

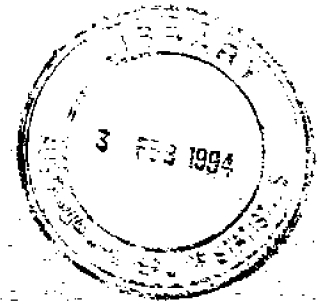
Catalogue No. 8731.5

2 February 1994

BUILDING APPROVALS

WESTERN AUSTRALIA

December 1993



MAIN FEATURES

The number of houses approved in December 1993 decreased by 5.8 per cent when compared with November 1993 and increased by 24.3 per cent when compared with December 1992.

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

The number of total dwelling units approved in December 1993 decreased by 3.0 per cent when compared with November 1993 and increased by 24.3 per cent when compared with December 1992.

Comparisons with previous periods are:

Month to month

	<i>Dec. 1993</i>	<i>Nov. 1993</i>	<i>% change</i>	<i>Dec. 1992</i>	<i>% change</i>
Houses	1,645	1,746	-5.8	1,323	+24.3
Total dwelling units	2,289	2,359	-3.0	1,841	+24.3

Three month moving average

	<i>Dec. 1993</i>	<i>Nov. 1993</i>	<i>% change</i>	<i>Dec. 1992</i>	<i>% change</i>
Houses	1,651	1,656	-0.3	1,376	+20.0
Total dwelling units	2,245	2,219	+1.2	1,855	+21.0

Twelve months January to December

	<i>1993</i>	<i>1992</i>	<i>% change</i>	<i>1991</i>	<i>% change</i>
Houses	17,944	15,480	+15.9	12,342	+45.4
Total dwelling units	24,397	21,335	+14.4	15,717	+55.2

PHONE INQUIRIES

Contact Ms Diane Braskic on (09) 323 5129 for further information about statistics in this publication and the availability of related unpublished statistics. Other inquiries, including copies of publications, contact Information Services on (09) 323 5140.

MAIL INQUIRIES

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

ELECTRONIC SERVICES

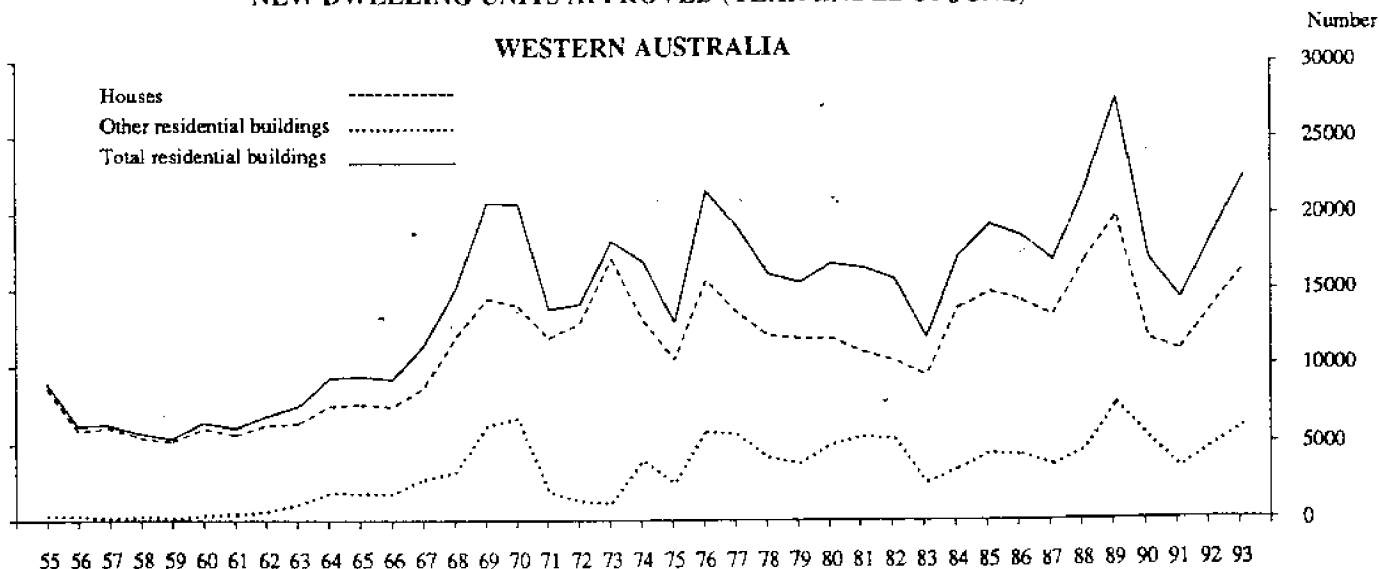
- on Discovery key *656#
- on Dial-A-Statistic phone 0055 86400
- on Elderlink key *620#
- on PC-AUSSTATS phone (06) 252 6017

CONTENTS

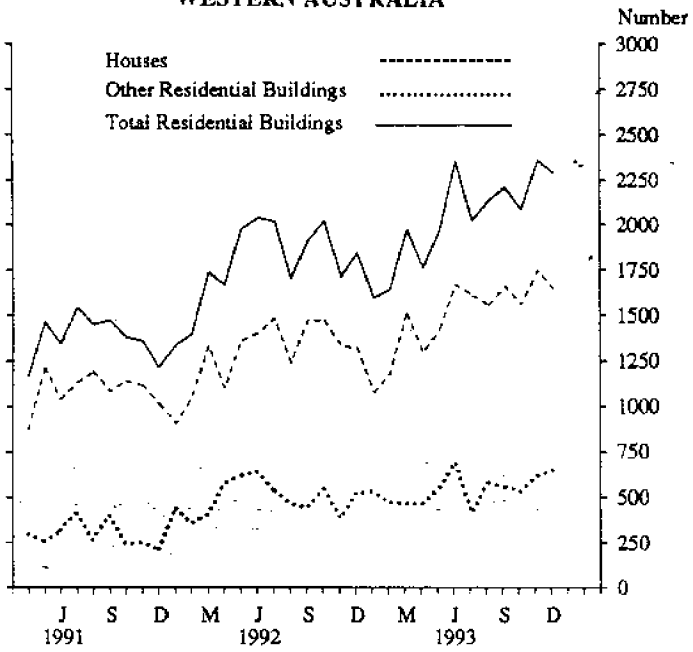
Table	Page
Graphs	
New dwelling units approved (year ended 30 June)	2
New dwelling units approved	3
Total value of building approved	3
New houses approved - original and seasonally adjusted	3
New houses approved - trend estimate and seasonally adjusted	3
1 Number of dwelling units approved in new residential building	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 residential dwellings approved, by type and statistical division	13
Explanatory Notes	14

NEW DWELLING UNITS APPROVED (YEAR ENDED 30 JUNE)

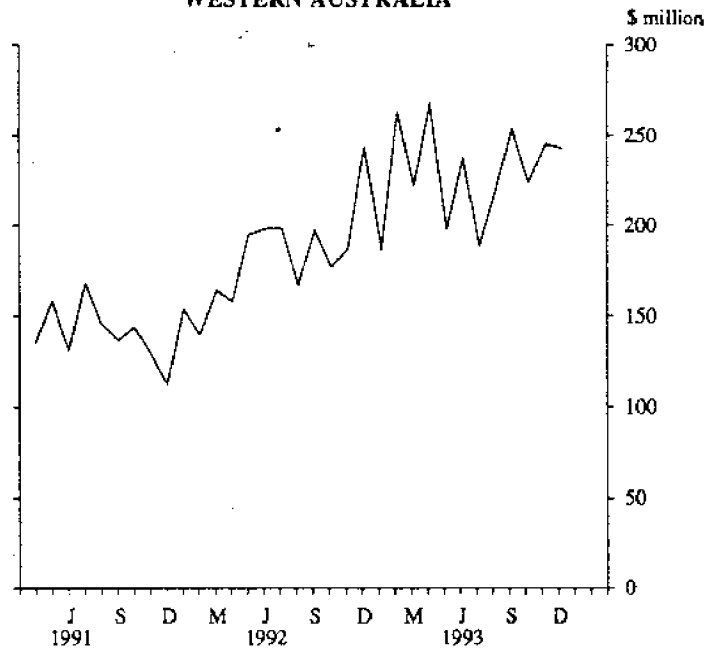
WESTERN AUSTRALIA



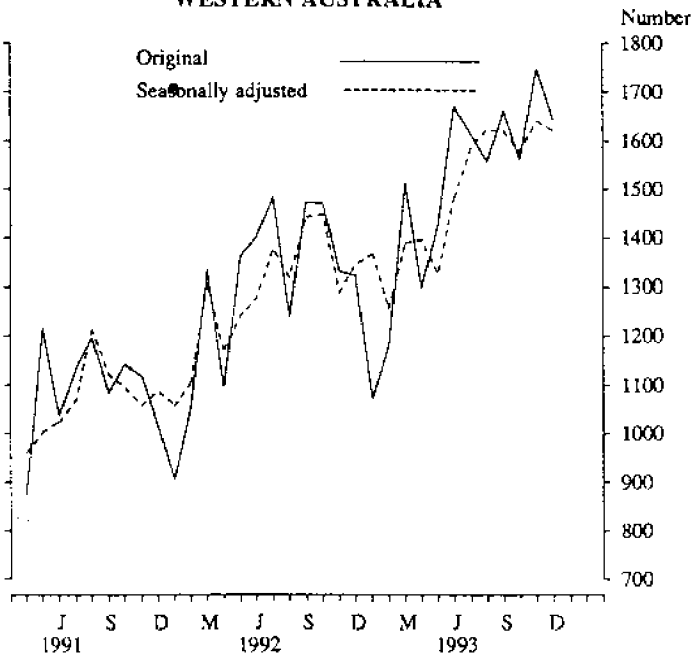
**NEW DWELLING UNITS APPROVED,
WESTERN AUSTRALIA**



**TOTAL VALUE OF BUILDING APPROVED
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED
WESTERN AUSTRALIA**



**NEW HOUSES APPROVED
WESTERN AUSTRALIA**

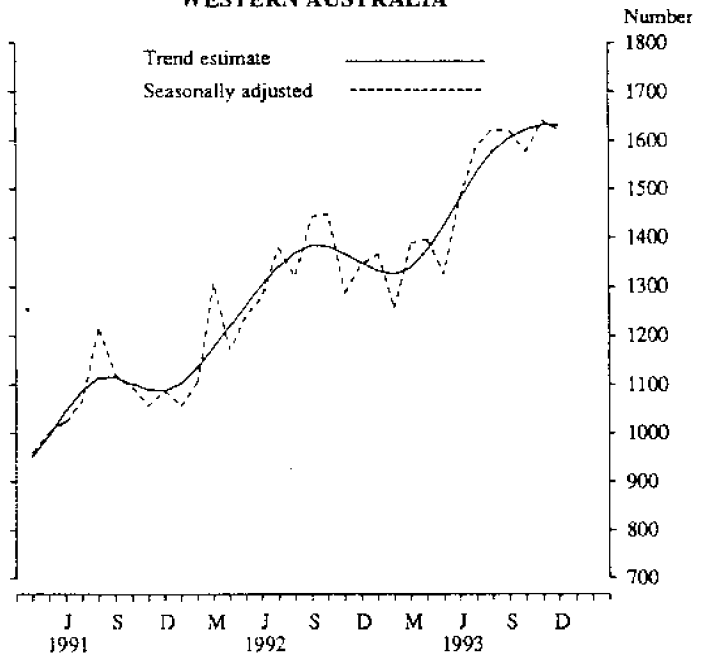


TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDING

Period	Houses			Other residential buildings			Total		
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total
PERTH STATISTICAL DIVISION									
1990-91	7,492	158	7,650	2,194	391	2,585	9,686	549	10,235
1991-92	9,969	194	10,163	2,505	1,434	3,939	12,474	1,628	14,102
1992-93	11,618	285	11,903	3,448	1,540	4,988	15,066	1,825	16,891
1992-93									
July-December	6,033	93	6,126	1,686	825	2,511	7,719	918	8,637
1993-94									
July-December	6,981	172	7,153	2,384	351	2,735	9,365	523	9,888
1992—									
October	1,039	3	1,042	340	115	455	1,379	118	1,497
November	971	11	982	206	123	329	1,177	134	1,311
December	938	46	984	215	234	449	1,153	280	1,433
1993—									
January	701	65	766	318	145	463	1,019	210	1,229
February	819	23	842	253	125	378	1,072	148	1,220
March	1,046	5	1,051	339	11	350	1,385	16	1,401
April	873	19	892	277	125	402	1,150	144	1,294
May	1,040	24	1,064	306	64	370	1,346	88	1,434
June	1,106	56	1,162	269	245	514	1,375	301	1,676
July	1,166	3	1,169	326	31	357	1,492	34	1,526
August	1,101	12	1,113	371	83	454	1,472	95	1,567
September	1,199	30	1,229	437	35	472	1,636	65	1,701
October	1,125	14	1,139	412	28	440	1,537	42	1,579
November	1,194	66	1,260	409	70	479	1,603	136	1,739
December	1,196	47	1,243	429	104	533	1,625	151	1,776
WESTERN AUSTRALIA									
1990-91	10,776	317	11,093	2,733	620	3,353	13,509	937	14,446
1991-92	13,474	362	13,836	3,078	1,663	4,741	16,552	2,025	18,577
1992-93	16,036	449	16,485	4,081	1,913	5,994	20,117	2,362	22,479
1992-93									
July-December	8,168	158	8,326	1,932	927	2,859	10,100	1,085	11,185
1993-94									
July-December	9,566	219	9,785	2,901	417	3,318	12,467	636	13,103
1992—									
October	1,454	19	1,473	408	133	541	1,862	152	2,014
November	1,319	13	1,332	252	125	377	1,571	138	1,709
December	1,263	60	1,323	251	267	518	1,514	327	1,841
1993—									
January	978	95	1,073	362	160	522	1,340	255	1,595
February	1,155	25	1,180	283	182	465	1,438	207	1,645
March	1,489	24	1,513	435	23	458	1,924	47	1,971
April	1,261	36	1,297	319	140	459	1,580	176	1,756
May	1,392	34	1,426	375	170	545	1,767	204	1,971
June	1,593	77	1,670	375	311	686	1,968	388	2,356
July	1,595	18	1,613	375	34	409	1,970	52	2,022
August	1,537	21	1,558	479	98	577	2,016	119	2,135
September	1,626	36	1,662	515	35	550	2,141	71	2,212
October	1,546	15	1,561	483	42	525	2,029	57	2,086
November	1,677	69	1,746	531	82	613	2,208	151	2,359
December	1,585	60	1,645	518	126	644	2,103	186	2,289

NOTE: The number of self-contained dwelling units approved as part of the construction of non-residential building and alterations and additions to existing buildings (including conversions to dwelling units) are excluded from this table. There were 8 such dwelling units approved in December 1993.

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

Period	New residential building									Alterations and additions to residential buildings	Non-residential building		Total building	
	Houses			Other residential buildings			Total				Private sector	Total	Private sector	Total
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total					
PERTH STATISTICAL DIVISION														
1990-91	566.3	9.3	575.6	144.3	20.5	164.8	710.6	29.8	740.4	104.9	417.8	769.5	1,232.7	1,614.8
1991-92	689.9	10.5	700.4	133.3	81.9	215.2	823.2	92.4	915.6	104.8	245.3	398.5	1,172.4	1,418.8
1992-93	822.1	17.7	839.7	188.9	92.3	281.2	1,010.9	109.9	1,120.9	113.3	463.2	715.9	1,585.3	1,950.1
1992-93														
July-December	418.7	5.6	424.3	91.4	46.4	137.9	510.1	52.1	562.2	54.9	201.9	299.4	766.7	916.4
1993-94														
July-December	520.2	10.3	530.5	146.4	22.3	168.7	666.6	32.6	699.2	59.5	204.0	269.9	929.8	1,028.6
1992—														
October	71.6	0.2	71.8	17.4	6.2	23.6	89.0	6.4	95.4	11.5	24.8	26.8	125.1	133.6
November	66.5	0.8	67.3	11.1	7.0	18.0	77.6	7.7	85.3	8.2	22.8	51.3	108.6	144.8
December	68.8	2.5	71.3	11.8	13.7	25.5	80.6	16.1	96.8	9.8	70.4	98.9	160.9	205.5
1993—														
January	47.4	3.9	51.3	18.9	9.4	28.2	66.3	13.3	79.6	9.7	17.5	57.1	92.4	146.4
February	60.4	1.5	61.9	13.0	11.9	24.8	73.4	13.4	86.7	8.3	108.8	130.8	190.4	225.8
March	74.5	0.3	74.8	17.9	0.6	18.5	92.4	0.9	93.3	12.6	25.4	58.2	129.6	164.0
April	65.7	1.0	66.7	13.7	7.2	20.9	79.4	8.2	87.7	8.8	62.0	88.0	150.2	184.5
May	77.3	1.5	78.8	18.1	3.5	21.6	95.4	5.0	100.4	10.0	13.9	33.3	119.3	143.7
June	78.0	3.8	81.9	15.9	13.3	29.2	93.9	17.1	111.0	9.1	33.6	49.1	136.6	169.2
July	87.3	0.2	87.5	20.4	1.4	21.8	107.7	1.5	109.3	9.1	15.4	22.1	132.2	140.5
August	80.5	0.9	81.4	20.6	6.2	26.8	101.1	7.2	108.3	9.1	28.9	39.7	139.1	157.0
September	85.5	2.2	87.7	28.1	2.4	30.5	113.6	4.6	118.2	9.7	56.6	57.9	179.9	185.9
October	85.5	0.8	86.3	27.1	1.8	28.9	112.6	2.6	115.2	11.3	47.0	50.7	170.9	177.2
November	89.7	3.5	93.2	25.2	4.2	29.4	114.9	7.7	122.6	10.4	35.4	43.1	160.8	176.2
December	91.6	2.7	94.4	24.9	6.3	31.2	116.5	9.0	125.5	9.8	20.7	56.4	147.0	191.8
WESTERN AUSTRALIA														
1990-91	804.7	21.4	826.2	174.2	34.1	208.3	979.0	55.5	1,034.4	126.2	505.9	894.4	1,610.1	2,055.0
1991-92	931.4	23.9	955.3	166.1	96.5	262.6	1,097.5	120.4	1,217.9	124.2	306.6	504.9	1,527.0	1,847.0
1992-93	1,138.8	34.9	1,173.7	227.6	118.1	345.7	1,366.4	153.0	1,519.4	137.1	591.3	889.6	2,091.8	2,546.1
1992-93														
July-December	568.6	13.2	581.8	105.7	53.9	159.6	674.3	67.1	741.4	66.7	244.7	362.4	985.0	1,170.6
1993-94														
July-December	714.6	15.0	729.6	177.6	27.0	204.5	892.2	41.9	934.1	72.9	268.4	368.2	1,232.8	1,375.3
1992—														
October	100.4	1.7	102.1	20.9	7.6	28.5	121.3	9.3	130.6	13.5	28.3	32.6	163.0	176.7
November	90.1	1.1	91.3	13.6	7.2	20.8	103.8	8.3	112.1	10.0	31.6	65.1	145.4	187.2
December	92.1	3.5	95.6	13.8	15.9	29.7	105.9	19.5	125.3	12.0	74.3	106.3	191.6	243.6
1993—														
January	67.5	6.1	73.6	21.7	10.3	32.0	89.1	16.4	105.5	11.2	21.6	69.6	120.6	186.3
February	84.1	1.6	85.7	14.8	16.3	31.1	98.8	17.9	116.8	10.4	112.9	135.9	222.2	263.1
March	108.1	2.4	110.5	23.4	1.5	24.9	131.5	3.9	135.4	14.7	37.2	71.9	182.6	222.1
April	93.7	2.7	96.3	16.4	8.2	24.6	110.1	10.9	121.0	10.7	104.5	136.3	225.1	268.0
May	103.3	2.5	105.8	22.6	10.3	32.9	125.8	12.8	138.6	11.6	22.3	48.0	159.7	198.3
June	113.7	6.3	120.0	23.0	17.7	40.7	136.7	24.0	160.7	11.7	48.1	65.4	196.5	237.8
July	118.6	1.6	120.2	22.9	1.6	24.5	141.5	3.2	144.7	10.5	21.9	33.6	173.9	188.7
August	113.4	2.1	115.5	27.2	7.1	34.3	140.6	9.1	149.8	11.0	47.0	58.9	198.5	219.7
September	118.4	3.0	121.4	32.3	2.4	34.7	150.6	5.4	156.1	12.7	66.7	84.8	230.1	253.7
October	116.4	0.9	117.2	31.4	2.8	34.3	147.8	3.7	151.5	14.0	53.0	58.9	214.6	224.4
November	126.5	3.7	130.3	32.6	5.0	37.5	159.1	8.7	167.8	13.0	54.0	64.9	225.6	245.7
December	121.3	3.7	125.0	31.2	8.1	39.3	152.5	11.8	164.3	11.7	25.8	67.2	190.0	243.2

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

Period	Houses				Total			
	Private sector		Total		Private sector		Total	
	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate	Seasonally adjusted	Trend estimate
<i>1992—</i>								
October	1,438	1,341	1,448	1,382	1,905	1,682	2,086	1,907
November	1,254	1,315	1,288	1,366	1,568	1,666	1,800	1,920
December	1,262	1,293	1,345	1,347	1,589	1,650	2,045	1,907
<i>1993—</i>								
January	1,290	1,280	1,367	1,331	1,692	1,642	1,909	1,880
February	1,230	1,282	1,256	1,325	1,562	1,644	1,698	1,846
March	1,340	1,303	1,388	1,338	1,724	1,660	1,871	1,826
April	1,413	1,343	1,395	1,374	1,735	1,693	1,828	1,833
May	1,292	1,396	1,325	1,424	1,695	1,742	1,809	1,870
June	1,416	r1,452	1,483	r1,481	1,758	r1,799	2,045	r1,925
July	1,565	r1,503	1,588	r1,536	1,853	r1,869	1,865	r1,998
August	1,579	r1,540	1,623	r1,578	1,999	1,942	2,183	r2,079
September	1,592	r1,563	1,620	r1,606	1,999	r2,011	2,145	r2,168
October	1,568	r1,574	1,577	r1,623	2,131	r2,072	2,197	r2,262
November	1,523	r1,579	1,642	r1,634	2,067	r2,122	2,351	r2,352
December	1,574	1,571	1,622	1,633	2,171	2,158	2,551	2,427

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

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

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

(a) See paragraphs 20-25 of the Explanatory Notes. Constant price estimates are subject to revision each quarter as more up to date information on prices and commodity compositions becomes available.

TABLE 5. VALUE OF BUILDING APPROVED, BY CLASS OF BUILDING AND OWNERSHIP
(\$ million)

Class of building	1991-92	1992-93	July-December		1993		
			1992-93	1993-94	October	November	December
PRIVATE SECTOR							
New houses	931.4	1,138.8	568.6	714.6	116.4	126.5	121.3
New other residential buildings	166.1	227.6	105.7	177.6	31.4	32.6	31.2
<i>Total new residential building</i>	<i>1,097.5</i>	<i>1,366.4</i>	<i>674.3</i>	<i>892.2</i>	<i>147.8</i>	<i>159.1</i>	<i>152.5</i>
Alterations and additions to residential buildings	122.9	134.1	65.9	72.2	13.9	12.6	11.7
Hotels, etc.	14.6	10.7	7.1	12.0	1.5	3.4	0.9
Shops	84.2	212.8	45.6	94.3	27.6	6.2	3.3
Factories	21.0	41.2	25.4	22.7	4.7	5.3	4.0
Offices	40.7	44.4	27.0	28.8	4.6	6.8	3.4
Other business premises	49.6	100.3	31.3	42.6	6.8	17.7	5.2
Educational	27.2	28.8	16.0	17.9	1.8	5.6	3.0
Religious	11.1	4.2	2.1	4.3	0.1	0.6	0.5
Health	22.9	79.8	50.1	17.4	2.5	3.8	4.2
Entertainment and recreational	8.7	24.4	15.7	10.2	2.2	2.6	1.2
Miscellaneous	26.6	44.7	24.5	18.3	1.2	1.9	0.1
<i>Total non-residential building</i>	<i>306.6</i>	<i>591.3</i>	<i>244.7</i>	<i>268.4</i>	<i>53.0</i>	<i>54.0</i>	<i>25.8</i>
Total	1,527.0	2,091.8	985.0	1,232.8	214.6	225.6	190.0
PUBLIC SECTOR							
New houses	23.9	34.9	13.2	15.0	0.9	3.7	3.7
New other residential buildings	96.5	118.1	53.9	27.0	2.8	5.0	8.1
<i>Total new residential building</i>	<i>120.4</i>	<i>153.0</i>	<i>67.1</i>	<i>41.9</i>	<i>3.7</i>	<i>8.7</i>	<i>11.8</i>
Alterations and additions to residential buildings	1.3	3.0	0.8	0.7	0.1	0.5	—
Hotels, etc.	0.2	0.2	0.1	—	—	—	—
Shops	2.2	2.0	0.7	1.6	—	—	—
Factories	0.1	4.6	—	0.8	—	0.2	0.1
Offices	28.7	67.6	44.3	19.6	1.3	2.2	14.3
Other business premises	12.6	12.2	5.7	12.5	0.9	3.3	5.9
Educational	94.5	98.6	38.8	30.9	2.4	2.7	19.5
Religious	—	—	—	—	—	—	—
Health	17.9	22.1	1.4	23.4	—	—	—
Entertainment and recreational	24.2	49.7	13.5	7.0	0.6	1.8	0.7
Miscellaneous	18.0	41.3	13.2	4.1	0.6	0.8	0.9
<i>Total non-residential building</i>	<i>198.3</i>	<i>298.3</i>	<i>117.6</i>	<i>99.8</i>	<i>5.9</i>	<i>10.9</i>	<i>41.3</i>
Total	320.0	454.3	185.6	142.5	9.7	20.0	53.2
TOTAL							
New houses ^a	955.3	1,173.7	581.8	729.6	117.2	130.3	125.0
New other residential buildings	262.6	345.7	159.6	204.5	34.3	37.5	39.3
<i>Total new residential building</i>	<i>1,217.9</i>	<i>1,519.4</i>	<i>741.4</i>	<i>934.1</i>	<i>151.5</i>	<i>167.8</i>	<i>164.3</i>
Alterations and additions to residential buildings	124.2	137.1	66.7	72.9	14.0	13.0	11.7
Hotels, etc.	14.8	10.8	7.2	12.0	1.5	3.4	0.9
Shops	86.4	214.8	46.4	95.9	27.6	6.2	3.3
Factories	21.1	45.8	25.4	23.5	4.7	5.5	4.1
Offices	69.4	112.0	71.2	48.4	5.9	9.0	17.7
Other business premises	62.1	112.5	37.0	55.1	7.6	21.0	11.1
Educational	121.6	127.4	54.8	48.8	4.3	8.3	22.5
Religious	11.1	4.2	2.1	4.3	0.1	0.6	0.5
Health	40.8	101.9	51.5	40.8	2.5	3.8	4.2
Entertainment and recreational	33.0	74.0	29.2	17.1	2.8	4.4	1.9
Miscellaneous	44.6	86.0	37.7	22.3	1.9	2.7	1.0
<i>Total non-residential building</i>	<i>504.9</i>	<i>889.6</i>	<i>362.4</i>	<i>368.2</i>	<i>58.9</i>	<i>64.9</i>	<i>67.2</i>
Total	1,847.0	2,546.1	1,170.6	1,375.3	224.4	245.7	243.2

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.												
1993 October	5	0.5	1	0.2	1	0.8	—	—	—	—	7	1.5
November	2	0.2	3	1.0	—	—	1	2.3	—	—	6	3.4
December	3	0.4	2	0.5	—	—	—	—	—	—	5	0.9
SHOPS												
1993 October	22	2.3	5	1.6	2	1.3	1	1.1	1	21.4	31	27.6
November	20	1.7	8	2.4	1	1.0	1	1.1	—	—	30	6.2
December	10	0.8	5	1.3	2	1.2	—	—	—	—	17	3.3
FACTORIES												
1993 October	14	1.3	6	1.4	1	0.8	1	1.2	—	—	22	4.7
November	16	2.1	10	2.8	1	0.6	—	—	—	—	27	5.5
December	13	1.5	4	1.1	1	0.6	1	1.0	—	—	19	4.1
OFFICES												
1993 October	19	2.0	5	1.5	4	2.5	—	—	—	—	28	5.9
November	22	2.1	9	2.4	1	0.5	1	4.0	—	—	33	9.0
December	10	1.2	5	1.5	3	1.9	5	13.2	—	—	23	17.7
OTHER BUSINESS PREMISES												
1993 October	18	1.8	10	3.1	2	1.3	1	1.5	—	—	31	7.6
November	23	2.1	10	2.5	3	1.8	4	6.0	1	8.5	41	21.0
December	19	1.8	6	1.9	2	1.4	3	6.0	—	—	30	11.1
EDUCATIONAL												
1993 October	3	0.4	7	2.0	3	1.9	—	—	—	—	13	4.3
November	11	1.3	6	2.2	3	1.8	2	3.0	—	—	22	8.3
December	6	0.8	4	1.2	4	2.3	3	5.2	1	13.0	18	22.5
RELIGIOUS												
1993 October	1	0.1	—	—	—	—	—	—	—	—	1	0.1
November	3	0.3	1	0.3	—	—	—	—	—	—	4	0.6
December	4	0.5	—	—	—	—	—	—	—	—	4	0.5
HEALTH												
1993 October	1	0.2	1	0.5	1	0.8	1	1.0	—	—	4	2.5
November	1	0.2	2	0.5	—	—	2	3.2	—	—	5	3.8
December	3	0.3	1	0.4	1	0.5	1	3.0	—	—	6	4.2
ENTERTAINMENT AND RECREATIONAL												
1993 October	7	0.7	3	0.9	2	1.3	—	—	—	—	12	2.8
November	6	0.6	2	0.7	—	—	2	3.1	—	—	10	4.4
December	6	0.6	1	0.4	1	0.9	—	—	—	—	8	1.9
MISCELLANEOUS												
1993 October	9	1.0	1	0.3	1	0.6	—	—	—	—	11	1.9
November	9	0.7	1	0.2	1	0.7	1	1.1	—	—	12	2.7
December	8	0.6	1	0.4	—	—	—	—	—	—	9	1.0
TOTAL NON-RESIDENTIAL BUILDING												
1993 October	99	10.1	39	11.4	17	11.2	4	4.8	1	21.4	160	58.9
November	113	11.3	52	15.0	10	6.3	14	23.7	1	8.5	190	64.9
December	82	8.4	29	8.8	14	8.6	13	28.4	1	13.0	139	67.2

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), DECEMBER 1993

Statistical local area, statistical subdivision and statistical division	New residential building						Alterations and additions to residential buildings (\$'000)	Non-residential building		Total building (\$'000)
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
PERTH STATISTICAL DIVISION										
Claremont (T)	4	—	325	—	—	—	115	1,957	1,957	2,397
Cottesloe (T)	1	—	180	2	—	96	142	—	—	418
Mosman Park (T)	4	—	1,142	4	—	272	126	—	—	1,540
Nedlands (C)	7	1	807	2	—	150	711	110	2,092	3,760
Peppermint Grove (S)	—	—	—	—	—	—	—	—	—	—
Perth (C) — Inner	—	—	—	—	—	—	—	296	7,780	7,780
Perth (C) — North	2	—	150	10	—	690	255	—	—	1,095
Perth (C) — Outer	1	—	53	4	—	307	727	1,078	1,078	2,164
Perth (C) — South	6	1	480	48	—	2,849	113	216	2,103	5,544
Perth (C) — Wembley-Coastal	3	—	425	6	—	350	328	—	—	1,103
Subiaco (C)	5	—	472	16	—	1,100	344	—	13,841	15,757
Central Metropolitan (SSD)	33	2	4,033	92	—	5,813	2,861	3,657	28,850	41,558
Bassendean (T)	27	—	1,321	2	—	101	23	—	—	1,445
Bayswater (C)	15	2	1,156	6	7	762	299	950	950	3,167
Kalamunda (S)	38	—	2,854	19	—	1,453	428	405	405	5,140
Mundaring (S)	16	—	1,345	—	—	—	378	80	80	1,803
Swan (S)	91	2	6,315	11	—	480	148	1,198	10,998	17,942
East Metropolitan (SSD)	187	4	12,992	38	7	2,796	1,276	2,633	12,433	29,496
Stirling (C) — Central	43	1	3,878	69	18	4,995	376	867	867	10,116
Stirling (C) — West	8	—	622	59	12	4,205	263	375	375	5,465
Stirling (C) — South-Eastern	2	—	292	7	—	430	491	—	—	1,213
Wanneroo (C)	385	2	30,208	49	—	2,477	980	1,835	2,295	35,960
North Metropolitan (SSD)	438	3	35,000	184	30	12,107	2,110	3,077	3,537	52,754
Cockburn (C)	136	—	10,548	21	—	1,071	720	1,734	1,734	14,073
East Fremantle (T)	2	2	463	—	—	—	255	—	—	718
Fremantle (C) — Inner	—	—	—	—	—	—	—	—	140	140
Fremantle (C) — Remainder	5	—	342	—	—	—	52	1,050	1,050	1,444
Kwinana (T)	36	—	1,774	—	—	—	—	1,004	1,004	2,778
Melville (C)	35	1	4,641	28	—	1,918	727	291	291	7,577
Rockingham (C)	130	9	8,532	36	—	1,381	45	1,901	1,901	11,859
South West Metropolitan (SSD)	344	12	26,301	85	—	4,370	1,798	5,980	6,120	38,590
Armadale (C)	39	1	2,720	—	5	327	166	190	340	3,553
Belmont (C)	15	5	1,324	—	14	741	160	600	600	2,825
Canning (C)	54	2	4,161	2	—	80	378	769	769	5,388
Gosnells (C)	45	15	3,711	—	48	2,789	178	3,160	3,160	9,839
Serpentine-Jarrahdale (S)	27	—	2,199	—	—	—	34	55	55	2,288
South Perth (C)	14	3	1,912	28	—	2,159	816	575	575	5,462
South East Metropolitan (SSD)	194	26	16,027	30	67	6,097	1,732	5,349	5,499	29,355
Total	1,196	47	94,352	429	104	31,183	9,778	20,695	56,439	191,752
SOUTH WEST STATISTICAL DIVISION										
Boddington (S)	1	—	40	—	—	—	—	—	—	40
Mandurah (C)	82	8	5,862	4	—	187	71	—	191	6,310
Murray (S)	13	—	709	—	—	—	59	—	—	768
Waroona (S)	1	—	110	—	—	—	15	—	—	125
Dale (SSD)	97	8	6,722	4	—	187	144	—	191	7,244
Bunbury (C)	13	—	825	13	—	775	13	635	1,621	3,234
Capel (S)	9	—	864	—	—	—	73	—	—	937
Collie (S)	8	—	579	—	—	—	45	—	—	624
Dardanup (S)	4	—	339	—	—	—	—	—	—	339
Donnybrook-Balingup (S)	3	—	205	—	—	—	—	—	—	205
Harvey (S)	19	—	1,761	—	—	—	61	360	360	2,182
Preston (SSD)	56	—	4,573	13	—	775	192	995	1,981	7,521

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), DECEMBER 1993—continued

Statistical local area, statistical subdivision and statistical division	New residential building						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
SOUTH WEST STATISTICAL DIVISION (continued)										
Augusta-Margaret River (S)	7	—	518	2	—	142	47	—	—	707
Busselton (S)	21	—	1,688	16	—	1,013	39	949	949	3,690
Vasse (SSD)	28	—	2,206	18	—	1,155	86	949	949	4,397
Boyoop Brook (S)	—	—	—	—	2	92	30	—	—	122
Bridgetown-Greenbushes (S)	5	—	476	—	—	—	37	100	100	613
Manjimup (S)	9	—	935	—	—	—	102	224	224	1,260
Nannup (S)	2	—	52	—	—	—	—	—	—	52
Blackwood (SSD)	16	—	1,462	—	2	92	169	324	324	2,047
Total	197	8	14,963	35	2	2,209	590	2,269	3,446	21,208
LOWER GREAT SOUTHERN STATISTICAL DIVISION										
Broomehill (S)	3	—	126	—	—	—	31	—	—	157
Gnowangerup (S)	1	—	30	—	—	—	10	—	—	40
Jerramungup (S)	—	—	—	—	—	—	—	—	—	—
Katanning (S)	3	1	428	—	—	—	12	—	—	440
Kent (S)	1	—	35	—	—	—	—	—	—	35
Kojoorup (S)	—	—	—	—	—	—	—	—	—	—
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	8	1	619	—	—	—	53	—	—	672
Albany (T)	13	—	1,154	2	—	140	132	—	—	1,426
Albany (S)	29	—	2,225	—	—	—	75	—	—	2,300
Cranbrook (S)	1	—	47	—	—	—	—	—	—	47
Denmark (S)	11	—	819	—	—	—	14	623	816	1,649
Plantagenet (S)	4	—	224	—	—	—	11	70	70	305
King (SSD)	58	—	4,469	2	—	140	232	693	886	5,727
Total	66	1	5,088	2	—	140	285	693	886	6,399
UPPER GREAT SOUTHERN STATISTICAL DIVISION										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	—	—	—	—	—	—	—	—	—	—
Dumbleyung (S)	—	—	—	—	—	—	24	—	—	24
Narrogin (T)	1	1	169	—	—	—	20	—	—	189
Narrogin (S)	—	—	—	—	—	—	—	—	—	—
Pingelly (S)	—	—	—	—	—	—	—	—	—	—
Wagin (S)	—	—	—	—	—	—	—	—	—	—
Wandering (S)	—	—	—	—	—	—	—	85	85	85
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	1	—	18	—	—	—	—	—	—	18
Williams (S)	1	—	66	—	—	—	—	—	—	66
Hotham (SSD)	3	1	253	—	—	—	44	85	85	382
Corrigin (S)	1	—	151	—	—	—	—	—	—	151
Kondinin (S)	—	—	—	—	—	—	—	—	—	—
Kulin (S)	1	—	107	—	—	—	96	—	—	203
Lake Grace (S)	—	—	—	—	—	—	—	—	—	—
Lakes (SSD)	2	—	258	—	—	—	96	—	—	354
Total	5	1	510	—	—	—	140	85	85	736

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), DECEMBER 1993—continued

Statistical local area, statistical subdivision and statistical division	New residential building			Alterations and additions to residential buildings			Non-residential building			
	Houses		Total value (\$'000)	Other residential buildings		Total value (\$'000)	Private sector (\$'000)	Total (\$'000)	Total building (\$'000)	
	Private sector (number)	Public sector (number)		Private sector (number)	Public sector (number)					
MIDLANDS STATISTICAL DIVISION										
Chittering (S)	2	—	107	—	—	—	—	—	107	
Dandaragan (S)	4	—	322	—	—	—	—	—	322	
Gingin (S)	14	—	785	—	—	—	—	—	785	
Moora (S)	3	—	198	—	—	—	—	—	198	
Victoria Plains (S)	—	—	—	—	—	—	—	—	—	
Moore (SSD)	23	—	1,412	—	—	—	—	—	1,412	
Beverley (S)	2	—	75	—	—	—	—	—	75	
Cunderdin (S)	—	—	—	—	—	120	60	60	180	
Daiwallinu (S)	—	—	—	—	—	—	—	80	80	
Dowerin (S)	—	—	—	—	—	—	—	—	—	
Goomalling (S)	2	—	104	—	—	—	—	—	104	
Koorda (S)	—	—	—	—	—	—	—	—	—	
Northam (T)	1	—	55	—	—	—	—	1,375	1,430	
Northam (S)	3	—	172	—	—	—	—	—	172	
Quairading (S)	—	—	—	—	—	—	—	423	423	
Tammin (S)	—	—	—	—	—	—	—	—	—	
Toodyay (S)	2	—	139	—	—	—	38	2,299	2,476	
Wongan-Ballidu (S)	—	—	—	—	—	—	—	—	—	
Wyalkatchem (S)	—	—	—	—	—	—	—	—	—	
York (S)	3	—	141	—	—	—	22	—	163	
Avon (SSD)	13	—	687	—	—	—	180	60	4,236	
Bruce Rock (S)	—	—	—	—	—	—	—	—	—	
Kellerberrin (S)	—	—	—	—	—	—	—	50	50	
Merredin (S)	1	—	83	—	4	320	15	—	418	
Mount Marshall (S)	—	—	—	—	—	—	—	—	—	
Mukinbudin (S)	—	—	—	—	—	—	—	—	—	
Narembeen (S)	—	—	—	—	4	287	—	—	287	
Nungarin (S)	—	—	—	—	—	—	—	—	—	
Trayning (S)	—	—	—	—	—	—	—	—	—	
Westonia (S)	—	—	—	—	—	—	—	—	—	
Yilgarn (S)	—	—	—	—	—	—	—	—	—	
Campion (SSD)	1	—	83	—	8	607	15	50	755	
Total	37	—	2,182	—	8	607	195	60	4,286	7,271
SOUTH EASTERN STATISTICAL DIVISION										
Coolgardie (S)	3	—	195	—	—	—	41	—	—	237
Kalgoorlie/Boulder (C)	11	—	835	25	4	2,424	208	70	70	3,536
Laverton (S)	—	—	—	—	—	—	—	—	—	—
Leonora (S)	—	—	—	—	—	—	—	—	—	—
Menzies (S)	—	—	—	—	—	—	—	—	—	—
Lefroy (SSD)	14	—	1,030	25	4	2,424	249	70	70	3,773
Dundas (S)	—	—	—	—	—	—	—	—	—	—
Esperance (S)	10	—	668	10	—	454	42	180	180	1,344
Ravensthorpe (S)	2	—	110	—	—	—	12	—	—	122
Johnston (SSD)	12	—	778	10	—	454	54	180	180	1,466
Total	26	—	1,808	35	4	2,878	303	250	250	5,239

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), DECEMBER 1993—continued

Statistical local area, statistical subdivision and statistical division	New residential building						Alterations and additions to residential buildings (\$'000)	Non-residential building		
	Houses			Other residential buildings				Private sector (\$'000)	Total (\$'000)	Total building (\$'000)
	Private sector (number)	Public sector (number)	Total value (\$'000)	Private sector (number)	Public sector (number)	Total value (\$'000)				
CENTRAL STATISTICAL DIVISION										
Carnarvon (S)	—	—	—	—	—	—	88	70	70	158
Exmouth (S)	—	—	—	—	—	—	23	—	—	23
Shark Bay (S)	2	—	158	—	—	—	—	—	—	158
Upper Gascoyne (S)	—	—	—	—	—	—	—	—	—	—
Gascoyne (SSD)	2	—	158	—	—	—	111	70	70	339
Cue (S)	—	—	—	—	—	—	11	—	—	11
Meekatharra (S)	—	—	—	—	—	—	—	—	—	—
Mount Magnet (S)	1	—	52	—	—	—	—	—	—	52
Murchison (S)	—	—	—	—	—	—	—	—	—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	1	—	52	—	—	—	11	—	—	63
Carnamah (S)	—	—	—	—	—	—	—	—	—	—
Chapman Valley (S)	—	—	—	—	—	—	45	—	—	45
Coorow (S)	—	—	—	—	—	—	—	—	—	—
Geraldton (C)	7	1	716	—	—	—	50	504	504	1,270
Greenough (S)	22	—	1,999	—	—	—	43	—	—	2,042
Irwin (S)	1	—	26	—	—	—	—	—	—	26
Mingenew (S)	1	—	32	—	—	—	—	70	70	102
Morawa (S)	—	—	—	—	—	—	—	—	—	—
Mullewa (S)	—	—	—	—	—	—	32	149	149	181
Northampton (S)	4	—	268	—	—	—	—	86	86	355
Perenjori (S)	—	—	—	—	—	—	—	—	—	—
Three Springs (S)	—	—	—	—	—	—	—	—	—	—
Greenough River (SSD)	35	1	3,041	—	—	—	170	810	810	4,020
Total	38	1	3,251	—	—	—	292	880	880	4,422
PILBARA STATISTICAL DIVISION										
East Pilbara (S)	—	—	—	—	—	—	—	—	—	—
Port Hedland (T)	1	—	120	—	5	493	53	—	—	666
De Grey (SSD)	1	—	120	—	5	493	53	—	—	666
Ashburton (S)	—	—	—	3	—	200	—	—	—	200
Roebourne (S)	9	—	1,280	—	—	—	59	180	180	1,519
Fortescue (SSD)	9	—	1,280	3	—	200	59	180	180	1,719
Total	10	—	1,400	3	5	693	112	180	180	2,385
KIMBERLEY STATISTICAL DIVISION										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	2	—	230	2	—	122	—	91	91	443
Ord (SSD)	2	—	230	2	—	122	—	91	91	443
Broome (S)	7	—	936	12	—	1,160	—	642	642	2,738
Derby-West Kimberley (S)	1	2	280	—	3	293	30	—	—	603
Fitzroy (SSD)	8	2	1,216	12	3	1,453	30	642	642	3,341
Total	10	2	1,446	14	3	1,574	30	733	733	3,783
WESTERN AUSTRALIA										
Western Australia	1,585	60	125,001	518	126	39,284	11,725	25,845	67,184	243,195

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

TABLE 8. NUMBER OF NEW HOUSES APPROVED BY MATERIAL OF OUTER WALLS, FLOOR AREA AND VALUE PER SQUARE METRE BY STATISTICAL DIVISION
DECEMBER 1993

Statistical division	Material of outer walls					Total	Floor area (sq m)	Average floor area (sq m)	Average value per square metre (\$)
	Double brick(a)	Brick veneer	Fibre cement	Timber	Other and not stated				
Perth	1,219	3	3	9	9	1,243	259,723	209	363
South-West	161	13	10	13	8	205	41,780	204	358
Lower Great Southern	16	22	10	15	4	67	13,514	202	377
Upper Great Southern	1	2	3	—	—	6	986	164	518
Midlands	10	5	17	4	1	37	6,588	178	331
South-Eastern	5	12	6	2	1	26	4,560	175	397
Central	30	1	5	2	1	39	7,306	187	445
Pilbara	—	9	—	—	1	10	1,834	183	763
Kimberley	1	1	—	—	10	12	2,849	237	508
Western Australia	1,443	68	54	45	35	1,645	339,148	206	369

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

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

Statistical division	Other residential building									Total residential building
	Houses	Semi-detached, row or terrace houses, townhouses, etc. of			Flats, units or apartments in a building of			Total	Total	
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys			
NUMBER OF DWELLING UNITS										
Perth	1,243	498	35	533	—	—	—	—	533	1,776
South West	205	35	2	37	—	—	—	—	37	242
Lower Great Southern	67	2	—	2	—	—	—	—	2	69
Upper Great Southern	6	—	—	—	—	—	—	—	—	6
Midlands	37	8	—	8	—	—	—	—	8	45
South Eastern	26	39	—	39	—	—	—	—	39	65
Central	39	—	—	—	—	—	—	—	—	39
Pilbara	10	8	—	8	—	—	—	—	8	18
Kimberley	12	17	—	17	—	—	—	—	17	29
Western Australia	1,645	607	37	644	—	—	—	—	644	2,289
VALUE (\$'000)										
Perth	94,352	28,098	3,086	31,183	—	—	—	—	31,183	125,535
South West	14,963	2,039	170	2,209	—	—	—	—	2,209	17,173
Lower Great Southern	5,088	140	—	140	—	—	—	—	140	5,228
Upper Great Southern	510	—	—	—	—	—	—	—	—	510
Midlands	2,182	607	—	607	—	—	—	—	607	2,789
South Eastern	1,808	2,878	—	2,878	—	—	—	—	2,878	4,686
Central	3,251	—	—	—	—	—	—	—	—	3,251
Pilbara	1,400	693	—	693	—	—	—	—	693	2,093
Kimberley	1,446	1,574	—	1,574	—	—	—	—	1,574	3,020
Western Australia	125,001	36,028	3,256	39,284	—	—	—	—	39,284	164,285

EXPLANATORY NOTES

Introduction

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

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

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

Factors affecting comparability

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

Scope and coverage

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

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

5. From July 1990, the statistics cover:

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

From July 1988 to June 1990, the statistics covered:

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

These changes in scope mainly affect non-residential building data and do not have a statistically significant effect on broad building approvals aggregate data. However, care should be taken in interpreting data for specific classes of non-residential building.

Definitions

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

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

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

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

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

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

Building classification

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

12. *Functional classification of buildings*. A building is classified according to its intended major function.

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

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

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

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

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

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

Seasonal adjustment

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

18. Each of the component series shown has been seasonally adjusted independently. As a consequence, while the unadjusted components in the original series shown add to the totals, the adjusted components may not add to the adjusted totals. Further, the difference between independently seasonally adjusted series does not necessarily produce series which are optimal or even adequate adjustments of the similarly derived original series. Thus the figures which can be derived by

subtracting seasonally adjusted private sector dwelling units from the seasonally adjusted total should not be used to represent seasonally adjusted public sector dwelling units.

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

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

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

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

23. While this technique enables trend estimates for the latest period to be produced, it does result in revisions to the trend estimates for the most recent months as additional observations become available. There may also be revisions as a result of changes in the original data, and as a result of the re-estimation of the seasonal factors. Details of other trend-cycle weighting patterns can be found in *A Guide to Smoothing Time Series - Estimates of Trend* (1316.0).

Estimates at constant prices

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

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

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

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

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

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

Australian Standard Geographical Classification

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

Unpublished data and related publications

31. The ABS also makes available certain building approvals data which are not published. Where it is not

practicable to provide the required information by telephone, data can be provided in the following forms: microfiche, photocopy, computer printout and clerically extracted tabulation. A charge may be made for providing unpublished information in these forms.

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

WESTERN AUSTRALIA	Catalogue No.
Building Approvals - Private Sector, Perth Statistical Division (monthly)	8732.5
Building Activity (quarterly)	8752.5
Dwelling Unit Commencements (monthly)	8741.5
AUSTRALIA	
Building Approvals (monthly)	8731.0
Building Activity (quarterly)	8752.0
Engineering Construction Survey (quarterly)	8762.0
Housing Finance for Owner Occupation: Australia	5609.0

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

Symbols and other usages

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

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

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

P.C.KELLY
Deputy Commonwealth Statistician
and Government Statistician

