

Catalogue No. 8731.5

1 March 1996

BUILDING APPROVALS

WESTERN AUSTRALIA

January 1996

MAIN FEATURES

The number of houses approved in January 1996 increased by 1.0 per cent when compared with December 1995 and decreased by 24.8 per cent when compared with January 1995.

The number of total dwelling units approved in January 1996 increased by 24.7 per cent when compared with December 1995 and decreased by 19.2 per cent when compared with January 1995.

The provisional trend for new private houses rose 0.2 per cent in January 1996, following a 0.7 per cent fall in December 1995. This trend will continue to grow unless there is a fall of more than 5.4 per cent in the February 1996 seasonally adjusted figure. The historical average monthly movement of this series regardless of sign is 6.9 per cent.

Comparisons with previous periods are:

Month to month

	<i>January 1996</i>	<i>December 1995</i>	<i>% change</i>	<i>January 1995</i>	<i>% change</i>
Houses	827	819	1.0	1,100	-24.8
Total dwelling units	1,241	995	24.7	1,535	-19.2

Three month moving average

	<i>January 1996</i>	<i>December 1995</i>	<i>% change</i>	<i>January 1995</i>	<i>% change</i>
Houses	911	971	-6.2	1,312	-30.6
Total dwelling units	1,205	1,213	-0.7	1,847	-34.8

P.C. Kelly
Deputy Commonwealth Statistician
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PHONE INQUIRIES

Contact Mr Peter Hodgson on (09) 360 5180 for further information about statistics in this publication and the availability of related unpublished statistics.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.

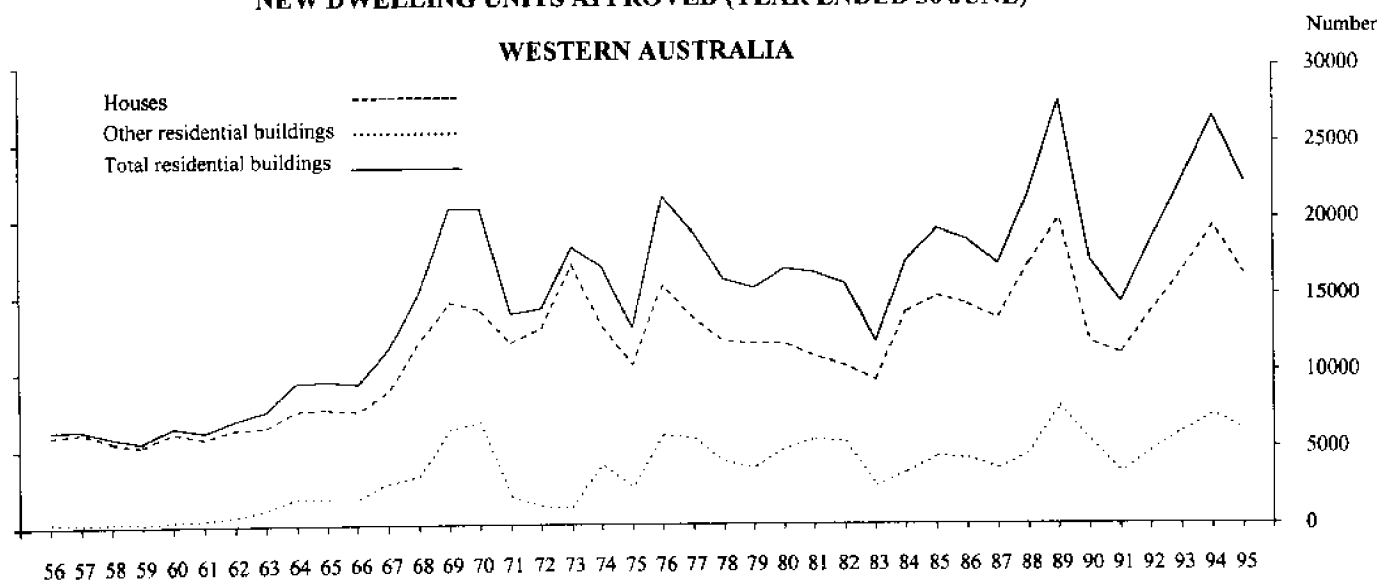
ELECTRONIC SERVICES

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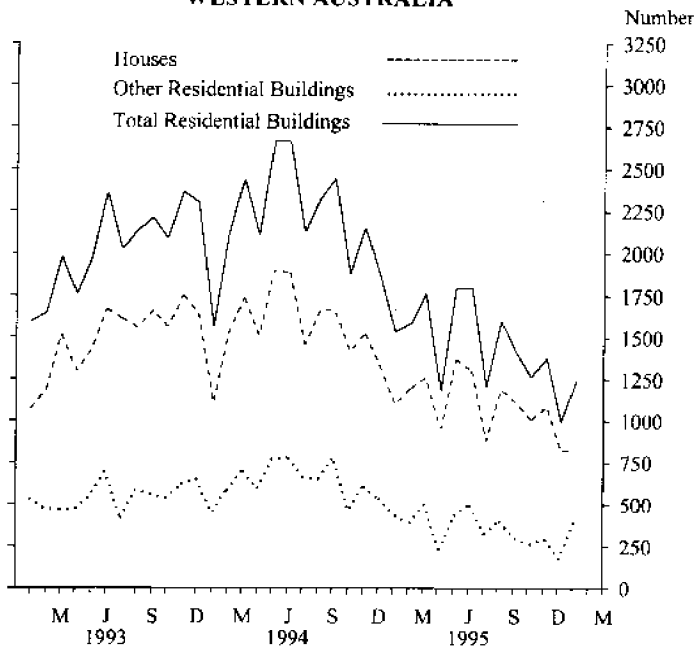
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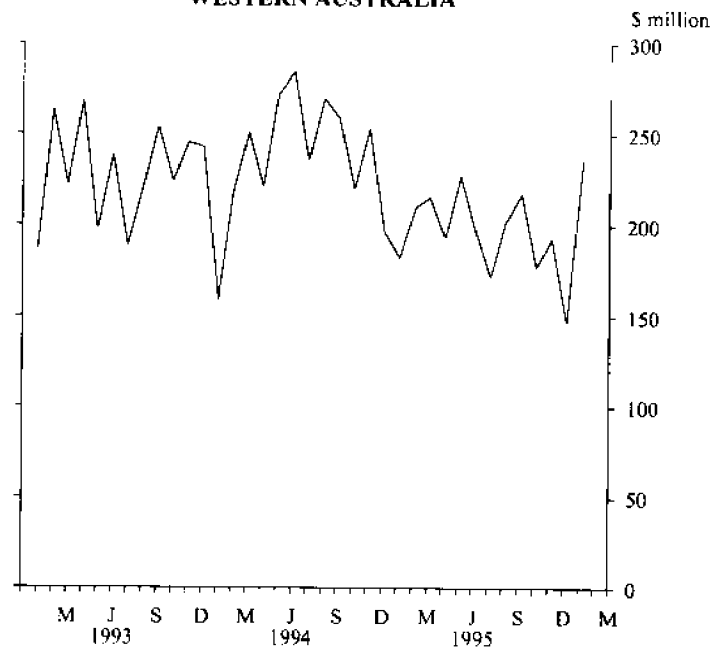
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NEW DWELLING UNITS APPROVED (YEAR ENDED 30 JUNE)**WESTERN AUSTRALIA**

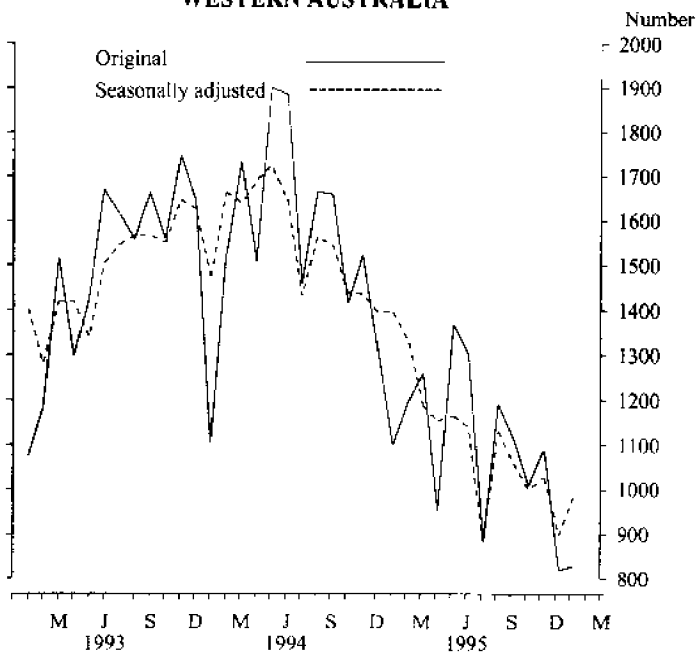
NEW DWELLING UNITS APPROVED WESTERN AUSTRALIA



TOTAL VALUE OF BUILDING APPROVED WESTERN AUSTRALIA



NEW HOUSES APPROVED WESTERN AUSTRALIA



NEW HOUSES APPROVED WESTERN AUSTRALIA

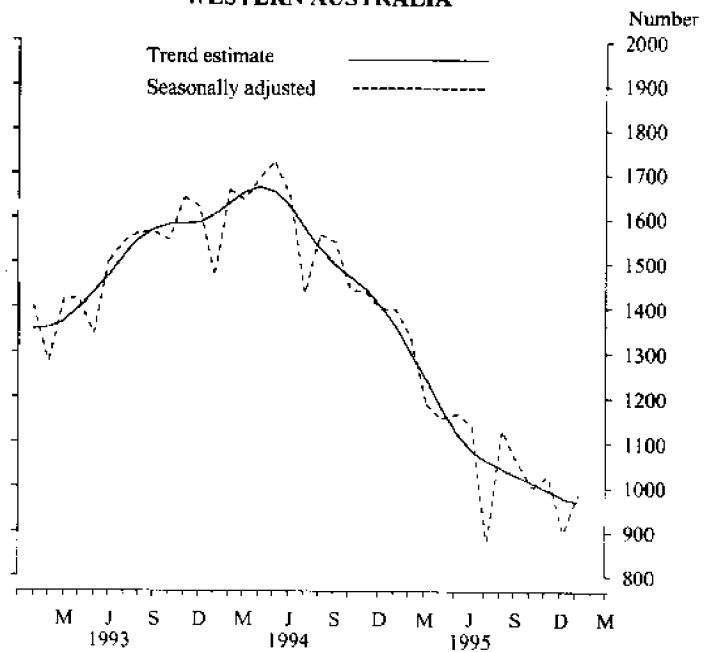


TABLE 1. NUMBER OF DWELLING UNITS APPROVED

Period	New houses			New other residential buildings			Conversions, etc.	Total (a)		
	Private sector	Public sector	Total	Private sector	Public sector	Total		Private sector	Public sector	Total
PERTH STATISTICAL DIVISION										
1992-93	11,618	285	11,903	3,448	1,540	4,988	60	15,126	1,825	16,951
1993-94	13,899	321	14,220	4,924	929	5,853	177	18,986	1,264	20,250
1994-95	11,238	255	11,493	4,430	509	4,939	98	15,765	765	16,530
1994-95 July-January	7,235	111	7,346	3,139	269	3,408	78	10,451	381	10,832
1995-96 July-January	4,658	70	4,728	1,508	220	1,728	35	6,201	290	6,491
1994— November	1,127	22	1,149	513	22	535	23	1,663	44	1,707
December	867	1	868	362	66	428	16	1,245	67	1,312
1995— January	783	27	810	307	44	351	3	1,093	71	1,164
February	794	41	835	258	29	287	6	1,058	70	1,128
March	790	36	826	364	33	397	6	1,160	69	1,229
April	625	15	640	169	5	174	4	798	20	818
May	947	35	982	297	54	351	1	1,245	89	1,334
June	847	17	864	203	119	322	3	1,053	136	1,189
July	493	6	499	269	—	269	4	766	6	772
August	835	20	855	317	15	332	8	1,160	35	1,195
September	772	17	789	200	19	219	5	977	36	1,013
October	691	2	693	157	51	208	3	851	53	904
November	750	2	752	212	18	230	5	967	20	987
December	538	13	551	129	2	131	6	673	15	688
1996— January	579	10	589	224	115	339	4	807	125	932
WESTERN AUSTRALIA										
1992-93	16,036	449	16,485	4,081	1,913	5,994	89	20,206	2,362	22,568
1993-94	18,966	471	19,437	5,938	1,206	7,144	195	25,085	1,691	26,776
1994-95	15,783	424	16,207	5,297	808	6,105	115	21,194	1,233	22,427
1994-95 July-January	9,968	166	10,134	3,731	356	4,087	90	13,788	523	14,311
1995-96 July-January	6,821	103	6,924	1,872	255	2,127	37	8,730	358	9,088
1994— November	1,498	24	1,522	566	36	602	25	2,089	60	2,149
December	1,290	24	1,314	437	89	526	16	1,743	113	1,856
1995— January	1,069	31	1,100	379	52	431	4	1,452	83	1,535
February	1,142	53	1,195	324	59	383	8	1,474	112	1,586
March	1,201	57	1,258	445	51	496	7	1,653	108	1,761
April	920	32	952	198	24	222	6	1,124	56	1,180
May	1,317	50	1,367	352	74	426	1	1,670	124	1,794
June	1,235	66	1,301	247	244	491	3	1,485	310	1,795
July	872	11	883	316	—	316	4	1,192	11	1,203
August	1,166	23	1,189	377	22	399	8	1,551	45	1,596
September	1,089	22	1,111	264	29	293	6	1,359	51	1,410
October	999	9	1,008	194	59	253	4	1,197	68	1,265
November	1,076	11	1,087	262	24	286	5	1,343	35	1,378
December	804	15	819	168	2	170	6	978	17	995
1996— January	815	12	827	291	119	410	4	1,110	131	1,241

(a) Includes Conversions, etc. See paragraphs 9-11 of the Explanatory Notes.

TABLE 2. VALUE OF BUILDING APPROVED
(\$ million)

Period	New residential building									Alterations and additions to residential buildings	Non-residential building		Total building	
	Houses			Other residential buildings			Total				Private sector	Total	Private sector	Total
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total					
PERTH STATISTICAL DIVISION														
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
1994-95	928.5	17.9	946.4	302.5	31.6	334.1	1,231.0	49.5	1,280.6	126.1	438.5	555.5	1,795.5	1,962.2
1994-95														
July-January	588.1	7.7	595.7	203.6	15.8	219.4	791.7	23.4	815.1	77.6	263.6	328.6	1,132.8	1,221.3
1995-96														
July-January	440.2	4.8	445.0	117.5	19.1	136.6	557.7	23.9	581.6	77.0	264.6	304.1	899.1	962.6
1994—														
November	93.8	1.4	95.1	34.2	1.4	35.5	127.9	2.7	130.7	13.8	37.8	58.9	179.6	203.4
December	72.0	0.1	72.0	22.7	3.9	26.6	94.7	4.0	98.7	8.5	31.0	32.4	134.1	139.6
1995—														
January	63.5	1.7	65.2	18.2	2.3	20.5	81.7	4.0	85.7	9.2	29.5	37.4	120.4	132.3
February	68.8	2.6	71.4	17.0	2.2	19.1	85.7	4.8	90.5	9.7	21.5	54.0	116.8	154.2
March	71.7	2.9	74.5	28.5	2.2	30.7	100.2	5.0	105.2	12.0	29.7	29.8	141.9	147.0
April	52.1	1.0	53.2	12.1	0.4	12.5	64.2	1.4	65.6	8.0	53.9	65.1	126.1	138.8
May	79.4	2.3	81.7	25.3	4.4	29.7	104.7	6.7	111.4	10.0	39.6	45.8	154.2	167.2
June	68.5	1.4	69.9	16.0	6.8	22.8	84.5	8.2	92.7	8.9	30.4	32.2	123.8	133.7
July	45.9	0.6	46.5	20.0	—	20.0	65.9	0.6	66.5	8.9	25.4	28.7	100.2	104.1
August	76.0	1.3	77.3	25.7	0.8	26.5	101.7	2.0	103.8	11.4	36.8	38.9	149.9	154.1
September	70.0	1.0	71.0	16.4	1.2	17.6	86.4	2.2	88.6	13.6	49.4	55.2	149.4	157.4
October	67.1	0.2	67.3	13.8	2.4	16.2	80.9	2.6	83.5	9.9	31.0	32.3	121.8	125.7
November	69.4	0.2	69.6	15.5	2.8	18.3	85.0	3.0	88.0	13.5	30.3	32.7	128.8	134.2
December	54.2	0.8	55.0	9.7	0.1	9.9	63.9	0.9	64.8	9.8	18.9	23.9	92.6	98.4
1996—														
January	57.6	0.7	58.3	16.3	11.8	28.1	73.9	12.5	86.4	9.9	72.7	92.5	156.5	188.7
WESTERN AUSTRALIA														
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
1994-95	1,319.8	34.5	1,354.3	366.3	54.0	420.3	1,686.1	88.5	1,774.6	156.2	580.9	728.2	2,422.9	2,659.0
1994-95														
July-January	821.8	13.2	834.9	245.2	22.0	267.3	1,067.0	35.2	1,102.2	94.4	331.7	419.1	1,492.9	1,615.7
1995-96														
July-January	630.6	9.0	639.6	144.0	21.7	165.8	774.6	30.7	805.3	99.0	389.0	441.5	1,262.2	1,345.8
1994—														
November	127.4	1.6	129.0	38.0	2.3	40.4	165.4	3.9	169.3	16.3	46.4	68.0	228.1	253.6
December	107.9	2.2	110.1	27.6	5.7	33.3	135.4	7.9	143.4	10.6	39.9	42.0	185.9	196.0
1995—														
January	88.2	2.4	90.6	22.9	2.9	25.8	111.1	5.3	116.4	11.3	40.5	54.8	162.8	182.5
February	97.9	4.1	102.0	22.6	4.2	26.8	120.5	8.3	128.8	12.5	34.2	68.3	167.1	209.6
March	106.7	4.7	111.4	35.5	3.6	39.0	142.2	8.3	150.4	14.9	48.2	50.1	205.3	215.5
April	79.1	2.7	81.7	14.0	2.2	16.1	93.0	4.8	97.9	10.3	73.6	85.8	176.9	193.9
May	111.5	3.7	115.2	29.5	6.2	35.7	141.0	9.9	151.0	12.9	54.7	63.3	208.6	227.2
June	102.9	6.1	109.0	19.4	15.9	35.3	122.3	22.0	144.3	11.2	38.5	41.6	172.0	197.1
July	76.8	1.1	77.8	23.1	—	23.1	99.9	1.1	100.9	15.8	51.9	55.1	167.5	171.9
August	103.1	1.6	104.8	29.3	1.3	30.6	132.4	3.0	135.4	14.0	51.0	53.2	197.5	202.6
September	97.5	1.8	99.2	21.2	1.7	22.9	118.6	3.5	122.1	16.2	72.2	79.0	207.0	217.4
October	95.4	1.2	96.6	17.0	3.3	20.4	112.5	4.5	117.0	11.9	47.1	48.5	171.3	177.4
November	97.6	1.5	99.1	19.5	3.2	22.7	117.1	4.7	121.8	16.5	51.2	54.7	184.8	192.9
December	78.5	1.0	79.5	12.8	0.1	12.9	91.3	1.1	92.4	12.2	28.7	42.9	132.2	147.5
1996—														
January	81.7	0.9	82.5	21.1	12.0	33.2	102.8	12.9	115.7	12.3	86.9	108.2	201.9	236.2

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

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate
1994—								
November	1,382	1,422	1,435	1,441	1,944	1,949	2,081	2,054
December	1,381	1,382	1,398	1,403	1,872	1,874	1,994	1,966
1995—								
January	1,421	1,330	1,396	1,356	1,844	1,775	1,824	1,858
February	1,271	1,267	1,332	1,299	1,664	1,662	1,781	1,739
March	1,136	1,202	1,186	1,239	1,506	1,553	1,659	1,629
April	1,107	1,138	1,153	1,177	1,398	1,459	1,386	1,537
May	1,129	1,082	1,163	1,121	1,440	1,384	1,510	1,467
June	1,118	1,045	1,139	1,082	1,320	1,335	1,510	1,426
July r	841	1,023	879	1,057	1,238	1,302	1,245	1,400
August r	1,094	1,010	1,129	1,041	1,387	1,279	1,510	1,378
September r	1,032	998	1,056	1,026	1,218	1,258	1,327	1,355
October r	970	988	1,000	1,010	1,213	1,241	1,323	1,327
November r	1,012	979	1,026	993	1,302	1,231	1,387	1,302
December r	884	972	898	975	1,075	1,228	1,081	1,284
1996—								
January	1,016	975	983	967	1,347	1,230	1,395	1,280

(a) Includes Conversions, etc. See paragraphs 9-11 of the Explanatory Notes. (b) Seasonally adjusted series smoothed by application of a 13-term Henderson moving average. Trend estimates for the most recent months are provisional and can be revised as data for additional months become available. See Explanatory Notes for a more detailed explanation.

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

(\$ 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							
1992-93	1,261.4	1,300.1	341.2	1,641.4	151.7	579.6	872.0	2,207.3	2,665.1
1993-94	1,580.5	1,617.4	453.3	2,070.7	161.4	501.0	651.3	2,613.2	2,883.4
1994-95	1,356.8	1,391.9	407.6	1,799.5	160.5	559.2	701.2	2,427.5	2,661.3
1994—									
Sept. qtr.	398.3	405.1	132.8	537.8	43.0	151.9	188.2	715.8	769.0
Dec. qtr.	359.5	363.9	102.3	466.2	42.8	129.9	164.3	623.7	673.3
1995—									
Mar. qtr.	300.3	311.7	88.6	400.3	39.7	118.0	166.5	535.3	606.4
June qtr.	298.6	311.3	83.8	395.1	35.0	159.5	182.3	552.6	612.4
Sept. qtr.	281.0	285.5	73.4	358.9	46.6	166.8	178.4	563.4	583.9
Dec. qtr.	271.3	274.9	53.5	328.4	40.6	120.6	138.6	478.7	507.6

(a) See paragraphs 22-27 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	(\$ million)						
	1993-94	1994-95	July-January 1994-95	1995-96	1995 November	December	1996 January
PRIVATE SECTOR							
New houses	1,469.3	1,319.8	821.8	630.6	97.6	78.5	81.7
New other residential buildings	382.5	366.3	245.2	144.0	19.5	12.8	21.1
Total new residential building	1,851.8	1,686.1	1,067.0	774.6	117.1	91.3	102.8
Alterations and additions to residential buildings	148.9	155.9	94.2	98.6	16.5	12.2	12.3
Hotels, etc.	30.3	46.9	27.1	87.1	7.0	2.7	41.5
Shops	151.3	131.8	68.4	41.8	4.5	7.7	8.7
Factories	55.4	79.5	56.0	42.4	4.9	4.0	10.0
Offices	53.7	85.1	40.0	42.9	9.3	2.2	4.9
Other business premises	89.9	90.8	47.9	61.9	13.8	4.0	4.8
Educational	41.0	30.2	25.0	31.9	3.9	3.3	4.5
Religious	9.1	5.7	1.7	2.3	0.5	0.2	—
Health	28.8	32.2	20.9	12.7	1.1	1.1	2.2
Entertainment and recreational	25.7	28.3	24.8	15.1	1.0	0.3	0.7
Miscellaneous	27.9	50.2	20.0	50.9	5.3	3.3	9.4
Total non-residential building	513.1	580.9	331.7	389.0	51.2	28.7	86.9
Total	2,513.8	2,422.9	1,492.9	1,262.2	184.8	132.2	201.9
PUBLIC SECTOR							
New houses	34.4	34.5	13.2	9.0	1.5	1.0	0.9
New other residential buildings	78.5	54.0	22.0	21.7	3.2	0.1	12.0
Total new residential building	112.9	88.5	35.2	30.7	4.7	1.1	12.9
Alterations and additions to residential buildings	1.1	0.2	0.2	0.4	—	—	—
Hotels, etc.	—	1.6	—	—	—	—	—
Shops	1.8	4.4	1.5	0.5	0.1	—	—
Factories	1.3	0.7	0.1	—	—	—	—
Offices	27.7	30.9	16.3	14.1	0.2	0.6	10.0
Other business premises	17.4	6.8	6.5	3.8	0.1	0.2	0.6
Educational	61.0	52.1	40.7	20.2	—	10.6	9.5
Religious	—	—	—	—	—	—	—
Health	23.4	3.8	3.6	0.7	—	—	—
Entertainment and recreational	13.7	7.7	3.1	6.4	0.9	0.9	1.1
Miscellaneous	7.6	39.3	15.5	6.8	2.2	1.9	0.1
Total non-residential building	153.9	147.3	87.3	52.6	3.4	14.2	21.3
Total	267.9	236.1	122.7	83.7	8.1	15.3	34.2
TOTAL							
New houses	1,503.7	1,354.3	834.9	639.6	99.1	79.5	82.5
New other residential buildings	461.0	420.3	267.3	165.8	22.7	12.9	33.2
Total new residential building	1,964.7	1,774.6	1,102.2	805.3	121.8	92.4	115.7
Alterations and additions to residential buildings	150.0	156.2	94.4	99.0	16.5	12.2	12.3
Hotels, etc.	30.3	48.5	27.1	87.1	7.0	2.7	41.5
Shops	153.1	136.2	69.9	42.2	4.5	7.7	8.7
Factories	56.7	80.3	56.1	42.4	4.9	4.0	10.0
Offices	81.3	116.0	56.3	57.0	9.5	2.7	14.9
Other business premises	107.3	97.7	54.4	65.7	13.8	4.2	5.4
Educational	102.1	82.3	65.7	52.2	3.9	13.9	14.0
Religious	9.1	5.7	1.7	2.3	0.5	0.2	—
Health	52.2	36.0	24.5	13.4	1.1	1.1	2.2
Entertainment and recreational	39.5	36.0	27.9	21.5	1.9	1.2	1.9
Miscellaneous	35.5	89.5	35.5	57.8	7.5	5.2	9.5
Total non-residential building	667.0	728.2	419.1	441.5	54.7	42.9	108.2
Total	2,781.7	2,659.0	1,615.7	1,345.8	192.9	147.5	236.2

**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.												
1995 November	7	0.7	1	0.5	4	2.7	2	3.1	—	—	14	7.0
December	2	0.1	1	0.2	—	—	1	2.4	—	—	4	2.7
1996 January	7	0.7	—	—	—	—	—	—	3	40.8	10	41.5
SHOPS												
1995 November	23	2.0	5	1.5	2	1.1	—	—	—	—	30	4.5
December	8	0.9	8	2.5	3	1.8	2	2.5	—	—	21	7.7
1996 January	8	0.8	7	2.0	2	1.0	—	—	1	5.0	18	8.7
FACTORIES												
1995 November	12	1.4	8	2.4	2	1.2	—	—	—	—	22	4.9
December	9	1.1	4	1.4	2	1.4	—	—	—	—	15	4.0
1996 January	9	0.8	7	1.9	1	0.9	—	—	1	6.5	18	10.0
OFFICES												
1995 November	18	1.7	10	3.0	2	1.2	2	3.5	—	—	32	9.5
December	8	0.8	4	1.4	1	0.6	—	—	—	—	13	2.7
1996 January	8	0.6	4	1.4	—	—	1	3.4	1	9.5	14	14.9
OTHER BUSINESS PREMISES												
1995 November	19	1.6	13	4.1	4	2.5	4	5.5	—	—	40	13.8
December	14	1.5	4	1.1	—	—	1	1.7	—	—	19	4.2
1996 January	7	0.6	11	3.0	3	1.9	—	—	—	—	21	5.4
EDUCATIONAL												
1995 November	5	0.6	—	—	—	—	2	3.4	—	—	7	3.9
December	5	0.5	2	0.5	2	1.0	5	11.8	—	—	14	13.9
1996 January	6	0.5	3	1.0	1	0.7	1	2.3	1	9.5	12	14.0
RELIGIOUS												
1995 November	1	0.1	2	0.4	—	—	—	—	—	—	3	0.5
December	2	0.2	—	—	—	—	—	—	—	—	2	0.2
1996 January	—	—	—	—	—	—	—	—	—	—	—	—
HEALTH												
1995 November	2	0.3	—	—	1	0.8	—	—	—	—	3	1.1
December	1	0.2	3	0.9	—	—	—	—	—	—	4	1.1
1996 January	3	0.2	3	1.0	—	—	1	1.0	—	—	7	2.2
ENTERTAINMENT AND RECREATIONAL												
1995 November	3	0.4	1	0.3	2	1.2	—	—	—	—	6	1.9
December	4	0.5	2	0.7	—	—	—	—	—	—	6	1.2
1996 January	3	0.3	1	0.5	—	—	1	1.1	—	—	5	1.9
MISCELLANEOUS												
1995 November	16	1.6	6	1.7	2	1.6	2	2.7	—	—	26	7.5
December	6	0.6	3	1.0	1	1.0	2	2.7	—	—	12	5.2
1996 January	22	2.1	4	1.2	2	1.8	2	4.4	—	—	30	9.5
TOTAL NON-RESIDENTIAL BUILDING												
1995 November	106	10.4	46	13.9	19	12.3	12	18.1	—	—	183	54.7
December	59	6.3	31	9.8	9	5.7	11	21.1	—	—	110	42.9
1996 January	73	6.5	40	11.9	9	6.3	6	12.2	7	71.3	135	108.2

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JANUARY 1996

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
PERTH STATISTICAL DIVISION										
Cambridge (T)	7	1	1,755	—	—	—	78	60	60	1,894
Claremont (T)	2	—	550	2	—	100	454	—	—	1,104
Cottesloe (T)	1	—	180	—	—	—	233	—	—	413
Mosman Park (T)	3	—	478	—	—	—	233	—	—	710
Nedlands (C)	9	—	2,150	—	—	—	934	300	300	3,383
Peppermint Grove (S)	1	—	1,000	—	—	—	85	—	—	1,085
Perth (C) — Inner	—	—	—	—	—	—	—	36,035	36,035	36,035
Perth (C) — Remainder	—	—	—	16	—	1,800	—	75	75	1,875
Subiaco (C)	2	—	214	2	—	270	189	500	500	1,173
Victoria Park (T)	5	—	428	5	—	246	180	—	—	854
Vincent (T)	3	—	210	10	—	1,260	278	—	—	1,748
Central Metropolitan (SSD)	33	1	6,965	35	—	3,676	2,663	36,970	36,970	50,273
Bassendean (T)	6	—	606	—	—	—	97	300	404	1,107
Bayswater (C)	9	—	613	—	—	—	316	305	305	1,234
Kalamunda (S)	12	—	1,200	16	—	1,084	349	205	205	2,838
Mundaring (S)	18	—	1,469	5	—	400	116	129	129	2,114
Swan (S)	98	—	6,924	—	—	—	517	6,120	6,120	13,561
East Metropolitan (SSD)	143	—	10,812	21	—	1,484	1,395	7,059	7,163	20,854
Stirling (C) — Central	18	—	2,471	87	23	5,494	563	7,581	8,181	16,709
Stirling (C) — West	14	—	1,342	10	—	730	446	3,390	3,390	5,908
Stirling (C) — South-Eastern	1	—	192	4	—	170	753	100	150	1,265
Wanneroo (C)	130	8	12,355	13	72	11,290	1,024	2,980	21,980	46,649
North Metropolitan (SSD)	163	8	16,360	114	95	17,684	2,786	14,051	33,701	70,531
Cockburn (C)	56	—	4,924	2	—	150	194	1,480	1,480	6,748
East Fremantle (T)	2	—	188	2	—	220	150	—	—	558
Fremantle (C) — Inner	—	—	—	—	—	—	—	250	250	250
Fremantle (C) — Remainder	6	—	1,043	5	—	330	205	275	275	1,853
Kwinana (T)	9	—	740	2	—	180	26	260	260	1,207
Melville (C)	19	—	4,904	8	—	1,020	1,254	7,120	7,120	14,298
Rockingham (C)	47	1	3,612	16	—	1,056	124	360	360	5,153
South West Metropolitan (SSD)	139	1	15,411	35	—	2,956	1,954	9,745	9,745	30,066
Armadale (C)	13	—	1,078	—	—	—	179	2,010	2,010	3,267
Belmont (C)	4	—	363	—	—	—	100	626	626	1,089
Canning (C)	31	—	2,573	7	18	1,271	450	1,656	1,656	5,950
Gosnells (C)	31	—	2,279	2	—	62	21	549	549	2,911
Serpentine-Jarrahdale (S)	13	—	1,267	—	—	—	30	—	—	1,297
South Perth (C)	9	—	1,175	10	2	970	293	60	60	2,497
South East Metropolitan (SSD)	101	—	8,734	19	20	2,304	1,072	4,901	4,901	17,011
Total	579	10	58,282	224	115	28,104	9,869	72,726	92,480	188,735
SOUTH WEST STATISTICAL DIVISION										
Boddington (S)	7	—	595	—	—	—	—	—	—	595
Mandurah (C)	26	—	2,789	2	2	251	335	448	448	3,824
Murray (S)	4	—	397	—	2	150	14	—	—	560
Waroona (S)	4	—	1,235	—	—	—	—	—	—	1,235
Dale (SSD)	41	—	5,016	2	4	401	349	448	448	6,215
Bunbury (C)	12	1	1,456	—	—	—	114	778	778	2,348
Capel (S)	5	—	443	—	—	—	110	—	—	553
Collie (S)	—	—	—	—	—	—	30	—	—	30
Dardanup (S)	9	—	578	—	—	—	100	—	—	677
Donnybrook-Balingup (S)	3	—	179	—	—	—	—	120	120	299
Harvey (S)	17	—	1,864	—	—	—	35	960	960	2,859
Preston (SSD)	46	1	4,519	—	—	—	389	1,858	1,858	6,766

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JANUARY 1996—continued

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
SOUTH WEST STATISTICAL DIVISION (continued)										
Augusta-Margaret River (S)	3	—	171	2	—	150	100	—	—	421
Busseton (S)	22	—	3,354	4	—	410	165	299	299	4,228
Vasse (SSD)	25	—	3,525	6	—	560	265	299	299	4,649
Boyup Brook (S)	—	—	—	—	—	—	—	56	56	56
Bridgetown-Greenbushes (S)	2	—	136	—	—	—	40	—	—	176
Manjimup (S)	4	—	312	—	—	—	64	52	52	428
Nannup (S)	4	—	238	—	—	—	18	—	—	256
Blackwood (SSD)	10	—	685	—	—	—	122	108	108	915
Total	122	1	13,746	8	4	961	1,125	2,713	2,713	18,545
LOWER GREAT SOUTHERN STATISTICAL DIVISION										
Broomehill (S)	1	—	100	—	—	—	17	—	—	117
Gnowangerup (S)	—	—	—	—	—	—	—	—	—	—
Jerramungup (S)	—	—	—	—	—	—	—	—	—	—
Katanning (S)	2	—	271	—	—	—	25	—	—	296
Kent (S)	—	—	—	—	—	—	—	—	—	—
Kojonup (S)	—	—	—	—	—	—	—	—	—	—
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	3	—	371	—	—	—	42	—	—	413
Albany (T)	6	—	623	—	—	—	25	1,367	1,817	2,465
Albany (S)	7	—	517	—	—	—	39	—	—	555
Cranbrook (S)	3	—	140	—	—	—	50	—	—	190
Denmark (S)	10	—	866	—	—	—	57	—	—	922
Plantagenet (S)	—	—	—	—	—	—	—	—	—	—
King (SSD)	26	—	2,145	—	—	—	170	1,367	1,817	4,132
Total	29	—	2,516	—	—	—	212	1,367	1,817	4,545
UPPER GREAT SOUTHERN STATISTICAL DIVISION										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	2	—	78	—	—	—	—	—	—	78
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	—
Narrogin (T)	—	—	—	—	—	—	10	75	75	85
Narrogin (S)	1	—	67	—	—	—	—	—	—	67
Pingelly (S)	—	—	—	—	—	—	—	—	—	—
Wagin (S)	—	—	—	—	—	—	—	—	—	—
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	—	—	—	—	—	—	—	—	—	—
Hotham (SSD)	3	—	145	—	—	—	10	75	75	230
Corrigin (S)	—	—	—	—	—	—	—	57	57	57
Kondinin (S)	—	—	—	—	—	—	—	—	—	—
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	—	—	—	—	—	—	11	—	—	11
Lakes (SSD)	—	—	—	—	—	—	11	57	57	69
Total	3	—	145	—	—	—	21	132	132	299

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JANUARY 1996 *continued*

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$ '000)	Non-residential building		Total building (\$ '000)
	Houses			Other residential buildings				Private sector (\$ '000)	Total (\$ '000)	
	Private sector (number)	Public sector (number)	Total value (\$ '000)	Private sector (number)	Public sector (number)	Total value (\$ '000)				
MIDLANDS STATISTICAL DIVISION										
Chittering (S)	5	—	339	—	—	—	11	—	—	350
Dandaragan (S)	2	—	436	—	—	—	28	—	—	464
Gingin (S)	5	—	277	—	—	—	—	—	—	277
Moora (S)	2	—	110	—	—	—	—	250	250	360
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	—
Moore (SSD)	14	—	1,161	—	—	—	39	250	250	1,450
Beverley (S)	—	—	—	—	—	—	—	—	—	—
Cunderdin (S)	—	—	—	—	—	—	—	—	—	—
Dalwallinu (S)	—	—	—	—	—	—	—	—	—	—
Dowerin (S)	—	—	—	—	—	—	—	—	—	—
Goomalling (S)	—	—	—	—	—	—	—	—	—	—
Koorda (S)	—	—	—	—	—	—	37	—	—	37
Northam (T)	2	—	155	—	—	—	—	100	100	255
Northam (S)	1	—	30	—	—	—	20	—	—	50
Quairading (S)	1	—	111	—	—	—	—	116	116	228
Tammin (S)	—	—	—	—	—	—	—	—	—	—
Toodyay (S)	1	—	40	—	—	—	—	—	—	40
Wongan-Ballidu (S)	—	—	—	—	—	—	—	—	—	—
Wyalkatchem (S)	1	—	60	—	—	—	—	—	—	60
York (S)	1	—	84	—	—	—	36	—	—	120
Avon (SSD)	7	—	480	—	—	—	93	216	216	789
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	—
Kellerberrin (S)	—	—	—	—	—	—	—	—	—	—
Merredin (S)	1	—	75	—	—	—	—	—	—	75
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	—
Mukinbudin (S)	—	—	—	—	—	—	44	—	—	44
Narembeen (S)	—	—	—	—	—	—	—	—	—	—
Nungarin (S)	—	—	—	—	—	—	—	—	—	—
Trayning (S)	—	—	—	—	—	—	—	—	—	—
Westonia (S)	—	—	—	—	—	—	—	—	—	—
Yilgarn (S)	—	—	—	—	—	—	—	—	1,120	1,120
Campion (SSD)	1	—	75	—	—	—	44	—	1,120	1,239
Total	22	—	1,717	—	—	—	176	466	1,586	3,479
SOUTH EASTERN STATISTICAL DIVISION										
Coolgardie (S)	1	—	59	—	—	—	40	—	—	99
Kalgoorlie/Boulder (C)	20	—	1,907	10	—	632	316	1,431	1,431	4,286
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	—	—	—	—	—	—
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	21	—	1,966	10	—	632	356	1,431	1,431	4,384
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	2	—	133	—	—	—	129	225	225	487
Ravensthorpe (S)	1	—	15	—	—	—	—	—	—	15
Johnston (SSD)	3	—	148	—	—	—	129	225	225	502
Total	24	—	2,114	10	—	632	485	1,656	1,656	4,886

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), JANUARY 1996—continued

Statistical local area, statistical subdivision and statistical division	New residential building (b)						Alterations and additions to residential buildings (\$'000)	Non-residential building		Total building (\$'000)
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
CENTRAL STATISTICAL DIVISION										
Carnarvon (S)	1	—	95	—	—	—	—	100	100	195
Exmouth (S)	2	—	320	—	—	—	—	120	120	440
Shark Bay (S)	—	—	—	—	—	—	—	—	—	—
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	3	—	415	—	—	—	—	220	220	635
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meekatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	—	—	—	—	—	—	—	—	—	—
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—	—	—	—	—
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	—	—	—	—
Coorow (S)	—	—	—	—	—	—	—	—	—	—
Geraldton (C)	1	—	90	2	—	123	157	547	547	918
Greenough (S)	14	—	1,352	7	—	481	40	337	337	2,210
Irwin (S)	4	—	547	—	—	—	15	—	—	562
Mingenew (S)	—	—	—	—	—	—	—	—	—	—
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	—	—	—	—	—	—	—	—	—
Northampton (S)	2	—	180	—	—	—	—	120	120	300
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	—	—	—	—	—	—	—	—	—	—
Greenough River (SSD)	21	—	2,169	9	—	604	212	1,004	1,004	3,990
Total	24	—	2,584	9	—	604	212	1,224	1,224	4,625
PILBARA STATISTICAL DIVISION										
East Pilbara (S)	—	—	—	—	—	—	—	5,300	5,300	5,300
Port Hedland (T)	2	—	185	—	—	—	26	780	780	991
De Grey (SSD)	2	—	185	—	—	—	26	6,080	6,080	6,291
Ashburton (S)	1	—	80	—	—	—	14	—	—	94
Roebourne (S)	—	—	—	4	—	360	—	130	130	490
Fortescue (SSD)	1	—	80	4	—	360	14	130	130	584
Total	3	—	265	4	—	360	40	6,210	6,210	6,875
KIMBERLEY STATISTICAL DIVISION										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	2	1	407	—	—	—	70	65	65	542
Ord (SSD)	2	1	407	—	—	—	70	65	65	542
Broome (S)	7	—	754	36	—	2,500	99	300	300	3,653
Derby-West Kimberley (S)	—	—	—	—	—	—	—	—	—	—
Fitzroy (SSD)	7	—	754	36	—	2,500	99	300	300	3,653
Total	9	1	1,161	36	—	2,500	169	365	365	4,195
WESTERN AUSTRALIA										
Western Australia	815	12	82,529	291	119	33,162	12,310	86,860	108,184	236,184

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

**TABLE 8. NUMBER OF NEW HOUSES (a) APPROVED BY MATERIAL OF OUTER WALLS, FLOOR AREA AND VALUE PER SQUARE METRE BY STATISTICAL DIVISION
JANUARY 1996**

Statistical division	Material of outer walls					Total	Floor area (sq m)	Average floor area (sq m)	Average value per square metre (\$)
	Double brick(h)	Brick veneer	Fibre cement	Timber	Other and not stated				
Perth	567	5	2	7	8	589	131,855	227	438
South-West	96	6	7	6	8	123	28,204	237	444
Lower Great Southern	16	2	5	1	5	29	6,394	220	394
Upper Great Southern			1	—	2	3	379	126	383
Midlands	11	1	5	4	1	22	4,798	218	358
South-Eastern	2	15	2	3	2	24	4,347	181	486
Central	22	1	1	—	—	24	5,091	231	460
Pilbara	3	—	—	—	—	3	336	112	789
Kimberley	3	—	1	—	6	10	2,147	215	541
Western Australia	720	30	24	21	32	827	183,551	226	439

(a) Excludes Conversions, etc. (b) Includes houses constructed with outer walls of stone and concrete.

**TABLE 9. NEW DWELLING UNITS (a) APPROVED, BY TYPE AND STATISTICAL DIVISION
JANUARY 1996**

Statistical division	New other residential building								Total new residential building	
	New houses	Semi-detached, row or terrace houses, townhouses, etc. of			Flats, units or apartments in a building of			Total		
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys			
										Total
NUMBER OF DWELLING UNITS										
Perth	589	235	32	267	—	72	—	72	339	928
South West	123	12	—	12	—	—	—	—	12	135
Lower Great Southern	29	—	—	—	—	—	—	—	—	29
Upper Great Southern	3	—	—	—	—	—	—	—	—	3
Midlands	22	—	—	—	—	—	—	—	—	22
South Eastern	24	10	—	10	—	—	—	—	10	34
Central	24	9	—	9	—	—	—	—	9	33
Pilbara	3	4	—	4	—	—	—	—	4	7
Kimberley	10	36	—	36	—	—	—	—	36	46
Western Australia	827	306	32	338	—	72	—	72	410	1,237
VALUE (\$'000)										
Perth	58,282	15,648	2,856	18,504	—	9,600	—	9,600	28,104	86,386
South West	13,746	961	—	961	—	—	—	—	961	14,707
Lower Great Southern	2,516	—	—	—	—	—	—	—	—	2,516
Upper Great Southern	145	—	—	—	—	—	—	—	—	145
Midlands	1,717	—	—	—	—	—	—	—	—	1,717
South Eastern	2,114	632	—	632	—	—	—	—	632	2,746
Central	2,584	604	—	604	—	—	—	—	604	3,189
Pilbara	265	360	—	360	—	—	—	—	360	625
Kimberley	1,161	2,500	—	2,500	—	—	—	—	2,500	3,661
Western Australia	82,529	20,706	2,856	23,562	—	9,600	—	9,600	33,162	115,691

(a) Excludes Conversions, etc.

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. From the January 1995 issue of this publication, the number of dwelling units approved as part of alterations and additions to existing buildings (including conversions of non-residential buildings to dwelling units) and as part of the construction of non-residential building is shown separately in Table 1 under the heading of "Conversions, etc.", and is included in the total number of dwelling units shown in the table. Previously, such dwellings were only included as a footnote.

10. In addition, from the January 1995 issue, the seasonally adjusted and trend estimates for the number of dwelling units approved, shown in Table 3, include these conversions, etc. Previously, only dwelling units approved as part of the construction of new residential buildings were included in these estimates.

11. The value of new residential building approved continues to exclude the value of dwelling units created as conversions of (residential and) non-residential buildings, and the value of dwelling units erected as part of the construction of new non-residential building. Approved building work represented by these conversions, etc. continues to be included in the value of alterations and additions to residential buildings or in the value of non-residential building as appropriate.

12. *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

13. *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.

14. *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*.

15. 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.

16. 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.

17. 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.

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

Seasonal adjustment

19. 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.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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

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

27. 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.

28. 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.

29. 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).

30. 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'.

31. 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

32. 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

33. 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 (renamed Victoria Park on 2 November 1994) 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

34. 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.

35. 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

36. 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

37. 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.

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

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