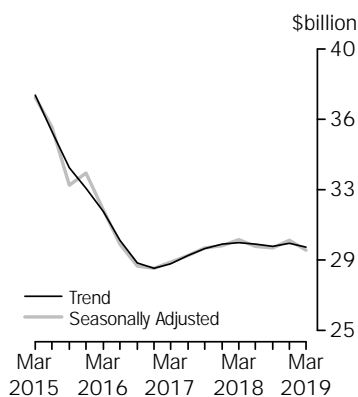


## PRIVATE NEW CAPITAL EXPENDITURE AND EXPECTED EXPENDITURE AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) THURS 30 MAY 2019

New Capital Expenditure  
in volume terms



### KEY FIGURES

	Mar Qtr 19 \$m	Dec Qtr 18 to Mar Qtr 19 % change	Mar Qtr 18 to Mar Qtr 19 % change
<b>Trend estimates<sup>(a)</sup></b>			
Total new capital expenditure	29 451	-0.6	-0.8
Buildings and structures	15 568	-1.4	-4.8
Equipment, plant and machinery	13 899	0.4	4.2
<b>Seasonally adjusted<sup>(a)</sup></b>			
Total new capital expenditure	29 291	-1.7	-1.9
Buildings and structures	15 490	-2.8	-5.5
Equipment, plant and machinery	13 801	-0.5	2.4

(a) In volume terms

### KEY POINTS

#### ACTUAL EXPENDITURE (VOLUME TERMS)

- The trend volume estimate for total new capital expenditure fell by 0.6% in the March quarter 2019 while the seasonally adjusted estimate fell by 1.7%.
- The trend volume estimate for buildings and structures fell by 1.4% in the March quarter 2019 while the seasonally adjusted estimate fell by 2.8%.
- The trend volume estimate for equipment, plant and machinery rose by 0.4% in the March quarter 2019 while the seasonally adjusted estimate fell by 0.5%.

#### EXPECTED EXPENDITURE (CURRENT PRICE TERMS)

- This issue includes the sixth estimate (Estimate 6) for 2018-19 and the second estimate (Estimate 2) for 2019-20.
- Estimate 6 for 2018-19 is \$122,193m. This is 3.8% higher than Estimate 6 for 2017-18. Estimate 6 is 3.7% higher than Estimate 5 for 2018-19.
- Estimate 2 for 2019-20 is \$99,139m. This is 12.8% higher than Estimate 2 for 2018-19. Estimate 2 is 7.6% higher than Estimate 1 for 2019-20.
- See pages 7-10 for further commentary on expectations data.

### INQUIRIES

Inquiries about these and related statistics, contact the National Information and Referral Service on 1300 135 070. The ABS Privacy Policy outlines how the ABS will handle any personal information that you provide to us.

# NOTES

## FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
June 2019	29 August 2019
September 2019	28 November 2019
December 2019	27 February 2020
March 2020	28 May 2020

## NOTES IN THIS ISSUE

The ABS intends to cease publishing a PDF as part of the release of Private New Capital Expenditure and Expected Expenditure, Australia (ABS cat. no. 5625.0). All of the information that is contained in the PDF will continue to be available elsewhere in this release. The March quarter 2019 issue is the final release with a PDF. Should you have any concerns regarding this transition, please contact us at [client.services@abs.gov.au](mailto:client.services@abs.gov.au).

## DATA NOTES

Mining projects tend to be complex in structure and comprise a number of different investment activities including exploration, engineering construction, plant and equipment and buildings. A feature article released in the March 2012 issue of Private New Capital Expenditure and Expected Expenditure, Australia (cat. no. 5625.0) provides a summary of the conceptual basis of the relevant ABS publications that measure investment in Australia, using a hypothetical mining project to illustrate how this investment is reflected in ABS data.

## ABBREVIATIONS

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
PAYG	pay-as-you-go tax
SNA08	System of National Accounts 2008 version
TAU	type of activity unit

David W. Kalisch  
Australian Statistician

# CONTENTS

page

## COMMENTARY

Actual new capital expenditure, In volume terms . . . . .	4
Actual and expected new capital expenditure . . . . .	7

## TABLES

### ACTUAL AND EXPECTED EXPENDITURE

<b>1</b> Actual and expected expenditure, By type of asset and industry, Current prices . . . . .	11
<b>2</b> Actual and expected expenditure, By detailed industry, Current prices . . . .	12
<b>3</b> Actual expenditure, By type of asset and industry, Chain volume measures . . . . .	14
<b>4</b> Actual expenditure, By type of asset and industry, Percentage change, Chain volume measures . . . . .	15

### FINANCIAL YEAR EXPENDITURE

<b>5</b> Expected expenditure and realisation ratios, By type of asset, Current prices . . . . .	16
<b>6</b> Expected expenditure and realisation ratios, By industry, Current prices . . . .	17
<b>7</b> Ratios of actual to short term expectations, By type of asset and industry, Current prices . . . . .	18

### STATE ESTIMATES

<b>8</b> Actual expenditure on buildings and structures, By state, Current prices . . . .	19
<b>9</b> Actual expenditure on equipment, plant and machinery, By state, Current prices . . . . .	20
<b>10</b> Actual total expenditure, By state, Current prices . . . . .	21
<b>11</b> Actual expenditure on buildings and structures, By state, Chain volume measures . . . . .	22
<b>12</b> Actual expenditure on equipment, plant and machinery, By state, Chain volume measures . . . . .	23
<b>13</b> Actual total expenditure, By state, Chain volume measures . . . . .	24

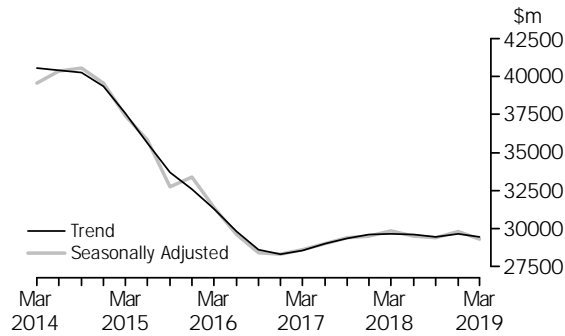
## ADDITIONAL INFORMATION

What if...? Revisions to trend estimates . . . . .	25
Explanatory Notes . . . . .	26
Appendix 1: Sampling errors . . . . .	34
Appendix 2: Experimental estimates of Education and Health . . . . .	36

# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS

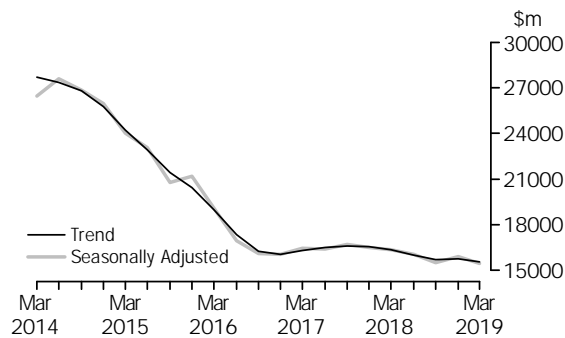
## TOTAL CAPITAL EXPENDITURE

The trend estimate for total new capital expenditure fell 0.6% in the March quarter 2019. By asset type, the trend estimate for buildings and structures fell 1.4% while equipment, plant and machinery rose 0.4%. The seasonally adjusted estimate for total new capital expenditure fell 1.7% in the March quarter 2019.



## BUILDINGS AND STRUCTURES

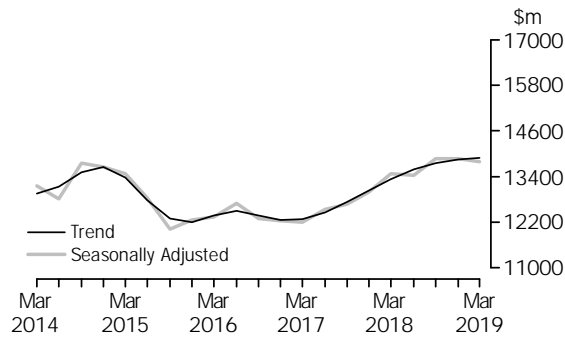
The trend estimate for buildings and structures fell 1.4% in the March quarter 2019. Buildings and structures for Mining fell 3.5%, Manufacturing fell 5.0% and Other Selected Industries rose 0.2%. The seasonally adjusted estimate for buildings and structures fell 2.8% in the March quarter 2019. Mining fell 3.7%, Other Selected Industries fell 1.7% and Manufacturing fell 10.2% in seasonally adjusted terms.



# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS *continued*

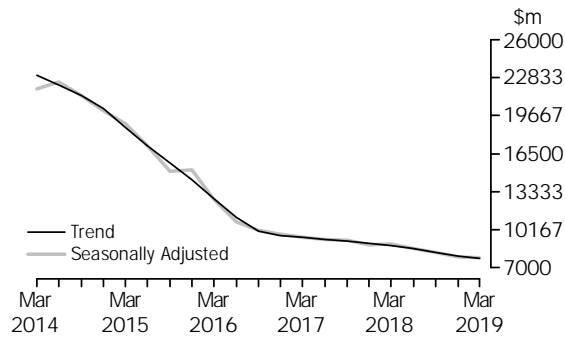
## EQUIPMENT, PLANT AND MACHINERY

The trend estimate for equipment, plant and machinery rose 0.4% in the March quarter 2019. Equipment, plant and machinery for Other Selected Industries rose 1.2%, Mining was relatively unchanged and Manufacturing fell 4.1%. The seasonally adjusted estimate for equipment, plant and machinery fell 0.5% in the March quarter 2019. Manufacturing fell 6.4%, Other Selected Industries fell 0.8% and Mining rose 6.3% in seasonally adjusted terms.



## MINING

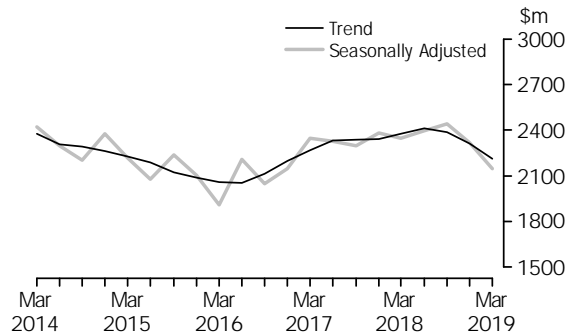
The trend estimate for Mining fell 2.8% in the March quarter 2019. Buildings and structures fell 3.5% while equipment, plant and machinery was relatively unchanged. The seasonally adjusted estimate for Mining fell 1.3% in the March quarter 2019. Buildings and structures fell 3.7% while equipment, plant and machinery rose 6.3% in seasonally adjusted terms.



# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS *continued*

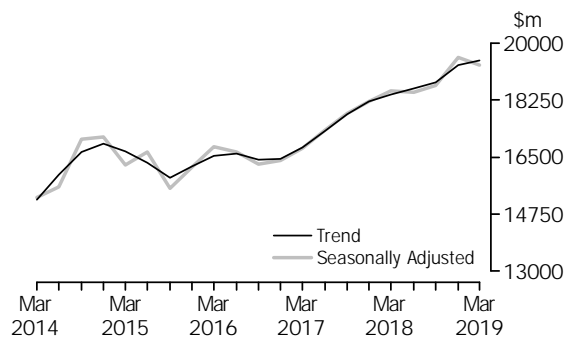
## MANUFACTURING

The trend estimate for Manufacturing fell 4.3% in the March quarter 2019. Equipment, plant and machinery fell 4.1% while buildings and structures fell 5.0%. The seasonally adjusted estimate for Manufacturing fell 7.4% in the March quarter 2019. Equipment, plant and machinery fell 6.4% while buildings and structures fell 10.2% in seasonally adjusted terms.



## OTHER SELECTED INDUSTRIES

The trend estimate for Other Selected Industries rose 0.7% in the March quarter 2019. Equipment, plant and machinery rose 1.2% while buildings and structures rose 0.2%. The seasonally adjusted estimate for Other Selected Industries fell 1.2% in the March quarter 2019. Buildings and structures fell 1.7% while equipment, plant and machinery fell 0.8% in seasonally adjusted terms.



# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE

FINANCIAL YEARS AT  
CURRENT PRICES

The graphs below show the seven estimates of actual and expected expenditure for each financial year. The estimates appearing below relate to data contained in Tables 5 and 6. Advice about the application of realisation ratios to these estimates is in paragraphs 27 to 30 of the Explanatory Notes.

The timing and construction of these estimates are as follows:

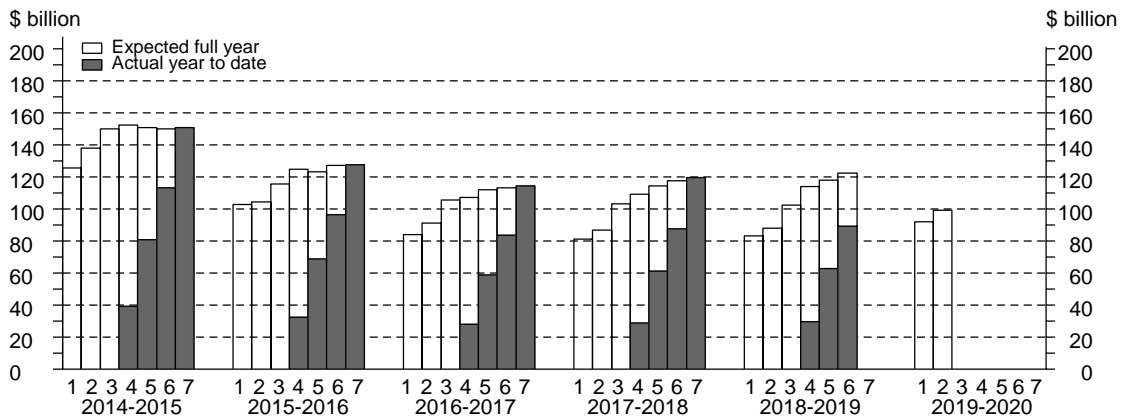
## TIMING & CONSTRUCTION OF SEVEN ESTIMATES COMPOSITION OF ESTIMATE.....

Estimate	Based on data reported at:	Data on long-term expected expenditure	Data on short-term expected expenditure	Data on actual expenditure
1	Jan-Feb, 5-6 months before period begins	12 months	Nil	Nil
2	Apr-May, 2-3 months before period begins	12 months	Nil	Nil
3	Jul-Aug, at beginning of period	6 months	6 months	Nil
4	Oct-Nov, 3-4 months into period	6 months	3 months	3 months
5	Jan-Feb, 6-7 months into period	Nil	6 months	6 months
6	Apr-May, 9-10 months into period	Nil	3 months	9 months
7	Jul-Aug, at end of period	Nil	Nil	12 months

TOTAL CAPITAL  
EXPENDITURE

Estimate 6 for total capital expenditure for 2018-19 is \$122,193m. This is 3.8% higher than Estimate 6 for 2017-18. The main contributor to the increase is Other Selected Industries (9.8%). Estimate 6 is 3.7% higher than Estimate 5 for 2018-19. The main contributor to the increase was Other Selected Industries (4.6%).

Estimate 2 for total capital expenditure for 2019-20 is \$99,139m. This is 12.8% higher than Estimate 2 for 2018-19. The main contributor to the increase was Mining (21.0%). Estimate 2 is 7.6% higher than Estimate 1 for 2019-20. The main contributor to this increase is Other Selected Industries (7.8%).



# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

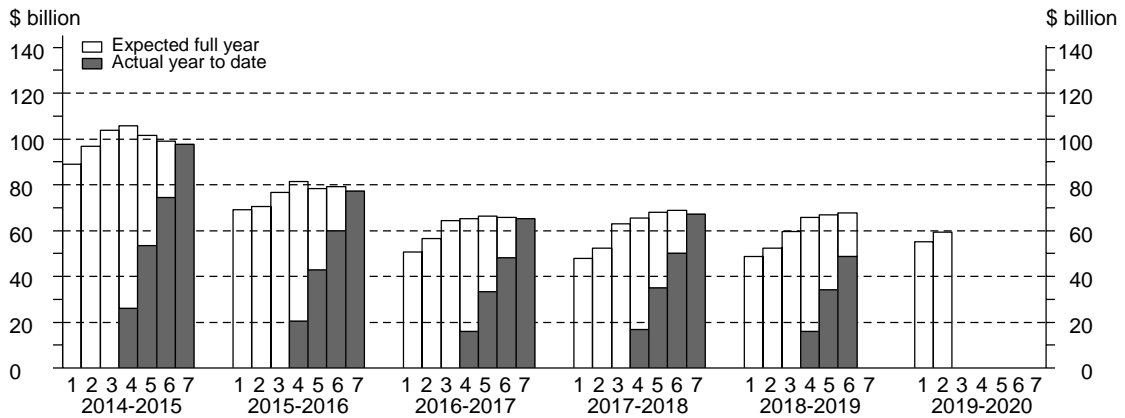
## BUILDINGS AND STRUCTURES

Estimate 6 for buildings and structures for 2018-19 is \$67,601m. This is 1.7% lower than Estimate 6 for 2017-18. The main contributor to the decrease is Mining (-15.3%).

Estimate 6 is 1.1% higher than Estimate 5 for 2018-19. The main contributor to the increase was Other Selected Industries (1.2%).

Estimate 2 for buildings and structures for 2019-20 is \$59,355m. This is 13.5% higher than Estimate 2 for 2018-19. The main contributor to the increase was Mining (22.7%).

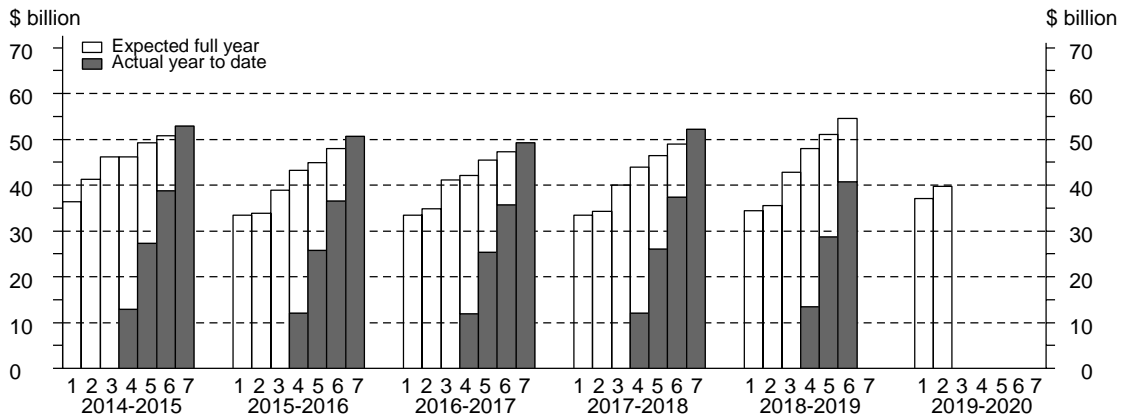
Estimate 2 is 7.8% higher than Estimate 1 for 2019-20. The main contributor to this increase is Other Selected Industries (8.3%).



## EQUIPMENT, PLANT AND MACHINERY

Estimate 6 for equipment, plant and machinery for 2018-19 is \$54,593m. This is 11.5% higher than Estimate 6 for 2017-18. The main contributor to this increase is Other Selected Industries (9.4%). Estimate 6 is 7.0% higher than Estimate 5 for 2018-19. The main contributor to the increase is Other Selected Industries (8.2%).

Estimate 2 for equipment, plant and machinery for 2019-20 is \$39,784m. This is 11.7% higher than Estimate 2 for 2018-19. The main contributor to the increase is Other Selected Industries (10.3%). Estimate 2 is 7.4% higher than Estimate 1 for 2019-20. The main contributor to the increase is Other Selected Industries (7.3%).



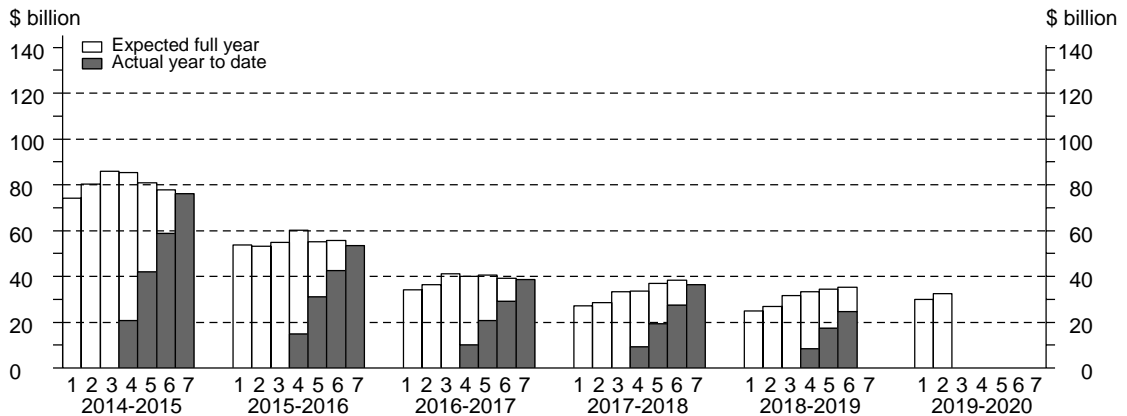


# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

## MINING

Estimate 6 for Mining for 2018-19 is \$35,333m. This is 7.8% lower than Estimate 6 for 2017-18. Estimate 6 is 2.4% higher than Estimate 5 for 2018-19. Buildings and structures is 1.3% higher and equipment, plant and machinery is 5.8% higher than the corresponding fifth estimate for 2018-19.

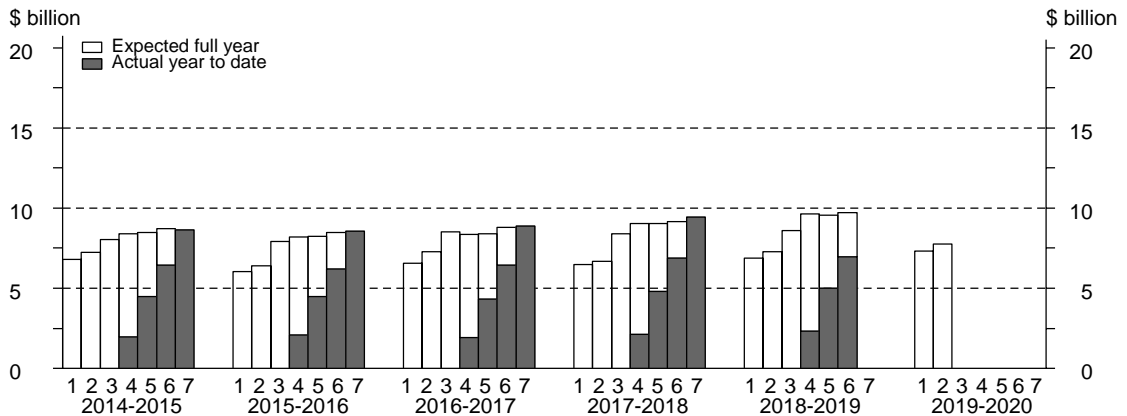
Estimate 2 for Mining for 2019-20 is \$32,410m. This is 21.0% higher than Estimate 2 for 2018-19. Estimate 2 is 7.7% higher than Estimate 1 for 2019-20. Buildings and structures is 6.4% higher and equipment, plant and machinery is 11.3% higher than the corresponding first estimate for 2019-20.



## MANUFACTURING

Estimate 6 for Manufacturing for 2018-19 is \$9,708m. This is 6.1% higher than Estimate 6 for 2017-18. Estimate 6 is 1.6% higher than Estimate 5 for 2018-19. Buildings and structures is 1.2% lower and Equipment, plant and machinery is 2.7% higher than the corresponding fifth estimate for 2018-19.

Estimate 2 for Manufacturing for 2019-20 is \$7,738m. This is 6.5% higher than Estimate 2 for 2018-19. Estimate 2 is 5.6% higher than Estimate 1 for 2019-20. Buildings and structures is 14.5% higher and equipment, plant and machinery is 1.8% higher than the corresponding first estimate for 2019-20.

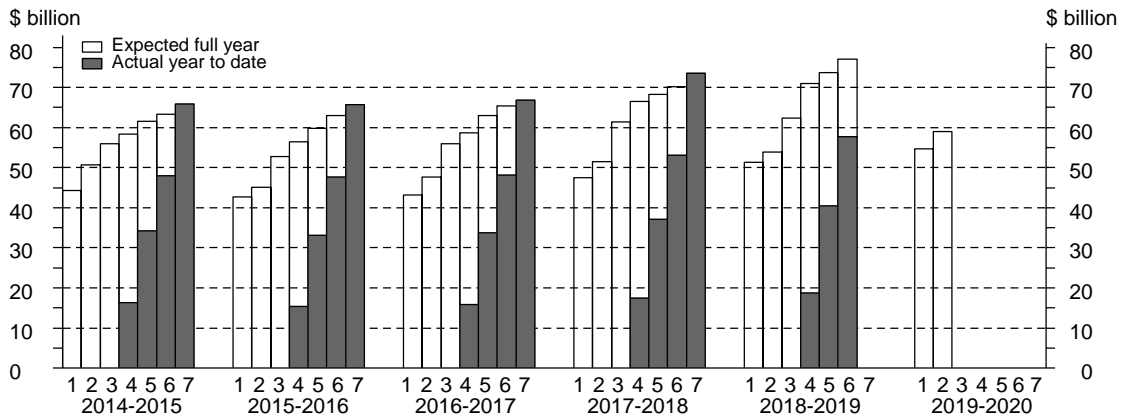


# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

## OTHER SELECTED INDUSTRIES

Estimate 6 for Other Selected Industries for 2018-19 is \$77,128m. This is 9.8% higher than Estimate 6 for 2017-18. Estimate 6 is 4.6% higher than Estimate 5 for 2018-19. Equipment, plant and machinery is 8.2% higher and buildings and structures is 1.2% higher than the corresponding fifth estimate for 2018-19.

Estimate 2 for Other Selected Industries for 2019-20 is \$58,992m. This is 9.6% higher than Estimate 2 for 2018-19. Estimate 2 is 7.8% higher than Estimate 1 for 2019-20. Equipment, plant and machinery is 7.3% higher and buildings and structures is 8.3% higher than the corresponding first estimate for 2019-20.



## ACTUAL AND EXPECTED EXPENDITURE, By type of asset and industry—Current prices

Period	BUILDINGS AND STRUCTURES				EQUIPMENT, PLANT AND MACHINERY				TOTAL			
	Mining	Manu- facturing	Other Selected Industries	Total	Mining	Manu- facturing	Other Selected Industries	Total	Mining	Manu- facturing	Other Selected Industries	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)												
<b>2016-17</b>	33 277	2 476	29 353	65 105	5 474	6 397	37 430	49 301	38 751	8 873	66 783	114 406
<b>2017-18</b>	29 390	2 597	35 200	67 187	6 999	6 854	38 320	52 174	36 389	9 451	73 520	119 361
<b>2017-18</b>												
December	7 709	825	9 779	18 312	2 165	1 846	9 915	13 926	9 873	2 671	19 693	32 238
March	6 684	543	7 658	14 886	1 491	1 535	8 364	11 390	8 175	2 078	16 022	26 276
June	6 913	641	9 621	17 174	2 063	1 931	10 776	14 770	8 975	2 572	20 397	31 945
<b>2018-19</b>												
September	6 499	619	8 822	15 964	1 923	1 702	9 851	13 476	8 422	2 322	18 672	29 440
December	6 654	725	10 855	18 234	2 370	1 940	10 868	15 178	9 023	2 665	21 724	33 412
March	5 521	500	8 389	14 410	1 741	1 455	8 882	12 079	7 263	1 955	17 271	26 489
ORIGINAL (Expected)(a)												
<b>2018-19</b>												
3 mths to Jun	7 680	763	10 549	18 992	2 944	2 004	8 912	13 860	10 624	2 766	19 461	32 852
Total fin year	26 355	2 607	38 615	67 601	8 978	7 101	38 513	54 593	35 333	9 708	77 128	122 193
<b>2019-20</b>												
Total fin year	23 288	2 468	33 600	59 355	9 122	5 270	25 392	39 784	32 410	7 738	58 992	99 139
SEASONALLY ADJUSTED (Actual)												
<b>2017-18</b>												
December	7 250	719	8 844	16 813	1 791	1 663	9 386	12 839	9 041	2 381	18 230	29 652
March	7 304	616	8 807	16 726	1 813	1 737	9 816	13 366	9 117	2 353	18 622	30 092
June	6 842	615	9 127	16 583	1 968	1 804	9 667	13 439	8 810	2 419	18 793	30 022
<b>2018-19</b>												
September	6 430	668	9 075	16 173	2 085	1 814	10 067	13 965	8 514	2 482	19 142	30 138
December	6 255	631	9 827	16 712	1 962	1 746	10 308	14 017	8 217	2 377	20 135	30 729
March	6 040	568	9 705	16 313	2 112	1 655	10 390	14 157	8 151	2 223	20 096	30 470
TREND (Actual)												
<b>2017-18</b>												
December	7 495	660	8 708	16 864	1 676	1 680	9 534	12 890	9 171	2 340	18 243	29 754
March	7 162	643	8 920	16 725	1 860	1 742	9 632	13 234	9 022	2 385	18 551	29 958
June	6 826	639	9 053	16 518	1 971	1 793	9 817	13 582	8 797	2 433	18 870	30 100
<b>2018-19</b>												
September	6 519	635	9 177	16 332	2 013	1 791	10 034	13 838	8 532	2 426	19 212	30 170
December	6 233	624	9 691	16 548	2 048	1 744	10 243	14 036	8 281	2 368	19 935	30 584
March	6 023	595	9 758	16 376	2 070	1 687	10 440	14 191	8 094	2 282	20 183	30 559

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 27 to 30 of the Explanatory Notes.

## ACTUAL AND EXPECTED EXPENDITURE, By detailed industry—Current prices

Period	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Transport, Postal and Warehousing
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)							
<b>2016-17</b>	38 751	8 873	5 406	6 286	4 152	5 666	10 037
<b>2017-18</b>	36 389	9 451	8 599	6 054	4 132	5 356	12 022
<b>2017-18</b>							
December	9 873	2 671	2 181	1 471	1 083	1 336	3 225
March	8 175	2 078	1 957	^ 1 315	870	1 014	2 694
June	8 975	2 572	2 657	^ 1 860	1 184	1 636	3 328
<b>2018-19</b>							
September	8 422	2 322	2 308	^ 1 660	1 028	1 471	3 065
December	9 023	2 665	2 651	1 954	1 344	1 873	3 918
March	7 263	1 955	2 207	^ 1 548	1 039	1 267	2 953
ORIGINAL (Expected)(a)							
<b>2018-19</b>							
3 mths to Jun	10 624	2 766	2 643	836	842	1 449	3 651
Total fin year	35 333	9 708	9 807	5 999	4 252	6 060	13 586
<b>2019-20</b>							
Total fin year	32 410	7 738	9 325	2 074	2 716	5 033	10 704
SEASONALLY ADJUSTED (Actual)							
<b>2017-18</b>							
December	9 041	2 381	2 010	1 462	937	1 161	2 992
March	9 117	2 353	2 278	1 522	1 049	1 358	3 150
June	8 810	2 419	2 452	1 497	1 093	1 427	3 186
<b>2018-19</b>							
September	8 514	2 482	2 368	1 844	1 082	1 495	3 016
December	8 217	2 377	2 455	1 958	1 193	1 632	3 640
March	8 151	2 223	2 546	1 796	1 240	1 614	3 539
TREND (Actual)							
<b>2017-18</b>							
December	9 171	2 340	2 042	1 520	1 005	1 281	2 974
March	9 022	2 385	2 270	1 482	1 023	1 311	3 102
June	8 797	2 433	2 381	1 609	1 067	1 414	3 146
<b>2018-19</b>							
September	8 532	2 426	2 429	1 768	1 122	1 520	3 133
December	8 281	2 368	2 464	1 870	1 174	1 587	3 537
March	8 094	2 282	2 507	1 905	1 226	1 633	3 567

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 27 to 30 of the Explanatory Notes.

ACTUAL AND EXPECTED EXPENDITURE, By detailed industry—Current prices *continued*

<i>Period</i>	<i>Information Media and Telecommunications</i>	<i>Financial and Insurance Services</i>	<i>Rental, Hiring and Real Estate Services</i>	<i>Professional, Scientific and Technical Services</i>	<i>Other Selected Services</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)						
<b>2016-17</b>	7 808	3 621	12 766	3 351	7 690	114 406
<b>2017-18</b>	8 101	3 824	13 332	3 915	8 186	119 361
<b>2017-18</b>						
December	2 164	1 071	3 837	^ 1 146	2 180	32 238
March	2 047	774	2 853	786	1 713	26 276
June	1 857	1 053	3 491	913	2 419	31 945
<b>2018-19</b>						
September	1 897	1 065	3 244	^ 1 007	1 928	29 440
December	^ 1 872	1 169	3 800	1 061	2 083	33 412
March	1 483	818	3 023	^ 987	1 947	26 489
ORIGINAL (Expected)(a)						
<b>2018-19</b>						
3 mths to Jun	2 236	942	3 990	836	2 037	32 852
Total fin year	7 487	3 994	14 056	3 890	7 996	122 193
<b>2019-20</b>						
Total fin year	7 156	3 375	11 323	2 065	5 221	99 139
SEASONALLY ADJUSTED (Actual)						
<b>2017-18</b>						
December	2 026	963	3 464	1 108	2 109	29 652
March	2 128	927	3 326	867	2 018	30 092
June	1 916	1 034	3 249	856	2 084	30 022
<b>2018-19</b>						
September	1 886	1 026	3 383	1 018	2 023	30 138
December	1 760	1 043	3 421	1 025	2 009	30 729
March	1 557	977	3 518	1 075	2 234	30 470
TREND (Actual)						
<b>2017-18</b>						
December	2 079	922	3 354	1 024	2 042	29 754
March	2 028	975	3 351	944	2 066	29 958
June	1 981	1 008	3 317	905	2 043	30 100
<b>2018-19</b>						
September	1 863	1 028	3 350	961	2 038	30 170
December	1 731	1 024	3 431	1 034	2 081	30 584
March	1 622	1 002	3 507	1 071	2 142	30 559

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 27 to 30 of the Explanatory Notes.

## ACTUAL EXPENDITURE, By type of asset and industry—Chain volume measures(a)

Period	ASSET			INDUSTRY			
	Buildings and Structures	Equipment, Plant and Machinery	Total	Mining	Manufacturing	Other Selected Industries	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL							
<b>2014-15</b>	99 910	53 724	153 343	77 566	8 878	67 086	153 343
<b>2015-16</b>	78 061	49 328	127 181	53 691	8 460	65 185	127 181
<b>2016-17</b>	65 105	49 301	114 406	38 751	8 873	66 783	114 406
<b>2017-18</b>	65 705	52 599	118 304	35 829	9 425	73 051	118 304
<b>2016-17</b>							
March	14 710	10 390	25 088	8 585	2 094	14 407	25 088
June	16 861	13 758	30 643	9 469	2 461	18 698	30 643
<b>2017-18</b>							
September	16 572	12 240	28 812	9 269	2 142	17 401	28 812
December	17 980	14 090	32 071	9 752	2 668	19 651	32 071
March	14 562	11 489	26 051	8 050	2 072	15 930	26 051
June	16 591	14 780	31 371	8 758	2 544	20 069	31 371
<b>2018-19</b>							
September	15 292	13 399	28 692	8 173	2 282	18 236	28 692
December	17 346	15 026	32 372	8 699	2 596	21 076	32 372
March	13 657	11 784	25 441	6 964	1 886	16 591	25 441
SEASONALLY ADJUSTED							
<b>2016-17</b>							
March	16 450	12 200	28 635	9 520	2 349	16 765	28 635
June	16 436	12 548	29 013	9 341	2 326	17 332	29 013
<b>2017-18</b>							
September	16 731	12 688	29 420	9 293	2 298	17 828	29 420
December	16 528	12 993	29 521	8 936	2 381	18 204	29 521
March	16 389	13 476	29 864	8 992	2 349	18 523	29 864
June	16 058	13 442	29 500	8 608	2 396	18 495	29 500
<b>2018-19</b>							
September	15 547	13 880	29 427	8 279	2 444	18 704	29 427
December	15 932	13 874	29 806	7 931	2 320	19 555	29 806
March	15 490	13 801	29 291	7 829	2 149	19 313	29 291
TREND							
<b>2016-17</b>							
March	16 302	12 276	28 582	9 525	2 269	16 783	28 582
June	16 532	12 456	28 996	9 356	2 332	17 300	28 996
<b>2017-18</b>							
September	16 625	12 736	29 369	9 209	2 340	17 815	29 369
December	16 576	13 040	29 618	9 066	2 343	18 208	29 618
March	16 348	13 333	29 679	8 880	2 378	18 422	29 679
June	16 018	13 603	29 621	8 609	2 411	18 601	29 621
<b>2018-19</b>							
September	15 710	13 759	29 469	8 293	2 387	18 787	29 469
December	15 789	13 846	29 638	7 998	2 311	19 329	29 638
March	15 568	13 899	29 451	7 773	2 213	19 466	29 451

(a) Reference year for chain volume measures is 2016-17.

ACTUAL EXPENDITURE, By type of asset and industry—Percentage change, Chain volume measures(a)

Period	ASSET			INDUSTRY			
	Buildings and Structures	Equipment, Plant and Machinery	Total	Mining	Manufacturing	Other Selected Industries	Total
	%	%	%	%	%	%	%
ORIGINAL							
<b>2014-15</b>	-9.8	1.5	-6.1	-16.9	-7.9	10.9	-6.1
<b>2015-16</b>	-21.9	-8.2	-17.1	-30.8	-4.7	-2.8	-17.1
<b>2016-17</b>	-16.6	-0.1	-10.0	-27.8	4.9	2.5	-10.0
<b>2017-18</b>	0.9	6.7	3.4	-7.5	6.2	9.4	3.4
<b>2016-17</b>							
March	-15.8	-21.8	-18.4	-18.9	-13.0	-18.9	-18.4
June	14.6	32.4	22.1	10.3	17.5	29.8	22.1
<b>2017-18</b>							
September	-1.7	-11.0	-6.0	-2.1	-13.0	-6.9	-6.0
December	8.5	15.1	11.3	5.2	24.5	12.9	11.3
March	-19.0	-18.5	-18.8	-17.5	-22.3	-18.9	-18.8
June	13.9	28.6	20.4	8.8	22.8	26.0	20.4
<b>2018-19</b>							
September	-7.8	-9.3	-8.5	-6.7	-10.3	-9.1	-8.5
December	13.4	12.1	12.8	6.4	13.8	15.6	12.8
March	-21.3	-21.6	-21.4	-20.0	-27.3	-21.3	-21.4
SEASONALLY ADJUSTED							
<b>2016-17</b>							
March	2.3	-0.4	1.1	-2.7	9.3	2.2	1.1
June	-0.1	2.9	1.3	-1.9	-1.0	3.4	1.3
<b>2017-18</b>							
September	1.8	1.1	1.4	-0.5	-1.2	2.9	1.4
December	-1.2	2.4	0.3	-3.8	3.6	2.1	0.3
March	-0.8	3.7	1.2	0.6	-1.3	1.8	1.2
June	-2.0	-0.3	-1.2	-4.3	2.0	-0.1	-1.2
<b>2018-19</b>							
September	-3.2	3.3	-0.2	-3.8	2.0	1.1	-0.2
December	2.5	0.0	1.3	-4.2	-5.1	4.5	1.3
March	-2.8	-0.5	-1.7	-1.3	-7.4	-1.2	-1.7
TREND							
<b>2016-17</b>							
March	1.5	0.1	0.9	-1.7	3.3	2.1	0.9
June	1.4	1.5	1.5	-1.8	2.8	3.1	1.5
<b>2017-18</b>							
September	0.6	2.2	1.3	-1.6	0.3	3.0	1.3
December	-0.3	2.4	0.8	-1.6	0.2	2.2	0.8
March	-1.4	2.2	0.2	-2.0	1.5	1.2	0.2
June	-2.0	2.0	-0.2	-3.1	1.4	1.0	-0.2
<b>2018-19</b>							
September	-1.9	1.1	-0.5	-3.7	-1.0	1.0	-0.5
December	0.5	0.6	0.6	-3.6	-3.2	2.9	0.6
March	-1.4	0.4	-0.6	-2.8	-4.3	0.7	-0.6

(a) Reference year for chain volume measures is 2016-17.

EXPECTED EXPENDITURE AND REALISATION RATIOS, By type of asset—Current prices

Financial Year	12 months expectation as reported in Jan-Feb of previous financial year (Estimate 1)	12 months expectation as reported in Apr-May of previous financial year (Estimate 2)	12 months expectation as reported in Jul-Aug (Estimate 3)	3 months actual and 9 months expectation as reported in Oct-Nov (Estimate 4)	6 months actual and 6 months expectation as reported in Jan-Feb (Estimate 5)	9 months actual and 3 months expectation as reported in Apr-May (Estimate 6)	12 months actual (Estimate 7)
BUILDINGS AND STRUCTURES (\$ million)							
2014-15	89 051	96 787	103 842	105 873	101 534	99 060	97 729
2015-16	69 097	70 607	76 759	81 484	78 344	79 159	77 111
2016-17	50 563	56 541	64 424	65 099	66 355	65 866	65 105
2017-18	47 783	52 262	63 034	65 362	67 870	68 748	67 187
2018-19	48 600	52 279	59 615	65 882	66 847	67 601	nya
2019-20	55 077	59 355	nya	nya	nya	nya	nya
BUILDINGS AND STRUCTURES (Realisation Ratio)(a)							
2013-14	0.97	0.94	0.91	0.90	0.90	0.95	1.00
2014-15	1.10	1.01	0.94	0.92	0.96	0.99	1.00
2015-16	1.12	1.09	1.00	0.95	0.98	0.97	1.00
2016-17	1.29	1.15	1.01	1.00	0.98	0.99	1.00
2017-18	1.41	1.29	1.07	1.03	0.99	0.98	1.00
EQUIPMENT, PLANT AND MACHINERY (\$ million)							
2014-15	36 326	41 273	46 105	46 221	49 264	50 754	52 925
2015-16	33 474	33 893	38 944	43 238	44 901	48 023	50 581
2016-17	33 374	34 768	41 175	42 080	45 400	47 309	49 301
2017-18	33 412	34 295	40 071	43 907	46 431	48 956	52 174
2018-19	34 388	35 605	42 865	47 922	51 004	54 593	nya
2019-20	37 044	39 784	nya	nya	nya	nya	nya
EQUIPMENT, PLANT AND MACHINERY (Realisation Ratio)(a)							
2013-14	1.23	1.23	1.14	1.09	1.06	1.00	1.00
2014-15	1.46	1.28	1.15	1.15	1.07	1.04	1.00
2015-16	1.51	1.49	1.30	1.17	1.13	1.05	1.00
2016-17	1.48	1.42	1.20	1.17	1.09	1.04	1.00
2017-18	1.56	1.52	1.30	1.19	1.12	1.07	1.00
TOTAL (\$ million)							
2014-15	125 378	138 060	149 948	152 094	150 798	149 814	150 655
2015-16	102 571	104 499	115 704	124 722	123 245	127 182	127 692
2016-17	83 937	91 309	105 599	107 179	111 755	113 175	114 406
2017-18	81 195	86 558	103 105	109 269	114 301	117 704	119 361
2018-19	82 987	87 883	102 479	113 804	117 852	122 193	nya
2019-20	92 121	99 139	nya	nya	nya	nya	nya
TOTAL (Realisation Ratio)(a)							
2013-14	1.04	1.01	0.98	0.95	0.95	0.97	1.00
2014-15	1.20	1.09	1.00	0.99	1.00	1.01	1.00
2015-16	1.24	1.22	1.10	1.02	1.04	1.00	1.00
2016-17	1.36	1.25	1.08	1.07	1.02	1.01	1.00
2017-18	1.47	1.38	1.16	1.09	1.04	1.01	1.00
TOTAL (percentage change over corresponding estimate for previous financial year)							
2014-15	-17.1	-11.3	-7.2	-8.2	-9.7	-8.2	-4.6
2015-16	-18.2	-24.3	-22.8	-18.0	-18.3	-15.1	-15.2
2016-17	-18.2	-12.6	-8.7	-14.1	-9.3	-11.0	-10.4
2017-18	-3.3	-5.2	-2.4	2.0	2.3	4.0	4.3
2018-19	2.2	1.5	-0.6	4.2	3.1	3.8	nya
2019-20	11.0	12.8	nya	nya	nya	nya	nya

nya not yet available

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. See paragraphs 27 to 30 of the Explanatory Notes.



EXPECTED EXPENDITURE AND REALISATION RATIOS, By industry—Current prices

Financial Year	12 months expectation as reported in Jan-Feb of previous financial year (Estimate 1)	12 months expectation as reported in Apr-May of previous financial year (Estimate 2)	12 months expectation as reported in Jul-Aug (Estimate 3)	3 months actual and 9 months expectation as reported in Oct-Nov (Estimate 4)	6 months actual and 6 months expectation as reported in Jan-Feb (Estimate 5)	9 months actual and 3 months expectation as reported in Apr-May (Estimate 6)	12 months actual (Estimate 7)
MINING (\$ million)							
2014-15	74 199	80 201	85 927	85 327	80 752	77 832	76 117
2015-16	53 820	53 058	54 991	60 110	55 251	55 696	53 389
2016-17	34 143	36 438	41 224	40 112	40 465	39 059	38 751
2017-18	27 244	28 427	33 259	33 727	36 970	38 319	36 389
2018-19	24 845	26 795	31 544	33 188	34 507	35 333	nya
2019-20	30 091	32 410	nya	nya	nya	nya	nya
MINING (Realisation Ratio)(a)							
2013-14	0.91	0.89	0.87	0.87	0.88	0.95	1.00
2014-15	1.03	0.95	0.89	0.89	0.94	0.98	1.00
2015-16	0.99	1.01	0.97	0.89	0.97	0.96	1.00
2016-17	1.13	1.06	0.94	0.97	0.96	0.99	1.00
2017-18	1.34	1.28	1.09	1.08	0.98	0.95	1.00
MANUFACTURING (\$ million)							
2014-15	6 814	7 234	8 053	8 386	8 470	8 703	8 628
2015-16	6 021	6 410	7 931	8 199	8 244	8 468	8 566
2016-17	6 563	7 269	8 499	8 345	8 378	8 809	8 873
2017-18	6 474	6 670	8 408	9 053	9 053	9 154	9 451
2018-19	6 888	7 267	8 593	9 645	9 553	9 708	nya
2019-20	7 329	7 738	nya	nya	nya	nya	nya
MANUFACTURING (Realisation Ratio)(a)							
2013-14	1.18	1.11	1.07	0.98	1.02	0.97	1.00
2014-15	1.27	1.19	1.07	1.03	1.02	0.99	1.00
2015-16	1.42	1.34	1.08	1.04	1.04	1.01	1.00
2016-17	1.35	1.22	1.04	1.06	1.06	1.01	1.00
2017-18	1.46	1.42	1.12	1.04	1.04	1.03	1.00
OTHER SELECTED INDUSTRIES (\$ million)							
2014-15	44 364	50 624	55 968	58 381	61 576	63 280	65 910
2015-16	42 730	45 032	52 781	56 413	59 750	63 019	65 737
2016-17	43 231	47 602	55 877	58 722	62 912	65 306	66 783
2017-18	47 477	51 460	61 438	66 490	68 278	70 231	73 520
2018-19	51 254	53 821	62 343	70 935	73 768	77 128	nya
2019-20	54 700	58 992	nya	nya	nya	nya	nya
OTHER SELECTED INDUSTRIES (Realisation Ratio)(a)							
2013-14	1.32	1.27	1.18	1.11	1.05	1.00	1.00
2014-15	1.49	1.30	1.18	1.13	1.07	1.04	1.00
2015-16	1.54	1.46	1.25	1.17	1.10	1.04	1.00
2016-17	1.54	1.40	1.20	1.14	1.06	1.02	1.00
2017-18	1.55	1.43	1.20	1.11	1.08	1.05	1.00

nya not yet available

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. See paragraphs 27 to 30 of the Explanatory Notes.

# RATIOS OF ACTUAL TO SHORT TERM EXPECTATIONS(a), By type of asset and industry—Current prices

Financial Year	3 MONTHS ENDING		6 MONTHS ENDING	
	31 December (collected in September Survey)	30 June (collected in March Survey)	31 December (collected in June Survey)	30 June (collected in December survey)
TYPE OF ASSET				
<b>Buildings and Structures</b>				
2014–15	0.93	0.95	0.97	0.92
2015–16	0.88	0.89	0.97	0.97
2016–17	0.97	0.96	0.97	0.96
2017–18	1.04	0.92	1.06	0.98
2018–19	1.01	nya	1.10	nya
<b>Equipment, Plant and Machinery</b>				
2014–15	1.15	1.18	1.15	1.17
2015–16	1.13	1.22	1.28	1.30
2016–17	1.19	1.17	1.19	1.19
2017–18	1.17	1.28	1.26	1.28
2018–19	1.21	nya	1.33	nya
<b>Total</b>				
2014–15	0.99	1.02	1.03	1.00
2015–16	0.96	1.02	1.07	1.08
2016–17	1.05	1.04	1.05	1.05
2017–18	1.09	1.05	1.13	1.10
2018–19	1.09	nya	1.19	nya
TYPE OF INDUSTRY				
<b>Mining</b>				
2014–15	0.89	0.91	0.93	0.88
2015–16	0.84	0.83	0.96	0.92
2016–17	0.98	0.97	0.93	0.91
2017–18	1.09	0.82	1.05	0.97
2018–19	0.99	nya	1.02	nya
<b>Manufacturing</b>				
2014–15	0.97	0.97	1.07	1.04
2015–16	1.00	1.04	1.04	1.09
2016–17	0.92	1.03	0.97	1.12
2017–18	1.04	1.13	1.09	1.09
2018–19	1.00	nya	1.16	nya
<b>Other selected industries</b>				
2014–15	1.15	1.17	1.18	1.16
2015–16	1.10	1.18	1.20	1.22
2016–17	1.12	1.09	1.16	1.13
2017–18	1.10	1.19	1.19	1.17
2018–19	1.15	nya	1.29	nya
<b>Total</b>				
2014–15	0.99	1.02	1.03	1.00
2015–16	0.96	1.02	1.07	1.08
2016–17	1.05	1.04	1.05	1.05
2017–18	1.09	1.05	1.13	1.10
2018–19	1.09	nya	1.19	nya

nya not yet available

(a) For more information on Realisation Ratios see paragraphs 27 to 30 of the Explanatory Notes.

## ACTUAL EXPENDITURE ON BUILDINGS AND STRUCTURES, By state—Current prices

Period	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
2014-15	11 185	7 145	23 268	3 273	46 395	272	5 831	360	97 729
2015-16	11 669	7 338	14 173	2 549	35 658	357	4 991	376	77 111
2016-17	11 804	9 032	13 516	2 564	22 062	404	5 289	434	65 105
2017-18	14 893	9 763	14 190	3 696	18 663	336	4 930	715	67 187
<b>2016-17</b>									
March	2 760	2 071	2 908	580	4 743	^ 82	1 479	^ 108	14 732
June	3 306	2 507	3 517	763	5 341	114	1 343	117	17 008
<b>2017-18</b>									
September	3 148	2 334	3 509	958	5 251	^ 88	1 390	136	16 815
December	3 966	2 854	3 970	1 092	4 879	76	1 242	234	18 312
March	3 390	2 083	2 953	658	4 278	^ 67	1 255	204	14 886
June	4 389	2 492	3 759	989	4 255	^ 105	1 044	141	17 174
<b>2018-19</b>									
September	3 774	2 737	3 719	^ 833	3 926	*119	727	129	15 964
December	5 087	3 123	3 922	1 114	4 190	^ 131	487	182	18 234
March	3 933	2 691	2 951	1 053	3 251	97	320	113	14 410
SEASONALLY ADJUSTED									
<b>2016-17</b>									
March	3 042	2 318	3 462	661	5 223	101	1 479	108	16 496
June	3 058	2 418	3 464	775	5 286	103	1 343	117	16 592
<b>2017-18</b>									
September	3 444	2 393	3 462	954	5 284	91	1 390	136	16 971
December	3 608	2 606	3 508	967	4 473	68	1 242	234	16 813
March	3 745	2 333	3 516	742	4 729	83	1 255	204	16 726
June	4 049	2 403	3 711	1 008	4 213	94	1 044	141	16 583
<b>2018-19</b>									
September	4 148	2 812	3 656	830	3 948	124	727	129	16 173
December	4 620	2 846	3 472	990	3 836	117	487	182	16 712
March	4 343	3 016	3 511	1 181	3 601	121	320	113	16 313
TREND									
<b>2016-17</b>									
March	2 970	2 310	3 420	660	5 342	107	1 396	106	16 363
June	3 164	2 403	3 453	805	5 229	100	1 406	123	16 684
<b>2017-18</b>									
September	3 371	2 466	3 478	896	5 056	86	1 355	163	16 847
December	3 595	2 445	3 500	914	4 806	78	1 300	198	16 864
March	3 813	2 430	3 581	887	4 509	82	1 206	192	16 725
June	4 013	2 505	3 638	867	4 253	98	1 014	166	16 518
<b>2018-19</b>									
September	4 128	2 684	3 617	921	4 015	113	759	147	16 332
December	(a)4 534	2 880	3 550	1 010	3 783	120	509	143	16 548
March	4 461	3 020	3 476	1 094	3 649	123	313	139	16 376

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Break in series between this quarter and preceding quarter

## ACTUAL EXPENDITURE ON EQUIPMENT, PLANT AND MACHINERY, By state—Current prices

	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
<i>Period</i>	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2014-15</b>	15 819	11 501	11 732	2 975	8 717	623	1 166	393	52 925
<b>2015-16</b>	16 585	12 324	9 884	2 694	7 502	587	585	419	50 581
<b>2016-17</b>	16 492	11 597	10 154	2 603	6 961	579	501	413	49 301
<b>2017-18</b>	16 149	12 148	10 727	2 743	8 469	924	552	463	52 174
<b>2016-17</b>									
March	3 172	2 437	2 087	^ 684	1 685	^ 128	^ 80	^ 65	10 339
June	4 421	3 229	3 024	^ 666	1 866	^ 172	176	^ 111	13 667
<b>2017-18</b>									
September	3 922	2 817	2 469	^ 687	1 768	^ 201	126	^ 99	12 088
December	4 337	3 132	2 879	^ 636	2 458	203	^ 165	115	13 926
March	3 497	2 784	2 170	514	1 944	^ 241	^ 124	^ 115	11 390
June	4 394	3 415	3 208	^ 905	2 298	^ 280	136	^ 134	14 770
<b>2018-19</b>									
September	4 506	3 023	2 521	^ 760	2 189	^ 234	125	^ 118	13 476
December	4 570	3 535	3 300	769	2 471	^ 278	^ 126	128	15 178
March	3 582	3 014	2 471	622	1 908	236	^ 127	^ 118	12 079
SEASONALLY ADJUSTED									
<b>2016-17</b>									
March	3 760	2 821	2 553	811	1 881	152	98	80	12 128
June	4 170	2 920	2 595	588	1 813	159	151	105	12 457
<b>2017-18</b>									
September	3 848	2 957	2 648	715	1 872	210	133	90	12 526
December	4 023	2 912	2 648	602	2 175	183	156	114	12 839
March	4 162	3 206	2 539	609	2 167	281	149	137	13 366
June	4 138	3 095	2 888	797	2 233	258	117	125	13 439
<b>2018-19</b>									
September	4 411	3 176	2 712	784	2 327	245	133	111	13 965
December	4 245	3 291	3 022	736	2 180	254	120	126	14 017
March	4 268	3 457	3 043	736	2 126	271	150	136	14 157
TREND									
<b>2016-17</b>									
March	3 973	2 867	2 567	699	1 772	149	119	96	12 222
June	3 930	2 880	2 612	692	1 860	166	132	92	12 344
<b>2017-18</b>									
September	3 974	2 936	2 611	644	1 949	189	145	100	12 584
December	4 020	3 013	2 629	625	2 074	221	149	116	12 890
March	4 105	3 082	2 658	672	2 201	248	141	125	13 234
June	4 234	3 139	2 733	731	2 262	258	130	125	13 582
<b>2018-19</b>									
September	4 284	3 204	2 845	770	2 252	257	125	121	13 838
December	4 297	3 296	2 952	760	2 212	255	131	124	14 036
March	4 289	3 403	3 027	734	2 148	263	141	131	14 191

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2014-15</b>	27 004	18 646	35 000	6 249	55 112	895	6 996	753	150 655
<b>2015-16</b>	28 254	19 661	24 057	5 242	43 160	944	5 577	795	127 692
<b>2016-17</b>	28 296	20 629	23 671	5 166	29 023	983	5 791	847	114 406
<b>2017-18</b>	31 042	21 912	24 917	6 439	27 131	1 260	5 482	1 178	119 361
<b>2016-17</b>									
March	5 932	4 509	4 995	1 265	6 428	^ 211	1 559	^ 174	25 072
June	7 727	5 736	6 542	1 429	7 207	286	1 520	229	30 675
<b>2017-18</b>									
September	7 070	5 151	5 978	1 645	7 020	^ 289	1 516	235	28 903
December	8 303	5 987	6 849	1 728	7 338	278	1 407	349	32 238
March	6 887	4 867	5 123	1 172	6 222	^ 307	1 378	319	26 276
June	8 784	5 907	6 967	1 894	6 553	^ 385	1 180	275	31 945
<b>2018-19</b>									
September	8 280	5 760	6 240	1 594	6 115	^ 353	852	246	29 440
December	9 657	6 658	7 222	1 883	6 661	^ 409	613	309	33 412
March	7 515	5 705	5 423	1 675	5 160	332	447	231	26 489
SEASONALLY ADJUSTED									
<b>2016-17</b>									
March	6 802	5 140	6 015	1 472	7 104	253	1 577	188	28 625
June	7 228	5 338	6 060	1 363	7 100	262	1 495	222	29 048
<b>2017-18</b>									
September	7 292	5 350	6 110	1 669	7 156	301	1 523	227	29 497
December	7 631	5 518	6 156	1 569	6 648	251	1 398	348	29 652
March	7 907	5 539	6 055	1 351	6 896	364	1 403	341	30 092
June	8 187	5 498	6 599	1 805	6 446	353	1 160	266	30 022
<b>2018-19</b>									
September	8 559	5 988	6 368	1 614	6 274	368	860	240	30 138
December	8 865	6 136	6 494	1 726	6 017	370	607	308	30 729
March	8 611	6 473	6 554	1 917	5 727	393	471	249	30 470
TREND									
<b>2016-17</b>									
March	6 943	5 176	5 988	1 358	7 114	256	1 515	201	28 586
June	7 094	5 284	6 065	1 497	7 089	266	1 538	215	29 028
<b>2017-18</b>									
September	7 345	5 401	6 090	1 540	7 006	276	1 500	263	29 431
December	7 616	5 458	6 129	1 539	6 880	298	1 449	314	29 754
March	7 918	5 513	6 240	1 560	6 709	330	1 347	317	29 958
June	8 247	5 644	6 371	1 598	6 515	356	1 144	291	30 100
<b>2018-19</b>									
September	8 412	5 888	6 462	1 691	6 267	370	884	268	30 170
December	8 832	6 176	6 502	1 770	5 994	375	640	267	30 584
March	8 750	6 424	6 502	1 828	5 797	386	454	271	30 559

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2014-15</b>	11 766	7 099	24 282	3 322	46 877	285	5 912	371	99 910
<b>2015-16</b>	11 995	7 287	14 547	2 574	35 839	367	5 022	382	78 061
<b>2016-17</b>	11 804	9 032	13 516	2 564	22 062	404	5 289	434	65 105
<b>2017-18</b>	14 424	9 595	13 888	3 622	18 351	325	4 805	696	65 705
<b>2016-17</b>									
March	2 757	2 072	2 894	581	4 737	82	1 476	108	14 710
June	3 256	2 498	3 475	758	5 312	112	1 334	116	16 861
<b>2017-18</b>									
September	3 079	2 319	3 453	948	5 187	86	1 366	134	16 572
December	3 860	2 828	3 895	1 074	4 808	73	1 214	228	17 980
March	3 285	2 046	2 891	643	4 212	64	1 223	198	14 562
June	4 200	2 402	3 648	957	4 145	101	1 002	135	16 591
<b>2018-19</b>									
September	3 570	2 619	3 570	803	3 801	113	694	123	15 292
December	4 773	2 949	3 770	1 063	4 034	123	463	172	17 346
March	3 667	2 536	2 827	998	3 127	91	303	107	13 657
SEASONALLY ADJUSTED									
<b>2016-17</b>									
March	3 043	2 320	3 432	656	5 219	101	1 476	108	16 450
June	3 019	2 411	3 412	767	5 256	102	1 334	116	16 436
<b>2017-18</b>									
September	3 377	2 382	3 401	946	5 213	90	1 366	134	16 731
December	3 521	2 590	3 440	957	4 399	65	1 214	228	16 528
March	3 639	2 300	3 443	732	4 645	80	1 223	198	16 389
June	3 887	2 324	3 604	986	4 094	90	1 002	135	16 058
<b>2018-19</b>									
September	3 936	2 700	3 511	809	3 813	117	694	123	15 547
December	4 348	2 697	3 340	955	3 684	109	463	172	15 932
March	4 063	2 852	3 366	1 131	3 455	113	303	107	15 490
TREND									
<b>2016-17</b>									
March	2 962	2 311	3 391	655	5 335	108	1 393	105	16 302
June	3 127	2 399	3 401	798	5 193	100	1 394	122	16 532
<b>2017-18</b>									
September	3 308	2 457	3 418	888	4 997	85	1 334	160	16 625
December	3 509	2 427	3 434	905	4 729	75	1 271	193	16 576
March	3 697	2 390	3 499	875	4 416	78	1 171	187	16 348
June	3 852	2 430	3 530	850	4 139	93	977	159	16 018
<b>2018-19</b>									
September	3 922	2 572	3 488	895	3 881	107	728	140	15 710
December	(b)4 270	2 737	3 409	975	3 636	113	484	135	15 789
March	4 173	2 854	3 330	1 049	3 497	115	281	131	15 568

(a) Reference year for chain volume measures is 2016-17.

(b) Break in series between this quarter and preceding quarter

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2014-15</b>	16 007	11 628	11 916	3 041	8 942	633	1 192	394	53 724
<b>2015-16</b>	16 165	11 999	9 646	2 635	7 335	572	571	407	49 328
<b>2016-17</b>	16 492	11 597	10 154	2 603	6 961	579	501	413	49 301
<b>2017-18</b>	16 286	12 258	10 813	2 765	8 522	931	556	468	52 599
<b>2016-17</b>									
March	3 191	2 447	2 098	686	1 694	129	80	66	10 390
June	4 450	3 251	3 043	669	1 882	173	177	112	13 758
<b>2017-18</b>									
September	3 970	2 853	2 499	695	1 792	203	128	100	12 240
December	4 389	3 174	2 914	644	2 481	205	167	117	14 090
March	3 529	2 811	2 189	519	1 956	243	125	117	11 489
June	4 398	3 420	3 212	907	2 294	280	137	134	14 780
<b>2018-19</b>									
September	4 482	3 010	2 507	754	2 172	232	124	118	13 399
December	4 535	3 511	3 266	759	2 426	276	125	128	15 026
March	3 505	2 944	2 410	606	1 852	227	124	117	11 784
SEASONALLY ADJUSTED									
<b>2016-17</b>									
March	3 795	2 835	2 572	803	1 889	152	101	82	12 200
June	4 209	2 941	2 614	587	1 828	160	155	106	12 548
<b>2017-18</b>									
September	3 897	2 992	2 682	724	1 899	212	135	92	12 688
December	4 067	2 945	2 680	613	2 199	184	157	115	12 993
March	4 192	3 229	2 561	621	2 188	280	148	138	13 476
June	4 130	3 092	2 891	808	2 237	255	115	124	13 442
<b>2018-19</b>									
September	4 376	3 153	2 697	787	2 317	240	130	110	13 880
December	4 201	3 259	2 990	736	2 148	249	117	125	13 874
March	4 165	3 368	2 967	726	2 071	258	145	133	13 801
TREND									
<b>2016-17</b>									
March	4 003	2 879	2 580	692	1 777	150	123	97	12 276
June	3 973	2 905	2 637	692	1 877	167	135	94	12 456
<b>2017-18</b>									
September	4 023	2 969	2 643	650	1 974	191	148	102	12 736
December	4 064	3 045	2 659	636	2 099	222	151	117	13 040
March	4 129	3 102	2 679	684	2 219	247	141	125	13 333
June	4 232	3 141	2 738	741	2 268	256	129	125	13 603
<b>2018-19</b>									
September	4 254	3 183	2 830	775	2 239	252	123	120	13 759
December	4 238	3 250	2 912	758	2 179	248	127	122	13 846
March	4 202	3 334	2 964	726	2 102	253	136	129	13 899

(a) Reference year for chain volume measures is 2016-17.

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2014-15</b>	27 762	18 750	36 074	6 365	55 719	921	7 104	766	153 343
<b>2015-16</b>	28 147	19 309	24 156	5 209	43 090	940	5 596	790	127 181
<b>2016-17</b>	28 296	20 629	23 671	5 166	29 023	983	5 791	847	114 406
<b>2017-18</b>	30 710	21 853	24 701	6 386	26 873	1 256	5 361	1 164	118 304
<b>2016-17</b>									
March	5 933	4 517	4 991	1 268	6 437	211	1 555	173	25 088
June	7 705	5 749	6 530	1 426	7 200	286	1 513	228	30 643
<b>2017-18</b>									
September	7 049	5 172	5 952	1 643	6 978	290	1 494	234	28 812
December	8 249	6 003	6 809	1 718	7 288	278	1 381	345	32 071
March	6 814	4 857	5 080	1 162	6 168	307	1 347	315	26 051
June	8 598	5 822	6 859	1 864	6 439	381	1 139	270	31 371
<b>2018-19</b>									
September	8 052	5 629	6 077	1 558	5 974	345	818	240	28 692
December	9 308	6 460	7 036	1 822	6 459	399	588	299	32 372
March	7 172	5 480	5 237	1 604	4 980	317	427	223	25 441
SEASONALLY ADJUSTED									
<b>2016-17</b>									
March	6 823	5 153	6 001	1 461	7 115	254	1 576	189	28 635
June	7 227	5 353	6 039	1 352	7 092	262	1 490	223	29 013
<b>2017-18</b>									
September	7 282	5 373	6 084	1 668	7 113	301	1 501	226	29 420
December	7 587	5 533	6 119	1 569	6 600	249	1 372	343	29 521
March	7 826	5 528	6 003	1 353	6 831	360	1 370	335	29 864
June	8 015	5 418	6 496	1 796	6 328	345	1 118	260	29 500
<b>2018-19</b>									
September	8 324	5 851	6 200	1 595	6 124	356	824	233	29 427
December	8 545	5 954	6 325	1 690	5 830	358	581	297	29 806
March	8 219	6 218	6 328	1 857	5 523	371	449	239	29 291
TREND									
<b>2016-17</b>									
March	6 960	5 189	5 973	1 347	7 117	257	1 516	203	28 582
June	7 097	5 303	6 044	1 490	7 077	267	1 530	215	28 996
<b>2017-18</b>									
September	7 333	5 425	6 065	1 537	6 976	275	1 482	262	29 369
December	7 573	5 471	6 094	1 540	6 829	297	1 422	310	29 618
March	7 824	5 492	6 177	1 560	6 634	325	1 312	312	29 679
June	8 086	5 571	6 266	1 591	6 404	349	1 106	284	29 621
<b>2018-19</b>									
September	8 179	5 754	6 312	1 670	6 118	359	850	260	29 469
December	8 510	5 985	6 316	1 733	5 813	360	611	257	29 638
March	8 369	6 181	6 292	1 773	5 577	367	433	260	29 451

(a) Reference year for chain volume measures is 2016-17.



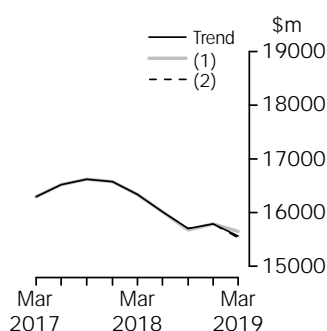
## WHAT IF...? REVISIONS TO TREND ESTIMATES

### EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

#### TREND REVISIONS

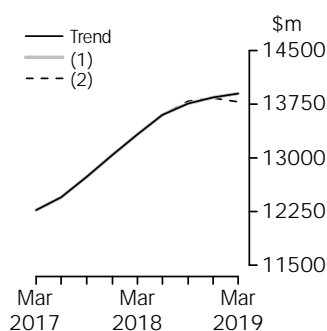
Recent seasonally adjusted and trend estimates are likely to be revised when original estimates for subsequent quarters become available. The approximate effects of possible scenarios on trend estimates for capital expenditure in chain volume terms are presented below by illustrating the impact if next quarter's seasonally adjusted estimate rises or falls by a specified percentage (based on the historical average of movements in seasonally adjusted estimates). For further information, see paragraphs 41 and 42 in the Explanatory Notes.

#### BUILDINGS AND STRUCTURES



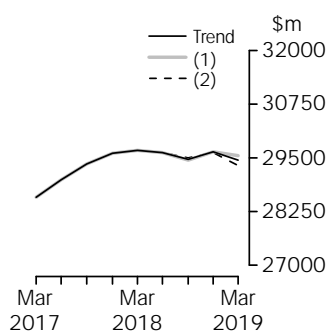
	WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:					
	Trend as published		(1) rises by 2.1% on this quarter		(2) falls by 2.1% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2018</b>						
June	16 018	-2.0	16 018	-2.0	16 018	-2.0
September	15 710	-1.9	15 687	-2.1	15 709	-1.9
December	15 789	0.5	15 795	0.7	15 787	0.5
<b>2019</b>						
March	15 568	-1.4	15 655	-0.9	15 545	-1.5

#### EQUIPMENT, PLANT AND MACHINERY



	WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:					
	Trend as published		(1) rises by 1.9% on this quarter		(2) falls by 1.9% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2018</b>						
June	13 603	2.0	13 603	2.0	13 603	2.0
September	13 759	1.1	13 766	1.2	13 790	1.4
December	13 846	0.6	13 846	0.6	13 838	0.3
<b>2019</b>						
March	13 899	0.4	13 903	0.4	13 787	-0.4

#### TOTAL CAPITAL EXPENDITURE



	WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:					
	Trend as published		(1) rises by 2.0% on this quarter		(2) falls by 2.0% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2018</b>						
June	29 621	-0.2	29 621	-0.2	29 621	-0.2
September	29 469	-0.5	29 452	-0.6	29 497	-0.4
December	29 638	0.6	29 647	0.7	29 631	0.5
<b>2019</b>						
March	29 451	-0.6	29 559	-0.3	29 336	-1.0

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication contains estimates of actual and expected new capital expenditure by private businesses for selected industries in Australia. The series have been compiled from data collected by the Australian Bureau of Statistics (ABS) in its quarterly Survey of New Capital Expenditure.

### SCOPE OF THE SURVEY

**2** The Survey of New Capital Expenditure includes the following industries classified according to the Australian and New Zealand Standard Industrial Classification, ANZSIC, 2006:

Mining (Division B)

Manufacturing (Division C)

Other selected industries:

Electricity, Gas, Water and Waste Services (Division D)

Construction (Division E)

Wholesale Trade (Division F)

Retail Trade (Division G)

Transport, Postal and Warehousing (Division I)

Information Media and Telecommunications (Division J)

Finance and Insurance (Division K, excluding ANZSIC class 6330, Superannuation Funds)

Rental, Hiring and Real Estate Services (Division L)

Professional, Scientific and Technical Services (Division M)

Other selected services:

Accommodation and Food Services (Division H)

Administrative and Support Services (Division N)

Arts and Recreation Services (Division R)

Other Services (Division S)

**3** From June quarter 2018 the survey also includes the following industries which are presented as experimental estimates in the Appendix section of this publication:

Education and Training (Division P)

Health Care and Social Assistance (Division Q)

**4** The survey excludes the following industries:

Agriculture, Forestry and Fishing (Division A)

Public Administration and Safety (Division O)

Superannuation Funds (Class 6330)

**5** The scope excludes public sector business units (i.e. all departments, authorities and other organisations owned and controlled by Commonwealth, State and Local Government).

**6** The Survey of New Capital Expenditure, like most ABS economic collections, takes its frame from Employing and Non-Employing Units on the ABS Business Register which is primarily based on ABN registrations to the Australian Business Register, which is managed by the Australian Taxation Office (ATO). The frame is updated quarterly to take account of new businesses and changes in the characteristics of businesses, such as industry and size.

**7** Businesses which have ceased employing are identified when the Australian Taxation Office (ATO) cancels their Australian Business Number (ABN) registration. In addition, businesses which do not remit for Goods and Services Tax and/or Income Tax Withholding purposes for the previous five quarters, are removed from the frame.

**8** As noted, the Survey frame includes Employing and Non-Employing Units on the ABS Business Register. However, micro non-employing businesses are excluded. These are very small units on the ABS Business Register, by standard measures of size. While there are a substantial number of these businesses, it is expected that they would not

## EXPLANATORY NOTES *continued*

### SCOPE OF THE SURVEY

*continued*

contribute significantly to the estimates, although the impact would vary from industry to industry.

### STATISTICAL UNIT

**9** In the Survey of New Capital Expenditure, 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 ATO administered Australian Business Register. This unit is suitable for ABS statistical needs when the business is simple in structure.

**10** For more significant and diverse businesses where the ABN unit is not suitable for ABS 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. Further details about the ABS economic statistical units used in this 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).

### SURVEY METHODOLOGY

**11** The survey is conducted on a quarterly basis. It is based on a random sample of approximately 9,000 units which is stratified by industry, state/territory and derived employment size. The figures obtained from the selected units are supplemented by data from units which have large capital expenditure and are outside the sample framework, or not adequately covered by it.

**12** Respondents are asked to provide data on the same basis as their own management accounts. Where a selected unit does not respond in a given survey period, a value is estimated. If data are subsequently provided, the estimated value is replaced with reported data. Aggregates are calculated from all data using the 'number raised' estimation technique. Data are edited at both individual unit level and at aggregate level.

### TIMING AND CONSTRUCTION OF SURVEY CYCLE

**13** Surveys are conducted in respect of each quarter and returns are completed in the 8 or 9 week period after the end of the quarter to which the survey data relate (e.g. March quarter survey returns are completed during April and May).

**14** Businesses are requested to provide 3 basic figures each survey:

- Actual expenditure incurred during the reference period (*Act*)
- A short term expectation (*E1*) and a longer term expectation (*E2*).

## EXPLANATORY NOTES *continued*

### Period to which reported data relates

<u>Survey Quarter</u>	2016-17				2017-18				2018-19			
	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
December 2016	Act	Act	E1		E2							
March 2017	Act	Act	Act	E1	E2							
June 2017	Act	Act	Act	Act	E1		E2					
September 2017					Act	E1	E2					
December 2017					Act	Act	E1		E2			
March 2018					Act	Act	Act	E1	E2			
June 2018					Act	Act	Act	Act	E1		E2	

#### TIMING AND CONSTRUCTION OF SURVEY CYCLE *continued*

**15** This survey cycle facilitates the formation of estimates of expenditure for financial years (12 months ending 30 June) which are presented in tables 5 and 6 of this publication. For example, as the previous table shows for 2018-19:

- the first estimate was available from the December 2017 survey as a longer term expectation (E2)
- the second estimate was available from the March 2018 survey (again as a longer term expectation)
- the third estimate was available from the June 2018 survey as the sum of two expectations (E1 + E2)
- in the September 2018, December 2018 and March 2019 surveys the fourth, fifth and sixth estimates, respectively, are derived from the sum of actual expenditure (for that part of the year completed) and expected expenditure (for the remainder of the year) as recorded in the current quarter's survey
- the final (or seventh) estimate from the June quarter 2019 survey is derived from the sum of the actual expenditure for each of the four quarters in the 2018-19 financial year.

**16** Businesses are requested to provide actual expenditure data by state/territory each quarter. Prior to 2002, businesses were also asked to provide expected expenditure data by state/territory each December quarter. Since 2002 state/territory expectations data for businesses which operate in more than one state or territory are pro-rated to states/territories based on actual expenditure for the December quarter in each state or territory. Expectations data for businesses operating within a single state/territory are allocated to that state/territory. Expectations for businesses which report no actual expenditure for the December quarter are split equally among the states in which the businesses are known to operate.

**17** These expectations data by state/territory are not included in this publication but are released on the ABS Website.

#### SAMPLE REVISION

**18** The survey frames and samples are revised each quarter to ensure that they remain representative of the survey population. The timing for creating each quarter's survey frame is consistent with that of other ABS business surveys. This provides for greater consistency when comparing data across surveys.

**19** Additionally, with these revisions to the sample, some of the units from the sampled sector are rotated out of the survey and are replaced by others to spread the reporting workload equitably.

## EXPLANATORY NOTES *continued*

### SAMPLE REVISION *continued*

**20** Adjustments are included in the estimates to allow for lags in processing new businesses to the ABS Business Register, and the omission of some businesses from the register. The majority of businesses affected and to which adjustments apply are small in size. As an indication of the size of these adjustments, in the March quarter 2019 they represented about 0.8% of the total estimate of actual new capital expenditure.

### CLASSIFICATION BY INDUSTRY

**21** The Australian and New Zealand Standard Industrial Classification (ANZSIC) has been developed for use in both countries for the production and analysis of industry statistics. For more information, users are referred to *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006* (cat. no. 1292.0).

**22** In order to classify new capital expenditure by industry, each statistical unit (as defined above) is classified to the (ANZSIC) industry in which it mainly operates.

### CHAIN VOLUME MEASURES

**23** The chain volume measures appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in the chosen reference year (currently 2016-17). The current price values may be thought to be the product of a price and quantity. The value in chain volume terms can be derived by linking together movements in volumes, calculated using the average prices of the previous financial year and applying compound movements to the current price estimates of the reference year. Each year's quarter-to-quarter growth rates in the chain volume series are based on the prices of the previous financial year, except for those quarters of the latest incomplete year which are based upon the second most recent financial year. Quarterly chain volume estimates for a financial year sum to the corresponding annual estimate.

**24** With each release of the September quarter issue of this publication, a new base year is introduced and the reference year is advanced one year to coincide with it. With the release of the September quarter 2018 issue of this publication, the chain volume measures currently have 2016-17 as their base year rather than 2015-16.

**25** A change in the reference year changes levels but not growth rates for all periods. A change in the base year can result in revisions, small in most cases, to growth rates for the last year.

**26** Chain volume measures are not generally additive. In other words, component chain volume measures do not, in general, sum to a total in the way original current price components do. For capital expenditure data, this means that the original chain volume estimates for the states will not add to total capital expenditure for Australia. In order to minimise the impact of this, the ABS uses the latest base year as the reference year. By adopting this approach, additivity does exist for the quarters following the reference year and non-additivity is relatively small for the quarters in the reference year and those immediately preceding it. For further information on chain volume measures refer to *Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts* (cat. no. 5248.0)

### DERIVATION AND USEFULNESS OF REALISATION RATIOS

**27** Once actual expenditure for a financial year is known, it is useful to investigate the relationship between each of the prior six estimates of expenditure for that financial year and the actual expenditure (see page 7 for an explanation of the derivation of the seven estimates). The resultant realisation ratios (subsequent actual expenditure divided by expected expenditure) then indicate how much expenditure was actually incurred against the amount expected to be incurred at the various times of reporting. Realisation ratios can also be formed separately for three or six month expectations as well as the 12 month E2 estimates or combinations of estimates containing at least some expectation components (e.g. six months actual and six months expected expenditure).

## EXPLANATORY NOTES *continued*

### DERIVATION AND USEFULNESS OF REALISATION RATIO *continued*

**28** Realisation ratios provide an important tool in understanding and interpreting expectation statistics for future periods. The application of realisation ratios enables the adjustment of expectation data for known under (or over) realisation patterns in the past and hence provides a valid basis for comparison with other expectation data and actual expenditure estimates. Once this has been done the predictions can be more validly compared with each other and with previously derived estimates of actual expenditure for earlier years. For example, if one wished to make a prediction about actual expenditure for 2018–19 based on the March 2019 survey results and compare this with 2017-18 expenditure, it is necessary to apply the relevant realisation factors to the expectations to put both estimates on the same basis.

**29** There are many ways in which realisation ratios can be applied to make predictions of actual expenditure for a future period. A range of realisation ratios for both type of asset and industry estimates is provided in tables 5 and 6.

**30** In using realisation ratios to adjust expectations data, attention should be paid to the range of values that has occurred in the past. A wide range of values is indicative of volatility in the realisation patterns and hence greater caution should be exercised regarding the predictive value of the expectation, even after adjustment by application of realisation ratios. This is particularly the case with the early 12 month expectations for the following financial year collected in the December and March surveys.

### RELIABILITY OF THE ESTIMATES

**31** Estimates provided in this publication are subject to non-sampling and sampling errors. The most common way of quantifying sampling error is to calculate the standard error for the published estimate. Details of standard errors are included in the appendix of this publication.

**32** Estimates that have an estimated relative standard error between 10% and 25% are annotated with the symbol '^'. These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '\*', indicating that the estimate should be used with caution as it is subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '\*\*' indicating that the sampling variability causes the estimates to be considered too unreliable for general use. These annotations have only been applied to estimates from the March quarter 2009.

**33** Non-sampling errors may arise as a result of errors in the reporting, recording or processing of the data and can occur even if there is a complete enumeration of the population. These errors can be introduced through inadequacies in the questionnaire, treatment of non-response, inaccurate reporting by respondents, errors in the application of survey procedures, incorrect recording of answers, and errors in data entry and processing.

**34** Estimates for the latest quarter presented in this publication are considered preliminary and revised estimates will be released with the next issue. As discussed in Paragraphs 38 to 42 below, seasonally adjusted and trend estimates are also subject to revision as data are revised and more data become available.

**35** It is difficult to measure the size of non-sampling errors. However, every effort is made in the design of the survey and development of survey procedures to minimise their effects. In addition, respondents may have difficulties in allocating to the appropriate state(s) expenditure on some equipment items such as mobile assets (e.g. aircraft, bulk oil carriers, satellites, off-shore drilling platforms and large computer installations supporting a national network). Where such difficulties exist expenditure is allocated to the state of the businesses' head office or, in the case of aircraft, is allocated across states in proportion to the likely use of the asset.

## EXPLANATORY NOTES *continued*

### RELIABILITY OF THE ESTIMATES *continued*

**36** The Australian equivalents to International Financial Reporting Standards (AIFRS) were progressively implemented in Australia from 1 January 2005. As a result, a number of items in the financial accounts of Australian businesses were affected by changed definitions which in turn impacted upon both Income Statements and Balance Sheets. A range of ABS economic collections source data from financial accounts of businesses and use those data to derive economic statistics. There have been no changes in the associated economic definitions.

**37** After monitoring data items in the immediate years following March quarter 2005 it was concluded that most affected published data series were impacted by data breaks but that the magnitude of such breaks could not be determined without imposing disproportionate load upon data providers to ABS surveys and other administratively collected data.

### SEASONAL ADJUSTMENT

**38** The quarterly original actual new capital expenditure series in this publication are affected in varying degrees by seasonal influences. The seasonal adjustment process estimates and removes the effects of normal seasonal variations from the original series so that the effects of other influences can be more easily recognised.

**39** In the seasonal adjustment process, account has been taken of normal seasonal factors (e.g. increase in June quarter capital expenditure due to the impending end of the financial year) to produce the seasonally adjusted estimates. Particular care should be taken in interpreting quarterly movements in the seasonally adjusted estimates because seasonal adjustment does not remove the effect of irregular or non-seasonal influences (e.g. change in interest rates) and reflects the sampling and other errors to which the original estimates are subject.

**40** The revision properties of the seasonally adjusted and trend estimates can be improved by the use of Autoregressive Integrated Moving Average (ARIMA) modelling. The Survey of Private New Capital Expenditure uses ARIMA modelling where appropriate for individual time series. ARIMA modelling relies on the characteristics of the series being analysed to project future period data. The projected values are temporary, intermediate values that are only used internally to improve the estimation of the seasonal factors. The projected data do not affect the original estimates and are discarded at the end of the seasonal adjustment process. 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

**41** The trend estimates are derived by applying a 7-term Henderson moving average to the seasonally adjusted estimates. The 7-term Henderson moving average is symmetric, but as the end of a time series is approached, asymmetric forms of the moving average are applied. The asymmetric moving average has been tailored to suit the particular characteristics of individual series and enable trend estimates for recent quarters to be produced. Estimates of the trend will be improved at the current end of the time series as additional observations become available. This improvement is due to the application of different asymmetric moving averages for the most recent three quarters. As a result of the improvement, revisions to the trend estimates will generally be observed for the most recent three quarters.

**42** There may also be revisions because of changes in the original estimates. As a result of these revisions, the seasonally adjusted and trend estimates will also be revised. For further information, see *Information Paper: A Guide to Interpreting Time Series - Monitoring Trend, An Overview* (cat. no. 1349.0).

### DESCRIPTION OF TERMS

**43** A description of the terms used in this publication is given below:

## EXPLANATORY NOTES *continued*

### DESCRIPTION OF TERMS *continued*

**44** *New capital expenditure* refers to the acquisition of new tangible assets either on own account or under a finance lease and includes major improvements, alterations and additions. In general, this is expenditure charged to fixed tangible assets accounts excluding expenditure on second hand assets unless these are imported for the first time.

**45** Some estimates are dissected by type of asset:

- Buildings and structures: Includes industrial and commercial buildings, houses, flats, home units, water and sewerage installations, lifts, heating, ventilating and similar equipment forming an integral part of buildings and structures, land development and construction site development, roads, bridges, wharves, harbours, railway lines, pipelines, power and telephone lines. Also includes mine development (e.g. construction of shafts in underground mines, preparation of mining and quarrying sites for open cut extraction and other developmental operations primarily for commencing or extending production). Excludes purchases of land, previously occupied buildings and speculatively built projects intended for sale before occupation:
- Equipment, plant and machinery: Includes plant, machinery, vehicles, electrical apparatus, office equipment, furniture, fixtures and fittings not forming an integral part of buildings, durable containers, special tooling, etc. Also includes goods imported for the first time whether previously used outside Australia or not.

### COMPARISON WITH NATIONAL ACCOUNTS AND OTHER ABS STATISTICS

**46** The statistics for new capital expenditure shown in this publication differ from estimates of private gross fixed capital expenditure shown in the Australian National Accounts for the following reasons:

- National Accounts estimates incorporate data from other sources as well as information from the new capital expenditure survey. For example, annual estimates for capital expenditure on 'machinery and equipment' are based on the ABS' annual Economic Activity Survey combined with data from the Australian Taxation Office. Quarterly estimates are interpolated between and extrapolated from the annual estimates using a variety of indicators including this survey. The ABS's quarterly Building Activity Survey and Engineering Construction Survey are the main sources for estimating the National Accounts dwellings and other buildings and structures items.
- National Accounts estimates include capital expenditure by all private businesses including units classified to agriculture, forestry and fishing, education, and health and community services industries and capital expenditure on dwellings by households. Data for these sectors are excluded from this publication.
- National Accounts estimates include the value of work done on speculative construction projects as the work is put into place. The statistics in this publication, however, include full value of the speculative projects as new capital expenditure of the purchases (if in scope), when the project is sold.
- National accounts estimates of gross fixed capital formation relate to acquisitions less disposals of new or existing fixed assets, whereas the survey figures are acquisitions of new fixed tangible assets only.

**47** For a more detailed explanation of the concepts and methods used in compiling the National Accounts estimates see *Australian National Accounts: Concepts, Sources and Methods* (cat. no. 5216.0).

**48** The estimates of capital expenditure on buildings and other structures will differ with estimates of Construction activity published in Construction Work Done, Australia, Preliminary (cat. no. 8755.0). The latter publication presents estimates of building and engineering construction work collected by the Building Activity Survey and the Engineering Construction Survey. Estimates of construction activity are based on the value of actual work done during the quarter of individual building or construction jobs



## EXPLANATORY NOTES *continued*

### COMPARISON WITH NATIONAL ACCOUNTS AND OTHER ABS STATISTICS *continued*

by builders, and do not necessarily equate to capitalisation of this work by the builders' eventual clients. Estimates of capital expenditure in this publication are based on data reported by businesses (that is, the builders' clients) from their financial or management accounts for purchases of buildings and structures.

### RELATED PUBLICATIONS

**49** Users may also wish to refer the following publications:

- *Information Paper: Changes to Private New Capital Expenditure and Expected Expenditure statistics, September 2009* (cat. no. 5625.0.55.001)
- *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0)
- *Australian National Accounts: Concepts, Sources and Methods* (cat. no. 5216.0)
- *Building Activity, Australia* (cat. no. 8752.0)
- *Business Indicators, Australia* (cat. no. 5676.0)
- *Business Operations and Industry Performance, Australia* (cat. no. 8140.0)
- *Construction Work Done, Australia* (cat no 8755.0)
- *Engineering Construction Activity, Australia* (cat. no. 8762.0)
- *Information Paper: Australian National Accounts, Introduction of Chain Volume and Price Indexes* (cat. no. 5248.0)

**50** Current publications and other products released by the ABS are available from the Statistics View. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.

### ABS DATA AVAILABLE ON REQUEST

**51** In addition to the data contained in this publication, more detailed industry and state information may be made available on request, the cost for such a service being dependent upon the amount of data requested. For example, data are generally available at the ANZSIC subdivision (2 digit) level.

### ABS WEBSITE

**52** The ABS website contains most of the data included in this publication but with a longer time series. In addition to the series in this publication, data for Manufacturing Subdivisions and State by Industry data are also available.

### ACKNOWLEDGMENT

**53** 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*.

**54** The results of these statistics are based, in part, on ABR data supplied by the Registrar to the ABS under A New Tax System (Australian Business Number) Act 1999 which requires that such data is only used for the purpose of carrying out functions of the ABS. No individual information collected under the Census and Statistics Act 1905 is provided back to the Registrar for administrative or regulatory purposes. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes, and is not related to the ability of the data to support the ABR's core operational requirements. Legislative requirements to ensure privacy and secrecy of this data have been followed. Only people authorised under the Australian Bureau of Statistics Act 1975 have been allowed to view data about any particular firm in conducting this survey. In accordance with the Census and Statistics Act 1905, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.

## APPENDIX 1 SAMPLING ERRORS

### LEVEL ESTIMATES

#### INTRODUCTION

The estimates in this publication are based on a sample drawn from units in the surveyed population. Because the entire population is not surveyed, the published estimates are subject to sampling error. The most common way of quantifying such sampling error is to calculate the standard error for the published estimate or statistic.

#### EXAMPLE OF USE

The following example illustrates how to use the standard error to interpret a level estimate.

Let us say that the published level estimate for total capital expenditure is \$26,489m and the calculated standard error in this case is \$393m. The standard error is then used to interpret the level estimate of \$26,489m.

For instance, the standard error of \$393m indicates that:

- There are approximately two chances in three that the real value falls within the range \$26,096m to \$26,882m ( $\$26,489\text{m} \pm \$393\text{m}$ )
- There are approximately 19 chances in 20 that the real value falls within the range \$25,703m to \$27,275m ( $\$26,489\text{m} \pm \$786\text{m}$ )

The real value in this case is the result we would obtain if we could enumerate the total population.

The following table shows the standard errors for March quarter 2019 estimates.

	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m
Mining	66	38	72
Manufacturing	44	71	86
Electricity, Gas, Water and Waste Services	80	17	93
Construction	23	183	185
Wholesale Trade	21	70	75
Retail Trade	87	64	118
Transport, Postal and Warehousing	20	86	91
Information Media and Telecommunications	1	34	34
Financial and Insurance Services	6	60	61
Rental, Hiring and Real Estate Services	71	107	124
Professional, Scientific and Technical Services	63	80	106
Other Selected Services	112	113	177
<b>Total</b>	<b>213</b>	<b>295</b>	<b>393</b>
New South Wales	117	122	178
Victoria	119	189	240
Queensland	55	167	179
South Australia	64	58	102
Western Australia	48	62	86
Tasmania	2	20	20
Northern Territory	1	29	29
Australian Capital Territory	1	23	23
<b>Australia</b>	<b>213</b>	<b>295</b>	<b>393</b>

## APPENDIX 1 SAMPLING ERRORS *continued*

### MOVEMENT ESTIMATES

#### EXAMPLE OF USE

The following example illustrates how to use the standard error to interpret a movement estimate.

Let us say that one quarter the published level estimate for total capital expenditure is \$33,412m and the next quarter the published level estimate is \$26,489m.

In this example, the calculated standard error for the movement estimate is \$436m. The standard error is then used to interpret the published movement estimate of \$6,923m.

For instance, the standard error of \$436m indicates that:

- There are approximately two chances in three that the real movement over the two-quarter period falls within the range \$6,487m to \$7,359m (\$6,923m  $\pm$  \$436m).
- There are approximately 19 chances in 20 that the real movement falls within the range \$6,051m to \$7,795m (\$6,923m  $\pm$  \$872m).

The following table shows the standard errors for March quarter 2019 movement estimates.

	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m
Mining	55	46	69
Manufacturing	43	109	120
Electricity, Gas, Water and Waste Services	27	9	32
Construction	18	243	244
Wholesale Trade	26	105	105
Retail Trade	118	91	163
Transport, Postal and Warehousing	21	132	134
Information Media and Telecommunications	5	37	38
Financial and Insurance Services	94	44	104
Rental, Hiring and Real Estate Services	69	87	111
Professional, Scientific and Technical Services	69	105	110
Other Selected Services	91	143	176
<b>Total</b>	<b>231</b>	<b>372</b>	<b>436</b>
New South Wales	136	216	250
Victoria	145	255	274
Queensland	62	208	204
South Australia	55	49	72
Western Australia	37	90	100
Tasmania	14	44	45
Northern Territory	5	32	32
Australian Capital Territory	3	23	23
<b>Australia</b>	<b>231</b>	<b>372</b>	<b>436</b>

## APPENDIX 2 EXPERIMENTAL ESTIMATES OF EDUCATION AND HEALTH

### INTRODUCTION

**1** This Appendix contains quarterly estimates for actual new capital expenditure by private businesses for Education and Training (ANZSIC Division P) and Health Care and Social Assistance (ANZSIC Division Q) in Australia from September quarter 2017 onwards.

**2** This new series will be ongoing and will be presented in current price original data until there are sufficient observations to produce seasonally adjusted and trend estimates.

**3** The estimates in this appendix are considered experimental. They are subject to evaluation and should therefore be used with caution. They are not included in any totals in the main outputs nor are they used in the current compilation of the Australian National Accounts.

### KEY STATISTICS

ACTUAL EXPENDITURE, Australia, by selected industries and type of asset—Current prices

	EDUCATION AND TRAINING			HEALTH CARE AND SOCIAL ASSISTANCE		
	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL						
<b>2017–18</b>						
September	461	^ 140	601	965	500	1 465
December	594	^ 212	806	1 151	^ 639	1 791
March	546	218	764	904	529	1 433
June	599	^ 210	809	1 218	840	2 058
<b>2018–19</b>						
September	631	^ 226	857	1 072	663	1 735
December	763	^ 223	986	1 353	718	2 071
March	610	293	903	1 147	^ 699	1 847

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

### FURTHER INFORMATION

**4** Experimental estimates of actual expenditure by state and territory are not included in this publication but are available in Table 13a from the Downloads tab of this issue on the ABS website.

**5** Experimental estimates of expected capital expenditure, including financial year estimates comprised of both actual and expected expenditure, will be available at a later date.







## FOR MORE INFORMATION . . .

*INTERNET* [www.abs.gov.au](http://www.abs.gov.au) the ABS website is the best place for data from our publications and information about the ABS.

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