



BUILDING ACTIVITY WESTERN AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) FRI 31 JULY 1998

MARCH QTR KEY FIGURES

SEASONALLY ADJUSTED	Mar qtr 98	Dec qtr 97 to	Mar qtr 97 to
		Mar qtr 98	Mar qtr 98
		% change	% change
Value of work done(a) (\$m)	734.8	-1.3	5.8
New residential building (\$m)	434.3	-1.4	9.9
Alterations and additions(b) (\$m)	55.9	14.1	24.2
Non-residential building (\$m)	247.4	-3.2	-4.0
Total dwelling units commenced (no.)	4 317	0.4	10.7
New private sector houses (no.)	3 612	0.3	10.5

(a) At average 1989-90 prices. (b) To residential dwellings.

MARCH QTR KEY POINTS

VALUE OF WORK DONE

- In seasonally adjusted average 1989-90 prices the value of new residential building work done during the March quarter 1998 fell by 1.4% to \$434.3m, but was still 9.9% above the level of a year ago. Work done on new houses fell by 1.8% to \$386.1m, while other residential building rose by 5.9% to \$48.3m.
- Work done on non-residential building fell by 3.2% to \$247.4m, following a fall of 7.8% in the December quarter.

VALUE OF WORK COMMENCED

- In average 1989-90 prices the value of new residential building work commenced during the quarter fell by 11.7% to \$407.7m, but was still 10.6% above that of a year ago. New house commencements decreased by 12.9% to \$366.4m while new other residential dwelling commencements were almost unchanged at \$41.3m.
- Non-residential building decreased by 5.0% to \$190.5m during the March quarter, the lowest level since the December quarter 1995.

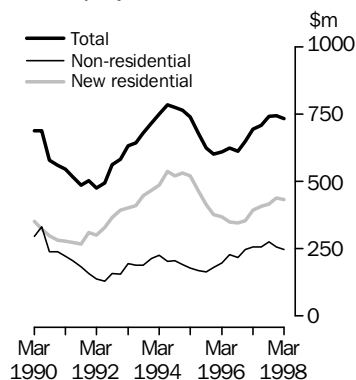
NUMBER OF DWELLING UNITS COMMENCED

- In seasonally adjusted terms, the total number of dwelling units commenced during the March quarter was steady at 4,317, and was 10.7% above that of a year ago.

VALUE OF WORK YET TO BE DONE

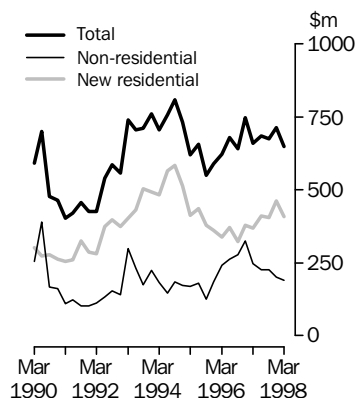
- In original terms the value of work yet to be done on jobs under construction at the end of March 1998 decreased by 5.5% to \$682.5m. This is 0.93 times the value of work done for the quarter.

Value of work done

At average 1989-90 prices
Seasonally adjusted

Value of work commenced

At average 1989-90 prices



- For further information about these and related statistics, contact Martin Yard on Adelaide 08 8237 7494, or any ABS office shown on the back cover of this publication.

NOTES

FORTHCOMING ISSUES

ISSUE (Quarter)

RELEASE DATE

June 1998

27 October 1998

CHANGES THIS ISSUE

There have been some changes to the layout of the publication, however the tables are unchanged.

SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
n.a.	not available
RSE	relative standard error
SE	standard error
..	not applicable
—	nil or rounded to zero

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

Colin Nagle
Regional Director
Western Australia

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TABLE 1. VALUE OF BUILDING WORK COMMENCED, AVERAGE 1989-90 PRICES(a)
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential building	Total		Private sector	Total	
1994-95	1,517.9	429.2	1,947.1	165.7	561.4	705.1	2,817.9
1995-96	1,160.0	290.8	1,450.8	177.6	621.0	813.5	2,441.9
1996-97	1,298.0	182.9	1,480.9	175.8	760.1	1,073.4	2,730.1
1996 Dec. qtr	322.6	56.7	379.3	42.3	218.7	324.2	745.8
1997 Mar. qtr	322.8	45.8	368.6	42.9	122.8	246.3	657.8
June qtr	366.9	44.2	411.1	48.4	177.5	225.2	684.7
Sept. qtr	370.6	35.6	406.2	41.4	158.1	227.0	674.6
Dec. qtr	420.5	41.0	461.5	51.7	165.7	200.6	713.8
1998 Mar. qtr	366.4	41.3	407.7	50.2	153.5	190.5	648.4

(a) See paragraphs 24 and 25 of the Explanatory Notes. Constant price estimates are subject to revision each quarter as more up to date information on prices and commodity compositions becomes available.

TABLE 2. VALUE OF BUILDING WORK DONE, AVERAGE 1989-90 PRICES(a)
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential building	Total		Private sector	Total	
ORIGINAL							
1994-95	1,577.6	462.8	2,040.4	177.9	594.1	745.9	2,964.2
1995-96	1,204.5	306.2	1,510.7	184.6	625.4	765.8	2,461.1
1996-97	1,289.0	214.2	1,503.2	178.7	715.4	978.9	2,660.8
1996 Dec. qtr	305.9	56.7	362.6	48.3	210.2	266.2	677.1
1997 Mar. qtr	333.1	47.4	380.5	41.5	174.1	241.6	663.6
June qtr	356.4	47.7	404.1	50.1	164.3	245.3	699.5
Sept. qtr	376.8	49.2	426.0	41.8	194.9	285.2	753.0
Dec. qtr	402.5	47.4	449.9	52.1	191.8	274.3	776.3
1998 Mar. qtr	373.3	45.5	418.8	51.6	169.3	232.0	702.4
SEASONALLY ADJUSTED							
1996 Dec. qtr	298.7	54.5	354.7	45.5	190.1	248.5	649.6
1997 Mar. qtr	345.1	50.4	395.1	45.0	183.3	257.8	694.6
June qtr	356.3	48.9	407.9	48.1	177.3	255.3	707.4
Sept. qtr	373.0	47.2	416.4	43.1	192.0	277.3	743.7
Dec. qtr	393.3	45.6	440.3	49.0	173.1	255.7	744.5
1998 Mar. qtr	386.1	48.3	434.3	55.9	178.3	247.4	734.8

(a) See paragraphs 24 to 26 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 3. VALUE OF BUILDING WORK DONE: SEASONALLY ADJUSTED SERIES
(\$ million)

Period	New residential building			Alterations and additions to residential buildings	Non-residential building		Total building
	Houses	Other residential building	Total		Private sector	Total	
1996 Dec. qtr	294.6	58.3	354.4	44.9	205.8	269.2	669.9
1997 Mar. qtr	341.9	54.0	395.5	44.6	199.1	279.9	716.3
June qtr	352.5	52.6	407.8	47.6	194.0	279.3	730.1
Sept. qtr	368.2	51.4	415.9	42.5	211.9	306.1	772.0
Dec. qtr	388.2	50.0	439.6	48.4	192.5	284.4	772.6
1998 Mar. qtr	382.1	53.3	435.2	55.3	200.1	277.6	764.6

TABLE 4. NUMBER OF DWELLING UNITS COMMENCED AND COMPLETED: SEASONALLY ADJUSTED SERIES

Period	New houses				Total dwelling units (includes conversions etc)			
	Private sector		Total		Private sector		Total	
	Commenced	Completed	Commenced	Completed	Commenced	Completed	Commenced	Completed
1996 Dec. qtr	2,876	2,682	3,062	n.a.	3,457	3,274	3,776	3,528
1997 Mar. qtr	3,268	2,622	3,335	n.a.	3,740	3,149	3,899	3,450
June qtr	3,181	2,959	3,330	n.a.	3,689	3,479	3,901	3,766
Sept. qtr	3,201	3,150	3,418	n.a.	3,630	3,582	3,858	3,794
Dec. qtr	3,600	3,504	3,759	n.a.	4,001	3,958	4,299	4,140
1998 Mar. qtr	3,612	3,081	3,708	n.a.	4,009	3,692	4,317	3,873

TABLE 5. NUMBER AND VALUE OF BUILDING COMMENCED: ORIGINAL

Period	Number of dwelling units				Value (\$m)						
	New houses	New other residential building	Conversions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-residential building	Total building
PRIVATE SECTOR											
1994-95	15,731	5,227	134	21,092	1,424.1	385.9	1,810.1	161.0	1,971.1	583.1	2,554.2
1995-96	11,228	2,920	104	14,252	1,120.6	246.4	1,367.0	175.9	1,542.9	657.0	2,199.8
1996-97	12,013	1,858	80	13,951	1,233.8	170.6	1,404.5	171.2	1,575.7	817.5	2,393.2
1996 Dec. qtr	2,924	599	17	3,540	303.1	55.5	358.6	41.4	400.0	234.7	634.8
1997 Mar. qtr	3,011	467	29	3,507	312.5	46.3	358.8	42.3	401.2	132.5	533.6
June qtr	3,315	430	22	3,767	347.8	41.8	389.6	47.0	436.6	193.0	629.6
Sept. qtr	3,256	411	17	3,684	340.7	34.0	374.7	40.2	414.9	173.3	588.2
Dec. qtr	3,665	396	41	4,102	401.9	39.4	441.3	51.2	492.5	183.1	675.7
1998 Mar. qtr	3,329	405	29	3,763	353.2	36.7	389.9	49.5	439.4	171.1	610.5
PUBLIC SECTOR											
1994-95	494	846	1	1,341	38.0	56.5	94.5	0.3	94.8	149.1	244.0
1995-96	282	801	—	1,083	25.2	59.1	84.3	0.5	84.8	204.2	289.0
1996-97	509	383	6	898	48.7	24.7	73.4	3.3	76.7	337.5	414.3
1996 Dec. qtr	158	67	6	231	15.9	4.8	20.7	0.6	21.3	113.2	134.5
1997 Mar. qtr	79	49	—	128	6.7	2.7	9.4	0.3	9.7	133.3	143.0
June qtr	138	99	—	237	14.4	5.8	20.3	1.0	21.3	51.9	73.2
Sept. qtr	257	73	—	330	24.9	4.6	29.5	0.8	30.3	75.5	105.8
Dec. qtr	123	75	—	198	13.0	5.3	18.3	0.1	18.5	38.6	57.0
1998 Mar. qtr	108	153	—	261	8.8	8.7	17.4	0.3	17.8	41.2	59.0
TOTAL											
1994-95	16,225	6,073	135	22,433	1,462.2	442.4	1,904.6	161.3	2,065.9	732.3	2,798.2
1995-96	11,510	3,721	104	15,335	1,145.8	305.5	1,451.3	176.4	1,627.6	861.2	2,488.8
1996-97	12,522	2,241	86	14,849	1,282.6	195.3	1,477.9	174.5	1,652.4	1,155.0	2,807.4
1996 Dec. qtr	3,082	666	23	3,771	319.0	60.4	379.3	42.0	421.3	347.9	769.2
1997 Mar. qtr	3,090	516	29	3,635	319.2	49.0	368.2	42.6	410.8	265.8	676.6
June qtr	3,453	529	22	4,004	362.2	47.7	409.9	48.0	457.9	244.9	702.8
Sept. qtr	3,513	484	17	4,014	365.6	38.6	404.2	41.0	445.2	248.8	694.0
Dec. qtr	3,788	471	41	4,300	414.8	44.7	459.6	51.4	511.0	221.7	732.7
1998 Mar. qtr	3,437	558	29	4,024	361.9	45.4	407.3	49.8	457.1	212.3	669.5

TABLE 6. VALUE OF NON-RESIDENTIAL BUILDING COMMENCED: ORIGINAL
(\$ million)

<i>Period</i>	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertainment and recreational</i>	<i>Miscellaneous</i>	<i>Total non-residential building</i>
PRIVATE SECTOR											
1994-95	52.9	136.1	78.1	85.7	91.5	34.6	6.2	30.7	25.2	42.1	583.1
1995-96	107.1	116.6	69.8	80.0	92.0	32.8	6.6	31.1	29.7	91.3	657.0
1996-97	79.2	173.8	105.2	105.7	141.3	40.8	5.7	89.9	41.2	34.7	817.5
1996 Dec. qtr	17.7	50.0	31.9	21.3	23.2	10.8	0.5	60.7	4.6	14.0	234.7
1997 Mar. qtr	12.3	28.7	20.7	19.3	25.0	11.5	1.0	4.4	4.4	5.2	132.5
June qtr	33.8	52.1	29.0	13.5	38.4	2.6	2.5	11.4	6.5	3.1	193.0
Sept. qtr	15.7	57.4	23.0	13.9	29.8	7.4	2.3	9.0	6.8	8.0	173.3
Dec. qtr	9.4	32.4	17.0	27.3	37.3	16.7	2.3	17.0	17.6	6.2	183.1
1998 Mar. qtr	16.6	30.4	30.1	22.3	33.9	8.7	1.8	14.7	6.4	6.1	171.1
PUBLIC SECTOR											
1994-95	1.6	4.0	0.6	30.0	5.8	51.2	—	3.9	6.6	45.3	149.1
1995-96	—	0.9	0.3	34.0	19.7	88.4	—	5.1	25.1	30.7	204.2
1996-97	—	2.7	6.9	40.3	33.9	58.1	0.2	135.2	41.2	19.0	337.5
1996 Dec. qtr	—	—	1.8	12.5	8.0	13.5	—	74.0	2.6	0.8	113.2
1997 Mar. qtr	—	0.3	4.8	10.3	23.7	16.8	—	53.1	12.2	12.1	133.3
June qtr	—	1.0	0.1	10.1	1.4	6.8	0.2	6.0	25.1	1.2	51.9
Sept. qtr	0.6	0.2	1.5	32.2	1.5	22.2	—	—	8.4	8.8	75.5
Dec. qtr	0.1	—	0.5	5.3	1.3	21.2	—	4.6	0.5	5.1	38.6
1998 Mar. qtr	0.7	0.6	—	7.4	3.6	22.7	—	—	1.9	4.3	41.2
TOTAL											
1994-95	54.5	140.1	78.7	115.8	97.4	85.8	6.2	34.6	31.8	87.4	732.3
1995-96	107.1	117.5	70.1	114.0	111.7	121.2	6.6	36.2	54.8	122.1	861.2
1996-97	79.2	176.5	112.1	146.0	175.3	98.9	5.8	225.1	82.5	53.7	1,155.0
1996 Dec. qtr	17.7	50.1	33.7	33.8	31.2	24.3	0.5	134.7	7.2	14.8	347.9
1997 Mar. qtr	12.3	29.0	25.5	29.6	48.7	28.3	1.0	57.5	16.5	17.3	265.8
June qtr	33.8	53.1	29.2	23.5	39.8	9.4	2.6	17.4	31.7	4.3	244.9
Sept. qtr	16.3	57.6	24.5	46.1	31.4	29.5	2.3	9.0	15.3	16.8	248.8
Dec. qtr	9.5	32.4	17.6	32.6	38.6	37.9	2.3	21.6	18.0	11.4	221.7
1998 Mar. qtr	17.3	30.9	30.1	29.7	37.6	31.4	1.8	14.7	8.3	10.4	212.3

TABLE 7. NUMBER AND VALUE OF BUILDING UNDER CONSTRUCTION AT END OF PERIOD: ORIGINAL

	<i>Number of dwelling units</i>				<i>Value (\$m)</i>						
	<i>New houses</i>	<i>New other residential building</i>	<i>Conversions etc.</i>	<i>Total dwelling units</i>	<i>New houses</i>	<i>New other residential building</i>	<i>New residential building</i>	<i>Alterations and additions to residential buildings</i>	<i>Total residential building</i>	<i>Total non-residential building</i>	<i>Total building</i>
PRIVATE SECTOR											
1994-95	5,849	2,540	60	8,449	662.4	209.4	871.8	67.1	938.9	283.5	1,222.3
1995-96	4,345	1,691	50	6,086	532.6	160.6	693.2	70.6	763.9	326.9	1,090.8
1996-97	5,157	1,268	37	6,462	645.2	134.5	779.7	70.0	849.7	467.2	1,316.9
1996 Dec. qtr	4,354	1,356	26	5,736	539.4	129.7	669.1	61.9	731.0	495.7	1,226.7
1997 Mar. qtr	4,886	1,357	38	6,281	602.5	141.3	743.8	66.3	810.1	472.5	1,282.6
June qtr	5,157	1,268	37	6,462	645.2	134.5	779.7	70.0	849.7	467.2	1,316.9
Sept. qtr	5,288	1,230	49	6,567	647.3	126.0	773.4	69.2	842.5	493.5	1,336.0
Dec. qtr	5,250	1,141	86	6,477	667.6	130.4	798.0	80.0	878.0	425.8	1,303.7
1998 Mar. qtr	5,669	1,027	82	6,778	714.0	116.5	830.5	82.3	912.8	408.6	1,321.3
PUBLIC SECTOR											
1994-95	154	300	—	454	12.1	21.1	33.2	—	33.3	117.9	151.1
1995-96	57	348	—	405	6.0	31.5	37.5	—	37.5	153.3	190.8
1996-97	139	119	—	258	14.5	6.5	21.0	0.9	22.0	326.3	348.2
1996 Dec. qtr	147	304	—	451	15.3	27.4	42.8	0.4	43.2	228.3	271.6
1997 Mar. qtr	149	128	—	277	14.9	8.8	23.7	0.6	24.3	344.8	369.2
June qtr	139	119	—	258	14.5	6.5	21.0	0.9	22.0	326.3	348.2
Sept. qtr	293	154	—	447	29.6	8.9	38.5	1.0	39.5	346.5	386.0
Dec. qtr	224	127	—	351	22.9	8.5	31.4	0.8	32.2	301.0	333.2
1998 Mar. qtr	192	239	—	431	16.5	13.2	29.7	0.2	29.9	234.0	263.9
TOTAL											
1994-95	6,003	2,840	60	8,903	674.5	230.5	905.0	67.1	972.1	401.4	1,373.5
1995-96	4,402	2,039	50	6,491	538.6	192.1	730.7	70.6	801.3	480.2	1,281.6
1996-97	5,296	1,387	37	6,720	659.7	141.0	800.8	70.9	871.7	793.4	1,665.1
1996 Dec. qtr	4,501	1,660	26	6,187	554.7	157.2	711.9	62.3	774.2	724.1	1,498.3
1997 Mar. qtr	5,035	1,485	38	6,558	617.4	150.1	767.5	66.9	834.4	817.4	1,651.8
June qtr	5,296	1,387	37	6,720	659.7	141.0	800.8	70.9	871.7	793.4	1,665.1
Sept. qtr	5,581	1,384	49	7,014	676.9	134.9	811.8	70.2	882.0	840.0	1,722.0
Dec. qtr	5,474	1,268	86	6,828	690.5	138.9	829.4	80.7	910.2	726.8	1,636.9
1998 Mar. qtr	5,861	1,266	82	7,209	730.4	129.7	860.2	82.5	942.7	642.5	1,585.2

**TABLE 8. VALUE OF NON-RESIDENTIAL BUILDING UNDER CONSTRUCTION AT END OF PERIOD: ORIGINAL
(\$ million)**

	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
PRIVATE SECTOR											
1994-95	41.5	63.9	26.4	48.3	35.3	11.6	2.8	21.0	9.0	23.7	283.5
1995-96	93.8	53.6	37.1	25.7	31.5	11.7	2.5	14.5	13.6	43.0	326.9
1996-97	62.5	108.9	47.3	48.0	64.0	12.7	4.0	84.5	19.3	16.0	467.2
1996 Dec. qtr	76.2	87.0	46.7	58.4	45.2	23.4	3.2	82.9	29.4	43.5	495.7
1997 Mar. qtr	60.0	94.1	43.3	61.7	49.0	16.6	1.7	85.8	30.1	30.2	472.5
June qtr	62.5	108.9	47.3	48.0	64.0	12.7	4.0	84.5	19.3	16.0	467.2
Sept. qtr	70.4	133.2	48.3	45.9	60.2	18.4	3.8	74.0	21.7	17.6	493.5
Dec. qtr	64.0	82.5	33.5	33.7	56.9	24.8	3.7	88.4	22.2	16.1	425.8
1998 Mar. qtr	60.3	55.3	46.0	40.5	50.9	15.1	3.4	95.7	22.0	19.4	408.6
PUBLIC SECTOR											
1994-95	1.6	1.4	0.5	49.3	1.8	25.8	—	1.2	3.6	32.8	117.9
1995-96	—	0.1	0.2	24.8	12.5	75.6	—	4.4	19.3	16.5	153.3
1996-97	—	0.9	4.8	25.6	29.8	75.4	0.2	143.3	37.1	9.1	326.3
1996 Dec. qtr	—	—	0.9	25.5	7.6	91.8	—	76.0	19.8	6.7	228.3
1997 Mar. qtr	—	0.1	4.7	33.1	30.0	96.5	—	137.6	28.1	14.8	344.8
June qtr	—	0.9	4.8	25.6	29.8	75.4	0.2	143.3	37.1	9.1	326.3
Sept. qtr	0.6	0.8	6.2	54.4	6.4	89.4	0.2	139.3	38.4	10.8	346.5
Dec. qtr	0.6	—	0.5	44.4	2.0	65.3	—	140.6	32.4	15.1	301.0
1998 Mar. qtr	0.7	0.6	0.5	32.0	4.4	71.4	—	79.9	28.2	16.3	234.0
TOTAL											
1994-95	43.1	65.3	26.9	97.6	37.0	37.4	2.8	22.1	12.6	56.5	401.4
1995-96	93.8	53.6	37.2	50.5	44.0	87.3	2.5	18.9	32.9	59.5	480.2
1996-97	62.5	109.8	52.1	73.6	93.9	88.1	4.2	227.8	56.3	25.1	793.4
1996 Dec. qtr	76.2	87.0	47.6	83.8	52.8	115.2	3.2	158.9	49.2	50.2	724.1
1997 Mar. qtr	60.0	94.2	48.0	94.7	79.0	113.1	1.7	223.4	58.2	45.1	817.4
June qtr	62.5	109.8	52.1	73.6	93.9	88.1	4.2	227.8	56.3	25.1	793.4
Sept. qtr	71.0	134.0	54.5	100.3	66.6	107.9	4.0	213.3	60.1	28.4	840.0
Dec. qtr	64.6	82.5	34.0	78.2	58.9	90.1	3.7	229.0	54.7	31.2	726.8
1998 Mar. qtr	61.0	55.9	46.6	72.5	55.3	86.4	3.4	175.6	50.2	35.6	642.5

TABLE 9. NUMBER AND VALUE OF BUILDING COMPLETED: ORIGINAL

Period	Number of dwelling units				Value (\$m)						
	New houses	New other residential building	Conversions etc.	Total dwelling units	New houses	New other residential building	New residential building	Alterations and additions to residential buildings	Total residential building	Total non-residential building	Total building
PRIVATE SECTOR											
1994-95	16,955	5,496	180	22,631	1,466.6	388.7	1,855.3	170.7	2,026.0	765.6	2,791.6
1995-96	12,579	3,737	113	16,430	1,256.7	305.6	1,562.3	179.6	1,741.9	627.5	2,369.4
1996-97	11,074	2,235	93	13,402	1,136.2	202.7	1,338.9	176.8	1,515.7	715.7	2,231.4
1996 Dec. qtr	2,840	599	32	3,471	292.5	57.0	349.5	49.9	399.4	227.6	627.0
1997 Mar. qtr	2,467	460	17	2,944	257.1	38.3	295.5	39.7	335.2	165.5	500.7
June qtr	2,995	491	23	3,509	310.7	47.9	358.6	44.4	403.0	205.2	608.3
Sept. qtr	3,125	449	5	3,579	347.1	47.0	394.2	42.0	436.2	156.5	592.7
Dec. qtr	3,690	485	3	4,178	393.2	42.9	436.1	42.7	478.8	253.9	732.7
1998 Mar. qtr	2,910	519	33	3,462	313.7	52.9	366.6	49.2	415.8	200.9	616.7
PUBLIC SECTOR											
1994-95	429	1,252	14	1,695	33.8	87.4	121.2	0.5	121.6	189.5	311.1
1995-96	378	753	—	1,131	31.0	49.1	80.1	0.5	80.6	168.1	248.7
1996-97	424	609	6	1,039	40.2	51.0	91.2	2.4	93.6	171.4	264.9
1996 Dec. qtr	151	191	6	348	13.3	14.6	27.9	1.0	28.9	35.7	64.6
1997 Mar. qtr	74	222	—	296	7.1	22.6	29.7	0.1	29.8	27.5	57.3
June qtr	148	108	—	256	14.8	8.2	23.0	0.7	23.6	68.3	91.9
Sept. qtr	103	38	—	141	9.9	2.3	12.2	0.7	13.0	58.8	71.8
Dec. qtr	189	102	—	291	19.4	5.7	25.1	0.4	25.5	86.9	112.3
1998 Mar. qtr	140	41	—	181	15.1	2.9	18.0	0.8	18.8	108.3	127.1
TOTAL											
1994-95	17,384	6,748	194	24,326	1,500.3	476.1	1,976.4	171.2	2,147.6	955.1	3,102.7
1995-96	12,957	4,490	113	17,561	1,287.8	354.6	1,642.4	180.1	1,822.5	795.6	2,618.1
1996-97	11,498	2,844	99	14,441	1,176.4	253.7	1,430.1	179.2	1,609.3	887.1	2,496.4
1996 Dec. qtr	2,991	790	38	3,819	305.8	71.6	377.4	50.9	428.3	263.4	691.6
1997 Mar. qtr	2,541	682	17	3,240	264.2	60.9	325.1	39.8	364.9	193.0	558.0
June qtr	3,143	599	23	3,765	325.5	56.1	381.6	45.1	426.7	273.5	700.2
Sept. qtr	3,228	487	5	3,720	357.1	49.3	406.4	42.8	449.2	215.3	664.5
Dec. qtr	3,879	587	3	4,469	412.6	48.6	461.2	43.1	504.3	340.8	845.1
1998 Mar. qtr	3,050	560	33	3,643	328.8	55.8	384.6	50.0	434.6	309.2	743.9

TABLE 10. VALUE OF NON-RESIDENTIAL BUILDING COMPLETED: ORIGINAL
(\$ million)

<i>Period</i>	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
PRIVATE SECTOR											
1994-95	36.7	337.1	78.1	65.7	82.2	49.3	7.2	38.5	37.3	33.5	765.6
1995-96	63.4	127.8	61.2	100.3	96.7	33.1	7.1	39.3	25.8	72.7	627.5
1996-97	121.9	126.3	99.2	89.8	110.8	40.4	4.8	21.8	35.0	65.7	715.7
1996 Dec. qtr	45.0	43.2	25.0	28.3	49.1	12.9	1.5	2.3	8.3	12.1	227.6
1997 Mar. qtr	30.0	23.1	25.2	21.2	21.0	18.5	2.7	1.7	3.7	18.4	165.5
June qtr	31.9	38.7	25.9	27.3	24.7	6.6	0.2	14.4	17.9	17.6	205.2
Sept. qtr	9.9	34.9	23.8	16.9	33.1	1.7	2.5	21.4	5.4	6.8	156.5
Dec. qtr	16.1	84.5	32.4	40.1	38.8	10.3	2.6	4.3	17.2	7.6	253.9
1998 Mar. qtr	24.0	60.0	20.4	16.4	38.9	18.8	2.0	8.1	9.4	2.8	200.9
PUBLIC SECTOR											
1994-95	—	4.6	0.4	19.6	5.1	93.3	—	43.0	9.5	14.0	189.5
1995-96	1.7	2.2	0.6	56.6	8.6	39.2	—	1.8	8.2	49.1	168.1
1996-97	—	1.9	2.2	40.6	17.3	50.1	—	7.4	24.9	26.9	171.4
1996 Dec. qtr	—	—	1.1	13.2	1.2	4.2	—	3.8	1.4	10.8	35.7
1997 Mar. qtr	—	0.2	1.0	2.6	1.3	11.9	—	2.8	3.8	3.9	27.5
June qtr	—	0.2	—	19.4	2.0	22.1	—	0.2	17.4	6.9	68.3
Sept. qtr	—	0.3	0.1	4.3	25.1	8.8	—	6.0	7.1	7.1	58.8
Dec. qtr	0.1	0.8	5.8	16.9	6.1	46.4	0.2	3.3	6.4	0.9	86.9
1998 Mar. qtr	0.5	—	—	19.9	1.3	16.7	—	60.7	6.2	3.1	108.3
TOTAL											
1994-95	36.7	341.7	78.5	85.3	87.3	142.6	7.2	81.5	46.8	47.5	955.1
1995-96	65.1	130.1	61.8	157.0	105.3	72.3	7.1	41.1	34.0	121.9	795.6
1996-97	121.9	128.2	101.4	130.4	128.1	90.5	4.8	29.2	60.0	92.5	887.1
1996 Dec. qtr	45.0	43.2	26.0	41.5	50.2	17.1	1.5	6.1	9.7	22.9	263.4
1997 Mar. qtr	30.0	23.3	26.2	23.8	22.4	30.4	2.7	4.4	7.6	22.3	193.0
June qtr	31.9	38.9	26.0	46.7	26.7	28.6	0.2	14.6	35.4	24.6	273.5
Sept. qtr	9.9	35.3	23.9	21.1	58.2	10.5	2.5	27.4	12.5	13.9	215.3
Dec. qtr	16.2	85.3	38.2	57.0	44.9	56.7	2.8	7.5	23.6	8.5	340.8
1998 Mar. qtr	24.5	60.0	20.4	36.3	40.1	35.5	2.0	68.8	15.6	6.0	309.2

TABLE 11. VALUE OF BUILDING WORK DONE: ORIGINAL
(\$ million)

<i>Period</i>	<i>New houses</i>	<i>New other residential building</i>	<i>New residential building</i>	<i>Alterations and additions to residential buildings</i>	<i>Total residential building</i>	<i>Total non-residential building</i>	<i>Total building</i>
PRIVATE SECTOR							
1994-95	1,483.6	408.5	1,892.1	170.9	2,063.0	623.0	2,686.0
1995-96	1,161.8	276.5	1,438.3	181.9	1,620.2	669.3	2,289.5
1996-97	1,230.7	185.2	1,415.9	174.0	1,589.9	776.5	2,366.4
1996 Dec. qtr	288.1	47.4	335.4	46.7	382.1	227.6	609.6
1997 Mar. qtr	320.0	41.7	361.8	41.0	402.8	189.1	591.8
June qtr	339.3	45.5	384.8	48.7	433.4	179.7	613.1
Sept. qtr	356.4	49.2	405.6	40.7	446.2	215.1	661.3
Dec. qtr	376.6	47.8	424.4	50.8	475.2	213.3	688.6
1998 Mar. qtr	358.8	45.7	404.5	50.7	455.1	190.0	645.1
PUBLIC SECTOR							
1994-95	36.3	71.3	107.6	0.4	107.9	159.2	267.2
1995-96	28.1	47.0	75.1	0.5	75.7	150.6	226.3
1996-97	44.4	44.3	88.7	2.9	91.6	286.5	378.2
1996 Dec. qtr	13.7	13.3	26.9	1.0	27.9	60.7	88.6
1997 Mar. qtr	10.0	9.1	19.1	0.1	19.2	73.3	92.5
June qtr	13.3	5.9	19.2	0.9	20.1	88.6	108.8
Sept. qtr	15.6	4.4	20.0	0.6	20.6	99.7	120.3
Dec. qtr	20.6	4.2	24.8	0.6	25.4	91.7	117.1
1998 Mar. qtr	10.6	4.5	15.2	0.4	15.5	70.3	85.8
TOTAL							
1994-95	1,519.8	479.8	1,999.7	171.2	2,170.9	782.2	2,953.2
1995-96	1,189.9	323.5	1,513.4	182.5	1,695.9	819.9	2,515.8
1996-97	1,275.2	229.4	1,504.6	176.9	1,681.5	1,063.0	2,744.5
1996 Dec. qtr	301.7	60.6	362.3	47.6	410.0	288.3	698.3
1997 Mar. qtr	330.0	50.9	380.9	41.2	422.0	262.3	684.4
June qtr	352.6	51.3	404.0	49.6	453.6	268.3	721.9
Sept. qtr	372.0	53.5	425.5	41.3	466.8	314.8	781.7
Dec. qtr	397.2	52.0	449.2	51.4	500.6	305.1	805.6
1998 Mar. qtr	369.4	50.2	419.6	51.0	470.6	260.3	730.9

TABLE 12. VALUE OF NON-RESIDENTIAL BUILDING WORK DONE: ORIGINAL
(\$ million)

<i>Period</i>	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertainment and recreational</i>	<i>Miscellaneous</i>	<i>Total non-residential building</i>
PRIVATE SECTOR											
1994-95	45.6	175.9	78.3	71.4	89.3	45.9	6.5	36.9	36.5	36.8	623.0
1995-96	104.7	128.9	70.2	93.0	98.9	32.2	6.7	28.3	27.0	79.4	669.3
1996-97	88.3	159.6	100.7	109.9	126.4	41.1	6.2	47.5	40.3	56.5	776.5
1996 Dec. qtr	17.6	52.9	28.1	31.0	35.2	16.4	1.5	15.0	12.2	17.6	227.6
1997 Mar. qtr	17.6	38.4	27.2	28.1	29.1	10.0	1.1	17.2	10.6	9.8	189.1
June qtr	24.5	40.9	23.0	24.5	32.9	4.8	1.6	11.6	8.8	7.0	179.7
Sept. qtr	19.6	61.8	32.5	19.1	35.2	5.9	2.4	23.7	8.8	6.2	215.1
Dec. qtr	23.0	55.6	23.9	22.4	35.0	14.5	1.9	22.3	8.3	6.5	213.3
1998 Mar. qtr	17.9	40.2	23.7	21.5	34.6	12.3	2.1	20.7	10.9	6.0	190.0
PUBLIC SECTOR											
1994-95	0.9	3.7	0.3	34.9	5.9	64.8	—	14.0	8.1	26.7	159.2
1995-96	0.8	1.6	0.7	31.9	14.7	45.1	—	1.2	11.1	43.4	150.6
1996-97	—	2.1	4.2	48.3	32.3	94.5	—	56.6	30.3	18.2	286.5
1996 Dec. qtr	—	—	1.3	11.1	2.5	19.9	—	15.0	5.8	5.1	60.7
1997 Mar. qtr	—	0.3	1.6	6.9	10.3	28.1	—	13.7	6.5	5.9	73.3
June qtr	—	0.4	1.0	17.8	13.8	20.5	—	23.1	10.9	1.0	88.6
Sept. qtr	0.2	0.7	3.1	13.1	7.5	15.2	0.2	38.0	10.7	11.1	99.7
Dec. qtr	0.3	0.1	0.9	12.2	3.1	23.3	—	34.9	11.7	5.2	91.7
1998 Mar. qtr	0.2	0.4	0.2	12.7	1.6	26.0	—	14.3	8.7	6.1	70.3
TOTAL											
1994-95	46.5	179.5	78.6	106.3	95.2	110.7	6.5	50.9	44.6	63.5	782.2
1995-96	105.5	130.5	70.9	124.9	113.6	77.3	6.7	29.5	38.1	122.8	819.9
1996-97	88.3	161.8	104.9	158.2	158.7	135.6	6.2	104.1	70.6	74.6	1,063.0
1996 Dec. qtr	17.6	52.9	29.4	42.2	37.7	36.3	1.5	30.0	18.0	22.7	288.3
1997 Mar. qtr	17.6	38.6	28.8	35.0	39.3	38.1	1.1	30.9	17.1	15.7	262.3
June qtr	24.5	41.3	24.0	42.4	46.7	25.3	1.6	34.7	19.7	8.0	268.3
Sept. qtr	19.7	62.5	35.6	32.3	42.7	21.0	2.6	61.6	19.5	17.3	314.8
Dec. qtr	23.2	55.7	24.7	34.6	38.2	37.8	1.9	57.2	20.1	11.7	305.1
1998 Mar. qtr	18.1	40.7	24.0	34.2	36.2	38.3	2.1	35.1	19.6	12.2	260.3

**TABLE 13. VALUE OF BUILDING WORK YET TO BE DONE AT END OF PERIOD: ORIGINAL
(\$ million)**

	<i>New houses</i>	<i>New other residential building</i>	<i>New residential building</i>	<i>Alterations and additions to residential buildings</i>	<i>Total residential building</i>	<i>Total non-residential building</i>	<i>Total building</i>
PRIVATE SECTOR							
1994-95	307.7	93.0	400.7	27.1	427.7	149.4	577.2
1995-96	280.3	75.0	355.3	28.1	383.4	155.1	538.5
1996-97	304.9	67.8	372.8	30.7	403.5	238.2	641.7
1996 Dec. qtr	285.5	62.7	348.2	28.1	376.3	261.5	637.7
1997 Mar. qtr	289.0	71.3	360.3	31.1	391.5	216.8	608.3
June qtr	304.9	67.8	372.8	30.7	403.5	238.2	641.7
Sept. qtr	298.1	57.2	355.3	31.3	386.6	206.1	592.7
Dec. qtr	335.5	56.7	392.2	34.0	426.2	179.2	605.4
1998 Mar. qtr	336.8	50.0	386.8	35.0	421.8	173.0	594.8
PUBLIC SECTOR							
1994-95	6.0	9.0	15.0	—	15.0	50.2	65.2
1995-96	2.9	21.4	24.3	—	24.3	104.0	128.3
1996-97	7.1	3.3	10.5	0.4	10.9	173.2	184.1
1996 Dec. qtr	9.4	8.4	17.8	0.2	18.0	132.4	150.3
1997 Mar. qtr	6.1	3.4	9.4	0.3	9.7	203.1	212.8
June qtr	7.1	3.3	10.5	0.4	10.9	173.2	184.1
Sept. qtr	16.6	3.6	20.2	0.6	20.8	153.9	174.6
Dec. qtr	8.8	4.7	13.6	0.1	13.7	103.5	117.2
1998 Mar. qtr	6.8	7.9	14.7	0.1	14.7	73.0	87.7
TOTAL							
1994-95	313.7	102.0	415.7	27.1	442.8	199.6	642.4
1995-96	283.2	96.4	379.6	28.1	407.7	259.0	666.8
1996-97	312.1	71.2	383.3	31.0	414.3	411.5	825.8
1996 Dec. qtr	294.8	71.2	366.0	28.2	394.2	393.8	788.1
1997 Mar. qtr	295.1	74.7	369.8	31.4	401.2	419.9	821.1
June qtr	312.1	71.2	383.3	31.0	414.3	411.5	825.8
Sept. qtr	314.7	60.8	375.5	31.8	407.3	360.0	767.4
Dec. qtr	344.3	61.4	405.7	34.1	439.8	282.7	722.6
1998 Mar. qtr	343.6	57.9	401.5	35.1	436.5	246.0	682.5

**TABLE 14. VALUE OF NON-RESIDENTIAL BUILDING WORK YET TO BE DONE AT END OF PERIOD: ORIGINAL
(\$ million)**

	<i>Hotels etc.</i>	<i>Shops</i>	<i>Factories</i>	<i>Offices</i>	<i>Other business premises</i>	<i>Educational</i>	<i>Religious</i>	<i>Health</i>	<i>Entertain- ment and recreational</i>	<i>Miscel- laneous</i>	<i>Total non-resi- dential building</i>
PRIVATE SECTOR											
1994-95	21.8	41.2	13.2	25.6	17.9	5.1	1.5	6.8	3.7	12.5	149.4
1995-96	33.6	29.8	14.9	13.0	12.2	6.4	1.6	11.3	7.1	25.1	155.1
1996-97	37.2	51.9	23.7	17.3	29.2	6.7	1.8	55.6	7.6	7.3	238.2
1996 Dec. qtr	30.0	47.4	22.2	29.6	26.5	7.2	0.8	66.8	15.4	15.6	261.5
1997 Mar. qtr	26.2	39.3	16.8	28.1	22.4	8.9	0.9	54.2	9.2	11.0	216.8
June qtr	37.2	51.9	23.7	17.3	29.2	6.7	1.8	55.6	7.6	7.3	238.2
Sept. qtr	35.5	49.4	16.1	13.0	23.4	8.2	1.7	42.8	6.6	9.5	206.1
Dec. qtr	22.5	27.7	9.8	18.5	23.8	10.4	2.4	39.2	16.0	9.2	179.2
1998 Mar. qtr	24.9	20.3	19.1	20.2	22.1	7.1	2.1	33.9	14.2	9.2	173.0
PUBLIC SECTOR											
1994-95	0.7	0.7	0.5	18.2	0.3	9.7	—	0.2	2.4	17.5	50.2
1995-96	—	—	0.1	18.4	5.3	53.5	—	4.0	15.8	6.9	104.0
1996-97	—	0.6	2.7	11.8	7.7	19.9	0.2	93.8	28.3	8.2	173.2
1996 Dec. qtr	—	—	0.5	14.5	6.2	41.9	—	60.3	7.2	1.8	132.4
1997 Mar. qtr	—	0.1	3.6	17.7	19.6	30.3	—	110.9	12.8	8.0	203.1
June qtr	—	0.6	2.7	11.8	7.7	19.9	0.2	93.8	28.3	8.2	173.2
Sept. qtr	0.4	0.1	1.2	31.8	1.8	27.6	—	59.2	26.0	5.9	153.9
Dec. qtr	0.2	—	0.5	26.5	0.4	26.5	—	28.8	14.7	5.8	103.5
1998 Mar. qtr	0.7	0.1	0.2	21.2	2.5	21.8	—	14.5	7.9	4.1	73.0
TOTAL											
1994-95	22.5	41.9	13.7	43.8	18.2	14.8	1.5	7.0	6.1	30.0	199.6
1995-96	33.6	29.8	15.0	31.3	17.4	59.9	1.6	15.4	22.9	32.0	259.0
1996-97	37.2	52.5	26.5	29.1	36.8	26.6	1.9	149.4	35.8	15.5	411.5
1996 Dec. qtr	30.0	47.4	22.7	44.1	32.8	49.1	0.8	127.1	22.5	17.4	393.8
1997 Mar. qtr	26.2	39.3	20.4	45.8	42.0	39.2	0.9	165.1	22.0	18.9	419.9
June qtr	37.2	52.5	26.5	29.1	36.8	26.6	1.9	149.4	35.8	15.5	411.5
Sept. qtr	35.9	49.5	17.3	44.7	25.2	35.8	1.7	101.9	32.6	15.4	360.0
Dec. qtr	22.7	27.7	10.3	44.9	24.2	36.9	2.4	68.0	30.7	15.0	282.7
1998 Mar. qtr	25.6	20.4	19.3	41.4	24.6	28.9	2.1	48.3	22.2	13.2	246.0

**TABLE 15. BUILDING ACTIVITY RELATIVE STANDARD ERRORS, MARCH QUARTER 1998
(Percentage)**

<i>Ownership and stage of construction</i>	<i>New residential building</i>				<i>Value</i>	
	<i>Houses</i>		<i>Total</i>		<i>Alterations and additions to residential buildings</i>	<i>Total building</i>
	<i>Number</i>	<i>Value</i>	<i>Number of dwelling units</i>	<i>Value</i>		
TOTAL PRIVATE AND PUBLIC SECTORS						
Commenced	3.6	4.0	3.1	3.6	5.4	3.3
Under construction at end of period	3.1	3.1	2.5	2.6	5.3	2.4
Completed	4.9	5.4	4.2	4.6	7.8	4.2
Value of work done	..	2.8	..	2.5	4.5	2.3
Value of work yet to be done	..	3.7	..	3.2	6.7	3.0

EXPLANATORY NOTES

INTRODUCTION

1 This publication contains detailed results from the quarterly Building Activity Survey. Each issue includes revisions to the previous quarter. Therefore data for the latest quarter should be considered to be preliminary only.

2 The statistics are compiled on the basis of returns collected from builders and other individuals and organisations engaged in building activity. The quarterly survey consists of two components:

- a sample survey of private sector house building activity involving new house construction or alterations and additions valued at \$10,000 or more to houses; and
- a complete enumeration of jobs involving construction of new residential buildings other than private sector houses, all alterations and additions to residential buildings (other than private sector houses) with an approval value of \$10,000 or more, and all non-residential building jobs with an approval value of \$50,000 or more.

3 Prior to the September quarter 1990, the cut-off for inclusion of non-residential building jobs (both new and alterations and additions) was \$30,000 or more, while prior to the September quarter 1985 it was \$10,000 or more. Care should be taken in interpreting data for specific classes of non-residential building.

4 The use of sample survey techniques in the Building Activity Survey means that reliable estimates of private sector house building activity, including alterations and additions to houses, are generally only available at the State, Territory and Australia levels. However, estimates for capital city Statistical Divisions can be made available. Also, data for regions below State and Territory level are available from the building approvals series and from the monthly series of dwelling unit commencements compiled for South Australia and Western Australia by the Australian Bureau of Statistics (ABS). Unlike data in this publication compiled from the Building Activity Survey, the series for smaller geographic areas are based on information reported by local and other government authorities.

SCOPE AND COVERAGE

5 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.

6 Building jobs included in each quarter in the Building Activity Survey comprise those building jobs selected in previous quarters which have not been completed (or commenced) by the end of the previous quarter and those building jobs newly selected in the current quarter. The population list from which building jobs are selected for inclusion comprises all approved building jobs which were notified to the ABS up to but not including the last month of the reference quarter (e.g. up to the end of August in respect of the September quarter survey). This introduces a lag to the statistics in respect of those building jobs notified and commenced in the last month of the reference quarter (e.g. for the month of September in respect of the September quarter survey). For example, building jobs which were notified as approved in the month of June and which actually commenced in that month are shown as commencements in the September quarter. Similarly, building jobs which were notified in the month of September and which actually commenced in that month are shown as commencements in the December quarter.

DEFINITIONS

7 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.

8 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.

9 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.

- 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.
- 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.).

10 From the June quarter 1996 issue of this publication, the number of dwelling units created as part of alterations and additions to, or conversions of, existing residential or non-residential buildings, and as part of the construction of non-residential building, is shown separately in tables 5, 7, and 9 under the heading of 'Conversions, etc.', and is included in the total number of dwelling units shown in these tables. Previously, such dwellings were only included as a footnote.

11 In addition, the seasonally adjusted estimates for the total number of dwelling units commenced and completed, shown in table 4, include these conversions, etc. Previously, only dwelling units created as part of the construction of new residential buildings were included in these estimates.

12 *Commenced*. A building job is regarded as commenced when the first physical building activity has been performed on site in the form of materials fixed in place and/or labour expended (this includes site preparation but excludes delivery of building materials, the drawing of plans and specifications and the construction of non-building infrastructures such as roads).

13 *Under construction*. A building job is regarded as being under construction at the end of a period if it has been commenced but has not been completed, and work on it has not been abandoned.

14 *Completed*. A building job is regarded as completed when building activity has progressed to the stage when the building can fulfil its intended function. In practice, the ABS regards buildings as completed when notified as such by respondents to the survey.

VALUATION OF BUILDING JOBS

15 The value series in this publication are derived from estimates reported on survey returns as follows.

- *Value of building commenced or under construction* represents the anticipated completion value based, where practicable, on estimated market or contract price of building jobs excluding the value of land and landscaping. Site preparation costs are included. Where building jobs proceed over several quarters, the anticipated completion value reported on the return for the first (commencement) quarter may be amended on returns for subsequent (under construction) quarters as the job nears completion.
- *Value of building completed* represents the actual completion value based, where practicable, on the market or contract price of building jobs including site preparation costs but excluding the value of land and landscaping.
- *Value of building work done during the period* represents the estimated value of building work actually carried out during the quarter on building jobs which have commenced.
- *Value of building work yet to be done* represents the difference between the anticipated completion value and the estimated value of work done up to the end of the period on building jobs commenced but not completed.

BUILDING CLASSIFICATION

16 *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.

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

18 Examples of the types of buildings included under each main functional heading are shown in the following list.

- *Houses*. Includes cottages, bungalows, detached caretakers'/managers' cottages, rectories.
- *Other residential buildings*. Includes blocks of flats, home units, attached townhouses, villa units, terrace houses, semi-detached houses, maisonettes.
- *Hotels, etc.* Includes motels, hostels, boarding houses, guest houses, holiday apartment buildings.
- *Shops*. Includes retail shops, restaurants, cafes, taverns, dry cleaners, laundromats, hair salons, shopping arcades.
- *Factories*. Includes paper mills, oil refinery buildings, brickworks, foundries, powerhouses, manufacturing laboratories, workshops as part of a manufacturing process.
- *Offices*. Includes banks, post offices, council chambers, head and regional offices.

EXPLANATORY NOTES *continued*

BUILDING CLASSIFICATION *continued*

- *Other business premises.* Includes warehouses, storage depots, service stations, transport depots and terminals, electricity substation buildings, pumping station buildings, telephone exchanges, mail sorting centres, broadcasting stations, film studios.
- *Educational.* Includes schools, colleges, kindergartens, libraries, museums, art galleries, research and teaching laboratories, theological colleges.
- *Religious.* Includes churches, chapels, temples.
- *Health.* Includes hospitals, nursing homes, surgeries, clinics, medical centres.
- *Entertainment and recreational.* Includes clubs, theatres, cinemas, public halls, gymnasiums, grandstands, squash courts, sports and recreation centres.
- *Miscellaneous.* Includes law courts, homes for the aged (where medical care is not provided as a normal service), orphanages, gaols, barracks, mine buildings, glasshouses, livestock sheds, shearing sheds, fruit and skin drying sheds, public toilets, and ambulance, fire and police stations.

RELIABILITY OF THE ESTIMATES

19 Since the figures for private sector house building activity (including alterations and additions) are derived from information obtained from a sample of approved building jobs, they are subject to sampling error; that is, they may differ from the figures that would have been obtained if information for all approved jobs for the relevant period had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of approved jobs was included. There are about two chances in three that a sample estimate will differ by less than one SE from the figure that would have been obtained if all approved jobs had been included, and about nineteen chances in twenty that the difference will be less than two SEs. Another measure of sampling variability is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate to which it refers. The RSEs of estimates provide an indication of the percentage errors likely to have occurred due to sampling, and are shown in table 15.

20 An example of the use of RSEs is as follows. Assume that the estimate of the number of new private sector houses commenced during the latest quarter is 2,000 (for actual estimate see table 5) and that the associated RSE is 2.5 per cent (for actual percentage see table 15). There would then be about two chances in three that the number which would have been obtained if information had been collected about all approved private sector house jobs would have been within the range 1,950 to 2,050 (2.5 per cent of 2,000 is 50) and about nineteen chances in twenty that the number would have been within the range 1,900 to 2,100.

21 The imprecision due to sampling variability, which is measured by the relative standard error, should not be confused with inaccuracies that may occur because of inadequacies in the source of building approval information, imperfections in reporting by respondents, and errors made in the coding and processing of data. Inaccuracies of this kind are referred to as non-sampling error, and may occur in any enumeration whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by the careful design of questionnaires, efforts to obtain responses for all selected building jobs, and efficient operating procedures.

SEASONAL ADJUSTMENT

22 Seasonally adjusted building statistics are shown in tables 2–4. In the seasonally adjusted 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 quarter) and the effect of movement in the date of Easter which may, in successive years, affect figures for different quarters. Further information about seasonal adjustment can be obtained from the Assistant Director of Time Series Analysis on Canberra 02 6252 6345.

23 Since seasonally adjusted statistics reflect both irregular and trend movements, an upward or downward movement in a seasonally adjusted series does not necessarily indicate a change of trend. Particular care should therefore be taken in interpreting individual quarter-to-quarter movements. 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.

ESTIMATES AT CONSTANT PRICES

24 Estimates of the value of commencements and work done at average 1989–90 prices are shown in tables 1 and 2. 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'.

25 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* (Cat. no. 5216.0).

26 The factors used to seasonally adjust the constant price series are identical to those used to adjust the corresponding current price series.

ACKNOWLEDGMENT

27 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

UNPUBLISHED DATA AND RELATED PUBLICATIONS

28 The ABS can also make available certain building approvals and activity 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: photocopy, computer printout, floppy disk and clerically extracted tabulation. Inquiries should be made to Information Inquiries on Perth 09 360 5140 or any ABS State office.

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

Building Activity, Australia (Cat. no. 8752.0) — issued quarterly

Building Activity, Australia: Dwelling Unit Commencements, Preliminary (Cat. no. 8750.0) — issued quarterly

Building Approvals, Australia (Cat. no. 8731.0) — issued monthly

Building Approvals, Western Australia (Cat. no. 8731.5) — issued monthly

Estimated Stocks of Dwellings, Western Australia (Cat. no. 8705.5) — issued annually

30 Current publications produced by the ABS are listed in the *Catalogue of Publications and Products* (Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

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