

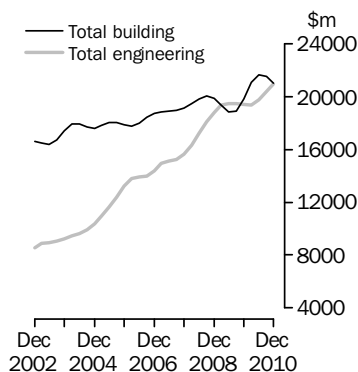
**CONSTRUCTION WORK DONE** AUSTRALIA  
PRELIMINARY

EMBARGO: 11.30AM (CANBERRA TIME) WED 23 FEB 2011

**KEY FIGURES**

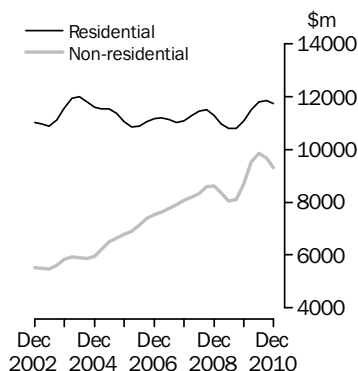
**Value of construction work done**

Chain volume measures  
Trend estimates



**Value of building work done**

Chain volume measures  
Trend estimates



**INQUIRIES**

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Rebecca Eales on Adelaide (08) 8237 7647.

	Dec qtr 10 \$m	Sep qtr 10 to Dec qtr 10 % change	Dec qtr 09 to Dec qtr 10 % change
<b>TREND ESTIMATES (a)</b>			
<b>Value of work done</b>			
Building	21 020.0	-2.4	6.2
Residential	11 743.7	-1.0	6.0
Non-residential	9 291.1	-4.0	6.6
Engineering	20 953.0	2.8	7.9
<b>Total construction</b>	<b>42 053.4</b>	<b>0.3</b>	<b>7.3</b>

**SEASONALLY ADJUSTED ESTIMATES (a)**

<b>Value of work done</b>			
Building	20 496.2	-5.1	4.0
Residential	11 591.6	-1.1	5.9
Non-residential	8 904.6	-9.9	1.5
Engineering	21 425.6	7.3	13.6
<b>Total construction</b>	<b>41 921.8</b>	<b>0.8</b>	<b>8.7</b>

(a) Chain volume measures, reference year 2008-09.

**KEY POINTS**

**VALUE OF WORK DONE, CHAIN VOLUME MEASURES**

**TOTAL CONSTRUCTION**

- The trend estimate for total construction work done rose 0.3% in the December quarter 2010.
- The seasonally adjusted estimate for total construction work done rose 0.8%, to \$41,921.8m, in the December quarter.

**BUILDING WORK DONE**

- The trend estimate for total building work done fell 2.4% in the December quarter 2010.
- The trend estimate for non-residential building work done fell 4.0% in the December quarter.
- The seasonally adjusted estimate of total building work done fell 5.1%, to \$20,496.2m, in the December quarter.

**ENGINEERING WORK DONE**

- The trend estimate for engineering work done rose 2.8% in the December quarter 2010.
- The seasonally adjusted estimate for engineering work done rose 7.3%, to \$21,425.6m, in the December quarter.

# NOTES

## FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
March 2011	25 May 2011
June 2011	24 August 2011



## ABOUT THIS ISSUE

This publication provides an early indication of trends in building and engineering construction activity. The data are estimates based on a response rate of approximately 80% of the value of both building and engineering work done during the quarter. More comprehensive and updated results will be released in *Engineering Construction Activity, Australia* (cat.no.8762.0) on 5 April 2011 and in *Building Activity, Australia* (cat. no. 8752.0) on 19 April 2011.

## CHANGES IN THIS ISSUE

There are no changes in this issue.

## DATA NOTES

The trend estimates should be interpreted with caution as the underlying behaviour of building activity may be affected by Government stimulus packages, including the "Building the Education Revolution" (BER) program and Social Housing Initiatives as well as other developments associated with global economic conditions. For more details on trend estimates, please see paragraphs 24 to 26 of the explanatory notes.

Widespread flooding in the eastern states, particularly Queensland, and other recent natural disasters have not affected the quality of statistics in this release. As these events occurred after, or very late, in the December quarter reference period, the overall level of construction activity was not noticeably affected for either national or state level estimates.

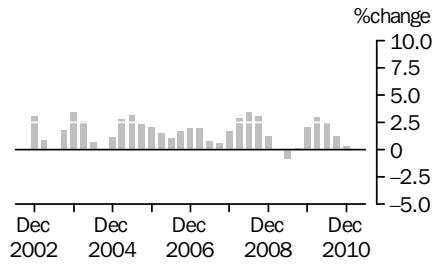
It is anticipated that the statistics presented in future releases of this publication may be affected both in the quality of estimates and through the direct impact on construction activity of the disasters and related recovery activities. Where impacts occur, these will be noted in this publication.

Trevor Sutton  
Acting Australian Statistician

# CONSTRUCTION WORK DONE CHAIN VOLUME MEASURES

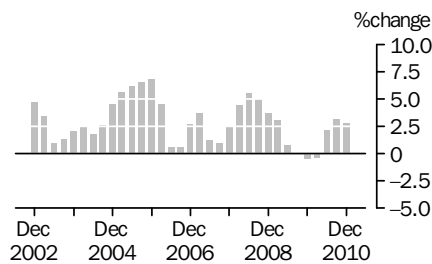
## TREND PERCENTAGE CHANGE

### TOTAL CONSTRUCTION



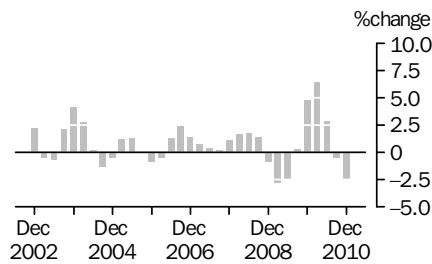
The trend estimate for total construction work done has risen 0.3% this quarter and has risen for six quarters.

### ENGINEERING



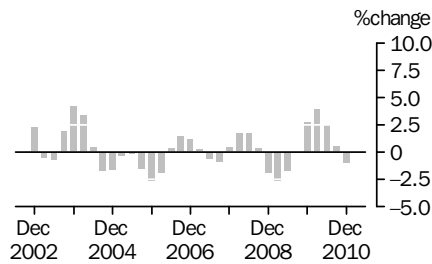
The trend estimate for engineering construction work done rose 2.8% and has risen for three quarters.

### BUILDING



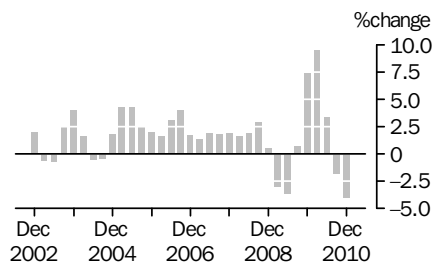
The trend estimate for total building work done fell 2.4% this quarter and has fallen for two quarters.

### RESIDENTIAL



The trend estimate for residential building work done fell 1.0% following four consecutive quarters of increases.

### NON-RESIDENTIAL

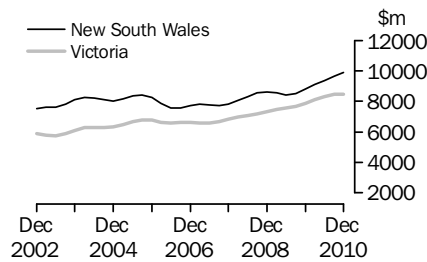


The trend estimate for non-residential building work done fell 4.0% and has now fallen for two quarters.

# CONSTRUCTION WORK DONE STATES AND TERRITORIES

## CHAIN VOLUME MEASURES—TREND ESTIMATES

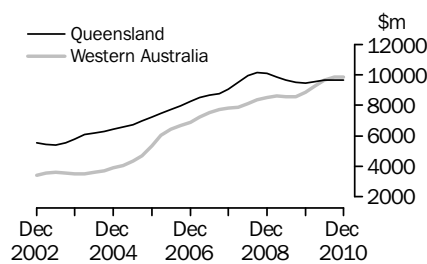
NEW SOUTH WALES  
VICTORIA



Construction work done in New South Wales has risen for the last six quarters.

Construction work done in Victoria has risen for the last 14 quarters.

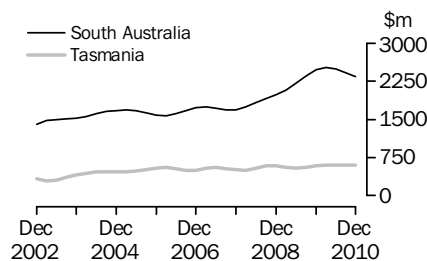
QUEENSLAND  
WESTERN AUSTRALIA



Construction work done in Queensland fell this quarter, after three consecutive rises.

Construction work done in Western Australia has increased for six quarters.

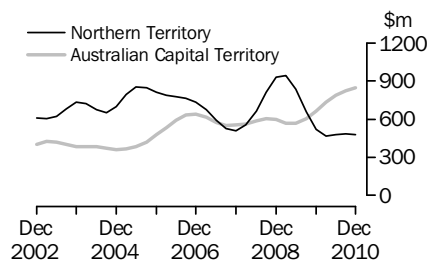
SOUTH AUSTRALIA  
TASMANIA



Construction work done in South Australia has fallen for three quarters.

In Tasmania, construction work done fell after five consecutive rises.

NORTHERN TERRITORY  
AUSTRALIAN CAPITAL  
TERRITORY



Construction work done in the Northern Territory fell after rises in the two previous quarters.

In the Australian Capital Territory, construction work done has increased for six quarters.

## LIST OF TABLES

page

### TABLES

<b>1</b>	Construction work done, chain volume measures . . . . .	6
<b>2</b>	Construction work done, chain volume measures, change from previous period . . . . .	7
<b>3</b>	Construction work done, current prices . . . . .	8
<b>4</b>	Construction work done, current prices, change from previous period . . . . .	9
<b>5</b>	Value of building work done, chain volume measures . . . . .	10
<b>6</b>	Value of building work done, chain volume measures, change from previous period . . . . .	11
<b>7</b>	Value of building work done, current prices . . . . .	12
<b>8</b>	Value of building work done, current prices, change from previous period . . . . .	13
<b>9</b>	Construction work done, states and territories, chain volume measures, original . . . . .	14
<b>10</b>	Construction work done, states and territories, chain volume measures, change from previous period, original . . . . .	15
<b>11</b>	Construction work done, states and territories, current prices, original . . . . .	16
<b>12</b>	Construction work done, states and territories, current prices, change from previous period, original . . . . .	17
<b>13</b>	Construction work done, states and territories, chain volume measures . . . . .	18
<b>14</b>	Construction work done, states and territories, chain volume measures, change from previous period . . . . .	19
<b>15</b>	Building Activity, work in the pipeline, current prices, original . . . . .	20
<b>16</b>	Number of dwellings approved but not yet commenced at end of quarter, states and territories, original . . . . .	21

CONSTRUCTION WORK DONE, Chain volume measures(a)

Period	BUILDING WORK DONE			ENGINEERING WORK DONE			CONSTRUCTION WORK DONE		
	Private	Public	Total	Private	Public	Total	Private	Public	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2007-08</b>	69 991.8	7 586.0	77 569.3	40 813.9	23 039.3	63 851.6	110 875.4	30 632.1	141 501.9
<b>2008-09</b>	69 679.0	8 534.3	78 213.3	48 316.1	27 717.8	76 033.9	117 995.1	36 252.0	154 247.2
<b>2009-10</b>	64 723.0	16 989.7	81 712.8	48 231.5	29 961.3	78 192.8	112 954.5	46 951.1	159 905.6
<b>2009</b>									
Sep Qtr	16 596.4	2 886.1	19 482.5	11 887.9	7 459.3	19 347.2	28 484.3	10 345.5	38 829.8
Dec Qtr	16 553.1	3 870.5	20 423.5	12 282.8	7 405.2	19 688.0	28 835.9	11 275.6	40 111.5
<b>2010</b>									
Mar Qtr	14 630.0	4 629.7	19 259.7	10 803.2	7 022.1	17 825.3	25 433.2	11 651.8	37 085.0
Jun Qtr	16 943.5	5 603.5	22 547.0	13 257.7	8 074.7	21 332.3	30 201.2	13 678.2	43 879.3
Sep Qtr	16 938.8	5 453.8	22 392.6	12 544.5	6 855.4	19 399.9	29 483.3	12 309.3	41 792.5
Dec Qtr	16 224.7	4 914.8	21 139.5	14 853.8	7 581.4	22 435.2	31 078.5	12 496.2	43 574.7
SEASONALLY ADJUSTED									
<b>2009</b>									
Sep Qtr	15 911.7	2 844.8	18 757.6	12 160.6	7 839.3	19 999.9	28 072.3	10 684.1	38 757.4
Dec Qtr	15 940.2	3 776.3	19 717.1	11 676.4	7 187.2	18 863.6	27 616.7	10 963.5	38 580.7
<b>2010</b>									
Mar Qtr	16 044.3	4 917.5	20 961.6	11 859.5	7 548.9	19 408.4	27 903.8	12 466.4	40 369.9
Jun Qtr	16 826.8	5 451.1	22 276.6	12 535.0	7 386.0	19 921.0	29 361.8	12 837.1	42 197.5
Sep Qtr	16 261.4	5 332.3	21 608.4	12 786.4	7 174.8	19 961.1	29 047.8	12 507.0	41 569.5
Dec Qtr	15 663.6	4 819.5	20 496.2	14 087.7	7 337.9	21 425.6	29 751.4	12 157.4	41 921.8
TREND									
<b>2009</b>									
Sep Qtr	15 931.9	2 970.1	18 903.6	12 055.2	7 443.7	19 498.5	27 983.5	10 414.6	38 399.3
Dec Qtr	15 946.0	3 848.1	19 793.6	11 908.1	7 502.9	19 410.8	27 853.4	11 351.1	39 203.8
<b>2010</b>									
Mar Qtr	16 256.6	4 796.4	21 052.7	11 904.7	7 429.0	19 333.8	28 162.0	12 225.3	40 387.0
Jun Qtr	16 403.6	5 248.4	21 652.7	12 398.9	7 343.4	19 745.7	28 799.9	12 592.5	41 393.6
Sep Qtr	16 259.9	5 270.4	21 538.8	13 075.2	7 306.3	20 383.7	29 333.2	12 576.7	41 918.5
Dec Qtr	15 937.6	5 069.9	21 020.0	13 754.1	7 246.8	20 953.0	29 735.4	12 310.9	42 053.4

(a) Reference year for chain volume measures is 2008-09. Refer to paragraphs 27-31 of the Explanatory Notes.

## CONSTRUCTION WORK DONE, Chain volume measures(a)—Change from previous period

Period	BUILDING WORK DONE			ENGINEERING WORK DONE			CONSTRUCTION WORK DONE		
	Private	Public	Total	Private	Public	Total	Private	Public	Total
	%	%	%	%	%	%	%	%	%
ORIGINAL									
<b>2007-08</b>	4.7	-0.6	4.1	8.1	12.6	9.7	5.9	9.0	6.6
<b>2008-09</b>	-0.4	12.5	0.8	18.4	20.3	19.1	6.4	18.3	9.0
<b>2009-10</b>	-7.1	99.1	4.5	-0.2	8.1	2.8	-4.3	29.5	3.7
<b>2009</b>									
Sep Qtr	1.2	18.0	3.4	-10.3	-3.7	-7.9	-3.9	1.5	-2.5
Dec Qtr	-0.3	34.1	4.8	3.3	-0.7	1.8	1.2	9.0	3.3
<b>2010</b>									
Mar Qtr	-11.6	19.6	-5.7	-12.0	-5.2	-9.5	-11.8	3.3	-7.5
Jun Qtr	15.8	21.0	17.1	22.7	15.0	19.7	18.7	17.4	18.3
Sep Qtr	—	-2.7	-0.7	-5.4	-15.1	-9.1	-2.4	-10.0	-4.8
Dec Qtr	-4.2	-9.9	-5.6	18.4	10.6	15.6	5.4	1.5	4.3
SEASONALLY ADJUSTED									
<b>2009</b>									
Sep Qtr	-2.3	19.5	0.5	-3.1	10.5	1.8	-2.6	12.7	1.2
Dec Qtr	0.2	32.7	5.1	-4.0	-8.3	-5.7	-1.6	2.6	-0.5
<b>2010</b>									
Mar Qtr	0.7	30.2	6.3	1.6	5.0	2.9	1.0	13.7	4.6
Jun Qtr	4.9	10.8	6.3	5.7	-2.2	2.6	5.2	3.0	4.5
Sep Qtr	-3.4	-2.2	-3.0	2.0	-2.9	0.2	-1.1	-2.6	-1.5
Dec Qtr	-3.7	-9.6	-5.1	10.2	2.3	7.3	2.4	-2.8	0.8
TREND									
<b>2009</b>									
Sep Qtr	-2.9	21.5	0.3	-1.3	2.3	0.1	-2.2	7.1	0.2
Dec Qtr	0.1	29.6	4.7	-1.2	0.8	-0.4	-0.5	9.0	2.1
<b>2010</b>									
Mar Qtr	1.9	24.6	6.4	—	-1.0	-0.4	1.1	7.7	3.0
Jun Qtr	0.9	9.4	2.9	4.2	-1.2	2.1	2.3	3.0	2.5
Sep Qtr	-0.9	0.4	-0.5	5.5	-0.5	3.2	1.9	-0.1	1.3
Dec Qtr	-2.0	-3.8	-2.4	5.2	-0.8	2.8	1.4	-2.1	0.3

— nil or rounded to zero (including null cells)

(a) Reference year for chain volume measures is 2008-09. Refer to paragraphs 27-31 of the Explanatory Notes.

## CONSTRUCTION WORK DONE, Current prices

Period	BUILDING WORK DONE			ENGINEERING WORK DONE			CONSTRUCTION WORK DONE		
	Private	Public	Total	Private	Public	Total	Private	Public	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2007-08</b>	67 836.5	7 423.6	75 260.1	38 956.6	22 143.2	61 099.8	106 793.0	29 566.8	136 359.9
<b>2008-09</b>	69 679.0	8 534.3	78 213.3	48 316.2	27 717.8	76 033.9	117 995.2	36 252.0	154 247.2
<b>2009-10</b>	64 531.5	16 446.1	80 977.6	47 111.9	29 619.3	76 731.2	111 643.5	46 065.4	157 708.8
<b>2009</b>									
Sep Qtr	16 418.0	2 777.4	19 195.4	11 710.1	7 329.8	19 039.9	28 128.1	10 107.2	38 235.2
Dec Qtr	16 459.1	3 733.9	20 193.0	11 991.4	7 299.9	19 291.2	28 450.5	11 033.8	39 484.2
<b>2010</b>									
Mar Qtr	14 629.4	4 495.1	19 124.5	10 503.8	6 943.9	17 447.7	25 133.2	11 439.0	36 572.2
Jun Qtr	17 025.0	5 439.8	22 464.8	12 906.7	8 045.7	20 952.4	29 931.7	13 485.5	43 417.2
Sep Qtr	17 204.9	5 329.7	22 534.6	12 345.9	6 883.1	19 229.0	29 550.8	12 212.8	41 763.7
Dec Qtr	16 613.5	4 830.8	21 444.3	14 633.0	7 645.3	22 278.3	31 246.5	12 476.1	43 722.6
SEASONALLY ADJUSTED									
<b>2009</b>									
Sep Qtr	15 731.2	2 741.2	18 472.4	11 964.4	7 712.0	19 676.5	27 695.6	10 453.3	38 148.9
Dec Qtr	15 845.1	3 651.7	19 496.8	11 396.5	7 098.5	18 495.0	27 241.6	10 750.2	37 991.8
<b>2010</b>									
Mar Qtr	16 050.1	4 790.2	20 840.3	11 535.1	7 481.2	19 016.3	27 585.2	12 271.5	39 856.6
Jun Qtr	16 925.9	5 309.1	22 235.0	12 211.8	7 381.8	19 593.6	29 137.6	12 690.9	41 828.5
Sep Qtr	16 477.8	5 225.9	21 703.7	12 592.5	7 218.1	19 810.7	29 070.3	12 444.0	41 514.4
Dec Qtr	15 995.7	4 749.8	20 745.5	13 888.3	7 418.4	21 306.7	29 884.0	12 168.2	42 052.2
TREND									
<b>2009</b>									
Sep Qtr	15 731.0	2 869.3	18 600.3	11 806.2	7 328.8	19 135.0	27 537.2	10 198.1	37 735.3
Dec Qtr	15 839.9	3 723.8	19 563.8	11 620.5	7 400.2	19 020.7	27 460.4	11 124.0	38 584.5
<b>2010</b>									
Mar Qtr	16 258.4	4 661.2	20 919.6	11 597.3	7 370.2	18 967.5	27 855.7	12 031.3	39 887.1
Jun Qtr	16 509.6	5 124.1	21 633.7	12 107.6	7 334.5	19 442.1	28 617.2	12 458.6	41 075.8
Sep Qtr	16 475.6	5 164.1	21 639.7	12 835.6	7 345.2	20 180.9	29 311.2	12 509.3	41 820.5
Dec Qtr	16 260.1	4 992.4	21 252.5	13 613.1	7 333.8	20 946.9	29 873.2	12 326.2	42 199.4



## CONSTRUCTION WORK DONE, Current prices—Change from previous period

Period	BUILDING WORK DONE			ENGINEERING WORK DONE			CONSTRUCTION WORK DONE		
	Private	Public	Total	Private	Public	Total	Private	Public	Total
	%	%	%	%	%	%	%	%	%
ORIGINAL									
<b>2007-08</b>	10.7	5.8	10.2	14.9	18.2	16.1	12.2	14.8	12.8
<b>2008-09</b>	2.7	15.0	3.9	24.0	25.2	24.4	10.5	22.6	13.1
<b>2009-10</b>	-7.4	92.7	3.5	-2.5	6.9	0.9	-5.4	27.1	2.2
<b>2009</b>									
Sep Qtr	1.8	17.0	3.7	-10.0	-3.9	-7.8	-3.5	1.1	-2.3
Dec Qtr	0.3	34.4	5.2	2.4	-0.4	1.3	1.1	9.2	3.3
<b>2010</b>									
Mar Qtr	-11.1	20.4	-5.3	-12.4	-4.9	-9.6	-11.7	3.7	-7.4
Jun Qtr	16.4	21.0	17.5	22.9	15.9	20.1	19.1	17.9	18.7
Sep Qtr	1.1	-2.0	0.3	-4.3	-14.4	-8.2	-1.3	-9.4	-3.8
Dec Qtr	-3.4	-9.4	-4.8	18.5	11.1	15.9	5.7	2.2	4.7
SEASONALLY ADJUSTED									
<b>2009</b>									
Sep Qtr	-1.8	18.4	0.7	-2.7	10.3	2.0	-2.2	12.3	1.4
Dec Qtr	0.7	33.2	5.5	-4.7	-8.0	-6.0	-1.6	2.8	-0.4
<b>2010</b>									
Mar Qtr	1.3	31.2	6.9	1.2	5.4	2.8	1.3	14.2	4.9
Jun Qtr	5.5	10.8	6.7	5.9	-1.3	3.0	5.6	3.4	4.9
Sep Qtr	-2.6	-1.6	-2.4	3.1	-2.2	1.1	-0.2	-1.9	-0.8
Dec Qtr	-2.9	-9.1	-4.4	10.3	2.8	7.6	2.8	-2.2	1.3
TREND									
<b>2009</b>									
Sep Qtr	-2.9	20.5	0.1	-1.9	1.9	-0.5	-2.5	6.5	-0.2
Dec Qtr	0.7	29.8	5.2	-1.6	1.0	-0.6	-0.3	9.1	2.3
<b>2010</b>									
Mar Qtr	2.6	25.2	6.9	-0.2	-0.4	-0.3	1.4	8.2	3.4
Jun Qtr	1.5	9.9	3.4	4.4	-0.5	2.5	2.7	3.6	3.0
Sep Qtr	-0.2	0.8	—	6.0	0.1	3.8	2.4	0.4	1.8
Dec Qtr	-1.3	-3.3	-1.8	6.1	-0.2	3.8	1.9	-1.5	0.9

— nil or rounded to zero (including null cells)

## VALUE OF BUILDING WORK DONE, Chain volume measures(a)

	NEW RESIDENTIAL BUILDING		ALTERATIONS AND ADDITIONS		RESIDENTIAL BUILDING		NON-RESIDENTIAL BUILDING		TOTAL BUILDING	
	<i>Private</i>	<i>Total</i>	<i>Private</i>	<i>Total</i>	<i>Private</i>	<i>Total</i>	<i>Private</i>	<i>Total</i>	<i>Private</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL										
<b>2007-08</b>	36 900.4	37 741.7	6 909.8	7 061.0	43 808.8	44 801.4	26 183.8	32 776.1	69 991.8	77 569.3
<b>2008-09</b>	36 901.3	37 681.8	6 646.8	6 792.3	43 548.1	44 474.1	26 131.0	33 739.1	69 679.0	78 213.3
<b>2009-10</b>	36 730.7	38 828.9	6 529.9	6 667.8	43 260.6	45 496.7	21 462.4	36 216.1	64 723.0	81 712.8
<b>2009</b>										
Sep Qtr	9 536.3	9 826.8	1 616.5	1 654.9	11 152.7	11 481.7	5 443.7	8 000.8	16 596.4	19 482.5
Dec Qtr	9 170.3	9 530.5	1 775.4	1 799.4	10 945.7	11 329.9	5 607.4	9 093.7	16 553.1	20 423.5
<b>2010</b>										
Mar Qtr	8 276.7	8 818.3	1 485.4	1 513.4	9 762.0	10 331.7	4 868.0	8 928.0	14 630.0	19 259.7
Jun Qtr	9 747.4	10 653.3	1 652.7	1 700.2	11 400.1	12 353.5	5 543.4	10 193.5	16 943.5	22 547.0
Sep Qtr	9 608.4	10 501.5	1 761.2	1 780.9	11 369.6	12 282.4	5 569.2	10 110.2	16 938.8	22 392.6
Dec Qtr	9 233.2	10 029.9	1 904.3	1 934.0	11 137.5	11 963.9	5 087.2	9 175.6	16 224.7	21 139.5
SEASONALLY ADJUSTED										
<b>2009</b>										
Sep Qtr	9 101.3	9 373.9	1 560.0	1 601.7	10 661.2	10 975.5	5 250.5	7 782.0	15 911.7	18 757.6
Dec Qtr	8 953.1	9 299.2	1 618.8	1 643.8	10 571.8	10 942.9	5 368.4	8 774.1	15 940.2	19 717.1
<b>2010</b>										
Mar Qtr	9 000.1	9 608.6	1 663.7	1 698.2	10 663.8	11 306.8	5 380.5	9 654.8	16 044.3	20 961.6
Jun Qtr	9 676.3	10 547.3	1 687.5	1 724.2	11 363.7	12 271.5	5 463.1	10 005.1	16 826.8	22 276.6
Sep Qtr	9 168.3	9 996.7	1 703.4	1 724.9	10 871.7	11 721.6	5 389.7	9 886.8	16 261.4	21 608.4
Dec Qtr	9 030.7	9 823.2	1 737.7	1 768.4	10 768.4	11 591.6	4 895.2	8 904.6	15 663.6	20 496.2
TREND										
<b>2009</b>										
Sep Qtr	8 932.3	9 193.2	1 560.9	1 594.6	10 493.3	10 787.9	5 439.0	8 115.6	15 931.9	18 903.6
Dec Qtr	9 034.7	9 440.0	1 603.7	1 637.3	10 638.4	11 077.3	5 307.7	8 716.4	15 946.0	19 793.6
<b>2010</b>										
Mar Qtr	9 204.7	9 818.9	1 658.3	1 690.7	10 863.0	11 509.6	5 393.5	9 543.1	16 256.6	21 052.7
Jun Qtr	9 307.0	10 078.2	1 686.6	1 717.6	10 993.4	11 795.5	5 410.2	9 858.9	16 403.6	21 652.7
Sep Qtr	9 278.1	10 117.6	1 710.0	1 739.2	10 987.9	11 856.7	5 272.0	9 682.2	16 259.9	21 538.8
Dec Qtr	9 140.6	9 985.2	1 730.5	1 757.2	10 872.6	11 743.7	5 065.1	9 291.1	15 937.6	21 020.0

(a) Reference year for chain volume measures is 2008-09. Refer to paragraphs 27-31 of the Explanatory Notes.

VALUE OF BUILDING WORK DONE, Chain volume measures(a)—Change from previous period

Period	NEW RESIDENTIAL BUILDING		ALTERATIONS AND ADDITIONS		RESIDENTIAL BUILDING		NON-RESIDENTIAL BUILDING		TOTAL BUILDING	
	Private	Total	Private	Total	Private	Total	Private	Total	Private	Total
	%	%	%	%	%	%	%	%	%	%
ORIGINAL										
<b>2007-08</b>	0.1	0.4	3.3	2.2	0.6	0.7	12.2	9.2	4.7	4.1
<b>2008-09</b>	—	-0.2	-3.8	-3.8	-0.6	-0.7	-0.2	2.9	-0.4	0.8
<b>2009-10</b>	-0.5	3.0	-1.8	-1.8	-0.7	2.3	-17.9	7.3	-7.1	4.5
<b>2009</b>										
Sep Qtr	6.4	7.1	9.3	8.8	6.8	7.3	-8.5	-1.7	1.2	3.4
Dec Qtr	-3.8	-3.0	9.8	8.7	-1.9	-1.3	3.0	13.7	-0.3	4.8
<b>2010</b>										
Mar Qtr	-9.7	-7.5	-16.3	-15.9	-10.8	-8.8	-13.2	-1.8	-11.6	-5.7
Jun Qtr	17.8	20.8	11.3	12.3	16.8	19.6	13.9	14.2	15.8	17.1
Sep Qtr	-1.4	-1.4	6.6	4.8	-0.3	-0.6	0.5	-0.8	—	-0.7
Dec Qtr	-3.9	-4.5	8.1	8.6	-2.0	-2.6	-8.7	-9.2	-4.2	-5.6
SEASONALLY ADJUSTED										
<b>2009</b>										
Sep Qtr	2.2	2.9	3.3	3.8	2.4	3.0	-10.7	-2.9	-2.3	0.5
Dec Qtr	-1.6	-0.8	3.8	2.6	-0.8	-0.3	2.2	12.7	0.2	5.1
<b>2010</b>										
Mar Qtr	0.5	3.3	2.8	3.3	0.9	3.3	0.2	10.0	0.7	6.3
Jun Qtr	7.5	9.8	1.4	1.5	6.6	8.5	1.5	3.6	4.9	6.3
Sep Qtr	-5.2	-5.2	0.9	—	-4.3	-4.5	-1.3	-1.2	-3.4	-3.0
Dec Qtr	-1.5	-1.7	2.0	2.5	-1.0	-1.1	-9.2	-9.9	-3.7	-5.1
TREND										
<b>2009</b>										
Sep Qtr	-0.5	—	-0.5	-0.5	-0.5	—	-7.2	0.7	-2.9	0.3
Dec Qtr	1.1	2.7	2.7	2.7	1.4	2.7	-2.4	7.4	0.1	4.7
<b>2010</b>										
Mar Qtr	1.9	4.0	3.4	3.3	2.1	3.9	1.6	9.5	1.9	6.4
Jun Qtr	1.1	2.6	1.7	1.6	1.2	2.5	0.3	3.3	0.9	2.9
Sep Qtr	-0.3	0.4	1.4	1.3	—	0.5	-2.6	-1.8	-0.9	-0.5
Dec Qtr	-1.5	-1.3	1.2	1.0	-1.0	-1.0	-3.9	-4.0	-2.0	-2.4

— nil or rounded to zero (including null cells)

(a) Reference year for chain volume measures is 2008-09. Refer to paragraphs 27-31 of the Explanatory Notes.

VALUE OF BUILDING WORK DONE, Current prices

Period	NEW RESIDENTIAL BUILDING		ALTERATIONS AND ADDITIONS		RESIDENTIAL BUILDING		NON-RESIDENTIAL BUILDING		TOTAL BUILDING	
	Private	Total	Private	Total	Private	Total	Private	Total	Private	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL										
<b>2007-08</b>	35 652.5	36 463.7	6 633.9	6 780.2	42 286.4	43 243.9	25 550.1	32 016.1	67 836.5	75 260.1
<b>2008-09</b>	36 901.3	37 681.8	6 646.8	6 792.3	43 548.1	44 474.2	26 131.0	33 739.1	69 679.0	78 213.3
<b>2009-10</b>	37 119.2	39 197.4	6 734.9	6 877.9	43 854.2	46 075.4	20 677.3	34 902.3	64 531.5	80 977.6
<b>2009</b>										
Sep Qtr	9 539.4	9 827.7	1 647.0	1 686.2	11 186.5	11 514.0	5 231.5	7 681.4	16 418.0	19 195.4
Dec Qtr	9 244.1	9 601.4	1 825.1	1 849.9	11 069.3	11 451.3	5 389.8	8 741.6	16 459.1	20 193.0
<b>2010</b>										
Mar Qtr	8 392.7	8 930.8	1 538.0	1 567.2	9 930.7	10 498.0	4 698.7	8 626.5	14 629.4	19 124.5
Jun Qtr	9 942.9	10 837.5	1 724.7	1 774.5	11 667.7	12 612.1	5 357.3	9 852.7	17 025.0	22 464.8
Sep Qtr	9 908.2	10 790.5	1 851.1	1 872.0	11 759.3	12 662.5	5 445.7	9 872.1	17 204.9	22 534.6
Dec Qtr	9 586.6	10 376.9	2 011.5	2 043.1	11 598.1	12 420.0	5 015.4	9 024.3	16 613.5	21 444.3
SEASONALLY ADJUSTED										
<b>2009</b>										
Sep Qtr	9 098.3	9 371.8	1 590.0	1 632.5	10 688.3	11 004.3	5 042.9	7 468.1	15 731.2	18 472.4
Dec Qtr	9 018.3	9 365.3	1 666.2	1 691.8	10 684.5	11 057.2	5 160.6	8 439.6	15 845.1	19 496.8
<b>2010</b>										
Mar Qtr	9 127.9	9 737.4	1 725.9	1 761.6	10 853.7	11 498.9	5 196.3	9 341.4	16 050.1	20 840.3
Jun Qtr	9 877.0	10 743.8	1 764.9	1 803.1	11 641.9	12 547.0	5 284.0	9 688.0	16 925.9	22 235.0
Sep Qtr	9 441.5	10 260.8	1 788.8	1 811.6	11 230.3	12 072.4	5 247.5	9 631.3	16 477.8	21 703.7
Dec Qtr	9 356.4	10 142.1	1 834.0	1 866.7	11 190.4	12 008.8	4 805.3	8 736.7	15 995.7	20 745.5
TREND										
<b>2009</b>										
Sep Qtr	8 920.2	9 181.6	1 588.3	1 622.6	10 508.5	10 804.3	5 222.5	7 796.0	15 731.0	18 600.3
Dec Qtr	9 091.8	9 498.4	1 650.3	1 684.8	10 742.1	11 183.2	5 097.8	8 380.5	15 839.9	19 563.8
<b>2010</b>										
Mar Qtr	9 336.4	9 950.0	1 721.4	1 754.8	11 057.7	11 704.9	5 200.6	9 214.7	16 258.4	20 919.6
Jun Qtr	9 507.2	10 275.4	1 761.8	1 794.1	11 269.1	12 069.5	5 240.6	9 564.2	16 509.6	21 633.7
Sep Qtr	9 545.1	10 378.2	1 796.3	1 827.2	11 341.4	12 205.3	5 134.1	9 434.3	16 475.6	21 639.7
Dec Qtr	9 469.6	10 302.3	1 828.0	1 856.6	11 297.6	12 158.8	4 962.4	9 093.7	16 260.1	21 252.5

VALUE OF BUILDING WORK DONE, Current Prices—Change from previous period

Period	NEW RESIDENTIAL BUILDING		ALTERATIONS AND ADDITIONS		RESIDENTIAL BUILDING		NON-RESIDENTIAL BUILDING		TOTAL BUILDING	
	Private	Total	Private	Total	Private	Total	Private	Total	Private	Total
	%	%	%	%	%	%	%	%	%	%
ORIGINAL										
<b>2007-08</b>	5.4	5.7	8.0	6.9	5.8	5.9	19.9	16.6	10.7	10.2
<b>2008-09</b>	3.5	3.3	0.2	0.2	3.0	2.8	2.3	5.4	2.7	3.9
<b>2009-10</b>	0.6	4.0	1.3	1.3	0.7	3.6	-20.9	3.4	-7.4	3.5
<b>2009</b>										
Sep Qtr	7.2	7.8	10.8	10.3	7.7	8.2	-9.0	-2.3	1.8	3.7
Dec Qtr	-3.1	-2.3	10.8	9.7	-1.0	-0.5	3.0	13.8	0.3	5.2
<b>2010</b>										
Mar Qtr	-9.2	-7.0	-15.7	-15.3	-10.3	-8.3	-12.8	-1.3	-11.1	-5.3
Jun Qtr	18.5	21.4	12.1	13.2	17.5	20.1	14.0	14.2	16.4	17.5
Sep Qtr	-0.3	-0.4	7.3	5.5	0.8	0.4	1.6	0.2	1.1	0.3
Dec Qtr	-3.2	-3.8	8.7	9.1	-1.4	-1.9	-7.9	-8.6	-3.4	-4.8
SEASONALLY ADJUSTED										
<b>2009</b>										
Sep Qtr	3.0	3.6	4.7	5.3	3.3	3.9	-11.1	-3.6	-1.8	0.7
Dec Qtr	-0.9	-0.1	4.8	3.6	—	0.5	2.3	13.0	0.7	5.5
<b>2010</b>										
Mar Qtr	1.2	4.0	3.6	4.1	1.6	4.0	0.7	10.7	1.3	6.9
Jun Qtr	8.2	10.3	2.3	2.4	7.3	9.1	1.7	3.7	5.5	6.7
Sep Qtr	-4.4	-4.5	1.4	0.5	-3.5	-3.8	-0.7	-0.6	-2.6	-2.4
Dec Qtr	-0.9	-1.2	2.5	3.0	-0.4	-0.5	-8.4	-9.3	-2.9	-4.4
TREND										
<b>2009</b>										
Sep Qtr	-0.2	0.4	0.5	0.5	-0.1	0.4	-8.1	-0.3	-2.9	0.1
Dec Qtr	1.9	3.4	3.9	3.8	2.2	3.5	-2.4	7.5	0.7	5.2
<b>2010</b>										
Mar Qtr	2.7	4.8	4.3	4.2	2.9	4.7	2.0	10.0	2.6	6.9
Jun Qtr	1.8	3.3	2.4	2.2	1.9	3.1	0.8	3.8	1.5	3.4
Sep Qtr	0.4	1.0	2.0	1.8	0.6	1.1	-2.0	-1.4	-0.2	—
Dec Qtr	-0.8	-0.7	1.8	1.6	-0.4	-0.4	-3.3	-3.6	-1.3	-1.8

— nil or rounded to zero (including null cells)

## CONSTRUCTION WORK DONE, States and territories—Chain volume measures(a): Original

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
BUILDING WORK DONE									
<b>2007-08</b>	19 153.3	19 990.0	19 290.6	4 240.6	10 959.0	1 181.9	924.2	1 878.4	<b>77 569.3</b>
<b>2008-09</b>	17 885.7	21 273.5	18 733.5	4 568.1	11 607.8	1 264.5	884.9	1 995.3	<b>78 213.3</b>
<b>2009-10</b>	19 578.4	22 348.9	18 236.3	5 121.8	11 748.0	1 384.4	925.9	2 369.0	<b>81 712.8</b>
<b>2009</b>									
Sep Qtr	4 336.7	5 494.4	4 579.4	1 202.6	2 764.6	318.4	244.5	541.8	<b>19 482.5</b>
Dec Qtr	4 778.4	5 588.2	4 720.6	1 300.5	2 862.0	339.8	234.7	599.3	<b>20 423.5</b>
<b>2010</b>									
Mar Qtr	4 848.5	5 138.6	4 107.9	1 227.1	2 855.4	346.8	195.9	539.5	<b>19 259.7</b>
Jun Qtr	5 614.8	6 127.7	4 828.4	1 391.6	3 266.0	379.5	250.7	688.4	<b>22 547.0</b>
Sep Qtr	5 311.4	6 114.3	4 944.9	1 386.9	3 264.8	385.8	260.3	724.2	<b>22 392.6</b>
Dec Qtr	5 050.7	5 978.4	4 498.1	1 292.2	3 050.0	380.5	216.0	673.6	<b>21 139.5</b>
ENGINEERING WORK DONE									
<b>2007-08</b>	12 745.0	7 614.2	17 705.4	2 730.7	20 467.3	867.3	1 343.4	381.9	<b>63 851.6</b>
<b>2008-09</b>	16 315.8	8 346.0	21 068.9	3 618.0	22 664.2	1 000.1	2 657.2	363.8	<b>76 033.9</b>
<b>2009-10</b>	16 380.8	9 641.6	19 977.8	4 746.2	24 868.4	974.7	1 190.6	412.8	<b>78 192.8</b>
<b>2009</b>									
Sep Qtr	4 058.4	2 325.3	5 336.8	1 042.1	5 866.8	223.3	414.4	80.1	<b>19 347.2</b>
Dec Qtr	4 020.3	2 480.3	5 086.6	1 272.3	6 169.2	260.5	305.3	93.3	<b>19 688.0</b>
<b>2010</b>									
Mar Qtr	3 889.3	2 151.0	4 549.9	1 130.7	5 601.0	239.8	154.7	108.9	<b>17 825.3</b>
Jun Qtr	4 412.7	2 685.1	5 004.4	1 301.1	7 231.4	251.1	316.2	130.4	<b>21 332.3</b>
Sep Qtr	3 814.3	2 588.6	5 198.5	921.7	6 268.2	203.4	240.7	164.4	<b>19 399.9</b>
Dec Qtr	5 263.4	2 693.8	5 352.8	1 121.0	7 359.2	221.9	240.9	182.3	<b>22 435.2</b>
CONSTRUCTION WORK DONE									
<b>2007-08</b>	31 856.8	27 610.8	37 036.9	6 969.3	31 427.6	2 048.7	2 259.2	2 260.8	<b>141 501.9</b>
<b>2008-09</b>	34 201.5	29 619.5	39 802.4	8 186.1	34 272.0	2 264.6	3 542.1	2 359.1	<b>154 247.2</b>
<b>2009-10</b>	35 959.2	31 990.5	38 214.1	9 867.9	36 616.4	2 359.1	2 116.5	2 781.8	<b>159 905.6</b>
<b>2009</b>									
Sep Qtr	8 395.1	7 819.7	9 916.2	2 244.7	8 631.5	541.7	658.9	622.0	<b>38 829.8</b>
Dec Qtr	8 798.7	8 068.5	9 807.2	2 572.8	9 031.2	600.3	540.1	692.7	<b>40 111.5</b>
<b>2010</b>									
Mar Qtr	8 737.9	7 289.6	8 657.8	2 357.8	8 456.4	586.5	350.7	648.4	<b>37 085.0</b>
Jun Qtr	10 027.5	8 812.8	9 832.9	2 692.6	10 497.4	630.6	566.9	818.8	<b>43 879.3</b>
Sep Qtr	9 125.7	8 703.0	10 143.4	2 308.6	9 533.0	589.2	501.0	888.6	<b>41 792.5</b>
Dec Qtr	10 314.1	8 672.2	9 850.9	2 413.2	10 409.2	602.4	457.0	855.9	<b>43 574.7</b>

(a) Reference year for chain volume measures is 2008-09. Refer to paragraphs 27-31 of the Explanatory Notes.

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Period	%	%	%	%	%	%	%	%	%
.....									
<b>BUILDING WORK DONE</b>									
<b>2007-08</b>	0.8	8.4	1.3	4.9	10.2	7.6	5.6	-10.3	<b>4.1</b>
<b>2008-09</b>	-6.6	6.4	-2.9	7.7	5.9	7.0	-4.3	6.2	<b>0.8</b>
<b>2009-10</b>	9.5	5.1	-2.7	12.1	1.2	9.5	4.6	18.7	<b>4.5</b>
<b>2009</b>									
Sep Qtr	1.6	—	11.5	6.1	-2.1	6.1	16.7	10.0	<b>3.4</b>
Dec Qtr	10.2	1.7	3.1	8.1	3.5	6.7	-4.0	10.6	<b>4.8</b>
<b>2010</b>									
Mar Qtr	1.5	-8.0	-13.0	-5.6	-0.2	2.1	-16.5	-10.0	<b>-5.7</b>
Jun Qtr	15.8	19.2	17.5	13.4	14.4	9.4	27.9	27.6	<b>17.1</b>
Sep Qtr	-5.4	-0.2	2.4	-0.3	—	1.7	3.9	5.2	<b>-0.7</b>
Dec Qtr	-4.9	-2.2	-9.0	-6.8	-6.6	-1.4	-17.0	-7.0	<b>-5.6</b>
.....									
<b>ENGINEERING WORK DONE</b>									
<b>2007-08</b>	7.9	-3.9	22.3	-3.9	14.2	-10.9	-29.4	20.3	<b>9.7</b>
<b>2008-09</b>	28.0	9.6	19.0	32.5	10.7	15.3	97.8	-4.8	<b>19.1</b>
<b>2009-10</b>	0.4	15.5	-5.2	31.2	9.7	-2.5	-55.2	13.5	<b>2.8</b>
<b>2009</b>									
Sep Qtr	-11.9	-5.0	-3.4	-14.8	-4.9	-17.1	-37.1	-14.7	<b>-7.9</b>
Dec Qtr	-0.9	6.7	-4.7	22.1	5.2	16.7	-26.3	16.5	<b>1.8</b>
<b>2010</b>									
Mar Qtr	-3.3	-13.3	-10.6	-11.1	-9.2	-8.0	-49.3	16.7	<b>-9.5</b>
Jun Qtr	13.5	24.8	10.0	15.1	29.1	4.7	104.4	19.7	<b>19.7</b>
Sep Qtr	-13.6	-3.6	3.9	-29.2	-13.3	-19.0	-23.9	26.1	<b>-9.1</b>
Dec Qtr	38.0	4.1	3.0	21.6	17.4	9.1	0.1	10.9	<b>15.6</b>
.....									
<b>CONSTRUCTION WORK DONE</b>									
<b>2007-08</b>	3.5	4.7	10.3	1.3	12.8	-1.1	-18.7	-6.3	<b>6.6</b>
<b>2008-09</b>	7.4	7.3	7.5	17.5	9.1	10.5	56.8	4.3	<b>9.0</b>
<b>2009-10</b>	5.1	8.0	-4.0	20.5	6.8	4.2	-40.2	17.9	<b>3.7</b>
<b>2009</b>									
Sep Qtr	-5.5	-1.5	3.0	-4.7	-4.0	-4.9	-24.1	6.1	<b>-2.5</b>
Dec Qtr	4.8	3.2	-1.1	14.6	4.6	10.8	-18.0	11.4	<b>3.3</b>
<b>2010</b>									
Mar Qtr	-0.7	-9.7	-11.7	-8.4	-6.4	-2.3	-35.1	-6.4	<b>-7.5</b>
Jun Qtr	14.8	20.9	13.6	14.2	24.1	7.5	61.7	26.3	<b>18.3</b>
Sep Qtr	-9.0	-1.2	3.2	-14.3	-9.2	-6.6	-11.6	8.5	<b>-4.8</b>
Dec Qtr	13.0	-0.4	-2.9	4.5	9.2	2.2	-8.8	-3.7	<b>4.3</b>

— nil or rounded to zero (including null cells)

(a) Reference year for chain volume measures is 2008-09. Refer to paragraphs 27-31 of the Explanatory Notes.

<i>Period</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>BUILDING WORK DONE</b>									
<b>2007-08</b>	18 238.2	20 020.4	18 691.9	4 017.0	10 514.4	1 124.4	859.7	1 794.1	<b>75 260.1</b>
<b>2008-09</b>	17 885.7	21 273.5	18 733.5	4 568.1	11 607.8	1 264.5	884.9	1 995.3	<b>78 213.3</b>
<b>2009-10</b>	19 590.9	22 354.3	17 527.5	5 154.3	11 538.8	1 458.9	961.5	2 391.5	<b>80 977.6</b>
<b>2009</b>									
Sep Qtr	4 308.1	5 431.4	4 399.7	1 204.1	2 726.8	329.9	251.5	543.9	<b>19 195.4</b>
Dec Qtr	4 766.9	5 561.4	4 547.1	1 302.0	2 814.4	354.9	242.6	603.6	<b>20 193.0</b>
<b>2010</b>									
Mar Qtr	4 868.5	5 153.1	3 943.1	1 235.3	2 807.8	368.6	204.0	544.2	<b>19 124.5</b>
Jun Qtr	5 647.3	6 208.5	4 637.5	1 412.9	3 189.8	405.5	263.4	699.9	<b>22 464.8</b>
Sep Qtr	5 371.4	6 375.4	4 723.0	1 417.6	3 210.3	418.2	275.6	743.3	<b>22 534.6</b>
Dec Qtr	5 160.7	6 307.9	4 310.9	1 329.2	2 994.4	415.5	230.8	694.9	<b>21 444.3</b>
<b>ENGINEERING WORK DONE</b>									
<b>2007-08</b>	12 341.7	7 324.2	16 786.6	2 601.5	19 559.2	837.2	1 279.6	369.8	<b>61 099.8</b>
<b>2008-09</b>	16 315.8	8 346.0	21 068.9	3 618.0	22 664.2	1 000.1	2 657.2	363.8	<b>76 033.9</b>
<b>2009-10</b>	16 136.9	9 540.9	19 578.7	4 698.9	24 238.1	964.1	1 169.3	404.4	<b>76 731.2</b>
<b>2009</b>									
Sep Qtr	4 006.1	2 293.3	5 240.4	1 027.7	5 765.2	219.6	409.2	78.4	<b>19 039.9</b>
Dec Qtr	3 954.4	2 449.3	4 978.9	1 252.6	6 010.2	255.2	299.4	91.3	<b>19 291.2</b>
<b>2010</b>									
Mar Qtr	3 820.0	2 125.8	4 451.0	1 116.9	5 438.8	237.0	151.5	106.5	<b>17 447.7</b>
Jun Qtr	4 356.3	2 672.5	4 908.4	1 301.7	7 023.9	252.3	309.1	128.3	<b>20 952.4</b>
Sep Qtr	3 794.0	2 594.3	5 148.7	925.3	6 157.8	206.3	239.3	163.3	<b>19 229.0</b>
Dec Qtr	5 258.8	2 716.3	5 304.1	1 123.5	7 229.2	225.2	240.1	181.1	<b>22 278.3</b>
<b>CONSTRUCTION WORK DONE</b>									
<b>2007-08</b>	30 579.9	27 344.6	35 478.5	6 618.5	30 073.6	1 961.5	2 139.3	2 163.9	<b>136 359.9</b>
<b>2008-09</b>	34 201.5	29 619.5	39 802.4	8 186.1	34 272.0	2 264.6	3 542.1	2 359.1	<b>154 247.2</b>
<b>2009-10</b>	35 727.7	31 895.2	37 106.2	9 853.1	35 777.0	2 422.9	2 130.7	2 795.9	<b>157 708.8</b>
<b>2009</b>									
Sep Qtr	8 314.3	7 724.6	9 640.1	2 231.8	8 492.0	549.5	660.8	622.2	<b>38 235.2</b>
Dec Qtr	8 721.3	8 010.7	9 526.0	2 554.7	8 824.6	610.1	542.0	694.9	<b>39 484.2</b>
<b>2010</b>									
Mar Qtr	8 688.5	7 278.9	8 394.1	2 352.1	8 246.7	605.6	355.5	650.7	<b>36 572.2</b>
Jun Qtr	10 003.7	8 880.9	9 545.9	2 714.5	10 213.8	657.8	572.5	828.1	<b>43 417.2</b>
Sep Qtr	9 165.4	8 969.7	9 871.6	2 342.9	9 368.1	624.4	514.9	906.6	<b>41 763.7</b>
Dec Qtr	10 419.5	9 024.2	9 615.0	2 452.7	10 223.6	640.8	470.9	876.0	<b>43 722.6</b>



<i>Period</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<b><i>Aust.</i></b>
	%	%	%	%	%	%	%	%	%
.....									
<b>BUILDING WORK DONE</b>									
<b>2007-08</b>	4.4	16.2	7.5	9.9	18.5	13.2	14.8	-7.0	<b>10.2</b>
<b>2008-09</b>	-1.9	6.3	0.2	13.7	10.4	12.5	2.9	11.2	<b>3.9</b>
<b>2009-10</b>	9.5	5.1	-6.4	12.8	-0.6	15.4	8.7	19.9	<b>3.5</b>
<b>2009</b>									
Sep Qtr	1.1	2.4	9.9	6.2	-2.5	9.3	17.5	9.9	<b>3.7</b>
Dec Qtr	10.6	2.4	3.4	8.1	3.2	7.6	-3.5	11.0	<b>5.2</b>
<b>2010</b>									
Mar Qtr	2.1	-7.3	-13.3	-5.1	-0.2	3.9	-15.9	-9.8	<b>-5.3</b>
Jun Qtr	16.0	20.5	17.6	14.4	13.6	10.0	29.1	28.6	<b>17.5</b>
Sep Qtr	-4.9	2.7	1.8	0.3	0.6	3.1	4.6	6.2	<b>0.3</b>
Dec Qtr	-3.9	-1.1	-8.7	-6.2	-6.7	-0.6	-16.3	-6.5	<b>-4.8</b>
.....									
<b>ENGINEERING WORK DONE</b>									
<b>2007-08</b>	14.0	1.5	29.7	1.7	20.5	-5.5	-24.7	27.1	<b>16.1</b>
<b>2008-09</b>	32.2	14.0	25.5	39.1	15.9	19.5	107.7	-1.6	<b>24.4</b>
<b>2009-10</b>	-1.1	14.3	-7.1	29.9	6.9	-3.6	-56.0	11.2	<b>0.9</b>
<b>2009</b>									
Sep Qtr	-11.7	-5.0	-3.3	-14.6	-4.8	-17.5	-36.8	-15.1	<b>-7.8</b>
Dec Qtr	-1.3	6.8	-5.0	21.9	4.2	16.2	-26.8	16.5	<b>1.3</b>
<b>2010</b>									
Mar Qtr	-3.4	-13.2	-10.6	-10.8	-9.5	-7.1	-49.4	16.7	<b>-9.6</b>
Jun Qtr	14.0	25.7	10.3	16.5	29.1	6.4	104.0	20.4	<b>20.1</b>
Sep Qtr	-12.9	-2.9	4.9	-28.9	-12.3	-18.2	-22.6	27.3	<b>-8.2</b>
Dec Qtr	38.6	4.7	3.0	21.4	17.4	9.2	0.3	10.9	<b>15.9</b>
.....									
<b>CONSTRUCTION WORK DONE</b>									
<b>2007-08</b>	8.1	11.9	17.0	6.5	19.8	4.4	-12.6	-2.5	<b>12.8</b>
<b>2008-09</b>	11.8	8.3	12.2	23.7	14.0	15.5	65.6	9.0	<b>13.1</b>
<b>2009-10</b>	4.5	7.7	-6.8	20.4	4.4	7.0	-39.8	18.5	<b>2.2</b>
<b>2009</b>									
Sep Qtr	-5.5	0.1	2.3	-4.5	-4.1	-3.2	-23.4	6.0	<b>-2.3</b>
Dec Qtr	4.9	3.7	-1.2	14.5	3.9	11.0	-18.0	11.7	<b>3.3</b>
<b>2010</b>									
Mar Qtr	-0.4	-9.1	-11.9	-7.9	-6.5	-0.7	-34.4	-6.4	<b>-7.4</b>
Jun Qtr	15.1	22.0	13.7	15.4	23.9	8.6	61.0	27.3	<b>18.7</b>
Sep Qtr	-8.4	1.0	3.4	-13.7	-8.3	-5.1	-10.1	9.5	<b>-3.8</b>
Dec Qtr	13.7	0.6	-2.6	4.7	9.1	2.6	-8.6	-3.4	<b>4.7</b>

## CONSTRUCTION WORK DONE, States and territories—Chain volume measures(a)

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
<i>Period</i>	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2007-08</b>	31 856.8	27 610.8	37 036.9	6 969.3	31 427.6	2 048.7	2 259.2	2 260.8	141 501.9
<b>2008-09</b>	34 201.5	29 619.5	39 802.4	8 186.1	34 272.0	2 264.6	3 542.1	2 359.1	154 247.2
<b>2009-10</b>	35 959.2	31 990.5	38 214.1	9 867.9	36 616.4	2 359.1	2 116.5	2 781.8	159 905.6
<b>2009</b>									
Sep Qtr	8 395.1	7 819.7	9 916.2	2 244.7	8 631.5	541.7	658.9	622.0	38 829.8
Dec Qtr	8 798.7	8 068.5	9 807.2	2 572.8	9 031.2	600.3	540.1	692.7	40 111.5
<b>2010</b>									
Mar Qtr	8 737.9	7 289.6	8 657.8	2 357.8	8 456.4	586.5	350.7	648.4	37 085.0
Jun Qtr	10 027.5	8 812.8	9 832.9	2 692.6	10 497.4	630.6	566.9	818.8	43 879.3
Sep Qtr	9 125.7	8 703.0	10 143.4	2 308.6	9 533.0	589.2	501.0	888.6	41 792.5
Dec Qtr	10 314.1	8 672.2	9 850.9	2 413.2	10 409.2	602.4	457.0	855.9	43 574.7
SEASONALLY ADJUSTED									
<b>2009</b>									
Sep Qtr	8 592.3	7 600.8	9 549.1	2 338.4	8 627.6	578.0	651.4	585.0	38 757.4
Dec Qtr	8 657.1	7 834.6	9 450.0	2 490.5	8 611.4	587.4	526.1	672.5	38 580.7
<b>2010</b>									
Mar Qtr	9 201.2	8 098.0	9 423.5	2 500.0	9 107.5	594.4	394.0	732.6	40 369.9
Jun Qtr	9 508.6	8 457.1	9 791.4	2 539.0	10 269.9	599.3	545.0	791.7	42 197.5
Sep Qtr	9 299.6	8 457.7	9 749.2	2 379.8	9 502.1	614.1	493.9	839.9	41 569.5
Dec Qtr	10 178.0	8 417.8	9 503.2	2 328.0	9 890.1	591.2	444.4	836.9	41 921.8
TREND									
<b>2009</b>									
Sep Qtr	8 502.9	7 654.4	9 490.3	2 350.9	8 566.5	560.1	655.9	602.4	38 399.3
Dec Qtr	8 808.3	7 858.8	9 455.1	2 470.9	8 849.2	587.6	519.4	662.3	39 203.8
<b>2010</b>									
Mar Qtr	9 092.7	8 125.9	9 553.1	2 517.5	9 268.7	597.7	469.6	733.2	40 387.0
Jun Qtr	9 359.8	8 346.8	9 654.8	2 485.7	9 678.7	601.7	479.9	790.1	41 393.6
Sep Qtr	9 634.3	8 453.2	9 685.4	2 414.3	9 855.1	603.3	486.9	826.5	41 918.5
Dec Qtr	9 902.6	8 485.8	9 642.5	2 340.3	9 873.4	601.0	480.9	845.5	42 053.4

(a) Reference year for Chain Volume Measures is 2008-09. See paragraphs 27-31 of the Explanatory Notes.

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Period	%	%	%	%	%	%	%	%	%
ORIGINAL									
<b>2007-08</b>	3.5	4.7	10.3	1.3	12.8	-1.1	-18.7	-6.3	6.6
<b>2008-09</b>	7.4	7.3	7.5	17.5	9.1	10.5	56.8	4.3	9.0
<b>2009-10</b>	5.1	8.0	-4.0	20.5	6.8	4.2	-40.2	17.9	3.7
<b>2009</b>									
Sep Qtr	-5.5	-1.5	3.0	-4.7	-4.0	-4.9	-24.1	6.1	-2.5
Dec Qtr	4.8	3.2	-1.1	14.6	4.6	10.8	-18.0	11.4	3.3
<b>2010</b>									
Mar Qtr	-0.7	-9.7	-11.7	-8.4	-6.4	-2.3	-35.1	-6.4	-7.5
Jun Qtr	14.8	20.9	13.6	14.2	24.1	7.5	61.7	26.3	18.3
Sep Qtr	-9.0	-1.2	3.2	-14.3	-9.2	-6.6	-11.6	8.5	-4.8
Dec Qtr	13.0	-0.4	-2.9	4.5	9.2	2.2	-8.8	-3.7	4.3
SEASONALLY ADJUSTED									
<b>2009</b>									
Sep Qtr	2.6	-0.6	-0.1	4.4	-2.3	8.3	-21.4	2.1	1.2
Dec Qtr	0.8	3.1	-1.0	6.5	-0.2	1.6	-19.2	15.0	-0.5
<b>2010</b>									
Mar Qtr	6.3	3.4	-0.3	0.4	5.8	1.2	-25.1	8.9	4.6
Jun Qtr	3.3	4.4	3.9	1.6	12.8	0.8	38.3	8.1	4.5
Sep Qtr	-2.2	—	-0.4	-6.3	-7.5	2.5	-9.4	6.1	-1.5
Dec Qtr	9.4	-0.5	-2.5	-2.2	4.1	-3.7	-10.0	-0.4	0.8
TREND									
<b>2009</b>									
Sep Qtr	0.8	1.2	-1.6	6.3	0.1	3.8	-21.7	6.5	0.2
Dec Qtr	3.6	2.7	-0.4	5.1	3.3	4.9	-20.8	10.0	2.1
<b>2010</b>									
Mar Qtr	3.2	3.4	1.0	1.9	4.7	1.7	-9.6	10.7	3.0
Jun Qtr	2.9	2.7	1.1	-1.3	4.4	0.7	2.2	7.8	2.5
Sep Qtr	2.9	1.3	0.3	-2.9	1.8	0.3	1.5	4.6	1.3
Dec Qtr	2.8	0.4	-0.4	-3.1	0.2	-0.4	-1.2	2.3	0.3

— nil or rounded to zero (including null cells)

(a) Reference year for Chain Volume Measures is 2008-09. See paragraphs 27-31 of the Explanatory Notes.

BUILDING ACTIVITY, WORK IN THE PIPELINE—Current prices: **Original**

<i>Period</i>	<i>New houses</i>	<i>New other residential building</i>	<i>New residential building</i>	<i>Alterations and additions to residential building</i>	<i>Total residential building</i>	<i>Non-residential building</i>	<i>Total building</i>
<i>Period</i>	\$m	\$m	\$m	\$m	\$m	\$m	\$m
WORK YET TO BE DONE AT END OF QUARTER (a)							
<b>2009</b>							
Sep Qtr	7 918.0	7 570.8	15 488.8	1 977.2	17 466.0	21 374.1	38 840.1
Dec Qtr	8 576.6	7 688.1	16 264.7	2 127.6	18 392.3	25 484.4	43 876.7
<b>2010</b>							
Mar Qtr	9 172.6	8 320.7	17 493.3	2 129.7	19 623.0	25 495.6	45 118.6
Jun Qtr	9 024.8	9 279.7	18 304.5	2 248.9	20 553.4	24 072.0	44 625.4
Sep Qtr	9 311.9	9 172.6	18 484.4	2 281.6	20 766.0	22 480.7	43 246.7
Dec Qtr	8 976.3	9 354.3	18 330.6	2 223.9	20 554.5	20 498.0	41 052.4
WORK APPROVED BUT NOT YET COMMENCED AT END OF QUARTER (a)							
<b>2009</b>							
Sep Qtr	3 115.4	2 979.8	6 095.3	882.7	6 978.0	8 811.2	15 789.1
Dec Qtr	3 202.0	3 427.5	6 629.5	954.1	7 583.6	6 469.1	14 052.7
<b>2010</b>							
Mar Qtr	2 836.7	3 323.1	6 159.8	875.8	7 035.6	6 784.7	13 820.2
Jun Qtr	3 030.6	2 773.5	5 804.1	910.6	6 714.7	4 964.3	11 679.0
Sep Qtr	2 969.2	3 260.2	6 229.4	923.2	7 152.6	4 343.3	11 495.9
Dec Qtr	3 328.3	3 426.2	6 754.5	982.6	7 737.1	4 128.1	11 865.2
WORK IN THE PIPELINE AT END OF QUARTER (a)							
<b>2009</b>							
Sep Qtr	11 033.5	10 550.7	21 584.1	2 859.9	24 444.0	30 185.3	54 629.2
Dec Qtr	11 778.6	11 115.6	22 894.2	3 081.7	25 975.9	31 953.5	57 929.3
<b>2010</b>							
Mar Qtr	12 009.3	11 643.8	23 653.1	3 005.5	26 658.6	32 280.2	58 938.8
Jun Qtr	12 055.4	12 053.2	24 108.6	3 159.5	27 268.1	29 036.3	56 304.4
Sep Qtr	12 281.1	12 432.7	24 713.8	3 204.8	27 918.6	26 823.9	54 742.5
Dec Qtr	12 304.6	12 780.5	25 085.0	3 206.5	28 291.5	24 626.1	52 917.7

(a) See Glossary for definitions.

<i>Period</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas., NT &amp; ACT</i>	<i>Aust.</i>
NEW HOUSES							
<b>2009</b>							
Sep Qtr	3 417	2 418	1 224	1 907	2 474	482	<b>11 921</b>
Dec Qtr	3 377	2 362	1 084	2 042	2 936	459	<b>12 259</b>
<b>2010</b>							
Mar Qtr	3 291	1 763	1 272	1 808	2 311	465	<b>10 911</b>
Jun Qtr	3 204	2 300	1 292	1 885	2 359	461	<b>11 501</b>
Sep Qtr	3 281	2 051	879	1 795	2 430	468	<b>10 904</b>
Dec Qtr	3 425	2 403	1 575	1 678	2 365	424	<b>11 870</b>
NEW OTHER RESIDENTIAL BUILDING							
<b>2009</b>							
Sep Qtr	6 097	1 298	1 989	1 365	1 241	475	<b>12 465</b>
Dec Qtr	6 062	1 512	1 821	1 390	1 218	276	<b>12 279</b>
<b>2010</b>							
Mar Qtr	5 408	1 289	1 845	1 377	1 283	290	<b>11 492</b>
Jun Qtr	5 705	804	1 632	1 510	1 273	262	<b>11 186</b>
Sep Qtr	6 389	1 175	1 932	1 850	1 138	399	<b>12 883</b>
Dec Qtr	6 442	2 271	1 973	1 831	1 351	438	<b>14 306</b>
TOTAL DWELLINGS (a)							
<b>2009</b>							
Sep Qtr	9 601	3 746	3 228	3 315	3 743	962	<b>24 596</b>
Dec Qtr	9 563	3 906	2 921	3 454	4 178	742	<b>24 763</b>
<b>2010</b>							
Mar Qtr	8 815	3 069	3 132	3 207	3 615	762	<b>22 601</b>
Jun Qtr	9 000	3 130	2 941	3 420	3 648	734	<b>22 872</b>
Sep Qtr	9 771	3 249	2 840	3 677	3 590	882	<b>24 008</b>
Dec Qtr	9 952	4 701	3 565	3 538	3 740	875	<b>26 371</b>

(a) Includes Conversions etc.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication contains preliminary estimates of building and engineering construction work done during the current quarter and revised estimates for the previous two quarters. The estimates of building work done and engineering work done are from the quarterly Building Activity Survey and the quarterly Engineering Construction Survey respectively. Estimates of work done are based upon a response from each survey of approximately 80% of the value of work done during the current quarter. More comprehensive and updated results will be available shortly in *Building Activity, Australia* (cat. no. 8752.0) and *Engineering Construction Activity, Australia* (cat. no. 8762.0).

### SCOPE AND COVERAGE

**2** The scope of the Building Activity Survey is all approved building activity involving the construction of new buildings or structural alterations, extensions or other additions made to existing buildings. Maintenance work is excluded but major repairs involving partial demolition and reconstruction are included.

**3** As of the June quarter 2006, the survey has consisted of:

- an indirect, modelled component comprising residential building work with approval values from \$10,000 to less than \$50,000 and non-residential building work with approval values from \$50,000 to less than \$250,000. The contributions from these building jobs are modelled based on their building approval details.
- a direct collection of all identified building work having approval values of \$2,000,000 or more.
- a sample survey, selected from other identified building work.

**4** For any particular quarter the Building Activity Survey includes newly selected jobs appearing in the survey for the first time and all incomplete building jobs which were selected in previous quarters. New selections are drawn from building jobs approved in the 3 month period prior to the last month in the quarter (e.g. up to the end of August for new selections in the September quarter survey) using the rules presented in paragraph 3, and any jobs otherwise identified to have commenced with approval values in excess of \$2 million, irrespective of the approval month. This may result in some jobs both approved and commencing in the last month of the quarter being shown as commencements in the following quarter.

**5** The scope of the Engineering Construction Survey is all engineering construction activity undertaken in Australia. This incorporates all construction activity except the construction of new buildings or structural alterations, extensions or other additions made to existing buildings. Maintenance work is excluded but major repairs involving partial demolition and reconstruction are included.

### STATISTICAL UNIT

**6** In the Engineering Construction Survey, the statistical unit used to represent businesses, and for which statistics are reported, is the Australian Business Number (ABN) unit, in most cases. The ABN unit is the business unit which has registered for an ABN, and thus appears on the Australian Taxation Office (ATO) administered Australian Business Register. This unit is suitable for Australian Bureau of Statistics statistical needs when the business is simple in structure. For more significant and diverse businesses where the ABN unit is not suitable for Australian Bureau of Statistics statistical needs, the statistical unit used is the Type of Activity Unit (TAU). A TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an enterprise group that can report production and employment data for similar economic activities. When a minimum set of data items is available, a TAU is created which covers all the operations within an industry subdivision – and the TAU is classified to the relevant subdivision of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*. Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision and the TAU is classified to the predominant ANZSIC subdivision.

## EXPLANATORY NOTES *continued*

### STATISTICAL UNIT *continued*

**7** Further details about the ABS economic statistical units used in the Engineering Construction Survey, and in other ABS economic surveys (both sample surveys and censuses), can be found in Chapter 2 of the *Standard Economic Sector Classifications of Australia (SESCA) 2008* (cat. no. 1218.0).

### RELATIONSHIP WITH NATIONAL ACCOUNTS

**8** Data on the value of work done on the construction of new residential buildings, alterations and additions to residential buildings, private sector non-residential buildings and the value of engineering construction activity are the major sources of data which are used to compile the national accounts estimates for private gross fixed capital formation on dwellings, and other buildings and structures. However, there are some adjustments to the survey data which are made in the process of compiling these national accounts series. Allowances are made for the value of activity which is out of scope of the Building Activity Survey and the Engineering Construction Survey. Such activity includes work done on projects which fall below the size cut-offs used for the Building Activity survey and also the value of building work done which is undertaken without obtaining a building permit, either because such a permit is not required or because the requisite permit is not obtained. The national accounts estimates also make allowances for purchases (less sales) of buildings and other structures from (to) the public sector.

### TREATMENT OF THE GST

**9** Statistics on the value of work (current prices) show residential building work done on a GST inclusive basis and non-residential work and engineering construction work done on a GST exclusive basis. This approach is consistent with that adopted in the Australian National Accounts which is based on the conceptual framework described in the 1993 edition of the international statistical standard System of National Accounts (SNA93).

**10** SNA93 requires value added taxes (VAT), such as the GST, to be recorded on a net basis where:

- (a) both outputs of goods and services and imports are valued excluding invoiced VAT
- (b) purchases of goods and services are recorded including non-deductible VAT.

**11** Under the net system, VAT is recorded as being payable by purchasers, not sellers, and then only by those purchasers who are not able to deduct it. Almost all VAT is therefore recorded in the SNA93 as being paid on final uses – mainly on household consumption. Small amounts of VAT, may however, be paid by businesses in respect of certain kinds of purchases on which VAT may not be deductible.

**12** The ABS records value of work done inclusive of GST in respect of residential construction and exclusive of GST in respect of non-residential construction and engineering construction. Purchasers of residential structures are unable to deduct GST from the purchase price. For non-residential structures and engineering construction, the reverse is true in most circumstances.

**13** Total construction work is derived by adding total building work and total engineering construction work. To derive total building activity it is appropriate to add the residential and non-residential components. Valuation of the components of the total is consistent, since, for both components, the value of work done is recorded inclusive of non-deductible GST paid by the purchaser. As such, total building activity and total construction includes the non-deductible GST payable on residential building.

**14** As estimates for engineering work are provided on a GST exclusive basis, and the majority of construction materials used were exempt from Wholesale Sales Tax, the introduction of the GST had little direct effect on the estimates of engineering construction.

## EXPLANATORY NOTES *continued*

### CLASSIFICATION

**15** *Ownership.* The ownership of a building is classified as either *private sector* or *public sector*, according to the sector of the intended owner of the completed building as evident at the time of approval. Engineering projects are classified as either *private sector* or *public sector* according to the expected ownership of the project at the time of completion.

**16** Building jobs are classified both by the *Type of building* ('residential', 'non-residential', 'house', 'other residential') and by the *Type of work* involved ('new' and 'alterations and additions'). For residential buildings these classifications are used in conjunction with each other. The classes are defined in the Glossary.

### RELIABILITY OF THE ESTIMATES

**17** The estimates of engineering activity are based on a sample survey as are the estimates of private sector building activity. A complete enumeration of public sector building activity is done. Because data are not collected for all engineering jobs nor for all building jobs, the published estimates are subject to sampling variability. Relative standard errors give a measure of this variability and therefore indicate the degree of confidence that can be attached to the data.

**18** Estimates presented in the tables are subject to sampling error arising from the inclusion of a sample only; that is, they may differ from the figures that would have been obtained if all eligible building jobs and engineering businesses had been included in the surveys. The likely differences due to the sampling process can be characterised by the standard error (SE) of the estimate. To more easily determine the relative quality of an estimate or to compare the quality of different estimates, the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the corresponding estimate, is commonly used. There are about two chances in three that an estimate from a sample of a group will differ by less than one RSE of the figure that would have been obtained if the entire group were surveyed, and about nineteen chances in twenty that the difference will be less than two RSEs of the estimate. Estimated RSEs for the value of work done in this quarter are given below.

### AUSTRALIA

	%
New private residential building	1.2
Total private residential building	1.0
Private non-residential building	1.1
Total private building	0.8
Total residential building	1.0
Total non-residential building	1.0
<b>Total building</b>	<b>0.7</b>
Engineering for the private sector	1.0
<b>Total engineering</b>	<b>0.9</b>

### STATES AND TERRITORIES

	<i>Total building</i>	<i>Total engineering</i>
	%	%
NSW	1.4	2.6
Vic.	1.4	2.1
Qld	1.5	2.1
SA	2.6	2.9
WA	1.7	0.8
Tas.	2.5	3.8
NT	1.1	4.2
ACT	1.6	11.3



## EXPLANATORY NOTES *continued*

### SEASONAL ADJUSTMENT

**19** In the seasonally adjusted series, account has been taken of normal seasonal factors, 'trading day' effects arising from the varying numbers of working days in a quarter and the effect of movement in the date of Easter which may, in successive years, affect figures for different quarters.

**20** 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.

**21** The seasonally adjusted estimates in this publication are produced by the concurrent seasonal adjustment method which takes account of the latest available original estimates. The concurrent method improves the estimation of seasonal factors and, therefore, the seasonally adjusted and trend estimates of the current and previous quarters.

**22** A more detailed review of concurrent seasonal factors will be conducted annually, generally prior to the release of data for the December quarter.

**23** The revision properties of the seasonally adjusted and trend estimates have been improved by the use of autoregressive integrated moving average (ARIMA) modelling. ARIMA modelling relies on the characteristics of the series being analysed to project future period data. The ARIMA model is assessed as part of the annual reanalysis. For more information on the details of ARIMA modelling see feature article: *Use of ARIMA modelling to reduce revisions* in the October 2004 issue of *Australian Economic Indicators* (cat. no. 1350.0).

### TREND ESTIMATES

**24** Seasonally adjusted series can be smoothed to reduce the impact of the irregular component in the adjusted series. This smoothed seasonally adjusted series is called a trend estimate.

**25** The trend estimates are derived by applying a 7-term Henderson moving average to the seasonally adjusted series. The 7-term Henderson average (like all Henderson averages) is symmetric but, as the end of a time series is approached, asymmetric forms of the average are applied. Unlike weights of the standard 7-term Henderson moving average, the weights employed here have been tailored to suit the particular characteristics of individual series.

**26** While the smoothing technique described in paragraphs 24 and 25 enables trend estimates to be produced for recent quarters, it does result in revisions to the estimates for the most recent three quarters as additional observations become available. There may also be revisions because of changes in the original data. For further information, see *Information Paper: A Guide to Interpreting Time Series—Monitoring Trends, 2003* (cat. no. 1349.0) or contact the Assistant Director, Time Series Analysis on Canberra (02) 6252 6540 or email <time.series.analysis@abs.gov.au>.

### CHAIN VOLUME MEASURES

**27** Chain volume estimates of the value of work done are presented in original, seasonally adjusted and trend terms.

**28** While current price estimates of value of work done reflect both price and volume changes, chain volume estimates measure changes in value after the direct effects of price changes have been eliminated and therefore only reflect volume changes. The direct impact of the GST is a price change, and hence is removed from chain volume estimates. 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 new other building components, and the new engineering construction component, of the national accounts aggregate 'Gross fixed capital formation'.

## EXPLANATORY NOTES *continued*

### CHAIN VOLUME MEASURES

*continued*

**29** The chain volume measures of work done appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in a chosen reference year. The reference year is updated annually in the September quarter publication. Each year's data in the value of work done series are based on the prices of the previous year, except for the quarters of the latest incomplete year which are based upon the current reference year. Comparability with previous years is achieved by linking (or chaining) the series together to form a continuous time series.

**30** Chain volume measures do not, in general, sum exactly to the extrapolated total value of the components. Further information on the nature and concepts of chain volume measures is contained in the *ABS Information Paper: Australian National Accounts, Introduction of Chain Volume and Price Indexes* (cat. no. 5248.0).

**31** The factors used to seasonally adjust the chain volume series are identical to those used to adjust the corresponding current price series.

### ACKNOWLEDGMENT

**32** 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*.

### RELATED PRODUCTS

**33** All tables in this publication, plus some additional state and territory series are available in electronic form on the ABS web site.

**34** Users may also wish to refer to the following publications:  
*Building Activity, Australia*, cat. no. 8752.0  
*Building Approvals, Australia*, cat. no. 8731.0  
*Dwelling Unit Commencements, Australia, Preliminary*, cat. no. 8750.0  
*Engineering Construction Activity, Australia*, cat. no. 8762.0  
*House Price Indexes: Eight Capital Cities*, cat. no. 6416.0  
*Housing Finance, Australia*, cat. no. 5609.0  
*Private Sector Construction Industry, Australia*, cat. no. 8772.0  
*Producer Price Indexes, Australia*, cat. no. 6427.0.

### ABS DATA AVAILABLE ON REQUEST

**35** As well as the statistics included in this and related publications, the ABS may have other relevant data available on request. Inquiries should be made to the National Information and Referral Service on 1300 135 070.

## EXPLANATORY NOTES *continued*

---

### ABBREVIATIONS

\$m	million dollars
ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANZSIC	Australian and New Zealand Standard Industrial Classification
ATO	Australian Taxation Office
Aust.	Australia
GST	goods and services tax
NSW	New South Wales
NT	Northern Territory
qtr	quarter
Qld	Queensland
SA	South Australia
Tas.	Tasmania
TAU	type of activity unit
VAT	value added tax
Vic.	Victoria
WA	Western Australia

## APPENDIX LIST OF ELECTRONIC TABLES

### ELECTRONIC TABLES

The following tables are available electronically via the ABS web site. Not all series in the table go back to the earliest start date.

#### WORK DONE

	<i>Publication table no.</i>	<i>Electronic table no.</i>	<i>Start date</i>
Construction work done, chain volume measures	1	1	September 1974
Construction work done, chain volume measures, change from previous period	2	n.a.	..
Construction work done, current prices	3	2	March 1957
Construction work done, current prices, change from previous period	4	n.a.	..
Value of building work done, chain volume measures	5	3	September 1974
Value of building work done, chain volume measures, states and territories, original	5	4	September 1974
Value of building work done, chain volume measures, states and territories, seasonally adjusted	5	5	September 1974
Value of building work done, chain volume measures, change from previous period	6	n.a.	..
Value of building work done, current prices, Australia	7	6	March 1957
Value of building work done, current prices, states and territories	7	7	September 1958
Value of building work done, current prices, change from previous period	8	n.a.	..
Construction work done, states and territories, chain volume measures	9	8	September 1974
Construction work done, states and territories, chain volume measures, change from previous period	10	n.a.	..
Construction work done, states and territories, current prices, original	11	9	March 1957
Construction work done, states and territories, current prices, original, change from previous period	12	n.a.	..
Construction work done, states and territories, chain volume measures	13	10	September 1986
Construction work done, states and territories, chain volume measures, change from previous period	14	n.a.	..
Building Activity, work in the pipeline, Australia, current prices, original	15	11	June 2003
Building Activity, work in the pipeline, states and territories, current prices, original	15	12	June 2003
Number of dwellings approved but not yet commenced, states and territories, original	16	13	June 2003

## GLOSSARY

Alterations and additions	Refer to Type of work. The term ' <i>Alterations and additions</i> ' in tables 5, 6, 7 and 8 refers to alterations and additions to residential buildings only.
Alterations and additions to residential buildings	Alterations and additions carried out on existing residential buildings, which may result in the creation of new dwelling units.
Building	A building is 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.
Building work done	The <i>Value of building work done</i> including only work carried out during the quarter
Construction work done	The sum of <i>building work done</i> and <i>engineering work done</i> .
Conversions, etc.	Refer to Type of Work.
Dwellings approved but not yet commenced	For known residential projects which have not yet commenced, dwellings to be created by the project.
Dwelling unit	A dwelling unit is 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 non-residential building.
Engineering work done	The <i>Value of engineering work done</i> including only work carried out during the quarter
House	Refer to Type of Building.
New	Refer to Type of Work.
Non-residential building	Refer to Type of Building.
Other residential building	Refer to Type of Building.
Residential building	Refer to Type of Building.
Type of building	Buildings are classified as either: <p style="margin-left: 20px;"><i>Residential building</i></p> <p style="margin-left: 20px;">A residential building is a building consisting of one or more dwelling units. Residential buildings can be either houses or other residential buildings.</p> <p style="margin-left: 40px;">A <i>house</i> is a detached building primarily used for long term residential purposes. It consists of one dwelling unit. For instance, detached 'granny flats' and detached dwelling units (e.g. caretaker's residences) associated with a non-residential building are defined as houses. Also includes 'cottages', 'bungalows' and rectories.</p> <p style="margin-left: 20px;">An other <i>residential building</i> is a building other than a house primarily used for long-term residential purposes. An other residential building contains more than one dwelling unit. Other residential buildings are coded to the following categories: semidetached, row or terrace house or townhouse with one storey; semidetached, row or terrace house or townhouse with two or more storeys; flat, unit or apartment in a building of one or two storeys; flat, unit or apartment in a building of three storeys; flat, unit or apartment in a building of four or more storeys; flat, unit or apartment attached to a house; other/number of storeys unknown.</p> <p style="margin-left: 20px;"><i>Non-residential building</i></p> <p style="margin-left: 20px;">A non-residential building is primarily intended for purposes other than long term residential purposes. Note that, on occasions, one or more dwelling units may be created through non-residential building activity. The value of these dwelling units cannot be separated out from that of the non-residential building which they are part of, therefore the value associated with these remain in the appropriate non-residential category.</p>

## GLOSSARY *continued*

<b>Type of building</b> <i>continued</i>	Non-residential building's are further classified by their functional use at time of approval.
<b>Type of work</b>	<p>The <i>Type of Work</i> classification refers to building activity approved to be carried out and consists of:</p> <p><i>Alterations and additions</i></p> <p>Building activity carried out on existing buildings excluding conversions.</p> <p>Includes adding to or diminishing floor area, altering the structural design of a building and affixing rigid components which are integral to the functioning of the building.</p> <p><i>Conversion</i></p> <p>Building activity conversion is building activity which converts a non-residential building to a residential building, e.g. conversion of a warehouse to residential apartments. Conversion is considered to be a special type of alteration.</p> <p>'Conversions, etc.' are 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. However, while the value of conversions is included in the value of alterations and additions to residential buildings, the value of new dwelling units associated with non-residential buildings is included in the value of non-residential buildings.</p> <p><i>New</i></p> <p>Building activity which will result in the creation of a building which previously did not exist.</p>
<b>Value of building work done</b>	Includes the costs of materials fixed in place, labour, and architects fees. It excludes the value of land and landscaping and non-building components such as fencing, paving, roadworks, tennis courts, outdoor pools and car parks.
<b>Value of engineering work done</b>	The value of engineering work done for the private sector consists of the value of work done on prime contracts, plus speculative contracts, plus work done on own account. The value of engineering work done for the public sector is the work done by the organisation's own workforce and subcontractors. In each case, the value excludes the cost of land and repair and maintenance activity, as well as the value of any transfers of existing assets, the value of installed machinery and equipment not integral to the structure and the expenses for relocation of utility services. However, a contract for the installation of machinery and equipment which is an integral part of a construction project is included.
<b>Work approved but not yet commenced</b>	For known projects which have not yet commenced, the anticipated final value at completion of the project.
<b>Work in the pipeline</b>	Value of building work that has been approved, but as yet, has not been undertaken. Work in the pipeline has two components. Firstly, there is an estimate of the amount of building work still to be done on projects that have already commenced, 'work yet to be done'. The second component is the building work that has been approved, but had not commenced by the end of the reference period, 'work approved but not yet commenced'. Information on 'work in the pipeline' is available from the June quarter 2003.
<b>Work yet to be done</b>	The difference between the anticipated completion value of the project and the estimated value of work already done up to the end of the reference period for jobs which have commenced.



## FOR MORE INFORMATION . . .

*INTERNET*      **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

### INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

*PHONE*                      1300 135 070

*EMAIL*                      [client.services@abs.gov.au](mailto:client.services@abs.gov.au)

*FAX*                              1300 135 211

*POST*                              Client Services, ABS, GPO Box 796, Sydney NSW 2001

## FREE ACCESS TO STATISTICS

All statistics on the ABS website can be downloaded free of charge.

*WEB ADDRESS*      [www.abs.gov.au](http://www.abs.gov.au)