	—	—	—	—	—	17	2.5
October	14	1.3	6	1.4	1	0.8	1	1.2	—	—	22	4.7
November	16	2.1	10	2.8	1	0.6	—	—	—	—	27	5.5
OFFICES												
1993 September	14	1.1	5	1.4	—	—	1	2.7	—	—	20	5.1
October	19	2.0	5	1.5	4	2.5	—	—	—	—	28	5.9
November	22	2.1	9	2.4	1	0.5	1	4.0	—	—	33	9.0
OTHER BUSINESS PREMISES												
1993 September	18	1.8	5	1.3	—	—	1	1.5	—	—	24	4.6
October	18	1.8	10	3.1	2	1.3	1	1.5	—	—	31	7.6
November	23	2.1	10	2.5	3	1.8	4	6.0	1	8.5	41	21.0
EDUCATIONAL												
1993 September	7	0.9	2	0.6	1	0.6	1	1.8	—	—	11	3.9
October	3	0.4	7	2.0	3	1.9	—	—	—	—	13	4.3
November	11	1.3	6	2.2	3	1.8	2	3.0	—	—	22	8.3
RELIGIOUS												
1993 September	—	—	3	1.1	—	—	—	—	—	—	3	1.1
October	1	0.1	—	—	—	—	—	—	—	—	1	0.1
November	3	0.3	1	0.3	—	—	—	—	—	—	4	0.6
HEALTH												
1993 September	5	0.5	2	0.6	—	—	2	3.7	1	13.8	10	18.6
October	1	0.2	1	0.5	1	0.8	1	1.0	—	—	4	2.5
November	1	0.2	2	0.5	—	—	2	3.2	—	—	5	3.8
ENTERTAINMENT AND RECREATIONAL												
1993 September	6	0.6	3	1.0	1	0.7	—	—	—	—	10	2.2
October	7	0.7	3	0.9	2	1.3	—	—	—	—	12	2.8
November	6	0.6	2	0.7	—	—	2	3.1	—	—	10	4.4
MISCELLANEOUS												
1993 September	9	0.8	2	0.4	2	1.5	1	2.5	—	—	14	5.2
October	9	1.0	1	0.3	1	0.6	—	—	—	—	11	1.9
November	9	0.7	1	0.2	1	0.7	1	1.1	—	—	12	2.7
TOTAL NON-RESIDENTIAL BUILDING												
1993 September	89	9.0	28	8.6	8	5.7	8	16.8	3	44.8	136	84.8
October	99	10.1	39	11.4	17	11.2	4	4.8	1	21.4	160	58.9
November	113	11.3	52	15.0	10	6.3	14	23.7	1	8.5	190	64.9



TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (sa), NOVEMBER 1993

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>										
Claremont (T)	4	—	466	—	—	—	552	—	—	1,018
Cottesloe (T)	1	—	72	2	—	115	237	50	50	474
Mosman Park (T)	9	—	1,880	—	—	—	110	—	—	1,990
Nedlands (C)	15	—	2,540	2	—	230	515	865	865	4,150
Peppermint Grove (S)	—	—	—	—	—	—	115	—	—	115
Perth (C) — Inner	—	—	—	—	—	—	—	775	1,127	1,127
Perth (C) — North	1	—	52	4	—	300	233	—	—	585
Perth (C) — Outer	2	—	260	10	—	600	120	1,136	1,390	2,370
Perth (C) — South	9	—	592	18	4	1,300	70	210	210	2,171
Perth (C) — Wembley-Coastal	5	—	494	—	—	—	661	80	80	1,234
Subiaco (C)	4	—	408	—	—	—	221	52	52	681
Central Metropolitan (SSD)	50	—	6,763	36	4	2,545	2,833	3,168	3,774	15,915
Bassendean (T)	4	—	257	2	—	134	10	—	—	401
Bayswater (C)	11	—	878	2	9	530	264	840	840	2,513
Kalamunda (S)	43	—	3,228	10	—	545	388	906	906	5,067
Mundaring (S)	19	—	1,611	—	—	—	263	858	858	2,732
Swan (S)	120	28	8,925	2	11	823	223	2,633	3,228	13,199
East Metropolitan (SSD)	197	28	14,900	16	20	2,031	1,150	5,237	5,832	23,913
Stirling (C) — Central	29	—	2,959	51	—	2,672	1,013	4,720	5,070	11,714
Stirling (C) — West	5	—	442	63	7	4,314	673	2,545	2,545	7,974
Stirling (C) — South-Eastern	1	—	60	42	—	2,840	238	60	190	3,328
Wanneroo (C)	401	32	30,896	63	—	4,599	934	3,628	3,723	40,152
North Metropolitan (SSD)	436	32	34,356	219	7	14,425	2,859	10,953	11,528	63,168
Cockburn (C)	104	—	7,690	4	10	794	238	280	280	9,002
East Fremantle (T)	2	—	188	—	—	—	65	—	—	253
Fremantle (C) — Inner	—	—	—	2	—	150	—	—	—	150
Fremantle (C) — Remainder	15	—	1,402	3	—	392	380	2,355	3,630	5,803
Kwinana (T)	18	—	938	—	—	—	72	955	2,955	3,965
Melville (C)	35	—	4,113	15	—	1,169	837	1,045	2,407	8,526
Rockingham (C)	110	—	7,069	42	—	1,687	421	2,450	2,760	11,937
South West Metropolitan (SSD)	284	—	21,400	66	10	4,193	2,012	7,085	12,032	39,636
Armadale (C)	49	—	3,023	9	—	360	412	1,480	2,232	6,027
Belmont (C)	11	5	1,005	10	17	1,416	55	1,981	2,221	4,697
Canning (C)	47	—	3,774	28	—	1,602	313	1,161	1,161	6,850
Gosnells (C)	83	1	4,710	5	—	200	326	641	641	5,876
Serpentine-Jarrahdale (S)	23	—	1,741	—	—	—	63	—	—	1,804
South Perth (C)	14	—	1,519	20	12	2,664	410	3,695	3,695	8,287
South East Metropolitan (SSD)	227	6	15,772	72	29	6,242	1,578	8,957	9,949	33,541
<b>Total</b>	<b>1,194</b>	<b>66</b>	<b>93,190</b>	<b>409</b>	<b>70</b>	<b>29,435</b>	<b>10,433</b>	<b>35,400</b>	<b>43,114</b>	<b>176,172</b>
<b>SOUTH WEST STATISTICAL DIVISION</b>										
Boddington (S)	—	—	—	—	—	—	25	—	—	25
Mandurah (C)	89	—	6,292	20	—	1,011	333	1,229	1,354	8,990
Murray (S)	15	—	1,038	—	—	—	20	80	80	1,138
Waroona (S)	10	—	829	—	—	—	11	—	—	840
Dale (SSD)	114	—	8,159	20	—	1,011	389	1,309	1,434	10,993
Bunbury (C)	12	1	999	15	12	1,640	92	2,970	3,303	6,034
Capel (S)	9	—	647	—	—	—	20	100	100	767
Collie (S)	6	—	365	—	—	—	24	—	1,100	1,489
Dardanup (S)	14	—	899	—	—	—	35	—	—	934
Donnybrook-Balingup (S)	7	—	485	—	—	—	—	80	80	565
Harvey (S)	32	—	2,518	10	—	759	90	—	—	3,368
Preston (SSD)	80	1	5,913	25	12	2,400	261	3,150	4,583	13,156

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1993—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)	17	1	1,366	2	—	140	89	70	70	1,665
Busselton (S)	54	—	5,010	12	—	710	87	749	749	6,556
Vasse (SSD)	71	1	6,376	14	—	850	176	819	819	8,221
Boyup Brook (S)	2	—	53	—	—	—	—	—	—	53
Bridgetown-Greenbushes (S)	2	—	72	—	—	—	10	—	—	82
Manjup (S)	12	—	941	—	—	—	38	—	—	980
Nannup (S)	—	—	—	—	—	—	—	—	—	—
Blackwood (SSD)	16	—	1,066	—	—	—	48	—	—	1,114
<b>Total</b>	<b>281</b>	<b>2</b>	<b>21,515</b>	<b>59</b>	<b>12</b>	<b>4,261</b>	<b>874</b>	<b>5,278</b>	<b>6,836</b>	<b>33,485</b>
<b>LOWER GREAT SOUTHERN STATISTICAL DIVISION</b>										
Broomehill (S)	—	—	—	—	—	—	—	—	—	—
Gnowangerup (S)	—	—	—	—	—	—	—	—	—	—
Jerramungup (S)	1	—	25	—	—	—	—	—	—	25
Katanning (S)	4	—	289	—	—	—	50	—	—	339
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	1	—	40	—	—	—	107	—	—	147
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	6	—	354	—	—	—	157	—	—	511
Albany (T)	19	1	1,532	3	—	200	163	334	334	2,229
Albany (S)	12	—	998	—	—	—	178	212	212	1,387
Cranbrook (S)	—	—	—	—	—	—	—	—	—	—
Denmark (S)	7	—	697	—	—	—	32	—	—	709
Plantagenet (S)	5	—	246	—	—	—	45	—	—	291
King (SSD)	43	1	3,473	3	—	200	397	546	546	4,616
<b>Total</b>	<b>49</b>	<b>1</b>	<b>3,827</b>	<b>3</b>	<b>—</b>	<b>200</b>	<b>554</b>	<b>546</b>	<b>546</b>	<b>5,127</b>
<b>UPPER GREAT SOUTHERN STATISTICAL DIVISION</b>										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	—	—	—	—	—	—	—	—	—	—
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	—
Narrogin (T)	1	—	55	—	—	—	—	—	—	55
Narrogin (S)	4	—	752	—	—	—	—	—	—	752
Pingelly (S)	1	—	28	—	—	—	—	—	—	28
Wagin (S)	—	—	—	—	—	—	—	—	—	—
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	1	—	58	—	—	—	12	—	—	70
Williams (S)	1	—	77	—	—	—	—	—	—	77
Hotham (SSD)	8	—	970	—	—	—	12	—	—	982
Corrigin (S)	1	—	75	—	—	—	—	—	—	75
Kondinin (S)	1	—	47	—	—	—	23	—	—	70
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	—	—	—	—	—	—	—	—	—	—
Lakes (SSD)	2	—	122	—	—	—	23	—	—	145
<b>Total</b>	<b>10</b>	<b>—</b>	<b>1,092</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>35</b>	<b>—</b>	<b>—</b>	<b>1,127</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1993—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	—	175	—	—	—	—	—	—	175
Dandaragan (S)	1	—	87	—	—	—	—	—	—	87
Gingin (S)	8	—	424	—	—	—	—	—	—	424
Moora (S)	1	—	56	—	—	—	—	—	—	56
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	—
Moore (SSD)	13	—	742	—	—	—	—	—	—	742
Beverley (S)	—	—	—	—	—	—	—	—	—	—
Cunderdin (S)	—	—	—	—	—	—	—	—	—	—
Dalwallinu (S)	1	—	67	—	—	—	—	—	—	67
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goornalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	—	—	—	—	—	—
Northam (T)	2	—	198	—	—	—	10	—	273	481
Northam (S)	5	—	184	—	—	—	—	—	—	184
Quairading (S)	—	—	—	—	—	—	—	—	—	—
Tammin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	16	—	1,033	—	—	—	120	—	177	1,330
Wongan-Ballidu (S)	1	—	78	—	—	—	—	—	—	78
Wyalkatchem (S)	—	—	—	—	—	—	—	—	—	—
York (S)	5	—	218	—	—	—	65	—	—	283
Avon (SSD)	30	—	1,778	—	—	—	195	—	450	2,424
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Kellerberrin (S)	—	—	—	—	—	—	—	—	—	—
Merredin (S)	1	—	70	—	—	—	39	—	465	574
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mulkinbudin (S)	—	—	—	—	—	—	—	—	—	—
Narembeen (S)	—	—	—	—	—	—	—	—	—	—
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	—	—	—	—	—	—	—	—	—	—
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgarn (S)	—	—	—	—	—	—	—	—	—	—
Campion (SSD)	1	—	70	—	—	—	39	—	465	574
<b>Total</b>	<b>44</b>	<b>—</b>	<b>2,591</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>234</b>	<b>—</b>	<b>916</b>	<b>3,740</b>
<b>SOUTH EASTERN STATISTICAL DIVISION</b>										
Coolgardie (S)	2	—	144	—	—	—	22	—	—	166
Kalgoorlie/Boulder (C)	16	—	1,227	20	—	1,306	147	547	1,047	3,728
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	—	—	—	—	—	—
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	18	—	1,371	20	—	1,306	169	547	1,047	3,894
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	17	—	1,158	4	—	218	15	—	—	1,391
Ravensthorpe (S)	1	—	107	—	—	—	—	87	87	194
Johnston (SSD)	18	—	1,265	4	—	218	15	87	87	1,585
<b>Total</b>	<b>36</b>	<b>—</b>	<b>2,637</b>	<b>24</b>	<b>—</b>	<b>1,524</b>	<b>184</b>	<b>634</b>	<b>1,134</b>	<b>5,479</b>

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), NOVEMBER 1993—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>										
Camarvon (S)	3	—	236	—	—	—	—	80	80	316
Exmouth (S)	—	—	—	—	—	—	—	—	195	195
Shark Bay (S)	3	—	249	—	—	—	38	325	325	612
Upper Gascoyne (S) Gascoyne (SSD)	6	—	486	—	—	—	38	405	600	1,124
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meekatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	—	—	—
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	1	—	35	—	—	—	—	—	—	35
Coorow (S)	—	—	—	—	—	—	—	—	—	—
Geraldton (C)	15	—	1,298	—	—	—	49	639	639	1,986
Greenough (S)	20	—	1,538	—	—	—	120	177	177	1,835
Irwin (S)	1	—	90	—	—	—	—	—	—	90
Mingenew (S)	—	—	—	—	—	—	—	—	—	—
Morawa (S)	—	—	—	—	—	—	—	258	258	258
Mullewa (S)	—	—	—	—	—	—	—	—	—	—
Northampton (S)	3	—	304	—	—	—	—	—	—	304
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	—	—	—	—	—	—	—	—	—	—
Greenough River (SSD)	40	—	3,266	—	—	—	168	1,074	1,074	4,508
<b>Total</b>	<b>46</b>	<b>—</b>	<b>3,751</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>206</b>	<b>1,479</b>	<b>1,674</b>	<b>5,632</b>
<b>PILBARA STATISTICAL DIVISION</b>										
East Pilbara (S)	—	—	—	—	—	—	—	—	—	—
Port Hedland (T)	6	—	669	4	—	400	461	2,155	2,155	3,685
De Grey (SSD)	6	—	669	4	—	400	461	2,155	2,155	3,685
Ashburton (S)	1	—	55	—	—	—	—	8,500	8,500	8,555
Roeboome (S)	2	—	291	—	—	—	39	—	—	331
Fortescue (SSD)	3	—	346	—	—	—	39	8,500	8,500	8,886
<b>Total</b>	<b>9</b>	<b>—</b>	<b>1,015</b>	<b>4</b>	<b>—</b>	<b>400</b>	<b>501</b>	<b>10,655</b>	<b>10,655</b>	<b>12,571</b>
<b>KIMBERLEY STATISTICAL DIVISION</b>										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	1	—	55	—	—	—	—	—	—	55
Ord (SSD)	1	—	55	—	—	—	—	—	—	55
Broome (S)	7	—	582	32	—	1,710	10	—	—	2,302
Derby-West Kimberley (S)	—	—	—	—	—	—	—	—	—	—
Fitzroy (SSD)	7	—	582	32	—	1,710	10	—	—	2,302
<b>Total</b>	<b>8</b>	<b>—</b>	<b>637</b>	<b>32</b>	<b>—</b>	<b>1,710</b>	<b>10</b>	<b>—</b>	<b>—</b>	<b>2,357</b>
<b>WESTERN AUSTRALIA</b>										
Western Australia	1,677	69	130,253	531	82	37,530	13,031	53,993	64,875	245,690

(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 1993

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	1,238	1	6	10	5	1,260	257,443	204	362
South-West	224	21	16	11	11	283	59,567	210	361
Lower Great Southern	10	24	9	6	1	50	10,242	205	374
Upper Great Southern	5	1	4	—	—	10	2,566	257	425
Midlands	11	3	16	7	7	44	7,308	166	354
South-Eastern	12	14	7	2	1	36	6,512	181	405
Central	37	2	4	1	2	46	7,820	178	469
Pilbara	6	2	1	—	—	9	1,941	243	502
Kimberley	—	—	—	—	8	8	1,769	221	360
<b>Western Australia</b>	<b>1,543</b>	<b>68</b>	<b>63</b>	<b>37</b>	<b>35</b>	<b>1,746</b>	<b>355,168</b>	<b>204</b>	<b>364</b>

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

TABLE 9. NEW DWELLING UNITS APPROVED, BY TYPE AND STATISTICAL DIVISION  
NOVEMBER 1993

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	1,260	411	68	479	—	—	—	479	1,739	
South West	283	71	—	71	—	—	—	71	354	
Lower Great Southern	50	3	—	3	—	—	—	3	53	
Upper Great Southern	10	—	—	—	—	—	—	—	10	
Midlands	44	—	—	—	—	—	—	—	44	
South Eastern	36	20	4	24	—	—	—	24	60	
Central	46	—	—	—	—	—	—	—	46	
Pilbara	9	4	—	4	—	—	—	4	13	
Kimberley	8	10	22	32	—	—	—	32	40	
<b>Western Australia</b>	<b>1,746</b>	<b>519</b>	<b>94</b>	<b>613</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>613</b>	<b>2,359</b>	
VALUE (\$'000)										
Perth	93,190	23,661	5,774	29,435	—	—	—	29,435	122,625	
South West	21,515	4,261	—	4,261	—	—	—	4,261	25,775	
Lower Great Southern	3,827	200	—	200	—	—	—	200	4,027	
Upper Great Southern	1,092	—	—	—	—	—	—	—	1,092	
Midlands	2,591	—	—	—	—	—	—	—	2,591	
South Eastern	2,637	1,284	240	1,524	—	—	—	1,524	4,161	
Central	3,751	—	—	—	—	—	—	—	3,751	
Pilbara	1,015	400	—	400	—	—	—	400	1,415	
Kimberley	637	650	1,060	1,710	—	—	—	1,710	2,347	
<b>Western Australia</b>	<b>130,253</b>	<b>30,456</b>	<b>7,074</b>	<b>37,530</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>37,530</b>	<b>167,783</b>	

## EXPLANATORY NOTES

### Introduction

1. 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:

- (a) 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.

#### Unpublished data and related publications

31. 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.

32. 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

33. 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

34. 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.

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

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