# Western Australia



Catalogue No. 8731.5

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6 May 1996

# BUILDING APPROVALS WESTERN AUSTRALIA March 1996

#### **MAIN FEATURES**

The number of houses approved in March 1996 decreased by 1.3 per cent when compared with February 1996 and decreased by 12.5 per cent when compared with March 1995.

The number of total dwelling units approved in March 1996 increased by 1.3 per cent when compared with February 1996 and decreased by 14.8 per cent when compared with March 1995.

The provisional trend for new private houses rose 3.2 per cent in March 1996, following a 2.6 per cent rise in February 1996. This trend will continue to grow unless there is a fall of more than 18.2 per cent in the April 1996 seasonally adjusted figure. The historical average monthly movement of this series regardless of sign is 7.0 per cent.

Comparisons with previous periods are:

#### Month to month

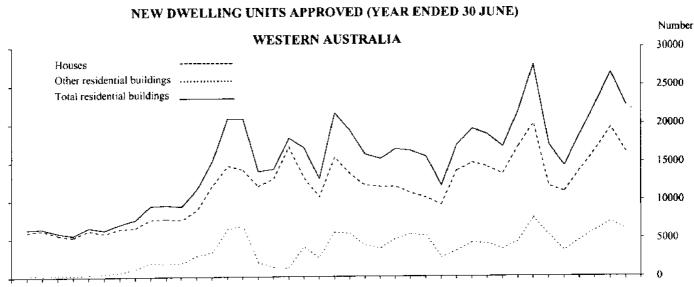
	March 1996	February 1996	% change	March 1995	% change
Houses	1,101	1,115	-1.3	1,258	-12.5
Total dwelling units	1,501	1,482	1.3	1,761	-14.8
	1	Three month mov	ing average		
	March 1996	February 1996	% change	March 1995	% change
Houses	1,014	920	10.2	1184	-14.4
Total dwelling units	1,408	1,239	13.6	1,627	-13.5

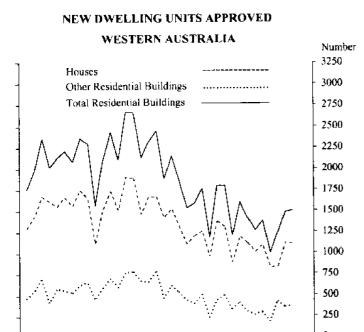
P.C. Kelly Deputy Commonwealth Statistician and Government Statistician

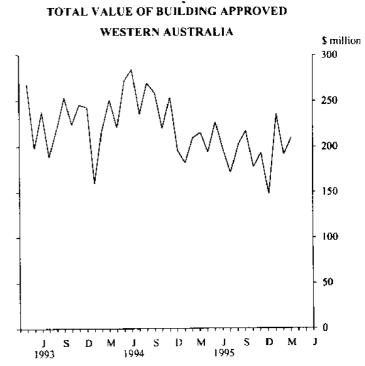
PHONE INQUIRIES		80 for further information about statistics in this annual statistics. Other inquiries, including rvices on (09),360 5140.
MAIL INQUIRIES	Write to Information Services, Australian Esplanade, Perth WA 6000.	Bureau of Statistics, Exchange Plaza, 2 The
ELECTRONIC SERVICES	<ul> <li>on Elderlink key *620#</li> <li>on PC-AUSSTATS phone (06) 252 6017</li> </ul>	on Dial-A-Statistic phone 0055 86400

# CONTENTS

Tabl	e	Page
	Graphs	
	New dwelling units approved ( year ended 30 June)	2
	New dwelling units approved	3
	Total value of building approved	3
	New houses approved - original and seasonally adjusted	3
	New houses approved - trend estimate and seasonally adjusted	3
1	Number of dwelling units approved	4
2	Value of building approved	5
3	Number of dwelling units approved - seasonally adjusted and trend estimates	6
4	Value of building approved at average 1989-90 prices	6
5	Value of building approved, by class of building and ownership	7
6	Non-residential building jobs approved, by class of building and value size groups	8
7	Building approvals by statistical local areas	9
8	Number of new houses approved by material of outer walls, floor area and value per square metre by statistical division	13
9	New dwelling units approved, by type and statistical division	13
	Explanatory Notes	14







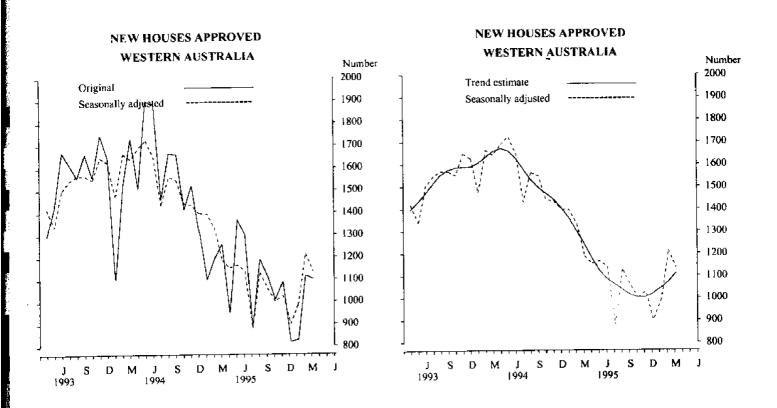


TABLE 1. NUMBER OF DWELLING UNITS APPROVED

	N.	ew houses		New other r	esidential build	lings	_	Total (a)			
Period	Private sector	Public sector	Total	Private sector	Public sector	Total	Conversions. elc.	Private sector	Public sector	Total	
			PER	TH STATIST	TICAL DIVIS	SION					
1992-93	11,618	2 <b>85</b>	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-March	8,819	188	9,007	3,761	331	4,092	90	12,669	520	13,189	
1995-96			£ 225	3.000	*10	2 227	40	8,203	429	8,632	
July-March	6,126	111	6,237	2,009	318	2,327	68	6,203	427	6,032	
1995	702	3=	010	307	44	261	2	1.002	21	1,164	
January	783	27	810	307	44	351	3 6	1,093 1,058	71 70	1,128	
February	794	41	835	258	29 33	287 397	6	1,160	69	1,128	
March	790	36	826	364 169	5	174	4	798	20	818	
April	625 947	15	640 982	297	54	351	1	1,245	89	1.334	
May	947 847	35 17	982 864	203	119	322	3	1,053	136	1,189	
June	493	6	499	269		269	4	766	6	772	
July	835	20	855	317	15	332	8	1,160	35	1,195	
August September	172	17	789	200	19	219	5	977	36	1,013	
October	691	2	693	157	51	208	3	851	53	904	
October November	750	2	752	212	18	230	5	967	20	987	
December	538	13	551	129	2	131	6	673	15	688	
1006											
1996 January	579	10	589	224	115	339	4	807	125	932	
February	737	40	777	245	38	283	23	1,005	78	1,083	
March	731	1	732	256	60	316	10	997	61	1,058	
				WESTERN	AUSTRALIA	A.					
			16.405		1.013	5,994	89	20,206	2,362	22,568	
1992-93	16,036	449	16,485	4,081	1,913 1,206	7,144		25,085	1,691	26,776	
1993-94	18,966	47 i 424	19,437 16,207	5,938 5,297	808	6,105		21,194	1,233	22,423	
1994-95	15,783	424	10,207	3,491	500	0,103	113	21,177	1,230	22,12	
1994-95	12,311	276	12,587	4,500	466	4,966	105	16,915	743	17,651	
July-March 1995-96	12,311	270	12,367	4,500	700	4,747.0	103	10,715	1.0	,.,,	
July-March	8,965	175	9,140	2,456	375	2.831	100	11,521	550	12,07	
1995—											
January	1,069	31	1,100	379	52	431	<b>7</b> 4	1,452	83	1,53:	
February	1,142	53	1,195	324	59	383	. 8	1,474	112	1,58	
March	1,201	57	1,258	445	51	496		1,653	108	1,76	
April	920	32	952	198	24	222		1,124	56	1,18	
May	1,317	50	1,367	352	74	426		1,670	1 <b>24</b>	1.79	
June	1,235	66	1,301	2 <b>47</b>	244	49 !		1,485	310	1,79	
July	872	11	883	316	_	316		1,192	11	1,20	
August	1,166	23	1,189	377	22	399		1,551	45	1,59	
September	1,089	22	1,111	264	29	293		1,359	51 49	1,41	
October	999	9	1,008	194	59	253		1,197	68 35	1,26 1,37	
November	1.076	11	1,087	262	24	286		1,343 97 <b>8</b>	35 17	99	
December	804	15	819	168	2	170	) 6	918	11	77	
1996—				-0.	*10		,	,	121	1 34	
January	815	12	827	291	119	410		1,110 1,393	131 89	1,24 1,48	
February	1,070	45	1,115	298	44	343			89 103	1,48	
March	1,074	27	1,101	286	76	362	2 38	1,398	103	1,30	

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

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

				New res.	idential bu	ilding				Alterations	Nr	lange-f		
		Houses		Other res	idential hu	ildings		Total		and additions to	Non-resid buildir		Total hu	ilding
Period	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector .	Public sector	Total	residential huildings	Private sector	Total	Private sector	Total
	•				PER	TH STAT	TISTICAL	DIVISIO	DN .					
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														
luly-March	728.5	13.2	741.7	249.1	20.1	269.2	977.6	33.3	1,010.9	99.2	314.7	412.4	1,391.4	1,522.5
1995-96 July-March	578.5	8.1	586.6	160.8	25.9	186.8	739.3	34.0	773.3	98.5	319.8	381.5	1,157.3	1,253.3
-														
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
January February	68.8	2.6	71.4	17.0	2.3	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
February	70.4	3.2	73.7	17.9	2.1	20.0	88.3	5.3	93.7	9.9	28.2	35.5	126.5	139.1
March	67.9	0.1	67.9	25.4	4.7	30.2	93.3	4.8	98.1	11.6	26.9	41.8	131.8	151.5
			- <del>-</del>		<u>.</u>	WESTE	RN AUST	RALIA						
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.
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.
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	2,659.6
1994-95														
July-March	1,026.3	22.0	1,048.3	303.3	29.8	333. I	1,329.7	51.8	1,381.5	121 8	414. I	537.5	1,865.3	2,040.
1995-96 July-March	832.7	16.5	849,2	194.4	30.6	225.0	1,027.1	47.1	1,074.2	126.2	465.7	547.1	1,618.6	1,747.
1006														
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.:
February	97.9		102.0		4.2	26.8	120.5	8.3	128.8	12.5	34.2	68.3	167.1	209.4
March	106.7		111.4		3.6	39.0	142.2	8.3	150.4	14.9	48.2	50.1	205.3	215.:
April	79.1		81.7		2.2	16.1	93.0	4.8	97.9	10.3	73.6	85.8	176.9	193.5
May	111.5		115.2		6.2	35.7	141.0	9.9	151.0	12.9	54.7	63.3	208.6	227.
June	102.9		109.0		15.9	35.3	122.3	22.0	144.3	11.2	38.5	41.6	172.0	197.
July	76.8		77.8		_	23.1	99,9	1.1	100.9	15.8	51.9	55.1	167.5	171.
August	103.1		104.8		1.3	30.6	132,4	3.0	135.4	14.0	51.0	53.2	197.5	202.
September	97.5		99.2		1.7	22.9	118.6	3.5	122.1	16.2	72.2	79.0	207.0	217.
October	95.4		96.6	17.0	3.3	20.4	112.5	4.5	117.0	11.9	47.1	48.5	171.3	177.
November	97.6	1.5	99.1		3.2	22.7	117.1	4.7	121.8	16.5		54.7	184.8	192.
December	78.5	1.0	79.5	12.8	0.1	12.9	91.3	l.i	92.4	12.2	28.7	42.9	132.2	147.
1996—														
January	81.7		82.5		12.0	33.2	102.8	12.9	115.7	12.3		108.2	201.9	236.
February	101.3	3.8	105.1			25.5	124.1	6.5	130.6			48.6	177.7	191.
March	100.8	3.7	104.5	27.6	6.1	33.7	128.4	9.9	138.2	14.8	35.5	56.9	178.7	210.

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

		House	5		Total					
	Private sector		Total		Private sector	-4	Total			
Period	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate		
1995—	<del>"</del>									
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	841	1.023	879	1.057	1.238	1,302	1,245	},400		
Augusi	1,094	1,005	1,129	1,035	1,387	1,271	1,510	1,370		
September r	1,032	988	1,056	1,013	1,218	1,244	1,327	1,338		
October r	970	980	1.000	1,001	1,213	1,233	1,323	1,315		
November r	1,012	988	1,026	1,003	1.302	1,245	1,387	1,318		
December r	884	1.005	898	1,018	1,075	1,275	180,1	1,346		
1996							1.205			
January r	1,016	1,029	983	1,042	1,347	1,316	1,395	1,391		
February r	1,163	1,056	1,211	1,071	1,537	1,359	1,642	1,443		
March	1,102	1,090	1,134	1,110	1,363	1,408	1,517	1,506		

(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)

	(ADD)	L 4. 1711.0L		(S milliot	n)	. —			
		New residentia	d huilding	Alterations	Non-residential huilding		Total building		
	Houses		Other		and — additions to				
Period	Private sector	Total	residential huildings	Total	residential huildings	Private sector	Total	Private sector	Total
						7	872.0	2,207.3	2,665.1
1992-93	1,261.4	1,300.1	341.2	1,641.4	151.7	579.6			•
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—				F20 0	43.0	1510	188.2	715.8	769.0
Sept. qtr.	398.3	405,1	132.8	537.8	43.0	151.9		623.7	673.3
Dec. qtr.	359.5	363.9	102.3	466.2	42.8	129.9	164.3	Q23.1	0,5,5
1995—			20.4	400.3	39,7	118,0	166.5	535.3	606.4
Mar. qtr.	300.3	311.7	88.6	400.3		159.5	182.3	552.6	612.4
June qtr.	298.6	311.3	83.8	395,1	35.0			563.4	583.9
Sept. gtr.	281.0	285.5	73.4	358.9	46.6	166.8	178.4		507.6
Dec. qtr.	271.3	274.9	53.5	328.4	40.6	120.6	138.6	478.7	307.0

(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

n et irli			July-Marci	a	•	1996	
Class of building	1993-94	1994-95	1994-95	1995-96	January	February	March
		PRIVATE SE	ECTOR				
			. 1 027 3	023 7	91.7	101.3	100.8
New houses	1,469.3	1,319.8	1,026.3	832.7	81.7	101.3	
New other residential buildings	382.5	366.3	303.3	194.4	21.1	22.8	27.6
Fotal new residential building	1,851.8	1,686.1	1,329.7	1,027.1	102.8	124.1	128.4
Alterations and additions to residential buildings	148.9	155.9	121.6	125.8	12.3	12.4	14.8
_	30.3	46.9	35.3	92,7	41.5	4,3	1.3
lotels, etc.	30.3 151.3	131.8	84.8	56.0	8.7	7.3	7.0
Shops	55.4	79.5	66.3	53.0	10.0	5.2	5.3
Factories	53.7	85.1	51.3	49.3	4.9	1.6	4.8
Offices	89.9	90.8	63.5	76.2	4.8	9.3	5.0
Other business premises	41.0	30.2	28.4	36.4	4.5	2.0	2.5
Educational	9,1	5.7	2.7	3.0	_	0.5	0.2
Religious	28.8	32.2	25.7	15.3	2.2	1.7	1.0
Health			25.5	22.2	0.7	6.6	0.5
Entertainment and recreational	25.7	28.3	30.4	61.6	9.4	2.8	7.9
Miscellaneous	27.9	50.2		465.7	86.9	41.3	35,5
Total non-residential building	5/3./	580.9	414.1	403.7	00.9	41.3	<b>3</b> 0,0
Total	2,513.8	2,422.9	1,865.3	1,618.6	201.9	177.7	178.7
		PUBLIC SI	ECTOR	<del></del> .			
New houses	34.4	34.5	22.0	16.5	0.9	3.8	3.7
New other residential buildings	78.5	54.0	29.8	30.6	12.0	2.7	6.1
New other residential building Total new residential building	112.9	88.5	51.8	47.1	12.9	6.5	9.9
Alasmaiana and additions to							
Alterations and additions to residential buildings	1.1	0.2	0.2	0.4	_	_	0.1
Hotels, etc.	_	1.6	1.5		_	_	_
Shops	1.8	4.4	1.5	0.5	<del></del>		-
Factories	1.3	0.7	0.1	_	_	-	
Offices	27.7	30.9	20.2	18.8	10.0	2.9	1.8
Other business premises	17.4	6.8	6.5	3.8	0.6		_
Educational	61.0	52.1	49.6	34.1	9.5	2.2	11.7
Religious		_	_	_		_	_
Health	23.4	3.8	3.8	0.9	_	-	0.2
Entertainment and recreational	13.7	7.7	3.9	9.3	1.1	0.3	2.7
Miscellaneous	7.6	39.3	36.2	13.9	0.1	2.0	5.0
Total non-residential building	153.9	147.3	123.4	81.3	21.3	7.3	21.4
Total	267.9	236.1	175.4	128.9	34.2	13.9	31.4
		TOTA	4L	•			
				0.45.5	92.5	105.1	104.5
New houses	1,503.7	1,354.3	1,048.3	849.2	82.5	25.5	33.1
New other residential buildings	461.0	420.3	333.1	225.0	33.2		138.2
Total new residential building	1,964.7	1,774.6	1,381.5	1.074.2	115.7	130.6	70.2
Alterations and additions to residential buildings	150.0	156.2	121.8	126.2	12.3	12.4	14.8
	30.3	48.5	36.9	92,7	41,5	4.3	1.3
Hotels, etc.	153.1	136.2	86.3	56.5	8.7	7.3	7.6
Shops	133.1 56.7	80.3	66.4	53.0	10.0	5.2	5
Factories	36.7 81.3	116.0	71.5	68.2	14.9	4.5	6.
Offices	81.3 107.3	97.7	71.3 70.1	80.0	5.4	9.3	5.0
Other business premises	107.3	82.3	78.0	70.6	14.0	4.3	14.3
Educational	9.1	52.3 5.7	2.7	3.0	_	0.5	0
Religious			29.5	16.3	2.2	1.7	1.
Health	52.2	36.0		31.5	1.9	6.8	3.
Entertainment and recreational	39.5	36.0	29.4 66.7	75.5	9.5	4.8	12.
Miscellaneous	35.5	89.5	66.7 53.7.5		108.2	48.6	56.
Total non-residential building	667.0	728.2	537.5	547.1	100.5	70.0	50.

TABLE 6. NON-RESIDENTIAL BUILDING JOBS APPROVED, BY CLASS OF BUILDING AND VALUE SIZE GROUPS

				AND V.	ALUE SIZ	E GROUP	PS					
	\$50,000 ti than \$200		\$200,000 to than \$500		\$500,000 to than \$1		<b>\$ im</b> to i than \$5		\$5m aver		Total	•
Period	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (Sm)	No.	Value (Sm)	No.	Value (Sm)
	,				HOTELS, E	ETC.					•	
1996 January	7	0.7							3	40.8	10	41.5
February	12	1.0	3	0.9	1	0.5	1	1.9	_	-	17	4.3
March	5	0.4	. 1	0.2	1	0.7		_			7	1.3
					SHOPS	;						
1996 January	8	0.8	7	2.0	2	1.0	_		1	5.0	18	8.7
February	9	0.8	1	0.3	4	2.5	3	3.6	_	_	17	7.3
March	9	0.6	2	0.5	2	1.2	3	4.7	<u> </u>		16	7.0
					FACTOR							
1996 January	9	0.8	7	1.9	1	0.9		_	1	6.5	18	10.0
February March	11 12	1.3 1.3	8 10	2.2 2.8	3 2	1.7 1.2	_	_	_	_	22 24	5.2 5.3
					OFFICE			•		. <u>.</u>		
took leaves	8	0.6	4	1.4	OFFICE —		1	3.4	1	9.5	14	14,9
1996 January February	5	0.4	6	1.9	_		1	2.1		7.2	12	4.5
March	18	2.0	5	1.4	1	0.8	2	2.5	_		26	6.7
				OTHE	R BUSINES	S PREMISE	S					
1996 January	7	0.6	11	3.0	3	1.9					21	5,4
February	13	1.4	12	3.6	2	1.3	2	3.0	_	_	29	9.3
March	9	1.0	8	2,7	2	1.3		_			19	5.0
					EDUCATIO	ONAL						
1996 January	6	0.5	3	1.0	1	0.7	1	2.3	1	9.5	12	14.0
February March	4 7	0.5 0.9		_		0.5	2 6	3.7 12.7	_		6 14	4.3 14.2
WIAICH		- 0.7										
1996 January			<del>-</del>		RELIGIO	ous ———		·				
Гууо лапцагу Гууо лапцагу		0.3	1	0.3	-	_	_	_	_	_	3	0.5
March	2	0.2			_	_	_	-		_	2	0.2
					HEALT	 ГН		<b>-</b>		•		
1996 January	3	0.2	3	1.0			1	1.0			7	2.2
February	2	0.2	ŀ	0.4	_	_	1	1.1	_	_	4	1.7
March	1	0.1	2	0.5	I	0.6		<del></del>	_		4	1.2
			E	NTERTAIN	MENT AN	D RECREAT	ΓΙΟΝΑL					
1996 January	3	0.3	1	0.5	_		1	1.1		_	5	1.9 6.8
February	4	0.4	!	0.2	_	_	2 1	6.2 2.6	_	_	7 5	0.0 3,1
March	3	0.3	1	0.2				2.0				J., .
					MISCELLA 2	NEOUS 1.8	2	4.4		<del></del>	30	9.5
1996 January	22 12	2.1 1.3	4 2	1.2 0.8	ĺ	0.7	1	2.0	_		16	4.8
February March	12 21	2.0	11	3.2	2	1.2	2	6.5	_		36	12.9
	<del></del>			TOTAL NO	N-RESIDE	NTIAL BUI	LDING					•
1996 January	73	6.5	40	11.9	9	6.3	6	12,2	7	71.3	135	108.2
February	74	7.7	35	10.5	11	6.7	13	23.7	_	_	133	48.6
March	87	9.0	40	11.6	12	7.4	14	29.0	_		153	56.9

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

		Ne	w residentia	l building (b)			Alterations and	Non-resid huildii		
		Houses		Other re	sidential huile	dings	and additions to			
Statistical local area, statistical subdivision and statistical division	Private sector (number)	Public sector (number)	Total value (\$ '000)	Private sector (number)	Public sector (number)	Total value (\$ 000)	residential buildings (\$ 000)	Private sector (\$'000)	Total (\$`000)	Total building (\$'000)
· · · · · · · · · · · · · · · · · · ·		PERT	H STATIS	TICAL DI	VISION				_	
Cambridge (T)	4		1,070	- 6		445	1,015			2,530
Claremont (T)	1	_	105	2	_	250	320	184	184	859
Cottesloe (T)	2	_	244	_	_	_	100		_	344
Mosman Park (T)	6	_	1,112	_	_	_	222	1,097	1,097	2,431
Nedlands (C)	10	_	2,248	4	_	370	782	800	1,020	4,420
Peppermint Grove (S)		_	_	_	_	_	765		725	765 325
Perth (C) Inner	_	_	-	_	_		_	325	325	
Perth (C) Remainder		_		61	_	10,000	60 442	1,970 310	2,087 1,610	12,147 2,808
Subiaco (C)	6		756	_	. —	920	152	539	539	2,111
Victoria Park (T)	6	_	500	16 —	_	920	372	80	80	990
Vincent (T)	5	_	538	 89	_	11,985		5,305	6,942	29,729
Central Metropolitan (SSD)	40	_	6,573	07	_	11,900		3,505	0,272	
Bassendean (T)	2	_	105	14	_	754				1,038
Bayswater (C)	2	_	268	5	<del></del>	270		270	270	976
Kalamunda (S)	9	_	1,125	10	_	750		345	508	2,969
Mundaring (S)	17	_	1,508	****	_	<del>-</del>	127	175	175	1,810
Swan (S)	93	1	6,851	5	2	466		2,777	2,777	10,322
East Metropolitan (SSD)	123	I	9,857	34	2	2,241	1,286	3,567	3,730	17,115
Stirling (C) - Central	12		1,433	19	13	1,685		690	4,104	7,843
Stirling (C) — West	11	_	1,246	15	6	2,185		140	140	4,022
Stirling (C) - South-Eastern	2	_	133	_	<del></del>	_ <b></b>		-	-	396
Wanneroo (C)	176	_	15,952	. 4		374		1,246	1,246	18,777
North Metropolitan (SSD)	201		18,764	38	19	4.244	2,540	2,076	5,490	31,038
Cockburn (C)	57	_	4,924	12		480		2,472	2,472	8,307
East Fremantle (T)	1	_	139	_		_		-	124	472
Fremantic (C) — Inner	_			_	_			136	136	13 <i>6</i> 4,525
Fremantle (C) · Remainder	13	-	1,900	_	_	_	117	2,508 1,200	2.508 1,200	2,214
Kwinana (T)	14	_	1,014		_	 2,412		2,600	9,504	16,003
Melville (C)	19	_	3,111	16	_	2,412	- 182	453	453	8,492
Rockingham (C)	107		7,856 18,945	28	_	2,892		9,369	16,273	40,150
South West Metropolitan (SSD)	211	_	10,790	20		2,01	_			
Armadale (C)	17	_	1,919			3,19	- 253 1 94	65 1,473	65 1,473	2,231 5,911
Belmont (C)	13	a	1,157		25 5	3,193 4,464		4,788	4,892	13,248
Canning (C)	35	_	3,446 5,850		3	4,40	041	285	285	6,370
Gosnells (C)	79 6	_	525			_	- 20	_	_	54:
Serpentine-Jarrahdale (S)	6		895		9	1,17		_	2,700	5,18
South Perth (C) South East Metropolitan (SSD)	156		13,792			8,83.		6,611	9,415	33.50
Total	731	1	67,932	256	60	30,19	3 11,564	26,928	41,850	151,53
7 0121			WEST ST	ATISTICA	L DIVISIO	N				
D. Idiana (C)		500111	WESTS							
Boddington (S) Mandurah (C)	41		3,655			34.		730	730	4,93
Murray (S)	17		1,687		_	_	- 20	190	190	1,89
Waroona (S)	3		227		_	_	- 85	76	76	38
Dale (SSD)	61		5,569		_	34	3 314	996	996	7,22
Bunbury (C)	14		1,748		_	_	_ 244		_	1,99
Capel (S)	4		383		_	_		_	_	38
Collie (S)	2		142		_			-	_	21
Dardanup (S)	7		473	· -	_	_		_	_	63
Donnybrook-Balingup (S)	8		646			_	- 70		_	71
-	18		1,854		_		_ 81	70	70	
Harvey (S)	16	,					- 628	70	70	5.94

For footnote, see end of table.

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

		Ne	w residentia	l building (b)	1		Alterations	~		
	-	Houses		Other re	esidential buil	dings	and = additions			
Statistical local area, statistical subdivision and statistical division	Private sector (number)	Public sector (number)	Total value (3'000)	Private sector (number)	Public sector (number)	Total value (\$'000)	to residential buildings (\$'000)	Private sector (\$'000)	Total (\$'000)	Total building ( <b>\$</b> '000)
	SOL	JTH WEST	STATIST	ICAL DIVI	SION (cont	inued)			·	
Augusta-Margaret River (S)	21	_	1,558	2		56	218	673	673	2,505
Busselton (S)	24		2,401	4	_	265	265	2,085	2,085	5,016
Vasse (SSD)	45	_	3,959	6	_	321	483	2,758	2,758	7,520
Boyup Brook (S)	2	_	132	_	_	_	_	_	_	132
Bridgetown-Greenbushes (S)	2		153	_	_	_	_			153
Manjimup (S)	9	_	675	_		_	42	492	492	1,209
Nannup (S)	2	_	160		-	_	_	_	_	160
Blackwood (SSD)	15	_	1,120	_	_	_	42	492	492	1,65
Total	174	_	15,894	12	_	664	1,467	4,316	4,316	22,34
	LOW	ER GREAT	r southe	RN STAT	ISTICAL D	IVISION				
Broomehill (S)	2		65		_				_	6:
Gnowangerup (S)	1	_	160	-	_	_	_			16
Jerramungup (S)	_	_	_	_		_	-		_	_
Katanning (S)	1	_	152	_		_	12	100	2,700	2,86
Kent (S)	_	_	_	_	_	_	_		_	_
Kojonup (\$)	2		165	-	_	_	80	_	_	24
Tambellup (S)			_	_	_		_	_	_	_
Woodanilling (S)	l		74	_		_	_	_	_	7
Pallinup (SSD)	7	_	616	_	-	_	92	100	2,700	3,40
Albany (T)	14	_	1,874	5	_	260	95	742	742	2,97
Albany (S)	12	_	1,166	_		_	174	500	500	1,84
Cranbrook (S)	-	_	· —	_		_	_		_	_
Denmark (S)	13	_	1,226		_	_	_	_		1,22
Plantagenet (S)	5		265	_	_		71	_		33
King (SSD)	44	_	4,531	5	_	260	340	1.242	1,242	6,37
Total	51	_	5,148	5		260	432	1,342	3,942	9,78
	UPP	ER GREAT	SOUTHE	RN STATI	STICAL DI	VISION				
Brookton (S)		_		_	_			_		_
Cubatting (S)	_	_		_	_	_	_		_	_
Dumbleyung (S)	_	_	_					_	_	-
Narrogin (T)	2	_	100		_				_	10
Narrogin (S)	_	_	_		_	_	_	_	_	-
Pingelly (S)	_		_	_	_	_	_	_	_	_
Wagin (S)	_	-	_	_	_	_	38	_	_	3
Wandering (S)	_	_	. –	_	_	_			-	70
West Arthur (S)	2	_	127		_	_	15	153	153	29
Wickepin (S)	_	_	-	_	_	_	40	_	_	74
Williams (S)	2	_	213	_	_		40		162	25 68
Hotham (SSD)	6	-	440	_	_	_	93	153	153	00
Cornigin (S)	1	_	150	_	_	_	-	_	_	1,5
Kondinin (S)		_	_	_	_	_	_		_	_
Kalin (S)	1	_	85	_	_	_	_	-	_	8
Lake Grace (S)	_	_	_	_	_	_	_	_	_	
Lakes (SSD)	2	_	235	_			_		_	2.

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), MARCH 1996. -continued

		Ne	w residentia	l building (b,	•		Alterations and	Non-resid buildii		
		Houses		Other re	esidential huit	ldings	additions to			
Statistical local area, statistical subdivision and statistical division	Private sector (number)	Public sector (number)	Total value (\$ 000)	Private sector (number)	Public sector (number)	Total value (\$'000)	residential buildings (\$*000)	Private sector (\$'000)	Total (\$1900)	Total building (\$'000)
		MIDLA	NDS STA	TISTICAL	DIVISION					
Chittering (S)	3	_	192				_			192
Dandaragan (S)		_	_	_	_	_	52	<u>-</u> ·	_	52
Gingin (S)	6	_	309	_		_	36	278	278	623
Moora (S)	1	_	61	_	_	_	_	150	150	211
Victoria Plains (S)	_	_	_		_	_	_			
Moore (SSD)	10	_	563	_		_	88	428	428	1,078
Beverley (S)	2	_	140	_	_	_	100	_		240
Cunderdin (S)	_	_	_	-	. —	-	_	_	1,540	1,540
Dalwallinu (S)	2	_	246	_	_	_	_	_	_	246
Dowerin (S)	_	_	_	_	_	_	_	_	_	_
Goomalling (S)	-		_		-	_	_	_	-	_
Koorda (S)	_		_		_	_		_		
Northam (T)	2	_	288	_	_	_	53	_	1,825	2,166
Northam (S)	5	_	1,319		_	_	22	_		1,341
Quairading (S)	_	<del></del>	_	_	_	_	_		320	320
Tanunin (S)	_	_	_	_	_	_	_	_	_	_
Toodyay (S)	3	_	193	_	_	_		_	_	193
Wongan-Ballidu (S)	_	_	_	_		_	15	_	_	15
Wyalkatchem (S)	_	_	_	_		_		_	_	_
York (S)	4	_	326	_	_			_		450
Avon (SSD)	18	_	2,511	_	_	_	315	_	3,685	6,511
Bruce Rock (S)	_	_	_	_	_	_	_	_	_	
Kellerberrin (S)		_	_	_	_	-	_	_	_	_
Merredin (S)	_	_		_	_	_		125	125	125
Mount Marshall (S)	_	_	_		_	_		_	_	_
Mukinbudin (S)	_	_	_	_	_	_	_		_	212
Narembeen (S)		_	_	_	4	312		_	_	312
Nungarin (S)	-	_	_		_	_		_		10
Trayning (S)	1	_	28	_	_	_		_	_	28
Westonia (S)	<del>-</del>	_	_	_	_			_	_	101
Yilgam (S) Campion (SSD)	1 2	_	101 <i>130</i>	_	- 4	312		125	125	566
Total	30		3,203	_	4	312	402	553	4,238	8,155
		<u> </u>		or a michiel	· · · · · ·	ON!	<u></u>		. <u></u>	
	<del></del>			MISH	AL DIVISI					256
Coolgardie (S)	2		256 2,315	 6	_	390	140	735	735	3,580
Kalgoorlie/Boulder (C)	22		2,31,3						_	-,
Laverton (\$)	_	_		_				_		21
Leonora (S)	_	_	_			_		_	_	_
Menzies (S) Lefroy (SSD)	24	2	2,571	б	_	39		735	735	3,85
Dundas (S)		<del></del>	_	_	_	_			_	_
Esperance (S)	12		1,092	_			- 85	126	126	
Ravensthorpe (S)	1		50		_		- 88	_	_	138
Johnston (SSD)	13		1,142		_	-	- 173	126	126	1.44
Total	37	2	3,712	6	_	39	0 335	861	861	5,29

For footnote, see end of table.

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

		Ne	w residentia.	l building (b,	<i>)</i>		Alterations and	Non-resia buildi		
		Houses		Other n	esidential buil	dings	additions			
Statistical local area, statistical subdivision and statistical division	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$ 000)	to residential huildings (\$ '000)	Private sector (\$'000)	Total ( <b>\$'00</b> 0)	Total building ( <b>\$'</b> 00 <b>0</b> )
		CENTI	RAL STAT	ISTICAL	DIVISION				<del></del>	
Camaryon (S)					_					<u> </u>
Exmouth (S)	_	4	1,108	_	_					1,108
Shark Bay (S)	I	_	72	_	_	_		_		72
Upper Gascoyne (S)		_	_	_	_	_	_	_	_	_
Gascoyne (SSD)	1	4	1,180	_	_	_	_	_	_	1.180
Cue (S)	_	_	_	_	_	_	_	_	_	_
Meekatharra (S)	_		_	-	_	_	_	_		_
Mount Magnet (S)	_	_	_	_	_			_	_	
Murchison (S)	_	_		_	_	· —	_	_	_	_
Ngaanyatjarraku (S)	3	_	230	_	_	_		_	_	230
Sandstone (S)		_		_	_	_	_	_	_	
Wiluna (S)	_	_		_		_	_	_	_	_
Yalgoo (S)	_				_	_		_		
Carnegie (SSD)	3	_	230	_	_	_	_	_	_	230
Camamah (S)	_	_	_	-	_	_	16	172	172	188
Chapman Valley (S)	_	_	_	_	_	_	_	_	_	_
Coorow (S)	_	_	_		_	_	31	_		31
Geraldton (C)	4	_	652	_	_		61	185	185	897
Greenough (S)	16	_	1,583	_	_	_	36	_	_	1,619
Irwin (S)	7	_	431	_	_		87	_	107	624
Mingenew (S)	_		_		_	_	20	_	-	20
Morawa (S)	1	_	90		_		_	_	_	90
Mullewa (S)	_	_	_	_	_	_	17	_	_	17
Northampton (S)		_	_	_	_	_		50	186	186
Perenjori (\$)	_	_	_	_	_	_	20		_	20
Three Springs (S)	_	_		_		_	_		_	
Greenough River (SSD)	28	_	2,756	_	_	_	287	402	650	3,693
Total	32	4	4,166	_	_	_	287	407	659	5,103
		PILBA	ARA STAT	ISTICAL	DIVISION					
East Pilbara (S)	-	_	_	_	_					_
Port Hedland (T)	_	_	_	_		_	10	140	140	150
De Grey (SSD)	_	_	_	_	_	_	10	140	140	150
Ashburton (S)	_	<del>-</del>	_	_	_	_				_
Roebourne (S)	2		196	_	_	_	_		_	196
Fortescue (SSD)	2	-	196	_	_	_		_	_	196
Total	2		196	_	_	_	10	148	140	346
		KIMBE	RLEY STA	ATISTICA	L DIVISIO	V		•		
Halls Creek (S)	1	3	632	2		150	190	632	632	1,604
Wyndham-East Kimberley (S)		8	863	_	2	202		100	100	1,223
Ord (SSD)	I	H	1,495	2	2	352		732	732	2,82
Broome (S)	5	9	1.760	5	10	1,524	_	60	60	3,344
Derby-West Kimberley (S)	3		362	_	_	_		_		362
Fitzroy (SSD)	8	Ģ	2,122	5	10	1,524	_	60	60	3.706
Totat	9	20	3,617	7	12	1,876	248	792	792	6,53
			WESTER	N AUSTRA	ALIA					
		_								210,011

<sup>(</sup>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 MARCH 1996

	· · · ·	i	Material of o	uter walls				Average floor area (sq m)	Average value per square metre (\$)
Statistical division	Double brick(b)	Brick veneer	Fibre cement	Timber	Other and not stated	Total	Floor area (sg m)		
Perth	720	3	1	4	4	732	160,281	221	419
South-West	135	10	6	15	8	174	35,803	216	423
Lower Great Southern	14	22	5	7	3	51	9,859	193	522
Upper Great Southern	2	2	3	_	1	8	1,942	243	348
Midlands	8	4	13	3	2	30	5,318	190	547
South-Eastern	8	22	7	2	_	39	7,631	196	486
Central	27	6	2	_	1	36	6,253	216	452
Pilbara	_	ı	1		_	2	632	316	310
Kimberley	17	3	3	_	6	29	4,776	165	757
Western Australia	931	73	41	31	25	1,101	232,495	216	436

<sup>(</sup>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 MARCH 1996

-		New other residential building								
	— New houses	Semi-detached, row or terrace houses, townhouses, etc. of			Flats, u		Total new			
Statistical division		l storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys	Tota!	Total	residential building
	<u> </u>		NUI	MBER OF I	WELLING UP	VITS		· <del></del> .		
					·					-
Perth	732	264	11	275	_		41	41	316	1,048
South West	174	12	_	12			_		12	186
Lower Great				_				_	5	56
Southern	51	5	_	5	_	_	_			
Upper Great	_								_	8
Southern	8	_	_	4	_		_		4	34
Midlands	30	4		6	_		_		6	45
South Eastern	39	6	_	O			_	_	_	3€
Central	36	_	_	_	_	_	_			- 2
Pilhara	2		-		_	_		_	19	48
Kimberley	29	19	_	19	_	_	<del>_</del>		.,	.,
Western Australia	1,101	310	11	321			41	41	362	1,463
		<u>-</u>		VAL	NE (\$,000)					<u>_</u>
	67.932	20,695	1,498	22,193			8,000	8,000	30,193	98,12
Perth South West	15,894	664		664	_	_	_	_	664	16,55
South West Lower Great	13,094	004		•••						
Southern	5,148	260	_	260	_	-		-	260	5,40
Upper Great										67:
Southern	675	_		_	_	_	_	_		3,51:
Midlands	3,203	312	_	312	_	_	_	_	312	3,511 4,10
South Eastern	3,712	390	_	390	_	_	_	_	390	
Central	4,166	_	_				_	_	_	4,16
Pilbara	196	_	_		-	_	_		- 05/	19
Kimberley	3,617	1,876	_	1,876	_		_	_	1,876	5,49
Western Australia	104,543	24,197	1,498	25,695	_	_	8,000	8,000	33,695	138,23

<sup>(</sup>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);
- (c) 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 averages employing appropriate moving 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:

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

WESTERN AUSTRALIA

- 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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