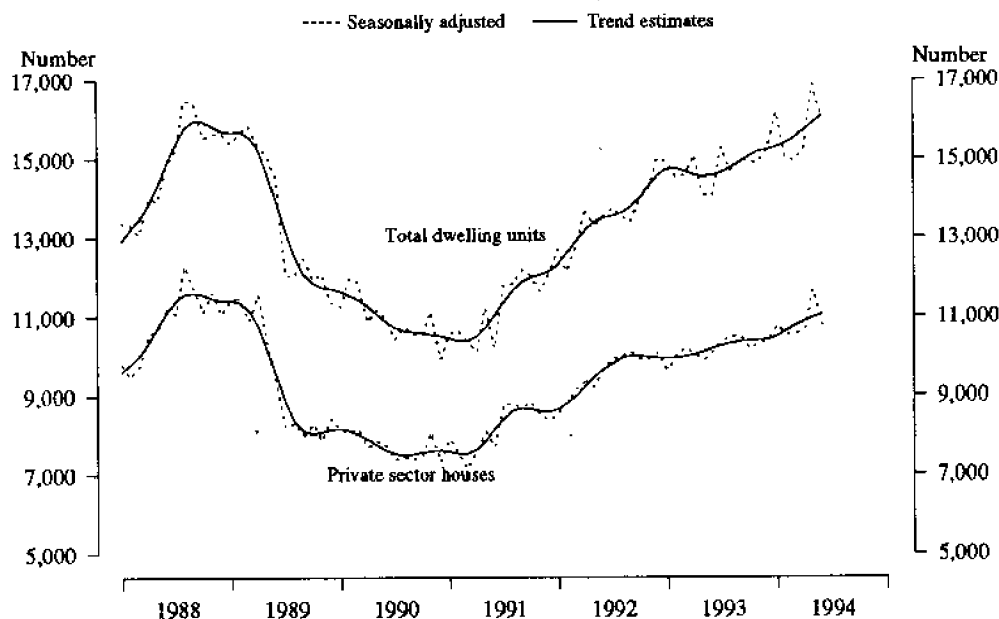


BUILDING APPROVALS, AUSTRALIA, JUNE 1994

NOTE: Trend estimates for the most recent months are provisional and can be revised as data for additional months become available. Readers are referred to the "Reliability of Contemporary Trends" on page 3 for assistance with interpreting selected trend estimates.

SUMMARY OF FINDINGS

DWELLING UNITS APPROVED, AUSTRALIA



Number of dwelling units approved, June 1994

The provisional trend for the *total number of dwelling units* approved continued to grow in June 1994, despite a 4.9 per cent fall in the seasonally adjusted series from the record high May 1994 estimate. The trend rose by 1.1 per cent to 16,076 in June 1994, the highest monthly figure recorded for this series, and followed increases of 1.3 per cent in May and 1.1 per cent in April 1994. There would need to be a fall of nearly 6 per cent in the seasonally adjusted series in July to halt this growth. The historical average monthly movement of this series, regardless of sign, is 4 per cent.

The growth in the provisional trend for the *number of private sector houses* approved has slowed in June 1994, as a result of a 7.8 per cent fall in the seasonally adjusted series. The trend rose by 0.7 per cent to 11,057 in June, following growth of 1.0 per cent in May and 1.1 per cent in April 1994. A further small fall (of around 0.5%) in the seasonally adjusted series in July 1994 would see the trend level off. The historical average monthly movement of this series is 4 per cent.

In seasonally adjusted terms, the *total number of dwelling units* approved fell by 4.9 per cent in June 1994 to 16,051, but remained 14.3 per cent above the June 1993 estimate. The *number of private sector houses* approved fell by 7.8 per cent in June 1994 to 10,757, but remained 6.5 per cent above the June 1993 estimate.

DWELLING UNITS APPROVED, JUNE 1994

	Number	Percentage change	
		From previous month	From corresponding month of previous year
Private sector houses —			
Trend estimate	11,057	0.7	8.5
Seasonally adjusted	10,757	-7.8	6.5
Original	11,429	-9.1	7.2
Total dwelling units —			
Trend estimate	16,076	1.1	10.3
Seasonally adjusted	16,051	-4.9	14.3
Original	17,478	-6.2	13.3

The provisional trend estimates for total dwelling units approved continue to show quite strong growth in New South Wales, Queensland, South Australia and Western Australia. The trend which had levelled in Victoria last month, has now been revised to show decline from February 1994, while the trend in Tasmania continues the decline evident since November 1993.

Number of dwelling units approved, 1993-94

In original terms, there were 184,705 dwelling units approved in 1993-94 an increase of 8.3 per cent, from 170,557 in 1992-93. The 1993-94 total was less than 1 per cent below the previous peak (186,358) for this series in 1988-89. An increase of

INQUIRIES

- for further information about statistics in this publication and the availability of related unpublished statistics, contact Paul Seville on Canberra (06) 252 6067 or any ABS State office.
- about constant price deflators, contact Paul Curran on Canberra (06) 252 6708.
- for information about other ABS statistics and services please refer to the back page of this publication.

10.2 per cent in private sector dwelling unit approvals more than offset a 27.9 per cent decrease in public sector dwelling unit approvals.

Total house approvals rose by 5.6 per cent and total other residential building approvals (townhouses, flats, apartments, etc.) rose by 15.4 per cent. There were 54,222 new other residential buildings approved in 1993-94, the highest annual figure recorded. On top of that, there were an additional 4,149 dwelling units approved as part of the construction of, and alterations and additions to, non-residential buildings in 1993-94. The number of other residential dwelling unit approvals, expressed as a proportion of total dwelling unit approvals, has risen from 25.4 per cent in 1990-91, to 29.4 per cent in 1993-94.

Percentage movements between 1992-93 and 1993-94 for each State/Territory in the number of dwelling units approved were:

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total dwellings	2.9	7.4	14.9	-4.5	18.2	1.3	6.1	-6.4	8.3

Value of building approved, June 1994

NOTE:

The Melbourne casino project was approved in June 1994 with an approval value of over \$500m. This approval has caused a large and abrupt increase in the original and seasonally adjusted value of non-residential building and total building approved. It is unlikely that this increase will be sustained in future months, with the result that the July 1994 value of approvals is expected to record a large decline from the June 1994 level. Inclusion of this extraordinary June seasonally adjusted estimate in the calculation of the underlying trend would have resulted in the trend displaying strong short term growth which would have been significantly revised away over the following periods. Thus trend estimates for the value of non-residential building approved and total building approved have been calculated to discount the extraordinary movement in the June 1994 seasonally adjusted estimates.

The provisional trend estimates for the value of total building approved are relatively flat to June 1994. However the trend series will be revised to show growth as long as the seasonally adjusted value of building approved in July 1994 is around \$2,160m.

The provisional trend estimates for the value of new residential building approved continued to grow to June 1994 as it has done since May 1993. The trend has grown by 2 per cent for each of the last three months. There would need to be a fall of over 13 per cent in the seasonally adjusted series in July 1994 for this trend growth to halt. The historical average monthly movement for this series is 5 per cent.

The June 1994 seasonally adjusted value of non-residential building approved increased significantly over the May 1994 estimate due to the approval of the Melbourne casino project in Victoria. This project has an approved value of over \$500m and contributed to the Hotels, etc., Shops, Entertainment and recreational and Other business premises categories. However, as mentioned previously, this large project has been discounted when calculating the trend series for the value of non-residential building approved. On this adjusted basis, the trend series continued to decline to June 1994. A seasonally adjusted estimate of \$680m for non-residential building approved in July 1994 would see the trend begin to level out.

Value of building approved, 1993-94

In original terms, the value of total building approved in 1993-94 (\$26,759.9m) increased by 12.0 per cent over the level recorded in 1992-93. Increases occurred in all three major categories, with new residential building approvals increasing by 11.1 per cent to \$15,685.3m, alterations and additions to residential buildings by 9.6 per cent to \$2,289.0m and non-residential building by 14.4 per cent to \$8,785.6m.

Percentage movements between 1992-93 and 1993-94 for the value of building approved for each State/Territory were:

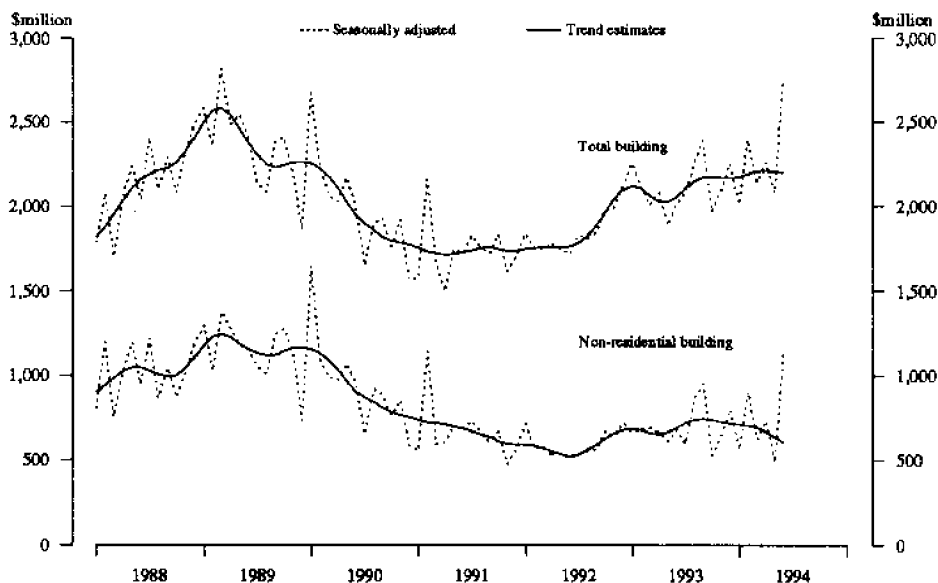
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Residential(a)	1.6	13.7	19.3	-1.3	27.7	10.7	18.0	-4.8	10.9
Non-residential	-9.3	78.0	27.3	-10.3	-25.0	41.5	95.9	34.4	14.4
Total building	-2.3	34.1	21.3	-4.0	9.3	18.5	45.8	7.8	12.0

(a) New dwellings plus alterations and additions to residential buildings.

The value of residential building approved increased substantially in all States and Territories except New South Wales, South Australia and the Australian Capital Territory. The value of non-residential building approved rose by 14.4 per cent in 1993-94, with large increases in Victoria, Queensland, Tasmania, Northern Territory and the Australian Capital Territory more than offsetting falls in New South Wales, South Australia and Western Australia. Despite the increase in 1993-94, the value of non-residential building approved remains well below the peak of \$13,534.1m achieved in 1988-89.

The rise in non-residential building approvals in 1993-94 was mainly due to large increases in the Other business premises (55.3%), Hotels, etc (165.8%), Shops (22.1%), and Health (14.1%) categories. Modest increases were recorded in the Educational (9.4%), and Miscellaneous (2.6%) categories. Falls were recorded in the Entertainment and recreational (-5.5%), Factories (-2.4%), Offices (-9.8%), and Religious (-13.3%) categories. The value of building work approved in the Offices category in 1993-94 was \$1,341.1m, the lowest annual value since 1983-84 and 70.4 per cent below the level recorded in 1988-89.

VALUE OF BUILDING APPROVED, AUSTRALIA



RELIABILITY OF CONTEMPORARY TREND ESTIMATES

The tables below present trend estimates of selected building approvals series for the six months January 1994 to June 1994.

Analysis of building approvals series has shown that the original series can be volatile and that the initial estimates of a month's trend value can be revised substantially. In particular, some months can elapse before a turning point in the trend series is reliably identified. Generally, the size of revisions to the trend estimates tends to be larger, the greater the volatility of the original series. Revisions to trend estimates will also occur with revisions to original data and re-estimation of seasonal adjustment factors. See paragraphs 22 to 24 of the Explanatory Notes for a more detailed explanation.

To illustrate the possible impact of future months' observations on the trend estimates for the latest months, the tables below show the revisions to the trend estimates that would result if the movements in the seasonally adjusted estimates for next month (July 1994) were equal to the average monthly percentage change (regardless of sign) in the series over the last ten years.

For example, if the seasonally adjusted estimate for the number of private houses approved (the first table) were to increase by 4 per cent in July 1994, the trend estimate for that month would be 11,361, a movement of 0.6 per cent. The monthly movements in the trend estimates for April, May and June 1994, which are currently estimated to be 1.1 per cent, 1.0 per cent and 0.8 per cent respectively, would be revised to 1.2 per cent, 1.0 per cent and 0.9 per cent. On the other hand, a 4 per cent seasonally adjusted decline in the number of private houses approved in July 1994 would produce a trend estimate for July of 10,811, a movement of -0.4 per cent, with the movements in the trend estimates for April, May and June 1994 being revised to 0.7 per cent, 0.3 per cent and -0.1 per cent, respectively.

NUMBER OF PRIVATE SECTOR HOUSES APPROVED RELIABILITY OF TREND ESTIMATES

	Trend estimate		Revised trend estimate if July 1994 seasonally adjusted estimate			
			is up 4% on June 1994		is down 4% on June 1994	
	No.	% change on previous month	No.	% change on previous month	No.	% change on previous month
1994—						
January	10,493	0.8	10,490	0.8	10,505	0.9
February	10,615	1.2	10,611	1.2	10,638	1.3
March	10,748	1.3	10,746	1.3	10,759	1.2
April	10,869	1.1	10,870	1.2	10,835	0.7
May	10,975	1.0	10,980	1.0	10,866	0.3
June	11,057	0.8	11,074	0.9	10,859	-0.1
July	n.y.a.	n.y.a.	11,136	0.6	10,811	-0.4

TOTAL NUMBER OF DWELLING UNITS APPROVED RELIABILITY OF TREND ESTIMATES

	Trend estimate		Revised trend estimate if July 1994 seasonally adjusted estimate			
			is up 4% on June 1994		is down 4% on June 1994	
	No.	% change on previous month	No.	% change on previous month	No.	% change on previous month
1994—						
January	15,293	0.5	15,281	0.4	15,305	0.5
February	15,396	0.7	15,378	0.6	15,421	0.8
March	15,532	0.9	15,522	0.9	15,544	0.8
April	15,706	1.1	15,729	1.3	15,673	0.8
May	15,905	1.3	15,982	1.6	15,797	0.8
June	16,076	1.1	16,241	1.6	15,892	0.6
July	n.y.a.	n.y.a.	16,460	1.4	15,935	0.3

**VALUE OF NEW RESIDENTIAL BUILDING APPROVED
RELIABILITY OF TREND ESTIMATES**

	<i>Revised trend estimate if July 1994 seasonally adjusted estimate</i>					
	<i>Trend estimate</i>		<i>is up 5% on June 1994</i>		<i>is down 5% on June 1994</i>	
	<i>\$m</i>	<i>% change on previous month</i>	<i>\$m</i>	<i>% change on previous month</i>	<i>\$m</i>	<i>% change on previous month</i>
<i>1994-</i>						
January	1,287.4	0.7	1,285.0	0.5	1,287.6	0.7
February	1,303.3	1.2	1,299.5	1.1	1,303.9	1.3
March	1,325.0	1.7	1,323.1	1.8	1,325.3	1.6
April	1,351.2	2.0	1,355.7	2.5	1,349.9	1.9
May	1,379.8	2.1	1,394.8	2.9	1,375.4	1.9
June	1,406.5	1.9	1,435.9	2.9	1,399.2	1.7
July	n.y.a.	n.y.a.	1,472.8	2.6	1,417.5	1.3

**VALUE OF NON-RESIDENTIAL BUILDING APPROVED
RELIABILITY OF TREND ESTIMATES**

	<i>Revised trend estimate if July 1994 seasonally adjusted estimate</i>					
	<i>Trend estimate</i>		<i>is up 19% on June 1994(a)</i>		<i>is down 19% on June 1994(a)</i>	
	<i>\$m</i>	<i>% change on previous month</i>	<i>\$m</i>	<i>% change on previous month</i>	<i>\$m</i>	<i>% change on previous month</i>
<i>1994--</i>						
January	709.5	-1.0	706.5	-1.4	711.4	-0.7
February	704.5	-0.7	697.9	-1.2	706.6	-0.7
March	692.6	-1.7	689.6	-1.2	693.9	-1.8
April	666.7	-3.7	672.6	-2.5	661.1	-4.7
May	636.8	-4.5	661.1	-1.7	623.2	-5.7
June	607.2	-4.7	659.4	-0.3	588.0	-5.7
July	n.y.a.	n.y.a.	674.1	2.2	566.4	-3.7

(a) June 1994 trend estimates have been calculated to discount extraordinary movements. See Note in Summary of Findings.

**VALUE OF TOTAL BUILDING APPROVED
RELIABILITY OF TREND ESTIMATES**

	<i>Revised trend estimate if July 1994 seasonally adjusted estimate</i>					
	<i>Trend estimate</i>		<i>is up 9% on June 1994(a)</i>		<i>is down 9% on June 1994(a)</i>	
	<i>\$m</i>	<i>% change on previous month</i>	<i>\$m</i>	<i>% change on previous month</i>	<i>\$m</i>	<i>% change on previous month</i>
<i>1994--</i>						
January	2,178.7	0.4	2,173.7	0.1	2,181.6	0.5
February	2,195.8	0.8	2,186.4	0.6	2,200.2	0.9
March	2,210.1	0.7	2,205.6	0.9	2,212.5	0.6
April	2,212.4	0.1	2,222.0	0.7	2,203.7	-0.4
May	2,209.2	-0.1	2,245.2	1.0	2,184.8	-0.9
June	2,203.0	-0.3	2,276.6	1.4	2,162.9	-1.0
July	n.y.a.	n.y.a.	2,320.8	1.9	2,149.2	-0.6

(a) June 1994 trend estimates have been calculated to discount extraordinary movements. See Note in Summary of Findings.

TABLE 1. NUMBER OF DWELLING UNITS APPROVED IN NEW RESIDENTIAL BUILDINGS, AUSTRALIA

Period	Houses			Other residential buildings			Total		
	Private sector	Public sector	Total	Private sector	Public sector	Total	Private sector	Public sector	Total
1991-92	107,171	3,693	110,864	31,038	8,299	39,337	138,209	11,992	150,201
1992-93	119,846	3,741	123,587	40,319	6,651	46,970	160,165	10,392	170,557
1993-94	127,299	3,184	130,483	49,281	4,941	54,222	176,580	8,125	184,705
1993—									
April	9,475	440	9,915	3,738	502	4,240	13,213	942	14,155
May	10,249	306	10,555	3,625	686	4,311	13,874	992	14,866
June	10,657	426	11,083	3,382	956	4,338	14,039	1,382	15,421
July	10,989	176	11,165	4,128	526	4,654	15,117	702	15,819
August	10,774	153	10,927	4,108	322	4,430	14,882	475	15,357
September	11,152	333	11,485	4,181	169	4,350	15,333	502	15,835
October	10,435	257	10,692	r 3,816	142	r 3,958	r 14,251	399	r 14,650
November	10,960	295	11,255	4,564	342	4,906	15,524	637	16,161
December	9,621	302	9,923	r 3,570	245	r 3,815	r 13,191	547	r 13,738
1994—									
January	8,325	220	8,545	3,955	274	4,229	12,280	494	12,774
February	9,718	130	9,848	3,588	448	4,036	13,306	578	13,884
March	11,734	249	11,983	4,061	468	4,529	15,795	717	16,512
April	9,586	339	9,925	3,644	287	3,931	13,230	626	13,856
May	12,576	301	12,877	5,006	758	5,764	17,582	1,059	18,641
June	11,429	429	11,858	4,660	960	5,620	16,089	1,389	17,478

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 150 such dwelling units approved in June 1994.

TABLE 2. VALUE OF BUILDING APPROVED, AUSTRALIA
(\$ 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		Private sector	Total	Private sector	Total
1991-92	9,113.0	275.6	9,388.5	2,060.3	557.1	2,617.4	11,173.3	832.7	12,005.9	1,973.9	4,745.4	7,208.7	17,873.5	21,188.5
1992-93	10,319.3	286.5	10,605.7	3,091.4	424.2	3,515.6	13,410.7	710.7	14,121.4	2,088.6	5,067.7	7,676.5	20,549.8	23,886.4
1993-94	11,403.8	265.4	11,669.2	3,693.6	322.5	4,016.1	15,097.4	587.9	15,685.3	2,289.0	6,057.0	8,785.6	23,421.5	26,759.9
1993—														
April	811.9	40.3	852.2	305.8	29.0	334.8	1,117.7	69.4	1,187.0	165.3	436.5	605.5	1,717.3	1,957.7
May	891.9	22.6	914.5	254.8	39.6	294.4	1,146.7	62.2	1,208.9	183.3	362.3	725.0	1,688.9	2,117.3
June	920.3	31.5	951.8	239.2	55.5	294.7	1,159.5	87.1	1,246.5	182.8	522.2	701.3	1,863.0	2,130.7
July	963.5	17.3	980.8	313.8	31.5	345.4	1,277.3	48.9	1,326.2	178.2	380.6	560.8	1,834.7	2,065.1
August	946.1	12.0	958.1	276.2	21.7	297.9	1,222.4	33.7	1,256.1	179.9	554.0	850.7	1,956.1	2,286.7
September	984.4	27.3	1,011.7	315.7	10.4	326.1	1,300.1	37.8	1,337.8	223.9	687.5	923.0	2,209.7	2,484.8
October r	908.5	20.7	929.2	271.2	9.4	280.6	1,179.6	30.1	1,209.7	195.0	421.4	640.4	1,795.5	2,045.1
November	966.3	19.0	985.3	330.1	22.8	352.9	1,296.4	41.8	1,338.2	198.3	424.5	672.7	1,918.6	2,209.2
December r	864.8	22.5	887.3	245.8	15.1	260.9	1,110.6	37.6	1,148.2	168.1	457.5	775.7	1,735.6	2,092.0
1994—														
January	750.2	25.8	776.0	296.8	20.4	317.2	1,047.1	46.2	1,093.3	145.2	302.7	566.0	1,494.5	1,804.5
February	867.0	11.2	878.3	274.4	28.7	303.1	1,141.4	39.9	1,181.3	173.7	492.5	781.0	1,806.6	2,136.0
March	1,061.9	19.7	1,081.6	350.7	30.8	381.6	1,412.6	50.6	1,463.1	203.3	436.0	596.7	2,051.4	2,263.1
April	878.1	33.3	911.4	263.5	17.8	281.3	1,141.5	51.1	1,192.7	178.8	448.3	642.0	1,767.2	2,013.4
May	1,144.9	21.9	1,166.8	369.1	49.1	418.2	1,514.0	71.0	1,585.0	250.3	446.2	612.2	2,199.4	2,447.5
June	1,068.2	34.5	1,102.7	386.2	64.8	451.0	1,454.4	99.3	1,553.7	194.4	1,006.0	1,164.4	2,652.1	2,912.5

TABLE 3. NUMBER AND VALUE OF BUILDING APPROVED, AUSTRALIA
SEASONALLY ADJUSTED ESTIMATES

Period	Number of dwelling units				Value(\$m)			
	Houses		Total		New residential building	Alterations and additions to residential buildings	Non-residential building(a)	Total building
	Private sector	Total	Private sector	Total				
<i>1993—</i>								
April	10,033	10,406	13,790	15,073	1,224.8	176.9	661.7	2,085.2
May	9,882	10,109	13,329	14,082	1,141.6	179.0	613.4	1,892.7
June	10,097	10,268	13,363	14,048	1,155.9	180.8	683.0	2,013.3
July	10,353	10,765	14,561	15,279	1,270.1	170.0	596.9	2,081.8
August	10,484	10,550	14,048	14,677	1,225.8	172.8	875.7	2,257.3
September	10,495	10,797	14,437	14,981	1,281.5	200.2	955.7	2,394.2
October	10,159	10,563	r 14,237	r 14,944	r 1,243.6	185.3	548.6	r 1,994.2
November	10,278	10,557	14,539	14,879	1,245.1	181.8	641.8	2,091.5
December	10,370	10,816	r 14,669	r 15,293	r 1,272.8	185.2	812.6	r 2,266.8
<i>1994—</i>								
January	10,764	10,950	15,666	16,166	1,352.0	183.1	567.4	2,015.4
February	10,536	10,719	14,203	15,047	1,277.6	193.4	910.3	2,400.7
March	10,557	10,837	14,110	14,919	1,317.2	185.4	624.7	2,149.3
April	10,641	10,887	14,567	15,297	1,274.4	199.2	732.7	2,260.7
May	11,663	11,903	15,941	16,883	1,432.0	232.5	488.3	2,085.4
June	10,757	10,906	15,401	16,051	1,454.1	194.2	1,161.3	2,741.7

(a) Extreme care should be exercised in using the seasonally adjusted series for the value of non-residential building. The highly erratic nature of this data makes reliable estimation of the seasonal pattern very difficult.

TABLE 4. NUMBER AND VALUE OF BUILDING APPROVED, AUSTRALIA
TREND ESTIMATES (a)

Period	Number of dwelling units				Value(\$m)			
	Houses		Total		New residential building	Alterations and additions to residential buildings	Non-residential building (b)	Total building (b)
	Private sector	Total	Private sector	Total				
<i>1993—</i>								
April	10,029	10,385	13,575	14,574	1,205.1	176.0	r 654.7	r 2,030.4
May r	10,104	10,391	13,650	14,536	1,188.8	176.7	667.4	2,028.2
June r	10,190	10,430	13,788	14,569	1,192.0	177.8	691.8	2,057.1
July r	10,259	10,494	13,948	14,641	1,210.0	179.4	722.3	2,109.1
August r	10,309	10,567	14,130	14,749	1,232.7	181.3	740.7	2,153.2
September r	10,350	10,637	14,336	14,900	1,248.7	183.3	745.9	2,175.9
October r	10,378	10,688	14,527	15,067	1,263.1	184.8	737.6	2,178.5
November r	10,382	10,699	14,628	15,172	1,272.7	185.0	726.5	2,174.2
December r	10,411	10,718	14,650	15,224	1,278.1	185.3	716.5	2,170.7
<i>1994—</i>								
January r	10,493	10,779	14,660	15,293	1,287.4	186.9	709.5	2,178.7
February r	10,615	10,875	14,696	15,396	1,303.3	190.5	704.5	2,195.8
March r	10,748	10,984	14,776	15,532	1,325.0	195.9	692.6	2,210.1
April r	10,869	11,090	14,914	15,706	1,351.2	201.3	666.7	2,212.4
May r	10,975	11,184	15,092	15,905	1,379.8	205.9	636.8	2,209.2
June	11,057	11,249	15,271	16,076	1,406.5	209.4	607.2	2,203.0

(a) Seasonally adjusted series smoothed by application of a 13-term Henderson moving average - see Explanatory Notes for a more detailed explanation. (b) The June 1994 trend estimates have been calculated to discount extraordinary movements in the seasonally adjusted series. See Note in Summary of Findings.

TABLE 5. TOTAL NUMBER OF DWELLING UNITS APPROVED, STATES(a)
SEASONALLY ADJUSTED AND TREND ESTIMATES

Period	NSW	Vic.	Qld	SA	WA	Tas.
SEASONALLY ADJUSTED						
1993—						
April	4,167	2,394	4,660	1,101	1,828	345
May	3,897	2,343	4,334	1,010	1,809	321
June	3,692	2,359	4,523	942	2,045	333
July	4,425	2,583	4,641	1,143	1,865	378
August	3,717	2,437	4,316	1,177	2,183	386
September	3,870	2,723	4,798	850	2,145	349
October	3,945	2,591	r 4,157	924	2,197	342
November	3,999	2,554	4,504	1,005	2,351	364
December	3,556	2,634	r 4,692	927	2,551	368
1994—						
January	4,348	2,754	4,570	927	1,881	390
February	3,965	2,886	4,061	897	2,174	362
March	3,806	2,636	4,676	906	2,334	297
April	4,354	2,667	4,399	982	2,163	292
May	4,872	2,685	5,180	1,051	2,367	354
June	4,957	2,625	4,981	957	2,394	283
TREND ESTIMATES						
1993—						
April	4,114	2,439	4,281	1,058	1,833	324
May	4,023	2,418	r 4,411	1,051	1,870	336
June	3,969	2,433	r 4,504	1,045	1,925	350
July	3,935	2,473	r 4,538	1,038	2,008	358
August	3,915	2,520	r 4,529	1,024	2,101	361
September	3,907	2,568	r 4,506	1,001	2,183	363
October	3,900	2,613	r 4,496	971	2,241	367
November	3,888	2,651	r 4,474	942	2,263	367
December	3,885	2,685	4,445	922	2,253	364
1994—						
January r	3,934	2,709	4,445	920	2,231	357
February r	4,043	2,720	4,484	933	2,217	347
March r	4,199	2,717	4,567	945	2,227	333
April r	4,391	2,700	4,677	961	2,257	320
May r	4,593	2,679	4,796	976	2,294	308
June	4,794	2,653	4,913	994	2,334	299

(a) Seasonally adjusted and trend estimates are not available for Northern Territory or Australian Capital Territory. NOTE: Analysis of the above State building approvals series has shown that they are subject to varying degrees of volatility. As an indication of this volatility, the average absolute monthly percentage change in the seasonally adjusted estimates over the last ten years, for each State series, is New South Wales, 8%; Victoria, 6%; Queensland, 7%; South Australia, 11%; Western Australia, 8% and Tasmania, 12%. This volatility should also be taken into account in analysis of the trend estimates presented (see "Reliability of Contemporary Trend Estimates" on page 3 of this publication).

TABLE 6. VALUE OF BUILDING APPROVED AT AVERAGE 1989-90 PRICES (a), AUSTRALIA
ORIGINAL AND SEASONALLY ADJUSTED ESTIMATES
(\$ 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							
ORIGINAL									
1990-91	7,543.6	7,743.0	2,257.4	10,000.3	1,827.5	6,327.1	9,070.7	17,627.8	20,898.6
1991-92	8,781.7	9,045.2	2,745.7	11,791.0	1,893.9	5,057.2	7,629.9	17,971.3	21,314.8
1992-93	9,875.9	10,151.8	3,720.3	13,872.1	2,000.4	5,466.0	8,206.8	20,726.9	24,079.4
1992—									
Dec. qtr.	2,502.9	2,563.9	834.4	3,398.2	508.1	1,396.4	2,265.0	5,147.4	6,171.3
1993—									
Mar. qtr.	2,283.0	2,376.9	1,163.6	3,540.5	457.4	1,371.0	2,056.7	5,197.8	6,054.6
June qtr.	2,500.2	2,590.2	971.5	3,561.7	507.0	1,412.8	2,166.9	5,288.4	6,235.5
Sept. qtr.	2,745.3	2,799.6	1,026.2	3,825.8	552.1	1,740.4	2,513.2	6,034.2	6,891.2
Dec. qtr.	2,569.2	2,626.7	942.2	3,569.0	524.4	1,412.0	2,240.8	5,440.2	6,334.2
1994—									
Mar. qtr.	2,510.9	2,562.1	1,054.6	3,616.8	487.9	1,340.4	2,118.8	5,340.7	6,223.5
SEASONALLY ADJUSTED									
1992—									
Dec. qtr.	2,468.7	2,546.3	n.a.	3,424.1	496.9	n.a.	2,169.5	5,264.8	6,141.4
1993—									
Mar. qtr.	2,463.9	2,564.1	n.a.	3,827.6	496.1	n.a.	2,179.9	5,516.2	6,453.1
June qtr.	2,470.9	2,538.0	n.a.	3,444.2	512.0	n.a.	2,088.2	5,152.0	6,019.9
Sept. qtr.	2,608.3	2,673.1	n.a.	3,686.6	515.2	n.a.	2,614.2	5,827.7	6,787.1
Dec. qtr.	2,548.2	2,619.9	n.a.	3,632.1	516.0	n.a.	2,148.8	5,479.4	6,340.5
1994—									
Mar. qtr.	2,698.2	2,755.2	n.a.	3,819.1	525.1	n.a.	2,291.9	5,693.2	6,586.4

(a) See paragraphs 25-27 of the Explanatory Notes. Constant price estimates are subject to revision each quarter as more up to date information on prices and commodity compositions becomes available.

TABLE 7. NEW DWELLING UNITS APPROVED, BY TYPE AND STATE, JUNE 1994

State	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										
NSW	2,945	650	426	1,076	463	135	487	1,085	2,161	5,106
Vic.	2,494	122	71	193	—	18	—	18	211	2,705
Qld	3,093	349	596	945	519	375	185	1,079	2,024	5,117
SA	974	165	40	205	—	—	—	—	205	1,179
WA	1,885	692	69	761	9	—	—	9	770	2,655
Tas.	241	31	—	31	34	—	—	34	65	306
NT	64	—	14	14	12	—	21	33	47	111
ACT	162	108	17	125	12	—	—	12	137	299
Australia	11,858	2,117	1,233	3,350	1,049	528	693	2,270	5,620	17,478
VALUE (\$m)										
NSW	314.5	43.6	43.2	86.8	33.2	13.2	57.8	104.2	191.0	505.5
Vic.	232.3	7.4	5.8	13.2	—	1.2	—	1.2	14.4	246.7
Qld	288.3	24.0	42.2	66.1	32.6	27.0	30.2	89.7	155.9	444.1
SA	71.0	10.1	3.7	13.8	—	—	—	—	13.8	84.8
WA	153.2	50.0	4.9	55.0	0.5	—	—	0.5	55.4	208.7
Tas.	20.0	1.5	—	1.5	1.8	—	—	1.8	3.3	23.3
NT	6.6	—	1.4	1.4	0.9	—	2.5	3.4	4.8	11.3
ACT	16.7	9.7	1.7	11.4	1.0	—	—	1.0	12.4	29.1
Australia	1,102.7	146.3	102.9	249.2	70.0	41.3	90.5	201.8	451.0	53.7

TABLE 9. VALUE OF BUILDING APPROVED, BY CLASS OF BUILDING AND OWNERSHIP
(\$ million)

Class of building	1991-92	1992-93	1993-94	1994			
				March	April	May	June
PRIVATE SECTOR							
New houses	9,113.0	10,319.3	11,403.8	1,061.9	878.1	1,144.9	1,068.2
New other residential buildings	2,060.3	3,091.4	3,693.6	350.7	263.5	369.1	386.2
<i>Total new residential building</i>	<i>11,173.3</i>	<i>13,410.7</i>	<i>15,097.4</i>	<i>1,412.6</i>	<i>1,141.5</i>	<i>1,514.0</i>	<i>1,454.4</i>
Alterations and additions to residential buildings	1,954.8	2,071.4	2,267.1	202.8	177.3	239.2	191.7
Hotels, etc.	399.0	226.3	614.5	11.3	22.8	16.8	178.2
Shops	787.7	1,114.7	1,365.2	153.4	91.2	89.3	138.1
Factories	651.9	716.2	635.2	44.1	114.4	65.0	72.2
Offices	1,196.0	943.4	851.2	48.0	86.2	85.2	72.3
Other business premises	566.6	697.3	800.4	58.6	48.6	62.4	200.4
Educational	237.2	277.4	328.8	39.9	10.0	26.8	28.9
Religious	79.4	88.0	76.3	2.4	4.8	4.3	7.2
Health	249.4	318.7	473.0	22.8	40.2	28.9	18.4
Entertainment and recreational	371.0	441.9	592.9	14.0	16.2	45.0	270.6
Miscellaneous	207.3	243.8	319.5	41.5	14.0	22.5	19.7
<i>Total non-residential building</i>	<i>4,745.4</i>	<i>5,067.7</i>	<i>6,057.0</i>	<i>436.0</i>	<i>448.3</i>	<i>446.2</i>	<i>1,006.0</i>
Total	17,873.5	20,549.8	23,421.5	2,051.4	1,767.2	2,199.4	2,652.1
PUBLIC SECTOR							
New houses	275.6	286.5	265.4	19.7	33.3	21.9	34.5
New other residential buildings	557.1	424.2	322.5	30.8	17.8	49.1	64.8
<i>Total new residential building</i>	<i>832.7</i>	<i>710.7</i>	<i>587.9</i>	<i>50.6</i>	<i>51.1</i>	<i>71.0</i>	<i>99.3</i>
Alterations and additions to residential buildings	19.1	17.1	22.0	0.5	1.4	11.1	2.7
Hotels, etc.	7.3	7.7	7.5	—	1.8	0.3	—
Shops	97.6	30.5	33.4	2.0	1.3	4.1	2.2
Factories	53.0	18.3	81.5	42.0	16.4	1.9	0.6
Offices	549.7	543.9	489.8	21.2	27.3	32.5	23.0
Other business premises	208.1	129.6	483.5	15.4	11.8	13.1	12.4
Educational	693.1	750.7	795.6	44.1	74.2	52.5	64.8
Religious	—	—	—	—	—	—	—
Health	248.2	535.1	501.3	2.4	44.2	24.2	31.0
Entertainment and recreational	305.6	342.0	147.9	16.2	3.4	17.2	9.7
Miscellaneous	300.7	251.1	188.1	17.4	13.1	20.4	14.8
<i>Total non-residential building</i>	<i>2,463.3</i>	<i>2,608.8</i>	<i>2,728.5</i>	<i>160.7</i>	<i>193.6</i>	<i>166.0</i>	<i>158.5</i>
Total	3,315.1	3,336.6	3,338.4	211.7	246.2	248.1	260.4
TOTAL							
New houses	9,388.5	10,605.7	11,669.2	1,081.6	911.4	1,166.8	1,102.7
New other residential buildings	2,617.4	3,515.6	4,016.1	381.6	281.3	418.2	451.0
<i>Total new residential building</i>	<i>12,005.9</i>	<i>14,121.4</i>	<i>15,685.3</i>	<i>1,463.1</i>	<i>1,192.7</i>	<i>1,585.0</i>	<i>1,553.7</i>
Alterations and additions to residential buildings	1,973.9	2,088.6	2,289.0	203.3	178.8	250.3	194.4
Hotels, etc.	406.3	234.0	622.0	11.3	24.6	17.1	178.2
Shops	885.2	1,145.1	1,398.6	155.4	92.5	93.3	140.3
Factories	704.9	734.5	716.7	86.1	130.8	66.9	72.8
Offices	1,745.7	1,487.3	1,341.1	69.2	113.5	117.6	95.3
Other business premises	774.7	826.9	1,283.9	74.0	60.4	75.5	212.8
Educational	930.3	1,028.1	1,124.4	84.1	84.2	79.3	93.7
Religious	79.4	88.0	76.3	2.4	4.8	4.3	7.2
Health	497.5	853.8	974.2	25.2	84.4	53.1	49.4
Entertainment and recreational	676.6	783.9	740.8	30.2	19.7	62.2	280.3
Miscellaneous	508.0	494.9	507.6	58.8	27.1	42.9	34.5
<i>Total non-residential building</i>	<i>7,208.7</i>	<i>7,676.5</i>	<i>8,785.6</i>	<i>596.7</i>	<i>642.0</i>	<i>612.2</i>	<i>1,164.4</i>
Total	21,188.5	23,886.4	26,759.9	2,263.1	2,013.4	2,447.5	2,912.5

TABLE 18. NON-RESIDENTIAL BUILDING JOBS APPROVED, BY CLASS OF BUILDING AND VALUE SIZE GROUPS

Period	\$50,000 to less than \$200,000		\$200,000 to less than \$500,000		\$500,000 to less than \$1m		\$1m to less than \$5m		\$5m and over		Total	
	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)
HOTELS, ETC.												
1994 April	16	1.4	15	5.1	3	2.5	4	8.1	1	7.5	39	24.6
May	22	1.9	14	4.5	2	1.2	1	1.1	1	8.5	40	17.1
June	21	2.1	16	4.5	2	1.2	5	9.4	1	161.0	45	178.2
SHOPS												
1994 April	176	15.9	45	13.6	21	14.6	7	14.9	3	33.5	252	92.5
May	197	18.4	66	19.3	16	10.9	17	44.7	1	5.0	296	93.3
June	200	17.5	64	19.0	14	8.5	21	38.8	4	56.5	303	140.3
FACTORIES												
1994 April	84	9.2	33	9.4	16	11.7	14	26.0	2	74.5	149	130.8
May	111	11.4	57	17.6	15	9.6	17	28.3	—	—	200	66.9
June	107	10.8	53	16.0	19	12.5	6	15.5	2	18.0	187	72.8
OFFICES												
1994 April	136	12.7	44	12.7	11	8.2	11	17.6	2	62.4	204	113.5
May	176	15.8	48	15.5	24	15.9	22	45.2	2	25.2	272	117.6
June	161	15.0	65	18.1	21	15.7	20	36.5	1	10.0	268	95.3
OTHER BUSINESS PREMISES												
1994 April	108	10.7	35	10.2	11	7.3	14	27.1	1	5.1	169	60.4
May	117	12.6	54	15.8	23	15.7	15	31.4	—	—	209	75.5
June	132	12.8	40	11.4	19	13.1	16	29.6	2	146.0	209	212.8
EDUCATIONAL												
1994 April	32	4.3	24	7.3	7	5.3	10	24.1	5	43.2	78	84.2
May	32	3.3	28	9.1	13	8.9	15	31.8	4	26.1	92	79.3
June	30	3.1	26	8.2	16	11.7	25	42.9	2	27.8	99	93.7
RELIGIOUS												
1994 April	11	1.4	4	1.1	1	0.9	1	1.5	—	—	17	4.8
May	6	0.7	7	2.1	3	1.5	—	—	—	—	16	4.3
June	23	2.6	5	1.7	—	—	2	2.9	—	—	30	7.2
HEALTH												
1994 April	39	4.0	13	4.2	5	3.5	10	20.1	4	52.6	71	84.4
May	23	2.4	25	7.4	5	3.5	10	21.0	3	18.8	66	53.1
June	37	3.3	14	4.3	9	6.3	7	19.2	1	16.2	68	49.4
ENTERTAINMENT AND RECREATIONAL												
1994 April	23	2.5	12	3.2	6	3.9	3	5.2	1	5.0	45	19.7
May	57	6.0	14	4.6	8	5.3	13	27.5	2	18.9	94	62.2
June	45	4.5	17	5.3	6	4.3	12	24.7	2	241.5	82	280.3
MISCELLANEOUS												
1994 April	52	5.1	25	8.2	10	6.2	5	7.6	—	—	92	27.1
May	69	6.6	20	5.5	8	5.7	10	19.6	1	5.5	108	42.9
June	55	5.7	24	8.0	7	4.7	4	9.2	1	6.9	91	34.5
TOTAL NON-RESIDENTIAL BUILDING												
1994 April	677	67.1	250	75.0	91	64.0	79	152.1	19	283.8	1,116	642.0
May	810	79.0	333	101.5	117	78.1	120	250.6	13	103.0	1,393	612.2
June	811	77.4	324	96.5	113	78.0	118	228.7	16	683.9	1,382	1,164.4

TABLE 11. SUMMARY OF BUILDING APPROVED

<i>Period</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
NUMBER OF DWELLING UNITS									
1993-94	49,910	31,750	54,927	11,759	26,581	4,147	1,571	4,060	184,705
1993— June	3,859	2,465	4,707	1,109	2,356	360	188	377	15,421
1994— March	4,316	2,905	5,017	1,031	2,422	330	133	358	16,512
April	3,808	2,422	4,021	847	2,094	279	141	244	13,856
May	5,433	3,029	5,591	1,103	2,664	348	114	359	18,641
June	5,106	2,705	5,117	1,179	2,655	306	111	299	17,478
VALUE OF NEW RESIDENTIAL BUILDING (\$m)									
1993-94	4,643.1	2,817.7	4,591.0	838.9	1,964.7	302.0	155.5	372.5	15,685.3
1993— June	350.7	211.3	375.9	75.7	160.7	23.7	14.3	34.2	1,246.5
1994— March	404.4	257.8	474.7	71.5	186.3	25.5	10.4	32.7	1,463.1
April	359.4	223.3	323.4	61.9	160.8	20.4	17.5	26.0	1,192.7
May	490.4	280.3	466.8	80.0	200.4	24.6	11.4	31.1	1,585.0
June	505.5	246.7	444.1	84.8	208.7	23.3	11.3	29.1	1,553.7
VALUE OF ALTERATIONS AND ADDITIONS TO RESIDENTIAL BUILDINGS (\$m)									
1993-94	1,043.1	623.5	229.2	122.2	150.0	39.5	17.3	64.1	2,289.0
1993— June	83.6	47.8	17.3	11.4	11.7	3.0	2.0	6.0	182.8
1994— March	91.1	53.7	20.8	10.4	14.8	4.1	1.9	6.5	203.3
April	83.9	42.1	16.6	10.6	13.5	3.7	1.9	6.4	178.8
May	98.1	96.7	19.9	10.7	13.4	4.3	1.3	5.8	250.3
June	93.4	49.5	19.9	10.6	12.0	3.1	1.3	4.7	194.4
VALUE OF NON-RESIDENTIAL BUILDING (\$m)									
1993-94	2,884.1	2,502.7	1,761.6	375.2	667.0	145.9	158.9	290.2	8,785.6
1993— June	231.0	178.5	161.4	23.7	65.4	14.6	3.4	23.2	701.3
1994— March	169.3	165.3	136.5	29.6	49.7	6.7	25.9	13.6	596.7
April	257.0	178.9	63.5	36.1	46.6	10.8	34.5	14.6	642.0
May	183.5	151.1	145.9	26.7	58.7	13.3	9.4	23.5	612.2
June	262.4	608.7	161.0	31.3	63.7	11.6	4.8	20.9	1,164.4
VALUE OF TOTAL BUILDING (\$m)									
1993-94	8,570.2	5,943.9	6,581.8	1,336.3	2,781.7	487.4	331.7	726.8	26,759.9
1993— June	665.4	437.6	554.5	110.9	237.8	41.4	19.8	63.4	2,130.7
1994— March	664.7	476.8	632.0	111.5	250.7	36.3	38.2	52.9	2,263.1
April	700.3	444.4	403.4	108.6	220.9	35.0	53.8	47.0	2,013.4
May	772.1	528.1	632.7	117.4	272.4	42.2	22.1	60.5	2,447.5
June	861.3	904.9	625.1	126.7	284.4	38.0	17.4	54.8	2,912.5

EXPLANATORY NOTES

Scope and coverage

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; and
- (b) 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.

2. 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 from this publication, but can be found in *Engineering Construction Activity, Australia* (8762.0).

3. 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.

4. 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.

Definitions

5. 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 persons.

6. 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.

7. 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 caretakers' 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 townhouses, duplexes, apartment buildings etc.).

8. 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.

9. 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 differ significantly from the completed value of the building.

Building classification

10. *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.

11. *Functional classification of buildings*. A building is classified according to its intended major function. 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 the treatment of group accommodation buildings where, for example, a student accommodation building on a university campus would be classified to Educational.

12. 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.

13. 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.

14. 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.

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

General

16. For purposes of comparison, it should be noted that statistics of building approvals are affected from month to month by 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.

Seasonal adjustment

17. Seasonally adjusted building statistics are shown in Tables 3 and 5. 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. Details of 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 building statistics are shown in Tables 4 and 5. Each of the component trend series shown has been derived independently. As with the seasonally adjusted series, the component trend series should not be subtracted from the total to derive unpublished components. The trend estimates have been derived by applying a 13-term Henderson-weighted moving average to all except the last six months of the corresponding seasonally adjusted series.

23. The last six monthly trend estimates are obtained by applying surrogates of the Henderson-weighted averages to the seasonally adjusted series. (Further details concerning trend estimates in general, and the "end-point problem" in particular, can be obtained from the information paper *A Guide to Smoothing Time Series — Estimates of Trend* (1316.0)). As additional observations become

available, the provisional trend estimates for the latest six months will be revised.

24. Revisions to trend estimates will also occur with revisions to original data and as a result of the re-estimation of the seasonal factors.

Estimates at constant prices

25. Estimates of the quarterly value of building approvals at average 1989-90 prices are presented in original and seasonally adjusted terms for Australia in Table 6. (Note: monthly value data at constant prices are not available).

26. 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'.

27. 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).

Unpublished data and related publications

28. The ABS can also make 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, floppy disk and clerically extracted tabulation. A charge may be made for providing unpublished information in these forms.

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

Building Activity, Australia: Dwelling Unit Commencements, Preliminary (8750.0) — issued quarterly

Building Activity, Australia (8752.0) — issued quarterly

Engineering Construction Activity, Australia (8762.0) — issued quarterly

Construction Activity at Constant Prices, Australia (8782.0) — issued quarterly

Housing Finance for Owner Occupation, Australia (5609.0) — issued monthly

Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0) — issued monthly

Price Index of Materials Used in Building Other Than House Building, Eight Capital Cities (6407.0) — issued monthly

House Price Indexes: Eight Capital Cities (6416.0) — issued quarterly

30. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS Office.

Next release date

31. The expected release date for the July 1994 issue of this publication is 29 August 1994. The date can be confirmed a few days prior to release by telephoning Canberra (06) 252 6067.

Symbols and other usages

- nil or rounded to zero.
- r figure or series revised since previous issue.
- n.a. not available
- n.y.a. not yet available

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

IAN CASTLES
Australian Statistician



For more information ...

The ABS publishes a wide range of statistics and other information on Australia's economic and social conditions. Details of what is available in various publications and other products can be found in the *ABS Catalogue of Publications and Products* available at all ABS Offices (see below for contact details).

Information Consultancy Service

Information tailored to special needs of clients can be obtained from the Information Consultancy Service available at ABS Offices (see Information Inquiries below for contact details).

National *Dial-a-Statistic* Line

0055 86 400

(Steadycom P/L: premium rate 25c/21.4 secs.)

This number gives 24-hour access, 365 days a year for a range of statistics.

Electronic Data Services

A large range of data is available via on-line services, diskette, magnetic tape, tape cartridge and CD ROM. For more details about our electronic data services, contact any ABS Office (see below).

Bookshops and Subscriptions

There are over 400 titles of various publications available from ABS bookshops in all ABS Offices (see below Bookshop Sales for contact details). The ABS also provides a subscription service through which nominated publications are provided by mail on a regular basis at no additional cost (telephone Publications Subscription Service toll free on 008 02 0608 Australia wide).

Sales and Inquiries

Regional Offices	Information Inquiries	Bookshop Sales
SYDNEY (02)	268 4611	268 4620
MELBOURNE (03)	615 7000	615 7829
BRISBANE (07)	222 6351	222 6350
PERTH (09)	360 5140	360 5307
ADELAIDE (08)	237 7100	237 7582
HOBART (002)	20 5800	20 5800
CANBERRA (06)	207 0326	207 0326
DARWIN (089)	43 2111	43 2111
National Office		
ACT (06)	252 6007	008 020 608

ABS Email Addresses

Keylink	STAT.INFO/ABS
X.400	(C:AU,A:TELMEMO,O:ABS,SN:INFO,FN:STAT)
Internet	STAT.INFO@ABS. TELEMEMO.AU



Information Services, ABS, PO Box 10, Belconnen ACT 2616

