

BUILDING APPROVALS

WESTERN AUSTRALIA July 1994

MAIN FEATURES

The number of houses approved in July 1994 decreased by 22.7 per cent when compared with May 1994 and decreased by 9.6 per cent when compared with July 1993.

The number of total dwelling units approved in July 1994 decreased by 20.3 per cent when compared with June 1994 and increased by 4.6 per cent when compared with July 1993.

The provisional trend for new private dwelling approvals fell 1.4 per cent in July 1994, following a 1.3 per cent fall in June 1994. This trend will continue to fall unless there is a rise of more than 21.6 per cent in the August seasonally adjusted figure. The historical average monthly movement of this series regardless of sign is 7.0 per cent.

NOTE: Prior to July 1994 Perth City Council was comprised of 5 SLA's: Perth(C) Inner; Perth(C) Outer; Perth(C) North; Perth(C) South and Perth(C) Wembley-Coastal.

From July 1994 Perth City Council was re-structured and as a consequence 3 new SLA's have been created: Cambridge(T), Shepperton(T) and Vincent(T). Perth City Council was reduced in size and now comprises 2 SLA's: Perth(C) Inner and Perth(C) Remainder. For further information please see the Explanatory Notes (point 31).

Comparisons with previous periods are:

Month to month

	<i>Jul. 1994</i>	<i>Jun. 1994</i>	<i>% change</i>	<i>Jul. 1993</i>	<i>% change</i>
Houses	1,458	1,885	-22.7	1,613	-9.6
Total dwelling units	2,116	2,655	-20.3	2,022	+4.6

Three month moving average

	<i>Jul. 1994</i>	<i>Jun. 1994</i>	<i>% change</i>	<i>Jul. 1993</i>	<i>% change</i>
Houses	1,748	1,764	-0.9	1,570	+11.3
Total dwelling units	2,748	2,471	+11.2	2,116	+29.9

Seven months January to July

	<i>1994</i>	<i>1993</i>	<i>% change</i>	<i>1992</i>	<i>% change</i>
Houses	11,110	9,772	+13.7	8,639	+28.6
Total dwelling units	15,594	13,316	+17.1	12,164	+28.2

PHONE INQUIRIES

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Braskic on (09) 360 5129 for further information about statistics in this publication and the availability of related unpublished statistics.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

MAIL INQUIRIES

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

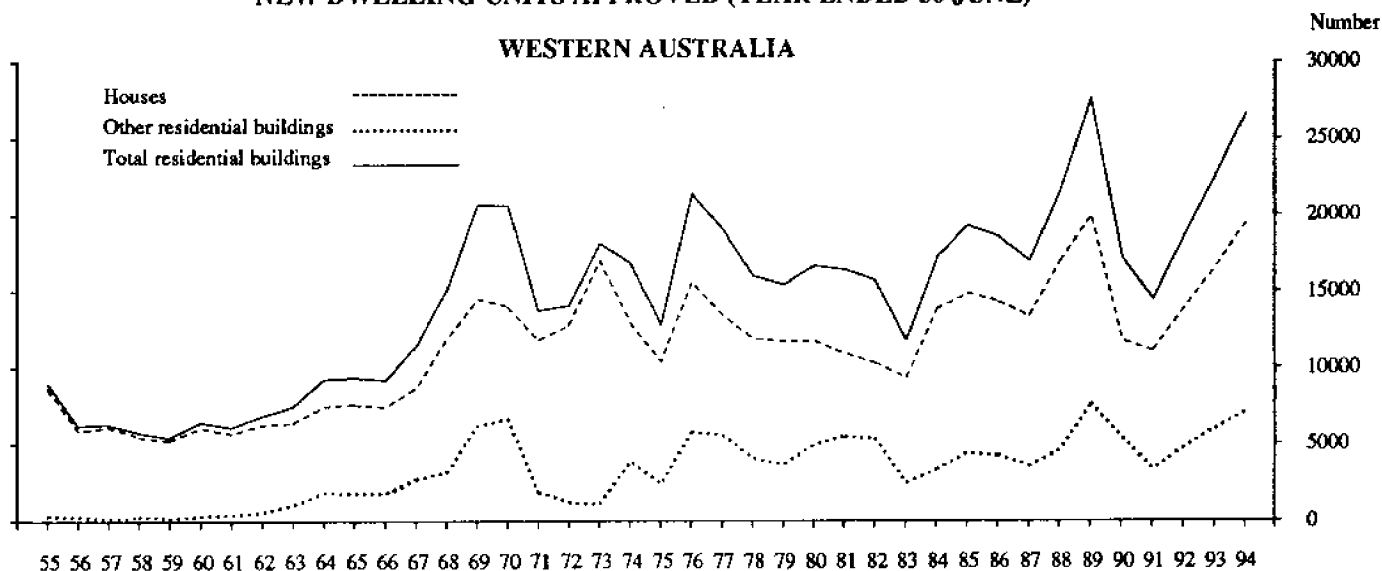
ELECTRONIC SERVICES

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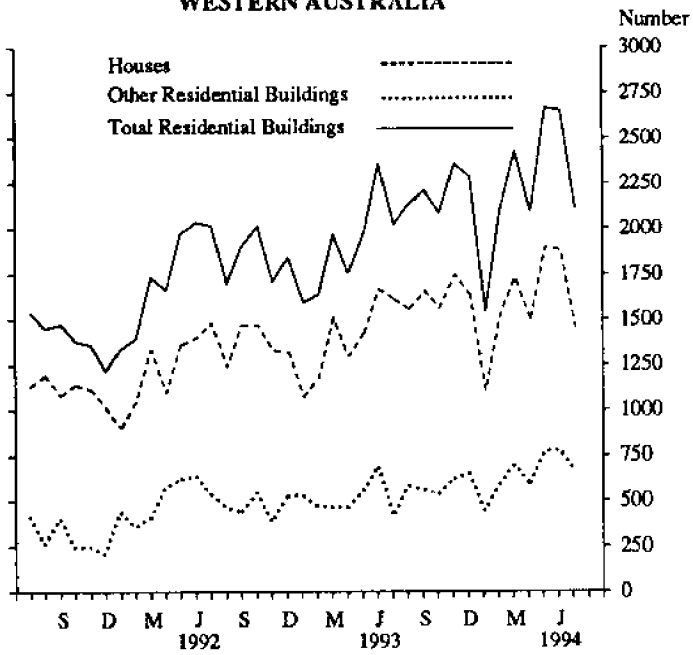
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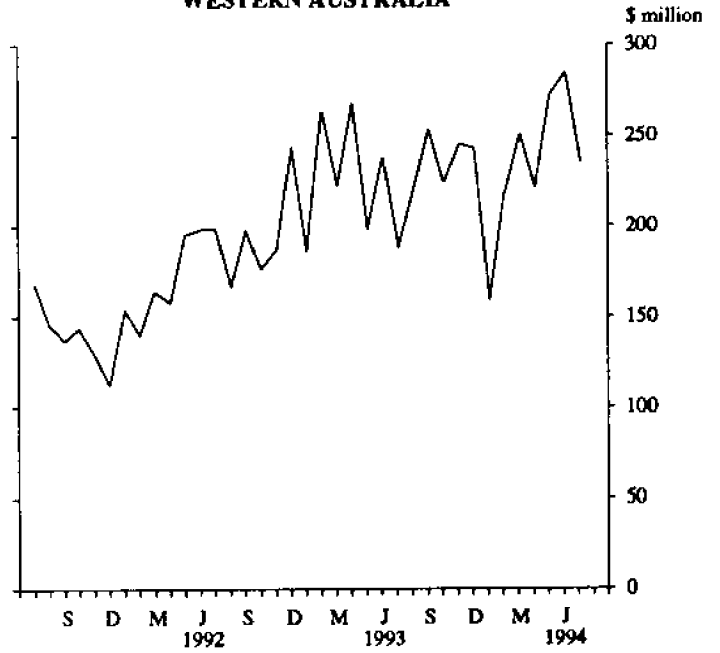
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NEW DWELLING UNITS APPROVED (YEAR ENDED 30 JUNE)**WESTERN AUSTRALIA**

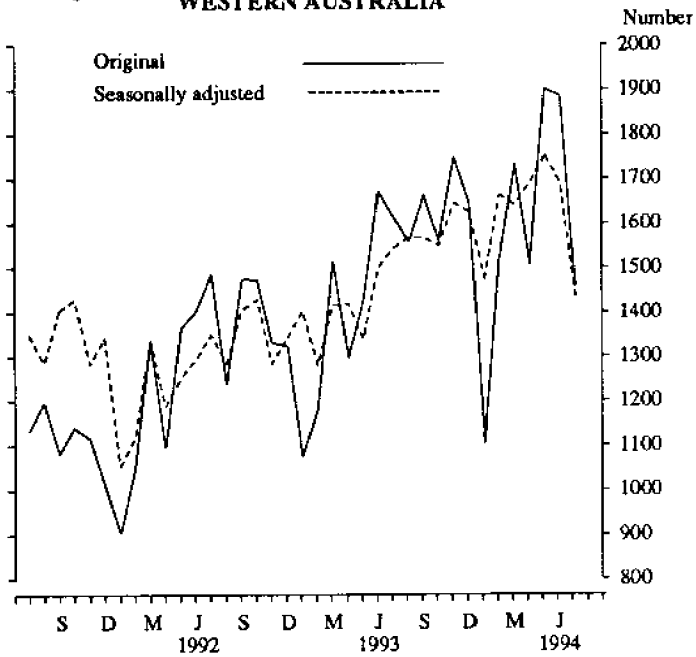
NEW DWELLING UNITS APPROVED WESTERN AUSTRALIA



TOTAL VALUE OF BUILDING APPROVED WESTERN AUSTRALIA



NEW HOUSES APPROVED WESTERN AUSTRALIA



NEW HOUSES APPROVED WESTERN AUSTRALIA

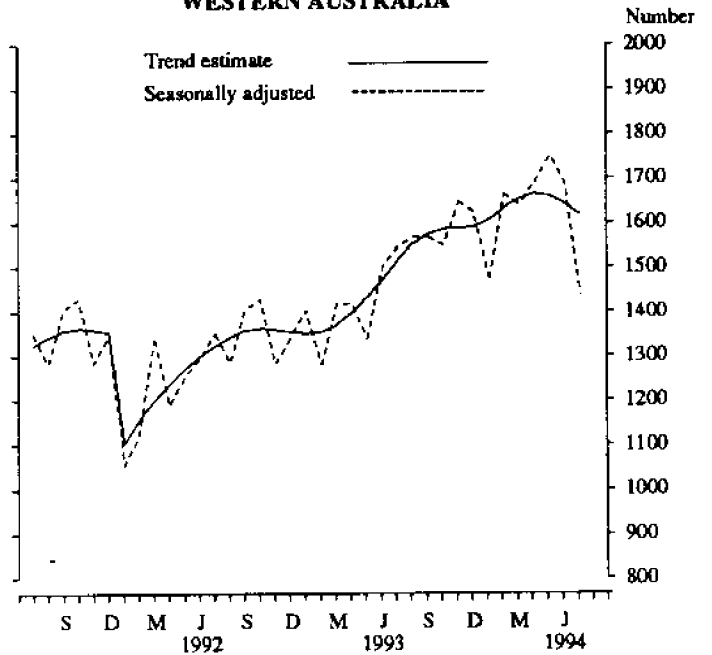


TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDING

Period	Houses			Other residential buildings			Total		
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total
PERTH STATISTICAL DIVISION									
1991-92	9,969	194	10,163	2,505	1,434	3,939	12,474	1,628	14,102
1992-93	11,618	285	11,903	3,448	1,540	4,988	15,066	1,825	16,891
1993-94	13,899	321	14,220	4,924	929	5,853	18,823	1,250	20,073
1993—									
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
June	1,317	81	1,398	465	161	626	1,782	242	2,024
July	1,061	44	1,105	489	60	549	1,550	104	1,654
WESTERN AUSTRALIA									
1991-92	13,474	362	13,836	3,078	1,663	4,741	16,552	2,025	18,577
1992-93	16,036	449	16,485	4,081	1,913	5,994	20,117	2,362	22,479
1993-94	18,966	471	19,437	5,938	1,206	7,144	24,904	1,677	26,581
1993—									
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
June	1,779	106	1,885	554	216	770	2,333	322	2,655
July	1,407	51	1,458	587	71	658	1,994	122	2,116

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 8 such dwelling units approved in July 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														
1991-92	689.9	10.5	700.4	133.3	81.9	215.2	823.2	92.4	915.6	104.8	245.3	398.5	1,172.4	1,418.8
1992-93	822.1	17.7	839.7	188.9	92.3	281.2	1,010.9	109.9	1,120.9	113.3	463.2	715.9	1,585.3	1,950.1
1993-94	1,067.8	19.2	1,087.0	319.3	58.6	377.9	1,387.1	77.8	1,464.8	122.0	388.1	492.4	1,896.8	2,079.3
1993—														
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
June	104.8	4.7	109.5	35.3	10.0	45.3	140.1	14.7	154.9	9.3	33.6	41.4	183.0	205.6
July	89.4	3.5	92.9	32.9	3.5	36.4	122.3	7.0	129.2	10.2	41.2	42.7	173.7	182.2
WESTERN AUSTRALIA														
1991-92	931.4	23.9	955.3	166.1	96.5	262.6	1,097.5	120.4	1,217.9	124.2	306.6	504.9	1,527.0	1,847.0
1992-93	1,138.8	34.9	1,173.7	227.6	118.1	345.7	1,366.4	153.0	1,519.4	137.1	591.3	889.6	2,091.8	2,546.1
1993-94	1,469.3	34.4	1,503.7	382.5	78.5	461.0	1,851.8	112.9	1,964.7	150.0	513.1	667.0	2,513.8	2,781.7
1993—														
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
June	145.7	7.6	153.2	40.7	14.8	55.4	186.3	22.3	208.7	12.0	46.0	63.7	244.3	284.4
July	119.4	4.0	123.3	40.1	4.4	44.4	159.4	8.3	167.8	12.7	51.5	55.0	223.6	235.5

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

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate
<i>1993—r</i>								
May	1,319	1,405	1,339	1,434	1,728	1,753	1,854	1,888
June	1,439	1,441	1,502	1,472	1,766	1,795	2,008	1,929
July	1,501	1,475	1,546	1,516	1,842	1,853	1,918	1,998
August	1,544	1,503	1,568	1,552	1,937	1,919	2,101	2,075
September	1,515	1,523	1,568	1,575	1,956	1,987	2,097	2,144
October	1,516	1,538	1,550	1,586	2,092	2,046	2,209	2,199
November	1,543	1,548	1,645	1,587	2,094	2,087	2,329	2,230
December	1,592	1,561	1,625	1,589	2,154	2,112	2,391	2,242
<i>1994—r</i>								
January	1,517	1,589	1,475	1,607	2,046	2,133	1,941	2,251
February	1,655	1,618	1,663	1,632	2,204	2,147	2,324	2,259
March	1,599	1,635	1,640	1,653	2,059	2,153	2,309	2,268
April	1,681	1,632	1,689	1,664	2,219	2,148	2,236	2,275
May	1,679	1,613	1,750	1,659	2,187	2,131	2,371	2,273
June	1,635	1,580	1,689	1,641	2,164	2,104	2,343	2,257
July	1,358	1,544	1,436	1,618	1,904	2,074	2,037	2,246

(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. (b) Series have been revised due to annual re-analysis of seasonal adjustment factors.

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

(\$ million)

Period	New residential building				Alterations and additions to residential buildings	Non-residential building		Total building	
	Houses		Other residential buildings	Total		Private sector	Total	Private sector	Total
	Private sector	Total							
1991-92	1,052.4	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
1993-94	1,580.5	1,617.4	454.0	2,071.4	161.4	501.9	652.4	2,613.9	2,885.1
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	r109.5	r512.2	41.8	129.9	186.8	657.2	r740.8
1994—									
Mar. qtr.	367.4	371.3	r112.8	r484.1	41.0	103.4	126.9	606.4	r652.0
June qtr.	437.7	454.3	139.5	593.9	41.3	135.7	165.0	718.7	800.2

(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	1993-94	1994			
				April	May	June	July
PRIVATE SECTOR							
New houses	931.4	1,138.8	1,469.3	119.6	147.0	145.7	119.4
New other residential buildings	166.1	227.6	382.5	32.0	34.5	40.7	40.1
Total new residential building	1,097.5	1,366.4	1,851.8	151.6	181.5	186.3	159.4
Alterations and additions to residential buildings	122.9	134.1	148.9	13.4	13.4	11.9	12.7
Hotels, etc.	14.6	10.7	30.3	5.7	0.3	6.6	2.5
Shops	84.2	212.8	151.3	8.8	14.9	10.6	9.6
Factories	21.0	41.2	55.4	8.9	5.1	6.2	11.7
Offices	40.7	44.4	53.7	4.2	4.2	7.3	2.6
Other business premises	49.6	100.3	89.9	4.4	8.5	9.1	10.6
Educational	27.2	28.8	41.0	0.8	11.0	1.7	4.5
Religious	11.1	4.2	9.1	1.1	0.5	1.7	0.3
Health	22.9	79.8	28.8	0.1	1.0	0.8	5.8
Entertainment and recreational	8.7	24.4	25.7	0.5	10.7	0.2	1.8
Miscellaneous	26.6	44.7	27.9	0.9	1.3	1.7	2.1
Total non-residential building	306.6	591.3	513.1	35.5	57.4	46.0	51.5
Total	1,527.8	2,091.8	2,513.8	200.4	252.3	244.3	233.6
PUBLIC SECTOR							
New houses	23.9	34.9	34.4	3.2	4.9	7.6	4.0
New other residential buildings	96.5	118.1	78.5	6.0	13.9	14.8	4.4
Total new residential building	120.4	153.0	112.9	9.2	18.8	22.3	8.3
Alterations and additions to residential buildings	1.3	3.0	1.1	0.2	—	0.1	—
Hotels, etc.	0.2	0.2	—	—	—	—	—
Shops	2.2	2.0	1.8	0.1	—	—	0.4
Factories	0.1	4.6	1.3	0.1	0.4	—	—
Offices	28.7	67.6	27.7	—	—	1.0	0.5
Other business premises	12.6	12.2	17.4	1.9	—	—	1.7
Educational	94.5	98.6	61.0	7.9	—	14.7	—
Religious	—	—	—	—	—	—	—
Health	17.9	22.1	23.4	—	—	—	0.4
Entertainment and recreational	24.2	49.7	13.7	0.6	0.8	0.1	0.4
Miscellaneous	18.0	41.3	7.6	0.6	0.1	1.9	0.1
Total non-residential building	198.3	298.3	153.9	11.1	1.3	17.7	3.5
Total	320.0	454.3	267.9	20.5	20.1	40.1	11.9
TOTAL							
New houses	955.3	1,173.7	1,503.7	122.8	151.9	153.2	123.3
New other residential buildings	262.6	345.7	461.0	38.0	48.4	55.4	44.4
Total new residential building	1,217.9	1,519.4	1,964.7	160.8	200.4	208.7	167.8
Alterations and additions to residential buildings	124.2	137.1	150.0	13.5	13.4	12.0	12.7
Hotels, etc.	14.8	10.8	30.3	5.7	0.3	6.6	2.5
Shops	86.4	214.8	153.1	8.9	14.9	10.6	10.1
Factories	21.1	45.8	56.7	9.0	5.5	6.2	11.7
Offices	69.4	112.0	81.3	4.2	4.2	8.3	3.2
Other business premises	62.1	112.5	107.3	6.3	8.5	9.1	12.3
Educational	121.6	127.4	102.1	8.7	11.0	16.4	4.5
Religious	11.1	4.2	9.1	1.1	0.5	1.7	0.3
Health	40.8	101.9	52.2	0.1	1.0	0.8	6.2
Entertainment and recreational	33.0	74.0	39.5	1.1	11.5	0.3	2.1
Miscellaneous	44.6	86.0	35.5	1.5	1.3	3.6	2.2
Total non-residential building	504.9	889.6	667.0	46.6	58.7	63.7	55.0
Total	1,847.8	2,546.1	2,781.7	220.9	272.4	284.4	235.5

**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 May	2	0.3	—	—	—	—	—	—	—	—	2	0.3
June	6	0.7	1	0.2	—	—	3	5.7	—	—	10	6.6
July	3	0.3	1	0.4	—	—	1	1.8	—	—	5	2.5
SHOPS												
1994 May	19	2.2	11	3.7	1	0.6	3	8.4	—	—	34	14.9
June	22	2.0	5	1.7	1	0.5	4	6.4	—	—	32	10.6
July	30	2.7	6	1.8	5	3.5	1	2.0	—	—	42	10.1
FACTORIES												
1994 May	11	1.1	8	2.3	1	0.9	1	1.2	—	—	21	5.5
June	23	2.6	5	1.8	3	1.9	—	—	—	—	31	6.2
July	14	1.7	6	1.9	2	1.6	—	—	1	6.4	23	11.7
OFFICES												
1994 May	18	1.5	2	0.8	3	2.0	—	—	—	—	23	4.2
June	13	1.1	13	3.5	3	2.5	1	1.2	—	—	30	8.3
July	6	0.5	8	2.0	1	0.6	—	—	—	—	15	3.2
OTHER BUSINESS PREMISES												
1994 May	26	3.0	5	1.5	3	1.9	1	2.0	—	—	35	8.5
June	19	1.9	8	2.4	5	3.3	1	1.5	—	—	33	9.1
July	9	1.0	6	1.7	2	1.7	4	7.9	—	—	21	12.3
EDUCATIONAL												
1994 May	—	—	1	0.2	—	—	2	4.5	1	6.3	4	11.0
June	3	0.2	3	0.8	—	—	8	15.3	—	—	14	16.4
July	2	0.2	2	0.5	5	3.8	—	—	—	—	9	4.5
RELIGIOUS												
1994 May	—	—	—	—	1	0.5	—	—	—	—	1	0.5
June	5	0.6	—	—	—	—	1	1.1	—	—	6	1.7
July	—	—	1	0.3	—	—	—	—	—	—	1	0.3
HEALTH												
1994 May	1	0.1	3	0.9	—	—	—	—	—	—	4	1.0
June	1	0.1	1	0.2	1	0.5	—	—	—	—	3	0.8
July	2	0.1	5	1.7	—	—	3	4.4	—	—	10	6.2
ENTERTAINMENT AND RECREATIONAL												
1994 May	2	0.2	1	0.2	1	0.6	—	—	1	10.5	5	11.5
June	3	0.3	—	—	—	—	—	—	—	—	3	0.3
July	6	0.6	1	0.3	2	1.2	—	—	—	—	9	2.1
MISCELLANEOUS												
1994 May	7	0.9	1	0.4	—	—	—	—	—	—	8	1.3
June	10	1.2	4	1.1	—	—	1	1.3	—	—	15	3.6
July	9	0.9	1	0.4	—	—	1	1.0	—	—	11	2.2
TOTAL NON-RESIDENTIAL BUILDING												
1994 May	86	9.3	32	10.0	10	6.5	7	16.1	2	16.8	137	58.7
June	105	10.9	40	11.6	13	8.7	19	32.5	—	—	177	63.7
July	81	8.0	37	10.9	17	12.5	10	17.2	1	6.4	146	55.0

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

Statistical local area, statistical subdivision and statistical division	New residential building						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
PERTH STATISTICAL DIVISION										
Cambridge (T)	13	—	2,473	3	9	881	530	3,018	3,018	6,902
Claremont (T)	—	—	—	—	—	—	575	172	172	747
Cottesloe (T)	—	—	—	—	—	—	130	—	—	130
Moosman Park (T)	7	—	1,134	3	—	145	88	1,210	1,210	2,578
Nedlands (C)	13	35	5,529	8	7	994	817	—	—	7,341
Peppermint Grove (S)	—	—	—	—	—	—	108	150	150	258
Perth (C) — Inner	—	—	—	—	—	—	—	—	—	—
Perth (C) — Remainder	—	—	—	—	—	—	110	330	330	440
Shepperton (T)	9	1	756	7	4	617	71	60	60	1,504
Subiaco (C)	2	—	230	14	—	1,398	691	250	250	2,569
Vincent (T)	9	—	824	14	—	1,100	285	310	310	2,519
Central Metropolitan (SSD)	53	36	10,946	49	20	5,135	3,405	5,500	5,500	24,987
Bassendean (T)	4	—	401	2	—	150	35	300	300	886
Bayswater (C)	13	4	1,231	15	—	700	54	1,016	1,016	3,000
Kalamunda (S)	23	—	1,736	2	2	237	487	—	—	2,459
Mandaring (S)	39	—	3,362	6	—	360	222	—	72	4,016
Swan (S)	123	3	9,385	2	—	104	226	3,392	3,392	13,108
East Metropolitan (SSD)	202	7	16,115	27	2	1,551	1,024	4,708	4,779	23,469
Stirling (C) — Central	37	—	4,664	115	—	6,146	443	2,519	2,519	13,772
Stirling (C) — West	12	—	1,270	64	2	4,495	500	900	900	7,165
Stirling (C) — South-Eastern	5	—	350	22	—	1,427	468	—	—	2,245
Wanneroo (C)	323	—	27,166	31	21	2,608	1,148	7,108	7,108	38,030
North Metropolitan (SSD)	377	—	33,450	232	23	14,675	2,560	10,527	10,527	61,212
Cockburn (C)	98	—	7,970	6	—	382	140	1,841	1,841	10,332
East Fremantle (T)	1	—	130	—	—	—	237	—	—	367
Fremantle (C) — Inner	—	—	—	—	—	—	10	60	200	210
Fremantle (C) — Remainder	13	—	1,154	56	—	6,250	684	7,652	7,952	16,039
Kwinana (T)	45	—	2,479	—	—	—	56	852	1,132	3,667
Melville (C)	26	—	3,543	39	13	2,934	536	130	130	7,143
Rockingham (C)	84	1	6,052	15	—	766	54	2,630	2,630	9,502
South West Metropolitan (SSD)	267	1	21,327	116	13	10,332	1,717	13,165	13,885	47,260
Armadale (C)	30	—	1,877	3	—	140	204	130	130	2,351
Belmont (C)	8	—	664	5	—	390	117	2,627	2,627	3,799
Canning (C)	30	—	2,545	30	—	1,498	158	3,564	3,903	8,104
Gosnells (C)	70	—	4,066	—	2	119	224	772	772	5,181
Serpentine-Jarrahdale (S)	19	—	1,368	—	—	—	101	130	130	1,599
South Perth (C)	5	—	501	27	—	2,531	718	50	440	4,191
South East Metropolitan (SSD)	162	—	11,021	65	2	4,678	1,522	7,273	8,002	25,223
Total	1,041	44	92,859	489	60	36,371	10,227	41,173	42,693	182,156
SOUTH WEST STATISTICAL DIVISION										
Boddington (S)	—	—	—	—	—	—	—	—	—	—
Mandurah (C)	84	—	7,048	30	—	2,256	85	878	878	10,268
Murray (S)	16	—	1,286	—	—	—	520	—	—	1,806
Warroona (S)	8	—	415	—	—	—	—	—	—	415
Dale (SSD)	108	—	8,749	30	—	2,256	605	878	878	12,489
Bunbury (C)	8	6	1,286	2	—	120	232	927	927	2,565
Capel (S)	5	—	373	—	—	—	23	—	—	396
Collie (S)	1	1	192	—	—	—	50	—	—	242
Dardanup (S)	11	—	810	—	—	—	25	—	—	835
Donnybrook-Balingup (S)	2	—	140	—	—	—	—	—	—	140
Harvey (S)	9	—	698	—	—	—	53	505	505	1,255
Preston (SSD)	36	7	3,498	2	—	120	382	1,432	1,432	5,433

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JULY 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)	11	—	919	8	—	600	110	270	270	1,899
Busselton (S)	32	—	2,993	6	—	408	327	610	610	4,338
Vasse (SSD)	43	—	3,912	14	—	1,008	437	880	880	6,237
Boyup Brook (S)	1	—	48	—	—	—	—	74	74	122
Bridgetown-Greenbushes (S)	2	—	154	—	—	—	55	—	—	209
Manjimup (S)	—	—	—	—	—	—	—	—	—	—
Nannup (S)	1	—	78	—	—	—	—	—	—	78
Blackwood (SSD)	4	—	280	—	—	—	55	74	74	409
Total	191	7	16,441	46	—	3,385	1,479	3,264	3,264	24,569
LOWER GREAT SOUTHERN STATISTICAL DIVISION										
Broomehill (S)	—	—	—	—	—	—	—	—	—	—
Gnowangerup (S)	—	—	—	—	—	—	—	—	—	—
Jerramungup (S)	—	—	—	—	—	—	—	—	—	—
Katanning (S)	—	—	—	—	—	—	—	—	—	—
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	—	—	—	—	—	—	—	—	—	—
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	—	—	—	—	—	—	—	—	—	—
Albany (T)	16	—	1,642	9	—	458	118	—	—	2,219
Albany (S)	7	—	603	—	—	—	15	3,183	3,183	3,801
Cranbrook (S)	—	—	—	—	—	—	—	—	—	—
Denmark (S)	8	—	550	—	—	—	44	—	—	594
Plantagenet (S)	3	—	124	—	—	—	—	—	—	124
King (SSD)	34	—	2,919	9	—	458	177	3,183	3,183	6,737
Total	34	—	2,919	9	—	458	177	3,183	3,183	6,737
UPPER GREAT SOUTHERN STATISTICAL DIVISION										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	1	—	50	—	—	—	—	—	—	50
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	—
Narrogin (T)	1	—	93	3	—	210	—	—	—	303
Narrogin (S)	2	—	206	—	—	—	—	—	—	206
Pingelly (S)	1	—	45	—	—	—	—	—	205	250
Wagin (S)	2	—	170	—	—	—	—	—	—	170
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	—	—	—	—	—	—	—	—	—	—
Hotham (SSD)	7	—	564	3	—	210	—	—	205	979
Corrigin (S)	—	—	—	—	—	—	—	—	—	—
Kondinin (S)	—	—	—	—	—	—	—	—	—	—
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	—	—	—	—	—	—	—	—	—	—
Lakes (SSD)	—	—	—	—	—	—	—	—	—	—
Total	7	—	564	3	—	210	—	—	205	979

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JULY 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)				
MIDLANDS STATISTICAL DIVISION										
Chittering (S)	8	—	609	—	—	—	—	—	—	609
Dandargan (S)	—	—	—	—	—	—	—	—	—	—
Gingin (S)	7	—	464	—	—	—	—	—	—	464
Moora (S)	—	—	—	—	—	—	23	—	—	23
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	—
Moore (SSD)	15	—	1,073	—	—	—	23	—	—	1,096
Beverley (S)	—	—	—	—	—	—	—	—	—	—
Cunderdin (S)	—	—	—	—	—	—	—	—	—	—
Dulwallinu (S)	—	—	—	—	—	—	—	—	—	—
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goomalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	—	—	—	—	—	—
Northam (T)	2	—	176	—	—	—	16	—	—	192
Northam (S)	3	—	235	—	—	—	—	—	—	235
Quairading (S)	—	—	—	—	2	190	—	—	—	190
Tammin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	9	—	720	—	—	—	40	—	—	760
Wongan-Ballidu (S)	—	—	—	—	—	—	24	—	—	24
Wyalkatchem (S)	1	—	35	—	—	—	—	—	—	35
York (S)	2	—	110	—	—	—	—	—	—	110
Avon (SSD)	17	—	1,276	—	2	190	80	—	—	1,546
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Kellerberrin (S)	—	—	—	—	—	—	24	—	—	24
Merredin (S)	—	—	—	—	—	—	53	—	—	53
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mukinbudin (S)	—	—	—	—	—	—	—	—	—	—
Narembeen (S)	1	—	100	—	—	—	—	—	—	100
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	1	—	96	—	—	—	—	—	—	96
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgarn (S)	—	—	—	—	—	—	—	—	—	—
Campion (SSD)	2	—	196	—	—	—	77	—	—	273
Total	34	—	2,544	—	2	190	180	—	—	2,914
SOUTH EASTERN STATISTICAL DIVISION										
Coolgardie (S)	—	—	—	—	—	—	77	—	—	77
Kalgoorlie/Boulder (C)	20	—	1,906	2	—	120	256	1,019	1,019	3,301
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	—	—	—	—	—	—
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	20	—	1,906	2	—	120	333	1,019	1,019	3,378
Dundas (S)	—	—	—	—	—	—	—	—	1,706	1,706
Esperance (S)	7	—	479	—	—	—	77	126	126	682
Ravensthorpe (S)	—	—	—	—	—	—	—	—	—	—
Johnston (SSD)	7	—	479	—	—	—	77	126	1,832	2,388
Total	27	—	2,385	2	—	120	410	1,145	2,851	5,766

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JULY 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)				
CENTRAL STATISTICAL DIVISION										
Camaron (S)	1	—	119	—	—	—	26	150	150	295
Exmouth (S)	—	—	—	—	—	—	—	—	—	—
Shark Bay (S)	1	—	50	—	—	—	—	113	113	163
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	2	—	169	—	—	—	26	263	263	458
Cue (S)	—	—	—	—	—	—	—	—	—	—
Moorkatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	—	—	—
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	—	—	—	—
Coorow (S)	—	—	—	—	—	—	—	—	—	—
Geraldton (C)	3	—	390	20	9	1,981	71	300	300	2,742
Greenough (S)	28	—	3,075	—	—	—	27	—	—	3,102
Irwin (S)	4	—	261	—	—	—	—	—	—	261
Mingenew (S)	—	—	—	—	—	—	—	—	—	—
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	—	—	—	—	—	—	—	—	—
Northampton (S)	—	—	—	—	—	—	—	—	—	—
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	—	—	—	—	—	—	—	—	—	—
Greenough River (SSD)	35	—	3,727	20	9	1,981	98	300	300	6,105
Total	37	—	3,896	20	9	1,981	124	563	563	6,563
PILBARA STATISTICAL DIVISION										
East Pilbara (S)	—	—	—	—	—	—	—	1,150	1,150	1,150
Port Hedland (T)	2	—	150	—	—	—	27	225	325	502
De Grey (SSD)	2	—	150	—	—	—	27	1,375	1,475	1,652
Ashburton (S)	—	—	—	—	—	—	—	—	—	—
Roeboorne (S)	1	—	180	—	—	—	36	365	365	581
Fortescue (SSD)	1	—	180	—	—	—	36	365	365	581
Total	3	—	330	—	—	—	63	1,740	1,840	2,233
KIMBERLEY STATISTICAL DIVISION										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	—	—	—	—	—	—	—	110	110	110
Ord (SSD)	—	—	—	—	—	—	—	110	110	110
Broome (S)	13	—	1,407	—	—	—	78	226	226	1,711
Derby-West Kimberley (S)	—	—	—	18	—	1,707	—	70	70	1,777
Fitzroy (SSD)	13	—	1,407	18	—	1,707	78	296	296	3,488
Total	13	—	1,407	18	—	1,707	78	406	406	3,598
WESTERN AUSTRALIA										
Western Australia	1,407	51	123,344	587	71	44,421	12,738	51,474	55,006	235,510

(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
JULY 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	1,087	1	4	10	3	1,105	247,033	224	376
South-West	158	17	13	5	5	198	42,571	215	386
Lower Great Southern	10	14	7	2	1	34	8,019	236	364
Upper Great Southern	5	—	1	—	1	7	1,617	231	349
Midlands	15	4	10	4	1	34	7,059	208	360
South-Eastern	5	9	9	3	1	27	5,358	198	445
Central	31	1	3	1	1	37	8,052	218	484
Pilbara	2	1	—	—	—	3	542	181	609
Kimberley	1	2	2	—	8	13	2,882	222	488
Western Australia	1,314	49	49	25	21	1,458	323,133	222	382

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

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

Other residential building										
Statistical division	Houses	Semi-detached, row or terrace houses, townhouses, etc. of			Flats, units or apartments in a building of				Total	Total residential building
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys	Total		
NUMBER OF DWELLING UNITS										
Perth	1,105	526	23	549	—	—	—	—	549	1,654
South West	198	44	2	46	—	—	—	—	46	244
Lower Great Southern	34	9	—	9	—	—	—	—	9	43
Upper Great Southern	7	3	—	3	—	—	—	—	3	10
Midlands	34	2	—	2	—	—	—	—	2	36
South Eastern	27	2	—	2	—	—	—	—	2	29
Central	37	29	—	29	—	—	—	—	29	66
Pilbara	3	—	—	—	—	—	—	—	—	3
Kimberley	13	18	—	18	—	—	—	—	18	31
Western Australia	1,458	633	25	658	—	—	—	—	658	2,116
VALUE (\$'000)										
Perth	92,859	34,490	1,881	36,371	—	—	—	—	36,371	129,230
South West	16,441	3,230	155	3,385	—	—	—	—	3,385	19,825
Lower Great Southern	2,919	458	—	458	—	—	—	—	458	3,377
Upper Great Southern	564	210	—	210	—	—	—	—	210	774
Midlands	2,544	190	—	190	—	—	—	—	190	2,734
South Eastern	2,385	120	—	120	—	—	—	—	120	2,505
Central	3,896	1,981	—	1,981	—	—	—	—	1,981	5,876
Pilbara	330	—	—	—	—	—	—	—	—	330
Kimberley	1,407	1,707	—	1,707	—	—	—	—	1,707	3,114
Western Australia	123,344	42,385	2,036	44,421	—	—	—	—	44,421	167,766

EXPLANATORY NOTES

Introduction

This publication contains monthly details of building work approved. Statistics of building work approved are compiled from:

- (a) permits issued by local government authorities in areas subject to building control by those authorities;
- (b) approvals issued by the Rural Housing Authority in areas not subject to building control by local government authorities;
- (c) contracts let or day labour work authorised by Commonwealth, State, semi-government and local government authorities.

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

Factors affecting comparability

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

Scope and coverage

3. The statistics relate to building activity which includes construction of new buildings and alterations and additions to existing buildings. Construction activity not defined as building (e.g. construction of roads, bridges, railways, earthworks, etc.) is excluded.

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

5. From July 1990, the statistics cover:

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

From July 1988 to June 1990, the statistics covered:

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

These changes in scope mainly affect non-residential building data and do not have a statistically significant effect on broad building approvals aggregate data.

However, care should be taken in interpreting data for specific classes of non-residential building.

Definitions

6. A *building* is defined as a rigid, fixed and permanent structure which has a roof. Its intended purpose is primarily to house people, plant, machinery, vehicles, goods or livestock. An integral feature of a building's design, to satisfy its intended use, is the provision for regular access by humans.

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

8. A *residential building* is defined as a building predominantly consisting of one or more dwelling units. Residential buildings can be either *houses* or *other residential buildings* as follows:

- (a) A *house* is defined as a detached building predominantly used for long term residential purposes and consisting of only one dwelling unit. Thus detached 'granny flats' and detached dwelling units (such as caretaker's residences) associated with non-residential buildings are defined as houses for the purpose of these statistics.
- (b) An *other residential building* is defined as a building which is predominantly used for long term residential purposes and which contains (or has attached to it) more than one dwelling unit (e.g. includes flats, home units, townhouses, duplexes, apartment buildings, etc).

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

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

Building classification

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

purchase the buildings on or before completion, are classified as public sector.

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

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

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

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

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

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

Seasonal adjustment

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

18. Each of the component series shown has been seasonally adjusted independently. As a consequence, while the unadjusted components in the original series

shown add to the totals, the adjusted components may not add to the adjusted totals. Further, the difference between independently seasonally adjusted series does not necessarily produce series which are optimal or even adequate adjustments of the similarly derived original series. Thus the figures which can be derived by subtracting seasonally adjusted private sector dwelling units from the seasonally adjusted total should not be used to represent seasonally adjusted public sector dwelling units.

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

20. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series may be more clearly recognised. Seasonal adjustment procedures do not aim to remove the irregular or non-seasonal influences which may be present in any particular month, such as the effect of the approval of large projects or as a consequence of the administrative arrangements of approving authorities. Irregular influences that are highly volatile can make it difficult to interpret the movement of the series even after adjustment for seasonal variation.

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

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

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

found in *A Guide to Smoothing Time Series - Estimates of 'Trend'* (1316.0).

Estimates at constant prices

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

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

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

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

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

29. Estimates at constant prices are subject to a number of approximations and assumptions. Further information on the nature and concepts of constant price estimates is contained in Chapter 4 of *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

Australian Standard Geographical Classification

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

Perth City Council Re-structure

31. From July 1994, Perth City Council has been split. Although there are still five SLA's, only two retain the same boundaries. The new Town of Shepperton comprises the whole of the SLA previously known as

Perth(C) South. The City of Perth is now comprised of two SLAs: Perth(C) Inner and Perth(C) Remainder. Perth(C) Inner boundaries have not changed. Perth(C) Remainder comprises the majority of Perth(C) Outer. The new Town of Vincent comprises the major part of Perth(C) North and a small part of Perth(C) Outer. The new Town of Cambridge comprises the remainder of Perth(C) North as well as all of Perth(C) Wembley-Coastal. For maps showing the new SLA boundaries, please contact the relevant councils.

Unpublished data and related publications

32. The ABS also makes available certain building approvals data which are not published. Where it is not practicable to provide the required information by telephone, data can be provided in the following forms: microfiche, photocopy, computer printout and clerically extracted tabulation. A charge may be made for providing unpublished information in these forms.

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

WESTERN AUSTRALIA	Catalogue No.
Building Approvals - Private Sector, Perth Statistical Division (monthly)	8732.5
Building Activity (quarterly)	8752.5
Dwelling Unit Commencements (monthly)	8741.5
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

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

Symbols and other usages

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

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

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

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