Western Australia

Australian Bureau of Statistics

Catalogue No. 8731.5

31 March 1994

BUILDING APPROVALS

WESTERN AUSTRALIA

February 1994

MAIN FEATURES

The number of houses approved in February 1994 increased by 38.0 per cent when compared with January 1994 and increased by 29.2 per cent when compared with February 1993.

The number of total dwelling units approved in February 1994 increased by 36.1 per cent when compared with January 1994 and increased by 27.7 per cent when compared with February 1993.

Comparisons with previous periods are:

Month to month

	Feb. 1994	*Jan. 1994*	*% change*	*Feb. 1993*	*% change*
Houses	1,524	1,104	+38.0	1,180	+29.2
Total dwelling units	2,100	1,543	+36.1	1,645	+27.7

Three month moving average

	Feb. 1994	*Jan. 1994*	*% change*	*Feb. 1993*	*% change*
Houses	1,424	1,498	-4.9	1,192	+19.5
Total dwelling units	1,977	2,064	-4.2	1,694	+16.7

Two months January to February

	1994	*1993*	*% change*	*1992*	*% change*
Houses	2,628	2,253	+16.6	1,955	+34.4
Total dwelling units	3,643	3,240	+12.4	2,736	+33.2

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Braskic on (09) 323 5129 for further information about statistics in this publication and the availability of related unpublished statistics.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.
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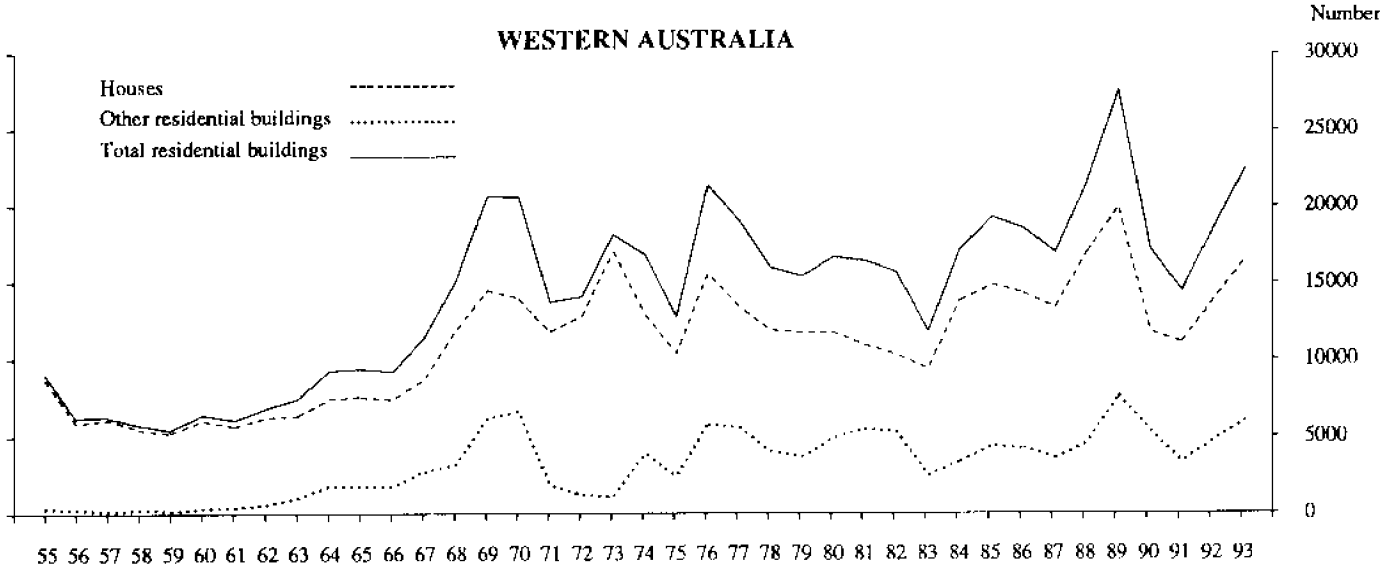
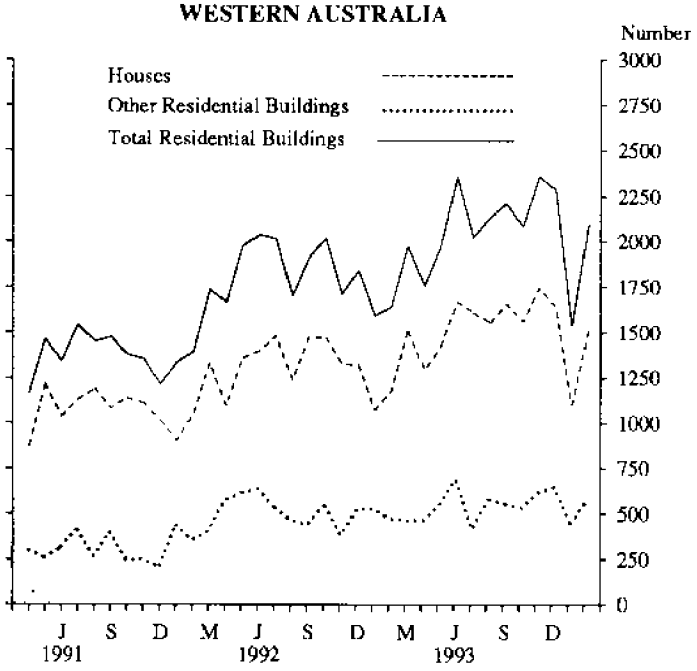
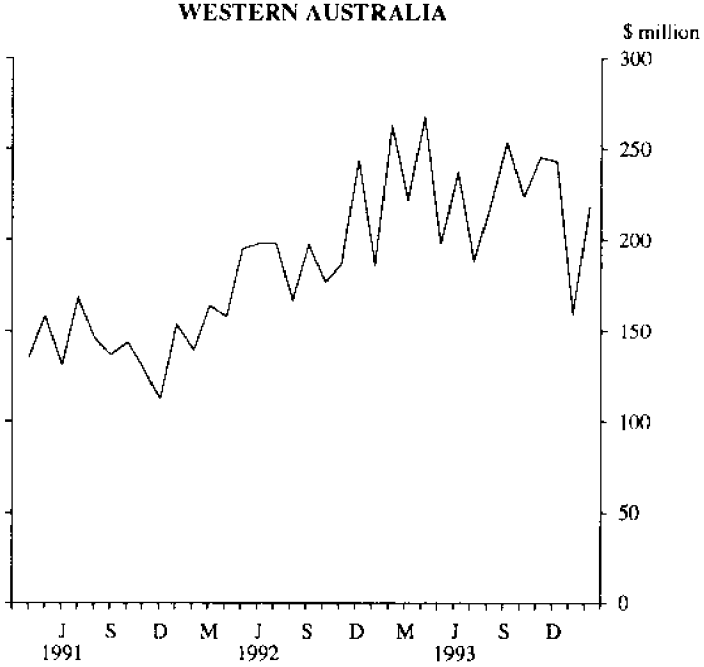
WESTERN AUSTRALIA



NEW DWELLING UNITS APPROVED
WESTERN AUSTRALIA



TOTAL VALUE OF BUILDING APPROVED
WESTERN AUSTRALIA



NEW HOUSES APPROVED
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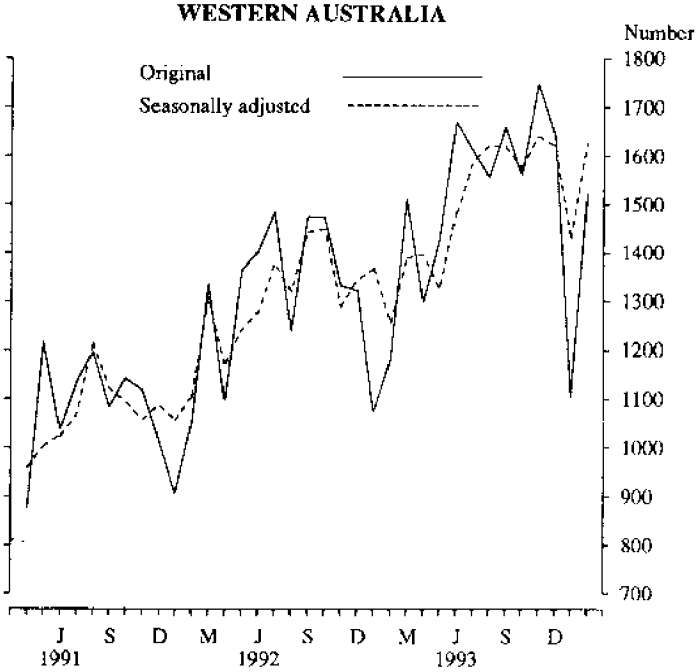

NEW HOUSES APPROVED
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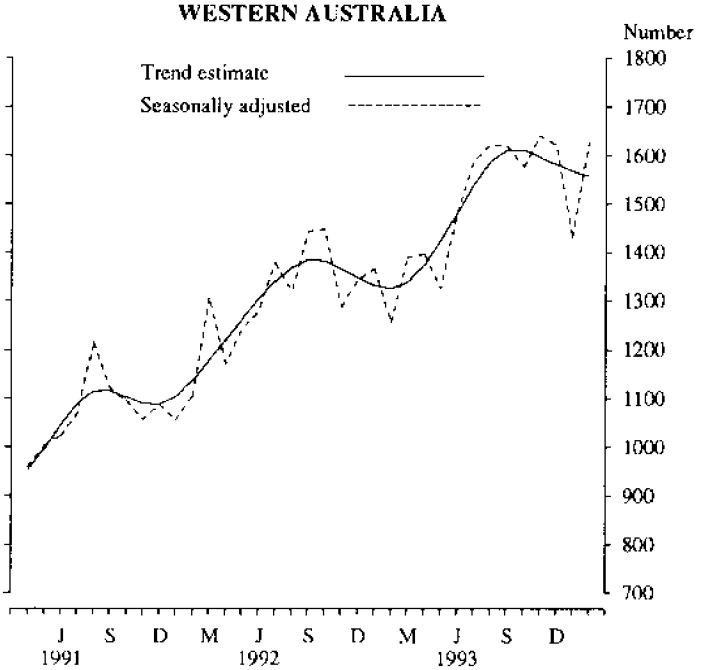

TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDING

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-February	7,553	181	7,734	2,257	1,095	3,352	9,810	1,276	11,086
1993-94									
July-February	8,904	180	9,084	3,046	470	3,516	11,950	650	12,600
1992—									
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
1994—									
January	828	2	830	261	24	285	1,089	26	1,115
February	1,095	6	1,101	401	95	496	1,496	101	1,597
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-February	10,301	278	10,579	2,577	1,269	3,846	12,878	1,547	14,425
1993-94									
July-February	12,162	251	12,413	3,778	555	4,333	15,940	806	16,746
1992—									
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
1994—									
January	1,091	13	1,104	398	41	439	1,489	54	1,543
February	1,505	19	1,524	479	97	576	1,984	116	2,100

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 10 such dwelling units approved in February 1994.

TABLE 2. VALUE OF BUILDING APPROVED
($ million)

Period	New residential building: Houses: Private sector	Houses: Public sector	Houses: Total	Other residential buildings: Private sector	Other residential buildings: Public sector	Other residential buildings: Total	Total: Private sector	Total: Public sector	Total: Total	Alterations and additions to residential buildings	Non-residential building: Private sector	Non-residential building: Total	Total building: Private sector	Total building: 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-February	526.5	11.0	537.5	123.3	67.7	191.0	649.8	78.7	728.4	72.9	328.2	487.3	1,049.5	1,288.6
1993-94 July-February	673.6	10.8	684.4	187.8	30.9	218.7	861.4	41.7	903.2	78.7	243.8	321.4	1,183.7	1,303.2
1992—														
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
1994														
January	64.0	0.1	64.2	15.4	1.1	16.4	79.4	1.2	80.6	8.8	23.7	27.5	111.8	116.8
February	89.4	0.4	89.8	26.0	7.6	33.6	115.5	7.9	123.4	10.4	16.2	23.9	142.1	157.8
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-February	720.1	21.0	741.1	142.2	80.5	222.6	862.3	101.5	963.8	88.3	379.2	567.9	1,327.9	1,619.9
1993-94 July-February	921.8	17.9	939.7	231.9	37.1	269.0	1,153.6	55.0	1,208.6	96.3	332.7	448.3	1,581.8	1,753.3
1992—														
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
1994														
January	84.8	1.3	86.0	23.5	2.4	25.9	108.2	3.7	111.9	10.4	33.1	37.4	151.6	159.6
February	122.4	1.7	124.0	30.8	7.8	38.6	153.2	9.4	162.6	13.0	31.2	42.7	197.4	218.4

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

	Houses				*Total*			
	Private sector		*Total*		*Private sector*		*Total*	
Period	*Seasonally adjusted*	*Trend estimate*	*Seasonally adjusted*	*Trend estimate*	*Seasonally adjusted*	*Trend estimate*	*Seasonally adjusted*	*Trend estimate*
1992--								
December	1,262	1,293	1,345	1,347	1,589	1,650	2,045	1,907
1993--								
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	1,452	1,483	1,481	1,758	1,799	2,045	1,925
July	1,565	1,506	1,588	1,541	1,853	1,872	1,865	2,008
August	1,579	1,547	1,623	1,588	1,999	1,949	2,183	r2,101
September	1,592	1,566	1,620	1,611	1,999	2,015	2,145	r2,183
October	1,568	1,567	1,577	1,612	2,131	2,063	2,197	r2,238
November	1,523	r1,556	1,642	1,597	2,067	r2,091	2,351	r2,258
December	1,574	r1,547	1,622	r1,582	2,171	r2,107	2,551	r2,251
1994--								
January	1,460	r1,541	1,431	r1,569	2,000	r2,118	1,881	r2,230
February	1,610	1,541	1,627	1,559	2,164	2,120	2,174	2,185

(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)

	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*
Period	*Private sector*	*Total*							
1990-91	884.2	907.7	204.4	1,112.1	138.4	495.1	875.0	1,681.3	2,125.5
1991-92	1,052.4	1,079.3	256.1	1,335.5	140.3	298.3	491.3	1,645.5	1,967.2
1992-93	1,261.4	1,300.1	341.2	1,641.4	151.7	579.6	872.0	2,207.3	2,665.1
1992--									
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
1993--									
Mar. qtr.	285.9	297.1	87.0	384.2	40.0	168.5	272.2	549.7	696.4
June qtr.	340.6	353.2	97.0	450.2	37.3	171.4	244.9	608.7	732.4
Sept. qtr.	381.7	389.0	92.2	481.2	37.2	132.8	173.6	631.5	692.1
Dec. qtr.	393.7	402.7	109.6	512.3	41.8	129.9	186.8	657.2	740.9

(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-February 1992-93	July-February 1993-94	1993 December	1994 January	1994 February
PRIVATE SECTOR							
New houses	931.4	1,138.8	720.1	921.8	121.3	84.8	122.4
New other residential buildings	166.1	227.6	142.2	231.9	31.2	23.5	30.8
Total new residential building	*1,097.5*	*1,366.4*	*862.3*	*1,153.6*	*152.5*	*108.2*	*153.2*
Alterations and additions to residential buildings	122.9	134.1	86.3	95.5	11.7	10.3	13.0
Hotels, etc.	14.6	10.7	7.3	15.7	0.9	0.6	3.1
Shops	84.2	212.8	147.2	104.7	3.3	4.3	6.2
Factories	21.0	41.2	29.0	29.5	4.0	3.0	3.9
Offices	40.7	44.4	32.0	35.3	3.4	4.1	2.5
Other business premises	49.6	100.3	38.1	59.1	5.2	6.9	9.6
Educational	27.2	28.8	21.3	23.2	3.0	5.0	0.3
Religious	11.1	4.2	2.5	5.4	0.5	0.8	0.4
Health	22.9	79.8	55.3	24.6	4.2	6.4	0.8
Entertainment and recreational	8.7	24.4	20.2	13.4	1.2	1.0	2.3
Miscellaneous	26.6	44.7	26.3	21.7	0.1	1.2	2.3
Total non-residential building	*306.6*	*591.3*	*379.2*	*332.7*	*25.8*	*33.1*	*31.2*
Total	**1,527.0**	**2,091.8**	**1,327.9**	**1,581.8**	**190.0**	**151.6**	**197.4**
PUBLIC SECTOR							
New houses	23.9	34.9	21.0	17.9	3.7	1.3	1.7
New other residential buildings	96.5	118.1	80.5	37.1	8.1	2.4	7.8
Total new residential building	*120.4*	*153.0*	*101.5*	*55.0*	*11.8*	*3.7*	*9.4*
Alterations and additions to residential buildings	1.3	3.0	2.0	0.9	—	0.1	—
Hotels, etc.	0.2	0.2	0.1	—		—	—
Shops	2.2	2.0	1.5	1.6	—	—	—
Factories	0.1	4.6	3.9	0.9	0.1	0.1	—
Offices	28.7	67.6	52.8	26.4	14.3	3.3	3.5
Other business premises	12.6	12.2	5.7	14.9	5.9	0.5	1.9
Educational	94.5	98.6	64.4	32.7	19.5	—	1.8
Religious	—	—	-			—	—
Health	17.9	22.1	1.4	23.4	—	—	—
Entertainment and recreational	24.2	49.7	23.1	11.5	0.7	0.4	4.1
Miscellaneous	18.0	41.3	35.7	4.4	0.9	0.1	0.2
Total non-residential building	*198.3*	*298.3*	*188.6*	*115.6*	*41.3*	*4.3*	*11.5*
Total	**320.0**	**454.3**	**292.1**	**171.5**	**53.2**	**8.1**	**20.9**
TOTAL							
New houses	955.3	1,173.7	741.1	939.7	125.0	86.0	124.0
New other residential buildings	262.6	345.7	222.6	269.0	39.3	25.9	38.6
Total new residential building	*1,217.9*	*1,519.4*	*963.8*	*1,208.6*	*164.3*	*111.9*	*162.6*
Alterations and additions to residential buildings	124.2	137.1	88.3	96.3	11.7	10.4	13.0
Hotels, etc.	14.8	10.8	7.4	15.7	0.9	0.6	3.1
Shops	86.4	214.8	148.7	106.3	3.3	4.3	6.2
Factories	21.1	45.8	32.9	30.3	4.1	3.0	3.9
Offices	69.4	112.0	84.8	61.7	17.7	7.3	6.0
Other business premises	62.1	112.5	43.8	74.0	11.1	7.3	11.5
Educational	121.6	127.4	85.7	55.9	22.5	5.0	2.1
Religious	11.1	4.2	2.5	5.4	0.5	0.8	0.4
Health	40.8	101.9	56.7	47.9	4.2	6.4	0.8
Entertainment and recreational	33.0	74.0	43.3	24.8	1.9	1.4	6.3
Miscellaneous	44.6	86.0	62.0	26.1	1.0	1.2	2.5
Total non-residential building	*504.9*	*889.6*	*567.9*	*448.3*	*67.2*	*37.4*	*42.7*
Total	**1,847.0**	**2,546.1**	**1,619.9**	**1,753.3**	**243.2**	**159.6**	**218.4**

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

Period	$50,000 to less than $200,000		$200,000 to less than $500,000		$500,000 to less than $1m		$1m to less than $5m		$5m and over		Total	
	No.	Value ($m)	No.	Value ($m)	No.	Value ($m)	No.	Value ($m)	No.	Value ($m)	No.	Value ($m)
HOTELS, ETC.												
1993 December	3	0.4	2	0.5	—		—	—	—	—	5	0.9
1994 January	6	0.6	—		—	—	—		—	—	6	0.6
February	3	0.3	2	0.6	1	0.8	1	1.4	—	—	7	3.1
SHOPS												
1993 December	10	0.8	5	1.3	2	1.2		—	—	—	17	3.3
1994 January	15	1.6	4	1.2	—	—	1	1.5	—	—	20	4.3
February	11	1.0	9	3.0	2	1.1	1	1.0	—	—	23	6.2
FACTORIES												
1993 December	13	1.5	4	1.1	1	0.6	1	1.0	—	—	19	4.1
1994 January	10	0.9	4	1.1	—		1	1.0	—	—	15	3.0
February	13	1.6	3	1.0	2	1.4	—		—	—	18	3.9
OFFICES												
1993 December	10	1.2	5	1.5	3	1.9	5	13.2	—	—	23	17.7
1994 January	19	2.0	4	1.3	—		2	4.1	—		25	7.3
February	12	1.0	4	1.3	3	2.4	1	1.3		—	20	6.0
OTHER BUSINESS PREMISES												
1993 December	19	1.8	6	1.9	2	1.4	3	6.0	—	—	30	11.1
1994 January	12	1.2	12	3.6	4	2.5	—	—	—	—	28	7.3
February	15	1.3	8	2.2	2	1.1	1	1.3	1	5.6	27	11.5
EDUCATIONAL												
1993 December	6	0.8	4	1.2	4	2.3	3	5.2	1	13.0	18	22.5
1994 January	2	0.1	1	0.4	1	0.5	2	4.0	—	—	6	5.0
February	3	0.3	1	0.2		—	1	1.6	—	—	5	2.1
RELIGIOUS												
1993 December	4	0.5	—	—	—	—	—	—	—	—	4	0.5
1994 January	—	—	1	0.2	1	0.6	—	—	—	—	2	0.8
February	—	—	1	0.4	—	—	—	—	—	—	1	0.4
HEALTH												
1993 December	3	0.3	1	0.4	1	0.5	1	3.0	—	—	6	4.2
1994 January	3	0.3	3	0.9	—	—	2	5.2	—	—	8	6.4
February	1	0.1	1	0.2	1	0.5	—	—	—	—	3	0.8
ENTERTAINMENT AND RECREATIONAL												
1993 December	6	0.6	1	0.4	1	0.9	—		—	—	8	1.9
1994 January	5	0.6	1	0.2	1	0.6		—	—	—	7	1.4
February	4	0.3	—		—	—	2	6.0	—	—	6	6.3
MISCELLANEOUS												
1993 December	8	0.6	1	0.4	—	—	—	—	—	—	9	1.0
1994 January	5	0.6	3	0.7	—	—		—	—	—	8	1.2
February	5	0.5	—	—	—	—	1	2.0	—	—	6	2.5
TOTAL NON-RESIDENTIAL BUILDING												
1993 December	82	8.4	29	8.8	14	8.6	13	28.4	1	13.0	139	67.2
1994 January	77	7.8	33	9.6	7	4.2	8	15.7	—	—	125	37.4
February	67	6.4	29	8.8	11	7.3	8	14.6	1	5.6	116	42.7

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

Statistical local area, statistical subdivision and statistical division	New residential building: Houses: Private sector (number)	Houses: Public sector (number)	Houses: Total value ($'000)	Other residential buildings: Private sector (number)	Other residential buildings: Public sector (number)	Other residential buildings: Total value ($'000)	Alterations and additions to residential buildings ($'000)	Non-residential building: Private sector ($'000)	Non-residential building: Total ($'000)	Total building ($'000)
PERTH STATISTICAL DIVISION										
Claremont (T)	4	—	722	2	—	460	252	—	—	1,434
Cottesloe (T)	1	..	191	—	—	—	521	..	..	712
Mosman Park (T)	4	—	5,748	2	—	198	84	600	600	6,630
Nedlands (C)	8	—	1,005	2	—	71	678	91	91	1,845
Peppermint Grove (S)	—	—	—	..	—	—	19	—	—	19
Perth (C) Inner	—	—	—	..	—	—	—	238	1,548	1,548
Perth (C) — North	1	—	50	10	—	850	205	—	—	1,105
Perth (C) — Outer	—	—	—	8	—	530	130	545	1,635	2,295
Perth (C) — South	2	3	298	41	..	2,740	120	1,025	1,025	4,183
Perth (C) — Wembley-Coastal	6	..	1,246	8	—	675	582	..	197	2,700
Subiaco (C)	1	—	66	—	—	—	300	90	305	671
Central Metropolitan (SSD)	*27*	*3*	*9,327*	*73*	—	*5,524*	*2,891*	*2,589*	*5,400*	*23,142*
Bassendean (T)	3	—	167	6	—	317	30	60	60	574
Bayswater (C)	11	—	819	2	16	909	134	.	..	1,862
Kalamunda (S)	31	..	2,372	9	—	566	477	—	—	3,415
Mundaring (S)	24	—	2,011	—	—	—	232	553	553	2,796
Swan (S)	164	2	9,811	33	—	1,480	216	1,064	5,506	17,013
East Metropolitan (SSD)	*233*	*2*	*15,180*	*50*	*16*	*3,272*	*1,089*	*1,677*	*6,119*	*25,660*
Stirling (C) — Central	33	—	3,057	64	..	3,387	406	435	435	7,285
Stirling (C) — West	11	1	1,319	37	—	1,970	596	..	..	3,885
Stirling (C) — South-Eastern	2	—	110	14	—	789	504	250	250	1,654
Wanneroo (C)	328	—	25,988	24	..	1,208	938	3,310	3,310	31,445
North Metropolitan (SSD)	*374*	*1*	*30,474*	*139*	..	*7,354*	*2,445*	*3,995*	*3,995*	*44,268*
Cockburn (C)	88	..	7,276	8	—	483	365	150	150	8,273
East Fremantle (T)	—	—	—	—	—	—	321	—	..	321
Fremantle (C) — Inner	..	..	—	—	—	—	—	300	300	300
Fremantle (C) — Remainder	8	—	717	—	8	408	614	450	450	2,189
Kwinana (T)	35	—	1,971	..	—	—	30	284	284	2,285
Melville (C)	43	.	4,733	23	9	3,122	924	595	709	9,488
Rockingham (C)	117	—	7,715	47	–	2,388	99	1,150	1,556	11,757
South West Metropolitan (SSD)	*291*	.	*22,412*	*78*	*17*	*6,401*	*2,351*	*2,929*	*3,449*	*34,613*
Armadale (C)	55	—	3,219	4	—	206	196	195	195	3,816
Belmont (C)	6	—	358	14	5	912	65	300	300	1,635
Canning (C)	47	.	3,868	—	6	354	307	1,150	1,150	5,679
Gosnells (C)	37	..	2,375	8	—	363	300	1,254	1,254	4,292
Serpentine-Jarrahdale (S)	15	—	1,278	—	—	—	39	—	—	1,317
South Perth (C)	10	—	1,330	35	51	9,201	752	2,080	2,080	13,363
South East Metropolitan (SSD)	*170*	—	*12,429*	*61*	*62*	*11,036*	*1,658*	*4,979*	*4,979*	*30,102*
Total	**1,095**	**6**	**89,822**	**401**	**95**	**33,587**	**10,435**	**16,168**	**23,942**	**157,786**
SOUTH WEST STATISTICAL DIVISION										
Boddington (S)	2	—	145	—	—	—	50	—	—	195
Mandurah (C)	91	—	7,403	26	—	1,438	134	305	305	9,280
Murray (S)	17	—	1,192	2	..	85	101	..	—	1,378
Waroona (S)	5	—	399	—	—	—	—	1,147	1,147	1,545
Dale (SSD)	*115*		*9,139*	*28*	—	*1,522*	*285*	*1,452*	*1,452*	*12,397*
Bunbury (C)	12	—	916	4	—	251	129	—	1,300	2,596
Capel (S)	9		685			..	15	—	—	700
Collie (S)	1	.	63			..		—	—	63
Dardanup (S)	5	—	415	..	—	—	—	—	—	415
Donnybrook-Balingup (S)	6	..	320	.	—	—	12	—	—	332
Harvey (S)	21	—	1,721	—	—	—	43	—	—	1,764
Preston (SSD)	*54*	.	*4,120*	*4*	..	*251*	*199*	—	*1,300*	*5,870*

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), FEBRUARY 1994—*continued*

Statistical local area, statistical subdivision and statistical division	*New residential building*						*Alterations and additions to residential buildings ($'000)*	*Non-residential building*		*Total building ($'000)*
	Houses			*Other residential buildings*						
	Private sector (number)	*Public sector (number)*	*Total value ($'000)*	*Private sector (number)*	*Public sector (number)*	*Total value ($'000)*		*Private sector ($'000)*	*Total ($'000)*	
SOUTH WEST STATISTICAL DIVISION (continued)										
Augusta-Margaret River (S)	7	—	685	—	—	—	296	542	542	1,523
Busselton (S)	27	—	2,162	17	—	1,253	293	2,213	2,213	5,920
Vasse (SSD)	*34*	—	*2,846*	*17*	—	*1,253*	*589*	*2,755*	*2,755*	*7,443*
Boyup Brook (S)	2		139	—	—	—	20	—	—	159
Bridgetown-Greenbushes (S)	2	—	195	—	—	—	91	—	—	286
Manjimup (S)	8	—	530	—	—	—	84	240	240	853
Nannup (S)	2	1	170	—	—	—	—	—	—	170
Blackwood (SSD)	*14*	*1*	*1,033*	—	—	—	*194*	*240*	*240*	*1,467*
Total	**217**	**1**	**17,138**	**49**	—	**3,026**	**1,268**	**4,446**	**5,746**	**27,178**
LOWER GREAT SOUTHERN STATISTICAL DIVISION										
Broomehill (S)	—	—	—	—	—	—	—	—	—	—
Gnowangerup (S)	1	—	49	—	—	—	238	180	180	467
Jerramungup (S)	2	—	65	—	—	—			60	125
Katanning (S)	—	—	—	—	—	—	36	—	—	36
Kent (S)	—	—	—	—	—	—	—			
Kojonup (S)	—	—	—	—	—	—	—	59	59	59
Tambellup (S)	—	—	—	—	—	—	—	—	—	—
Woodanilling (S)	—	—	—	—	—	—	—	—	—	—
Pallinup (SSD)	*3*	—	*114*	—	—	—	*274*	*239*	*299*	*686*
Albany (T)	9	—	611	3	—	462	84	80	80	1,237
Albany (S)	17	1	1,399	—	—	—	74	487	487	1,960
Cranbrook (S)	—	—	—	—	—	—	—	—	—	—
Denmark (S)	10		688	—	—	—	98	150	150	936
Plantagenet (S)	2		110	—	—	—	18	—	—	128
King (SSD)	*38*	*1*	*2,808*	*3*	—	*462*	*274*	*717*	*717*	*4,261*
Total	**41**	**1**	**2,922**	**3**	—	**462**	**548**	**956**	**1,016**	**4,947**
UPPER GREAT SOUTHERN STATISTICAL DIVISION										
Brookton (S)	—	—	—	—	—	—	—	—	—	—
Cuballing (S)	1	—	50	—	—	—	—	—	—	50
Dumbleyung (S)	—	—	—	—	—	—	—	—	—	
Narrogin (T)	2	—	154	—	—	—	18	75	75	247
Narrogin (S)	—	—	—	—	—	—	—	—	—	—
Pingelly (S)	—	—	—	—	—	—	—	—	—	—
Wagin (S)	1	—	70	5	—	276	51	—	—	397
Wandering (S)	—	—	—	—	—	—	—	—	—	—
West Arthur (S)	—	—	—	—	—	—	—	—	—	—
Wickepin (S)	—	—	—	—	—	—	—	—	—	—
Williams (S)	—	—	—	—	—	—	—	—	—	—
Hotham (SSD)	*4*	—	*273*	*5*	—	*276*	*69*	*75*	*75*	*693*
Corrigin (S)	1	—	69	—	—	—	—	—	—	69
Kondinin (S)	—	—	—	—	—	—	—	—	—	—
Kulin (S)	—	—	—	—	—	—	—	—	—	—
Lake Grace (S)	—	—	—	—	—	—	—	—	—	—
Lakes (SSD)	*1*	—	*69*	—	—	—	—	—	—	*69*
Total	**5**	—	**342**	**5**	—	**276**	**69**	**75**	**75**	**762**

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), FEBRUARY 1994—*continued*

Statistical local area, statistical subdivision and statistical division	*New residential building*						*Alterations and additions to residential buildings ($'000)*	*Non-residential building*		*Total building ($'000)*
	Houses			*Other residential buildings*						
	Private sector (number)	*Public sector (number)*	*Total value ($'000)*	*Private sector (number)*	*Public sector (number)*	*Total value ($'000)*		*Private sector ($'000)*	*Total ($'000)*	
MIDLANDS STATISTICAL DIVISION										
Chittering (S)	6	—	405	—	—	—		—	—	405
Dandaragan (S)	2	—	255		—	—	—		—	255
Gingin (S)	5	—	369	2	—	95		—	—	464
Moora (S)	1	—	65		—	—		—	—	65
Victoria Plains (S)	—	—		—	—	—		—	—	—
Moore (SSD)	*14*	—	*1,094*	*2*	—	*95*		—	—	*1,189*
Beverley (S)	—	—		—	—			—	—	—
Cunderdin (S)			—	—	—		—	—	—	
Dalwallinu (S)	—	—			—	—		—	—	—
Dowerin (S)	—			—	—	—		—	—	
Goomalling (S)	—	—			—	—		—	—	—
Koorda (S)			—	—	—	—	—	—	—	—
Northam (T)	3	2	383	—	2	194	—	350	350	926
Northam (S)	2	—	141		—	—	17		—	158
Quairading (S)	—	—	—		—	—	—	—		—
Tammin (S)	—	—		—	—	—		—	—	—
Toodyay (S)	6	—	467	2	—	70	40		—	577
Wongan-Ballidu (S)	1	—	78	—	—	—		—	—	78
Wyalkatchem (S)	—	—			—	—	—		—	—
York (S)	5		301	—	—		—	—	—	301
Avon (SSD)	*17*	*2*	*1,370*	*2*	*2*	*264*	*57*	*350*	*350*	*2,040*
Bruce Rock (S)		—	—	—	—	—	—	—		
Kellerberrin (S)	1	—	78	—	—	—	—	—	—	78
Merredin (S)	1	—	163		—	—	40		—	203
Mount Marshall (S)	—	—	—		—	—			—	—
Mukinbudin (S)	—		—	—	—		15	—	—	15
Narembeen (S)	2	—	113	—	—	—	—	—	—	113
Nungarin (S)	—	1	66	—	—	—	—	—	—	66
Trayning (S)	1	—	96	—	—	—		—	—	96
Westonia (S)	—		—	—	—		—	—	—	
Yilgarn (S)	2	1	340	2	—	91		—	—	431
Campion (SSD)	*7*	*2*	*856*	*2*		*91*	*54*	—		*1,001*
Total	**38**	**4**	**3,320**	**6**	**2**	**450**	**111**	**350**	**350**	**4,230**
SOUTH EASTERN STATISTICAL DIVISION										
Coolgardie (S)	—	—	—	—	—	—		—	—	—
Kalgoorlie/Boulder (C)	41	—	3,958	13	—	650	181	222	222	5,010
Laverton (S)	—		—	—	—		—	—	—	
Leonora (S)	—	—	—	—	—		—	—	—	
Menzies (S)	—	—	—	—	—	—			—	—
Lefroy (SSD)	*41*	—	*3,958*	*13*	—	*650*	*181*	*222*	*222*	*5,010*
Dundas (S)		—	—	—		—	—	—	—	
Esperance (S)	15	1	1,297	—	—	—	71	85	85	1,453
Ravensthorpe (S)	3	—	204		—	—	—			204
Johnston (SSD)	*18*	*1*	*1,501*	—	—	—	*71*	*85*	*85*	*1,657*
Total	**59**	**1**	**5,458**	**13**	—	**650**	**252**	**307**	**307**	**6,667**

For footnote, see end of table.

TABLE 7. BUILDING APPROVALS BY STATISTICAL LOCAL AREAS (a), FEBRUARY 1994—*continued*

Statistical local area, statistical subdivision and statistical division	New residential building: Houses: Private sector (number)	Houses: Public sector (number)	Houses: Total value ($'000)	Other residential buildings: Private sector (number)	Other residential buildings: Public sector (number)	Other residential buildings: Total value ($'000)	Alterations and additions to residential buildings ($'000)	Non-residential building: Private sector ($'000)	Non-residential building: Total ($'000)	Total building ($'000)
CENTRAL STATISTICAL DIVISION										
Carnarvon (S)	2	—	211		—	—	10	450	1,018	1,239
Exmouth (S)	—	—	—	—	—			—	—	—
Shark Bay (S)	1	3	363	—		—	—	—	—	363
Upper Gascoyne (S)	—	—	—	—		—	—	—	—	—
Gascoyne (SSD)	*3*	*3*	*574*	—	—	—	*10*	*450*	*1,018*	*1,602*
Cue (S)	—	—	—	—	—	—	—	—	—	—
Meekatharra (S)	—		—	—	—	—	—		—	—
Mount Magnet (S)	—	—	—	—		—	—	—	—	—
Murchison (S)			—	—	—	—	—		—	—
Ngaanyatjarraku (S)	—	—	—	—	—	—	—	—	—	—
Sandstone (S)	—	—	—	—	—	—	—	—	—	—
Wiluna (S)	—	—	—	—	—	—	—	—	—	—
Yalgoo (S)	—	—	—	—	—	—	—	—	—	—
Carnegie (SSD)	—	—	—	—	—	—		—	—	—
Carnamah (S)	2	—	70	—	—	—	25		—	95
Chapman Valley (S)	—	—	—	—	—	—	—			—
Coorow (S)	—	—	—	—	—	—	—	—		
Geraldton (C)	6	—	475	2	—	132	86	182	182	874
Greenough (S)	21	—	1,850	—	—	—	114	—	—	1,964
Irwin (S)	4	1	370	—	—	—			—	370
Mingenew (S)		—	—	—	—	—	—		—	—
Morawa (S)	—	—	—	—	—	—	39	—	—	39
Mullewa (S)	—	—	—	—	—	—	—	—	—	—
Northampton (S)	1	—	150	—	—	—	—	—	—	150
Perenjori (S)	—	—	—	—	—	—			—	—
Three Springs (S)	—	—	—	—		—	—	—	—	—
Greenough River (SSD)	*34*	*1*	*2,915*	*2*	—	*132*	*264*	*182*	*182*	*3,493*
Total	**37**	**4**	**3,488**	**2**	**—**	**132**	**274**	**632**	**1,200**	**5,094**
PILBARA STATISTICAL DIVISION										
East Pilbara (S)	—	2	248			—	14	—	—	261
Port Hedland (T)	—	—	—	—	—	—	—	65	255	255
De Grey (SSD)	—	*2*	*248*	—	—	—	*14*	*65*	*255*	*516*
Ashburton (S)	—		—	—	—	—	—	5,650	5,650	5,650
Roebourne (S)	3	—	460	—	—		34	68	68	562
Fortescue (SSD)	*3*	—	*460*	—			*34*	*5,717*	*5,717*	*6,211*
Total	**3**	**2**	**708**	**—**	**—**	**—**	**48**	**5,782**	**5,972**	**6,728**
KIMBERLEY STATISTICAL DIVISION										
Halls Creek (S)	—	—	—	—	—	—	—	—	—	—
Wyndham-East Kimberley (S)	—	—	—	—	—	—	—	120	1,724	1,724
Ord (SSD)			—	—	—	—	—	*120*	*1,724*	*1,724*
Broome (S)	9	—	747	—	—	—	—	2,375	2,375	3,122
Derby-West Kimberley (S)	1		87	—	—	—	35	—	—	122
Fitzroy (SSD)	*10*		*833*	—	—	—	*35*	*2,375*	*2,375*	*3,243*
Total	**10**	**—**	**833**	**—**	**—**	**—**	**35**	**2,495**	**4,099**	**4,968**
WESTERN AUSTRALIA										
Western Australia	**1,505**	**19**	**124,031**	**479**	**97**	**38,583**	**13,039**	**31,211**	**42,708**	**218,360**

(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 FEBRUARY 1994

Statistical division	Material of outer walls: Double brick(a)	Brick veneer	Fibre cement	Timber	Other and not stated	Total	Floor area (sq m)	Average floor area (sq m)	Average value per square metre ($)
Perth	1,081	4	..	12	4	1,101	238,695	217	376
South-West	164	12	17	14	11	218	45,745	210	375
Lower Great Southern	5	20	6	6	5	42	8,101	193	361
Upper Great Southern	1	—	.	4	.	5	818	164	418
Midlands	14	10	9	8	1	42	8,423	201	394
South-Eastern	8	42	5	1	4	60	11,807	197	462
Central	33	5	—	1	2	41	7,912	193	441
Pilbara		4	—	1	—	5	1,430	286	495
Kimberley	1	—	.	—	9	10	2,181	218	382
Western Australia	**1,307**	**97**	**37**	**47**	**36**	**1,524**	**325,112**	**213**	**382**

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

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

Statistical division	Houses	Other residential building: Semi-detached, row or terrace houses, townhouses, etc. of: 1 storey	2 or more storeys	Total	Flats, units or apartments in a building of: 1-2 storeys	3 storeys	4 or more storeys	Total	Total	Total residential building
					NUMBER OF DWELLING UNITS					
Perth	1,101	468	25	493	—	—	3	3	496	1,597
South West	218	43	6	49	—	—		—	49	267
Lower Great Southern	42	3	—	3	—	. .	.	—	3	45
Upper Great Southern	5	5	—	5	—	—		—	5	10
Midlands	42	8	—	8	—	—	-	—	8	50
South Eastern	60	13	—	13	—	.	—	—	13	73
Central	41	2	—	2	..	—	—	—	2	43
Pilbara	5	—	—	—	—	—	—	—	—	5
Kimberley	10	-	—	—		—	—	—	..	10
Western Australia	**1,524**	**542**	**31**	**573**	**—**	**—**	**3**	**3**	**576**	**2,100**
					VALUE ($'000)					
Perth	89,822	29,711	2,126	31,837	—	—	1,750	1,750	33,587	123,409
South West	17,138	2,440	586	3,026	—		—	..	3,026	20,164
Lower Great Southern	2,922	462	-	462		—	—		462	3,384
Upper Great Southern	342	276	—	276	—	—		—	276	618
Midlands	3,320	450	.	450	—	..	—	—	450	3,769
South Eastern	5,458	650	—	650	—	..	.	—	650	6,109
Central	3,488	132	.	132	—		-	—	132	3,620
Pilbara	708		—	—	—	—	—		—	708
Kimberley	833	..	—	—		—	—	.	—	833
Western Australia	**124,031**	**34,121**	**2,712**	**36,833**	**—**	**—**	**1,750**	**1,750**	**38,583**	**162,614**

EXPLANATORY NOTES

Introduction

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

(a) permits issued by local government authorities in areas subject to building control by those authorities;

(b) approvals issued by the Rural Housing Authority in areas not subject to building control by local government authorities;

(c) contracts let or day labour work authorised by Commonwealth, State, semi-government and local government authorities.

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

Factors affecting comparability

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

Scope and coverage

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

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

5. From July 1990, the statistics cover:

(b) all approved new residential building jobs valued at $10,000 or more:

(b) approved alterations and additions to residential buildings valued at $10,000 or more;

(c) all approved non-residential building jobs valued at $50,000 or more.

From July 1988 to June 1990, the statistics covered:

(d) all approved new residential building jobs valued at $5,000 or more (previously all new residential building jobs were included regardless of value);

(e) approved alterations and additions to residential buildings valued at $10,000 or more;

(f) all approved non-residential building jobs valued at $30,000 or more (previously $10,000 or more).

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

Definitions

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

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

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

(a) A *house* is defined as a detached building predominantly used for long term residential purposes and consisting of only one dwelling unit. Thus detached 'granny flats' and detached dwelling units (such as caretaker's residences) associated with non-residential buildings are defined as houses for the purpose of these statistics.

(b) An *other residential building* is defined as a building which is predominantly used for long term residential purposes and which contains (or has attached to it) more than one dwelling unit (e.g. includes flats, home units, townhouses, duplexes, apartment buildings, etc).

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

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

Building classification

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

whereby the authority has contracted, or intends to contract, to purchase the buildings on or before completion, are classified as public sector.

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

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

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

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

(a) *Semi-detached, row or terrace houses, townhouses, etc.* (dwellings having their own private grounds and no other dwellings above or below) with
- one storey;
- two or more storeys.

(b) *Flats, units or apartments, etc.* (dwellings not having their own private grounds and usually sharing a common entrance, foyer or stairwell) in a building of:
- one or two storeys;
- three storeys;
- four or more storeys.

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

Seasonal adjustment

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

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

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

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

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

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

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

factors. Details of other trend-cycle weighting patterns can be found in *A Guide to Smoothing Time Series - Estimates of Trend* (1316.0).

Estimates at constant prices

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

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

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

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

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

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

Australian Standard Geographical Classification

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

Unpublished data and related publications

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

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

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

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

Symbols and other usages

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

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

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

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2873150002945
ISSN 0727-2278

Recommended retail price: $11.00