

BUILDING APPROVALS

WESTERN AUSTRALIA

May 1994

MAIN FEATURES

The number of houses approved in May 1994 increased by 26.1 per cent when compared with April 1994 and increased by 33.2 per cent when compared with May 1993.

The number of total dwelling units approved in May 1994 increased by 27.2 per cent when compared with April 1994 and increased by 35.2 per cent when compared with May 1993.

The provisional trend for new private dwelling approvals rose 0.7 per cent in May 1994, following a 0.5 per cent rise in April 1994. This trend will continue to grow unless there is a fall of more than 4.1 per cent in the June seasonally adjusted figure. The historical average monthly movement of this series regardless of sign is 7.1 per cent.

Comparisons with previous periods are:

Month to month

	<i>May 1994</i>	<i>Apr. 1994</i>	<i>% change</i>	<i>May 1993</i>	<i>% change</i>
Houses	1,900	1,507	+26.1	1,426	+33.2
Total dwelling units	2,664	2,094	+27.2	1,971	+35.2

Three month moving average

	<i>May 1994</i>	<i>Apr. 1994</i>	<i>% change</i>	<i>May 1993</i>	<i>% change</i>
Houses	1,713	1,588	+7.9	1,412	+21.3
Total dwelling units	2,393	2,205	+8.5	1,899	+26.0

Five months January to May

	<i>1994</i>	<i>1993</i>	<i>% change</i>	<i>1992</i>	<i>% change</i>
Houses	7,767	6,489	+19.7	5,751	+35.1
Total dwelling units	10,823	8,938	+21.1	8,113	+33.4

PHONE INQUIRIES

Contact Ms Diane Braskic on (09) 323 5129 for further information about statistics in this publication and the availability of related unpublished statistics.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) 323 5140.

MAIL INQUIRIES

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

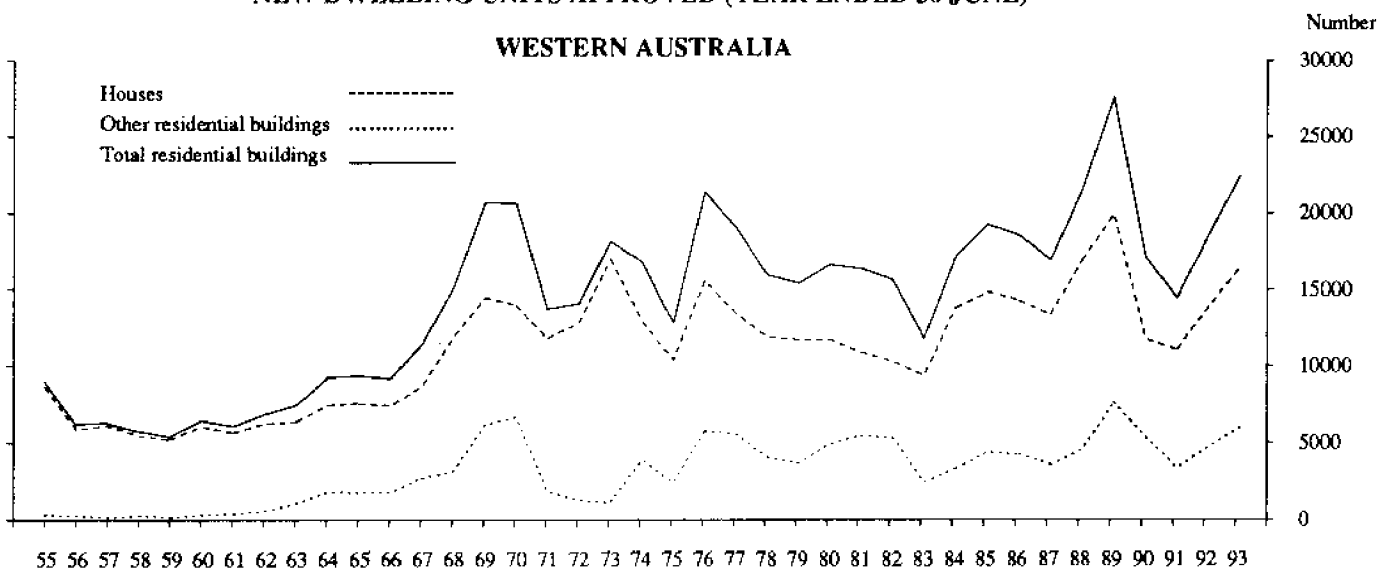
ELECTRONIC SERVICES

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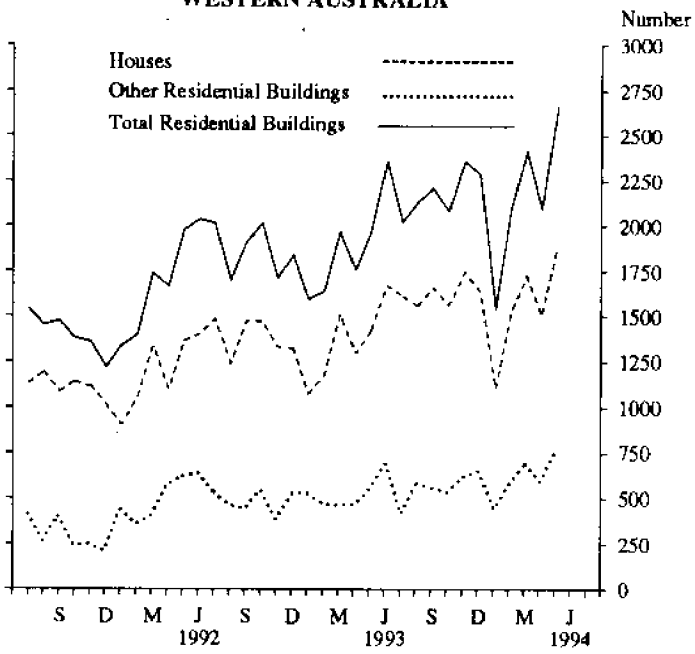
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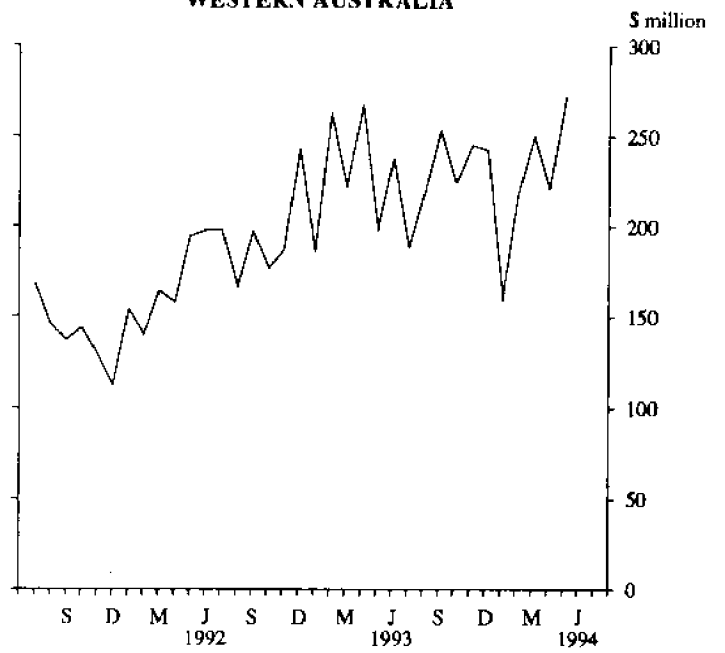
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NEW DWELLING UNITS APPROVED (YEAR ENDED 30 JUNE)**WESTERN AUSTRALIA**

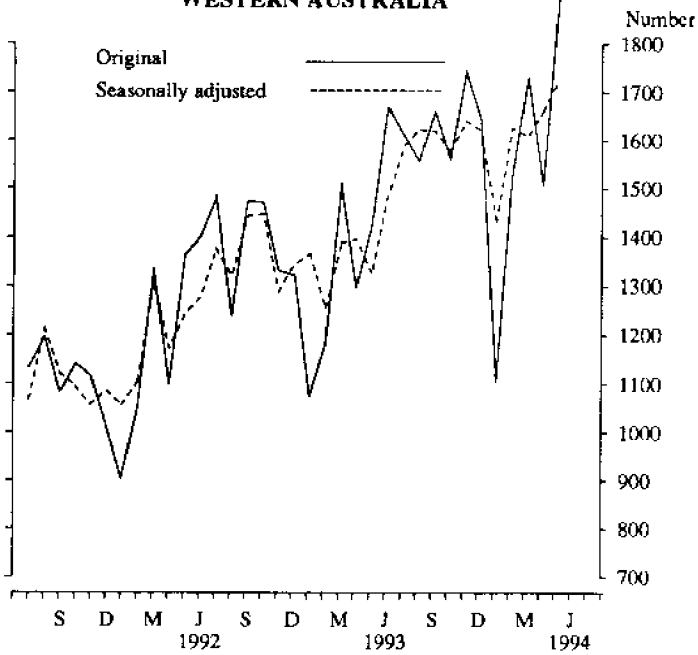
**NEW DWELLING UNITS APPROVED
WESTERN AUSTRALIA**



**TOTAL VALUE OF BUILDING APPROVED
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED
WESTERN AUSTRALIA**

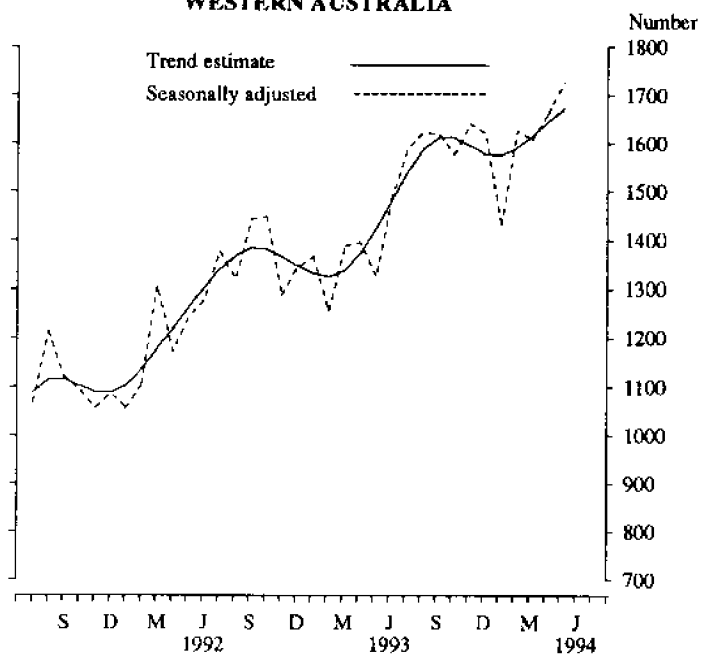


TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDING

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-May	10,512	229	10,741	3,179	1,295	4,474	13,691	1,524	15,215
1993-94 July-May	12,582	240	12,822	4,459	768	5,227	17,041	1,008	18,049
1993—									
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
December	1,196	47	1,243	429	104	533	1,625	151	1,776
1994—									
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
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-May	14,443	372	14,815	3,706	1,602	5,308	18,149	1,974	20,123
1993-94 July-May	17,187	365	17,552	5,384	990	6,374	22,571	1,355	23,926
1993—									
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
December	1,585	60	1,645	518	126	644	2,103	186	2,289
1994—									
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

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 3 such dwelling units approved in May 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					
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-May	744.0	13.8	757.9	172.9	79.0	252.0	917.0	92.8	1,009.8	104.2	429.6	666.8	1,448.7	1,780.9
1993-94														
July-May	963.0	14.4	977.4	283.9	48.6	332.6	1,246.9	63.0	1,310.0	112.8	354.5	451.0	1,713.8	1,873.8
1993—														
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
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
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-May	1,025.1	28.6	1,053.7	204.6	100.5	305.0	1,229.7	129.1	1,358.8	125.3	543.2	824.2	1,895.3	2,308.3
1993-94														
July-May	1,323.6	26.9	1,350.5	341.8	63.7	405.6	1,665.5	90.6	1,756.1	138.0	467.1	603.3	2,269.5	2,497.3
1993—														
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
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

**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
	1993—							
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	1,452	1,483	1,481	1,758	1,799	2,045	1,925
July	1,565	1,506	1,588	1,541	1,853	1,872	1,865	2,008
August	1,579	1,547	1,623	1,588	1,999	1,949	2,183	2,101
September	1,592	1,567	1,620	1,612	1,999	2,019	2,145	2,183
October	1,568	1,567	1,577	1,613	2,131	2,069	2,197	2,241
November r	1,523	1,554	1,642	1,596	2,067	2,096	2,351	2,263
December r	1,574	1,544	1,622	1,578	2,171	2,102	2,551	2,254
1994—								
January r	1,460	1,550	1,431	1,577	2,000	2,104	1,881	2,233
February r	1,610	1,569	1,627	1,592	2,164	2,110	2,174	2,219
March r	1,563	1,594	1,608	1,616	2,044	2,120	2,334	2,221
April r	1,678	1,620	1,662	1,646	2,209	2,131	2,163	2,235
May	1,643	1,645	1,727	1,673	2,135	2,145	2,367	2,249

(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	341.2	1,641.4	151.7	579.6	872.0	2,207.3	2,665.1
1992—									
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	97.0	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	109.6	512.3	41.8	129.9	186.8	657.2	740.9
1994—									
Mar. qtr.	367.4	371.3	112.9	484.3	41.0	103.4	126.9	606.4	652.1

(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	July-May				1994		
	1991-92	1992-93	1992-93	1993-94	March	April	May
PRIVATE SECTOR							
New houses	931.4	1,138.8	1,025.1	1,323.6	135.3	119.6	147.0
New other residential buildings	166.1	227.6	204.6	341.8	43.5	32.0	34.5
<i>Total new residential building</i>	<i>1,097.5</i>	<i>1,366.4</i>	<i>1,229.7</i>	<i>1,665.5</i>	<i>178.7</i>	<i>151.6</i>	<i>181.5</i>
Alterations and additions to residential buildings	122.9	134.1	122.3	137.0	14.8	13.4	13.4
Hotels, etc.	14.6	10.7	9.5	23.7	1.9	5.7	0.3
Shops	84.2	212.8	200.3	140.7	12.4	8.8	14.9
Factories	21.0	41.2	39.6	49.1	5.6	8.9	5.1
Offices	40.7	44.4	42.0	46.3	2.6	4.2	4.2
Other business premises	49.6	100.3	95.8	80.7	8.7	4.4	8.5
Educational	27.2	28.8	26.9	39.4	4.3	0.8	11.0
Religious	11.1	4.2	4.1	7.4	0.3	1.1	0.5
Health	22.9	79.8	65.2	28.0	2.4	0.1	1.0
Entertainment and recreational	8.7	24.4	24.0	25.5	0.9	0.5	10.7
Miscellaneous	26.6	44.7	35.8	26.2	2.4	0.9	1.3
<i>Total non-residential building</i>	<i>306.6</i>	<i>591.3</i>	<i>543.2</i>	<i>467.1</i>	<i>41.5</i>	<i>35.5</i>	<i>57.4</i>
Total	1,527.0	2,091.8	1,895.3	2,249.5	235.0	200.4	252.3
PUBLIC SECTOR							
New houses	23.9	34.9	28.6	26.9	0.8	3.2	4.9
New other residential buildings	96.5	118.1	100.5	63.7	6.7	6.0	13.9
<i>Total new residential building</i>	<i>120.4</i>	<i>153.0</i>	<i>129.1</i>	<i>90.6</i>	<i>7.5</i>	<i>9.2</i>	<i>18.8</i>
Alterations and additions to residential buildings	1.3	3.0	3.0	1.0	—	0.2	—
Hotels, etc.	0.2	0.2	0.2	—	—	—	—
Shops	2.2	2.0	2.0	1.8	0.1	0.1	—
Factories	0.1	4.6	4.6	1.3	—	0.1	0.4
Offices	28.7	67.6	67.0	26.6	0.2	—	—
Other business premises	12.6	12.2	12.2	17.4	0.7	1.9	—
Educational	94.5	98.6	89.3	46.3	5.7	7.9	—
Religious	—	—	—	—	—	—	—
Health	17.9	22.1	20.7	23.4	—	—	—
Entertainment and recreational	24.2	49.7	44.2	13.6	0.8	0.6	0.8
Miscellaneous	18.0	41.3	40.7	5.7	0.7	0.6	0.1
<i>Total non-residential building</i>	<i>198.3</i>	<i>298.3</i>	<i>280.9</i>	<i>136.2</i>	<i>8.2</i>	<i>11.1</i>	<i>1.3</i>
Total	320.0	454.3	413.0	227.8	15.7	20.5	20.1
TOTAL							
New houses	955.3	1,173.7	1,053.7	1,350.5	136.1	122.8	151.9
New other residential buildings	262.6	345.7	305.0	405.6	50.2	38.0	48.4
<i>Total new residential building</i>	<i>1,217.9</i>	<i>1,519.4</i>	<i>1,358.8</i>	<i>1,756.1</i>	<i>186.3</i>	<i>160.8</i>	<i>200.4</i>
Alterations and additions to residential buildings	124.2	137.1	125.3	138.0	14.8	13.5	13.4
Hotels, etc.	14.8	10.8	9.7	23.7	1.9	5.7	0.3
Shops	86.4	214.8	202.2	142.5	12.4	8.9	14.9
Factories	21.1	45.8	44.3	50.4	5.6	9.0	5.5
Offices	69.4	112.0	109.0	73.0	2.8	4.2	4.2
Other business premises	62.1	112.5	108.0	98.1	9.4	6.3	8.5
Educational	121.6	127.4	116.2	85.7	10.0	8.7	11.0
Religious	11.1	4.2	4.1	7.4	0.3	1.1	0.5
Health	40.8	101.9	85.9	51.4	2.4	0.1	1.0
Entertainment and recreational	33.0	74.0	68.3	39.2	1.8	1.1	11.5
Miscellaneous	44.6	86.0	76.5	31.9	3.1	1.5	1.3
<i>Total non-residential building</i>	<i>504.9</i>	<i>889.6</i>	<i>824.2</i>	<i>603.3</i>	<i>49.7</i>	<i>46.6</i>	<i>58.7</i>
Total	1,847.0	2,546.1	2,308.3	2,497.3	250.7	220.9	272.4

**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.												
1994 March	4	0.4	2	0.5	—	—	1	1.0	—	—	7	1.9
April	2	0.2	4	1.3	1	1.0	1	3.3	—	—	8	5.7
May	2	0.3	—	—	—	—	—	—	—	—	2	0.3
SHOPS												
1994 March	13	1.2	4	1.2	4	2.9	3	7.2	—	—	24	12.4
April	13	1.4	12	3.8	2	1.5	2	2.2	—	—	29	8.9
May	19	2.2	11	3.7	1	0.6	3	8.4	—	—	34	14.9
FACTORIES												
1994 March	11	1.4	10	2.8	1	0.5	1	1.0	—	—	23	5.6
April	18	2.3	7	2.2	2	1.5	1	2.9	—	—	28	9.0
May	11	1.1	8	2.3	1	0.9	1	1.2	—	—	21	5.5
OFFICES												
1994 March	18	1.7	2	0.5	1	0.7	—	—	—	—	21	2.8
April	15	1.5	4	0.9	—	—	1	1.8	—	—	20	4.2
May	18	1.5	2	0.8	3	2.0	—	—	—	—	23	4.2
OTHER BUSINESS PREMISES												
1994 March	13	1.1	8	2.2	7	4.3	1	1.7	—	—	29	9.4
April	13	1.1	6	1.8	—	—	2	3.4	—	—	21	6.3
May	26	3.0	5	1.5	3	1.9	1	2.0	—	—	35	8.5
EDUCATIONAL												
1994 March	1	0.1	4	1.3	—	—	4	8.7	—	—	9	10.0
April	1	0.2	2	0.7	—	—	—	—	1	7.9	4	8.7
May	—	—	1	0.2	—	—	2	4.5	1	6.3	4	11.0
RELIGIOUS												
1994 March	—	—	1	0.3	—	—	—	—	—	—	1	0.3
April	2	0.3	—	—	1	0.9	—	—	—	—	3	1.1
May	—	—	—	—	1	0.5	—	—	—	—	1	0.5
HEALTH												
1994 March	4	0.5	—	—	1	0.7	1	1.2	—	—	6	2.4
April	1	0.1	—	—	—	—	—	—	—	—	1	0.1
May	1	0.1	3	0.9	—	—	—	—	—	—	4	1.0
ENTERTAINMENT AND RECREATIONAL												
1994 March	3	0.3	3	1.0	1	0.5	—	—	—	—	7	1.8
April	—	—	—	—	2	1.1	—	—	—	—	2	1.1
May	2	0.2	1	0.2	1	0.6	—	—	1	10.5	5	11.5
MISCELLANEOUS												
1994 March	9	0.8	2	0.7	1	0.6	1	1.0	—	—	13	3.1
April	4	0.4	3	1.1	—	—	—	—	—	—	7	1.5
May	7	0.9	1	0.4	—	—	—	—	—	—	8	1.3
TOTAL NON-RESIDENTIAL BUILDING												
1994 March	76	7.4	36	10.3	16	10.1	12	21.9	—	—	140	49.7
April	69	7.4	38	11.7	8	5.9	7	13.6	1	7.9	123	46.6
May	86	9.3	32	10.0	10	6.5	7	16.1	2	16.8	137	58.7

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

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)				
PERTH STATISTICAL DIVISION										
Claremont (T)	—	—	—	—	—	—	—	—	—	—
Cottesloe (T)	5	—	1,137	1	—	27	661	—	—	1,825
Moosman Park (T)	6	—	843	—	—	—	45	—	—	888
Nedlands (C)	17	—	2,894	4	—	467	785	6,300	6,300	10,446
Peppermint Grove (S)	1	—	600	—	—	—	590	67	67	1,257
Perth (C) — Inner	—	—	—	52	—	3,600	—	4,738	4,738	8,338
Perth (C) — North	—	—	—	3	16	1,260	179	500	1,085	2,524
Perth (C) — Outer	—	—	—	65	—	3,900	201	690	690	4,791
Perth (C) — South	13	2	935	18	14	2,026	78	—	—	3,039
Perth (C) — Wembley-Coastal	5	—	997	—	—	—	154	—	—	1,151
Subiaco (C)	2	—	295	—	—	—	181	11,037	11,037	11,513
Central Metropolitan (SSD)	49	2	7,701	143	30	11,280	2,874	23,332	23,917	45,772
Bassendean (T)	3	—	178	6	—	302	111	—	—	591
Bayswater (C)	6	—	534	10	16	1,455	252	623	833	3,073
Kalamunda (S)	30	—	2,347	—	2	115	512	832	832	3,806
Mundaring (S)	23	—	2,116	2	—	125	315	—	—	2,556
Swan (S)	156	—	10,198	—	10	585	337	1,260	1,260	12,380
East Metropolitan (SSD)	218	—	15,374	18	28	2,582	1,526	2,714	2,924	22,407
Stirling (C) — Central	48	—	4,442	92	—	5,360	281	4,965	4,965	15,048
Stirling (C) — West	17	—	1,595	50	—	3,070	508	—	—	5,173
Stirling (C) — South-Eastern	—	—	—	24	8	2,105	334	—	—	2,439
Wanneroo (C)	431	2	32,909	25	—	1,319	871	3,623	3,623	38,722
North Metropolitan (SSD)	496	2	38,946	191	8	11,855	1,993	8,587	8,587	61,381
Cockburn (C)	116	—	10,209	6	2	585	318	1,038	1,358	12,470
East Fremantle (T)	—	—	—	—	—	—	90	—	—	90
Fremantle (C) — Inner	—	—	—	—	—	—	—	—	—	—
Fremantle (C) — Remainder	8	3	774	11	29	2,866	161	1,570	1,570	5,371
Kwinana (T)	22	—	1,236	—	—	—	26	530	530	1,792
Melville (C)	40	—	5,196	36	2	3,113	1,252	1,267	1,267	10,828
Rockingham (C)	147	12	10,548	11	21	1,651	179	1,097	1,097	13,475
South West Metropolitan (SSD)	333	15	27,962	64	54	8,215	2,027	5,502	5,822	44,026
Armadale (C)	54	1	3,408	6	11	840	237	500	500	4,985
Belmont (C)	23	25	2,677	2	—	135	60	600	600	3,472
Canning (C)	46	—	4,216	14	15	1,939	623	7,322	7,322	14,100
Gosnells (C)	72	4	4,325	20	—	765	332	480	480	5,902
Serpentine-Jarrahdale (S)	14	2	1,435	—	—	—	42	562	562	2,039
South Perth (C)	16	1	1,754	15	6	1,572	855	80	80	4,261
South East Metropolitan (SSD)	225	33	17,815	57	32	5,250	2,150	9,544	9,544	34,759
Total	1,321	52	107,798	473	152	39,182	10,569	49,679	50,794	208,344
SOUTH WEST STATISTICAL DIVISION										
Boddington (S)	4	—	248	—	—	—	—	—	—	248
Mandurah (C)	118	—	9,565	29	18	3,115	153	2,830	2,830	15,662
Murray (S)	23	—	1,743	—	2	168	25	595	595	2,531
Waroona (S)	3	—	273	—	—	—	—	—	—	273
Dale (SSD)	148	—	11,828	29	20	3,283	178	3,425	3,425	18,714
Bunbury (C)	10	9	1,389	—	—	—	118	540	540	2,047
Capel (S)	9	—	620	—	—	—	—	—	—	620
Collie (S)	1	—	86	—	—	—	—	—	—	86
Dardanup (S)	7	—	561	4	—	220	30	—	—	811
Donnybrook-Balingup (S)	2	—	146	—	—	—	15	—	—	161
Harvey (S)	26	1	2,362	—	—	—	125	70	70	2,557
Preston (SSD)	55	10	5,165	4	—	220	288	610	610	6,283

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (s), MAY 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)				
SOUTH WEST STATISTICAL DIVISION (continued)										
Augusta-Margaret River (S)	15	—	1,107	2	—	230	160	190	190	1,686
Busselton (S)	41	—	3,406	—	20	1,107	255	569	569	5,337
Vasse (SSD)	56	—	4,513	2	20	1,337	415	759	759	7,023
Boyup Brook (S)	3	—	111	—	—	—	—	—	—	111
Bridgetown-Greenbushes (S)	2	—	119	—	—	—	36	—	—	155
Manjimup (S)	9	—	633	—	—	—	35	—	—	668
Namup (S)	—	—	—	—	—	—	—	—	—	—
Blackwood (SSD)	14	—	863	—	—	—	71	—	—	933
Total	273	10	22,368	35	40	4,840	951	4,794	4,794	32,953
LOWER GREAT SOUTHERN STATISTICAL DIVISION										
Broomehill (S)	—	—	—	—	—	—	—	—	—	—
Gnowangerup (S)	—	—	—	—	—	—	—	—	—	—
Jerramungup (S)	—	—	—	—	—	—	—	—	—	—
Katanning (S)	3	—	231	—	—	—	19	—	—	250
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	—	—	—	—	—	—	—	—	—	—
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	1	—	14	—	—	—	—	—	—	14
Pallinup (SSD)	4	—	245	—	—	—	19	—	—	264
Albany (T)	14	—	1,450	—	6	348	145	340	340	2,283
Albany (S)	14	—	1,050	—	—	—	80	175	175	1,305
Cranbrook (S)	—	—	—	—	—	—	—	—	—	—
Denmark (S)	15	—	879	—	—	—	25	160	160	1,064
Plantagenet (S)	7	—	372	—	10	598	16	—	—	986
King (SSD)	50	—	3,751	—	16	946	266	675	675	5,638
Total	54	—	3,997	—	16	946	285	675	675	5,902
UPPER GREAT SOUTHERN STATISTICAL DIVISION										
Brookton (S)	1	—	120	—	—	—	—	58	58	178
Cuballing (S)	—	—	—	—	—	—	—	—	—	—
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	—
Narrogin (T)	3	—	194	—	—	—	18	—	—	212
Narrogin (S)	—	—	—	—	—	—	—	—	—	—
Pingelly (S)	—	—	—	—	—	—	—	—	—	—
Wagin (S)	—	—	—	—	—	—	—	—	—	—
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	1	—	110	—	—	—	—	—	—	110
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	—	—	—	—	—	—	50	—	—	50
Hotham (SSD)	5	—	424	—	—	—	68	58	58	550
Corrigin (S)	1	—	147	—	—	—	—	—	—	147
Kondinin (S)	—	—	—	—	—	—	—	—	—	—
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	1	—	50	—	—	—	—	100	100	150
Lakes (SSD)	2	—	197	—	—	—	—	100	100	297
Total	7	—	622	—	—	—	68	158	158	847

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), MAY 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)				
MIDLANDS STATISTICAL DIVISION										
Chittering (S)	3	—	186	—	—	—	35	—	—	221
Dandaragan (S)	2	—	179	—	—	—	25	—	—	204
Gingin (S)	9	—	654	—	—	—	28	80	80	762
Moora (S)	—	—	—	—	—	—	—	—	—	—
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	—
Moore (SSD)	14	—	1,018	—	—	—	88	80	80	1,187
Beverley (S)	—	—	—	—	—	—	—	—	—	—
Cunderdin (S)	1	—	124	—	—	—	—	—	—	124
Dalwallinu (S)	—	—	—	—	—	—	—	—	—	—
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goomalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	—	—	—	—	—	—
Northam (T)	6	—	425	—	—	—	—	—	—	425
Northam (S)	6	—	288	—	—	—	25	—	—	313
Quairading (S)	—	—	—	—	—	—	—	—	—	—
Tammin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	11	—	897	—	—	—	23	—	—	920
Wongan-Ballidu (S)	2	—	220	—	—	—	—	—	—	220
Wyalkatchem (S)	—	—	—	—	—	—	—	—	—	—
York (S)	2	1	111	—	—	—	—	—	—	111
Avon (SSD)	28	1	2,064	—	—	—	48	—	—	2,112
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Kellerberrin (S)	—	—	—	—	—	—	—	—	—	—
Merredin (S)	2	—	217	—	—	—	—	—	—	217
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mukinbudin (S)	—	—	—	—	—	—	—	—	—	—
Narembeen (S)	—	—	—	—	—	—	—	—	—	—
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	—	—	—	—	—	—	—	—	—	—
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgarn (S)	4	—	196	—	—	—	—	—	—	196
Campion (SSD)	6	—	413	—	—	—	—	—	—	413
Total	48	1	3,496	—	—	—	136	80	80	3,712
SOUTH EASTERN STATISTICAL DIVISION										
Coolgardie (S)	9	—	913	—	—	—	39	—	—	952
Kalgoorlie/Boulder (C)	29	2	3,233	17	6	1,314	358	1,175	1,325	6,230
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	—	—	—	—	—	—
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	38	2	4,146	17	6	1,314	397	1,175	1,325	7,183
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	18	—	1,706	5	—	381	190	—	—	2,276
Ravensthorpe (S)	2	—	120	—	—	—	—	—	—	120
Johnston (SSD)	20	—	1,826	5	—	381	190	—	—	2,396
Total	58	2	5,972	22	6	1,695	587	1,175	1,325	9,579

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), MAY 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)				
CENTRAL STATISTICAL DIVISION										
Carnarvon (S)	2	—	448	—	—	—	—	90	90	538
Exmouth (S)	—	—	—	—	—	—	34	—	—	34
Shark Bay (S)	—	—	—	—	—	—	—	—	—	—
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	2	—	448	—	—	—	34	90	90	572
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meekatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Nganyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	—	—	—
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	—	—	—	—
Coorow (S)	—	—	—	—	—	—	—	—	—	—
Geraldton (C)	3	1	323	3	—	280	308	80	80	991
Greenough (S)	22	—	2,168	—	—	—	132	—	—	2,300
Irwin (S)	6	—	498	2	—	190	12	420	420	1,120
Mingenew (S)	1	—	15	—	—	—	—	—	—	15
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	—	—	—	—	—	—	—	—	—
Northampton (S)	2	1	373	—	—	—	—	—	—	373
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	—	—	—	—	—	—	—	—	—	—
Greenough River (SSD)	34	2	3,377	5	—	470	452	500	500	4,799
Total	36	2	3,825	5	—	470	486	590	590	5,371
PILBARA STATISTICAL DIVISION										
East Pilbara (S)	1	—	140	—	—	—	13	—	—	153
Port Hedland (T)	3	—	265	—	—	—	58	80	80	403
De Grey (SSD)	4	—	405	—	—	—	71	80	80	555
Ashburton (S)	—	—	—	—	—	—	—	120	120	120
Roebourne (S)	2	—	333	—	7	558	139	—	—	1,029
Fortescue (SSD)	2	—	333	—	7	558	139	120	120	1,149
Total	6	—	737	—	7	558	209	200	200	1,705
KIMBERLEY STATISTICAL DIVISION										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	1	—	79	2	—	180	—	80	80	339
Ord (SSD)	1	—	79	2	—	180	—	80	80	339
Broome (S)	20	1	1,892	4	—	360	42	—	—	2,294
Derby-West Kimberley (S)	4	4	1,125	—	2	214	26	—	—	1,364
Fitzroy (SSD)	24	5	3,017	4	2	574	68	—	—	3,658
Total	25	5	3,096	6	2	754	68	80	80	3,997
WESTERN AUSTRALIA										
Western Australia	1,828	72	151,911	541	223	48,444	13,359	57,431	58,694	272,410

(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
MAY 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	1,347	1	7	12	6	1,373	296,460	216	364
South-West	223	16	21	15	8	283	56,940	201	393
Lower Great Southern	15	20	7	8	4	54	11,051	205	362
Upper Great Southern	4	1	1	—	1	7	1,773	253	351
Midlands	20	1	18	5	5	49	10,136	207	345
South-Eastern	11	32	6	—	11	60	12,537	209	476
Central	35	—	2	—	1	38	8,247	217	464
Pilbara	3	2	—	—	1	6	1,143	191	645
Kimberley	4	2	4	1	19	30	5,351	178	579
Western Australia	1,662	75	66	41	56	1,900	403,638	212	376

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

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

Statistical division	Houses	Other residential building						Total	Total residential building	
		Semi-detached, row or terrace houses, townhouses, etc. of			Flats, units or apartments in a building of					
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys			
										Total
NUMBER OF DWELLING UNITS										
Perth	1,373	480	93	573	—	52	—	52	625	1,998
South West	283	75	—	75	—	—	—	—	75	358
Lower Great Southern	54	16	—	16	—	—	—	—	16	70
Upper Great Southern	7	—	—	—	—	—	—	—	—	7
Midlands	49	—	—	—	—	—	—	—	—	49
South Eastern	60	28	—	28	—	—	—	—	28	88
Central	38	5	—	5	—	—	—	—	5	43
Pilbara	6	7	—	7	—	—	—	—	7	13
Kimberley	30	8	—	8	—	—	—	—	8	38
Western Australia	1,900	619	93	712	—	52	—	52	764	2,664
VALUE (\$'000)										
Perth	107,798	29,512	6,070	35,582	—	3,600	—	3,600	39,182	146,980
South West	22,368	4,840	—	4,840	—	—	—	—	4,840	27,208
Lower Great Southern	3,997	946	—	946	—	—	—	—	946	4,942
Upper Great Southern	622	—	—	—	—	—	—	—	—	622
Midlands	3,496	—	—	—	—	—	—	—	—	3,496
South Eastern	5,972	1,695	—	1,695	—	—	—	—	1,695	7,667
Central	3,825	470	—	470	—	—	—	—	470	4,295
Pilbara	737	558	—	558	—	—	—	—	558	1,295
Kimberley	3,096	754	—	754	—	—	—	—	754	3,850
Western Australia	151,911	38,774	6,070	44,844	—	3,600	—	3,600	48,444	200,355

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.

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

AUSTRALIA

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.

P.C.KELLY
Deputy Commonwealth Statistician
and Government Statistician

