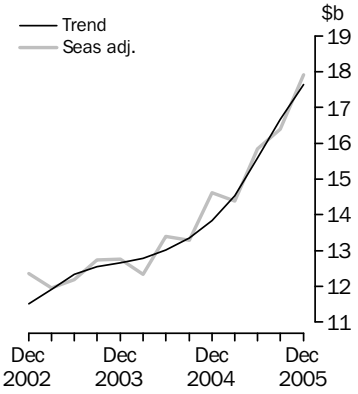
Australian Bureau of Statistics

DECEMBER QUARTER 2005 **5625.0**

PRIVATE NEW CAPITAL EXPENDITURE AND EXPECTED EXPENDITURE AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) THURS 23 FEB 2006

New Capital Expenditure
in volume terms



KEY FIGURES

	Dec Qtr 05 $m	Sep Qtr 05 to Dec Qtr 05 % change	Dec Qtr 04 to Dec Qtr 05 % change
Trend estimates(a)			
Total new capital expenditure	17 647	5.9	27.6
Buildings & structures	5 649	5.1	31.9
Equipment, plant & machinery	11 963	5.8	25.0
Seasonally adjusted(a)			
Total new capital expenditure	17 910	9.2	22.5
Buildings & structures	5 783	6.6	38.7
Equipment, plant & machinery	12 160	9.9	16.4

(a) In volume terms.

KEY POINTS

ACTUAL EXPENDITURE (VOLUME TERMS)

- The trend estimate for total capital expenditure increased by 5.9% in December quarter 2005. It rose by 9.2% in seasonally adjusted terms after a rise (3.5%) in the September quarter 2005.
- A strong increase in seasonally adjusted expenditure on equipment, plant and machinery (up 9.9%) has been the major source of growth this quarter, mainly driven by the Other selected industries and Mining.
- Seasonally adjusted buildings and structures increased (6.6%) mainly driven by Mining.

EXPECTED EXPENDITURE (CURRENT TERMS)

- This issue includes the fifth estimate for 2005-06 and the first estimate for 2006-07.
- Estimate 5 for 2005-06 is $67,307m. This estimate is 21.0% higher than the comparable estimate for 2004-05 and 6.4% higher than estimate 4.
- Estimate 1 for 2006-07 is $52,690m. This is 17.6% higher than Estimate 1 for 2005-06.
- See pages 6 to 9 for further commentary on expectations data.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Esther Lauw on Sydney (02) 9268 4357.

NOTES

FORTHCOMING ISSUES

ISSUE (Quarter)	*RELEASE DATE*
March 2006	1 June 2006
June 2006	31 August 2006

CHANGES IN THIS ISSUE

There are no changes in this issue.

ABBREVIATIONS

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
PAYGW	pay-as-you-go withholding
TAU	type of activity unit

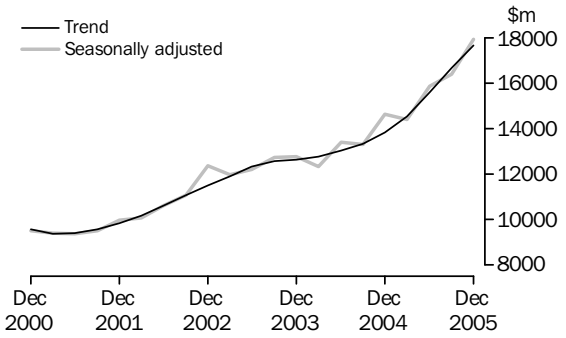
Dennis Trewin
Australian Statistician

CONTENTS

ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS

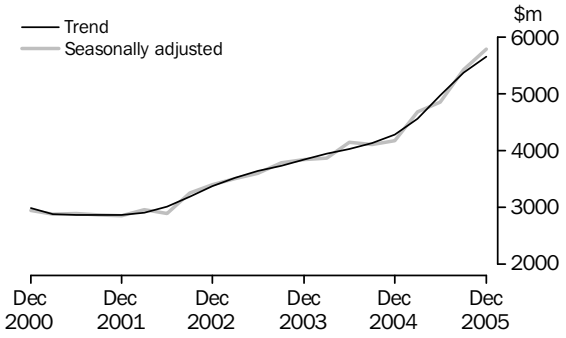
TOTAL CAPITAL EXPENDITURE

The trend estimate for total new capital expenditure increased 5.9% in December quarter 2005, the fourth consecutive quarter of similar growth. The seasonally adjusted estimate increased 9.2% primarily due to an increase in equipment, plant and machinery of 9.9%.



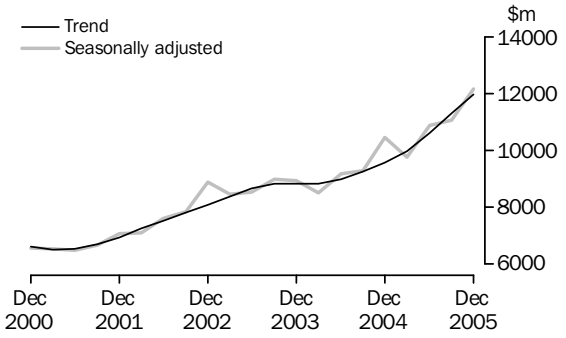
BUILDINGS AND STRUCTURES

The trend estimate for buildings and structures increased 5.1% in December quarter 2005, the growth rate slowing after two consecutive quarters of strong growth. In seasonally adjusted terms, the estimate increased 6.6%. The increase this quarter is driven by Mining, up 11.9%.



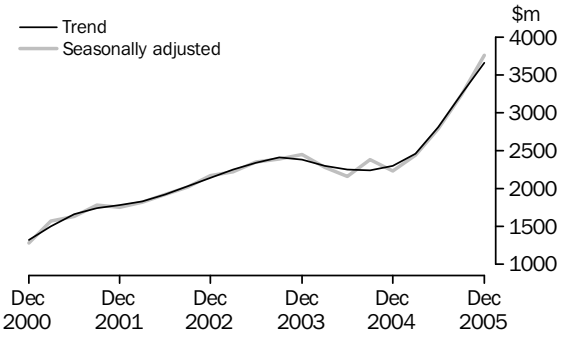
EQUIPMENT, PLANT AND MACHINERY

Trend estimates for equipment, plant and machinery have increased by 5.8% in December quarter 2005, the eighth consecutive rise. The December quarter estimate, in seasonally adjusted terms, rose strongly by 9.9%. Mining and Other selected industries rose 21.4% and 14.0% respectively, with Construction and Transport and storage industries being the main contributors in Other selected industries.



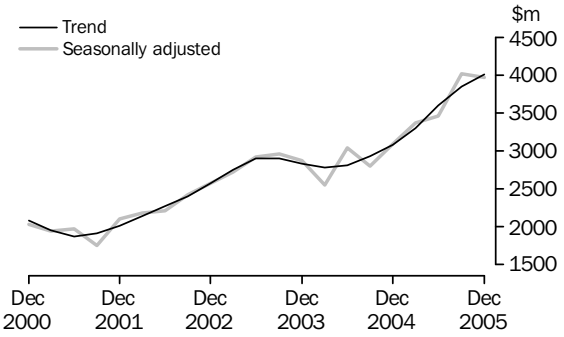
MINING

The trend estimate for Mining increased by 12.7% in December quarter 2005, the fourth quarter of consecutive growth. The seasonally adjusted estimate increased 16.0%, maintaining the strong growth seen in the previous two quarters. Equipment, plant and machinery is the main contributor, with 21.4% seasonally adjusted growth and buildings and structures recording a 11.9% increase.



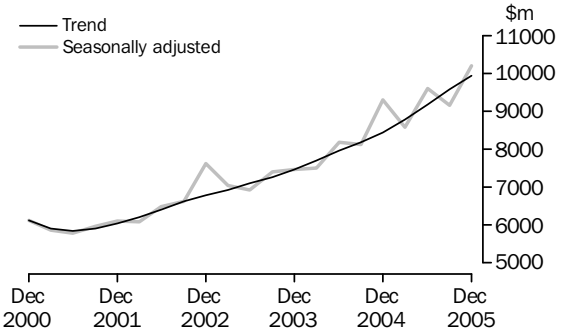
MANUFACTURING

Manufacturing trend estimate increased 4.2% in December quarter 2005, the seventh consecutive quarter of growth. In seasonally adjusted terms, the estimate fell 1.3% after experiencing very strong growth in September quarter 2005. Equipment, plant and machinery is the main contributor to the fall, down 3.0% in seasonally adjusted terms.



OTHER SELECTED INDUSTRIES

Trend estimate for Other selected industries increased 3.9% in December quarter 2005. In seasonally adjusted terms, Other selected industries rose strongly (11.4%) following a fall last quarter of 4.6%. The increase was mainly due to an increase in equipment, plant and machinery expenditure of 14.0%.



ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE

FINANCIAL YEARS AT CURRENT PRICES

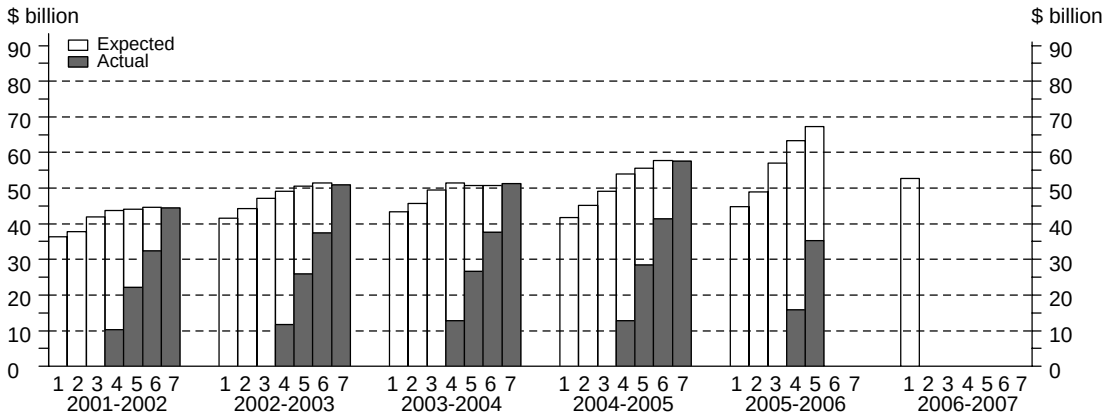
The graphs below show the seven estimates of actual and expected expenditure for each financial year. The estimates appearing below relate to data contained in tables 5 and 6. Advice about the application of realisation ratios to these estimates is in paragraphs 24 to 27 of the Explanatory Notes.

The timing and construction of these estimates are as follows:

		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

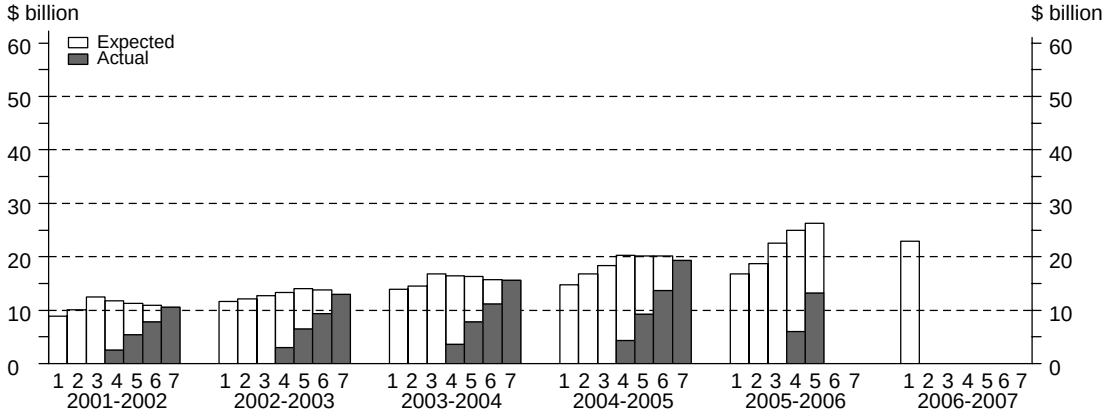
The fifth estimate for 2005-06 is $67,307m which is 21.0% higher than the comparable estimate for 2004-05 and 6.4% higher than the fourth estimate for 2005-06. All industries recorded increases with Mining (8.7%) recording the largest increase. The first estimate for 2006-07 is 17.6% higher than the corresponding estimate for 2005-06. The increase was mainly driven by Mining, although most other industries also report higher expectations for next financial year.



BUILDINGS AND STRUCTURES

Estimate 5 for 2005-06 is 29.9% higher than Estimate 5 for 2004-05 and 5.0% higher than Estimate 4. All industries have increased since Estimate 4 for this financial year. Mining and Manufacturing recorded the strongest increases.

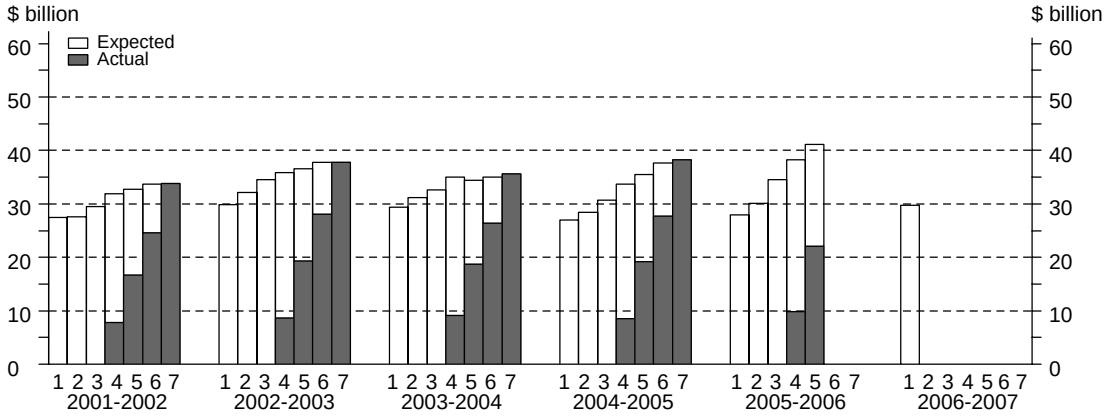
Estimate 1 for 2006-07 is 36.3% higher than Estimate 1 for 2005-06. The majority of industries have increased although Manufacturing, Wholesale trade, Transport and storage, and Finance and insurance are all lower than Estimate 1 for 2005-06.



EQUIPMENT, PLANT AND MACHINERY

The fifth estimate for 2005-06 is 16.0% higher than the comparable estimate for 2004-05 and 7.4% higher than Estimate 4 for 2005-06. Increases in Transport and storage, Manufacturing, and Property and business more than offset the lower estimate for Finance and insurance.

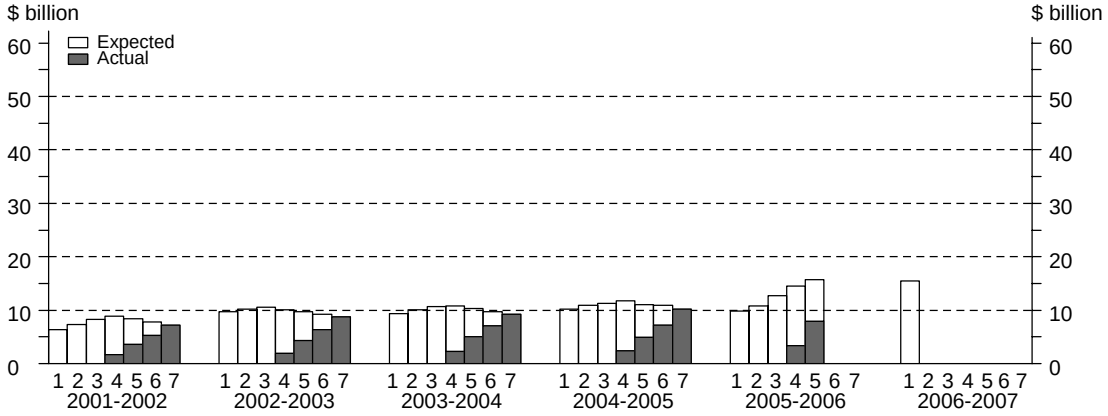
The first estimate for 2006-07 is 6.2% higher than the first estimate for 2005-06. Most industries have increased, but Retail and Transport and storage industries are lower than estimate 1 for 2005-06.



MINING

Estimate 5 for 2005-06 has increased by 43.0% compared to Estimate 5 for the 2004-05 year and is 8.7% higher than Estimate 4 for this financial year. The Mining industry continues to have strong growth in expectations this quarter due to increased expectations for both equipment, plant and machinery and buildings and structures.

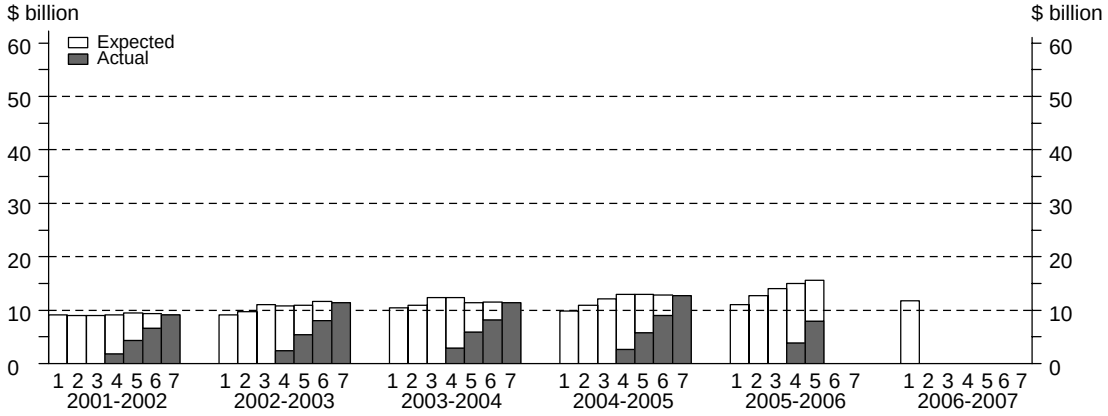
The first estimate for 2006-07 for Mining is 58.3% higher than Estimate 1 for 2005-06 with expectations remaining at high levels in both asset groups.



MANUFACTURING

Estimate 5 is 20.6% higher than the comparable estimate for 2004-05 and 3.6% higher than Estimate 4 for 2005-06. The main contributor to growth in Estimate 5 was expenditure on equipment, plant and machinery (up 7.5%).

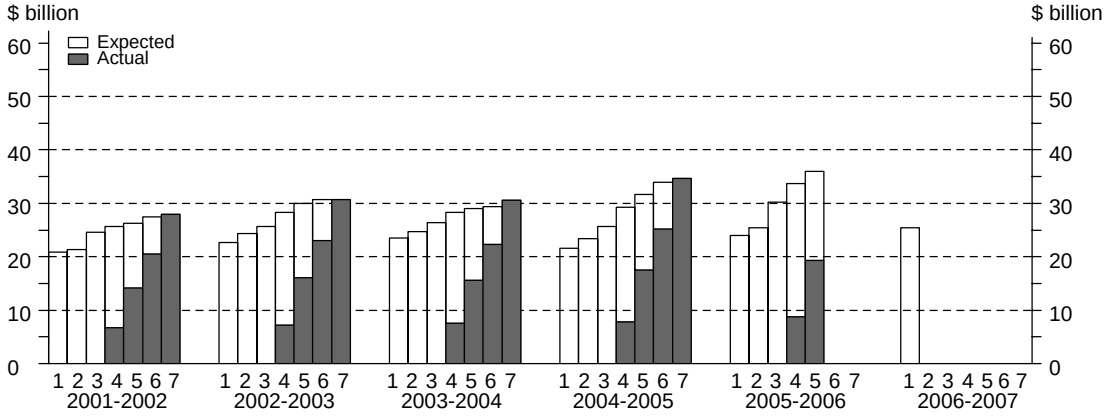
Estimate 1 for 2006-07 is 6.1% higher than the comparable estimate for 2005-06. An increase of 10.8% in equipment, plant and machinery was slightly off set by a decrease of 4.9% in buildings and structures.



OTHER SELECTED INDUSTRIES

Estimate 5 for 2005-06 is 13.5% above the corresponding estimate for 2004-05 and is 6.7% higher than Estimate 4 for this financial year. Equipment, plant and machinery is contributing to the majority of this growth, with Property and business services and Transport and storage showing increases on Estimate 4.

The first estimate for 2006-07 is 6.2% higher than Estimate 1 for 2005-06. All industries except for Transport and storage have increased.



IN CURRENT PRICE TERMS

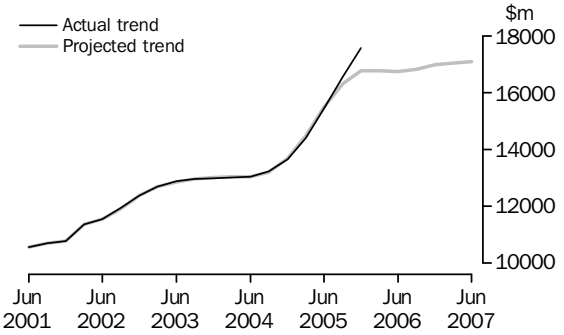
PROJECTED CAPITAL EXPENDITURE SERIES

The projected series below apply historical realisation ratios to contemporary expectations to convert these to quarterly figures. Trend estimates of resultant quarterly time series of actual and expected expenditure are produced.

The following graphs, with accompanying commentary, show the projected capital expenditure series based on December quarter 2005 data, which includes expected expenditure up to and including the June quarter 2007. Please see paragraphs 28 to 32 of the Explanatory Notes for further details about the methodology and cautionary notes for these series.

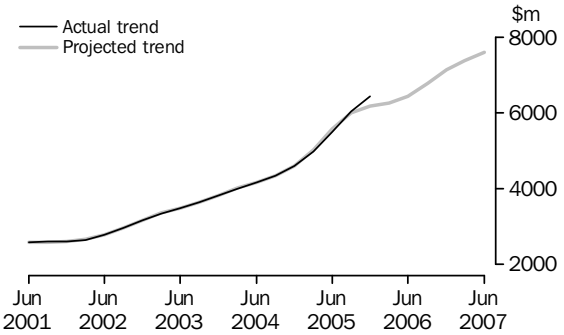
TOTAL CAPITAL EXPENDITURE

Current price trend estimates for total capital expenditure have increased sharply since 2004-05. Expectations for the next eighteen months suggest a flattening of capital expenditure. With the exception of Mining, capital expenditure is projected to decline over 2006-07 for all major industry groups.



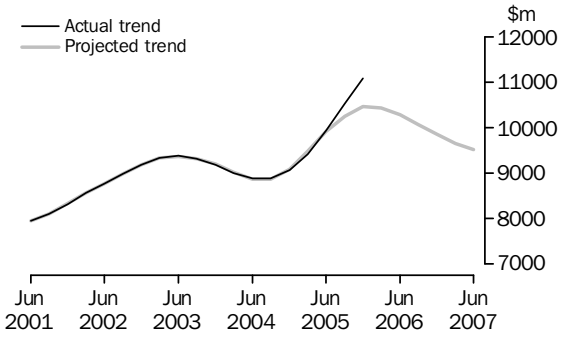
BUILDINGS AND STRUCTURES

In current price terms, trend estimates for buildings and structures have displayed sustained growth over the past three years. The expectations for the next eighteen months suggest a period of levelling in growth over the coming months, followed by steady growth for the 2006-07 financial year.



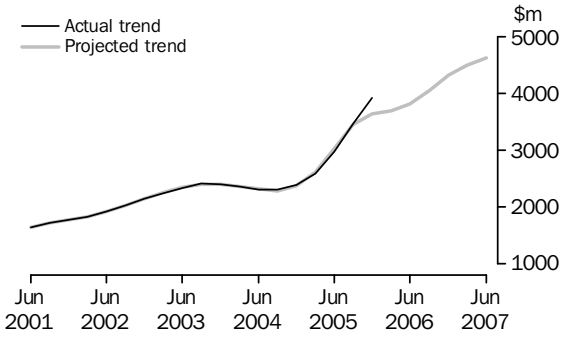
EQUIPMENT, PLANT AND MACHINERY

Current price trend estimates for equipment, plant and machinery, have shown strong growth since the beginning of the 2004-05 financial year. Expectations for the next eighteen months suggest a decline towards the end of the 2005-06 financial year. All major industry groups are projected to decline with the strongest decline coming from Mining which is projected to decline for the first three quarters of 2006 followed by a resumption of growth in the latter part of 2006-07.



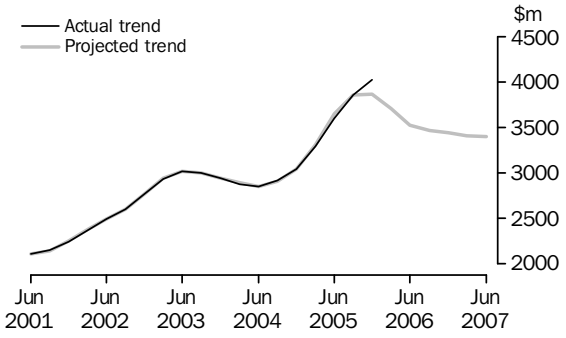
MINING

Trend estimates for Mining have increased strongly since the September quarter of 2004. Estimates suggest a flattening of expenditure towards the end of the 2005-06 financial year followed by growth. Equipment, plant and machinery is expected to decline before increasing again from December quarter 2006. Strong growth for buildings and structures should flatten towards the end of the 2006-07 financial year.



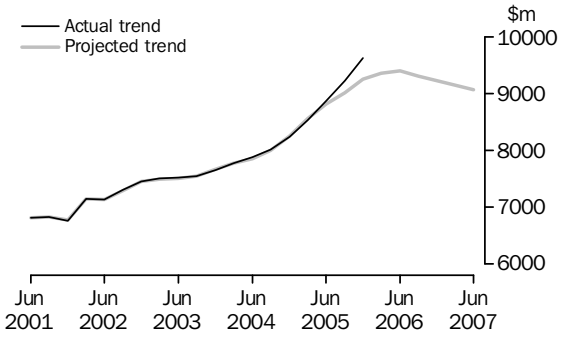
MANUFACTURING

Manufacturing trend estimates have shown strong growth since the 2004-05 financial year. Expectations suggest expenditure has peaked and will fall for the remainder of this financial year, followed by a flattening of spending for 2006-07. Both asset groups are expecting a decline, with buildings and structures expecting growth from the March quarter 2007.



OTHER SELECTED INDUSTRIES

The current price estimate for Other selected industries have shown strong growth since March quarter 2005. Estimates suggest that growth is expected to peak toward the end of 2005-06 financial year, followed by a decline. Growth for buildings and structures will continue for the next eighteen months, while a decline in equipment, plant and machinery is expected from the September quarter of 2006, mainly driven by Transport and storage.



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

	BUILDINGS AND STRUCTURES				EQUIPMENT, PLANT AND MACHINERY				TOTAL CAPITAL EXPENDITURE			
	Mining	*Manu-facturing*	*Other selected indus-tries*	*Total*	*Mining*	*Manu-facturing*	*Other selected indus-tries*	*Total*	*Mining*	*Manu-facturing*	*Other selected indus-tries*	*Total*
Period	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
ORIGINAL (Actual)												
2003–04	4 910	2 462	8 273	15 645	4 372	8 962	22 268	35 602	9 282	11 424	30 541	51 247
2004–05	6 062	3 690	9 509	19 262	4 191	8 991	25 111	38 293	10 253	12 681	34 620	57 554
2004–05												
September	1 391	723	2 170	4 284	989	1 896	5 619	8 504	2 380	2 619	7 790	12 789
December	1 479	899	2 524	4 902	1 125	2 306	7 225	10 655	2 604	3 205	9 749	15 557
March	1 368	939	2 179	4 486	866	2 193	5 470	8 530	2 234	3 132	7 649	13 016
June	1 824	1 129	2 636	5 589	1 211	2 596	6 796	10 604	3 035	3 725	9 433	16 192
2005–06												
September	2 003	1 211	2 806	6 019	1 360	2 612	5 921	9 893	3 362	3 823	8 727	15 912
December	2 679	1 301	3 220	7 200	1 875	2 856	7 388	12 120	4 554	4 157	10 608	19 320
ORIGINAL (Expected) (a)												
2005–06												
6 mths to Jun	5 117	2 404	5 468	12 988	2 696	5 211	11 178	19 084	7 812	7 615	16 648	32 075
Total fin year	9 798	4 916	11 494	26 207	5 931	10 680	24 486	41 096	15 728	15 595	35 984	67 307
2006–07												
12 mths to Jun	10 741	3 195	9 027	22 963	4 761	8 575	16 385	29 721	15 502	11 770	25 417	52 690
SEASONALLY ADJUSTED (Actual)												
2004–05												
September	1 435	727	2 165	4 327	1 017	2 063	5 777	8 858	2 452	2 790	7 943	13 185
December	1 301	875	2 307	4 483	1 010	2 193	6 779	9 981	2 311	3 068	9 086	14 465
March	1 561	1 022	2 529	5 112	1 002	2 347	5 874	9 223	2 563	3 369	8 404	14 336
June	1 792	1 066	2 528	5 386	1 156	2 368	6 601	10 125	2 948	3 434	9 129	15 511
2005–06												
September	2 074	1 216	2 793	6 083	1 393	2 834	6 079	10 306	3 467	4 050	8 873	16 390
December	2 342	1 266	2 943	6 551	1 684	2 731	6 927	11 342	4 026	3 997	9 870	17 893
TREND (Actual)												
2004–05												
September	1 321	772	2 259	4 352	983	2 143	5 752	8 878	2 304	2 915	8 010	13 229
December	1 401	873	2 325	4 599	982	2 171	5 910	9 064	2 383	3 044	8 238	13 665
March	1 548	989	2 448	4 985	1 037	2 305	6 078	9 420	2 585	3 294	8 527	14 406
June	1 796	1 104	2 609	5 509	1 181	2 498	6 253	9 933	2 977	3 602	8 860	15 439
2005–06												
September	2 072	1 192	2 764	6 028	1 399	2 669	6 465	10 533	3 471	3 861	9 229	16 561
December	2 286	1 244	2 916	6 446	1 638	2 782	6 684	11 085	3 924	4 026	9 627	17 577

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 24 to 27 of the Explanatory Notes.

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

Period	Mining	Manu-facturing	Construction	Wholesale trade	Retail trade	Transport and storage	Finance and insurance	Property and business services	Other services	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
ORIGINAL (Actual)										
2003–04	9 282	11 424	1 725	2 101	3 571	7 076	2 962	6 710	6 397	51 247
2004–05	10 253	12 681	2 295	2 766	4 041	7 749	3 352	7 636	6 781	57 554
2004–05										
September	2 380	2 619	^472	576	974	1 730	757	1 675	1 606	12 789
December	2 604	3 205	^680	716	1 206	2 415	894	2 073	1 763	15 557
March	2 234	3 132	^544	650	844	1 458	758	1 761	1 634	13 016
June	3 035	3 725	599	825	1 017	2 146	942	2 126	1 777	16 192
2005–06										
September	3 362	3 823	^457	762	1 114	1 724	874	2 158	1 639	15 912
December	4 554	4 157	^697	904	1 098	2 915	827	2 228	1 939	19 320
ORIGINAL (Expected) (a)										
2005–06										
6 mths to Jun	7 812	7 615	1 020	1 188	2 011	3 627	1 760	3 530	3 512	32 075
Total fin year	15 728	15 595	2 174	2 855	4 223	8 266	3 460	7 915	7 090	67 307
2006–07										
12 mths to Jun	15 502	11 770	1 314	1 697	2 890	3 998	3 102	5 956	6 460	52 690
SEASONALLY ADJUSTED (Actual)										
2004–05										
September	2 452	2 790	545	578	906	1 824	742	1 664	1 684	13 185
December	2 311	3 068	627	658	1 112	2 191	851	2 034	1 613	14 465
March	2 563	3 369	543	762	1 016	1 626	847	1 897	1 713	14 336
June	2 948	3 434	567	773	1 000	2 038	922	2 041	1 788	15 511
2005–06										
September	3 467	4 050	534	768	1 036	1 821	859	2 143	1 712	16 390
December	4 026	3 997	639	840	1 016	2 633	782	2 190	1 770	17 893
TREND (Actual)										
2004–05										
September	2 304	2 915	550	588	926	1 813	769	1 703	1 661	13 229
December	2 383	3 044	580	662	956	1 768	821	1 782	1 669	13 665
March	2 585	3 294	573	734	995	1 742	875	1 905	1 703	14 406
June	2 977	3 602	558	770	1 016	1 865	883	2 029	1 739	15 439
2005–06										
September	3 471	3 861	569	795	1 023	2 103	855	2 128	1 756	16 561
December	3 924	4 026	604	818	1 023	2 405	815	2 206	1 756	17 577

^ 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 24 to 27 of the Explanatory Notes.

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

	ASSET			INDUSTRY			
	Buildings and structures	*Equipment, plant and machinery*	*Total*	*Mining*	*Manufacturing*	*Other selected industries*	*Total*
Period	$m	$m	$m	$m	$m	$m	$m
			ORIGINAL				
2001–02	11 589	28 473	40 172	7 284	8 242	24 628	40 172
2002–03	13 772	33 707	47 599	8 757	10 634	28 218	47 599
2003–04	15 645	35 602	51 247	9 282	11 424	30 541	51 247
2004–05	17 802	40 349	58 151	9 833	12 720	35 599	58 151
2003–04							
December	4 206	9 493	13 694	2 728	3 007	7 975	13 694
March	3 379	7 857	11 246	1 994	2 374	6 872	11 246
June	4 309	9 599	13 902	2 223	3 273	8 389	13 902
2004–05							
September	4 074	8 883	12 957	2 318	2 639	7 999	12 957
December	4 568	11 120	15 689	2 516	3 220	9 953	15 689
March	4 117	8 994	13 111	2 132	3 134	7 845	13 111
June	5 043	11 352	16 395	2 867	3 726	9 801	16 395
2005–06							
September	5 366	10 603	15 969	3 148	3 789	9 031	15 969
December	6 357	12 967	19 324	4 245	4 120	10 959	19 324
			SEASONALLY ADJUSTED				
2003–04							
December	3 835	8 933	12 768	2 448	2 867	7 461	12 768
March	3 871	8 502	12 329	2 276	2 553	7 499	12 329
June	4 149	9 170	13 399	2 163	3 044	8 176	13 399
2004–05							
September	4 106	9 278	13 298	2 378	2 803	8 117	13 298
December	4 170	10 446	14 618	2 231	3 088	9 300	14 618
March	4 679	9 753	14 387	2 435	3 365	8 588	14 387
June	4 847	10 872	15 847	2 789	3 464	9 594	15 847
2005–06							
September	5 424	11 069	16 407	3 239	4 018	9 150	16 407
December	5 783	12 160	17 910	3 756	3 965	10 189	17 910
			TREND				
2003–04							
December	3 841	8 823	12 653	2 377	2 829	7 453	12 653
March	3 949	8 835	12 779	2 304	2 775	7 696	12 779
June	4 028	8 992	13 018	2 251	2 807	7 954	13 018
2004–05							
September	4 130	9 243	13 348	2 241	2 933	8 169	13 348
December	4 283	9 568	13 834	2 301	3 082	8 450	13 834
March	4 555	9 972	14 534	2 461	3 301	8 772	14 534
June	4 969	10 609	15 585	2 808	3 601	9 181	15 585
2005–06							
September	5 374	11 308	16 667	3 250	3 845	9 573	16 667
December	5 649	11 963	17 647	3 662	4 008	9 945	17 647

(a) Reference year for chain volume measures is 2003–04.

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

	ASSET			INDUSTRY			
	Buildings and structures	*Equipment, Plant and Machinery*	*Total*	*Mining*	*Manufacturing*	*Other selected industries*	*Total*
Period	%	%	%	%	%	%	%
ORIGINAL							
2001–02	–2.8	7.9	5.2	29.4	0.1	2.1	5.2
2002–03	18.8	18.4	18.5	20.2	29.0	14.6	18.5
2003–04	13.6	5.6	7.7	6.0	7.4	8.2	7.7
2004–05	13.8	13.3	13.5	5.9	11.3	16.6	13.5
2003–04							
December	12.1	9.7	10.4	16.7	8.6	9.2	10.4
March	–19.7	–17.2	–17.9	–26.9	–21.0	–13.8	–17.9
June	27.5	22.2	23.6	11.5	37.9	22.1	23.6
2004–05							
September	–5.5	–7.5	–6.8	4.3	–19.4	–4.6	–6.8
December	12.1	25.2	21.1	8.5	22.0	24.4	21.1
March	–9.9	–19.1	–16.4	–15.3	–2.7	–21.2	–16.4
June	22.5	26.2	25.0	34.5	18.9	24.9	25.0
2005–06							
September	6.4	–6.6	–2.6	9.8	1.7	–7.9	–2.6
December	18.5	22.3	21.0	34.8	8.7	21.3	21.0
SEASONALLY ADJUSTED							
2003–04							
December	1.2	–0.7	0.1	2.2	–3.1	0.8	0.1
March	0.9	–4.8	–3.4	–7.0	–11.0	0.5	–3.4
June	7.2	7.9	8.7	–4.9	19.2	9.0	8.7
2004–05							
September	–1.0	1.2	–0.7	9.9	–7.9	–0.7	–0.7
December	1.5	12.6	9.9	–6.2	10.1	14.6	9.9
March	12.2	–6.6	–1.6	9.2	9.0	–7.7	–1.6
June	3.6	11.5	10.1	14.5	3.0	11.7	10.1
2005–06							
September	11.9	1.8	3.5	16.1	16.0	–4.6	3.5
December	6.6	9.9	9.2	16.0	–1.3	11.4	9.2
TREND							
2003–04							
December	2.7	–0.1	0.8	–1.3	–2.5	2.7	0.8
March	2.8	0.1	1.0	–3.1	–1.9	3.3	1.0
June	2.0	1.8	1.9	–2.3	1.2	3.3	1.9
2004–05							
September	2.5	2.8	2.5	–0.4	4.5	2.7	2.5
December	3.7	3.5	3.6	2.7	5.1	3.4	3.6
March	6.4	4.2	5.1	7.0	7.1	3.8	5.1
June	9.1	6.4	7.2	14.1	9.1	4.7	7.2
2005–06							
September	8.1	6.6	6.9	15.8	6.8	4.3	6.9
December	5.1	5.8	5.9	12.7	4.2	3.9	5.9

(a) Reference year for chain volume measures is 2003–04.

5 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)							
2002–03	11 694	12 124	12 691	13 344	14 067	13 744	13 000
2003–04	13 975	14 551	16 834	16 427	16 353	15 712	15 645
2004–05	14 754	16 775	18 359	20 323	20 176	20 160	19 262
2005–06	16 846	18 724	22 499	24 963	26 207	nya	nya
2006–07	22 963	nya	nya	nya	nya	nya	nya
BUILDINGS AND STRUCTURES (Realisation Ratio) (a)							
2002–03	1.11	1.07	1.02	0.97	0.92	0.95	1.00
2003–04	1.12	1.08	0.93	0.95	0.96	1.00	1.00
2004–05	1.31	1.15	1.05	0.95	0.95	0.96	1.00
5-year average	1.18	1.09	0.97	0.94	0.94	0.97	1.00
EQUIPMENT, PLANT AND MACHINERY ($ million)							
2002–03	29 859	32 157	34 478	35 805	36 540	37 770	37 816
2003–04	29 393	31 129	32 627	35 031	34 402	35 034	35 602
2004–05	26 927	28 423	30 675	33 645	35 442	37 661	38 293
2005–06	27 975	30 147	34 508	38 272	41 096	nya	nya
2006–07	29 721	nya	nya	nya	nya	nya	nya
EQUIPMENT, PLANT AND MACHINERY (Realisation Ratio) (a)							
2002–03	1.27	1.18	1.10	1.06	1.03	1.00	1.00
2003–04	1.21	1.14	1.09	1.02	1.03	1.02	1.00
2004–05	1.42	1.35	1.25	1.14	1.08	1.02	1.00
5-year average	1.28	1.21	1.14	1.05	1.04	1.01	1.00
TOTAL ($ million)							
2002–03	41 553	44 281	47 169	49 149	50 607	51 514	50 816
2003–04	43 369	45 681	49 462	51 458	50 755	50 747	51 247
2004–05	41 682	45 197	49 034	53 969	55 619	57 821	57 554
2005–06	44 819	48 871	57 005	63 235	67 307	nya	nya
2006–07	52 690	nya	nya	nya	nya	nya	nya
TOTAL (Realisation Ratio) (a)							
2002–03	1.22	1.15	1.08	1.03	1.00	0.99	1.00
2003–04	1.18	1.12	1.04	1.00	1.01	1.01	1.00
2004–05	1.38	1.27	1.17	1.07	1.03	1.00	1.00
5-year average	1.25	1.18	1.08	1.02	1.01	1.00	1.00
TOTAL (Percentage change over corresponding estimate for previous financial year)							
2002–03	14.4	17.3	12.5	12.3	14.7	15.5	14.5
2003–04	4.4	3.2	4.9	4.7	0.3	–1.5	0.8
2004–05	–3.9	–1.1	–0.9	4.9	9.6	13.9	12.3
2005–06	7.5	8.1	16.3	17.2	21.0	nya	nya
2006–07	17.6	nya	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. For more information see paragraphs 24 to 27 of the Explanatory Notes.

6 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)							
2002–03	9 764	10 163	10 510	10 089	9 695	9 222	8 766
2003–04	9 388	10 053	10 672	10 812	10 365	9 780	9 282
2004–05	10 192	10 937	11 226	11 784	10 998	10 950	10 253
2005–06	9 795	10 817	12 759	14 465	15 728	nya	nya
2006–07	15 502	nya	nya	nya	nya	nya	nya
MINING (Realisation Ratio) (a)							
2002–03	0.90	0.86	0.83	0.87	0.90	0.95	1.00
2003–04	0.99	0.92	0.87	0.86	0.90	0.95	1.00
2004–05	1.01	0.94	0.91	0.87	0.93	0.94	1.00
5-year average	1.01	0.94	0.89	0.85	0.90	0.94	1.00
MANUFACTURING ($ million)							
2002–03	9 173	9 776	11 021	10 808	10 904	11 624	11 384
2003–04	10 453	10 911	12 402	12 370	11 371	11 571	11 424
2004–05	9 853	10 915	12 133	12 937	12 928	12 895	12 681
2005–06	11 095	12 684	14 024	15 046	15 595	nya	nya
2006–07	11 770	nya	nya	nya	nya	nya	nya
MANUFACTURING (Realisation Ratio) (a)							
2002–03	1.24	1.16	1.03	1.05	1.04	0.98	1.00
2003–04	1.09	1.05	0.92	0.92	1.00	0.99	1.00
2004–05	1.29	1.16	1.05	0.98	0.98	0.98	1.00
5-year average	1.12	1.06	0.98	0.97	0.98	0.98	1.00
OTHER SELECTED INDUSTRIES ($ million)							
2002–03	22 616	24 341	25 638	28 252	30 009	30 669	30 665
2003–04	23 528	24 716	26 388	28 276	29 019	29 396	30 541
2004–05	21 637	23 346	25 676	29 247	31 693	33 976	34 620
2005–06	23 929	25 370	30 222	33 724	35 984	nya	nya
2006–07	25 417	nya	nya	nya	nya	nya	nya
OTHER SELECTED INDUSTRIES (Realisation Ratio) (a)							
2002–03	1.36	1.26	1.20	1.09	1.02	1.00	1.00
2003–04	1.30	1.24	1.16	1.08	1.05	1.04	1.00
2004–05	1.60	1.48	1.35	1.18	1.09	1.02	1.00
5-year average	1.40	1.32	1.21	1.10	1.06	1.02	1.00

nya not yet available

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. For more information see paragraphs 24 to 27 of the Explanatory Notes.

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

Financial Year	3 MONTHS ENDING 31 December (collected in September Survey)	3 MONTHS ENDING 30 June (collected in March Survey)	6 MONTHS ENDING 31 December (collected in June Survey)	6 MONTHS ENDING 30 June (collected in December Survey)
TYPE OF ASSET				
Buildings and structures				
2003–04	0.91	0.99	0.91	0.92
2004–05	0.89	0.86	1.01	0.92
2005–06	1.01	nya	1.10	nya
5-year average	0.94	0.71	0.98	0.71
Equipment, plant and machinery				
2003–04	0.95	1.07	1.06	1.08
2004–05	1.08	1.06	1.18	1.18
2005–06	1.05	nya	1.22	nya
5-year average	1.04	0.83	1.13	0.88
Total				
2003–04	0.94	1.04	1.01	1.02
2004–05	1.01	0.98	1.12	1.07
2005–06	1.04	nya	1.17	nya
5-year average	1.01	0.79	1.08	0.82
TYPE OF INDUSTRY				
Mining				
2003–04	0.86	0.82	0.86	0.80
2004–05	0.79	0.81	0.90	0.88
2005–06	1.07	nya	1.17	nya
5-year average	0.85	0.65	0.92	0.65
Manufacturing				
2003–04	0.81	0.96	0.91	1.01
2004–05	0.85	0.95	0.99	0.97
2005–06	0.97	nya	1.08	nya
5-year average	0.90	0.75	0.98	0.80
Other selected industries				
2003–04	1.04	1.16	1.11	1.11
2004–05	1.18	1.07	1.26	1.21
2005–06	1.05	nya	1.22	nya
5-year average	1.11	0.86	1.19	0.90
Total				
2003–04	0.94	1.04	1.01	1.02
2004–05	1.01	0.98	1.12	1.07
2005–06	1.04	nya	1.17	nya
5-year average	1.01	0.79	1.08	0.82

nya not yet available

(a) For more information on Realisation Ratios see paragraphs 24 to 27 of the Explanatory Notes.

8 ACTUAL EXPENDITURE ON BUILDINGS AND STRUCTURES, 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									
2001–02	2 695	1 847	1 948	617	1 831	445	975	194	10 552
2002–03	3 112	2 343	2 122	783	2 898	255	1 380	107	13 000
2003–04	4 084	2 670	2 363	969	3 793	167	1 520	78	15 645
2004–05	4 820	3 161	3 033	992	5 135	430	1 534	158	19 262
2003–04									
December	1 050	717	608	281	1 079	^24	383	14	4 157
March	914	601	493	192	786	52	334	*25	3 397
June	1 225	632	731	301	1 075	71	379	*23	4 437
2004–05									
September	1 136	714	621	221	1 153	93	327	*22	4 284
December	1 198	788	836	235	1 334	^116	363	^33	4 902
March	1 020	778	707	245	1 219	104	368	*45	4 486
June	1 467	881	870	291	1 429	^118	475	*58	5 589
2005–06									
September	1 603	970	908	296	1 613	^82	463	*84	6 019
December	1 859	1 042	1 280	368	2 011	81	521	38	7 200
SEASONALLY ADJUSTED									
2003–04									
December	962	669	546	242	986	np	np	np	3 789
March	1 067	679	557	235	891	np	np	np	3 890
June	1 160	647	714	275	1 049	np	np	np	4 273
2004–05									
September	1 138	669	642	236	1 161	np	np	np	4 327
December	1 099	737	739	206	1 213	np	np	np	4 483
March	1 190	875	804	298	1 375	np	np	np	5 112
June	1 390	906	851	261	1 399	np	np	np	5 386
2005–06									
September	1 602	907	942	320	1 632	np	np	np	6 083
December	1 710	976	1 125	325	1 816	np	np	np	6 551
TREND									
2003–04									
December	990	674	552	234	912	28	378	18	3 818
March	1 063	666	597	249	963	47	380	20	4 010
June	1 125	654	643	248	1 034	72	356	22	4 170
2004–05									
September	1 128	681	689	240	1 136	94	337	26	4 352
December	1 130	755	733	241	1 241	109	355	31	4 599
March	1 215	841	784	258	1 330	113	408	47	4 985
June	1 387	897	869	287	1 463	104	451	60	5 509
2005–06									
September	1 568	932	968	308	1 621	92	466	65	6 028
December	1 718	959	1 068	320	1 752	82	469	61	6 446

^ 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

np not available for publication but included in totals where applicable, unless otherwise indicated

ACTUAL EXPENDITURE ON EQUIPMENT, PLANT AND MACHINERY, Current prices

Period	New South Wales $m	Victoria $m	Queensland $m	South Australia $m	Western Australia $m	Tasmania $m	Northern Territory $m	Australian Capital Territory $m	Total $m
ORIGINAL									
2001–02	10 821	9 508	5 480	2 497	4 163	518	414	427	33 828
2002–03	11 312	10 487	6 929	3 223	4 241	626	427	570	37 816
2003–04	10 287	9 198	6 612	2 978	5 124	533	381	489	35 602
2004–05	11 986	9 648	7 306	2 993	4 815	698	316	534	38 293
2003–04									
December	2 672	2 480	1 854	798	1 462	136	^ 114	112	9 627
March	2 250	2 017	1 398	609	1 087	^ 126	80	^ 107	7 674
June	2 778	2 226	1 853	795	1 201	132	65	^ 136	9 186
2004–05									
September	2 609	2 121	1 717	608	1 119	^ 135	61	^ 135	8 504
December	3 261	2 725	2 013	885	1 338	209	^ 77	^ 146	10 655
March	2 679	2 197	1 514	^ 671	1 156	^ 135	^ 61	^ 117	8 530
June	3 436	2 605	2 062	828	1 201	^ 219	^ 117	^ 136	10 604
2005–06									
September	3 089	2 448	1 784	671	1 503	^ 209	^ 79	111	9 893
December	3 374	2 979	2 364	875	1 907	^ 288	180	^ 152	12 120
SEASONALLY ADJUSTED									
2003–04									
December	2 538	2 279	1 711	706	1 342	np	np	np	9 050
March	2 466	2 227	1 552	673	1 212	np	np	np	8 294
June	2 624	2 163	1 693	758	1 177	np	np	np	8 762
2004–05									
September	2 679	2 174	1 874	663	1 133	np	np	np	8 858
December	3 089	2 501	1 837	783	1 216	np	np	np	9 981
March	2 966	2 421	1 695	777	1 293	np	np	np	9 223
June	3 217	2 535	1 883	755	1 182	np	np	np	10 125
2005–06									
September	3 174	2 512	1 952	731	1 522	np	np	np	10 306
December	3 190	2 731	2 146	776	1 723	np	np	np	11 342
TREND									
2003–04									
December	2 533	2 324	1 630	746	1 326	135	106	119	9 188
March	2 510	2 210	1 637	700	1 249	128	86	114	9 003
June	2 594	2 175	1 718	698	1 167	135	70	126	8 880
2004–05									
September	2 764	2 257	1 790	726	1 169	150	62	142	8 878
December	2 944	2 379	1 810	752	1 192	164	67	141	9 064
March	3 078	2 466	1 791	764	1 224	177	77	127	9 420
June	3 145	2 515	1 851	761	1 322	197	93	122	9 933
2005–06									
September	3 182	2 576	1 977	751	1 480	226	113	130	10 533
December	3 223	2 652	2 093	755	1 650	247	134	145	11 085

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

np not available for publication but included in totals where applicable, unless otherwise indicated

10 ACTUAL TOTAL EXPENDITURE, Current prices

Period	New South Wales $m	Victoria $m	Queensland $m	South Australia $m	Western Australia $m	Tasmania $m	Northern Territory $m	Australian Capital Territory $m	Total $m
				ORIGINAL					
2001–02	13 516	11 355	7 428	3 113	5 994	963	1 389	621	44 380
2002–03	14 424	12 830	9 052	4 006	7 140	881	1 806	677	50 816
2003–04	14 371	11 869	8 975	3 947	8 917	700	1 901	567	51 247
2004–05	16 805	12 809	10 339	3 985	9 950	1 127	1 849	692	57 554
2003–04									
December	3 722	3 197	2 462	1 079	2 541	160	497	126	13 783
March	3 164	2 618	1 891	802	1 873	^ 177	414	^ 132	11 070
June	4 003	2 858	2 584	1 096	2 276	202	444	^ 159	13 623
2004–05									
September	3 745	2 834	2 338	829	2 272	227	387	^ 157	12 789
December	4 459	3 513	2 849	1 120	2 672	324	440	^ 179	15 557
March	3 699	2 975	2 221	917	2 375	239	429	^ 162	13 016
June	4 902	3 486	2 932	1 119	2 630	^ 337	592	^ 194	16 192
2005–06									
September	4 692	3 418	2 692	967	3 116	^ 291	541	^ 195	15 912
December	5 233	4 021	3 644	1 243	3 918	^ 369	701	^ 190	19 320
				SEASONALLY ADJUSTED					
2003–04									
December	3 500	2 948	2 257	948	2 328	150	448	127	12 839
March	3 533	2 906	2 109	908	2 103	195	474	129	12 184
June	3 784	2 810	2 407	1 033	2 226	190	456	144	13 035
2004–05									
September	3 817	2 843	2 516	899	2 294	239	370	177	13 185
December	4 188	3 238	2 576	989	2 429	307	399	181	14 465
March	4 156	3 296	2 499	1 075	2 668	258	495	158	14 336
June	4 607	3 441	2 734	1 016	2 581	317	598	179	15 511
2005–06									
September	4 776	3 419	2 894	1 051	3 154	308	522	212	16 390
December	4 900	3 707	3 271	1 101	3 539	342	632	193	17 893
				TREND					
2003–04									
December	3 523	2 998	2 182	980	2 238	163	484	137	13 000
March	3 573	2 876	2 234	949	2 212	175	466	134	13 006
June	3 719	2 829	2 361	946	2 201	207	426	148	13 046
2004–05									
September	3 892	2 938	2 479	966	2 305	244	399	168	13 229
December	4 074	3 134	2 543	993	2 433	273	422	172	13 665
March	4 293	3 307	2 575	1 022	2 554	290	485	174	14 406
June	4 532	3 412	2 720	1 048	2 785	301	544	182	15 439
2005–06									
September	4 750	3 508	2 945	1 059	3 101	318	579	195	16 561
December	4 941	3 611	3 161	1 075	3 402	329	603	206	17 577

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

11 ACTUAL EXPENDITURE ON BUILDINGS AND STRUCTURES—Chain volume measures(a)

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									
2001–02	2 965	2 023	2 140	679	2 013	491	1 067	213	11 589
2002–03	3 300	2 476	2 251	831	3 070	272	1 459	114	13 772
2003–04	4 084	2 670	2 363	969	3 793	167	1 520	78	15 645
2004–05	4 455	2 922	2 803	916	4 748	397	1 416	145	17 802
2003–04									
December	1 064	724	616	285	1 092	24	387	14	4 206
March	910	596	491	192	781	52	331	25	3 379
June	1 190	613	711	292	1 044	69	368	22	4 309
2004–05									
September	1 080	678	590	210	1 096	88	310	21	4 074
December	1 116	734	779	219	1 243	108	339	30	4 568
March	936	714	649	225	1 119	95	338	41	4 117
June	1 323	795	785	262	1 290	106	429	53	5 043
2005–06									
September	1 429	863	810	264	1 437	74	414	75	5 366
December	1 642	917	1 130	326	1 775	72	461	34	6 357
SEASONALLY ADJUSTED									
2003–04									
December	974	675	554	248	1 001	np	np	np	3 835
March	1 059	674	555	236	891	np	np	np	3 871
June	1 125	626	694	269	1 023	np	np	np	4 149
2004–05									
September	1 082	632	610	224	1 104	np	np	np	4 106
December	1 025	683	688	190	1 128	np	np	np	4 170
March	1 093	796	737	270	1 258	np	np	np	4 679
June	1 256	811	767	232	1 257	np	np	np	4 847
2005–06									
September	1 428	806	841	288	1 459	np	np	np	5 424
December	1 509	860	995	289	1 609	np	np	np	5 783
TREND									
2003–04									
December	1 002	680	560	240	926	28	382	18	3 841
March	1 053	661	593	250	961	47	377	20	3 949
June	1 092	634	626	243	1 007	71	345	22	4 028
2004–05									
September	1 073	644	656	229	1 081	89	319	25	4 130
December	1 055	699	684	222	1 155	101	328	30	4 283
March	1 113	764	718	233	1 216	103	370	43	4 555
June	1 254	806	787	258	1 322	94	405	55	4 969
2005–06									
September	1 399	828	865	276	1 447	83	415	58	5 374
December	1 499	840	930	284	1 535	75	414	54	5 649

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Reference year for chain volume measures is 2003–04.

12 ACTUAL EXPENDITURE ON EQUIPMENT, PLANT AND MACHINERY—Chain volume measures(a)

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									
2001–02	9 006	7 936	4 623	2 118	3 621	438	357	356	28 473
2002–03	10 012	9 298	6 173	2 889	3 860	558	386	505	33 707
2003–04	10 287	9 198	6 612	2 978	5 124	533	381	489	35 602
2004–05	12 702	10 208	7 669	3 138	5 003	734	330	566	40 349
2003–04									
December	2 628	2 450	1 822	788	1 450	134	113	110	9 493
March	2 302	2 066	1 429	623	1 113	129	83	110	7 857
June	2 910	2 330	1 933	828	1 248	138	68	141	9 599
2004–05									
September	2 739	2 224	1 788	631	1 156	141	63	142	8 883
December	3 417	2 856	2 097	919	1 383	217	79	153	11 120
March	2 843	2 324	1 589	705	1 204	143	63	124	8 994
June	3 704	2 804	2 195	884	1 260	233	124	148	11 352
2005–06									
September	3 346	2 645	1 899	711	1 571	224	84	121	10 603
December	3 650	3 208	2 520	929	1 995	309	190	166	12 967
SEASONALLY ADJUSTED									
2003–04									
December	2 499	2 250	1 689	697	1 332	np	np	np	8 933
March	2 528	2 278	1 594	689	1 242	np	np	np	8 502
June	2 753	2 263	1 773	790	1 224	np	np	np	9 170
2004–05									
September	2 820	2 281	1 958	690	1 171	np	np	np	9 278
December	3 246	2 625	1 920	817	1 254	np	np	np	10 446
March	3 157	2 567	1 783	820	1 342	np	np	np	9 753
June	3 479	2 735	2 008	812	1 236	np	np	np	10 872
2005–06									
September	3 444	2 711	2 087	775	1 598	np	np	np	11 069
December	3 457	2 937	2 298	824	1 811	np	np	np	12 160
TREND									
2003–04									
December	2 498	2 294	1 612	735	1 314	132	104	116	8 823
March	2 566	2 256	1 675	714	1 272	130	87	116	8 835
June	2 711	2 267	1 791	724	1 209	140	72	130	8 992
2004–05									
September	2 908	2 369	1 874	757	1 212	156	64	147	9 243
December	3 110	2 507	1 897	788	1 233	173	69	147	9 568
March	3 281	2 621	1 888	808	1 269	190	81	134	9 972
June	3 389	2 699	1 967	810	1 385	212	99	131	10 609
2005–06									
September	3 449	2 778	2 113	800	1 555	242	120	142	11 308
December	3 492	2 860	2 253	803	1 703	261	139	156	11 963

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Reference year for chain volume measures is 2003–04.

13 ACTUAL TOTAL EXPENDITURE—Chain volume measures(a)

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									
2001–02	12 047	10 002	6 676	2 793	5 730	867	1 441	538	40 172
2002–03	13 396	11 804	8 418	3 733	6 913	818	1 847	613	47 599
2003–04	14 371	11 869	8 975	3 947	8 917	700	1 901	567	51 247
2004–05	17 157	13 129	10 471	4 054	9 750	1 131	1 746	712	58 151
2003–04									
December	3 688	3 174	2 442	1 070	2 538	160	501	125	13 694
March	3 215	2 662	1 922	817	1 899	179	414	134	11 246
June	4 099	2 949	2 641	1 119	2 286	204	434	164	13 902
2004–05									
September	3 818	2 902	2 378	841	2 252	229	374	163	12 957
December	4 533	3 590	2 876	1 138	2 626	324	418	184	15 689
March	3 778	3 038	2 238	929	2 322	238	402	165	13 111
June	5 027	3 599	2 979	1 146	2 550	339	553	200	16 395
2005–06									
September	4 775	3 508	2 709	975	3 009	298	498	197	15 969
December	5 293	4 125	3 650	1 254	3 770	381	651	200	19 324
SEASONALLY ADJUSTED									
2003–04									
December	3 474	2 923	2 248	942	2 331	148	451	126	12 768
March	3 583	2 952	2 151	923	2 136	196	473	131	12 329
June	3 878	2 893	2 461	1 058	2 239	189	442	147	13 399
2004–05									
September	3 901	2 913	2 568	914	2 275	241	356	182	13 298
December	4 270	3 308	2 608	1 007	2 382	308	377	185	14 618
March	4 250	3 363	2 520	1 090	2 600	260	459	162	14 387
June	4 736	3 545	2 775	1 044	2 493	322	555	183	15 847
2005–06									
September	4 871	3 517	2 928	1 063	3 057	315	479	215	16 407
December	4 966	3 797	3 293	1 113	3 419	349	583	202	17 910
TREND									
2003–04									
December	3 497	2 973	2 174	975	2 242	162	487	135	12 653
March	3 618	2 916	2 268	962	2 232	175	462	135	12 779
June	3 802	2 902	2 415	966	2 214	208	416	152	13 018
2004–05									
September	3 981	3 014	2 528	985	2 291	245	383	172	13 348
December	4 165	3 206	2 580	1 011	2 388	274	397	176	13 834
March	4 394	3 385	2 606	1 041	2 485	293	452	178	14 534
June	4 642	3 504	2 753	1 068	2 703	306	504	186	15 585
2005–06									
September	4 848	3 606	2 977	1 076	3 001	324	535	200	16 667
December	5 000	3 707	3 182	1 088	3 259	339	554	210	17 647

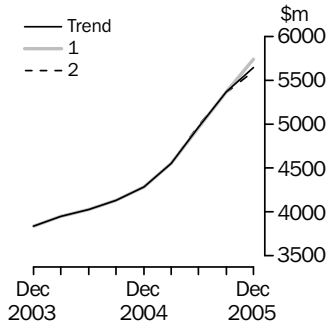
(a) Reference year for chain volume measures is 2003–04.

EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

TREND REVISIONS

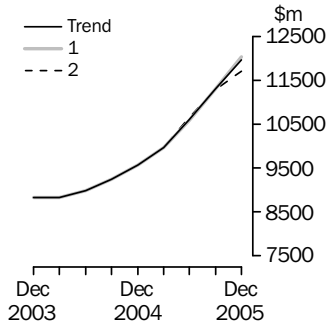
Recent seasonally adjusted and trend estimates are likely to be revised when original estimates for subsequent quarters become available. The approximate effect of possible scenarios on trend estimates for capital expenditure in chain volume terms are presented below by illustrating the impact if next 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 42 and 43 in the Explanatory Notes.

BUILDINGS AND STRUCTURES



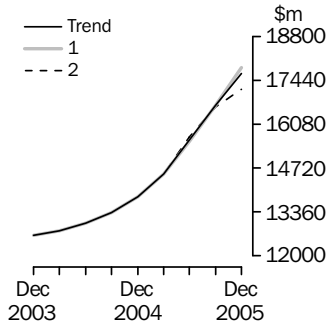
			WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	Trend as published		*(1) rises by 6.7% on this quarter*		*(2) falls by 6.7% on this quarter*	
	$m	%	$m	%	$m	%
2005						
March	4 555	6.4	4 555	6.4	4 555	6.4
June	4 969	9.1	4 956	8.8	4 986	9.5
September	5 374	8.1	5 372	8.4	5 360	7.5
December	5 649	5.1	5 744	6.9	5 600	4.5

EQUIPMENT, PLANT AND MACHINERY



			WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	Trend as published		*(1) rises by 4.9% on this quarter*		*(2) falls by 4.9% on this quarter*	
	$m	%	$m	%	$m	%
2005						
March	9 972	4.2	9 972	4.2	9 972	4.2
June	10 609	6.4	10 584	6.1	10 654	6.8
September	11 308	6.6	11 315	6.9	11 289	6.0
December	11 963	5.8	12 042	6.4	11 704	3.7

TOTAL CAPITAL EXPENDITURE



			WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	Trend as published		*(1) rises by 4.4% on this quarter*		*(2) falls by 4.4% on this quarter*	
	$m	%	$m	%	$m	%
2005						
March	14 534	5.1	14 534	5.1	14 534	5.1
June	15 585	7.2	15 539	6.9	15 680	7.9
September	16 667	6.9	16 674	7.3	16 625	6.0
December	17 647	5.9	17 843	7.0	17 164	3.2

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, 1993:

Mining (Division B)
Manufacturing (Division C)
Other selected industries:
- Construction (Division E)
- Wholesale trade (Division F)
- Retail trade (Division G)
- Transport and storage (Division I)
- Finance and insurance (Division K, but excluding Superannuation funds (Class 7412))
- Property and business services (Division L)
- Other selected services:
  - Electricity, gas and water (Division D)
  - Accommodation, cafes and restaurants (Division H)
  - Communication services (Division J)
  - Cultural and recreational services (Division P)
  - Personal services (Subdivision 95)

3 The survey excludes the following industries:

Agriculture, forestry and fishing (Division A)
Government administration and defence (Division M)
Superannuation funds (Class 7412)
Education (Division N)
Health and community services (Division O)
Other services (Subdivision 96)

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 businesses on the ABS Business Register which is primarily based on registrations to the Australian Taxation Office's Pay As You Go Witholding (PAYGW) scheme (and prior to 1 July 2000 the Group Employer scheme). The frame is updated quarterly to take account of new businesses, businesses which have ceased employing, changes in employment levels, changes in industry and other general business changes.

6 Businesses which have ceased employing are identified when the Australian Taxation Office (ATO) cancels their PAYGW registration (or previously their Group Employer registration). In addition, from September quarter 1999, businesses which did not remit under the Group Employer scheme for the previous five quarters were removed from the frame. A similar process has been adopted to remove businesses which did not remit under the PAYGW scheme.

7 The statistics in this publication exclude non-employing businesses. Though 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.

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. 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) 2002* (cat. no. 1218.0).

SURVEY METHODOLOGY

9 The survey is conducted by mail on a quarterly basis. It is based on a random sample of approximately 8,000 units which is stratified by industry, state/territory and number of employees. The figures obtained from the selected businesses are supplemented by data from units which have large capital expenditure and/or large employment and which are outside the sample framework, or not adequately covered by it.

10 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.

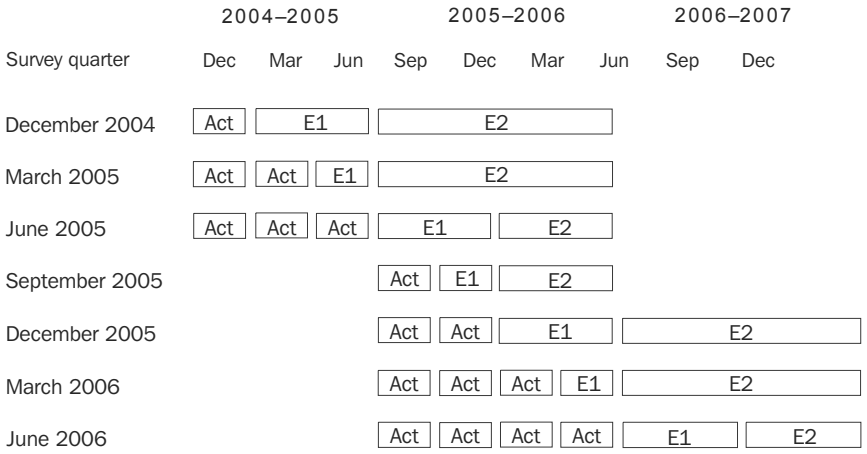
TIMING AND CONSTRUCTION OF SURVEY CYCLE

11 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).

12 Businesses are requested to provide 3 basic figures each survey:

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

Period to which reported data relates



TIMING AND CONSTRUCTION OF SURVEY CYCLE *continued*

13 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 table above shows for 2005-2006:

- the first estimate was available from the December 2004 survey as a longer term expectation (E2)
- the second estimate is available from the March 2005 survey (again as a longer term expectation)
- the third estimate will be available from in the June 2005 survey as the sum of two expectations (E1 + E2)
- in the September 2005, December 2005 and March 2006 surveys the fourth, fifth and sixth estimates, respectively, are derived as 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 2006 survey will be derived by summing the actual expenditure for each of the four quarters in the 2005–06 financial year.

14 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 have been directly collected each December quarter only from those businesses contributing significantly to data for a particular state or territory. Expectations data for the remaining 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. As has always been the case, expectations data for businesses operating within a single state/territory are allocated to that state/territory.

15 These expectations data by state/territory are not included in this publication but are released on AusStats and are available on request.

SAMPLE REVISION

16 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.

17 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.

18 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 December quarter 2005 they represented about 0.6% of the total estimate of new capital expenditure.

CLASSIFICATION BY INDUSTRY

19 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), 1993* (cat. no. 1292.0).

20 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

21 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 2003–04). The current price values may be thought as being 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

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.

22 With each release of the June quarter issue of this publication, a new base year is introduced and the reference year is advanced one year to coincide with it. This means that with the release of the June quarter 2005 issue of this publication, the chain volume measures for 2004–05 will have 2003–04 (the previous financial year) as their base year rather than 2002–03, and the reference year will be 2003–04. 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.

23 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 industry groups 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

24 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 6 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).

25 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 2005–06 based on the June 2005 survey results and compare this with 2004–05 expenditure, it is necessary to apply the relevant realisation factors to the expectation to put both estimates on the same basis.

26 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.

27 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.

EXPERIMENTAL PROJECTED CAPITAL EXPENDITURE

28 Current short and long term expectations are of varying periods depending on the quarter in which they are collected (see paragraph 12 of the Explanatory Notes). Each expectation from the beginning of the time series is confronted with the actual expenditure that occurred in each quarter to which that expectations figure related (for example, June quarter 2005 short-term expectations related to the September and December quarters 2005). The output of this is to produce a quarterly realisation ratio for each expectations estimate through time.

29 Five-year average realisation ratios are then calculated. These average realisation ratios are applied to contemporary expectations to produce estimates of projected expenditure for forthcoming quarters.

30 These estimates of likely expenditure are then linked with the current price time series of actual expenditure to produce a quarterly time series which extends to the end point of the contemporary expectations series. For December, March and June quarters, the end point is 30 June of the following financial year. For September quarters, the end point is 30 June of the current financial year.

31 The resultant quarterly time series are then produced in trend terms. The same aggregation structure which is used to produce seasonally adjusted and trend estimates of actual capital expenditure is used for these projected series. (See Paragraphs 38 to 43 of the Explanatory notes for more information regarding seasonally adjusted and trend estimates).

32 While the ABS has produced these projected series to assist users in interpreting capital expenditure expectations, users should exercise caution in comparing these estimates with the estimates of actual and expected expenditure contained elsewhere in this release. In particular:

- The trend estimates which feature as key indicators in this release are based on the time series up to and including the current quarter, while the projected trend estimates are based on a time series which concludes at the end point of available expectations. Paragraph 42 of the Explanatory Notes describe the potential impact of future estimates on the end point of the trend estimate, and this is shown in more detail in the "What if ..." analysis on page 26 of this release.
- Key indicators of actual expenditure in this release are presented in volume terms, which removes the impact of price changes on the time series. Tables 1 and 2 of this release also present actual and expected expenditure in current price terms. The projected series, however, are compiled using current price estimates for the actual component of the time series (that is, prices as they related to the particular quarter) and expectations which are generally based on prices for the quarter in which they were reported. The impact of price changes can have a significant impact on some series. For example, trend estimates of total expenditure in volume terms have been increasing in recent quarters, while current price estimates have been decreasing.
- The projected series is based on five-year average realisation ratios. As is discussed in paragraphs 24 to 27 of the Explanatory Notes, there is some volatility in realisation ratios over time and so it is not necessarily the case that contemporary expectations will be realised in line with the average of the past five years.

RELIABILITY OF THE ESTIMATES

33 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 on pages 36 and 37 of this publication.

RELIABILITY OF THE ESTIMATES *continued*

34 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 September quarter 2003.

35 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.

36 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 43 below, seasonally adjusted and trend estimates are also subject to revision as data are revised and more data becomes available.

37 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.

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 In this publication, the seasonally adjusted estimates are produced by the concurrent seasonal adjustment method which takes account of the latest available original estimates. This method improves the estimation of seasonal factors, and therefore, the seasonally adjusted and trend estimates for the current and previous quarters. As a result of this improvement, revisions to the seasonally adjusted and trend estimates will be observed for recent periods. In most instances the only noticeable revisions will be to the previous quarter and the same quarter one year ago. A more detailed review is conducted annually prior to the September quarter release using data up to and including the June quarter. The concurrent seasonal adjustment methodology replaces the forward factor methodology previously used to adjust capital expenditure estimates where seasonal factors for these estimates were only revised following an annual reanalysis.

SEASONAL ADJUSTMENT *continued*

41 Seasonally adjusted estimates by asset type for Tasmania, Northern Territory and Australian Capital Territory are not separately available because of the high sampling variability associated with them. They are included in totals for Australia and while a combined residual can be derived, the measure should not be considered reliable.

TREND ESTIMATES

42 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.

43 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) or contact the Assistant Director, Time Series Analysis on Canberra (02) 6252 6345 or email <timeseries@abs.gov.au>.

DESCRIPTION OF TERMS

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

45 *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.

46 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

47 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:

COMPARISON WITH NATIONAL ACCOUNTS AND OTHER ABS STATISTICS *continued*

- 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 building 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.

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

49 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.

RELATED PUBLICATIONS

50 Users may also wish to refer the following publications:

- *Australian Business Expectations* (cat. no. 5250.0)
- *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)
- *Constructon Work Done, Australia* (cat no 8755.0)
- *Directory of Capital Expenditure Data Sources and Related Statistics* (cat. no. 5653.0)
- *Engineering Construction Activity, Australia* (cat. no. 8762.0)
- *Information Paper: Experimental Estimates: Australian Industry, A State Perspective, 1998–99* (cat. no. 8156.0)
- *Information Paper: Improvements to Australian Bureau of Statistics Business Indicators* (cat. no. 5677.0)
- *Information Paper: Australian National Accounts, Introduction of Chain Volume and Price Indexes* (cat. no. 5248.0)

RELATED PUBLICATIONS *continued*

51 Current publications and other products released by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <http://www.abs.gov.au>. 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

52 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 group (3 digit) level.

DATA AVAILABLE ON AUSSTATS

53 The ABS' time series service AusStats 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. A full list of available AusStats tables is in Appendix 2 on page 38.

ACKNOWLEDGMENT

54 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*.

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

To illustrate, let us say that the published level estimate for total capital expenditure is $10,500m and the calculated standard error in this case is $173m. The standard error is then used to interpret the level estimate of $10,500m. For instance, the standard error of $173m indicates that:

- There are approximately two chances in three that the real value falls within the range $10,327m to $10,673m ($10,500m ± $173m)
- There are approximately 19 chances in 20 that the real value falls within the ranges $10,154m and $10,846m ($10,500m ± $346m)

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 quarterly level estimates. These standard errors are based on a smoothed average of capital expenditure estimates.

	Buildings and structures	*Equipment, plant and machinery*	*Total*
	$m	$m	$m
Mining	11	16	36
Manufacturing	16	51	62
Construction	7	35	40
Wholesale trade	5	57	65
Retail trade	7	22	34
Transport and storage	10	40	45
Finance and insurance	3	29	31
Property and business services	52	62	84
Other services	69	36	89
Total	**90**	**124**	**173**
New South Wales	17	77	92
Victoria	73	71	108
Queensland	10	35	44
South Australia	2	13	27
Western Australia	5	25	32
Tasmania	1	8	8
Northern Territory	na	na	2
Australian Capital Territory	na	na	6
Australia	**90**	**124**	**173**

na not available

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 $10,500m, and the next quarter the published level estimate is $11,100m. In this example the calculated standard error for the movement estimate is $221m. The standard error is then used to interpret the published movement estimate of +$600m.

For instance, the standard error of $221m indicates that:

- There are approximately two chances in three that the real movement over the two quarter period falls within the range $379m to $821m ($600m ±$221m)
- There are approximately nineteen chances in twenty that the real movement falls within the range $158m to $1,042m ($600m ± $442m)

The following table shows the standard errors for national quarterly movement estimates. These standard errors are based on a smoothed average of capital expenditure estimates.

	Buildings and structures	*Equipment, plant and machinery*	*Total*
	$m	$m	$m
Mining	15	23	49
Manufacturing	22	64	78
Construction	10	48	55
Wholesale trade	7	51	66
Retail trade	11	25	45
Transport and storage	12	49	53
Finance insurance	5	40	32
Property and business services	74	84	114
Other services	98	46	119
Total	**127**	**153**	**221**
New South Wales	26	99	103
Victoria	26	114	117
Queensland	63	75	100
South Australia	10	84	84
Western Australia	24	87	91
Tasmania	5	21	21
Northern Territory	na	na	33
Australian Capital Territory	na	na	67
Australia	**127**	**153**	**221**

na not available

APPENDIX 2 DATA AVAILABLE ON AUSSTATS

DATA AVAILABLE ON AUSSTATS

The full list of Ausstats tables is as follows:

1a Actual expenditure, By type of asset and broad industry, Australia, Original, Current price terms
1b Short-term expectations, By type of asset and broad industry, Australia, Original, Current price terms
1c Long-term expectations, By type of asset and broad industry, Australia, Original, Current price terms
1e Actual expenditure, By type of asset and broad industry, Australia, Seasonally adjusted, Current price terms
1f Actual expenditure, By type of asset and broad industry, Australia, Trend, Current price terms
2a Actual expenditure, By detailed industry, Australia, Original, Current price terms
2b Short-term expectations, By detailed industry, Australia, Original, Current price terms
2c Long-term expectations, By detailed industry, Australia, Original, Current price terms
2e Actual expenditure, By detailed industry, Australia, Seasonally adjusted, Current price terms
2f Actual expenditure, By detailed industry, Australia, Trend, Current price terms
3a Actual expenditure, By type of asset, Australia, Original, Seasonally adjusted, Trend, Chain volume measures
3b Actual expenditure, By industry, Australia, Original, Seasonally adjusted, Trend, Chain volume measures
4a Actual expenditure, By type of asset, States and Australia, Original, Current price terms
4b Actual expenditure, By type of asset, States and Australia, Seasonally adjusted, Current price terms
4c Actual expenditure, By type of asset, States and Australia, Trend, Current price terms
5a Actual expenditure, By type of asset, States and Australia, Original, Chain volume measures
5b Actual expenditure, By type of asset, States and Australia, Seasonally adjusted, Chain volume measures
5c Actual expenditure, By type of asset, States and Australia, Trend, Chain volume measures
6a Actual and expected expenditure, By type of asset, New South Wales, Original, Current price terms
6b Actual and expected expenditure, By industry, New South Wales, Original, Current price terms
7a Actual and expected expenditure, By type of asset, Victoria, Original, Current price terms
7b Actual and expected expenditure, By industry, Victoria, Original, Current price terms
8a Actual and expected expenditure, By type of asset, Queensland, Original, Current price terms
8b Actual and expected expenditure, By industry, Queensland, Original, Current price terms
9a Actual and expected expenditure, By type of asset, South Australia, Original, Current price terms
9b Actual and expected expenditure, By industry, South Australia, Original, Current price terms
10a Actual and expected expenditure, By type of asset, Western Australia, Original, Current price terms

DATA AVAILABLE ON AUSSTATS *continued*

10b Actual and expected expenditure, By industry, Western Australia, Original, Current price terms

11a Actual and expected expenditure, By type of asset, Tasmania, Original, Current price terms

11b Actual and expected expenditure, By industry, Tasmania, Original, Current price terms

FOR MORE INFORMATION . . .

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