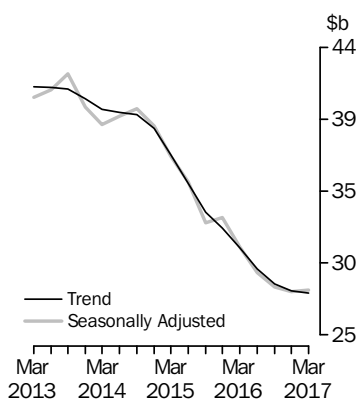


# PRIVATE NEW CAPITAL EXPENDITURE AND EXPECTED EXPENDITURE AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) THURS 1 JUN 2017

## New Capital Expenditure in volume terms



## KEY FIGURES

	<i>Mar Qtr 17</i>	<i>Dec Qtr 16 to Mar Qtr 17</i>	<i>Mar Qtr 16 to Mar Qtr 17</i>
	<i>\$m</i>	<i>% change</i>	<i>% change</i>
<b>Trend estimates<sup>(a)</sup></b>			
Total new capital expenditure	27 752	-0.6	-9.8
Buildings and structures	15 697	-0.2	-15.4
Equipment, plant and machinery	12 069	-1.0	-1.2
<b>Seasonally adjusted<sup>(a)</sup></b>			
Total new capital expenditure	27 969	0.3	-9.3
Buildings and structures	15 836	0.7	-15.2
Equipment, plant and machinery	12 133	-0.1	-0.1

(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 2017 while the seasonally adjusted estimate rose by 0.3%.
- The trend volume estimate for buildings and structures fell by 0.2% in the March quarter 2017 while the seasonally adjusted estimate rose by 0.7%.
- The trend volume estimate for equipment, plant and machinery fell by 1.0% in the March quarter 2017 while the seasonally adjusted estimate fell by 0.1%.

### EXPECTED EXPENDITURE (CURRENT PRICE TERMS)

- This issue includes the sixth estimate (Estimate 6) for 2016-17 and the second estimate (Estimate 2) for 2017-18.
- Estimate 6 for 2016-17 is \$112,629m. This is 11.4% lower than Estimate 6 for 2015-16. Estimate 6 is 0.8% higher than Estimate 5 for 2016-17.
- Estimate 2 for 2017-18 is \$85,436m. This is 6.4% lower than Estimate 2 for 2016-17. Estimate 2 is 5.2% higher than Estimate 1 for 2017-18.
- 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 2017	31 August 2017
Sept 2017	30 November 2017
December 2017	1 March 2018
March 2018	31 May 2018

## CHANGES TO THIS ISSUE

This issue contains a feature article titled "The GFC Investment Tax Credit" which is based on the research undertaken by David Rodgers, Research Economist, Reserve Bank of Australia on secondment to the ABS. The article uses business-level data from the Australian Bureau of Statistics' Survey of New Capital Expenditure, which underlies the Private New Capital Expenditure and Expected Expenditure release, to analyse the effects of an investment tax credit that was in force during the global financial crisis. The article is available on the ABS website <<http://www.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

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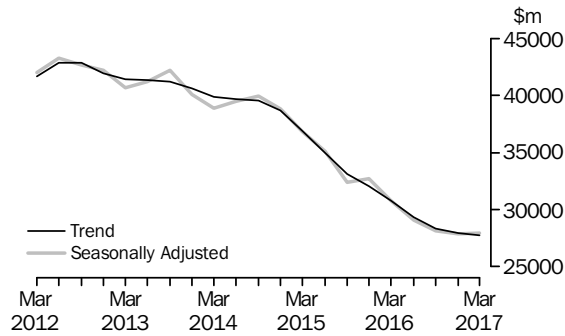
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# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS

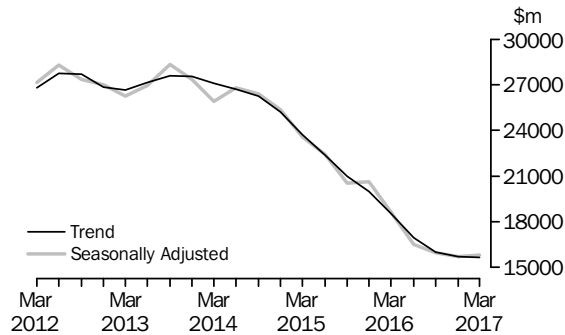
## TOTAL CAPITAL EXPENDITURE

The trend estimate for total new capital expenditure fell 0.6% in the March quarter 2017. By asset type, the trend estimate for buildings and structures fell 0.2% and equipment, plant and machinery fell 1.0%. The seasonally adjusted estimate for total new capital expenditure rose 0.3% in the March quarter 2017.



## BUILDINGS AND STRUCTURES

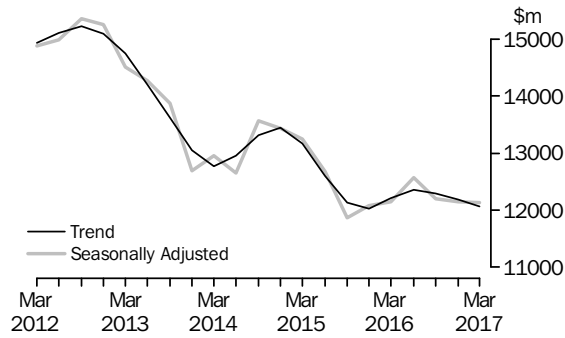
The trend estimate for buildings and structures fell 0.2% in the March quarter 2017. Buildings and structures for Mining fell 2.5%, Other Selected Industries rose 1.5% and Manufacturing rose 10.6%. The seasonally adjusted estimate for buildings and structures rose 0.7% in the March quarter 2017. Mining rose 0.6%, Other Selected Industries fell 1.1% and Manufacturing rose 24.6% in seasonally adjusted terms.



# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS *continued*

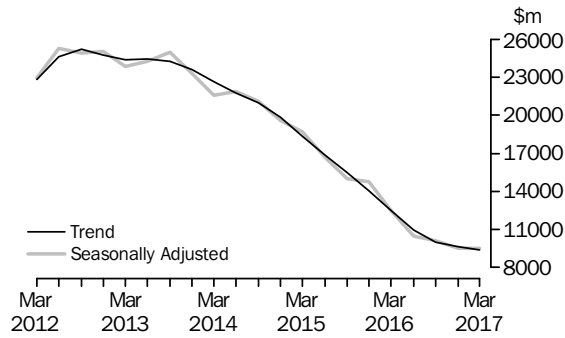
## EQUIPMENT, PLANT AND MACHINERY

The trend estimate for equipment, plant and machinery fell 1.0% in the March quarter 2017. Equipment, plant and machinery for Mining rose 2.0%, Manufacturing fell 0.2% and Other Selected Industries fell 1.4%. The seasonally adjusted estimate for equipment, plant and machinery fell 0.1% in the March quarter 2017. Mining fell 1.3%, Manufacturing rose 0.4%, and Other Selected Industries fell 0.02% in seasonally adjusted terms.



## MINING

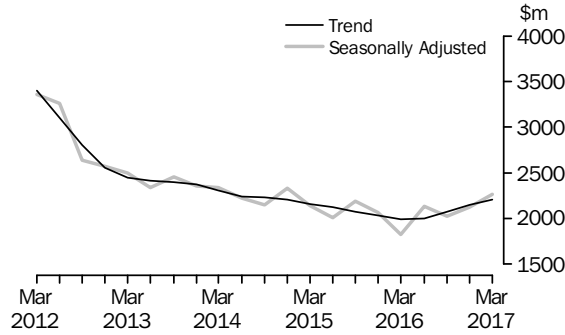
The trend estimate for Mining fell 2.1% in the March quarter 2017. Buildings and structures fell 2.5% and equipment, plant and machinery rose 2.0%. The seasonally adjusted estimate for Mining rose 0.4%. Buildings and structures rose 0.6% and equipment, plant and machinery fell 1.3% in seasonally adjusted terms.



# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS *continued*

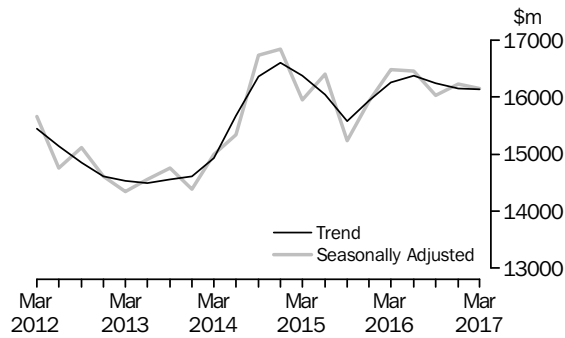
## MANUFACTURING

The trend estimate for Manufacturing rose 2.5% in the March quarter 2017. Equipment, plant and machinery fell 0.2% and buildings and structures rose 10.6%. The seasonally adjusted estimate for Manufacturing rose 6.6% in the March quarter 2017. Buildings and structures rose 24.6% and equipment, plant and machinery rose 0.4% in seasonally adjusted terms.



## OTHER SELECTED INDUSTRIES

The trend estimate for Other Selected industries fell 0.1% in the March quarter 2017. Buildings and structures rose 1.5% and equipment, plant and machinery fell 1.4%. The seasonally adjusted estimate for Other Selected Industries fell 0.5% in the March quarter 2017. Buildings and structures fell 1.1% and equipment, plant and machinery fell 0.02% 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 paragraph 26 to 29 of the Explanatory Notes.

The timing and construction of these estimates are as follows:

## TIMING & CONSTRUCTION OF SEVEN ESTIMATES

Estimate	Based on data reported at:	COMPOSITION OF ESTIMATE.....		
		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

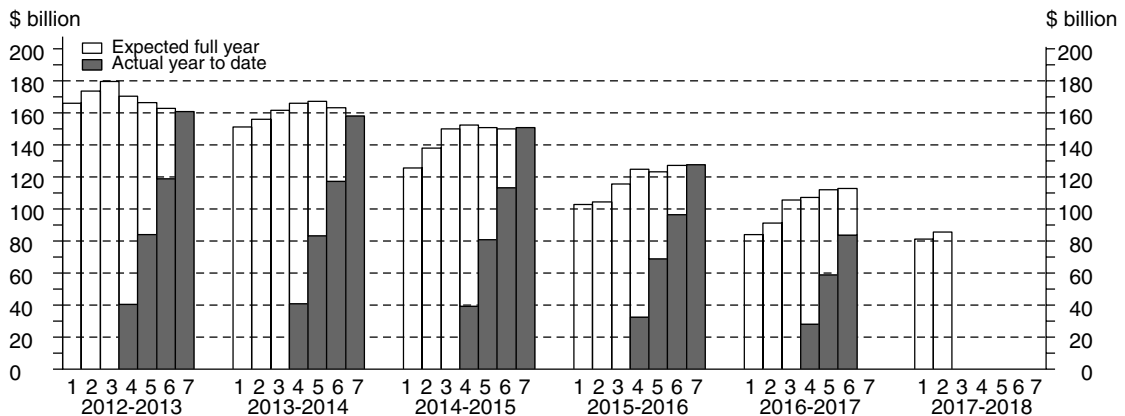
TOTAL CAPITAL  
EXPENDITURE

Estimate 6 for total capital expenditure in 2016-17 is \$112,629m. This is 11.4% lower than Estimate 6 for 2015-16. The main contributor to this decrease is Mining (-29.6%).

Estimate 6 is 0.8% higher than Estimate 5 for 2016-17. The main contributor to this increase is Other Selected Industries (2.6%).

Estimate 2 for total capital expenditure for 2017-18 is \$85,436m. This is 6.4% lower than Estimate 2 for 2016-17. The main contributor to the decrease is Mining (-21.7%).

Estimate 2 is 5.2% higher than Estimate 1 for 2017-18. The main contributor to the increase was Other Selected Industries (6.5%).



# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

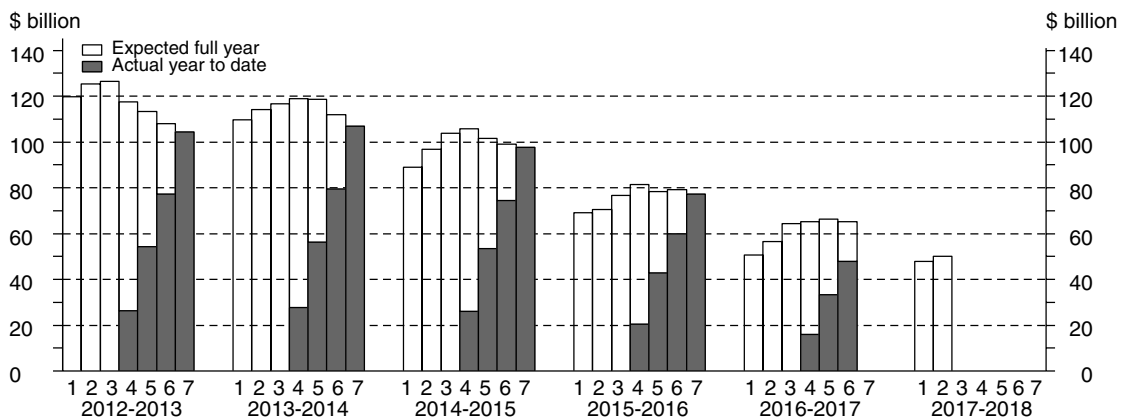
## BUILDINGS AND STRUCTURES

Estimate 6 for buildings and structures in 2016-17 is \$65,248m. This is 17.6% lower than Estimate 6 for 2015-16. The main contributor to this decrease is Mining (-33.4%).

Estimate 6 for buildings and structures is 1.7% lower than Estimate 5 for 2016-17. The main contributor to this decrease is Mining (-2.7%).

Estimate 2 for buildings and structures for 2017-18 is \$50,087m. This is 11.4% lower than Estimate 2 for 2016-17. The main contributor to the decrease was Mining (-28.1%).

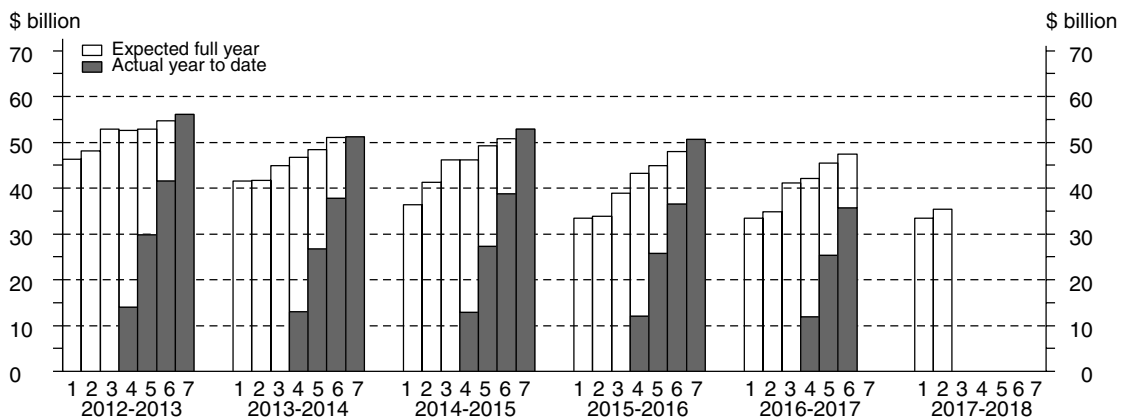
Estimate 2 is 4.8% higher than Estimate 1 for 2017-18. The main contributor to the increase was Other Selected Industries (5.4%).



## EQUIPMENT, PLANT AND MACHINERY

Estimate 6 for equipment, plant and machinery for 2016-17 is \$47,382m. This is 1.3% lower than Estimate 6 for 2015-16. The main contributor to this decrease is Other Selected Industries (-1.8%). Estimate 6 is 4.4% higher than Estimate 5 for 2016-17. The main contributor to this increase is Other Selected Industries (6.2%).

Estimate 2 for equipment, plant and machinery for 2017-18 is \$35,349m. This is 1.7% higher than Estimate 2 for 2016-17. The main contributor to this increase is Other Selected Industries (3.7%). Estimate 2 is 5.8% higher than Estimate 1 for 2017-18. The main contributor to the increase is Other Selected Industries (7.6%).



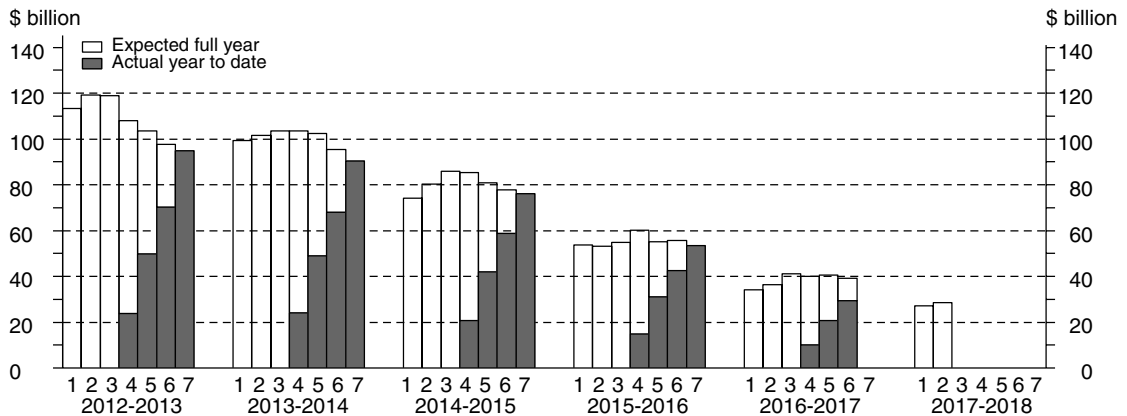


# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

## MINING

Estimate 6 for Mining for 2016-17 is \$39,220m. This is 29.6% lower than Estimate 6 for 2015-16. Estimate 6 is 3.1% lower than Estimate 5 for 2016-17. Buildings and structures is 2.7% lower and equipment, plant and machinery is 5.2% lower than the corresponding fifth estimates for 2016-17.

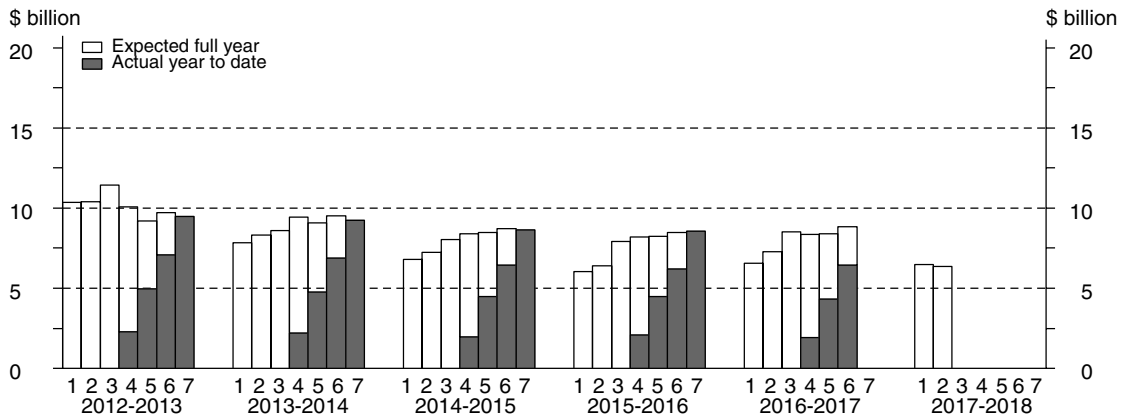
Estimate 2 for Mining for 2017-18 is \$28,527m. This is 21.7% lower than Estimate 2 for 2016-17. Estimate 2 is 4.7% higher than Estimate 1 for 2017-18. Buildings and structures is 3.8% higher and equipment, plant and machinery is 7.8% higher than the corresponding first estimates for 2017-18.



## MANUFACTURING

Estimate 6 for Manufacturing for 2016-17 is \$8,846m. This is 4.5% higher than Estimate 6 for 2015-16. Estimate 6 is 5.6% higher than Estimate 5 for 2016-17. Buildings and structures is 8.5% higher and equipment, plant and machinery is 4.5% higher than the corresponding fifth estimates for 2016-17.

Estimate 2 for Manufacturing for 2017-18 is \$6,368m. This is 12.4% lower than Estimate 2 for 2016-17. Estimate 2 is 1.6% lower than Estimate 1 for 2017-18. Buildings and structures is 8.7% higher and equipment, plant and machinery is 5.6% lower than the corresponding first estimates for 2017-18.

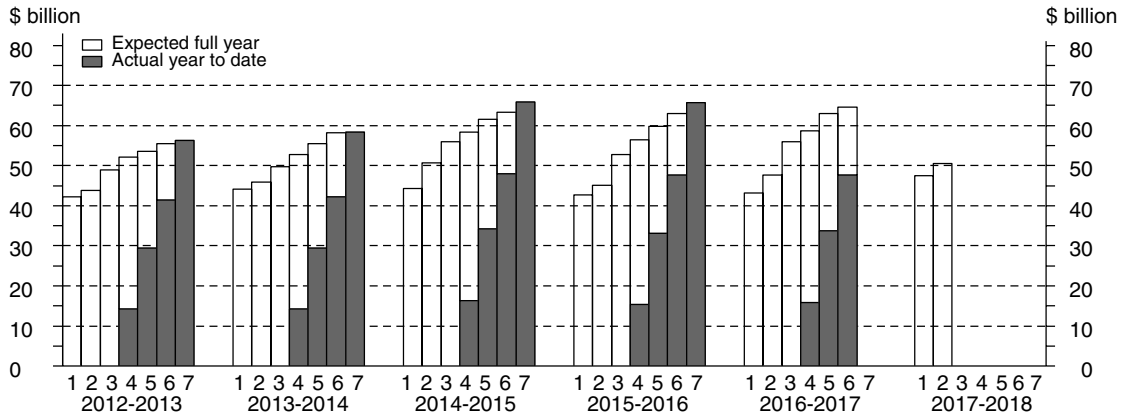


# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

## OTHER SELECTED INDUSTRIES

Estimate 6 for Other Selected Industries for 2016-17 is \$65,564m. This is 2.5% higher than Estimate 6 for 2015-16. Estimate 6 is 2.6% higher than Estimate 5 for 2016-17. Buildings and structures is 1.3% lower and equipment, plant and machinery is 6.2% higher than the corresponding fifth estimates for 2016-17.

Estimate 2 for Other Selected Industries for 2017-18 is \$50,541m. This is 6.2% higher than Estimate 2 for 2016-17. Estimate 2 is 6.5% higher than Estimate 1 for 2017-18. Buildings and structures is 5.4% higher and equipment, plant and machinery is 7.6% higher than the corresponding first estimates for 2017-18.



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

Period	BUILDINGS AND STRUCTURES				EQUIPMENT, PLANT AND MACHINERY				TOTAL			
	Mining	Man- ufacturing	Other Selected Industries	Total	Mining	Man- ufacturing	Other Selected Industries	Total	Mining	Man- ufacturing	Other Selected Industries	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)												
<b>2014-15</b>	67 622	2 483	27 625	97 729	8 495	6 145	38 286	52 925	76 117	8 628	65 910	150 655
<b>2015-16</b>	47 515	1 950	27 646	77 111	5 874	6 616	38 090	50 581	53 389	8 566	65 737	127 692
<b>2015-16</b>												
December	14 453	512	7 568	22 533	1 773	1 865	10 121	13 760	16 227	2 378	17 689	36 293
March	10 228	403	6 265	16 896	1 172	1 337	8 220	10 728	11 400	1 740	14 485	27 624
June	9 443	584	7 264	17 291	1 432	1 770	10 873	14 075	10 874	2 354	18 137	31 366
<b>2016-17</b>												
September	8 835	449	6 640	15 925	1 233	1 467	9 258	11 958	10 069	1 916	15 898	27 883
December	8 879	630	7 931	17 440	1 704	1 790	9 842	13 336	10 582	2 420	17 774	30 776
March	7 655	659	6 284	14 598	1 141	1 449	7 760	10 351	8 796	2 108	14 044	24 949
ORIGINAL (Expected)(a)												
<b>2016-17</b>												
3 mths to Jun	7 743	774	8 768	17 285	2 029	1 628	8 079	11 737	9 772	2 402	16 847	29 022
Total fin year	33 112	2 512	29 624	65 248	6 108	6 334	34 940	47 382	39 220	8 846	64 564	112 629
<b>2017-18</b>												
Total fin year	21 802	1 941	26 344	50 087	6 724	4 428	24 197	35 349	28 527	6 368	50 541	85 436
SEASONALLY ADJUSTED (Actual)												
<b>2015-16</b>												
December	13 483	462	6 937	20 882	1 487	1 696	9 442	12 625	14 970	2 158	16 379	33 507
March	11 256	436	7 189	18 881	1 411	1 466	9 677	12 553	12 667	1 902	16 866	31 435
June	9 222	562	6 875	16 660	1 360	1 654	9 882	12 897	10 583	2 216	16 757	29 557
<b>2016-17</b>												
September	8 889	484	6 766	16 139	1 342	1 601	9 465	12 407	10 231	2 085	16 231	28 546
December	8 278	568	7 230	16 076	1 419	1 620	9 196	12 235	9 696	2 188	16 426	28 311
March	8 403	713	7 198	16 313	1 376	1 600	9 149	12 125	9 778	2 313	16 347	28 438
TREND (Actual)												
<b>2015-16</b>												
December	12 736	467	6 963	20 166	1 490	1 653	9 416	12 558	14 226	2 120	16 379	32 724
March	11 262	476	7 005	18 743	1 401	1 601	9 647	12 649	12 664	2 077	16 652	31 392
June	9 717	492	6 954	17 163	1 364	1 579	9 727	12 670	11 081	2 071	16 681	29 833
<b>2016-17</b>												
September	8 779	532	6 952	16 263	1 367	1 609	9 522	12 498	10 146	2 140	16 472	28 758
December	8 410	590	7 064	16 064	1 381	1 618	9 283	12 282	9 790	2 209	16 345	28 344
March	8 264	657	7 214	16 134	1 394	1 601	9 083	12 062	9 658	2 258	16 312	28 228

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 26 to 29 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>2014-15</b>	76 117	8 628	5 097	6 279	3 449	5 679	12 495
<b>2015-16</b>	53 389	8 566	5 406	5 437	4 243	5 152	10 529
<b>2015-16</b>							
December	16 227	2 378	1 543	^ 1 174	^ 1 143	1 447	2 813
March	11 400	1 740	1 134	^ 1 266	^ 1 030	984	2 113
June	10 874	2 354	1 378	^ 1 922	^ 1 172	1 438	2 597
<b>2016-17</b>							
September	10 069	1 916	1 207	^ 1 306	962	1 285	2 425
December	10 582	2 420	1 410	^ 1 738	1 240	1 671	2 506
March	8 796	2 108	1 139	^ 1 087	832	1 122	2 210
ORIGINAL (Expected)(a)							
<b>2016-17</b>							
3 mths to Jun	9 772	2 402	1 631	1 174	901	1 581	3 005
Total fin year	39 220	8 846	5 387	5 306	3 936	5 658	10 147
<b>2017-18</b>							
Total fin year	28 527	6 368	5 081	2 738	2 735	4 245	10 268
SEASONALLY ADJUSTED (Actual)							
<b>2015-16</b>							
December	14 970	2 158	1 397	1 125	953	1 248	2 594
March	12 667	1 902	1 321	1 433	1 209	1 266	2 661
June	10 583	2 216	1 305	1 601	1 156	1 343	2 375
<b>2016-17</b>							
September	10 231	2 085	1 232	1 500	1 009	1 293	2 320
December	9 696	2 188	1 278	1 677	1 042	1 431	2 336
March	9 778	2 313	1 332	1 239	989	1 442	2 683
TREND (Actual)							
<b>2015-16</b>							
December	14 226	2 120	1 373	1 244	1 042	1 274	2 714
March	12 664	2 077	1 344	1 367	1 120	1 270	2 564
June	11 081	2 071	1 286	1 541	1 133	1 302	2 406
<b>2016-17</b>							
September	10 146	2 140	1 266	1 582	1 075	1 348	2 359
December	9 790	2 209	1 279	1 508	1 016	1 396	2 417
March	9 658	2 258	1 308	1 395	986	1 436	2 536

^ 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 26 to 29 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>2014-15</b>	5 810	3 794	12 192	3 639	7 476	150 655
<b>2015-16</b>	6 413	3 950	12 899	3 735	7 972	127 692
<b>2015-16</b>						
December	1 701	1 173	3 510	^ 1 045	2 140	36 293
March	1 671	773	2 804	^ 970	1 740	27 624
June	1 505	1 050	3 786	^ 1 044	2 245	31 366
<b>2016-17</b>						
September	1 804	1 046	3 246	^ 753	^ 1 864	27 883
December	1 962	970	3 463	836	1 978	30 776
March	1 774	807	2 678	^ 797	1 597	24 949
ORIGINAL (Expected)(a)						
<b>2016-17</b>						
3 mths to Jun	1 621	888	3 534	606	1 906	29 022
Total fin year	7 160	3 711	12 921	2 992	7 346	112 629
<b>2017-18</b>						
Total fin year	5 541	3 323	9 923	1 863	4 825	85 436
SEASONALLY ADJUSTED (Actual)						
<b>2015-16</b>						
December	1 604	1 096	3 270	1 010	2 082	33 507
March	1 667	909	3 278	1 051	2 069	31 435
June	1 591	1 009	3 441	972	1 964	29 557
<b>2016-17</b>						
September	1 825	1 008	3 360	785	1 900	28 546
December	1 833	901	3 199	809	1 921	28 311
March	1 764	961	3 170	862	1 906	28 438
TREND (Actual)						
<b>2015-16</b>						
December	1 583	985	3 181	955	2 028	32 724
March	1 639	999	3 325	993	2 030	31 392
June	1 689	986	3 393	955	1 990	29 833
<b>2016-17</b>						
September	1 757	968	3 335	854	1 928	28 758
December	1 803	956	3 249	815	1 906	28 344
March	1 825	933	3 168	820	1 904	28 228

^ 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 26 to 29 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>2012-13</b>	107 542	59 378	166 803	98 078	10 055	58 617	166 803
<b>2013-14</b>	108 451	52 171	160 641	91 746	9 375	59 476	160 641
<b>2014-15</b>	97 729	52 925	150 655	76 117	8 628	65 910	150 655
<b>2015-16</b>	76 386	48 678	125 064	52 741	8 227	64 097	125 064
<b>2014-15</b>							
March	21 125	11 333	32 459	16 793	1 955	13 709	32 459
June	23 208	13 762	36 970	17 182	2 133	17 657	36 970
<b>2015-16</b>							
September	20 310	11 463	31 773	14 790	2 017	14 966	31 773
December	22 256	13 147	35 403	15 954	2 271	17 178	35 403
March	16 702	10 375	27 077	11 245	1 672	14 159	27 077
June	17 118	13 694	30 812	10 752	2 266	17 793	30 812
<b>2016-17</b>							
September	15 732	11 740	27 472	9 934	1 856	15 682	27 472
December	17 048	13 200	30 248	10 355	2 348	17 545	30 248
March	14 161	10 340	24 500	8 566	2 063	13 871	24 500
SEASONALLY ADJUSTED							
<b>2014-15</b>							
March	23 552	13 243	36 802	18 712	2 140	15 945	36 802
June	22 429	12 673	35 093	16 705	2 007	16 396	35 093
<b>2015-16</b>							
September	20 538	11 872	32 410	14 980	2 193	15 236	32 410
December	20 661	12 086	32 747	14 755	2 064	15 928	32 747
March	18 678	12 146	30 824	12 518	1 831	16 476	30 824
June	16 509	12 575	29 084	10 489	2 138	16 457	29 084
<b>2016-17</b>							
September	15 956	12 204	28 160	10 113	2 023	16 025	28 160
December	15 725	12 147	27 872	9 512	2 127	16 233	27 872
March	15 836	12 133	27 969	9 547	2 267	16 154	27 969
TREND							
<b>2014-15</b>							
March	23 721	13 174	36 896	18 357	2 161	16 380	36 896
June	22 407	12 594	34 997	16 834	2 125	16 042	34 997
<b>2015-16</b>							
September	20 999	12 134	33 131	15 486	2 071	15 578	33 131
December	20 010	12 029	32 038	14 068	2 033	15 937	32 038
March	18 557	12 211	30 768	12 513	1 994	16 259	30 768
June	16 985	12 353	29 338	10 959	1 998	16 381	29 338
<b>2016-17</b>							
September	16 038	12 296	28 340	10 023	2 075	16 242	28 340
December	15 732	12 187	27 921	9 618	2 151	16 152	27 921
March	15 697	12 069	27 752	9 412	2 205	16 132	27 752

(a) Reference year for chain volume measures is 2014-15.

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>2012–13</b>	4.5	-0.2	2.8	13.7	-28.5	-5.2	2.8
<b>2013–14</b>	0.8	-12.1	-3.7	-6.5	-6.8	1.5	-3.7
<b>2014–15</b>	-9.9	1.4	-6.2	-17.0	-8.0	10.8	-6.2
<b>2015–16</b>	-21.8	-8.0	-17.0	-30.7	-4.7	-2.8	-17.0
<b>2014–15</b>							
March	-22.3	-22.8	-22.5	-21.1	-23.5	-24.0	-22.5
June	9.9	21.4	13.9	2.3	9.1	28.8	13.9
<b>2015–16</b>							
September	-12.5	-16.7	-14.1	-13.9	-5.5	-15.2	-14.1
December	9.6	14.7	11.4	7.9	12.6	14.8	11.4
March	-25.0	-21.1	-23.5	-29.5	-26.4	-17.6	-23.5
June	2.5	32.0	13.8	-4.4	35.5	25.7	13.8
<b>2016–17</b>							
September	-8.1	-14.3	-10.8	-7.6	-18.1	-11.9	-10.8
December	8.4	12.4	10.1	4.2	26.5	11.9	10.1
March	-16.9	-21.7	-19.0	-17.3	-12.1	-20.9	-19.0
SEASONALLY ADJUSTED							
<b>2014–15</b>							
March	-7.1	-1.4	-5.2	-4.7	-8.3	-5.3	-5.2
June	-4.8	-4.3	-4.6	-10.7	-6.2	2.8	-4.6
<b>2015–16</b>							
September	-8.4	-6.3	-7.6	-10.3	9.3	-7.1	-7.6
December	0.6	1.8	1.0	-1.5	-5.9	4.5	1.0
March	-9.6	0.5	-5.9	-15.2	-11.3	3.4	-5.9
June	-11.6	3.5	-5.6	-16.2	16.8	-0.1	-5.6
<b>2016–17</b>							
September	-3.3	-2.9	-3.2	-3.6	-5.4	-2.6	-3.2
December	-1.5	-0.5	-1.0	-5.9	5.1	1.3	-1.0
March	0.7	-0.1	0.3	0.4	6.6	-0.5	0.3
TREND							
<b>2014–15</b>							
March	-5.9	-2.0	-4.6	-7.5	-2.0	-1.3	-4.6
June	-5.5	-4.4	-5.1	-8.3	-1.6	-2.1	-5.1
<b>2015–16</b>							
September	-6.3	-3.7	-5.3	-8.0	-2.5	-2.9	-5.3
December	-4.7	-0.9	-3.3	-9.2	-1.9	2.3	-3.3
March	-7.3	1.5	-4.0	-11.1	-1.9	2.0	-4.0
June	-8.5	1.2	-4.6	-12.4	0.2	0.7	-4.6
<b>2016–17</b>							
September	-5.6	-0.5	-3.4	-8.5	3.9	-0.8	-3.4
December	-1.9	-0.9	-1.5	-4.0	3.7	-0.6	-1.5
March	-0.2	-1.0	-0.6	-2.1	2.5	-0.1	-0.6

(a) Reference year for chain volume measures is 2014-15.

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)
<b>BUILDINGS AND STRUCTURES (\$ million)</b>							
2012-13	119 640	125 271	126 439	117 631	113 418	108 037	104 404
2013-14	109 775	114 042	116 782	118 995	118 538	112 038	106 820
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	65 248	nya
2017-18	47 783	50 087	nya	nya	nya	nya	nya
<b>BUILDINGS AND STRUCTURES (Realisation Ratio)(a)</b>							
2011-12	1.06	1.02	1.01	0.91	0.92	0.96	1.00
2012-13	0.87	0.83	0.83	0.89	0.92	0.97	1.00
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
<b>EQUIPMENT, PLANT AND MACHINERY (\$ million)</b>							
2012-13	46 252	48 185	52 841	52 596	52 891	54 751	56 126
2013-14	41 490	41 649	44 838	46 727	48 467	51 100	51 158
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	47 382	nya
2017-18	33 412	35 349	nya	nya	nya	nya	nya
<b>EQUIPMENT, PLANT AND MACHINERY (Realisation Ratio)(a)</b>							
2011-12	1.35	1.29	1.08	0.99	1.03	1.00	1.00
2012-13	1.21	1.16	1.06	1.07	1.06	1.03	1.00
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
<b>TOTAL (\$ million)</b>							
2012-13	165 892	173 457	179 279	170 227	166 308	162 789	160 530
2013-14	151 265	155 691	161 621	165 722	167 005	163 138	157 978
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	112 629	nya
2017-18	81 195	85 436	nya	nya	nya	nya	nya
<b>TOTAL (Realisation Ratio)(a)</b>							
2011-12	1.15	1.11	1.03	0.94	0.96	0.97	1.00
2012-13	0.97	0.93	0.90	0.94	0.97	0.99	1.00
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
<b>TOTAL (percentage change over corresponding estimate for previous financial year)</b>							
2012-13	23.0	23.8	19.3	3.1	2.8	2.4	3.7
2013-14	-8.8	-10.2	-9.8	-2.6	0.4	0.2	-1.6
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	-11.4	nya
2017-18	-3.3	-6.4	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 26 to 29 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)							
2012-13	113 396	119 290	118 984	108 065	103 622	97 587	94 710
2013-14	99 224	101 482	103 379	103 608	102 528	95 365	90 393
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	39 220	nya
2017-18	27 244	28 527	nya	nya	nya	nya	nya
MINING (Realisation Ratio)(a)							
2011-12	1.04	1.00	0.97	0.88	0.89	0.95	1.00
2012-13	0.84	0.79	0.80	0.88	0.91	0.97	1.00
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
MANUFACTURING (\$ million)							
2012-13	10 353	10 394	11 414	10 074	9 204	9 700	9 470
2013-14	7 838	8 304	8 592	9 422	9 059	9 524	9 229
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	8 846	nya
2017-18	6 474	6 368	nya	nya	nya	nya	nya
MANUFACTURING (Realisation Ratio)(a)							
2011-12	1.15	1.11	0.98	0.96	0.96	0.99	1.00
2012-13	0.91	0.91	0.83	0.94	1.03	0.98	1.00
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
OTHER SELECTED INDUSTRIES (\$ million)							
2012-13	42 143	43 772	48 882	52 088	53 482	55 502	56 350
2013-14	44 203	45 905	49 650	52 692	55 418	58 248	58 356
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	64 564	nya
2017-18	47 477	50 541	nya	nya	nya	nya	nya
OTHER SELECTED INDUSTRIES (Realisation Ratio)(a)							
2011-12	1.35	1.30	1.13	1.03	1.07	1.01	1.00
2012-13	1.34	1.29	1.15	1.08	1.05	1.02	1.00
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

nya not yet available

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. See paragraphs 26 to 29 of the Explanatory Notes.

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

<i>Financial Year</i>	3 MONTHS ENDING		6 MONTHS ENDING	
	<i>31 December (collected in September Survey)</i>	<i>30 June (collected in March Survey)</i>	<i>31 December (collected in June Survey)</i>	<i>30 June (collected in December survey)</i>
TYPE OF ASSET				
<b>Buildings and Structures</b>				
2012-13	0.90	0.88	0.87	0.85
2013-14	0.93	0.84	0.95	0.81
2014-15	0.93	0.95	0.97	0.92
2015-16	0.88	0.89	0.97	0.97
2016-17	0.97	nya	0.97	nya
<b>Equipment, Plant and Machinery</b>				
2012-13	1.04	1.10	1.07	1.14
2013-14	1.08	1.00	1.16	1.12
2014-15	1.15	1.18	1.15	1.17
2015-16	1.13	1.22	1.28	1.30
2016-17	1.19	nya	1.19	nya
<b>Total</b>				
2012-13	0.95	0.95	0.93	0.93
2013-14	0.97	0.89	1.01	0.89
2014-15	0.99	1.02	1.03	1.00
2015-16	0.96	1.02	1.07	1.08
2016-17	1.05	nya	1.05	nya
TYPE OF INDUSTRY				
<b>Mining</b>				
2012-13	0.91	0.89	0.84	0.83
2013-14	0.93	0.82	0.93	0.77
2014-15	0.89	0.91	0.93	0.88
2015-16	0.84	0.83	0.96	0.92
2016-17	0.98	nya	0.93	nya
<b>Manufacturing</b>				
2012-13	0.84	0.91	0.88	1.06
2013-14	0.95	0.89	1.10	1.04
2014-15	0.97	0.97	1.07	1.04
2015-16	1.00	1.04	1.04	1.09
2016-17	0.92	nya	0.97	nya
<b>Other selected industries</b>				
2012-13	1.05	1.06	1.14	1.12
2013-14	1.06	1.01	1.15	1.11
2014-15	1.15	1.17	1.18	1.16
2015-16	1.10	1.18	1.20	1.22
2016-17	1.12	nya	1.16	nya
<b>Total</b>				
2012-13	0.95	0.95	0.93	0.93
2013-14	0.97	0.89	1.01	0.89
2014-15	0.99	1.02	1.03	1.00
2015-16	0.96	1.02	1.07	1.08
2016-17	1.05	nya	1.05	nya

nya not yet available

(a) For more information on Realisation Ratios see paragraphs 26 to 29 of the Explanatory Notes.

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

<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>2012-13</b>	10 134	7 082	31 667	2 912	45 035	353	6 799	421	104 404
<b>2013-14</b>	9 606	6 822	34 064	3 346	46 060	268	6 337	318	106 820
<b>2014-15</b>	11 185	7 145	23 268	3 273	46 395	272	5 831	360	97 729
<b>2015-16</b>	11 669	7 338	14 173	2 549	35 658	357	4 991	376	77 111
<b>2014-15</b>									
March	2 247	1 667	4 375	639	10 763	44	1 317	88	21 141
June	2 978	1 950	4 769	^ 576	11 459	87	1 316	107	23 242
<b>2015-16</b>									
September	2 444	1 757	3 953	^ 596	10 104	77	1 359	101	20 391
December	3 072	1 922	4 471	^ 749	10 793	105	1 331	90	22 533
March	2 791	1 667	2 784	^ 572	7 859	76	1 067	81	16 896
June	3 361	1 993	2 965	^ 632	6 902	^ 100	1 234	^ 104	17 291
<b>2016-17</b>									
September	2 592	2 054	3 431	^ 593	5 932	77	1 149	98	15 925
December	3 147	2 400	3 660	627	6 046	^ 130	1 319	111	17 440
March	2 638	2 080	2 855	528	4 831	^ 94	1 476	^ 98	14 598
SEASONALLY ADJUSTED									
<b>2014-15</b>									
March	2 480	1 851	5 113	735	11 838	50	1 317	88	23 526
June	2 812	1 874	4 650	567	11 093	84	1 316	107	22 422
<b>2015-16</b>									
September	2 571	1 795	3 955	598	10 235	81	1 359	101	20 579
December	2 833	1 779	3 979	669	10 056	91	1 331	90	20 882
March	3 082	1 851	3 277	657	8 651	90	1 067	81	18 881
June	3 161	1 908	2 889	625	6 691	95	1 234	104	16 660
<b>2016-17</b>									
September	2 748	2 111	3 434	596	6 036	81	1 149	98	16 139
December	2 891	2 218	3 247	557	5 607	113	1 319	111	16 076
March	2 917	2 311	3 375	607	5 314	113	1 476	98	16 313
TREND									
<b>2014-15</b>									
March	2 708	1 842	5 259	748	11 574	64	1 394	95	23 690
June	2 632	1 857	4 569	623	11 119	72	1 341	101	22 421
<b>2015-16</b>									
September	2 687	1 810	4 123	599	10 566	84	1 314	98	21 087
December	2 873	1 794	3 707	636	9 691	90	1 267	92	20 166
March	3 010	1 836	3 339	655	8 463	89	1 186	89	18 743
June	3 030	1 945	3 157	627	7 081	90	1 149	95	17 163
<b>2016-17</b>									
September	2 928	2 082	3 192	595	6 094	94	1 213	102	16 263
December	2 864	2 211	3 314	582	5 570	104	1 320	104	16 064
March	2 856	2 317	3 398	583	5 317	113	1 421	103	16 134

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

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

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Total
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2012-13</b>	13 974	11 146	13 404	2 626	13 134	673	645	525	56 126
<b>2013-14</b>	13 682	11 029	12 082	2 671	9 886	596	859	353	51 158
<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>2014-15</b>									
March	3 421	2 494	^ 2 609	^ 618	1 839	^ 126	237	*61	11 406
June	4 375	3 316	3 154	827	1 967	^ 169	251	^ 111	14 169
<b>2015-16</b>									
September	3 630	2 921	2 529	^ 663	1 796	150	184	^ 145	12 018
December	4 574	3 385	2 572	^ 764	2 081	152	134	^ 99	13 760
March	3 702	2 653	1 915	^ 567	1 609	^ 119	*97	65	10 728
June	4 680	3 365	2 868	699	2 016	^ 166	^ 170	^ 110	14 075
<b>2016-17</b>									
September	4 454	2 828	2 271	572	1 475	^ 129	106	^ 123	11 958
December	4 445	3 102	2 772	680	1 935	^ 150	138	^ 113	13 336
March	3 233	2 470	2 034	^ 751	1 600	^ 126	^ 67	^ 71	10 351
SEASONALLY ADJUSTED									
<b>2014-15</b>									
March	4 015	2 909	2 941	700	2 097	157	299	80	13 327
June	4 139	3 010	2 905	770	1 847	154	232	108	13 040
<b>2015-16</b>									
September	3 622	3 034	2 692	710	1 891	159	172	120	12 430
December	4 199	3 143	2 393	691	1 879	131	126	99	12 625
March	4 367	3 097	2 343	643	1 829	148	125	88	12 553
June	4 408	3 039	2 442	648	1 893	151	154	105	12 897
<b>2016-17</b>									
September	4 442	2 951	2 415	610	1 562	136	100	101	12 407
December	4 085	2 881	2 580	620	1 742	131	131	113	12 235
March	3 821	2 879	2 459	849	1 816	155	88	98	12 125
TREND									
<b>2014-15</b>									
March	4 006	2 903	2 946	749	2 099	160	297	93	13 258
June	3 948	2 995	2 845	739	1 929	155	235	102	12 946
<b>2015-16</b>									
September	3 948	3 068	2 664	717	1 857	149	173	109	12 651
December	4 084	3 109	2 465	689	1 872	145	139	104	12 558
March	4 320	3 099	2 364	655	1 855	145	129	96	12 649
June	4 455	3 037	2 394	621	1 772	143	129	98	12 670
<b>2016-17</b>									
September	4 328	2 957	2 464	628	1 716	141	124	104	12 498
December	4 122	2 900	2 500	683	1 716	140	111	106	12 282
March	3 892	2 869	2 508	760	1 754	144	97	104	12 062

^ 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

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									
<b>2012–13</b>	24 108	18 228	45 072	5 537	58 169	1 026	7 444	946	160 530
<b>2013–14</b>	23 287	17 850	46 147	6 017	55 946	864	7 196	672	157 978
<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>2014–15</b>									
March	5 668	4 162	6 984	1 258	12 603	^170	1 554	^149	32 547
June	7 353	5 266	7 923	1 403	13 426	^256	1 566	218	37 411
<b>2015–16</b>									
September	6 074	4 677	6 482	1 260	11 900	227	1 543	246	32 409
December	7 646	5 306	7 042	1 513	12 874	257	1 465	189	36 293
March	6 493	4 320	4 700	^1 139	9 468	^195	1 164	146	27 624
June	8 041	5 358	5 833	1 331	8 918	266	1 404	^214	31 366
<b>2016–17</b>									
September	7 046	4 882	5 702	1 165	7 407	206	1 255	221	27 883
December	7 591	5 502	6 432	1 308	7 982	^281	1 457	224	30 776
March	5 870	4 549	4 889	1 278	6 430	^219	1 543	^169	24 949
SEASONALLY ADJUSTED									
<b>2014–15</b>									
March	6 495	4 761	8 054	1 435	13 935	208	1 616	167	36 853
June	6 950	4 885	7 555	1 337	12 940	238	1 548	215	35 462
<b>2015–16</b>									
September	6 193	4 829	6 647	1 308	12 126	240	1 531	221	33 009
December	7 032	4 922	6 371	1 359	11 934	222	1 457	189	33 507
March	7 448	4 948	5 620	1 300	10 481	237	1 193	169	31 435
June	7 569	4 947	5 331	1 273	8 584	246	1 388	209	29 557
<b>2016–17</b>									
September	7 190	5 062	5 848	1 206	7 598	217	1 248	199	28 546
December	6 976	5 098	5 827	1 177	7 349	244	1 450	224	28 311
March	6 738	5 190	5 833	1 456	7 130	268	1 564	197	28 438
TREND									
<b>2014–15</b>									
March	6 714	4 744	8 205	1 497	13 672	224	1 690	188	36 949
June	6 580	4 852	7 414	1 362	13 048	228	1 576	203	35 367
<b>2015–16</b>									
September	6 635	4 878	6 787	1 315	12 423	233	1 486	207	33 737
December	6 957	4 903	6 172	1 325	11 563	236	1 406	196	32 724
March	7 330	4 935	5 704	1 310	10 317	234	1 315	185	31 392
June	7 485	4 981	5 551	1 248	8 853	232	1 279	194	29 833
<b>2016–17</b>									
September	7 256	5 038	5 657	1 223	7 810	235	1 337	207	28 758
December	6 986	5 111	5 814	1 265	7 285	243	1 431	210	28 344
March	6 748	5 185	5 906	1 343	7 071	257	1 518	207	28 228

^ 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>2012-13</b>	10 500	7 232	32 921	2 976	46 105	353	7 070	436	107 542
<b>2013-14</b>	9 802	6 901	34 754	3 367	46 586	269	6 507	323	108 451
<b>2014-15</b>	11 185	7 145	23 268	3 273	46 395	272	5 831	360	97 729
<b>2015-16</b>	11 386	7 322	13 944	2 528	35 495	350	4 991	370	76 386
<b>2014-15</b>									
March	2 246	1 665	4 355	638	10 768	44	1 315	87	21 125
June	2 956	1 947	4 738	575	11 469	87	1 327	107	23 208
<b>2015-16</b>									
September	2 392	1 758	3 922	593	10 104	76	1 365	100	20 310
December	3 004	1 912	4 396	744	10 689	103	1 320	89	22 256
March	2 725	1 660	2 725	567	7 810	74	1 061	79	16 702
June	3 265	1 992	2 902	624	6 891	97	1 244	102	17 118
<b>2016-17</b>									
September	2 502	2 066	3 356	584	5 892	74	1 162	95	15 732
December	2 992	2 414	3 509	614	5 965	126	1 321	107	17 048
March	2 489	2 079	2 714	512	4 721	89	1 463	93	14 161
SEASONALLY ADJUSTED									
<b>2014-15</b>									
March	2 493	1 852	5 118	738	11 832	51	1 315	87	23 552
June	2 806	1 875	4 646	569	11 096	85	1 327	107	22 429
<b>2015-16</b>									
September	2 526	1 797	3 946	596	10 236	81	1 365	100	20 538
December	2 776	1 771	3 932	665	9 964	89	1 320	89	20 661
March	3 012	1 845	3 224	651	8 606	87	1 061	79	18 678
June	3 072	1 908	2 842	616	6 688	92	1 244	102	16 509
<b>2016-17</b>									
September	2 655	2 124	3 376	586	6 002	78	1 162	95	15 956
December	2 750	2 231	3 129	545	5 538	109	1 321	107	15 725
March	2 755	2 311	3 225	588	5 198	108	1 463	95	15 836
TREND									
<b>2014-15</b>									
March	2 720	1 844	5 276	752	11 566	64	1 392	95	23 721
June	2 621	1 858	4 567	624	11 114	73	1 345	101	22 407
<b>2015-16</b>									
September	2 650	1 809	4 101	598	10 540	83	1 315	97	20 999
December	2 815	1 789	3 669	632	9 642	89	1 263	91	20 010
March	2 938	1 831	3 293	649	8 418	87	1 184	88	18 557
June	2 946	1 947	3 105	619	7 054	87	1 155	93	16 985
<b>2016-17</b>									
September	2 821	2 090	3 120	585	6 059	91	1 221	100	16 038
December	2 731	2 220	3 206	569	5 501	99	1 322	101	15 732
March	2 703	2 324	3 254	566	5 214	108	1 418	99	15 697

(a) Reference year for chain volume measures is 2014-15.

<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>2012-13</b>	14 706	11 722	14 201	2 796	14 038	712	689	543	59 378
<b>2013-14</b>	13 954	11 254	12 322	2 731	10 067	607	874	359	52 171
<b>2014-15</b>	15 819	11 501	11 732	2 975	8 717	623	1 166	393	52 925
<b>2015-16</b>	16 009	11 892	9 511	2 581	7 155	564	559	406	48 678
<b>2014-15</b>									
March	3 397	2 484	2 595	612	1 825	126	234	61	11 333
June	4 250	3 224	3 062	804	1 907	164	243	108	13 762
<b>2015-16</b>									
September	3 467	2 787	2 416	629	1 707	143	175	138	11 463
December	4 377	3 250	2 459	727	1 967	144	127	96	13 147
March	3 601	2 565	1 849	547	1 542	115	92	64	10 375
June	4 564	3 290	2 787	679	1 940	161	165	109	13 694
<b>2016-17</b>									
September	4 394	2 786	2 224	556	1 428	126	104	122	11 740
December	4 426	3 088	2 737	668	1 882	149	136	114	13 200
March	3 254	2 472	2 036	741	1 576	126	67	69	10 340
SEASONALLY ADJUSTED									
<b>2014-15</b>									
March	3 989	2 902	2 909	697	2 081	157	296	80	13 243
June	4 022	2 931	2 810	753	1 793	150	227	107	12 673
<b>2015-16</b>									
September	3 458	2 899	2 569	675	1 799	151	165	117	11 872
December	4 015	3 021	2 292	658	1 777	125	121	97	12 086
March	4 243	2 998	2 268	619	1 755	142	121	87	12 146
June	4 293	2 974	2 382	629	1 824	146	152	105	12 575
<b>2016-17</b>									
September	4 377	2 910	2 373	593	1 514	132	99	102	12 204
December	4 064	2 870	2 558	608	1 696	129	131	115	12 147
March	3 842	2 884	2 471	837	1 792	154	89	101	12 133
TREND									
<b>2014-15</b>									
March	3 981	2 890	2 911	748	2 084	159	295	94	13 174
June	3 840	2 918	2 758	721	1 873	151	230	101	12 594
<b>2015-16</b>									
September	3 786	2 948	2 552	686	1 770	143	166	107	12 134
December	3 915	2 984	2 361	657	1 778	138	133	102	12 029
March	4 176	2 998	2 284	628	1 772	138	125	95	12 211
June	4 349	2 969	2 335	601	1 706	138	127	99	12 353
<b>2016-17</b>									
September	4 263	2 918	2 424	612	1 663	137	123	106	12 296
December	4 098	2 886	2 482	669	1 675	138	111	108	12 187
March	3 920	2 871	2 510	749	1 725	143	99	106	12 069

(a) Reference year for chain volume measures is 2014-15.

## ACTUAL TOTAL EXPENDITURE, By state—Chain volume measures(a)

<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>2012-13</b>	25 207	18 954	47 085	5 766	59 993	1 066	7 762	979	166 803
<b>2013-14</b>	23 756	18 154	47 075	6 101	56 646	875	7 378	682	160 641
<b>2014-15</b>	27 004	18 646	35 000	6 249	55 112	895	6 996	753	150 655
<b>2015-16</b>	27 395	19 214	23 456	5 109	42 650	913	5 550	777	125 064
<b>2014-15</b>									
March	5 643	4 150	6 951	1 249	12 594	170	1 549	148	32 459
June	7 206	5 171	7 801	1 377	13 377	251	1 570	215	36 970
<b>2015-16</b>									
September	5 860	4 544	6 338	1 222	11 811	219	1 540	239	31 773
December	7 381	5 162	6 855	1 471	12 655	247	1 448	185	35 403
March	6 327	4 226	4 573	1 114	9 353	189	1 153	143	27 077
June	7 828	5 283	5 689	1 303	8 831	259	1 409	210	30 812
<b>2016-17</b>									
September	6 896	4 852	5 580	1 140	7 320	200	1 265	218	27 472
December	7 418	5 502	6 246	1 282	7 848	275	1 457	221	30 248
March	5 743	4 551	4 750	1 252	6 297	214	1 530	162	24 500
SEASONALLY ADJUSTED									
<b>2014-15</b>									
March	6 483	4 756	8 032	1 435	13 914	208	1 611	168	36 802
June	6 828	4 804	7 458	1 320	12 888	234	1 552	214	35 093
<b>2015-16</b>									
September	5 982	4 697	6 520	1 271	12 039	232	1 529	217	32 410
December	6 791	4 792	6 224	1 323	11 739	214	1 442	186	32 747
March	7 257	4 844	5 491	1 270	10 363	230	1 184	167	30 824
June	7 366	4 880	5 221	1 245	8 509	238	1 395	207	29 084
<b>2016-17</b>									
September	7 035	5 034	5 746	1 179	7 517	211	1 261	197	28 160
December	6 815	5 101	5 682	1 153	7 233	238	1 452	223	27 872
March	6 590	5 195	5 691	1 425	6 989	261	1 554	194	27 969
TREND									
<b>2014-15</b>									
March	6 701	4 735	8 189	1 500	13 651	224	1 687	189	36 896
June	6 460	4 776	7 329	1 344	12 988	224	1 575	202	34 997
<b>2015-16</b>									
September	6 435	4 757	6 656	1 283	12 312	226	1 481	204	33 131
December	6 730	4 773	6 031	1 289	11 421	227	1 396	193	32 038
March	7 115	4 829	5 576	1 277	10 189	226	1 309	183	30 768
June	7 297	4 915	5 437	1 220	8 759	225	1 283	192	29 338
<b>2016-17</b>									
September	7 087	5 009	5 539	1 197	7 722	228	1 345	205	28 340
December	6 830	5 107	5 683	1 238	7 175	237	1 434	209	27 921
March	6 602	5 183	5 762	1 315	6 937	250	1 512	205	27 752

(a) Reference year for chain volume measures is 2014-15.



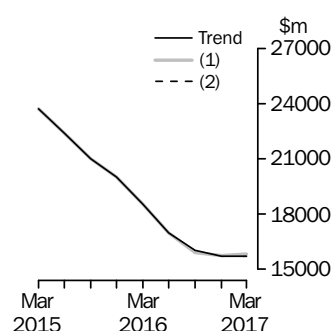
## WHAT IF...? REVISIONS TO TREND ESTIMATES

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

#### TREND REVISIONS

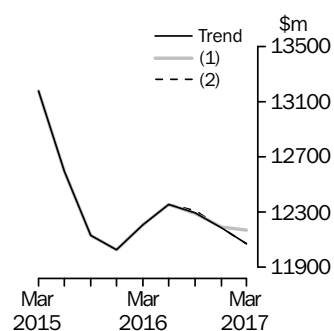
Recent seasonally adjusted and trend estimates are likely to be revised when original estimates for subsequent quarters become available. The approximate effects of possible scenarios on trend estimates for capital expenditure in chain volume terms are presented below by illustrating the impact if next 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



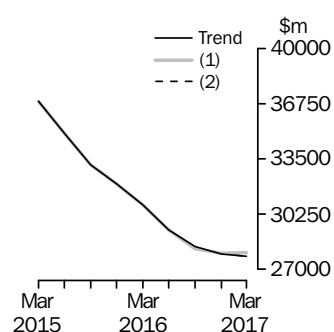
	Trend as published		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	%	(1) rises by 2.1% on this quarter		(2) falls by 2.1% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2016</b>						
June	16 985	-8.5	16 985	-8.5	16 985	-8.5
September	16 038	-5.6	15 921	-6.3	15 947	-6.1
December	15 732	-1.9	15 755	-1.0	15 745	-1.3
<b>2017</b>						
March	15 697	-0.2	15 840	0.5	15 715	-0.2

#### EQUIPMENT, PLANT AND MACHINERY



	Trend as published		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	%	(1) rises by 1.9% on this quarter		(2) falls by 1.9% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2016</b>						
June	12 353	1.2	12 353	1.2	12 353	1.2
September	12 296	-0.5	12 289	-0.5	12 310	-0.3
December	12 187	-0.9	12 191	-0.8	12 184	-1.0
<b>2017</b>						
March	12 069	-1.0	12 172	-0.2	12 069	-0.9

#### TOTAL CAPITAL EXPENDITURE



	Trend as published		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	%	(1) rises by 2.0% on this quarter		(2) falls by 2.0% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2016</b>						
June	29 338	-4.6	29 338	-4.6	29 338	-4.6
September	28 340	-3.4	28 210	-3.8	28 257	-3.7
December	27 921	-1.5	27 953	-0.9	27 937	-1.1
<b>2017</b>						
March	27 752	-0.6	28 013	0.2	27 786	-0.5

## 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** The survey excludes the following industries:

Agriculture, Forestry and Fishing (Division A)

Public Administration and Safety (Division O)

Education and Training (Division P)

Health Care and Social Assistance (Division Q)

Superannuation Funds (Class 6330)

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

**5** 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.

**6** 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.

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

## EXPLANATORY NOTES *continued*

### STATISTICAL UNIT

**8** 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.

**9** 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

**10** 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.

**11** 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

**12** 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. December quarter survey returns are completed during January and February).

**13** 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*).

### PERIOD TO WHICH REPORTED DATA RELATES

#### Period to which reported data relates

<u>Survey Quarter</u>	2015-16				2016-17				2017-18			
	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
December 2015	Act	Act	E1		E2							
March 2016	Act	Act	Act	E1	E2							
June 2016	Act	Act	Act	Act	E1		E2					
September 2016					Act	E1	E2					
December 2016					Act	Act	E1		E2			
March 2017					Act	Act	Act	E1	E2			
June 2017					Act	Act	Act	Act	E1		E2	

## EXPLANATORY NOTES *continued*

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

**14** 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 2016-2017:

- the first estimate was available from the December 2015 survey as a longer term expectation (E2)
- the second estimate was available from the March 2016 survey (again as a longer term expectation)
- the third estimate was available from the June 2016 survey as the sum of two expectations (E1 + E2)
- in the September 2016, December 2016 and March 2017 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 2017 survey is derived from the sum of the actual expenditure for each of the four quarters in the 2016-17 financial year.

**15** 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.

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

### SAMPLE REVISION

**17** 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.

**18** 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.

**19** 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 2017 they represented about 0.60% of the total estimate of actual new capital expenditure.

### CLASSIFICATION BY INDUSTRY

**20** 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).

**21** 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

**22** 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 2014-15). 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

## EXPLANATORY NOTES *continued*

### CHAIN VOLUME MEASURES

*continued*

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.

**23** 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. Since the release of the September quarter 2016 issue of this publication, the chain volume measures currently have 2014-15 as their base year rather than 2013-14.

**24** 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.

**25** 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

**26** 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).

**27** 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 2016-17 based on the March 2017 survey results and compare this with 2015-16 expenditure, it is necessary to apply the relevant realisation factors to the expectations to put both estimates on the same basis.

**28** 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.

**29** 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.

## EXPLANATORY NOTES *continued*

### RELIABILITY OF THE ESTIMATES

**30** 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.

**31** 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.

**32** 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.

**33** 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 37 to 42 below, seasonally adjusted and trend estimates are also subject to revision as data are revised and more data become available.

**34** 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.

**35** 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.

**36** 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

**37** 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.

## EXPLANATORY NOTES *continued*

### SEASONAL ADJUSTMENT

*continued*

**38** 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.

**39** 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

**40** 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.

**41** 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

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

**43** *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.

**44** 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

**45** 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.

**46** 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).

**47** 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 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.



## EXPLANATORY NOTES *continued*

### RELATED PUBLICATIONS

**48** 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)

**49** 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 web site which details products to be released in the week ahead.

### ABS DATA AVAILABLE ON REQUEST

**50** 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

**51** 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

**52** 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*.

## APPENDIX 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 \$24,949m and the calculated standard error in this case is \$330m. The standard error is then used to interpret the level estimate of \$24,949m.

For instance, the standard error of \$330m indicates that:

- There are approximately two chances in three that the real value falls within the range \$24,619m to \$25,279m ( $\$24,949\text{m} \pm \$330\text{m}$ )
- There are approximately 19 chances in 20 that the real value falls within the range \$24,289m to \$25,609m ( $\$24,949\text{m} \pm \$660\text{m}$ )

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 2017 estimates.

	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m
Mining	40	49	70
Manufacturing	43	83	103
Electricity, Gas, Water and Waste Services	7	19	23
Construction	10	120	121
Wholesale Trade	15	62	65
Retail Trade	53	83	105
Transport, Postal and Warehousing	10	121	121
Information Media and Telecommunications	2	12	13
Financial and Insurance Services	11	67	69
Rental, Hiring and Real Estate Services	123	71	129
Professional, Scientific and Technical Services	33	85	90
Other Selected Services	77	105	128
<b>Total</b>	<b>172</b>	<b>296</b>	<b>330</b>
New South Wales	72	167	196
Victoria	60	122	143
Queensland	141	140	182
South Australia	28	94	103
Western Australia	32	90	97
Tasmania	17	18	25
Northern Territory	39	8	39
Australian Capital Territory	17	14	20
<b>Australia</b>	<b>172</b>	<b>296</b>	<b>330</b>

## APPENDIX 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 one quarter the published level estimate for total capital expenditure is \$30,776m and the next quarter the published level estimate is \$24,949m.

In this example, the calculated standard error for the movement estimate is \$469m. The standard error is then used to interpret the published movement estimate of \$5,827m.

For instance, the standard error of \$469m indicates that:

- There are approximately two chances in three that the real movement over the two-quarter period falls within the range \$5,358m to \$6,296m ( $\$5,827m \pm \$469m$ ).
- There are approximately 19 chances in 20 that the real movement falls within the range \$4,889m to \$6,765m ( $\$5,827m \pm \$938m$ ).

The following table shows the standard errors for March Quarter 2017 movement estimates.

	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m
Mining	50	23	53
Manufacturing	40	95	106
Electricity, Gas, Water and Waste Services	8	17	15
Construction	17	251	253
Wholesale Trade	38	112	114
Retail Trade	83	95	136
Transport, Postal and Warehousing	12	150	152
Information Media and Telecommunications	69	39	103
Financial and Insurance Services	24	54	54
Rental, Hiring and Real Estate Services	173	120	203
Professional, Scientific and Technical Services	35	103	101
Other Selected Services	71	98	123
<b>Total</b>	<b>245</b>	<b>400</b>	<b>469</b>
New South Wales	71	229	238
Victoria	115	154	197
Queensland	146	184	241
South Australia	25	89	93
Western Australia	109	117	162
Tasmania	22	24	38
Northern Territory	39	15	43
Australian Capital Territory	9	23	26
<b>Australia</b>	<b>245</b>	<b>400</b>	<b>469</b>

## 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.

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