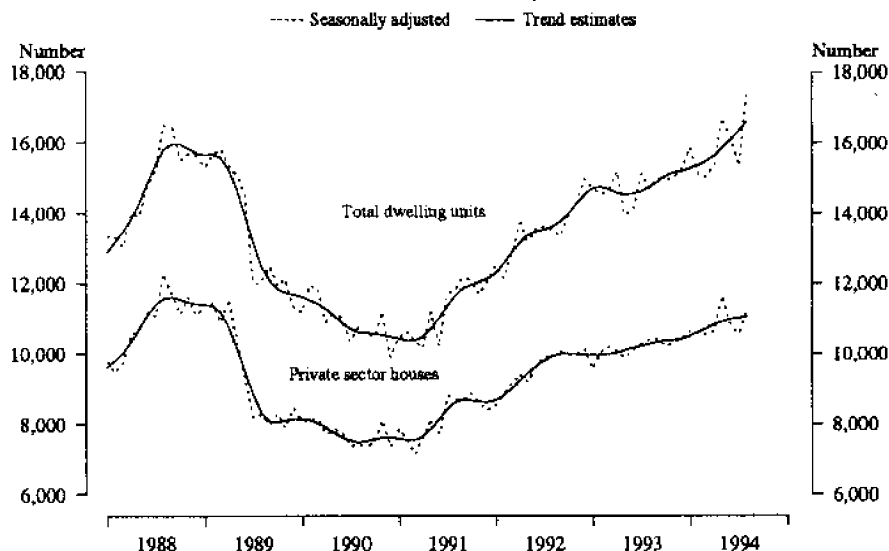


BUILDING APPROVALS, AUSTRALIA, AUGUST 1994

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

The number of dwelling units approved rose sharply in August 1994 due to increased approvals of both new houses and, in particular, other residential buildings (flats, townhouses, apartments, etc.). Although most States and Territories recorded increases in dwelling unit approvals, the most significant increases occurred in New South Wales.

The provisional trend for the *total number of dwelling units* approved, which had been slowing in previous months has been revised to show renewed growth. The trend rose by 1.6 per cent to 16,610 in August 1994, following rises of 1.5 per cent in both July and June 1994. There would need to be a fall of more than 11 per cent in the seasonally adjusted series in September 1994 for the trend to flatten out. The historical average monthly movement of this series, regardless of sign, is 4 per cent.

The provisional trend for the *number of private sector houses* approved has also been revised to show growth to August 1994. The trend rose by 0.4 per cent to 11,060 in August following increases of 0.4 per cent in July and 0.5 per cent in June 1994. There would need to be a fall of about 3 per cent in the seasonally adjusted series in Sep-

tember 1994 for the trend to flatten out. The historical average monthly movement for this series is 4 per cent.

DWELLING UNITS APPROVED, AUGUST 1994

	Number	Percentage change	
		From previous month	From corresponding of previous year
Private sector houses -			
Trend estimate	11,060	0.4	7.6
Seasonally adjusted	11,288	6.7	8.5
Original	12,079	12.4	12.1
Total dwelling units -			
Trend estimate	16,610	1.6	12.7
Seasonally adjusted	17,396	13.4	18.3
Original	18,778	22.6	22.3

In seasonally adjusted terms, the *total number of dwelling units* approved rose by 13.4 per cent in August 1994 to 17,396. The *number of private sector houses* approved rose by 6.7 per cent to 11,288.

Seasonally adjusted estimates are not available for approvals of private sector other residential building. However, in original terms, this series increased by over 50 per cent

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.

in August 1994 and was a significant contributor to the overall increase in total dwelling units approved.

As a result of an increase of more than 37 per cent in the seasonally adjusted series, the provisional trend estimate for total dwelling units approved in New South Wales is showing growth of more than 5 per cent to August 1994. However, because of the abnormally high increase in the number of dwelling units approved in August, it is highly likely that this will be revised downwards next month.

The provisional trend for total dwelling units approved is showing renewed growth in Victoria after a period of stability between February and May 1994. The trend is displaying continuous growth in Queensland from December 1993. The trend has levelled out in South Australia following a period of growth since January 1994. The trend is falling in Western Australia and Tasmania.

Value of building approved

The provisional trend estimate for the *value of total building* approved rose by 2.9 per cent in August 1994 following growth of 3.4 per cent in July and 2.9 per cent in June. There would need to be a fall of almost 30 per cent in the seasonally adjusted series in September to halt this growth. The historical average monthly movement of this series is 9 per cent.

The provisional trend series for the *value of new residential building* approved rose by 3.3 per cent in August 1994 following similar growth in July and June 1994. There would need to be a fall of almost 25 per cent in the seasonally adjusted series in September to arrest this decline. The historical average monthly movement of this series is 4 per cent.

The provisional trend for the *value of non-residential building* approved has been revised to show growth from May 1994, following a period of decline since September 1993. There would need to be a fall of almost 40 per cent in the seasonally adjusted series in September 1994 to reverse this latest growth. The historical average monthly movement of this series is 18 per cent.

The provisional trend for the *value of approved alterations and additions to residential buildings* rose by 1.1 per

cent in August following growth of 1.4 per cent in July and 1.5 per cent in June 1994. There would need to be a fall of 14 per cent in the seasonally adjusted series in September 1994 to halt this growth. The historical average monthly movement of this series is 5 per cent.

Type of residential building approved, 1993-94

The table below shows the number of new dwelling units approved in Australia during 1993-94 by type of dwelling, together with the distribution of each dwelling category as a percentage of total dwelling units approved.

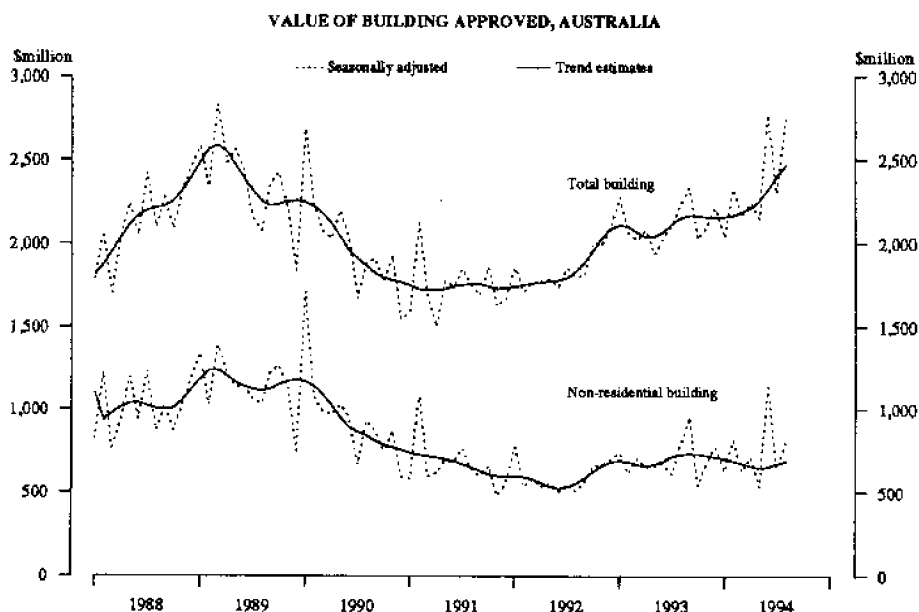
Dwelling type	Number	Per cent
Houses	130,483	70.6
Semi-detached, row or terrace houses, townhouses, etc. of:		
1 storey	21,982	11.9
2 or more storeys	10,886	5.9
Total semi-detached, etc.	32,868	17.8
Flats, units or apartments in a building of:		
1 or 2 storeys	10,037	5.4
3 storeys	5,244	2.8
4 or more storeys	6,073	3.3
Total flats, units or apartments	21,354	11.6
Total other residential buildings	54,222	29.4
Total residential building	184,705	100.0

It can be seen from the table above that 29.4 per cent of all dwelling units approved in 1993-94 were 'other residential buildings', up on the 27.5 per cent in 1992-93 and 26.2 per cent in 1991-92.

The proportion of the number of other residential dwelling units approved in each State/Territory of Australia, in 1993-94, as a percentage of total new dwelling units approved were:

NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust
38.7	11.6	33.4	15.8	26.9	24.9	30.4	58.6	29.4

During 1993-94, the Australian Capital Territory had the highest proportion of other residential building approvals.



Of all dwellings approved in the Australian Capital Territory, 31 per cent were semi-detached, row or terrace houses or townhouse developments, substantially more than the average for all States and Territories (17.8%).

New South Wales, Queensland and the Northern Territory recorded the next highest proportions of other residential building. For Queensland and the Northern Territory, the majority of these dwellings were flats, units and apartments. For New South Wales, the majority of these dwellings were semi-detached, row or terrace houses or townhouse developments (21%).

In South Australia, Western Australia and Tasmania, more than 90 per cent of the other residential buildings were semi-detached, row or terrace houses or townhouse developments.

The apparent low incidence of the approval of other residential dwelling units in Victoria, compared with the other States, is due to the incidence in that State of a significant number of "villa units". While many commentators describe "villa unit" developments as medium density, their construction and appearance tend to conform with the ABS definition of a separate detached house. Because they are not connected in any structural way with neigh-

bouring dwellings they are recorded in ABS building statistics as separate houses. In other States and Territories, "villa units" tend more towards the "townhouse" style and share a common wall or roofline with adjacent dwellings and are thus classified to other residential building.

In addition to the approval for construction of new dwellings, approval was given for 4,149 dwellings to be created as a result of alterations and additions to existing residential or non-residential buildings in 1993-94. This compares with a total of 1,717 such dwelling units approved throughout 1992-93. (These dwellings are not included in the table above). In most cases the number of dwelling units created by such work is small (1 or 2 per job). There were, however, six jobs in New South Wales in 1993-94 (3 conversions from Hotels/Motels and 3 conversions from Offices) which resulted in the creation of a total of 992 dwelling units. There were 4 jobs in Victoria in 1993-94 (1 conversion each of a Hotel, Office, Warehouse and Hospital) which resulted in the creation of a total of 597 dwelling units.

RELIABILITY OF CONTEMPORARY TREND ESTIMATES

The tables below present trend estimates of selected building approvals series for the six months March 1994 to August 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 (September 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 September 1994, the trend estimate for that month would be 11,332, a movement of 1.0 per cent. The monthly movements in the trend estimates for June, July and August 1994, which are currently estimated to be 0.5 per cent, 0.4 per cent and 0.4 per cent respectively, would be revised to 0.8 per cent, 0.9 per cent and 1.0 per cent. On the other hand, a 4 per cent seasonally adjusted decline in the number of private houses approved in September 1994 would produce a trend estimate for September of 10,992, a movement of 0.0 per cent, with the movements in the trend estimates for June, July and August 1994 being revised to 0.4 per cent, 0.2 per cent and 0.1 per cent, respectively.

NUMBER OF PRIVATE SECTOR HOUSES APPROVED RELIABILITY OF TREND ESTIMATES

	Trend estimate		Revised trend estimate if September 1994 seasonally adjusted estimate			
			is up 4% on August 1994		is down 4% on August 1994	
	No.	% change on previous month	No.	% change on previous month	No.	% change on previous month
<i>1994-</i>						
March	10,751	1.1	10,740	1.0	10,756	1.2
April	10,847	0.9	10,829	0.8	10,857	0.9
May	10,921	0.7	10,912	0.8	10,925	0.6
June	10,979	0.5	11,004	0.8	10,967	0.4
July	11,020	0.4	11,107	0.9	10,987	0.2
August	11,060	0.4	11,220	1.0	10,995	0.1
September	n.y.a.	n.y.a.	11,332	1.0	10,992	0.0

TOTAL NUMBER OF DWELLING UNITS APPROVED RELIABILITY OF TREND ESTIMATES

	Trend estimate		Revised trend estimate if September 1994 seasonally adjusted estimate			
			is up 4% on August 1994		is down 4% on August 1994	
	No.	% change on previous month	No.	% change on previous month	No.	% change on previous month
<i>1994-</i>						
March	15,496	0.8	15,467	0.6	15,493	0.7
April	15,661	1.1	15,610	0.9	15,656	1.1
May	15,873	1.4	15,848	1.5	15,871	1.4
June	16,116	1.5	16,183	2.1	16,122	1.6
July	16,353	1.5	16,571	2.4	16,371	1.5
August	16,610	1.6	16,977	2.5	16,601	1.4
September	n.y.a.	n.y.a.	17,354	2.2	16,786	1.1

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

	Revised trend estimate if September 1994 seasonally adjusted estimate					
	Trend estimate		is up 4% on August 1994		is down 4% on August 1994	
	\$m	% change on previous month	\$m	% change on previous month	\$m	% change on previous month
<i>1994-</i>						
March	1,321.5	1.6	1,316.7	1.2	1,319.6	1.5
April	1,351.9	2.3	1,344.0	2.1	1,349.1	2.2
May	1,391.8	3.0	1,388.0	3.3	1,390.6	3.1
June	1,439.1	3.4	1,448.9	4.4	1,442.2	3.7
July	1,488.5	3.4	1,520.5	4.9	1,498.3	3.9
August	1,538.0	3.3	1,595.0	4.9	1,553.3	3.7
September	n.y.a.	n.y.a.	1,664.1	4.3	1,601.1	3.1

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

	Revised trend estimate if September 1994 seasonally adjusted estimate					
	Trend estimate		is up 18% on August 1994		is down 18% on August 1994	
	\$m	% change on previous month	\$m	% change on previous month	\$m	% change on previous month
<i>1994-</i>						
March	676.4	-1.8	670.7	-2.6	676.4	-1.8
April	660.4	-2.4	652.0	-2.8	662.0	-2.1
May	651.4	-1.4	646.8	-0.8	651.8	-1.6
June	657.3	0.9	669.7	3.6	656.5	0.7
July	674.1	2.6	712.4	6.4	668.7	1.9
August	688.7	2.2	764.0	7.3	681.7	1.9
September	n.y.a.	n.y.a.	827.3	8.3	703.1	3.1

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

	Revised trend estimate if September 1994 seasonally adjusted estimate					
	Trend estimate		is up 9% on August 1994		is down 9% on August 1994	
	\$m	% change on previous month	\$m	% change on previous month	\$m	% change on previous month
<i>1994-</i>						
March	2,187.0	0.8	2,176.1	0.3	2,185.6	0.8
April	2,213.5	1.2	2,196.1	0.9	2,212.7	1.2
May	2,257.5	2.0	2,248.7	2.4	2,257.0	2.0
June	2,322.6	2.9	2,345.5	4.3	2,323.6	3.0
July	2,401.9	3.4	2,473.5	5.5	2,401.0	3.3
August	2,472.2	2.9	2,613.0	5.6	2,476.4	3.1
September	n.y.a.	n.y.a.	2,760.0	5.6	2,554.0	3.1

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
1993-94									
July-August	21,763	329	22,092	8,236	848	9,084	29,999	1,177	31,176
1994-95									
July-August	22,830	390	23,220	10,227	643	10,870	33,057	1,033	34,090
1993—									
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	3,816	142	3,958	14,251	399	14,650
November	10,960	295	11,255	4,564	342	4,906	15,524	637	16,161
December	9,621	302	9,923	3,570	245	3,815	13,191	547	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
July	10,751	185	10,936	4,058	318	4,376	14,809	503	15,312
August	12,079	205	12,284	6,169	325	6,494	18,248	530	18,778

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 374 such dwelling units approved in August 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—														
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	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	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
July	1,003.8	16.8	1,020.6	331.9	19.6	351.5	1,335.7	36.4	1,372.1	186.1	399.3	593.6	1,918.9	2,151.8
August	1,133.1	21.6	1,154.7	598.7	44.0	642.8	1,731.8	65.6	1,797.4	239.8	607.6	868.2	2,578.1	2,905.3

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>								
June	10,116	10,399	13,423	14,128	1,171.4	182.4	678.6	2,036.4
July	10,301	10,685	14,431	15,117	1,247.2	171.8	610.9	2,104.9
August	10,406	10,554	14,038	14,705	1,221.5	177.3	788.8	2,232.5
September	10,442	10,756	14,386	14,977	1,275.0	191.2	957.5	2,335.4
October	10,212	10,598	14,256	14,964	1,245.6	185.5	545.1	2,026.6
November	10,346	10,603	14,510	15,025	1,254.2	182.4	672.8	2,099.0
December	10,435	10,806	14,590	15,268	1,265.7	183.4	772.5	2,216.1
<i>1994—</i>								
January	10,683	10,882	15,583	15,862	1,321.1	184.9	630.2	2,036.0
February	10,566	10,731	14,279	15,102	1,288.7	194.4	815.3	2,327.9
March	10,550	10,862	14,212	15,038	1,322.0	188.0	628.7	2,163.7
April	10,676	10,948	14,651	15,413	1,305.5	197.9	717.9	2,246.4
May	11,663	11,756	15,948	16,705	1,424.4	229.8	536.1	2,149.5
June	10,781	11,067	15,473	16,164	1,471.7	195.8	1,160.9	2,777.3
July	10,577	10,918	14,673	15,338	1,350.8	189.0	646.9	2,298.7
August	11,288	11,428	16,930	17,396	1,688.1	228.7	802.6	2,744.4

(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	Total building
	Private sector	Total	Private sector	Total				
<i>1993—</i>								
June	10,170	10,429	13,794	14,557	1,193.2	178.3	689.2	2,070.4
July	10,231	10,489	13,931	14,626	1,207.9	179.5	712.9	2,115.8
August	10,283	10,563	14,097	14,741	1,228.4	180.8	728.2	2,152.7
September	10,338	10,636	14,293	14,902	1,243.9	182.4	733.2	2,167.8
October	10,382	10,686	14,481	15,068	1,257.9	183.7	729.2	2,165.8
November	10,399	10,699	14,588	15,167	1,267.8	184.2	720.9	2,157.7
December	10,432	10,717	14,625	15,209	1,273.8	185.1	711.2	2,152.2
<i>1994—</i>								
January	10,519	10,782	14,669	15,287	1,286.0	187.7	701.4	2,159.3
February r	10,634	10,877	14,709	15,381	1,300.7	191.4	688.8	2,169.4
March r	10,751	10,981	14,773	15,496	1,321.5	195.8	676.4	2,187.0
April r	10,847	11,077	14,913	15,661	1,351.9	200.2	660.4	2,213.5
May r	10,921	11,154	15,138	15,873	1,391.8	203.8	651.4	2,257.5
June r	10,979	11,213	15,419	16,116	1,439.1	206.8	657.3	2,322.6
July r	11,020	11,255	15,702	16,353	1,488.5	209.6	674.1	2,401.9
August	11,060	11,290	16,034	16,610	1,538.0	211.9	688.7	2,472.2

(a) Seasonally adjusted series smoothed by application of a 13-term Henderson moving average - see Explanatory Notes for a more detailed explanation.

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—						
June	3,686	2,379	4,472	947	2,008	356
July	4,402	2,548	4,575	1,114	1,918	373
August	3,769	2,453	4,331	1,109	2,101	379
September	3,865	2,675	4,732	891	2,097	340
October	3,927	2,629	4,300	938	2,209	346
November	3,965	2,580	4,507	978	2,329	360
December	3,636	2,612	4,586	934	2,391	356
1994—						
January	4,256	2,741	4,555	937	1,941	375
February	3,966	2,844	4,211	928	2,324	361
March	3,849	2,640	4,648	930	2,309	310
April	4,380	2,681	4,513	957	2,236	305
May	4,816	2,694	5,026	1,040	2,371	355
June	4,957	2,661	4,903	967	2,343	295
July	4,414	2,745	4,521	950	2,037	353
August	6,060	2,875	4,763	953	2,142	271
TREND ESTIMATES						
1993—						
June	3,968	2,434	4,471	1,028	1,929	354
July	3,935	2,472	4,506	1,020	1,998	360
August	3,915	2,519	4,507	1,008	2,075	360
September	3,907	2,567	4,499	991	2,144	358
October	3,898	2,613	4,498	968	2,199	360
November	3,883	2,649	4,485	946	2,230	359
December	3,879	2,678	4,463	932	2,242	357
1994—						
January	3,933	2,699	4,472	931	2,251	352
February	4,025	2,707	4,515	943	2,261	346
March	4,158	2,705	4,582	954	2,272	338
April	4,353	2,702	4,657	964	2,277	329
May	4,590	2,704	4,720	971	2,270	322
June	4,848	2,719	4,763	974	2,244	317
July	5,102	2,742	4,784	973	2,211	311
August	5,361	2,769	4,798	970	2,156	306

(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, 10%; 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									
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
1993-94	10,714.2	10,960.7	4,224.8	15,185.5	2,145.4	6,617.0	9,540.7	23,514.7	26,871.6
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	1,739.9	2,512.4	6,034.3	6,890.4
Dec. qtr.	2,569.2	2,626.7	941.3	3,568.1	524.4	1,409.7	2,237.4	5,435.9	6,329.9
1994—									
Mar. qtr.	2,510.9	2,562.1	1,052.1	3,614.3	487.9	1,337.0	2,113.6	5,335.2	6,215.8
June qtr.	2,888.9	2,972.2	1,205.1	4,177.4	580.9	2,130.2	2,677.2	6,709.3	7,435.5
SEASONALLY ADJUSTED									
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.	2,613.3	5,827.8	6,786.3
Dec. qtr.	2,548.2	2,619.9	n.a.	3,631.1	516.0	n.a.	2,145.5	5,475.1	6,336.2
1994—									
Mar. qtr.	2,698.2	2,755.2	n.a.	3,816.5	525.1	n.a.	2,286.3	5,687.4	6,578.3
June qtr.	2,844.5	2,901.9	n.a.	4,012.5	583.2	n.a.	2,637.1	6,513.8	7,147.5

(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, AUGUST 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		
		1 storey	2 or more storeys	Total	1-2 storeys	3 storeys	4 or more storeys			Total
NUMBER OF DWELLING UNITS										
NSW	3,046	756	411	1,167	392	331	1,288	2,011	3,178	6,224
Vic.	2,753	122	118	240	15	33	—	48	288	3,041
Qld	3,410	401	353	754	445	296	432	1,173	1,927	5,337
SA	927	113	38	151	—	—	—	—	151	1,078
WA	1,665	548	81	629	—	15	—	15	644	2,309
Tas.	257	34	—	34	—	—	—	—	34	291
NT	111	43	—	43	—	—	106	106	149	260
ACT	115	123	—	123	—	—	—	—	123	238
Australia	12,284	2,140	1,001	3,141	852	675	1,826	3,353	6,494	18,778
VALUE (\$m)										
NSW	332.4	52.4	39.0	91.4	29.4	23.8	207.9	261.1	352.5	684.9
Vic.	254.7	7.1	9.3	16.4	1.4	1.1	—	2.5	18.9	273.7
Qld	315.1	22.7	26.8	49.6	29.3	20.9	64.3	114.5	164.1	479.2
SA	70.6	6.7	2.4	9.1	—	—	—	—	9.1	79.7
WA	134.8	33.9	6.7	40.6	—	1.8	—	1.8	42.4	177.3
Tas.	21.2	1.9	—	1.9	—	—	—	—	1.9	23.2
NT	14.8	5.0	—	5.0	—	—	38.5	38.5	43.5	58.4
ACT	10.9	10.3	—	10.3	—	—	—	—	10.3	21.2
Australia	1,154.7	140.1	84.2	224.3	60.2	47.6	310.7	418.5	642.8	1,797.4

TABLE 8. DETAILS OF BUILDING APPROVED, AUGUST 1994

State	New residential building										Non-residential building															
	Houses					Other residential buildings					Alterations and additions to residential buildings etc.					Other business premises					Entertainment and recreational					
	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Total	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Value (\$m)	Hotels, etc.	Shops	Factories	Offices	Educational	Religious	Health	Miscellaneous	Total building	Number of dwelling units	Value (\$m)	Number of dwelling units	Value (\$m)	Total building		
PRIVATE SECTOR																										
NSW	2,985	325.2	3,078	345.6	6,063	670.7	105.4	2.5	175.0	26.7	31.8	27.7	11.2	0.7	2.4	15.0	11.1	304.1	1,080.2							
Vic.	2,716	252.5	243	16.5	2,959	269.0	77.1	0.9	13.4	22.3	8.8	14.1	3.8	0.7	7.1	4.3	4.3	79.6	425.7							
Qld	3,396	313.9	1,824	134.6	5,220	448.4	21.2	5.0	70.1	10.4	7.3	16.1	3.7	0.8	1.8	5.5	2.7	123.4	593.1							
SA	897	68.8	92	6.1	989	74.8	10.7	0.3	10.9	2.2	0.8	6.0	0.6	0.3	5.1	0.2	0.3	26.5	112.1							
WA	1,642	132.7	631	41.6	2,273	174.3	14.9	0.9	10.8	5.6	16.6	6.5	2.9	0.1	3.4	4.2	3.2	54.2	243.4							
Tas.	257	21.2	32	1.8	289	23.1	3.4	0.2	2.7	2.3	2.1	0.7	—	—	2.9	0.4	—	11.3	37.7							
NT	71	7.8	146	42.3	217	50.2	1.2	0.1	0.8	0.6	0.6	2.8	—	—	—	0.1	—	5.0	56.5							
ACT	115	10.9	123	10.3	238	21.2	4.9	—	0.6	—	—	2.7	—	—	—	—	—	3.4	29.5							
Australia	12,079	1,133.1	6,169	598.7	18,248	1,731.8	238.8	9.8	284.4	70.1	68.1	76.6	22.1	2.7	22.7	29.6	21.5	607.6	2,578.1							
PUBLIC SECTOR																										
NSW	61	7.2	100	6.9	161	14.2	0.8	0.2	3.8	0.1	15.4	—	—	—	26.8	—	—	9.4	156.2	171.1						
Vic.	37	2.2	45	2.4	82	4.7	—	—	2.6	0.3	1.5	0.1	15.1	—	15.1	—	—	0.7	31.8	36.5						
Qld	14	1.3	103	29.5	117	30.8	—	—	—	0.4	1.2	0.9	16.5	—	16.5	—	—	2.6	21.5	52.2						
SA	30	1.8	59	3.0	89	4.8	0.2	—	0.1	0.1	4.3	0.3	—	—	—	—	—	1.0	6.1	11.0						
WA	23	2.1	13	0.8	36	2.9	—	—	—	0.1	1.2	4.2	15.4	—	—	—	—	1.8	22.9	25.8						
Tas.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
NT	40	7.0	3	1.2	43	8.2	—	—	—	0.2	0.1	—	0.1	—	0.2	—	—	1.1	2.8	11.0						
ACT	—	—	—	—	—	—	—	—	0.2	—	7.6	—	—	—	3.0	—	—	7.7	18.6	18.6						
Australia	205	21.6	325	44.0	530	65.6	1.0	0.2	6.7	1.1	31.4	5.5	77.0	—	77.8	36.7	24.3	260.6	327.2							
TOTAL																										
NSW	3,046	332.4	3,178	352.5	6,224	684.9	106.1	2.7	178.8	26.8	47.2	27.7	37.9	0.7	75.5	42.4	20.5	460.3	1,251.3							
Vic.	2,753	254.7	288	18.9	3,041	273.7	77.1	0.9	16.0	22.6	10.3	14.2	18.9	0.7	11.0	11.9	5.0	111.5	462.2							
Qld	3,410	315.1	1,927	164.1	5,337	479.2	21.2	5.0	70.1	10.8	8.5	17.0	20.2	0.8	1.8	5.5	5.2	144.9	645.3							
SA	927	70.6	151	9.1	1,078	79.7	10.9	0.3	10.9	2.3	5.1	6.3	0.6	0.3	5.3	0.3	1.3	32.6	123.2							
WA	1,665	134.8	644	42.4	2,309	177.3	14.9	0.9	10.8	5.6	17.8	10.7	18.2	0.1	3.7	4.2	5.0	77.1	269.3							
Tas.	257	21.2	34	1.9	291	23.2	3.5	0.2	2.7	2.3	2.3	0.7	0.2	—	3.2	0.5	—	12.0	38.6							
NT	111	14.8	149	43.5	260	58.4	1.2	0.1	0.8	0.7	0.7	2.8	0.1	—	1.5	—	—	7.8	67.4							
ACT	115	10.9	123	10.3	238	21.2	4.9	—	0.9	—	7.6	2.7	3.0	—	—	—	—	7.7	21.9	48.0						
Australia	12,284	1,154.7	6,494	642.8	18,778	1,797.4	239.8	10.0	291.1	71.1	99.4	82.1	99.1	2.7	100.5	66.3	45.8	868.2	2,905.3							

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

Class of building	1992-93	1993-94	July-August		1994		
			1993-94	1994-95	June	July	August
PRIVATE SECTOR							
New houses	10,319.3	11,403.8	1,909.6	2,136.8	1,068.2	1,003.8	1,133.1
New other residential buildings	3,091.4	3,693.6	590.0	930.6	386.2	331.9	598.7
<i>Total new residential building</i>	<i>13,410.7</i>	<i>15,097.4</i>	<i>2,499.7</i>	<i>3,067.4</i>	<i>1,454.4</i>	<i>1,335.7</i>	<i>1,731.8</i>
Alterations and additions to residential buildings	2,071.4	2,267.1	356.5	422.7	191.7	184.0	238.8
Hotels, etc.	226.3	614.5	95.7	24.4	178.2	14.6	9.8
Shops	1,114.7	1,365.2	237.0	364.7	138.1	80.3	284.4
Factories	716.2	635.2	77.7	128.9	72.2	58.8	70.1
Offices	943.4	851.2	133.4	145.7	72.3	77.6	68.1
Other business premises	697.3	800.4	98.2	147.3	200.4	70.7	76.6
Educational	277.4	328.8	59.0	57.2	28.9	35.1	22.1
Religious	88.0	76.3	23.0	10.1	7.2	7.4	2.7
Health	318.7	473.0	62.1	46.0	18.4	23.3	22.7
Entertainment and recreational	441.9	592.9	49.5	49.5	270.6	19.8	29.6
Miscellaneous	243.8	319.5	99.1	33.0	19.7	11.5	21.5
<i>Total non-residential building</i>	<i>5,067.7</i>	<i>6,057.0</i>	<i>934.6</i>	<i>1,006.9</i>	<i>1,006.0</i>	<i>399.3</i>	<i>607.6</i>
Total	20,549.8	23,421.5	3,790.8	4,497.1	2,652.1	1,918.9	2,578.1
PUBLIC SECTOR							
New houses	286.5	265.4	29.3	38.4	34.5	16.8	21.6
New other residential buildings	424.2	322.5	53.2	63.6	64.8	19.6	44.0
<i>Total new residential building</i>	<i>710.7</i>	<i>587.9</i>	<i>82.5</i>	<i>102.1</i>	<i>99.3</i>	<i>36.4</i>	<i>65.6</i>
Alterations and additions to residential buildings	17.1	22.0	1.5	3.1	2.7	2.1	1.0
Hotels, etc.	7.7	7.5	1.2	2.0	—	1.8	0.2
Shops	30.5	33.4	10.3	12.8	2.2	6.1	6.7
Factories	18.3	81.5	3.9	4.8	0.6	3.7	1.1
Offices	543.9	489.8	79.1	103.0	23.0	71.6	31.4
Other business premises	129.6	483.5	31.8	14.4	12.4	8.9	5.5
Educational	750.7	795.6	172.4	135.5	64.8	58.6	77.0
Religious	—	—	—	—	—	—	—
Health	535.1	501.3	125.4	104.8	31.0	26.9	77.8
Entertainment and recreational	342.0	147.9	31.7	44.1	9.7	7.4	36.7
Miscellaneous	251.1	188.1	21.1	33.6	14.8	9.2	24.3
<i>Total non-residential building</i>	<i>2,608.8</i>	<i>2,728.5</i>	<i>476.9</i>	<i>454.9</i>	<i>158.5</i>	<i>194.3</i>	<i>260.6</i>
Total	3,336.6	3,338.4	561.0	560.1	260.4	232.9	327.2
TOTAL							
New houses	10,605.7	11,669.2	1,939.0	2,175.3	1,102.7	1,020.6	1,154.7
New other residential buildings	3,515.6	4,016.1	643.3	994.2	451.0	351.5	642.8
<i>Total new residential building</i>	<i>14,121.4</i>	<i>15,685.3</i>	<i>2,582.2</i>	<i>3,169.5</i>	<i>1,553.7</i>	<i>1,372.1</i>	<i>1,797.4</i>
Alterations and additions to residential buildings	2,088.6	2,289.0	358.1	425.8	194.4	186.1	239.8
Hotels, etc.	234.0	622.0	96.8	26.4	178.2	16.4	10.0
Shops	1,145.1	1,398.6	247.2	377.5	140.3	86.4	291.1
Factories	734.5	716.7	81.6	133.7	72.8	62.6	71.1
Offices	1,487.3	1,341.1	212.5	248.7	95.3	149.3	99.4
Other business premises	826.9	1,283.9	130.0	161.7	212.8	79.6	82.1
Educational	1,028.1	1,124.4	231.4	192.8	93.7	93.7	99.1
Religious	88.0	76.3	23.0	10.1	7.2	7.4	2.7
Health	853.8	974.2	187.5	150.8	49.4	50.3	100.5
Entertainment and recreational	783.9	740.8	81.2	93.5	280.3	27.3	66.3
Miscellaneous	494.9	507.6	120.3	66.6	34.5	20.8	45.8
<i>Total non-residential building</i>	<i>7,676.5</i>	<i>8,785.6</i>	<i>1,411.5</i>	<i>1,461.8</i>	<i>1,164.4</i>	<i>593.6</i>	<i>868.2</i>
Total	23,886.4	26,759.9	4,351.8	5,057.1	2,912.5	2,151.8	2,905.3

**TABLE 10. 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 June	21	2.1	16	4.5	2	1.2	5	9.4	1	161.0	45	178.2
July	23	1.9	12	3.5	3	1.9	4	9.0	—	—	42	16.4
August	17	1.8	10	3.3	2	1.5	2	3.4	—	—	31	10.0
SHOPS												
1994 June	200	17.5	64	19.0	14	8.5	21	38.8	4	56.5	303	140.3
July	213	20.6	59	17.2	27	17.2	15	31.4	—	—	314	86.4
August	226	21.3	63	19.1	24	16.2	14	25.6	6	209.0	333	291.1
FACTORIES												
1994 June	107	10.8	53	16.0	19	12.5	6	15.5	2	18.0	187	72.8
July	92	9.6	48	15.1	9	6.3	11	19.9	2	11.7	162	62.6
August	146	15.3	58	17.7	18	11.2	15	26.9	—	—	237	71.1
OFFICES												
1994 June	161	15.0	65	18.1	21	15.7	20	36.5	1	10.0	268	95.3
July	128	12.8	77	21.4	25	15.7	15	25.6	2	73.7	247	149.3
August	138	13.7	56	16.3	30	18.9	10	23.4	3	27.2	237	99.4
OTHER BUSINESS PREMISES												
1994 June	132	12.8	40	11.4	19	13.1	16	29.6	2	146.0	209	212.8
July	121	12.4	54	15.8	15	10.0	15	33.4	1	8.0	206	79.6
August	133	13.3	57	17.3	17	11.4	20	34.1	1	6.0	228	82.1
EDUCATIONAL												
1994 June	30	3.1	26	8.2	16	11.7	25	42.9	2	27.8	99	93.7
July	44	4.6	28	8.3	25	17.7	19	47.7	2	15.4	118	93.7
August	52	6.1	41	13.0	14	9.9	20	37.9	4	32.3	131	99.1
RELIGIOUS												
1994 June	23	2.6	5	1.7	—	—	2	2.9	—	—	30	7.2
July	8	1.0	7	2.5	3	1.6	2	2.4	—	—	20	7.4
August	7	0.6	5	1.5	1	0.6	—	—	—	—	13	2.7
HEALTH												
1994 June	37	3.3	14	4.3	9	6.3	7	19.2	1	16.2	68	49.4
July	20	2.1	14	4.6	3	2.1	10	22.6	1	19.0	48	50.3
August	21	2.0	12	3.2	2	1.4	9	17.5	3	76.4	47	100.5
ENTERTAINMENT AND RECREATIONAL												
1994 June	45	4.5	17	5.3	6	4.3	12	24.7	2	241.5	82	280.3
July	38	3.8	10	2.9	10	7.3	6	13.2	—	—	64	27.3
August	44	4.3	21	6.6	11	7.1	10	16.5	2	31.8	88	66.3
MISCELLANEOUS												
1994 June	55	5.7	24	8.0	7	4.7	4	9.2	1	6.9	91	34.5
July	54	5.5	16	5.0	3	1.9	6	8.3	—	—	79	20.8
August	67	6.6	24	6.9	8	5.5	7	13.7	2	13.1	108	45.8
TOTAL NON-RESIDENTIAL BUILDING												
1994 June	811	77.4	324	96.5	113	78.0	118	228.7	16	683.9	1,382	1,164.4
July	741	74.3	325	96.3	123	81.7	103	213.6	8	127.8	1,300	593.6
August	851	85.0	347	104.8	127	83.8	107	198.8	21	395.7	1,453	868.2

TABLE 11. SUMMARY OF BUILDING APPROVED

Period	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
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—									
August	3,843	2,510	4,650	1,188	2,135	383	164	484	15,357
1994—									
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
July	4,341	2,732	4,490	955	2,116	309	72	297	15,312
August	6,224	3,041	5,337	1,078	2,309	291	260	238	18,778
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—									
August	345.4	220.5	374.2	85.9	149.8	27.0	12.8	40.6	1,256.1
1994—									
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
July	423.1	250.5	404.9	70.1	167.8	20.9	6.7	28.2	1,372.1
August	684.9	273.7	479.2	79.7	177.3	23.2	58.4	21.2	1,797.4
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—									
August	81.1	44.7	21.5	10.9	11.0	2.7	1.8	6.3	179.9
1994—									
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
July	85.2	44.7	22.2	12.0	12.7	3.2	0.9	5.2	186.1
August	106.1	77.1	21.2	10.9	14.9	3.5	1.2	4.9	239.8
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—									
August	286.0	300.8	150.0	16.3	58.9	7.9	18.9	11.8	850.7
1994—									
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
July	206.1	80.6	138.7	33.4	55.0	7.1	8.5	64.3	593.6
August	460.3	111.5	144.9	32.6	77.1	12.0	7.8	21.9	868.2
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—									
August	712.4	566.0	545.8	113.1	219.7	37.6	33.5	58.7	2,286.7
1994—									
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
July	714.3	375.7	565.8	115.5	235.5	31.2	16.0	97.7	2,151.8
August	1,251.3	462.2	645.3	123.2	269.3	38.6	67.4	48.0	2,905.3

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.

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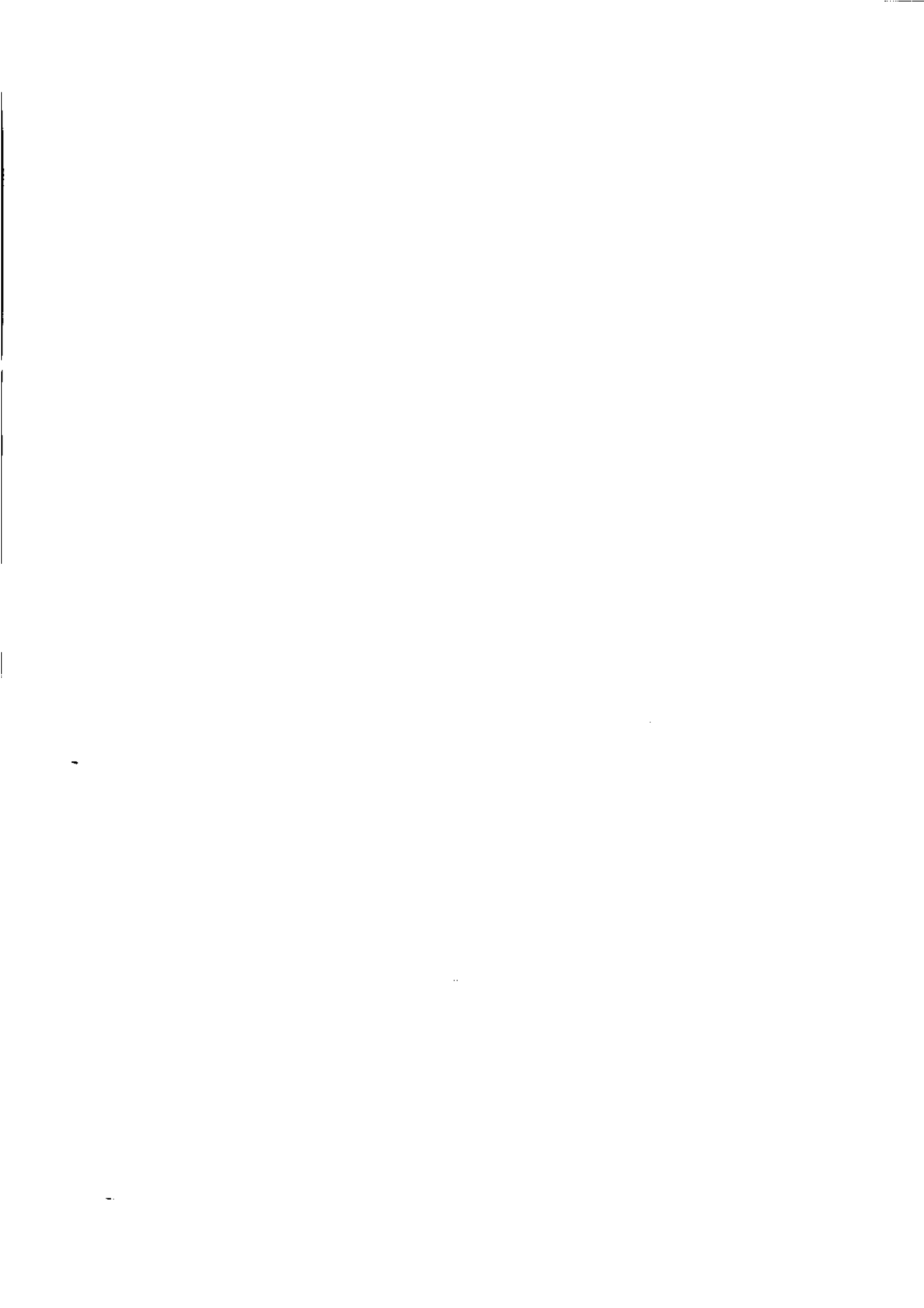
31. The expected release date for the August 1994 issue of this publication is 29 September 1994. The date can be confirmed a few days prior to release by telephoning Canberra (06) 252 6067.

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.

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