Australian Government
Department of Infrastructure and Regional Development
Bureau of Infrastructure, Transport and Regional Economics

STATISTICAL REPORT

bitre

Yearbook 2017

Australian infrastructure statistics

Bureau of Infrastructure, Transport and Regional Economics

Australian infrastructure statistics

yearbook 2017

Department of Infrastructure and Regional Development
Canberra, Australia

ISSN: 1838-9244 (Print)
ISSN: 1838-9252 (Online)
ISBN: 978-1-925531-86-2
December 2017/INFRA3417

Errata

Some minor corrections have been made in January 2018. This includes changes to the data in Tables E 2.2 and W 1.3.

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An appropriate citation for this report is:

Bureau of Infrastructure, Transport and Regional Economics (BITRE), 2017, *Yearbook 2017: Australian Infrastructure Statistics, Statistical Report,* BITRE, Canberra ACT.

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Foreword

The aim of the Australian Infrastructure Statistics Yearbook is to provide a single, comprehensive annual source of infrastructure statistics for use by policymakers, industry leaders, transport analysts and the wider Australian community.

The publication is primarily a source of long-term, aggregate time series infrastructure statistics. In most cases the time series extend to 2015–16. Most statistics included in the publication are currently collected by BITRE or other Australian, state or territory government agencies.

The Yearbook is presented in five parts:

- Part I: Infrastructure and the Economy,
- Part T: Transport,
- Part E: Energy,
- Part C: Communications, and
- Part W: Water.

BITRE would like to acknowledge input from the Australian Bureau of Statistics, the Australian Communications and Media Authority, the Australian Energy Regulator, the Australian Institute of Health and Welfare, the Australian Taxation Office, the Australian Transport Safety Bureau, the Bureau of Meteorology, the Department of Communications, the Department of the Environment, the Department of Immigration and Border Protection, the Department of Industry and Science, the Energy Supply Association of Australia, Geoscience Australia, the Office of the National Rail Safety Regulator and the Treasury.

The 2017 Yearbook was prepared by Sivam Perumal, Warwick Wearing, Kristan Dunford, Natalie Fisher and Jack McAuley.

Gary Dolman
Head of Bureau
Bureau of Infrastructure, Transport and Regional Economics
December 2017

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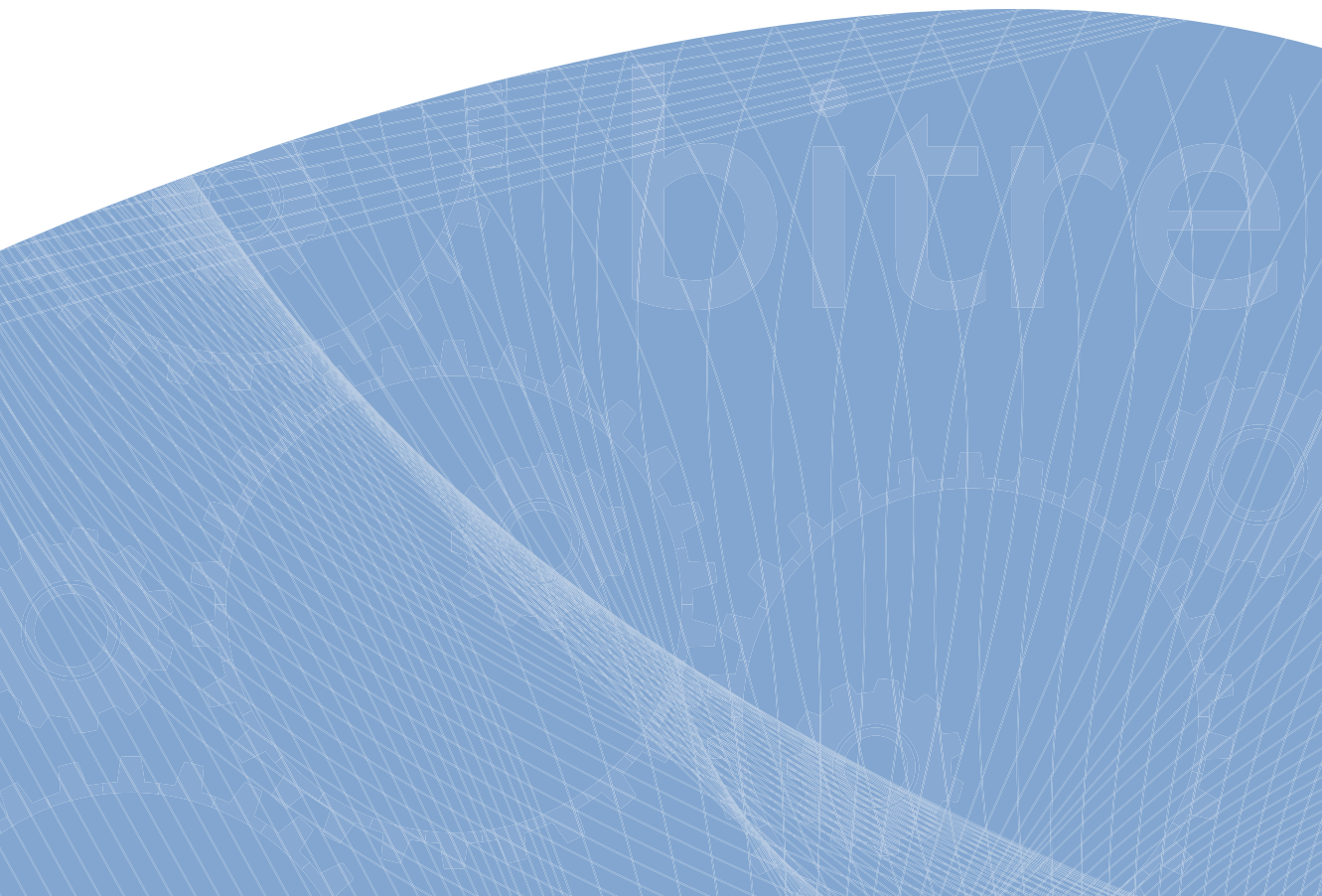


Introduction

The Australian Infrastructure Statistics Yearbook provides comprehensive and coherent time series statistics on major Australian infrastructure and its use.

Part I of the Yearbook provides a summary of major economic infrastructure and several statistical measures of factors that relate to investment in and use of major economic infrastructure. The rest of the Yearbook is divided into four sections, focussing on each of the four themes of major economic infrastructure:

- Part T, for transport infrastructure;
- Part E, for energy infrastructure;
- Part C, for communications infrastructure; and
- Part W, for water infrastructure.

The yearbook covers four key areas.

- Physical infrastructure
  - Measures include the value and capacity of infrastructure at a given time ('stock' measures); additions to the amount of infrastructure (construction) and reductions (depreciation) that take place during the year ('flow' measures); and measures of the quality of the infrastructure.
- Inputs
  - Measures of non–capital inputs to activities that rely on infrastructure.
- Activity
  - Measures of activities associated with infrastructure. For transport, this includes freight and passenger movements, and road, rail, aviation and maritime activity.
- Impacts
  - Measures of the external impact of activities. These impacts include safety and security issues as well as greenhouse gas emissions and other pollution.

Each of the chapters in the yearbook cover these four key areas. A summary of each chapter is provided below.

Publication layout

Notes on each table, including end notes, are included in the end notes and definitions. End notes are numbered consecutively within each Part. References provided at the bottom of tables relate to the most recent issue of the statistical publication. Where a complete time series is not available from the most recent issue, earlier issues were used.

Part I Infrastructure and the economy

Chapter 1: The Economy

This chapter provides several key macroeconomic indicators of factors that are likely to influence, or be influenced by, activity associated with infrastructure. Where available, the contribution of detailed infrastructure industries to the key macroeconomic indicator is provided. This chapter provides estimates of production, employment, wages and salaries, prices, international trade, interest rates, the Australian currency exchange rate and the Australian resident population.

Chapter 2: Infrastructure construction

Time series statistics on infrastructure construction activity across the four forms of major economic infrastructure covered in the Yearbook are provided in this chapter.

Part T Transport

Chapter 1: Transport infrastructure

This chapter provides a number of measures of the construction of transport infrastructure as well as measures of the length of roads available for public use and road construction price indexes.

Chapter 2: Freight

In its broadest sense, freight transport describes the movement of physical items between locations. A summary of freight statistics is provided, classified by mode of transport. Freight is further classified into bulk and non–bulk segments. Two measures of freight transport are currently provided in the framework: the weight of freight moved in Australia (measured in millions of tonnes) and freight by weight and distance moved (measured in tonne kilometres—the transport task performed in moving one tonne of freight one kilometre).

Chapter 3: Passengers

In a similar fashion, passenger transport describes the movement of people between locations. This definition of passengers does not include drivers of freight vehicles when they are employed for freight purposes but does include drivers of freight vehicles when they are being used to transport passengers (e.g. private use of light commercial vehicles). The chapter provides a

summary of passenger statistics, classified by mode of transport (some measures of walking and cycling to work are available in Table T 3.4, but estimates for recreational boating are not currently provided in this publication). Two measures of passenger transport are currently provided: the number of people transported and the number of passenger kilometres travelled (a measure of the transport task performed in moving one passenger one kilometre).

Chapters 4, 5, 6 and 7: Road, Rail, Aviation and Shipping

These chapters focus on the four main motorised modes of transport including road, rail, aviation and shipping. Where possible, data are classified by location in terms of state or territory (interstate, intrastate, intercapital) or level of urbanisation.

Price data are included in the framework to provide an indication of the costs of each mode of transport. Price estimates for shipping and rail are not readily available.

The Yearbook also includes estimates for the size and characteristics of the various modal vehicle fleets.

Chapters 8 and 9: Safety and Energy and the Environment

These chapters complete the section on transport infrastructure with a summary of some key impacts of transport activity.

Chapter 8 presents safety statistics for transport accidents and casualties with comparisons by mode of transport; state or territory of accident; and severity of injuries.

Chapter 9 provides direct energy consumption and emissions data by transport activity. This includes estimates for fuel sales, fuel prices and the production and international trade of transport fuels, classified by petroleum fuel type, as well as estimates of transport emissions, classified by transport mode and emission type.

Part E Energy

Chapter 1: Energy infrastructure.

A number of measures of energy infrastructure construction are provided in this chapter. As well as measures of the length of electricity networks, capacity of electricity generation plants and reliability of electricity supply.

Chapter 2: Energy inputs

In this chapter, data are provided on inputs to energy infrastructure; including:

- measures of mineral energy reserves, and
- energy used in the generation of electricity and natural gas distribution.

Chapter 3: Energy production and trade

The first few tables in Chapter 3 provide a summary of energy production in Australia of all main primary fuels and energy imports and exports. The remaining tables provide energy usage details for key specific energy types:

- For electricity, detailed usage statistics are provided by state/territory and industry, with further detail provided for the number of customers and electricity prices facing residential consumers in each capital city.
- For gas usage statistics are provided by state/territory and industry, as well as gas prices facing residential consumers in each capital city., detailed
- For black coal, detailed usage statistics are provided by state/territory and industry, as well as time series statistics for export prices for black coal.
- For brown coal, detailed usage statistics are provided, classified by industry for New South Wales and Victoria.
- For petroleum fuels, detailed usage statistics are provided by state/territory and industry, as well as time series statistics for a range of international measures of crude oil prices.

Chapter 4: Energy impacts

Measures of the external impacts of energy usage are provided for serious injuries and greenhouse gas emissions. The electricity generation industry plays a unique role in greenhouse gas statistics within the Kyoto framework: Greenhouse gas emissions from the electricity generation industry represent all 'scope 2' ('upstream' or indirect) emissions for other industries (see Table E 4.2).

Part C Communication

The Yearbook focuses on key infrastructure that enables economic activity. Telecommunications networks are a vital part of Australian infrastructure, however, the telecommunications industry is becoming increasingly integrated with the radio communications and broadcasting industries. At the same time, rapid advances in technology have enabled a dramatic expansion in the capacity of existing physical infrastructure in the communications industry.

Chapter 1, 2 and 3: Communication infrastructure, Investment in information technology and subscribers and providers

To provide a meaningful summary of Australian communications infrastructure, Part C includes measures of both physical infrastructure (see Chapter 1) and technology investments that enhance infrastructure capacity (see Chapter 2). Chapter 3 provides estimates for fixed and mobile telephone and internet subscribers and internet service providers.

Chapter 4: Communications usage

This chapter provides estimates of internet usage and internet commerce, as well as telecommunication prices facing residential customers in each capital city, indicative broadband subscription prices and domain name registration statistics.

Chapter 5: Communication security

Communication security provides statistics for the number of telephone numbers registered on the do not call register and the number of emergency calls to 000 and 112.

Part W Water

A significant number of tables presented were compiled by BITRE using data published by the Bureau of Meteorology (BoM) and the National Water Commission (NWC) in two annual National Performance Reports (NPR); one for urban utilities and the other for rural water service providers. The urban and rural NPRs provide comprehensive data on water supply and wastewater treatment activity for major water utilities (above 10,000 properties) in Australia using a common set of measures.

Following the closure of National Water Commission in 2014, the Bureau of Meteorology took up the task to produce the national performance reports on urban water utilities. The national performance report on rural water service providers is no longer updated, and the rural water data presented in the Yearbook are sourced from the final national performance report published by the NWC in 2014.

Chapter 1: Water infrastructure

This chapter provides measures of water infrastructure construction that are consistent with construction measures used in earlier parts of the Yearbook. In addition, there are several stock measures such as:

- the current value of water infrastructure assets
- the capacity of major water storage dams; and
- infrastructure quality measures for water supply, wastewater treatment and rural water supply networks.

Chapter 2: Inputs to water supply

Tables in Chapter 2 provide:

- estimates for total Australian rainfall each calendar year
- measures of sources of water used in urban and rural water distribution networks
- water supply prices facing residential customers in each capital city
- measures of power consumed to provide rural water distribution; and
- trading activity in rural water markets.

Chapter 3: Water usage

Chapter 3 provides a summary of annual water usage in Australia. Statistics are provided for the services provided by major water utilities (urban water, urban wastewater and rural water) in terms of the population that their networks serve, the number of customer connections to the network and the volume and nature of water supplied. In addition, Chapter 3 provides a summary of water consumed by agriculture, including water sourced from rural water supply networks as well as other sources.

Chapter 4: Water health and emissions

Chapter 4 provides measures of water quality for urban water supply, sewer overflows to the environment and greenhouse gas emissions from urban and rural water supply and wastewater treatment.

PART I: Infrastructure and the economy

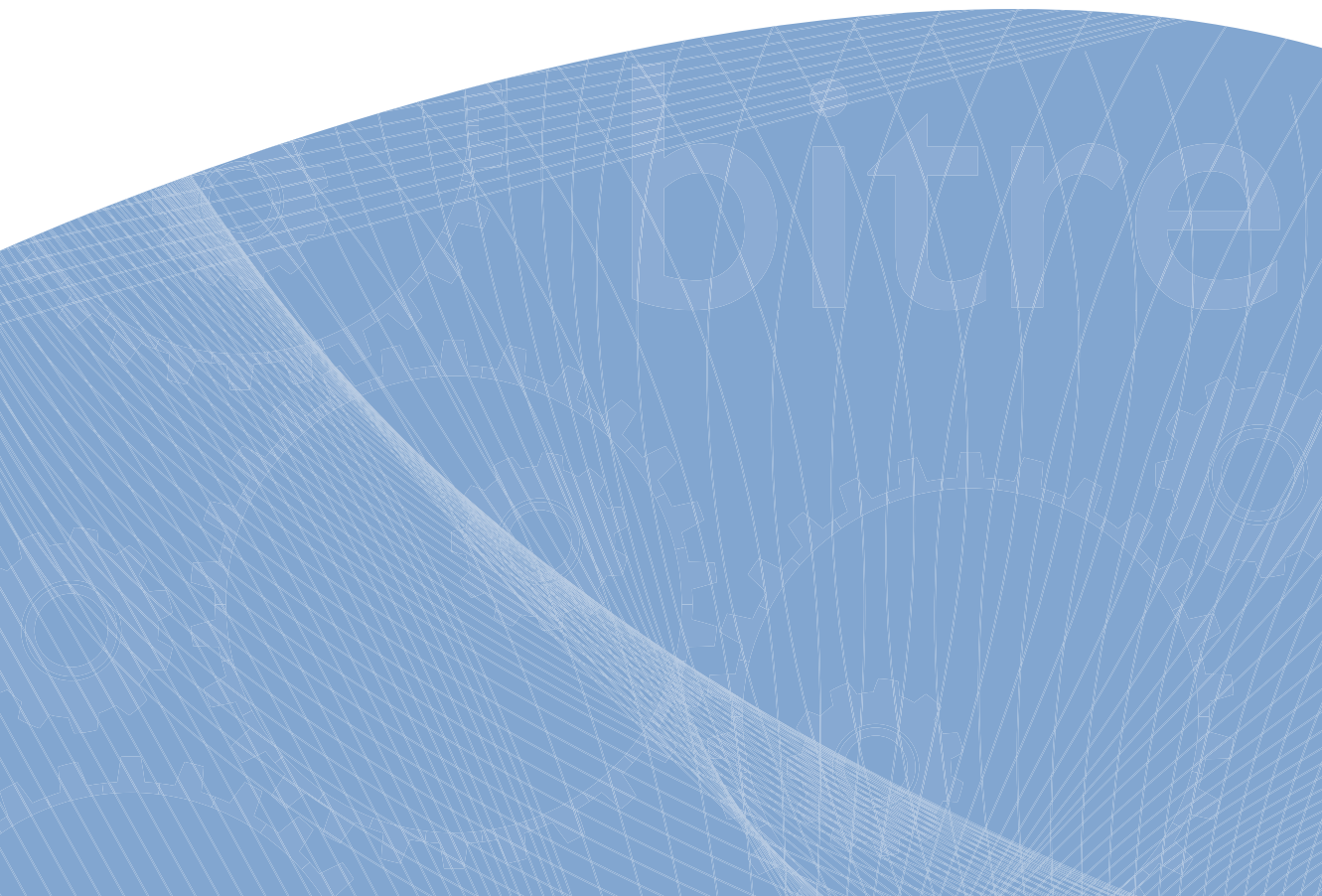
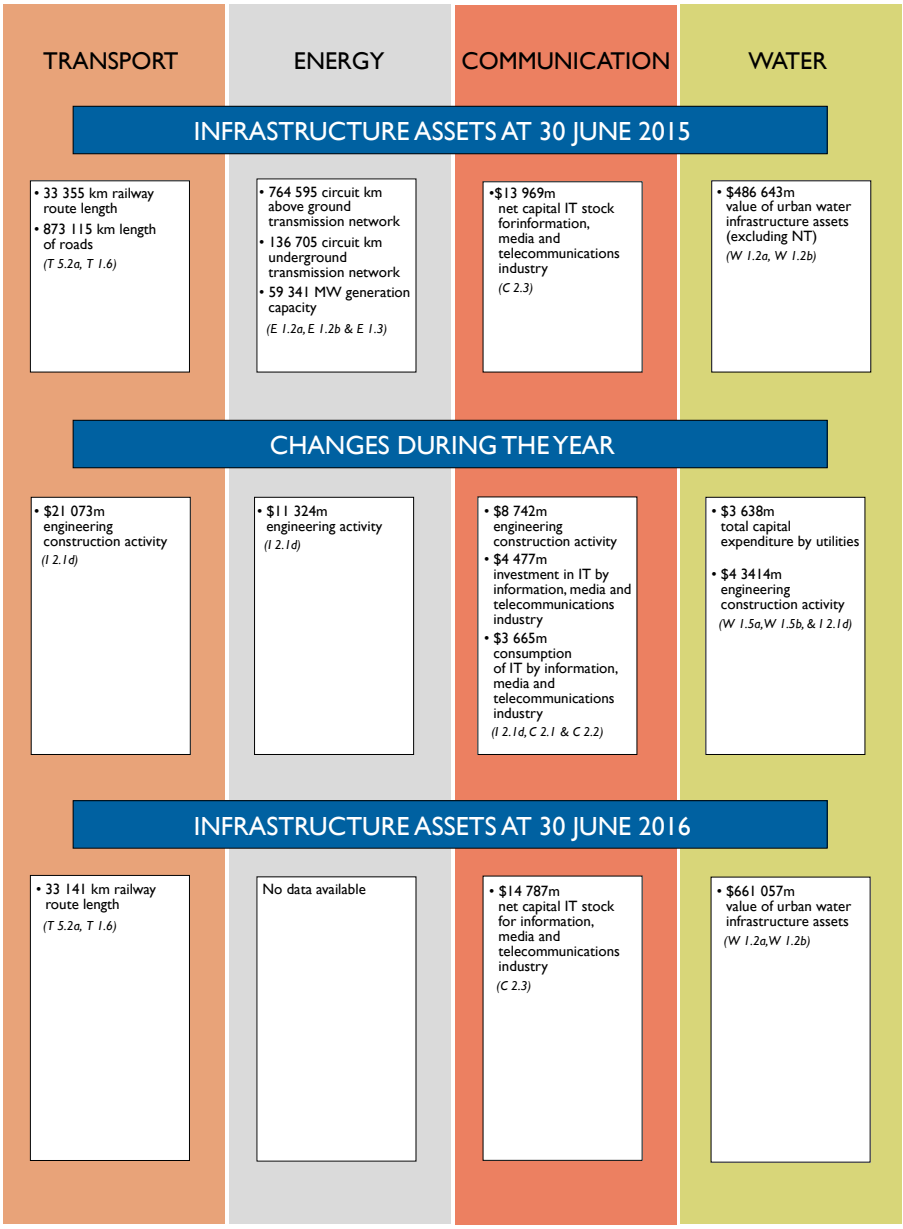


Figure 1.1 Australia's key economic infrastructure at 30 June 2015 and 30 June 2016



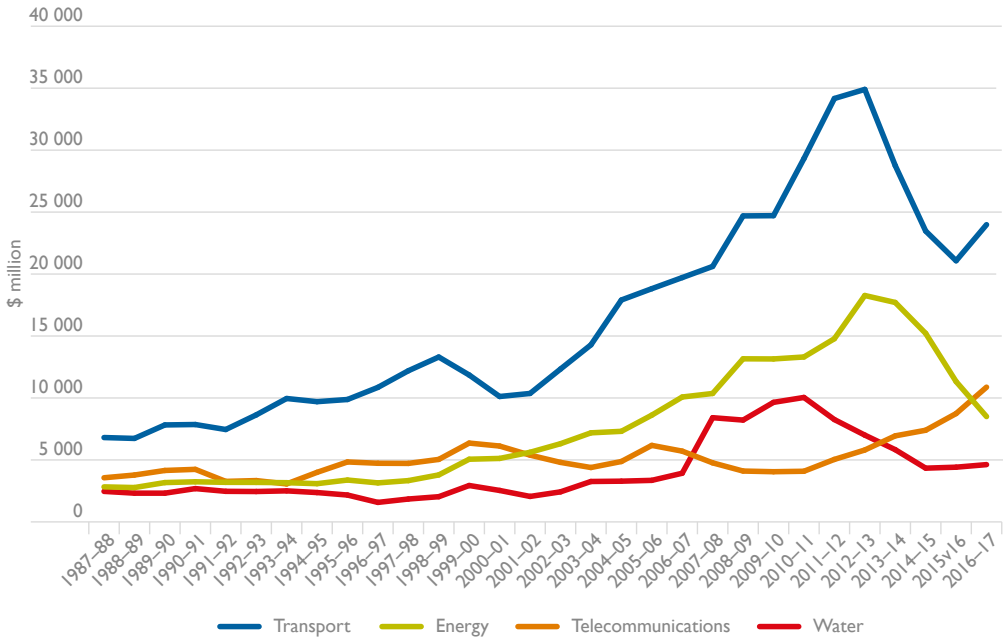
Notes:

1. Railway route length refers to lines that are open for traffic.
2. The value of urban water infrastructure assets at 30 June 2015 excludes Northern Territory data.
3. Total capital expenditure by utilities also excludes Northern Territory data.

PART I:
Infrastructure and the economy

The main source of infrastructure statistics used by BITRE is the ABS publication Engineering Construction Activity, Australia (ABS cat. no. 8762.0). This publication provides measures of non–building construction, classified by major form of infrastructure: transport (roads, rail, ports, etc), energy (electricity and gas transmission networks, etc), telecommunications networks, and water supply and distribution networks.

Figure I 2 Infrastructure construction activity, adjusted by chain volume index

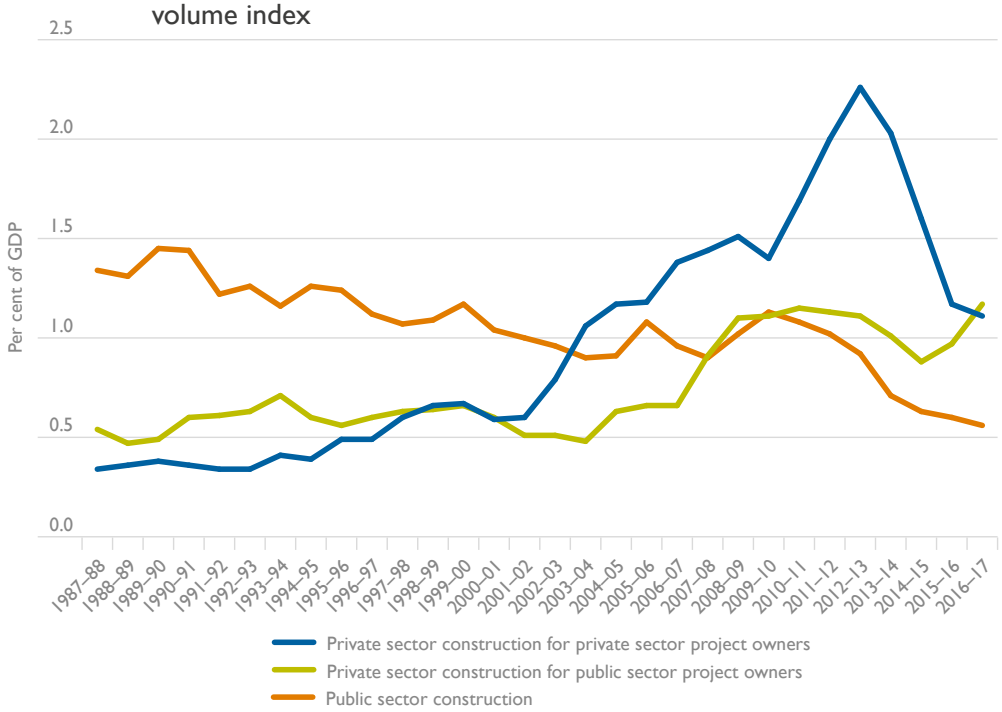


Source: ABS (2017a).

Since 2001, Australian real infrastructure construction activity has increased strongly, mainly due to sharp increases in the construction of transport, water and energy infrastructure. Growth in transport infrastructure construction increased in 2009–10 to 2011–2012. However, the value of transport construction activity stabilised in 2012–13 and has decreased since 2013–14.

Water infrastructure construction expenditure increased sharply in 2007–08 and again in 2009–10, reflecting work conducted on the South East Queensland Water Grid and the Victorian desalination plant. With the completion of these projects, expenditure on water infrastructure decreased but has stabilised to slightly above pre desalination plant levels.

Figure 1 3 Infrastructure construction activity, by sector, adjusted by chain volume index



Source: ABS (2017a).

Between 2000 and 2013, private sector involvement in the construction of infrastructure increased sharply. Initially in the form of private sector–owned projects, then from 2005 in the form of private sector construction of public sector projects. Private sector involvement has declined since peaking in 2012–13.

CHAPTER 1
The economy

Table 1 1.1a Gross value added, major Australian infrastructure industries

Financial year	Chain volume measures [1] Gross value added, at basic prices [2] Transport, postal and warehousing	Energy		Information media and telecom-munications	Water Supply and waste services	Gross Domestic Product	Major infrastructure industries as percentage of GDP
		Electricity	Gas				
			$ million				%
1981-82	25 760	11 259	675	6 861	9 867	578 316	9.4
1982-83	24 822	11 441	672	7 164	10 450	565 414	9.6
1983-84	26 074	12 092	739	7 591	10 436	591 597	9.6
1984-85	28 192	12 834	826	8 180	10 971	622 652	9.8
1985-86	29 901	13 492	812	8 876	11 152	648 182	9.9
1986-87	30 456	14 064	797	9 549	11 088	664 895	9.9
1987-88	31 797	14 904	855	10 389	11 369	703 305	9.9
1988-89	33 243	15 709	913	11 244	11 647	730 599	10.0
1989-90	34 080	16 507	979	12 568	12 204	756 395	10.1
1990-91	34 313	16 814	927	13 260	12 766	753 556	10.4
1991-92	35 068	17 203	911	14 217	12 623	756 845	10.6
1992-93	35 304	17 726	921	15 879	12 521	787 588	10.5
1993-94	37 228	18 352	973	17 345	12 899	819 498	10.6
1994-95	39 477	18 764	1 040	19 396	13 307	851 371	10.8
1995-96	42 600	19 061	1 050	20 506	13 269	884 990	10.9
1996-97	44 350	18 993	1 055	22 025	13 189	919 926	10.8
1997-98	45 350	19 710	1 096	23 830	13 619	960 772	10.8
1998-99	46 658	20 048	1 168	25 594	13 951	1 008 876	10.6
1999-00	48 400	20 638	1 216	26 405	13 919	1 047 898	10.6
2000-01	50 256	20 943	1 254	27 388	14 304	1 068 123	10.7
2001-02	51 812	20 675	1 268	28 190	14 894	1 109 277	10.5
2002-03	54 955	20 862	1 303	29 997	15 018	1 143 313	10.7
2003-04	56 883	21 263	1 326	31 448	14 602	1 190 711	10.5
2004-05	60 350	21 581	1 319	32 298	14 597	1 228 856	10.6
2005-06	62 164	22 323	1 325	33 594	14 366	1 265 452	10.6
2006-07	65 903	22 469	1 403	35 784	14 540	1 312 903	10.7
2007-08	69 474	23 030	1 444	37 911	13 889	1 361 456	10.7
2008-09	68 949	24 205	1 454	38 413	14 365	1 386 125	10.6
2009-10	70 097	24 248	1 459	38 999	14 777	1 413 929	10.6
2010-11	72 239	24 304	1 594	40 261	15 750	1 447 479	10.6
2011-12	75 263	24 012	1 517	40 499	16 378	1 500 084	10.5
2012-13	77 897	23 816	1 654	40 171	16 775	1 538 634	10.4
2013-14	77 557	23 232	1 630	41 393	16 321	1 578 784	10.1
2014-15	77 591	23 483	1 769	43 970	16 700	1 617 016	10.1
2015-16	78 358	23 781	1 947	46 897	17 101	1 660 918	10.1
2016-17	79 686	23 760	1 976	48 498	17 231	1 693 119	10.1

[1, 2] See end notes.

Source: ABS (2017b).

Table 1 1.1b Gross value added, Australia's transport industry

Financial year	Chain volume measures [1] Gross value added, at basic prices [2] Transport			Transport, postal and storage services	Total transport, postal and warehousing	Gross Domestic Product	Major infrastructure industries as percentage of GDP
	Road	Air and space	Rail, pipeline and other transport [3]				
			$ million				%
1976-77	5 747	1 187	3 852	10 841	20 290	500 538	4.1
1977-78	6 784	1 300	3 945	11 320	22 852	505 034	4.5
1978-79	6 726	1 440	3 900	11 668	23 219	525 518	4.4
1979-80	6 613	1 585	4 295	12 583	23 910	541 559	4.4
1980-81	7 415	1 556	4 361	12 437	25 375	559 736	4.5
1981-82	7 580	1 597	4 417	12 187	25 760	578 316	4.5
1982-83	7 418	1 516	4 141	11 380	24 822	565 414	4.4
1983-84	7 612	1 596	4 491	12 748	26 074	591 597	4.4
1984-85	8 178	1 721	5 058	13 905	28 192	622 652	4.5
1985-86	8 636	1 871	5 405	14 247	29 901	648 182	4.6
1986-87	8 572	2 067	5 390	14 600	30 456	664 895	4.6
1987-88	9 084	2 313	5 492	15 018	31 797	703 305	4.5
1988-89	9 766	2 455	5 580	15 461	33 243	730 599	4.6
1989-90	10 222	2 127	5 927	15 857	34 080	756 395	4.5
1990-91	9 943	2 472	5 923	16 002	34 313	753 556	4.6
1991-92	10 264	2 880	5 939	15 918	35 068	756 845	4.6
1992-93	10 037	3 181	6 121	15 922	35 304	787 588	4.5
1993-94	10 527	3 480	6 373	16 790	37 228	819 498	4.5
1994-95	11 552	3 784	6 348	17 744	39 477	851 371	4.6
1995-96	12 806	4 045	6 784	18 948	42 600	884 990	4.8
1996-97	13 393	4 303	6 980	19 634	44 350	919 926	4.8
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1999-00	15 145	4 622	7 315	21 325	48 400	1 047 898	4.6
2000-01	15 619	4 995	7 394	22 153	50 256	1 068 123	4.7
2001-02	16 532	4 687	7 703	22 928	51 812	1 109 277	4.7
2002-03	17 732	5 305	8 120	23 780	54 955	1 143 313	4.8
2003-04	19 022	5 637	8 287	24 008	56 883	1 190 711	4.8
2004-05	20 216	6 246	8 503	25 396	60 350	1 228 856	4.9
2005-06	21 204	6 595	8 587	25 830	62 164	1 265 452	4.9
2006-07	23 461	7 185	8 590	26 898	65 903	1 312 903	5.0
2007-08	24 946	7 425	9 214	28 197	69 474	1 361 456	5.1
2008-09	23 325	7 163	9 513	29 064	68 949	1 386 125	5.0
2009-10	23 853	7 149	9 553	29 657	70 097	1 413 929	5.0
2010-11	23 376	7 681	9 937	31 267	72 239	1 447 479	5.0
2011-12	23 269	8 066	10 454	33 445	75 263	1 500 084	5.0
2012-13	23 215	8 132	11 033	35 450	77 897	1 538 634	5.1
2013-14	23 613	8 255	10 314	35 300	77 557	1 578 784	4.9
2014-15	23 770	8 802	10 786	34 233	77 591	1 617 016	4.8
2015-16	23 666	9 501	10 577	34 613	78 358	1 660 918	4.7
2016-17	23 858	9 639	10 731	35 459	79 686	1 693 119	4.7

[1, 2, 3] See end notes.

Source: ABS (2017b).

Table 1 1.2a Australian employment, major infrastructure industries—transport and storage

August reference month	Transport and Storage Total Employment									Total Aust employment	Transport and storage as % of total employment
	Transport					Postal and courier services	Transport support services	Warehousing and storage services	Total		
	Road	Rail	Water	Air and space	Other						
	thousands										%
1985	159.1	74.1	5.6	33.1	14.0	73.4	49.4	8.6	417.2	6 675.5	6.2
1986 [4]	171.8	73.3	6.1	35.1	14.9	74.4	49.5	11.2	436.2	6 918.5	6.3
1987	170.0	65.7	5.7	32.5	12.7	69.5	44.6	7.8	408.6	7 092.3	5.8
1988	171.8	60.5	5.2	34.4	13.6	68.5	46.1	9.1	409.1	7 353.3	5.6
1989	185.5	59.2	6.3	43.9	12.6	71.2	48.3	11.5	438.6	7 715.3	5.7
1990	193.4	48.7	6.6	40.0	10.9	73.9	42.6	17.0	433.2	7 808.0	5.5
1991	185.4	54.4	7.7	39.0	10.7	68.4	41.5	14.5	421.6	7 620.7	5.5
1992	184.7	42.4	5.5	36.1	10.0	61.1	37.2	13.9	390.8	7 613.4	5.1
1993	171.3	47.8	3.7	35.8	9.1	60.1	39.8	16.6	384.2	7 589.4	5.1
1994	175.7	43.8	7.1	36.8	14.4	56.7	40.8	19.3	394.6	7 861.7	5.0
1995	183.6	39.7	7.3	40.7	13.5	63.5	40.8	15.2	404.3	8 165.9	5.0
1996	184.7	40.5	10.1	48.2	17.0	69.1	36.8	21.0	427.5	8 265.9	5.2
1997	194.2	38.2	7.4	46.7	14.4	74.1	38.7	15.9	429.5	8 250.3	5.2
1998	190.6	30.0	7.9	46.4	12.2	78.0	36.5	19.6	421.1	8 455.2	5.0
1999	204.3	27.8	8.2	44.9	11.2	73.2	45.6	24.8	440.1	8 603.6	5.1
2000	205.1	30.8	9.2	56.6	8.1	81.8	35.4	30.3	459.8	8 911.6	5.2
2001	213.8	28.7	10.7	52.5	8.0	81.2	37.4	26.6	460.6	8 971.9	5.1
2002	204.2	28.4	7.9	45.2	6.9	78.9	36.3	27.7	438.1	9 150.3	4.8
2003	217.8	32.3	8.5	47.7	8.1	77.9	39.4	27.2	460.0	9 327.0	4.9
2004	218.9	29.9	13.4	40.3	9.2	81.7	39.6	36.2	487.3	9 462.1	5.2
2005	214.1	30.3	8.7	50.3	7.4	86.3	41.9	41.4	495.2	9 870.3	5.0
2006	228.8	33.1	12.4	46.0	7.6	74.8	45.0	43.2	501.0	10 105.8	5.0
2007	234.5	30.5	12.6	46.4	13.8	88.6	44.6	48.1	536.3	10 406.4	5.2
2008	228.3	48.5	9.4	48.7	8.9	96.6	57.3	57.0	566.4	10 710.4	5.3
2009	231.0	52.0	8.5	51.0	11.5	97.9	71.2	25.1	571.6	10 707.3	5.3
2010	215.0	46.9	7.2	52.1	9.3	93.1	79.8	43.3	562.7	10 973.8	5.1
2011	233.7	46.0	9.2	56.9	10.9	89.4	67.8	48.0	576.5	11 130.6	5.2
2012	222.3	46.5	8.1	49.1	9.2	76.7	64.7	53.6	548.8	11 260.8	4.9
2013	220.3	44.9	11.8	54.4	5.5	97.4	82.8	51.4	582.6	11 355.6	5.1
2014	252.0	41.2	8.7	57.2	6.8	81.5	81.6	49.4	648.6	11 565.4	5.6
2015	252.9	40.7	6.3	58.8	7.7	89.2	83.4	53.2	618.6	11 686.6	5.3
2016	268.5	36.7	6.5	54.1	7.0	99.6	74.5	54.4	608.7	11 869.1	5.1
2017	293.7	43.4	5.6	63.7	4.8	80.0	81.5	60.4	636.8	12,195.2	5.2

[4] See end notes.

Source: ABS (2017c).

Table 1 1.2b Australian employment, major infrastructure industries—energy

August reference month	Energy Total Employment						Total Aust employ-ment	Energy as % of total employ-ment
	Mining							
	Coal mining	Oil and gas extraction	Petroleum and coal product manufacturing	Electricity supply	Gas supply	Total		
	thousands							%
1985	37.2	2.3	6.7	81.4	10.5	138.0	6 675.5	2.1
1986 [4]	32.2	1.5	6.0	84.2	9.6	133.5	6 918.5	1.9
1987	39.2	1.7	6.2	72.8	11.2	131.0	7 092.3	1.8
1988	33.2	3.8	5.1	73.8	8.4	124.3	7 353.3	1.7
1989	28.8	3.4	7.5	66.9	10.4	117.2	7 715.3	1.5
1990	28.2	4.5	9.5	62.3	5.2	109.6	7 808.0	1.4
1991	32.6	5.2	6.8	62.6	7.2	114.4	7 620.7	1.5
1992	25.6	6.6	9.2	62.5	8.5	112.4	7 613.4	1.5
1993	29.4	3.2	6.4	54.5	7.9	101.4	7 589.4	1.3
1994	22.3	2.6	7.7	55.7	8.2	96.5	7 861.7	1.2
1995	24.0	4.0	5.2	49.3	7.6	90.1	8 165.9	1.1
1996	20.5	2.6	7.4	38.5	7.7	76.7	8 265.9	0.9
1997	23.1	3.5	9.0	37.7	6.4	79.7	8 250.3	1.0
1998	19.5	5.9	6.6	37.7	5.9	75.5	8 455.2	0.9
1999	18.4	4.0	6.2	38.1	5.7	72.5	8 603.6	0.8
2000	15.5	6.0	10.0	36.5	3.0	71.0	8 911.6	0.8
2001	21.7	3.9	13.6	44.6	4.9	88.7	8 971.9	1.0
2002	17.2	4.7	13.1	37.3	5.9	78.2	9 150.3	0.9
2003	20.8	5.4	6.0	57.1	5.0	94.3	9 327.0	1.0
2004	18.0	5.5	8.1	40.2	4.0	75.8	9 462.1	0.8
2005	27.3	7.3	7.7	45.1	7.3	94.7	9 870.3	1.0
2006	28.6	8.7	9.8	36.0	6.6	89.8	10 105.8	0.9
2007	24.6	10.6	6.7	39.8	10.0	91.6	10 406.4	0.9
2008	33.3	14.0	5.6	44.7	10.8	108.4	10 710.4	1.0
2009	39.6	11.6	6.2	61.1	9.3	127.8	10 707.3	1.2
2010	42.0	15.3	6.6	67.7	7.6	139.3	10 973.8	1.3
2011	51.0	14.1	11.0	60.4	9.7	146.3	11 130.6	1.3
2012	46.7	16.9	11.8	70.8	11.0	157.2	11 260.8	1.4
2013	51.7	19.9	6.9	58.6	22.6	159.7	11 355.6	1.4
2014	38.9	24.8	6.5	63.9	15.6	149.6	11 565.4	1.3
2015	46.0	36.1	9.3	63.1	14.3	168.8	11 686.6	1.4
2016	53.6	22.3	3.6	59.7	14.0	153.0	11 869.1	1.3
2017	47.5	22.1	11.2	56.9	11.4	149.2	12 195.2	1.2

[4] See end notes.

Source: ABS (2017c).

Table 1 1.2c Australian employment, major infrastructure industries—communication

August reference month	Communication Total Employment			Total Aust employment	Communication services as % of total employment
	Telecommunication services	Internet service providers, web search portals and data processing services	Total		
	thousands				%
1985	79.0	7.6	86.6	6 675.5	1.3
1986 [4]	79.0	7.7	86.7	6 918.5	1.3
1987	73.8	7.5	81.4	7 092.3	1.1
1988	71.4	7.5	78.9	7 353.3	1.1
1989	73.8	7.9	81.7	7 715.3	1.1
1990	76.7	8.3	85.0	7 808.0	1.1
1991	70.4	7.9	78.3	7 620.7	1.0
1992	61.7	7.4	69.1	7 613.4	0.9
1993	60.7	7.4	68.0	7 589.4	0.9
1994	74.9	9.6	84.4	7 861.7	1.1
1995	80.0	11.1	91.1	8 165.9	1.1
1996	92.1	12.8	104.8	8 265.9	1.3
1997	75.5	13.0	88.5	8 250.3	1.1
1998	70.3	14.4	84.7	8 455.2	1.0
1999	73.0	14.0	87.0	8 603.6	1.0
2000	88.7	20.3	109.0	8 911.6	1.2
2001	85.4	19.3	104.7	8 971.9	1.2
2002	85.6	20.7	106.3	9 150.3	1.2
2003	92.5	20.5	113.0	9 327.0	1.2
2004	88.2	18.6	106.8	9 462.1	1.1
2005	96.4	19.9	116.3	9 870.3	1.2
2006	97.9	21.6	119.5	10 105.8	1.2
2007	96.7	22.8	119.5	10 406.4	1.1
2008	96.5	15.9	112.4	10 710.4	1.0
2009	85.2	7.1	92.4	10 707.3	0.9
2010	89.7	8.0	97.7	10 973.8	0.9
2011	90.0	8.5	98.5	11 130.6	0.9
2012	102.2	7.6	109.8	11 260.8	1.0
2013	86.8	6.0	92.8	11 355.6	0.8
2014	102.7	7.7	110.4	11 565.4	1.0
2015	90.5	10.6	101.1	11 686.6	0.9
2016	100.9	11.2	112.1	11 869.1	0.9
2017	93.9	9.4	103.3	12 195.2	0.8

[4] See end notes.

Source: ABS (2017c).

Table 1 1.2d Australian employment, major infrastructure industries—water

August reference month	Water supply, sewerage and drainage services	Total Aust employment	Water supply, sewerage and drainage services as % of total employment
	thousands		%
1985	46.8	6 675.5	0.7
1986 [4]	43.7	6 918.5	0.6
1987	35.7	7 092.3	0.5
1988	31.8	7 353.3	0.4
1989	35.5	7 715.3	0.5
1990	36.5	7 808.0	0.5
1991	32.7	7 620.7	0.4
1992	33.7	7 613.4	0.4
1993	32.1	7 589.4	0.4
1994	28.5	7 861.7	0.4
1995	27.7	8 165.9	0.3
1996	21.7	8 265.9	0.3
1997	22.0	8 250.3	0.3
1998	25.6	8 455.2	0.3
1999	23.0	8 603.6	0.3
2000	25.2	8 911.6	0.3
2001	20.5	8 971.9	0.2
2002	23.2	9 150.3	0.3
2003	18.7	9 327.0	0.2
2004	23.9	9 462.1	0.3
2005	26.0	9 870.3	0.3
2006	29.8	10 105.8	0.3
2007	25.2	10 406.4	0.2
2008	35.3	10 710.4	0.3
2009	28.2	10 707.3	0.3
2010	37.5	10 973.8	0.3
2011	32.5	11 130.6	0.3
2012	37.3	11 260.8	0.3
2013	29.2	11 355.6	0.3
2014	28.9	11 565.4	0.2
2015	33.3	11 686.6	0.3
2016	21.8	11 869.1	0.2
2017	33.7	12 195.2	0.3

[4] See end notes.

Source: ABS (2017c).

Table 1 1.3a Australian average weekly earnings[5], transport industry (2015–16 prices, adjusted by CPI)

May reference month	Road	Rail	Water	Air and space	Other transport	All industries
			$			
1996	993.70	1 295.38	1 087.06	1 357.89	789.92	931.51
1998	1 032.55	1 353.27	1 705.32	1 638.16	[b] 748.25	980.48
2000	992.44	1 451.56	1 688.06	1 679.88	0.00	1 007.10
2002	1 067.31	1 452.29	1 229.76	1 414.69	0.00	986.29
2004	1 050.75	1 542.13	[b] 1 171.10	1 427.52	0.00	1 016.49
2006 [6]	1 145.41	1 807.19	1 373.86	1 483.17	0.00	1 036.98
2008	1 148.15	1 625.33	1 659.97	1 551.31	1 305.39	1 082.17
2010	1 080.74	1 783.90	2 055.21	1 885.64	690.84	1 097.36
2012	1 111.26	1 950.37	1 657.08	1 743.59	[b] 1 263.49	1 164.98
2014	1 219.83	1 926.08	1 826.17	1 514.77	1 059.07	1 170.54
2015	1 233.81	2 023.75		1 799.09	[b] 1 229.48	1 201.48

[b] Use estimate with caution as it is subject to a relative standard error between 25 per cent and 50 per cent.
[5, 6] See end notes.
Source: ABS (2016a), ABS (2017d) and unpublished data..

Table 1 1.3b Australian average weekly earnings[5], energy industry (2015–16 prices, adjusted by CPI)

May reference month	Electricity supply	Gas supply	All industries
		$	
1996	1 316.81	1 239.69	931.51
1998	1 537.25	1 339.61	980.48
2000	1 649.03	1 408.36	1 007.10
2002	1 607.25	1 546.60	986.29
2004	1 645.33	1 511.23	1 016.49
2006 [6]	1 716.66	1 442.32	1 036.98
2008	1 797.00	2 133.37	1 082.17
2010	1 947.48	1 460.02	1 097.36
2012	2 060.83	2 210.66	1 164.98
2014	2 112.62	1 847.54	1 170.54
2015	2 094.57	2 029.79	1 201.48

[5, 6] See end notes.
Source: ABS (2016a), ABS (2017d) and unpublished data.

Table 1 1.3c Australian average weekly earnings[5], communication industry (2015–16 prices, adjusted by CPI)

May reference month	Telecommunication services	Radio and television services	Broadcasting (except internet)	Internet service providers, web search portals and data processing services	All industries
			$		
1996	1 309.83	1 127.65			931.51
1998	1 566.01	1 395.37			980.48
2000	1 640.08	1 534.71			1 007.10
2002	1 558.90	1 286.31			986.29
2004	1 486.37	1 294.36			1 016.49
2006 [6]	1 539.78	1 499.94			1 036.98
2008	1 572.48		1 444.32		1 082.17
2010	1 618.40		1 523.89		1 097.36
2012	1 588.80		1 555.90	1 425.37	1 164.98
2014	1 832.61		1 670.11	1 374.46	1 170.54
2015	2 057.50		1 627.42	1 219.71	1 201.48

[5, 6] See end notes.

Source: ABS (2016a), ABS (2017d) and unpublished data.

Table 1 1.3d Australian average weekly earnings[5], water industry (2015–16 prices, adjusted by CPI)

May reference month	Water supply, sewerage and drainage services	All industries
	$	$
1996	1 189.19	931.51
1998	1 297.83	980.48
2000	1 244.06	1 007.10
2002	1 445.51	986.29
2004	1 371.49	1 016.49
2006 [6]	1 355.20	1 036.98
2008	1 336.84	1 082.17
2010	1 595.11	1 097.36
2012	1 709.28	1 164.98
2014	1 555.06	1 170.54
2015	1 657.34	1 201.48

[5, 6] See end notes.

Source: ABS (2016a), ABS (2017d) and unpublished data.

Table 1 1.4a Australian producer price indexes, transport industry

Financial year	Transport					Water transport support services			Airport operations and other air transport support services	Customs agency services
	Road freight	Rail freight	Water freight	Pipeline transport	Postal and courier services	Steve-doring services	Port and water transport terminal operations	Other water transport support services		
	base of each index: 2011–12 = 100									
1996-97		79.4				108.4				
1997-98	64.8	76.1				102.0				
1998-99	65.6	72.4	90.7			100.3		74.4	94.3	82.3
1999-00	66.2	68.3	94.2			100.3		69.6	91.7	82.3
2000-01	67.6	69.0	99.7	72.2		98.1		69.7	87.1	83.7
2001-02	68.8	68.6	99.3	73.0	77.6	95.9	62.8	69.7	86.3	84.1
2002-03	70.4	68.6	96.5	73.3	79.1	93.7	63.2	72.8	91.2	85.6
2003-04	72.3	69.2	95.5	72.1	80.5	92.1	63.1	73.8	90.7	86.6
2004-05	75.9	70.0	103.8	76.5	82.2	95.4	66.1	75.1	91.5	88.2
2005-06	80.6	70.9	101.0	76.2	84.1	94.6	67.5	75.0	95.1	90.1
2006-07	83.2	72.4	100.3	76.4	85.7	98.9	72.9	80.5	94.2	90.9
2007-08	86.4	73.8	98.5	79.4	86.6	97.2	75.9	80.1	96.9	91.7
2008-09	92.5	80.3	108.9	89.5	90.2	98.9	80.0	81.2	97.3	94.1
2009-10	92.0	86.8	99.3	92.5	91.5	100.4	89.9	88.3	98.6	95.0
2010-11	95.9	91.8	97.3	96.6	96.4	99.6	96.2	96.9	99.2	96.4
2011-12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012-13	104.2	101.9	107.8	103.1	101.6	102.4	108.6	103.8	102.7	100.3
2013-14	106.3	102.6	104.2	102.6	107.7	103.0	110.7	109.1	106.4	102.8
2014-15	107.2	100.5	101.3	102.7	112.7	102.2	113.0	112.4	109.2	102.7
2015-16	105.5	101.7	103.9	103.3	119.9	101.9	113.8	114.8	111.7	100.8
2016-17	106.5	111.4	92.6	102.1	128.7	101.2	115.8	114.4	113.5	95.3

Note: Data are not readily available for missing years.
Source: ABS (2017e).

Table 11.4b Australian producer price indexes, communications industry

Financial year	Data processing and web hosting services	Electronic information storage services
	base of each index 2011–12 = 100	
1998-99		110.6
1999-00		109.6
2000-01		104.1
2001-02	83.7	103.8
2002-03	85.1	102.8
2003-04	86.1	105.3
2004-05	86.4	105.5
2005-06	91.8	107.4
2006-07	93.4	103.5
2007-08	94.2	102.1
2008-09	95.2	101.9
2009-10	95.7	99.9
2010-11	98.7	98.6
2011-12	100.0	100.0
2012-13	103.0	98.1
2013-14	105.4	99.2
2014-15	106.6	99.5
2015-16	106.8	98.5
2016-17	107.3	98.4

Note: Data are not readily available for missing years.
Source: ABS (2017e).

Table 11.5a Australian population, by state/territory—capital city

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT[7,8]
1970-71	2 977 300	2 515 400	891 100	850 700	711 800	153 100	37 100	160 800
1971-72	3 017 700	2 559 000	915 900	864 100	734 700	153 800	39 900	174 150
1972-73	3 040 800	2 597 200	941 800	877 800	751 700	155 500	42 800	185 100
1973-74	3 063 300	2 632 100	967 400	892 700	775 000	157 800	46 700	197 400
1974-75	3 082 500	2 658 800	979 000	905 100	799 600	160 600	25 700	209 900
1975-76	3 143 800	2 723 700	1 000 900	924 000	832 800	164 400	44 200	226 500
1976-77	3 168 100	2 740 800	1 012 200	934 200	851 800	165 800		232 600
1977-78	3 197 700	2 757 200	1 028 300	942 900	869 000	167 300		236 900
1978-79	3 226 800	2 771 000	1 046 400	944 800	882 900	168 400		239 700
1979-80	3 257 500	2 787 400	1 063 300	948 000	899 400	169 400		243 200
1980-81	3 279 500	2 806 300	1 096 200	953 700	922 000	171 100	56 400	246 500
1981-82	3 318 700	2 833 800	1 128 700	962 500	952 400	172 200	61 800	252 100
1982-83	3 350 700	2 861 700	1 148 300	973 400	976 800	173 400	65 100	258 400
1983-84	3 382 900	2 884 600	1 161 200	984 300	995 600	175 500	68 900	265 200
1984-85	3 425 200	2 909 100	1 176 500	994 000	1 018 200	177 500	72 200	272 300
1985-86	3 471 567	2 966 901	1 217 348	1 003 548	1 050 120	182 071	75 360	257 852
1986-87	3 528 486	3 003 582	1 238 378	1 011 904	1 079 603	183 321	77 047	264 405
1987-88	3 590 980	3 042 608	1 264 491	1 021 117	1 110 469	184 186	75 888	271 044
1988-89	3 622 859	3 085 580	1 300 218	1 033 471	1 147 375	185 938	76 025	275 334
1989-90	3 643 660	3 125 919	1 330 879	1 044 602	1 175 362	189 039	76 542	281 099
1990-91 [9]	3 672 855	3 155 576	1 357 993	1 056 561	1 188 762	190 739	86 415	288 195
1991-92	3 710 168	3 182 441	1 388 383	1 065 647	1 207 350	192 439	87 836	293 554
1992-93	3 734 809	3 197 927	1 422 783	1 068 616	1 225 552	193 627	89 908	298 222
1993-94	3 769 641	3 213 021	1 455 195	1 071 672	1 246 266	194 519	91 133	301 131
1994-95	3 821 233	3 243 707	1 486 730	1 074 679	1 271 738	195 026	93 238	304 463
1995-96 [10]	3 881 136	3 283 278	1 500 803	1 078 437	1 295 092	195 718	95 829	307 917
1996-97	3 928 658	3 309 601	1 524 315	1 083 906	1 316 274	195 976	98 891	308 700
1997-98	3 969 649	3 342 230	1 548 584	1 090 526	1 334 992	195 913	101 165	309 539
1998-99	4 019 954	3 379 714	1 572 204	1 096 934	1 355 373	196 011	103 064	311 967
1999-00	4 069 093	3 422 722	1 598 585	1 102 445	1 372 947	196 468	105 113	314 848
2000-01	4 128 272	3 471 625	1 663 120	1 107 986	1 393 002	197 282	106 842	318 939
2001-02	4 162 999	3 523 946	1 701 606	1 114 990	1 413 867	197 931	107 443	322 316
2002-03	4 162 593	3 594 031	1 780 650	1 162 250	1 496 016	199 788	108 433	327 357
2003-04	4 184 763	3 641 951	1 823 496	1 168 541	1 520 232	201 771	109 211	328 940
2004-05	4 217 563	3 697 372	1 866 210	1 177 345	1 544 977	203 288	111 388	331 399
2005-06	4 256 161	3 760 760	1 908 265	1 189 243	1 576 912	204 753	113 461	335 170
2006-07	4 325 525	3 841 760	1 958 907	1 204 210	1 628 467	206 649	116 935	342 644
2007-08	4 409 562	3 931 438	2 012 204	1 219 523	1 682 860	209 166	121 210	348 368
2008-09	4 492 380	4 031 787	2 068 479	1 237 354	1 739 342	212 085	125 315	354 785
2009-10	4 555 516	4 105 857	2 108 348	1 253 097	1 781 132	214 669	127 829	361 766
2010-11	4 608 949	4 169 366	2 147 436	1 264 091	1 833 567	216 273	129 106	367 985
2011-12 [11]	4 676 118	4 252 458	2 193 316	1 278 600	1 904 858	216 921	132 321	375 183
2012-13	4 755 029	4 343 568	2 235 774	1 291 206	1 970 005	217 977	137 370	380 914
2013-14	4 837 661	4 437 903	2 273 474	1 304 637	2 008 061	219 240	139 621	385 346
2014-15	4 922 561	4 533 866	2 308 564	1 316 983	2 039 136	221 016	142 482	391 274
2015-16	5 005 358	4 641 636	2 349 699	1 326 354	2 066 564	222 802	143 629	396 294

[7,8,9,10,11] See end notes.

Note: Data are not readily available for missing years.

Source: ABS (2017f).

Table 1 1.5b Australian population, by state/territory—rest of state[11, 12]

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT[7,8]
1970-71	1 748 203	1 085 952	960 385	349 414	342 034	244 973	48 635	
1971-72	1 777 406	1 102 254	982 578	350 528	347 317	246 508	52 181	
1972-73	1 801 098	1 110 453	1 010 151	350 675	349 341	247 587	54 327	
1973-74	1 830 753	1 123 626	1 040 940	348 838	352 598	248 351	56 224	
1974-75	1 849 516	1 128 641	1 072 362	360 164	355 348	249 488	67 169	
1975-76	1 815 788	1 086 726	1 091 475	350 070	345 542	247 914	54 028	
1976-77	1 833 788	1 096 564	1 117 639	351 919	352 566	249 232		
1977-78	1 856 090	1 106 559	1 143 747	353 305	358 851	250 342		
1978-79	1 884 330	1 115 406	1 168 371	356 309	363 711	252 356		
1979-80	1 914 027	1 126 903	1 202 635	360 397	369 668	254 190		
1980-81	1 955 389	1 140 617	1 249 008	365 069	378 056	256 124	66 216	
1981-82	1 984 880	1 159 070	1 295 886	368 608	386 499	257 645	68 514	
1982-83	2 002 259	1 174 002	1 333 982	372 375	392 250	259 405	70 816	
1983-84	2 019 829	1 191 892	1 362 659	375 748	395 637	262 260	73 254	
1984-85	2 039 312	1 210 968	1 394 718	377 197	400 364	265 328	76 336	
1985-86	2 059 959	1 193 955	1 407 247	379 002	408 899	264 402	79 061	
1986-87	2 088 250	1 206 529	1 436 729	380 860	416 645	265 905	81 158	
1987-88	2 116 329	1 219 961	1 475 416	383 792	424 698	266 962	83 138	
1988-89	2 153 424	1 234 584	1 527 419	385 558	431 059	269 320	85 154	
1989-90	2 190 361	1 252 673	1 568 404	387 454	437 687	273 149	87 186	
1990-91 [9]	2 225 876	1 264 797	1 602 958	389 738	447 305	276 063	79 078	1 125
1991-92	2 252 401	1 272 561	1 641 567	390 865	450 695	277 387	80 250	1 120
1992-93	2 270 071	1 274 460	1 687 005	392 058	452 117	278 032	80 826	1 080
1993-94	2 290 549	1 274 549	1 731 918	394 466	456 743	278 420	82 242	355
1994-95	2 305 748	1 273 680	1 778 379	394 750	462 049	278 647	84 314	342
1995-96 [10]	2 323 592	1 276 877	1 837 887	395 816	470 164	278 725	86 014	334
1996-97	2 348 303	1 287 600	1 870 356	397 451	478 718	277 629	88 021	342
1997-98	2 369 422	1 295 590	1 899 141	399 026	487 676	276 054	88 715	349
1998-99	2 391 416	1 306 688	1 929 217	400 885	494 360	275 419	89 671	359
1999-00	2 417 120	1 318 617	1 962 952	402 593	501 512	274 941	90 448	367
2000-01	2 446 945	1 333 101	1 965 826	403 742	508 157	274 513	90 926	378
2001-02	2 465 952	1 339 138	2 013 192	406 137	512 244	274 835	91 968	359
2002-03	2 458 122	1 279 778	1 962 471	358 149	456 725	278 746	93 292	
2003-04	2 465 972	1 285 198	2 006 474	359 648	459 310	281 407	93 452	
2004-05	2 475 643	1 291 874	2 052 284	361 459	466 230	282 914	94 517	
2005-06	2 486 529	1 300 506	2 099 727	363 286	473 669	284 549	95 596	
2006-07	2 508 631	1 311 762	2 152 111	366 409	477 672	286 613	96 813	
2007-08	2 533 899	1 324 937	2 207 301	369 142	488 840	289 402	98 664	
2008-09	2 561 375	1 340 147	2 260 292	371 548	500 908	292 268	100 712	
2009-10	2 588 776	1 355 244	2 296 396	374 225	509 713	294 178	101 949	
2010-11	2 609 580	1 368 451	2 329 342	375 523	519 842	295 210	102 186	
2011-12 [11]	2 631 065	1 380 063	2 374 889	377 435	533 136	295 185	103 560	
2012-13	2 652 034	1 389 977	2 415 585	379 068	545 382	295 090	105 199	
2013-14	2 675 757	1 400 207	2 446 451	380 913	548 985	295 486	103 747	
2014-15	2 698 778	1 412 639	2 470 080	381 890	550 801	295 576	102 175	
2015-16	2 721 566	1 428 000	2 493 604	381 781	550 510	296 261	101 562	

[7, 8, 9, 10, 11, 12] See end notes.

Note: Data are not readily available for missing years.

Source: ABS (2017f).

Table 11.5c Australian population, by state/territory—total

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT[7,8]
1970-71	4 725 503	3 601 352	1 851 485	1 200 114	1 053 834	398 073	85 735	151 169
1971-72	4 795 106	3 661 254	1 898 478	1 214 628	1 082 017	400 308	92 081	159 792
1972-73	4 841 898	3 707 653	1 951 951	1 228 475	1 101 041	403 087	97 127	173 306
1973-74	4 894 053	3 755 726	2 008 340	1 241 538	1 127 598	406 151	102 924	186 241
1974-75	4 932 016	3 787 441	2 051 362	1 265 264	1 154 948	410 088	92 869	199 007
1975-76	4 959 588	3 810 426	2 092 375	1 274 070	1 178 342	412 314	98 228	207 740
1976-77	5 001 888	3 837 364	2 129 839	1 286 119	1 204 366	415 032	103 938	213 688
1977-78	5 053 790	3 863 759	2 172 047	1 296 205	1 227 851	417 642	109 980	217 981
1978-79	5 111 130	3 886 406	2 214 771	1 301 109	1 246 611	420 756	114 149	220 797
1979-80	5 171 527	3 914 303	2 265 935	1 308 397	1 269 068	423 590	118 245	224 291
1980-81	5 234 889	3 946 917	2 345 208	1 318 769	1 300 056	427 224	122 616	227 581
1981-82	5 303 580	3 992 870	2 424 586	1 331 108	1 338 899	429 845	130 314	233 045
1982-83	5 352 959	4 035 702	2 482 282	1 345 775	1 369 050	432 805	135 916	238 983
1983-84	5 402 729	4 076 492	2 523 859	1 360 048	1 391 237	437 760	142 154	245 112
1984-85	5 464 512	4 120 068	2 571 218	1 371 197	1 418 564	442 828	148 536	251 389
1985-86	5 531 526	4 160 856	2 624 595	1 382 550	1 459 019	446 473	154 421	258 910
1986-87	5 616 736	4 210 111	2 675 107	1 392 764	1 496 248	449 226	158 205	265 477
1987-88	5 707 309	4 262 569	2 739 907	1 404 909	1 535 167	451 148	159 026	272 129
1988-89	5 776 283	4 320 164	2 827 637	1 419 029	1 578 434	455 258	161 179	276 432
1989-90	5 834 021	4 378 592	2 899 283	1 432 056	1 613 049	462 188	163 728	282 211
1990-91	5 898 731	4 420 373	2 960 951	1 446 299	1 636 067	466 802	165 493	289 320
1991-92	5 962 569	4 455 002	3 029 950	1 456 512	1 658 045	469 826	168 086	294 674
1992-93	6 004 880	4 472 387	3 109 788	1 460 674	1 677 669	471 659	170 734	299 302
1993-94	6 060 190	4 487 570	3 187 113	1 466 138	1 703 009	472 939	173 375	301 486
1994-95	6 126 981	4 517 387	3 265 109	1 469 429	1 733 787	473 673	177 552	304 805
1995-96	6 204 728	4 560 155	3 338 690	1 474 253	1 765 256	474 443	181 843	308 251
1996-97	6 276 961	4 597 201	3 394 671	1 481 357	1 794 992	473 605	186 912	309 042
1997-98	6 339 071	4 637 820	3 447 725	1 489 552	1 822 668	471 967	189 880	309 888
1998-99	6 411 370	4 686 402	3 501 421	1 497 819	1 849 733	471 430	192 735	312 326
1999-00	6 486 213	4 741 339	3 561 537	1 505 038	1 874 459	471 409	195 561	315 215
2000-01	6 575 217	4 804 726	3 628 946	1 511 728	1 901 159	471 795	197 768	319 317
2001-02	6 628 951	4 863 084	3 714 798	1 521 127	1 926 111	472 766	199 411	322 675
2002-03	6 620 715	4 873 809	3 743 121	1 520 399	1 952 741	478 534	201 725	327 357
2003-04	6 650 735	4 927 149	3 829 970	1 528 189	1 979 542	483 178	202 663	328 940
2004-05	6 693 206	4 989 246	3 918 494	1 538 804	2 011 207	486 202	205 905	331 399
2005-06	6 742 690	5 061 266	4 007 992	1 552 529	2 050 581	489 302	209 057	335 170
2006-07	6 834 156	5 153 522	4 111 018	1 570 619	2 106 139	493 262	213 748	342 644
2007-08	6 943 461	5 256 375	4 219 505	1 588 665	2 171 700	498 568	219 874	348 368
2008-09	7 053 755	5 371 934	4 328 771	1 608 902	2 240 250	504 353	226 027	354 785
2009-10	7 144 292	5 461 101	4 404 744	1 627 322	2 290 845	508 847	229 778	361 766
2010-11	7 218 529	5 537 817	4 476 778	1 639 614	2 353 409	511 483	231 292	367 985
2011-12 [11]	7 307 183	5 632 521	4 568 205	1 656 035	2 437 994	512 106	235 881	375 183
2012-13	7 407 063	5 733 545	4 651 359	1 670 274	2 515 387	513 067	242 569	380 914
2013-14	7 513 418	5 838 110	4 719 925	1 685 550	2 557 046	514 726	243 368	385 346
2014-15	7 621 339	5 946 505	4 778 644	1 698 873	2 589 937	516 592	244 657	391 274
2015-16	7 726 924	6 069 636	4 843 303	1 708 135	2 617 074	519 063	245 191	396 294

[7, 8, 11] See end notes.

Source: ABS (2017f).

Table 1 1.6 Key indicators influencing Australian infrastructure

Financial year	Goods exports	Goods imports	Rate at close of financial year	
			Exchange rate[13]	Interest rate[14]
	$ million – chain volume measures		*1 $A=$US*	%
1972-73	35 249	17 515	1.4	6.4
1973-74	32 834	23 350	1.5	18.8
1974-75	35 378	23 812	1.3	8.8
1975-76	37 382	22 099	1.2	10.3
1976-77	40 388	24 850	1.1	11.0
1977-78	41 183	23 412	1.1	10.6
1978-79	43 417	25 556	1.1	10.3
1979-80	46 804	25 957	1.2	13.8
1980-81	43 218	28 377	1.1	15.6
1981-82	44 234	31 774	1.0	18.6
1982-83	44 504	28 210	0.9	14.2
1983-84	48 148	29 845	0.9	12.8
1984-85	56 225	34 908	0.7	15.8
1985-86	58 240	35 890	0.7	14.7
1986-87	63 814	34 081	0.7	13.7
1987-88	67 739	37 514	0.8	13.1
1988-89	66 816	47 264	0.8	18.4
1989-90	70 527	49 470	0.8	15.0
1990-91	78 951	47 007	0.8	10.4
1991-92	87 033	49 058	0.7	6.4
1992-93	92 055	53 131	0.7	5.2
1993-94	100 004	56 831	0.7	5.1
1994-95	102 390	67 585	0.7	7.6
1995-96	113 229	70 771	0.8	7.6
1996-97	127 091	78 398	0.7	5.4
1997-98	133 271	87 996	0.6	5.3
1998-99	134 778	93 055	0.7	4.9
1999-00	148 976	106 395	0.6	6.2
2000-01	157 965	105 381	0.5	5.0
2001-02	159 023	108 795	0.6	5.1
2002-03	159 626	126 315	0.7	4.7
2003-04	160 819	141 144	0.7	5.5
2004-05	166 868	159 590	0.8	5.7
2005-06	170 266	174 386	0.7	6.0
2006-07	174 482	191 845	0.8	6.4
2007-08	180 425	216 576	1.0	7.8
2008-09	184 069	208 823	0.8	3.3
2009-10	197 616	221 657	0.9	4.9
2010-11	200 230	241 580	1.1	5.0
2011-12	212 919	271 692	1.0	3.5
2012-13	226 439	267 311	0.9	2.8
2013-14	240 176	262 654	0.9	2.7
2014-15	255 611	268 716	0.8	2.2
2015-16	272 139	268 754	0.7	2.0
2016-17	285 746	283 550	0.8	1.7

[13, 14] See end notes.

Source: ABS (2016g), RBA (2017).

CHAPTER 2
Infrastructure construction

Table 1 2.1a Value of major infrastructure engineering construction work done, by the private sector for the private sector, adjusted by chain volume index

Financial year	Transport	Energy	Telecommunications	Water	Total major infrastructure engineering construction work done
			$ million		
1986–87	1 533.4	427.1	28.8	186.7	2 176.0
1987–88	1 730.2	414.9	14.5	245.0	2 404.7
1988–89	1 964.4	386.4	15.3	256.9	2 623.0
1989–90	2 292.5	297.8	12.2	249.6	2 852.1
1990–91	2 016.8	298.1	16.1	355.1	2 686.2
1991–92	1 971.5	352.5	12.1	206.2	2 542.4
1992–93	1 814.4	471.4	122.4	276.4	2 684.6
1993–94	2 227.9	514.7	146.0	448.0	3 336.6
1994–95	2 028.2	578.6	125.7	587.6	3 320.1
1995–96	2 081.8	1 213.4	329.8	680.8	4 305.8
1996–97	2 803.5	1 095.0	280.5	331.1	4 510.1
1997–98	3 742.5	1 496.8	111.8	401.3	5 752.4
1998–99	4 220.8	1 879.7	181.1	361.6	6 643.2
1999–00	3 214.3	2 773.2	549.2	504.2	7 041.0
2000–01	2 234.5	2 575.6	954.5	571.3	6 335.9
2001–02	2 926.0	2 774.7	543.7	445.3	6 689.7
2002–03	4 650.6	3 241.0	515.9	645.4	9 053.0
2003–04	6 405.8	4 033.4	1 085.2	1 090.3	12 614.7
2004–05	8 569.9	3 761.5	1 236.9	866.5	14 434.8
2005–06	8 806.8	3 656.4	1 537.1	973.8	14 974.0
2006–07	8 638.3	4 547.1	3 969.2	976.1	18 130.7
2007–08	8 381.4	4 668.0	4 727.7	1 767.3	19 544.5
2008–09	8 922.2	6 250.8	4 040.4	1 663.7	20 877.1
2009–10	8 095.6	5 539.3	3 845.1	2 371.0	19 851.1
2010–11	10 747.8	6 221.4	3 788.1	3 756.4	24 513.7
2011–12	15 414.9	7 324.7	4 487.5	2 783.3	30 010.4
2012–13	16 985.8	11 164.0	4 568.0	2 086.5	34 804.2
2013–14	13 591.5	11 743.8	4 854.0	1 791.7	31 980.9
2014–15	9 928.7	10 000.8	4 681.6	1 336.1	25 947.1
2015–16	6 123.2	7 190.8	4 945.0	1 149.9	19 408.9
2016–17	6 319.5	5 352.8	5 951.5	1 136.2	18 760.0

Source: ABS (2017a), adjusted by chain volume index.

Table 12.1b Value of major infrastructure engineering construction work done, by the private sector for the public sector, adjusted by chain volume index

Financial year	Transport	Energy	Telecommunications	Water	Total major infrastructure engineering construction work done
			$ million		
1986–87	2 803.2	1 458.6	78.8	821.6	5 162.2
1987–88	2 018.0	946.4	59.7	783.5	3 807.7
1988–89	1 840.4	931.6	13.6	635.2	3 420.8
1989–90	2 128.6	867.5	21.0	652.2	3 669.4
1990–91	2 370.0	1 263.5	39.8	825.0	4 498.3
1991–92	2 340.6	1 333.4	57.5	848.8	4 580.3
1992–93	2 935.6	1 143.2	42.2	836.7	4 957.7
1993–94	3 627.9	1 044.6	56.9	1 075.5	5 804.9
1994–95	3 382.0	854.6	21.7	816.1	5 074.4
1995–96	3 231.2	930.3	46.0	743.8	4 951.4
1996–97	3 767.0	1 039.5	12.4	669.0	5 488.0
1997–98	4 555.7	739.6	55.3	714.0	6 064.6
1998–99	5 168.2	449.8	37.2	824.4	6 479.6
1999–00	4 795.4	493.6	218.8	1 420.2	6 927.9
2000–01	4 381.3	444.9	419.3	1 183.9	6 429.5
2001–02	3 700.2	583.7	506.9	872.0	5 662.8
2002–03	3 777.6	674.7	428.7	924.1	5 805.1
2003–04	3 923.7	418.2	65.8	1 345.6	5 753.3
2004–05	5 263.5	709.0	226.6	1 522.5	7 721.6
2005–06	5 921.1	958.6	77.7	1 336.8	8 294.2
2006–07	6 524.4	618.7	47.4	1 520.6	8 711.3
2007–08	7 151.0	506.3	28.4	4 723.0	12 408.6
2008–09	9 724.8	729.3	54.6	4 681.4	15 190.1
2009–10	9 881.8	1 027.9	192.7	4 662.0	15 764.3
2010–11	11 796.9	1 076.9	291.6	3 410.3	16 575.8
2011–12	12 518.8	1 209.7	550.0	2 716.0	16 994.5
2012–13	12 251.9	1 481.5	1 223.3	2 085.5	17 042.2
2013–14	10 965.4	1 258.6	2 080.9	1 707.5	16 012.4
2014–15	9 680.3	708.3	2 711.8	1 200.4	14 300.7
2015–16	10 692.7	518.9	3 785.3	1 103.8	16 100.7
2016–17	13 272.9	391.4	4 916.5	1 144.6	19 725.5

Source: ABS (2017a), adjusted by chain volume index.

Table 12.1c Value of major infrastructure engineering construction work done, by the public sector, adjusted by chain volume index

Financial year	Transport	Energy	Telecommunications	Water	Total major engineering construction work done
			$ million		
1986–87	3 250.1	1 473.4	3 768.2	1 747.5	10 239.2
1987–88	3 057.8	1 464.0	3 486.1	1 433.6	9 441.6
1988–89	2 930.6	1 452.8	3 752.3	1 426.5	9 562.2
1989–90	3 402.8	2 006.9	4 117.1	1 416.0	10 942.8
1990–91	3 470.4	1 674.2	4 183.7	1 506.4	10 834.8
1991–92	3 142.3	1 506.2	3 198.5	1 411.4	9 258.3
1992–93	3 881.9	1 572.7	3 168.9	1 338.4	9 961.8
1993–94	4 101.2	1 603.7	2 861.3	979.9	9 546.2
1994–95	4 291.8	1 650.9	3 850.3	963.5	10 756.5
1995–96	4 563.0	1 233.7	4 461.0	742.7	11 000.4
1996–97	4 282.8	1 012.1	4 438.4	572.7	10 305.9
1997–98	3 897.9	1 093.8	4 552.9	730.2	10 274.9
1998–99	3 915.7	1 460.7	4 823.0	846.5	11 046.0
1999–00	3 843.1	1 790.6	5 591.7	1 012.4	12 237.7
2000–01	3 502.2	2 099.8	4 747.2	781.9	11 131.1
2001–02	3 738.0	2 258.9	4 336.0	737.2	11 070.1
2002–03	3 905.3	2 392.9	3 857.0	853.9	11 009.1
2003–04	3 957.0	2 734.7	3 236.5	824.3	10 752.6
2004–05	4 072.3	2 837.7	3 408.7	896.2	11 214.9
2005–06	4 091.6	3 999.2	4 559.1	1 041.0	13 690.9
2006–07	4 552.4	4 911.6	1 692.8	1 429.1	12 585.9
2007–08	5 082.0	5 188.3	7.8	1 918.0	12 196.1
2008–09	6 045.1	6 179.7	7.8	1 870.5	14 103.1
2009–10	6 733.1	6 581.9	10.9	2 614.2	15 940.2
2010–11	6 775.2	6 009.4	6.5	2 875.2	15 666.4
2011–12	6 233.6	6 247.3	5.0	2 757.4	15 243.3
2012–13	5 663.3	5 623.8	9.8	2 830.7	14 127.6
2013–14	4 193.9	4 704.3	8.0	2 328.6	11 234.8
2014–15	3 861.0	4 503.0	1.9	1 799.0	10 164.8
2015–16	4 257.0	3 613.9	11.8	2 160.7	10 043.4
2016–17	4 392.6	2 753.8	4.0	2 340.6	9 491.0

Source: ABS (2017a), adjusted by chain volume index.

Table 12.1d Total value of major infrastructure engineering construction work done, adjusted by chain volume index

Financial year	Transport	Energy	Telecommunications	Water	Total major engineering construction work done
			$ million		
1986–87	7 586.8	3 359.0	3 875.8	2 755.8	17 577.4
1987–88	6 806.1	2 825.4	3 560.3	2 462.2	15 654.0
1988–89	6 735.5	2 770.8	3 781.2	2 318.6	15 606.0
1989–90	7 823.9	3 172.2	4 150.3	2 317.8	17 464.2
1990–91	7 857.3	3 235.9	4 239.6	2 686.5	18 019.3
1991–92	7 454.4	3 192.1	3 268.1	2 466.4	16 380.9
1992–93	8 631.9	3 187.2	3 333.5	2 451.5	17 604.1
1993–94	9 957.0	3 163.1	3 064.1	2 503.4	18 687.6
1994–95	9 702.1	3 084.0	3 997.7	2 367.3	19 151.1
1995–96	9 876.1	3 377.3	4 836.8	2 167.4	20 257.6
1996–97	10 853.3	3 146.6	4 731.3	1 572.8	20 304.0
1997–98	12 196.0	3 330.3	4 720.0	1 845.6	22 091.9
1998–99	13 304.7	3 790.2	5 041.3	2 032.5	24 168.8
1999–00	11 852.8	5 057.4	6 359.6	2 936.8	26 206.7
2000–01	10 118.0	5 120.3	6 121.0	2 537.1	23 896.4
2001–02	10 364.2	5 617.3	5 386.5	2 054.5	23 422.5
2002–03	12 333.5	6 308.6	4 801.6	2 423.4	25 867.2
2003–04	14 286.5	7 186.3	4 387.6	3 260.2	29 120.6
2004–05	17 905.6	7 308.2	4 872.3	3 285.3	33 371.3
2005–06	18 819.4	8 614.2	6 173.9	3 351.6	36 959.1
2006–07	19 715.2	10 077.5	5 709.4	3 925.9	39 427.9
2007–08	20 614.4	10 362.5	4 763.8	8 408.3	44 149.2
2008–09	24 692.0	13 159.8	4 102.8	8 215.6	50 170.2
2009–10	24 710.6	13 149.1	4 048.7	9 647.2	51 555.6
2010–11	29 319.9	13 307.8	4 086.2	10 041.9	56 755.8
2011–12	34 167.3	14 781.8	5 042.5	8 256.7	62 248.2
2012–13	34 901.0	18 269.2	5 801.1	7 002.7	65 974.1
2013–14	28 750.8	17 706.7	6 942.9	5 827.8	59 228.2
2014–15	23 469.9	15 212.0	7 395.3	4 335.4	50 412.6
2015–16	21 072.9	11 323.7	8 742.0	4 414.4	45 553.0
2016–17	23 985.0	8 498.0	10 872.0	4 621.4	47 976.5

Source: ABS (2017a), adjusted by chain volume index.

PART T: Transport

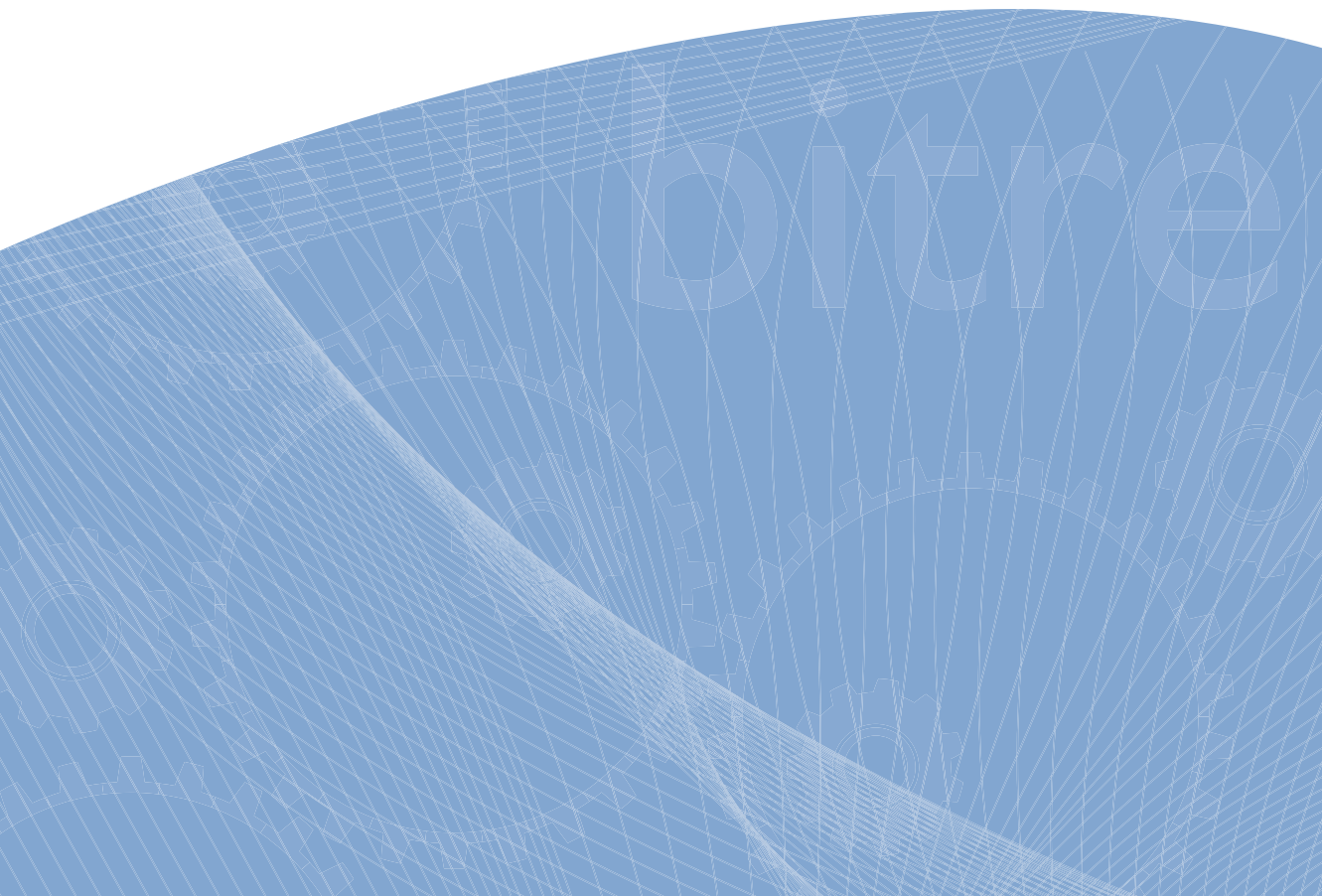
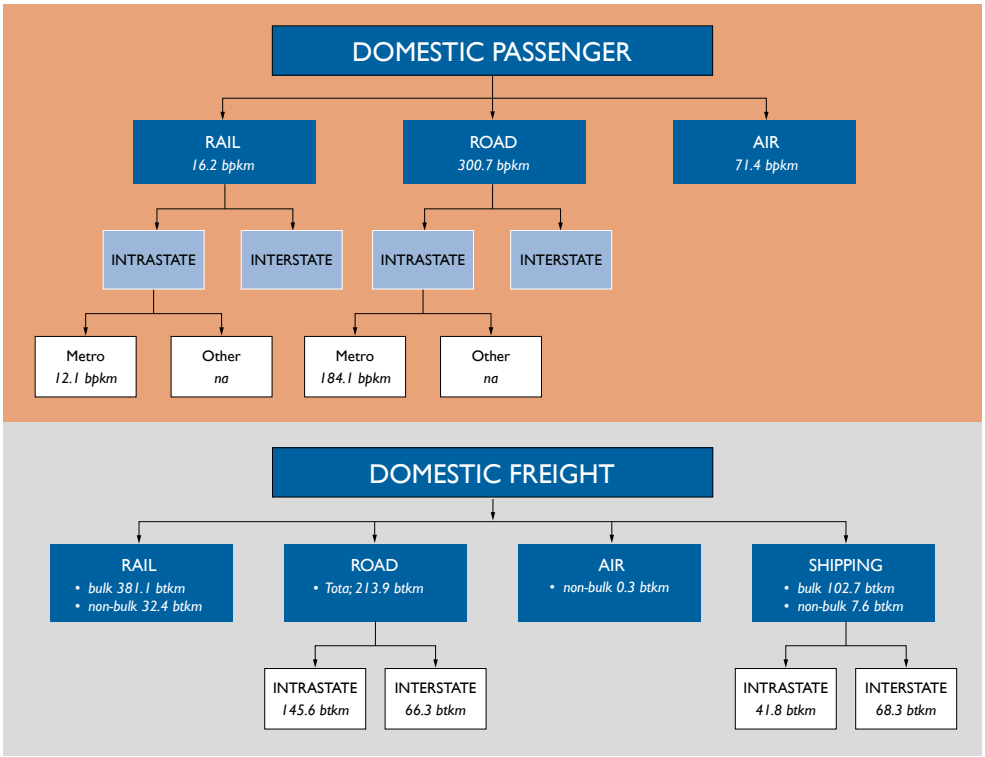


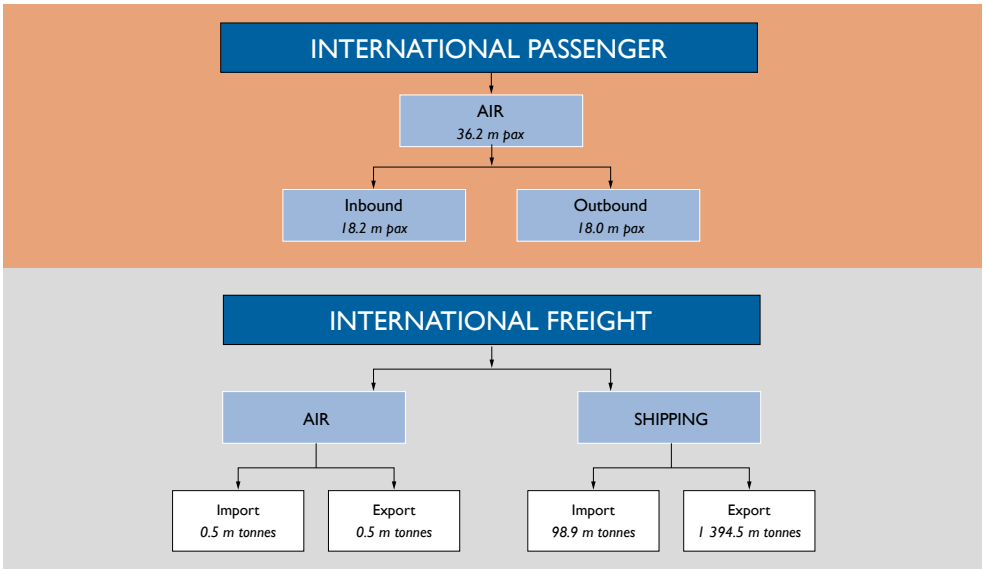
Figure T 1a Australia's domestic transport, 2015-16



Note: Metropolitan refers to the eight capital cities: Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Darwin and Canberra.

Source: BITRE (2017d), BITRE (2017f), BITRE (2017k) and BITRE estimates.

Figure T 1b Australia's international transport, 2015-16

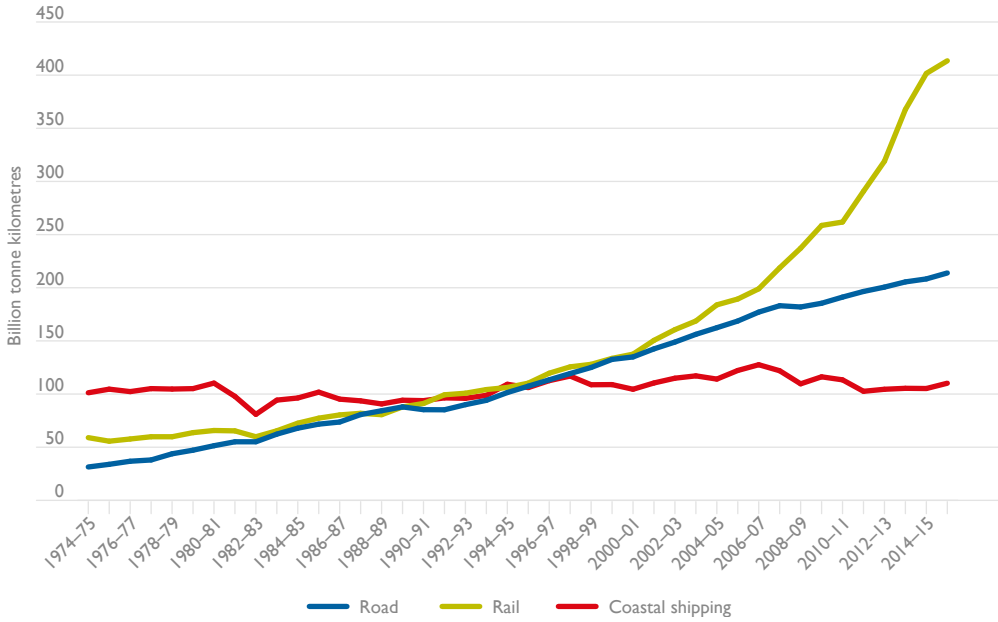


Source: BITRE (2017e) and ABS (2017r).

PART T
Transport

Statistics for Australian transport activity are provided from two perspectives: transportation activity measured in terms of what is being transported (freight or passengers), or transportation activity by mode (road, rail, aviation or shipping).

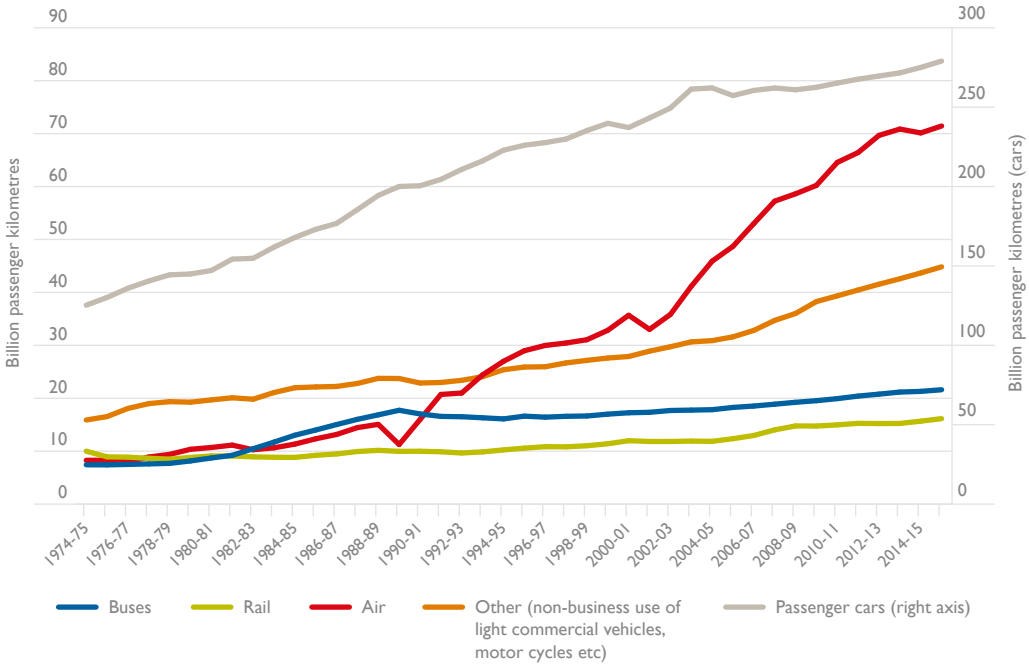
Figure T 2 Australian domestic freight task, by mode of transport



Source: BITRE (2012a) and BITRE estimates.

Freight transport activity is measured in terms of tonne kilometres (the movement of one tonne of freight, one kilometre). The Australian domestic freight task has been increasing strongly for the last 40 years, with road and rail freight now dominating domestic freight activity. The rapid growth in rail freight task has been driven by rail's movement of iron ore in the Pilbara region. Coastal freight has decreased since 2006–07.

Figure T 3 Australian domestic passenger task, by mode of transport



Source: BITRE (2015e) and BITRE estimates.

Passenger transport activity is measured in terms of passenger kilometres (the movement of one passenger, one kilometre). The Australian domestic passenger task is dominated by road transport, mainly passenger cars (right axis). Passenger travel on other modes has increased in recent years, with travel by air increasing rapidly since 2001.

CHAPTER 1
Transport infrastructure

Table T 1.1a Value of transport infrastructure engineering construction work done by the private sector for the private sector, adjusted by chain volume index

Financial year	Roads and bridges	Railways	Ports and harbours	Total major infrastructure engineering construction work done	Transport percentage of total major infrastructure engineering construction work done
		$ million			*per cent*
1986–87	976.4	193.3	363.7	1 533.4	70.47
1987–88	1 371.5	87.6	271.2	1 730.2	71.95
1988–89	1 868.8	42.7	52.9	1 964.4	74.89
1989–90	2 148.0	29.3	115.2	2 292.5	80.38
1990–91	1 894.8	32.2	89.8	2 016.8	75.08
1991–92	1 859.2	59.1	53.1	1 971.5	77.55
1992–93	1 734.3	22.3	57.9	1 814.4	67.59
1993–94	2 038.3	68.1	121.5	2 227.9	66.77
1994–95	1 934.8	49.3	44.1	2 028.2	61.09
1995–96	1 936.7	103.7	41.5	2 081.8	48.35
1996–97	2 534.7	134.4	134.5	2 803.5	62.16
1997–98	3 118.4	283.5	340.6	3 742.5	65.06
1998–99	3 648.1	257.7	315.0	4 220.8	63.54
1999–00	2 847.7	241.7	125.0	3 214.3	45.65
2000–01	1 960.9	138.3	135.3	2 234.5	35.27
2001–02	2 367.4	404.1	154.5	2 926.0	43.74
2002–03	3 685.7	764.0	200.9	4 650.6	51.37
2003–04	5 623.0	382.4	400.4	6 405.8	50.78
2004–05	6 905.5	648.9	1 015.5	8 569.9	59.37
2005–06	7 088.7	612.5	1 105.5	8 806.8	58.81
2006–07	6 314.1	1 152.1	1 172.0	8 638.3	47.64
2007–08	5 579.2	1 694.0	1 108.2	8 381.4	42.88
2008–09	6 401.2	1 248.3	1 272.7	8 922.2	42.74
2009–10	5 164.6	1 405.0	1 526.1	8 095.6	40.78
2010–11	5 532.7	2 212.7	3 002.4	10 747.8	43.84
2011–12	5 708.3	4 189.5	5 517.1	15 414.9	51.37
2012–13	5 338.0	4 409.5	7 238.3	16 985.8	48.80
2013–14	4 436.8	3 826.8	5 327.9	13 591.5	42.50
2014–15	4 720.7	2 845.8	2 362.2	9 928.7	38.27
2015–16	4 492.5	844.3	786.3	6 123.2	31.55
2016–17	4 979.6	537.2	802.7	6 319.5	33.69

Source: ABS (2017a), adjusted by chain volume index.

Table T 1.1b Value of transport infrastructure engineering construction work done by the private sector for the public sector, adjusted by chain volume index

Financial year	Roads and bridges	Railways	Ports and harbours	Transport infrastructure engineering construction work done	Transport percentage of total major infrastructure engineering construction work done
		$ million			*per cent*
1986–87	2 234.9	305.7	262.6	2 803.2	54.30
1987–88	1 639.6	277.9	100.5	2 018.0	53.00
1988–89	1 610.5	85.0	145.0	1 840.4	53.80
1989–90	1 952.6	99.7	76.4	2 128.6	58.01
1990–91	2 089.8	163.9	116.3	2 370.0	52.69
1991–92	2 089.4	177.5	73.7	2 340.6	51.10
1992–93	2 561.1	197.9	176.6	2 935.6	59.21
1993–94	3 035.5	401.0	191.4	3 627.9	62.50
1994–95	2 723.5	551.7	106.9	3 382.0	66.65
1995–96	2 780.1	339.1	112.1	3 231.2	65.26
1996–97	2 822.2	682.4	262.5	3 767.0	68.64
1997–98	3 672.8	737.8	145.1	4 555.7	75.12
1998–99	4 411.2	596.0	160.9	5 168.2	79.76
1999–00	4 403.1	272.9	119.4	4 795.4	69.22
2000–01	4 098.9	170.8	111.7	4 381.3	68.14
2001–02	3 358.7	100.4	241.1	3 700.2	65.34
2002–03	3 244.3	352.1	181.2	3 777.6	65.07
2003–04	2 777.2	965.1	181.4	3 923.7	68.20
2004–05	3 699.8	1 356.5	207.2	5 263.5	68.17
2005–06	4 377.2	1 372.3	171.7	5 921.1	71.39
2006–07	5 411.1	954.0	159.4	6 524.4	74.90
2007–08	6 217.0	697.7	236.3	7 151.0	57.63
2008–09	7 998.1	1 396.8	329.9	9 724.8	64.02
2009–10	7 716.4	1 582.5	582.9	9 881.8	62.68
2010–11	8 885.2	2 179.7	732.0	11 796.9	71.17
2011–12	9 628.4	2 561.9	328.5	12 518.8	73.66
2012–13	9 421.5	2 602.8	227.6	12 251.9	71.89
2013–14	8 102.3	2 429.7	433.4	10 965.4	68.48
2014–15	6 936.9	2 130.9	612.5	9 680.3	67.69
2015–16	7 546.7	2 703.6	442.3	10 692.7	66.41
2016–17	9 530.8	3 468.6	273.6	13 272.9	67.29

Source: ABS (2017a), adjusted by chain volume index.

Table T 1.1c Value of transport infrastructure engineering construction work done by the public sector, adjusted by chain volume index

Financial year	Roads and bridges	Railways	Ports and harbours	Transport infrastructure engineering construction work done	Transport percentage of total major infrastructure engineering construction work done
		$ million			*per cent*
1986–87	2 889.0	288.8	72.3	3 250.1	31.74
1987–88	2 698.2	314.9	44.8	3 057.8	32.39
1988–89	2 685.5	198.0	47.2	2 930.6	30.65
1989–90	2 808.7	535.0	59.0	3 402.8	31.10
1990–91	2 806.4	592.9	71.2	3 470.4	32.03
1991–92	2 483.7	627.9	30.7	3 142.3	33.94
1992–93	3 114.4	733.1	34.4	3 881.9	38.97
1993–94	3 199.1	852.3	49.9	4 101.2	42.96
1994–95	3 116.4	1 136.3	39.1	4 291.8	39.90
1995–96	3 156.0	1 375.2	31.8	4 563.0	41.48
1996–97	2 800.3	1 443.2	39.3	4 282.8	41.56
1997–98	2 940.6	909.7	47.6	3 897.9	37.94
1998–99	2 966.6	869.3	79.8	3 915.7	35.45
1999–00	3 073.0	743.7	26.4	3 843.1	31.40
2000–01	2 786.3	652.3	63.6	3 502.2	31.46
2001–02	2 806.1	831.2	100.7	3 738.0	33.77
2002–03	3 027.0	812.4	65.9	3 905.3	35.47
2003–04	3 018.5	869.1	69.4	3 957.0	36.80
2004–05	2 925.3	1 117.8	29.2	4 072.3	36.31
2005–06	3 099.3	975.0	17.3	4 091.6	29.89
2006–07	3 451.2	1 065.9	35.3	4 552.4	36.17
2007–08	3 760.9	993.3	327.9	5 082.0	41.67
2008–09	4 571.1	1 027.3	446.6	6 045.1	42.86
2009–10	4 350.1	2 160.5	222.5	6 733.1	42.24
2010–11	4 485.7	2 233.3	56.2	6 775.2	43.25
2011–12	4 992.8	1 198.0	42.8	6 233.6	40.89
2012–13	4 886.5	730.1	46.7	5 663.3	40.09
2013–14	3 679.5	455.6	58.8	4 193.9	37.33
2014–15	3 567.5	260.6	32.8	3 861.0	37.98
2015–16	3 975.7	248.5	32.8	4 257.0	42.39
2016–17	3 938.1	394.9	59.7	4 392.6	46.28

Source: ABS (2017a), adjusted by chain volume index.

Table T 1.1d Total value of transport infrastructure engineering construction work done, adjusted by chain volume index

Financial year	Roads and bridges	Railways	Ports and harbours	Transport infrastructure engineering construction work done	Transport percentage of total major infrastructure engineering construction work done
		$ million			*per cent*
1986–87	6100.3	787.8	698.7	7586.8	43.16
1987–88	5709.3	680.4	416.4	6806.1	43.48
1988–89	6164.7	325.6	245.2	6735.5	43.16
1989–90	6909.3	664.1	250.6	7823.9	44.80
1990–91	6791.1	789.0	277.2	7857.3	43.60
1991–92	6432.3	864.5	157.6	7454.4	45.51
1992–93	7409.7	953.3	268.9	8631.9	49.03
1993–94	8272.8	1321.3	362.9	9957.0	53.28
1994–95	7774.8	1737.3	190.0	9702.1	50.66
1995–96	7872.7	1818.0	185.3	9876.1	48.75
1996–97	8157.2	2260.0	436.2	10853.3	53.45
1997–98	9731.8	1930.9	533.3	12196.0	55.21
1998–99	11025.9	1723.1	555.7	13304.7	55.05
1999–00	10323.8	1258.3	270.8	11852.8	45.23
2000–01	8846.1	961.4	310.5	10118.0	42.34
2001–02	8532.2	1335.7	496.3	10364.2	44.25
2002–03	9956.9	1928.6	448.0	12333.5	47.68
2003–04	11418.7	2216.6	651.2	14286.5	49.06
2004–05	13530.6	3123.1	1251.9	17905.6	53.66
2005–06	14565.2	2959.7	1294.5	18819.4	50.92
2006–07	15176.4	3172.1	1366.7	19715.2	50.00
2007–08	15557.1	3385.0	1672.4	20614.4	46.69
2008–09	18970.4	3672.4	2049.2	24692.0	49.22
2009–10	17231.1	5148.0	2331.4	24710.6	47.93
2010–11	18903.6	6625.6	3790.7	29319.9	51.66
2011–12	20329.4	7949.4	5888.4	34167.3	54.89
2012–13	19646.0	7742.3	7512.6	34901.0	52.90
2013–14	16218.6	6712.1	5820.1	28750.8	48.54
2014–15	15225.2	5237.3	3007.5	23469.9	46.56
2015–16	16014.9	3796.5	1261.5	21072.9	46.26
2016–17	18448.4	4400.7	1136.0	23 985.0	50.00

Source: ABS (2017a), adjusted by chain volume index.

Table T 1.2a Road–related expenditure, by Commonwealth, 1998–99 to 2015–16 (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Other	Total Government
					$ million					
1999–00	865.8	415.9	576.6	203.9	267.9	115.9	90.0	71.6	5.1	2 612.6
2000–01	717.6	332.3	562.4	121.1	231.1	85.2	64.9	26.2	3.9	2 144.7
2001–02	802.4	593.9	557.8	162.1	294.9	77.0	62.6	48.5	4.7	2 603.9
2002–03	802.4	493.7	525.8	138.6	257.9	77.0	59.5	28.3	3.5	2 386.7
2003–04	936.0	389.4	558.3	161.6	263.2	68.1	56.7	28.5	3.0	2 464.7
2004–05	1 035.7	542.4	541.2	183.9	293.7	85.7	66.8	30.4	3.4	2 783.3
2005–06	2 281.0	680.7	1 057.5	332.8	765.7	173.9	112.3	40.1	4.5	5 448.4
2006–07	1 166.2	665.9	838.3	223.5	374.0	85.1	55.4	36.5	7.7	3 452.7
2007–08	864.8	652.8	889.8	236.7	421.0	83.7	77.7	22.5	7.4	3 256.4
2008–09	1 766.4	743.0	2 123.7	398.8	521.7	109.0	93.1	30.8	4.8	5 791.3
2009–10	1 818.9	894.9	1 831.7	531.5	433.8	171.9	165.8	45.7	7.1	5 901.2
2010–11	1 648.0	584.1	872.7	209.2	369.3	149.7	85.4	52.8	6.8	3 978.0
2011–12	2 882.0	1 191.4	2 273.2	513.3	674.3	110.0	156.9	54.8	8.0	7 863.9
2012–13	1 327.2	457.6	739.7	196.9	525.9	69.0	99.7	51.4	7.4	3 474.9
2013–14	1 992.5	1 941.4	1 134.3	127.1	388.2	63.9	103.2	78.4	7.4	5 836.5
2014–15	1 825.8	543.7	1 158.5	199.5	763.3	106.3	134.5	87.0	8.0	4 826.6
2015–16	1 988.6	547.9	1 452.7	343.5	473.5	133.9	177.0	42.2	7.7	5 167.0

Source: BITRE estimates, ABS (2017d).

Table T 1.2b Road–related expenditure, by State/Territory, 1998–99 to 2015–16 (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total Government	Total Public Sector
					$ million					
1999–00	2 708.1	1 660.6	1 754.0	400.4	1 062.8	121.2	30.3	33.0	7 770.3	8 358.6
2000–01	3 562.7	1 623.6	2 464.0	488.7	928.2	123.6	71.3	137.1	9 399.0	9 903.3
2001–02	3 017.9	1 101.6	2 203.8	404.0	1 261.8	157.5	65.2	140.3	8 352.2	8 241.5
2002–03	2 960.0	1 976.3	1 290.3	424.1	789.4	180.8	60.3	153.6	7 834.8	7 770.0
2003–04	2 853.3	1 541.2	1 543.6	248.3	884.0	189.4	65.1	160.0	7 484.9	7 788.8
2004–05	3 085.5	1 595.3	1 599.7	343.4	962.1	252.7	60.4	123.2	8 022.3	8 070.9
2005–06	2 085.2	1 430.0	1 208.0	361.6	558.3	151.8	200.7	128.0	6 123.5	6 070.9
2006–07	3 311.2	1 602.9	2 535.0	358.8	1 222.5	186.6	239.2	145.4	9 601.5	9 654.8
2007–08	3 878.9	1 974.5	3 443.7	416.4	1 468.7	216.6	231.9	190.9	11 821.6	12 473.1
2008–09	3 622.0	2 415.4	3 136.2	431.2	1 281.4	180.2	306.4	205.4	11 578.1	12 207.2
2009–10	3 764.9	2 210.3	3 142.2	271.0	1 207.1	235.5	178.1	212.5	11 221.6	11 717.2
2010–11	3 709.2	2 384.5	4 345.9	527.8	1 059.4	261.4	253.9	243.1	12 785.4	13 148.5
2011–12	2 891.0	1 393.2	4 147.4	318.6	970.2	207.2	301.2	219.3	10 448.1	11 240.1
2012–13	4 281.7	1 412.4	6 436.3	774.2	1 624.9	225.7	156.1	234.6	15 145.8	15 423.1
2013–14	3 257.5	996.3	5 405.7	584.6	1 968.3	231.8	214.0	277.3	12 935.5	13 363.2
2014–15	4 369.9	1 918.3	3 949.0	379.4	1 452.2	216.1	222.5	171.5	12 679.0	12 697.6
2015–16	5 281.0	1 998.5	2 201.6	569.2	1 679.2	126.2	244.7	108.8	12 209.1	15 598.0

Note: Total public sector includes general government and public non–financial corporations.
Source: ABS (2017h), BITRE estimates, ABS (2017d).

Table T 1.2c Road–related expenditure, by Local, 1999–00 to 2015–16 (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total Government
					$ million				
1999–00	2 127.8	1 235.5	979.7	262.1	496.1	90.5	29.6	na	5 221.2
2000–01	1 929.4	1 060.3	805.4	248.6	556.5	88.4	14.6	na	4 703.2
2001–02	1 876.6	1 110.8	1 214.9	252.1	275.9	96.0	9.5	na	4 835.9
2002–03	1 734.9	1 059.3	1 223.6	237.4	333.3	94.9	28.2	na	4 711.6
2003–04	1 559.9	1 062.7	1 245.7	247.9	289.2	128.6	29.9	na	4 564.0
2004–05	1 381.5	1 106.5	1 012.0	298.1	389.1	125.2	29.2	na	4 341.6
2005–06	1 292.6	982.9	1 095.2	269.9	212.0	111.2	8.7	na	3 972.5
2006–07	1 238.0	1 074.7	1 115.8	308.1	307.7	135.2	44.6	na	4 224.2
2007–08	1 371.5	1 216.2	1 544.9	333.7	424.0	135.9	20.5	na	5 046.7
2008–09	1 531.1	1 178.6	1 701.2	370.0	555.3	162.9	22.7	na	5 521.7
2009–10	862.3	1 110.1	2 029.2	320.6	582.8	158.0	– 1.1	na	5 062.0
2010–11	1 392.9	1 238.7	2 024.6	335.9	625.9	180.0	6.6	na	5 804.6
2011–12	1 308.3	1 379.7	1 687.7	389.5	568.7	179.6	– 69.5	na	5 444.0
2012–13	1 688.7	1 412.0	1 430.8	401.9	587.2	174.7	– 2.7	na	5 692.7
2013–14	1 788.8	1 356.8	1 164.0	426.7	535.0	150.2	– 31.6	na	5 389.9
2014–15	1 784.2	1 362.4	1 058.4	429.0	608.0	191.7	– 41.9	na	5 391.9
2015–16	1 605.4	1 252.1	1 449.7	355.5	664.3	160.6	– 87.6	na	5 400.0

na*: not applicable.
Source: ABS (2017h), BITRE estimates, ABS (2017d).

Table T 1.2d Road–related expenditure, by All Government, 1999–00 to 2015–16 (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Other	Total Government	Total Public Sector
						$ million					
1999–00	5 701.6	3 312.0	3 310.2	866.3	1 826.7	327.6	149.9	104.5	5.1	15 604.1	16 192.4
2000–01	6 209.6	3 016.2	3 831.7	858.4	1 715.7	297.2	150.9	163.3	3.9	16 246.9	16 751.2
2001–02	5 696.8	2 806.3	3 976.6	818.3	1 832.7	330.5	137.3	188.8	4.7	15 792.0	15 681.3
2002–03	5 497.3	3 529.3	3 039.7	800.0	1 380.6	352.8	148.0	181.9	3.5	14 933.1	14 868.2
2003–04	5 349.2	2 993.3	3 347.6	657.8	1 436.3	386.1	151.8	188.5	3.0	14 513.6	14 817.5
2004–05	5 502.7	3 244.2	3 152.9	825.4	1 644.9	463.6	156.4	153.6	3.4	15 147.2	15 195.8
2005–06	5 658.8	3 093.6	3 360.6	964.2	1 536.0	436.9	321.7	168.1	4.5	15 544.5	15 491.8
2006–07	5 715.3	3 343.5	4 489.1	890.4	1 904.3	406.9	339.2	182.0	7.7	17 278.4	17 331.7
2007–08	6 115.2	3 843.6	5 878.5	986.7	2 313.7	436.2	330.0	213.4	7.4	20 124.7	20 776.2
2008–09	6 919.5	4 336.9	6 961.0	1 200.0	2 358.3	452.0	422.2	236.2	4.8	22 891.1	23 520.2
2009–10	6 446.0	4 215.3	7 003.1	1 123.1	2 223.7	565.5	342.9	258.3	7.1	22 184.9	22 680.4
2010–11	6 750.1	4 207.4	7 243.3	1 072.9	2 054.6	591.0	346.0	295.9	6.8	22 568.0	22 931.1
2011–12	7 081.3	3 964.4	8 108.3	1 221.4	2 213.1	496.8	388.6	274.1	8.0	23 756.0	24 548.0
2012–13	7 297.7	3 282.1	8 606.8	1 373.0	2 738.0	469.4	253.1	286.0	7.4	24 313.4	24 590.7
2013–14	7 038.9	4 294.5	7 704.0	1 138.3	2 891.4	445.9	285.6	355.8	7.4	24 161.9	24 589.6
2014–15	7 980.0	3 824.4	6 166.0	1 007.9	2 823.5	514.1	315.1	258.5	8.0	22 897.5	22 916.1
2015–16	8 875.0	3 798.5	5 104.0	1 268.3	2 817.0	420.6	334.0	151.0	7.7	22 776.1	26 165.0

Note: Total public sector includes general government and public non–financial corporations.
Source: ABS (2017h), BITRE estimates, ABS (2017d).

Table T 1.3 Road-related expenditure by jurisdictions, 2000–01 to 2015–16 (constant 2015–16 prices), adjusted by BITRE Road Construction and Maintenance Price Index

Financial year	Common–wealth Government	State – General Government	State – Public Sector	Local Government	Total Government	Total Public Sector
			$ million			
2000–01	2 153.1	9 435.7	9 942.0	4 721.5	16 310.3	16 816.6
2001–02	2 674.2	8 577.6	8 463.9	4 966.4	16 218.2	16 104.5
2002–03	2 418.8	7 940.4	7 874.6	4 775.1	15 134.3	15 068.6
2003–04	2 429.7	7 378.4	7 678.0	4 499.0	14 307.1	14 606.7
2004–05	2 660.5	7 668.6	7 715.0	4 150.1	14 479.2	14 525.7
2005–06	5 130.8	5 766.6	5 716.9	3 740.9	14 638.3	14 588.7
2006–07	3 244.8	9 023.5	9 073.7	3 969.9	16 238.3	16 288.4
2007–08	2 987.8	10 846.6	11 444.3	4 630.5	18 464.9	19 062.7
2008–09	5 084.0	10 164.1	10 716.4	4 847.3	20 095.4	20 647.7
2009–10	5 350.1	10 173.5	10 622.8	4 589.2	20 112.7	20 562.0
2010–11	3 611.8	11 608.5	11 938.2	5 270.3	20 490.7	20 820.4
2011–12	6 956.3	9 242.3	9 942.8	4 815.7	21 014.3	21 714.9
2012–13	3 099.9	13 511.3	13 758.7	5 078.4	21 689.6	21 937.0
2013–14	5 304.5	11 756.3	12 145.0	4 898.5	21 959.3	22 348.0
2014–15	4 530.8	11 901.9	11 919.4	5 061.4	21 494.1	21 511.6
2015–16	5 167.0	12 209.1	15 598.0	5 400.0	22 776.1	26 165.0

Source: ABS (2017h), BITRE (2015a), BITRE estimates.

Table T 1.4a Selected road–related taxes and charges (Constant 2015–16 prices, adjusted by ABS Consumer Price Index)

	Australian Government						State and Territory governments			
Financial Year	"Net road–related petroleum products excise"	Road–related Goods and Service Tax (GST)	Road–related Fringe Benefits Tax (FBT)	"Federal Interstate Registration Scheme (FIRS) "	Luxury car tax	Passenger motor vehicles customs duty	Vehicle registration fees	Driver's licence fees	Stamp duty	Tolls
					$ million					
1997–98	13 698.0	na*	2 402.9	28.7	na*		3 696.3	358.5	2 038.2	223.0
1998–99	13 761.8	na*	2 437.9	30.1	na*		4 127.5	308.0	2 105.3	435.1
1999–00	13 861.5	na*	2 451.1	34.1	na*		3 943.6	347.6	2 129.3	562.4
2000–01	13 036.6	2 554.5	2 431.9	39.1	251.4		3 893.5	372.8	2 040.9	691.4
2001–02	13 018.4	2 513.6	2 296.2	44.8	316.2		3 987.2	342.1	2 151.7	860.2
2002–03	13 164.0	2 493.1	2 201.4	50.0	375.0		4 157.0	327.3	2 355.6	918.3
2003–04	12 670.7	2 643.4	2 160.6	55.7	451.6	2 098.2	4 398.5	356.3	2 559.3	993.9
2004–05	12 442.4	2 660.7	2 164.1	57.1	394.7	1 850.1	4 631.3	415.5	2 540.1	1 026.0
2005–06	12 168.4	2 721.6	2 131.6	64.2	411.9	1 448.7	4 679.7	400.2	2 466.3	1 278.4
2006–07	12 229.6	3 050.8	2 012.0	64.0	461.1	1 561.6	4 874.1	314.5	2 498.8	1 421.1
2007–08	12 011.5	2 956.3	1 825.1	65.4	538.9	1 687.9	4 894.3	290.4	2 662.1	1 394.8
2008–09	11 619.7	3 354.5	1 715.5	63.9	439.6	1 327.1	5 027.0	345.5	2 368.9	1 402.7
2009–10	11 538.5	3 444.1	1 597.1	70.7	550.8	1 401.0	5 530.9	370.0	2 419.1	1 634.3
2010–11	11 389.6	3 813.4	1 516.2	82.7	530.8	857.8	5 667.2	392.9	2 401.5	1 791.3
2011–12	11 368.3	3 966.9	1 455.3	89.4	477.7	978.2	5 918.1	422.1	2 469.9	1 934.4
2012–13	11 396.2	4 052.4	1 407.4	81.3	451.2	944.8	6 273.0	453.1	2 619.3	1 991.2
2013–14	11 178.1	4 119.1	1 351.7	77.4	477.4	948.7	6 474.8	508.9	2 529.3	2 045.6
2014–15	11 184.1	3 987.7	1 247.3	73.6	532.2	742.1	6 816.1	530.8	2 560.0	2 296.7
2015–16	10 976.2	4 015.8	1 103.0	68.8	609.0	614.0	7 011.0	535.4	2 669.5	2 673.9

Note: This table excludes items that raise relatively small amounts of revenue.

na*: not applicable.

Source: ATO (2017a), ATO (2017b), Treasury (2017), State/Territory road agencies, private toll road operators, ABS (2017p), ABS (2017d).

Table T 1.4b Gross excise on petroleum products and fuel tax credits (Constant 2015–16 prices, adjusted by CPI)

Financial year	Excise on petroleum products				Fuel tax credits
	Petrol	Diesel	Other petroleum products	Total (excluding crude and condensate)	
			$ million		
2008–09	7578	7837	1608	17023	5923
2009–10	7182	7841	2089	17112	5706
2010–11	6582	8273	2331	17185	5662
2011–12	6659	9085	2053	17797	5987
2012–13	6402	9069	2433	17903	5728
2013–14	6150	8925	2489	17564	5884
2014–15	6174	8965	2341	17480	6093
2015–16	6141	9656	1671	17468	6082

Source: ATO (2017a).

Table T 1.4c Road–related taxes and charges, New South Wales (Constant 2015–16 prices, adjusted by CPI)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty	Tolls
		$ million		
2007–08	1794.0	110.1	723.4	763.1
2008–09	1795.8	135.4	627.9	756.0
2009–10	1874.0	166.4	670.8	756.6
2010–11	2018.2	177.6	652.7	807.7
2011–12	2085.2	134.9	644.5	831.9
2012–13	2178.5	122.2	674.7	821.9
2013–14	2234.4	135.7	685.4	884.2
2014–15	2330.2	143.6	717.1	1010.4
2015–16	2425.3	149.4	786.0	1173.8

Source: NSW Roads and Maritime Services data (2017), Private toll road operators, ABS (2017p).

Table T 1.4d Road–related taxes and charges, Victoria (Constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty	Tolls
		$ million		
2007–08	915.8	35.4	690.9	437.4
2008–09	937.6	39.9	602.2	430.7
2009–10	975.4	39.9	654.8	643.7
2010–11	1011.7	58.2	641.7	701.8
2011–12	1077.6	73.6	632.6	773.4
2012–13	1229.6	82.7	673.6	795.1
2013–14	1253.1	130.3	681.3	835.3
2014–15	1400.1	134.0	727.7	885.7
2015–16	1439.5	133.3	777.0	999.3

Source: VicRoads data (2017), Private toll road operators.

Table T 1.4e Road–related taxes and charges, Queensland (Constant 2015–16 prices, adjusted by CPI)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty	Tolls
		$ million		
2007–08	1170.7	60.3	485.9	194.4
2008–09	1224.0	68.4	506.3	216.0
2009–10	1436.5	69.9	454.8	234.0
2010–11	1480.8	68.0	478.7	281.8
2011–12	1556.1	96.6	499.4	329.0
2012–13	1581.4	132.2	539.1	374.2
2013–14	1599.2	140.4	501.2	326.1
2014–15	1601.0	147.8	494.7	400.6
2015–16	1641.3	145.1	504.0	500.8

Source: Department of Transport and Main Roads Queesnsland data (2017), Private toll road operators.

Table T 1.4f Road–related taxes and charges, South Australia (Constant 2015–16 prices, adjusted by CPI)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty
		$ million	
2007–08	276.1	28.3	178.4
2008–09	287.3	42.9	162.5
2009–10	299.8	30.9	165.7
2010–11	314.6	30.0	162.9
2011–12	323.2	56.5	156.0
2012–13	338.1	55.6	157.8
2013–14	352.9	36.1	161.9
2014–15	353.9	35.6	158.2
2015-16	357.8	36.3	158.9

Source: Department of Planning, Transport and Infrastructure (SA) data (2017).

Table T 1.4g Road–related taxes and charges, Western Australia (Constant 2015–16 prices, adjusted by CPI)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty
		$ million	
2007–08	492.4	37.8	473.8
2008–09	535.1	41.2	371.8
2009–10	682.1	40.2	379.4
2010–11	579.1	39.0	374.6
2011–12	608.0	38.1	397.6
2012–13	652.9	38.2	427.9
2013–14	708.4	44.1	404.6
2014–15	815.4	48.6	366.9
2015–16	831.2	48.2	348.7

Source: Department of Transport (WA) data (2017).

Table T 1.4h Road–related taxes and charges, Tasmania (Constant 2015–16 prices, adjusted by CPI)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty
		$ million	
2007–08	98.9	8.4	49.4
2008–09	97.0	8.2	44.4
2009–10	102.8	10.3	36.6
2010–11	105.3	7.8	36.6
2011–12	105.1	9.7	85.6
2012–13	112.3	9.5	91.1
2013–14	169.1	9.3	40.2
2014–15	156.0	8.4	40.9
2015–16	158.1	8.1	43.4

Note 2015–16 vehicle registration fees includes motor tax, vehicle registration fees, motor vehicle fire levy, road safety levy, motor accident insurance board (MAIB) premiums.
Source: Department of Treasury and Finance (TAS) data (2017).

Table T 1.4i Road–related taxes and charges, Northern Territory (Constant 2015–16 prices, adjusted by CPI)

Financial Year	Vehicle registration fees	Driver's licence fees	Stamp duty
		$ million	
2007–08	63.9	2.5	26.5
2008–09	64.1	2.3	23.4
2009–10	67.9	2.7	24.0
2010–11	69.4	2.7	22.2
2011–12	71.4	2.7	23.8
2012–13	85.5	2.8	27.5
2013–14	47.8	3.3	25.2
2014–15	47.0	3.6	24.6
2015–16	48.6	4.4	22.7

Source: Department of Treasury and Finance (NT) data (2017).

Table T 1.4j Road–related taxes and charges, Australian Capital Territory (Constant 2015–16 prices, adjusted by CPI)

Financial year	Vehicle registration fees	Driver's licence fees	Stamp duty
		$ million	
2007–08	82.5	7.6	33.8
2008–09	86.0	7.3	30.4
2009–10	92.3	9.7	33.1
2010–11	88.2	9.5	32.1
2011–12	91.4	9.9	30.3
2012–13	94.6	9.7	27.5
2013–14	110.0	9.7	29.5
2014–15	112.4	9.2	30.0
2015–16	109.3	10.6	28.8

Sources: ACT Government data (2017).

Table T 1.5 Arterial road and bridge maintenance expenditure, constant 2015–16 prices, adjusted by BITRE Road Construction and Maintenance Price Index—Road maintenance sub–index

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				$ million				
2000–01	596.9	256.7	364.2	73.5	213.2	39.2	39.8	19.1
2001–02	547.0	298.5	364.5	69.9	183.0	41.0	35.3	14.7
2002–03	550.7	293.1	321.5	69.2	213.4	30.6	22.4	20.7
2003–04	553.8	280.1	391.2	74.4	212.6	35.4	26.5	12.1
2004–05	569.9	245.0	385.9	88.4	198.1	33.3	25.3	10.9
2005–06	527.9	231.9	400.2	89.2	213.3	46.6	26.8	9.6
2006–07	532.3	250.0	464.9	77.0	254.5	44.7	33.7	10.9
2007–08	577.7	276.6	475.1	87.1	246.8	35.7	26.3	12.2
2008–09	687.8	270.5	502.9	109.7	287.9	34.3	44.9	8.9
2009–10	666.3	267.1	581.0	103.3	278.6	44.3	29.6	17.6
2010–11	708.8	356.1	603.6	75.5	236.7	54.1	53.8	12.6
2011–12	756.1	301.4	741.7	85.6	166.0	45.3	44.4	11.7
2012–13	664.1	257.8	1 031.2	78.8	240.1	58.9	54.1	12.5
2013–14	862.1	249.0	1 049.0	76.5	297.7	46.3	53.1	9.9
2014–15	912.2	319.7	590.6	69.2	288.4	53.0	64.5	12.0
2015–16	872.3	310.8	473.2	102.7	286.6	48.1	61.9	13.0
2016–17	930.1	340.5	700.6	84.7	311.0	51.0	56.0	12.5

Note: For this table, arterial roads are defined as by the NTC, which differs from that used in Table T 1.6 and between each state. The list of road classifications used by the NTC is included in the endnotes. Road and bridge maintenance figures exclude Commonwealth–funded Natural Disaster Relief and Recovery Arrangements (NDRRA) and Insurance–related expenditure since 2010–11.

Source: NTC (2017a), BITRE (2015a), BITRE estimates.

Table T 1.6a Total road length by state/territory, by road type[1, 2, 3, 4, 5, 6, 7, 8]

	Urban					Non–urban					
	Highway	Arterial	Local	Busway	Total	Highway	Arterial	Local	Busway	Total	Total
						kilometres					
New South Wales											
2010	1 463.7	3 823.9	33 191.1	na	38 478.7	10 172.1	70 354.0	87 393.8	na	167 919.9	206 398.6
2011	1 470.1	3 947.2	33 405.0	na	38 822.3	10 272.2	70 010.1	87 906.0	na	168 188.3	207 010.6
2012	1 491.2	3 968.3	33 047.6	49.5	38 556.6	10 329.1	69 972.5	87 416.6	0.0	167 718.2	206 274.8
2013	1 491.7	4 013.4	33 339.1	51.8	38 896.0	10 353.1	69 847.0	87 112.5	0.0	167 312.6	206 208.6
2014	1 498.0	4 069.4	33 585.5	51.8	39 204.7	10 355.9	69 836.9	87 414.3	0.0	167 607.1	206 811.8
2015	1 501.3	4 064.5	33 832.4	52.6	39 450.8	10 348.7	69 867.0	87 572.9	0.0	167 788.6	207 239.4
Victoria											
2010	1 631.2	4 984.1	27 956.8	na	34 572.1	6 614.5	30 578.7	71 861.2	na	109 054.4	143 626.5
2011	1 634.1	4 982.6	28 626.3	na	35 243.0	6 591.5	30 605.3	71 764.7	na	108 961.5	144 204.5
2012	1 652.9	5 012.7	29 182.0	0.0	35 847.6	6 626.2	30 620.1	71 332.8	0.0	108 579.1	144 426.7
2013	1 669.1	5 060.8	29 293.4	0.0	36 023.3	6 623.6	30 625.2	71 731.0	0.0	108 979.8	145 003.1
2014	1 671.0	5 057.4	29 432.7	0.0	36 161.1	6 643.9	30 633.9	71 874.3	0.0	109 152.1	145 313.2
2015	1 672.6	5 060.8	29 683.1	0.0	36 416.5	6 644.3	30 636.2	72 039.3	0.0	109 319.8	145 736.3
Queensland											
2010	912.4	2 188.9	25 792.9	na	28 894.2	10 879.2	19 055.2	170 713.0	na	200 647.4	229 541.6
2011	950.6	2 214.4	26 095.5	na	29 260.5	10 880.4	19 029.7	169 582.1	na	199 492.2	228 752.7
2012	983.7	2 281.1	26 238.0	28.7	29 531.5	10 887.2	19 051.2	167 603.2	0.0	197 541.6	227 073.1
2013	975.7	2 286.4	26 398.7	29.4	29 690.2	10 888.5	19 060.7	164 128.9	0.0	194 078.1	223 768.3
2014	954.8	2 270.8	26 618.6	34.7	29 878.9	10 885.4	19 053.6	163 793.7	0.0	193 732.7	223 611.6
2015	993.2	2 320.5	26 744.1	33.5	30 091.3	10 892.6	19 063.8	163 340.8	0.0	193 297.2	223 388.5
South Australia											
2010	273.6	1 636.7	10 595.6	na	12 505.9	4 347.5	12 801.8	67 051.2	na	84 200.5	96 706.4
2011	252.1	1 692.8	10 606.3	na	12 551.2	3 229.0	13 902.7	66 625.9	na	83 757.6	96 308.8
2012	252.5	1 694.3	10 607.2	12.4	12 566.4	3 231.2	13 978.1	67 262.8	0.0	84 472.1	97 038.5
2013	252.8	1 693.3	10 703.8	12.4	12 662.3	3 231.2	13 974.4	67 313.2	0.0	84 518.8	97 181.1
2014	254.9	1 690.2	10 739.1	12.4	12 696.6	3 231.0	13 957.1	66 959.8	0.0	84 147.9	96 844.5
2015	273.7	1 702.3	10 729.6	12.1	12 717.7	3 231.0	13 961.5	67 019.5	0.0	84 212.0	96 929.7
Western Australia											
2010	1 266.3	1 286.7	15 652.6	na	18 205.6	10 238.3	15 785.5	111 400.2	na	137 424.0	155 629.6
2011	1 441.2	1 555.5	15 302.2	na	18 298.9	9 917.7	15 120.2	114 429.1	na	139 467.0	157 765.9
2012	1 392.6	1 626.0	15 325.9	13.6	18 358.1	9 869.3	15 175.7	113 990.6	5.8	139 041.4	157 399.5
2013	1 413.7	1 618.1	15 467.4	12.8	18 512.0	9 904.1	15 175.2	114 105.6	5.8	139 190.7	157 702.7
2014	1 428.9	1 606.1	15 661.5	12.8	18 709.3	9 946.1	15 133.5	113 761.8	5.8	138 847.2	157 556.5
2015	1 432.5	1 638.7	15 869.9	13.4	18 954.5	9 930.8	15 192.5	113 319.7	5.8	138 448.8	157 403.3
Tasmania											
2010	349.1	538.1	3 023.9	na	3 911.1	1 518.6	3 064.3	10 817.9	na	15 400.8	19 311.9
2011	350.9	537.9	3 030.9	na	3 919.7	1 516.3	3 090.9	11 270.8	na	15 878.0	19 797.7
2012	349.4	568.2	3 017.5	0.0	3 935.1	1 530.4	3 083.2	11 554.8	0.0	16 168.4	20 103.5
2013	349.3	569.0	3 033.1	0.0	3 951.4	1 530.3	3 084.7	11 535.2	0.0	16 150.2	20 101.6
2014	349.0	567.8	3 037.4	0.0	3 954.2	1 530.4	3 235.8	11 377.6	0.0	16 143.8	20 098.0
2015	348.6	563.4	3 036.0	0.0	3 948.0	1 529.4	3 289.8	11 184.8	0.0	16 004.0	19 952.0
Northern Territory											
2010	43.2	237.2	867.1	na	1 147.5	6 553.3	9 737.1	1 594.0	na	17 884.4	19 031.9
2011	23.9	302.9	839.9	na	1 166.7	6 556.5	10 144.0	1 477.3	na	18 177.8	19 344.5
2012	23.5	309.6	910.5	0.0	1 243.6	2 648.2	13 560.5	1 772.7	0.0	17 981.4	19 225.0
2013	23.5	309.5	925.6	0.0	1 258.6	2 647.9	13 594.4	1 802.6	0.0	18 044.9	19 303.5
2014	23.5	309.6	939.0	0.0	1 272.1	2 648.2	13 610.5	1 727.8	0.0	17 986.5	19 258.6
2015	23.5	310.7	946.5	0.0	1 280.7	2 649.8	13 607.3	1 744.3	0.0	18 001.4	19 282.1
Australian Capital Territory											
2010	33.4	300.7	2 589.6	na	2 923.7	38.0	53.7	440.2	na	531.9	3 455.6
2011	32.0	310.0	2 629.6	na	2 971.6	36.6	55.6	448.1	na	540.3	3 511.9
2012	28.9	308.7	2 650.5	0.0	2 988.1	36.3	57.8	277.9	0.0	372.0	3 360.1
2013	28.5	314.2	2 669.1	0.0	3 011.8	36.9	55.5	287.6	0.0	380.0	3 391.8

	Urban					Non–urban					
	Highway	Arterial	Local	Busway	Total	Highway	Arterial	Local	Busway	Total	Total
						kilometres					
2014	29.3	328.4	2 692.9	0.0	3 050.6	37.2	61.2	277.5	0.0	375.9	3 426.5
2015	30.6	327.7	2 698.6	0.0	3 056.9	37.4	62.1	291.3	0.0	390.8	3 447.7
Other Territories											
2010	0.0	0.0	0.0	na	0.0	0.0	12.2	141.9	na	154.1	154.1
2011	0.0	0.0	0.0	na	0.0	0.0	12.2	175.3	na	187.5	187.5
2012	0.0	0.0	0.0	0.0	0.0	0.0	18.7	162.0	0.0	180.7	180.7
2013	0.0	0.0	0.0	0.0	0.0	0.0	18.7	163.2	0.0	181.9	181.9
2014	0.0	0.0	0.0	0.0	0.0	0.0	18.7	163.1	0.0	181.8	181.8
2015	0.0	0.0	0.0	0.0	0.0	0.0	18.7	163.2	0.0	181.9	181.9
Australia											
2010	5 972.8	14 996.1	119 669.7	na	140 638.6	50 361.6	161 442.6	521 413.5	na	733 217.7	873 856.3
2011	6 154.9	15 543.2	120 535.9	na	142 234.0	49 000.0	161 970.7	523 679.4	na	734 650.1	876 884.1
2012	6 174.8	15 768.9	120 979.2	104.2	143 027.1	45 157.9	165 517.8	521 373.3	5.8	732 054.8	875 081.9
2013	6 204.2	15 864.8	121 830.2	106.4	144 005.6	45 215.7	165 435.7	518 179.8	5.8	728 837.0	872 842.6
2014	6 209.4	15 899.8	122 706.7	111.7	144 927.6	45 278.0	165 541.2	517 349.8	5.8	728 174.8	873 102.4
2015	6 275.9	15 988.6	123 540.2	111.6	145 916.3	45 264.0	165 698.9	516 675.9	5.8	727 644.6	873 560.9

[1, 2, 3, 4, 5, 6, 7, 8] See end notes.

na: not available.

Source: PSMA (2010, 2011, 2012, 2013, 2014, 2015), OpenStreetMap (2012, 2014), ABS (2010), ABS (2012a), BITRE estimates.

Table T 1.6b Total locally controlled road length by state/territory, by road type

	NSW	Vic	Qld	SA	WA	Tas	NT	Australia
				kilometres				
2012–13	145,950	129,105	153,187	77,849	128,162	14,324	13,872	662,449
2013–14	146,210	129,464	152,827	77,786	128,003	14,219	13,675	662,184
2014–15	146,191	129,881	153,207	77,924	127,796	14,260	12,957	662,216

Source: DIRD data.

Table T 1.6c Toll road length

Type	Name	State	Length (km)
Harbour/river crossing	Sydney Harbour Bridge	NSW	1.1
	Sydney Harbour Tunnel	NSW	2.7
	Go Between Bridge	QLD	0.3
Tunnels or roads with tunnels	Cross City Tunnel	NSW	2.1
	Lane Cove Tunnel	NSW	3.8
	Clem7	QLD	6.8
	Airport Link	QLD	6.7
	Legacy Way	QLD	5.7
Intra–city links	M1 (Eastern Distributor)	NSW	6.0
	M2 (Hills)	NSW	21.0
	M7 (Westlink)	NSW	40.0
	M5 (South–West)	NSW	22.0
	CityLink	VIC	22.0
	EastLink	VIC	39.0
	Gateway Motorway	QLD	23.1
	Logan Motorway	QLD	38.7
Total			241.0

Source: BITRE (2016a).

Table T 1.7 Selected road and bridge construction and maintenance price and cost indexes, for Australia and for states and territories

Financial year	NSW	VIC	QLD	SA	WA	Australia (BITRE)	Australia (ABS)
			index (2011–12 = 100)				
1998–99	60.2	56.9	56.5	56.3	59.2		58.1
1999–00	62.0	59.3	58.7	58.3	62.0		60.2
2000–01	63.8	62.4	60.8	61.8	64.8	64.9	62.6
2001–02	64.8	64.5	60.9	62.9	66.0	65.2	63.7
2002–03	69.1	68.3	64.6	65.7	68.4	68.1	67.4
2003–04	72.0	71.1	68.1	67.3	69.9	71.7	70.1
2004–05	75.2	72.2	72.1	70.2	73.2	75.7	73.0
2005–06	78.8	75.4	77.5	74.5	79.3	79.3	77.4
2006–07	82.4	78.7	82.4	77.7	83.8	81.8	81.3
2007–08	86.1	82.4	88.4	81.7	89.5	86.6	85.7
2008–09	89.6	87.9	96.6	89.4	94.4	93.4	91.2
2009–10	91.9	89.5	96.1	92.7	93.8	92.5	92.4
2010–11	94.3	93.9	98.2	95.7	95.3	95.2	95.2
2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012–13	103.6	103.8	103.9	103.4	103.1	101.4	103.6
2013–14	106.7	106.6	106.3	107.2	103.9	102.2	106.1
2014–15	108.7	107.3	106.0	109.6	104.3	100.7	106.8
2015–16	109.6	107.5	106.4	110.6	103.4	95.8	107.2
2016–17	110.6	104.6	107.0	112.8	104.3	95.2	107.4

Note: Data are not available for missing years.
2016–17 BITRE index is preliminary.

Source: For state and national indexes – ABS (2017e); for national (BITRE) index – BITRE estimates.

Table T 1.8a Rail–related expenditure, by Commonwealth Government (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW[b]	VIC	QLD	SA[b]	WA	TAS	NT	ACT	Non-State	Total Government	Total Public Sector[a]
						$ million					
1998–99	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	15.5	16.2	824.2
1999–00	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0	79.0	92.0	946.9
2000–01	0.0	0.0	0.0	0.0	0.0	17.4	80.9	0.0	69.3	166.2	815.2
2001–02	0.0	0.0	4.2	0.0	0.0	1.1	157.4	0.0	0.0	162.7	442.1
2002–03	0.0	0.0	3.2	0.0	0.0	0.1	19.3	0.0	0.0	22.6	152.8
2003–04	194.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	804.8	805.1	123.4
2004–05	0.2	0.0	0.2	26.6	12.6	0.0	16.6	0.0	132.5	228.0	564.2
2005–06	1.6	0.0	0.0	22.1	0.0	0.0	0.0	0.0	346.5	388.2	786.6
2006–07	- 1.1	31.6	0.0	26.5	0.0	2.0	0.0	0.0	0.1	64.9	1 075.5
2007–08	23.9	113.9	30.1	3.9	33.9	18.4	0.0	0.0	0.0	251.6	1 489.0
2008–09	160.9	316.0	40.0	33.9	24.0	37.3	1.0	0.0	493.5	1 140.9	1 697.7
2009–10	- 30.2	51.0	449.6	63.0	17.5	54.3	1.9	0.0	876.4	1 507.7	2 326.6
2010–11	6.0	339.3	0.0	163.0	66.7	16.0	0.0	0.0	618.7	1 212.2	2 064.6
2011–12	73.2	520.7	32.5	337.3	134.2	29.8	0.0	0.0	443.4	1 571.9	2 828.4
2012–13	147.7	660.7	36.7	- 17.9	176.7	46.5	0.0	0.0	224.2	1 275.4	2 884.1
2013–14	422.7	1 164.0	70.5	0.6	23.7	34.7	0.0	0.0	0.0	1 718.1	2 371.7
2014–15	304.9	145.9	251.4	0.0	0.0	4.7	0.0	0.0	0.0	751.6	1 368.6
2015–16	100.0	0.1	102.0	0.0	0.0	11.3	0.0	0.0	0.0	284.6	878.0

[a] Total public sector includes general government and public non-financial corporations.

[b] Negative expenditure represents money recovered from state.

Source: ABS (2017d), ABS (2017h), BITRE estimates.

Table T 1.8b Rail–related expenditure, by State/Territory Government (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW	VIC	QLD	SA[c]	WA[c]	TAS[c]	NT[c]	ACT	Total Government	Total Public Sector[a]
					$ million					
1998-99	1 475.9	105.4	881.7	47.9	204.5	- 0.1	20.8	0.0	2 736.2	7 114.3
1999-00	1 134.1	1 505.4	1 074.8	37.4	163.8	- 13.0	17.2	1.6	3 921.2	8 781.1
2000-01	1 496.5	1 475.9	965.3	79.5	248.7	- 16.0	111.8	0.0	4 361.6	5 593.1
2001-02	1 463.6	1 347.7	887.0	47.2	61.5	0.3	277.5	0.0	4 084.9	7 890.4
2002-03	1 682.0	1 230.6	928.8	77.8	156.9	- 0.1	12.6	0.0	4 088.6	8 577.5
2003-04	1 585.0	3 210.3	919.3	40.7	177.7	0.0	6.8	0.0	5 939.7	7 414.0
2004-05	1 897.6	1 701.8	1 022.2	- 18.6	123.8	5.3	- 11.3	0.0	4 720.9	8 479.7
2005-06	2 222.2	2 083.9	985.5	- 1.6	128.3	3.8	0.0	0.0	5 422.1	8 347.7
2006-07	3 367.3	2 361.3	1 095.5	29.6	104.7	0.5	0.0	0.0	6 958.8	10 326.4
2007-08	2 421.2	2 232.3	1 075.5	15.4	100.0	6.9	0.0	0.0	5 851.2	10 516.3
2008-09	3 134.0	1 890.3	594.8	149.6	67.2	37.5	- 1.0	0.0	5 872.5	11 994.3
2009-10	3 760.0	2 980.6	48.6	356.4	76.2	5.1	- 1.9	0.0	7 225.0	12 741.8
2010-11	2 918.6	2 548.7	190.6	165.0	6.4	25.0	21.1	0.0	5 875.4	11 731.7
2011-12	3 338.0	2 680.4	386.7	118.8	- 89.8	- 2.7	0.0	0.0	6 431.4	10 021.3
2012-13	3 535.0	2 720.2	928.2	521.0	- 128.0	- 25.3	0.0	0.0	7 551.1	9 017.6
2013-14	3 604.1	2 022.3	1 132.9	238.7	20.6	- 9.0	0.0	8.2	7 017.8	6 841.7
2014-15	3 691.6	4 628.2	1 520.7	114.6	38.5	17.6	0.0	23.3	10 034.5	7 255.4
2015-16	1 507.0	5 048.0	1 581.0	59.0	40.0	35.8	0.0	18.0	8 288.7	10 429.4

[a] Total public sector includes general government and public non-financial corporations.

[c] Negative values are due to some mismatch between Commonwealth expenditure, and reported state expenditure from the ABS Government Financial Statistics.

Source: ABS (2017d), ABS (2017h), BITRE estimates.

Table T 1.8c Rail–related expenditure, by All Government (constant 2015–16 prices, adjusted by ABS Consumer Price Index)

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total Government [d]	Total Public Sector [a, e]	Public Corporations
						$ million					
1998–99	1 475.9	105.4	881.7	47.9	204.5	3.2	20.8	0.0	2 752.4	8 021.9	7 938.6
1999–00	1 134.1	1 505.4	1 074.8	37.4	163.8	1.6	17.2	1.6	4 013.2	9 453.3	9 727.9
2000–01	1 496.5	1 475.9	965.3	79.5	248.7	1.5	192.8	0.0	4 527.9	5 415.0	6 408.3
2001–02	1 463.6	1 347.7	891.3	47.2	61.5	1.4	434.9	0.0	4 247.6	6 884.3	8 332.4
2002–03	1 682.0	1 230.6	932.0	77.8	156.9	0.0	31.9	0.0	4 111.2	8 384.8	8 730.3
2003–04	1 779.5	3 210.3	919.6	40.7	177.7	0.0	6.8	0.0	6 744.9	8 087.6	7 537.4
2004–05	1 897.8	1 701.8	1 022.4	7.9	136.4	5.3	5.3	0.0	4 948.9	9 316.9	9 043.9
2005–06	2 223.7	2 083.9	985.5	20.5	128.3	3.8	0.0	0.0	5 810.3	9 757.3	9 134.3
2006–07	3 366.1	2 392.8	1 095.5	56.1	104.7	2.5	0.0	0.0	7 023.7	11 844.5	11 401.9
2007–08	2 445.1	2 346.2	1 105.6	19.3	133.8	25.3	0.0	0.0	6 102.9	12 217.1	12 005.3
2008–09	3 294.9	2 206.3	634.9	183.6	91.2	74.8	0.0	0.0	7 013.4	15 043.3	13 692.0
2009–10	3 729.8	3 031.6	498.2	419.4	93.7	59.4	0.0	0.0	8 732.7	14 438.1	15 068.4
2010–11	2 924.6	2 888.0	190.6	328.0	73.1	41.0	21.1	0.0	7 087.6	14 431.1	13 796.3
2011–12	3 411.2	3 201.1	419.2	456.1	44.4	27.1	0.0	0.0	8 003.3	12 587.6	12 849.7
2012–13	3 682.7	3 380.9	964.9	503.1	48.7	21.2	0.0	0.0	8 826.5	10 967.7	11 901.8
2013–14	4 026.8	3 186.4	1 203.4	239.2	44.3	25.8	0.0	8.2	8 735.9	8 791.9	9 213.5
2014–15	3 996.4	4 774.0	1 772.1	114.6	38.5	22.3	0.0	23.3	10 786.1	8 644.7	8 624.1
2015–16	1 607.0	5 048.0	1 683.0	59.0	40.0	47.0	0.0	18.0	8 573.4	8 527.0	11 307.4

[a] Total public sector includes general government and public non-financial corporations.

[d] State totals will not add to total government as they do not include transfer payments to public non-financial corporations.

[e] The sum of public corporations and total government will not add to total public sector due to the existence of payments from general government to public non-financial corporations.

Source: ABS (2017d), ABS (2017h), BITRE estimates.

CHAPTER 2
Freight

Table T 2.1a Domestic freight, by transport mode—bulk

Financial year	Goods moved (billion tkm)				Goods moved (million tonnes)	
	Road	Rail	Coastal shipping	Total freight task	Rail	Coastal shipping
1974–75	9.6	48.9	95.2	154.6		
1975–76	10.3	45.2	99.0	155.4		
1976–77	11.3	47.5	97.3	157.3		
1977–78	11.6	49.2	100.3	162.7		
1978–79	13.4	48.4	100.5	163.5		
1979–80	14.5	52.4	101.2	169.0		
1980–81	15.8	55.0	106.6	178.0		
1981–82	16.9	55.3	94.1	168.0		
1982–83	16.9	51.4	78.4	148.8		
1983–84	19.2	55.8	91.3	167.5		
1984–85	20.9	62.8	93.3	178.2		
1985–86	22.1	66.5	99.0	189.0		
1986–87	22.7	69.1	92.5	185.8		
1987–88	24.9	69.7	90.9	186.9		
1988–89	26.1	66.8	87.8	182.3		
1989–90	27.2	74.3	91.3	194.8		
1990–91	26.5	77.7	90.8	196.0		
1991–92	26.6	85.5	93.3	207.1		
1992–93	28.3	85.5	92.8	208.9		
1993–94	29.8	88.4	95.4	216.8		
1994–95	32.3	91.0	105.6	231.6		
1995–96	34.5	95.6	102.4	234.2		43.5
1996–97	36.7	104.0	109.0	250.5		44.7
1997–98	38.8	107.7	112.1	259.1		47.6
1998–99	41.0	109.5	104.4	255.9		43.3
1999–00	43.8	114.4	102.6	261.4		45.1
2000–01	44.8	117.9	97.1	260.9		45.3
2001–02	47.6	129.6	102.8	280.9		46.1
2002–03	50.0	138.8	106.3	295.8		45.7
2003–04	52.8	142.8	109.3	305.7		45.5
2004–05	55.2	155.0	106.7	316.9		45.9
2005–06	57.8	157.0	115.4	330.2		48.6
2006–07	61.1	172.7	119.5	353.3		51.8
2007–08	63.6	[9] 187.4	112.3	363.2	[9] 642.8	49.3
2008–09	63.6	207.6	100.3	371.5	705.0	44.9
2009–10	65.4	230.5	106.5	402.3	798.8	44.7
2010–11	68.1	233.8	102.9	404.8	[10] 840.3	43.3
2011–12	70.6	260.0	94.8	425.3	[10] 908.0	43.0
2012–13	72.8	288.1	96.6	457.6	1,013.0	43.5
2013–14	75.4	337.6	97.8	510.8	1,089.6	45.3
2014–15	76.8	369.4	98.4	544.7	1,210.9	43.8
2015–16	79.3	381.1	102.7	563.1	1,322.1	44.6

[9, 10] See end notes.
Note: Data are not readily available for missing years.
Source: BITRE(2017b) and BITRE estimates.

Table T 2.1b Domestic freight by transport mode—non–bulk

Financial year	Goods moved (billion tkm)					Goods moved (million tonnes)		
	Road	Rail	Coastal shipping	Air freight	Total freight task	Rail	Coastal shipping	Air freight
1974–75	21.9	10.1	6.0	0.1	40.0			
1975–76	23.5	10.4	5.6	0.1	41.6			
1976–77	25.6	10.2	5.0	0.1	43.6			
1977–78	26.4	10.6	4.8	0.1	45.3			
1978–79	30.4	11.5	4.2	0.2	48.9			
1979–80	32.7	11.3	3.9	0.2	50.4			
1980–81	35.7	10.8	3.7	0.2	51.8			
1981–82	38.2	10.0	3.7	0.2	55.6			
1982–83	38.2	8.5	2.5	0.2	54.2			
1983–84	43.1	9.6	3.0	0.2	58.7			
1984–85	47.0	9.8	3.0	0.2	62.6			
1985–86	49.6	10.8	2.8	0.2	66.2			
1986–87	50.9	11.3	2.7	0.2	68.7			
1987–88	55.8	12.2	2.7	0.2	73.9			
1988–89	58.2	13.8	2.9	0.2	78.9			
1989–90	60.7	13.6	2.9	0.1	81.6			
1990–91	58.9	13.4	3.0	0.2	77.8			
1991–92	58.6	13.8	3.1	0.2	79.5			
1992–93	61.7	15.2	3.2	0.2	85.5			
1993–94	64.3	15.9	3.4	0.3	91.0			
1994–95	69.1	15.2	3.6	0.3	93.9			
1995–96	72.9	14.6	3.7	0.3	95.1		4.3	
1996–97	76.8	15.6	3.6	0.3	97.9		4.4	
1997–98	80.5	17.9	4.8	0.3	104.3		4.9	
1998–99	84.0	18.4	4.4	0.4	109.4		5.1	
1999–00	88.8	19.2	6.3	0.4	116.1		6.2	
2000–01	90.1	19.6	7.4	0.4	119.7		6.7	
2001–02	95.0	20.9	7.6	0.3	125.5		6.3	
2002–03	98.9	21.8	8.5	0.3	129.5		7.1	
2003–04	103.4	25.9	8.7	0.3	138.3		7.7	
2004–05	107.1	29.0	7.4	0.4	143.9		7.8	
2005–06	110.9	32.4	6.8	0.4	150.6		6.7	0.3
2006–07	116.0	26.3	8.0	0.4	150.8		7.1	0.3
2007–08	119.5	[9] 31.3	9.6	0.4	160.9	[9] 19.5	8.3	0.3
2008–09	118.3	29.6	9.3	0.3	157.5	17.5	7.8	0.2
2009–10	120.0	28.1	9.8	0.3	158.2	16.5	7.7	0.2
2010–11	123.2	28.0	10.5	0.3	162.0	[10] 18.8	8.5	0.3
2011–12	125.9	30.7	7.8	0.3	164.7	[10] 21.6	7.5	0.2
2012–13	127.8	30.8	7.8	0.3	166.8	27.6	7.4	0.2
2013–14	130.1	30.1	7.6	0.3	168.0	21.9	6.7	0.2
2014–15	131.5	32.2	6.8	0.3	170.8	24.3	6.5	0.2
2015–16	134.6	32.4	7.6	0.3	174.8	25.4	7.1	0.2

[9, 10] See end notes.

Note: Data are not readily available for missing years.

Source: BITRE(2017b), BITRE (2017c) and BITRE estimates.

Table T 2.1c Domestic freight by transport mode—total bulk and non–bulk

Financial year	Goods moved (billion tkm)					Goods moved (million tonnes)				
	Road	Rail	Coastal shipping	Air freight	Total freight task	Road	Rail	Coastal shipping	Air freight	Total freight weight
1974–75	31.4	59.0	101.2		191.6			46.4		
1975–76	33.9	55.6	104.6		194.1			47.5		
1976–77	36.8	57.7	102.3		196.9			47.2		
1977–78	38.0	59.8	105.1		203.0			48.0		
1978–79	43.8	59.8	104.7		208.3			47.4		
1979–80	47.2	63.7	105.1		216.0			48.1		
1980–81	51.4	65.7	110.3		227.5			47.3		
1981–82	55.1	65.4	97.8		218.2			43.1		
1982–83	55.1	59.8	80.9		195.8			38.3		
1983–84	62.3	65.4	94.3		222.0			42.7		
1984–85	67.9	72.6	96.3		236.8	1 030.6		42.7		
1985–86	71.7	77.3	101.8		250.8	1 017.5		44.7		
1986–87	73.7	80.4	95.2		249.2	1 004.4		44.4		
1987–88	80.7	81.9	93.6		256.2	991.3		43.2		
1988–89	84.3	80.6	90.7		255.6	1 005.4		43.0		
1989–90	87.9	87.9	94.2		270.0	1 019.5		44.5		
1990–91	85.3	91.1	93.8		270.3	1 033.6		44.2		
1991–92	85.2	99.3	96.4		280.9	1 081.3		43.6		
1992–93	90.0	100.8	96.0		286.8	1 129.1		44.2		
1993–94	94.1	104.2	98.8		297.1	1 176.8		45.3		
1994–95	101.4	106.2	109.2		316.8	1 224.5		49.2		
1995–96	107.4	110.3	106.1		323.7	1 265.1		47.8		
1996–97	113.4	119.6	112.6							
1997–98	119.3	125.6	116.9							
1998–99	125.0	128.0	108.8							
1999–00	132.6	133.6	108.9							
2000–01	134.9	137.5	104.5							
2001–02	142.5	150.5	110.4							
2002–03	148.9	160.6	114.9		424.4	1 553.0	575.7	52.8		2 181.5
2003–04	156.2	168.7	117.1		442.0	1 696.0	590.9	53.2		2 340.1
2004–05	162.4	183.9	114.1		460.4	1 756.0	634.3	53.7		2 444.0
2005–06	168.7	189.4	122.2	0.4	480.7	1 844.0	641.2	55.2	0.3	2 540.8
2006–07	177.1	199.0	127.6	0.4	504.0	2 146.0	665.6	58.9	0.3	2 870.9
2007–08	183.1	[9] 218.7	121.9	0.4	524.1		[9] 662.3	57.6	0.3	
2008–09	181.9	237.2	109.6	0.3	529.0		722.5	52.7	0.2	
2009–10	185.4	258.6	116.2	0.3	560.5	2 092.0	815.3	52.4	0.2	2 959.9
2010–11	191.2	261.8	113.4	0.3	566.8		[10] 859.1	51.9	0.3	
2011–12	196.5	290.7	102.6	0.3	590.1	2 280.0	[10] 929.6	50.5	0.2	3 260.4
2012–13	200.6	319.0	104.5	0.3	624.3		1 040.6	50.9	0.2	
2013–14	205.5	367.7	105.4	0.3	678.9	2,276.5	1 111.5	52.0	0.2	3 440.1
2014–15	208.3	401.6	105.2	0.3	715.4		1 235.2	50.3	0.2	
2015–16	213.9	413.5	110.2	0.3	738.0		1 347.5	51.7	0.2	

[9, 10] See end notes.
Note: Data are not readily available for missing years.
Source: BITRE(2017b), BITRE (2017c) and BITRE estimates.

Table T 2.2a Total domestic freight by state/territory, by transport mode—road

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total[11]
				billion tonne–kilometres					
1972–73	10.1	7.1	3.9	1.7	3.5	0.6	0.9	0.2	27.9
1973–74	10.9	7.7	4.3	1.8	3.9	0.7	1.0	0.2	30.5
1974–75	11.2	7.9	4.5	1.9	4.0	0.7	1.0	0.2	31.4
1975–76	12.0	8.5	4.8	2.1	4.4	0.8	1.1	0.2	33.9
1976–77	12.9	9.3	5.3	2.3	4.9	0.8	1.2	0.2	36.8
1977–78	13.2	9.5	5.5	2.4	5.1	0.9	1.2	0.2	38.0
1978–79	15.0	11.0	6.4	2.7	6.0	1.0	1.4	0.2	43.8
1979–80	16.1	11.8	7.0	3.0	6.5	1.1	1.5	0.3	47.2
1980–81	17.4	12.8	7.6	3.3	7.2	1.2	1.7	0.3	51.4
1981–82	18.5	13.7	8.3	3.5	7.8	1.3	1.8	0.3	55.1
1982–83	18.4	13.6	8.4	3.5	7.9	1.3	1.8	0.3	55.1
1983–84	20.9	15.3	9.5	3.9	8.9	1.4	2.0	0.3	62.3
1984–85	22.7	16.7	10.4	4.3	9.7	1.5	2.2	0.3	67.9
1985–86	24.1	17.5	11.0	4.6	10.2	1.6	2.4	0.3	71.7
1986–87	24.8	18.0	11.3	4.8	10.5	1.6	2.4	0.4	73.7
1987–88	27.2	19.6	12.4	5.3	11.4	1.7	2.7	0.4	80.7
1988–89	28.5	20.4	13.0	5.6	11.9	1.8	2.8	0.4	84.3
1989–90	29.8	21.2	13.5	5.9	12.3	1.8	3.0	0.4	87.9
1990–91	29.1	20.6	13.0	5.9	11.8	1.7	2.9	0.4	85.3
1991–92	29.1	20.5	13.0	6.0	11.8	1.7	2.9	0.4	85.2
1992–93	30.7	21.6	13.7	6.3	12.4	1.8	3.1	0.4	90.0
1993–94	32.2	22.6	14.4	6.7	12.9	1.8	3.2	0.4	94.1
1994–95	34.8	24.3	15.4	7.3	13.8	1.9	3.5	0.4	101.4
1995–96	37.0	25.7	16.3	7.9	14.5	2.0	3.7	0.4	107.4
1996–97	39.2	27.1	17.1	8.5	15.1	2.1	3.9	0.4	113.4
1997–98	41.4	28.5	17.9	9.1	15.7	2.1	4.2	0.4	119.3
1998–99	43.3	29.5	19.8	10.1	15.4	2.1	4.4	0.4	125.0
1999–00	45.7	31.4	21.4	11.1	15.4	2.5	4.6	0.4	132.6
2000–01	45.8	31.9	22.2	11.7	15.7	2.7	4.5	0.4	134.9
2001–02	48.5	33.7	24.0	12.4	16.6	2.7	4.1	0.4	142.5
2002–03	50.2	34.6	25.2	13.2	18.6	2.7	3.9	0.4	148.9
2003–04	52.5	35.2	27.1	13.8	20.0	3.1	4.0	0.5	156.2
2004–05	54.4	36.5	28.9	14.2	20.8	3.2	4.0	0.5	162.4
2005–06	55.9	38.7	30.6	14.6	21.7	2.8	4.0	0.5	168.7
2006–07	55.7	40.3	33.4	15.0	25.1	3.3	3.8	0.5	177.1
2007–08	58.2	41.1	34.4	15.3	26.4	3.4	3.9	0.5	183.1
2008–09	59.5	40.4	33.2	15.2	25.8	3.2	4.0	0.5	181.9
2009–10	60.4	40.4	34.0	15.5	27.2	3.4	4.1	0.5	185.4
2010–11	59.4	41.1	36.1	16.0	30.8	3.3	4.0	0.5	191.2
2011–12	59.5	41.3	37.8	16.4	33.7	3.2	4.1	0.6	196.5
2012–13	59.9	41.3	38.9	15.8	36.6	3.2	4.2	0.6	200.6
2013–14	60.4	41.4	40.2	15.4	39.9	3.3	4.3	0.6	205.5
2014–15	61.2	43.4	41.8	15.6	38.4	3.3	4.1	0.6	208.3
2015–16	62.8	45.9	43.9	16.0	37.4	3.4	4.0	0.6	213.9

[11] See end notes.

Source: BITRE estimates.

Table T 2.2b Total domestic freight by state/territory, by transport mode—rail

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
					billion tonne–kilometres				
1971–72	7.4	2.9	7.0	3.2	22.0	0.2	na	na	42.7
1972–73	8.1	3.2	7.6	3.5	24.1	0.2	na	na	46.7
1973–74	8.5	3.1	7.7	3.9	30.6	0.3	na	na	54.1
1974–75	8.6	3.0	9.0	3.8	34.2	0.3	na	na	59.0
1975–76	8.3	3.0	9.8	3.8	30.4	0.2	na	na	55.6
1976–77	9.1	3.0	10.0	4.0	31.4	0.2	na	na	57.7
1977–78	9.2	3.1	10.4	4.1	32.9	0.2	na	na	59.8
1978–79	9.1	3.3	11.3	4.5	31.4	0.3	na	na	59.8
1979–80	10.6	3.9	11.4	4.7	32.9	0.2	na	na	63.7
1980–81	10.6	3.7	12.0	4.9	34.2	0.2	na	na	65.7
1981–82	10.8	3.5	13.2	4.9	32.7	0.2	na	na	65.4
1982–83	9.2	2.5	13.3	4.6	30.1	0.2	na	na	59.8
1983–84	11.2	3.1	15.5	5.0	30.3	0.2	na	na	65.4
1984–85	12.5	3.6	16.9	5.3	34.0	0.2	na	na	72.6
1985–86	14.1	3.2	18.5	6.1	35.2	0.3	na	na	77.3
1986–87	14.4	3.3	19.8	5.9	36.7	0.3	na	na	80.4
1987–88	14.4	3.4	20.7	6.4	36.7	0.2	na	na	81.9
1988–89	13.6	3.3	21.9	6.7	34.9	0.2	na	na	80.6
1989–90	14.7	3.8	22.8	6.9	39.5	0.2	na	na	87.9
1990–91	14.7	3.8	23.4	6.6	42.4	0.3	na	na	91.1
1991–92	15.4	3.6	27.2	7.2	45.7	0.3	na	na	99.3
1992–93	16.2	4.0	26.7	7.6	46.0	0.3	na	na	100.8
1993–94	17.3	4.5	26.7	8.0	47.5	0.3	na	na	104.2
1994–95	16.9	4.6	28.7	7.9	47.7	0.3	na	na	106.2
1995–96	18.1	4.8	28.4	7.8	50.8	0.4	na	na	110.3
1996–97	20.0	5.5	30.9	10.2	52.7	0.4	na	na	119.6
1997–98	20.0	4.5	32.0	9.8	58.9	0.5	na	na	125.6
1998–99	19.5	4.6	33.2	9.9	60.2	0.5	na	na	128.0
1999–00	19.9	4.8	35.5	9.6	63.3	0.5	na	na	133.6
2000–01	21.0	5.0	39.4	10.0	60.8	0.7	na	na	136.9
2001–02	23.1	5.5	43.3	11.0	66.8	0.8	na	na	150.5
2002–03	24.3	5.7	45.5	11.5	70.2	0.8	na	na	158.1
2003–04	25.8	6.1	48.4	12.3	74.7	0.9	na	na	168.1
2004–05	28.1	6.6	52.7	13.4	81.3	0.9	na	na	183.0
2005–06	29.0	6.9	54.4	13.8	84.0	1.0	na	na	189.0
2006–07	30.5	7.2	57.2	14.5	88.2	1.0	na	na	198.7
2007–08 [9]	28.9	15.3	52.2	12.8	123.8	0.5	2.4	na	203.5
2008–09	27.4	13.6	56.0	11.4	153.6	0.3	3.1	na	237.2
2009–10	28.2	12.6	60.7	10.5	170.9	0.1	3.2	na	258.6

[9] See end notes.

na: not available.

Source: ARA (2008), BITRE (2012a).

Table T 2.2c Total domestic freight by state/territory, by transport mode—shipping

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
					billion tonne–kilometres				
1995–96	4.7	8.6	24.1	9.1	54.2	3.7	1.6	na*	106.1
1996–97	5.5	8.8	25.6	9.7	57.6	3.2	2.2	na*	112.6
1997–98	5.6	10.3	25.6	9.7	60.5	2.4	2.8	na*	116.9
1998–99	4.9	7.9	24.8	9.7	55.1	3.5	2.9	na*	108.8
1999–00	6.4	8.9	30.3	9.6	46.3	4.0	3.3	na*	108.8
2000–01	7.4	9.4	30.7	9.0	41.8	2.9	3.2	na*	104.5
2001–02	5.2	6.6	30.9	9.6	49.9	5.7	2.5	na*	110.5
2002–03	5.7	7.6	31.7	10.1	51.9	5.8	2.3	na*	114.9
2003–04	4.9	6.5	33.8	8.2	55.6	5.5	2.6	na*	117.1
2004–05	5.3	6.6	37.1	8.5	48.0	4.6	3.6	na*	114.1
2005–06	5.3	9.0	41.2	8.9	50.9	4.5	2.4	na*	122.2
2006–07	6.2	9.1	42.0	9.4	56.3	4.4	0.2	na*	127.6
2007–08	6.0	8.0	43.8	10.5	46.4	4.5	2.5	na*	121.9
2008–09	5.0	6.2	42.0	9.3	40.1	3.9	2.8	na*	109.6
2009–10	5.9	6.1	41.2	8.2	49.7	3.5	1.5	na*	116.2
2010–11	4.8	5.7	42.1	8.6	45.6	3.5	2.8	na*	113.4
2011–12	5.3	5.8	43.6	9.1	32.9	3.3	2.3	na*	102.6
2012–13	4.5	5.4	47.6	8.6	32.8	3.0	2.4	na*	104.5
2013–14	4.7	5.1	49.0	9.8	30.9	3.3	2.4	na*	105.4
2014–15	3.8	4.5	48.1	11.5	30.2	3.2	3.9	na*	105.2
2015–16	3.8	4.6	48.8	11.1	30.8	3.6	7.3	na*	110.2

na*: not applicable.
Source: BITRE (2017k), BITRE estimates.

Table T 2.2d Total domestic freight by state/territory, by transport mode—total

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
					billion tonne–kilometres				
1995–96	59.8	39.1	68.7	24.8	119.4	6.1	5.3	na	323.8
1996–97	64.7	41.4	73.6	28.3	125.5	5.7	6.1	na	345.6
1997–98	67.0	43.3	75.5	28.6	135.1	5.0	7.0	na	361.8
1998–99	67.7	42.0	77.8	29.7	130.7	6.1	7.3	na	361.8
1999–00	72.0	45.1	87.2	30.3	125.0	7.0	7.9	na	375.0
2000–01	74.2	46.3	92.3	30.7	118.3	6.3	7.7	na	376.3
2001–02	76.8	45.7	98.3	33.0	133.4	9.2	6.6	na	403.5
2002–03	80.1	47.9	102.4	34.8	140.7	9.2	6.2	na	421.9
2003–04	83.2	47.7	109.4	34.3	150.2	9.5	6.6	na	441.4
2004–05	87.8	49.8	118.7	36.0	150.2	8.7	7.6	na	459.5
2005–06	90.3	54.5	126.2	37.3	156.5	8.3	6.4	na	480.0
2006–07	92.4	56.6	132.6	38.9	169.7	8.7	4.0	na	503.3
2007–08	93.1	64.4	130.4	38.6	196.5	8.4	8.8	na	508.5
2008–09	91.9	60.2	131.2	35.9	219.5	7.5	9.9	na	528.7
2009–10	94.5	59.1	135.9	34.2	247.8	7.0	8.8	na	560.2

na: not available.
Source: ARA (2008), BITRE (2012a), BITRE (2017k) and BITRE estimates.

Table T 2.3a Intrastate freight by state/territory, by transport mode—road

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
				billion tonne–kilometres					
1972–73	5.9	5.2	3.3	1.0	3.2	0.6	0.7	0.2	20.2
1973–74	6.5	5.7	3.7	1.1	3.5	0.7	0.8	0.2	22.2
1974–75	6.7	5.9	3.8	1.2	3.6	0.7	0.8	0.2	22.9
1975–76	7.3	6.4	4.2	1.3	3.9	0.8	0.9	0.2	24.9
1976–77	7.9	7.0	4.6	1.4	4.4	0.8	1.0	0.2	27.3
1977–78	8.2	7.2	4.8	1.4	4.6	0.9	1.0	0.2	28.3
1978–79	9.7	8.4	5.7	1.7	5.4	1.0	1.2	0.2	33.4
1979–80	10.6	9.1	6.2	1.9	5.9	1.1	1.3	0.3	36.4
1980–81	11.7	10.0	6.9	2.1	6.5	1.2	1.4	0.3	40.1
1981–82	12.4	10.7	7.5	2.2	7.0	1.3	1.5	0.3	42.9
1982–83	12.4	10.6	7.6	2.2	7.1	1.3	1.5	0.3	42.9
1983–84	14.2	12.1	8.6	2.5	8.1	1.4	1.8	0.3	49.0
1984–85	15.4	13.1	9.4	2.8	8.8	1.5	1.9	0.3	53.3
1985–86	16.0	13.6	9.9	2.9	9.3	1.6	2.0	0.3	55.7
1986–87	16.1	13.8	10.1	2.9	9.5	1.6	2.1	0.3	56.4
1987–88	17.5	14.9	11.0	3.2	10.3	1.7	2.3	0.4	61.4
1988–89	17.8	15.3	11.4	3.3	10.7	1.8	2.4	0.4	63.1
1989–90	18.1	15.6	11.9	3.4	11.1	1.8	2.5	0.4	64.8
1990–91	17.2	14.8	11.2	3.3	10.5	1.7	2.4	0.4	61.5
1991–92	16.7	14.5	11.2	3.2	10.4	1.7	2.4	0.4	60.4
1992–93	17.2	15.1	11.7	3.3	10.9	1.8	2.5	0.4	62.9
1993–94	17.4	15.4	12.2	3.4	11.3	1.8	2.6	0.4	64.4
1994–95	18.7	16.5	13.0	3.7	12.0	1.9	2.8	0.4	69.0
1995–96	19.7	17.3	13.7	4.0	12.6	2.0	3.0	0.4	72.7
1996–97	20.7	18.1	14.3	4.3	13.2	2.1	3.2	0.4	76.2
1997–98	21.4	18.7	14.9	4.5	13.7	2.1	3.3	0.4	79.0
1998–99	19.9	18.3	16.2	5.0	13.2	2.1	3.5	0.4	78.5
1999–00	20.7	19.6	17.6	5.8	13.1	2.5	3.6	0.4	83.2
2000–01	20.6	20.1	18.3	6.4	13.5	2.7	3.4	0.4	85.3
2001–02	21.6	21.1	19.9	6.9	14.4	2.7	3.0	0.4	90.0
2002–03	21.7	21.5	20.8	7.5	16.3	2.7	2.8	0.4	93.7
2003–04	22.0	21.5	22.4	8.1	17.6	3.1	2.8	0.4	97.9
2004–05	22.1	22.5	23.8	8.3	18.4	3.2	2.7	0.4	101.4
2005–06	21.3	23.5	25.2	8.5	19.1	2.8	2.6	0.5	103.5
2006–07	21.9	25.4	28.2	9.0	22.6	3.3	2.5	0.4	113.3
2007–08	21.8	25.2	28.7	9.0	23.7	3.4	2.5	0.4	114.8
2008–09	21.6	24.0	27.3	8.7	23.0	3.2	2.5	0.4	110.8
2009–10	23.0	24.3	28.1	9.0	24.6	3.4	2.6	0.4	115.4
2010–11	25.2	25.9	30.7	9.5	28.2	3.3	2.6	0.5	125.9
2011–12	26.7	26.8	32.5	9.8	30.9	3.2	2.7	0.5	133.2
2012–13	27.0	26.4	33.7	9.6	34.2	3.2	2.8	0.5	137.5
2013–14	27.3	25.9	35.1	9.5	37.8	3.3	2.9	0.5	142.2
2014–15	25.6	27.2	36.1	9.4	36.2	3.3	2.6	0.5	141.0
2015–16	26.3	30.6	37.7	9.6	35.0	3.4	2.4	0.6	145.6

Source: BITRE estimates.

Table T 2.3b Intrastate freight by state/territory, by transport mode—rail

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
				billion tonne–kilometres					
2007–08	16.8	0.7	45.1	2.1	105.0	0.5	0.8	na*	171.0
2008–09	17.6	0.4	50.6	1.8	137.0	0.3	1.1	na*	208.9
2009–10	18.3	0.4	54.9	2.0	154.0	0.1	1.2	na*	231.0

na*: not applicable.
Source: BITRE (2012a).

Table T 2.3c Intrastate freight by state/territory, by transport mode—shipping

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
				billion tonne–kilometres					
1995–96	0.1	0.0	19.3	0.1	3.6	0.2	0.0	na*	23.4
1996–97	0.1	0.0	20.9	0.2	3.8	0.0	0.0	na*	25.0
1997–98	0.2	0.0	20.8	0.1	4.0	0.1	0.0	na*	25.3
1998–99	0.1	0.1	19.8	0.1	2.9	0.2	0.1	na*	23.3
1999–00	0.1	0.0	23.7	0.2	3.3	0.2	0.1	na*	27.6
2000–01	0.1	0.0	24.1	0.2	6.6	0.1	0.1	na*	31.1
2001–02	0.1	0.0	24.1	0.2	5.6	0.6	0.1	na*	30.6
2002–03	0.0	0.0	24.4	0.2	5.7	0.1	0.1	na*	30.6
2003–04	0.0	0.0	24.7	0.2	5.3	0.1	0.0	na*	30.3
2004–05	0.0	0.0	27.5	0.2	4.4	0.1	0.1	na*	32.3
2005–06	0.0	0.0	31.3	0.2	3.7	0.1	0.0	na*	35.3
2006–07	0.0	0.1	32.2	0.2	5.5	0.1	0.0	na*	38.2
2007–08	0.0	0.1	32.1	0.2	5.6	0.1	0.0	na*	38.1
2008–09	0.0	0.1	32.1	0.1	4.1	0.1	0.0	na*	36.6
2009–10	0.0	0.0	32.3	0.1	1.4	0.1	0.0	na*	34.1
2010–11	0.0	0.0	32.4	0.2	1.6	0.1	0.1	na*	34.4
2011–12	0.0	0.1	33.0	0.3	1.3	0.1	0.0	na*	34.8
2012–13	0.0	0.0	39.1	0.2	2.5	0.1	0.0	na*	41.9
2013–14	0.0	0.0	39.6	0.1	4.0	0.1	0.0	na*	43.9
2014–15	0.1	0.0	39.8	0.2	1.0	0.1	0.0	na*	41.3
2015–16	0.0	0.0	39.5	0.1	2.0	0.1	0.0	na*	41.8

na*: not applicable.
Source: BITRE estimates.

Table T 2.4a Interstate freight by state/territory, by transport mode—road

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
					billion tonne–kilometres				
1971–72	4.1	1.8	0.6	0.6	0.3	na*	0.1	0.0	7.5
1972–73	4.3	1.9	0.6	0.7	0.3	na*	0.2	0.0	8.0
1973–74	4.6	2.0	0.6	0.8	0.4	na*	0.2	0.0	8.6
1974–75	4.6	2.1	0.7	0.8	0.4	na*	0.2	0.0	8.8
1975–76	4.8	2.2	0.7	0.9	0.5	na*	0.2	0.0	9.3
1976–77	5.1	2.4	0.7	1.0	0.5	na*	0.2	0.0	9.8
1977–78	5.1	2.4	0.7	1.0	0.5	na*	0.2	0.0	10.0
1978–79	5.4	2.6	0.7	1.1	0.6	na*	0.2	0.0	10.6
1979–80	5.6	2.7	0.8	1.2	0.7	na*	0.2	0.0	11.1
1980–81	5.8	2.8	0.8	1.2	0.7	na*	0.3	0.0	11.6
1981–82	6.2	3.0	0.8	1.3	0.8	na*	0.3	0.0	12.5
1982–83	6.2	3.0	0.8	1.4	0.8	na*	0.3	0.0	12.5
1983–84	6.7	3.3	0.9	1.5	0.9	na*	0.3	0.0	13.6
1984–85	7.4	3.6	1.0	1.6	0.9	na*	0.3	0.0	14.9
1985–86	8.1	3.9	1.1	1.8	1.0	na*	0.4	0.0	16.3
1986–87	8.8	4.2	1.2	1.9	1.0	na*	0.4	0.0	17.6
1987–88	9.8	4.7	1.4	2.1	1.1	na*	0.5	0.0	19.7
1988–89	10.7	5.1	1.5	2.3	1.2	na*	0.5	0.0	21.5
1989–90	11.7	5.6	1.7	2.5	1.3	na*	0.6	0.0	23.3
1990–91	12.0	5.8	1.7	2.6	1.3	na*	0.6	0.0	24.1
1991–92	12.4	6.0	1.8	2.8	1.4	na*	0.6	0.0	25.0
1992–93	13.5	6.6	2.0	3.0	1.5	na*	0.7	0.0	27.3
1993–94	14.8	7.2	2.2	3.3	1.6	na*	0.7	0.0	29.9
1994–95	16.1	7.8	2.4	3.6	1.7	na*	0.8	0.0	32.5
1995–96	17.2	8.4	2.6	3.9	1.8	na*	0.8	0.0	34.8
1996–97	18.4	9.0	2.8	4.2	1.9	na*	0.9	0.0	37.3
1997–98	19.9	9.8	3.0	4.6	2.0	na*	1.0	0.0	40.4
1998–99	23.3	11.2	3.6	5.2	2.2	na*	1.1	0.0	46.8
1999–00	24.9	11.8	3.9	5.4	2.3	na*	1.2	0.0	49.6
2000–01	25.0	11.9	3.9	5.4	2.3	na*	1.2	0.0	49.7
2001–02	26.7	12.5	4.2	5.6	2.3	na*	1.3	0.0	52.7
2002–03	28.2	13.1	4.4	5.9	2.4	na*	1.4	0.0	55.4
2003–04	30.2	13.5	4.8	5.8	2.4	na*	1.5	0.0	58.2
2004–05	32.0	13.9	5.1	5.9	2.4	na*	1.5	0.0	60.8
2005–06	34.2	15.1	5.4	6.1	2.5	na*	1.6	0.1	64.9
2006–07	33.1	14.6	5.2	5.9	2.5	na*	1.6	0.0	62.9
2007–08	35.5	15.6	5.6	6.2	2.6	na*	1.7	0.1	67.2
2008–09	37.0	16.2	5.8	6.4	2.6	na*	1.7	0.1	69.8
2009–10	37.5	16.2	6.0	6.6	2.8	na*	1.8	0.1	70.9
2010–11	33.5	15.2	5.4	6.5	2.8	na*	1.7	0.0	65.1
2011–12	31.8	14.5	5.2	6.5	2.9	na*	1.7	0.0	62.6
2012–13	31.8	14.9	5.0	6.0	2.4	na*	1.6	0.0	61.8
2013–14	31.7	15.3	4.9	5.5	2.0	na*	1.6	0.0	61.0
2014–15	33.0	15.7	5.1	5.7	2.3	na*	1.6	0.0	63.4
2015–16	34.7	16.2	5.3	5.9	2.5	na*	1.7	0.0	66.3

na*: not applicable.
Source: BITRE estimates.

Table T 2.4b Interstate freight by state/territory, by transport mode—shipping

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
				billion tonne–kilometres					
1995–96	4.6	8.5	4.8	9.0	50.7	3.5	1.6	na*	82.7
1996–97	5.4	8.8	4.7	9.5	53.8	3.2	2.2	na*	87.6
1997–98	5.4	10.3	4.8	9.6	56.5	2.3	2.8	na*	91.7
1998–99	4.8	7.8	4.9	9.6	52.2	3.3	2.8	na*	85.4
1999–00	6.2	8.8	6.6	9.4	43.0	3.9	3.3	na*	81.2
2000–01	7.3	9.4	6.6	8.9	35.2	2.8	3.1	na*	73.3
2001–02	5.1	6.6	6.8	9.4	44.3	5.1	2.4	na*	79.8
2002–03	5.6	7.5	7.2	9.9	46.1	5.6	2.2	na*	84.3
2003–04	4.9	6.5	9.1	8.0	50.3	5.4	2.6	na*	86.8
2004–05	5.3	6.6	9.6	8.3	43.7	4.5	3.5	na*	81.5
2005–06	5.3	9.0	9.9	8.7	47.2	4.4	2.4	na*	86.9
2006–07	6.2	8.9	9.7	9.2	50.8	4.3	0.2	na*	89.4
2007–08	6.0	8.0	11.7	10.3	40.8	4.4	2.5	na*	83.6
2008–09	5.0	6.1	9.9	9.2	35.9	3.8	2.8	na*	72.7
2009–10	5.9	6.1	8.8	8.1	48.3	3.4	1.4	na*	82.0
2010–11	4.7	5.7	9.7	8.5	44.0	3.4	2.8	na*	78.8
2011–12	5.2	5.8	10.6	8.8	31.7	3.2	2.2	na*	67.5
2012–13	4.5	5.3	8.5	8.4	30.3	2.9	2.3	na*	62.3
2013–14	4.7	5.1	9.4	9.7	26.9	3.2	2.4	na*	61.4
2014–15	3.7	4.4	8.3	11.4	29.2	3.1	3.8	na*	64.0
2015–16	3.8	4.5	9.3	11.0	28.8	3.5	7.3	na*	68.3

na*: not applicable.
Source: BITRE (2017k), BITRE estimates.

Table T 2.5 Urban road freight by capital city

Financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Total captial cities
				billion tonne kilometres					
1971–72	3.0	2.1	0.7	0.7	0.8	0.1	0.0	0.1	7.6
1972–73	3.0	2.1	0.7	0.7	0.9	0.1	0.0	0.2	7.9
1973–74	3.3	2.3	0.8	0.8	0.9	0.1	0.1	0.2	8.5
1974–75	3.4	2.4	0.9	0.8	1.0	0.2	0.1	0.2	8.8
1975–76	3.6	2.6	0.9	0.9	1.0	0.2	0.1	0.2	9.4
1976–77	3.8	2.8	1.1	0.9	1.1	0.2	0.1	0.2	10.2
1977–78	3.9	2.9	1.2	1.0	1.2	0.2	0.1	0.2	10.7
1978–79	4.2	3.2	1.5	1.0	1.3	0.2	0.1	0.2	11.8
1979–80	4.4	3.4	1.6	1.0	1.4	0.2	0.1	0.3	12.4
1980–81	4.6	3.6	1.8	1.0	1.5	0.2	0.1	0.3	13.1
1981–82	4.8	3.8	2.0	1.0	1.5	0.2	0.2	0.3	13.7
1982–83	4.7	3.7	2.0	1.0	1.5	0.3	0.2	0.3	13.6
1983–84	5.1	4.1	2.1	1.0	1.6	0.3	0.2	0.3	14.7
1984–85	5.4	4.4	2.3	1.1	1.7	0.3	0.2	0.3	15.9
1985–86	5.7	4.7	2.5	1.2	1.8	0.3	0.2	0.3	16.8
1986–87	5.9	5.0	2.6	1.2	1.9	0.3	0.2	0.4	17.6
1987–88	6.5	5.5	2.8	1.4	2.1	0.4	0.2	0.4	19.2
1988–89	6.7	5.8	3.0	1.4	2.2	0.4	0.2	0.4	20.1
1989–90	7.0	6.1	3.1	1.5	2.3	0.4	0.2	0.4	21.1
1990–91	6.8	6.1	3.0	1.4	2.3	0.4	0.2	0.4	20.7
1991–92	6.8	6.2	3.1	1.5	2.3	0.3	0.2	0.4	20.8
1992–93	7.2	6.5	3.3	1.5	2.5	0.3	0.2	0.4	21.9
1993–94	7.6	7.0	3.5	1.6	2.6	0.3	0.2	0.4	23.1
1994–95	8.0	7.5	3.7	1.7	2.8	0.3	0.2	0.4	24.7
1995–96	8.4	7.8	3.9	1.8	2.9	0.3	0.2	0.4	25.8
1996–97	8.7	8.2	4.2	1.9	3.0	0.3	0.2	0.4	26.9
1997–98	9.0	8.5	4.4	2.0	3.2	0.3	0.2	0.4	28.0
1998–99	9.2	8.9	4.8	2.0	3.3	0.3	0.2	0.4	29.1
1999–00	9.5	9.4	5.1	2.0	3.5	0.3	0.2	0.4	30.5
2000–01	9.7	9.5	5.4	2.0	3.5	0.3	0.2	0.4	31.0
2001–02	9.9	9.9	5.8	2.1	3.7	0.3	0.2	0.4	32.4
2002–03	10.2	10.2	6.2	2.2	3.8	0.3	0.2	0.4	33.5
2003–04	10.4	10.4	6.6	2.3	4.1	0.3	0.2	0.5	34.8
2004–05	10.6	10.6	7.0	2.4	4.2	0.3	0.2	0.5	35.8
2005–06	10.9	10.9	7.2	2.5	4.6	0.4	0.3	0.5	37.1
2006–07	11.0	11.1	7.7	2.6	5.1	0.4	0.3	0.5	38.7
2007–08	11.2	11.4	8.1	2.7	5.4	0.4	0.3	0.5	39.8
2008–09	10.9	11.2	8.0	2.6	5.3	0.4	0.3	0.5	39.1
2009–10	11.0	11.3	8.2	2.7	5.5	0.4	0.3	0.5	39.9
2010–11	11.3	11.6	8.6	2.8	5.7	0.4	0.3	0.5	41.2
2011–12	11.7	11.9	9.0	2.9	6.0	0.4	0.3	0.6	42.8
2012–13	12.0	12.1	9.1	2.9	6.4	0.4	0.3	0.6	43.9
2013–14	12.3	12.4	9.2	3.0	6.7	0.4	0.3	0.6	44.9
2014–15	12.6	12.7	9.4	3.1	6.9	0.4	0.3	0.6	45.9
2015–16	13.0	13.0	9.7	3.1	7.0	0.5	0.3	0.6	47.2
2016–17	13.4	13.4	10.0	3.2	7.3	0.5	0.3	0.6	48.7

Source: BITRE estimates.

CHAPTER 3
Passengers

Table T 3.1 Total national passenger travel, by transport mode

Financial year	Passenger cars	Buses	Rail	Air	Other[12]	Total
			billion passenger kilometres			
1974–75	125.27	7.43	10.00	8.28	15.89	166.87
1975–76	130.14	7.42	8.93	8.29	16.54	171.31
1976–77	135.96	7.50	8.87	7.99	18.08	178.40
1977–78	140.52	7.60	8.66	8.90	18.99	184.66
1978–79	144.42	7.70	8.50	9.40	19.36	189.38
1979–80	144.94	8.16	8.82	10.36	19.26	191.52
1980–81	147.14	8.72	9.11	10.70	19.69	195.37
1981–82	154.29	9.22	9.09	11.15	20.09	203.84
1982–83	154.81	10.46	8.93	10.27	19.82	204.29
1983–84	161.84	11.71	8.85	10.64	21.08	214.11
1984–85	167.93	13.02	8.83	11.34	21.99	223.11
1985–86	173.05	14.00	9.22	12.34	22.14	230.75
1986–87	176.78	15.03	9.48	13.16	22.23	236.68
1987–88	185.47	16.02	9.94	14.46	22.80	248.68
1988–89	194.41	16.87	10.16	15.07	23.76	260.26
1989–90	200.05	17.73	9.97	11.26	23.73	262.74
1990–91	200.49	17.04	9.99	15.98	22.88	266.37
1991–92	204.51	16.57	9.89	20.72	22.98	274.67
1992–93	210.81	16.51	9.66	20.99	23.39	281.36
1993–94	216.15	16.31	9.87	24.43	24.08	290.84
1994–95	222.87	16.10	10.24	26.98	25.39	301.57
1995–96	226.01	16.62	10.58	28.98	25.90	308.09
1996–97	227.68	16.43	10.85	29.98	25.95	310.89
1997–98	229.90	16.59	10.82	30.44	26.68	314.43
1998–99	235.27	16.65	11.03	31.06	27.16	321.16
1999–00	239.81	17.00	11.40	32.84	27.60	328.66
2000–01	237.16	17.26	11.98	35.68	27.89	329.98
2001–02	243.17	17.35	11.84	33.01	28.90	334.26
2002–03	249.45	17.69	11.84	35.83	29.73	344.54
2003–04	261.37	17.76	11.91	41.15	30.65	362.84
2004–05	262.06	17.84	11.86	45.90	30.89	368.55
2005–06	257.21	18.27	12.36	48.70	31.60	368.15
2006–07	260.42	18.53	12.97	53.01	32.82	377.77
2007–08	261.87	18.88	14.03	57.24	34.71	386.74
2008–09	260.70	19.24	14.77	58.63	36.02	389.36
2009–10	262.23	19.54	14.75	60.22	38.27	395.01
2010–11	264.86	19.93	14.97	64.56	39.35	403.67
2011–12	267.18	20.41	15.26	66.43	40.45	409.73
2012–13	269.62	20.78	15.22	69.67	41.55	416.85
2013–14	271.60	21.17	15.24	70.86	42.58	421.45
2014–15	275.02	21.30	15.67	70.13	43.67	425.80
2015–16	279.07	21.61	16.15	71.44	44.83	433.09

[12] See end notes.

Note: Bus and rail pkm values are trend estimates – subject to later revision when final data become available.

Source: BITRE estimates.

Table T 3.2 Inter–capital city passenger travel by city pair

Financial year	Syd–Mel	Syd–Can	Syd–Bne	Mel–Adl	Mel–Bne	Syd–Adl
			thousand passenger movements			
1999–00	7 169	9 519	5 283	2 554	2 008	1 407
2000–01	8 314	8 616	6 171	2 708	2 477	1 737
2001–02	7 293	9 225	5 400	2 664	2 638	1 397
2002–03	7 066	8 556	5 376	2 588	2 630	1 371
2003–04	7 303	8 681	5 459	2 744	2 948	1 533
2004–05	7 652	7 732	5 511	2 756	2 912	1 525
2005–06	7 761	7 230	5 287	2 805	2 911	1 572
2006–07	8 079	7 713	5 307	2 834	3 041	1 648
2007–08	8 301	7 696	5 846	2 906	2 996	1 753
2008–09	8 218	7 938	5 645	2 929	3 027	1 683
2009–10	8 817	8 148	5 815	3 064	3 119	1 897
2010–11	9 186	8 755	5 962	3 124	3 476	1 965
2011–12	8 914	8 974	5 523	2 922	3 465	1 792
2012–13	9 291	9 207	5 643	2 971	3 489	1 822
2013–14	9 493	9 090	5 565	3 137	3 544	1 967
2014–15	9 943	9 947	5 872	3 167	3 617	1 996
2015–16	10 477	9 696	6 292	3 316	3 728	2 049
2016–17	10 634	11 002	6 515	3 498	3 895	2 037

Source: TRA (2016), BITRE (2016c), BITRE estimates.

Table T 3.3a Total passenger kilometres travelled by capital city—Sydney

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	24.13	2.02	0.24	3.14	0.00	1.57	0.10	31.20
1977–78	24.80	2.10	0.24	3.09	0.00	1.60	0.11	31.94
1978–79	25.59	2.15	0.25	3.09	0.00	1.59	0.11	32.78
1979–80	25.79	2.13	0.27	3.52	0.00	1.63	0.12	33.48
1980–81	26.15	2.18	0.29	3.64	0.00	1.69	0.13	34.07
1981–82	27.17	2.26	0.32	3.76	0.00	1.68	0.14	35.33
1982–83	26.97	2.22	0.33	3.55	0.00	1.72	0.15	34.94
1983–84	28.34	2.37	0.34	3.47	0.00	1.76	0.15	36.42
1984–85	29.65	2.47	0.34	3.44	0.00	1.81	0.15	37.86
1985–86	30.51	2.54	0.31	3.71	0.00	1.84	0.16	39.07
1986–87	31.20	2.56	0.29	3.78	0.00	1.91	0.17	39.91
1987–88	32.59	2.63	0.27	4.08	0.00	1.97	0.15	41.69
1988–89	33.83	2.68	0.27	4.13	0.01	2.00	0.16	43.09
1989–90	34.70	2.63	0.24	4.23	0.01	1.96	0.18	43.95
1990–91	34.69	2.47	0.21	4.30	0.01	2.01	0.15	43.83
1991–92	35.29	2.47	0.20	4.20	0.01	2.01	0.13	44.31
1992–93	36.35	2.51	0.20	4.03	0.01	1.95	0.11	45.17
1993–94	37.20	2.60	0.20	4.13	0.01	1.98	0.11	46.23
1994–95	38.26	2.78	0.19	4.40	0.01	2.02	0.12	47.78
1995–96	38.48	2.91	0.18	4.50	0.01	2.08	0.12	48.30
1996–97	38.43	2.97	0.18	4.64	0.01	2.13	0.13	48.50
1997–98	38.99	3.09	0.17	4.67	0.01	2.18	0.12	49.23
1998–99	2.00	3.19	0.16	4.74	0.02	2.21	0.12	50.38
1999–00	40.94	3.27	0.16	4.90	0.02	2.21	0.12	51.62
2000–01	40.68	3.32	0.16	5.27	0.02	2.21	0.14	51.80
2001–02	41.52	3.40	0.17	4.89	0.02	2.12	0.13	52.24
2002–03	42.18	3.48	0.16	4.89	0.02	2.12	0.13	52.98
2003–04	44.28	3.57	0.17	4.94	0.02	2.10	0.13	55.20
2004–05	44.55	3.56	0.18	4.96	0.02	2.11	0.13	55.52
2005–06	43.70	3.59	0.20	5.05	0.02	2.11	0.13	54.80
2006–07	43.99	3.71	0.22	5.22	0.02	2.15	0.13	55.43
2007–08	44.26	3.89	0.24	5.51	0.02	2.22	0.13	56.26
2008–09	44.20	3.98	0.26	5.49	0.02	2.30	0.13	56.39
2009–10	44.63	4.17	0.28	5.32	0.02	2.31	0.14	56.87
2010–11	45.43	4.29	0.29	5.27	0.02	2.39	0.14	57.84
2011–12	45.71	4.40	0.30	5.47	0.02	2.46	0.14	58.50
2012–13	46.20	4.52	0.31	5.48	0.02	2.48	0.14	59.15
2013–14	46.44	4.65	0.32	5.61	0.01	2.50	0.15	59.68
2014–15	47.08	4.79	0.32	5.84	0.02	2.51	0.14	60.71

Source: BITRE estimates.

Table T 3.3b Total passenger kilometres travelled by capital city—Melbourne

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	21.79	1.96	0.20	1.91	0.53	0.56	na*	26.94
1977–78	22.76	2.09	0.20	1.81	0.53	0.56	na*	27.95
1978–79	23.54	2.09	0.19	1.71	0.53	0.57	na*	28.63
1979–80	23.76	2.00	0.19	1.60	0.52	0.58	na*	28.66
1980–81	24.29	1.95	0.19	1.53	0.53	0.59	na*	29.09
1981–82	25.83	1.95	0.20	1.39	0.54	0.61	na*	30.51
1982–83	26.07	1.86	0.20	1.41	0.53	0.62	na*	30.69
1983–84	27.08	1.97	0.21	1.44	0.54	0.64	na*	31.88
1984–85	27.98	2.05	0.21	1.45	0.60	0.68	na*	32.97
1985–86	29.07	2.21	0.20	1.54	0.62	0.71	na*	34.36
1986–87	29.91	2.34	0.20	1.60	0.63	0.74	na*	35.43
1987–88	31.46	2.54	0.20	1.53	0.65	0.78	na*	37.15
1988–89	32.96	2.71	0.22	1.61	0.66	0.81	na*	38.98
1989–90	33.74	2.74	0.20	1.63	0.53	0.85	na*	39.71
1990–91	33.51	2.68	0.19	1.63	0.59	0.85	na*	39.45
1991–92	33.97	2.73	0.19	1.76	0.59	0.81	na*	40.06
1992–93	34.63	2.80	0.20	1.81	0.51	0.81	na*	40.77
1993–94	35.30	2.89	0.20	1.81	0.51	0.84	na*	41.55
1994–95	36.30	3.02	0.20	1.94	0.51	0.86	na*	42.84
1995–96	37.03	2.96	0.20	1.99	0.52	0.88	na*	43.58
1996–97	37.41	2.92	0.20	1.97	0.52	0.88	na*	43.90
1997–98	38.15	2.97	0.20	1.90	0.52	0.90	na*	44.64
1998–99	39.21	2.98	0.19	1.99	0.53	0.92	na*	45.81
1999–00	40.12	2.98	0.19	2.11	0.56	0.93	na*	46.89
2000–01	40.14	3.04	0.20	2.19	0.58	0.94	na*	47.09
2001–02	40.88	3.12	0.21	2.30	0.59	0.95	na*	48.05
2002–03	41.64	3.18	0.21	2.34	0.60	0.96	na*	48.92
2003–04	43.04	3.26	0.22	2.41	0.60	0.96	na*	50.50
2004–05	43.27	3.30	0.24	2.48	0.61	0.95	na*	50.84
2005–06	42.80	3.38	0.26	2.78	0.62	0.96	na*	50.80
2006–07	42.83	3.52	0.29	3.07	0.63	1.02	na*	51.35
2007–08	43.39	3.69	0.31	3.48	0.65	1.13	na*	52.65
2008–09	42.89	3.80	0.33	3.72	0.71	1.23	na*	52.68
2009–10	43.57	3.99	0.35	3.82	0.70	1.29	na*	53.72
2010–11	44.45	4.12	0.36	3.98	0.73	1.36	na*	55.01
2011–12	45.12	4.23	0.38	3.86	0.77	1.53	na*	55.89
2012–13	45.80	4.31	0.38	3.92	0.73	1.47	na*	56.62
2013–14	46.35	4.45	0.39	3.94	0.71	1.54	na*	57.38
2014–15	47.12	4.59	0.40	3.96	0.73	1.54	na*	58.33

na*: not applicable.
Source: BITRE estimates.

Table T 3.3c Total passenger kilometres travelled by capital city—Brisbane

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	7.82	0.86	0.14	0.38	na*	0.49	0.00	9.70
1977–78	8.21	0.95	0.14	0.37	na*	0.51	0.00	10.17
1978–79	8.60	1.01	0.14	0.35	na*	0.50	0.00	10.61
1979–80	8.78	1.02	0.15	0.38	na*	0.49	0.00	10.83
1980–81	9.16	1.03	0.16	0.42	na*	0.45	0.00	11.23
1981–82	9.88	1.07	0.17	0.46	na*	0.47	0.00	12.05
1982–83	10.07	1.08	0.17	0.47	na*	0.49	0.00	12.29
1983–84	10.50	1.21	0.17	0.52	na*	0.47	0.00	12.87
1984–85	10.82	1.29	0.18	0.55	na*	0.49	0.00	13.33
1985–86	11.40	1.37	0.17	0.62	na*	0.49	0.00	14.04
1986–87	11.68	1.43	0.17	0.68	na*	0.51	0.00	14.47
1987–88	12.39	1.50	0.18	0.74	na*	0.55	0.00	15.36
1988–89	13.23	1.54	0.21	0.85	na*	0.61	0.00	16.44
1989–90	13.69	1.54	0.20	0.78	na*	0.58	0.00	16.80
1990–91	13.94	1.49	0.20	0.79	na*	0.62	0.00	17.04
1991–92	14.53	1.50	0.21	0.75	na*	0.64	0.00	17.63
1992–93	15.28	1.53	0.21	0.74	na*	0.63	0.00	18.39
1993–94	15.80	1.62	0.20	0.72	na*	0.66	0.00	19.00
1994–95	16.46	1.79	0.19	0.70	na*	0.72	0.01	19.86
1995–96	16.87	1.93	0.17	0.74	na*	0.71	0.01	20.43
1996–97	17.01	1.99	0.17	0.79	na*	0.71	0.01	20.68
1997–98	17.34	2.14	0.16	0.80	na*	0.71	0.01	21.15
1998–99	17.70	2.19	0.15	0.81	na*	0.65	0.01	21.51
1999–00	18.21	2.25	0.15	0.87	na*	0.69	0.01	22.17
2000–01	18.24	2.28	0.16	0.94	na*	0.70	0.01	22.32
2001–02	18.81	2.40	0.17	0.96	na*	0.72	0.01	23.06
2002–03	19.36	2.48	0.16	0.97	na*	0.74	0.01	23.73
2003–04	20.70	2.57	0.17	1.01	na*	0.78	0.01	25.25
2004–05	21.12	2.59	0.18	0.99	na*	0.84	0.02	25.74
2005–06	21.10	2.64	0.20	1.07	na*	0.94	0.02	25.96
2006–07	21.75	2.75	0.22	1.05	na*	0.98	0.02	26.78
2007–08	22.35	2.93	0.24	1.08	na*	1.03	0.02	27.65
2008–09	22.18	3.05	0.26	1.17	na*	1.11	0.02	27.80
2009–10	22.34	3.29	0.28	1.13	na*	1.19	0.02	28.25
2010–11	22.59	3.36	0.28	1.10	na*	1.24	0.02	28.58
2011–12	22.94	3.48	0.29	1.10	na*	1.29	0.02	29.11
2012–13	23.33	3.59	0.30	1.06	na*	1.30	0.02	29.60
2013–14	23.53	3.66	0.30	1.05	na*	1.29	0.02	29.87
2014–15	23.91	3.76	0.31	1.07	na*	1.26	0.03	30.33

na*: not applicable.
Source: BITRE estimates.

Table T 3.3d Total passenger kilometres travelled by capital city—Adelaide

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	8.23	0.57	0.11	0.17	0.01	0.42	na*	9.50
1977–78	8.46	0.59	0.11	0.16	0.01	0.43	na*	9.77
1978–79	8.50	0.60	0.11	0.16	0.01	0.44	na*	9.82
1979–80	8.30	0.58	0.11	0.18	0.02	0.46	na*	9.64
1980–81	8.17	0.58	0.11	0.19	0.02	0.51	na*	9.58
1981–82	8.48	0.58	0.12	0.20	0.02	0.52	na*	9.93
1982–83	8.53	0.57	0.12	0.18	0.02	0.47	na*	9.90
1983–84	8.94	0.63	0.12	0.17	0.02	0.48	na*	10.37
1984–85	9.31	0.67	0.12	0.17	0.02	0.46	na*	10.75
1985–86	9.62	0.67	0.11	0.18	0.02	0.47	na*	11.07
1986–87	9.81	0.66	0.10	0.18	0.02	0.47	na*	11.24
1987–88	10.20	0.68	0.10	0.13	0.02	0.50	na*	11.62
1988–89	10.58	0.71	0.10	0.14	0.02	0.47	na*	12.02
1989–90	10.75	0.71	0.09	0.14	0.02	0.50	na*	12.20
1990–91	10.66	0.69	0.08	0.12	0.02	0.53	na*	12.10
1991–92	10.75	0.70	0.08	0.11	0.01	0.53	na*	12.19
1992–93	10.94	0.72	0.07	0.12	0.01	0.51	na*	12.38
1993–94	10.94	0.74	0.07	0.15	0.02	0.52	na*	12.44
1994–95	11.03	0.78	0.07	0.16	0.01	0.54	na*	12.60
1995–96	11.00	0.80	0.07	0.15	0.01	0.54	na*	12.57
1996–97	11.06	0.79	0.06	0.15	0.01	0.54	na*	12.62
1997–98	11.22	0.81	0.06	0.14	0.01	0.54	na*	12.79
1998–99	11.61	0.81	0.06	0.14	0.01	0.53	na*	13.15
1999–00	12.00	0.80	0.06	0.13	0.01	0.53	na*	13.53
2000–01	11.96	0.79	0.06	0.13	0.01	0.55	na*	13.50
2001–02	12.13	0.80	0.06	0.14	0.02	0.56	na*	13.71
2002–03	12.53	0.82	0.06	0.16	0.02	0.57	na*	14.16
2003–04	12.66	0.83	0.07	0.18	0.02	0.57	na*	14.32
2004–05	12.41	0.83	0.07	0.18	0.02	0.58	na*	14.08
2005–06	12.17	0.84	0.08	0.19	0.02	0.61	na*	13.90
2006–07	12.26	0.86	0.08	0.19	0.02	0.62	na*	14.03
2007–08	11.91	0.91	0.09	0.19	0.02	0.63	na*	13.76
2008–09	11.83	0.94	0.10	0.20	0.02	0.64	na*	13.73
2009–10	11.95	0.98	0.10	0.19	0.03	0.65	na*	13.91
2010–11	11.88	1.01	0.11	0.17	0.03	0.65	na*	13.84
2011–12	11.80	1.03	0.11	0.16	0.03	0.65	na*	13.77
2012–13	11.95	1.05	0.11	0.16	0.04	0.64	na*	13.94
2013–14	12.12	1.08	0.11	0.17	0.04	0.64	na*	14.16
2014–15	12.25	1.11	0.11	0.23	0.05	0.65	na*	14.40

na*: not applicable.
Source: BITRE estimates.

Table T 3.3e Total passenger kilometres travelled by capital city—Perth

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	8.19	0.92	0.10	0.09	na*	0.52	0.00	9.82
1977–78	8.61	0.97	0.10	0.10	na*	0.53	0.00	10.31
1978–79	8.86	1.00	0.10	0.10	na*	0.52	0.00	10.58
1979–80	8.88	1.00	0.11	0.08	na*	0.56	0.00	10.63
1980–81	8.95	1.02	0.11	0.07	na*	0.58	0.00	10.74
1981–82	9.45	1.03	0.13	0.07	na*	0.55	0.00	11.22
1982–83	9.53	0.99	0.13	0.08	na*	0.55	0.00	11.29
1983–84	10.15	1.04	0.14	0.11	na*	0.48	0.00	11.91
1984–85	10.52	1.06	0.14	0.11	na*	0.46	0.00	12.29
1985–86	10.90	1.07	0.13	0.12	na*	0.50	0.00	12.72
1986–87	11.19	1.06	0.13	0.12	na*	0.51	0.00	13.02
1987–88	11.78	1.10	0.13	0.12	na*	0.51	0.00	13.64
1988–89	12.36	1.16	0.14	0.11	na*	0.54	0.00	14.32
1989–90	12.73	1.19	0.13	0.11	na*	0.57	0.00	14.73
1990–91	12.65	1.15	0.11	0.09	na*	0.55	0.00	14.56
1991–92	12.85	1.17	0.11	0.12	na*	0.53	0.00	14.77
1992–93	13.31	1.22	0.10	0.17	na*	0.52	0.00	15.32
1993–94	14.06	1.30	0.09	0.30	na*	0.51	0.00	16.26
1994–95	14.96	1.41	0.09	0.30	na*	0.52	0.00	17.29
1995–96	15.28	1.49	0.09	0.34	na*	0.52	0.00	17.71
1996–97	15.44	1.49	0.09	0.38	na*	0.52	0.00	17.91
1997–98	15.66	1.51	0.08	0.39	na*	0.53	0.00	18.17
1998–99	16.08	1.51	0.08	0.38	na*	0.52	0.00	18.58
1999–00	16.31	1.52	0.08	0.39	na*	0.55	0.00	18.85
2000–01	16.11	1.52	0.09	0.41	na*	0.57	0.00	18.71
2001–02	16.44	1.58	0.09	0.41	na*	0.59	0.00	19.11
2002–03	16.89	1.62	0.09	0.42	na*	0.60	0.00	19.62
2003–04	17.74	1.68	0.10	0.42	na*	0.62	0.00	20.56
2004–05	18.02	1.70	0.11	0.44	na*	0.64	0.00	20.91
2005–06	17.68	1.74	0.12	0.46	na*	0.65	0.00	20.65
2006–07	18.08	1.82	0.14	0.50	na*	0.65	0.00	21.20
2007–08	18.18	1.93	0.15	0.66	na*	0.62	0.00	21.54
2008–09	18.69	2.00	0.17	0.87	na*	0.64	0.00	22.36
2009–10	18.56	2.10	0.18	0.90	na*	0.64	0.00	22.38
2010–11	18.79	2.16	0.18	0.94	na*	0.66	0.00	22.74
2011–12	19.18	2.24	0.19	1.02	na*	0.71	0.00	23.34
2012–13	19.31	2.32	0.20	1.06	na*	0.74	0.00	23.63
2013–14	19.50	2.39	0.21	1.03	na*	0.75	0.00	23.88
2014–15	19.74	2.45	0.21	1.05	na*	0.76	0.00	24.21

na*: not applicable.
Source: BITRE estimates.

Table T 3.3f Total passenger kilometres travelled by capital city—Hobart

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	1.23	0.13	0.01	na*	na*	0.12	na*	1.51
1977–78	1.31	0.14	0.01	na*	na*	0.12	na*	1.60
1978–79	1.37	0.15	0.01	na*	na*	0.11	na*	1.64
1979–80	1.39	0.15	0.01	na*	na*	0.11	na*	1.66
1980–81	1.42	0.15	0.01	na*	na*	0.11	na*	1.69
1981–82	1.47	0.16	0.01	na*	na*	0.10	na*	1.74
1982–83	1.47	0.17	0.01	na*	na*	0.09	na*	1.74
1983–84	1.53	0.18	0.01	na*	na*	0.10	na*	1.83
1984–85	1.59	0.20	0.01	na*	na*	0.10	na*	1.90
1985–86	1.67	0.19	0.01	na*	na*	0.11	na*	1.98
1986–87	1.68	0.19	0.01	na*	na*	0.11	na*	1.99
1987–88	1.75	0.19	0.01	na*	na*	0.10	na*	2.05
1988–89	1.82	0.19	0.01	na*	na*	0.10	na*	2.12
1989–90	1.91	0.18	0.01	na*	na*	0.10	na*	2.20
1990–91	1.92	0.17	0.01	na*	na*	0.10	na*	2.20
1991–92	1.95	0.18	0.01	na*	na*	0.10	na*	2.24
1992–93	2.02	0.19	0.01	na*	na*	0.10	na*	2.33
1993–94	2.07	0.21	0.01	na*	na*	0.10	na*	2.38
1994–95	2.10	0.22	0.01	na*	na*	0.10	na*	2.43
1995–96	2.12	0.22	0.01	na*	na*	0.10	na*	2.45
1996–97	2.12	0.22	0.01	na*	na*	0.09	na*	2.45
1997–98	2.09	0.22	0.01	na*	na*	0.09	na*	2.41
1998–99	2.08	0.22	0.01	na*	na*	0.09	na*	2.40
1999–00	2.08	0.22	0.01	na*	na*	0.09	na*	2.40
2000–01	2.02	0.22	0.01	na*	na*	0.09	na*	2.35
2001–02	2.06	0.23	0.01	na*	na*	0.09	na*	2.39
2002–03	2.14	0.23	0.01	na*	na*	0.09	na*	2.47
2003–04	2.25	0.24	0.01	na*	na*	0.09	na*	2.59
2004–05	2.20	0.24	0.01	na*	na*	0.09	na*	2.55
2005–06	2.17	0.24	0.01	na*	na*	0.09	na*	2.52
2006–07	2.19	0.25	0.01	na*	na*	0.09	na*	2.55
2007–08	2.19	0.27	0.01	na*	na*	0.09	na*	2.57
2008–09	2.16	0.28	0.02	na*	na*	0.10	na*	2.55
2009–10	2.14	0.29	0.02	na*	na*	0.10	na*	2.53
2010–11	2.12	0.29	0.02	na*	na*	0.10	na*	2.54
2011–12	2.12	0.30	0.02	na*	na*	0.10	na*	2.54
2012–13	2.11	0.31	0.02	na*	na*	0.10	na*	2.54
2013–14	2.11	0.31	0.02	na*	na*	0.10	na*	2.54
2014–15	2.11	0.32	0.02	na*	na*	0.10	na*	2.55

na*: not applicable.
Source: BITRE estimates.

Table T 3.3g Total passenger kilometres travelled by capital city—Darwin

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	0.33	0.09	0.01	na*	na*	0.01	na*	0.44
1977–78	0.35	0.10	0.01	na*	na*	0.01	na*	0.46
1978–79	0.37	0.10	0.01	na*	na*	0.01	na*	0.49
1979–80	0.38	0.10	0.01	na*	na*	0.02	na*	0.51
1980–81	0.41	0.11	0.01	na*	na*	0.02	na*	0.55
1981–82	0.45	0.11	0.01	na*	na*	0.02	na*	0.60
1982–83	0.47	0.10	0.02	na*	na*	0.03	na*	0.61
1983–84	0.51	0.11	0.02	na*	na*	0.03	na*	0.66
1984–85	0.55	0.11	0.02	na*	na*	0.03	na*	0.71
1985–86	0.61	0.12	0.01	na*	na*	0.03	na*	0.77
1986–87	0.63	0.12	0.01	na*	na*	0.03	na*	0.79
1987–88	0.65	0.12	0.01	na*	na*	0.03	na*	0.82
1988–89	0.66	0.12	0.01	na*	na*	0.04	na*	0.84
1989–90	0.68	0.12	0.01	na*	na*	0.04	na*	0.86
1990–91	0.69	0.12	0.01	na*	na*	0.05	na*	0.86
1991–92	0.70	0.12	0.01	na*	na*	0.05	na*	0.88
1992–93	0.72	0.12	0.01	na*	na*	0.05	na*	0.90
1993–94	0.74	0.13	0.01	na*	na*	0.05	na*	0.93
1994–95	0.79	0.14	0.01	na*	na*	0.05	na*	0.99
1995–96	0.83	0.14	0.01	na*	na*	0.06	na*	1.04
1996–97	0.84	0.15	0.01	na*	na*	0.06	na*	1.06
1997–98	0.86	0.16	0.01	na*	na*	0.06	na*	1.08
1998–99	0.87	0.16	0.01	na*	na*	0.06	na*	1.10
1999–00	0.88	0.16	0.01	na*	na*	0.06	na*	1.11
2000–01	0.85	0.16	0.01	na*	na*	0.06	na*	1.08
2001–02	0.86	0.16	0.01	na*	na*	0.06	na*	1.09
2002–03	0.87	0.17	0.01	na*	na*	0.06	na*	1.10
2003–04	0.89	0.17	0.01	na*	na*	0.06	na*	1.14
2004–05	0.88	0.17	0.01	na*	na*	0.06	na*	1.13
2005–06	0.87	0.18	0.01	na*	na*	0.06	na*	1.13
2006–07	0.90	0.19	0.01	na*	na*	0.06	na*	1.17
2007–08	0.93	0.20	0.01	na*	na*	0.07	na*	1.21
2008–09	0.95	0.21	0.01	na*	na*	0.07	na*	1.24
2009–10	0.95	0.22	0.02	na*	na*	0.07	na*	1.26
2010–11	0.96	0.23	0.02	na*	na*	0.07	na*	1.28
2011–12	0.97	0.23	0.02	na*	na*	0.07	na*	1.29
2012–13	0.98	0.24	0.02	na*	na*	0.09	na*	1.33
2013–14	1.00	0.25	0.02	na*	na*	0.11	na*	1.38
2014–15	1.00	0.26	0.02	na*	na*	0.11	na*	1.38

na*: not applicable.
Source: BITRE estimates.

Table T 3.3h Total passenger kilometres travelled by capital city—Canberra

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus	Ferry	Total
				billion passenger kilometres				
1976–77	1.99	0.16	0.02	na*	na*	0.09	na*	2.27
1977–78	2.08	0.18	0.02	na*	na*	0.09	na*	2.37
1978–79	2.15	0.18	0.02	na*	na*	0.11	na*	2.46
1979–80	2.17	0.18	0.03	na*	na*	0.12	na*	2.50
1980–81	2.20	0.18	0.03	na*	na*	0.12	na*	2.54
1981–82	2.34	0.19	0.03	na*	na*	0.12	na*	2.68
1982–83	2.37	0.19	0.03	na*	na*	0.14	na*	2.73
1983–84	2.49	0.20	0.04	na*	na*	0.16	na*	2.89
1984–85	2.62	0.21	0.04	na*	na*	0.17	na*	3.03
1985–86	2.74	0.22	0.04	na*	na*	0.16	na*	3.16
1986–87	2.82	0.23	0.03	na*	na*	0.17	na*	3.26
1987–88	2.99	0.24	0.03	na*	na*	0.18	na*	3.44
1988–89	3.16	0.25	0.04	na*	na*	0.18	na*	3.62
1989–90	3.29	0.25	0.03	na*	na*	0.18	na*	3.76
1990–91	3.34	0.25	0.03	na*	na*	0.18	na*	3.81
1991–92	3.45	0.25	0.03	na*	na*	0.18	na*	3.91
1992–93	3.59	0.26	0.03	na*	na*	0.18	na*	4.06
1993–94	3.70	0.26	0.03	na*	na*	0.18	na*	4.16
1994–95	3.79	0.28	0.03	na*	na*	0.19	na*	4.28
1995–96	3.82	0.29	0.03	na*	na*	0.19	na*	4.33
1996–97	3.83	0.28	0.02	na*	na*	0.20	na*	4.34
1997–98	3.84	0.29	0.02	na*	na*	0.20	na*	4.36
1998–99	3.93	0.29	0.02	na*	na*	0.19	na*	4.44
1999–00	4.02	0.30	0.02	na*	na*	0.19	na*	4.53
2000–01	3.95	0.30	0.02	na*	na*	0.19	na*	4.45
2001–02	4.02	0.31	0.03	na*	na*	0.19	na*	4.55
2002–03	4.16	0.32	0.03	na*	na*	0.20	na*	4.70
2003–04	4.34	0.33	0.03	na*	na*	0.20	na*	4.89
2004–05	4.34	0.33	0.03	na*	na*	0.20	na*	4.90
2005–06	4.28	0.33	0.03	na*	na*	0.21	na*	4.85
2006–07	4.33	0.34	0.03	na*	na*	0.20	na*	4.91
2007–08	4.35	0.36	0.04	na*	na*	0.20	na*	4.95
2008–09	4.35	0.37	0.04	na*	na*	0.21	na*	4.97
2009–10	4.38	0.38	0.04	na*	na*	0.22	na*	5.02
2010–11	4.43	0.39	0.05	na*	na*	0.22	na*	5.08
2011–12	4.51	0.41	0.05	na*	na*	0.22	na*	5.18
2012–13	4.58	0.42	0.05	na*	na*	0.22	na*	5.26
2013–14	4.60	0.43	0.05	na*	na*	0.22	na*	5.29
2014–15	4.64	0.44	0.05	na*	na*	0.22	na*	5.35

na*: not applicable.
Source: BITRE estimates.

Table T 3.3i Total passenger kilometres travelled by capital city —Australian capital cities

Financial year	Passenger cars	Commercial vehicles	Motor cycles	Rail	Light rail	Bus[f]	Ferry	Total
				billion passenger kilometres				
1976–77	73.73	6.70	0.82	5.68	0.54	3.78	0.12	91.39
1977–78	76.58	7.11	0.83	5.53	0.54	3.86	0.12	94.57
1978–79	78.97	7.28	0.83	5.41	0.54	3.86	0.12	97.01
1979–80	79.45	7.16	0.88	5.77	0.54	3.98	0.13	97.92
1980–81	80.77	7.20	0.92	5.85	0.55	4.07	0.13	99.49
1981–82	85.07	7.35	1.00	5.88	0.56	4.07	0.14	104.06
1982–83	85.48	7.19	1.01	5.69	0.55	4.11	0.15	104.19
1983–84	89.53	7.72	1.04	5.70	0.56	4.12	0.15	108.83
1984–85	93.03	8.07	1.06	5.71	0.62	4.20	0.16	112.84
1985–86	96.53	8.38	0.99	6.16	0.64	4.31	0.16	117.18
1986–87	98.93	8.59	0.96	6.36	0.65	4.45	0.17	120.12
1987–88	103.80	8.99	0.94	6.60	0.67	4.62	0.15	125.77
1988–89	108.61	9.35	1.00	6.84	0.70	4.75	0.17	131.42
1989–90	111.50	9.37	0.92	6.88	0.56	4.79	0.18	134.20
1990–91	111.40	9.02	0.84	6.93	0.62	4.88	0.15	133.84
1991–92	113.50	9.11	0.84	6.94	0.62	4.85	0.13	135.99
1992–93	116.86	9.35	0.83	6.88	0.54	4.74	0.11	139.32
1993–94	119.80	9.75	0.81	7.11	0.54	4.82	0.12	142.94
1994–95	123.70	10.41	0.79	7.50	0.54	5.00	0.13	148.06
1995–96	125.43	10.75	0.75	7.73	0.55	5.08	0.13	150.41
1996–97	126.16	10.81	0.74	7.93	0.54	5.13	0.14	151.46
1997–98	128.15	11.19	0.71	7.90	0.54	5.21	0.13	153.84
1998–99	131.42	11.35	0.68	8.06	0.56	5.16	0.13	157.37
1999–00	134.57	11.49	0.69	8.39	0.60	5.23	0.13	161.10
2000–01	133.95	11.63	0.71	8.94	0.61	5.30	0.15	161.29
2001–02	136.72	12.00	0.75	8.70	0.62	5.27	0.14	164.20
2002–03	139.75	12.30	0.74	8.78	0.63	5.34	0.14	167.69
2003–04	145.90	12.65	0.78	8.96	0.63	5.38	0.14	174.44
2004–05	146.80	12.71	0.84	9.06	0.64	5.48	0.15	175.67
2005–06	144.77	12.95	0.91	9.56	0.66	5.63	0.15	174.62
2006–07	146.33	13.45	1.01	10.03	0.67	5.78	0.15	177.42
2007–08	147.56	14.18	1.10	10.93	0.69	5.98	0.15	180.59
2008–09	147.25	14.62	1.19	11.45	0.76	6.30	0.16	181.72
2009–10	148.52	15.41	1.27	11.35	0.75	6.48	0.16	183.94
2010–11	150.65	15.85	1.30	11.47	0.78	6.70	0.16	186.91
2011–12	152.35	16.32	1.34	11.60	0.82	7.03	0.16	189.62
2012–13	154.27	16.75	1.38	11.68	0.79	7.02	0.17	192.07
2013–14	155.66	17.23	1.42	11.79	0.76	7.14	0.18	194.17
2014–15	157.85	17.72	1.44	12.14	0.80	7.13	0.17	197.26

[f] Total bus pkt values are calculated as the sum of urban passenger transport (UPT) bus values and private bus usage. The UPT bus values refer solely to public route buses, where as private bus values include private bus usage such as by charter buses.

Source: BITRE estimates.

Table T 3.4a Method of travel to work, by state/territory—New South Wales

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	225 068	10 632	1 164 920	171 024	na	26 294	18 851	118 626	na
1991	211 372	8 407	1 197 033	168 743	na	17 269	16 970	123 248	86 035
1996	225 515	9 496	1 396 204	176 686	na	16 423	17 305	114 538	97 989
2001	249 096	8 223	1 487 981	168 862	54 094	14 157	17 730	114 927	112 728
2006	265 113	8 219	1 639 528	166 871	45 953	16 495	19 274	127 446	93 564
2011	317 806	7 730	1 807 359	157 359	38 584	19 629	23 358	128 340	113 376
2016	397 173	6 694	1 953 399	144 820	32 908	21 159	23 332	130 957	140 478

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4b Method of travel to work, by state/territory—Victoria

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	134 654	5 873	986 891	132 471	na	12 132	24 022	79 580	na
1991	106 427	4 022	1 008 838	114 370	na	8 704	18 334	74 133	41 684
1996	103 778	4 989	1 157 773	114 478	na	8 414	17 190	63 668	46 918
2001	119 408	4 520	1 276 600	109 752	25 682	8 376	18 910	64 732	57 770
2006	143 412	4 555	1 394 017	111 030	22 806	10 838	25 180	80 539	63 067
2011	190 018	4 887	1 554 490	116 099	20 122	10 645	30 913	83 525	87 112
2016	238 249	4 882	1 691 496	110 502	16 720	9 878	33 963	87 794	101 999

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4c Method of travel to work, by state/territory—Queensland

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	59 836	5 131	553 352	90 210	na	20 495	19 469	62 369	na
1991	55 908	3 787	624 144	93 935	na	16 819	22 964	62 908	16 016
1996	62 621	5 255	809 145	111 524	na	16 608	20 454	62 025	18 470
2001	68 732	4 020	906 073	112 409	30 538	15 601	20 252	60 529	24 510
2006	91 302	4 531	1 090 011	123 254	29 283	20 071	20 580	72 981	27 915
2011	113 051	4 335	1 248 540	125 270	25 604	19 101	21 576	75 561	39 650
2016	110 920	3 554	1 368 965	112 508	19 948	19 630	21 679	70 471	38 398

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4d Method of travel to work, by state/territory—South Australia

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	41 952	1 954	322 855	44 187	na	9 376	10 415	28 744	na
1991	33 062	1 453	322 141	41 368	na	5 600	8 662	26 514	7 033
1996	27 567	1 840	363 074	39 302	na	3 740	5 962	21 015	6 539
2001	28 282	1 475	392 511	37 455	7 298	2 904	5 889	21 553	7 837
2006	36 140	1 458	429 822	38 720	6 609	4 324	7 942	24 862	8 298
2011	39 880	1 549	471 362	39 168	5 881	4 059	7 503	23 623	9 931
2016	41 548	1 374	492 357	34 003	4 513	3 440	7 455	20 697	10 337

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4e Method of travel to work, by state/territory—Western Australia

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	36 629	2 191	324 791	48 071	na	6 925	7 830	27 995	na
1991	33 026	1 206	361 689	46 036	na	6 022	9 102	26 828	7 113
1996	33 163	1 865	453 690	55 553	na	4 817	7 152	28 440	13 566
2001	34 294	1 521	498 685	51 929	11 019	4 247	8 279	28 307	17 701
2006	47 087	1 972	570 271	58 748	10 910	5 176	9 294	31 757	19 833
2011	65 538	2 218	662 949	63 485	10 485	6 508	11 758	35 995	37 158
2016	71 026	2 041	733 030	56 173	8 503	5 751	11 730	31 914	35 447

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4f Method of travel to work, by state/territory—Tasmania

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	8 622	693	101 797	17 505	na	1 108	1 244	12 265	na
1991	5 924	546	97 245	14 746	na	779	1 012	10 712	858
1996	5 342	551	109 633	14 441	na	838	964	9 466	811
2001	4 290	416	110 241	12 645	2 740	825	1 145	10 070	779
2006	5 156	495	125 485	14 506	2 572	1 089	1 478	11 693	805
2011	5 672	560	137 140	14 799	2 040	1 144	1 372	10 850	1 134
2016	5 362	576	141 396	12 541	1 695	1 298	1 656	10 443	1 057

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4g Method of travel to work, by state/territory—Northern Territory

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	2 429	537	32 209	7 021	na	1 391	2 185	6 934	na
1991	2 389	317	31 781	6 118	na	1 146	2 908	6 938	218
1996	2 887	477	40 865	7 445	na	1 040	2 636	9 369	381
2001	2 711	411	44 343	7 261	1 050	918	2 846	10 561	483
2006	3 082	328	46 702	7 114	795	978	2 579	10 347	369
2011	3 306	327	55 435	7 750	727	1 419	2 742	10 863	518
2016	4 966	279	61 874	6 947	557	1 392	2 552	8 683	1 458

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4h Method of travel to work, by state/territory—Australian Capital Territory

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	9 614	540	77 313	11 524	na	1 310	2 185	4 084	na
1991	9 680	325	78 981	12 363	na	906	2 043	4 726	1 440
1996	8 638	540	89 613	12 713	na	986	2 760	5 373	1 728
2001	7 506	561	99 585	12 845	1 695	1 069	3 115	5 741	1 595
2006	10 374	411	107 608	13 011	1 471	1 766	3 757	7 399	1 362
2011	11 208	463	122 109	13 626	1 284	1 800	4 671	8 164	1 899
2016	12 462	315	130 776	12 320	979	1 974	5 366	9 305	2 179

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4i Method of travel to work by state/territory—total Australia

Census year	One method only								Public transport and other method[13]
	Public transport	Taxi	Car, as driver	Car, as passenger	Truck	Motor bike/motor scooter	Bicycle	Walked only	
	Number of employed persons								
1986	518 804	27 551	3 564 128	522 013	na	79 031	86 201	340 597	na
1991	457 788	20 063	3 721 852	497 679	na	57 245	81 995	336 007	160 397
1996	469 511	25 013	4 419 997	532 142	na	52 866	74 423	313 894	186 402
2001	514 320	21 147	4 816 019	513 158	134 116	48 097	78 166	316 420	223 403
2006	601 666	21 969	5 403 443	533 252	120 399	60 741	90 085	367 020	215 213
2011	746 479	22 069	6 059 384	537 556	104 727	64 305	103 893	376 921	290 778
2016	881 706	19 715	6 573 293	489 814	85 823	64 522	107 733	370 264	331 353

[13] See end notes.
na: not available.
Source: ABS (2017q).

Table T 3.4j Total employed persons, by state/territory

Month and year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total Australia
					Number of employed persons				
June 1981	2 258 262	1 724 384	962 389	560 940	574 751	174 612	56 726	101 881	6 413 945
June 1986	2 378 161	1 856 220	1 118 679	606 673	660 945	182 977	74 271	129 752	7 007 678
August 1991	2 588 182	1 963 645	1 296 483	627 912	728 773	194 338	75 287	146 082	7 620 703
August 1996	2 770 218	2 064 961	1 497 430	645 811	845 583	199 774	87 090	154 997	8 265 865
August 2001	3 007 640	2 240 409	1 663 074	671 810	925 757	193 121	98 703	171 382	8 971 895
August 2006	3 226 341	2 505 369	2 036 215	751 359	1 067 806	221 511	101 650	195 523	10 105 773
August 2011	3 478 967	2 786 526	2 260 729	801 295	1 241 835	234 673	119 989	206 656	11 130 669
August 2015	3 709 530	2 919 569	2 336 461	801 087	1 349 951	240 356	134 888	206 456	11 698 299
August 2016	3 775 231	3 049 547	2 337 190	806 546	1 320 097	235 089	131 502	215 099	11 870 300

Source: ABS (2017c).

CHAPTER 4
Road

Figure T 4 Map of national road network

Table T 4.1 Intercapital road distances

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Darwin	Canberra
	km	*km*	*km*	*km*	*km*	*km*	*km*
Sydney	–	877	921	1 375	3 935	3 976	287
Melbourne	–	–	1 667	727	3 418	3 753	663
Brisbane	–	–	–	2 049	4 563	3 425	1 197
Adelaide	–	–	–	–	2 693	3 028	1 194
Perth	–	–	–	–	–	4 041	3 718
Darwin	–	–	–	–	–	–	4 053

Source: Google maps.

Table T 4.2 Total vehicle kilometres travelled, by vehicle type

Financial year	Passenger cars	Motor cycles	Buses	Light commercial vehicles	Rigid trucks	Articulated trucks	Total
			billion vehicle kilometres travelled				
1970–71	60.73	1.01	0.66	9.84	4.70	1.66	78.61
1971–72	64.80	1.10	0.65	10.42	4.69	1.76	83.43
1972–73	67.33	1.20	0.68	11.01	4.71	1.80	86.72
1973–74	71.99	1.30	0.69	12.02	4.87	1.90	92.76
1974–75	75.21	1.40	0.69	12.96	5.03	1.91	97.19
1975–76	78.40	1.64	0.69	13.12	5.25	2.03	101.12
1976–77	82.08	1.68	0.70	14.83	5.15	2.20	106.64
1977–78	85.02	1.73	0.71	16.11	5.10	2.22	110.90
1978–79	87.56	1.77	0.73	16.67	5.13	2.60	114.46
1979–80	88.06	1.90	0.77	16.79	5.65	2.80	115.97
1980–81	89.57	2.00	0.82	17.34	6.13	2.88	118.74
1981–82	94.14	2.18	0.86	17.86	6.97	3.06	125.07
1982–83	94.64	2.20	0.95	17.89	6.22	3.03	124.94
1983–84	99.13	2.25	1.05	19.32	6.17	3.41	131.32
1984–85	103.07	2.28	1.14	20.52	6.34	3.59	136.95
1985–86	106.47	2.10	1.22	21.23	6.22	3.67	140.91
1986–87	109.00	2.00	1.30	21.72	6.28	3.69	144.00
1987–88	114.57	1.92	1.39	22.77	6.69	3.95	151.29
1988–89	120.30	2.00	1.47	23.73	6.73	4.05	158.28
1989–90	124.00	1.80	1.56	23.90	6.84	4.13	162.23
1990–91	124.47	1.62	1.52	23.30	6.12	4.07	161.10
1991–92	127.18	1.61	1.48	24.17	5.91	4.10	164.46
1992–93	131.33	1.62	1.49	24.95	5.82	4.39	169.61
1993–94	134.91	1.59	1.55	25.76	6.02	4.53	174.35
1994–95	139.38	1.57	1.59	27.27	6.32	4.82	180.95
1995–96	141.59	1.52	1.64	28.28	6.65	5.02	184.71
1996–97	142.87	1.52	1.65	28.65	7.15	5.21	187.06
1997–98	144.51	1.46	1.69	29.94	7.24	5.40	190.24
1998–99	148.08	1.40	1.71	30.69	7.17	5.55	194.61
1999–00	151.17	1.42	1.76	31.33	7.29	5.70	198.67
2000–01	149.75	1.46	1.80	31.70	7.17	5.62	197.51
2001–02	153.63	1.55	1.82	32.94	7.44	5.81	203.19
2002–03	157.71	1.52	1.86	34.02	7.70	5.97	208.78
2003–04	165.35	1.60	1.89	35.15	7.85	6.16	218.00
2004–05	166.02	1.72	1.91	35.38	8.10	6.32	219.45
2005–06	162.91	1.88	1.96	36.28	8.39	6.46	217.89
2006–07	164.94	2.08	2.00	37.64	8.62	6.72	221.99
2007–08	165.73	2.28	2.06	39.26	8.86	6.91	225.10
2008–09	165.08	2.44	2.13	40.19	8.75	6.83	225.43
2009–10	166.15	2.63	2.20	41.85	8.99	6.95	228.77
2010–11	168.03	2.68	2.27	43.12	9.21	7.20	232.51
2011–12	169.58	2.77	2.36	44.48	9.45	7.45	236.10
2012–13	171.20	2.86	2.40	45.83	9.65	7.65	239.60
2013–14	172.50	2.93	2.44	47.08	9.84	7.84	242.63
2014–15	174.70	2.98	2.46	48.36	10.06	8.07	246.62
2015–16	177.32	3.05	2.48	49.71	10.32	8.32	251.20

Note: 2015–16 data are preliminary/provisional.
Source: BITRE estimates.

Table T 4.3 Total vehicle kilometres travelled, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
				billion vehicle kilometres travelled					
1970–71	27.76	21.45	10.77	7.42	7.49	2.30	0.51	0.91	78.61
1971–72	29.31	22.78	11.52	7.76	8.04	2.42	0.57	1.02	83.43
1972–73	30.24	23.65	12.17	8.00	8.43	2.50	0.61	1.12	86.72
1973–74	31.99	25.24	13.23	8.61	9.10	2.65	0.68	1.26	92.76
1974–75	33.18	26.38	14.11	9.09	9.65	2.74	0.67	1.37	97.19
1975–76	34.00	27.48	14.95	9.49	10.17	2.82	0.75	1.47	101.12
1976–77	35.60	28.96	15.84	9.98	10.91	2.95	0.84	1.57	106.64
1977–78	36.77	30.05	16.70	10.29	11.49	3.07	0.89	1.64	110.90
1978–79	38.12	30.76	17.56	10.40	11.84	3.15	0.94	1.70	114.46
1979–80	38.83	30.83	18.18	10.28	11.97	3.16	0.99	1.72	115.97
1980–81	39.90	31.30	19.12	10.27	12.16	3.19	1.04	1.76	118.74
1981–82	41.72	32.99	20.60	10.68	12.79	3.32	1.12	1.86	125.07
1982–83	41.18	33.15	20.85	10.69	12.73	3.33	1.13	1.89	124.94
1983–84	43.23	34.73	21.91	11.28	13.45	3.52	1.21	1.99	131.32
1984–85	45.11	36.22	22.79	11.80	13.94	3.69	1.28	2.10	136.95
1985–86	46.03	37.47	23.59	12.14	14.35	3.79	1.34	2.20	140.91
1986–87	46.70	38.63	24.20	12.36	14.66	3.82	1.36	2.27	144.00
1987–88	48.65	40.92	25.65	12.87	15.43	3.97	1.40	2.41	151.29
1988–89	50.42	42.99	27.29	13.32	16.16	4.12	1.42	2.54	158.28
1989–90	51.48	44.02	28.22	13.51	16.63	4.28	1.45	2.64	162.23
1990–91	50.93	43.54	28.49	13.30	16.48	4.26	1.43	2.67	161.10
1991–92	51.80	44.20	29.73	13.43	16.74	4.34	1.46	2.76	164.46
1992–93	53.38	45.13	31.30	13.69	17.25	4.49	1.50	2.87	169.61
1993–94	54.82	46.06	32.55	13.77	18.07	4.60	1.54	2.95	174.35
1994–95	56.71	47.38	34.31	13.99	19.17	4.73	1.62	3.04	180.95
1995–96	57.43	48.45	35.52	14.06	19.69	4.79	1.70	3.08	184.71
1996–97	57.76	49.38	36.10	14.19	20.00	4.81	1.73	3.09	187.06
1997–98	58.85	49.88	37.03	14.43	20.41	4.77	1.76	3.11	190.24
1998–99	60.24	51.06	37.86	14.84	20.89	4.76	1.78	3.17	194.61
1999–00	61.72	51.70	38.99	15.26	21.19	4.77	1.80	3.23	198.67
2000–01	61.50	51.06	39.15	15.20	21.00	4.67	1.75	3.18	197.51
2001–02	62.85	52.86	40.64	15.50	21.52	4.79	1.78	3.26	203.19
2002–03	64.01	54.53	41.98	16.01	22.10	4.97	1.82	3.36	208.78
2003–04	66.72	56.67	44.62	16.26	23.14	5.20	1.87	3.51	218.00
2004–05	67.15	56.82	45.32	16.07	23.54	5.16	1.86	3.52	219.45
2005–06	66.45	56.10	45.59	15.86	23.42	5.12	1.86	3.49	217.89
2006–07	67.32	56.74	47.04	16.11	24.06	5.25	1.92	3.55	221.99
2007–08	67.94	57.68	48.25	15.92	24.46	5.28	1.99	3.58	225.10
2008–09	68.03	57.38	48.12	15.90	25.13	5.26	2.04	3.59	225.43
2009–10	68.99	58.62	48.86	16.13	25.25	5.24	2.05	3.63	228.77
2010–11	70.42	59.90	49.27	16.16	25.74	5.27	2.06	3.68	232.51
2011–12	71.20	61.02	50.15	16.19	26.40	5.30	2.07	3.76	236.10
2012–13	72.21	61.85	51.09	16.38	26.83	5.30	2.11	3.82	239.60
2013–14	72.97	62.79	51.62	16.66	27.30	5.32	2.12	3.86	242.63
2014–15	74.16	63.89	52.55	16.88	27.74	5.34	2.14	3.91	246.62
2015–16	75.61	65.09	53.61	17.08	28.31	5.36	2.16	3.96	251.20

Note: 2015–16 data are preliminary/provisional.
NSW includes Jervis Bay.
Source: BITRE estimates.

Table T 4.4 Total vehicle kilometres travelled, by capital city

Financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Total
				billion vehicle kilometres travelled					
1970–71	14.79	12.31	4.34	4.57	4.52	0.72	0.21	0.90	42.36
1971–72	15.64	13.08	4.68	4.81	4.87	0.76	0.23	1.01	45.09
1972–73	16.15	13.60	4.98	5.00	5.13	0.78	0.26	1.11	47.02
1973–74	17.10	14.51	5.43	5.43	5.58	0.84	0.29	1.25	50.43
1974–75	17.76	15.36	5.76	5.76	5.95	0.89	0.25	1.36	53.10
1975–76	18.23	16.21	6.14	6.04	6.28	0.94	0.31	1.46	55.61
1976–77	19.07	17.23	6.51	6.35	6.72	1.00	0.34	1.56	58.78
1977–78	19.68	18.06	6.88	6.53	7.07	1.08	0.35	1.63	61.29
1978–79	20.36	18.63	7.23	6.57	7.28	1.12	0.38	1.69	63.24
1979–80	20.69	18.78	7.41	6.44	7.37	1.14	0.40	1.71	63.95
1980–81	21.15	19.18	7.72	6.39	7.50	1.17	0.43	1.75	65.27
1981–82	22.14	20.33	8.29	6.63	7.91	1.22	0.47	1.85	68.84
1982–83	21.94	20.40	8.44	6.66	7.94	1.23	0.47	1.88	68.97
1983–84	23.09	21.28	8.91	7.03	8.42	1.30	0.51	1.98	72.54
1984–85	24.19	22.12	9.31	7.37	8.74	1.37	0.55	2.09	75.75
1985–86	24.85	23.10	9.82	7.59	9.03	1.43	0.59	2.19	78.60
1986–87	25.39	23.94	10.12	7.74	9.24	1.44	0.61	2.26	80.75
1987–88	26.54	25.41	10.76	8.07	9.75	1.49	0.63	2.40	85.05
1988–89	27.50	26.73	11.43	8.38	10.27	1.54	0.64	2.53	89.03
1989–90	28.05	27.38	11.77	8.52	10.57	1.60	0.65	2.64	91.18
1990–91	27.76	27.11	11.88	8.41	10.44	1.59	0.65	2.66	90.52
1991–92	28.25	27.59	12.38	8.51	10.63	1.63	0.67	2.75	92.39
1992–93	29.10	28.23	12.99	8.67	11.03	1.70	0.69	2.86	95.27
1993–94	29.89	28.88	13.50	8.71	11.66	1.75	0.71	2.94	98.05
1994–95	30.95	29.81	14.23	8.85	12.45	1.79	0.76	3.03	101.88
1995–96	31.45	30.34	14.77	8.87	12.83	1.82	0.79	3.08	103.95
1996–97	31.69	30.68	15.05	8.94	13.03	1.82	0.82	3.09	105.11
1997–98	32.30	31.31	15.52	9.08	13.25	1.79	0.84	3.11	107.19
1998–99	33.12	32.03	15.83	9.34	13.55	1.78	0.85	3.17	109.69
1999–00	33.97	32.70	16.31	9.61	13.75	1.79	0.86	3.23	112.21
2000–01	33.89	32.80	16.38	9.57	13.62	1.75	0.84	3.18	112.03
2001–02	34.65	33.53	16.99	9.74	13.97	1.79	0.85	3.25	114.77
2002–03	35.30	34.21	17.54	10.05	14.37	1.85	0.87	3.36	117.55
2003–04	36.88	35.35	18.66	10.18	15.08	1.94	0.89	3.50	122.49
2004–05	37.12	35.65	19.05	10.03	15.35	1.92	0.89	3.51	123.52
2005–06	36.64	35.50	19.19	9.90	15.22	1.90	0.90	3.49	122.75
2006–07	37.04	35.79	19.85	10.01	15.64	1.94	0.93	3.54	124.74
2007–08	37.44	36.42	20.50	9.84	15.84	1.95	0.97	3.57	126.52
2008–09	37.47	36.17	20.53	9.81	16.27	1.94	0.99	3.59	126.77
2009–10	37.98	36.89	20.93	9.94	16.31	1.93	1.00	3.62	128.62
2010–11	38.78	37.76	21.27	9.94	16.59	1.94	1.02	3.68	130.97
2011–12	39.18	38.49	21.73	9.93	17.00	1.94	1.03	3.76	133.05
2012–13	39.72	39.10	22.21	10.06	17.23	1.95	1.06	3.82	135.15
2013–14	40.11	39.71	22.48	10.23	17.51	1.96	1.08	3.85	136.93
2014–15	40.78	40.46	22.91	10.37	17.80	1.97	1.09	3.90	139.29
2015–16	41.62	41.24	23.45	10.50	18.22	1.98	1.11	3.96	142.10

Note: 2015–16 data are preliminary/provisional.
Source: BITRE estimates.

Table T 4.5 Total road freight, by vehicle type

Financial year	Light commercial vehicles	Rigid trucks	Articulated trucks	Total[11]
		billion tonne–kilometres		
1974–75	1.0	10.9	19.5	31.4
1975–76	1.0	11.4	21.4	33.9
1976–77	1.2	11.8	23.9	36.8
1977–78	1.2	12.4	24.4	38.0
1978–79	1.3	13.3	29.1	43.8
1979–80	1.4	14.2	31.7	47.2
1980–81	1.5	14.8	35.1	51.4
1981–82	1.5	15.9	37.6	55.1
1982–83	1.5	15.2	38.3	55.1
1983–84	1.7	16.2	44.4	62.3
1984–85	1.8	17.7	48.3	67.9
1985–86	2.0	18.1	51.5	71.7
1986–87	2.2	18.9	52.5	73.7
1987–88	2.5	20.5	57.8	80.7
1988–89	2.6	20.9	60.7	84.3
1989–90	2.7	22.0	63.2	87.9
1990–91	2.7	20.2	62.5	85.3
1991–92	2.7	19.5	63.0	85.2
1992–93	2.8	19.2	68.0	90.0
1993–94	2.9	19.8	71.4	94.1
1994–95	3.1	20.9	77.4	101.4
1995–96	3.2	22.1	82.1	107.4
1996–97	3.2	23.8	86.4	113.4
1997–98	3.4	24.3	91.7	119.3
1998–99	3.5	24.3	97.2	125.0
1999–00	3.6	25.2	103.9	132.6
2000–01	3.5	25.1	106.3	134.9
2001–02	3.7	26.2	112.6	142.5
2002–03	3.9	27.3	117.7	148.9
2003–04	4.1	28.1	124.0	156.2
2004–05	4.1	29.2	129.1	162.4
2005–06	4.2	30.5	134.0	168.7
2006–07	4.2	31.6	141.4	177.1
2007–08	4.2	32.6	146.4	183.1
2008–09	4.2	32.3	145.4	181.9
2009–10	4.3	33.2	147.8	185.4
2010–11	4.4	33.9	152.9	191.2
2011–12	4.6	34.6	157.3	196.5
2012–13	4.7	35.2	160.7	200.6
2013–14	4.8	35.9	164.8	205.5
2014–15	4.9	36.7	169.5	211.2
2015–16	5.1	37.7	176.3	219.1

[11] See end notes.

Source: BITRE estimates.

Table T 4.6 Private vehicle ownership and operating cost indices

June reference month	Australia motor vehicle producer price	Private motoring	Motor vehicle retail price	Automotive fuel	Motor vehicle repair and servicing	Motor vehicle parts and accessories	Other motoring services	Urban transport fares
			base of each index: 2011–12 = 100.0					
1974		13.1	24.0	8.0				8.4
1975		16.0	28.2	9.5				9.5
1976		18.5	34.5	10.3				11.1
1977		20.3	38.2	10.7				10.8
1978		21.8	41.7	11.8				11.7
1979		24.4	43.0	16.2				12.3
1980		27.6	45.6	21.6				14.3
1981		30.1	48.4	25.1	29.3	43.4	19.4	16.6
1982		32.6	53.2	24.8	33.6	44.3	23.3	19.1
1983	43.0	35.9	58.5	27.7	36.5	47.3	24.7	21.2
1984	44.8	39.1	61.2	32.1	38.8	51.7	26.6	24.1
1985	47.0	42.5	66.6	35.9	41.0	54.4	28.6	25.4
1986	53.9	44.3	75.5	32.3	45.3	56.6	30.0	27.2
1987	61.8	50.7	89.1	36.3	50.1	60.3	33.1	29.9
1988	67.1	53.4	97.9	35.5	53.2	65.9	34.2	32.3
1989	70.6	56.1	103.8	37.3	55.6	68.6	35.4	35.3
1990	82.5	60.5	107.7	42.2	60.0	71.2	36.3	38.5
1991	85.2	62.1	108.7	42.9	62.9	71.4	38.8	44.1
1992	88.1	63.9	111.7	44.8	63.6	71.1	41.9	46.6
1993	92.8	65.7	118.8	45.3	64.3	71.0	45.7	49.3
1994	96.2	67.5	122.1	46.0	65.3	72.6	46.9	50.9
1995	99.2	69.6	128.1	46.8	66.1	74.2	48.1	52.4
1996	98.4	72.6	130.0	49.1	68.6	73.5	50.0	54.4
1997	97.0	72.2	120.6	49.4	69.1	74.4	52.1	57.8
1998	98.5	71.5	116.5	47.8	69.2	74.0	53.9	58.6
1999	96.6	71.4	112.2	47.2	71.3	74.9	56.7	59.8
2000	100.1	76.8	111.7	57.5	69.4	74.1	59.1	62.7
2001	102.3	80.9	112.8	63.9	74.3	75.4	61.3	69.5
2002	106.5	80.6	113.9	60.7	76.5	77.7	63.6	71.7
2003	108.0	80.6	112.2	59.9	78.9	79.0	65.8	73.1
2004	105.5	83.2	108.9	66.9	81.1	79.2	69.9	76.8
2005	103.8	86.1	106.0	73.9	84.5	80.9	72.0	78.1
2006	104.2	92.9	105.0	92.2	86.3	83.8	73.5	80.6
2007	104.7	92.9	106.5	88.3	88.6	86.8	77.1	83.6
2008	106.1	99.4	105.2	104.5	91.6	91.0	81.1	87.7
2009	105.0	92.8	104.2	83.1	95.4	99.1	84.3	92.2
2010	103.8	95.8	103.4	89.4	97.5	99.5	90.8	94.5
2011	99.3	99.2	101.9	99.4	95.8	99.5	96.5	97.2
2012	99.9	101.2	100.3	101.9	100.7	100.0	102.7	102.3
2013	98.9	100.4	96.9	98.5	105.3	100.4	107.4	106.8
2014	96.7	103.1	96.2	106.1	103.1	102.3	111.2	109.5
2015	97.7	100.7	94.9	94.9	105.2	106.1	118.7	105.1
2016	93.7	97.7	95.0	83.9	107.4	106.2	121.1	105.2
2017	95.1	99.9	93.8	89.7	108.4	107.7	123.5	106.7

Note: Data are not readily available for missing years.
Source: ABS (2017d) and ABS (2017e).

Table T 4.7 Stock of registered motor vehicles, by vehicle type

	Passenger cars	Motor cycles	LCVs	Rigid trucks	Articulated trucks	Other trucks	Buses	All vehicles
				thousands				
1971	3 990.9	152.6	532.7	365.8	32.0	10.0	22.8	5 106.8
1972								
1973								
1974								
1975								
1976	5 102.2	293.4	758.2	372.2	39.0	25.1	31.4	6 621.5
1977								
1978								
1979	5 669.6	288.3	879.2	419.9	43.7	36.3	37.8	7 374.7
1980								
1981								
1982	6 233.4	366.9	1 003.0	479.0	47.2	42.0	46.2	8 217.7
1983								
1984								
1985	6 734.2	361.6	1 140.5	543.7	50.2	49.4	80.1	8 959.7
1986								
1987								
1988	7 158.8	304.0	1 183.5	576.3	48.9	53.4	93.2	9 418.0
1989								
1990								
1991	7 860.7	284.1	1 479.2	333.2	51.7	47.0	42.3	10 098.2
1992								
1993	8 279.4	288.8	1 453.8	336.5	52.5	46.6	46.6	10 504.2
1994								
1995	8 628.8	296.6	1 527.2	337.4	58.3	47.0	52.2	10 947.5
1996	8 989.1	303.9	1 601.6	341.0	58.4	48.3	58.8	11 401.1
1997	9 206.2	313.1	1 632.2	342.4	59.3	50.0	61.1	11 664.4
1998	9 526.7	328.8	1 686.4	347.2	62.3	51.3	64.1	12 066.9
1999	9 686.2	333.8	1 721.2	346.8	63.3	51.3	65.9	12 268.5
2000								
2001	9 835.9	350.9	1 769.6	338.4	62.6	51.8	67.6	12 476.8
2002	10 101.4	371.0	1 820.0	341.5	63.9	54.0	70.2	12 822.0
2003	10 365.9	377.3	1 879.8	348.7	64.3	56.9	70.1	13 163.0
2004	10 629.4	396.3	1 952.5	357.6	66.3	59.6	71.3	13 533.1
2005	10 896.4	421.9	2 030.3	368.5	69.7	60.7	72.6	13 920.1
2006	11 188.9	463.1	2 114.3	383.5	71.7	61.8	75.4	14 358.7
2007	11 466.6	512.4	2 190.1	394.5	74.5	64.5	77.6	14 780.2
2008	11 803.5	567.6	2 288.2	410.9	79.1	66.6	80.6	15 296.5
2009	12 023.1	624.1	2 371.1	421.7	81.2	68.8	84.4	15 674.4
2010	12 269.3	660.1	2 460.6	431.3	82.4	71.0	86.4	16 061.1
2011	12 474.0	678.8	2 530.6	437.8	86.0	73.3	87.9	16 368.4
2012	12 714.2	709.3	2 617.8	446.4	88.0	75.3	90.6	16 741.6
2013	13 000.0	744.7	2 717.7	457.1	90.9	77.1	93.0	17 180.6
2014	13 297.3	780.2	2 824.1	465.1	93.9	78.9	94.1	17 633.5
2015	13 549.4	807.2	2 907.0	472.3	95.0	81.6	95.1	18 007.8
2016	13 815.1	829.0	2 985.6	480.2	96.2	84.5	96.6	18 387.1
2017	14 078.6	849.3	3 079.6	491.5	98.1	87.1	96.9	18 781.2

Note: Data are not readily available for missing years.
Source: ABS (2017i).

Table T 4.8 Stock of registered motor vehicles, by state/territory

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
					thousands				
1982	2 708.1	2 127.2	1 440.0	744.0	783.4	244.3	60.9	109.7	8 217.7
1983									
1984									
1985	2 900.5	2 376.3	1 479.4	848.7	887.6	268.7	71.1	127.6	8 959.7
1986									
1987									
1988	2 993.6	2 556.0	1 567.2	869.1	947.0	284.3	60.7	140.2	9 418.0
1989									
1990									
1991	3 106.9	2 756.4	1 694.1	922.7	1 072.0	300.4	84.3	161.5	10 098.2
1992									
1993	3 172.4	2 864.7	1 847.2	932.8	1 114.5	311.9	84.2	176.5	10 504.2
1994									
1995	3 332.5	2 869.9	2 012.9	962.8	1 175.5	319.9	90.4	183.8	10 947.5
1996	3 448.9	3 050.2	2 082.0	984.5	1 225.0	325.5	96.2	188.8	11 401.1
1997	3 530.1	3 119.0	2 132.2	992.2	1 269.6	325.0	99.1	197.2	11 664.4
1998	3 682.6	3 177.4	2 228.8	1 031.1	1 327.2	322.7	102.2	194.8	12 066.9
1999	3 679.3	3 266.5	2 315.6	1 032.5	1 344.8	329.6	103.2	197.0	12 268.5
2000									
2001	3 745.5	3 317.7	2 354.4	1 050.6	1 371.3	331.1	102.8	203.4	12 476.8
2002	3 847.1	3 413.7	2 445.5	1 063.1	1 405.7	335.1	103.8	208.0	12 822.0
2003	3 944.9	3 494.3	2 552.1	1 077.2	1 438.4	338.5	104.3	213.4	13 163.0
2004	4 063.6	3 565.2	2 656.0	1 095.9	1 480.2	350.4	106.0	215.7	13 533.1
2005	4 170.4	3 649.6	2 767.3	1 111.7	1 529.6	362.1	109.8	219.6	13 920.1
2006	4 268.6	3 740.7	2 897.9	1 138.0	1 600.6	374.8	114.0	224.1	14 358.7
2007	4 361.2	3 818.1	3 033.4	1 157.0	1 676.5	381.2	118.2	234.6	14 780.2
2008	4 520.0	3 921.6	3 173.4	1 178.9	1 746.6	391.3	123.0	241.8	15 296.5
2009	4 567.4	4 010.3	3 283.2	1 208.9	1 828.3	400.5	128.8	247.0	15 674.4
2010	4 681.5	4 112.9	3 358.2	1 239.7	1 870.1	410.2	134.7	253.8	16 061.1
2011	4 778.4	4 198.4	3 401.9	1 261.9	1 912.7	419.0	137.1	258.9	16 368.4
2012	4 870.0	4 286.3	3 492.3	1 275.0	1 977.8	432.0	141.1	267.2	16 741.6
2013	4 984.6	4 383.6	3 606.1	1 298.4	2 048.4	437.0	148.6	273.9	17 180.6
2014	5 102.4	4 483.1	3 705.4	1 326.2	2 142.3	442.6	152.2	279.4	17 633.5
2015	5 247.2	4 567.3	3 771.3	1 347.5	2 185.4	450.4	155.0	283.6	18 007.8
2016	5 374.4	4 681.3	3 854.2	1 364.7	2 208.8	457.6	157.7	288.3	18 387.1
2017	5 509.2	4 798.1	3 948.2	1 386.0	2 219.3	469.5	155.4	295.6	18 781.2

Source: ABS (2017i).

Table T 4.9 New motor vehicles sales, excluding motor cycles, by vehicle type

Financial year	Passenger cars	Sports utility vehicles	Other vehicles	Total vehicles excluding motor cycles
		thousands		
1995–96	487.7	46.1	105.5	639.4
1996–97	503.3	58.7	108.2	670.2
1997–98	570.1	87.7	119.1	776.9
1998–99	575.7	101.8	128.3	805.8
1999–00	509.4	97.6	135.6	742.6
2000–01	571.0	114.8	122.9	808.7
2001–02	537.6	129.1	137.9	804.6
2002–03	560.2	144.0	156.4	860.5
2003–04	594.4	160.9	184.8	940.1
2004–05	604.0	182.0	195.8	981.8
2005–06	599.4	173.3	198.7	971.4
2006–07	624.1	180.4	199.4	1 003.9
2007–08	631.8	210.9	225.5	1 068.3
2008–09	542.8	176.1	205.9	924.7
2009–10	582.1	216.2	215.0	1 013.3
2010–11	566.3	230.6	203.7	1 000.6
2011–12	568.0	282.5	209.6	1 060.1
2012–13	572.0	323.1	242.8	1 137.9
2013–14	554.3	338.4	229.8	1 122.5
2014–15	523.3	376.6	231.8	1 131.7
2015–16	502.1	431.2	241.8	1 175.1
2016–17	469.4	452.1	258.0	1 179.5

Source: ABS (2017j).

Table T 4.10 New motor vehicles sales excluding motor cycles, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
					thousands				
1995–96	230.1	152.7	117.1	42.7	64.4	12.8	7.5	12.0	639.4
1996–97	239.7	164.3	121.2	43.0	68.6	13.9	7.6	12.0	670.2
1997–98	273.3	193.1	141.0	51.0	79.1	15.5	8.9	15.0	776.9
1998–99	287.3	207.7	145.9	50.7	76.9	14.5	8.6	14.2	805.8
1999–00	268.2	195.5	133.3	44.3	64.7	13.9	7.9	14.8	742.6
2000–01	284.8	224.4	140.3	49.6	72.8	14.6	7.5	14.6	808.7
2001–02	280.3	221.2	144.4	50.8	71.9	14.8	7.5	13.7	804.6
2002–03	290.2	234.8	164.7	56.6	76.7	15.4	7.7	14.5	860.5
2003–04	308.3	246.7	193.2	63.1	86.7	18.8	8.4	14.9	940.1
2004–05	308.8	256.3	212.7	64.1	95.2	20.6	9.3	14.7	981.8
2005–06	297.0	250.2	212.8	62.4	105.4	19.6	9.3	14.7	971.4
2006–07	305.9	252.5	223.4	60.8	117.2	18.8	9.7	15.6	1 003.9
2007–08	323.7	276.9	233.7	64.6	122.5	20.0	10.5	16.5	1 068.3
2008–09	280.6	243.4	194.1	59.4	105.3	17.7	9.4	14.9	924.7
2009–10	309.2	272.3	211.0	66.1	110.3	18.8	9.9	15.7	1 013.3
2010–11	310.6	269.3	202.7	62.8	111.6	17.9	10.0	15.7	1 000.6
2011–12	329.1	280.2	224.2	65.3	117.6	16.1	10.9	16.6	1 060.1
2012–13	348.0	302.3	238.3	70.3	130.9	18.7	11.4	18.0	1 137.9
2013–14	353.0	304.5	227.4	70.1	119.8	18.9	11.3	17.5	1 122.5
2014–15	366.8	308.7	229.7	69.3	110.4	18.3	11.1	17.5	1 131.7
2015–16	394.7	321.2	236.4	70.4	103.9	19.4	10.5	18.6	1 175.1
2016–17	397.3	333.3	231.2	71.9	96.5	19.9	10.7	18.7	1 179.5

Source: ABS (2017j).

Table T 4.11a Licence holders[14], by age and gender—New South Wales

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	137 689	197 443	215 084	461 701	469 189	421 116	309 668	152 765	53 743	2 418 398
30 June 2013	139 198	198 294	214 947	465 003	472 387	430 366	323 208	160 449	56 239	2 460 091
30 June 2014	140 367	199 350	216 933	471 747	475 479	438 574	333 489	170 423	58 377	2 504 739
30 June 2015	141 662	201 665	221 972	481 869	481 264	444 563	343 801	180 209	60 713	2 557 718
30 June 2016	143 365	201 936	226 743	491 897	485 894	447 972	354 081	189 642	64 035	2 605 565
Male										
30 June 2012	144 815	201 827	215 802	466 699	481 561	446 717	348 551	186 071	74 532	2 566 575
30 June 2013	144 415	202 781	215 411	470 168	482 750	455 140	360 292	192 797	76 917	2 600 671
30 June 2014	144 666	202 942	217 932	476 857	483 801	462 110	368 163	202 195	78 991	2 637 657
30 June 2015	145 142	205 116	223 392	488 552	489 526	467 314	376 425	211 174	81 355	2 687 996
30 June 2016	146 098	206 049	228 090	500 233	492 494	469 627	384 945	220 383	84 385	2 732 304
Persons										
30 June 2012	282 504	399 270	430 886	928 400	950 750	867 833	658 219	338 836	128 275	4 984 973
30 June 2013	283 613	401 075	430 358	935 171	955 137	885 506	683 500	353 246	133 156	5 060 762
30 June 2014	285 033	402 292	434 865	948 604	959 280	900 684	701 652	372 618	137 368	5 142 396
30 June 2015	286 804	406 781	445 364	970 421	970 801	911 892	720 235	391 388	142 069	5 245 755
30 June 2016	289 463	407 985	454 833	992 130	978 408	917 622	739 051	410 034	148 421	5 337 947

[14] See end notes.

Source: BITRE estimates based on NSW Roads and Maritime Services data (2017).

Table T 4.11b Licence holders[14], by age and gender—Victoria

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	106 561	172 828	193 490	387 392	393 330	338 903	247 450	124 303	57 363	2 021 620
30 June 2013	105 888	173 604	197 944	397 253	399 368	347 912	260 558	130 354	59 060	2 071 941
30 June 2014	105 605	174 835	201 073	406 378	403 234	354 991	269 879	138 019	59 905	2 113 919
30 June 2015	105 444	175 998	204 668	416 987	407 574	360 248	278 850	145 692	57 662	2 153 123
30 June 2016	106 409	176 253	208 208	429 888	411 528	365 510	288 206	153 949	60 292	2 199 924
Male										
30 June 2012	113 479	179 156	203 208	394 661	393 913	345 262	264 146	148 396	71 881	2 114 102
30 June 2013	112 710	178 658	207 022	406 988	398 659	353 550	273 778	152 996	71 926	2 156 287
30 June 2014	112 017	181 058	209 702	418 036	402 445	360 467	281 094	158 908	73 038	2 196 765
30 June 2015	111 681	182 835	212 747	428 943	405 740	365 539	287 633	165 404	70 952	2 231 474
30 June 2016	111 752	184 757	214 877	441 997	410 495	369 749	295 237	172 191	73 464	2 274 519
Persons										
30 June 2012	220 040	351 984	396 698	782 056	787 243	684 165	511 596	272 699	129 244	4 135 725
30 June 2013	218 598	352 262	404 966	804 243	798 027	701 462	534 336	283 350	130 986	4 228 230
30 June 2014	217 622	355 894	410 775	824 416	805 679	715 458	550 973	296 927	132 943	4 310 687
30 June 2015	217 127	358 834	417 418	845 931	813 317	725 789	566 483	311 096	128 614	4 384 609
30 June 2016	218 166	361 029	423 110	871 888	821 708	735 261	583 444	326 140	133 756	4 474 502

[14] See end notes.

Note: Totals include 59 drivers with unspecified gender.

Source: BITRE estimates based on VicRoads data (2017).

Table T 4.11c Licence holders[14], by age and gender—Queensland

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	93 614	136 149	148 254	298 259	311 710	277 259	207 584	97 747	31 293	1 601 869
30 June 2013	95 254	139 032	149 712	302 964	316 032	284 082	216 522	103 355	33 535	1 640 488
30 June 2014	95 689	138 142	146 726	301 129	314 733	286 496	221 341	109 817	35 750	1 649 823
30 June 2015	96 771	139 252	147 566	305 423	317 081	290 502	228 135	117 610	36 010	1 678 350
30 June 2016	97 836	140 690	150 590	313,026	321 161	294 677	235 607	125 489	38 133	1 717 299
Male										
30 June 2012	97 569	139 312	155 589	308 626	320 873	286 986	228 101	116 553	45 526	1 699 135
30 June 2013	97 514	142 117	157 590	313 499	325 075	293 339	236 053	121 277	47 872	1 734 336
30 June 2014	96 958	141 315	153 301	309 645	322 040	295 354	238 600	127 248	49 987	1 734 448
30 June 2015	97 176	142 628	152 981	312 395	323 433	298 649	243 220	134 572	48 767	1 753 821
30 June 2016	98 832	144 309	155 570	318 931	326 575	301 972	249 033	141 965	51 310	1 788 497
Persons										
30 June 2012	191 183	275 461	303 843	606 885	632 583	564 245	435 685	214 300	76 819	3 301 004
30 June 2013	192 768	281 149	307 302	616 463	641 107	577 421	452 575	224 632	81 407	3 374 824
30 June 2014	192 647	279 457	300 027	610 774	636 773	581 850	459 941	237 065	85 737	3 384 271
30 June 2015	193 947	281 880	300 547	617 818	640 514	589 151	471 355	252 182	84 777	3 432 171
30 June 2016	196 668	284 999	306 160	631 957	647 736	596 649	484 640	267 454	89 443	3 505 796

[14] See end notes.

Source: BITRE estimates based on Department of Transport and Main Roads (QLD) data (2017).

Table T 4.11d Licence holders[14], by age and gender—South Australia

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	31 889	44 671	47 536	93 976	106 366	101 726	79 185	37 841	14 355	557 545
30 June 2013	31 954	46 009	48 541	95 431	107 309	103 706	83 256	40 661	15 605	572 472
30 June 2014	31 678	46 325	48 299	96 716	106 450	105 093	86 145	43 074	16 024	579 804
30 June 2015	31 371	46 291	48 317	97 818	105 528	105 761	88 307	46 172	16 640	586 205
30 June 2016	31 549	46 375	48 661	99 912	104 744	106 189	90 633	53 548	18 072	594 494
Male										
30 June 2012	33 645	46 873	49 942	97 933	110 053	105 571	85 726	45 382	19 151	594 276
30 June 2013	33 392	47 885	50 952	99 905	110 905	108 033	89 528	48 624	21 596	610 820
30 June 2014	33 024	47 960	50 782	101 102	110 017	109 529	91 649	50 632	22 055	616 750
30 June 2015	32 110	48 110	50 344	101 727	108 989	109 747	93 284	52 953	22 639	619 903
30 June 2016	32 284	48 076	50 361	102 775	107 821	109 985	94 959	59 086	23 972	624 838
Persons										
30 June 2012	65 534	91 544	97 478	191 909	216 419	207 297	164 911	83 223	33 506	1 151 821
30 June 2013	65 346	93 894	99 493	195 336	218 214	211 739	172 784	89 285	37 201	1 183 292
30 June 2014	64 702	94 285	99 081	197 818	216 467	214 622	177 794	93 706	38 079	1 196 554
30 June 2015	63 501	94 408	98 674	199 566	214 527	215 517	181 594	99 128	39 279	1 206 194
30 June 2016	63 880	94 469	99 045	202 725	212 583	216 185	185 595	112 639	42 046	1 219 494

[14] See end notes.

Note: Totals include 161 drivers with unspecified gender.

Source: BITRE estimates based on Department of Planning, Transport and Infrastructure (SA) data (2017).

Table T 4.11e Licence holders[14], by age and gender—Western Australia

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	20 359	63 475	74 314	149 324	158 874	141 849	100 898	49 970	15 497	774 560
30 June 2013	20 879	65 165	79 043	156 500	162 653	146 369	106 245	52 866	16 541	806 261
30 June 2014	20 994	64 456	81 366	161 477	164 217	149 425	110 700	56 568	17 451	826 654
30 June 2015	21 079	63 733	82 195	166 430	165 384	151 251	115 009	59 919	19 070	844 070
30 June 2016	21 918	62 766	81 908	171 283	166 189	152 555	119 704	63 403	20 711	860 437
Male										
30 June 2012	23 276	67 623	82 865	161 301	170 909	150 066	112 263	57 264	21 148	846 715
30 June 2013	24 913	72 375	92 303	174 870	177 780	156 024	117 579	59 860	22 005	897 709
30 June 2014	24 535	71 010	93 642	181 719	178 908	159 668	121 197	63 529	22 785	916 993
30 June 2015	24 380	69 631	93 344	187 251	179 647	162 264	124 244	66 741	24 157	931 659
30 June 2016	24 340	68 878	91 609	191 589	180 292	163 236	128 056	70 153	25 602	943 755
Persons										
30 June 2012	43 637	131 116	157 227	310 812	330 205	292 454	213 651	107 443	36 681	1 623 226
30 June 2013	45 797	137 561	171 410	331 549	340 841	302 934	224 293	112 946	38 584	1 705 915
30 June 2014	45 530	135 482	175 076	343 359	343 492	309 596	232 382	120 323	40 283	1 745 523
30 June 2015	45 460	133 372	175 592	353 832	345 356	314 026	239 707	126 888	43 282	1 777 515
30 June 2016	46 258	131 656	173 555	363 024	346 773	316 254	248 203	133 805	46 367	1 805 895

[14] See end notes.

Note: Sum of female and male licence holders does not equal to total i, since it includes the number of licence holders of unknown gender.
Data were revised for all years due to new method of calculating age groups.
Data is for 15–19 year olds (rather than 16–19).
Gender break down by age group is not available for June 2016.

Source: BITRE estimates based on Department of Transport (WA) data (2017).

Table T 4.11f Licence holders[14], by age and gender—Tasmania

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	10 387	13 810	13 503	27 942	33 654	34 944	27 806	14 122	4 702	180 870
30 June 2013	10 155	13 471	13 435	27 297	33 087	35 005	28 883	14 701	4 997	181 031
30 June 2014	10 134	13 254	13 192	27 046	32 439	35 187	29 763	15 516	5 352	181 883
30 June 2015	10 177	13 468	13 033	27 207	32 301	35 147	30 694	16 609	5 784	184 420
30 June 2016	10 296	13 538	13 417	27 926	32 355	35 334	31 707	17 865	6 553	188 991
Male										
30 June 2012	10 752	13 844	13 600	27 026	33 010	34 642	29 645	15 892	6 078	184 489
30 June 2013	10 540	13 751	13 319	26 705	32 217	34 626	30 413	16 462	6 231	184 264
30 June 2014	10 218	13 679	13 110	26 354	31 570	34 893	30 710	17 322	6 492	184 348
30 June 2015	10 184	13 740	13 111	26 406	31 118	34 930	31 396	18 170	6 821	185 876
30 June 2016	10 280	14 010	13 580	27 926	32 355	35 334	31 707	17 865	7 392	190 314
Persons										
30 June 2012	21 139	27 654	27 103	54 968	66 664	69 586	57 451	30 014	10 780	365 359
30 June 2013	20 695	27 222	26 754	54 002	65 304	69 631	59 296	31 163	11 228	365 295
30 June 2014	20 352	26 933	26 302	53 400	64 009	70 080	60 473	32 838	11 844	366 231
30 June 2015	20 361	27 208	26 144	53 613	63 419	70 077	62 090	34 779	12 605	370 296
30 June 2016	20 576	27 548	26 997	54 981	63 697	70 283	64 197	37 081	13 945	379 305

[14] See end notes.

Source: BITRE estimates based on Department of State Growth (TAS) data (2017).

Table T 4.11g Licence holders[14], by age and gender—Northern Territory

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	3 182	5 736	7 573	14 396	13 076	10 863	5 686	1 609	343	62 464
30 June 2013	3 099	6 167	8 068	15 256	13 404	11 352	6 091	1 791	374	65 602
30 June 2014	3 113	6 225	8 316	15 754	13 526	11 499	6 441	1 966	405	67 245
30 June 2015	2 990	6 222	8 441	16 224	13 459	11 606	6 617	2 087	443	68 089
30 June 2016	3 134	6 178	8 561	16 901	13 712	11 611	6 880	2 265	455	69 697
Male										
30 June 2012	3 589	7 302	8 861	15 834	15 233	13 344	8 350	2 555	545	75 613
30 June 2013	3 522	7 840	9 702	17 425	15 896	14 109	8 913	2 822	573	80 802
30 June 2014	3 482	7 892	10 322	18 168	16 196	14 442	9 243	3 054	609	83 408
30 June 2015	3 448	7 508	10 476	18 668	16 306	14 486	9 482	3 172	633	84 179
30 June 2016	3 488	7 493	10 165	19 147	16 298	14 489	9 588	3 389	651	84 708
Persons										
30 June 2012	6 771	13 038	16 434	30 230	28 309	24 207	14 036	4 164	888	138 077
30 June 2013	6 621	14 007	17 770	32 681	29 300	25 461	15 004	4 613	947	146 404
30 June 2014	6 595	14 117	18 638	33 922	29 722	25 941	15 684	5 020	1 014	150 653
30 June 2015	6 438	13 730	18 917	34 892	29 765	26 092	16 099	5 259	1 076	152 268
30 June 2016	6 622	13 671	18 726	36 048	30 010	26 100	16 468	5 654	1 106	154 405

[14] See end notes.

Source: BITRE estimates based on Department of Transport (NT) data (2017).

Table T 4.11h Licence holders[14], by age and gender—Australian Capital Territory

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	8 581	14 401	16 193	30 372	27 560	23 826	16 582	7 125	3 307	147 947
30 June 2013	8 336	14 421	16 489	31 080	28 214	24 003	17 301	7 562	3 576	150 982
30 June 2014	8 199	14 419	16 448	31 843	29 544	24 387	17 878	8 082	3 903	154 703
30 June 2015	8 290	14 442	16 454	31 843	28 544	24 384	17 867	8 078	3 903	153 805
30 June 2016	6 098	13 576	16 365	34 868	29 879	25 313	19 455	10 517	3 868	159 939
Male										
30 June 2012	8 887	15 245	16 913	31 435	28 147	23 842	17 383	7 938	4 104	153 894
30 June 2013	8 555	15 397	17 050	32 390	28 711	24 059	17 996	8 294	4 400	156 852
30 June 2014	8 452	15 182	17 050	33 306	29 204	24 416	18 459	8 749	4 723	159 541
30 June 2015	8 515	15 049	16 864	33 045	29 036	24 302	18 360	8 623	4 668	158 462
30 June 2016	6 031	14 176	16 798	35 636	30 792	25 262	19 353	10 834	4 462	163 344
Persons										
30 June 2012	17 468	29 646	33 106	61 807	55 707	47 668	33 965	15 063	7 411	301 841
30 June 2013	16 891	29 818	33 539	63 470	56 925	48 062	35 297	15 856	7 976	307 834
30 June 2014	16 651	29 601	33 498	65 149	58 748	48 803	36 337	16 831	8 626	314 244
30 June 2015	16 805	29 491	33 318	64 888	57 580	48 686	36 227	16 701	8 571	312 267
30 June 2016	12 129	27 752	33 163	70 505	60 671	50 576	38 808	21 351	8 330	323 285

[14] See end notes.

Note: Data is for 15–19 year olds (rather than 16–19).
Persons total includes drivers of unspecified gender.

Source: BITRE estimates based on ACT Office of Regulatory Services data (2017).

Table T 4.11i Licence holders[14], by age and gender—Australia

Date	Age									
	16–19	20–24	25–29	30–39	40–49	50–59	60–69	70–79	80+	Total
Female										
30 June 2012	412 262	648 513	715 947	1 463 362	1 513 759	1 350 486	994 859	485 482	180 603	7 765 273
30 June 2013	414 763	656 163	728 179	1 490 784	1 532 454	1 382 795	1 042 064	511 739	189 927	7 948 868
30 June 2014	415 779	657 006	732 353	1 512 090	1 539 622	1 405 652	1 075 636	543 465	197 167	8 078 770
30 June 2015	417 784	661 071	742 646	1 543 801	1 551 135	1 423 462	1 109 280	576 376	200 225	8 225 780
30 June 2016	420 605	661 312	754 453	1 585 701	1 565 462	1 439 161	1 146 273	616 678	212 119	8 396 346
Male										
30 June 2012	436 012	671 182	746 780	1 503 515	1 553 699	1 406 430	1 094 165	580 051	242 965	8 234 799
30 June 2013	435 561	680 804	763 349	1 541 950	1 571 993	1 438 880	1 134 552	603 132	251 520	8 421 741
30 June 2014	433 352	681 038	765 841	1 565 187	1 574 181	1 460 879	1 159 115	631 637	258 680	8 529 910
30 June 2015	432 636	684 617	773 259	1 596 987	1 583 795	1 477 231	1 184 044	660 809	259 992	8 653 370
30 June 2016	433 105	687 748	781 050	1 638 234	1 597 122	1 489 654	1 212 878	695 866	271 238	8 802 279
Persons										
30 June 2012	848 276	1 319 713	1 462 775	2 967 067	3 067 880	2 757 455	2 089 514	1 065 742	423 604	16 002 026
30 June 2013	850 329	1 336 988	1 491 592	3 032 915	3 104 855	2 822 216	2 177 085	1 115 091	441 485	16 372 556
30 June 2014	849 132	1 338 061	1 498 262	3 077 442	3 114 170	2 867 034	2 235 236	1 175 328	455 894	16 610 559
30 June 2015	850 443	1 345 704	1 515 974	3 140 961	3 135 279	2 901 230	2 293 790	1 237 421	460 273	16 881 075
30 June 2016	853 762	1 349 109	1 535 589	3 223 258	3 161 586	2 928 930	2 360 406	1 314 158	483 414	17 200 629

[14] See end notes.

Source: BITRE estimates based on state/territory licensing data (2017).

Table T 4.12a Licensed vehicle operators, by vehicle type—New South Wales[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	4 286 343	471 975	86 022	126 495	202 116	110 908	21 054
30 June 2013	4 358 073	483 321	89 597	127 577	200 451	108 849	22 073
30 June 2014	4 433 197	497 469	90 810	129 138	201 400	107 581	22 959
30 June 2015	4 519 456	512 932	93 057	130 642	200 719	106 026	24 099
30 June 2016	4 773 770	93 461	93 461	133 276	203 002	104 923	24 994
Provisional licence							
30 June 2012	410 282	25 568	164	1 184	776	0	0
30 June 2013	418 195	28 600	160	1 174	868	0	0
30 June 2014	422 097	29 563	140	1 105	867	0	0
30 June 2015	438 304	30 256	128	1 165	991	0	0
30 June 2016	461 775	29 635	118	1 175	1 007	0	0
L Permits							
30 June 2012	284 370	27 459	0	0	0	0	0
30 June 2013	280 321	28 079	0	0	0	0	0
30 June 2014	282 832	27 552	0	0	0	0	0
30 June 2015	283 601	26 120	0	0	0	0	0
30 June 2016	282 462	25 886	0	0	0	0	0

[15] See end notes.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).

Source: BITRE estimates based on NSW Roads and Maritime Services data (2017).

Table T 4.12b Licensed vehicle operators, by vehicle type—Victoria[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	3 598 026	343 439	31 393	89 818	168 585	132 852	23 011
30 June 2013	3 654 040	355 194	33 249	91 344	171 765	131 558	24 763
30 June 2014	3 719 847	367 222	35 270	92 525	173 629	129 679	26 134
30 June 2015	3 786 036	380 241	38 566	93 409	176 151	127 679	27 508
30 June 2016	3 868 031	394 801	40 392	94 523	179 861	126 641	28 717
Provisional licence							
30 June 2012	259 188	5 169	60	1 114	859	159	15
30 June 2013	276 379	5 689	51	1 343	1 066	182	36
30 June 2014	286 231	6 118	43	1 365	1 125	173	26
30 June 2015	290 357	6 790	48	1 382	1 227	194	19
30 June 2016	304 723	7 246	49	1 276	1 252	175	32
L Permits							
30 June 2012	295 094	18 599	0	0	0	0	0
30 June 2013	297 533	18 177	0	0	0	0	0
30 June 2014	304 305	19 572	0	0	0	0	0
30 June 2015	308 119	18 022	0	0	0	0	0
30 June 2016	311 765	16 194	0	0	0	0	0

[15] See end notes.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).

Source: BITRE estimates based on VicRoads data (2017).

Table T 4.12c Licensed vehicle operators, by vehicle type—Queensland[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	2 784 683	636 847	45 388	92 772	243 501	90 209	44 196
30 June 2013	2 852 194	651 781	46 806	94 396	246 500	89 188	47 127
30 June 2014	2 864 350	654 427	47 650	93 616	244 899	85 899	49 185
30 June 2015	2 909 487	664 046	49 038	93 845	246 100	83 640	51 227
30 June 2016	2 978 250	680 046	50 687	94 886	247 700	81 724	53 667
Provisional licence							
30 June 2012	194 110	na	275	1 568	1 754	481	412
30 June 2013	204 231	6 079	295	1 638	1 980	489	459
30 June 2014	205 550	6 477	285	1 664	2 131	541	533
30 June 2015	202 169	6 249	278	1 548	2 061	519	521
L Permits							
30 June 2012	175 603	na	0	0	1	211	16
30 June 2013	178 236	148 949	0	0	0	188	15
30 June 2014	173 507	148 246	0	0	0	0	0
30 June 2015	174 731	150 497	0	0	1	178	15

[15] See end notes.

na: not available.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).

Source: BITRE estimates based on Department of Transport and Main Roads (QLD) data (2015).

Table T 4.12d Licensed vehicle operators, by vehicle type—South Australia[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	1 038 857	160 282	23 305	39 724	58 489	38 369	9 722
30 June 2013	1 070 037	164 730	26 056	40 467	59 502	38 273	10 425
30 June 2014	1 083 808	166 083	27 775	40 705	59 803	37 585	11 013
30 June 2015	1 107 312	163 142	25 625	40 830	59 149	36 953	11 548
30 June 2016	1 045 375	153 181	24 766	41 288	58 494	36 086	41 288
Provisional licence							
30 June 2012	68 404	1 102	18	420	285	161	33
30 June 2013	67 831	1 247	16	427	308	149	44
30 June 2014	68 636	1 325	23	446	338	141	35
30 June 2015	54 095	1 120	10	281	240	90	27
L Permits							
30 June 2012	43 408	7 029	0	6	7	367	0
30 June 2013	42 872	7 588	0	2	7	306	0
30 June 2014	42 914	7 897	0	2	10	272	0
30 June 2015	42 872	7 781	0	2	6	220	0

[15] See end notes.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).

Source: BITRE estimates based on Department of Planning, Transport and Infrastructure (SA) data (2015).

Table T 4.12e Licensed vehicle operators, by vehicle type—Tasmania[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	328 079	42 428	6 214	28 084	13 868	12 644	1 935
30 June 2013	328 360	43 102	7 063	27 713	13 930	12 300	2 005
30 June 2014	328 797	44 173	7 921	27 341	13 995	12 060	2 077
30 June 2015	331 881	45 476	8 274	27 400	14 150	12 032	2 173
30 June 2016	271 500	47 176	8 717	27 541	14 385	11 988	2 303
Provisional licence							
30 June 2012	16 059	2 869	2	77	15	6	0
30 June 2013	15 076	3 264	6	95	15	5	0
30 June 2014	15 231	3 482	6	88	8	6	0
30 June 2015	15 543	3 502	13	81	11	6	0
30 June 2016	17 097	3 413	8	66	6	8	1
L Permits							
30 June 2012	20 615	2 024	0	0	0	0	0
30 June 2013	21 292	2 172	0	0	0	0	0
30 June 2014	21 591	1 958	0	0	0	0	0
30 June 2015	22 116	1 911	0	0	0	0	0
30 June 2016	21 401	1 837	0	45	386	315	11

[15] See end notes.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).
Data are not readily available for missing years.

Source: BITRE estimates based on Department of State Growth (TAS) data (2017).

Table T 4.12f Licensed vehicle operators, by vehicle type—Northern Territory[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	122 841	21 484	5 651	6 797	12 263	5 337	4 270
30 June 2013	126 917	22 091	5 807	6 685	12 988	5 311	4 491
30 June 2014	136 502	24 570	6 236	6 984	14 422	5 478	5 038
30 June 2015	138 374	24 824	6 301	6 876	15 013	5 367	5 152
30 June 2016	101 345	25 014	6 360	6 839	15 183	5 294	5 226
Provisional licence							
30 June 2012	6 108	70	5	3	7	0	2
30 June 2013	5 796	115	0	3	3	0	0
30 June 2014	6 319	134	5	8	2	0	0
30 June 2015	6 342	154	3	13	7	0	1
30 June 2016	6 693	130	7	6	1	0	1
L Permits							
30 June 2012	6 265	1 570	0	0	1	0	1
30 June 2013	6 766	1 674	0	1	0	0	1
30 June 2014	6 976	2 339	0	0	0	0	0
30 June 2015	6 605	2 195	0	0	0	0	0
30 June 2016	6 604	2 026	0	0	0	0	0

[15] See end notes.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).

Source: BITRE estimates based on Department of Transport (NT) data (2017).

Table T 4.12g Licensed vehicle operators, by vehicle type—Australian Capital Territory[15]

Date			Highest class of heavy vehicle licence				
	Car	Motorcycle	Light Rigid	Medium Rigid	Heavy Rigid	Heavy Combination	Multi Combination
Full licence							
30 June 2012	268 621	30 180	2 695	6 958	9 787	3 347	530
30 June 2013	275 825	31 032	2 718	6 983	9 748	3 252	517
30 June 2014	281 602	31 921	2 762	7 022	9 755	3 191	523
30 June 2015	287 703	32 849	2 820	7 068	9 722	3 132	526
30 June 2016	272 122	33 804	2 864	7 207	9 790	3 090	522
Provisional licence							
30 June 2012	21 255	1 148	4	32	6	0	0
30 June 2013	20 196	1 293	4	27	6	1	0
30 June 2014	19 976	1 440	1	21	4	0	0
30 June 2015	19 756	1 240	1	16	6	0	0
30 June 2016	19 881	1 125	1	17	5	0	0
L Permits							
30 June 2012	10 810	3 437	0	0	0	0	0
30 June 2013	10 769	3 325	0	0	0	0	0
30 June 2014	10 513	1 874	0	0	0	0	0
30 June 2015	10 994	1 874	0	0	0	0	0
30 June 2016	11 030	1 774	0	0	0	0	0

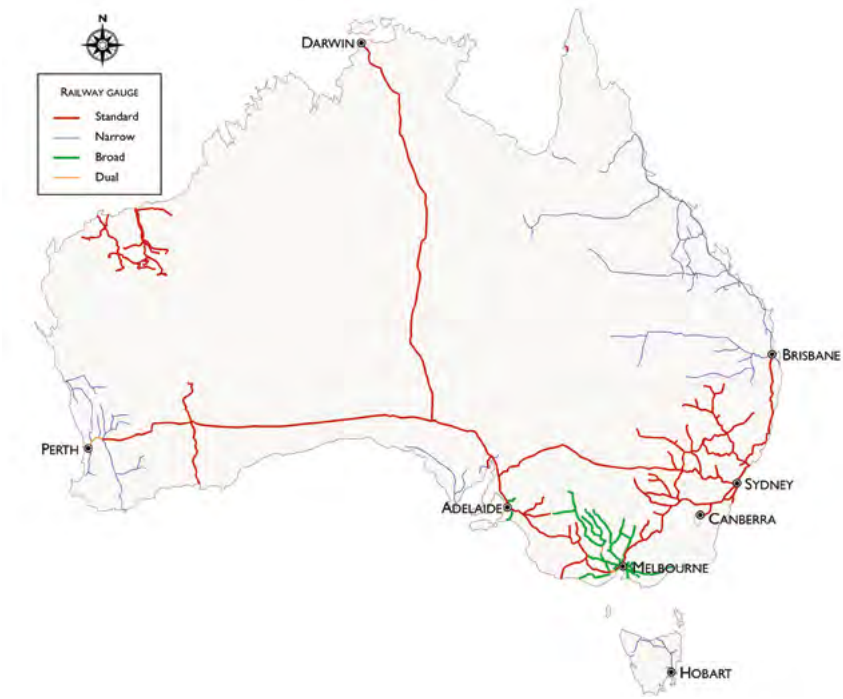
[15] See end notes.

Note: Some licence holders may appear under more than one vehicle type (car, motorcycle and heavy vehicle).

Source: BITRE estimates based on ACT Office of Regulatory Services data (2017).

CHAPTER 5
Rail

Figure T 5 Australia's railways, by gauge



Note: The lines shown here are the railways that were open for traffic at September 2016. The BHP Goldsworthy line in the Pilbara is shown on the map but was mothballed in 2014. They Roy Hill line in the Pilbara region of Western Australia opened in December 2015. The two South Australian Mallee grain lines are also shown but they became non–operational in August 2015.

Table T 5.1a Intercapital rail distances—freight terminals

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Darwin	Canberra
				kilometres			
Sydney		929	965	1 868	4 137	4 459	316
Melbourne			1 901	832	3 468	3 790	811
Brisbane				2 816	5 101	5 424	1 281
Adelaide					2 637	2 959	1 643
Perth						4 174	4 019
Darwin							4 341

Source: BITRE estimates.

Table T 5.1b Intercapital rail distances—passenger terminals

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Darwin	Canberra
				kilometres			
Sydney		953	987	1 711	4 156	4 285	329
Melbourne			1 914	828	3 485	3 798	822
Brisbane				2 672	4 933	5 247	1 291
Adelaide					2 657	2 971	1 629
Perth						4 178	4 025
Darwin							4 339

Source: BITRE estimates.

Table T 5.2a Route–kilometres of open railway 2016–17[16], by jurisdiction and gauge[17]

Jurisdiction	Gauge					
	1 067	1 435	1 600	Dual	Other	Total
New South Wales		7 104	73		1	7 178
Victoria	16	1 222	2 921	32	30	4 221
Queensland	8 136	117		36	4	8 293
South Australia	561	2 561	253	22		3 397
Western Australia	2 970	4 558		207		7 735
Tasmania	611				7	618
Northern Territory	3	1 690				1 693
ACT		6				6
Total	12 297	17 258	3 247	297	42	33 141

[16,17] See end notes.
Source: BITRE (2017b).

Table T 5.2b Route–kilometres of open railway 2016–17[16], by jurisdiction and single or double (or more) trackage[17]

Jurisdiction	Trackage		
	Double (or more)	Single	Total
New South Wales	1 188	5 990	7 178
Victoria	875	3 346	4 221
Queensland	839	7 454	8 293
South Australia	122	3 275	3 397
Western Australia	953	6 782	7 735
Tasmania	0	618	618
Northern Territory	0	1 693	1 693
ACT	0	6	6
Total	3 978	29 164	33 141

[16,17] See end notes.
Source: BITRE estimates.

Table T 5.2c Route–kilometres of open railway 2016–17[16], by jurisdiction and overhead electrical system used[17]

Jurisdiction	Electrical system					
	1 500 V DC	25 kV AC, 50 Hz	33 kV AC	De–electrified	Not electrified	Total
New South Wales	641		8	2	6 527	7 178
Victoria	375			100	3 746	4 221
Queensland		2 135			6 158	8 293
South Australia		44			3 353	3 397
Western Australia		181			7 554	7 735
Tasmania					618	618
Northern Territory					1 693	1 693
ACT					6	6
Total	1 016	2 360	8	102	29 655	33 141

[16,17] See end notes.
Source: BITRE (2017b).

Table T 5.3 Network characteristics of heavy urban passenger railways

	Route–kilometres in metropolitan area					
	Passenger–only lines	Freight–only lines	Shared passenger/freight	Total	Route–kilometres, electrified	Metropolitan Stations
Sydney				381	381	178
Melbourne	212	28	181	421	362	218
Brisbane	127.8	34.9	268.1	430.8	414	152
Adelaide	126	62	30 [g]	188	44	86
Perth	180	48	1	229	181	71

[g] Broad gauge freight services over this track ceased during 2014.
Note: Brisbane route kilometres and stations includes the recently opened Petrie – Kippa–Ring line.
Source: BITRE (2017b).

Table T 5.4 Interstate non–bulk rail freight by state/territory of origin

Financial year	NSW	VIC	QLD	SA	WA	NT	ACT	Total
				million tonne–kilometres				
1971–72	1 208	1 550	414	1 212	288	63	na*	4 735
1972–73	1 318	1 688	413	1 281	472	67	na*	5 238
1973–74	1 429	1 822	412	1 344	657	70	na*	5 733
1974–75	1 542	1 952	411	1 404	841	74	na*	6 223
1975–76	1 656	2 079	410	1 458	1 026	77	na*	6 706
1976–77	1 706	2 066	429	1 537	961	82	na*	6 780
1977–78	1 756	2 052	448	1 614	897	87	na*	6 853
1978–79	1 806	2 040	467	1 689	832	91	na*	6 927
1979–80	1 857	2 020	487	1 763	768	96	na*	6 991
1980–81	1 877	2 125	443	1 692	931	93	na*	7 161
1981–82	1 670	2 045	464	1 520	1 111	85	na*	6 895
1982–83	1 464	1 964	485	1 352	1 292	76	na*	6 632
1983–84	1 671	2 134	495	1 575	1 164	94	na*	7 134
1984–85	1 646	2 177	555	1 488	1 155	87	na*	7 108
1985–86	1 846	2 106	681	1 321	1 345	79	na*	7 379
1986–87	2 007	2 171	737	1 628	1 402	93	na*	8 038
1987–88	2 545	2 468	760	1 865	1 404	107	na*	9 149
1988–89	2 864	2 970	865	2 059	1 580	113	na*	10 451
1989–90	2 623	2 846	952	2 242	1 467	112	na*	10 241
1990–91	2 381	2 844	978	1 970	1 540	117	na*	9 829
1991–92	2 416	2 968	1 100	2 013	1 728	122	na*	10 346
1992–93	2 576	2 967	1 162	2 235	1 952	132	na*	11 023
1993–94	2 698	3 167	1 225	2 344	2 167	139	na*	11 740
1994–95	2 851	3 396	1 288	2 454	2 382	147	na*	12 518
1995–96	2 873	3 329	1 352	2 448	2 107	154	na*	12 264
1996–97	2 884	3 679	1 443	2 347	2 300	120	na*	12 772
1997–98	2 916	3 997	1 641	2 338	2 583	150	na*	13 624
1998–99	2 926	4 469	1 444	2 262	3 130	138	na*	14 369
1999–00	2 918	4 620	1 580	2 348	3 422	154	na*	15 042
2000–01	2 910	4 775	1 703	2 432	3 708	170	na*	15 697
2001–02	2 917	4 934	1 803	2 513	4 285	185	na*	16 636
2002–03	2 922	5 091	1 903	2 592	4 859	200	na*	17 567
2003–04	2 930	5 251	2 002	2 672	5 437	214	na*	18 506
2004–05	2 939	5 410	2 102	2 751	6 008	214	na*	19 426
2005–06	2 948	5 570	2 202	2 832	6 586	214	na*	20 353
2006–07	4 074	8 409	2 365	4 985	6 570	454	na*	26 857
2007–08 [9]	4 342	7 242	2 677	4 079	6 642	621	na*	25 603
2008–09	3 851	6 586	2 041	4 229	5 913	550	na*	23 170
2009–10	3 948	6 688	2 206	3 867	6 008	513	na*	23 230

[9] See end notes.

na*: not applicable.

Source: BITRE (2012a).

Table T 5.5a Public transit patronage on heavy rail, Australian capital cities

Financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Metropolitan
					million passenger movements				
1979–80	201.3	100.8	28.0	13.1	7.2				350.4
1980–81	207.9	97.4	30.3	13.8	6.5				355.9
1981–82	214.9	89.0	32.4	14.7	6.1				357.1
1982–83	202.8	91.4	33.1	12.9	6.8				347.0
1983–84	198.1	94.4	35.8	12.4	8.7				349.4
1984–85	196.5	97.5	37.4	11.8	8.7				351.9
1985–86	213.9	102.9	40.3	12.8	9.8				379.7
1986–87	220.5	106.0	43.0	12.5	9.7				391.7
1987–88	240.2	100.1	45.0	9.5	9.4				404.2
1988–89	240.6	105.7	49.4	10.1	8.8				414.6
1989–90	244.6	107.1	43.3	10.0	8.4				413.4
1990–91	246.5	106.9	42.1	8.9	7.6				411.9
1991–92	238.8	109.0	40.1	8.4	9.6				405.8
1992–93	227.7	106.1	39.4	9.1	13.6				395.8
1993–94	231.3	101.1	38.4	10.5	22.9				404.3
1994–95	244.6	105.5	37.0	10.9	23.4				421.4
1995–96	249.9	109.3	39.2	10.8	25.9				435.1
1996–97	257.0	112.7	41.5	10.7	29.0				450.9
1997–98	258.4	113.1	41.5	10.5	29.2				452.7
1998–99	261.9	118.4	41.0	10.3	28.9				460.5
1999–00	270.4	125.4	42.2	10.3	29.5				477.7
2000–01	293.1	130.5	44.2	10.2	31.2				509.3
2001–02	267.1	131.8	45.4	8.1	31.0				483.4
2002–03	263.7	133.8	46.2	8.4	31.4				483.5
2003–04	263.6	134.9	48.1	8.8	31.1				486.5
2004–05	259.9	145.1	48.6	8.9	32.7				495.2
2005–06	261.9	159.1	53.1	9.4	34.1				517.6
2006–07	269.0	178.6	57.9	9.3	35.8				550.6
2007–08	283.3	201.2	51.0	9.4	42.6				587.5
2008–09	292.2	213.9	54.7	9.6	54.7				625.1
2009–10	289.1	219.3	52.3	9.4	56.4				626.5
2010–11	294.5	228.9	51.0	8.8	58.9				642.1
2011–12	303.5	222	52.8	8.0	63.0				649.3
2012–13	272.4	225.5	48.5	8.0	65.7				620.1
2013–14	282.2	225.7	50.9	8.2	63.5				630.5
2014–15	291.9	227.5	51.6	10.9	64.2				646.1
2015–16	322.6	233.4	52.4	11.3	62.6				682.3

Note: Values denote total UPT train passenger trips including concessions and transfers. Up to 2000–01, figures refer to trips within the metropolitan area. From 2001–02 on, figures refer to all trips on suburban rail networks.

Source: BITRE (2017b), BITRE (2015e).

Table T 5.5b Public transit patronage on light rail, Australian capital cities

Financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Metropolitan
				million passenger movements					
1979–80	0.0	98.9		3.0					101.9
1980–81	0.0	100.1		2.9					103.0
1981–82	0.0	102.4		2.9					105.3
1982–83	0.0	101.3		2.8					104.1
1983–84	0.0	102.1		2.8					104.9
1984–85	0.0	109.4		2.7					112.1
1985–86	0.0	112.4		2.6					115.0
1986–87	0.0	113.3		2.6					115.9
1987–88	0.0	115.6		2.4					118.0
1988–89	3.5	118.9		2.7					125.1
1989–90	3.5	95.6		2.2					101.3
1990–91	3.4	107.6		2.2					113.2
1991–92	3.4	112.0		2.1					117.5
1992–93	3.4	100.9		1.8					106.1
1993–94	3.4	104.0		1.8					109.2
1994–95	3.4	108.6		2.0					113.9
1995–96	4.0	114.1		1.9					120.0
1996–97	4.7	115.4		1.9					122.0
1997–98	5.4	117.2		1.9					124.5
1998–99	5.8	121.6		1.9					129.3
1999–00	6.2	129.8		1.9					138.0
2000–01	6.7	133.9		2.0					142.6
2001–02	6.3	137.2		2.0					145.5
2002–03	6.2	140.6		2.0					148.8
2003–04	5.1	142.5		2.2					149.7
2004–05		145.3							145.3
2005–06		149.6							149.6
2006–07		154.9							154.9
2007–08		158.3							158.3
2008–09		178.1							178.1
2009–10		175.6							175.6
2010–11	3.3	182.7							186.0
2011–12	4.4	191.6							196.0
2012–13	3.6	182.7							186.3
2013–14	3.9	176.9							180.8
2014–15	6.1	182.1	6.3	8.9					203.4
2015–16	9.7	203.8	7.7	8.9					230.1

Note: Values denote total UPT passenger trips (including concessions and transfers) on all metropolitan light rail networks. Up to 2003–04, figures include the Sydney monorail, which closed in 2013.

Source: BITRE (2017b), BITRE (2015e).

CHAPTER 6
Aviation

Figure T 6 Australia's top 40 airports in 2015–16, passengers

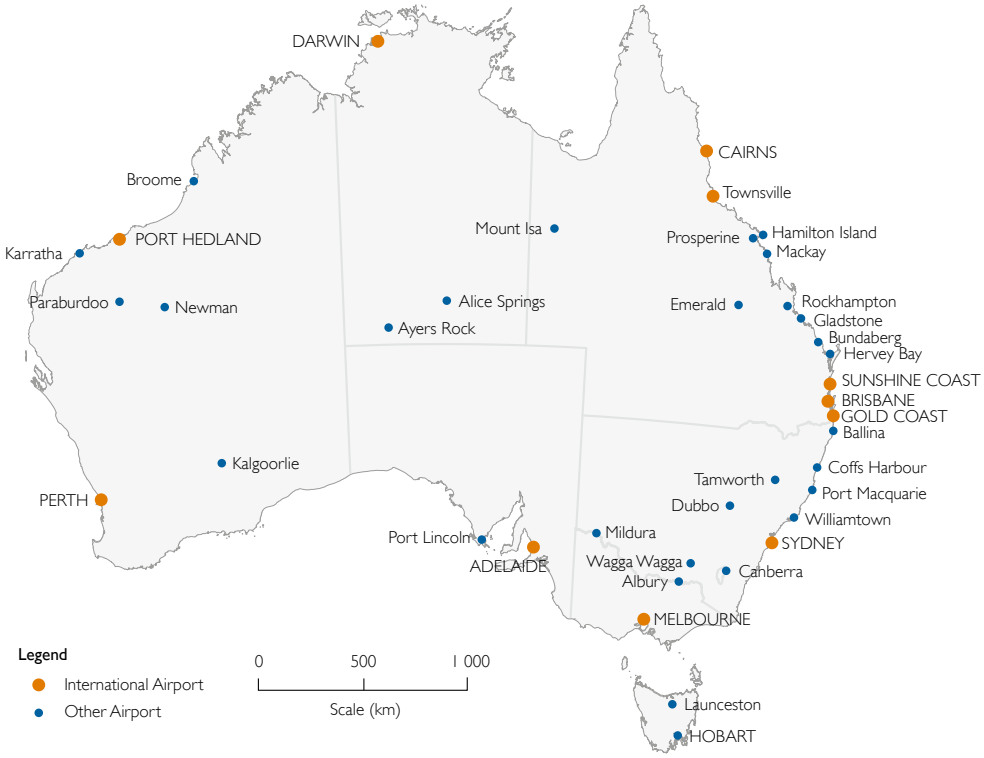


Table T 6.1 Intercapital air distances (great circle distances)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
				km				
Sydney		706	753	1 167	3 284	1 039	3 155	236
Melbourne			1 381	643	2 706	618	3 131	470
Brisbane				1 622	3 615	1 791	2 852	956
Adelaide					2 120	1 172	2 619	972
Perth						3 022	2 651	3 091
Hobart							3 742	850
Darwin								3 141

Source: BITRE (2017l).

Table T 6.2 International airline activity

Financial year	Flights	Revenue passengers[18]	Available seats	Load factor[19]	Freight
	no.	*no.*	*no.*	*per cent*	*'000 tonnes*
1970–71	17 067	1 199 148			33.4
1971–72	18 573	1 433 739			36.3
1972–73	19 735	1 769 816			44.7
1973–74	20 474	2 160 876			58.1
1974–75	27 013	2 392 102			65.8
1975–76	23 267	2 801 883			71.1
1976–77	21 938	2 894 965			78.5
1977–78	24 082	3 036 960			89.2
1978–79	20 764	3 506 753			111.8
1979–80	20 478	4 019 316			122.0
1980–81	20 487	4 108 265			127.8
1981–82	22 346	4 186 171			157.7
1982–83	21 486	4 249 249			166.7
1983–84	21 082	4 451 708			193.9
1984–85	22 385	4 988 998			222.9
1985–86	25 308	5 424 377			235.8
1986–87	29 698	6 194 981			268.4
1987–88	33 848	7 211 743			296.1
1988–89	38 854	7 930 588	11 435 873	69.3	324.6
1989–90	42 353	8 252 769	12 257 200	67.3	353.9
1990–91	45 300	8 424 511	12 991 767	64.8	357.5
1991–92	48 419	9 042 889	13 773 493	65.7	379.8
1992–93	52 295	9 759 065	15 023 875	65.0	432.8
1993–94	54 781	10 621 976	15 709 444	67.6	476.3
1994–95	60 658	11 565 753	17 443 065	66.9	543.5
1995–96	68 387	12 679 451	19 610 366	66.0	564.9
1996–97	74 347	13 718 480	20 792 015	67.4	614.9
1997–98	77 811	14 080 113	21 604 059	66.7	645.6
1998–99	80 476	14 564 061	21 621 816	68.9	645.6
1999–00	86 751	15 583 694	22 895 592	69.3	687.2
2000–01	93 828	17 126 504	24 565 665	71.1	665.7
2001–02	87 557	16 486 343	22 892 570	73.8	634.3
2002–03	89 374	16 108 417	23 062 891	71.8	635.1
2003–04	100 336	18 131 286	25 885 687	71.5	627.0
2004–05	116 087	20 309 733	29 691 278	69.7	702.4
2005–06	117 790	21 096 951	30 041 002	71.3	726.0
2006–07	119 330	22 137 767	29 768 595	75.6	754.5
2007–08	124 176	23 264 573	30 625 242	77.1	781.0
2008–09	131 560	23 486 506	32 174 834	74.2	709.4
2009–10	141 194	25 625 654	34 309 383	75.7	760.0
2010–11	150 440	27 549 289	36 923 253	75.5	822.5
2011–12	156 100	28 882 348	38 574 696	76.6	856.8
2012–13	161 101	30 309 898	40 433 560	77.3	882.8
2013–14	174 045	32 422 133	43 732 584	76.5	882.4
2014–15	175 251	33 864 637	44 226 790	79.0	939.8
2015–16	183 206	36 228 731	46 946 066	79.7	996.6
2016–17	193 267	38 660 946	50 599 437	79.3	1044.8

[18, 19] See end notes.

Note: Data are not readily available for missing years.

Source: BITRE (2017e).

Table T 6.3 Domestic airline activity

Financial year	Flights	Revenue passengers[18]	Revenue passenger kilometres[20]	Available seats	Available seat kilometres	Domestic load factor[21]	Cargo
			'000	'000	'000	per cent	'000 tonnes
1977–78	374 866	11 958 560	8 313 930		12 465 976	66.7	
1978–79	397 242	12 587 854	8 787 099		12 795 744	68.7	
1979–80	415 879	13 540 872	9 692 782		13 526 185	71.7	
1980–81	416 282	13 563 340	9 979 054		13 627 596	73.2	
1981–82	416 291	13 695 462	10 406 883		14 933 230	69.7	
1982–83	411 027	12 644 727	9 586 535		14 247 860	67.3	
1983–84	406 679	13 037 551	9 940 350		13 966 231	71.2	
1984–85	411 621	13 768 268	10 604 648	21 123	14 733 094	72.0	
1985–86	426 450	14 798 619	11 588 920	22 642	16 109 845	71.9	
1986–87	427 149	15 267 094	12 372 645	23 352	17 316 196	71.5	
1987–88	435 622	16 471 140	13 623 398	24 130	18 321 841	74.4	
1988–89	452 433	16 844 631	14 168 630	24 430	18 821 360	75.3	
1989–90	364 595	12 272 726	10 490 243	18 836	14 846 965	70.7	
1990–91	444 183	16 935 005	15 139 951	26 123	21 748 111	69.6	
1991–92	490 740	20 997 030	19 806 981	29 384	25 703 400	77.1	
1992–93	522 879	21 475 685	19 849 262	30 943	26 293 801	75.5	
1993–94	543 428	24 788 627	23 862 333	35 549	32 153 754	74.2	
1994–95	572 035	26 997 493	26 394 411	39 610	36 685 149	71.9	
1995–96	589 501	28 611 325	28 372 962	41 964	39 670 986	71.5	
1996–97	592 477	29 040 584	29 344 131	43 024	41 423 354	70.8	
1997–98	589 262	29 358 221	29 780 624	42 291	41 077 354	72.5	
1998–99	596 302	29 733 510	30 390 004	42 322	41 276 389	73.6	
1999–00	595 629	31 365 384	32 203 645	43 442	42 669 709	75.5	
2000–01	625 903	34 105 561	35 014 922	47 541	46 709 057	75.0	
2001–02	493 750	30 510 909	32 300 227	41 596	42 265 977	76.4	
2002–03	484 895	32 104 317	35 103 726	43 207	45 534 719	77.1	
2003–04	501 771	36 410 853	40 402 092	47 683	51 741 384	78.1	
2004–05	544 317	40 435 504	45 047 723	53 859	58 303 803	77.3	
2005–06	545 410	42 531 425	47 782 489	56 532	61 808 822	77.3	
2006–07	541 497	45 827 236	52 022 148	59 121	65 670 698	79.2	
2007–08	562 366	49 278 702	56 191 023	63 873	71 066 014	79.1	
2008–09	563 245	50 238 810	57 551 830	65 493	73 180 717	78.6	
2009–10	577 968	51 744 281	59 007 388	66 577	74 182 141	79.5	
2010–11	610 889	54 733 463	63 132 736	70 604	80 236 667	78.7	253
2011–12	615 706	54 972 783	64 330 105	71 105	81 619 449	78.8	236
2012–13	641 532	57 101 239	67 150 979	76 656	87 503 289	76.7	215
2013–14	640 437	57 715 861	68 079 149	77 721	89 533 104	76.0	197
2014–15	633 248	57 233 927	67 439 299	76 560	88 253 534	76.4	192
2015–16	640 619	58 438 418	68 840 249	77 212	88 892 186	77.4	195
2016–17	641 732	59 302 873	69 484 742	77 256	88 674 847	78.4	225

[18, 20, 21] See end notes.

Note: Data are not readily available for missing years.

Source: BITRE (2017g).

Table T 6.4a Activity at major airports—revenue passengers (thousand)

Financial year	Sydney	Melb–ourne	Brisbane	Perth	Adelaide	Gold Coast	Cairns	Canberra	Darwin	Hobart	Towns–ville
1985–86	9 498	6 476	3 457	1 939	2 082	778	578	1 008	506	407	1 030
1986–87	10 187	6 776	3 728	2 098	2 083	930	742	1 043	494	420	1 010
1987–88	11 510	7 448	4 325	2 226	2 239	1 120	934	1 117	539	469	1 007
1988–89	12 100	7 743	4 834	2 338	2 290	1 259	1 054	1 089	544	496	908
1989–90	10 108	6 511	3 933	1 999	1 825	659	840	721	455	398	455
1990–91	12 361	8 346	5 246	2 508	2 461	1 090	1 288	1 124	590	496	512
1991–92	15 070	10 196	6 644	3 026	3 006	1 495	1 776	1 361	684	563	482
1992–93	15 486	10 255	6 900	2 997	3 033	1 564	1 948	1 382	706	610	555
1993–94	16 650	10 884	7 493	3 429	3 251	1 711	2 223	1 514	743	707	514
1994–95	18 335	11 992	8 509	3 833	3 500	1 879	2 419	1 679	815	824	577
1995–96	19 878	12 972	9 236	4 145	3 743	1 993	2 595	1 750	850	932	598
1996–97	20 637	13 419	9 683	4 484	3 768	1 937	2 657	1 735	841	984	607
1997–98	21 013	13 791	9 737	4 624	3 949	1 868	2 598	1 825	854	1 011	628
1998–99	21 585	14 131	9 834	4 677	4 046	1 864	2 656	1 821	860	1 028	653
1999–00	23 098	15 146	10 534	4 891	4 186	1 959	2 718	1 969	909	1 057	682
2000–01	25 814	16 881	12 467	5 162	4 443	1 888	2 891	2 107	974	1 078	732
2001–02	23 150	15 967	11 774	4 766	4 175	1 736	2 642	1 841	958	963	696
2002–03	23 447	16 382	11 841	5 189	4 351	2 178	2 900	1 916	1 010	985	778
2003–04	26 090	18 631	13 780	5 889	4 893	2 504	3 222	2 303	1 226	1 073	923
2004–05	27 954	20 274	15 358	6 525	5 363	3 142	3 551	2 479	1 523	1 211	1 055
2005–06	28 996	21 041	16 016	7 005	5 767	3 515	3 731	2 550	1 606	1 219	1 161
2006–07	31 016	22 157	17 380	7 977	6 181	3 778	3 782	2 687	1 629	1 404	1 279
2007–08	32 701	23 943	18 298	8 952	6 619	4 323	3 777	2 853	1 758	1 562	1 366
2008–09	32 346	24 448	18 720	9 359	6 784	4 618	3 654	3 062	1 869	1 539	1 436
2009–10	34 461	25 918	18 897	9 993	7 016	5 186	3 550	3 258	1 856	1 557	1 518
2010–11	35 958	27 963	19 975	10 890	7 279	5 486	3 859	3 241	1 903	1 666	1 630
2011–12	35 987	27 956	20 874	11 997	6 947	5 327	3 943	3 159	1 815	2 045	1 627
2012–13	37 603	29 492	21 145	12 832	7 171	5 805	4 158	3 014	2 027	1 903	1 570
2013–14	38 629	30 896	21 821	12 980	7 577	5 784	4 296	2 858	2 107	2 045	1 523
2014–15	39 022	31 936	21 918	12 730	7 670	5 867	4 391	2 804	2 186	2 057	1 498
2015–16	41 091	33 705	22 320	12 558	7 778	6 274	4 711	2 815	2 313	2 041	1 530
2016–17	42 600	34 878	22 653	12 453	7 999	6 457	4 898	2 995	2 441	2 093	1 535

Source: BITRE (2017g).

Table T 6.4b Activity at major airports—aircraft movements[22]

Financial year	Sydney	Melb–ourne	Brisbane	Perth	Adelaide	Gold Coast	Cairns	Canberra	Darwin	Hobart	Towns–ville
1985–86	137 898	86 391	51 460	45 124	52 360	12 926	11 358	20 615	12 200	10 781	17 471
1986–87	144 160	88 271	55 946	36 222	50 587	16 715	14 568	21 568	11 728	12 294	17 644
1987–88	152 972	92 487	65 359	32 184	47 688	19 653	17 551	21 642	11 556	12 125	16 482
1988–89	163 946	95 555	70 241	31 799	49 656	22 224	19 694	20 726	10 095	10 794	17 425
1989–90	139 038	79 854	57 931	28 193	41 827	16 540	14 805	15 092	8 445	5 284	10 732
1990–91	165 921	102 204	77 181	35 522	50 315	22 609	25 480	22 432	10 140	7 199	13 732
1991–92	182 968	110 530	94 527	39 472	55 797	26 299	32 547	25 988	10 681	13 162	14 299
1992–93	202 555	119 862	99 854	39 590	58 533	26 358	35 854	29 054	10 929	15 323	14 386
1993–94	206 660	118 507	105 662	44 900	59 633	27 228	38 776	31 275	11 325	17 954	15 137
1994–95	221 208	127 155	116 880	50 002	63 253	26 828	41 903	35 625	12 381	20 663	15 928
1995–96	235 398	132 411	125 827	54 088	66 866	26 446	43 119	37 057	11 230	23 781	17 103
1996–97	243 592	136 339	125 108	57 286	68 970	24 203	44 009	38 173	9 468	24 303	18 035
1997–98	248 791	138 252	125 581	55 893	72 544	22 581	42 152	38 446	8 965	23 729	17 373
1998–99	249 175	141 560	129 230	53 609	73 258	22 260	41 594	38 077	9 697	25 138	17 943
1999–00	255 600	150 657	133 352	55 806	71 543	21 320	41 415	40 941	10 776	22 374	17 994
2000–01	283 408	174 663	151 552	56 176	73 666	20 417	41 859	51 867	15 205	22 126	19 013
2001–02	227 644	147 150	125 469	45 051	66 533	16 153	35 161	39 716	12 266	17 253	12 687
2002–03	225 872	146 751	116 552	47 854	66 231	21 225	38 594	35 986	11 444	17 243	15 208
2003–04	241 787	157 524	123 901	51 283	67 051	20 837	41 965	39 418	12 729	16 508	17 402
2004–05	257 630	176 038	139 984	56 445	70 761	27 728	45 474	38 512	15 889	16 501	20 101
2005–06	258 923	175 435	141 785	57 972	70 829	27 471	46 547	38 182	14 335	16 416	22 156
2006–07	264 401	176 112	144 359	61 659	72 508	27 279	44 952	38 257	13 497	17 981	21 108
2007–08	275 226	186 431	150 895	68 985	74 772	31 691	43 488	41 177	14 488	19 270	20 120
2008–09	271 029	189 011	157 675	78 623	74 654	32 083	39 511	45 191	15 027	22 727	21 044
2009–10	279 356	194 298	157 756	82 349	74 504	35 297	38 958	44 345	15 166	25 973	25 840
2010–11	290 501	206 798	168 342	87 863	76 110	37 737	42 611	43 280	16 064	26 894	29 327
2011–12	291 310	205 916	178 195	93 590	72 259	35 698	43 529	42 938	14 529	26 829	28 110
2012–13	305 006	215 414	188 320	98 974	75 518	39 035	44 914	41 816	16 410	25 823	27 483
2013–14	306 703	222 851	194 688	101 380	76 955	38 831	44 767	40 498	16 375	26 997	26 350
2014–15	306 685	228 444	194 842	96 942	78 072	38 809	44 539	38 718	17 379	26 565	25 555
2015–16	314 352	234 789	192 917	94 747	78 695	41 370	48 473	37 147	18 170	27 129	25 255
2016–17	318 790	236 864	191 169	93 323	78 503	42 570	48 828	37 123	19 023	27 616	25 688

[22] See end notes.

Source: BITRE (2017g).

Table T 6.5 Domestic on–time performance[23]

Financial year	Sectors scheduled	Cancellations	Sectors flown	On–time arrivals	On–time departures
		per cent		*per cent*	*per cent*
2004–05	430 714	0.9	426 662	86.4	87.0
2005–06	457 817	1.0	453 406	85.7	87.0
2006–07	467 907	0.8	463 981	85.6	86.9
2007–08	496 564	1.7	488 112	78.8	80.6
2008–09	502 291	1.7	493 710	79.7	81.1
2009–10	502 106	1.0	497 268	84.4	85.6
2010–11	527 708	1.6	519 255	78.8	80.6
2011–12	530 101	1.5	522 374	80.0	81.4
2012–13	563 636	1.7	554 258	78.8	81.1
2013–14	574 385	1.6	565 077	81.9	83.8
2014–15	573 966	1.4	565 695	85.1	86.5
2015–16	579 884	1.6	570 449	86.1	86.7
2016–17	574 740	1.8	564 479	83.0	83.8

[23] See end notes.

Source: BITRE (2017f).

Table T 6.6 BITRE airfare index

Financial year	Business	Economy	Restricted economy	Best discount
	index	*index*	*index*	*index*
1994–95	62.8	69.1		95.8
1995–96	65.6	71.5		94.9
1996–97	71.6	76.1		104.3
1997–98	76.2	78.7		114.9
1998–99	79.2	80.9		114.3
1999–00	80.0	81.8		114.0
2000–01	89.0	91.5		100.5
2001–02	92.5	96.0		109.1
2002–03	96.8	97.1	102.7	105.5
2003–04	103.0	100.2	100.1	102.3
2004–05	109.8	106.7	106.7	87.8
2005–06	106.6	112.8	99.6	95.0
2006–07	111.9	120.0	103.5	100.4
2007–08	117.4	112.9	111.3	100.1
2008–09	124.6	104.1	115.9	87.1
2009–10	116.1	108.2	113.2	74.8
2010–11	124.3	114.4	111.8	70.5
2011–12	116.9	131.0	84.9	87.7
2012–13	89.4	154.7	91.5	83.7
2013–14	108.6	157.8	97.0	82.1
2014–15	120.5	*	103.8	81.0
2015–16	127.0	*	108.8	81.7
2016–17	132.0	*	111.4	90.7

Note: Data are not readily available for missing years.
Base of index: July 2003 = 100.00.
Airfare Indices are not adjusted by ABS Consumer Price Index.

Source: BITRE (2017d).

* From the middle of February 2015, Qantas Airways ceased offering Full Economy fares for domestic travel. Since the Full Economy fare category was mainly made up of Qantas fares, it is no longer possible to continue producing the index for this fare category. In the future, if Full Economy fares are offered on sufficient routes, the index for this fare category could be reinstated.

Table T 6.7 Number of Australian registered aircraft, by aircraft type

Date	Aeroplane				Helicopter	Balloon	Glider
	Piston	Turbofan	Turbojet	Turboprop			
14 December 1998	8 244	257	31	519	779	296	1 056
20 December 1999	8 347	268	34	534	870	308	1 063
17 December 2000	8 394	293	34	549	942	323	1 060
17 December 2001	8 440	310	37	553	980	332	1 060
16 December 2002	8 440	303	42	549	1 034	337	1 082
13 December 2003	8 684	308	51	576	1 195	351	1 106
20 December 2004	8 688	308	51	576	1 196	350	1 106
4 December 2005	8 798	323	52	611	1 284	350	1 115
7 November 2006	8 691	337	52	628	1 303	318	1 047
14 December 2007	8 928	370	52	693	1 479	335	1 085
31 December 2008	9 123	426	52	737	1 635	336	1 122
31 December 2009	9 202	458	54	746	1 696	339	1 143
13 December 2010	9 413	516	55	778	1 797	350	1 172
14 December 2011	9 663	559	54	845	1 909	361	1 193
19 November 2012	9 808	579	51	882	2 003	368	1 201
23 December 2013	9 918	611	48	908	2 077	379	1 220
27 October 2014	9 945	617	45	899	2 107	379	1 240
16 October 2015	9 927	620	45	910	2 134	395	1 258
31 December 2016	9 907	615	45	914	2 172	397	1 274

Source: CASA (2017).

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Figure T 7 Principal Australian ports, by commodity

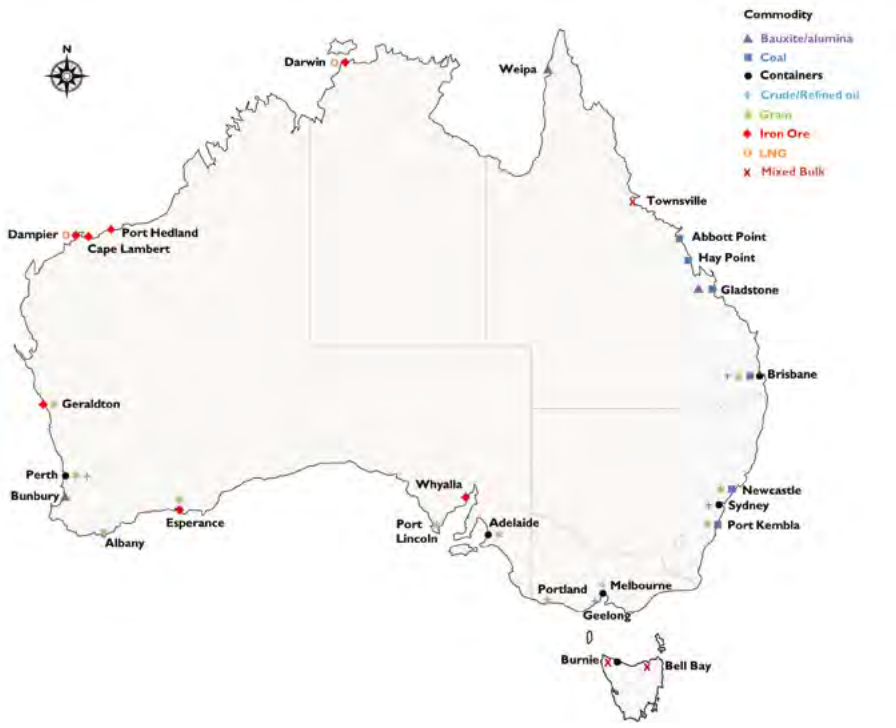


Table T 7.1 Intercapital sea distances

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin
				kilometres			
Sydney		1 114	977	1 833	3 991	1 195	4 595
Melbourne			2 042	988	3 111	878	5 661
Brisbane				2 761	4 920	2 120	3 845
Adelaide					2 509	1 436	na*
Perth						3 367	3 426
Hobart							5 739

na*: not applicable.
Source: BITRE estimates, Australian Chamber of Shipping (1993).

Table T 7.2a Number of cargo ships involved in coastal or international voyages that made port calls, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	Other[h]	Total[i]
1998–99	1 689	1 123	2 351	615	2 396	363	308	81	3 291
1999–00	1 560	1 090	2 459	588	2 470	373	293	93	3 207
2000–01	1 514	1 058	2 417	679	2 332	383	286	80	3 167
2001–02	1 522	1 024	2 368	740	2 047	370	265	77	3 136
2002–03	1 565	1 006	2 517	677	2 208	407	306	55	3 189
2003–04	1 622	1 054	2 701	699	2 360	362	286	39	3 448
2004–05	1 629	1 121	2 751	670	2 445	387	319	26	3 552
2005–06	1 587	1 010	2 888	684	2 540	330	315	39	3 440
2006–07	1 726	1 071	3 123	595	2 738	370	330	32	3 796
2007–08	1 789	1 112	3 255	600	2 690	369	349	20	3 852
2008–09	1 839	1 033	3 311	673	2 968	337	353	30	4 048
2009–10	1 855	994	3 432	590	3 044	327	432	5	4 343
2010–11	2 050	1 192	3 344	783	3 395	338	417	0	4 502
2011–12	2 214	1 386	3 560	862	3 857	265	405	2	5 082
2012–13	2 343	1 389	3 694	809	4 093	286	392	0	5 246
2013–14	2 206	1 437	3 771	858	4 352	303	483	0	5 530
2014–15	2 192	1 249	3 768	814	4 242	308	432	0	5 475

[h] "Other" includes state/territory not clearly specified in the source data.
[i] "Total" refers to the number of cargo ships that visited at least one Australian port. The "Total" value is less than the sum of all states/territory values as some cargo ships may visit multiple jurisdictions.
Note: Data may change slightly from year to year due revisions to historical data.
Source: BITRE estimates based on Lloyds List Intelligence data.

Table T 7.2b Number of port calls made by ships involved in coastal or international voyages, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	Other[h]	Total
1998–99	3 996	3 497	4 582	1 093	4 333	1 314	599	91	19 505
1999–00	3 908	3 753	5 025	1 091	4 338	1 568	705	106	20 494
2000–01	3 877	3 707	5 039	1 201	4 309	1 610	642	91	20 476
2001–02	3 755	3 575	5 041	1 271	3 600	1 651	562	88	19 543
2002–03	3 768	3 889	5 473	1 242	3 700	1 951	558	74	20 655
2003–04	3 850	3 818	5 159	1 250	3 925	1 767	497	46	20 312
2004–05	4 076	4 098	5 224	1 194	4 037	2 024	517	28	21 198
2005–06	4 202	4 137	5 809	1 277	4 338	1 957	529	52	22 301
2006–07	4 218	4 211	6 405	1 210	4 662	1 929	577	32	23 244
2007–08	4 457	4 264	6 841	1 254	4 840	1 933	626	24	24 239
2008–09	4 273	3 738	6 441	1 216	5 288	1 736	639	34	23 365
2009–10	4 152	3 495	6 672	1 135	5 379	1 567	721	6	23 127
2010–11	4 522	4 164	6 554	1 376	6 000	1 682	668		24 966
2011–12	4 658	4 148	6 788	1 637	6 833	1 390	616	2	26 072
2012–13	5 074	4 226	6 961	1 723	7 471	1 516	688		27 659
2013–14	5 055	4 207	7 319	1 790	8 210	1 553	799		28 933
2014–15	5 102	3 997	7 820	1 831	8 418	1 569	858		29 595

[h] "Other" includes state/territory not clearly specified in the source data.
Note: Data may change slightly from year to year due revisions to historical data.
Source: BITRE estimates based on Lloyds List Intelligence data.

Table T 7.3a Number of ships involved in coastal or international voyages that made port calls, by major ports

Financial year	Melbourne	Brisbane	Sydney	Fremantle	Newcastle	Gladstone	Dampier	Port Hedland
1998–99	670	767	658	734	658	407	467	310
1999–00	596	763	627	719	594	422	507	326
2000–01	587	727	579	678	583	459	477	361
2001–02	589	678	560	670	619	469	240	343
2002–03	575	688	590	703	662	531	254	376
2003–04	613	717	618	712	686	637	394	332
2004–05	672	756	617	716	685	652	405	437
2005–06	597	780	606	687	654	679	460	517
2006–07	697	786	671	745	706	737	513	491
2007–08	655	794	662	709	706	795	533	485
2008–09	653	841	555	838	760	852	621	550
2009–10	634	824	476	810	810	879	652	590
2010–11	689	891	506	795	905	832	731	679
2011–12	827	993	577	905	977	906	709	801
2012–13	839	1007	543	964	1026	947	729	858
2013–14	818	905	523	946	1049	999	750	957
2014–15	734	872	512	834	1046	944	731	990

Note: Data may change slightly from year to year due revisions to historical data.
Source: BITRE estimates based on Lloyds List Intelligence data.

Table T 7.3b Number of port calls made by ships involved in coastal or international voyages, by major ports

Financial year	Melbourne	Brisbane	Sydney	Fremantle	Newcastle	Gladstone	Dampier	Port Hedland
1998–99	2 595	1 981	2 111	1 705	1 221	606	870	602
1999–00	2 812	2 148	2 157	1 609	1 130	668	956	589
2000–01	2 776	2 052	2 053	1 611	1 153	810	950	677
2001–02	2 810	1 934	1 967	1 589	1 184	919	350	617
2002–03	3 037	2 005	1 972	1 527	1 233	1 015	345	672
2003–04	2 901	1 970	2 074	1 548	1 224	1 055	645	541
2004–05	3 191	2 078	2 149	1 447	1 337	1 096	645	800
2005–06	3 296	2 317	2 327	1 460	1 284	1 215	851	883
2006–07	3 386	2 410	2 294	1 565	1 307	1 368	929	879
2007–08	3 390	2 395	2 233	1 594	1 481	1 504	963	953
2008–09	3 032	2 265	1 886	1 688	1 490	1 518	1 184	1 172
2009–10	2 846	2 219	1 608	1 635	1 538	1 495	1 226	1 168
2010–11	3 274	2 380	1 703	1 603	1 774	1 422	1 408	1 312
2011–12	3 238	2 460	1 697	1 698	1 903	1 559	1 439	1 672
2012–13	3 313	2 469	1 781	1 816	2 119	1 628	1 500	1 913
2013–14	3 209	2 475	1 792	1 790	2 282	1 726	1 494	2 385
2014–15	3 109	2 498	1 741	1 634	2 391	1 704	1 412	2 719

Note: Data may change slightly from year to year due revisions to historical data.
Source: BITRE estimates based on Lloyds List Intelligence data.

Table T 7.4a Cargo loaded (including exports) at Australian ports, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	Other	Total
					million tonnes				
1996–97	80.7	13.8	98.2	8.5	191.5	3.9	6.0	1.2	453.1
1997–98	96.3	20.6	119.0	13.8	213.7	8.6	6.4	1.2	479.6
1998–99	93.0	20.2	126.1	14.9	207.6	10.3	6.4	1.6	480.2
1999–00	90.6	22.5	141.2	14.2	225.5	11.5	6.2	1.6	513.3
2000–01	95.7	25.3	156.0	15.4	235.7	11.2	6.0	1.7	547.0
2001–02	94.6	23.7	159.5	17.0	238.1	13.5	5.4	1.5	553.4
2002–03	93.2	20.7	166.7	14.7	265.8	13.8	5.8	1.5	582.2
2003–04	98.1	21.6	172.8	15.2	282.2	13.8	6.3	1.4	611.5
2004–05	101.9	21.0	186.2	15.0	318.1	13.3	7.3	1.6	664.3
2005–06	106.7	23.1	186.0	15.6	328.7	12.0	7.6	1.8	681.6
2006–07	106.5	22.0	197.0	14.7	351.9	11.9	10.3	1.8	716.1
2007–08 [25]	114.7	20.6	199.5	16.8	386.2	13.1	11.2	2.3	764.5
2008–09	117.1	19.1	205.3	18.3	419.4	11.7	12.7	2.2	805.9
2009–10	125.4	19.2	228.8	19.2	493.9	10.9	15.0	1.9	914.3
2010–11	139.3	21.8	210.2	23.8	511.8	10.5	14.5	1.4	933.3
2011–12	155.8	26.1	218.3	27.6	571.8	8.9	13.8	1.6	1 023.8
2012–13	172.6	25.5	237.5	25.9	634.7	8.2	15.9	0.7	1 121.1
2013–14	180.0	26.3	261.6	32.2	745.6	9.4	18.6	0.0	1 273.8
2014–15	185.7	24.2	276.7	30.6	849.9	9.9	20.3	0.0	1 397.3
2015–16	179.8	23.0	289.4	25.6	897.5	10.9	20.0	0.0	1 446.2

[25] See end notes.

Note: Small differences exist in historical estimates due to revised coastal freight estimates for some years.

Source: ABS (2017r).

Table T 7.4b Cargo discharged (including imports) at Australian ports, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	Total
				million tonnes				
1996–97	13.3	10.3	12.2	3.6	8.5	0.4	1.4	99.9
1997–98	34.2	18.0	26.9	8.4	12.0	4.3	1.8	105.6
1998–99	30.7	21.2	27.7	7.2	11.7	4.0	1.9	104.4
1999–00	31.0	20.4	29.7	7.8	12.0	4.5	2.1	107.5
2000–01	30.9	21.2	28.8	7.5	12.0	3.9	2.1	106.5
2001–02	30.7	21.2	29.3	8.4	13.0	6.2	1.9	110.6
2002–03	31.2	22.8	31.8	8.0	14.6	5.6	1.7	115.7
2003–04	32.1	25.9	31.6	6.9	15.0	6.0	1.8	119.3
2004–05	32.5	25.8	34.3	7.3	15.2	6.7	2.2	123.9
2005–06	32.3	26.2	37.4	8.8	14.7	5.2	3.1	127.8
2006–07	34.4	26.9	39.2	7.6	16.8	4.3	6.5	135.8
2007–08 [25]	34.4	28.4	39.8	8.2	19.0	5.6	6.6	142.0
2008–09	30.1	26.2	38.5	6.9	18.5	5.4	7.7	133.2
2009–10	34.5	25.7	40.9	7.6	17.9	4.9	6.8	138.4
2010–11	35.1	28.2	41.8	7.6	19.1	5.1	7.4	144.3
2011–12	31.3	28.7	43.3	8.4	20.4	4.8	6.9	143.8
2012–13	30.1	28.4	48.1	8.4	22.2	4.8	7.9	149.9
2013–14	29.7	29.4	47.1	8.7	24.3	4.9	7.5	151.4
2014–15	31.0	29.5	46.3	9.1	22.9	5.2	7.0	151.0
2015–16	32.1	29.5	44.8	8.8	22.7	5.5	7.2	150.7

[25] See end notes.

Note: Small differences exist in historical estimates due to revised coastal freight estimates for some years.

Source: ABS (2017r).

Table T 7.5a Cargo loaded (including exports), by selected Australian ports[26]

Financial year	Port Hedland	Dampier	Newcastle	Hay Point	Gladstone	Port Walcott	Weipa	Port Kembla
				million tonnes				
1996–97	68.3	78.0	60.4	46.3	28.3	25.0	10.7	18.7
1997–98	69.5	87.5	70.0	52.0	30.2	22.2	10.9	17.7
1998–99	66.9	87.2	71.3	53.9	32.5	17.9	10.6	15.4
1999–00	65.0	92.7	68.6	64.1	35.0	26.4	13.3	14.9
2000–01	72.5	90.4	70.6	70.3	41.3	28.7	13.1	17.6
2001–02	72.5	96.4	72.0	70.3	43.2	27.0	12.9	15.3
2002–03	81.6	101.2	74.0	76.3	44.1	39.6	13.2	13.8
2003–04	89.4	101.6	79.6	78.0	48.0	43.9	13.4	12.7
2004–05	107.9	104.2	81.1	84.8	49.7	56.4	15.4	14.6
2005–06	110.2	112.1	83.1	80.3	52.0	55.2	17.8	16.2
2006–07	111.4	128.2	82.8	86.4	58.4	53.9	19.3	16.2
2007–08 [25]	129.9	137.9	90.3	80.3	60.4	56.4	22.1	16.6
2008–09	158.0	141.9	92.5	82.0	62.6	56.9	20.5	16.9
2009–10	178.1	169.4	99.8	99.3	67.0	78.7	20.4	18.0
2010–11	197.2	166.7	111.7	87.8	59.6	80.9	22.4	19.6
2011–12	243.9	173.6	126.2	83.3	66.5	81.8	24.9	20.9
2012–13	286.5	181.2	146.3	96.4	65.3	84.8	29.0	18.4
2013–14	366.6	175.7	157.1	108.3	77.1	120.3	30.7	15.7
2014–15	442.0	167.9	162.9	114.9	78.3	157.4	31.8	16.1
2015–16	455.6	169.7	160.7	115.6	92.7	187.7	33.2	12.5

[25, 26] See end notes.

Source: ABS (2017r) and data provided by ports.

Table T 7.5b Cargo discharged (including imports), by selected Australian ports[26]

Financial year	Gladstone	Port Kembla	Geelong	Townsville	Newcastle	Bunbury	Devonport	Dampier
				million tonnes				
1996–97	9.9	9.1	4.7	4.8	6.2	0.6	0.9	0.3
1997–98	9.4	11.5	5.1	4.4	6.6	0.9	0.9	0.2
1998–99	10.1	8.7	5.9	4.9	6.4	0.8	1.1	0.3
1999–00	10.9	9.4	5.8	4.9	4.3	0.9	1.1	0.4
2000–01	11.0	9.6	6.0	4.7	3.4	1.2	1.2	0.2
2001–02	11.0	9.5	6.3	4.8	3.5	1.1	1.1	0.2
2002–03	10.9	9.7	6.1	5.6	3.1	1.1	1.3	0.7
2003–04	11.5	9.7	6.9	5.3	2.7	1.0	1.3	0.6
2004–05	13.3	9.9	7.3	5.3	2.9	1.2	1.3	0.5
2005–06	15.4	9.1	7.6	5.6	2.7	1.1	1.3	0.6
2006–07	16.1	9.4	6.8	5.2	3.2	1.2	1.0	0.8
2007–08 [25]	16.0	9.8	7.1	5.3	3.2	1.5	1.4	1.3
2008–09	16.5	7.1	6.5	4.8	3.1	1.6	1.4	1.3
2009–10	16.7	9.9	6.3	5.9	3.2	1.4	1.4	1.6
2010–11	17.0	10.2	7.4	6.0	3.3	1.6	1.4	1.0
2011–12	17.9	6.5	7.3	6.2	3.6	1.3	1.4	2.2
2012–13	21.0	5.6	7.9	6.7	3.2	1.7	1.4	1.7
2013–14	20.9	5.5	8.5	5.5	3.4	1.8	1.4	1.8
2014–15	21.3	7.1	8.3	5.2	3.9	1.8	1.5	1.5
2015–16	22.6	7.6	7.7	3.8	4.1	1.8	1.5	1.5

[25, 26] See end notes.

Source: ABS (2017r) and data provided by ports.

Table T 7.6a Cargo loaded (including exports), by capital city ports[26]

Financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin
				million tonnes			
1996–97	4.7	8.8	10.3	4.4	11.9	0.3	1.3
1997–98	5.1	9.8	9.7	4.0	13.3	0.6	0.9
1998–99	4.3	9.5	9.7	4.2	12.9	0.7	0.7
1999–00	5.1	10.5	10.7	4.6	12.9	0.9	0.6
2000–01	5.8	11.1	11.4	5.3	12.5	0.6	0.4
2001–02	5.7	11.9	11.6	6.0	12.1	1.6	0.3
2002–03	4.7	10.8	11.0	5.3	12.9	1.3	0.4
2003–04	5.0	11.4	10.8	4.7	14.2	1.4	0.8
2004–05	5.1	11.8	11.5	4.5	14.2	1.8	1.1
2005–06	6.2	12.8	12.1	5.1	14.3	1.5	1.4
2006–07	6.2	11.3	11.6	4.4	12.6	1.5	3.9
2007–08 [25]	6.7	11.5	13.4	4.4	12.8	1.8	4.6
2008–09	6.5	12.2	15.3	4.2	15.6	1.6	6.1
2009–10	6.3	12.3	15.3	4.7	15.4	1.2	6.4
2010–11	6.8	13.4	15.4	6.8	13.0	1.3	6.2
2011–12	7.5	15.1	19.2	9.2	14.3	0.9	5.5
2012–13	6.9	14.9	19.4	8.3	18.1	0.7	6.7
2013–14	6.4	15.0	17.0	8.9	19.3	0.7	7.0
2014–15	5.9	14.1	16.0	7.1	20.6	0.6	5.6
2015–16	6.1	13.3	13.5	6.7	20.1	0.8	4.8

[25, 26] See end notes.

Source: ABS (2017r) and data provided by ports.

Table T 7.6b Cargo discharged (including imports), by capital city ports[26]

Financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin
				million tonnes			
1996–97	15.7	10.6	9.6	5.8	9.9	0.2	0.8
1997–98	16.0	10.8	11.4	6.3	9.2	1.1	0.8
1998–99	15.6	12.6	11.1	5.4	9.2	0.8	0.9
1999–00	17.3	12.4	12.3	5.9	9.1	0.9	1.0
2000–01	17.9	11.6	11.4	5.8	9.0	0.5	1.0
2001–02	17.6	12.4	11.7	6.2	10.1	1.1	0.8
2002–03	18.4	14.2	13.4	5.9	11.4	1.0	0.7
2003–04	19.7	15.4	13.1	4.9	11.6	1.0	1.0
2004–05	19.6	16.2	13.9	5.1	12.0	1.1	1.4
2005–06	20.5	16.2	14.4	6.4	11.1	1.1	2.1
2006–07	21.8	17.7	16.2	5.3	12.4	1.1	5.3
2007–08 [25]	21.4	18.8	16.4	6.0	13.6	1.2	5.4
2008–09	19.9	17.3	16.0	5.0	12.5	1.1	6.2
2009–10	21.3	17.3	16.6	5.6	12.1	1.0	5.3
2010–11	21.5	18.4	17.2	5.7	13.0	1.1	6.1
2011–12	21.2	19.3	17.4	6.3	13.7	0.9	5.4
2012–13	21.3	19.0	18.3	6.4	13.9	1.0	6.3
2013–14	20.7	19.3	18.2	6.6	14.4	0.9	6.5
2014–15	20.0	19.4	17.9	7.2	15.2	1.0	6.9
2015–16	20.4	19.8	16.1	6.8	14.8	1.2	7.1

[25, 26] See end notes.

Source: ABS (2017r) and data provided by ports.

Table T 7.7 Containers exchanged, selected Australian ports

Financial year	Melbourne	Sydney	Brisbane	Fremantle	Adelaide	Five ports
			twenty foot equivalent units (TEU) exchanged			
1993–94	801 344	587 670	228 055	169 174	64 619	1 850 862
1994–95	880 151	666 586	232 693	189 272	66 525	2 035 227
1995–96	923 142	684 714	249 439	202 680	69 355	2 129 330
1996–97	984 394	730 446	272 632	209 564	88 497	2 285 533
1997–98	1 040 810	798 209	317 568	250 802	107 912	2 515 301
1998–99	1 121 161	878 580	357 703	275 697	120 586	2 753 727
1999–00	1 287 795	1 010 509	414 449	297 363	115 506	3 125 622
2000–01	1 316 665	988 967	453 257	354 144	133 236	3 246 269
2001–02	1 420 781	1 009 453	481 623	381 809	145 226	3 438 892
2002–03	1 593 798	1 160 513	570 204	431 342	148 333	3 904 190
2003–04	1 717 718	1 270 256	639 272	457 305	169 108	4 253 659
2004–05	1 910 441	1 375 610	726 147	467 313	170 585	4 650 096
2005–06	1 929 925	1 445 465	766 278	455 428	189 391	4 786 487
2006–07	2 093 611	1 620 121	875 045	505 082	219 117	5 312 976
2007–08	2 256 644	1 778 425	940 760	573 527	280 121	5 829 477
2008–09	2 157 352	1 783 920	896 167	565 491	276 545	5 679 475
2009–10	2 236 635	1 927 520	919 242	557 039	274 501	5 768 095
2010–11	2 392 974	2 020 151	978 815	598 250	297 701	6 137 455
2011–12	2 579 098	2 036 064	1 025 069	656 918	323 834	6 620 983
2012–13	2 512 926	2 126 284	1 069 881	670 296	339 061	6 718 448
2013–14	2 532 669	2 206 401	1 097 365	703 081	382 681	6 922 197
2014–15	2 578 839	2 289 673	1 138 706	743 562	365 874	7 116 654
2015–16	2 638 536	2 323 722	1 147 173	715 107	389 684	7 214 222

Source: BITRE (2017i).

Table T 7.8a Summary of the Australian trading fleet—number of vessels

Financial year	Vessel capacity			Flag	
	Major trading fleet (greater than 2000 dwt)	Other (minor) trading ships (greater than 150 gross registered tonnage and less than or equal to 2000 dwt)	Total Australian trading fleet	Total Australian registered	Total Overseas registered
2001–02	94	23	117	62	55
2002–03	93	25	118	58	60
2003–04	89	26	115	60	55
2004–05	86	21	107	58	49
2005–06	82	23	105	59	46
2006–07	86	24	110	59	51
2007–08	91	20	111	55	56
2008–09	89	22	111	56	55
2009–10	94	22	116	53	63
2010–11	96	22	118	54	64
2011–12	88	26	114	51	63
2012–13	85	26	111	48	63
2013–14	83	31	114	51	63
2014–15	85	27	112	48	64

Note: Historical vessel list data are reviewed by BITRE each year as new information becomes available. This sometimes results in revisions to historical data.

Source: BITRE (2017k).

Table T 7.8b Summary of the Australian trading fleet—deadweight (tonnes)

Financial year	Vessel capacity			Flag	
	Major trading fleet (greater than 2000 dwt)	Other (minor) trading ships (greater than 150 gross registered tonnage and less than or equal to 2000 dwt)	Total Australian trading fleet	Total Australian registered	Total Overseas registered
2001–02	3 473 723	12 811	3 486 534	1 734 477	1 752 057
2002–03	3 457 486	14 622	3 472 108	1 580 392	1 891 716
2003–04	3 731 527	15 212	3 746 739	1 607 609	2 139 130
2004–05	3 302 358	12 917	3 315 275	1 464 396	1 850 879
2005–06	3 026 081	14 576	3 040 657	1 370 386	1 670 271
2006–07	3 308 506	15 646	3 324 152	1 373 446	1 950 706
2007–08	3 560 906	15 515	3 576 421	1 235 915	2 340 506
2008–09	3 343 806	13 246	3 357 052	1 164 046	2 193 006
2009–10	3 795 476	16 341	3 811 817	1 239 015	2 572 802
2010–11	3 779 671	17 193	3 796 864	1 086 283	2 710 581
2011–12	3 738 754	20 465	3 759 219	934 610	2 824 609
2012–13	4 530 039	24 419	4 554 458	577 545	3 976 913
2013–14	4 512 300	28 513	4 540 813	546 967	3 993 846
2014–15	4 856 937	27 659	4 884 596	534 765	4 349 831

Source: BITRE (2017k).

Table T 7.8c Summary of the Australian trading fleet—gross tonnage (tonnes)

Financial year	Vessel capacity			Flag	
	Major trading fleet (greater than 2000 dwt)	Other (minor) trading ships (greater than 150 gross registered tonnage and less than or equal to 2000 dwt)	Total Australian trading fleet	Total Australian registered	Total Overseas registered
2001–02	2 515 439	19 186	2 534 625	1 421 136	1 113 489
2002–03	2 438 734	28 565	2 467 299	1 275 626	1 191 673
2003–04	2 703 809	36 736	2 740 545	1 379 775	1 360 770
2004–05	2 446 408	25 250	2 471 658	1 307 557	1 164 101
2005–06	2 346 281	22 776	2 369 057	1 253 895	1 115 162
2006–07	2 543 670	25 329	2 568 999	1 232 529	1 336 470
2007–08	2 739 770	24 529	2 764 299	1 146 529	1 617 770
2008–09	2 673 070	29 329	2 702 399	1 100 229	1 602 170
2009–10	3 027 360	27 497	3 054 857	1 126 829	1 928 028
2010–11	3 045 112	21 658	3 066 770	1 047 899	2 018 871
2011–12	2 999 228	30 620	3 029 848	948 108	2 081 740
2012–13	3 363 957	34 372	3 398 329	744 171	2 654 158
2013–14	3 459 700	38 109	3 497 809	737 640	2 760 169
2014–15	3 641 396	28 528	3 669 924	712 233	2 957 691

Source: BITRE (2017k).

Table T 7.8d Summary of the Australian trading fleet—age distribution (percentage of total deadweight (tonnes))

Financial year	0–4 years	5–9 years	10–14 years	15–19 years	20+ years	Average age (years)
2001–02	7.8	24.2	26.9	31.9	9.2	16.0
2002–03	7.6	22.6	26.5	27.1	16.1	15.5
2003–04	9.3	21.8	24.7	25.8	18.4	14.8
2004–05	3.1	31.6	22.7	15.3	27.2	16.0
2005–06	3.4	16.9	37.3	15.5	26.9	17.2
2006–07	3.3	10.2	25.4	35.3	26.0	18.0
2007–08	15.7	7.9	21.8	35.5	19.0	16.7
2008–09	20.9	10.1	22.4	23.1	23.6	16.7
2009–10	15.0	13.0	21.0	26.0	41.0	16.8
2010–11	16.0	14.0	21.0	24.0	43.0	16.5
2011–12	16.0	17.0	18.0	23.0	40.0	16.3
2012–13	17.0	23.0	14.0	20.0	37.0	14.8
2013–14	16.0	30.0	11.0	25.0	32.0	14.6
2014–15	15.0	34.0	12.0	18.0	33.0	14.1

Source: BITRE (2017k).

Table T 7.9a Ships in the major trading fleet—overseas trades, 2014–15—tankers

		Ports called at	
Name	Products	Australian	Overseas
Dapeng Moon	LNG	Dampier	CHN, SGP
Dapeng Star	LNG	Dampier	CHN, SGP
Dapeng Sun	LNG	Dampier, Port Walcott	CHN
Gas Defiance	LPG	Brisbane, Cairns, Darwin, Devonport, Gladstone, Hastings, Hobart, Port Kembla, Sydney, Townsville	IDN, NZL, PNG, SLB
Maea	LPG	Brisbane, Hastings, Melbourne, Port Kembla, Sydney	ASM, FJI, NCL, NZL, WSM
Methane Rita Andrea	LNG	Gladstone	PNG, SGP
Northwest Sanderling	LNG	Dampier	JPN, KOR
Northwest Sandpiper	LNG	Dampier, Port Hedland	JPN, KOR, SGP
Northwest Seaeagle	LNG	Dampier	JPN
Northwest Shearwater	LNG	Dampier	JPN, SGP
Northwest Snipe	LNG	Dampier	JPN
Northwest Stormpetrel	LNG	Dampier	JPN, SGP
Northwest Swan	LNG	Dampier	JPN, KOR, SGP, THA
Victoire	LPG	Hastings, Melbourne, Port Kembla	FJI, NCL, NZL, PYF, TON

Source: BITRE (2017k).

Table T 7.9b Ships in the major trading fleet—overseas trades, 2014–15—bulk carriers

		Ports called at	
Name	Products	Australian	Overseas
Artemis	Coal, dry bulk	Carnarvon, Gladstone, Gove, Hay Point, Newcastle, Weipa	CHN, SGP, THA, TWN
Barwon	Bauxite	Gladstone, Gove, Weipa	CHN, JPN
Cape Mary	Coal, dry bulk	Hay Point	BRA, CHN
FMG Cloudbreak	Iron ore	Port Hedland	CHN, PHL, RUS, SGP
FMG Grace	Iron ore	Port Hedland	CHN, PHL
FMG Matilda	Iron ore	Port Hedland	CHN
Frontier	Coal	Newcastle	CHN, KOR
Goodwill	Coal	Gladstone, Newcastle	KOR
Goonyella Trader	Coal	Hay Point	GBR, NLD, SGP
Melia	Dry bulk	Brisbane, Gladstone, Gove, Hay Point, Weipa	CHN, JPN
Mineral Manila; RS Iron Range	Iron ore	Dampier, Port Walcott	CHN
Pacific Dolphin	Dry bulk	Gladstone	IDN, RUS
Pacific Triangle	Iron ore, coal	Newcastle, Port Hedland, Port Kembla	JPN
Pioneer	Sugar	Mackay, Sydney	SGP
Star Yandi	Iron ore, coal	Dampier, Newcastle, Port Walcott (Cape Lambert)	CHN
Yarra	Bauxite	Gladstone, Weipa	CHN, JPN

Source: BITRE (2017k).

Table T 7.9c Ships in the major trading fleet—overseas trades, 2014–15—container carriers

		Ports called at	
Name	Products	Australian	Overseas
ANL Barega	General cargo	Melbourne, Sydney	NZL
ANL Barwon	General cargo	Melbourne, Sydney	NZL
ANL Echuca	General cargo	Melbourne, Sydney	NZL, PNG
ANL Elanora	General cargo	Brisbane, Melbourne, Sydney	MYS, NZL
ANL Euroa	General cargo	Brisbane, Melbourne, Sydney	MYS, NZL
ANL Kurango	General cargo	Brisbane, Sydney	MYS, NZL, SGP, URY
ANL Wangaratta	General cargo	Brisbane, Melbourne, Sydney	CHN, JPN
ANL Wodonga	General cargo	Brisbane, Melbourne, Sydney	CHN
ANL Wyong	General cargo	Brisbane, Melbourne, Sydney	JPN, TWN
OOCL Brisbane	General cargo	Adelaide, Fremantle, Melbourne	MYS, SGP
OOCL New Zealand	General cargo	Brisbane	NZL, SGP

Source: BITRE (2017k).

Table T 7.9d Ships in the major trading fleet—overseas trades, 2014–15—livestock carriers

		Ports called at	
Name	Products	Australian	Overseas
Bader III	Livestock carrier	Adelaide, Darwin, Fremantle	ARE, IDN, ISR, JOR, QAT, SGP
Devon Express	Livestock carrier	Brisbane, Darwin, Fremantle, Portland, Townsville	CHN, IDN, KOR, MYS, NZL, PAK, PHL, SGP, VNM
Maysora	Livestock carrier	Adelaide, Broome, Darwin, Fremantle	ARE, DJI, EGY, IDN, ISR, KWT, SGP
Nine Eagle	Livestock carrier	Darwin, Karumba	IDN, MYS, VNM
Ocean Outback	Livestock carrier	Darwin, Fremantle, Townsville	CHN, IDN, NZL, PHL, SGP, VNM
Ocean Swagman	Livestock carrier	Darwin, Portland, Townsville	CHN, IDN, PHL, SGP, VNM

Source: BITRE (2017k).

Table T 7.9e Ships in the major trading fleet—overseas trades, 2014–15—general cargo ships

		Ports called at	
Name	Products	Australian	Overseas
ANL Darwin Trader; MCP Vienna	General cargo	Darwin, Gladstone, Mackay, Townsville	NCL, SGP
Capitaine Fearn	General cargo	Brisbane	FJI, SLB, VUT

Source: BITRE (2017k).

Table T 7.10a Ships in the major trading fleet—coastal trades, 2014–15—tankers

		Ports called at	
Name	Products	Australian	Overseas
Alexander Spirit	Petroleum products	Brisbane, Cairns, Devonport, Gladstone, Hobart, Mackay, Sydney, Townsville	
British Fidelity	Petroleum products	Adelaide, Fremantle, Port Hedland	SGP
Destine	Petroleum products	Port Kembla, Sydney	
Gas Shuriken	Petroleum products	Brisbane, Cairns, Darwin, Devonport, Gladstone, Hastings, Hobart, Port Kembla, Sydney, Townsville	CHN, GUM, NCL, PNG
Larcom	Petroleum products	Gladstone	
Zemira	Petroleum products	Geelong, Melbourne	

Source: BITRE (2017k).

Table T 7.10b Ships in the major trading fleet—coastal trades, 2014–15—bulk carriers

		Ports called at	
Name	Products	Australian	Overseas
Aburri	Metal concentrates	Bing Bong, Karumba	SGP
CSL Brisbane	Alumina, cement, gypsum	Adelaide, Ardrossan, Brisbane, Geelong, Geraldton, Gladstone, Mackay, Melbourne, Port Kembla, Portland, Thevenard, Towns	CHN
CSL Melbourne	Dry bulk	Ardrossan, Gladstone, Newcastle, Port Kembla, Port Latta, Sydney, Thevenard, Whyalla	
CSL Pacific	Dry bulk	Adelaide, Ardrossan, Brisbane, Devonport, Geraldton, Gladstone, Melbourne, Port Kembla, Portland, Sydney, Thevenard, Townsville, Whyalla	
CSL Thevenard	Cement	Adelaide, Brisbane, Geelong, Geraldton, Gladstone, Hobart, Melbourne, Port Kembla, Portland, Sydney, Thevenard	
CSL Whyalla	Iron ore	Whyalla	
Goliath	Cement	Adelaide, Devonport, Melbourne, Sydney	
Iron Chieftain	Iron ore, coal	Ardrossan, Gladstone, Newcastle, Port Kembla, Port Latta, Sydney, Whyalla	
Lowlands Brilliance	Dry bulk	Gladstone, Hay Point, Port Hedland, Port Kembla	CHN, SGP
Mariloula	Dry bulk	Abbot Point, Gladstone, Hay Point, Port Hedland, Port Kembla, Whyalla	CHN
Portland	Alumina	Bunbury, Fremantle, Portland	
RTM Gladstone	Bauxite	Brisbane, Gladstone, Weipa	CHN
RTM Piiramu	Bauxite	Brisbane, Gladstone, Weipa	
RTM Twarra	Bauxite	Brisbane, Gladstone, Weipa	
RTM Wakmatha	Bauxite	Brisbane, Gladstone, Weipa	CHN
RTM Weipa	Bauxite	Brisbane, Gladstone, Weipa	CHN
Stadacona	Dry bulk	Adelaide, Brisbane, Fremantle, Geraldton, Gladstone, Melbourne, Port Kembla, Portland, Thevenard, Townsville	CHN, TWN
Wunma	Metal concentrates	Karumba	SGP

Source: BITRE (2017k).

Table T 7.10c Ships in the major trading fleet—coastal trades, 2014–15—general cargo

		Ports called at	
Name	Products	Australian	Overseas
Accolade II	General cargo ship	Adelaide, Klein Point	
Aurora Australis	General cargo ship	Hobart	SGP
Hakula	General cargo ship	Burnie, Hobart, Port Pirie	IND
Newcastle Bay	General cargo ship	Cairns, Thursday Island, Weipa	DEU
Searoad Mersey	General cargo ship	Devonport, Melbourne	
Searoad Tamar	General cargo ship	Devonport, Melbourne	
Spirit of Tasmania I	General cargo ship	Devonport, Melbourne	
Spirit of Tasmania II	General cargo ship	Devonport, Melbourne, Sydney	
Tasmanian Achiever	General cargo ship	Burnie, Melbourne	SGP
Trinity Bay	General cargo ship	Cairns, Thursday Island, Weipa	
Victorian Reliance	General cargo ship	Burnie, Melbourne	SGP

Source: BITRE (2017k).

CHAPTER 8
Safety

Table T 8.1a Number of fatal accidents, by transport mode

Calendar year	Road	Rail	Marine	Aviation
1973				15
1974				17
1975				22
1976				27
1977				31
1978				34
1979				31
1980				32
1981				27
1982				35
1983				30
1984				32
1985				29
1986				29
1987				25
1988				35
1989	2 407			46
1990	2 050			44
1991	1 874			28
1992	1 736			38
1993	1 737			30
1994	1 702			35
1995	1 822			33
1996	1 768			29
1997	1 601			25
1998	1 573			31
1999	1 553			25
2000	1 628			24
2001	1 584		32	27
2002	1 525		40	19
2003	1 445		39	21
2004	1 444		44	21
2005	1 472		37	24
2006	1 452		40	24
2007	1 453		41	30
2008	1 315		37	27
2009	1 347		43	23
2010	1 233		[k] 2	19
2011	1 151		6	24
2012	1 190		6	27
2013	1 101		6	33
2014	1 050		3	20
2015	1 101		2	27
2016	1 198		2	15

[k] Marine accidents data from 2010 onwards were compiled using a different methodology and should not be compared with earlier results.

Note: Data are not readily available for missing years.
Road fatal accidents are defined as fatal crashes.

Source: ATSB (2017a), ATSB (2017b), BITRE (2016j) and NMSC (2010).

Table T 8.1b Number of fatalities, by transport mode

Calendar year	Road	Rail	Marine	Aviation
1973	3 679			26
1974	3 572			39
1975	3 694			49
1976	3 583			58
1977	3 578			55
1978	3 705			65
1979	3 508	49		45
1980	3 272	56		64
1981	3 321	72		58
1982	3 252	72		60
1983	2 755	66		54
1984	2 822	76		48
1985	2 941	66		54
1986	2 888	66		54
1987	2 772	54		39
1988	2 887	64		67
1989	2 800	67		82
1990	2 331	76		80
1991	2 113	42		52
1992	1 974	61		63
1993	1 953	52		56
1994	1 928	43		62
1995	2 017	46		51
1996	1 970	30		51
1997	1 767	43		38
1998	1 755	43		56
1999	1 764	43		46
2000	1 817	38		44
2001	1 737	53	47	46
2002	1 715	40	50	34
2003	1 621	33	43	44
2004	1 583	33	50	34
2005	1 627	35	41	45
2006	1 598	39	49	40
2007	1 603	42	53	44
2008	1 437	31	41	43
2009	1 491	28	53	25
2010	1 353	29	[k] 2	24
2011	1 277	33	6	38
2012	1 300	[i] 20	6	39
2013	1 187	[i] 7	6	46
2014	1 150		4	28
2015	1 205		2	31
2016	1 292		3	21

Note: Data are not readily available for missing years.

[i] Rail fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

[k] Marine fatalities data from 2010 onwards were compiled using a different methodology and should not be compared with earlier results.

Source: ATSB (2017a), ATSB (2017b), BITRE (2016j) and ONRSR (2017).

Table T 8.2a Fatality rate, by transport mode (per 100,000 population)

Calendar year	Road	Rail	Marine	Aviation
		deaths per 100 000 population		
1973	27.24			0.19
1974	26.03			0.28
1975	26.59			0.35
1976	25.53			0.41
1977	25.21			0.39
1978	25.80			0.45
1979	24.17	0.34		0.31
1980	22.27	0.38		0.44
1981	22.25	0.48		0.39
1982	21.42	0.47		0.40
1983	17.90	0.43		0.35
1984	18.11	0.49		0.31
1985	18.63	0.42		0.34
1986	18.03	0.41		0.34
1987	17.04	0.33		0.24
1988	17.46	0.39		0.41
1989	16.65	0.40		0.49
1990	13.66	0.45		0.47
1991	12.23	0.24		0.30
1992	11.29	0.35		0.36
1993	11.07	0.29		0.32
1994	10.83	0.24		0.35
1995	11.20	0.25		0.28
1996	10.81	0.16		0.28
1997	9.59	0.23		0.21
1998	9.43	0.23		0.30
1999	9.38	0.23		0.24
2000	9.55	0.20		0.23
2001	9.01	0.27	0.24	0.24
2002	8.80	0.20	0.25	0.17
2003	8.22	0.17	0.22	0.22
2004	7.94	0.17	0.25	0.17
2005	8.06	0.17	0.20	0.22
2006	7.81	0.19	0.24	0.20
2007	7.70	0.20	0.25	0.21
2008	6.76	0.15	0.19	0.20
2009	6.87	0.13	0.24	0.12
2010	6.14	0.13	[k] 0.01	0.11
2011	5.72	0.15	0.03	0.17
2012	5.72	[j] 0.09	0.03	0.17
2013	5.13	0.03	0.03	0.20
2014	4.89		0.02	0.12
2015	5.05		0.02	0.12
2016	5.34		0.01	0.09

[j] Rail fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

[k] Marine fatalities data from 2010 onwards were compiled using a different methodology and should not be compared with earlier results.

Note: Data are not readily available for missing years.

Source: ABS (2017f), ATSB (2017a), ATSB (2017b), BITRE (2017j), NMSC (2010) and ONRSR (2017).

Table T 8.2b Injury rate, by transport mode (per 100,000 population)

Calendar year	Road	Rail	Marine	Aviation
	serious injuries per 100 000 population			
1973				0.17
1974				0.17
1975				0.19
1976				0.35
1977				0.36
1978				0.34
1979				0.34
1980				0.28
1981				0.33
1982				0.28
1983				0.29
1984				0.24
1985				0.23
1986				0.22
1987				0.36
1988				0.27
1989	169.26			0.45
1990	146.27			0.36
1991	130.34			0.23
1992	123.08			0.22
1993	122.24			0.33
1994	124.30			0.17
1995	124.23			0.27
1996	120.59			0.18
1997	116.80			0.16
1998				0.12
1999				0.11
2000	141.70			0.22
2001	142.58	0.43	0.45	0.16
2002	143.41	0.50	0.59	0.13
2003	144.24	0.26	0.40	0.13
2004	144.92	0.35	0.62	0.12
2005	151.64	0.35	0.67	0.03
2006	157.88	0.65	0.78	0.07
2007	156.29	0.87	0.61	0.08
2008	157.77	0.53	0.72	0.20
2009	155.32	0.41	0.45	0.09
2010	148.76	0.18	[k] 0.11	0.15
2011	152.56	0.30	0.11	0.17
2012	149.90	[i] 0.33	0.13	0.17
2013	151.47	0.21	0.10	0.08
2014	151.26		0.16	0.15
2015			0.15	0.13
2016			0.07	0.15

[i] Rail fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

[k] Marine fatalities data from 2010 onwards were compiled using a different methodology and should not be compared with earlier results.

[27, 28] See end notes.

Note: Data are not readily available for missing years.
Hospital injury series contains a break at 2012 due to changes in admission criteria in one jurisdiction.
Data for Hospitalised Injuries on roads have been revised. Minor injuries are excluded.
A hospitalised injury is defined as a person admitted to hospital.

Source: ABS (2017f), AIHW (2017b), ATSB (2017a), ATSB (2017b), Infrastructure (2012), NMSC (2010) and ONRSR (2017).

Table T 8.3a Fatality rate, by transport mode (per billion passenger km travelled)

Calendar year	Road	Rail	Aviation
	deaths per billion passenger km travelled		
1972	26.68		8.63
1973	27.58		4.03
1974	25.09		5.08
1975	28.93		5.91
1976	26.93		7.12
1977	25.88		6.51
1978	26.01		7.11
1979	24.25	5.66	4.56
1980	22.40	6.25	6.08
1981	22.03	7.91	5.31
1982	21.04	7.99	5.60
1983	17.40	7.42	5.17
1984	17.11	8.60	4.37
1985	17.25	7.32	4.56
1986	16.51	7.06	4.24
1987	15.30	5.56	2.82
1988	15.20	6.37	4.54
1989	12.20	6.66	6.23
1990	10.24	7.62	5.87
1991	9.25	4.23	2.83
1992	8.36	6.24	3.02
1993	8.14	5.32	2.47
1994	7.75	4.28	2.41
1995	8.12	4.42	1.82
1996	7.79	2.80	1.73
1997	7.00	3.97	1.26
1998	6.76	3.94	1.82
1999	6.54	3.83	1.44
2000	6.83	3.25	1.28
2001	6.60	4.45	1.34
2002	6.19	3.38	0.99
2003	5.66	2.78	1.14
2004	5.52	2.78	0.78
2005	5.67	2.89	0.95
2006	5.61	3.08	0.79
2007	5.56	3.11	0.80
2008	5.03	2.15	0.74
2009	5.15	1.90	0.42
2010	4.67	1.95	0.38
2011	4.32	2.18	0.58
2012	4.43	[i] 1.31	0.57
2013	4.07	0.46	0.65
2014	3.84		0.40
2015	3.97		0.44

[i] Rail fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

Note: Data are not readily available for missing years.

Source: ATSB (2012), ATSB (2017a), BITRE (2017j) and BITRE estimates.

Table T 8.3b Injury rate, by transport mode (per billion passenger km travelled)

Calendar year	Road Hospitalised injury Rate[27]	Rail	Aviation
	serious injuries per billion passenger km travelled		
1972			3.32
1973			3.57
1974			2.78
1975			3.26
1976			6.02
1977			6.04
1978			5.36
1979			5.06
1980			3.89
1981			4.48
1982			4.02
1983			4.31
1984			3.37
1985			3.04
1986			2.75
1987			4.20
1988			2.98
1989	121.33		5.70
1990	103.57		4.48
1991	93.90		2.13
1992	88.30		1.82
1993	86.13		2.55
1994	86.43		1.21
1995	84.77		1.72
1996	81.99		1.12
1997	79.83		0.96
1998			0.72
1999			0.63
2000	94.98		1.23
2001	97.54	6.93	0.90
2002	96.79	8.28	0.76
2003	96.02	4.31	0.68
2004	93.44	5.96	0.53
2005	98.66	6.07	0.15
2006	105.37	10.92	0.29
2007	104.61	14.11	0.31
2008	106.45	8.13	0.72
2009	106.81	6.16	0.34
2010	102.55	2.58	0.51
2011	105.29	4.41	0.58
2012	104.13	[i] 4.85	0.57
2013	106.02	3.16	0.27
2014		1.24	0.50
2015			0.42

[27, 28, 29] See end notes.

Note: Data for Hospitalised Injuries on roads have been revised. Minor injuries are excluded.
A hospitalised injury is a person admitted to hospital.
Data are not readily available for missing years.

[i] Rail fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

Source: AIHW (2017b), ATSB (2012), ATSB (2017a), BITRE (2017j), Infrastructure (2012) and BITRE estimates.

Table T 8.4a Number of road accidents, by accident severity

Calendar year	Fatal	Hospitalised injury crash[29]
1989	2 407	22 158
1990	2 050	20 014
1991	1 874	17 844
1992	1 736	17 108
1993	1 737	17 164
1994	1 702	17 560
1995	1 822	17 803
1996	1 768	17 505
1997	1 601	17 150
1998	1 573	
1999	1 553	
2000	1 628	
2001	1 584	
2002	1 525	
2003	1 445	
2004	1 444	
2005	1 472	
2006	1 452	
2007	1 453	
2008	1 315	
2009	1 347	
2010	1 233	
2011	1 151	
2012	1 190	
2013	1 101	
2014	1 050	
2015	1 101	
2016	1 198	

[29] See end notes.

Note: Data are not readily available for missing years.
Hospitalised Injury crash data excludes all fatal crashes.

Source: BITRE (2017j) and Infrastructure (2012).

Table T 8.4b Number of road casualties, by severity

Calendar year	Fatal	Hospitalised injury[29]
1973	3 679	
1974	3 572	
1975	3 694	
1976	3 583	
1977	3 578	
1978	3 705	
1979	3 508	
1980	3 272	
1981	3 321	
1982	3 252	
1983	2 755	
1984	2 822	
1985	2 941	
1986	2 888	
1987	2 772	
1988	2 887	
1989	2 800	28 483
1990	2 331	24 961
1991	2 113	22 528
1992	1 974	21 512
1993	1 953	21 557
1994	1 928	22 133
1995	2 017	22 368
1996	1 970	21 989
1997	1 767	21 519
1998	1 755	
1999	1 764	
2000	1 817	26 963
2001	1 737	27 482
2002	1 715	27 958
2003	1 621	28 446
2004	1 583	28 886
2005	1 627	30 597
2006	1 598	32 288
2007	1 603	32 552
2008	1 437	33 524
2009	1 491	33 692
2010	1 353	32 775
2011	1 277	34 082
2012	1 300	34 091
2013	1 187	35 059
2014	1 150	
2015	1 205	
2016	1 292	

[29, 30] See end notes.

Note: Data are not readily available for missing years.
Data for Hospitalised Injuries have been revised. Minor injuries are excluded.
A hospitalised injury is a person admitted to hospital.
In 2012 there is a break in the series for Hospitalised Injury as a result of a change in the criteria for patient admission in one jurisdiction.

Source: AIHW (2017b), BITRE (2017j) and Infrastructure (2012).

Table T 8.5a Road accident rate, by accident severity (per 100,000 population)

Calendar year	Fatal Crash	Hospitalised injury crash[29]
1989	14.32	131.78
1990	12.01	117.28
1991	10.84	103.24
1992	9.93	97.88
1993	9.85	97.33
1994	9.56	98.62
1995	10.12	98.88
1996	9.70	96.05
1997	8.69	93.09
1998	8.45	
1999	8.26	
2000	8.56	
2001	8.22	
2002	7.82	
2003	7.33	
2004	7.24	
2005	7.30	
2006	7.10	
2007	6.98	
2008	6.19	
2009	6.21	
2010	5.60	
2011	5.15	
2012	5.24	
2013	4.76	
2014	4.47	
2015	4.62	
2016	4.95	

[29] See end notes.

Note: Hospitalised Injury crash data excludes all fatal crashes.
Data are not readily available for missing years.

Source: ABS (2017f), BITRE (2017j) and Infrastructure (2012).

Table T 8.5b Road casualty rate, by severity (per 100,000 population)

Calendar year	Fatalities	Hospitalised injury[29]
1973	27.24	
1974	26.03	
1975	26.59	
1976	25.53	
1977	25.21	
1978	25.80	
1979	24.17	
1980	22.27	
1981	22.25	
1982	21.42	
1983	17.90	
1984	18.11	
1985	18.63	
1986	18.03	
1987	17.04	
1988	17.46	
1989	16.65	169.26
1990	13.66	146.27
1991	12.23	130.34
1992	11.29	123.08
1993	11.07	122.24
1994	10.83	124.30
1995	11.20	124.23
1996	10.81	120.59
1997	9.59	116.80
1998	9.43	
1999	9.38	
2000	9.55	141.70
2001	9.01	142.58
2002	8.80	143.41
2003	8.22	144.24
2004	7.94	144.92
2005	8.06	151.64
2006	7.81	157.88
2007	7.70	156.29
2008	6.76	157.77
2009	6.87	155.32
2010	6.14	148.76
2011	5.72	152.56
2012	5.72	149.90
2013	5.13	151.47
2014	4.89	151.26
2015	5.05	
2016	5.34	

[29, 30] See end notes.

Note: Data for Hospitalised Injuries have been revised. Minor injuries are excluded.
A hospitalised injury is defined as a person admitted to hospital.
Data are not readily available for missing years.
In 2012 there is a break in the series for Hospitalised Injury as a result of a change in the criteria for patient admission in one jurisdiction.

Source: ABS (2017f), AIHW (2017b), BITRE (2017j) and Infrastructure (2012).

Table T 8.6a Number of fatal road accidents, by state/territory

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
1989	784	681	376	201	214	68	57	26	2 407
1990	702	492	347	187	181	63	54	24	2 050
1991	585	435	359	166	187	66	60	16	1 874
1992	576	365	363	142	171	59	42	18	1 736
1993	518	381	357	191	191	47	41	11	1 737
1994	552	345	364	143	195	52	36	15	1 702
1995	563	371	408	163	194	53	56	14	1 822
1996	538	382	338	162	220	53	58	17	1 768
1997	525	346	321	123	184	29	56	17	1 601
1998	491	348	257	152	199	47	59	20	1 573
1999	506	345	273	132	189	47	44	17	1 553
2000	543	373	275	151	184	38	48	16	1 628
2001	486	404	296	137	151	52	43	15	1 584
2002	501	361	283	138	159	35	40	8	1 525
2003	483	294	284	136	155	39	44	10	1 445
2004	458	312	289	128	162	52	34	9	1 444
2005	459	314	296	127	151	49	51	25	1 472
2006	449	309	313	104	181	43	41	12	1 452
2007	405	289	338	107	214	39	47	14	1 453
2008	353	278	294	87	185	37	67	14	1 315
2009	409	268	296	104	176	52	31	11	1 347
2010	365	260	236	105	176	29	46	16	1 233
2011	336	259	227	95	167	23	38	6	1 151
2012	336	261	255	86	171	29	40	12	1 190
2013	316	225	246	90	149	35	33	7	1 101
2014	285	223	199	95	173	31	34	10	1 050
2015	326	231	219	96	141	32	42	14	1 101
2016	356	276	238	76	170	33	40	9	1 198

Source: BITRE (2017j).

Table T 8.6b Number of fatalities, by state/territory

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
1972	1 092	915	572	312	340	106	53	32	3 422
1973	1 230	935	638	329	358	105	55	29	3 679
1974	1 275	806	589	382	334	111	44	31	3 572
1975	1 288	910	635	339	304	122	64	32	3 694
1976	1 264	938	569	307	308	108	51	38	3 583
1977	1 268	954	572	306	290	112	47	29	3 578
1978	1 384	869	612	291	345	106	68	30	3 705
1979	1 288	846	616	309	279	93	53	24	3 508
1980	1 303	657	557	269	293	100	63	30	3 272
1981	1 291	766	594	222	238	111	70	29	3 321
1982	1 253	709	602	270	236	96	60	26	3 252
1983	966	664	510	266	203	70	48	28	2 755
1984	1 037	657	505	232	221	83	50	37	2 822
1985	1 067	683	502	268	243	78	67	33	2 941
1986	1 029	668	481	288	228	91	71	32	2 888
1987	959	705	442	256	213	77	84	36	2 772
1988	1 037	701	539	223	230	75	51	31	2 887
1989	959	776	428	222	242	80	61	32	2 800
1990	797	548	399	226	196	71	68	26	2 331
1991	663	503	395	184	207	77	67	17	2 113
1992	649	396	416	165	200	74	54	20	1 974
1993	581	435	396	218	209	58	44	12	1 953
1994	646	377	418	159	211	59	41	17	1 928
1995	620	418	456	181	209	57	61	15	2 017
1996	581	417	385	181	247	64	72	23	1 970
1997	576	377	360	148	197	32	60	17	1 767
1998	556	390	279	168	223	48	69	22	1 755
1999	577	383	314	151	218	53	49	19	1 764
2000	603	407	317	166	212	43	51	18	1 817
2001	524	444	324	153	165	61	50	16	1 737
2002	561	397	322	154	179	37	55	10	1 715
2003	539	330	310	157	180	41	53	11	1 621
2004	510	343	311	139	178	58	35	9	1 583
2005	508	346	330	148	163	51	55	26	1 627
2006	496	337	335	117	200	55	45	13	1 598
2007	435	332	360	124	235	45	58	14	1 603
2008	374	303	328	99	205	39	75	14	1 437
2009	454	290	331	119	191	63	31	12	1 491
2010	405	288	249	118	193	31	50	19	1 353
2011	364	287	269	103	179	24	45	6	1 277
2012	369	282	280	94	183	31	49	12	1 300
2013	333	243	271	98	162	36	37	7	1 187
2014	307	248	223	107	183	33	39	10	1 150
2015	350	252	243	102	160	34	49	15	1 205
2016	380	291	251	86	193	37	45	9	1 292

Source: BITRE (2017j).

Table T 8.6c Number of fatalities, by road user type

Calendar year	Driver	Passenger	Pedestrian	Motorcyclist	Pedal cyclist	Total
2005	775	347	226	233	41	1627
2006	757	336	228	238	39	1598
2007	785	336	204	237	41	1603
2008	670	303	189	245	28	1437
2009	707	333	196	224	31	1491
2010	636	284	170	224	38	1353
2011	568	286	186	202	34	1277
2012	610	260	170	223	33	1300
2013	557	204	158	213	50	1187
2014	532	228	151	191	45	1150
2015	555	251	162	203	31	1205
2016	623	208	181	248	29	1292

Note: The total includes deaths to persons with road user type not recorded.
Source: BITRE (2017j).

Table T 8.6d Number of fatalities, by age–group (years)

Calendar year	0 to 16	17 to 25	26 to 39	40 to 64	65 to 74	≥ 75
2005	110	426	414	408	112	154
2006	118	435	393	424	98	129
2007	101	392	412	451	101	145
2008	87	377	345	395	86	147
2009	106	362	355	445	94	129
2010	74	336	305	418	97	122
2011	93	280	275	398	83	148
2012	70	284	300	400	96	149
2013	66	230	243	374	118	156
2014	65	234	252	359	108	129
2015	65	225	272	373	118	152
2016	60	265	290	412	103	162

Source: BITRE (2017j).

Table T 8.6e Number of fatalities, by gender

Calendar year	Females	Males	Total
2005	443	1,182	1,627
2006	405	1,191	1,598
2007	431	1,172	1,603
2008	376	1,060	1,437
2009	407	1,081	1,491
2010	370	982	1,353
2011	355	920	1,277
2012	369	931	1,300
2013	334	852	1,187
2014	331	818	1,150
2015	339	866	1,205
2016	337	954	1,292

Note: The total includes deaths to persons with gender not recorded.
Source: BITRE (2017j).

Table T 8.7a Fatal road accident rate, by state/territory (per 100,000 population)

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
1989	13.6	15.8	13.3	14.2	13.6	14.9	35.4	9.4	14.3
1990	12.0	11.2	12.0	13.1	11.2	13.6	33.0	8.5	12.0
1991	9.9	9.8	12.1	11.5	11.4	14.1	36.3	5.5	10.8
1992	9.7	8.2	12.0	9.8	10.3	12.6	24.9	6.1	9.9
1993	8.6	8.5	11.5	13.1	11.4	10.0	23.9	3.7	9.8
1994	9.1	7.7	11.5	9.8	11.4	11.0	20.6	5.0	9.6
1995	9.2	8.2	12.6	11.1	11.2	11.2	31.2	4.6	10.1
1996	8.7	8.4	10.2	11.0	12.4	11.1	31.4	5.5	9.7
1997	8.4	7.6	9.6	8.3	10.2	6.1	29.5	5.5	8.7
1998	7.8	7.6	7.5	10.2	10.9	9.9	30.6	6.4	8.5
1999	7.9	7.4	7.9	8.9	10.2	9.9	22.4	5.4	8.3
2000	8.4	7.9	7.8	10.1	9.8	8.0	24.1	5.0	8.6
2001	7.4	8.5	8.3	9.1	7.9	11.0	21.3	4.7	8.2
2002	7.6	7.5	7.7	9.1	8.2	7.4	19.8	2.5	7.8
2003	7.3	6.0	7.6	8.9	7.9	8.1	21.8	3.1	7.3
2004	6.9	6.3	7.5	8.4	8.2	10.8	16.8	2.7	7.2
2005	6.9	6.3	7.6	8.3	7.5	10.1	24.8	7.5	7.3
2006	6.7	6.1	7.8	6.7	8.8	8.8	19.6	3.6	7.1
2007	5.9	5.6	8.2	6.8	10.2	7.9	22.0	4.1	7.0
2008	5.1	5.3	7.0	5.5	8.5	7.4	30.5	4.0	6.2
2009	5.8	5.0	6.8	6.5	7.9	10.3	13.7	3.1	6.2
2010	5.1	4.8	5.4	6.5	7.7	5.7	20.0	4.4	5.6
2011	4.7	4.7	5.1	5.8	7.1	4.5	16.4	1.6	5.2
2012	4.6	4.6	5.6	5.2	7.0	5.7	17.0	3.2	5.2
2013	4.3	3.9	5.3	5.4	6.0	6.8	13.6	1.8	4.8
2014	3.8	3.8	4.2	5.6	6.9	6.0	14.0	2.6	4.5
2015	4.3	3.8	4.6	5.6	5.5	6.2	17.1	3.5	4.6
2016	4.6	4.5	4.9	4.4	6.6	6.4	16.3	2.2	4.9

Source: ABS (2017f) and BITRE (2017j).

Table T 8.7b Fatality rate, by state/territory (per 100,000 population)

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
1972	22.8	25.0	30.1	25.7	31.4	26.5	57.6	20.0	25.7
1973	25.4	25.2	32.7	26.8	32.5	26.0	56.6	16.7	27.2
1974	26.1	21.5	29.3	30.8	29.6	27.3	42.7	16.6	26.0
1975	26.1	24.0	31.0	26.8	26.3	29.7	68.9	16.1	26.6
1976	25.5	24.6	27.2	24.1	26.1	26.2	51.9	18.3	25.5
1977	25.4	24.9	26.9	23.8	24.1	27.0	45.2	13.6	25.2
1978	27.4	22.5	28.2	22.5	28.1	25.4	61.8	13.8	25.8
1979	25.2	21.8	27.8	23.7	22.4	22.1	46.4	10.9	24.2
1980	25.2	16.8	24.6	20.6	23.1	23.6	53.3	13.4	22.3
1981	24.7	19.4	25.3	16.8	18.3	26.0	57.1	12.7	22.3
1982	23.6	17.8	24.8	20.3	17.6	22.3	46.0	11.2	21.4
1983	18.0	16.5	20.5	19.8	14.8	16.2	35.3	11.7	17.9
1984	19.2	16.1	20.0	17.1	15.9	19.0	35.2	15.1	18.1
1985	19.5	16.6	19.5	19.5	17.1	17.6	45.1	13.1	18.6
1986	18.6	16.1	18.3	20.8	15.6	20.4	46.0	12.4	18.0
1987	17.1	16.7	16.5	18.4	14.2	17.1	53.1	13.6	17.0
1988	18.2	16.4	19.7	15.9	15.0	16.6	32.1	11.4	17.5
1989	16.6	18.0	15.1	15.6	15.3	17.6	37.8	11.6	16.7
1990	13.7	12.5	13.8	15.8	12.2	15.4	41.5	9.2	13.7
1991	11.2	11.4	13.3	12.7	12.7	16.5	40.5	5.9	12.2
1992	10.9	8.9	13.8	11.3	12.1	15.7	32.0	6.8	11.3
1993	9.7	9.7	12.8	14.9	12.4	12.3	25.6	4.0	11.1
1994	10.7	8.4	13.2	10.9	12.4	12.5	23.4	5.6	10.8
1995	10.2	9.3	14.1	12.4	12.0	12.0	34.0	4.9	11.2
1996	9.4	9.2	11.7	12.3	14.0	13.5	39.0	7.4	10.8
1997	9.2	8.3	10.7	10.0	11.0	6.7	31.6	5.5	9.6
1998	8.8	8.5	8.2	11.3	12.2	10.1	35.8	7.1	9.4
1999	9.1	8.2	9.1	10.1	11.8	11.2	25.0	6.0	9.4
2000	9.4	8.7	9.0	11.1	11.3	9.1	25.6	5.7	9.5
2001	8.0	9.3	9.1	10.2	8.7	12.9	24.8	5.0	9.0
2002	8.5	8.2	8.8	10.2	9.3	7.8	27.2	3.1	8.8
2003	8.1	6.8	8.3	10.3	9.2	8.6	26.3	3.4	8.2
2004	7.7	7.0	8.1	9.1	9.0	12.0	17.3	2.7	7.9
2005	7.6	6.9	8.4	9.6	8.1	10.5	26.7	7.8	8.1
2006	7.4	6.7	8.4	7.5	9.8	11.2	21.5	3.9	7.8
2007	6.4	6.4	8.8	7.9	11.2	9.1	27.1	4.1	7.7
2008	5.4	5.8	7.8	6.2	9.4	7.8	34.1	4.0	6.8
2009	6.4	5.4	7.6	7.4	8.5	12.5	13.7	3.4	6.9
2010	5.7	5.3	5.7	7.3	8.4	6.1	21.8	5.3	6.1
2011	5.0	5.2	6.0	6.3	7.6	4.7	19.5	1.6	5.7
2012	5.0	5.0	6.1	5.7	7.5	6.1	20.8	3.2	5.7
2013	4.5	4.2	5.8	5.9	6.5	7.0	15.2	1.8	5.1
2014	4.1	4.2	4.7	6.3	7.3	6.4	16.0	2.6	4.9
2015	4.6	4.2	5.1	6.0	6.3	6.6	20.0	3.8	5.1
2016	4.9	4.7	5.2	5.0	7.5	7.1	18.3	2.2	5.3

Source: ABS (2017f) and BITRE (2017j).

Table T 8.8 Number of persons with hospitalised injuries due to road accidents, by state/territory[1, 29]

Year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
1989	8 233	9 356	3 955	2 491	2 996	705	503	221	28 460
1990	7 466	7 117	3 970	2 397	2 643	607	544	217	24 961
1991	6 702	6 198	3 825	2 058	2 565	538	430	212	22 528
1992	6 398	5 929	3 961	1 599	2 554	490	403	178	21 512
1993	6 337	5 953	4 027	1 549	2 583	522	430	156	21 557
1994	6 244	6 045	4 576	1 514	2 660	523	386	185	22 133
1995	6 127	6 124	4 605	1 521	2 890	528	401	172	22 368
1996	5 975	6 077	4 469	1 701	2 592	439	480	245	21 978
1997	6 141	5 781	4 145	1 509	2 899	420	402	222	21 519
1998									
1999									
2000									26 963
2000–01[28]	8 598	7 562	4 626	2 256	2 008	616	435	231	26 694
2001–02	9 026	8 247	5 177	2 216	2 062	562	455	293	28 440
2002–03	8 488	8 052	5 070	2 298	2 001	571	444	243	27 526
2003–04	9 243	7 834	5 376	2 293	2 271	602	431	328	28 782
2004–05	9 393	8 196	5 874	2 221	2 348	640	392	361	29 850
2005–06	10 108	8 235	5 986	2 347	2 454	736	406	492	31 204
2006–07	10 296	8 551	6 542	2 411	2 723	739	498	539	32 777
2008	9 894	8 879	7 042	2 401	2 964	730	536	609	33 524
2009	9 977	8 606	7 074	2 407	3 161	689	535	628	33 692
2010	10 139	8 636	6 242	2 369	3 228	537	541	578	32 775
2011	10 635	9 335	6 325	2 360	3 449	494	n.p.	n.p.	34 082
2012	11 172	7 341	7 383	2 266	3 611	543	539	598	34 091
2013									35 059
2014									35 552

[1] Includes non–fatal serious injuries that were sustained in an accident that involved a fatality.

[29, 30] See end notes.

Note: Data for Hospitalised Injuries have been revised. Minor injuries are excluded.
A hospitalised injury is a person admitted to hospital.
Data are not readily available for missing years.

Source: AIHW (2012), AIHW (2017b) and Infrastructure (2012).

Table T 8.9 Hospitalised road injury rate, by state/territory (per 100,000 population)[29]

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
1989	142.5	216.6	139.9	175.5	189.8	154.9	312.1	79.9	169.3
1990	128.0	162.5	136.9	167.4	163.9	131.3	332.3	76.9	146.3
1991	113.6	140.2	129.2	142.3	156.8	115.3	259.8	73.3	130.3
1992	107.4	133.2	131.0	109.9	154.0	104.3	239.1	60.4	123.1
1993	105.7	133.4	130.1	106.2	153.9	110.6	250.4	52.0	122.2
1994	103.3	135.1	144.5	103.5	156.0	110.5	220.7	61.2	124.3
1995	100.4	136.2	142.2	103.8	166.5	111.3	223.3	56.2	124.2
1996	96.7	134.0	135.3	115.8	146.6	92.3	260.1	79.1	120.6
1997	98.3	126.5	123.5	102.3	161.2	88.4	211.9	71.5	116.8
1998									
1999									
2000									141.7
2000–01 [30]	132.6	159.8	130.8	150.4	106.1	130.2	217.5	72.4	139.5
2001–02	137.6	172.2	143.4	147.0	107.5	118.6	225.5	90.7	146.7
2002–03	128.6	166.2	137.0	151.6	103.2	120.0	220.3	74.6	140.4
2003–04	139.3	159.9	141.9	150.4	115.5	125.0	213.7	100.1	145.2
2004–05	140.8	165.3	151.7	144.9	117.7	132.0	192.3	109.6	148.9
2005–06	150.5	163.9	151.0	151.9	120.9	150.8	195.8	147.5	153.6
2006–07	151.7	167.5	161.3	154.4	131.1	150.4	236.0	159.3	158.9
2008	149.7	166.7	144.0	140.5	141.9	104.8	188.3	150.0	157.8
2009	141.7	158.9	163.7	151.1	140.4	141.4	229.9	169.5	155.3
2010	142.3	156.2	142.5	146.1	139.8	110.3	225.4	152.9	148.8
2011	147.7	166.6	141.8	144.0	145.3	99.7	n.p.	n.p.	152.6
2012	153.3	142.3	150.1	138.5	142.9	107.9	202.5	156.0	149.9
2013									151.5
2014									151.3

[29, 30] See end notes.

Note: For the calendar year rates, the June population was used and for financial year rates, December population was used.

Data for Hospitalised Injuries have been revised. Minor injuries are excluded.

A hospitalised injury is a person admitted to hospital.

Data are not readily available for missing years.

Source: ABS (2017f) AIHW (2016b), AIHW (2012) and Infrastructure (2012).

Table T 8.10 Number of rail casualties, by severity

Calendar year	Fatal	Serious injuries
1979	49	
1980	56	
1981	72	
1982	72	
1983	66	
1984	76	
1985	66	
1986	66	
1987	54	
1988	64	
1989	67	
1990	76	
1991	42	
1992	61	
1993	52	
1994	43	
1995	46	
1996	30	
1997	43	
1998	43	
1999	43	
2000	38	
2001	53	83
2002	40	98
2003	33	51
2004	33	71
2005	35	72
2006	39	135
2007	42	183
2008	31	114
2009	28	91
2010	29	38
2011	33	66
	Change in methodology	
2012	[m] 20	
2013	[m] 7	

[m] Fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

[29] See end notes.

Note: Data are not readily available for missing years.

Source: ATSB (2004), ATSB (2010), ATSB (2012), ONRSR (2017).

Table T 8.11 Number of rail fatalities, by state/territory

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT[30]	Total
2001	34	10	5	2	2	0	0		53
2002	16	14	3	4	2	0	1		40
2003	18	10	3	0	2	0	0		33
2004	15	12	2	2	1	0	1		33
2005	11	14	6	4	0	0	0		35
2006	9	14	9	2	4	1	0		39
2007	8	23	3	5	3	0	0		42
2008	7	17	6	1	0	0	0		31
2009	5	15	3	2	2	0	1		28
2010	10	9	4	2	3	1	0		29
2011	13	8	5	3	3	1	1		34
				Change in methodology					
2012	[m] 3	[m] 10	[m] 7	[m] 1	[m] 2	[m] 0	[m] 0		[m] 20
2013	[m] 1	[m] 5	[m] 0	[m] 1	[m] 1	[m] 0	[m] 0		[m] 7
2014	[m] 1	[m] 2		[m] 0		[m] 1	[m] 0	[m] 0	
2015	[m] 3	[m] 0		[m] 1	[m] 0	[m] 0	[m] 0	[m] 0	
2016	[m] 1	[m] 3		[m] 0	[m] 3	[m] 0	[m] 0	[m] 0	

[m] Fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

[30] See end notes.

Note: Queensland and Western Australia are not under the sources jurisdiction and therefore data for those states is not provided.

Source: ATSB (2004), ATSB (2010), ATSB (2012), ONRSR (2017).

Table T 8.12 Rail fatality rate per 100 000 population, by state/territory

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT[30]	Total
2001	0.52	0.21	0.14	0.13	0.11	0.00	0.00		0.27
2002	0.24	0.29	0.08	0.26	0.10	0.00	0.50		0.20
2003	0.27	0.20	0.08	0.00	0.10	0.00	0.00		0.17
2004	0.22	0.24	0.05	0.13	0.05	0.00	0.49		0.16
2005	0.16	0.28	0.15	0.26	0.00	0.00	0.00		0.17
2006	0.13	0.27	0.22	0.13	0.19	0.20	0.00		0.19
2007	0.12	0.44	0.07	0.32	0.14	0.00	0.00		0.20
2008	0.10	0.32	0.14	0.06	0.00	0.00	0.00		0.14
2009	0.07	0.28	0.07	0.12	0.09	0.00	0.44		0.13
2010	0.14	0.16	0.09	0.12	0.13	0.20	0.00		0.13
2011	0.18	0.14	0.11	0.18	0.13	0.00	0.43		0.15
				Change in methodology					
2012	[m] 0.04	[m] 0.18	[m] 0.15	[m] 0.06	[m] 0.08	[m] 0.00	[m] 0.00		[m] 0.09
2013	[m] 0.01	[m] 0.09	[m] 0.00	[m] 0.06	[m] 0.04	[m] 0.00	[m] 0.00		[m] 0.03
2014	[m] 0.01	[m] 0.03		[m] 0.00		[m] 0.19	[m] 0.00	[m] 0.00	
2015	[m] 0.04	[m] 0.00		[m] 0.06	[m] 0.00	[m] 0.00	[m] 0.00	[m] 0.00	
2016	[m] 0.01	[m] 0.05		[m] 0.00	[m] 0.11	[m] 0.00	[m] 0.00	[m] 0.00	

[m] Fatality and serious injury data from 2012 onwards excludes suspected suicide and trespass occurrences. They were compiled using new methodology and should not be compared with earlier results.

[30] See end notes.

Note: Queensland and Western Australia are not under the sources jurisdiction and therefore data for those states is not provided.

Source: ABS (2017f), ATSB (2004), ATSB (2010), ATSB (2012), ONRSR (2017).

Table T 8.13a Number of aviation accidents, by accident severity

Calendar year	Fatal accidents	Non-fatal accidents
1971	14	225
1972	23	177
1973	15	227
1974	17	241
1975	22	206
1976	27	285
1977	31	259
1978	34	274
1979	31	284
1980	32	269
1981	27	254
1982	35	223
1983	30	275
1984	32	234
1985	29	212
1986	29	218
1987	25	264
1988	35	289
1989	46	300
1990	44	299
1991	28	291
1992	38	267
1993	30	283
1994	35	228
1995	33	235
1996	29	214
1997	25	231
1998	31	197
1999	25	167
2000	24	193
2001	27	169
2002	19	145
2003	21	133
2004	21	142
2005	24	109
2006	24	81
2007	30	132
2008	27	163
2009	23	144
2010	19	181
2011	24	168
2012	27	176
2013	33	148
2014	20	255
2015	27	196
2016	15	212

Note: Includes civilian aviation accidents (VH and non-VH registered aircraft) in Australia only.
Source: ATSB (2017b).

Table T 8.13b Number of aviation casualties, by severity

Calendar year	Fatalities	Serious injuries
1971	35	24
1972	52	20
1973	26	23
1974	39	23
1975	49	27
1976	58	49
1977	55	51
1978	65	49
1979	45	50
1980	64	41
1981	58	49
1982	60	43
1983	54	45
1984	48	37
1985	54	36
1986	54	35
1987	39	58
1988	67	44
1989	82	75
1990	80	61
1991	52	39
1992	63	38
1993	56	58
1994	62	31
1995	51	48
1996	51	33
1997	38	29
1998	56	22
1999	46	20
2000	44	42
2001	46	31
2002	34	26
2003	44	26
2004	34	23
2005	45	7
2006	40	15
2007	44	17
2008	43	42
2009	25	20
2010	24	32
2011	38	38
2012	39	39
2013	46	19
2014	28	35
2015	31	32
2016	21	35

Note: Includes civilian aviation casualties (VH and non-VH registered aircraft) in Australia only.
Source: ATSB (2017b).

Table T 8.14a Aviation accident rate by accident severity (per 100,000 population)

Calendar year	Fatal	Non-fatal
1971	0.11	1.72
1972	0.17	1.33
1973	0.11	1.68
1974	0.12	1.76
1975	0.16	1.48
1976	0.19	2.03
1977	0.22	1.82
1978	0.24	1.91
1979	0.21	1.96
1980	0.22	1.83
1981	0.18	1.70
1982	0.23	1.47
1983	0.19	1.79
1984	0.21	1.50
1985	0.18	1.34
1986	0.18	1.36
1987	0.15	1.62
1988	0.21	1.75
1989	0.27	1.78
1990	0.26	1.75
1991	0.16	1.68
1992	0.22	1.53
1993	0.17	1.60
1994	0.20	1.28
1995	0.18	1.30
1996	0.16	1.17
1997	0.14	1.25
1998	0.17	1.05
1999	0.13	0.88
2000	0.13	1.01
2001	0.14	0.87
2002	0.10	0.74
2003	0.11	0.67
2004	0.11	0.71
2005	0.12	0.54
2006	0.12	0.40
2007	0.14	0.63
2008	0.13	0.77
2009	0.11	0.66
2010	0.09	0.82
2011	0.11	0.75
2012	0.12	0.77
2013	0.14	0.64
2014	0.09	1.09
2015	0.06	0.88

Note: Includes civilian aviation accidents (VH and non-VH registered aircraft) inside Australia only.
Source: ABS (2017f), ATSB (2017b).

Table T 8.14b Aviation casualty rate by severity (per 100,000 population)

Calendar year	Fatalities	Non-fatal injuries
1971	0.27	0.18
1972	0.39	0.15
1973	0.19	0.17
1974	0.28	0.17
1975	0.35	0.19
1976	0.41	0.35
1977	0.39	0.36
1978	0.45	0.34
1979	0.31	0.34
1980	0.44	0.28
1981	0.39	0.33
1982	0.40	0.28
1983	0.35	0.29
1984	0.31	0.24
1985	0.34	0.23
1986	0.34	0.22
1987	0.24	0.36
1988	0.41	0.27
1989	0.49	0.45
1990	0.47	0.36
1991	0.30	0.23
1992	0.36	0.22
1993	0.32	0.33
1994	0.35	0.17
1995	0.28	0.27
1996	0.28	0.18
1997	0.21	0.16
1998	0.30	0.12
1999	0.24	0.11
2000	0.23	0.22
2001	0.24	0.16
2002	0.17	0.13
2003	0.22	0.13
2004	0.17	0.12
2005	0.22	0.03
2006	0.20	0.07
2007	0.21	0.08
2008	0.20	0.20
2009	0.12	0.09
2010	0.11	0.15
2011	0.17	0.17
2012	0.17	0.17
2013	0.20	0.08
2014	0.12	0.15
2015	0.09	0.15

Note: Includes civilian aviation accidents (VH and non-VH registered aircraft) inside Australia only.
Source: ABS (2017f), ATSB (2017b).

Table T 8.15a Number of aviation accidents, by state/territory

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Other°	Total
1971	79	27	39	24	47	6	15	2	0	239
1972	45	46	39	20	25	9	15	1	0	200
1973	76	54	37	22	27	10	13	3	0	242
1974	58	52	46	33	40	10	16	1	2	258
1975	68	48	45	24	27	5	9	2	0	228
1976	95	70	47	42	38	8	12	0	0	312
1977	78	67	45	33	41	7	16	3	0	290
1978	78	57	69	29	51	2	20	2	0	308
1979	102	52	62	31	42	4	20	2	0	315
1980	88	43	68	27	48	5	19	2	1	301
1981	68	33	83	35	44	4	14	0	0	281
1982	74	37	73	21	37	3	10	2	1	258
1983	97	36	92	22	33	10	11	4	0	305
1984	83	38	68	20	36	8	13	0	0	266
1985	82	27	64	14	35	8	10	1	0	241
1986	76	47	52	20	29	5	17	1	0	247
1987	91	43	81	23	22	7	22	0	0	289
1988	89	36	103	27	36	6	23	4	0	324
1989	98	45	117	22	28	6	25	5	0	346
1990	122	39	90	16	47	6	23	0	0	343
1991	88	43	90	16	50	6	23	2	1	319
1992	93	47	66	24	47	9	18	1	0	305
1993	92	40	88	23	40	10	19	1	0	313
1994	79	35	71	20	32	3	23	0	0	263
1995	67	31	96	16	41	4	11	2	0	268
1996	66	25	77	15	42	9	9	0	0	243
1997	71	30	74	18	32	5	24	2	0	256
1998	64	25	68	13	33	8	14	3	0	228
1999	47	32	50	18	26	4	11	3	1	192
2000	59	31	63	10	34	2	17	1	0	217
2001	41	24	57	15	35	4	18	2	0	196
2002	51	21	42	9	25	6	10	0	0	164
2003	45	22	37	8	21	5	12	4	0	154
2004	38	26	55	11	17	5	11	0	0	163
2005	45	17	37	10	17	0	7	0	0	133
2006	30	14	27	3	15	5	10	1	0	105
2007	42	28	40	10	22	5	14	0	1	162
2008	55	27	47	12	32	4	13	0	0	190
2009	48	26	45	6	24	6	10	1	0	166
2010	42	32	57	18	31	4	16	0	0	200
2011	51	26	53	11	29	7	15	0	0	192
2012	53	43	56	13	22	4	11	1	0	203
2013	44	37	51	12	21	6	9	1	0	181
2014	65	48	73	18	50	4	16	1	0	275
2015	57	40	65	15	32	0	12	2	0	223
2016	51	35	67	22	37	5	10	0	0	227

° Other includes accidents that occurred on Norfolk Island and in the Australian Antarctic Territory.

Source: ATSB (2017b).

Table T 8.15b Number of aviation fatalities, by state/territory

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Other[o]	Total
1971	11	5	0	2	17	0	0	0	0	35
1972	10	3	9	14	1	2	13	0	0	52
1973	14	0	1	5	5	1	0	0	0	26
1974	10	6	9	7	3	2	2	0	0	39
1975	11	6	13	5	7	0	6	1	0	49
1976	33	4	9	11	0	1	0	0	0	58
1977	20	6	9	8	4	2	6	0	0	55
1978	12	23	17	4	7	0	2	0	0	65
1979	13	15	6	4	5	0	2	0	0	45
1980	30	16	6	4	8	0	0	0	0	64
1981	14	14	18	2	5	0	5	0	0	58
1982	21	12	23	0	4	0	0	0	0	60
1983	10	8	25	2	6	3	0	0	0	54
1984	15	7	11	4	8	3	0	0	0	48
1985	17	7	12	7	7	0	4	0	0	54
1986	15	12	13	8	5	0	1	0	0	54
1987	13	5	18	1	1	1	0	0	0	39
1988	24	7	21	2	12	0	1	0	0	67
1989	26	6	23	5	2	0	20	0	0	82
1990	29	7	33	3	5	0	3	0	0	80
1991	15	6	15	3	3	4	2	4	0	52
1992	26	10	9	3	8	5	1	1	0	63
1993	21	5	18	2	1	6	1	2	0	56
1994	29	5	20	6	2	0	0	0	0	62
1995	19	8	17	0	0	3	4	0	0	51
1996	15	3	19	1	10	3	0	0	0	51
1997	16	2	10	2	1	1	6	0	0	38
1998	24	4	13	1	8	5	1	0	0	56
1999	11	8	17	6	2	0	1	1	0	46
2000	2	6	21	9	4	0	2	0	0	44
2001	6	5	18	2	8	2	1	4	0	46
2002	11	7	11	0	0	0	5	0	0	34
2003	16	0	13	2	9	4	0	0	0	44
2004	7	13	10	0	2	1	1	0	0	34
2005	12	6	23	2	1	0	1	0	0	45
2006	16	5	14	0	2	0	3	0	0	40
2007	8	12	9	0	8	3	4	0	0	44
2008	16	3	11	1	8	0	4	0	0	43
2009	6	7	5	1	6	0	0	0	0	25
2010	7	2	7	1	4	0	3	0	0	24
2011	14	4	12	3	3	1	1	0	0	38
2012	13	8	15	1	2	0	0	0	0	39
2013	11	11	12	2	3	1	6	0	0	46
2014	12	2	8	3	1	2	0	0	0	28
2015	11	6	10	0	3	0	1	0	0	31
2016	4	9	6	2	0	0	0	0	0	21

[o] Other includes accidents that occurred on Norfolk Island and in the Australian Antarctic Territory.

Source: ATSB (2017b).

CHAPTER 9
Energy and the environment

Table T 9.1 Total transport petroleum sales, by fuel type

Financial year	Automotive gasoline	Automotive LPG	Automotive diesel	Industrial & marine diesel	Aviation gasoline	Aviation turbine fuel
			megalitres			
1981–82	15 224.8		7 841.4			
1982–83	14 983.4		7 456.5			
1983–84	15 336.5		7 933.8			
1984–85	15 577.6		8 152.4			
1985–86	15 870.0		8 297.2			
1986–87	16 006.0		8 695.8			
1987–88	16 567.0		9 093.8			2 788.2
1988–89	17 079.0		9 756.1			2 981.1
1989–90	17 348.0		10 087.0			2 843.0
1990–91	16 874.0		9 795.0			3 229.0
1991–92	16 963.0		9 984.4			3 459.1
1992–93	17 293.0		10 321.4			3 684.6
1993–94	17 506.7		10 721.3		76.5	3 823.1
1994–95	17 751.5		11 174.7		104.5	4 301.8
1995–96	17 885.8		11 923.2		101.6	4 664.9
1996–97	17 889.0		12 315.8		102.3	4 847.8
1997–98	17 912.7		12 557.4		104.1	4 863.0
1998–99	18 202.1		12 823.2		105.9	4 793.8
1999–00	18 476.6	1 902.9	13 245.1	17.7	103.3	5 022.8
2000–01	18 167.6	2 221.4	12 952.4	22.1	101.4	5 318.5
2001–02	18 668.8	2 422.2	13 441.2	45.8	96.5	4 602.6
2002–03	18 872.5	2 416.3	13 888.0	18.1	90.2	4 249.7
2003–04	19 962.0	2 546.8	14 461.5	17.0	89.9	4 328.8
2004–05	19 875.7	2 338.8	15 185.0	14.7	90.7	4 729.9
2005–06	19 047.9	2 563.7	15 803.6	19.4	86.4	5 359.4
2006–07	19 250.7	2 335.3	17 027.6	15.2	89.5	5 837.0
2007–08	19 234.2	2 240.5	18 244.9	11.5	87.8	6 211.8
2008–09	18 734.2	2 253.1	18 587.0	16.2	96.1	6 316.7
2009–10	18 643.6	2 083.1	19 043.9	25.8	79.7	6 675.2
2010–11	18 925.5	2 073.5	20 866.7	na	78.7	7 067.6
2011–12	18 716.8	1 986.2	22 537.8	na	84.1	7 336.3
2012–13	18 519.6	1 980.2	24 221.5	na	81.0	7 773.1
2013–14	18 093.5	2 007.1	24 911.8	na	72.7	8 167.6
2014–15	17 979.8	1 945.7	25 470.4	na	68.2	8 142.8
2015–16	18 012.8	1 613.6	25 911.9	na	67.5	8 516.3
2016–17	18 240.1	1 298.3	26 539.0	na	69.1	8 927.6

Note: Data are not readily available for missing years.
From 2010–11 onwards, industrial & marine diesel figures are included in the automotive diesel data.
From March 2017 all published estimates of "Automotive Gasoline" and "Diesel Oil" have been revised. These revisions impact all of the individual state/territory and product estimates and sub–totals for "sales to retailers" and apply to the entire published time series.

na: not available.

Source: Environment (2017).

Table T 9.2a Selected refined petroleum products—Australian production

Financial year	Automotive gasoline	LPG	Automotive diesel	Industrial & marine diesel	Aviation gasoline	Aviation turbine fuel
			megalitres			
1999–00	18 652.4	1 674.4	12 736.8	59.6	158.1	5 538.7
2000–01	17 886.9	1 794.7	13 212.1	98.1	137.5	5 836.3
2001–02	17 999.6	1 718.2	13 064.1	105.4	146.8	5 389.7
2002–03	17 984.1	1 657.2	13 334.8	116.7	134.1	5 148.9
2003–04	17 375.3	1 061.8	12 544.1	84.1	113.8	4 964.3
2004–05	17 668.4	974.4	12 661.1	22.0	139.7	5 275.0
2005–06	16 527.6	1 124.7	10 153.7	30.8	119.5	5 215.5
2006–07	17 732.1	1 386.7	11 055.3	20.7	119.3	5 332.1
2007–08	17 049.0	1 514.9	12 176.6	3.4	119.0	5 181.8
2008–09	17 159.5	1 476.9	12 230.9	13.0	104.6	5 494.3
2009–10	16 771.1	1 203.6	11 719.6	3.0	103.6	5 340.7
2010–11	16 642.8	1 477.5	12 894.4	na	91.4	5 447.7
2011–12	15 573.0	1 213.5	12 691.3	na	89.8	5 453.3
2012–13	15 606.3	1 215.0	12 908.6	na	92.2	5 534.5
2013–14	14 477.9	1 094.4	12 456.3	na	89.2	5 008.7
2014–15	12 753.2	976.1	11 459.3	na	86.8	4 255.2
2015–16	11 641.3	747.5	8 980.2	na	63.8	3 412.7
2016–17	11 044.9	671.5	8 663.8	na	49.3	3 529.0

Note: LPG figures include all production and trade, including petrochemical transfers to industry.
From 2010–11 onwards, industrial & marine diesel figures are included in the automotive diesel data.
Source: Environment (2017).

Table T 9.2b Selected refined petroleum products—imports to Australia

Financial year	Automotive gasoline	LPG	Automotive diesel	Industrial & marine diesel	Aviation gasoline	Aviation turbine fuel
			megalitres			
1999–00	1 065.1	518.9	1 399.7		0.0	170.6
2000–01	1 188.7	633.4	1 129.0		0.0	387.4
2001–02	1 436.2	588.0	1 280.3		0.0	224.7
2002–03	1 686.1	299.0	1 645.6		55.8	440.8
2003–04	3 213.2	789.4	3 383.0		203.8	725.9
2004–05	3 166.0	540.0	3 965.1		47.0	986.9
2005–06	3 696.0	631.5	6 127.1		10.5	827.5
2006–07	2 815.5	749.3	5 931.5		0.8	1 089.4
2007–08	3 533.1	964.8	7 476.2		0.1	1 845.5
2008–09	4 087.5	1 003.8	8 245.9		0.0	2 026.5
2009–10	3 887.4	1 066.8	8 680.5		0.0	2 168.4
2010–11	2 652.8	888.2	8 843.4		0.0	2 085.9
2011–12	3 671.7	1 022.7	11 244.3		5.8	2 251.9
2012–13	3 653.1	918.0	12 512.1		0.0	3 201.2
2013–14	3 598.3	729.9	13 602.6		0.0	3 481.8
2014–15	5 534.2	958.0	15 178.2		0.1	4 299.4
2015–16	6 637.5	918.2	17 758.9		0.0	5 580.2
2016–17	6 950.0	958.5	18 551.5		0.0	5 852.3

Note: LPG figures include all production and trade.
Data are not separately available for missing years.
All diesel imports are included in automotive diesel.
Source: Environment (2017).

Table T 9.2c Selected refined petroleum products—exports from Australia

Financial year	Automotive gasoline	LPG	Automotive diesel	Industrial & marine diesel	Aviation gasoline	Aviation turbine fuel
			megalitres			
1999–00	1 372.6	2 858.9	1 018.1	51.3	78.9	578.3
2000–01	1 286.0	2 784.6	1 150.1	119.5	28.5	755.5
2001–02	1 184.8	3 211.2	886.2	60.0	73.8	549.0
2002–03	1 052.6	3 195.2	1 044.1	0.0	52.5	651.7
2003–04	755.5	2 936.9	840.7	0.0	29.6	518.7
2004–05	770.6	2 846.6	293.9	0.0	35.7	227.0
2005–06	629.5	2 799.9	418.8	0.0	174.4	126.5
2006–07	763.5	2 850.9	283.6	0.0	97.0	121.7
2007–08	628.3	2 589.0	461.7	0.0	96.4	149.5
2008–09	243.8	2 499.7	357.2	0.0	56.2	112.7
2009–10	221.9	2 776.3	187.0	0.0	32.5	71.9
2010–11	174.5	2 470.8	117.2	na	19.8	11.8
2011–12	175.2	2 114.7	129.6	na	25.5	2.4
2012–13	99.7	2 385.6	91.1	na	22.1	13.0
2013–14	131.2	2 458.9	61.0	na	20.3	2.3
2014–15	118.1	2 111.7	76.3	na	10.2	19.9
2015–16	72.4	1 989.2	51.9	na	3.9	1.7
2016–17	218.8	2 226.7	105.4	na	1.6	69.8

Note: LPG figures include all production and trade.
From 2010–11 onwards, industrial & marine diesel figures are included in the automotive diesel data.
Source: Environment (2017).

Table T 9.3 Average retail petrol prices in Australia (nominal), by state/territory

Average over financial year	NSW/ACT	VIC	QLD	SA	WA	TAS	NT	National
				cents per litre				
2002–03	91.8	90.3	83.7	91.6	94.0	95.1	99.8	90.3
2003–04	93.6	91.7	85.2	93.8	94.5	98.3	101.3	91.9
2004–05	105.2	102.4	95.9	104.5	103.8	109.1	112.5	102.8
2005–06	124.6	123.3	116.9	125.1	124.3	129.0	131.2	123.0
2006–07	124.9	124.1	118.0	124.2	124.5	127.0	133.9	123.4
2007–08	137.9	137.0	130.6	137.1	137.5	141.4	147.8	136.3
2008–09	129.7	130.2	123.3	129.8	128.7	134.3	140.2	128.8
2009–10	124.8	125.3	125.9	124.2	124.7	129.8	133.6	125.3
2010–11	132.0	131.5	133.2	130.9	133.5	138.5	141.2	132.4
2011–12	144.0	141.9	145.7	143.4	144.9	150.3	156.2	144.1
2012–13	143.5	141.3	145.4	141.7	144.0	152.1	161.6	143.6
2013–14	152.6	149.7	154.4	150.9	152.8	162.0	171.8	152.5
2014–15	137.0	133.2	138.8	133.5	137.1	146.0	151.6	136.5
2015–16	123.5	120.8	125.4	120.8	123.9	130.4	127.0	123.2
2016–17	123.7	123.1	125.9	121.1	124.7	128.8	132.3	124.1

Source: AIP (2017).

Table T 9.4 Transport direct greenhouse gas (carbon dioxide equivalent) emissions, by transport mode, from energy end–use

Financial year	Road Vehicles	Rail (excl electric)	Domestic Maritime	Domestic Aviation	Total (including off–road vehicles)
			gigagrams of CO_2 equivalent		
1974–75	33 088	1 916	3 447	2 822	41 273
1975–76	34 617	1 907	3 292	2 603	42 421
1976–77	36 646	1 952	3 594	2 584	44 775
1977–78	38 191	1 976	3 948	2 845	46 960
1978–79	39 984	2 024	3 581	2 698	48 287
1979–80	40 716	2 023	3 758	2 806	49 303
1980–81	41 589	1 993	3 799	2 790	50 171
1981–82	43 570	1 963	3 272	3 124	51 929
1982–83	43 097	1 802	2 988	3 010	50 897
1983–84	45 146	1 956	3 050	2 936	53 089
1984–85	46 909	2 040	2 907	3 017	54 873
1985–86	48 062	1 985	2 986	3 244	56 277
1986–87	48 961	2 016	2 963	3 331	57 272
1987–88	51 488	1 985	2 932	3 600	60 005
1988–89	53 511	1 820	2 702	3 536	61 569
1989–90	54 803	1 753	2 414	2 833	61 803
1990–91	53 777	1 745	2 109	3 517	61 147
1991–92	54 478	1 696	2 166	3 817	62 157
1992–93	56 197	1 699	1 977	4 005	63 878
1993–94	57 735	1 800	1 846	4 239	65 619
1994–95	59 998	1 755	2 351	4 997	69 100
1995–96	61 438	1 707	2 473	5 485	71 103
1996–97	62 458	1 739	2 466	5 857	72 521
1997–98	63 504	1 779	2 176	5 312	72 770
1998–99	64 671	1 829	2 018	5 115	73 633
1999–00	65 914	1 884	2 115	5 348	75 262
2000–01	65 452	1 854	2 023	5 960	75 288
2001–02	67 289	1 939	2 089	5 344	76 661
2002–03	69 062	1 991	2 164	5 098	78 315
2003–04	71 919	2 127	2 310	5 333	81 690
2004–05	72 326	2 305	2 435	5 820	82 885
2005–06	71 959	2 319	2 281	6 158	82 716
2006–07	73 308	2 499	2 344	6 663	84 814
2007–08	74 347	2 580	2 332	7 160	86 419
2008–09	74 085	2 584	2 288	7 340	86 297
2009–10	75 045	2 683	2 391	7 457	87 576
2010–11	76 226	2 763	2 441	7 981	89 412
2011–12	77 344	2 907	2 333	8 308	90 892
2012–13	78 020	3 026	2 141	8 848	92 035
2013–14	78 244	3 213	2 212	8 953	92 623
2014–15	78 584	3 421	2 245	8 949	93 199
2015–16	80 282	3 493	2 269	9 097	95 142
2016–17	81 524	3 527	2 297	9 177	96 525

Note: 2016–17 estimates are preliminary and subject to change.
no emissions from electricity use included.
provisional estimate or extrapolation, subject to su.bsequent revision/updating.

Source: BITRE estimates.

Table T 9.5 Road transport direct greenhouse gas (carbon dioxide equivalent) emissions, by vehicle type, from energy end–use

Financial year	Cars	Light commercial vehicles	Articulated trucks	Rigid and other trucks	Buses	Motor cycles	Total road
			gigagrams of CO_2 equivalent				
1989–90	34 878	7 619	5 629	5 099	1 267	251	54 743
1990–91	34 795	7 365	5 544	4 560	1 225	226	53 717
1991–92	35 433	7 590	5 592	4 393	1 183	226	54 417
1992–93	36 576	7 817	6 008	4 332	1 174	226	56 133
1993–94	37 521	8 049	6 187	4 483	1 206	223	57 669
1994–95	38 580	8 518	6 658	4 723	1 229	221	59 929
1995–96	39 069	8 816	7 003	4 999	1 266	214	61 368
1996–97	39 301	8 910	7 312	5 381	1 269	213	62 387
1997–98	39 532	9 310	7 626	5 461	1 298	205	63 431
1998–99	40 228	9 540	7 891	5 428	1 310	197	64 595
1999–00	40 895	9 731	8 148	5 517	1 346	200	65 836
2000–01	40 474	9 853	8 079	5 393	1 368	206	65 373
2001–02	41 408	10 271	8 358	5 587	1 367	218	67 209
2002–03	42 310	10 561	8 668	5 810	1 416	214	68 979
2003–04	44 333	10 909	8 993	5 937	1 435	226	71 833
2004–05	44 145	10 968	9 285	6 157	1 440	243	72 239
2005–06	42 961	11 262	9 513	6 407	1 468	265	71 874
2006–07	43 259	11 659	9 931	6 611	1 468	294	73 221
2007–08	43 289	12 172	10 205	6 792	1 479	322	74 258
2008–09	42 810	12 526	10 102	6 699	1 515	344	73 996
2009–10	42 848	13 023	10 273	6 882	1 558	370	74 954
2010–11	43 033	13 369	10 663	7 070	1 615	383	76 133
2011–12	43 216	13 720	11 071	7 258	1 666	320	77 251
2012–13	43 174	14 075	11 317	7 386	1 650	325	77 927
2013–14	42 940	14 366	11 513	7 427	1 579	330	78 155
2014–15	43 114	14 715	11 499	7 301	1 531	333	78 493
2015–16	43 336	15 095	11 981	7 766	1 672	337	80 188
2016–17	43 756	15 500	12 202	7 949	1 680	340	81 428

Note: 2016–17 data is preliminary and subject to change.
Source: BITRE estimates.

Table T 9.6 Transport direct emissions, by transport mode, from energy end-use—carbon dioxide

Financial year	Road Vehicles	Rail (excluding electric)	Domestic Maritime (including small craft)	Domestic Aviation	Total (including off–road vehicles)
			gigagrams of CO_2		
1989–90	53 655	1 714	2 345	2 803	60 517
1990–91	52 562	1 706	2 042	3 481	59 791
1991–92	53 173	1 659	2 095	3 779	60 705
1992–93	54 783	1 661	1 905	3 965	62 314
1993–94	56 217	1 760	1 772	4 197	63 946
1994–95	58 357	1 716	2 269	4 947	67 289
1995–96	59 702	1 669	2 387	5 431	69 189
1996–97	60 654	1 700	2 378	5 800	70 532
1997–98	61 626	1 740	2 088	5 259	70 713
1998–99	62 713	1 789	1 928	5 064	71 494
1999–00	63 884	1 843	2 021	5 296	73 044
2000–01	63 402	1 813	1 928	5 902	73 046
2001–02	65 180	1 897	1 990	5 292	74 359
2002–03	66 939	1 948	2 061	5 049	75 996
2003–04	69 761	2 081	2 202	5 281	79 325
2004–05	70 240	2 255	2 323	5 765	80 583
2005–06	69 991	2 268	2 176	6 097	80 532
2006–07	71 384	2 445	2 238	6 597	82 663
2007–08	72 481	2 524	2 225	7 092	84 322
2008–09	72 301	2 527	2 181	7 269	84 278
2009–10	73 313	2 624	2 280	7 385	85 602
2010–11	74 548	2 702	2 328	7 907	87 485
2011–12	75 728	2 843	2 218	8 232	89 021
2012–13	76 463	2 960	2 024	8 771	90 218
2013–14	76 748	3 143	2 098	8 875	90 863
2014–15	77 154	3 347	2 128	8 869	91 498
2015–16	78 882	3 418	2 150	9 016	93 467
2016–17	80 148	3 451	2 175	9 095	94 869

Note: 2016–17 data is preliminary and subject to change.
Source: BITRE estimates.

Table T 9.7 Transport direct emissions, by transport mode, from energy end-use—methane

Financial year	Road Vehicles	Rail (excluding electric)	Domestic Maritime (including small craft)	Domestic Aviation	Total (including off–road vehicles)
			gigagrams of methane		
1989–90	23.30	1.24	2.34	0.29	27.16
1990–91	22.93	1.23	2.38	0.25	26.79
1991–92	23.31	1.20	2.50	0.24	27.26
1992–93	23.91	1.20	2.65	0.26	28.02
1993–94	24.26	1.27	2.79	0.26	28.58
1994–95	24.80	1.24	2.97	0.27	29.29
1995–96	24.82	1.21	3.12	0.27	29.42
1996–97	24.67	1.23	3.24	0.28	29.42
1997–98	24.48	1.26	3.34	0.28	29.36
1998–99	24.16	1.29	3.50	0.28	29.23
1999–00	23.70	1.33	3.67	0.28	28.98
2000–01	22.69	1.31	3.73	0.28	28.01
2001–02	22.34	1.37	3.87	0.26	27.84
2002–03	21.88	1.41	4.04	0.25	27.58
2003–04	21.76	1.50	4.25	0.25	27.77
2004–05	20.62	1.63	4.36	0.26	26.87
2005–06	18.94	1.64	4.10	0.26	24.94
2006–07	18.03	1.77	4.15	0.27	24.21
2007–08	16.95	1.82	4.19	0.28	23.25
2008–09	15.67	1.83	4.23	0.29	22.02
2009–10	14.69	1.90	4.35	0.29	21.23
2010–11	13.56	1.95	4.45	0.30	20.26
2011–12	12.39	2.05	4.56	0.30	19.31
2012–13	11.45	2.14	4.71	0.31	18.60
2013–14	10.56	2.27	4.57	0.31	17.71
2014–15	9.87	2.42	4.66	0.31	17.27
2015–16	9.40	2.47	4.77	0.31	16.96
2016–17	8.91	2.49	4.87	0.32	16.59

Note: 2016–17 data is preliminary and subject to change.
Source: BITRE estimates.

Table T 9.8 Transport direct emissions, from energy end–use, by transport mode, from energy end–use—nitrous oxide

Financial year	Road Vehicles	Rail (excluding electric)	Domestic Maritime (including small craft)	Domestic Aviation	Total (including off–road vehicles)
			gigagrams of nitrous oxide		
1990–91	2.36	0.04	0.06	0.10	2.56
1991–92	2.63	0.04	0.06	0.11	2.84
1992–93	2.94	0.04	0.05	0.11	3.15
1993–94	3.25	0.04	0.05	0.12	3.46
1994–95	3.61	0.04	0.06	0.14	3.86
1995–96	3.92	0.04	0.07	0.15	4.18
1996–97	4.15	0.04	0.07	0.17	4.42
1997–98	4.40	0.04	0.06	0.15	4.65
1998–99	4.68	0.04	0.05	0.14	4.92
1999–00	4.94	0.04	0.06	0.15	5.19
2000–01	5.07	0.04	0.05	0.17	5.34
2001–02	5.29	0.04	0.06	0.15	5.54
2002–03	5.37	0.05	0.06	0.14	5.61
2003–04	5.49	0.05	0.06	0.15	5.75
2004–05	5.33	0.05	0.06	0.16	5.61
2005–06	5.07	0.05	0.06	0.18	5.36
2006–07	4.98	0.06	0.06	0.19	5.30
2007–08	4.87	0.06	0.06	0.20	5.19
2008–09	4.70	0.06	0.06	0.21	5.02
2009–10	4.59	0.06	0.06	0.21	4.93
2010–11	4.50	0.06	0.07	0.22	4.84
2011–12	4.38	0.07	0.06	0.22	4.73
2012–13	4.25	0.07	0.06	0.23	4.60
2013–14	4.11	0.07	0.06	0.23	4.48
2014–15	3.94	0.07	0.06	0.24	4.32
2015–16	3.88	0.07	0.06	0.24	4.26
2016–17	3.84	0.07	0.06	0.24	4.22

Note: 2016–17 data is preliminary and subject to change.
Source: BITRE estimates.

Table T 9.9 Transport full fuel cycle greenhouse gas (carbon dioxide equivalent) emissions, by transport mode

Financial year	Road Vehicles	Rail (all)	Domestic Maritime	Domestic Aviation	Total (direct)
			gigagrams of CO_2 equivalent		
1974–75	37 353	3 054	3 923	3 237	47 567
1975–76	39 085	3 057	3 747	2 985	48 874
1976–77	41 383	3 116	4 092	2 962	51 554
1977–78	43 133	3 146	4 496	3 262	54 037
1978–79	45 175	3 152	4 078	3 093	55 499
1979–80	46 021	3 195	4 279	3 218	56 713
1980–81	47 017	3 220	4 325	3 199	57 761
1981–82	49 265	3 205	3 722	3 583	59 776
1982–83	48 738	3 038	3 394	3 453	58 622
1983–84	51 073	3 242	3 438	3 367	61 120
1984–85	53 078	3 435	3 278	3 460	63 251
1985–86	54 384	3 421	3 367	3 721	64 893
1986–87	55 403	3 539	3 339	3 821	66 102
1987–88	58 266	3 552	3 304	4 130	69 251
1988–89	60 552	3 604	3 039	4 056	71 250
1989–90	62 014	3 598	2 713	3 247	71 572
1990–91	60 841	3 583	2 363	4 034	70 822
1991–92	61 630	3 565	2 426	4 379	72 000
1992–93	63 575	3 518	2 208	4 596	73 897
1993–94	65 317	3 619	2 060	4 864	75 861
1994–95	67 890	3 625	2 636	5 734	79 886
1995–96	69 530	3 586	2 775	6 295	82 185
1996–97	70 696	3 704	2 764	6 723	83 887
1997–98	71 892	3 738	2 433	6 096	84 159
1998–99	73 215	3 841	2 253	5 870	85 179
1999–00	74 631	4 014	2 360	6 138	87 144
2000–01	74 121	4 042	2 262	6 841	87 266
2001–02	76 221	4 138	2 337	6 133	88 830
2002–03	78 241	4 186	2 422	5 852	90 700
2003–04	81 439	4 339	2 584	6 122	94 484
2004–05	81 915	4 583	2 712	6 680	95 891
2005–06	81 575	4 592	2 545	7 068	95 781
2006–07	83 201	4 869	2 614	7 648	98 333
2007–08	84 476	5 023	2 607	8 220	100 326
2008–09	84 261	5 097	2 553	8 426	100 337
2009–10	85 421	5 163	2 675	8 561	101 821
2010–11	86 836	5 231	2 742	9 164	103 973
2011–12	88 121	5 366	2 622	9 539	105 647
2012–13	88 930	5 420	2 423	10 160	106 934
2013–14	89 313	5 607	2 505	10 281	107 707
2014–15	89 873	5 886	2 542	10 277	108 577
2015–16	91 552	6 014	2 569	10 447	110 582
2016–17	92 990	6 083	2 600	10 538	112 212

Note: 2016–17 estimates are preliminary and subject to change.
Source: BITRE estimates.

Table T 9.10 Transport energy use, by transport mode

Financial year	Road Vehicles	Rail (excluding electric)	Rail (electric)	Domestic Maritime (including small craft)	Domestic Aviation	Total civil domestic transport
			petajoules (end–use, higher heating value)			
1974–75	483.7	27.0	2.5	47.1	40.7	600.9
1975–76	506.0	26.9	2.5	45.0	37.5	617.9
1976–77	535.6	27.5	2.5	49.3	37.2	652.1
1977–78	558.2	27.8	2.5	54.2	41.0	683.7
1978–79	584.2	28.5	2.4	49.2	38.9	703.3
1979–80	594.7	28.5	2.6	51.6	40.4	717.9
1980–81	607.3	28.1	2.8	52.0	40.2	730.5
1981–82	636.0	27.7	2.8	44.7	45.0	756.3
1982–83	628.9	25.4	3.0	40.7	43.4	741.4
1983–84	658.5	27.6	3.1	40.8	42.3	772.3
1984–85	684.0	28.8	3.4	38.9	43.5	798.7
1985–86	700.8	28.0	3.8	40.0	46.7	819.3
1986–87	713.7	28.5	4.0	39.7	48.0	833.9
1987–88	750.3	28.0	4.3	39.2	51.9	873.7
1988–89	779.7	25.7	5.1	36.0	50.9	897.4
1989–90	798.3	24.8	5.5	32.1	40.8	901.5
1990–91	782.8	24.7	5.4	27.9	50.7	891.4
1991–92	792.3	24.0	5.5	28.6	55.0	905.4
1992–93	816.8	24.0	5.4	26.0	57.7	929.9
1993–94	838.7	25.4	5.4	24.3	61.0	954.8
1994–95	871.4	24.8	5.6	31.2	71.9	1 004.9
1995–96	891.7	24.1	5.5	32.9	78.9	1 033.2
1996–97	906.1	24.6	5.8	32.8	84.3	1 053.6
1997–98	920.8	25.1	5.8	28.8	76.5	1 056.9
1998–99	937.0	25.9	5.9	26.6	73.6	1 069.0
1999–00	954.5	26.6	6.4	27.9	77.0	1 092.4
2000–01	947.6	26.2	6.6	26.8	85.8	1 092.9
2001–02	974.5	27.4	6.5	27.7	76.9	1 113.0
2002–03	1 000.0	28.2	6.5	28.8	73.4	1 136.8
2003–04	1 040.6	30.1	6.6	30.6	76.8	1 184.7
2004–05	1 046.8	32.6	6.6	32.0	83.8	1 201.7
2005–06	1 044.2	32.8	6.7	30.1	88.6	1 202.3
2006–07	1 066.3	35.3	6.9	30.9	95.8	1 235.3
2007–08	1 083.9	36.5	7.1	30.9	103.0	1 261.5
2008–09	1 082.6	36.5	7.5	30.2	105.6	1 262.4
2009–10	1 098.0	37.9	7.4	31.8	107.3	1 282.3
2010–11	1 116.3	39.1	7.4	32.8	114.9	1 310.3
2011–12	1 132.8	41.1	7.5	31.4	119.6	1 332.3
2012–13	1 144.2	42.8	7.4	29.3	127.4	1 351.1
2013–14	1 151.7	45.4	7.4	30.3	128.9	1 363.7
2014–15	1 163.3	48.4	7.5	30.8	128.8	1 378.8
2015–16	1 176.6	49.4	7.8	31.1	130.9	1 395.9
2016–17	1 194.4	49.9	8.0	31.5	132.1	1 415.9

Note: 2016–17 estimates are preliminary and subject to change.
Source: BITRE estimates.

Table T 9.11 Road transport energy use, by vehicle type

Financial year	Cars	Light commercial vehicles	Articulated trucks	Rigid and other trucks	Buses	Motor cycles	Total road
			petajoules (end–use, higher heating value)				
1974–75	326.6	62.3	35.9	48.4	8.0	2.5	483.7
1975–76	341.1	63.8	39.2	50.9	8.0	3.0	506.0
1976–77	358.0	72.2	43.3	50.7	8.2	3.1	535.6
1977–78	372.5	78.6	44.8	50.6	8.4	3.3	558.2
1978–79	385.7	81.5	53.2	51.9	8.6	3.4	584.2
1979–80	385.6	81.0	57.6	57.7	9.1	3.7	594.7
1980–81	389.9	82.1	59.3	62.5	9.7	4.0	607.3
1981–82	406.0	83.9	63.0	68.7	10.1	4.4	636.0
1982–83	403.7	83.1	62.7	63.9	11.2	4.4	628.9
1983–84	419.0	88.7	70.4	63.7	12.2	4.5	658.5
1984–85	431.7	94.2	74.3	66.0	13.3	4.6	684.0
1985–86	444.0	97.4	76.0	64.9	14.2	4.2	700.8
1986–87	452.5	99.7	76.7	65.7	15.1	4.0	713.7
1987–88	473.1	104.9	82.6	69.7	16.1	3.9	750.3
1988–89	495.6	110.1	82.6	70.2	17.1	4.0	779.7
1989–90	510.8	111.6	80.8	73.2	18.2	3.6	798.3
1990–91	508.9	107.9	79.6	65.5	17.6	3.3	782.8
1991–92	517.6	111.1	80.3	63.1	17.0	3.3	792.3
1992–93	533.7	114.4	86.3	62.2	16.9	3.3	816.8
1993–94	547.0	117.9	88.8	64.4	17.3	3.2	838.7
1994–95	562.1	125.0	95.6	67.8	17.7	3.2	871.4
1995–96	568.6	129.4	100.6	71.8	18.2	3.1	891.7
1996–97	571.7	130.8	105.0	77.3	18.3	3.1	906.1
1997–98	574.7	136.5	109.5	78.4	18.7	3.0	920.8
1998–99	584.2	139.7	113.4	77.9	18.9	2.8	937.0
1999–00	593.5	142.3	117.1	79.2	19.5	2.9	954.5
2000–01	587.0	144.0	116.2	77.5	19.9	3.0	947.6
2001–02	600.6	149.9	120.3	80.4	20.1	3.2	974.5
2002–03	614.3	154.2	124.5	83.3	20.6	3.1	1 000.0
2003–04	643.3	159.0	129.2	85.0	20.8	3.3	1 040.6
2004–05	641.0	159.7	133.5	88.2	21.0	3.5	1 046.8
2005–06	625.9	164.1	136.9	91.9	21.5	3.8	1 044.2
2006–07	631.8	170.1	143.2	95.1	21.9	4.3	1 066.3
2007–08	634.2	177.6	147.3	97.9	22.2	4.7	1 083.9
2008–09	628.9	182.8	146.1	96.7	23.0	5.0	1 082.6
2009–10	630.7	189.9	148.7	99.5	23.8	5.4	1 098.0
2010–11	635.0	195.0	154.3	102.0	24.5	5.6	1 116.3
2011–12	638.0	200.1	160.2	104.6	25.3	4.7	1 132.8
2012–13	637.8	205.0	164.2	106.8	25.6	4.7	1 144.2
2013–14	634.4	209.1	168.5	109.0	25.9	4.8	1 151.7
2014–15	637.4	214.0	170.5	110.6	26.0	4.9	1 163.3
2015–16	639.7	219.0	173.8	112.9	26.2	4.9	1 176.6
2016–17	645.8	224.7	177.1	115.6	26.3	5.0	1 194.4

Note: 2016–17 estimates are preliminary and subject to change.
Source: BITRE estimates.

Table T 9.12 Energy use of major land transport fuels

Financial year	Petrol (automotive gasoline, all grades)	Diesel (automotive and industrial diesel oil)	LPG	Natural Gas (both compressed and liquefied)	Bio–fuels (ethanol & biodiesel, straight and mixtures)	Total
			petajoules (higher heating value)			
1974–75	428.01	94.10	2.59	0.00	0.00	524.70
1975–76	444.12	100.17	2.97	0.00	0.00	547.26
1976–77	464.92	113.20	3.41	0.00	0.00	581.53
1977–78	481.45	121.72	3.86	0.00	0.00	607.02
1978–79	493.25	134.78	4.61	0.00	0.00	632.65
1979–80	489.44	148.29	5.85	0.00	0.00	643.58
1980–81	492.65	153.78	7.17	0.00	0.00	653.60
1981–82	509.25	161.63	8.15	0.00	0.00	679.03
1982–83	497.30	161.85	9.14	0.00	0.00	668.28
1983–84	508.03	179.08	10.47	0.00	0.00	697.58
1984–85	519.95	193.02	11.83	0.00	0.00	724.81
1985–86	528.42	197.15	13.81	0.00	0.00	739.38
1986–87	532.59	206.38	15.78	0.12	0.00	754.88
1987–88	553.38	217.70	18.14	0.03	0.00	789.25
1988–89	573.14	221.97	20.71	0.06	0.00	815.89
1989–90	582.24	227.53	23.00	0.17	0.00	832.94
1990–91	569.04	218.89	27.94	0.30	0.00	816.17
1991–92	571.86	221.34	32.46	0.43	0.01	826.11
1992–93	582.58	229.17	38.12	0.53	0.02	850.42
1993–94	589.91	239.32	44.78	0.62	0.05	874.68
1994–95	598.29	255.00	55.09	0.72	0.12	909.23
1995–96	602.62	267.17	59.36	0.82	0.24	930.21
1996–97	602.86	278.03	63.43	0.88	0.37	945.56
1997–98	602.54	288.89	67.31	0.95	0.50	960.19
1998–99	611.21	297.63	67.04	1.04	0.70	977.62
1999–00	619.16	306.96	67.65	1.07	1.04	995.87
2000–01	613.72	306.99	65.06	1.12	1.59	988.48
2001–02	624.95	322.57	67.10	1.32	2.09	1 018.03
2002–03	636.41	338.82	66.95	1.41	1.81	1 045.41
2003–04	665.92	353.81	66.75	1.45	0.70	1 088.62
2004–05	665.52	368.08	61.62	1.51	0.67	1 097.40
2005–06	637.68	384.62	69.26	1.64	1.51	1 094.72
2006–07	645.66	405.92	62.72	1.79	4.14	1 120.22
2007–08	643.81	426.87	60.53	1.93	6.29	1 139.43
2008–09	631.84	436.27	58.90	2.09	8.16	1 137.25
2009–10	629.84	458.91	54.79	2.25	9.56	1 155.34
2010–11	623.33	486.38	53.19	2.50	10.45	1 175.84
2011–12	621.74	507.53	52.25	2.85	10.08	1 194.46
2012–13	617.63	525.48	52.00	3.50	10.80	1 209.40
2013–14	600.71	547.49	52.57	3.85	14.60	1 219.22
2014–15	596.24	562.09	51.10	4.04	20.62	1 234.10
2015–16	600.51	592.47	41.69	4.01	10.19	1 248.87
2016–17	607.71	611.32	34.01	4.05	10.52	1 267.62

Note: 2016–17 estimates are preliminary and subject to change.
Source: BITRE estimates.

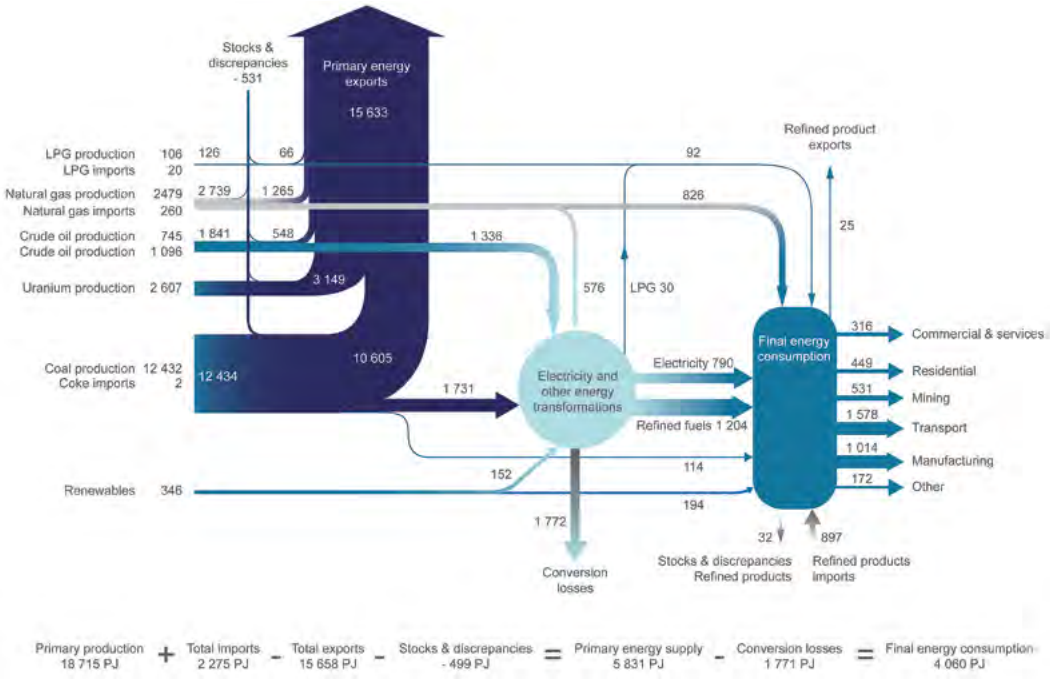
Table T 9.13 Other transport energy use

Financial year	Aviation gasoline	Aviation turbine fuel	Fuel oil	Coal	Electricity	Total
			petajoules (end–use)			
1974–75	3.31	37.35	32.70	0.33	2.47	76.16
1975–76	3.37	34.14	30.31	0.32	2.51	70.66
1976–77	3.63	33.61	30.51	0.32	2.50	70.57
1977–78	3.77	37.23	32.84	0.31	2.51	76.66
1978–79	4.16	34.73	29.11	0.22	2.44	70.67
1979–80	3.77	36.67	31.08	0.16	2.59	74.27
1980–81	3.77	36.43	33.77	0.12	2.84	76.93
1981–82	3.74	41.28	29.32	0.09	2.84	77.26
1982–83	3.44	39.92	26.15	0.66	2.96	73.14
1983–84	3.57	38.73	25.55	3.75	3.10	74.71
1984–85	3.64	39.83	23.50	3.43	3.45	73.85
1985–86	3.57	43.16	26.08	3.33	3.77	79.91
1986–87	3.67	44.31	23.17	3.84	4.03	79.02
1987–88	3.91	47.96	24.77	3.55	4.27	84.46
1988–89	3.94	47.00	21.59	3.95	5.06	81.54
1989–90	4.30	36.54	18.79	3.51	5.46	68.59
1990–91	3.50	47.15	15.37	3.76	5.41	75.19
1991–92	3.30	51.66	14.82	4.00	5.51	79.29
1992–93	3.40	54.27	12.20	4.13	5.43	79.43
1993–94	3.30	57.73	9.76	3.93	5.41	80.13
1994–95	3.36	68.57	14.12	4.03	5.60	95.68
1995–96	3.26	75.68	14.50	3.99	5.54	102.97
1996–97	3.30	81.00	13.58	4.30	5.83	108.00
1997–98	3.35	73.11	10.28	4.24	5.77	96.75
1998–99	3.42	70.21	7.66	4.16	5.90	91.34
1999–00	3.41	73.57	8.71	4.44	6.36	96.50
2000–01	3.31	82.47	8.59	3.51	6.57	104.45
2001–02	3.15	73.76	8.06	3.51	6.50	94.99
2002–03	3.03	70.35	7.97	3.51	6.55	91.41
2003–04	2.91	73.84	8.68	4.01	6.61	96.06
2004–05	2.96	80.81	8.34	5.60	6.62	104.32
2005–06	2.80	85.79	7.53	4.80	6.69	107.61
2006–07	2.90	92.95	7.12	5.20	6.91	115.07
2007–08	2.85	100.19	7.51	4.40	7.14	122.08
2008–09	3.14	102.48	7.20	4.84	7.46	125.12
2009–10	2.62	104.66	8.20	4.13	7.35	126.95
2010–11	2.60	112.25	9.30	2.94	7.38	134.47
2011–12	2.78	116.80	8.30	2.52	7.46	137.86
2012–13	2.68	124.71	6.90	0.00	7.41	141.70
2013–14	2.40	126.48	8.25	0.00	7.36	144.50
2014–15	2.25	126.55	8.30	0.00	7.57	144.67
2015–16	2.23	128.70	8.21	0.00	7.83	146.98
2016–17	2.28	129.80	8.12	0.00	8.07	148.27

Note: 2016–17 estimates are preliminary and subject to change.
Source: BITRE estimates.

PART E: Energy

Figure E 1 Australian energy flows in petajoules, 2013–14

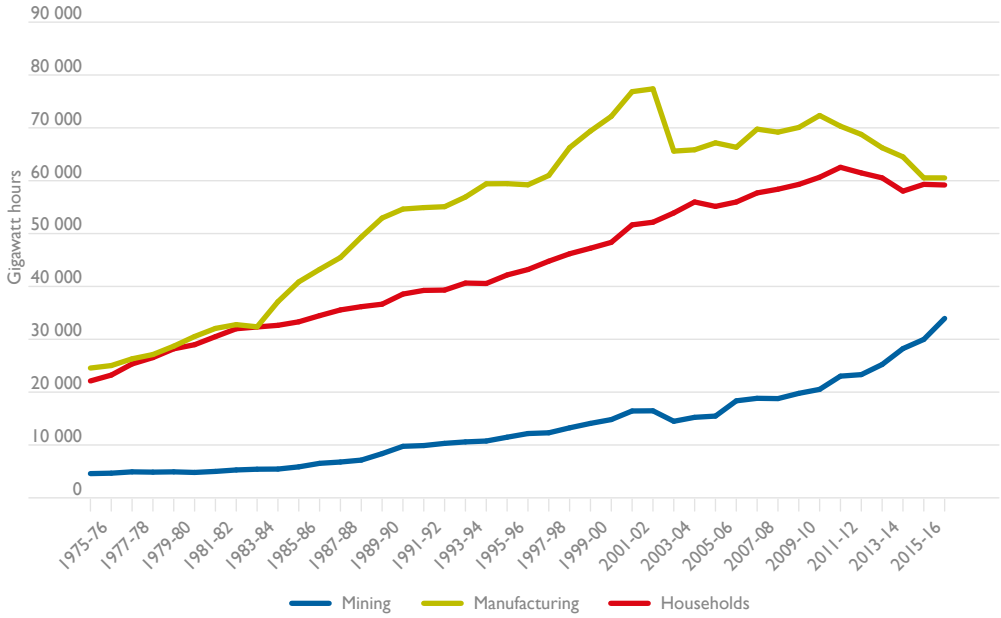


Source: Reproduced with permission from the Department of Industry and Science (2015).

PART E
Energy

Statistics are provided for the production of energy, the conversion of primary forms of energy into electricity and the distribution of energy through electricity and gas networks.

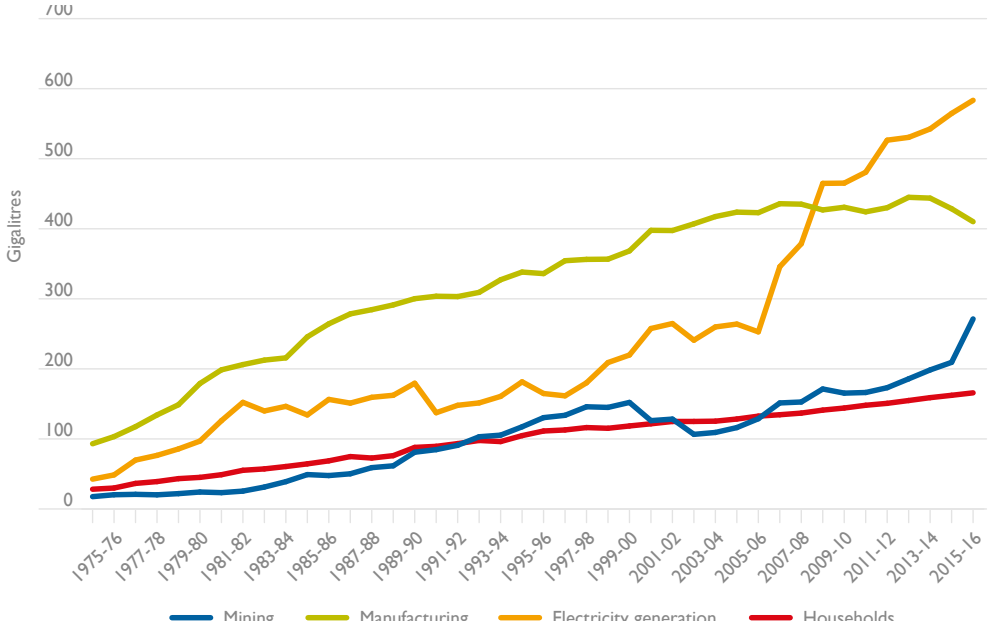
Figure E 2 Australian electricity consumption, by broad industry



Source: Industry (2017b).

The three largest groups of electricity consumers are the manufacturing industry, households and the mining industry. The acceleration of electricity consumption by the manufacturing industry up to 2001–02 was influenced by a rapid increase in consumption by businesses manufacturing basic non–ferrous metals. Consumption by the mining industry increased significantly from 2010–11 to 2013–14. Household consumption peaked in 2009–10 and has declined since then.

Figure E 3 Australian gas consumption, by broad industry



Source: Industry (2017b).

The consumption of gas by the electricity generation industry increased sharply since 2006–07. The growth reflected a sharp increase in gas consumption by the electricity generation industry in Western Australia and New South Wales.

CHAPTER 1
Energy infrastructure

Table E 1.1a Flow of new infrastructure—value of energy infrastructure engineering construction work done by the private sector for the private sector, adjusted by chain volume index

Financial year	Electricity generation, transmission and distribution	Pipelines	Energy infrastructure engineering construction work done	Energy percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	199.8	227.3	427.1	19.63
1987–88	255.1	159.9	414.9	17.26
1988–89	206.9	179.5	386.4	14.73
1989–90	139.9	157.9	297.8	10.44
1990–91	173.2	124.9	298.1	11.10
1991–92	176.9	175.6	352.5	13.87
1992–93	139.8	331.6	471.4	17.56
1993–94	267.8	246.9	514.7	15.43
1994–95	282.7	295.8	578.6	17.43
1995–96	752.7	460.6	1 213.4	28.18
1996–97	693.8	401.1	1 095.0	24.28
1997–98	1 002.7	494.2	1 496.8	26.02
1998–99	1 223.8	655.8	1 879.7	28.29
1999–00	2 125.1	648.1	2 773.2	39.39
2000–01	2 216.0	359.6	2 575.6	40.65
2001–02	2 026.2	748.5	2 774.7	41.48
2002–03	1 919.1	1 322.0	3 241.0	35.80
2003–04	2 075.9	1 957.5	4 033.4	31.97
2004–05	2 839.2	922.3	3 761.5	26.06
2005–06	2 516.9	1 139.5	3 656.4	24.42
2006–07	3 497.1	1 050.0	4 547.1	25.08
2007–08	3 992.1	675.9	4 668.0	23.88
2008–09	5 342.2	908.5	6 250.8	29.94
2009–10	4 478.5	1 060.8	5 539.3	27.90
2010–11	4 396.7	1 824.7	6 221.4	25.38
2011–12	4 738.2	2 586.5	7 324.7	24.41
2012–13	6 995.0	4 169.0	11 164.0	32.08
2013–14	6 403.4	5 340.4	11 743.8	36.72
2014–15	3 820.3	6 180.5	10 000.8	38.54
2015–16	3 569.2	3 621.6	7 190.8	37.05
2016–17	4 344.3	1 008.6	5 352.8	28.53

Source: ABS (2017a), adjusted by chain volume index.

Table E 1.1b Flow of new infrastructure—value of energy infrastructure engineering construction work done by the private sector for the public sector, adjusted by chain volume index

Financial year	Electricity generation, transmission and distribution	Pipelines	Energy infrastructure engineering construction work done	Energy percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	1 409.4	49.2	1 458.6	28.26
1987–88	911.6	34.8	946.4	24.85
1988–89	851.3	80.3	931.6	27.23
1989–90	701.8	165.7	867.5	23.64
1990–91	1 182.4	81.1	1 263.5	28.09
1991–92	1 317.7	15.7	1 333.4	29.11
1992–93	1 100.0	43.1	1 143.2	23.06
1993–94	1 018.9	25.8	1 044.6	18.00
1994–95	779.5	75.1	854.6	16.84
1995–96	524.1	406.2	930.3	18.79
1996–97	899.6	140.0	1 039.5	18.94
1997–98	684.1	55.5	739.6	12.20
1998–99	428.3	21.5	449.8	6.94
1999–00	457.7	35.9	493.6	7.12
2000–01	401.4	43.5	444.9	6.92
2001–02	557.9	25.8	583.7	10.31
2002–03	661.8	12.9	674.7	11.62
2003–04	405.3	12.9	418.2	7.27
2004–05	695.2	13.8	709.0	9.18
2005–06	952.9	5.7	958.6	11.56
2006–07	614.6	4.1	618.7	7.10
2007–08	495.4	10.8	506.3	4.08
2008–09	725.6	3.7	729.3	4.80
2009–10	1 018.1	9.8	1 027.9	6.52
2010–11	1 044.5	32.5	1 076.9	6.50
2011–12	1 173.6	36.1	1 209.7	7.12
2012–13	1 442.7	38.8	1 481.5	8.69
2013–14	1 244.6	14.0	1 258.6	7.86
2014–15	698.8	9.5	708.3	4.95
2015–16	506.7	12.2	518.9	3.22
2016–17	381.9	9.5	391.4	2.0

Source: ABS (2017a), adjusted by chain volume index.

Table E 1.1c Flow of new infrastructure—value of energy infrastructure engineering construction work done by the public sector, adjusted by chain volume index

Financial year	Electricity generation, transmission and distribution	Pipelines	Energy infrastructure engineering construction work done	Energy percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	1 444.1	29.3	1 473.4	14.39
1987–88	1 344.5	119.5	1 464.0	15.51
1988–89	1 331.5	121.4	1 452.8	15.19
1989–90	1 898.8	108.1	2 006.9	18.34
1990–91	1 559.1	115.2	1 674.2	15.45
1991–92	1 426.2	80.0	1 506.2	16.27
1992–93	1 515.7	56.9	1 572.7	15.79
1993–94	1 413.5	190.2	1 603.7	16.80
1994–95	1 496.7	154.1	1 650.9	15.35
1995–96	1 073.9	159.8	1 233.7	11.21
1996–97	976.9	35.2	1 012.1	9.82
1997–98	1 034.4	59.4	1 093.8	10.65
1998–99	1 302.8	157.9	1 460.7	13.22
1999–00	1 743.5	47.1	1 790.6	14.63
2000–01	2 061.0	38.8	2 099.8	18.86
2001–02	2 210.0	48.9	2 258.9	20.41
2002–03	2 357.8	35.1	2 392.9	21.74
2003–04	2 703.9	30.8	2 734.7	25.43
2004–05	2 830.1	7.5	2 837.7	25.30
2005–06	3 853.1	146.2	3 999.2	29.21
2006–07	4 671.8	239.7	4 911.6	39.02
2007–08	5 153.2	35.1	5 188.3	42.54
2008–09	6 171.6	8.0	6 179.7	43.82
2009–10	6 575.1	6.8	6 581.9	41.29
2010–11	6 006.0	3.4	6 009.4	38.36
2011–12	6 246.1	1.3	6 247.3	40.98
2012–13	5 618.3	5.5	5 623.8	39.81
2013–14	4 704.1	0.2	4 704.3	41.87
2014–15	4 502.6	0.4	4 503.0	44.30
2015–16	3 613.4	0.5	3 613.9	35.98
2016–17	2 746.4	7.4	2 753.8	29.01

Source: ABS (2017a), adjusted by chain volume index.

Table E 1.1d Flow of new infrastructure—total value of energy infrastructure engineering construction work done, adjusted by chain volume index

Financial year	Electricity generation, transmission and distribution	Pipelines	Energy infrastructure engineering construction work done	Energy percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	3 053.2	305.8	3 359.0	19.11
1987–88	2 511.2	314.2	2 825.4	18.05
1988–89	2 389.7	381.1	2 770.8	17.75
1989–90	2 740.4	431.8	3 172.2	18.16
1990–91	2 914.7	321.2	3 235.9	17.96
1991–92	2 920.8	271.3	3 192.1	19.49
1992–93	2 755.6	431.6	3 187.2	18.11
1993–94	2 700.2	462.9	3 163.1	16.93
1994–95	2 558.9	525.1	3 084.0	16.10
1995–96	2 350.7	1 026.6	3 377.3	16.67
1996–97	2 570.3	576.3	3 146.6	15.50
1997–98	2 721.2	609.1	3 330.3	15.07
1998–99	2 954.9	835.3	3 790.2	15.68
1999–00	4 326.3	731.1	5 057.4	19.30
2000–01	4 678.3	441.9	5 120.3	21.43
2001–02	4 794.1	823.2	5 617.3	23.98
2002–03	4 938.7	1 369.9	6 308.6	24.39
2003–04	5 185.1	2 001.2	7 186.3	24.68
2004–05	6 364.5	943.7	7 308.2	21.90
2005–06	7 322.9	1 291.4	8 614.2	23.31
2006–07	8 783.5	1 293.9	10 077.5	25.56
2007–08	9 640.8	721.8	10 362.5	23.47
2008–09	12 239.4	920.3	13 159.8	26.23
2009–10	12 071.7	1 077.4	13 149.1	25.50
2010–11	11 447.2	1 860.6	13 307.8	23.45
2011–12	12 157.8	2 624.0	14 781.8	23.75
2012–13	14 055.9	4 213.3	18 269.2	27.69
2013–14	12 352.1	5 354.6	17 706.7	29.90
2014–15	9 021.7	6 190.3	15 212.0	30.18
2015–16	7 689.4	3 634.3	11 323.7	24.86
2016–17	7 472.5	1 025.5	8 498.0	17.71

Source: ABS (2017a), adjusted by chain volume index.

Table E 1.2a Length of electricity transmission and distribution systems—overhead lines

End of financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Snowy Mountains Hydro Electric Authority
					circuit kilometres				
1978–79	198 652	115 947	105 033	64 606	52 029	20 925	1 574	2 276	518
1979–80	203 846	117 103	110 057	65 573	57 787	21 276	1 663	2 316	518
1980–81	202 814	119 125	109 362	66 235	60 120	21 863	1 716	2 349	518
1981–82	211 235	120 305	113 637	66 882	62 379	22 175	2 092	2 452	518
1982–83	210 619	120 493	121 374	67 568	64 773	22 175	2 135	2 491	518
1983–84	213 987	121 805	126 237	68 245	66 501	23 016	2 484	2 540	518
1984–85	214 657	122 784	131 949	69 271	68 528	22 761	2 992	2 405	510
1985–86	235 346	124 089	137 527	69 646	70 706	23 277	2 992	2 543	510
1986–87	237 065	127 455	143 012	69 829	71 199	23 764	3 301	2 548	510
1987–88	239 878	128 709	149 643	70 094	71 642	24 153	3 349	2 605	510
1988–89	243 437	130 728	155 246	70 815	71 801	24 619	2 341	2 639	529
1989–90	241 851	147 892	160 962	71 416	88 615	25 400	3 408	2 627	529
1990–91	243 561	129 609	159 807	71 786	89 965	25 577	3 715	2 703	522
1991–92	246 283	121 509	162 503	71 873	91 849	25 464	3 925	2 708	522
1992–93	247 086	123 543	163 945	72 357	92 172	25 736	4 157	2 710	527
1993–94	254 487	124 224	166 113	81 557	74 896	25 947	4 861	2 717	425
1994–95									
1995–96									
1996–97									
1997–98	256 859	135 001	176 468	[a] 69560	80 075	26 239	5 435		
1998–99	257 032	135 348	174 997	71 334	81 898	27 787	5 714		
1999–00	268 816	138 050	182 002	71 294	[b] 99302	27 095	5 255		
2000–01	268 821	139 125	182 780	72 382	79 743	27 027	5 331		
2001–02	268 117	138 268	182 818	73 962	80 866	27 014	5 614		
2002–03	261 285	126 929	184 358	74 104	81 269	28 519	5 413		
2003–04	261 184	142 417	192 318	74 482	81 454	26 054	5 236		
2004–05	261 031	129 257	186 838	75 092	80 823	26 139	5 427		
2005–06	268 187	129 445	187 126	75 548	78 349	26 966	5 422		
2006–07	270 727	129 022	189 776	76 720	83 552	26 065	5 521		
2007–08	268 147	129 582	190 688	76 558	83 485	25 834	5 622		
2008–09	268 186	130 033	192 018	76 725	82 183	25 596	5 994		
2009–10	268 378	130 158	198 612	76 918	81 821	25 734	5 676		
2010–11	270 428	130 502	194 927	76 695	81 581	25 666	5 555		
2011–12	263 343	130 827	189 615	76 787	80 994	29 082	5 672		
2012–13	262 930	130 854	199 338	76 724	81 609	29 076	5 271		
2013–14	251 085	131 212	196 611	76 774	81 559	23 533	5 140		
2014–15	254 601	132 118	193 030	76 832	79 212	23 634	5 167		

[a] Measures of circuit kilometres for South Australia were recalculated in 1997–98 due to a field audit. Measures from 1997–98 onwards should not be compared with earlier estimates.

[b] Prior to 1999–2000, Western Australian estimates for circuit kilometres were compiled using a different methodology and should not be compared with later results.

Note: Decrease in overhead lines circuit kilometres between 2012–13 and 2013–14 is due to changes in reporting by businesses which took part in the survey.

Data are not readily available for missing years.

From 1997–98, the figures for ACT are included in the NSW total.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.2b Length of electricity transmission and distribution systems—underground cables

End of financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Snowy Mountains Hydro Electric Authority
					circuit kilometres				
1978–79	8 934	4 907	3 071	2 580	481	979	194	660	0
1979–80	9 729	4 918	3 318	2 858	579	1 039	245	744	0
1980–81	10 182	5 109	3 393	2 984	685	1 072	270	805	0
1981–82	12 850	5 271	3 702	3 199	843	1 111	333	908	0
1982–83	11 720	5 418	3 986	3 336	966	1 199	568	984	0
1983–84	12 299	5 613	4 244	3 640	1 081	1 058	702	1 029	0
1984–85	12 889	5 729	4 531	4 167	1 252	1 188	1 205	1 146	0
1985–86	15 977	6 162	4 837	4 822	1 478	1 246	1 205	1 232	0
1986–87	16 896	6 507	5 116	5 372	1 684	1 304	983	1 336	0
1987–88	17 504	7 010	5 305	5 795	1 872	1 360	993	1 382	0
1988–89	18 867	7 904	5 552	6 360	1 872	1 419	427	1 443	0
1989–90	19 572	8 749	5 877	6 824	2 552	1 470	1 059	1 528	0
1990–91	20 497	6 399	6 175	7 339	2 702	1 508	692	1 595	0
1991–92	21 324	5 792	6 436	7 700	2 772	1 534	724	1 721	3
1992–93	21 257	5 669	6 829	7 963	2 830	1 596	776	1 829	3
1993–94	23 210	5 764	7 238	7 954	4 541	1 627	825	1 920	4
1994–95									
1995–96									
1996–97									
1997–98	23 989	8 282	10 874	[a] 6443	6 798	1 655	1 079		
1998–99	25 587	14 387	8 572	6 858	7 264	1 741	2 000		
1999–00	26 649	15 622	9 615	7 382	[b] 11855	1 548	2 251		
2000–01	28 770	16 659	12 390	8 243	9 596	1 578	2 315		
2001–02	29 486	16 625	14 668	9 206	10 865	1 583	2 315		
2002–03	29 068	15 388	16 763	10 178	10 923	1 622	2 332		
2003–04	29 545	18 712	16 370	10 891	11 952	1 636	2 284		
2004–05	29 101	15 758	15 282	11 193	12 724	1 651	2 295		
2005–06	30 567	16 824	16 211	12 217	14 233	1 819	2 290		
2006–07	32 194	16 960	18 475	14 311	16 420	1 980	2 385		
2007–08	35 546	16 883	19 666	14 850	17 425	2 043	2 405		
2008–09	36 439	17 471	21 395	15 500	18 174	2 129	2 597		
2009–10	37 208	18 655	23 080	15 895	19 947	2 192	2 534		
2010–11	38 149	19 505	23 994	16 142	21 304	2 313	2 577		
2011–12	39 622	21 779	23 554	16 528	22 555	2 422	2 826		
2012–13	41 122	22 214	24 903	16 759	22 961	2 458	1 458		
2013–14	39 423	22 785	25 591	16 952	24 019	2 457	1 468		
2014–15	40 229	23 639	26 401	17 000	25 436	2 489	1 510		

[a] Measures of circuit kilometres for South Australia were recalculated in 1997–98 due to a field audit. Measures from 1997–98 onwards should not be compared with earlier estimates.

[b] Prior to 1999–2000, Western Australian estimates for circuit kilometres were compiled using a different methodology and should not be compared with later results.

Note: Decrease in underground cables between 2012–13 and 2013–14 is due to changes in reporting by businesses which took part in the survey.

Data are not readily available for missing years.

From 1997–98, the figures for ACT are included in the NSW total.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3a Infrastructure capacity—generation capacity, by type of plant—New South Wales

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1976–77	290		6 089	50	24	0	0		6 453
1977–78	370		6 899	49	24	0	0		7 343
1978–79	370		7 359	52	24	0	0		7 805
1979–80	370		7 345	48	24	0	0		7 788
1980–81	370		7 846	50	24	0	0		8 290
1981–82	370		8 506	50	319	0	0		9 245
1982–83	370		9 150	44	319	0	0		9 883
1983–84	370		10 470	44	319	0	0		11 204
1984–85	370		10 905	44	319	0	0		11 639
1985–86	370		10 826	43	319	0	0		11 558
1986–87	370		11 459	41	269	0	0		12 138
1987–88	345		11 496	37	295	0	0		12 172
1988–89	345		11 336	38	295	0	0		12 014
1989–90	345		10 775	28	295	0	0		11 443
1990–91	345		10 175	1	295	0	0		10 816
1991–92	345		10 215	1	295	0	0		10 856
1992–93	345		10 875	1	295	0	0		11 516
1993–94	345		11 535	1	295	0	0		12 176
1994–95									12 177
1995–96									12 177
1996–97									12 201
1997–98	120	240	11 520	0	295	0	0		12 175
1998–99 [c]	25	240	11 520	0	250	162			12 197
1999–00	25	240	11 520	0	146	162			12 093
2000–01	25	240	11 670	0	100	162			12 197
2001–02	25	240	11 670	0	50	162			12 147
2002–03	29	240	11 750	0	50	162	0		12 231
2003–04	[d] 109	240	11 670	0	50	160	0		12 229
2004–05	109	240	11 670	0	50	160	0		12 229
2005–06	109	240	11 670	0	50	160	0		12 229
2006–07	109	240	11 730	0	50	160	0	0	12 289
2007–08	109	240	11 730	0	50	160	0	0	12 289
2008–09 [e]	2 285	240	11 730	0	690	595	0	0	15 540
2009–10	2 285	240	11 797	0	1 438	595	0	0	16 355
2010–11	2 285	240	11 937	0	1 382	595	0	0	16 439
2011–12	2 285	240	11 937	0	1 382	595	95	0	16 534
2012–13	2 285	240	11 284	0	1 434	591	95	0	15 929
2013–14	2 285	240	11 504	0	1 378	591	260	0	16 258
2014–15	2 285	240	10 504	0	1 434	591	528	122	15 704

[c] From 1998–99, non–schedule small hydro plants are excluded from estimates.

[d] From 2003–04, generation capacity of Blowering is included in NSW hydro figures, where previously they were shown in Snowy Mountains Hydro Electric Authority.

[e] The Snowy region was abolished on 1 July 2008. Generation plant previously included within the Snowy region have been reallocated to New South Wales and Victoria.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3b Infrastructure capacity—generation capacity, by type of plant—Victoria

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1976–77	319		3 342	0	0	0	0		3 661
1977–78	319		3 342	0	0	0	0		3 661
1978–79	319		3 317	0	225	0	0		3 861
1979–80	319		3 317	0	465	0	0		4 101
1980–81	469		3 749	0	465	0	0		4 683
1981–82	469		4 301	0	465	0	0		5 235
1982–83	469		4 301	0	465	0	0		5 235
1983–84	469		4 801	0	465	0	0		5 735
1984–85	469		4 560	0	465	0	0		5 494
1985–86	469		4 960	0	465	0	0		5 894
1986–87	469		5 460	0	465	0	0		6 394
1987–88	469		5 460	0	465	0	0		6 394
1988–89	469		5 720	0	465	0	0		6 654
1989–90	469		5 720	0	465	0	0		6 654
1990–91	469		5 720	0	465	0	0		6 654
1991–92	469		5 720	0	465	0	0		6 654
1992–93	469		5 720	0	465	0	0		6 654
1993–94	469		6 050	0	466	0	0		6 985
1994–95									7 155
1995–96									7 155
1996–97									7 673
1997–98	479	0	6 881	0	295	0	0		7 826
1998–99 [c]	453	0	6 891	0	466	0			7 810
1999–00	453	0	6 905	0	466	0			7 824
2000–01	453	0	6 905	0	506	0			7 864
2001–02	453	0	6 905	0	979	0			8 337
2002–03	490	0	6 950	0	1 001	0	0		8 441
2003–04	[d] 511	0	7 015	0	1 001	0	0		8 527
2004–05	511	0	7 065	0	1 001	0	0		8 577
2005–06	526	0	7 065	0	1 001	0	0		8 592
2006–07	526	0	7 065	0	1 321	0	0	0	8 912
2007–08	526	0	7 065	0	1 321	0	0	0	8 912
2008–09 [e]	2 026	0	7 065	0	1 321	0	0	0	10 412
2009–10	2 176	0	7 065	0	1 321	0	0	0	10 562
2010–11	2 206	0	7 140	0	1 321	0	0	0	10 667
2011–12	2 206	0	7 140	0	1 871	0	67	0	11 284
2012–13	2 206	0	7 318	0	1 889	0	487	0	11 900
2013–14	2 206	0	7 335	0	1 889	0	618	0	12 048
2014–15	2 206	0	7 335	0	1 889	0	725	0	12 155

[c] From 1998–99, non–schedule small hydro plants are excluded from estimates.

[d] From 2003–04, generation capacity of Blowering is included in NSW hydro figures, where previously they were shown in Snowy Mountains Hydro Electric Authority.

[e] The Snowy region was abolished on 1 July 2008. Generation plant previously included within the Snowy region have been reallocated to New South Wales and Victoria.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3c Infrastructure capacity—generation capacity, by type of plant—Queensland[f]

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1975–76	132		1 789	38	132	0	0		2 091
1976–77	132		1 999	52	163	0	0		2 345
1977–78	132		2 511	48	163	0	0		2 854
1978–79	132		2 734	48	163	0	0		3 076
1979–80	132		2 696	49	163	0	0		3 040
1980–81	132		2 971	48	163	0	0		3 314
1981–82	132		3 246	50	163	0	0		3 591
1982–83	132		3 246	58	178	0	0		3 614
1983–84	382		3 596	60	178	0	0		4 216
1984–85	632		3 946	60	178	0	0		4 816
1985–86	632		3 906	60	178	0	0		4 776
1986–87	632		3 752	59	178	0	0		4 621
1987–88	632		4 042	46	178	0	0		4 898
1988–89	632		4 242	41	178	0	0		5 093
1989–90	632		4 242	46	178	0	0		5 098
1990–91	632		4 242	41	178	0	0		5 093
1991–92	632		4 428	47	178	0	0		5 285
1992–93	632		4 910	29	178	0	0		5 749
1993–94	632		5 435	28	188	0	0		6 283
1994–95									6 896
1995–96									7 040
1996–97									7 041
1997–98	132	500	6 353	29	250	0	0		7 264
1998–99 [c]	132	500	6 517	0	736	216			8 101
1999–00	139	500	6 517	0	1 025	214			8 395
2000–01	139	500	6 937	0	1 026	214			8 816
2001–02	132	500	8 105	0	1 478	476			10 691
2002–03	132	500	8 394	0	1 201	419	0		10 646
2003–04	132	500	8 464	0	1 223	158	0		10 477
2004–05	144	500	8 187	0	741	840	0		10 412
2005–06	144	500	8 187	0	741	840	0		10 412
2006–07	144	500	8 187	0	1 245	840	0	0	10 916
2007–08	144	500	8 937	0	1 245	840	0	0	11 666
2008–09	144	500	8 937	0	1 695	840	0	0	12 116
2009–10	144	500	8 937	0	1 883	1 610	0	0	13 074
2010–11	144	500	8 937	0	2 043	1 610	0	0	13 234
2011–12	144	500	8 937	0	2 043	1 610	0	0	13 234
2012–13	152	500	8 416	0	2 028	1 626	0	0	12 722
2013–14	152	500	8 244	0	2 083	1 840	0	0	12 819
2014–15	152	500	8 177	0	2 080	1 841	0	0	12 750

[c] From 1998–99, non–schedule small hydro plants are excluded from estimates.

[f] Prior to 2003–04, Queensland generation capacity did not include generating capacity at Mt Isa.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3d Infrastructure capacity—generation capacity, by type of plant—South Australia

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1975–76	0		1 077	15	156	0	0		1 248
1976–77	0		1 455	16	156	0	0		1 627
1977–78	0		1 455	13	156	0	0		1 624
1978–79	0		1 455	12	231	0	0		1 698
1979–80	0		1 655	13	231	0	0		1 899
1980–81	0		1 855	14	231	0	0		2 100
1981–82	0		1 855	16	231	0	0		2 102
1982–83	0		1 855	17	231	0	0		2 103
1983–84	0		1 855	17	321	0	0		2 193
1984–85	0		2 105	17	321	0	0		2 443
1985–86	0		2 355	17	321	0	0		2 693
1986–87	0		2 355	18	321	0	0		2 694
1987–88	0		2 355	19	321	0	0		2 695
1988–89	0		2 265	19	321	0	0		2 605
1989–90	0		2 025	22	321	0	0		2 368
1990–91	0		2 025	21	321	0	0		2 367
1991–92	0		2 025	21	321	0	0		2 367
1992–93	0		2 025	15	321	0	0		2 361
1993–94	0		1 905	21	321	0	0		2 247
1994–95									2 248
1995–96									2 248
1996–97									2 322
1997–98	0	0	2 080	0	246	0	0		2 326
1998–99	0	0	2 040	0	359	180			2 579
1999–00	0	0	2 010	0	429	180			2 619
2000–01	0	0	2 040	0	439	658			3 137
2001–02	0	0	2 040	0	759	680			3 479
2002–03	0	0	2 040	0	759	660	0		3 459
2003–04	0	0	2 040	0	718	663	0		3 421
2004–05	0	0	2 050	40	718	663	0		3 471
2005–06	0	0	2 050	40	718	663	0		3 471
2006–07	0	0	2 060	50	718	663	0	0	3 491
2007–08	0	0	2 060	50	718	663	95	0	3 586
2008–09	0	0	2 060	50	846	663	353	0	3 972
2009–10	0	0	2 060	50	846	663	481	0	4 100
2010–11	0	0	2 060	50	890	663	764	0	4 426
2011–12	0	0	2 060	50	890	663	816	0	4 479
2012–13	0	0	2 066	50	920	663	815	0	4 514
2013–14	0	0	2 064	50	920	663	1 085	0	4 782
2014–15	0	0	2 066	50	920	663	1 085	0	4 784

Note: Data are not readily available for missing years.
Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3e Infrastructure capacity—generation capacity, by type of plant—Western Australia

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1975–76	2		1 195	85	40	0	0		1 322
1976–77	2		1 195	111	40	0	0		1 348
1977–78	2		1 195	126	40	0	0		1 363
1978–79	2		1 395	113	40	0	0		1 550
1979–80	2		1 395	128	40	0	0		1 565
1980–81	2		1 595	156	40	0	0		1 793
1981–82	2		1 795	162	40	0	0		1 999
1982–83	2		1 740	169	40	0	0		1 951
1983–84	2		1 740	172	40	0	0		1 954
1984–85	2		1 915	155	60	0	0		2 132
1985–86	2		2 040	162	60	0	0		2 264
1986–87	2		2 040	170	60	0	0		2 272
1987–88	0		2 040	172	60	0	0		2 272
1988–89	0		2 040	180	60	0	0		2 280
1989–90	0		2 040	184	240	0	0		2 464
1990–91	0		2 040	192	312	0	0		2 544
1991–92	2		2 040	181	596	0	0		2 819
1992–93	2		2 040	175	596	0	0		2 813
1993–94	2		2 042	198	712	0	2		2 956
1994–95									2 958
1995–96									2 958
1996–97									3 086
1997–98	2	0	2 040	116	932	0	2		3 092
1998–99 [c]	2	0	2 370	131	806	0			3 308
1999–00	2	0	2 310	130	838	0			3 280
2000–01	2	0	2 406	105	802	0			3 315
2001–02	2	0	2 406	106	802	0			3 316
2002–03	2	0	2 250	98	802	0	25		3 273
2003–04	2	0	2 348	0	958	240	22		3 570
2004–05	2	0	2 250	0	958	240	23		3 473
2005–06	2	0	2 250	0	960	240	23		3 475
2006–07 [g]	0	0	2 477	0	2 110	360	191		4 887
2007–08	0	0	2 477	0	2 110	360	191	0	5 138
2008–09	0	0	2 445	0	2 110	680	191	0	5 426
2009–10	0	0	2 653	0	2 440	680	191	0	5 964
2010–11	0	0	2 653	0	2 440	800	191	0	6 084
2011–12	0	0	2 653	0	2 440	800	410	0	6 303
2012–13	0	0	2 653	0	2 531	800	464	0	6 448
2013–14	0	0	2 670	0	2 536	800	465	0	6 470
2014–15	0	0	2 575	1	2 575	800	476	0	6 481

[c] From 1998–99, non–schedule small hydro plants are excluded from estimates.

[g] The Wholesale Electricity Market commenced in WA in September 2006. From 2006–07, generation capacity includes all market generators in the SWIS with a capacity greater than 10 MW.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3f Infrastructure capacity—generation capacity, by type of plant—Tasmania

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1975–76	1 202		240	6	20	0	0		1 469
1976–77	1 202		240	4	0	0	0		1 447
1977–78	1 396		240	1	0	0	0		1 638
1978–79	1 540		240	2	0	0	0		1 782
1979–80	1 540		240	2	0	0	0		1 782
1980–81	1 540		240	2	0	0	0		1 782
1981–82	1 620		240	2	0	0	0		1 862
1982–83	1 620		240	2	0	0	0		1 863
1983–84	1 700		240	2	0	0	0		1 943
1984–85	1 700		240	3	0	0	0		1 943
1985–86	1 816		240	5	0	0	0		2 061
1986–87	1 931		240	5	0	0	0		2 176
1987–88	2 075		240	5	0	0	0		2 320
1988–89	2 075		240	5	0	0	0		2 320
1989–90	2 075		240	5	0	0	0		2 320
1990–91	2 076		240	5	0	0	0		2 321
1991–92	2 219		240	5	0	0	0		2 464
1992–93	2 195		240	6	0	0	0		2 441
1993–94	2 254		240	6	0	0	0		2 500
1994–95									2 509
1995–96									2 509
1996–97									2 502
1997–98	2 262	0	240	6	0	0	1		2 509
1998–99 [c]	2 262	0	240	6	0	0			2 508
1999–00	2 262	0	240	6	0	0			2 508
2000–01	2 262	0	240	6	0	0			2 508
2001–02	2 276	0	240	26	0	0			2 542
2002–03	2 276	0	240	26	0	0	0		2 542
2003–04	2 266	0	240	0	0	0	65		2 571
2004–05	2 265	0	240	0	0	0	65		2 570
2005–06	2 278	0	240	0	0	0	65		2 583
2006–07	2 274	0	240	0	105	0	140		2 759
2007–08	2 274	0	240	0	105	0	140	0	2 759
2008–09	2 274	0	0	0	165	210	140	0	2 789
2009–10	2 283	0	0	0	283	208	140	0	2 914
2010–11	2 283	0	0	0	283	208	140	0	2 914
2011–12	2 283	0	0	0	283	208	140	0	2 914
2012–13	2 277	0	0	0	298	208	308	0	3 090
2013–14	2 277	0	0	0	298	208	308	0	3 090
2014–15	2 277	0	0	0	298	208	308	0	3 090

[c] From 1998–99, non–schedule small hydro plants are excluded from estimates.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3g Infrastructure capacity—generation capacity, by type of plant—Northern Territory[h]

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1975–76	0		94	40	10	0	0		144
1976–77	0		94	40	10	0	0		144
1977–78	0		118	40	10	0	0		168
1978–79	0		141	47	10	0	0		198
1979–80	0		141	47	40	0	0		228
1980–81	0		141	56	40	0	0		237
1981–82	0		141	62	40	0	0		243
1982–83	0		141	66	40	0	0		247
1983–84	0		141	66	40	0	0		247
1984–85	0		141	72	30	0	0		243
1985–86	0		141	72	30	0	0		243
1986–87	0		141	81	190	0	0		412
1987–88	0		0	72	162	95	0		330
1988–89	0		0	69	175	95	0		340
1989–90	0		0	92	175	95	0		362
1990–91	0		0	94	180	95	0		369
1991–92	0		0	99	184	95	0		378
1992–93	0		0	99	186	95	0		381
1993–94	0		0	85	188	95	0		368
1994–95									417
1995–96									427
1996–97									436
1997–98	0	0	0	101	209	124	0		434
1998–99	0	0	0	103	229	124			455
1999–00	0	0	0	149	229	123			500
2000–01	0	0	0	136	236	123			495
2001–02	0	0	0	136	245	123			504
2002–03	0	0	0	136	245	123	0		504
2003–04	0	0	0	36	316	96	0		449
2004–05	0	0	0	74	277	131	0		482
2005–06	0	0	0	72	272	131	0		475
2006–07	0	0	0	74	266	131	0	0.2	472
2007–08	0	0	0	76	309	131	0	0.2	516
2008–09	0	0	0	76	352	131	0	0.2	560
2009–10	0	0	0	77	352	131	0	0.2	561
2010–11	0	0	0	77	352	131	0	0.2	561
2011–12	0	0	0	99	420	131	0	0.2	649
2012–13	0	0	0	97	416	122	0	0.2	636
2013–14	0	0	0	100	512	122	0	0.2	735
2014–15	0	0	0	97	482	122	0	0.2	702

[h] The basis for reporting generating plant in Northern Territory changed in 2003–04 and should not be compared to previous years.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 1.3h Infrastructure capacity—generation capacity, by type of plant—Snowy Mountains Hydro Electric Authority

End of financial year	Hydro	Pump storage	Steam	Internal combustion	Gas turbine	Combined cycle	Wind	Photovoltaic	Total
					megawatts				
1975–76	3 740		0	0	0	0	0		3 740
1976–77	3 740		0	0	0	0	0		3 740
1977–78	3 740		0	0	0	0	0		3 740
1978–79	3 740		0	0	0	0	0		3 740
1979–80	3 740		0	0	0	0	0		3 740
1980–81	3 740		0	0	0	0	0		3 740
1981–82	3 740		0	0	0	0	0		3 740
1982–83	3 740		0	0	0	0	0		3 740
1983–84	3 740		0	0	0	0	0		3 740
1984–85	3 740		0	0	0	0	0		3 740
1985–86	3 740		0	0	0	0	0		3 740
1986–87	3 740		0	0	0	0	0		3 740
1987–88	3 740		0	0	0	0	0		3 740
1988–89	3 740		0	0	0	0	0		3 740
1989–90	3 740		0	0	0	0	0		3 740
1990–91	3 740		0	0	0	0	0		3 740
1991–92	3 740		0	0	0	0	0		3 740
1992–93	3 740		0	0	0	0	0		3 740
1993–94	3 740		0	0	0	0	0		3 740
1994–95									3 756
1995–96									3 756
1996–97									3 756
1997–98	3 006	750	0	0	0	0	0		3 756
1998–99 [c]	3 006	750	0	0	0	0			3 756
1999–00	3 006	750	0	0	0	0			3 756
2000–01	3 006	750	0	0	0	0			3 756
2001–02	3 006	750	0	0	0	0			3 756
2002–03	3 006	750	0	0	0	0	0		3 756
2003–04	3 000	676	0	0	0	0	0		3 676
2004–05	3 676	0	0	0	0	0	0		3 676
2005–06	3 676	0	0	0	0	0	0		3 676
2006–07	3 676	0	0	0	0	0	0	0	3 676
2007–08 [e]	3 676	0	0	0	0	0	0	0	3 676

[c] From 1998–99, non–schedule small hydro plants are excluded from estimates.

[d] From 2003–04, generation capacity of Blowering is included in NSW hydro figures, where previously they were shown in Snowy Mountains Hydro Electric Authority.

[e] The Snowy region was abolished on 1 July 2008. Generation plant previously included within the Snowy region have been reallocated to New South Wales and Victoria.

Note: Data are not readily available for missing years.

Figures represent commissioned scheduled and semi–scheduled generators only and exclude embedded, non–grid private generators and non–scheduled intermittent generators.

Source: esaa (2005) and esaa updates.

Table E 1.4a Infrastructure quality—electricity distribution supply reliability measures, National Electricity Market, by state—System Average Interruption Duration Index (SAIDI)

Financial year	New South Wales	Victoria	Queensland	South Australia	Tasmania	Australian Capital Territory	National Electricity Market weighted average	Western Australia
				minutes				
1999–2000		156						
2000–01		152	314	164	198		198	
2001–02	324	151	275	147	198		245	
2002–03	193	161	265	184	214		199	
2003–04	279	132	434	164	324		260	
2004–05	218	165	283	169	314		214	
				change in methodology				
2005–06	168	138	631	208	200	50	263	
2006–07	318	168	181	203	253	45	228	325
2007–08	157	201	219	137	283	26	183	317
2008–09	177	231	305	182	331	33	223	
2009–10	124	131	315	207	471	29	183	
2010–11	158	126	1083	318	210	48	365	
2011–12	156	128	164	171	179	33	149	
2012–13	163	140	549	233	389	48	251	
2013–14	129	162	176	290	312	28	166	
2014–15	445	127	436	160	320	33	315	
2015–16	174	174	173	174	275	40	174	

Note: Data from 2005–06 onwards excludes planned outages (this note does not refer to Western Australia data; data for Victoria is calender year).

Data are not readily available for missing years.

Source: AER (2017), BITRE (2016c).

Table E 1.4b Infrastructure quality—electricity distribution supply reliability measures, National Electricity Market, by state—System Average Interruption Frequency Index (SAIFI)

Financial year	New South Wales	Victoria	Queensland	South Australia	Tasmania	Australian Capital Territory	National Electricity Market weighted average	Western Australia
				average number of times a customer's supply is interrupted per year				
1999–00		2.1			2.3			
2000–01		2.0	3.0	1.7	2.8		2.4	
2001–02	2.6	2.0	2.8	1.6	2.3		2.4	
2002–03	1.4	2.2	2.7	1.8	2.4		2.0	
2003–04	1.6	1.9	3.4	1.7	3.1		2.2	
2004–05	1.6	1.8	2.7	1.7	3.1		2.0	
				change in methodology				
2005–06	1.7	1.8	3.1	2.0	2.6	0.8	2.1	
2006–07	1.8	2.0	2.0	1.9	2.4	0.8	1.9	3.3
2007–08	1.6	1.6	2.3	1.4	2.4	0.6	1.7	3.3
2008–09	1.7	2.4	2.6	1.8	2.3	0.6	2.1	
2009–10	1.4	1.5	2.3	1.8	2.4	0.7	1.7	
2010–11	1.3	1.4	2.2	2.2	1.8	0.8	1.6	
2011–12	1.4	1.4	1.6	1.5	2.1	0.6	1.4	
2012–13	1.2	1.7	1.9	1.8	1.9	0.7	1.6	
2013–14	1.2	1.6	1.6	2.0	2.2	0.5	1.5	
2014–15	1.4	1.3	1.8	1.3	1.9	0.6	1.5	
2015–16	1.3	1.4	1.5	1.4	1.9	0.7	1.4	

Note: Data from 2005–06 onwards excludes planned outages (this note does not refer to Western Australia data; data for Victoria is calender year).
Data are not readily available for missing years.

Source: AER (2017) BITRE (2016c).

CHAPTER 2
Inputs to energy supply

Table E 2.1 Energy inputs—Australia's economic demonstrated mineral energy resources

End of calendar year	Black coal[i]	Brown coal (lignite)[i]	Uranium[j]	Crude oil	Condensate	LPG	Natural gas
	gigatonnes	*gigatonnes*	*kilotonnes*	*gigalitres*	*gigalitres*	*gigalitres*	*billion cubic metres*
1984				240	81	86	689
1985				217	86	88	709
1986				242	116	99	902
1987				246	119	97	1 069
1988				255	122	130	1 033
1989				260	119	114	955
1990				270	118	114	927
1991				258	124	131	950
1992				244	133	135	1 006
1993				249	136	133	992
1994				297	156	154	1 292
1995				277	183	144	1 264
1996				240	193	174	1 360
1997				266	192	184	1 494
1998	51.1	41.1	607	243	273	243	1 989
1999	44.4	37.7	571	215	277	262	1 989
2000	42.6	37.7	654	194	300	292	2 203
2001	40.8	37.7	648	206	289	293	2 667
2002	39.7	37.6	689	176	277	274	2 528
2003	38.3	37.5	675	186	247	210	2 462
2004	40.4	37.5	701	157	301	214	2 587
2005	39.2	37.4	716	169	257	214	2 428
2006	39.6	37.3	714	160	236	203	2 421
2007	38.9	37.3	983	162	228	191	2 362
2008	39.2	37.2	1 163	188	340	174	3 145
2009	43.8	37.1	1 223	170	340	166	2 984
2010	49.2	44.2	1 158	154	335	153	2 918
2011	57.5	44.2	1 196	148	305	148	2 817
2012	61.1	44.2	1 174	148	305	148	2 803
2013	62.1	44.2	1 167				
2014	62.6	44.2	1 151	191	445	225	
2015	68.3	76.5	1 287				

Note: Data are not readily available for missing years.
Changing evaluation methods for brown coal resulted in an increase in 2015.

[i] Estimates are for recoverable Economic Demonstrated Resources of coal after allowances for losses due to mining.

[j] Estimates are for recoverable Economic Demonstrated Resources of uranium after allowances for losses due to mining and processing.

Source: GA (2017a, 2017b).

Table E 2.2a Energy inputs—Australian electricity generation, input fuel—energy units

Financial year	Black coal	Brown coal (including coal byproducts and brown coal briquettes)	Petroleum products	Natural gas	Electricity
			petajoules		
1974-75	375.1	243.6	49.5	34.3	37.3
1975-76	373.4	263.6	51.2	40.3	38.9
1976-77	438.7	282.2	53.0	53.0	43.5
1977-78	471.4	276.2	58.7	57.0	45.1
1978-79	481.8	291.6	59.7	66.6	49.9
1979-80	544.8	300.6	51.1	76.3	52.6
1980-81	570.6	293.3	49.8	106.5	55.9
1981-82	578.4	338.7	53.8	130.9	57.2
1982-83	578.4	313.4	47.7	117.7	55.7
1983-84	659.1	302.3	46.3	124.1	58.7
1984-85	695.1	352.2	41.6	111.0	66.6
1985-86	708.9	332.1	36.1	134.4	67.0
1986-87	730.9	389.2	27.7	129.1	69.4
1987-88	753.3	407.6	22.4	139.8	67.9
1988-89	799.0	460.8	29.5	143.6	73.7
1989-90	836.0	437.6	40.0	161.2	74.5
1990-91	848.7	470.0	40.8	121.3	71.6
1991-92	872.4	481.4	28.8	132.0	75.9
1992-93	905.6	456.9	29.1	136.4	75.2
1993-94	917.4	462.5	29.2	146.3	75.6
1994-95	946.6	480.5	32.9	167.4	79.4
1995-96	1 001.4	503.8	34.3	151.5	80.9
1996-97	1 018.5	546.5	27.2	148.1	81.3
1997-98	1 061.4	627.3	25.2	166.9	91.3
1998-99	1 081.2	662.7	23.7	196.5	97.8
1999-00	1 100.2	665.4	22.2	206.8	99.8
2000-01	1 176.1	665.8	19.2	241.7	102.7
2001-02	1 213.7	670.0	19.2	247.2	104.2
2002-03	1 176.2	698.4	28.0	224.9	102.6
2003-04	1 245.1	715.6	34.6	241.7	114.1
2004-05	1 279.5	712.5	36.1	250.3	108.5
2005-06	1 304.0	729.0	38.6	239.0	109.7
2006-07	1 325.4	726.2	37.0	334.9	112.2
2007-08	1 297.4	728.2	52.4	367.6	109.3
2008-09	1 361.2	752.1	37.5	453.6	115.3
2009-10	1 223.2	746.1	33.4	454.2	113.9
2010-11	1 146.2	732.4	32.6	468.9	108.5
2011-12	1 123.3	742.4	35.6	514.6	107.1
2012-13	1 084.7	640.7	37.3	517.5	99.0
2013-14	1 024.0	622.6	48.5	530.8	96.1
2014-15	1 045.7	668.6	60.1	553.3	97.2
2015-16	1 111.3	643.1	54.5	572.2	101.3

Source: Industry (2017a).

Table E 2.2b Australian electricity generation, input fuel—physical units

Financial year	Black coal	Brown coal (including briquettes)	Petroleum products	Natural gas	Electricity
	million tonnes	*million tonnes*	*megalitres*	*megalitres*	*gigawatt hours*
1974-75	15.0	25.1	1 447	870 874	10 361
1975-76	15.0	27.4	1 497	1 023 214	10 806
1976-77	17.8	29.0	1 550	1 345 666	12 083
1977-78	19.3	28.3	1 716	1 447 225	12 528
1978-79	19.7	29.7	1 746	1 690 968	13 861
1979-80	22.4	30.3	1 494	1 937 251	14 611
1980-81	23.5	29.9	1 456	2 704 026	15 528
1981-82	23.5	35.4	1 573	3 323 540	15 889
1982-83	25.3	33.3	1 395	2 988 393	15 472
1983-84	27.4	31.7	1 354	3 150 889	16 306
1984-85	28.8	36.9	1 216	2 818 281	18 500
1985-86	29.4	35.1	1 056	3 412 405	18 611
1986-87	30.7	41.0	810	3 277 838	19 278
1987-88	31.5	42.9	655	3 549 510	18 861
1988-89	33.6	48.2	863	3 645 992	20 472
1989-90	35.3	46.3	1 170	4 092 855	20 694
1990-91	36.0	49.4	1 193	3 079 797	19 889
1991-92	37.0	50.8	842	3 351 469	21 083
1992-93	38.4	48.4	851	3 463 185	20 889
1993-94	39.1	49.3	854	3 714 545	21 000
1994-95	40.2	51.3	962	4 250 272	22 056
1995-96	43.0	54.2	1 003	3 846 572	22 472
1996-97	43.6	58.6	795	3 760 247	22 583
1997-98	45.8	67.1	737	4 237 577	25 361
1998-99	46.8	70.9	693	4 989 119	27 167
1999-00	46.0	71.4	649	5 250 635	27 722
2000-01	50.2	69.9	561	6 136 743	28 528
2001-02	51.6	70.4	561	6 276 387	28 944
2002-03	53.4	65.3	818	5 710 952	28 488
2003-04	56.6	67.2	1 011	6 136 583	31 694
2004-05	58.3	66.9	1 054	6 355 429	30 150
2005-06	59.3	68.6	1 129	6 067 778	30 475
2006-07	60.3	68.2	1 083	8 503 859	31 174
2007-08	58.7	68.6	1 534	9 333 290	30 363
2008-09	61.6	71.1	1 098	11 516 940	32 025
2009-10	55.5	70.5	977	11 530 913	31 629
2010-11	52.1	69.2	954	11 906 110	30 146
2011-12	50.9	70.4	1 041	13 065 303	29 738
2012-13	49.7	61.5	1 090	13 138 821	27 509
2013-14	46.2	59.8	1 418	13 477 643	26 707
2014-15	47.2	64.3	1 759	14 048 866	27 012
2015-16	50.1	61.8	1 594	14 528 508	28 143

Source: BITRE estimates based on Industry (2017a).

Table E 2.3a Energy inputs—Australian gas production and distribution, input fuel—energy units

Financial year	Black coal	LPG and other petroleum products	Natural gas	Town gas	Electricity
			petajoules		
1974–75	1.8	18.4	8.1	1.9	0.1
1975–76	1.5	17.1	8.1	1.9	0.1
1976–77	1.6	10.8	16.6	2.1	0.1
1977–78	1.1	4.3	19.3	2.1	0.1
1978–79	0.8	4.2	18.9	1.9	0.1
1979–80	0.6	4.2	20.3	1.9	0.1
1980–81	0.7	4.1	19.3	2.0	0.1
1981–82	0.3	4.0	21.0	1.9	0.1
1982–83	0.2	3.3	22.0	1.7	0.1
1983–84	0.1	3.2	22.3	1.5	0.1
1984–85	0.0	2.0	23.0	1.3	0.1
1985–86	0.0	1.8	21.8	1.0	0.1
1986–87	0.0	1.6	21.8	0.8	0.1
1987–88	0.0	1.4	19.4	0.7	0.1
1988–89	0.0	1.4	18.4	0.4	0.1
1989–90	0.0	1.5	17.9	0.4	0.1
1990–91	0.0	1.3	15.8	0.2	0.1
1991–92	0.0	1.3	15.7	0.2	0.0
1992–93	0.0	1.3	14.7	0.2	0.0
1993–94	0.0	0.9	14.0	0.2	0.0
1994–95	0.0	1.0	13.7	0.2	0.0
1995–96	0.0	1.0	12.9	0.2	0.0
1996–97	0.0	1.0	13.0	0.1	0.0
1997–98	0.0	1.0	13.6	0.0	0.0
1998–99	0.0	1.0	14.2	0.0	0.0
1999–00	0.0	1.1	14.7	0.0	0.1
2000–01	0.0	1.0	15.3	0.0	0.1
2001–02	0.0	1.0	16.8	0.0	0.1
2002–03	0.0	0.9	15.5	0.0	0.1
2003–04	0.0	1.1	17.6	0.0	0.1
2004–05	0.0	1.4	13.1	0.0	0.0
2005–06	0.0	1.4	13.2	0.0	0.0
2006–07	0.0	0.9	10.3	0.0	0.0
2007–08	0.0	0.7	10.4	0.0	0.0
2008–09	0.0	0.5	10.1	0.0	0.0
2009–10	0.0	0.4	10.2	0.0	0.0
2010–11	0.0	0.3	10.8	0.0	0.0
2011–12	0.0	0.2	10.7	0.0	0.0
2012–13	0.0	0.0	12.5	0.0	0.1
2013–14	0.0	0.0	11.0	0.0	0.2
2014–15	0.0	0.0	9.9	0.0	0.1
2015–16	0.0	0.0	10.0	0.0	0.2

Source: Industry (2017b).

Table E 2.3b Australian natural gas production and distribution, input fuel —physical units

Financial year	Black coal	LPG and other petroleum products	Natural gas	Town gas	Electricity
	million tonnes	*megalitres*	*megalitres*	*megalitres*	*gigawatt hours*
1974–75	0.1	543	205 658	48 241	28
1975–76	0.1	517	205 658	48 241	28
1976–77	0.1	333	421 473	53 319	28
1977–78	0.0	144	490 025	53 319	28
1978–79	0.0	141	479 869	48 241	28
1979–80	0.0	143	515 415	48 241	28
1980–81	0.0	138	490 025	50 780	28
1981–82	0.0	135	533 188	48 241	28
1982–83	0.0	111	558 578	43 163	28
1983–84	0.0	110	566 195	38 085	28
1984–85	0.0	75	583 968	33 007	28
1985–86	0.0	68	553 500	25 390	28
1986–87	0.0	60	553 500	20 312	28
1987–88	0.0	53	492 564	17 773	28
1988–89	0.0	53	467 174	10 156	28
1989–90	0.0	57	454 480	10 156	28
1990–91	0.0	49	401 161	5 078	28
1991–92	0.0	49	398 622	5 078	0
1992–93	0.0	49	373 232	5 078	0
1993–94	0.0	34	355 459	5 078	0
1994–95	0.0	38	347 842	5 078	0
1995–96	0.0	38	327 530	5 078	0
1996–97	0.0	38	330 069	2 539	0
1997–98	0.0	38	345 303	0	0
1998–99	0.0	38	360 537	0	0
1999–00	0.0	42	373 232	0	28
2000–01	0.0	38	388 466	0	28
2001–02	0.0	38	426 551	0	28
2002–03	0.0	34	392 579	0	22
2003–04	0.0	42	446 710	0	22
2004–05	0.0	51	331 770	0	3
2005–06	0.0	54	335 502	0	3
2006–07	0.0	36	261 364	0	6
2007–08	0.0	27	263 268	0	3
2008–09	0.0	20	256 286	432	3
2009–10	0.0	15	257 962	330	3
2010–11	0.0	11	263 776	229	3
2011–12	0.0	8	264 131	178	3
2012–13	0.0	1	222 035	0	32
2013–14	0.0	1	209 238	0	50
2014–15	0.0	0	189 094	0	41
2015–16	0.0	0	190 123	0	60

Source: BITRE estimates based on Industry (2017b).

CHAPTER 3
Energy production and usage

Table E 3.1a Energy production and trade—Australian energy production (primary fuels), by fuel type—New South Wales

Financial year	Black coal	Brown coal	Bagasse and wood[m]	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1977–78	40 592	0	1 285	0	0	0	6 231	0.00	0	0	0
1978–79	40 995	0	1 309	0	0	0	7 169	0.10	0	0	0
1979–80	39 970	0	1 341	0	0	0	4 786	0.10	0	0	0
1980–81	47 923	0	1 359	0	0	0	5 586	0.20	0	0	0
1981–82	50 077	0	1 376	0	0	0	5 455	0.20	0	0	0
1982–83	56 669	0	1 405	0	0	0	4 029	0.30	0	0	0
1983–84	55 014	0	1 507	0	0	0	4 161	0.40	0	0	0
1984–85	57 496	0	1 552	0	0	0	5 288	0.50	0	0	0
1985–86	63 159	0	1 590	0	0	0	5 310	0.60	0	0	0
1986–87	72 343	0	1 624	0	0	0	4 487	0.60	0	0	0
1987–88	62 403	0	1 657	0	0	0	4 463	0.60	0	0	0
1988–89	66 605	0	1 688	0	0	0	4 568	0.60	0	0	0
1989–90	76 479	0	1 754	0	0	0	4 741	0.60	0	0	0
1990–91	78 491	0	1 805	0	0	0	6 237	0.60	0	0	0
1991–92	82 339	0	1 888	0	0	0	5 298	0.60	0	0	0
1992–93	82 745	0	1 950	0	0	0	6 642	0.60	0	0	0
1993–94	82 779	0	1 970	0	0	0	5 770	0.60	0	0	0
1994–95	87 410	0	1 992	0	0	0	5 728	0.60	0	0	0
1995–96	90 856	0	1 975	0	0	0	5 058	0.60	0	0	0
1996–97	98 287	0	1 983	0	50	0	5 279	0.60	0	0	0
1997–98	107 708	0	2 006	0	112	0	4 056	0.60	0	0	0
1998–99	103 421	0	2 040	0	190	0	4 805	0.70	0	0	0
1999–00	105 193	0	2 027	0	216	0	5 030	0.70	0	0	0
2000–01	110 240	0	1 969	0	222	0	5 157	0.60	0	0	0
2001–02	114 329	0	1 574	0	230	0	4 274	0.70	0	0	0
2002–03	111 533	0	2 572	0	211	0	4 868	0.70	0	0	0
2003–04	114 239	0	2 513	0	213	0	4 811	0.60	0	0	0
2004–05	119 835	0	2 457	0	210	0	4 434	0.60	0	0	0
2005–06	124 611	0	2 436	0	260	0	5 621	0.60	0	0	0
2006–07	130 885	0	2 505	0	285	0	4 639	1.50	0	0	0
2007–08	134 978	0	2 460	0	140	0	2 642	1.70	0	0	0
2008–09	137 798	0	2 643	0	125	0	3 174	2.52	0	41	36
2009–10	147 299	0	2 580	0	169	0	3 821	3.15	0	433	119
2010–11	156 951	0	2 642	0	148	0	5 267	3.45	0	530	526
2011–12	167 171	0	2 605	0	148	0	3 793	3.59	0	698	658
2012–13	185 553	0	2 273	0	140	0	5 652	3.73	0	833	858
2013–14	196 635	0	2 505	0	128	0	4 213	3.74	0	899	976
2014–15	196 413	0	2 498	0	113	0	3 114	4.01	nr	1 376	1 271
2015–16	191 331	0	2 913	0	154	0	5 191	4.01	nr	1 899	1 861

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

[m] Bagasse production figures are not available before 2002–03.

Note: Data are not readily available for missing years.
ACT figures are included in the NSW total.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1b Energy production and trade—Australian energy production (primary fuels), by fuel type—Victoria

Financial year	Black coal	Brown coal	Bagasse and wood	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	0	27 542	1 874	20 931	2 414	64	991	0.00	0	0	0
1975–76	0	29 212	1 827	21 795	2 793	73	810	0.00	0	0	0
1976–77	0	30 994	1 739	22 647	3 171	103	538	0.00	0	0	0
1977–78	0	30 473	1 764	23 459	3 366	129	515	0.00	0	0	0
1978–79	0	32 101	1 786	23 068	3 810	144	557	0.00	0	0	0
1979–80	0	32 895	1 793	22 080	4 347	147	584	0.00	0	0	0
1980–81	0	32 103	1 853	21 421	5 264	139	670	0.00	0	0	0
1981–82	0	37 567	1 921	20 994	5 919	150	737	0.00	0	0	0
1982–83	0	34 708	1 979	20 187	5 631	168	929	0.00	0	0	0
1983–84	0	33 257	1 885	24 051	5 957	175	532	0.10	0	0	0
1984–85	0	38 380	1 822	26 457	5 444	172	525	0.10	0	0	0
1985–86	0	36 075	1 856	25 766	5 643	159	697	0.10	0	0	0
1986–87	0	41 804	1 871	24 447	5 422	154	706	0.10	0	0	0
1987–88	0	43 399	1 834	22 959	5 376	153	945	0.10	0	0	0
1988–89	0	48 289	1 870	18 698	5 645	153	688	0.10	0	0	0
1989–90	0	45 989	1 953	18 678	6 393	158	803	0.10	0	0	0
1990–91	0	49 386	1 960	17 483	5 679	146	765	0.10	0	0	0
1991–92	0	50 723	1 981	16 873	5 899	149	734	0.10	0	0	0
1992–93	0	47 648	2 031	17 806	6 053	162	713	0.10	0	0	0
1993–94	0	48 752	2 106	16 605	5 793	162	1 117	0.10	0	0	0
1994–95	0	50 751	2 110	14 390	6 415	181	1 042	0.20	0	0	0
1995–96	0	53 712	2 141	12 251	6 520	165	642	0.20	0	0	0
1996–97	0	58 156	2 154	11 927	5 924	156	1 024	0.20	0	0	0
1997–98	0	65 274	2 088	13 564	5 975	176	1 152	0.20	0	0	0
1998–99	0	66 648	2 067	9 732	5 655	121	748	0.20	0	0	0
1999–00	0	67 363	2 049	11 639	5 860	140	512	0.20	0	0	0
2000–01	0	64 958	2 003	9 409	6 359	332	625	0.20	0	0	0
2001–02	0	66 661	1 995	9 085	6 533	269	761	0.20	0	0	0
2002–03	0	66 809	1 892	7 155	7 051	163	1 064	0.20	0	0	0
2003–04	0	66 343	1 850	6 555	7 827	172	854	0.20	0	0	0
2004–05	0	67 152	1 805	4 939	8 165	182	817	0.20	0	0	0
2005–06	0	67 737	1 734	4 277	8 665	187	465	0.20	0	0	0
2006–07	0	65 613	1 690	4 420	9 632	190	590	0.40	0	0	0
2007–08	0	66 033	1 638	4 042	10 984	195	1 583	0.60	0	0	0
2008–09	0	68 252	1 133	4 420	10 667	139	558	1.05	0	573	24
2009–10	0	68 751	1 088	4 648	9 564	173	844	1.68	0	1 406	66
2010–11	0	66 733	1 062	3 971	13 589	151	1 119	1.97	0	1 434	206
2011–12	0	69 124	1 082	3 184	12 813	160	1 047	2.17	0	1 416	379
2012–13	0	59 854	1 600	3 008	13 115	163	940	2.36	0	2 005	580
2013–14	0	58 606	1 609	3 047	12 846	187	1 103	2.37	0	2 772	679
2014–15	0	62 895	1 635	2 747	11 418	159	1 171	2.86	nr	3 068	884
2015–16	0	60 639	1 610	2 418	12 583	0	1 208	2.86	nr	3 342	1 068

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

Note: Data are not readily available for missing years.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1c Energy production and trade—Australian energy production (primary fuels), by fuel type—Queensland

Financial year	Black coal	Brown coal	Bagasse and wood[m]	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	23 902	0	572	73	258	0	694	0.00	0	0	0
1975–76	23 921	0	552	73	238	0	804	0.00	120	0	0
1976–77	25 671	0	526	65	237	0	814	0.00	486	0	0
1977–78	24 954	0	533	62	277	0	598	0.00	493	0	0
1978–79	26 939	0	543	71	280	0	710	0.10	680	0	0
1979–80	27 510	0	565	80	313	0	569	0.10	813	0	0
1980–81	32 849	0	517	81	338	0	727	0.20	836	0	0
1981–82	34 276	0	466	86	356	0	720	0.20	907	0	0
1982–83	35 812	0	409	103	434	0	428	0.30	354	0	0
1983–84	44 036	0	394	284	434	0	480	0.30	0	0	0
1984–85	54 288	0	397	1 241	479	0	1 118	0.30	0	0	0
1985–86	63 997	0	399	1 742	517	0	1 123	0.40	0	0	0
1986–87	68 820	0	386	1 852	524	0	979	0.40	0	0	0
1987–88	65 819	0	390	1 562	601	0	770	0.40	0	0	0
1988–89	74 118	0	406	1 562	541	0	874	0.40	0	0	0
1989–90	74 931	0	433	1 462	579	0	978	0.40	0	0	0
1990–91	78 363	0	443	1 306	1 102	0	1 027	0.40	0	0	0
1991–92	84 085	0	483	1 228	1 292	0	758	0.40	0	0	0
1992–93	85 301	0	498	1 121	1 635	0	685	0.40	0	0	0
1993–94	85 648	0	502	1 084	2 142	0	834	0.40	0	0	0
1994–95	94 381	0	508	1 091	2 657	0	756	0.40	0	0	0
1995–96	93 763	0	493	1 025	2 778	0	883	0.40	0	0	0
1996–97	99 437	0	498	948	2 644	0	897	0.40	0	0	0
1997–98	105 752	0	506	846	3 286	0	600	0.40	0	0	0
1998–99	112 634	0	510	848	3 775	0	896	0.40	0	0	0
1999–00	124 348	0	502	761	4 811	0	926	0.40	0	0	0
2000–01	138 286	0	505	713	4 770	0	868	0.40	0	0	0
2001–02	148 587	0	501	701	5 557	0	594	0.40	0	0	0
2002–03	153 602	0	9 749	628	5 670	0	354	0.40	0	0	0
2003–04	160 183	0	10 411	615	5 459	0	562	0.40	0	0	0
2004–05	173 712	0	11 152	636	5 826	0	528	0.40	0	0	0
2005–06	171 689	0	11 292	620	5 735	0	552	0.40	0	0	0
2006–07	184 083	0	11 416	943	5 993	0	880	1.00	0	0	0
2007–08	180 518	0	11 654	1 040	6 487	0	924	1.10	0	0	0
2008–09	190 450	0	6 761	998	6 484	0	820	1.25	0	27	51
2009–10	208 946	0	9 842	654	7 996	0	573	1.71	0	31	121
2010–11	179 834	0	8 701	518	7 719	0	966	2.05	0	27	401
2011–12	188 247	0	8 832	552	7 656	0	723	2.26	0	28	760
2012–13	202 688	0	10 170	564	7 966	0	684	2.40	0	31	1 310
2013–14	224 886	0	9 514	560	8 974	0	821	2.41	0	34	1 465
2014–15	244 246	0	10 797	551	12 232	0	649	2.66	nr	33	1 794
2015–16	240 625	0	10 567	518	26 442	0	492	2.67	nr	28	2 063

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

[m] Bagasse production figures are not available before 2002–03.

Note: Data are not readily available for missing years.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1d Energy production and trade—Australian energy production (primary fuels), by fuel type—Western Australia

Financial year	Black coal	Brown coal	Bagasse and wood	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	1 877	0	701	2 095	831	0	13	0.10	0	0	0
1975–76	2 143	0	685	1 962	843	0	10	0.10	0	0	0
1976–77	2 376	0	628	1 843	858	0	1	0.20	0	0	0
1977–78	2 424	0	603	1 802	819	0	1	0.30	0	0	0
1978–79	2 407	0	610	1 708	842	0	0	0.30	0	0	0
1979–80	3 029	0	621	1 507	867	0	0	0.50	0	0	0
1980–81	3 118	0	586	1 530	880	0	0	0.50	0	0	0
1981–82	3 415	0	530	1 241	836	0	1	0.60	0	0	0
1982–83	3 962	0	526	1 325	1 003	0	2	0.80	0	0	0
1983–84	3 925	0	522	1 260	1 012	0	0	0.90	0	0	0
1984–85	3 654	0	537	1 415	1 911	0	2	1.00	0	0	0
1985–86	3 750	0	503	1 812	2 928	0	3	1.10	0	0	0
1986–87	3 782	0	503	2 174	3 377	0	0	1.00	0	0	0
1987–88	3 686	0	541	3 100	3 887	0	0	1.00	0	0	0
1988–89	3 891	0	597	3 205	4 071	0	0	1.00	0	0	0
1989–90	4 125	0	633	5 809	7 446	0	1	1.00	0	0	0
1990–91	5 206	0	656	6 897	9 389	0	0	1.00	0	0	0
1991–92	5 477	0	622	7 350	10 439	0	1	1.00	0	0	0
1992–93	5 395	0	638	6 693	11 866	0	6	1.00	0	0	0
1993–94	5 153	0	682	7 639	13 579	0	4	1.10	0	0	0
1994–95	5 824	0	695	12 680	15 774	0	4	1.10	0	0	0
1995–96	5 971	0	702	14 322	16 407	0	2	1.10	0	0	0
1996–97	5 593	0	713	15 974	16 734	0	6	1.10	0	0	0
1997–98	5 798	0	715	17 561	18 140	0	200	1.10	0	0	0
1998–99	5 741	0	719	15 493	18 545	0	206	1.10	0	0	0
1999–00	6 628	0	723	17 925	18 885	0	207	1.10	0	0	0
2000–01	6 193	0	724	19 130	19 178	0	202	1.10	0	0	0
2001–02	6 595	0	770	21 107	19 444	0	212	1.10	0	0	0
2002–03	6 136	0	651	19 694	20 179	0	207	1.20	0	0	0
2003–04	5 981	0	639	17 374	20 561	0	206	1.10	0	0	0
2004–05	6 099	0	623	17 190	24 582	0	212	1.10	0	0	0
2005–06	6 681	0	609	16 041	25 887	0	163	1.00	0	0	0
2006–07	6 018	0	596	19 569	27 198	0	150	2.40	0	0	0
2007–08	6 231	0	585	18 302	27 499	0	51	2.50	0	0	0
2008–09	6 979	0	530	19 244	29 712	0	na	2.50	0	675	19
2009–10	6 712	0	460	19 206	32 847	0	na	2.75	0	664	58
2010–11	7 234	0	444	19 786	33 842	0	na	2.89	0	719	198
2011–12	6 986	0	439	17 190	31 908	0	0	3.01	0	1 279	331
2012–13	7 494	0	498	14 380	38 273	0	221	3.25	0	1 300	450
2013–14	6 370	0	504	13 104	39 471	0	205	3.29	0	1 579	520
2014–15	6 052	0	483	12 198	39 973	0	206	3.76	nr	1 643	646
2015–16	6 553	0	481	12 584	43 839	0	217	3.77	nr	1 476	789

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

Note: Data are not readily available for missing years.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1e Energy production and trade—Australian energy production (primary fuels), by fuel type—South Australia

Financial year	Black coal	Brown coal	Bagasse and wood	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	0	1 793	666	35	1 314	0	0	0.00	0	0	0
1975–76	0	1 819	655	42	1 502	0	0	0.00	0	0	0
1976–77	0	1 945	550	43	2 132	0	0	0.00	0	0	0
1977–78	0	1 780	533	46	2 591	0	0	0.00	0	0	0
1978–79	0	1 471	532	49	2 932	0	0	0.00	0	0	0
1979–80	0	1 717	562	44	3 567	0	0	0.00	0	0	0
1980–81	0	1 732	581	61	4 037	0	0	0.10	0	0	0
1981–82	0	1 436	568	65	4 537	0	0	0.10	0	0	0
1982–83	0	1 451	606	453	4 686	0	0	0.10	0	0	0
1983–84	0	1 328	555	1 233	4 907	0	0	0.10	0	0	0
1984–85	0	1 745	563	1 768	5 307	28	0	0.10	0	0	0
1985–86	0	2 167	606	2 227	5 373	37	0	0.20	0	0	0
1986–87	0	2 426	612	2 070	5 444	26	0	0.10	0	0	0
1987–88	0	2 519	620	2 062	5 348	36	0	0.10	0	0	0
1988–89	0	2 758	632	2 248	5 452	32	0	0.10	912	0	0
1989–90	0	2 943	656	2 138	5 512	26	0	0.10	1 005	0	0
1990–91	0	2 527	686	2 106	4 912	26	0	0.10	1 458	0	0
1991–92	0	2 887	711	1 965	4 905	27	0	0.20	1 349	0	0
1992–93	0	2 785	753	1 661	4 645	23	0	0.20	1 351	0	0
1993–94	0	2 692	875	1 497	4 539	17	0	0.20	1 271	0	0
1994–95	0	3 039	865	1 277	4 091	21	0	0.20	1 073	0	0
1995–96	0	2 447	863	1 117	3 744	38	0	0.20	1 635	0	0
1996–97	0	2 594	868	1 059	4 047	279	0	0.20	1 737	0	0
1997–98	0	2 697	838	1 041	3 674	390	0	0.20	1 626	0	0
1998–99	0	2 799	840	1 056	3 738	441	0	0.20	2 012	0	0
1999–00	0	2 874	830	872	3 234	472	0	0.20	4 073	0	0
2000–01	0	3 160	824	906	3 432	344	0	0.20	4 963	0	0
2001–02	0	3 365	551	868	3 257	269	0	0.20	4 017	0	0
2002–03	0	3 240	787	866	3 262	243	0	0.20	3 860	0	0
2003–04	0	3 208	742	684	2 388	207	0	0.20	4 902	0	0
2004–05	0	3 381	711	679	1 932	225	0	0.20	5 420	0	0
2005–06	0	3 479	734	758	1 660	270	0	0.20	4 790	0	0
2006–07	0	3 880	775	1 412	1 661	249	0	0.50	4 328	0	0
2007–08	0	3 874	754	1 604	1 548	259	0	0.50	4 850	0	0
2008–09	0	3 619	738	2 257	1 945	256	4	0.59	4 633	2 020	23
2009–10	0	3 796	675	1 745	1 563	166	4	0.72	2 847	2 029	51
2010–11	0	3 670	649	900	2 484	116	4	0.78	4 392	2 890	183
2011–12	0	2 867	602	1 024	2 342	171	4	0.81	4 366	3 127	398
2012–13	0	2 481	541	1 325	2 889	164	6	0.84	4 605	3 314	559
2013–14	0	1 943	565	1 937	2 957	174	6	0.84	4 435	4 150	679
2014–15	0	2 466	580	1 784	3 139	186	11	0.91	nr	4 292	804
2015–16	0	835	604	1 600	3 290	0	6	0.91	nr	4 398	897

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

Note: Data are not readily available for missing years.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1f Energy production and trade—Australian energy production (primary fuels), by fuel type—Tasmania

Financial year	Black coal	Brown coal	Bagasse and wood	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	101	0	395	0	0	0	5 918	0.00	0	0	0
1975–76	133	0	385	0	0	0	5 899	0.00	0	0	0
1976–77	163	0	378	0	0	0	6 789	0.00	0	0	0
1977–78	156	0	378	0	0	0	7 113	0.00	0	0	0
1978–79	195	0	381	0	0	0	7 599	0.10	0	0	0
1979–80	163	0	385	0	0	0	7 843	0.10	0	0	0
1980–81	208	0	405	0	0	0	7 844	0.10	0	0	0
1981–82	249	0	448	0	0	0	7 659	0.10	0	0	0
1982–83	329	0	451	0	0	0	7 526	0.10	0	0	0
1983–84	280	0	524	0	0	0	7 715	0.10	0	0	0
1984–85	321	0	554	0	0	0	8 033	0.10	0	0	0
1985–86	310	0	587	0	0	0	8 381	0.10	0	0	0
1986–87	394	0	621	0	0	0	8 378	0.10	0	0	0
1987–88	380	0	689	0	0	0	8 786	0.10	0	0	0
1988–89	407	0	750	0	0	0	8 900	0.10	0	0	0
1989–90	356	0	763	0	0	0	8 357	0.10	0	0	0
1990–91	350	0	783	0	0	0	8 076	0.10	0	0	0
1991–92	342	0	733	0	0	0	8 977	0.10	0	0	0
1992–93	301	0	758	0	0	0	8 907	0.10	0	0	0
1993–94	378	0	723	0	0	0	8 924	0.10	0	0	0
1994–95	401	0	736	0	0	0	8 709	0.10	0	0	0
1995–96	400	0	751	0	0	0	9 146	0.10	0	0	0
1996–97	392	0	761	0	0	0	9 646	0.10	0	0	0
1997–98	414	0	764	0	0	0	9 725	0.10	0	0	0
1998–99	419	0	732	0	0	0	9 908	0.10	0	0	0
1999–00	387	0	724	0	0	0	10 045	0.10	0	0	0
2000–01	339	0	717	0	0	0	10 081	0.10	0	0	0
2001–02	360	0	784	0	0	0	10 213	0.10	0	0	0
2002–03	343	0	614	0	0	0	9 997	0.00	0	0	0
2003–04	350	0	604	0	0	0	9 898	0.00	0	0	0
2004–05	388	0	588	0	0	0	9 620	0.00	0	0	0
2005–06	420	0	551	0	0	0	9 236	0.00	0	0	0
2006–07	406	0	551	0	0	0	8 258	0.10	0	0	0
2007–08	437	0	544	0	0	0	6 854	0.10	0	0	0
2008–09	384	0	516	0	0	0	7 314	0.14	0	487	2
2009–10	372	0	479	0	0	0	8 307	0.21	0	489	6
2010–11	381	0	409	0	0	0	9 452	0.23	0	484	12
2011–12	304	0	427	0	0	0	8 516	0.24	0	423	23
2012–13	360	0	441	0	0	0	10 766	0.26	0	478	53
2013–14	360	0	425	0	0	0	12 073	0.26	0	818	74
2014–15	360	0	404	0	0	0	8 294	0.30	nr	1 055	97
2015–16	360	0	400	0	0	0	8 204	0.30	nr	1 056	109

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

Note: Data are not readily available for missing years.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1g Energy production and trade—Australian energy production (primary fuels), by fuel type—Northern Territory

Financial year	Black coal	Brown coal	Bagasse and wood	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	0	0	19	0	0	0	0	0.00	0	0	0
1975–76	0	0	19	0	0	0	0	0.00	0	0	0
1976–77	0	0	19	0	0	0	0	0.00	0	0	0
1977–78	0	0	19	0	0	0	0	0.00	0	0	0
1978–79	0	0	19	0	0	0	0	0.00	0	0	0
1979–80	0	0	19	0	0	0	0	0.00	0	0	0
1980–81	0	0	19	0	0	0	0	0.00	0	0	0
1981–82	0	0	19	0	0	0	0	0.00	4 157	0	0
1982–83	0	0	19	0	0	0	0	0.00	4 231	0	0
1983–84	0	0	19	0	3	0	0	0.00	4 384	0	0
1984–85	0	0	20	75	26	0	0	0.00	4 327	0	0
1985–86	0	0	21	187	31	0	0	0.00	4 450	0	0
1986–87	0	0	21	935	127	0	0	0.00	4 505	0	0
1987–88	0	0	21	1 478	276	0	0	0.00	4 193	0	0
1988–89	0	0	21	2 542	259	0	0	0.00	3 595	0	0
1989–90	0	0	22	3 907	324	0	0	0.00	3 084	0	0
1990–91	0	0	23	4 164	341	0	0	0.00	2 909	0	0
1991–92	0	0	24	3 893	353	0	0	0.00	2 980	0	0
1992–93	0	0	25	3 425	354	0	0	0.00	1 335	0	0
1993–94	0	0	26	2 120	351	0	0	0.00	1 462	0	0
1994–95	0	0	27	1 734	378	0	0	0.00	1 548	0	0
1995–96	0	0	27	1 545	441	0	0	0.00	3 453	0	0
1996–97	0	0	25	1 140	462	0	0	0.00	4 238	0	0
1997–98	0	0	25	936	479	0	0	0.00	4 162	0	0
1998–99	0	0	25	770	494	0	0	0.00	4 375	0	0
1999–00	0	0	25	6 268	535	0	0	0.00	4 144	0	0
2000–01	0	0	10	9 682	529	0	0	0.00	4 586	0	0
2001–02	0	0	6	6 059	540	0	0	0.00	3 806	0	0
2002–03	0	0	6	4 977	452	0	0	0.10	5 312	0	0
2003–04	0	0	5	2 648	424	0	0	0.10	4 667	0	0
2004–05	0	0	5	1 928	479	0	0	0.10	5 544	0	0
2005–06	0	0	5	1 456	494	0	0	0.10	5 184	0	0
2006–07	0	0	5	1 525	532	0	0	0.20	5 261	0	0
2007–08	0	0	5	882	541	0	0	0.20	5 273	0	0
2008–09	0	0	4	866	537	0	0	0.19	5 678	0	1
2009–10	0	0	4	1 078	512	0	0	0.28	4 262	0	4
2010–11	0	0	4	597	335	0	0	0.29	2 677	0	6
2011–12	0	0	4	2 119	316	0	0	0.30	3 284	0	10
2012–13	0	0	4	2 007	694	0	0	0.32	4 313	0	17
2013–14	0	0	4	1 484	837	0	0	0.32	1 113	0	24
2014–15	0	0	4	1 767	963	0	0	0.35	nr	0	35
2015–16	0	0	3	1 276	925	0	0	0.35	nr	0	51

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

Note: Data are not readily available for missing years.

Does not include production in the Joint Petroluem Development Area.

Source: Industry (2017b), BITRE (2016c).

Table E 3.1h Energy production and trade—Australian energy production (primary fuels), by fuel type—Australia

Financial year	Black coal	Brown coal	Bagasse and wood	Crude oil, NGL[k] and naturally occurring LPG	Natural gas[k]	Ethane	Hydro-electricity	Solar hotwater	Uranium[l]	Wind	Solar PV
	kilo-tonnes	*kilo-tonnes*	*kilo-tonnes*	*mega-litres*	*giga-litres*	*giga-litres*	*gigawatt hours*	*petajoules*	*tonnes*	*gigawatt hours*	*gigawatt hours*
1974–75	62 501	29 335	11 887	23 134	4 817	64	15 105	0.10	0	0	0
1975–76	61 328	31 031	12 085	23 827	5 376	73	15 509	0.20	484	0	0
1976–77	68 417	32 939	12 314	24 598	6 398	103	13 670	0.30	480	0	0
1977–78	69 906	32 253	12 255	25 369	7 053	129	14 458	0.40	696	0	0
1978–79	72 007	33 572	11 448	24 896	7 864	144	16 035	0.60	951	0	0
1979–80	72 389	34 612	11 604	23 711	9 094	147	13 782	0.80	1 837	0	0
1980–81	85 830	33 835	12 492	23 093	10 519	139	14 827	1.00	3 944	0	0
1981–82	89 453	39 003	13 083	22 386	11 648	150	14 572	1.30	5 968	0	0
1982–83	98 223	36 159	12 921	22 069	11 754	168	12 914	1.60	4 334	0	0
1983–84	104 583	34 585	12 629	26 828	12 312	175	12 888	1.80	5 836	0	0
1984–85	117 504	40 125	13 070	30 956	13 167	200	14 966	2.10	4 327	0	0
1985–86	133 383	38 242	13 036	31 734	14 495	195	15 514	2.50	4 450	0	0
1986–87	147 765	44 230	13 316	31 504	14 895	180	14 550	2.40	4 505	0	0
1987–88	134 807	45 918	13 480	31 264	15 483	196	14 964	2.40	4 193	0	0
1988–89	147 778	51 047	14 409	28 255	15 964	189	15 030	2.40	4 507	0	0
1989–90	158 834	48 932	14 744	31 994	20 077	191	14 880	2.40	4 089	0	0
1990–91	164 937	51 913	14 539	31 955	21 049	180	16 103	2.40	4 367	0	0
1991–92	175 130	53 610	13 088	31 309	23 297	182	15 768	2.50	4 329	0	11
1992–93	176 527	50 433	14 811	30 705	24 417	194	16 953	2.50	2 686	0	13
1993–94	176 650	51 444	15 687	28 945	26 567	188	16 649	2.50	2 733	4	16
1994–95	191 055	53 790	16 488	31 190	29 264	203	16 239	2.50	2 622	7	19
1995–96	193 437	56 159	17 572	30 251	29 890	203	15 731	2.60	5 088	7	23
1996–97	206 303	60 750	18 452	31 049	29 861	435	16 852	2.60	5 975	7	28
1997–98	222 369	67 971	18 718	33 961	31 666	566	15 733	2.60	5 788	8	34
1998–99	225 014	69 447	18 346	27 898	32 397	562	16 563	2.60	6 387	28	38
1999–00	239 430	70 237	17 891	37 465	33 541	612	16 720	2.60	8 217	58	44
2000–01	258 218	68 118	17 013	39 839	34 490	676	16 933	2.60	9 549	210	50
2001–02	273 236	70 026	15 420	37 820	35 039	538	16 054	2.70	7 823	364	58
2002–03	271 614	70 049	16 410	33 320	36 826	406	16 490	2.80	9 172	703	58
2003–04	280 753	69 551	16 903	27 876	36 872	380	16 331	2.60	9 569	705	68
2004–05	300 034	70 533	17 480	25 372	41 194	407	15 612	2.60	10 964	885	78
2005–06	303 402	71 216	17 464	23 152	42 701	456	16 029	2.40	9 974	1 713	90
2006–07	321 391	69 493	17 636	27 868	45 301	439	14 517	6.00	9 589	2 611	105
2007–08	322 164	69 907	17 640	25 870	47 199	453	12 057	6.70	10 123	3 093	123
2008–09	335 611	71 871	12 326	27 785	49 470	395	11 869	8.24	10 311	3 824	156
2009–10	363 329	72 547	15 128	27 330	52 651	339	13 549	10.49	7 109	5 052	425
2010–11	344 400	70 403	13 912	25 772	58 118	267	16 807	11.66	7 069	6 085	1 531
2011–12	362 709	71 991	13 990	24 068	55 184	331	14 083	12.38	7 650	6 970	2 559
2012–13	396 095	62 335	15 527	21 284	63 077	327	18 270	13.14	8 918	7 960	3 826
2013–14	428 251	60 549	15 126	20 131	65 213	361	18 421	13.23	5 548	10 252	4 416
2014–15	447 071	65 361	16 401	19 046	67 838	345	13 445	14.84	nr	11 467	5 531
2015–16	438 869	61 473	16 577	18 395	87 232	0	15 318	14.88	nr	12 199	6 838

[k] NGL represents natural gas liquid hydrocarbons other than methane, while LNG represents liquid natural gas (principally methane).

[l] Australian energy production of uranium is measured in terms of tonnes of uranium metal equivalent, rather than ore extracted.

Note: Data are not readily available for missing years.

Source: Industry (2017b), BITRE (2016c).

Table E 3.2 Energy production and trade—Australian energy imports, by fuel type

Financial year	Natural gas	Petroleum products						
		Crude oil and other refinery fuel	LPG	Automotive gasoline	Aviation turbine fuel	Automotive diesel oil	Fuel oil	Bitumen, lubricants and greases
	Mcm	*megalitres*	*megalitres*	*megalitres*	*megalitres*	*megalitres*	*megalitres*	*megalitres*
1974–75	0	10 171	0	407	96	479	2 574	69
1975–76	0	9 702	0	876	101	377	2 123	59
1976–77	0	10 116	0	922	129	492	2 234	28
1977–78	0	11 214	0	758	100	529	2 001	57
1978–79	0	10 407	0	708	193	411	2 482	61
1979–80	0	11 263	0	488	178	620	2 649	77
1980–81	0	11 450	1	419	150	637	2 070	71
1981–82	0	12 460	2	399	106	523	1 529	61
1982–83	0	11 780	2	553	107	468	1 180	50
1983–84	0	8 553	6	338	63	322	1 419	30
1984–85	0	7 294	4	590	95	679	1 102	54
1985–86	0	6 186	1	505	165	715	1 093	53
1986–87	0	7 724	38	1 276	219	1 016	1 180	57
1987–88	0	9 577	42	908	171	708	1 010	54
1988–89	0	12 058	39	1 565	197	847	309	52
1989–90	0	11 603	85	1 703	234	1 028	0	122
1990–91	0	13 389	36	717	104	462	0	30
1991–92	0	15 332	49	357	103	390	413	38
1992–93	0	19 421	115	440	36	702	1 124	30
1993–94	0	20 296	164	447	189	764	944	56
1994–95	0	20 639	266	745	231	767	948	64
1995–96	0	23 703	415	447	302	1 110	720	34
1996–97	0	24 768	588	1 074	306	952	809	36
1997–98	0	25 017	511	483	111	770	795	53
1998–99	0	29 729	496	890	140	1 435	596	71
1999–00	0	26 936	519	1 065	171	1 400	799	137
2000–01	0	26 489	633	1 189	387	1 129	814	102
2001–02	0	27 308	588	1 436	225	1 280	557	93
2002–03	0	27 959	299	1 673	429	1 627	611	313
2003–04	0	23 499	785	3 242	681	3 374	1 285	461
2004–05	0	26 056	540	3 131	983	3 944	1 281	716
2005–06	1 295	24 418	599	3 687	817	6 122	1 418	741
2006–07	5 805	25 345	748	2 912	1 045	5 439	1 363	715
2007–08	5 483	26 223	965	3 533	1 846	7 470	1 625	812
2008–09	6 462	24 302	1 002	4 087	2 026	8 246	1 682	752
2009–10	5 643	27 284	1 067	3 884	2 168	8 668	1 797	707
2010–11	6 526	32 225	888	2 944	2 086	8 820	1 559	820
2011–12	5 811	29 495	1 023	3 672	2 252	11 225	1 623	1 047
2012–13	6 517	29 966	920	3 707	3 201	12 504	1 677	1 196
2013–14	6 938	28 310	730	3 598	3 482	13 603	1 338	1 334
2014–15	6 373	24 722	959	5 534	4 299	15 178	262	1 167

Source: Industry (2017b).

Table E 3.3a Energy production and trade—Australian energy exports, by fuel type—petroleum exports

Financial year	Crude oil and other refinery feedstock	LPG	Automotive gasoline	Aviation gasoline	Aviation turbine fuel	Automotive diesel oil	Fuel oil	Bitumen, lubricants and greases
				megalitres				
1974–75		2 000	249	24	356	336	540	
1975–76		1 950	155	14	278	387	823	
1976–77		2 253	211	21	271	263	713	
1977–78	221	2 864	286	23	326	522	396	278
1978–79	371	3 031	339	20	314	735	253	259
1979–80	127	2 764	312	8	210	638	352	251
1980–81	86	2 569	268	18	277	705	323	173
1981–82	44	2 622	340	43	268	669	307	227
1982–83	61	2 334	513	57	267	793	466	222
1983–84	1 056	2 851	592	72	382	1 035	505	247
1984–85	5 819	2 620	342	83	375	576	517	245
1985–86	5 051	2 977	397	70	329	578	723	181
1986–87	5 702	2 675	251	68	303	444	765	230
1987–88	6 453	2 402	360	81	398	682	754	224
1988–89	4 789	2 178	288	63	514	941	639	236
1989–90	7 202	1 983	212	83	541	756	443	253
1990–91	8 830	1 508	314	63	321	882	878	299
1991–92	8 967	1 568	700	158	248	830	1 043	419
1992–93	10 098	1 483	678	69	390	657	1 053	402
1993–94	9 538	1 290	891	59	400	809	713	400
1994–95	11 445	1 189	648	42	284	673	853	448
1995–96	10 899	1 469	1 127	69	552	1 201	629	351
1996–97	12 401	2 421	1 293	43	708	1 363	928	363
1997–98	14 785	2 824	1 521	56	658	1 305	633	402
1998–99	14 291	2 486	1 533	74	547	1 231	253	320
1999–00	20 877	2 857	1 371	79	579	1 070	585	259
2000–01	24 044	2 785	1 288	28	755	1 276	724	281
2001–02	23 936	3 211	1 186	71	549	948	293	171
2002–03	20 950	3 194	1 058	52	645	1 052	95	163
2003–04	17 526	2 916	774	36	528	872	81	122
2004–05	15 731	2 844	774	38	240	367	201	156
2005–06	13 026	2 800	714	85	127	419	490	179
2006–07	15 965	2 824	771	81	120	288	209	207
2007–08	15 975	2 589	628	96	149	462	257	161
2008–09	16 588	2 500	244	56	106	357	188	164
2009–10	18 064	2 776	222	32	72	187	109	189
2010–11	19 638	2 471	175	20	12	117	194	200
2011–12	17 438	2 115	175	25	2	130	485	288
2012–13	15 761	2 386	100	22	13	91	220	429
2013–14	14 817	2 459	131	20	2	61	47	337
2014–15	15 152	2 112	118	10	20	76	108	299
2015–16	13 891	1 989	72	4	2	52	181	268

Source: Industry (2017b).

Table E 3.3b Energy production and trade—Australian energy exports, by fuel type—non-petroleum exports

Financial year	Black coal		Uranium	Briquettes	Coke[n]	LNG
	Coking	Steaming				
	kilotonnes	*kilotonnes*	*tonnes*	*kilotonnes*	*kilotonnes*	*kilotonnes*
1974–75	28 666	3 756	0	1	421	
1975–76	27 431	2 994	0	2	182	
1976–77	32 219	3 153	750	44	189	
1977–78	33 634	4 277	1 452	42	149	
1978–79	33 257	5 021	1 317	25	147	
1979–80	36 144	7 017	1 210	25	122	
1980–81	36 404	10 844	1 625	39	21	
1981–82	36 539	9 582	5 460	46	9	
1982–83	38 866	15 779	3 233	47	5	
1983–84	44 509	19 819	3 259	54	14	
1984–85	50 800	35 300	3 441	47	11	
1985–86	51 800	38 500	3 210	62	217	
1986–87	54 400	43 300	4 364	53	108	
1987–88	57 100	45 000	4 552	75	816	
1988–89	57 208	40 448	5 061	24	986	
1989–90	60 605	43 975	4 812	31	574	2 010
1990–91	61 904	51 468	6 129	44	897	3 400
1991–92	65 077	58 225	4 729	82	724	4 660
1992–93	69 533	59 651	2 289	61	599	4 984
1993–94	69 889	59 166	3 992	100	529	6 032
1994–95	73 335	62 901	4 069	105	295	7 018
1995–96	77 412	61 138	5 286	98	421	7 482
1996–97	78 688	67 064	5 701	95	329	7 486
1997–98	84 073	78 538	6 415	28	178	7 650
1998–99	85 260	84 153	5 989		67	7 819
1999–00	96 808	78 970	8 025		24	7 923
2000–01	105 527	87 975	9 722		19	7 530
2001–02	105 833	92 040	7 367		81	7 600
2002–03	107 794	99 950	9 593		262	7 826
2003–04	111 732	106 694	9 099			7 914
2004–05	124 915	106 396	11 249			10 589
2005–06	120 479	110 821	10 253			12 029
2006–07	131 965	111 624	9 518			14 332
2007–08	136 921	115 069	10 140			13 678
2008–09	125 238	136 362	10 114			15 410
2009–10	157 265	134 985	7 555			17 866
2010–11	140 455	143 320	6 950			19 957
2011–12	142 396	158 436	6 917		543	18 866
2012–13	154 193	181 659	8 391		1 039	23 503
2013–14	180 458	194 586	6 596		1 012	23 246
2014–15	187 664	204 527	5 515		684	25 047
2015–16	187 998	201 302	7 837		756	36 852

[n] Coke exports have been confidentialised since 2003-04, but were again made publically available 2011-12.

Source: Industry (2017b).

Table E 3.4 Electricity usage—Australian electricity consumption, by state/territory

Financial year	NSW	VIC	QLD	WA	SA	TAS	NT	Australia
				gigawatt hours				
1975–76	27 879	19 962	9 779	6 508	5 966	6 034	701	76 828
1976–77	30 309	21 023	10 615	6 986	6 520	6 873	729	83 055
1977–78	31 787	21 395	11 300	7 229	6 797	7 201	775	86 484
1978–79	34 201	22 820	11 884	7 492	6 934	7 787	831	91 950
1979–80	36 708	23 595	12 558	7 733	7 074	7 950	1 100	96 717
1980–81	38 845	25 396	13 501	7 885	7 458	8 096	1 175	102 356
1981–82	39 666	26 587	14 640	8 199	7 618	8 173	1 183	106 065
1982–83	38 475	26 457	16 125	8 365	7 879	8 006	1 235	106 542
1983–84	41 253	27 152	18 551	8 647	7 681	8 173	1 296	112 752
1984–85	44 712	28 080	20 626	9 711	8 144	8 320	1 368	120 960
1985–86	46 895	29 176	22 267	10 321	8 370	8 451	1 456	126 936
1986–87	48 900	31 123	23 344	10 881	8 426	8 463	1 494	132 631
1987–88	50 011	33 909	24 313	11 455	8 824	9 011	1 564	139 088
1988–89	51 741	37 435	25 677	12 848	9 254	9 135	1 705	147 796
1989–90	54 216	38 226	27 473	14 261	9 791	9 223	1 828	155 019
1990–91	54 140	38 476	28 423	14 809	9 851	9 219	1 899	156 818
1991–92	54 542	38 907	29 823	15 208	9 979	9 131	1 966	159 556
1992–93	56 167	39 642	30 992	15 624	10 210	9 054	1 961	163 652
1993–94	58 229	39 229	32 214	16 295	10 433	9 099	1 967	167 466
1994–95	59 725	40 229	33 999	17 362	10 876	8 877	2 095	173 162
1995–96	61 371	40 062	35 555	18 106	10 879	9 277	2 351	177 602
1996–97	63 101	41 145	36 967	18 291	11 193	9 783	2 463	182 944
1997–98	65 653	44 258	41 909	19 542	11 571	9 882	2 559	195 375
1998–99	67 487	46 782	43 318	21 407	12 386	10 027	2 585	203 991
1999–00	69 215	47 576	44 911	22 869	12 816	10 137	2 706	210 230
2000–01	71 690	52 153	50 692	23 135	13 676	10 412	2 883	224 641
2001–02	72 547	53 091	51 363	23 378	13 492	10 724	2 969	227 563
2002–03	73 522	49 323	51 777	20 487	13 546	10 963	2 362	221 980
2003–04	75 649	49 972	55 374	20 757	14 188	11 302	2 394	229 636
2004–05	74 318	50 643	54 351	20 935	13 958	11 778	2 388	228 370
2005–06	75 556	51 893	54 403	22 382	14 276	11 503	2 536	232 549
2006–07	78 760	53 669	56 795	23 414	14 950	12 180	3 082	242 849
2007–08	78 317	53 417	56 828	24 370	14 863	12 069	3 060	242 924
2008–09	78 342	53 277	59 253	27 821	15 347	11 841	2 892	248 773
2009–10	79 895	54 606	59 164	29 006	15 218	12 033	3 267	253 189
2010–11	80 690	51 696	58 563	31 829	15 860	12 601	3 120	254 357
2011–12	78 234	52 434	59 027	31 977	15 521	11 767	3 203	252 163
2012–13	74 606	51 051	60 857	33 613	15 952	11 932	3 436	251 447
2013–14	72 460	49 724	59 834	36 715	15 992	11 860	3 479	250 065
2014–15	73 029	49 412	61 820	37 782	15 557	11 794	2 997	252 390
2015–16	74 731	48 892	64 430	38 737	15 783	11 790	3 066	257 428

Note: ACT figures are included in the NSW total.
Source: Industry (2017b).

Table E 3.5a Electricity usage—Australian electricity consumption, by industry —New South Wales

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	1.10	3.00	31.90	13.20	12.30	1.50	28.90	91.90	943.00
1974–75	1.10	3.20	31.80	14.90	12.70	1.60	32.80	98.10	964.70
1975–76	1.10	3.20	31.80	14.80	13.40	1.60	34.50	100.40	934.00
1976–77	1.20	3.40	32.50	18.10	14.50	1.70	37.70	109.10	980.20
1977–78	1.20	3.50	33.80	19.20	15.60	1.80	39.40	114.40	1011.30
1978–79	1.30	3.60	35.00	22.00	17.00	1.70	42.50	123.10	1019.30
1979–80	1.50	3.80	38.00	24.70	18.80	1.90	43.50	132.20	1059.00
1980–81	1.60	4.20	40.60	24.90	20.40	2.10	46.20	139.80	1060.40
1981–82	1.70	4.30	40.20	25.30	20.70	2.30	48.50	142.80	1077.80
1982–83	1.90	4.40	37.10	24.40	20.50	2.30	48.10	138.50	1002.50
1983–84	2.00	4.40	45.00	25.50	20.90	2.30	48.60	148.50	1045.60
1984–85	2.20	4.70	52.70	27.80	21.90	2.50	49.20	161.00	1080.30
1985–86	2.20	5.50	57.50	25.40	23.70	2.70	51.80	168.80	1108.70
1986–87	2.30	5.70	60.40	26.40	25.20	2.80	53.40	176.00	1137.10
1987–88	2.50	5.50	62.70	25.10	27.00	2.90	54.30	180.00	1143.30
1988–89	2.60	5.90	64.80	27.30	28.60	3.00	54.10	186.30	1194.20
1989–90	2.20	6.80	67.10	27.40	30.60	2.90	57.70	195.20	1230.40
1990–91	2.40	6.80	67.10	24.50	32.40	2.90	58.40	194.90	1228.60
1991–92	2.50	6.90	68.40	24.70	32.60	2.90	58.10	196.40	1219.40
1992–93	2.60	7.00	71.30	24.90	32.90	2.80	60.40	202.20	1249.10
1993–94	2.50	7.10	77.90	25.40	33.30	2.90	60.10	209.60	1276.70
1994–95	2.70	7.50	78.00	26.80	35.10	2.90	61.60	215.00	1314.60
1995–96	2.80	8.00	77.30	27.10	39.20	3.10	63.00	220.90	1351.20
1996–97	2.60	7.90	80.20	26.90	40.30	3.20	65.50	227.20	1380.60
1997–98	2.90	8.40	83.50	28.90	43.20	3.30	65.90	236.40	1382.00
1998–99	2.80	8.70	85.90	28.90	45.80	3.50	66.80	242.90	1413.80
1999–00	2.70	8.70	87.60	29.70	46.70	3.60	69.40	249.10	1426.30
2000–01	2.60	11.30	85.50	32.20	45.90	3.50	71.20	252.20	1450.50
2001–02	2.30	11.50	85.00	31.40	47.80	3.40	72.40	253.80	1445.70
2002–03	3.98	11.02	76.23	34.48	57.93	5.09	75.95	264.68	1510.48
2003–04	3.55	12.81	75.93	36.87	59.30	5.39	78.48	272.34	1574.79
2004–05	3.07	12.47	73.80	36.67	59.19	5.15	77.21	267.54	1544.92
2005–06	3.16	12.50	74.40	38.64	60.43	5.39	77.48	272.00	1545.99
2006–07	3.18	13.42	79.66	39.34	63.60	5.62	78.71	283.53	1568.89
2007–08	3.08	13.54	78.53	38.46	63.06	5.86	79.41	281.94	1610.71
2008–09	2.21	13.53	78.23	37.74	64.28	4.32	81.72	282.03	1593.12
2009–10	2.37	13.85	78.96	37.46	66.14	4.49	84.35	287.62	1643.15
2010–11	2.30	13.91	80.33	35.71	66.88	4.76	86.59	290.48	1657.26
2011–12	2.39	14.91	76.99	32.73	65.91	4.55	84.16	281.64	1614.68
2012–13	2.44	16.19	65.97	27.02	68.26	5.55	83.17	268.58	1581.14
2013–14	2.25	16.58	64.32	27.50	67.39	5.53	77.29	260.86	1523.09
2014–15	2.32	16.49	64.09	24.05	71.95	5.63	78.38	262.90	1471.83
2015–16	1.77	16.36	65.30	29.45	71.63	5.75	78.76	269.03	1518.19

Note: Electricity does not include thermal electricity.
ACT figures are included in the NSW total.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.5b Electricity usage—Australian electricity consumption, by industry—Victoria

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.90	1.40	23.30	10.70	8.20	0.90	18.70	63.90	710.90
1974–75	1.00	1.30	23.80	11.20	8.90	0.90	21.00	68.10	731.00
1975–76	1.00	1.50	24.80	12.10	9.60	1.00	21.90	71.90	752.80
1976–77	1.00	1.70	24.80	12.80	10.30	1.00	24.10	75.70	802.10
1977–78	1.10	1.80	25.10	12.50	10.70	1.00	25.00	77.00	823.10
1978–79	1.00	1.90	27.00	13.50	11.80	1.00	26.00	82.20	857.30
1979–80	1.10	1.80	28.30	13.60	12.40	1.00	26.70	84.90	869.40
1980–81	1.20	1.90	31.60	14.90	13.40	1.10	27.40	91.40	880.80
1981–82	1.20	2.10	33.20	16.10	14.10	0.90	28.30	95.70	939.40
1982–83	1.30	2.10	32.10	15.70	14.80	0.90	28.30	95.20	896.50
1983–84	1.20	2.30	33.50	15.90	15.30	1.10	28.50	97.80	904.90
1984–85	1.40	2.40	34.20	17.50	15.90	1.10	28.60	101.10	936.20
1985–86	1.40	2.70	35.70	17.60	17.00	1.20	29.40	105.00	926.40
1986–87	1.40	2.70	39.80	18.70	18.20	1.20	30.00	112.00	979.50
1987–88	1.40	2.80	47.30	19.30	20.00	1.10	30.10	122.10	1014.50
1988–89	1.40	2.80	56.50	21.30	21.10	1.20	30.50	134.80	1090.20
1989–90	1.60	2.80	56.90	20.90	22.90	1.10	31.50	137.60	1099.80
1990–91	1.60	2.50	56.70	21.00	23.90	1.20	31.90	138.50	1090.90
1991–92	1.70	2.60	56.90	22.30	24.00	1.20	31.70	140.10	1108.70
1992–93	1.80	2.70	58.40	21.60	25.20	1.20	32.20	142.70	1104.70
1993–94	1.90	2.70	57.80	20.90	26.00	1.20	31.20	141.20	1102.50
1994–95	2.10	2.70	56.90	21.80	27.90	1.20	32.80	144.80	1152.20
1995–96	2.00	2.40	55.10	21.00	28.90	1.30	34.00	144.30	1184.90
1996–97	2.20	2.60	55.80	21.00	30.80	1.20	35.20	148.20	1202.70
1997–98	2.20	2.70	59.00	25.90	31.80	1.30	37.00	159.30	1286.30
1998–99	2.20	2.70	59.90	31.60	33.00	1.40	38.30	168.40	1318.30
1999–00	2.20	2.90	61.50	32.20	34.20	1.40	37.50	171.30	1346.30
2000–01	2.10	2.80	71.90	32.00	35.40	1.40	37.80	183.50	1337.20
2001–02	1.90	2.80	74.50	32.50	36.80	1.40	36.80	186.70	1371.90
2002–03	2.30	1.29	52.60	33.56	44.51	2.66	40.66	177.56	1330.64
2003–04	2.33	1.28	52.88	33.75	45.54	2.76	41.35	179.90	1364.92
2004–05	2.03	1.51	55.82	34.47	45.65	2.65	40.18	182.31	1356.53
2005–06	2.04	1.85	56.26	35.58	46.83	2.76	41.50	186.81	1429.49
2006–07	2.08	2.01	59.31	32.52	51.24	2.88	43.17	193.21	1433.87
2007–08	2.05	2.04	60.02	30.98	51.00	3.05	43.17	192.30	1426.09
2008–09	2.34	2.15	58.65	31.57	52.12	2.58	42.39	191.80	1420.96
2009–10	2.35	2.27	62.19	31.34	53.18	2.83	42.42	196.58	1432.92
2010–11	1.94	2.63	53.60	27.97	54.49	3.10	42.37	186.10	1436.97
2011–12	1.99	2.46	53.77	32.19	54.43	3.12	40.80	188.76	1447.83
2012–13	1.84	2.31	51.72	29.19	55.59	3.19	39.93	183.79	1396.52
2013–14	2.34	1.69	49.92	29.96	55.32	3.16	36.62	179.01	1409.07
2014–15	2.15	1.74	39.85	30.72	60.80	3.24	39.38	177.88	1430.98
2015–16	1.44	1.63	39.83	30.91	60.87	3.26	38.08	176.01	1416.88

np: Not available for publication but included in the totals.
Note: Electricity does not include thermal electricity.
Source: Industry (2017b).

Table E 3.5c Electricity usage—Australian electricity consumption, by industry—Queensland

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.80	4.10	7.60	4.70	4.50	0.10	9.60	31.30	371.30
1974–75	0.90	4.50	8.10	5.00	4.80	0.10	10.60	34.00	392.60
1975–76	0.80	4.50	8.60	5.50	4.80	0.10	10.90	35.20	410.00
1976–77	0.90	4.80	9.10	5.90	5.50	0.10	11.80	38.20	441.80
1977–78	1.10	4.80	9.30	6.40	6.30	0.10	12.80	40.70	461.20
1978–79	0.90	4.90	9.40	7.20	6.60	0.10	13.50	42.80	463.20
1979–80	1.20	4.80	10.20	7.20	7.70	0.20	13.90	45.20	480.20
1980–81	1.30	5.10	10.40	8.10	8.70	0.20	14.80	48.60	502.90
1981–82	1.30	5.50	11.40	8.50	9.60	0.20	16.10	52.70	537.20
1982–83	1.50	5.90	14.70	8.80	9.80	0.30	17.10	58.10	541.50
1983–84	1.40	5.70	21.70	9.90	10.00	0.50	17.60	66.80	571.60
1984–85	1.50	6.10	24.40	12.90	10.60	0.60	18.10	74.30	600.30
1985–86	1.60	6.50	25.30	15.30	12.10	0.70	18.70	80.20	604.80
1986–87	1.90	7.10	26.20	15.50	13.40	0.80	19.40	84.10	620.00
1987–88	2.00	7.60	27.30	14.40	14.60	1.30	20.40	87.50	642.40
1988–89	1.70	8.20	28.20	14.90	16.20	1.90	21.30	92.50	678.30
1989–90	1.10	8.90	29.50	16.20	17.20	2.40	22.80	98.90	691.80
1990–91	1.20	9.30	30.10	16.50	18.20	2.40	23.60	102.30	702.00
1991–92	1.20	10.00	30.20	18.60	19.10	2.60	24.50	107.40	715.00
1992–93	1.40	10.50	31.30	18.90	20.10	2.60	25.50	111.60	758.50
1993–94	1.30	11.10	32.70	19.20	21.10	2.60	26.60	116.00	793.20
1994–95	1.30	11.60	33.50	20.40	23.50	2.80	27.90	122.40	847.30
1995–96	1.20	11.50	34.40	21.70	26.20	2.70	28.70	128.00	882.70
1996–97	1.20	12.00	35.20	22.70	27.90	3.00	29.60	133.10	914.10
1997–98	1.40	12.90	45.80	25.70	29.70	2.90	30.90	150.90	968.50
1998–99	1.20	14.00	47.90	25.90	30.30	3.10	31.80	156.00	983.80
1999–00	1.40	15.20	49.80	25.80	32.10	3.20	32.50	161.70	1009.70
2000–01	1.30	20.60	52.00	26.20	33.00	3.00	33.70	169.80	1020.00
2001–02	1.20	20.60	53.10	26.80	34.40	2.90	34.30	173.30	1057.80
2002–03	1.50	16.82	57.01	27.44	41.30	4.17	38.16	186.40	1064.04
2003–04	1.59	17.28	57.56	36.31	42.25	4.17	40.18	199.35	1081.14
2004–05	1.54	17.27	59.87	30.19	42.41	4.04	40.34	195.66	1225.09
2005–06	1.61	17.28	60.90	28.75	42.27	4.41	40.63	195.85	1279.52
2006–07	1.68	17.11	59.19	34.61	45.20	4.62	42.06	204.46	1329.00
2007–08	1.64	17.78	58.35	32.90	46.08	4.74	43.08	204.58	1289.55
2008–09	1.57	21.20	58.93	35.85	47.28	4.23	44.24	213.31	1355.35
2009–10	1.51	20.83	59.12	34.40	46.98	4.89	45.26	212.99	1296.89
2010–11	1.46	21.68	59.41	29.47	47.42	4.80	46.58	210.83	1277.92
2011–12	1.49	23.49	60.45	30.02	46.13	4.77	46.14	212.50	1323.06
2012–13	1.40	24.31	61.27	29.37	49.37	6.79	46.58	219.08	1348.18
2013–14	1.62	25.47	60.99	25.60	49.26	6.86	45.60	215.40	1331.91
2014–15	1.44	31.03	57.76	28.32	52.69	6.95	44.37	222.55	1453.57
2015–16	1.33	42.92	57.24	27.95	52.23	6.74	43.54	231.95	1477.76

Note: Electricity does not include thermal electricity.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.5d Electricity usage—Australian electricity consumption, by industry—South Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.30	0.40	6.40	3.30	2.90	0.00	6.40	19.70	215.40
1974–75	0.40	0.40	6.10	3.40	3.10	0.00	7.00	20.40	222.80
1975–76	0.40	0.40	6.10	3.70	3.40	0.00	7.40	21.50	234.50
1976–77	0.50	0.40	6.40	4.50	3.60	0.00	8.10	23.50	249.30
1977–78	0.50	0.40	6.50	4.90	3.80	0.00	8.20	24.50	247.70
1978–79	0.50	0.40	6.90	4.10	4.10	0.10	8.90	25.00	259.60
1979–80	0.50	0.50	7.10	4.30	4.30	0.10	8.70	25.50	264.20
1980–81	0.50	0.50	6.90	5.00	4.60	0.10	9.20	26.90	255.70
1981–82	0.60	0.50	7.20	4.60	4.90	0.10	9.60	27.40	260.00
1982–83	0.70	0.50	6.90	5.10	5.10	0.10	10.00	28.40	254.60
1983–84	0.60	0.90	6.60	4.70	5.20	0.10	9.60	27.70	258.00
1984–85	0.60	1.00	6.90	5.10	5.50	0.10	10.10	29.30	280.20
1985–86	0.70	1.00	7.20	5.40	5.70	0.10	10.10	30.10	284.50
1986–87	0.60	1.00	7.30	5.20	5.90	0.10	10.30	30.30	284.70
1987–88	0.70	1.00	7.70	5.30	6.30	0.10	10.70	31.80	291.10
1988–89	0.80	1.30	8.10	5.60	6.60	0.10	10.70	33.30	299.30
1989–90	0.60	1.50	9.10	5.40	7.00	0.10	11.30	35.30	301.90
1990–91	0.60	1.60	9.10	5.20	7.30	0.10	11.40	35.50	287.40
1991–92	0.60	1.60	9.30	5.70	7.30	0.10	11.20	35.90	296.90
1992–93	0.60	1.60	9.90	4.90	7.60	0.10	11.80	36.80	300.10
1993–94	0.70	1.50	10.20	5.60	7.80	0.10	11.50	37.60	304.80
1994–95	0.60	1.60	10.70	5.70	8.10	0.10	12.20	39.20	304.40
1995–96	0.80	1.60	10.70	5.60	8.20	0.10	12.20	39.20	296.60
1996–97	0.70	1.50	10.70	5.60	8.60	0.10	12.90	40.30	299.70
1997–98	0.70	1.50	11.10	5.80	9.00	0.10	13.30	41.70	311.90
1998–99	0.70	2.10	11.80	6.50	9.50	0.10	13.70	44.60	327.20
1999–00	0.70	2.20	12.00	7.00	9.80	0.10	14.20	46.10	328.00
2000–01	0.60	2.40	11.50	7.70	10.70	0.30	15.00	48.20	329.30
2001–02	0.60	2.30	10.90	8.00	11.20	0.40	14.10	47.40	328.10
2002–03	0.63	4.53	9.34	7.17	12.59	0.08	14.43	48.77	357.30
2003–04	0.73	4.49	9.47	7.39	12.92	0.08	16.00	51.08	371.54
2004–05	0.73	4.87	9.19	7.09	12.69	0.09	15.59	50.25	355.55
2005–06	0.90	4.75	10.27	6.82	12.74	0.11	15.82	51.39	350.12
2006–07	0.97	5.22	10.83	6.44	13.48	0.11	16.77	53.82	375.46
2007–08	1.01	5.09	10.54	6.34	13.58	0.12	16.83	53.51	372.53
2008–09	0.95	5.25	10.06	7.63	13.87	0.22	17.26	55.25	359.47
2009–10	1.02	4.72	10.03	6.85	14.04	0.24	17.88	54.78	344.62
2010–11	0.91	5.82	9.82	7.92	13.98	0.31	18.35	57.10	348.24
2011–12	1.00	5.87	9.60	7.35	13.58	0.29	18.19	55.88	344.54
2012–13	0.89	6.14	9.14	8.28	14.04	0.91	18.03	57.43	335.44
2013–14	1.26	6.38	9.69	8.51	13.94	0.50	17.29	57.57	328.97
2014–15	1.16	6.00	8.70	8.07	14.79	0.17	17.12	56.00	326.05
2015–16	0.76	6.33	8.83	8.39	14.91	0.13	17.47	56.82	334.02

Note: Electricity does not include thermal electricity.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.5e Electricity usage—Australian electricity consumption, by industry—Western Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.40	4.70	4.50	2.60	3.30	0.00	4.20	19.60	272.60
1974–75	0.40	5.10	5.10	3.00	3.40	0.00	4.60	21.60	279.60
1975–76	0.50	5.30	5.70	3.10	3.80	0.00	5.10	23.40	296.50
1976–77	0.50	5.40	6.60	3.10	4.10	0.00	5.50	25.20	322.10
1977–78	0.50	5.10	6.80	3.40	4.50	0.00	5.80	26.00	328.40
1978–79	0.50	4.90	7.20	3.60	4.70	0.00	6.20	27.00	336.00
1979–80	0.50	4.20	7.70	3.60	5.20	0.00	6.60	27.80	334.10
1980–81	0.50	3.90	7.50	3.90	5.40	0.00	7.20	28.40	322.00
1981–82	0.60	4.30	7.40	4.00	5.70	0.00	7.50	29.50	300.10
1982–83	0.60	4.20	7.60	4.00	6.10	0.00	7.60	30.10	304.60
1983–84	0.60	4.20	8.20	4.00	6.40	0.10	7.70	31.10	313.90
1984–85	0.60	4.60	9.90	4.70	6.90	0.00	8.20	35.00	343.10
1985–86	0.60	5.60	10.60	5.00	7.10	0.10	8.30	37.20	344.80
1986–87	0.70	5.60	11.00	5.10	7.90	0.10	8.80	39.20	358.40
1987–88	0.70	6.40	11.60	5.20	8.50	0.10	8.70	41.20	391.10
1988–89	0.70	9.00	12.00	5.70	9.60	0.10	9.20	46.30	427.70
1989–90	0.70	11.90	12.80	6.00	10.40	0.10	9.50	51.30	473.00
1990–91	0.80	12.50	12.90	6.30	10.70	0.10	10.00	53.30	488.40
1991–92	0.80	13.20	13.50	6.30	10.80	0.10	10.10	54.80	496.40
1992–93	0.80	13.40	14.40	6.40	11.10	0.20	10.10	56.30	522.00
1993–94	0.80	13.40	15.60	6.60	11.60	0.20	10.40	58.70	554.10
1994–95	0.90	15.00	16.20	6.90	12.20	0.20	11.10	62.50	592.70
1995–96	0.80	16.40	16.80	7.40	12.40	0.20	11.10	65.20	630.20
1996–97	0.90	16.50	17.00	7.00	12.90	0.20	11.40	65.90	649.60
1997–98	0.90	18.00	18.40	7.20	13.30	0.20	12.30	70.40	662.60
1998–99	0.90	19.30	23.00	7.50	13.40	0.20	12.80	77.10	672.80
1999–00	0.90	20.40	25.90	7.90	13.70	0.30	13.30	82.30	688.50
2000–01	0.70	15.30	23.20	8.90	14.40	0.30	13.70	76.50	708.10
2001–02	0.70	15.70	22.00	9.40	15.30	0.20	14.30	77.60	722.90
2002–03	0.82	17.18	19.41	4.34	16.14	0.24	15.63	73.75	719.96
2003–04	0.87	17.08	19.62	4.56	16.53	0.34	15.73	74.73	730.33
2004–05	0.80	17.23	19.76	5.32	16.49	0.54	15.21	75.37	748.20
2005–06	0.84	27.04	14.55	5.61	16.06	0.64	15.83	80.58	757.07
2006–07	0.88	25.97	17.61	5.44	17.16	0.67	16.57	84.29	820.67
2007–08	0.86	25.18	17.62	8.68	17.44	0.79	17.17	87.73	827.96
2008–09	0.58	28.85	25.42	9.50	18.01	0.85	16.95	100.16	919.98
2009–10	0.56	31.73	27.40	9.73	16.95	1.01	17.04	104.42	907.30
2010–11	1.10	38.80	22.82	11.99	18.14	1.08	20.63	114.58	973.92
2011–12	1.15	37.85	22.34	11.17	18.53	2.18	21.88	115.12	1011.57
2012–13	1.04	42.16	24.69	11.02	19.04	2.69	20.36	121.01	1048.18
2013–14	0.89	51.86	24.21	11.29	19.58	3.07	21.27	132.17	1059.77
2014–15	0.89	48.32	24.58	12.75	19.65	5.23	24.60	136.01	1047.55
2015–16	0.78	50.29	23.98	12.75	19.51	6.66	25.49	139.45	1119.89

Note: Electricity does not include thermal electricity.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.5f Electricity usage—Australian electricity consumption, by industry—Tasmania

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.10	1.70	13.00	1.90	2.00	0.00	2.90	21.60	71.90
1974–75	0.10	1.80	12.70	2.20	2.10	0.00	3.20	22.00	71.30
1975–76	0.10	1.70	12.30	2.10	2.10	0.00	3.30	21.70	71.90
1976–77	0.10	1.70	14.60	2.30	2.40	0.00	3.60	24.70	77.00
1977–78	0.10	1.80	15.50	2.20	2.50	0.00	3.80	25.90	78.40
1978–79	0.10	1.80	17.10	2.40	2.60	0.00	4.00	28.00	82.00
1979–80	0.20	1.80	17.40	2.40	2.70	0.00	4.20	28.60	84.60
1980–81	0.20	1.80	17.10	2.90	2.80	0.00	4.30	29.20	83.30
1981–82	0.20	1.80	17.60	2.40	3.00	0.00	4.50	29.40	84.50
1982–83	0.20	1.80	17.00	2.30	2.90	0.00	4.60	28.80	82.30
1983–84	0.20	1.70	17.40	2.50	3.00	0.00	4.60	29.40	83.30
1984–85	0.20	1.70	17.70	2.50	3.00	0.00	4.70	30.00	85.00
1985–86	0.20	1.80	17.90	2.50	3.20	0.00	4.80	30.40	86.40
1986–87	0.20	1.80	17.80	2.40	3.30	0.00	5.00	30.50	85.40
1987–88	0.20	1.80	19.70	2.50	3.40	0.00	4.80	32.40	89.50
1988–89	0.20	2.00	19.70	2.80	3.40	0.00	4.80	32.90	92.00
1989–90	0.20	2.10	20.00	2.80	3.50	0.00	4.70	33.20	96.60
1990–91	0.20	1.80	20.40	2.60	3.50	0.00	4.70	33.20	97.60
1991–92	0.20	1.80	19.90	2.60	3.50	0.00	4.80	32.90	89.30
1992–93	0.20	1.80	19.60	2.50	3.40	0.00	4.90	32.60	90.10
1993–94	0.30	1.90	19.70	2.50	3.50	0.00	4.90	32.80	92.00
1994–95	0.30	1.70	18.60	2.40	4.10	0.00	4.80	32.00	92.40
1995–96	0.30	2.00	19.00	2.50	4.60	0.00	5.00	33.40	93.00
1996–97	0.30	1.90	20.70	2.60	4.70	0.00	5.00	35.20	94.80
1997–98	0.40	1.90	20.90	2.60	4.70	0.00	5.00	35.60	95.80
1998–99	0.40	2.00	21.20	2.60	4.90	0.00	5.10	36.10	95.70
1999–00	0.40	2.00	21.30	2.60	5.00	0.00	5.30	36.50	95.80
2000–01	0.50	3.00	19.90	2.60	5.50	0.00	5.30	36.70	93.60
2001–02	0.50	2.00	20.40	2.60	5.60	0.00	6.60	37.70	97.20
2002–03	0.65	0.84	21.52	2.79	6.74	0.03	6.91	39.47	99.50
2003–04	0.52	1.39	21.53	2.86	6.87	0.03	7.49	40.69	103.40
2004–05	0.46	1.48	23.29	2.75	6.49	0.02	7.90	42.40	107.39
2005–06	0.47	1.52	22.33	2.71	6.44	0.02	7.92	41.41	111.57
2006–07	0.46	1.57	24.37	2.56	6.82	0.03	8.04	43.85	113.32
2007–08	0.46	1.67	23.83	2.47	6.86	0.03	8.13	43.45	115.51
2008–09	0.60	1.69	22.55	2.49	6.99	0.04	8.26	42.63	115.47
2009–10	0.57	1.61	22.78	2.73	6.98	0.04	8.61	43.32	115.20
2010–11	0.30	1.80	23.38	4.02	7.27	0.05	8.54	45.36	114.99
2011–12	0.30	1.92	21.88	2.70	7.08	0.04	8.44	42.36	108.30
2012–13	0.36	1.84	22.43	2.57	7.28	0.05	8.42	42.95	113.42
2013–14	0.44	1.68	22.40	2.81	7.03	0.05	8.28	42.70	109.43
2014–15	0.49	1.56	22.39	2.61	7.11	0.04	8.25	42.46	106.27
2015–16	0.24	1.49	22.28	2.75	7.24	0.05	8.40	42.44	108.43

Note: Electricity does not include thermal electricity.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.5g Electricity usage—Australian electricity consumption, by industry—Northern Territory

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.20	np	0.20	0.70	0.00	0.40	2.50	30.10
1974–75	0.00	0.20	0.00	0.20	0.70	0.00	0.40	2.30	32.80
1975–76	0.00	0.20	0.00	0.40	0.70	0.00	0.50	2.50	31.20
1976–77	0.00	0.20	0.00	0.40	0.80	0.00	0.50	2.60	33.60
1977–78	0.00	0.20	0.00	0.50	0.90	0.00	0.50	2.80	35.10
1978–79	0.00	0.20	0.00	0.50	1.00	0.00	0.60	3.00	35.70
1979–80	0.00	0.50	0.00	0.50	1.20	0.00	0.70	4.00	40.00
1980–81	0.00	0.50	0.00	0.50	1.30	0.00	0.80	4.20	41.30
1981–82	0.00	0.60	0.00	0.50	1.40	0.00	0.80	4.30	38.60
1982–83	0.00	0.50	0.00	0.50	1.40	0.00	0.80	4.50	40.80
1983–84	0.00	0.50	0.00	0.50	1.50	0.00	0.90	4.70	43.80
1984–85	0.00	0.50	0.00	0.60	1.60	0.00	1.00	4.90	45.80
1985–86	0.00	0.60	0.00	0.60	1.80	0.00	1.10	5.20	47.00
1986–87	0.00	0.60	0.00	0.50	2.00	0.00	1.10	5.40	49.30
1987–88	0.00	0.60	0.00	0.50	2.10	0.00	1.20	5.60	51.10
1988–89	0.00	0.90	0.00	0.60	2.10	0.00	1.20	6.10	51.00
1989–90	0.00	1.20	0.00	0.60	2.30	0.00	1.20	6.60	52.50
1990–91	0.00	1.20	0.00	0.60	2.40	0.00	1.20	6.80	55.00
1991–92	0.00	1.10	0.00	0.80	2.50	0.00	1.30	7.10	56.90
1992–93	0.00	1.10	0.00	0.60	2.60	0.00	1.30	7.10	57.20
1993–94	0.00	1.10	0.00	0.60	2.60	0.00	1.40	7.10	58.50
1994–95	0.00	1.20	0.00	0.60	2.70	0.00	1.50	7.50	61.80
1995–96	0.00	1.90	0.00	0.60	2.80	0.00	1.60	8.50	67.00
1996–97	0.00	2.10	0.00	0.60	2.90	0.00	1.60	8.90	69.70
1997–98	0.00	2.20	0.00	0.70	3.10	0.00	1.80	9.40	70.40
1998–99	0.00	1.90	0.00	0.70	3.20	0.00	1.60	9.30	73.20
1999–00	0.10	1.90	0.00	0.70	3.20	0.00	1.90	9.70	76.40
2000–01	0.10	1.40	0.00	0.80	3.90		1.80	9.50	73.20
2001–02	0.10	2.00	0.00	0.80	3.60		1.80	9.80	73.40
2002–03	0.06	0.48	0.05	0.90	4.71	0.01	2.30	8.50	56.78
2003–04	0.05	0.51	0.05	0.93	4.77	0.01	2.29	8.62	58.65
2004–05	0.04	0.85	0.05	0.90	4.69	0.01	2.07	8.60	61.54
2005–06	0.03	1.14	0.05	0.86	4.73	0.01	2.32	9.13	73.00
2006–07	0.03	2.48	0.17	1.01	5.02	0.01	2.38	11.10	82.79
2007–08	0.03	2.30	0.20	0.95	5.14	0.01	2.41	11.02	95.99
2008–09	0.03	1.10	0.13	0.96	5.53	0.01	2.65	10.41	95.09
2009–10	0.03	1.32	0.26	1.25	6.08	0.01	2.80	11.76	98.76
2010–11	0.02	1.28	2.15	1.02	4.67	0.02	2.07	11.23	96.33
2011–12	0.03	1.76	2.17	0.68	5.19	0.02	1.69	11.53	97.87
2012–13	0.03	2.01	2.88	1.17	4.81	0.02	1.44	12.37	99.75
2013–14	0.03	2.38	2.06	0.44	6.03	0.02	1.57	12.52	99.61
2014–15	0.03	2.77	0.56	0.93	5.06	0.03	1.41	10.79	90.50
2015–16	0.02	3.19	0.45	0.93	5.08	0.03	1.33	11.04	90.72

Note: Electricity does not include thermal electricity.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.5h Electricity usage—Australian electricity consumption, by industry—Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	3.60	15.40	87.60	36.40	33.90	2.50	71.10	250.50	2615.20
1974–75	3.90	16.50	88.40	39.80	35.60	2.60	79.60	266.40	2694.80
1975–76	3.90	16.80	90.10	41.70	37.90	2.70	83.60	276.60	2730.80
1976–77	4.20	17.70	94.70	47.10	41.30	2.80	91.20	299.00	2905.90
1977–78	4.50	17.50	97.60	49.10	44.20	2.90	95.50	311.30	2985.10
1978–79	4.40	17.70	103.30	53.30	47.90	2.90	101.50	331.00	3053.10
1979–80	5.00	17.30	109.90	56.20	52.30	3.20	104.30	348.20	3131.40
1980–81	5.30	18.00	115.40	60.10	56.50	3.50	109.80	368.50	3146.30
1981–82	5.60	19.00	118.00	61.20	59.30	3.50	115.20	381.90	3237.60
1982–83	6.20	19.50	116.50	60.70	60.70	3.60	116.40	383.60	3122.70
1983–84	6.00	19.60	133.60	63.10	62.10	4.10	117.50	405.90	3221.20
1984–85	6.50	21.10	147.10	71.10	65.60	4.30	119.90	435.50	3370.70
1985–86	6.70	23.50	155.60	71.80	70.60	4.80	124.10	457.00	3402.50
1986–87	7.00	24.40	163.70	73.70	75.80	5.00	128.00	477.50	3514.40
1987–88	7.50	25.70	177.60	72.40	81.90	5.50	130.20	500.70	3623.00
1988–89	7.60	30.10	190.60	78.20	87.50	6.30	131.90	532.10	3832.70
1989–90	6.30	35.10	196.70	79.10	93.90	6.60	138.80	558.10	3945.90
1990–91	6.70	35.60	197.70	76.60	98.40	6.70	141.30	564.60	3949.90
1991–92	7.00	37.10	198.30	80.70	99.80	6.90	141.50	574.40	3982.70
1992–93	7.50	38.10	204.90	79.80	102.90	6.90	146.30	589.20	4081.80
1993–94	7.50	38.70	213.90	80.70	106.00	7.00	146.00	602.90	4181.90
1994–95	8.00	41.30	214.00	84.80	113.60	7.20	151.80	623.40	4365.40
1995–96	7.80	43.80	213.20	86.00	122.40	7.40	155.50	639.40	4505.50
1996–97	8.00	44.30	219.60	86.50	128.10	7.70	161.20	658.70	4611.10
1997–98	8.50	47.70	238.60	96.80	134.90	7.80	166.30	703.60	4777.60
1998–99	8.20	50.70	249.80	103.60	140.00	8.30	170.00	734.30	4884.70
1999–00	8.20	53.30	259.80	106.00	144.80	8.60	174.00	756.80	4971.00
2000–01	7.80	56.80	265.60	110.30	148.90	8.50	178.50	776.40	5011.80
2001–02	7.30	56.90	267.40	111.40	154.80	8.30	180.20	786.40	5097.00
2002–03	9.92	52.14	236.16	110.68	183.91	12.27	194.04	799.13	5138.69
2003–04	9.64	54.84	237.05	122.68	188.18	12.78	201.52	826.69	5284.77
2004–05	8.67	55.68	241.79	117.39	187.61	12.51	198.50	822.13	5399.21
2005–06	9.04	66.07	238.77	118.95	189.50	13.35	201.49	837.18	5546.76
2006–07	9.28	67.79	251.12	121.93	202.52	13.94	207.68	874.26	5724.00
2007–08	9.13	67.59	249.08	120.77	203.16	14.60	210.20	874.53	5738.34
2008–09	8.28	73.77	253.96	125.74	208.10	12.25	213.47	895.58	5859.44
2009–10	8.41	76.33	260.72	123.78	210.35	13.51	218.36	911.48	5838.85
2010–11	8.04	85.92	251.51	118.10	212.86	14.11	225.13	915.69	5905.62
2011–12	8.36	88.26	247.20	116.84	210.85	14.97	221.30	907.79	5947.85
2012–13	8.01	94.95	238.10	108.62	218.39	19.20	217.94	905.21	5922.64
2013–14	8.83	106.04	233.61	106.11	218.56	19.18	207.91	900.23	5861.84
2014–15	8.48	107.90	217.93	107.46	232.06	21.28	213.51	908.60	5926.74
2015–16	6.32	122.20	217.91	113.13	231.47	22.62	213.08	926.74	6065.90

Note: Electricity does not include thermal electricity.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.6a Electricity usage—number of electricity customers, by state/territory—residential

At end of financial year	NSW[n]	VIC	QLD	SA[o]	WA[p]	TAS	NT[q]	ACT[n]	Australia
					number				
1977–78	1 704 606	1 295 514	627 874	464 066	362 365	142 729	20 168	66 152	4 683 474
1978–79	1 736 954	1 319 274	641 056	471 670	372 467	145 780	20 254	69 954	4 777 409
1979–80	1 778 482	1 344 255	686 986	479 005	382 500	148 777	20 930	70 529	4 911 464
1980–81	1 827 382	1 368 502	715 571	486 018	397 740	151 615	21 537	72 518	5 040 883
1981–82	1 871 428	1 390 366	747 572	492 616	400 255	153 942	24 106	75 027	5 155 312
1982–83	1 910 929	1 410 782	778 871	500 328	407 679	156 016	25 678	77 517	5 267 800
1983–84	1 941 518	1 434 797	810 816	510 369	410 000	158 448	27 704	79 306	5 372 958
1984–85	1 977 262	1 463 053	841 251	522 654	443 222	161 755	30 842	81 784	5 521 823
1985–86	2 016 735	1 495 878	866 602	534 823	464 403	165 435	33 535	84 978	5 662 389
1986–87	2 047 229	1 523 100	889 389	544 326	481 310	168 796	33 883	88 542	5 776 575
1987–88	2 076 298	1 552 603	914 714	522 980	514 316	172 109	35 417	91 010	5 879 447
1988–89	2 110 063	1 585 877	954 244	561 293	520 623	175 472	36 592	93 549	6 037 713
1989–90	2 155 493	1 618 058	996 542	571 712	544 680	178 291	37 439	96 122	6 198 337
1990–91	2 197 765	1 639 066	1 031 612	581 503	556 378	182 340	38 252	99 078	6 325 994
1991–92	2 231 018	1 661 567	1 073 548	591 655	571 727	186 134	41 304	101 920	6 458 873
1992–93	2 302 524	1 684 837	1 123 671	594 229	590 546	190 308	42 588	105 588	6 634 291
1993–94	2 329 499	1 709 280	1 174 558	605 481	609 852	194 314	48 190	109 005	6 780 179
1994–95									
1995–96									
1996–97									
1997–98	2 555 906	1 804 169	1 346 548	630 060	673 571	206 926	54 998		7 272 178
1998–99	2 513 792	1 800 026	1 382 747	636 283	676 947	205 138	56 686		7 271 619
1999–00	2 572 324	1 871 775	1 426 420	642 878	692 475	207 285	58 550		7 471 707
2000–01	2 610 259	1 896 991	1 460 916	649 387	722 853	207 336	54 748		7 602 490
2001–02	2 661 016	1 942 595	1 487 968	657 209	736 100	208 380	55 779		7 749 047
2002–03	2 850 155	2 005 664	1 491 127	660 926	742 270	208 795	62 317		8 021 254
2003–04	2 876 498	2 048 182	1 558 783	659 211	748 903	211 422	62 330		8 165 329
2004–05	2 919 583	2 097 560	1 574 167	670 743	820 703	213 832	61 222		8 357 810
2005–06	2 949 376	2 109 756	1 603 756	679 069		216 983	61 555		
2006–07	2 923 107	2 141 284	1 629 232	688 524	807 136	219 809	61 783		8 470 875
2007–08	2 977 603	2 164 899	1 670 789	697 518	883 932	220 148	63 800		8 678 689
2008–09	3 000 551	2 190 588	1 697 545	708 242	909 680		60 805		
2009–10	3 058 479	2 248 207	1 742 545	717 813	928 654	229 420	62 522		8 987 640
2010–11	3 089 086	2 269 037	1 767 850	725 439	946 513	228 128	64 854		9 090 907
2011–12	3 116 809	2 312 250	1 806 860	732 350	961 804	229 663	64 808		9 224 544
2012–13	3 148 350	2 344 031	1 842 983	737 582	971 097	233 979	67 441		9 345 463
2013–14	3 189 194	2 377 337	1 857 602	743 918	996 657	235 170	75 669		9 475 547
2014–15	3 231 203	2 393 125	1 887 425	751 078	1 009 250	237 366	69 729		9 579 176

[n] From 1997–98, ACT figures are included in the NSW total.
[o] The method of compiling South Australian customer numbers changed from 2003–04 and is not comparable to earlier years.
[p] A breakdown of customer connections for Western Australia was not available for 2005–06. The method of compiling Western Australian customer numbers changed from 2007–08 and again in 2008–09. Estimates are not comparable to earlier years.
[q] The method of compiling Northern Territory customer numbers changed from 2005–06 and is not comparable to earlier years.
[r] Estimate only.
[s] in 2015–16, the number of customers is based on information provided by companies in the industry. CitiPower and Powercor did not participate in the esaa/AEC survey and their customer breakdown was estimated.

Note: Data are not readily available for missing years.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 3.6b Electricity usage—number of electricity customers, by state/territory—business

At end of financial year	NSW[n]	VIC	QLD	SA[o]	WA[p]	TAS	NT[q]	ACT[n]	Australia
					number				
1977–78	197 424	215 600	109 315	79 736	37 812	33 141	3 957	7 698	684 683
1978–79	201 962	218 117	120 791	81 439	40 458	33 945	3 772	7 877	708 361
1979–80	205 546	221 392	110 348	83 387	42 675	34 689	4 201	7 593	709 831
1980–81	210 005	225 018	117 797	84 719	41 490	35 300	4 458	7 829	726 616
1981–82	214 174	226 919	126 009	85 849	59 156	35 609	4 659	7 319	759 694
1982–83	219 349	228 718	130 232	86 831	68 258	35 842	4 733	7 474	781 437
1983–84	223 425	232 144	135 705	87 792	80 639	36 755	4 795	7 636	808 892
1984–85	227 898	236 536	139 314	89 016	69 073	37 253	5 276	8 173	812 539
1985–86	233 894	238 419	146 119	90 830	71 707	37 849	5 768	8 507	833 093
1986–87	240 513	240 848	150 231	90 847	74 242	38 503	6 140	8 821	850 145
1987–88	247 375	246 856	156 614	91 283	70 558	39 209	6 617	9 369	867 881
1988–89	242 024	255 125	162 348	92 488	75 840	40 063	6 689	9 816	884 393
1989–90	248 015	255 895	165 650	93 570	78 318	40 670	6 950	10 244	899 312
1990–91	252 036	254 817	169 271	93 576	84 304	41 731	7 064	10 697	913 496
1991–92	264 021	256 222	172 743	93 784	85 050	42 000	8 330	10 820	932 970
1992–93	260 095	259 862	175 658	85 228	86 785	42 356	8 133	11 175	929 292
1993–94	270 419	262 286	181 103	85 559	89 622	43 086	9 315	11 669	953 059
1994–95									
1995–96									
1996–97									
1997–98	391 107	283 882	185 486	94 471	88 133	38 572	11 128		1 092 779
1998–99	337 090	285 271	193 566	66 303	98 655	27 821	11 663		1 020 369
1999–00	358 674	226 217	173 719	64 199	102 271	28 653	11 283		965 016
2000–01	337 054	265 878	162 095	66 672	87 715	40 563	10 762		970 739
2001–02	319 964	268 453	164 248	67 743	92 013	27 662	11 093		951 176
2002–03	319 156	301 925	195 682	95 061	104 788	42 098	12 664		1 071 374
2003–04	337 501	303 481	192 454	95 626	118 164	42 100	13 066		1 102 392
2004–05	343 345	271 844	199 802	86 885	109 215	42 190	15 305		1 068 586
2005–06	348 482	311 820	205 283	97 425		42 147	12 078		
2006–07	410 577	313 330	216 421	97 980	117 977	43 102	13 499		1 212 886
2007–08	394 249	313 735	221 671	98 695	128 965	44 159	11 874		1 213 348
2008–09	394 817	315 256	211 191	99 311	141 654		11 275		
2009–10	371 501	313 895	204 783	99 457	127 207	50 369	11 482		1 178 694
2010–11	374 819	316 665	212 902	99 779	113 756	47 408	11 749		1 177 078
2011–12	378 233	321 226	215 740	99 723	124 490	48 293	12 900		1 200 605
2012–13	387 369	319 840	221 300	98 783	128 942	44 777	15 104		1 216 115
2013–14	407 330	321 142	227 379	99 203	129 259	42 356	13 632		1 240 301
2014–15	404 566	323 608	217 113	99 138	125 479	42 208	12 640		1 224 752

[n] From 1997–98, ACT figures are included in the NSW total.

[o] The method of compiling South Australian customer numbers changed from 2003–04 and is not comparable to earlier years.

[p] A breakdown of customer connections for Western Australia was not available for 2005–06. The method of compiling Western Australian customer numbers changed from 2007–08 and again in 2008–09. Estimates are not comparable to earlier years.

[q] The method of compiling Northern Territory customer numbers changed from 2005–06 and is not comparable to earlier years.

[s] The number of "other" electricity customers is not separately available and has been included in estimates of the number of business customers.

[s] in 2015–16, the number of customers is based on information provided by companies in the industry. CitiPower and Powercor did not participate in the esaa/AEC survey and their customer breakdown was estimated.

Note: Data are not readily available for missing years.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 3.6c Electricity usage—Number of electricity customers, by state/territory—total

At end of financial year	NSW[n]	VIC	QLD	SA[o]	WA[p]	TAS	NT[q]	ACT[n]	Australia
					number				
1978–79	1 939 596	1 538 913	761 978	553 252	413 186	179 861	24 026	78 608	5 489 420
1979–80	1 984 905	1 567 229	797 466	562 525	425 456	183 607	25 131	78 945	5 625 264
1980–81	2 038 231	1 595 187	833 501	570 870	439 518	187 072	25 995	81 123	5 771 497
1981–82	2 086 303	1 619 017	873 714	578 599	459 580	189 727	28 765	83 138	5 918 843
1982–83	2 130 945	1 641 282	909 236	587 300	476 138	192 034	30 411	85 792	6 053 138
1983–84	2 165 672	1 668 777	946 654	598 306	490 818	195 387	32 499	87 928	6 186 041
1984–85	2 205 979	1 701 447	980 698	611 837	512 441	199 197	36 118	90 776	6 338 493
1985–86	2 251 361	1 736 223	1 012 854	625 818	536 254	203 489	39 303	94 306	6 499 608
1986–87	2 288 497	1 766 019	1 039 753	635 341	555 698	207 498	40 023	98 201	6 631 030
1987–88	2 324 422	1 801 532	1 071 461	614 435	585 020	211 527	42 039	101 246	6 751 682
1988–89	2 367 718	1 843 039	1 116 725	653 954	596 609	215 743	43 286	104 236	6 941 310
1989–90	2 420 231	1 875 962	1 162 325	665 454	623 146	219 169	44 394	107 278	7 117 959
1990–91	2 479 616	1 895 753	1 201 016	675 252	640 830	224 283	45 321	110 699	7 272 770
1991–92	2 524 339	1 919 796	1 246 424	685 605	656 927	228 348	49 639	113 690	7 424 768
1992–93	2 592 256	1 946 798	1 299 462	680 247	677 477	232 895	50 738	117 765	7 597 638
1993–94	2 625 379	1 985 687	1 355 793	692 536	699 625	237 607	57 538	121 679	7 775 844
1994–95	2 797 616	2 002 363	1 410 842	704 156	706 634	239 876	59 226		7 920 713
1995–96	2 834 776	2 035 584	1 457 364	711 050	725 430	241 818	61 305		8 067 327
1996–97	2 875 350	2 062 587	1 495 900	713 333	742 150	243 522	63 533		8 196 375
1997–98	2 947 013	2 088 051	1 532 034	724 531	761 704	245 498	66 126		8 364 957
1998–99	2 982 253	2 153 429	1 576 313	733 783	775 602	245 185	68 349		8 534 914
1999–00	3 015 336	2 156 391	1 629 495	736 384	794 746	248 260	69 833		8 650 445
2000–01	3 076 397	2 218 712	1 655 507	744 128	810 568	247 899	72 167		8 825 378
2001–02	3 113 869	2 268 466	1 684 488	751 802	828 113	248 544	73 811		8 969 093
2002–03	3 169 311	2 307 589	1 686 809	755 987	847 058	250 893	74 981		9 092 628
2003–04	3 213 999	2 351 663	1 751 237	754 837	867 067	253 522	75 396		9 267 721
2004–05	3 262 928	2 369 404	1 773 969	757 628	929 918	256 022	76 527		9 426 396
2005–06	3 297 858	2 421 576	1 809 039	776 494	892 601	259 130	73 633		9 530 331
2006–07	3 333 684	2 454 614	1 845 653	786 504	925 113	262 911	75 282		9 683 761
2007–08	3 371 852	2 478 634	1 892 460	796 213	1 012 897	264 307	75 674		9 892 037
2008–09	3 395 368	2 505 844	1 908 736	807 553	1 051 334	269 556	72 080		10 010 471
2009–10	3 426 356	2 562 102	1 947 328	817 270	1 055 861	279 789	74 004		10 162 710
2010–11	3 459 414	2 585 702	1 980 752	825 218	1 060 269	275 536	76 603		10 263 494
2011–12	3 485 897	2 633 476	2 022 600	832 073	1 086 294	277 956	77 708		10 416 004
2012–13	3 535 719	2 663 871	2 064 283	836 365	1 100 039	278 756	82 545		10 561 578
2013–14	3 596 524	2 698 479	2 084 981	843 121	1 125 916	277 526	89 301		10 715 848
2014–15	3 635 769	2 716 733	2 104 538	850 216	1 134 729	279 574	82 369		10 803 928

[n] From 1997–98, ACT figures are included in the NSW total.
[o] The method of compiling South Australian customer numbers changed from 2003–04 and is not comparable to earlier years.
[p] A breakdown of customer connections for Western Australia was not available for 2005–06. The method of compiling Western Australian customer numbers changed from 2007–08 and again in 2008–09. Estimates are not comparable to earlier years.
[q] The method of compiling Northern Territory customer numbers changed from 2005–06 and is not comparable to earlier years.
[r] in 2014–15, the number of customers is based on information provided by companies in the industry. CitiPower and Powercor did not participate in the esaa/AEC survey and their customer breakdown was estimated.

Source: esaa (2005), esaa (2015), AEC (2017).

Table E 3.7 Electricity usage—price index for residential electricity supply, by capital city

Average over financial year ending	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
				base of each index: 2011–12 = 100				
Jun–1981	14.5	18.3	18.9	14.1	24.8	14.6	22.7	14.9
Jun–1982	17.3	21.2	22.3	17.1	28.3	16.8	26.1	17.7
Jun–1983	23.7	24.7	26.8	21.3	32.5	18.7	32.2	24.9
Jun–1984	24.3	26.9	30.0	23.5	37.4	21.4	35.9	26.0
Jun–1985	25.3	28.1	34.0	26.6	38.8	23.6	38.7	26.8
Jun–1986	27.1	29.5	37.6	27.3	40.5	24.5	48.7	28.8
Jun–1987	27.8	31.5	38.7	28.3	45.1	27.8	53.9	30.5
Jun–1988	30.0	33.2	39.7	30.5	47.7	29.1	54.7	34.6
Jun–1989	32.9	34.3	40.3	32.0	47.7	30.6	54.7	36.8
Jun–1990	34.0	35.9	40.3	33.0	51.1	32.2	54.7	38.3
Jun–1991	33.6	38.5	40.9	34.1	55.1	36.1	55.2	39.9
Jun–1992	37.2	41.0	41.8	36.1	56.2	38.1	58.3	41.3
Jun–1993	38.3	44.8	42.5	36.9	56.2	39.8	59.4	43.4
Jun–1994	38.3	47.8	42.8	37.5	56.2	41.4	59.7	43.4
Jun–1995	38.3	47.8	43.1	37.1	56.2	41.8	59.7	43.5
Jun–1996	38.3	47.8	43.1	37.8	56.2	42.3	59.7	44.6
Jun–1997	38.9	48.2	43.1	39.5	56.2	43.7	59.7	44.6
Jun–1998	38.9	48.5	43.1	40.0	58.3	45.1	59.7	45.3
Jun–1999	38.9	42.1	43.1	40.8	58.3	45.4	62.9	46.5
Jun–2000	39.0	42.6	43.1	41.6	58.3	46.6	62.9	48.0
Jun–2001	42.7	48.0	48.7	46.7	63.7	53.0	68.6	54.1
Jun–2002	42.9	53.5	50.3	48.1	63.7	52.9	68.6	55.8
Jun–2003	44.3	55.3	51.9	56.2	63.7	55.0	68.6	56.3
Jun–2004	45.5	55.3	54.1	63.6	63.7	56.8	68.6	63.1
Jun–2005	49.4	55.0	55.5	62.8	63.7	58.2	68.6	63.9
Jun–2006	52.9	55.1	57.8	60.7	63.7	59.6	68.6	66.3
Jun–2007	55.9	55.8	59.9	62.3	63.7	62.0	70.5	69.1
Jun–2008	60.1	61.0	66.8	64.9	63.7	67.1	74.2	81.6
Jun–2009	65.5	69.1	72.4	69.8	65.3	73.8	77.1	87.0
Jun–2010	79.7	79.8	83.6	73.0	82.0	78.0	93.2	93.3
Jun–2011	86.9	91.9	94.5	81.9	95.2	86.6	97.6	94.9
Jun–2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Jun–2013	118.6	121.8	113.4	116.7	112.1	110.7	120.1	118.7
Jun–2014	123.5	127.0	134.8	117.4	116.4	109.7	134.3	122.3
Jun–2015	114.5	120.4	139.4	118.0	111.2	98.3	132.4	112.6
Jun–2016	109.3	122.7	141.4	107.5	118.0	100.2	131.9	107.4
Jun–2017	120.7	126.3	145.9	121.0	121.6	103.7	128.1	114.2

Source: ABS (2017d).

Table E 3.8a Natural gas usage—Australian natural gas consumption, by industry —New South Wales

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	943.00
1974–75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	964.70
1975–76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	934.00
1976–77	0.00	0.00	2.20	7.80	0.10	0.00	0.20	10.30	980.20
1977–78	0.00	0.00	12.00	10.10	0.50	0.00	0.30	22.90	1011.30
1978–79	0.00	0.00	21.70	9.70	1.10	0.00	0.30	32.80	1019.30
1979–80	0.00	0.00	38.50	9.60	1.60	0.20	0.50	50.40	1059.00
1980–81	0.00	0.00	50.10	9.50	1.90	0.40	0.80	62.70	1060.40
1981–82	0.00	0.00	56.70	11.30	3.50	0.30	1.20	73.00	1077.80
1982–83	0.00	0.00	59.30	12.00	4.30	0.20	1.80	77.50	1002.50
1983–84	0.00	0.00	63.30	12.10	5.30	0.20	2.80	83.80	1045.60
1984–85	0.00	0.00	63.50	12.20	6.00	0.20	3.60	85.50	1080.30
1985–86	0.00	0.00	69.40	11.30	6.80	0.20	5.30	93.10	1108.70
1986–87	0.00	0.00	74.70	12.30	7.70	0.40	6.30	101.40	1137.10
1987–88	0.00	0.00	67.70	10.70	8.20	0.40	7.40	94.50	1143.30
1988–89	0.00	0.00	67.80	9.80	9.10	0.40	8.40	95.50	1194.20
1989–90	0.00	0.00	71.10	9.50	10.20	0.40	9.90	101.20	1230.40
1990–91	0.00	0.00	65.40	8.30	10.90	0.50	11.20	96.40	1228.60
1991–92	0.00	0.00	64.00	7.70	11.70	0.60	12.00	96.00	1219.40
1992–93	0.00	0.00	64.60	6.40	12.20	0.60	13.50	97.40	1249.10
1993–94	0.00	0.00	66.30	5.70	12.10	0.70	13.90	98.60	1276.70
1994–95	0.00	0.00	68.00	5.20	13.10	0.80	15.00	102.00	1314.60
1995–96	0.00	0.00	68.30	8.20	14.40	0.80	16.10	107.80	1351.20
1996–97	0.00	0.00	83.70	13.60	14.70	1.10	17.20	130.30	1380.60
1997–98	0.00	0.00	83.40	13.90	16.00	1.30	18.30	132.80	1382.00
1998–99	0.00	0.00	83.10	17.60	16.60	1.40	20.30	139.00	1413.80
1999–00	0.00	0.00	85.00	18.60	17.10	2.00	20.70	143.20	1426.30
2000–01	0.00	1.20	93.10	20.40	9.40	1.00	21.00	146.10	1450.50
2001–02	0.00	1.30	89.50	21.30	9.50	1.10	21.60	144.20	1445.70
2002–03	0.00	1.79	88.24	17.86	9.66	2.08	20.77	140.41	1510.48
2003–04	0.00	0.89	87.55	18.73	10.02	1.15	20.54	138.87	1574.79
2004–05	0.00	1.17	81.62	19.66	10.13	1.27	20.49	134.32	1544.92
2005–06	0.00	1.53	79.00	19.55	10.00	1.36	20.78	132.23	1545.99
2006–07	0.00	1.70	77.70	12.50	9.81	1.33	21.06	124.10	1568.89
2007–08	0.00	0.93	78.58	10.92	9.19	1.44	21.30	122.35	1610.71
2008–09	0.00	0.01	76.59	22.08	9.25	1.50	22.31	131.75	1593.12
2009–10	0.00	0.01	74.66	39.71	9.45	1.65	23.29	148.77	1643.15
2010–11		0.00	75.38	38.23	10.02	1.53	24.25	149.42	1657.26
2011–12	0.34	0.01	71.34	37.59	10.14	1.59	25.10	146.09	1614.68
2012–13	0.24	0.01	71.03	48.89	10.43	1.72	25.72	158.05	1581.14
2013–14	0.38	0.95	66.97	51.44	10.69	1.76	26.30	158.49	1523.09
2014–15	0.33	0.67	65.80	45.64	10.97	1.41	26.39	151.22	1471.83
2015–16	1.77	0.63	63.98	51.32	11.39	1.47	26.96	157.52	1518.19

Note: ACT figures are included in the NSW total.
np: Not available for publication but included in the 'other manufacturing' category and the totals.
Source: Industry (2017b).

Table E 3.8b Natural gas usage—Australian natural gas consumption, by industry —Victoria

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	11.00	40.00	0.00	4.00	0.00	18.50	80.60	710.90
1974–75	0.00	14.70	46.70	0.00	5.50	0.00	22.40	97.30	731.00
1975–76	0.00	17.30	56.10	0.00	6.20	0.00	23.70	112.60	752.80
1976–77	0.00	18.00	64.00	0.00	7.50	0.00	29.20	130.90	802.10
1977–78	0.00	16.60	70.80	0.00	8.20	0.00	31.50	139.60	823.10
1978–79	0.00	18.00	75.20	0.00	9.60	0.00	34.90	157.50	857.30
1979–80	0.00	18.50	83.30	0.00	10.30	0.00	36.60	178.50	869.40
1980–81	0.00	16.70	88.90	0.00	11.10	0.00	40.10	213.30	880.80
1981–82	0.00	16.00	90.40	0.00	12.80	0.10	45.60	238.90	939.40
1982–83	0.00	20.50	86.90	0.00	13.60	0.10	46.80	228.50	896.50
1983–84	0.00	24.20	88.10	0.00	14.50	0.20	49.20	243.70	904.90
1984–85	0.00	21.40	90.50	0.00	15.20	0.20	51.50	224.20	936.20
1985–86	0.00	18.70	90.70	0.00	15.80	0.20	53.50	230.40	926.40
1986–87	0.00	19.10	92.90	0.00	16.60	0.20	58.00	221.10	979.50
1987–88	0.00	21.90	95.70	0.00	16.30	0.20	54.70	218.80	1014.50
1988–89	0.00	20.90	98.30	0.00	16.60	0.20	56.30	230.00	1090.20
1989–90	0.00	21.90	96.40	0.00	17.80	0.40	65.40	259.20	1099.80
1990–91	0.00	20.20	89.20	0.00	18.10	0.40	65.00	230.80	1090.90
1991–92	0.00	22.40	87.90	0.00	19.00	0.60	67.60	239.00	1108.70
1992–93	0.00	22.50	90.20	0.00	19.50	0.60	69.60	245.70	1104.70
1993–94	0.00	19.00	90.70	0.00	19.40	0.70	67.50	234.90	1102.50
1994–95	0.00	20.30	94.90	0.00	21.10	0.70	73.90	260.20	1152.20
1995–96	0.00	22.90	92.00	0.00	22.20	0.70	79.00	262.10	1184.90
1996–97	0.10	23.40	92.80	0.00	22.20	1.00	78.90	238.40	1202.70
1997–98	0.10	25.30	93.30	0.00	24.40	1.20	80.50	241.40	1286.30
1998–99	0.10	17.80	84.90	0.00	23.60	1.30	77.10	223.40	1318.30
1999–00	0.00	22.00	89.80	0.00	23.80	1.80	80.00	236.90	1346.30
2000–01	0.00	21.40	87.80	0.00	28.30	0.60	82.40	246.20	1337.20
2001–02	0.00	20.70	86.80	0.00	28.60	0.60	84.60	251.00	1371.90
2002–03	0.02	18.42	85.44	29.89	28.52	0.24	85.00	247.53	1330.64
2003–04	0.02	21.51	87.49	36.23	28.52	0.25	85.42	259.44	1364.92
2004–05	0.02	18.23	87.31	38.58	28.55	0.30	86.12	259.11	1356.53
2005–06	0.02	18.82	84.70	38.15	27.14	0.37	89.43	258.64	1429.49
2006–07	0.02	18.98	82.61	39.32	27.10	0.40	90.76	259.19	1433.87
2007–08	0.02	19.11	84.88	44.58	28.04	0.44	92.37	269.44	1426.09
2008–09	0.02	24.32	87.88	40.14	30.20	2.04	95.32	279.92	1420.96
2009–10	0.02	20.72	86.16	32.24	32.23	2.08	97.53	270.98	1432.92
2010–11	0.03	21.03	83.70	24.91	34.37	2.17	100.18	266.39	1436.97
2011–12	0.07	22.60	89.18	22.98	33.73	2.02	100.90	271.49	1447.83
2012–13	0.48	22.97	88.07	32.71	33.83	2.95	103.84	284.85	1396.52
2013–14	0.83	29.27	81.47	34.38	33.65	2.78	106.91	289.30	1409.07
2014–15	0.78	26.38	78.39	29.97	35.42	1.18	109.73	281.85	1430.98
2015–16	0.16	27.12	77.75	28.13	36.93	2.12	112.10	284.30	1416.88

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.8c Natural gas usage—Australian natural gas consumption, by industry —Queensland

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.00	10.60	0.00	0.20	0.10	0.40	12.00	371.30
1974–75	0.00	0.00	8.80	0.00	0.20	0.10	0.50	10.20	392.60
1975–76	0.00	0.00	7.90	0.00	0.20	0.10	0.60	9.40	410.00
1976–77	0.00	0.00	7.90	0.00	0.20	0.10	0.50	9.40	441.80
1977–78	0.00	0.00	9.40	0.00	0.20	0.10	0.60	11.00	461.20
1978–79	0.00	0.00	9.50	0.00	0.20	0.10	0.60	11.10	463.20
1979–80	0.00	0.00	11.00	0.00	0.30	0.10	0.70	12.60	480.20
1980–81	0.00	0.00	11.80	0.00	0.30	0.10	0.70	13.40	502.90
1981–82	0.00	0.20	12.40	0.00	0.30	0.20	0.70	14.30	537.20
1982–83	0.00	0.40	14.50	0.00	0.30	0.30	0.70	16.80	541.50
1983–84	0.00	0.60	14.90	0.00	0.30	0.40	0.70	17.60	571.60
1984–85	0.00	1.00	14.40	0.00	0.30	0.50	0.70	19.00	600.30
1985–86	0.00	1.40	14.50	0.00	0.30	0.70	0.80	19.70	604.80
1986–87	0.00	1.50	14.80	0.00	0.30	0.70	0.80	19.90	620.00
1987–88	0.00	2.20	17.70	0.00	0.30	0.80	0.80	23.50	642.40
1988–89	0.00	2.00	15.90	0.00	0.40	0.80	0.80	21.40	678.30
1989–90	0.00	1.80	16.40	0.00	0.40	0.90	0.90	22.00	691.80
1990–91	0.00	1.70	31.40	0.00	0.40	1.00	0.90	37.00	702.00
1991–92	0.00	2.90	32.30	0.00	0.40	1.00	0.90	39.10	715.00
1992–93	0.00	3.70	31.80	0.00	0.40	1.10	0.90	39.40	758.50
1993–94	0.00	4.80	35.70	0.00	0.50	0.80	1.00	44.30	793.20
1994–95	0.00	4.90	36.10	0.00	0.50	0.70	1.00	44.70	847.30
1995–96	0.00	4.80	37.10	0.00	0.50	0.70	1.10	47.20	882.70
1996–97	0.00	5.00	36.50	0.00	0.70	0.70	1.10	47.00	914.10
1997–98	0.00	5.20	38.00	0.00	0.90	0.80	1.40	50.20	968.50
1998–99	0.00	5.70	43.50	0.00	1.00	0.90	1.40	64.40	983.80
1999–00	0.10	5.60	44.80	0.00	0.80	1.40	1.50	73.80	1009.70
2000–01	0.10	10.00	46.10	0.00	0.60	1.20	1.50	88.40	1020.00
2001–02	0.10	10.50	46.00	0.00	0.60	1.30	1.50	90.30	1057.80
2002–03	0.08	8.48	60.15	22.01	0.59	1.31	1.44	94.06	1064.04
2003–04	0.08	9.06	60.36	24.72	0.58	1.38	1.45	97.63	1081.14
2004–05	0.08	9.75	61.26	21.99	0.58	1.43	2.45	97.53	1225.09
2005–06	0.08	10.50	62.71	20.77	0.56	1.54	2.53	98.69	1279.52
2006–07	0.08	11.20	64.04	85.76	0.56	1.59	2.61	165.84	1329.00
2007–08	0.08	14.13	68.37	90.36	0.57	1.69	2.67	177.87	1289.55
2008–09	0.10	17.42	71.74	99.78	0.57	1.27	2.72	193.60	1355.35
2009–10	0.10	16.32	72.62	101.57	0.57	1.50	2.75	195.43	1296.89
2010–11	0.10	17.75	72.63	96.76	0.97	2.29	2.86	193.36	1277.92
2011–12	0.07	19.08	73.21	143.29	1.02	2.63	2.90	242.21	1323.06
2012–13	0.05	21.86	83.92	125.22	1.05	3.00	3.02	238.12	1348.18
2013–14	0.04	23.74	83.83	140.73	1.13	2.73	3.16	255.36	1331.91
2014–15	0.06	33.39	91.40	167.32	1.12	2.76	3.36	299.41	1453.57
2015–16	0.46	86.92	79.81	141.80	1.11	2.28	3.44	315.82	1477.76

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.8d Gas usage—Australian gas consumption, by industry—South Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	1.60	8.30	0.00	0.80	0.00	3.50	48.70	215.40
1974–75	0.00	2.20	9.70	0.00	1.10	0.10	4.00	50.20	222.80
1975–76	0.00	2.40	10.90	0.00	1.40	0.20	4.20	57.30	234.50
1976–77	0.00	2.30	14.90	0.00	1.60	0.90	4.70	72.90	249.30
1977–78	0.00	3.00	14.80	0.00	1.70	1.40	4.90	78.40	247.70
1978–79	0.00	3.30	14.60	0.00	1.80	1.20	5.30	81.30	259.60
1979–80	0.00	5.20	17.80	0.00	1.80	1.70	5.20	88.00	264.20
1980–81	0.00	6.00	19.00	0.00	2.00	1.90	5.20	92.90	255.70
1981–82	0.00	8.50	19.80	0.00	2.10	2.20	5.60	104.00	260.00
1982–83	0.00	9.20	19.60	0.00	2.20	2.40	5.70	105.10	254.60
1983–84	0.00	13.20	18.00	0.00	2.20	2.30	5.60	106.20	258.00
1984–85	0.00	21.20	20.80	0.00	2.30	2.80	5.90	119.60	280.20
1985–86	0.00	21.50	22.40	0.00	2.40	2.20	6.00	111.10	284.50
1986–87	0.00	22.70	20.10	0.00	2.50	1.60	6.30	107.90	284.70
1987–88	0.00	23.90	22.40	0.00	2.60	1.60	6.00	109.50	291.10
1988–89	0.00	22.10	21.50	0.00	2.70	1.60	6.40	111.30	299.30
1989–90	0.00	22.90	23.80	0.00	2.90	1.50	6.60	109.90	301.90
1990–91	0.00	21.70	23.80	0.00	3.00	1.10	6.80	96.70	287.40
1991–92	0.00	20.90	23.30	0.00	3.40	1.20	7.10	101.80	296.90
1992–93	0.00	20.60	22.00	0.00	3.50	1.50	7.30	103.40	300.10
1993–94	0.00	20.10	26.80	0.00	3.60	1.80	6.80	112.20	304.80
1994–95	0.00	20.60	29.10	0.00	3.80	1.70	7.30	110.20	304.40
1995–96	0.00	20.10	30.10	0.00	3.80	1.80	7.30	99.40	296.60
1996–97	0.00	20.30	30.30	0.00	3.80	1.80	7.50	99.50	299.70
1997–98	0.00	23.70	28.80	0.00	3.90	1.80	7.60	106.90	311.90
1998–99	0.00	23.80	27.40	0.00	4.10	2.00	7.70	120.50	327.20
1999–00	0.00	22.30	27.90	0.00	4.20	2.10	7.80	119.90	328.00
2000–01	0.00	26.00	23.60	0.00	3.60	1.80	7.90	121.50	329.30
2001–02	0.00	25.90	24.60	0.00	4.00	2.00	8.10	123.20	328.10
2002–03	0.00	29.24	26.96	55.59	4.21	1.99	8.74	126.73	357.30
2003–04	0.00	28.63	27.76	56.25	4.22	2.02	9.23	128.10	371.54
2004–05	0.00	25.31	30.06	57.86	4.90	2.24	10.23	130.60	355.55
2005–06	0.00	21.77	30.64	49.45	5.13	2.46	10.73	120.18	350.12
2006–07	0.00	16.96	30.14	71.04	5.26	2.53	10.65	136.58	375.46
2007–08	0.00	16.00	31.30	79.44	5.43	2.57	10.77	145.51	372.53
2008–09	0.00	18.31	26.16	72.23	5.43	1.12	10.98	134.23	359.47
2009–10	0.00	18.24	28.12	55.88	5.42	1.18	10.66	119.50	344.62
2010–11		17.04	25.77	63.66	3.41	1.32	10.66	121.87	348.24
2011–12	0.08	17.74	27.32	64.23	3.29	0.88	11.70	125.23	344.54
2012–13	0.07	17.09	24.91	66.26	3.34	0.69	11.82	124.17	335.44
2013–14	0.08	18.85	23.97	55.53	5.55	0.72	11.94	116.63	328.97
2014–15	0.08	17.93	21.73	47.88	5.84	0.88	11.97	106.32	326.05
2015–16	0.08	16.76	21.15	59.34	6.15	1.00	12.23	116.70	334.02

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.8e Natural gas usage—Australian natural gas consumption, by industry —Western Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.80	26.90	1.50	0.50	0.00	0.00	31.20	272.60
1974–75	0.00	0.70	27.90	0.60	0.80	0.10	1.30	31.50	279.60
1975–76	0.00	0.70	28.30	0.60	0.80	0.20	1.40	31.90	296.50
1976–77	0.00	0.60	28.60	0.60	0.80	0.20	1.90	32.80	322.10
1977–78	0.00	0.60	27.20	0.70	0.80	0.20	1.90	31.30	328.40
1978–79	0.00	0.60	27.70	0.50	0.90	0.20	2.20	32.20	336.00
1979–80	0.00	0.50	28.60	0.60	1.10	0.30	2.10	33.10	334.10
1980–81	0.00	0.60	28.80	0.60	1.00	0.40	2.20	33.60	322.00
1981–82	0.00	0.80	26.80	0.60	1.10	0.50	2.10	31.90	300.10
1982–83	0.00	1.10	32.30	0.60	1.10	1.00	2.30	38.30	304.60
1983–84	0.00	1.00	31.40	1.10	1.20	1.50	2.40	38.60	313.90
1984–85	0.00	5.50	56.60	6.80	1.60	0.80	2.70	73.90	343.10
1985–86	0.00	5.90	67.30	34.00	1.70	3.30	3.00	115.30	344.80
1986–87	0.00	6.40	76.00	43.40	2.10	1.60	3.40	132.90	358.40
1987–88	0.00	10.60	81.10	53.20	2.30	2.10	3.80	153.00	391.10
1988–89	0.00	16.50	87.80	45.50	2.50	2.00	4.20	158.50	427.70
1989–90	0.00	34.40	92.40	46.70	2.80	2.00	5.10	183.30	473.00
1990–91	0.00	41.00	94.00	36.20	2.90	1.80	5.50	181.30	488.40
1991–92	0.00	44.70	95.70	37.80	3.00	2.10	5.80	189.00	496.40
1992–93	0.00	56.20	100.60	38.20	3.30	2.70	6.50	207.40	522.00
1993–94	0.00	61.40	107.90	49.20	3.80	3.80	7.10	233.10	554.10
1994–95	0.00	71.50	110.20	63.20	4.10	4.80	7.40	261.10	592.70
1995–96	0.00	82.70	108.50	54.90	4.20	5.20	7.80	263.30	630.20
1996–97	0.00	84.90	111.10	71.40	4.30	5.40	8.10	285.10	649.60
1997–98	0.00	91.60	112.80	86.30	4.60	5.50	8.40	309.20	662.60
1998–99	0.00	97.60	117.80	85.70	5.00	6.20	8.60	320.90	672.80
1999–00	0.00	102.00	120.90	85.30	5.20	6.70	8.60	328.60	688.50
2000–01	0.00	67.40	147.10	102.40	2.80	8.90	8.80	337.50	708.10
2001–02	0.00	69.70	150.50	102.70	2.90	10.30	9.10	345.10	722.90
2002–03	0.00	48.45	145.68	98.36	2.87	10.45	8.99	314.80	719.96
2003–04	0.00	48.40	153.69	104.00	2.83	10.46	8.70	328.08	730.33
2004–05	0.00	61.00	162.53	104.14	2.82	11.21	9.10	350.80	748.20
2005–06	0.00	69.64	165.07	104.56	2.73	11.72	9.03	362.75	757.07
2006–07	0.00	82.70	180.23	113.43	2.75	12.28	9.43	400.83	820.67
2007–08	0.00	84.08	170.87	128.41	2.90	12.35	9.69	408.30	827.96
2008–09	0.00	90.21	160.72	204.63	2.90	8.01	9.70	476.18	919.98
2009–10	0.00	89.36	165.53	200.59	2.97	6.84	9.78	475.07	907.30
2010–11		94.58	161.62	219.98	3.68	5.31	10.00	495.17	973.92
2011–12	0.02	97.06	165.71	220.64	4.00	5.71	10.10	503.24	1011.57
2012–13	0.02	104.46	173.50	218.22	3.94	5.65	10.30	516.08	1048.18
2013–14	0.05	105.94	183.71	226.42	4.28	6.11	10.50	537.02	1059.77
2014–15	0.06	105.68	166.93	246.14	4.32	6.22	10.71	540.05	1047.55
2015–16	0.02	111.70	163.18	266.50	4.49	6.34	10.94	563.17	1119.89

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.8f Natural gas usage—Australian natural gas consumption, by industry —Tasmania

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.90
1974–75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.30
1975–76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.90
1976–77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.00
1977–78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.40
1978–79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.00
1979–80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.60
1980–81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.30
1981–82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.50
1982–83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.30
1983–84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.30
1984–85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.00
1985–86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.40
1986–87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.40
1987–88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.50
1988–89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92.00
1989–90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.60
1990–91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.60
1991–92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.30
1992–93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.10
1993–94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92.00
1994–95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92.40
1995–96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.00
1996–97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.80
1997–98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.80
1998–99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.70
1999–00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.80
2000–01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.60
2001–02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.20
2002–03	0.00	0.00	0.52	3.59	0.00	0.37	0.00	4.47	99.50
2003–04	0.00	0.00	0.52	6.25	0.00	0.37	0.00	7.13	103.40
2004–05	0.00	0.00	0.91	7.36	0.00	0.39	0.00	8.65	107.39
2005–06	0.00	0.00	0.78	8.60	0.00	0.40	0.00	9.77	111.57
2006–07	0.00	0.00	1.02	9.70	0.00	0.40	0.01	11.13	113.32
2007–08	0.00	0.00	1.07	12.50	0.00	0.42	0.05	14.03	115.51
2008–09	0.00	0.00	3.72	7.28	0.00	0.08	0.10	11.18	115.47
2009–10	0.00	0.00	3.58	9.77	0.00	0.10	0.10	13.56	115.20
2010–11	0.00	0.00	5.04	12.39	0.08	0.08	0.10	17.69	114.99
2011–12	0.00	0.00	3.26	12.71	0.09	0.00	0.10	16.16	108.30
2012–13	0.02	0.00	3.47	14.04	0.08	0.00	0.10	17.71	113.42
2013–14	0.02	0.00	3.81	7.90	0.09	0.00	0.10	11.93	109.43
2014–15	0.02	0.01	4.35	1.50	0.09	0.00	0.10	6.06	106.27
2015–16	0.02	0.01	4.20	8.00	0.07	0.00	0.11	12.40	108.43

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.8g Natural gas usage—Australian natural gas consumption, by industry —Northern Territory

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.10
1974–75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.80
1975–76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.20
1976–77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.60
1977–78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.10
1978–79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.70
1979–80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00
1980–81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.30
1981–82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.60
1982–83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.80
1983–84	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.10	43.80
1984–85	0.00	0.10	0.00	1.00	0.00	0.00	0.00	1.00	45.80
1985–86	0.00	0.30	0.00	1.00	0.00	0.00	0.00	1.30	47.00
1986–87	0.00	0.50	0.00	4.60	0.00	0.00	0.00	5.10	49.30
1987–88	0.00	0.40	0.00	10.70	0.10	0.00	0.00	11.30	51.10
1988–89	0.00	0.10	0.00	10.70	0.10	0.00	0.00	11.00	51.00
1989–90	0.00	0.10	0.00	12.30	0.10	0.00	0.00	12.50	52.50
1990–91	0.00	0.10	0.00	13.00	0.10	0.00	0.00	13.20	55.00
1991–92	0.00	0.10	0.00	13.50	0.10	0.00	0.00	13.60	56.90
1992–93	0.00	0.00	0.00	13.60	0.10	0.00	0.00	13.80	57.20
1993–94	0.00	0.10	0.00	13.50	0.10	0.00	0.00	13.70	58.50
1994–95	0.00	0.10	0.00	14.70	0.10	0.00	0.00	15.00	61.80
1995–96	0.00	0.10	0.00	17.00	0.10	0.00	0.00	17.20	67.00
1996–97	0.00	0.10	0.10	17.60	0.20	0.10	0.00	18.10	69.70
1997–98	0.00	0.20	0.10	18.10	0.20	0.20	0.00	18.80	70.40
1998–99	0.00	0.20	0.10	19.40	0.20	0.30	0.00	20.20	73.20
1999–00	0.00	0.20	0.10	21.10	0.20	0.40	0.00	21.90	76.40
2000–01	0.00	0.20	0.10	21.40	0.20	0.10	0.00	21.90	73.20
2001–02	0.00	0.20	0.10	21.90	0.20	0.20	0.00	22.40	73.40
2002–03	0.00	0.15	0.06	13.62	0.16	0.15	0.00	14.14	56.78
2003–04	0.00	0.73	0.06	13.67	0.16	0.10	0.00	14.72	58.65
2004–05	0.00	0.73	0.06	14.38	0.16	0.10	0.01	15.43	61.54
2005–06	0.00	6.53	0.05	11.75	0.15	0.11	0.01	18.60	73.00
2006–07	0.00	19.82	0.05	14.11	0.15	0.10	0.01	34.24	82.79
2007–08	0.00	18.45	0.05	12.42	0.16	0.10	0.01	31.20	95.99
2008–09	0.00	21.01	0.05	18.67	0.17	0.13	0.00	40.03	95.09
2009–10	0.00	20.73	0.05	25.39	0.18	0.04	0.00	46.39	98.76
2010–11	0.00	15.86	0.05	24.77	0.21	0.00	0.00	40.89	96.33
2011–12	0.00	16.63	0.05	25.03	0.20	0.00	0.00	41.91	97.87
2012–13	0.00	19.39	0.01	25.18	0.20	0.01	0.00	44.79	99.75
2013–14	0.00	19.73	0.01	26.14	1.47	0.02	0.00	47.37	99.61
2014–15	0.00	25.25	0.02	26.20	0.19	0.01	0.00	51.68	90.50
2015–16	0.00	28.17	0.01	28.31	0.20	0.04	0.00	56.74	90.72

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.8h Natural gas usage—Australian natural gas consumption, by industry —Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	13.40	85.70	43.90	5.50	0.10	23.60	172.50	2615.20
1974–75	0.00	17.60	93.10	42.60	7.50	0.30	28.20	189.20	2694.80
1975–76	0.00	20.30	103.30	48.60	8.60	0.50	29.90	211.20	2730.80
1976–77	0.00	20.90	117.50	69.80	10.30	1.20	36.50	256.20	2905.90
1977–78	0.00	20.20	134.20	76.50	11.40	1.70	39.10	283.00	2985.10
1978–79	0.00	21.90	148.80	85.70	13.70	1.50	43.30	314.90	3053.10
1979–80	0.00	24.20	179.10	96.90	15.10	2.30	45.10	362.60	3131.40
1980–81	0.00	23.30	198.60	126.00	16.20	2.80	48.90	416.00	3146.30
1981–82	0.00	25.50	206.10	152.20	19.60	3.30	55.20	462.00	3237.60
1982–83	0.00	31.30	212.50	139.90	21.40	4.00	57.20	466.20	3122.70
1983–84	0.00	39.00	215.70	146.50	23.50	4.60	60.60	490.00	3221.20
1984–85	0.00	49.10	245.70	134.20	25.40	4.50	64.40	523.30	3370.70
1985–86	0.00	47.70	264.30	156.40	27.00	6.60	68.70	570.70	3402.50
1986–87	0.00	50.20	278.50	151.10	29.30	4.50	74.80	588.40	3514.40
1987–88	0.00	59.00	284.50	159.40	29.80	5.10	72.70	610.50	3623.00
1988–89	0.00	61.60	291.30	162.30	31.40	5.00	76.10	627.80	3832.70
1989–90	0.00	81.00	300.20	179.50	34.20	5.20	87.90	688.00	3945.90
1990–91	0.00	84.70	303.70	137.40	35.40	4.80	89.40	655.40	3949.90
1991–92	0.00	90.90	303.20	148.00	37.60	5.50	93.30	678.70	3982.70
1992–93	0.00	103.10	309.20	151.40	39.10	6.50	97.80	707.00	4081.80
1993–94	0.00	105.40	327.20	160.70	39.60	7.80	96.20	736.80	4181.90
1994–95	0.00	117.30	338.20	181.50	42.80	8.70	104.70	793.10	4365.40
1995–96	0.00	130.40	336.00	164.80	45.20	9.20	111.30	797.00	4505.50
1996–97	0.10	133.70	354.40	161.50	45.90	10.10	112.80	818.40	4611.10
1997–98	0.10	145.90	356.30	180.10	49.90	10.80	116.20	859.30	4777.60
1998–99	0.10	145.00	356.60	209.00	50.60	12.10	115.20	888.40	4884.70
1999–00	0.10	152.10	368.40	219.80	51.30	14.40	118.50	924.30	4971.00
2000–01	0.10	126.10	397.80	257.60	44.80	13.60	121.60	961.60	5011.80
2001–02	0.10	128.30	397.50	264.70	45.60	15.50	124.90	976.40	5097.00
2002–03	0.10	106.52	407.05	240.92	46.01	16.60	124.94	942.13	5138.69
2003–04	0.10	109.22	417.42	259.86	46.32	15.72	125.34	973.98	5284.77
2004–05	0.10	116.18	423.74	263.96	47.14	16.94	128.40	996.44	5399.21
2005–06	0.10	128.80	422.96	252.83	45.70	17.96	132.51	1000.85	5546.76
2006–07	0.10	151.36	435.78	345.87	45.64	18.64	134.53	1131.91	5724.00
2007–08	0.10	152.71	435.12	378.61	46.29	19.01	136.86	1168.70	5738.34
2008–09	0.12	171.29	426.87	464.81	48.53	14.15	141.12	1266.88	5859.44
2009–10	0.12	165.37	430.71	465.16	50.82	13.40	144.11	1269.69	5838.85
2010–11	0.13	166.26	424.19	480.70	52.74	12.70	148.05	1284.77	5905.62
2011–12	0.57	173.12	430.06	526.47	52.47	12.84	150.80	1346.33	5947.85
2012–13	0.88	185.77	444.92	530.51	52.87	14.03	154.81	1383.78	5922.64
2013–14	1.41	198.48	443.77	542.54	56.87	14.12	158.91	1416.11	5861.84
2014–15	1.33	209.31	428.62	564.64	57.95	12.46	162.27	1436.59	5926.74
2015–16	2.50	271.30	410.09	583.40	60.35	13.24	165.78	1506.66	6065.90

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.9 Gas usage—price index for gas and other household fuels, by capital city

Average over financial year ending	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
				base of each index: 2011–12 = 100				
Jun–1990	36.0	39.7	36.6	35.4	34.8	45.2	38.8	31.2
Jun–1991	39.1	42.0	39.2	37.6	38.0	51.2	41.8	35.2
Jun–1992	40.0	44.1	40.5	39.2	38.5	49.6	42.7	36.2
Jun–1993	39.8	47.5	40.8	39.8	38.5	49.7	43.5	36.5
Jun–1994	39.7	49.6	41.0	39.9	38.5	51.2	43.8	37.1
Jun–1995	39.8	51.7	41.2	40.8	38.7	51.3	45.0	37.8
Jun–1996	42.3	51.7	41.8	42.4	38.8	52.2	47.9	40.4
Jun–1997	43.3	52.7	41.8	44.0	39.0	53.6	49.2	41.9
Jun–1998	45.9	53.3	41.8	45.4	38.9	51.7	51.9	42.9
Jun–1999	47.3	50.8	41.8	46.0	39.4	51.2	54.2	44.5
Jun–2000	46.6	49.5	41.9	47.4	39.6	55.2	59.8	45.1
Jun–2001	53.2	54.1	47.8	53.7	43.9	62.9	68.0	52.1
Jun–2002	57.4	55.3	49.4	56.2	46.2	63.7	68.7	51.8
Jun–2003	62.5	58.5	51.0	59.2	47.7	67.0	70.3	55.1
Jun–2004	67.6	62.1	52.8	62.5	49.6	71.6	70.4	58.5
Jun–2005	70.1	65.4	56.1	66.9	51.4	75.1	73.4	62.2
Jun–2006	72.7	68.0	65.8	71.2	54.2	81.0	76.8	65.9
Jun–2007	75.0	70.9	70.6	74.7	56.6	80.8	83.2	68.9
Jun–2008	78.7	74.6	77.3	77.8	58.7	87.2	91.4	74.0
Jun–2009	83.0	81.8	83.8	84.9	68.5	94.8	97.9	84.8
Jun–2010	89.1	88.6	88.6	87.9	81.5	94.8	98.7	92.1
Jun–2011	94.0	94.5	93.1	93.1	89.7	96.5	104.7	95.1
Jun–2012	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Jun–2013	114.8	120.1	115.8	117.7	113.0	101.2	103.0	111.1
Jun–2014	125.8	124.8	122.2	131.6	119.2	104.2	113.5	116.1
Jun–2015	140.9	122.0	125.6	144.5	118.1	108.2	109.2	125.2
Jun–2016	121.8	130.8	128.3	150.0	119.7	110.7	105.8	131.1
Jun–2017	122.7	140.1	129.4	135.1	121.3	114.9	99.6	125.2

Source: ABS (2017d).

Table E 3.10a Black coal usage—Australian black coal consumption, by industry—New South Wales

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.10	242.10	220.80	3.90	0.30	0.70	467.80	943.00
1974–75	0.00	0.10	260.50	225.80	4.00	0.30	0.70	491.30	964.70
1975–76	0.00	0.10	246.30	216.40	3.80	0.20	1.50	468.30	934.00
1976–77	0.00	0.10	223.60	272.90	3.70	0.20	0.90	501.40	980.20
1977–78	0.00	0.10	228.10	291.30	3.60	0.20	0.80	524.00	1011.30
1978–79	0.00	0.10	221.50	300.70	3.80	0.20	0.70	526.90	1019.30
1979–80	0.00	0.10	212.70	343.00	3.60	0.10	0.70	560.20	1059.00
1980–81	0.00	0.00	219.80	354.50	3.40	0.10	0.70	578.50	1060.40
1981–82	0.00	0.00	205.60	348.10	3.20	0.10	0.50	557.60	1077.80
1982–83	0.00	0.00	160.80	364.00	3.20	0.10	0.50	528.50	1002.50
1983–84	0.00	0.00	155.50	382.80	3.20	0.00	0.40	542.00	1045.60
1984–85	0.00	0.00	160.60	395.80	3.20	0.00	0.40	560.10	1080.30
1985–86	0.00	0.00	154.00	420.50	3.10	0.00	0.30	578.00	1108.70
1986–87	0.00	0.00	158.80	435.80	3.10	0.00	0.20	598.10	1137.10
1987–88	0.00	0.00	163.90	446.00	3.00	0.10	0.20	613.20	1143.30
1988–89	0.00	0.00	184.00	464.70	2.90	0.10	0.20	651.90	1194.20
1989–90	0.00	0.00	169.80	479.50	2.80	0.00	0.20	652.30	1230.40
1990–91	0.00	0.00	169.50	475.10	2.40	0.00	0.20	647.20	1228.60
1991–92	0.00	0.00	171.20	480.90	1.70	0.00	0.10	654.00	1219.40
1992–93	0.00	0.00	164.50	497.80	1.50	0.00	0.10	663.90	1249.10
1993–94	0.00	0.00	171.90	507.90	1.30	0.00	0.10	681.10	1276.70
1994–95	0.00	0.00	168.00	521.60	1.00	0.00	0.10	690.60	1314.60
1995–96	0.00	0.00	153.20	546.10	0.70	0.00	0.10	700.10	1351.20
1996–97	0.00	0.00	160.20	554.80	0.60	0.00	0.10	715.70	1380.60
1997–98	0.00	0.00	157.10	551.90	0.40	0.00	0.10	709.50	1382.00
1998–99	0.00	0.00	155.50	561.30	0.40	0.00	0.10	717.30	1413.80
1999–00	0.00	0.00	139.80	573.40	0.40	0.00	0.10	713.60	1426.30
2000–01	0.00	0.00	122.00	614.90	0.50	0.00	0.10	737.50	1450.50
2001–02	0.00	0.00	123.90	619.00	0.50	0.00	0.10	743.50	1445.70
2002–03	0.00	0.00	135.65	616.56	0.50	0.00	0.05	752.76	1510.48
2003–04	0.00	0.00	146.12	640.69	0.55	0.00	0.05	787.42	1574.79
2004–05	0.00	0.00	148.38	633.75	0.55	0.00	0.05	782.73	1544.92
2005–06	0.00	0.00	146.95	649.84	0.19	0.00	0.05	797.04	1545.99
2006–07	0.00	0.00	147.31	653.57	0.13	0.00	0.05	801.06	1568.89
2007–08	0.00	0.00	150.73	708.55	0.01	0.00	0.05	859.35	1610.71
2008–09	0.00	0.00	109.21	693.50	0.00	0.00	0.00	802.70	1593.12
2009–10	0.00	0.00	140.74	637.10	0.00	0.00	0.00	777.84	1643.15
2010–11	0.00	0.00	143.86	596.50	0.00	0.00	0.00	740.36	1657.26
2011–12	0.00	0.00	118.94	592.96	0.00	0.00	0.00	711.90	1614.68
2012–13	0.00	0.00	112.34	561.88	0.00	0.00	0.00	674.22	1581.14
2013–14	0.00	0.00	104.32	526.82	0.00	0.00	0.00	631.14	1523.09
2014–15	0.00	0.00	92.69	512.71	0.00	0.00	0.00	605.40	1471.83
2015–16	0.00	0.00	93.67	544.77	0.00	0.00	0.00	638.44	1518.19

Note: ACT figures are included in the NSW total.
np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10b Black Coal usage—Australian black coal consumption, by industry—Victoria

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.00	included in total	included in total	0.00	0.00	0.00	included in total	710.90
1974–75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	731.00
1975–76	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	752.80
1976–77	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	802.10
1977–78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	823.10
1978–79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	857.30
1979–80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	869.40
1980–81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	880.80
1981–82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	939.40
1982–83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	896.50
1983–84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	904.90
1984–85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	936.20
1985–86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	926.40
1986–87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	979.50
1987–88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1014.50
1988–89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1090.20
1989–90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1099.80
1990–91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1090.90
1991–92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1108.70
1992–93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1104.70
1993–94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1102.50
1994–95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1152.20
1995–96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1184.90
1996–97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1202.70
1997–98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1286.30
1998–99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1318.30
1999–00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1346.30
2000–01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1337.20
2001–02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1371.90
2002–03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	1330.64
2003–04	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	1364.92
2004–05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1356.53
2005–06	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1429.49
2006–07	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1433.87
2007–08	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	1426.09
2008–09	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	1420.96
2009–10	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1432.92
2010–11	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1436.97
2011–12	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1447.83
2012–13	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1396.52
2013–14	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1409.07
2014–15	0.00	0.00	0.06	0.01	0.00	0.00	0.00	0.00	1430.98
2015–16	0.00	0.00	0.06	0.42	0.00	0.00	0.00	0.00	1416.88

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10c Black coal usage—Australian black coal consumption, by industry—Queensland

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.00	included in total	29.20	84.20	0.70	0.00	0.10	114.20	371.30
1974–75	0.00	0.00	35.90	91.70	0.70	0.00	0.10	128.50	392.60
1975–76	0.00	0.00	36.70	93.00	0.70	0.00	0.10	130.50	410.00
1976–77	0.00	0.00	39.70	100.90	0.70	0.00	0.10	141.40	441.80
1977–78	0.00	0.00	37.60	116.40	0.70	0.00	0.10	154.90	461.20
1978–79	0.00	0.00	41.20	117.80	0.70	0.00	0.10	159.80	463.20
1979–80	0.00	0.00	43.60	126.60	0.80	0.00	0.20	171.20	480.20
1980–81	0.00	0.00	44.20	137.20	0.80	0.00	0.20	182.40	502.90
1981–82	0.00	0.00	46.10	152.20	0.90	0.00	0.20	199.40	537.20
1982–83	0.00	0.00	47.10	174.40	0.90	0.60	0.20	223.20	541.50
1983–84	0.00	0.00	45.40	195.60	0.90	3.70	0.20	245.80	571.60
1984–85	0.00	0.00	47.00	212.30	0.90	3.40	0.20	263.80	600.30
1985–86	0.00	0.00	48.80	210.40	0.90	3.30	0.20	263.60	604.80
1986–87	0.00	0.00	50.70	217.50	0.80	3.80	0.20	273.00	620.00
1987–88	0.00	0.00	49.60	224.10	0.80	3.50	0.20	278.10	642.40
1988–89	0.00	0.00	53.30	234.30	0.90	3.90	0.10	292.40	678.30
1989–90	0.00	0.00	50.70	244.40	0.80	3.50	0.10	299.50	691.80
1990–91	0.00	0.00	49.70	251.90	0.80	3.70	0.10	306.20	702.00
1991–92	0.00	0.00	52.30	266.40	0.80	4.00	0.10	323.50	715.00
1992–93	0.00	0.00	52.70	282.60	0.70	4.10	0.10	340.00	758.50
1993–94	0.00	0.00	53.40	288.00	0.70	3.90	0.10	346.10	793.20
1994–95	0.00	0.00	55.20	310.90	0.60	4.00	0.10	370.80	847.30
1995–96	0.00	0.00	53.90	327.90	0.60	4.00	0.00	386.40	882.70
1996–97	0.00	0.00	57.00	336.40	0.60	4.30	0.00	398.30	914.10
1997–98	0.00	0.00	53.40	385.20	0.50	4.20	0.00	443.30	968.50
1998–99	0.00	0.00	54.40	395.20	0.40	4.20	0.00	454.10	983.80
1999–00	0.00	0.00	54.60	387.50	0.60	4.40	0.00	475.20	1009.70
2000–01	0.00	0.00	52.70	421.80	0.60	4.90	0.00	478.60	1020.00
2001–02	0.00	0.00	52.00	452.00	0.60	5.00	0.00	508.10	1057.80
2002–03	0.00	0.00	49.77	453.41	0.59	5.00	0.00	508.78	1064.04
2003–04	0.00	0.00	50.44	497.39	0.59	5.80	0.00	554.21	1081.14
2004–05	0.00	0.00	54.83	541.06	0.59	8.00	0.00	604.48	1225.09
2005–06	0.00	0.00	53.87	553.03	0.57	6.90	0.00	614.37	1279.52
2006–07	0.00	0.00	56.40	571.32	0.57	7.40	0.00	635.69	1329.00
2007–08	0.00	0.00	59.58	498.96	0.55	8.00	0.00	567.09	1289.55
2008–09	0.00	0.00	55.45	568.85	0.50	4.87	0.00	629.67	1355.35
2009–10	0.00	0.00	53.41	489.86	0.43	4.14	0.00	547.84	1296.89
2010–11	0.00	0.00	45.95	448.51	0.09	2.95	0.00	497.50	1277.92
2011–12	0.00	0.00	45.05	434.25	0.09	2.52	0.00	481.92	1323.06
2012–13	0.00	0.00	49.73	426.07	0.09	0.00	0.00	475.89	1348.18
2013–14	0.00	0.00	50.02	394.70	0.09	0.00	0.00	444.81	1331.91
2014–15	0.00	0.00	50.06	433.96	0.09	0.02	0.00	484.56	1453.57
2015–16	0.00	0.00	53.16	463.01	0.10	0.00	0.00	516.69	1477.76

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10d Black coal usage—Australian black coal consumption, by industry—South Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
					Petajoules				
1973–74	0.00	0.00	included in total	0.00	included in total	0.00	0.00	included in total	215.40
1974–75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	222.80
1975–76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	234.50
1976–77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	249.30
1977–78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	247.70
1978–79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	259.60
1979–80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	264.20
1980–81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	255.70
1981–82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	260.00
1982–83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	254.60
1983–84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	258.00
1984–85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	280.20
1985–86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	284.50
1986–87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	284.70
1987–88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	291.10
1988–89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	299.30
1989–90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	301.90
1990–91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	287.40
1991–92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	296.90
1992–93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.10
1993–94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	304.80
1994–95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	304.40
1995–96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	296.60
1996–97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	299.70
1997–98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	311.90
1998–99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	327.20
1999–00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	328.00
2000–01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	329.30
2001–02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	328.10
2002–03	0.00	0.00	26.65	0.00	0.00	0.00	0.00	0.00	357.30
2003–04	0.00	0.00	26.87	0.00	0.00	0.00	0.00	0.00	371.54
2004–05	0.00	0.00	28.71	0.00	0.00	0.00	0.00	0.00	355.55
2005–06	0.00	0.00	28.93	0.00	0.00	0.00	0.00	0.00	350.12
2006–07	0.00	0.00	28.69	0.00	0.00	0.00	0.00	0.00	375.46
2007–08	0.00	0.00	28.15	0.00	0.00	0.00	0.00	0.00	372.53
2008–09	0.00	0.00	26.41	0.00	0.00	0.00	0.00	0.00	359.47
2009–10	0.00	0.00	29.04	0.00	0.00	0.00	0.00	0.00	344.62
2010–11	0.00	0.00	28.47	0.00	0.00	0.00	0.00	0.00	348.24
2011–12	0.00	0.00	28.09	0.00	0.00	0.00	0.00	0.00	344.54
2012–13	0.00	0.00	30.49	0.00	0.00	0.00	0.00	0.00	335.44
2013–14	0.00	0.00	27.89	0.00	0.00	0.00	0.00	0.00	328.97
2014–15	0.00	0.00	28.36	0.00	0.00	0.00	0.00	0.00	326.05
2015–16	0.00	0.00	28.77	0.00	0.00	0.00	0.00	0.00	334.02

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10e Black coal usage—Australian black coal consumption, by industry—Western Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.00	0.40	0.00	22.60	0.00	0.00	0.00	23.00	272.60
1974–75	0.00	0.90	1.50	33.70	0.00	0.00	0.00	36.10	279.60
1975–76	0.00	0.80	2.70	38.90	0.00	0.00	0.00	42.50	296.50
1976–77	0.00	0.70	3.10	41.30	0.00	0.00	0.00	45.10	322.10
1977–78	0.00	0.70	3.30	42.10	0.00	0.00	0.00	46.10	328.40
1978–79	0.00	0.80	3.50	43.20	0.00	0.00	0.00	47.60	336.00
1979–80	0.00	0.90	3.00	53.70	0.00	0.00	0.00	57.60	334.10
1980–81	0.00	0.90	4.10	57.50	0.00	0.00	0.00	62.50	322.00
1981–82	0.00	1.10	4.40	58.90	0.00	0.00	0.00	64.40	300.10
1982–83	0.00	0.70	5.30	61.90	0.00	0.00	0.00	67.90	304.60
1983–84	0.00	0.80	6.40	63.90	0.00	0.00	0.00	71.10	313.90
1984–85	0.00	1.20	14.90	66.40	0.00	0.00	0.00	82.40	343.10
1985–86	0.00	1.20	15.50	47.10	0.00	0.00	0.00	63.70	344.80
1986–87	0.00	2.60	12.00	46.00	0.00	0.00	0.00	60.60	358.40
1987–88	0.00	3.40	11.10	46.60	0.00	0.00	0.00	61.10	391.10
1988–89	0.00	3.70	11.40	63.80	0.00	0.00	0.00	78.80	427.70
1989–90	0.00	5.90	16.30	71.50	0.00	0.00	0.00	93.70	473.00
1990–91	0.00	5.60	16.90	86.80	0.00	0.00	0.00	109.30	488.40
1991–92	0.00	6.10	18.20	87.00	0.00	0.00	0.00	111.30	496.40
1992–93	0.00	6.00	20.40	88.10	0.00	0.00	0.00	114.50	522.00
1993–94	0.00	5.50	19.60	85.40	0.00	0.00	0.00	110.60	554.10
1994–95	0.00	7.40	19.50	78.50	0.00	0.00	0.00	105.40	592.70
1995–96	0.00	7.90	20.50	93.80	0.00	0.00	0.00	122.10	630.20
1996–97	0.00	7.90	19.40	90.30	0.00	0.00	0.00	117.70	649.60
1997–98	0.00	6.50	19.80	86.60	0.00	0.00	0.00	112.90	662.60
1998–99	0.00	6.40	20.00	85.10	0.00	0.00	0.00	111.60	672.80
1999–00	0.00	6.80	19.70	93.50	0.00	0.00	0.00	120.00	688.50
2000–01	0.00	6.40	20.90	91.20	0.00	0.00	0.00	118.50	708.10
2001–02	0.00	6.40	21.30	93.60	0.00	0.00	0.00	121.30	722.90
2002–03	0.00	0.00	27.22	106.25	0.00	0.00	0.00	133.47	719.96
2003–04	0.00	0.00	27.86	107.00	0.00	0.00	0.00	134.86	730.33
2004–05	0.00	0.00	26.29	104.72	0.00	0.00	0.00	131.01	748.20
2005–06	0.00	0.00	26.79	101.15	0.00	0.00	0.00	127.94	757.07
2006–07	0.00	0.00	27.78	100.53	0.00	0.00	0.00	128.31	820.67
2007–08	0.00	0.00	28.60	89.88	0.00	0.00	0.00	118.48	827.96
2008–09	0.00	0.00	25.79	98.83	0.00	0.00	0.00	132.94	919.98
2009–10	0.00	0.00	23.58	96.21	0.00	0.00	0.00	125.47	907.30
2010–11	0.00	0.00	23.79	101.16	0.00	0.00	0.00	130.53	973.92
2011–12	0.00	0.00	24.03	96.10	0.00	0.00	0.00	124.97	1011.57
2012–13	0.00	0.00	29.23	96.73	0.00	0.00	0.00	129.06	1048.18
2013–14	0.00	0.00	29.66	102.46	0.00	0.00	0.00	135.23	1059.77
2014–15	0.00	0.00	26.89	99.05	0.00	0.00	0.00	126.86	1047.55
2015–16	0.00	0.00	29.91	103.15	0.00	0.00	0.00	135.79	1119.89

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10f Black coal usage—Australian black coal consumption, by industry—Tasmania

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.00	included in total	2.00	0.20	0.00	0.00	0.00	2.40	71.90
1974–75	0.00	0.00	2.10	0.20	0.00	0.00	0.00	2.50	71.30
1975–76	0.00	0.00	2.60	0.20	0.00	0.00	0.00	3.00	71.90
1976–77	0.00	0.00	3.90	0.20	0.00	0.00	0.00	4.30	77.00
1977–78	0.00	0.00	3.70	0.20	0.00	0.00	0.00	4.00	78.40
1978–79	0.00	0.00	4.10	0.00	0.00	0.00	0.00	4.30	82.00
1979–80	0.00	0.00	4.10	0.00	0.00	0.00	0.00	4.30	84.60
1980–81	0.00	0.00	4.40	0.00	0.00	0.00	0.00	4.80	83.30
1981–82	0.00	0.00	5.70	0.00	0.00	0.00	0.00	6.20	84.50
1982–83	0.00	0.00	7.40	0.00	0.00	0.00	0.00	7.90	82.30
1983–84	0.00	0.00	6.40	0.00	0.00	0.00	0.00	7.10	83.30
1984–85	0.00	0.00	7.40	0.00	0.00	0.00	0.00	8.10	85.00
1985–86	0.00	0.00	8.20	0.00	0.00	0.00	0.00	9.10	86.40
1986–87	0.00	0.00	8.40	0.00	0.00	0.00	0.00	8.90	85.40
1987–88	0.00	0.00	8.70	0.00	0.00	0.00	0.00	9.50	89.50
1988–89	0.00	0.00	9.60	0.00	0.00	0.00	0.00	10.40	92.00
1989–90	0.00	0.00	9.30	0.00	0.00	0.00	0.00	10.00	96.60
1990–91	0.00	0.00	9.50	0.00	0.00	0.00	0.00	10.00	97.60
1991–92	0.00	0.00	8.50	0.00	0.00	0.00	0.00	9.10	89.30
1992–93	0.00	0.00	7.80	0.00	0.00	0.00	0.00	8.30	90.10
1993–94	0.00	0.00	9.30	0.00	0.00	0.00	0.00	9.80	92.00
1994–95	0.00	0.00	9.70	0.00	0.00	0.00	0.00	10.30	92.40
1995–96	0.00	0.00	9.60	0.00	0.00	0.00	0.00	10.10	93.00
1996–97	0.00	0.00	9.90	0.00	0.00	0.00	0.00	10.30	94.80
1997–98	0.00	0.00	9.80	0.00	0.00	0.00	0.00	10.20	95.80
1998–99	0.00	0.00	9.40	0.00	0.00	0.00	0.00	9.80	95.70
1999–00	0.00	0.00	9.30	0.00	0.00	0.00	0.00	9.80	95.80
2000–01	0.00	0.00	9.20	0.00	0.00	0.00	0.00	9.70	93.60
2001–02	0.00	0.00	9.20	0.00	0.00	0.00	0.00	9.60	97.20
2002–03	0.00	0.00	6.15	0.00	0.18	0.00	0.00	6.33	99.50
2003–04	0.00	0.00	6.67	0.00	0.18	0.00	0.00	6.85	103.40
2004–05	0.00	0.00	7.26	0.00	0.18	0.00	0.00	7.44	107.39
2005–06	0.00	0.00	7.85	0.00	0.18	0.00	0.00	8.03	111.57
2006–07	0.00	0.00	7.88	0.00	0.18	0.00	0.00	8.05	113.32
2007–08	0.00	0.00	7.88	0.00	0.17	0.00	0.00	8.05	115.51
2008–09	0.00	0.00	9.50	0.00	0.16	0.00	0.00	9.66	115.47
2009–10	0.00	0.00	8.62	0.00	0.13	0.00	0.00	8.76	115.20
2010–11	0.00	0.00	6.39	0.00	0.10	0.00	0.00	6.49	114.99
2011–12	0.00	0.00	6.13	0.00	0.06	0.00	0.00	6.18	108.30
2012–13	0.00	0.00	8.50	0.00	0.02	0.00	0.00	8.52	113.42
2013–14	0.00	0.00	7.74	0.00	0.00	0.00	0.00	7.75	109.43
2014–15	0.00	0.00	8.06	0.00	0.00	0.00	0.00	8.06	106.27
2015–16	0.00	0.00	7.45	0.00	0.00	0.00	0.00	7.45	108.43

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10g Black coal usage—Australian black coal consumption, by industry—Northern Territory

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.10
1974–75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.80
1975–76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.20
1976–77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.60
1977–78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.10
1978–79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.70
1979–80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00
1980–81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.30
1981–82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.60
1982–83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.80
1983–84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.80
1984–85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.80
1985–86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.00
1986–87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.30
1987–88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.10
1988–89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.00
1989–90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.50
1990–91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.00
1991–92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.90
1992–93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.20
1993–94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.50
1994–95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.80
1995–96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00
1996–97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.70
1997–98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.40
1998–99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.20
1999–00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.40
2000–01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.20
2001–02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.40
2002–03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.78
2003–04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.65
2004–05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.54
2005–06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.00
2006–07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.79
2007–08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.99
2008–09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.09
2009–10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	98.76
2010–11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.33
2011–12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.87
2012–13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.75
2013–14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.61
2014–15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.50
2015–16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.72

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.10h Black coal usage—Australian black coal consumption, by industry—Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.00	0.40	306.30	350.10	4.90	0.30	0.80	662.90	2615.20
1974–75	0.00	1.00	332.50	378.00	5.00	0.30	0.80	717.60	2694.80
1975–76	0.00	0.90	318.50	376.20	4.70	0.30	1.60	702.20	2730.80
1976–77	0.00	0.80	301.60	441.50	4.70	0.30	1.00	749.70	2905.90
1977–78	0.00	0.80	296.70	473.70	4.40	0.20	1.00	776.80	2985.10
1978–79	0.00	0.90	302.70	483.30	4.70	0.20	0.80	792.70	3053.10
1979–80	0.00	1.00	294.10	545.90	4.60	0.10	0.90	846.50	3131.40
1980–81	0.00	1.10	309.80	571.40	4.40	0.10	0.80	887.60	3146.30
1981–82	0.00	1.40	291.50	578.70	4.30	0.10	0.80	876.70	3237.60
1982–83	0.00	1.00	243.70	619.30	4.30	0.70	0.70	869.60	3122.70
1983–84	0.00	1.40	245.30	659.20	4.30	3.70	0.60	914.40	3221.20
1984–85	0.00	1.70	264.20	695.10	4.30	3.40	0.60	969.20	3370.70
1985–86	0.00	1.90	262.10	708.90	4.20	3.30	0.50	980.90	3402.50
1986–87	0.00	3.00	265.90	730.90	4.10	3.80	0.50	1008.10	3514.40
1987–88	0.00	4.00	270.50	753.30	4.00	3.60	0.40	1035.60	3623.00
1988–89	0.00	4.30	295.70	799.00	3.90	4.00	0.30	1107.30	3832.70
1989–90	0.00	6.50	282.10	836.00	3.80	3.50	0.30	1132.10	3945.90
1990–91	0.00	6.00	279.20	848.70	3.40	3.70	0.30	1141.30	3949.90
1991–92	0.00	6.50	282.50	872.40	2.70	4.00	0.10	1168.20	3982.70
1992–93	0.00	6.50	277.10	905.60	2.30	4.10	0.10	1195.60	4081.80
1993–94	0.00	5.90	283.90	917.40	2.10	3.90	0.10	1213.30	4181.90
1994–95	0.00	7.80	282.50	946.60	1.80	4.00	0.10	1242.80	4365.40
1995–96	0.00	8.20	268.00	1001.40	1.50	4.00	0.10	1283.10	4505.50
1996–97	0.00	8.20	276.60	1018.50	1.30	4.30	0.10	1309.00	4611.10
1997–98	0.00	6.80	271.20	1061.40	1.10	4.20	0.10	1344.80	4777.60
1998–99	0.00	6.70	269.20	1081.20	1.00	4.20	0.10	1362.40	4884.70
1999–00	0.00	7.00	248.10	1126.80	1.20	4.40	0.10	1387.50	4971.00
2000–01	0.00	6.70	231.00	1176.10	1.30	4.90	0.10	1418.60	5011.80
2001–02	0.00	6.70	232.00	1213.70	1.20	5.00	0.10	1457.10	5097.00
2002–03	0.00	0.00	245.45	1176.22	1.27	5.00	0.05	1427.99	5138.69
2003–04	0.00	0.00	257.97	1245.08	1.32	5.80	0.05	1510.23	5284.77
2004–05	0.00	0.00	265.52	1279.52	1.32	8.00	0.05	1554.41	5399.21
2005–06	0.00	0.00	264.45	1304.02	0.94	6.90	0.05	1576.36	5546.76
2006–07	0.00	0.00	268.12	1325.41	0.88	7.40	0.05	1601.86	5724.00
2007–08	0.00	0.00	274.99	1297.39	0.73	8.00	0.05	1581.16	5738.34
2008–09	0.00	8.32	226.41	1361.17	0.66	4.87	0.00	1601.43	5859.44
2009–10	0.00	5.69	255.44	1223.17	0.56	4.14	0.00	1489.00	5838.85
2010–11	0.00	5.57	248.52	1146.17	0.19	2.95	0.00	1403.40	5905.62
2011–12	0.00	4.84	222.28	1123.31	0.15	2.52	0.00	1353.11	5947.85
2012–13	0.00	3.10	230.35	1084.68	0.11	0.00	0.00	1318.24	5922.64
2013–14	0.00	3.12	219.68	1023.97	0.09	0.00	0.00	1246.88	5861.84
2014–15	0.00	1.34	206.13	1045.73	0.10	0.02	0.00	1253.31	5926.74
2015–16	0.00	3.17	213.01	1111.34	0.10	0.00	0.00	1327.62	6065.90

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.11 Black coal usage—coal prices (export)

Average over financial year ending	Hard coking coal	Semisoft coking coal	Thermal coal
		$A/tonne	
Jun–2002	81.77	66.51	57.51
Jun–2003	77.08	56.25	44.50
Jun–2004	64.26	49.10	40.98
Jun–2005	95.28	69.40	59.55
Jun–2006	157.49	111.65	65.02
Jun–2007	132.96	81.97	60.54
Jun–2008	129.66	97.46	72.70
Jun–2009	318.28	251.46	131.16
Jun–2010	174.59	125.37	88.06
Jun–2011	230.81	177.06	97.37
Jun–2012	237.00	177.13	108.04
Jun–2013	157.85	124.70	89.01
Jun–2014	136.84	114.82	85.83
Jun–2015	122.74	104.67	78.54
Jun–2016	111.04	95.20	73.28

Source: Industry (2017b).

Table E 3.12 Brown coal usage—Australian brown coal consumption, by industry—Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973-74	0.00	27.00	6.00	229.50	0.20	0.00	0.00	262.60	2615.20
1974-75	0.00	25.70	5.10	239.80	0.20	0.00	0.00	270.80	2694.80
1975-76	0.00	21.90	4.80	260.00	0.20	0.00	0.00	286.80	2730.80
1976-77	0.00	24.00	3.90	276.00	0.00	0.00	0.00	304.00	2905.90
1977-78	0.00	24.80	3.80	268.80	0.00	0.00	0.00	297.40	2985.10
1978-79	0.00	26.20	4.40	282.30	0.00	0.00	0.00	312.90	3053.10
1979-80	0.00	29.10	3.90	288.00	0.00	0.00	0.00	321.00	3131.40
1980-81	0.00	25.10	4.10	282.80	0.00	0.00	0.00	312.00	3146.30
1981-82	0.00	23.10	3.70	330.90	0.00	0.00	0.00	357.70	3237.60
1982-83	0.00	17.00	3.80	308.70	0.00	0.00	0.00	329.40	3122.70
1983-84	0.00	17.30	3.60	295.70	0.00	0.00	0.00	316.50	3221.20
1984-85	0.00	18.50	3.40	347.30	0.00	0.00	0.00	369.20	3370.70
1985-86	0.00	18.80	3.50	327.80	0.00	0.00	0.00	350.10	3402.50
1986-87	0.00	18.20	3.30	383.60	0.00	0.00	0.00	405.00	3514.40
1987-88	0.00	18.00	3.60	403.30	0.00	0.00	0.00	424.90	3623.00
1988-89	0.00	15.80	2.10	457.00	0.00	0.00	0.00	474.80	3832.70
1989-90	0.00	15.80	0.80	434.10	0.00	0.00	0.00	450.70	3945.90
1990-91	0.00	16.00	0.50	467.60	0.00	0.00	0.00	484.10	3949.90
1991-92	0.00	17.90	0.50	478.90	0.00	0.00	0.00	497.30	3982.70
1992-93	0.00	11.30	0.50	455.00	0.00	0.00	0.00	466.80	4081.80
1993-94	0.00	13.10	0.60	460.60	0.00	0.00	0.00	474.30	4181.90
1994-95	0.00	12.70	0.60	478.70	0.00	0.00	0.00	492.00	4365.40
1995-96	0.00	11.60	0.50	502.20	0.00	0.00	0.00	514.40	4505.50
1996-97	0.00	13.70	0.50	544.90	0.00	0.00	0.00	559.10	4611.10
1997-98	0.00	11.10	0.40	625.00	0.00	0.00	0.00	636.50	4777.60
1998-99	0.00	8.60	0.00	660.40	0.00	0.00	0.00	669.10	4884.70
1999-00	0.00	10.30	0.00	662.20	0.00	0.00	0.00	672.50	4971.00
2000-01	0.00	8.10	0.00	657.80	0.00	0.00	0.00	666.00	5011.80
2001-02	0.00	11.80	0.00	661.60	0.00	0.00	0.00	673.40	5097.00
2002-03	0.00	0.00	13.18	685.90	0.00	0.00	0.00	699.08	5138.69
2003-04	0.00	0.00	9.85	704.71	0.00	0.00	0.00	714.55	5284.77
2004-05	0.00	0.00	10.33	701.41	0.00	0.00	0.00	711.74	5399.21
2005-06	0.00	0.00	7.94	717.20	0.00	0.00	0.00	725.14	5546.76
2006-07	0.00	0.00	7.47	714.45	0.00	0.00	0.00	721.92	5724.00
2007-08	0.00	0.00	7.03	718.03	0.00	0.00	0.00	725.06	5738.34
2008-09	0.00	0.00	6.22	743.52	0.00	0.00	0.00	749.74	5859.44
2009-10	0.00	0.00	4.92	737.05	0.00	0.00	0.00	741.96	5838.85
2010-11	0.00	0.00	5.56	722.60	0.00	0.00	0.00	728.16	5905.62
2011-12	0.00	0.00	6.51	732.79	0.00	0.00	0.00	739.30	5947.85
2012-13	0.00	0.00	6.10	639.60	0.00	0.00	0.00	645.70	5922.64
2013-14	0.00	0.00	5.96	621.83	0.00	0.00	0.00	627.78	5861.84
2014-15	0.00	0.00	1.05	668.06	0.00	0.00	0.00	669.11	5926.74
2015-16	0.00	0.00	0.05	642.84	0.00	0.00	0.00	642.89	6065.90

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13a Petroleum usage—Australian petroleum consumption, by industry—New South Wales

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	-12.52	2.40	144.90	19.00	16.10	238.89	13.00	442.10	943.00
1974–75	-11.52	2.80	134.00	18.40	17.20	246.18	15.00	440.50	964.70
1975–76	-10.52	2.90	127.00	17.30	16.40	247.65	14.90	433.80	934.00
1976–77	-9.52	3.10	128.50	11.20	18.10	261.97	16.80	443.80	980.20
1977–78	-8.52	3.10	117.30	4.50	17.20	273.61	15.20	440.50	1011.30
1978–79	-7.52	3.30	109.00	4.30	16.80	278.93	15.10	431.70	1019.30
1979–80	-6.52	3.70	96.20	4.00	17.00	284.31	10.30	421.40	1059.00
1980–81	-5.52	4.00	79.80	4.40	16.00	289.11	7.40	405.80	1060.40
1981–82	-4.52	4.30	72.00	5.80	15.10	296.25	6.90	400.90	1077.80
1982–83	-3.52	4.40	53.60	3.90	14.40	284.87	6.20	361.70	1002.50
1983–84	-2.52	4.00	57.90	3.10	15.20	296.61	5.60	381.70	1045.60
1984–85	-1.52	3.80	61.10	3.30	17.00	305.40	5.70	390.10	1080.30
1985–86	-0.52	4.10	64.10	3.40	20.70	304.67	5.20	399.00	1108.70
1986–87	0.48	4.60	62.50	3.50	19.90	305.42	5.10	396.50	1137.10
1987–88	1.48	4.30	69.20	3.30	20.80	321.52	4.60	417.80	1143.30
1988–89	2.48	5.40	70.20	3.80	21.10	332.87	4.30	433.10	1194.20
1989–90	3.48	6.20	72.30	2.60	21.40	332.43	4.80	433.90	1230.40
1990–91	4.48	6.30	72.60	2.30	21.60	328.34	5.20	436.90	1228.60
1991–92	5.48	6.40	74.30	2.00	21.10	331.69	5.60	447.40	1219.40
1992–93	6.48	6.40	83.20	2.10	19.80	342.24	4.90	464.80	1249.10
1993–94	7.48	6.90	75.20	2.20	18.70	348.71	4.60	464.20	1276.70
1994–95	8.48	6.90	82.40	2.20	17.60	371.75	4.80	492.40	1314.60
1995–96	9.48	7.60	80.00	2.10	16.70	391.95	4.50	508.20	1351.20
1996–97	10.48	8.80	51.40	2.10	16.00	393.84	4.30	482.90	1380.60
1997–98	11.48	9.50	54.70	2.00	15.40	398.41	4.30	489.30	1382.00
1998–99	12.48	9.70	56.10	2.00	14.60	404.49	3.90	498.10	1413.80
1999–00	13.48	9.70	56.00	2.00	13.90	416.66	4.30	513.10	1426.30
2000–01	14.48	10.70	62.60	2.90	9.70	419.40	4.00	524.10	1450.50
2001–02	15.48	11.70	62.80	3.10	9.90	411.82	4.00	515.20	1445.70
2002–03	16.48	14.27	72.44	2.47	9.06	411.31	3.96	540.32	1510.48
2003–04	17.48	19.24	73.04	2.83	7.87	431.92	3.08	564.37	1574.79
2004–05	18.48	22.24	74.03	3.55	7.15	444.36	2.80	580.58	1544.92
2005–06	19.48	20.63	72.82	3.71	8.54	449.70	4.23	586.17	1545.99
2006–07	20.48	19.95	73.07	3.69	8.52	464.58	4.12	600.06	1568.89
2007–08	21.48	20.72	72.70	3.80	8.58	474.64	4.62	610.96	1610.71
2008–09	22.48	21.84	69.36	2.85	8.71	470.50	4.61	604.13	1593.12
2009–10	23.48	27.23	71.30	2.89	8.68	488.49	4.61	629.51	1643.15
2010–11	24.48	31.49	77.61	1.96	9.70	492.93	5.00	645.34	1657.26
2011–12	25.48	36.72	85.92	1.97	9.88	494.18	5.00	660.43	1614.68
2012–13	26.48	40.70	92.80	1.71	10.38	499.25	4.99	676.42	1581.14
2013–14	25.13	40.35	83.35	3.18	10.61	497.83	4.85	665.36	1523.09
2014–15	27.46	39.50	48.22	3.49	11.27	504.86	4.66	639.53	1471.83
2015–16	30.01	45.22	42.36	3.17	10.43	504.60	4.60	640.60	1518.19

Note: ACT figures are included in the NSW total.
np: Not available for publication but included in the totals.
Source: Industry (2017b)

Table E 3.13b Petroleum usage—Australian petroleum consumption, by industry —Victoria

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	7.60	1.70	98.60	2.50	17.10	168.86	18.70	320.70	710.90
1974–75	7.80	1.70	89.40	2.10	17.60	172.65	21.70	318.90	731.00
1975–76	7.70	1.60	79.10	2.50	18.70	176.99	20.40	312.60	752.80
1976–77	8.00	1.90	83.80	2.90	21.10	184.58	21.70	330.50	802.10
1977–78	8.00	1.60	86.20	7.50	19.20	195.48	19.50	344.80	823.10
1978–79	8.60	1.40	82.20	8.40	18.90	197.41	18.40	344.90	857.30
1979–80	8.60	1.20	77.60	7.60	14.60	193.47	12.50	327.10	869.40
1980–81	9.20	0.70	71.80	6.80	10.50	194.11	8.30	311.60	880.80
1981–82	9.00	0.80	63.30	6.70	10.10	207.87	7.30	314.60	939.40
1982–83	8.70	0.60	58.80	3.40	10.70	202.99	6.20	303.00	896.50
1983–84	9.80	0.60	65.00	2.30	10.10	207.71	6.00	311.80	904.90
1984–85	9.50	0.70	66.40	1.90	9.70	215.80	5.50	319.20	936.20
1985–86	9.30	0.60	68.60	2.10	8.90	220.00	4.90	323.30	926.40
1986–87	8.90	0.70	70.30	1.50	10.40	229.90	4.80	333.10	979.50
1987–88	8.60	0.60	74.10	1.40	11.20	240.20	4.40	346.80	1014.50
1988–89	9.40	0.60	74.10	2.10	11.90	249.30	4.20	357.90	1090.20
1989–90	8.90	0.80	70.40	2.40	11.90	253.20	4.20	358.10	1099.80
1990–91	9.00	0.90	77.20	1.70	10.10	246.90	3.90	351.30	1090.90
1991–92	8.80	0.80	70.80	1.40	10.00	252.60	4.30	349.20	1108.70
1992–93	8.80	0.90	75.80	1.70	9.90	253.70	5.20	359.70	1104.70
1993–94	9.00	0.90	85.90	1.00	9.80	258.50	4.70	371.30	1102.50
1994–95	9.10	0.90	85.40	0.80	9.50	268.20	4.30	381.20	1152.20
1995–96	8.80	0.80	87.30	1.10	9.40	275.90	4.50	390.20	1184.90
1996–97	9.30	0.70	83.20	1.00	9.10	283.70	4.60	392.00	1202.70
1997–98	9.80	0.70	90.00	0.90	8.80	281.60	4.20	402.30	1286.30
1998–99	10.30	0.70	92.10	0.90	7.70	286.30	4.20	414.70	1318.30
1999–00	10.50	0.70	92.10	0.90	7.40	292.60	4.10	421.50	1346.30
2000–01	14.70	1.00	58.10	0.50	7.10	295.80	4.10	385.30	1337.20
2001–02	15.20	1.00	55.20	0.60	6.80	299.60	4.10	392.50	1371.90
2002–03	16.51	0.36	53.41	0.29	6.83	311.77	4.35	393.51	1330.64
2003–04	16.97	0.32	76.72	0.42	6.70	326.77	3.84	431.73	1364.92
2004–05	17.96	0.60	78.74	1.05	6.59	329.56	3.62	438.13	1356.53
2005–06	15.53	1.37	76.27	1.62	5.68	334.67	4.01	439.16	1429.49
2006–07	13.35	1.51	79.48	0.76	5.60	339.23	3.71	443.64	1433.87
2007–08	13.67	1.56	81.93	2.49	5.73	335.35	3.70	444.43	1426.09
2008–09	11.87	1.54	74.28	0.59	5.49	334.66	3.59	432.03	1420.96
2009–10	13.18	1.67	72.61	0.52	5.46	339.85	3.29	436.59	1432.92
2010–11	13.61	1.86	80.01	0.95	5.65	345.91	3.38	451.37	1436.97
2011–12	13.60	1.97	85.80	1.08	5.54	339.82	3.07	450.90	1447.83
2012–13	13.13	2.27	91.17	0.81	5.73	346.38	3.17	462.66	1396.52
2013–14	13.75	1.55	90.52	1.89	5.87	357.29	3.06	473.93	1409.07
2014–15	13.87	1.63	105.13	2.66	6.64	365.88	2.90	498.77	1430.98
2015–16	13.93	1.32	93.81	2.09	5.28	361.35	2.85	480.68	1416.88

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13c Petroleum usage—Australian petroleum consumption, by industry —Queensland

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	9.60	4.40	48.20	4.00	9.50	86.50	3.20	173.20	371.30
1974–75	10.40	3.60	47.00	6.30	10.00	93.40	3.20	178.30	392.60
1975–76	10.70	3.90	52.50	6.70	9.20	101.00	3.20	189.70	410.00
1976–77	11.00	4.20	58.50	6.30	10.10	106.60	3.30	205.90	441.80
1977–78	11.10	4.00	59.80	7.00	11.10	110.00	3.40	211.10	461.20
1978–79	11.50	4.10	56.20	6.90	11.80	115.90	3.30	215.90	463.20
1979–80	11.50	4.10	54.60	6.10	13.50	120.00	3.20	219.80	480.20
1980–81	12.30	4.60	52.10	6.00	14.70	125.00	3.00	223.50	502.90
1981–82	14.50	4.80	46.60	5.80	18.20	133.50	3.20	234.10	537.20
1982–83	14.60	4.80	36.00	5.30	13.30	132.40	3.00	217.90	541.50
1983–84	15.70	5.30	40.00	5.30	12.60	137.00	2.70	226.40	571.60
1984–85	15.90	5.70	39.40	4.70	10.90	141.00	2.70	231.00	600.30
1985–86	15.80	6.30	37.10	3.90	12.00	145.30	2.60	233.60	604.80
1986–87	16.20	7.40	37.30	3.50	12.20	149.70	2.60	238.70	620.00
1987–88	15.80	7.80	39.50	3.60	15.10	156.70	2.60	251.90	642.40
1988–89	16.40	8.60	41.00	4.30	15.30	166.50	2.60	267.60	678.30
1989–90	15.50	9.10	40.70	5.40	15.70	169.10	2.80	271.40	691.80
1990–91	15.70	9.70	30.00	5.20	15.00	174.00	2.90	263.30	702.00
1991–92	16.00	9.90	32.50	4.90	14.90	179.50	2.60	271.90	715.00
1992–93	16.70	10.80	32.60	5.40	14.90	189.10	3.00	283.60	758.50
1993–94	17.10	11.00	34.30	6.00	15.10	197.70	2.70	299.20	793.20
1994–95	17.70	12.20	34.80	6.00	15.10	217.60	2.60	321.00	847.30
1995–96	18.10	13.70	34.90	6.20	14.70	220.10	2.50	327.40	882.70
1996–97	18.70	14.70	36.20	6.50	14.40	225.10	2.80	339.10	914.10
1997–98	19.20	17.30	38.80	5.90	14.10	228.80	2.70	344.20	968.50
1998–99	20.10	18.60	36.60	6.90	14.10	226.10	2.60	341.90	983.80
1999–00	21.30	18.70	43.70	8.50	14.10	236.20	2.90	366.80	1009.70
2000–01	14.10	24.00	34.10	7.50	14.20	234.00	3.10	346.60	1020.00
2001–02	14.40	25.90	32.90	7.70	14.80	238.40	3.00	353.20	1057.80
2002–03	17.56	37.89	45.12	6.57	13.96	246.34	3.22	370.66	1064.04
2003–04	17.59	39.93	47.22	6.40	15.86	263.10	3.22	393.32	1081.14
2004–05	19.31	48.10	76.98	6.55	15.52	270.34	2.87	439.68	1225.09
2005–06	20.38	42.20	80.80	7.19	14.77	278.50	3.18	447.04	1279.52
2006–07	20.46	41.51	79.27	6.42	14.90	288.47	3.27	454.32	1329.00
2007–08	20.47	42.79	70.81	6.35	15.38	303.14	3.76	462.71	1289.55
2008–09	20.85	46.87	72.81	5.86	15.35	309.05	3.93	474.74	1355.35
2009–10	20.96	49.02	68.87	5.43	15.02	312.76	3.92	476.00	1296.89
2010–11	21.33	53.75	73.73	5.09	15.33	317.59	4.11	490.93	1277.92
2011–12	21.73	65.03	80.45	5.96	15.49	332.58	4.09	525.33	1323.06
2012–13	23.32	73.69	82.94	5.63	15.83	335.79	4.28	541.49	1348.18
2013–14	23.35	75.15	89.98	6.76	16.12	338.13	4.22	553.78	1331.91
2014–15	23.71	67.97	102.78	13.67	16.06	341.11	4.14	569.47	1453.57
2015–16	26.46	66.15	52.33	12.65	16.43	358.83	3.54	536.42	1477.76

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13d Petroleum usage—Australian petroleum consumption, by industry—South Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	4.00	1.80	23.50	6.40	3.90	49.99	3.70	99.30	215.40
1974–75	3.70	2.00	22.90	7.20	4.30	51.94	4.30	101.80	222.80
1975–76	3.70	2.30	26.10	7.00	4.40	54.39	4.30	108.60	234.50
1976–77	3.90	4.20	20.20	7.60	4.60	57.96	4.70	110.00	249.30
1977–78	3.90	4.40	21.40	6.10	3.70	60.97	4.10	111.20	247.70
1978–79	4.30	4.70	18.90	6.10	3.90	62.51	4.30	112.00	259.60
1979–80	4.60	4.60	18.60	4.70	5.40	62.93	3.00	110.50	264.20
1980–81	4.50	4.30	12.70	3.10	4.70	63.13	2.30	100.40	255.70
1981–82	4.80	3.10	11.10	3.20	5.60	62.83	2.30	96.80	260.00
1982–83	4.30	2.10	9.00	2.90	5.20	63.69	2.00	94.40	254.60
1983–84	4.90	1.90	7.40	2.50	4.30	65.41	1.70	93.40	258.00
1984–85	4.60	1.60	7.40	3.70	3.70	68.00	1.90	95.90	280.20
1985–86	4.70	1.50	7.80	3.70	3.40	69.30	1.80	97.50	284.50
1986–87	5.60	1.60	10.00	0.80	3.70	70.70	1.70	99.20	284.70
1987–88	5.20	1.60	8.60	0.50	4.10	72.30	1.70	98.60	291.10
1988–89	5.40	1.80	11.50	0.50	4.00	75.70	1.50	105.30	299.30
1989–90	5.00	1.60	9.80	0.60	4.40	75.00	1.50	103.90	301.90
1990–91	5.20	1.40	12.30	0.70	3.80	74.30	1.40	103.10	287.40
1991–92	5.20	1.80	12.70	0.50	3.90	73.90	1.30	104.20	296.90
1992–93	5.20	2.00	13.00	0.60	3.90	76.50	1.50	107.40	300.10
1993–94	5.30	2.00	13.30	0.50	3.80	77.00	1.40	108.70	304.80
1994–95	5.00	2.10	12.50	0.50	3.80	78.20	1.40	107.20	304.40
1995–96	4.70	2.10	12.20	0.80	3.80	78.10	1.40	106.70	296.60
1996–97	5.50	2.10	10.90	0.60	3.90	79.00	1.30	106.90	299.70
1997–98	5.80	2.00	12.20	0.80	3.80	80.30	1.30	110.60	311.90
1998–99	6.00	2.70	10.90	1.40	3.70	81.70	1.30	111.80	327.20
1999–00	6.00	3.40	11.30	1.40	3.80	81.30	1.30	114.80	328.00
2000–01	6.80	3.50	8.80	0.70	3.60	79.40	1.20	110.50	329.30
2001–02	5.90	3.40	8.20	0.40	3.80	79.30	1.20	109.90	328.10
2002–03	8.43	4.09	7.31	1.14	3.63	86.04	1.43	112.07	357.30
2003–04	7.53	3.81	9.13	2.25	3.55	88.94	1.44	116.65	371.54
2004–05	8.20	3.81	8.84	1.12	3.63	88.32	1.14	115.06	355.55
2005–06	8.32	4.39	9.29	1.20	3.21	90.22	1.26	117.99	350.12
2006–07	8.23	3.65	9.67	1.36	3.18	91.06	1.16	118.40	375.46
2007–08	8.70	3.14	10.43	1.23	3.03	92.12	1.47	120.22	372.53
2008–09	7.22	4.22	3.77	1.24	3.01	94.27	1.46	115.31	359.47
2009–10	6.67	3.90	3.20	2.27	3.01	94.90	1.46	115.54	344.62
2010–11	6.11	5.87	5.90	1.33	3.05	95.71	1.56	119.64	348.24
2011–12	6.10	7.52	6.53	1.40	3.10	95.30	1.46	121.42	344.54
2012–13	6.12	9.71	2.69	1.12	3.20	98.03	1.47	122.33	335.44
2013–14	5.79	9.74	3.17	1.32	3.16	97.52	1.55	122.26	328.97
2014–15	5.94	9.18	2.40	1.97	3.10	97.89	1.55	122.05	326.05
2015–16	6.09	6.23	2.14	1.30	2.99	98.93	1.29	118.98	334.02

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13e Petroleum usage—Australian petroleum consumption, by industry —Western Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	4.40	15.70	39.40	30.70	6.10	85.90	5.90	186.00	272.60
1974–75	4.20	14.60	38.50	27.20	5.90	85.20	4.80	179.20	279.60
1975–76	4.40	14.60	46.90	27.50	5.40	83.20	4.90	185.10	296.50
1976–77	4.40	16.70	56.70	29.30	5.90	92.70	4.90	209.70	322.10
1977–78	5.30	16.60	58.20	29.90	6.10	95.30	4.80	214.80	328.40
1978–79	5.40	18.50	57.60	30.80	6.40	93.00	5.10	216.40	336.00
1979–80	6.00	20.30	54.50	23.50	7.90	91.30	4.40	207.20	334.10
1980–81	6.70	11.00	50.80	22.70	8.60	92.20	3.90	195.20	322.00
1981–82	6.80	8.10	48.70	22.10	7.80	90.90	3.40	186.20	300.10
1982–83	7.30	7.40	41.30	20.80	8.30	93.00	2.90	180.80	304.60
1983–84	8.20	7.70	50.40	21.40	7.70	91.50	2.70	187.20	313.90
1984–85	8.10	8.60	31.50	16.80	6.80	96.80	2.60	168.50	343.10
1985–86	7.30	8.70	18.20	12.90	6.70	94.90	2.40	147.70	344.80
1986–87	8.80	9.70	14.90	10.30	6.60	96.50	2.40	146.60	358.40
1987–88	8.90	10.10	16.90	11.30	6.70	104.70	2.10	157.80	391.10
1988–89	9.30	12.50	18.30	16.10	7.90	104.60	2.20	169.60	427.70
1989–90	8.60	15.80	16.60	20.00	7.60	105.50	2.20	174.70	473.00
1990–91	8.00	16.70	20.00	19.40	7.40	104.40	2.10	176.80	488.40
1991–92	8.50	17.80	15.70	18.30	7.20	105.80	2.00	175.00	496.40
1992–93	9.10	18.90	15.50	18.10	7.20	108.20	2.10	178.30	522.00
1993–94	9.70	20.50	16.10	17.80	7.20	111.40	2.00	187.50	554.10
1994–95	10.40	22.00	16.50	21.50	7.00	119.50	1.90	201.00	592.70
1995–96	10.70	26.60	19.00	22.10	7.00	123.60	2.00	218.10	630.20
1996–97	10.80	30.90	17.00	14.90	6.90	125.40	1.90	218.40	649.60
1997–98	10.30	28.70	15.80	13.30	7.00	125.10	1.90	212.00	662.60
1998–99	10.30	28.40	16.40	9.80	7.60	127.60	1.90	210.90	672.80
1999–00	10.50	29.80	14.70	9.60	7.60	128.70	2.00	210.20	688.50
2000–01	12.20	30.10	32.40	6.40	6.90	130.20	1.90	224.40	708.10
2001–02	12.50	33.20	34.10	6.40	7.60	130.80	1.90	232.40	722.90
2002–03	14.36	37.43	29.49	12.33	7.73	134.36	1.87	237.57	719.96
2003–04	15.11	34.41	31.47	16.51	8.21	140.29	1.78	247.79	730.33
2004–05	16.44	35.37	18.63	17.02	9.46	143.81	1.79	242.52	748.20
2005–06	12.87	32.21	17.90	17.83	11.30	148.81	1.92	242.85	757.07
2006–07	12.54	33.97	16.69	18.65	11.78	155.98	1.72	251.33	820.67
2007–08	12.92	38.40	23.05	26.26	12.00	161.74	1.91	276.29	827.96
2008–09	15.04	43.45	23.77	16.76	12.02	170.24	1.90	283.18	919.98
2009–10	16.20	42.12	23.08	14.93	12.05	171.71	1.89	282.00	907.30
2010–11	16.46	49.85	41.72	16.61	12.25	186.54	1.88	325.32	973.92
2011–12	17.20	66.36	41.55	17.99	12.50	202.18	1.97	359.77	1011.57
2012–13	17.03	81.72	31.77	21.22	12.50	209.26	2.06	375.56	1048.18
2013–14	16.93	86.96	35.15	29.34	12.78	216.25	2.04	399.50	1059.77
2014–15	18.72	83.44	32.91	33.24	12.68	218.51	2.07	401.62	1047.55
2015–16	19.90	83.97	22.63	32.04	12.60	231.36	1.91	404.46	1119.89

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13f Petroleum usage—Australian petroleum consumption, by industry—Tasmania

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.50	0.80	2.40	1.40	1.10	17.09	2.60	40.10	71.90
1974–75	0.50	0.90	2.50	1.70	1.10	17.39	3.10	39.70	71.30
1975–76	0.80	0.90	3.10	2.00	1.30	18.10	3.20	39.80	71.90
1976–77	1.00	1.00	3.20	0.50	1.30	18.77	3.60	40.30	77.00
1977–78	1.00	1.00	3.00	1.20	1.20	18.94	3.40	40.10	78.40
1978–79	1.10	1.00	2.60	0.60	1.60	19.13	3.20	40.80	82.00
1979–80	1.20	1.00	2.40	0.80	1.90	19.51	2.30	41.90	84.60
1980–81	1.20	1.00	2.20	2.10	1.80	19.57	1.70	40.40	83.30
1981–82	1.20	0.90	2.10	4.60	1.70	19.68	1.40	40.90	84.50
1982–83	1.20	0.90	1.90	4.50	1.60	19.30	1.20	37.20	82.30
1983–84	1.30	0.90	2.00	4.10	1.70	20.56	1.00	37.40	83.30
1984–85	1.30	0.90	2.10	2.40	1.70	21.04	1.00	35.90	85.00
1985–86	1.20	1.00	2.20	0.50	1.90	21.42	0.90	34.80	86.40
1986–87	1.40	1.00	1.90	0.70	1.60	20.86	0.90	34.10	85.40
1987–88	1.70	1.00	2.00	0.90	1.60	20.91	0.90	34.70	89.50
1988–89	1.60	0.80	2.20	1.00	1.80	20.57	0.90	35.60	92.00
1989–90	1.70	0.90	2.80	7.20	1.50	19.86	0.90	42.10	96.60
1990–91	1.90	0.80	3.00	9.70	1.50	18.79	0.80	44.30	97.60
1991–92	1.80	0.80	3.10	0.30	1.50	18.22	0.80	34.20	89.30
1992–93	1.80	0.80	3.00	0.30	1.50	18.56	0.90	35.90	90.10
1993–94	1.90	0.80	2.70	0.30	1.50	18.19	0.70	35.70	92.00
1994–95	2.10	0.70	2.70	0.30	1.50	18.22	0.80	36.50	92.40
1995–96	2.10	0.80	2.70	0.30	1.40	18.26	0.70	36.10	93.00
1996–97	1.80	0.90	2.50	0.30	1.40	17.98	0.70	36.00	94.80
1997–98	1.90	0.90	2.20	0.30	1.40	16.80	0.60	35.90	95.80
1998–99	2.00	0.90	2.10	0.40	1.30	16.07	0.50	35.80	95.70
1999–00	2.10	0.90	2.10	0.30	1.30	15.34	0.60	35.80	95.80
2000–01	2.10	0.90	2.30	1.30	1.10	15.00	0.60	36.90	93.60
2001–02	2.15	0.90	2.30	1.30	1.20	13.99	0.50	37.10	97.20
2002–03	2.96	0.97	4.90	0.62	1.13	26.86	0.63	38.09	99.50
2003–04	3.09	0.90	4.58	0.66	1.84	28.06	0.62	39.74	103.40
2004–05	3.11	0.95	4.60	0.71	1.62	28.90	0.33	40.20	107.39
2005–06	3.13	1.01	4.54	0.64	2.39	30.98	0.42	43.10	111.57
2006–07	3.10	1.16	4.44	0.55	2.59	29.70	0.32	41.87	113.32
2007–08	3.11	1.92	4.58	0.49	2.62	30.49	0.52	43.73	115.51
2008–09	3.10	1.42	4.12	0.38	2.58	29.58	0.52	41.71	115.47
2009–10	3.13	1.39	4.20	0.33	2.54	29.74	0.52	41.85	115.20
2010–11	2.73	1.41	4.14	0.33	2.53	27.81	0.52	39.46	114.99
2011–12	2.74	1.65	5.11	0.26	2.51	25.62	0.52	38.41	108.30
2012–13	3.09	1.60	5.79	0.12	2.49	25.54	0.52	39.16	113.42
2013–14	3.31	1.63	5.89	0.15	2.54	24.85	0.51	38.88	109.43
2014–15	3.85	1.36	4.95	0.20	2.55	24.80	0.49	38.21	106.27
2015–16	3.83	1.15	4.97	0.90	2.58	24.84	0.45	38.73	108.43

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13g Petroleum usage—Australian petroleum consumption, by industry —Northern Territory

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	0.30	0.20	0.80	5.70	0.70	5.62	0.30	25.90	30.10
1974–75	0.50	0.60	0.40	5.70	1.30	5.81	0.30	29.10	32.80
1975–76	0.40	0.50	0.40	6.20	0.80	5.54	0.20	28.80	31.20
1976–77	0.40	0.60	0.20	6.70	0.80	6.48	0.20	30.90	33.60
1977–78	0.40	0.50	0.20	7.40	0.80	6.45	0.20	32.10	35.10
1978–79	0.70	0.50	0.20	7.50	0.90	7.26	0.20	32.60	35.70
1979–80	0.70	0.60	0.30	9.50	0.90	8.61	0.20	36.50	40.00
1980–81	0.80	0.70	0.30	9.60	2.00	8.20	0.30	38.30	41.30
1981–82	0.80	0.50	0.40	10.40	1.00	8.84	0.30	35.70	38.60
1982–83	0.80	0.50	0.20	10.80	1.40	8.71	0.20	37.60	40.80
1983–84	0.80	0.50	0.20	11.30	1.60	9.43	0.30	40.30	43.80
1984–85	0.60	1.10	0.20	11.20	1.70	9.94	0.30	41.10	45.80
1985–86	0.70	0.80	0.30	12.10	2.10	10.28	0.30	42.00	47.00
1986–87	0.70	0.80	0.10	9.40	2.00	10.49	0.30	40.00	49.30
1987–88	0.70	0.90	0.10	3.30	1.90	10.90	0.30	35.50	51.10
1988–89	0.90	1.20	0.00	3.80	2.10	10.70	0.30	36.70	51.00
1989–90	1.20	1.40	0.00	3.80	1.90	10.71	0.30	36.70	52.50
1990–91	1.00	1.40	0.00	3.60	2.10	10.32	0.30	38.00	55.00
1991–92	0.90	1.20	0.00	3.10	2.10	10.62	0.30	38.90	56.90
1992–93	0.80	1.20	0.00	2.90	2.10	10.93	0.30	38.30	57.20
1993–94	0.80	1.10	0.00	2.90	2.10	11.73	0.30	39.20	58.50
1994–95	0.90	1.00	0.00	3.10	2.10	13.04	0.30	40.60	61.80
1995–96	0.90	1.30	0.10	3.30	2.10	12.84	0.30	43.60	67.00
1996–97	1.00	1.50	0.10	3.50	2.10	13.25	0.40	45.50	69.70
1997–98	1.00	1.90	0.10	3.70	2.10	14.25	0.30	46.80	70.40
1998–99	1.30	1.70	0.10	4.00	2.00	14.65	0.30	47.70	73.20
1999–00	1.30	1.80	0.10	4.30	2.10	14.94	0.30	49.20	76.40
2000–01	1.30	2.00	1.00	1.30	2.00	14.43	0.20	46.90	73.20
2001–02	1.40	1.80	1.10	1.30	2.00	14.23	0.20	47.50	73.40
2002–03	1.21	0.91	23.00	5.89	1.96	15.35	0.29	48.62	56.78
2003–04	1.33	2.19	23.07	7.16	1.79	14.44	0.25	50.23	58.65
2004–05	1.33	4.17	22.24	7.93	1.67	15.31	0.22	52.87	61.54
2005–06	1.10	8.82	22.04	8.43	1.49	17.08	0.19	59.15	73.00
2006–07	1.07	4.18	23.07	7.13	1.45	15.72	0.19	52.82	82.79
2007–08	1.07	3.74	26.88	13.19	1.52	16.16	0.28	62.85	95.99
2008–09	1.24	2.95	21.29	11.46	1.54	14.67	0.27	53.43	95.09
2009–10	1.24	2.52	22.65	8.59	1.57	14.22	0.17	50.96	98.76
2010–11	1.24	2.90	21.77	7.43	1.60	18.79	0.26	53.98	96.33
2011–12	1.24	3.29	21.93	8.11	1.58	18.42	0.26	54.83	97.87
2012–13	1.25	4.03	20.21	7.71	1.59	18.19	0.25	53.23	99.75
2013–14	1.14	4.63	15.73	8.87	1.70	18.53	0.25	50.86	99.61
2014–15	1.17	3.51	1.68	7.73	1.79	21.12	0.24	37.25	90.50
2015–16	1.22	2.37	0.65	5.07	1.81	21.05	0.19	32.36	90.72

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.13h Petroleum usage—Australian petroleum consumption, by industry —Australia

Financial year	Agriculture, forestry and fishing	Mining	Manu-facturing	Electricity, gas, water and waste services	Cons-truction, commercial and services	Transport, postal and ware-housing	Residential	Total electricity cons-umption	Total energy cons-umption
				Petajoules					
1973–74	35.20	29.20	382.70	69.50	55.10	657.80	47.20	1298.10	2615.20
1974–75	35.40	28.30	359.60	68.50	57.90	677.65	52.10	1299.05	2694.80
1975–76	35.80	28.60	358.40	68.90	56.50	691.96	50.90	1312.86	2730.80
1976–77	37.10	33.80	375.40	64.40	62.10	734.54	55.20	1384.84	2905.90
1977–78	38.80	33.40	370.40	63.70	59.50	766.42	50.50	1407.52	2985.10
1978–79	40.60	35.40	352.00	64.70	60.50	779.64	49.40	1411.74	3053.10
1979–80	42.20	37.50	330.40	56.10	60.90	785.49	35.90	1377.79	3131.40
1980–81	43.70	28.00	294.60	54.70	57.40	796.55	26.80	1331.65	3146.30
1981–82	47.90	24.10	266.10	58.40	57.40	824.90	24.80	1331.10	3237.60
1982–83	43.30	22.30	221.20	51.50	51.70	809.13	21.60	1250.13	3122.70
1983–84	49.60	22.20	244.20	50.10	49.20	832.76	19.90	1293.36	3221.20
1984–85	48.30	23.40	228.70	44.10	47.00	862.24	19.80	1295.64	3370.70
1985–86	47.30	24.10	217.50	38.40	51.00	870.36	18.00	1290.56	3402.50
1986–87	49.30	26.90	215.30	29.70	51.40	887.93	17.90	1297.73	3514.40
1987–88	48.10	27.30	231.00	24.30	56.40	931.65	16.60	1356.05	3623.00
1988–89	51.00	32.10	237.30	31.50	59.10	965.66	16.10	1413.86	3832.70
1989–90	48.70	36.90	232.20	42.10	59.30	971.48	16.60	1428.28	3945.90
1990–91	49.20	37.90	235.80	42.60	56.30	962.43	16.40	1421.93	3949.90
1991–92	50.10	39.50	229.60	30.60	55.70	977.53	16.90	1423.53	3982.70
1992–93	51.60	41.70	243.90	30.90	54.40	1005.09	17.90	1468.29	4081.80
1993–94	53.40	43.90	248.50	30.70	53.40	1028.92	16.50	1505.32	4181.90
1994–95	55.20	46.60	255.70	34.50	52.40	1092.43	16.30	1585.23	4365.40
1995–96	55.40	53.80	257.70	35.90	51.10	1127.10	15.90	1630.40	4505.50
1996–97	57.60	60.30	223.50	28.80	50.10	1144.86	16.00	1620.36	4611.10
1997–98	59.00	62.00	235.40	26.80	49.00	1150.39	15.50	1639.29	4777.60
1998–99	61.10	63.30	239.30	25.40	47.60	1161.77	14.70	1653.97	4884.70
1999–00	63.20	64.90	243.70	23.80	47.10	1190.54	15.40	1697.54	4971.00
2000–01	77.70	73.80	222.80	20.70	45.00	1190.71	15.10	1682.71	5011.80
2001–02	78.80	79.40	220.40	20.90	46.20	1190.68	15.20	1696.68	5097.00
2002–03	87.72	95.93	235.68	29.33	44.30	1232.04	15.75	1740.85	5138.69
2003–04	87.90	100.80	265.25	36.22	45.82	1293.53	14.23	1843.86	5284.77
2004–05	92.69	115.25	284.07	37.93	45.64	1320.60	12.77	1909.05	5399.21
2005–06	87.76	110.64	283.66	40.61	47.39	1349.97	15.23	1935.47	5546.76
2006–07	84.78	105.92	285.71	38.57	48.03	1384.75	14.50	1962.46	5724.00
2007–08	85.75	112.27	290.40	53.81	48.87	1413.64	16.25	2021.20	5738.34
2008–09	85.46	122.30	269.42	39.15	48.71	1423.00	16.29	2004.54	5859.44
2009–10	87.58	127.88	265.93	34.97	48.36	1451.69	15.85	2032.47	5838.85
2010–11	88.01	147.12	304.89	33.71	50.12	1485.29	16.71	2126.07	5905.62
2011–12	89.26	182.56	327.30	36.79	50.61	1508.11	16.38	2211.11	5947.85
2012–13	90.43	213.72	327.38	38.32	51.73	1532.44	16.74	2270.88	5922.64
2013–14	89.40	220.01	323.80	51.52	52.81	1550.41	16.49	2304.59	5861.84
2014–15	94.73	206.62	298.08	62.97	54.11	1574.19	16.05	2306.92	5926.74
2015–16	101.44	206.43	218.90	57.22	52.13	1600.97	14.83	2252.25	6065.90

np: Not available for publication but included in the totals.
Source: Industry (2017b).

Table E 3.14 Petroleum usage—world crude oil prices, by region of origin

Average over financial year	World Trade Weighted	Dubai[2]	Brent[3]	West Texas Intermediate[4]	Gippsland[5]	Tapis[6]
			US$/bbl			
1990–91	21.95	20.74	24.64	25.32		
1991–92	17.76	16.96	19.61	20.89		
1992–93	17.74	16.91	19.08	20.52		
1993–94	14.45	13.88	15.51	16.74		
1994–95	16.83	16.20	17.31	18.48		
1995–96	17.44	16.30	17.92	19.38		
1996–97	20.55	19.35	21.20	22.47		
1997–98	14.88	15.10	16.47	17.59	16.52	18.04
1998–99	12.08	12.61	13.01	14.49	13.33	13.07
1999–00	23.73	22.96	25.07	25.84	25.00	24.33
2000–01	26.35	26.25	28.90	30.10	29.48	29.23
2001–02	21.24	21.78	22.75	23.80	23.01	24.15
2002–03	26.21	25.90	27.78	29.86	28.59	28.79
2003–04	29.20	29.47	31.31	33.76	32.99	33.20
2004–05	41.43	40.80	46.24	48.80	48.36	49.18
2005–06	57.52	58.32	62.42	64.27	64.60	66.73
2006–07	59.96	61.27	63.94	63.37	67.53	69.32
2007–08	92.23	90.42	95.27	96.85	98.45	100.87
2008–09	67.21	63.88	68.75	70.29	71.07	74.13
2009–10	73.39	73.44	74.51	75.15	76.53	77.46
2010–11	93.11	75.07	96.00	89.29	98.87	100.74
2011–12	106.27	109.17	112.09	95.05	116.07	120.53
2012–13		105.71	108.63	92.15	109.25	114.45
2013–14		105.94	109.34	101.27	na	115.55
2014–15		73.12	74.21	70.03	na	77.13
2015–16		43.04	46.01	45.53	na	47.45

2, 3, 4, 5, 6 See end notes.
Note: Data are not readily available for missing years.
na: Not available.
Source: Industry (2017c).

CHAPTER 4
Energy safety and emissions

Table E 4.1a Energy safety—number of hospital admissions (separations) due to exposure to electricity, radiation, extreme temperature/pressure—public hospitals

Financial year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Australia
2001–02	306	177	466	240	84	63	4	29	1 369
2002–03	323	257	373	236	92	69	3	21	1 374
2003–04	364	254	376	175	98	112	4	33	1 416
2004–05	349	212	302	167	99	95	7	12	1 243
2005–06	354	223	299	132	89	54	18	20	1 189
2006–07	357	242	272	128	85	61	10	14	1 169
2007–08	361	263	300	245	88	52	8	24	1 341
2008–09	340	223	251	381	85	49	11	15	1 355
2009–10	292	250	282	506	80	34	12	17	1 473
2010–11	290	262	326	325	55	27	5	21	1 311
2011–12	np	np	np	np	np	np	np	np	1 256
2012–13	np	np	np	np	np	np	np	np	1 108
2013–14	np	np	np	np	np	np	np	np	1 073
				change in methodology					
2014–15	np	np	np	np	np	np	np	np	695
2015–16	np	np	np	np	np	np	np	np	766

[1] See endnote.
Note: 2014–15 and 2015–16 data should not be compared with previous years see end notes.
Data on state of hospitalisation should be interpreted with caution because of cross–border flows of patients.
np Not available for publication but included in the totals.
Source: AIHW (2016b), AIHW (2017).

Table E 4.1b Energy safety—number of hospital admissions (separations) due to exposure to electricity, radiation, extreme temperature/pressure—private hospitals

Financial year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Australia
2001–02	24	20	127	8	np	np	0	0	185
2002–03	39	30	88	12	9	np	np	np	183
2003–04	59	12	85	10	7	np	np	np	180
2004–05	34	18	114	17	7	np	np	np	194
2005–06	40	19	128	19	9	np	np	np	219
2006–07	37	11	84	26	48	np	np	np	212
2007–08	35	9	68	38	59	np	np	np	214
2008–09	50	17	107	16	5	np	np	np	204
2009–10	32	17	92	30	2	np	np	np	178
2010–11	49	26	78	22	5	np	np	np	186
2011–12	np	np	np	np	np	np	np	np	140
2012–13	np	np	np	np	np	np	np	np	189
2013–14	np	np	np	np	np	np	np	np	196
				change in methodology					
2014–15	np	np	np	np	np	np	np	np	39
2015–16	np	np	np	np	np	np	np	np	23

[1] See endnote.
Note: 2014–15 and 2015–16 data should not be compared with previous years.
Data on state of hospitalisation should be interpreted with caution because of cross–border flows of patients.
Data are not readily available for missing years.
np: Not available for publication but included in the totals.
Source: AIHW (2017).

Table E 4.2 Energy emissions—public electricity and heat production greenhouse gas (carbon dioxide equivalent) emissions, by type of emissions

Year	Carbon dioxide	Methane	Nitrous oxide
		gigagrams of CO_2 equivalent	
1990	129 096.6	34.6	410.6
1991	131 266.5	33.4	421.8
1992	134 115.6	34.0	428.0
1993	135 024.2	34.5	444.5
1994	136 597.2	35.6	445.6
1995	142 196.8	38.2	464.3
1996	147 213.2	39.4	476.2
1997	152 193.0	40.0	527.3
1998	164 724.5	83.8	587.4
1999	170 956.4	85.2	577.4
2000	174 647.8	149.3	612.2
2001	181 825.9	157.0	699.3
2002	183 036.4	149.4	795.4
2003	185 522.3	144.3	883.4
2004	193 540.4	150.6	907.9
2005	195 666.7	143.9	948.4
2006	200 199.6	157.4	954.2
2007	202 966.7	340.2	996.9
2008	204 797.8	174.4	980.3
2009	210 254.0	392.5	1 048.0
2010	203 738.6	358.2	989.8
2011	197 146.0	245.0	1 098.0
2012	197 716.7	331.7	1 068.7
2013	185 720.4	282.4	1 023.2
2014	179 396.4	393.6	965.0
2015	187 736.5	473.5	756.2

Source: Environment (2017).

Table E 4.3a Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—New South Wales

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Auto-motive diesel oil	Liquified petro-leum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990	45 740.9		122.4	160.2	316.2	4.4		356.7		
1991	45 815.1		117.6	142.7	333.4	3.0		344.3		
1992	46 243.8		117.0	135.4	352.7	0.4		342.3		
1993	47 648.2		116.4	119.6	380.7	0.4		360.7		
1994	47 144.9		129.4	132.1	406.7	0.4		353.9		
1995	48 076.0		133.2	129.6	435.0	0.4		316.8		
1996	48 721.7		129.7	124.6	439.8	0.4		542.2		
1997	50 441.7		132.6	122.7	529.2	0.5		821.5		
1998	50 790.3		135.0	119.8	625.7	0.5	283.9	856.5		
1999	52 361.4		130.6	117.9	636.7	0.5	318.7	1 169.8		
2000	53 553.1		110.4	131.5	658.6	0.5	391.6	1 180.9	0.3	12.0
2001	56 364.0		93.2	139.5	705.1	4.0	463.8	1 250.6	0.2	11.8
2002	56 591.1		98.3	152.9	711.7	4.0	485.8	1 312.5	0.0	11.8
2003	56 571.4		68.3	160.3	942.9	6.2	359.8	1 400.5	1.8	14.5
2004	58 065.2		74.6	151.5	1 271.4	15.7		1 048.7	0.4	54.8
2005	57 540.0		74.6	157.4	1 478.6	19.4	335.8	1 506.1	0.5	16.3
2006	59 464.3		74.9	136.5	1 387.8	20.3	311.1	1 513.8	0.4	20.4
2007	61 246.9		75.8	136.2	1 351.1	16.8	388.4	2 364.3	0.2	21.3
2008	63 580.7		77.3	170.5	1 386.2	17.0	283.9	1 374.1	2.5	22.9
2009	62 291.5		60.1	53.5	1 472.8	97.7	186.4	1 479.2	2.2	25.0
2010	57 992.6		53.8	53.8	1 739.9	62.4	300.5	2 450.1	3.3	26.4
2011	54 265.7		63.4	35.0	2 022.4	68.9	321.7	2 428.0	3.5	23.1
2012	53 725.3		55.7	35.9	2 397.2	91.2	363.8	2 389.9	2.0	29.0
2013	50 987.6		50.5	30.8	2 676.5	0.5	375.8	2 525.1	3.4	27.5
2014	49 187.1			51.1	2 764.6	0.8	451.2	2 574.8	5.5	30.2
2015	46 686.5			28.0	2 795.0	0.7	384.1	2 204.5	7.7	31.2

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring. ACT figures are included in the NSW total.

Source: Environment (2017).

Table E 4.3b Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—Victoria

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Automotive diesel oil	Liquified petroleum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990		41 232.6	283.9	99.5	1.5			4 069.9		
1991		44 435.3	179.7	58.6	2.6			3 088.2		
1992		45 665.6	188.9	34.1	13.5			3 221.1		
1993		43 249.4	135.3	45.7	10.3			3 320.6		
1994		43 758.7	114.4	25.1	7.3			2 986.6		
1995		45 525.8	116.5	22.0	0.1			3 486.3		
1996		47 840.7	181.5	22.0	15.6			3 408.7		
1997		51 819.1	179.9	22.0	9.7			2 193.0		
1998		58 528.4	215.2	26.3				2 076.7		
1999		60 995.6	160.7	21.5	5.7			1 936.5		
2000		61 909.5	262.1	28.2	1.6			2 074.9		15.4
2001		61 186.8	261.6	40.5	19.2	3.1		2 401.8		15.1
2002		59 356.2	125.9	46.6	16.6	3.1		2 657.0		16.9
2003		60 385.3	167.7	29.3	25.4	3.9		2 709.3		13.7
2004		63 706.3	41.8	40.7	14.0	0.8		3 505.6	0.6	13.7
2005	12.5	62 118.3	41.9	41.3	32.8	6.8		3 373.0	0.6	11.5
2006		62 674.0	68.0	42.3	85.9	8.5		3 328.4	0.6	10.8
2007		61 582.7	61.5	40.3	57.2	2.6		3 180.8	0.6	10.5
2008		61 590.6	136.4	40.1	178.9	2.1		3 437.0	0.3	22.3
2009		63 759.3	135.2	68.5	67.1	1.7		3 659.0		22.1
2010		63 847.7	115.3	24.3	63.2	1.1		2 970.5		22.3
2011	2.6	63 343.0	117.9	46.5	53.7	1.2		2 626.9		27.3
2012	0.4	65 749.6	138.3	45.3	89.1	3.4		2 703.2		29.8
2013		57 326.1	103.8	51.1	97.5	0.5		3 135.6		29.3
2014		55 181.0		48.4	119.4	4.9		3 467.8	1.4	34.5
2015	0.8	59 279.7		40.6	134.6	1.3		3 124.5	1.8	48.3

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.3c Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—Queensland

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Automotive diesel oil	Liquified petroleum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990	22 379.6			53.0	917.8	8.9		364.6		
1991	23 010.9			41.6	947.7	6.1		392.3		
1992	24 265.8			35.7	949.7	0.8		419.8		
1993	25 787.8			58.5	992.2	0.8		472.5		
1994	26 368.2			54.0	1 040.1	0.8		492.8		
1995	28 228.8			45.0	1 077.4	0.8		481.1		
1996	29 133.4			43.5	1 116.9	0.8		629.7		
1997	30 389.4			43.4	1 198.4	0.8		645.7		
1998	34 619.5			70.5	1 210.4	0.7		673.6		
1999	35 549.0			58.9	1 296.7	0.7		1 217.3		
2000	35 519.0			32.6	1 485.4	0.7		1 672.1		1.3
2001	38 691.3			160.0	1 346.7	4.0		2 104.4		1.3
2002	41 172.8			35.4	1 518.9	3.9		2 457.7		1.9
2003	41 241.1			35.4	2 886.4	11.2	488.0	1 688.4	3.5	1.2
2004	44 398.7			46.0	2 995.9	0.0	501.6	2 210.7		1.3
2005	45 155.4			40.0	3 576.6	0.0	1 049.2	2 865.4	5.6	1.8
2006	46 754.4			37.4	3 225.5	0.0	1 770.6	3 547.6	5.7	1.8
2007	45 186.4			45.8	3 056.6	0.0	2 085.4	5 370.1	6.1	1.5
2008	44 368.6			43.2	3 104.8		1 957.1	5 745.7	6.0	1.8
2009	45 157.3			73.6	3 279.2	0.4	2 144.7	6 132.4	5.4	5.6
2010	43 660.7			69.5	3 273.6	18.5	3 303.6	6 094.7	6.3	7.7
2011	40 203.7			44.3	3 646.5	0.5	3 764.9	7 000.5	3.4	9.6
2012	39 052.8			11.6	4 408.9	1.9	5 568.7	8 390.4	1.8	9.9
2013	38 060.1			6.6	4 927.5	0.8	4 592.2	7 507.4	4.1	4.8
2014	35 078.5			28.8	5 192.6	21.4	3 476.5	8 384.0	4.4	6.8
2015	38 823.3			35.7	5 163.2	7.0	4 716.8	9 843.6	4.0	6.5

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.3d Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—South Australia

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Auto-motive diesel oil	Liquified petro-leum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990	337.5	3 886.7		26.0	22.4	3.0		3 767.9		
1991	431.9	3 350.0		16.7	42.3	3.0		3 081.4		
1992	605.2	3 657.6		21.1	23.5	2.4		3 334.6		
1993	565.6	3 561.8		24.3	27.3	2.4		3 531.9		
1994	291.6	3 456.4		19.2	29.8	2.4		3 666.3		
1995	213.3	3 410.3		19.5	34.2	2.4		3 437.8		
1996	71.5	3 229.2		54.4	19.7			2 907.7		
1997	311.3	3 535.9		16.3	45.9			2 930.9		
1998	205.1	3 612.6		18.0	50.8			3 270.9		
1999	221.2	3 795.7		86.6	32.5	16.1		3 990.1		
2000	148.1	4 251.9		88.3	32.2	14.9		3 691.2		27.4
2001	122.3	4 615.2		90.9	- 21.0	14.0		3 877.7		26.9
2002	142.2	4 706.2		37.0	11.6			4 062.0		12.1
2003	247.3	5 012.6		25.0	98.9			4 257.3	0.6	12.4
2004	193.6	4 452.0		32.0	176.4	0.0		4 675.3	0.6	12.5
2005	162.8	5 097.8		33.4	97.7	0.0		4 474.4	0.6	5.8
2006	291.1	4 824.7		30.1	104.7	0.0		4 316.3	0.5	6.2
2007	347.3	5 592.5		48.8	96.3	0.0		4 498.2	0.5	5.7
2008	331.0	5 246.6		43.2	92.7	0.0		4 886.5	3.8	3.9
2009	178.9	5 318.1		21.4	97.1	0.0		4 604.8		5.3
2010	228.9	5 090.2		20.1	169.4	0.0		4 373.7		5.2
2011	244.7	4 257.7		16.2	110.7	0.0		4 219.9		5.7
2012	237.4	3 186.5		13.5	117.5	0.0		4 153.1		5.2
2013	292.1	2 334.5		7.8	142.2	0.0		4 241.1		4.2
2014	244.7	2 102.0		6.4	149.4	0.5		3 756.7		5.2
2015	204.6	2 716.8		15.5	216.8	0.7		3 339.8		6.4

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.3e Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—Western Australia

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Automotive diesel oil	Liquified petroleum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990	6 662.2			274.8	1 193.7			4 298.4		
1991	8 084.3			279.9	1 147.9			3 992.1		
1992	8 107.1			217.0	1 116.4			4 428.6		
1993	8 208.2			215.7	1 105.3			4 972.2		
1994	7 960.6			214.5	1 081.7			5 755.3		
1995	7 319.6			215.2	1 355.8			6 975.8		
1996	8 739.2			241.8	1 365.9			6 809.5		
1997	8 419.1			208.6	867.9			7 953.0		
1998	8 070.6			14.0	901.8			9 068.7		
1999	7 933.4			42.0	636.5			9 249.1		
2000	8 715.3			22.1	499.1			9 374.5		3.3
2001	8 496.0			25.3	433.4	2.3		10 392.3		3.3
2002	8 724.8			21.5	437.7	2.3		10 663.8		4.4
2003	9 899.7			14.0	982.5	2.9		9 369.9		7.1
2004	9 006.3			23.2	1 235.3	0.6		9 604.9		7.0
2005	9 182.9			77.7	1 256.0	0.7		11 224.0		3.5
2006	9 213.2			180.4	1 215.9	0.8		11 702.0	0.5	3.5
2007	8 432.2			173.4	1 263.1	0.8		12 368.8	0.1	3.3
2008	7 658.6			167.9	1 270.3	1.4		13 116.9		5.2
2009	9 358.0			16.7	1 245.2	3.8		15 164.1		10.2
2010	8 492.2			11.9	1 115.6	1.0		15 241.5		8.6
2011	9 498.4			12.4	1 236.1	0.6		16 207.9		8.2
2012	8 977.8			17.9	1 356.7	0.6		16 224.8		4.7
2013	9 832.4			17.5	1 551.0	0.6		16 441.3		3.4
2014	8 996.1			15.2	1 970.5	0.6		16 927.2		8.2
2015	9 198.5			20.1	2 275.6	0.3		17 824.4		8.0

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.3f Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—Tasmania

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Auto-motive diesel oil	Liquified petro-leum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
					gigagrams of CO_2 equivalent					
1990	46.4			503.7	20.2	0.0				
1991	46.4			699.7	10.2	0.0				
1992	46.4			4.1	10.3	0.0				
1993	46.4			0.0	10.9	0.0				
1994	53.6			0.5	11.4	0.0				
1995	53.6			0.0	13.4	0.0				
1996	53.6			0.0	14.5	0.0				
1997	53.6			0.0	14.0	0.0				
1998	53.6			0.0	14.8	0.0				
1999	53.6			5.0	11.0	0.0				
2000	53.6			2.7	8.9	0.0				
2001	53.6			12.5	46.1	0.0				
2002	53.6			47.0	12.6	0.0		58.1		
2003				96.4	- 85.8	3.0		186.8		
2004					9.5	1.9		325.5		
2005					13.2	7.3		482.8		
2006					14.0	8.0		485.5		
2007					11.4	3.9		509.4		
2008					13.2	2.9		651.9		1.6
2009					10.5	2.2		375.5		2.9
2010					11.2	1.4		500.2		2.1
2011					14.4	0.8		634.1		2.1
2012					12.0	7.5		651.4		2.4
2013					8.5	0.8		720.7		2.4
2014				2.4	7.9			409.2		2.2
2015				6.7	12.9			85.4		2.5

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.3g Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—Northern Territory

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Auto-motive diesel oil	Liquified petro-leum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
	gigagrams of CO_2 equivalent									
1990					266.7			637.6		
1991					253.2			673.3		
1992					217.6			700.1		
1993					202.1			707.1		
1994					206.4			707.6		
1995					213.6			770.5		
1996					229.0			885.3		
1997					244.5			924.7		
1998					259.1			950.9		
1999					279.8			1 019.8		
2000					164.8			1 098.4		
2001					94.2			1 116.5		
2002					91.8			1 134.6		
2003					412.8			727.3		
2004					665.2			875.2		0.5
2005					734.6			855.8		
2006					1 015.0	2.3		1 168.9		
2007					588.3	1.0		1 842.9		
2008					993.3	0.8		1 728.9		0.6
2009					869.9	0.6		2 078.2		0.7
2010					674.8	0.5		2 426.5		0.7
2011					526.7	0.2		2 110.7		0.7
2012					603.8	2.0		2 163.5		0.5
2013					566.3			2 299.7		0.5
2014				357.9	356.0	0.0		2 366.2		0.7
2015				47.0	531.1	0.0		2 353.4		0.7

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.3h Energy emissions—stationary energy, energy industries greenhouse gas (carbon dioxide equivalent) emissions—Australian external territories

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Auto-motive diesel oil	Liquified petro-leum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990					3.4					
1991					3.6					
1992					3.4					
1993					5.1					
1994					8.4					
1995					4.7					
1996					8.9					
1997					5.6					
1998					2.1					
1999					5.8					
2000					12.7					
2001					7.1					
2002					7.7					
2003					6.6					
2004					7.4					
2005					7.3					
2006					7.1					
2007					8.5					
2008					27.1					
2009					20.4					
2010					18.2					
2011					34.4					
2012					36.6					
2013					36.6					
2014					36.6					
2015					36.6					

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.4 Energy emissions—public electricity and heat production greenhouse gas (carbon dioxide equivalent) emissions, by type of fuel—Australia

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Automotive diesel oil	Liquified petroleum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
	gigagrams of CO_2 equivalent									
1990	72 928.3	45 096.8	284.0	1 048.5	1 865.6			8 331.5		
1991	74 521.4	47 764.6	179.8	1 173.8	1 804.2			6 255.1		
1992	76 305.9	49 136.8	189.0	379.0	1 711.6			6 837.2		
1993	79 369.4	46 811.2	135.3	392.2	1 716.3			7 056.7		
1994	80 056.9	47 188.8	114.4	369.5	1 757.9			7 566.4		
1995	82 579.0	48 924.0	116.5	352.1	2 044.1			8 656.7		
1996	86 272.5	50 928.4	181.6	407.4	2 078.3			7 830.1		
1997	87 691.7	55 217.3	180.0	332.3	1 634.6			7 671.8		
1998	92 551.6	62 076.4	215.3	166.5	1 599.5		284.0	8 753.9		
1999	94 715.7	64 790.4	160.8	248.0	1 439.4		318.7	10 234.4		
2000	97 125.7	66 115.9	262.2	218.8	1 310.9		391.6	10 286.1	0.3	59.5
2001	103 117.3	65 743.3	261.8	348.9	1 006.3		463.8	12 118.9	0.2	58.3
2002	105 985.7	63 941.4	125.0	208.1	1 152.1		485.8	12 501.2	0.0	47.1
2003	106 737.3	65 160.2	167.8	267.7	1 691.4	8.4	602.1	12 443.2	5.9	48.9
2004	110 673.5	67 585.8	41.6	205.0	2 247.7		239.0	13 725.0	1.6	89.8
2005	111 263.1	66 913.2	41.9	271.2	2 261.9	0.7	1 103.5	15 929.8	7.2	38.9
2006	114 299.9	67 434.6	68.0	357.0	2 357.6	1.0	1 780.8	16 710.4	7.8	42.7
2007	113 499.8	67 114.0	61.5	376.6	2 225.8	0.9	2 152.3	20 761.8	7.5	42.2
2008	114 256.9	66 745.2	136.0	396.4	2 769.9	0.9	1 834.8	21 550.1	12.6	58.4
2009	116 146.2	68 996.1	135.2	113.1	2 426.7	0.8	1 827.0	23 611.7	7.6	71.8
2010	109 114.6	68 873.8	115.3	101.2	2 171.8		3 134.3	24 507.6	9.5	73.0
2011	102 830.5	67 523.4	117.9	97.4	2 188.6		3 379.3	25 558.0	6.9	76.6
2012	100 824.8	68 801.4	138.3	90.0	2 423.7		5 187.8	26 654.4	3.9	81.4
2013	97 898.0	59 584.3	103.8	80.4	2 489.8		4 191.3	26 706.8	7.5	72.1
2014	92 436.6	57 162.3		492.3	2 809.4	22.6	3 051.5	27 497.6	11.4	87.7
2015	94 096.5	61 993.0		170.5	3 859.3	4.7	4 141.8	28 416.1	13.6	103.6

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

Table E 4.5 Energy emissions—Natural gas transmission greenhouse gas (carbon dioxide equivalent) emissions, by type of fuel—Australia

Calendar year	Solid fuels			Liquid fuels			Gaseous fuels		Renewable	
	Black coal	Brown coal	Brown coal briquettes	Fuel oil	Auto-motive diesel oil	Liquified petro-leum gas (LPG)	Coal gas	Natural gas	Wood and wood waste	Gas biomass
				gigagrams of CO_2 equivalent						
1990								107.6		
1991								102.7		
1992								108.0		
1993								108.0		
1994								118.1		
1995								125.2		
1996								137.8		
1997								146.3		
1998								146.5		
1999								180.3		
2000								197.6		
2001								203.1		
2002								208.7		
2003								214.4		
2004								221.2		
2005								230.0		
2006								252.2		
2007								268.0		
2008								279.6		
2009								283.2		
2010								297.6		
2011								293.5		
2012								294.6		
2013								288.9		
2014								290.9		
2015								308.0		

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.
Source: Environment (2017).

PART C: Communication

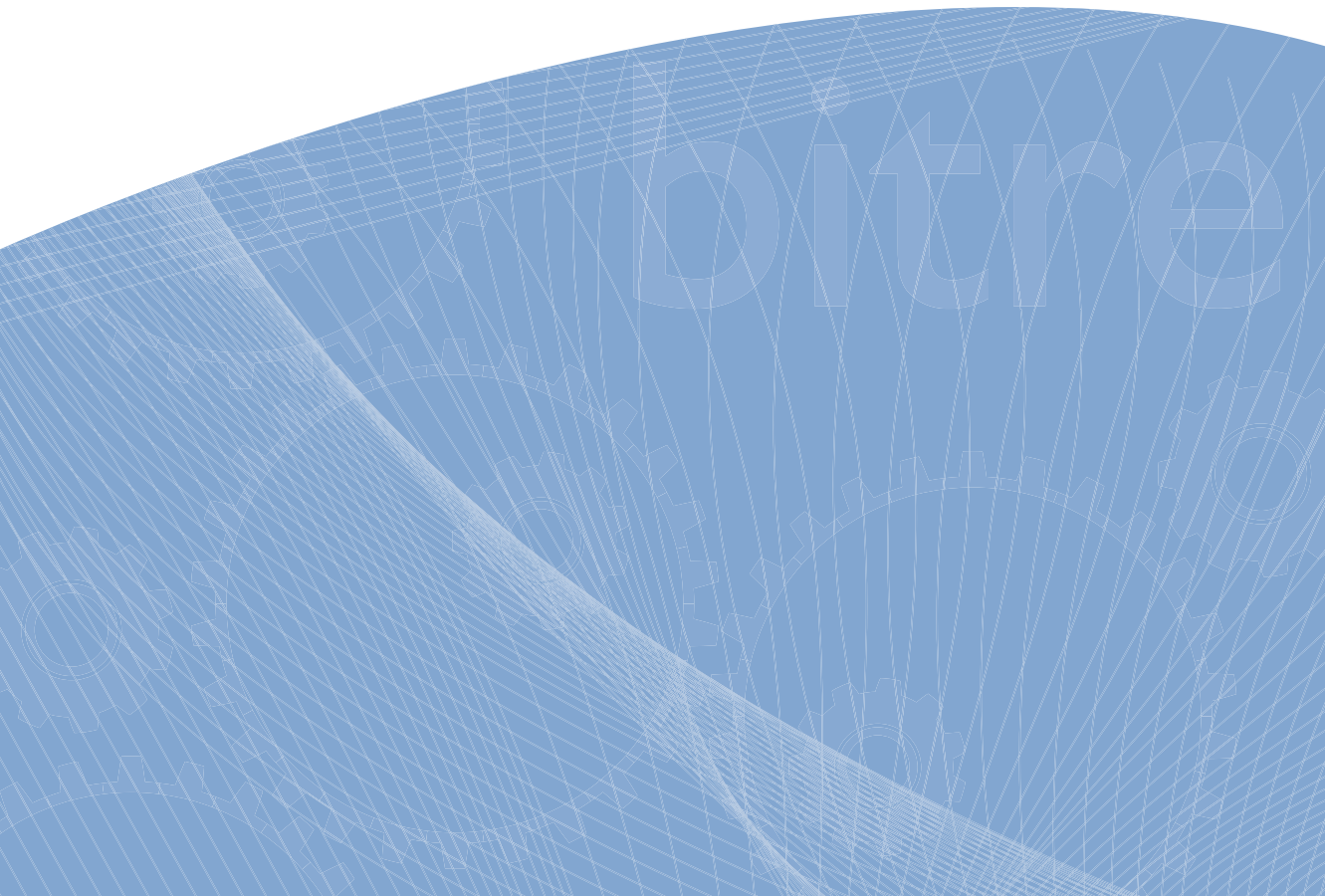
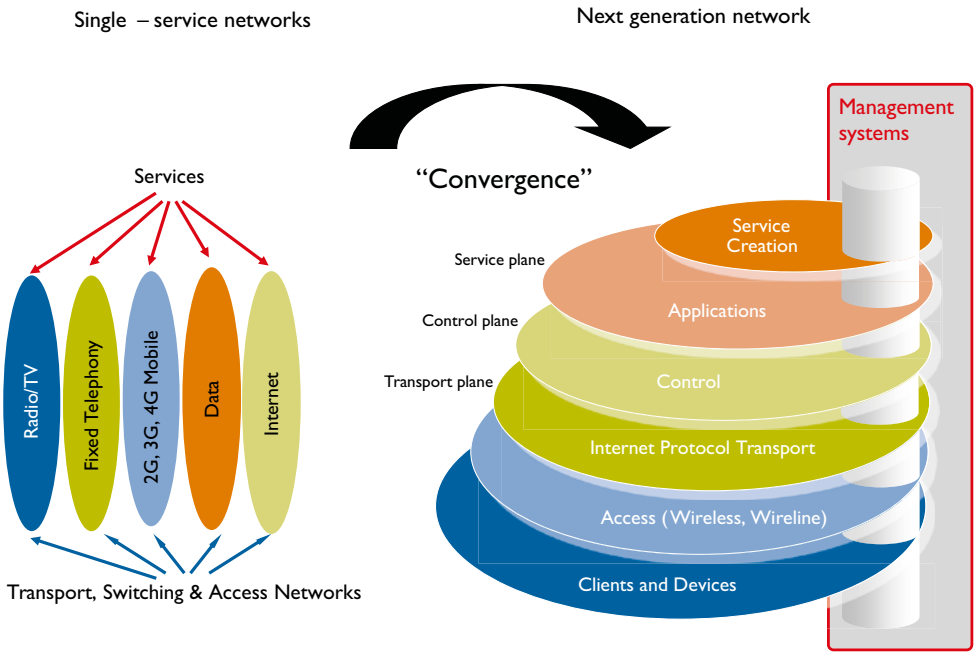


Figure C 1 Telecommunications networks: traditional and next generation



Source: Adapted from "Developments in next generation applications and services" report, *Australian Communications and Media Authority*, 2011.

PART C
Communication

Telecommunications networks are a vital part of Australian infrastructure, with communications networks now in a period of significant transition.

Traditional communications architecture was based on vertically integrated separate networks that delivered separate services over a dedicated network (see Figure C1, facing page). Modern communications networks are moving to the use of a more horizontal, next generation network architecture organised into layers of common functions, which allows the delivery of multiple services to a single user device delivered over a common internet protocol based platform.

The upper layers of the diagram (control, applications and service creation) are associated with the presentation of software-based user-focussed features and services, while the lower layers in the diagram are associated with the more physical elements of the communications process. Management systems provide overall management of network interaction between layers. The horizontal architecture allows for competition amongst industry participants operating within a layer.

The phenomenon of communications 'convergence' is not just occurring at the network, service and device level, but also among the previously distinct industries of telecommunications, broadcasting, radio communications and the Internet.

Readers should take these rapid developments in communications technology into account when analysing time series statistics for communications networks.

Where possible, statistics in this section focus on physical infrastructure networks and their usage, rather than the broader communications industry. For Chapter 2, these distinctions are not possible as data are not available with sufficient detail to separately identify physical infrastructure networks.

Traditional measures of infrastructure construction activity only provide a partial picture of the capacity and usage of communications infrastructure as they only measure investment in the physical infrastructure networks. Information technology upgrades that provide additional functionality or new services on existing networks, along with network upgrades that extend geographic coverage, have been major drivers of increased infrastructure capacity in the communications industry. Chapter 2 of Part C: Communication provides estimates of investment in information technology by the information media and telecommunications industry.

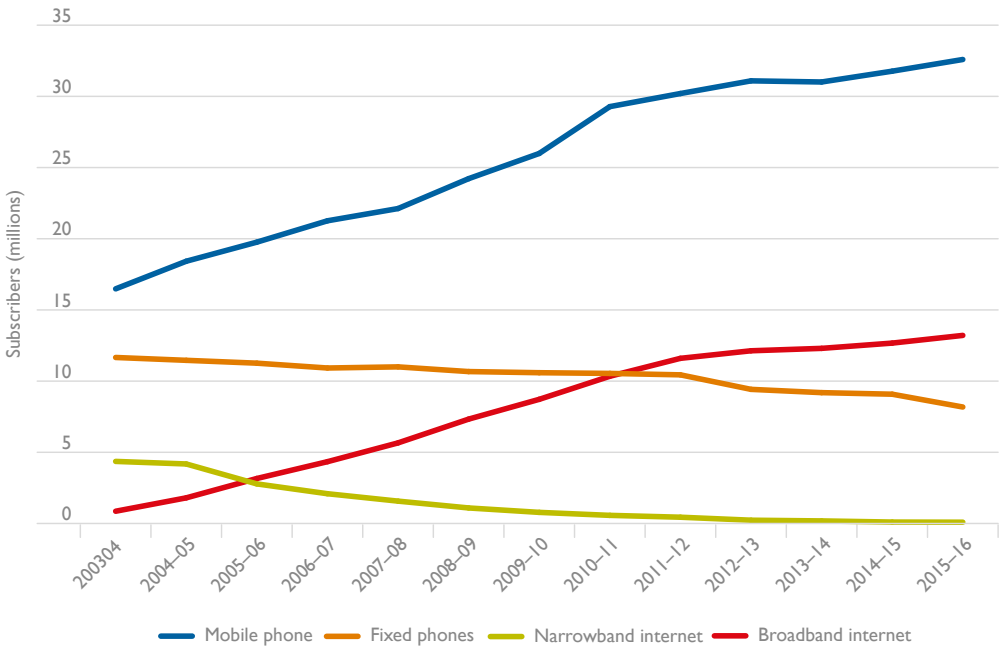
Major drivers of communications infrastructure activity over recent years have been:

- increasing international bandwidth capacity
- growth in domestic backhaul transmission capacity (infrastructure connecting access nodes to the core network)
- a broadening range of internet access technologies available, including digital subscriber line (DSL) and wireless broadband network deployments (with increasing intensity of use and reliance on radio communications spectrum allocations)
- mobile network extensions for 3G and 4G mobile services, and
- the convergence of networks, devices and service

The deployment of the National Broadband Network (NBN) represents a significant investment in a fibre optic network. This investment will be reflected in the statistics over the coming years of the NBN deployment and beyond.

An illustration of the dynamism of the communications sector, Figure C2 demonstrates the take-up of mobile phones and broadband internet over the last ten years, and the decline of the number of subscribers to the older technologies of dial-up internet and fixed phones.

Figure C 2 Communications subscribers—number of subscribers, by communications medium



Source: Table C 3.1.

CHAPTER 1
Communication infrastructure

Table C 1.1 Flow of new infrastructure—value of telecommunications engineering construction work done by sector of construction and sector of ownership, adjusted by chain volume index

Financial year	Private sector for the private sector	Private sector for the public sector	Public sector	Telecommunications infrastructure engineering construction work done	Telecommunications percentage of total major infrastructure engineering construction work done
		$ million			*per cent*
1986–87	28.8	78.8	3 756.2	3 863.8	21.98
1987–88	14.5	59.7	3 475.0	3 549.2	22.67
1988–89	15.3	13.6	3 740.4	3 769.3	24.15
1989–90	12.2	21.0	4 104.0	4 137.2	23.69
1990–91	16.1	39.8	4 170.4	4 226.3	23.45
1991–92	12.1	57.5	3 188.3	3 257.9	19.89
1992–93	122.4	42.2	3 158.8	3 323.4	18.88
1993–94	146.0	56.9	2 852.2	3 055.1	16.35
1994–95	125.7	21.7	3 838.0	3 985.5	20.81
1995–96	329.8	46.0	4 446.8	4 822.6	23.81
1996–97	280.5	12.4	4 424.3	4 717.2	23.23
1997–98	111.8	55.3	4 538.5	4 705.5	21.30
1998–99	181.1	37.2	4 807.7	5 026.0	20.80
1999–00	549.2	218.8	5 573.9	6 341.9	24.20
2000–01	954.5	419.3	4 732.1	6 105.9	25.55
2001–02	543.7	506.9	4 322.2	5 372.7	22.94
2002–03	515.9	428.7	3 844.8	4 789.4	18.52
2003–04	1 085.2	65.8	3 226.2	4 377.3	15.03
2004–05	1 236.9	226.6	3 397.9	4 861.4	14.57
2005–06	1 537.1	77.7	4 544.6	6 159.4	16.67
2006–07	3 969.2	47.4	1 687.4	5 704.0	14.47
2007–08	4 727.7	28.4	[a] 7.8	4 756.0	10.88
2008–09	4 040.4	54.6	7.8	4 102.8	8.18
2009–10	3 845.1	192.7	10.9	4 048.7	7.85
2010–11	3 788.1	291.6	6.5	4 086.2	7.20
2011–12	4 487.5	550.0	5.0	5 042.4	8.10
2012–13	4 568.0	1 223.3	9.8	5 801.1	8.79
2013–14	4 854.0	2 080.9	8.0	6 942.9	11.72
2014–15	4 681.6	2 711.8	1.9	7 395.3	14.67
2015–16	4 945.0	3 785.3	11.8	8 742.0	19.19
2016–17	5 951.5	4 916.5	4.0	10 872.0	22.66

[a] Following the third tranche of privatisation of Telstra, ABS classifies Telstra investment as private sector rather than public sector investment.

Source: ABS (2017a), adjusted by chain volume index.

Table C 1.2a Flow of new infrastructure—capital investment by selected communications industries—gross fixed capital formation[e]

Financial year	Broadcasting (except internet)	Internet publishing and broadcasting [b]	Tele-communications services	Internet service providers, web search portals and data processing services [b]	Publishing, motion picture and sound recording, and library and other information services[c, d]	TOTAL information media and tele-communications industry
			$ million			
2009–10	488	30	7 648	195	675	9 037
2010–11	467	38	7 863	232	676	9 276
2011–12	343	23	8 262	175	757	9 560
2012–13	278	34	8 883	240	655	10 091
2013–14	496	62	9 131	482	791	10 960
2014–15	589	101	9 484	490	598	11 285
2015–16	520	39	9 988	600	618	11 765

[b] Estimate has a relative standard error between 10% and 25%.
[c] Estimate has a relative standard error of 25% to 50%.
[d] This series groups several industries into the one measure. Relative standard errors were calculated for component series, but are not available for the new measure.
[e] Gross fixed capital expenditure represents expenditure on fixed assets that excludes repair and maintenance expenses, but includes all costs associated with own-account capital formation. Fixed assets include all produced assets (physical assets, cultivated assets and intellectual property products) that are used in processes of production for more than one year. Non-produced assets such as spectrum assets are not included in gross fixed capital formation.
Source: ABS (2017k, 2017d).

Table C 1.2b Flow of new infrastructure—capital investment by selected communications industries—net capital expenditure[f]

Financial year	Broadcasting (except internet)	Internet publishing and broadcasting	Tele-communications services	Internet service providers, web search portals and data processing services	Publishing, motion picture and sound recording, and library and other information services[d]	TOTAL information media and tele-communications industry
			$ million			
2009–10	511	np	7 685	258	828	9 330
2010–11	417	- 152	8 066	[b] 348	667	9 349
2011–12	np	31	np	np	831	10 034
2012–13	278	np	np	np	720	np
2013–14	551	32	np	680	844	np
2014–15	np	np	np	np	np	11 836
2015–16	597	np	np	679	305	12 344

[b] Estimate has a relative standard error between 10% and 25%.
[d] This series groups several industries into the one measure. Relative standard errors were calculated for component series, but are not available for the new measure.
[f] Net capital expenditure represents expenditure on all forms of capital, net of depreciation of fixed capital. This measure of capital expenditure includes non-produced assets such as spectrum assets.
np: Not available for publication but included in total where applicable.
Source: ABS (2017k, 2017d).

Table C 1.2c Flow of new infrastructure—capital investment by selected communications industries—depreciation and amortisation

Financial year	Broadcasting (except internet)	Internet publishing and broadcasting	Tele-communications services	Internet service providers, web search portals and data processing services	Publishing, motion picture and sound recording, and library and other information services[d]	TOTAL information media and tele-communications industry
				$ million		
2009–10	856	25	7 206	205	895	9 186
2010–11	879	35	7 261	[b] 229	776	9 179
2011–12	1 029	37	7 095	[b] 330	817	9 307
2012–13	1 220	38	7 243	[c] 3018	818	9 636
2013–14	1 279	np	7 495	[b] 348	802	9 968
2014–15	1 251	38	7 248	374	823	9 734
2015–16	1 339	37	7 241	360	701	9 678

[b] Estimate has a relative standard error between 10% and 25%.
[c] Estimate has a relative standard error of 25% to 50%.
[d] This series groups several industries into the one measure. Relative standard errors were calculated for component series, but are not available for the new measure.

Source: ABS (2017k, 2017d).

CHAPTER 2
Investment in information technology

Table C 2.1 Investment in information technology—information media and telecommunications industry[g] investment in information technology gross fixed capital formation[1], chain volume measures

Financial year	Information media and telecommunications industry investment in IT				Total Australian investment in information technology	Information media and telecommunications industry percentage of total
	Computers and peripherals	Electrical and electronic equipment	Intellectual property products—Computer software	TOTAL investment in IT by the information media and telecommunications industry		
			$ million			*per cent*
1974–75	0	117	2	119	568	20.95
1975–76	0	89	3	92	602	15.28
1976–77	0	101	4	105	594	17.68
1977–78	0	97	4	101	625	16.16
1978–79	0	113	6	119	699	17.02
1979–80	0	109	7	116	699	16.60
1980–81	1	122	10	133	846	15.72
1981–82	1	139	13	153	961	15.92
1982–83	1	135	17	153	932	16.42
1983–84	1	195	22	218	1 353	16.11
1984–85	1	245	28	274	1 511	18.13
1985–86	2	358	38	398	1 750	22.74
1986–87	2	265	43	310	1 934	16.03
1987–88	3	288	72	363	2 068	17.55
1988–89	3	313	79	395	2 270	17.40
1989–90	3	416	123	542	2 631	20.60
1990–91	4	364	143	511	2 464	20.74
1991–92	5	391	203	599	2 830	21.17
1992–93	9	642	361	1 012	3 548	28.52
1993–94	5	442	424	871	3 727	23.37
1994–95	11	568	454	1 033	4 126	25.04
1995–96	16	659	524	1 199	4 644	25.82
1996–97	22	800	607	1 429	5 552	25.74
1997–98	19	571	625	1 215	6 752	17.99
1998–99	34	680	729	1 443	7 096	20.34
1999–00	62	1 139	861	2 062	9 150	22.54
2000–01	91	1 669	1 146	2 906	10 710	27.13
2001–02	75	1 327	1 186	2 588	11 088	23.34
2002–03	84	1 295	1 152	2 531	13 697	18.48
2003–04	57	1 049	1 114	2 220	15 665	14.17
2004–05	78	1 273	1 241	2 592	17 506	14.81
2005–06	108	1 308	1 376	2 792	19 026	14.67
2006–07	98	1 464	1 331	2 893	20 758	13.94
2007–08	163	1 537	1 268	2 968	23 159	12.82
2008–09	152	1 454	1 237	2 843	23 733	11.98
2009–10	180	1 090	1 386	2 656	23 746	11.19
2010–11	246	1 219	1 830	3 295	26 148	12.60
2011–12	228	1 222	1 969	3 419	28 568	11.97
2012–13	199	1 018	2 026	3 243	30 344	10.69
2013–14	181	1 095	2 326	3 602	29 855	12.06
2014–15	143	1 311	2 264	3 718	31 736	11.72
2015–16	240	1 689	2 548	4 477	32 759	13.67
2016–17	270	1 799	2 671	4 740	34 835	13.61

[1] See end notes.

[g] Investment in information technology statistics are not available with the same level of industry detail as Table C 1.2.

Source: ABS (2017o).

Table C 2.2 Consumption of information technology—information media and telecommunications industry[g] consumption of information technology fixed capital[2], chain volume measures

Financial year	Information media and telecommunications industry consumption of IT				Total Australian consumption of information technology fixed capital	Information media and telecommunications industry percentage of total
	Computers and peripherals	Electrical and electronic equipment	Intellectual property products—Computer software	TOTAL consumption of IT fixed capital by the information media and telecommunications industry		
			$ million			*per cent*
1973–74	0	81	1	82	385	21.30
1974–75	0	85	1	86	406	21.18
1975–76	0	87	1	88	426	20.66
1976–77	0	88	2	90	448	20.09
1977–78	0	89	3	92	472	19.49
1978–79	0	91	3	94	498	18.88
1979–80	0	93	4	97	527	18.41
1980–81	0	95	5	100	560	17.86
1981–82	0	98	7	105	603	17.41
1982–83	0	102	9	111	649	17.10
1983–84	0	107	11	118	703	16.79
1984–85	1	117	15	133	783	16.99
1985–86	1	132	19	152	885	17.18
1986–87	1	149	25	175	1 013	17.28
1987–88	1	162	33	196	1 163	16.85
1988–89	2	176	44	222	1 327	16.73
1989–90	2	195	62	259	1 559	16.61
1990–91	3	215	90	308	1 837	16.77
1991–92	3	233	124	360	2 119	16.99
1992–93	4	261	181	446	2 456	18.16
1993–94	5	290	257	552	2 819	19.58
1994–95	6	315	330	651	3 167	20.56
1995–96	8	347	398	753	3 515	21.42
1996–97	10	386	469	865	3 933	21.99
1997–98	13	421	535	969	4 478	21.64
1998–99	17	449	600	1 066	5 095	20.92
1999–00	25	500	678	1 203	5 835	20.62
2000–01	39	592	791	1 422	6 757	21.04
2001–02	53	691	922	1 666	7 715	21.59
2002–03	63	771	1 033	1 867	8 797	21.22
2003–04	69	834	1 123	2 026	10 152	19.96
2004–05	72	893	1 206	2 171	11 661	18.62
2005–06	79	959	1 292	2 330	13 212	17.64
2006–07	86	1 030	1 360	2 476	14 768	16.77
2007–08	99	1 104	1 383	2 586	16 436	15.73
2008–09	117	1 170	1 367	2 654	18 109	14.66
2009–10	133	1 207	1 360	2 700	19 645	13.74
2010–11	156	1 227	1 437	2 820	21 276	13.25
2011–12	181	1 246	1 591	3 018	23 131	13.05
2012–13	195	1 252	1 754	3 201	24 981	12.81
2013–14	199	1 247	1 925	3 371	26 528	12.71
2014–15	193	1 250	2 074	3 517	27 887	12.61
2015–16	192	1 275	2 198	3 665	29 190	12.56
2016–17	205	1 317	2 332	3 854	30 489	12.64

[2] See end notes.

[g] Investment in information technology statistics are not available with the same level of industry detail as Table C 1.2.

Source: ABS (2017o).

Table C 2.3 Stock of information technology—information media and telecommunications industry[g] net capital stock[3] of information technology assets, chain volume measures

Financial year	Information media and telecommunications industry stock of IT assets				Total stock of information technology	Information media and telecommunications industry percentage of total
	Computers and peripherals	Electrical and electronic equipment	Intellectual property products—Computer software	TOTAL stock of IT held by the information media and telecommunications industry		
			$ million			*per cent*
1973–74	0	609	3	612	3 306	18.51
1974–75	0	634	4	638	3 435	18.57
1975–76	0	631	7	638	3 577	17.84
1976–77	0	638	9	647	3 692	17.52
1977–78	0	639	11	650	3 814	17.04
1978–79	0	654	14	668	3 981	16.78
1979–80	1	664	17	682	4 120	16.55
1980–81	1	684	22	707	4 370	16.18
1981–82	1	716	29	746	4 689	15.91
1982–83	2	742	38	782	4 938	15.84
1983–84	2	818	51	871	5 534	15.74
1984–85	3	932	65	1 000	6 212	16.10
1985–86	4	1 137	86	1 227	7 026	17.46
1986–87	4	1 238	107	1 349	7 912	17.05
1987–88	5	1 347	150	1 502	8 791	17.09
1988–89	6	1 465	189	1 660	9 697	17.12
1989–90	7	1 661	257	1 925	10 756	17.90
1990–91	9	1 788	317	2 114	11 397	18.55
1991–92	10	1 923	408	2 341	12 140	19.28
1992–93	14	2 265	607	2 886	13 274	21.74
1993–94	14	2 390	796	3 200	14 245	22.46
1994–95	18	2 610	943	3 571	15 274	23.38
1995–96	25	2 887	1 088	4 000	16 440	24.33
1996–97	36	3 264	1 260	4 560	18 175	25.09
1997–98	41	3 394	1 383	4 818	20 580	23.41
1998–99	57	3 620	1 547	5 224	22 823	22.89
1999–00	93	4 261	1 760	6 114	26 359	23.20
2000–01	146	5 375	2 139	7 660	30 607	25.03
2001–02	170	6 055	2 426	8 651	34 339	25.19
2002–03	192	6 633	2 621	9 446	39 997	23.62
2003–04	180	6 892	2 750	9 822	46 741	21.01
2004–05	188	7 324	2 942	10 454	53 894	19.40
2005–06	222	7 749	3 143	11 114	61 156	18.17
2006–07	237	8 255	3 210	11 702	68 397	17.11
2007–08	307	8 750	3 118	12 175	75 809	16.06
2008–09	344	9 062	2 993	12 399	81 868	15.15
2009–10	387	8 929	3 071	12 387	86 344	14.35
2010–11	473	8 906	3 546	12 925	91 670	14.10
2011–12	519	8 878	4 019	13 416	97 752	13.72
2012–13	520	8 631	4 368	13 519	103 543	13.06
2013–14	501	8 466	4 808	13 775	107 101	12.86
2014–15	450	8 515	5 004	13 969	111 034	12.58
2015–16	498	8 929	5 360	14 787	114 662	12.90
2016–17	564	9 410	5 699	15 673	119 007	13.17

[g] Investment in information technology statistics are not available with the same level of industry detail as Table C 1.2.

[3] See end notes.

Source: ABS (2017o).

CHAPTER 3
Subscribers and providers

Table C 3.1 Number of services, by communications medium

End of financial year	Number of payphones	Terrestrial mobile	Fixed line	Mobile Handset internet subscribers	Internet (excluding mobile handset subscribers)	
					Dial-up	Broadband
			Number of subscribers (millions)			
2003–04 [i]	64 803	16.48	11.66	np	[h] 4.36	[h] 0.86
2004–05 [i]	61 735	18.42	11.46	np	[h] 4.18	[h] 1.80
2005–06 [j]	58 230	19.76	11.26	np	2.78	3.16
2006–07	49 862	21.26	10.92	np	[h] 2.09	[h] 4.34
2007–08	45 114	22.12	11.00	np	1.57	5.66
ISPs with more than 1000 active subscribers						
2008–09 [k]	39 328	24.22	10.67	np	1.09	7.33
2009–10	35 012	25.99	10.59	np	0.78	8.72
2010–11	33 201	29.28	10.54	np	0.57	10.34
2011–12	31 032	30.20	10.44	16.19	0.44	11.60
2012–13	29 523	31.09	9.42	19.65	0.23	12.13
2013–14	28 068	31.01	9.19	20.57	0.18	12.30
2014–15	25 876	31.77	[l] 8.50	20.99	0.10	12.67
2015–16	25 438	32.59	[l] 8.18	21.97	0.09	13.21

[h] Internet subscriptions for the end of the March quarter.

[i] Internet subscriptions prior to 2005–06 reflect data from all ISPs.

[j] From 2005–06 to 2007–08 internet subscriptions reflect data from ISPs with more than 10 000 active subscribers.

[k] Internet subscriptions for 2008–13 reflect data from ISPs with more than 1000 active subscribers.

[l] Change in data source in 2016 to ACCC retail and resale data collected from the providers. 2015 data has been revised to be consistent with the 2016 data collection method and differs from data reported in the previous Communications report.

np: refers to non available data.

Source: BITRE (2016c), ABS (2017), ACMA (2015), ACMA (2016).

Table C 3.2a Number of internet subscribers, by download speed—total all subscribers (excluding mobile handset subscribers)

	Less than 1.5Mbps	1.5Mbps to less than 8Mbps	8Mbps to less than 24Mbps	24Mbps or greater	Total broadband	Total all subscribers
Census of all ISPs						
September 2000						3 849
September 2001						4 289
September 2002						4 555
September 2003	5 043	np	np	np	656	5 211
September 2004	5 287	np	np	np	1 290	5 741
March 2005	5 380	np	np	np	1 787	5 980
September 2006	5 525	np	np	np	3 900	6 657
December 2007	4 589	1 045	1 293	180	5 218	7 105
December 2008	3 959	2 012	1 653	373	6 678	7 996
ISPs with more than 1000 active subscribers						
December 2009	3 286	3 188	1 973	503	8 046	8 951
December 2010	1 948	4 067	3 530	901	9 739	10 446
December 2011	1 283	5 115	3 985	1 213	11 121	11 596
December 2012	897	4 213	5 406	1 645	11 873	12 161
December 2013	542	4 159	5 608	2 088	12 187	12 397
December 2014	334	3 305	6 715	2 337	12 531	12 691
December 2015	193	2 183	np	np	12 871	12 946
December 2016	92	2 158	3 368	7 843	13 461	13 461

Note: Data are not readily available for missing years.
ABS changed its reporting in 2016 as reflected in the table.
Total subscribers equal total broadband subscribers as dial-up subscribers are not recorded.
Changing thresholds represent increasing download speed.
np: not available for publication but included in the totals.
Source: ABS (2017), BITRE (2016c).

Table C 3.3 Number of internet subscribers, by access connection (exlcuding mobile handset subscribers)

	Dial-up	Non dial-up							
		DSL	Cable and fibre	Satellite	Wireless (excluding mobile handset connections)			Other	Combined connections
					Fixed	Mobile	Total wireless (excluding mobile handset connections)		
	Number of subscribers ('000)								
Census of all ISPs									
September 2000	3 745	6	np	np				np	
September 2001	4 088	30	np	np				np	
September 2002	4 204	127	np	np				np	
September 2003	4 522	372	np	np	np	3	8	np	
September 2004	4 441	822	np	np	np	9	15	np	
March 2005	4 177	1 256	np	np	np	7	38	np	
September 2006	2 749	2 995	np	np	np	np	186	np	727
December 2007	1 887	3 815	np	np	np	np	481	np	922
December 2008	1 311	4 208	916	80	np	1 369	1 462	19	na
ISPs with more than 1000 active subscribers									
December 2009	891	4 178	np	107	22	2 838	2 860	np	na
December 2010	707	4 458	np	np	24	4 230	4 254	np	na
December 2011	473	4 553	937	100	35	5 491	5 526	8	na
December 2012	282	4 727	1 009	92	49	5 995	6 044	7	na
December 2013	205	4 898	1 111	91	48	6 040	6 088	3	na
December 2014	159	5 099	1 290	75	67	5 996	6 063	5	na
December 2015	93	5 030	1 649	np	84	6 025	6 109	np	na
December 2016	na	4 716	2 479	76	102	6 087	6 189	1	na

Note: Data in column Cable and fibre has been updated to include fibre. Data has been revised back to 2011. Data are not readily available for missing years. from 2016 'dial up' is no longer a valid access connection response.

np: not available for publication but included in the totals.

na: not applicable.

Source: ABS (2017l).

Table C 3.4 Communications providers—number of internet service providers (ISP), by size

	Very small 1 to 100 subscribers	Small 101 to 1,000 subscribers	Medium 1,001 to 10,000 subscribers	Large 10,001 to 100,000 subscribers	Very large 100,000 + subscribers	Total all subscribers
			Number of ISPs			
September 2000	132	377	173	28	8	718
September 2001	112	299	155	30	6	602
September 2002	102	254	172	29	6	563
September 2003	153	316	163	27	8	667
September 2004	171	323	157	26	10	687
March 2005	180	312	162	25	10	689
September 2006	124	199	112	22	10	467
December 2007	108	179	96	28	10	421
December 2008			88	27	11	126
December 2009			66	27	10	103
December 2010			71	21	12	104
December 2011			58	23	10	91
December 2012			46	22	8	76
December 2013			48	19	9	76
December 2014			41	21	9	71
December 2015			31	21	10	62
December 2016			34	19	10	63

Note: Data are not readily available for missing years.
Source: ABS (2017l).

CHAPTER 4
Price and activity

Table C 4.1 Communications prices—consumer price index, telecommunication services, index numbers by capital city

Average over financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Australia
				base of each index: 2011–12 = 100					
1980–81	59.1	60.5	57.1	59.8	58.7	59.9	66.7	60.5	59.5
1981–82	62.7	64.2	60.5	63.4	62.2	63.6	70.6	64.1	63.1
1982–83	69.1	70.7	66.7	69.9	68.7	69.9	77.8	70.8	69.5
1983–84	74.9	76.6	71.9	75.7	74.4	75.5	84.6	76.8	75.3
1984–85	78.0	79.9	74.6	78.9	77.5	78.6	88.1	80.0	78.4
1985–86	81.8	83.5	78.0	82.4	81.4	82.2	91.1	83.6	82.0
1986–87	84.0	85.0	81.0	83.9	84.2	84.3	93.7	85.6	84.1
1987–88	90.9	91.9	88.1	90.6	91.1	91.1	101.1	92.7	91.0
1988–89	92.5	93.3	89.1	91.9	93.1	92.0	101.3	94.1	92.4
1989–90	90.9	91.2	87.4	89.9	91.9	89.5	98.1	92.2	90.7
1990–91	93.3	93.6	89.2	92.1	94.2	91.4	100.1	94.7	93.0
1991–92	97.5	97.9	92.9	96.3	98.5	95.0	104.1	99.1	97.1
1992–93	96.9	97.4	92.1	95.8	98.1	93.7	103.3	98.6	96.5
1993–94	96.1	96.6	91.5	95.1	97.5	92.7	102.3	97.7	95.8
1994–95	97.5	97.7	93.7	96.3	98.9	94.5	104.3	99.1	97.1
1995–96	97.1	97.2	93.8	95.9	98.8	94.3	104.2	98.7	96.8
1996–97	96.4	96.4	93.1	94.3	98.1	93.2	103.4	97.8	96.0
1997–98	96.5	96.4	93.4	93.9	97.9	93.3	102.7	97.7	96.0
1998–99	92.6	92.9	90.8	90.4	93.3	90.7	95.1	93.5	92.3
1999–00	87.5	87.5	86.5	85.8	86.8	86.6	87.6	87.9	87.1
2000–01	93.7	93.9	92.9	92.1	92.5	93.1	93.4	94.2	93.4
2001–02	93.8	94.4	93.4	93.1	93.2	93.3	93.6	94.0	93.8
2002–03	96.6	97.2	96.3	96.5	96.2	96.3	96.2	96.8	96.7
2003–04	97.8	98.3	97.5	97.7	97.4	97.5	97.4	98.0	97.8
2004–05	98.7	99.2	98.5	98.7	98.3	98.4	98.2	98.8	98.8
2005–06	97.1	97.7	96.9	97.2	96.7	96.9	96.7	97.3	97.2
2006–07	98.3	98.7	98.2	98.3	98.0	98.0	97.9	98.4	98.3
2007–08	98.6	98.9	98.5	98.6	98.2	98.3	98.1	98.7	98.6
2008–09	99.1	99.4	99.1	99.2	98.8	98.9	98.7	99.2	99.2
2009–10	99.4	99.7	99.4	99.4	99.1	99.3	99.1	99.5	99.4
2010–11	99.0	99.1	99.0	99.0	98.9	99.0	99.0	99.0	99.0
2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012–13	101.6	101.7	101.7	101.7	101.5	101.6	101.6	101.6	101.6
2013–14	102.7	102.8	102.9	102.8	102.5	102.8	102.6	102.7	102.7
2014–15	99.2	99.3	99.4	99.2	98.9	99.2	99.1	99.2	99.2
2015–16	93.0	93.1	93.2	93.1	92.8	93.0	92.9	92.9	93.0
2016–17	87.5	87.6	87.7	87.6	87.3	87.6	87.4	87.5	87.5

Source: ABS (2017d).

Table C 4.2 Communication activity—internet domain names registered, excluding ".gov.au"

End of financial year	com.au	net.au	org.au	asn.au	id.au	Total (.au)
			number			
2001–02	255 408	12 794	9 203	2 832	0	280 237
2002–03	308 423	20 149	13 279	3 198	2 527	347 576
2003–04	382 994	34 391	17 480	3 581	4 682	443 128
2004–05	477 376	46 727	18 562	2 800	5 826	551 291
2005–06	612 918	60 000	23 406	3 058	6 746	706 128
2006–07	795 368	79 783	28 363	3 166	8 091	914 771
2007–08	1 009 347	112 555	34 167	3 483	8 954	1 168 506
2008–09	1 221 915	140 364	41 323	3 842	9 853	1 417 297
2009–10	1 513 617	185 029	45 536	4 196	10 917	1 759 295
2010–11	1 818 353	230 437	50 143	4 111	12 086	2 115 130
2011–12	2 102 823	266 511	54 736	4 105	12 798	2 441 240
2012–13	2 309 521	287 603	59 415	4 005	13 156	2 673 939
2013–14	2 439 375	321 673	62 684	3 913	13 331	2 841 217
2014–15	2 570 665	320 910	64 080	3 731	13 143	2 972 751
2015–16	2 660 185	292 743	66 357	3 656	12 775	3 035 915
2016–17	2 743 436	282 567	69 207	3 471	12 581	3 111 507

Source: AusRegistry (2017).

Table C 4.3 Communication activity—internet commerce

Financial year	Proportion of all businesses which:		Internet income
	Placed orders via the internet	Received orders via the internet	
	per cent		*$ billion*
1999–00	4.0	6.0	5.1
2000–01	20.0	9.0	9.4
2001–02	25.0	6.0	11.3
2002–03	27.8	13.3	24.3
2003–04	31.3	12.0	33.3
2004–05	32.7	12.2	39.6
2005–06	37.3	20.9	56.7
2006–07	39.8	23.3	67.6
2007–08	42.7	23.7	81.0
2008–09	46.0	27.1	122.9
2009–10	46.5	24.8	142.8
2010–11	50.8	28.0	188.7
2011–12	55.3	27.8	237.1
2012–13	53.4	30.2	246.4
2013–14	56.0	33.2	266.8
2014–15	55.7	33.8	285.5

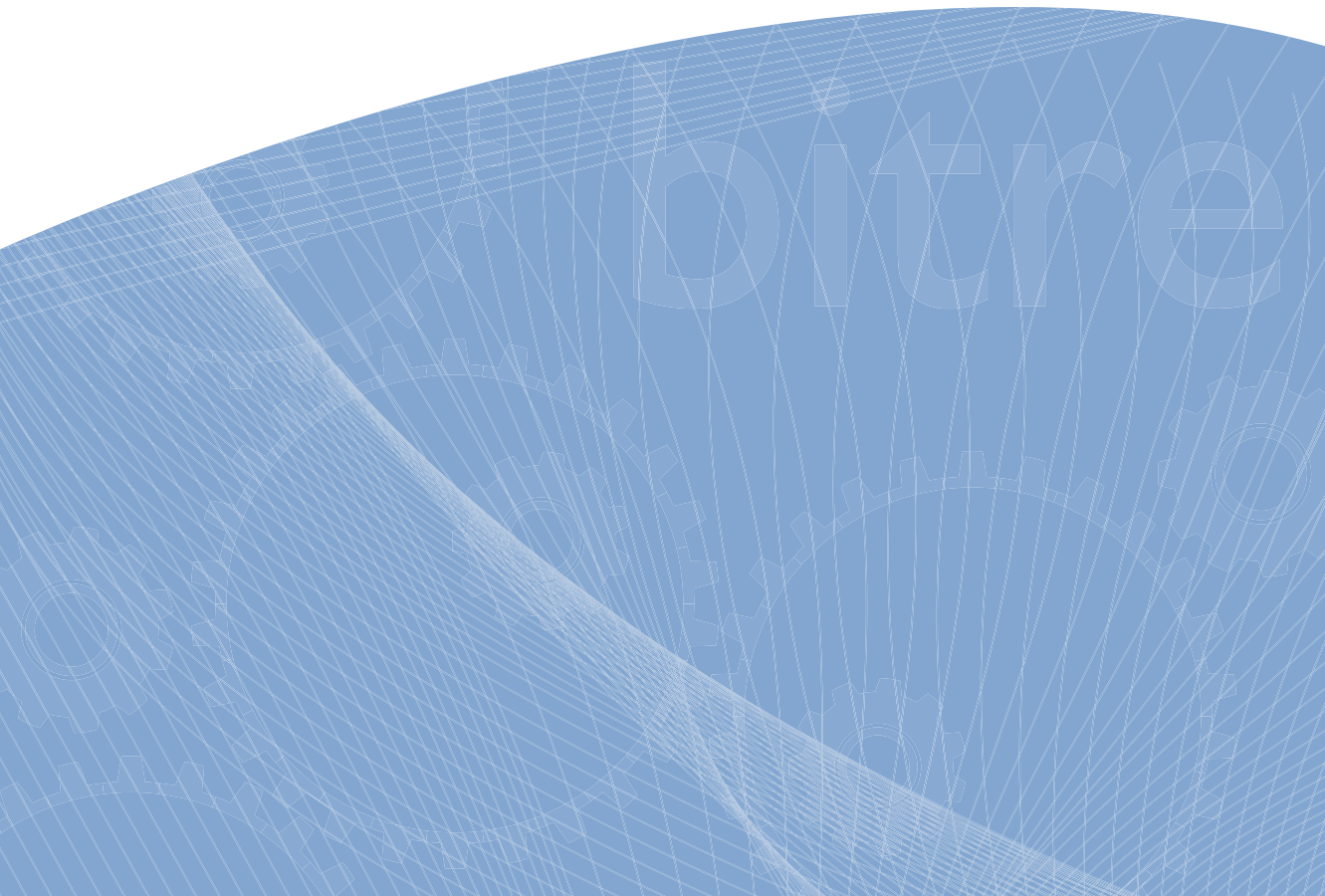
Source: ABS (2017n).

Table C 4.4 Internet use—volume of data downloaded by subscriber type, for ISPs with more than 1 000 active subscribers (excluding mobile handset subscribers)

Quarter ending	Dial-up	Fixed line broadband	Wireless broadband	Business and government	Household
			Terabytes		
September 2000				437	544
September 2001				466	762
September 2002				690	2 152
September 2003	1 430			1 117	3 204
September 2004	1 667			2 259	8 298
March 2005	1 820			3 252	10 372
September 2006	2 216			6 733	29 415
December 2007	2 693			6 247	53 084
December 2008	1 079			15 180	66 172
December 2009	294	113 410	14 251		
December 2010	183	174 665	16 990		
December 2011	96	322 280	23 142		
December 2012	np	526 472	28 196		
December 2013	73	823 421	37 426		
December 2014	25	1 112 379	34 339		
December 2015	43	1 673 123	41 757		
December 2016	na	2 532 367	54 689		

np: not available for publication but included in totals where applicable.
Note: Data not available for missing years.
from 2016 'dial-up' is no longer a valid connection response.
Source: ABS (2017l), BITRE (2016c).

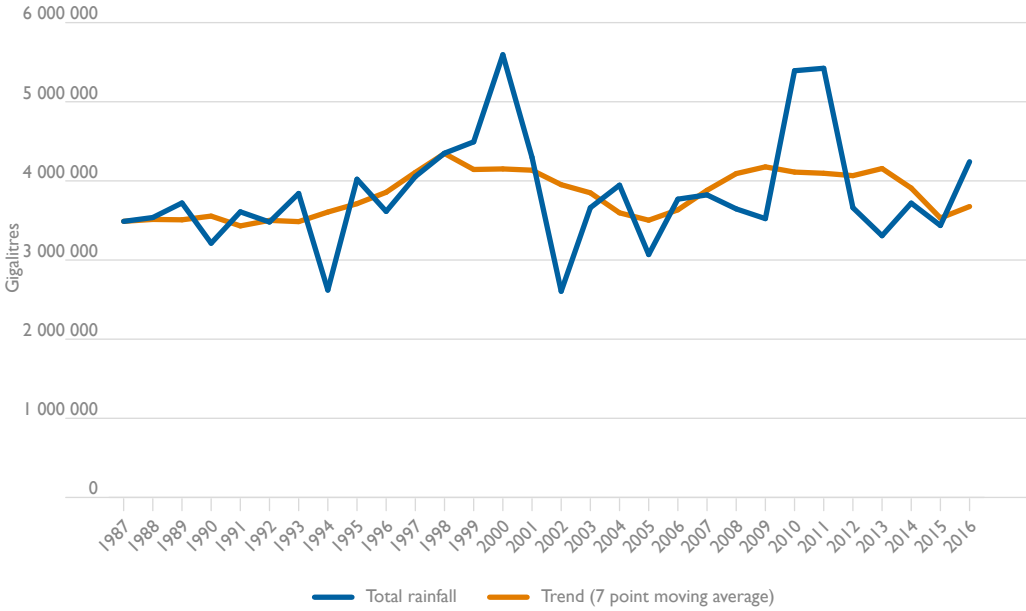
PART W: Water



PART W
Water

Australian water utilities use infrastructure networks to provide water to urban and rural areas and to provide wastewater collection and treatment services to large areas of the country. Part W: Water provides statistics on both physical and financial measures of water infrastructure, water supply and wastewater treatment activity, and measures of water health and emissions issues.

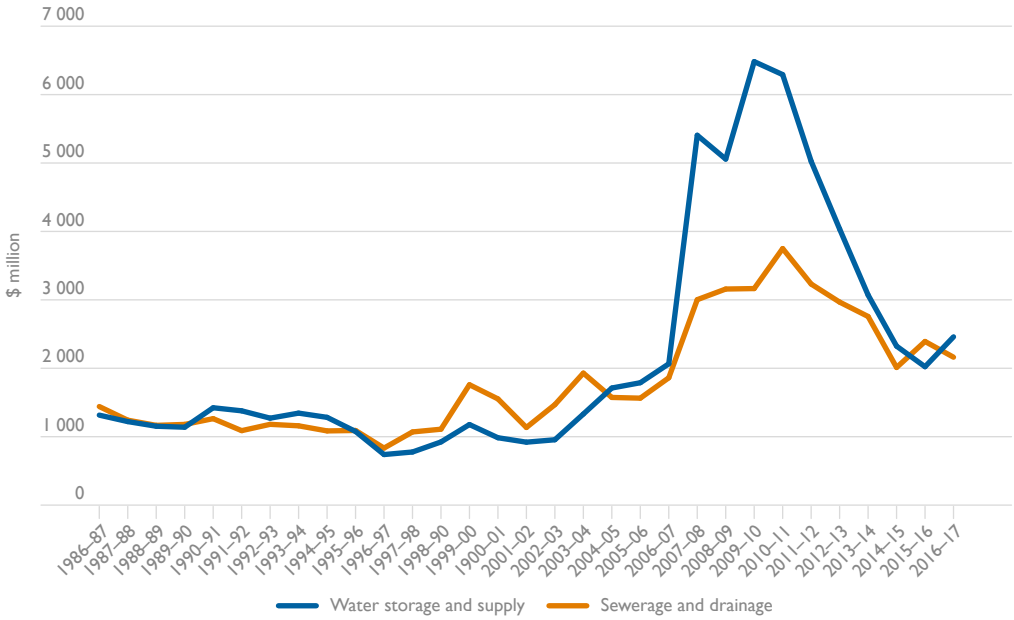
Figure W 1 Total volume of rainfall in Australia



Source: BoM (2016c).

Total rainfall is subject to significant annual variations. Rainfall was considerably higher than average in 2010 and 2011 – the years in which parts of Queensland, Victoria and New South Wales were flooded. In the following four years rainfall decreased sharply to finish just below trend.

Figure W 2 Water infrastructure engineering construction, adjusted by chain volume index



Source: ABS (2016a).

Infrastructure construction activity was relatively constant (in chain volume adjusted terms) until about 2002–03. Since 2003–04, water infrastructure construction expenditure has increased sharply in real terms, particularly for water storage and supply projects, which reflect construction work on the South-East Queensland water grid and the construction of desalination plants in Western Australia, New South Wales, Queensland and Victoria. Expenditure on the construction of water storage and supply decreased with the recent completion of these projects.

CHAPTER 1
Water infrastructure

Table W 1.1a Flow of new infrastructure—value of water infrastructure engineering construction work done by the private sector for the private sector, adjusted by chain volume index

Financial year	Water storage and supply	Sewerage and drainage	Water infrastructure engineering construction work done	Water percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	105.9	80.8	186.7	11.68
1987–88	121.0	124.0	245.0	12.02
1988–89	129.5	127.4	256.9	10.27
1989–90	143.6	105.9	249.6	9.31
1990–91	183.6	171.6	355.1	13.96
1991–92	105.9	100.3	206.2	8.56
1992–93	144.9	131.4	276.4	10.63
1993–94	254.9	193.1	448.0	14.32
1994–95	461.9	125.7	587.6	18.27
1995–96	430.0	250.9	680.8	16.62
1996–97	204.0	127.1	331.1	7.91
1997–98	231.3	170.0	401.3	7.89
1998–99	233.4	128.2	361.6	6.06
1999–00	269.5	234.7	504.2	7.74
2000–01	280.5	290.8	571.3	9.45
2001–02	211.9	233.3	445.3	7.32
2002–03	237.8	407.6	645.4	8.09
2003–04	413.1	677.3	1 090.3	9.26
2004–05	472.1	394.4	866.5	6.85
2005–06	568.8	404.9	973.8	7.36
2006–07	553.7	422.4	976.1	6.21
2007–08	806.5	960.8	1 767.3	10.62
2008–09	614.3	1 049.3	1 663.7	9.11
2009–10	1 827.4	543.7	2 371.0	14.05
2010–11	3 075.5	680.8	3 756.4	19.58
2011–12	2 086.7	696.6	2 783.3	13.81
2012–13	1 439.3	647.2	2 086.5	9.04
2013–14	1 192.4	599.3	1 791.7	7.89
2014–15	917.6	418.5	1 336.1	6.49
2015–16	597.3	552.7	1 149.9	6.49
2016–17	654.6	481.6	1 136.2	6.57

Source: ABS (2017a), adjusted by chain volume index.

Table W 1.1b Flow of new infrastructure—value of water infrastructure engineering construction work done by the private sector for the public sector, adjusted by chain volume index

Financial year	Water storage and supply	Sewerage and drainage	Water infrastructure engineering construction work done	Water percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	427.5	394.1	821.6	15.92
1987–88	386.9	396.7	783.5	20.58
1988–89	300.9	334.3	635.2	18.57
1989–90	262.2	390.0	652.2	17.77
1990–91	391.2	433.9	825.0	18.34
1991–92	534.0	314.8	848.8	18.53
1992–93	431.5	405.2	836.7	16.88
1993–94	614.9	460.7	1 075.5	18.53
1994–95	390.5	425.6	816.1	16.08
1995–96	303.3	440.5	743.8	15.02
1996–97	298.0	371.0	669.0	12.19
1997–98	257.8	456.2	714.0	11.77
1998–99	302.4	522.0	824.4	12.72
1999–00	382.2	1 038.0	1 420.2	20.50
2000–01	312.5	871.5	1 183.9	18.41
2001–02	334.2	537.8	872.0	15.40
2002–03	277.8	646.3	924.1	15.92
2003–04	515.1	830.5	1 345.6	23.39
2004–05	800.4	722.1	1 522.5	19.72
2005–06	789.7	547.2	1 336.8	16.12
2006–07	872.6	648.0	1 520.6	17.46
2007–08	3 529.5	1 193.5	4 723.0	38.06
2008–09	3 446.8	1 234.6	4 681.4	30.82
2009–10	3 112.6	1 549.4	4 662.0	29.57
2010–11	1 684.0	1 726.3	3 410.3	20.57
2011–12	1 435.1	1 280.9	2 716.0	15.98
2012–13	1 171.1	914.4	2 085.5	12.24
2013–14	713.6	993.9	1 707.5	10.66
2014–15	586.8	613.6	1 200.4	8.39
2015–16	583.9	519.9	1 103.8	6.86
2016–17	691.1	453.5	1 144.6	5.80

Source: ABS (2017a), adjusted by chain volume index.

Table W 1.1c Flow of new infrastructure—value of water infrastructure engineering construction work done by the public sector, adjusted by chain volume index

Financial year	Water storage and supply	Sewerage and drainage	Water infrastructure engineering construction work done	Water percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	781.7	965.8	1 747.5	17.07
1987–88	712.9	720.7	1 433.6	15.18
1988–89	722.5	704.0	1 426.5	14.92
1989–90	732.5	683.5	1 416.0	12.94
1990–91	848.1	658.2	1 506.4	13.90
1991–92	738.2	673.2	1 411.4	15.24
1992–93	694.4	644.0	1 338.4	13.44
1993–94	474.6	505.3	979.9	10.26
1994–95	430.4	533.2	963.5	8.96
1995–96	343.4	399.4	742.7	6.75
1996–97	237.0	335.7	572.7	5.56
1997–98	287.2	443.1	730.2	7.11
1998–99	387.4	459.2	846.5	7.66
1999–00	525.7	486.7	1 012.4	8.27
2000–01	391.8	390.1	781.9	7.02
2001–02	373.7	363.4	737.2	6.66
2002–03	439.4	414.4	853.9	7.76
2003–04	402.9	421.4	824.3	7.67
2004–05	439.1	457.2	896.2	7.99
2005–06	430.0	611.0	1 041.0	7.60
2006–07	638.8	790.4	1 429.1	11.36
2007–08	1 069.6	848.4	1 918.0	15.73
2008–09	996.3	874.3	1 870.5	13.26
2009–10	1 542.2	1 072.0	2 614.2	16.40
2010–11	1 532.6	1 342.6	2 875.2	18.35
2011–12	1 503.5	1 253.9	2 757.4	18.09
2012–13	1 425.2	1 405.5	2 830.7	20.04
2013–14	1 164.9	1 163.8	2 328.6	20.73
2014–15	819.3	979.6	1 799.0	17.70
2015–16	841.5	1 319.2	2 160.7	21.51
2016–17	1 113.8	1 226.8	2 340.6	24.66

Source: ABS (2017a), adjusted by chain volume index.

Table W 1.1d Flow of new infrastructure—total value of water infrastructure engineering construction work done, adjusted by chain volume index

Financial year	Water storage and supply	Sewerage and drainage	Water infrastructure engineering construction work done	Water percentage of total major infrastructure engineering construction work done
		$ million		*per cent*
1986–87	1 315.1	1 440.6	2 755.8	16.21
1987–88	1 220.8	1 241.3	2 462.2	16.11
1988–89	1 152.9	1 165.7	2 318.6	14.97
1989–90	1 138.4	1 179.4	2 317.8	13.40
1990–91	1 422.9	1 263.6	2 686.5	15.03
1991–92	1 378.1	1 088.3	2 466.4	15.18
1992–93	1 270.9	1 180.6	2 451.5	13.99
1993–94	1 344.4	1 159.0	2 503.4	13.55
1994–95	1 282.8	1 084.5	2 367.3	12.43
1995–96	1 076.6	1 090.8	2 167.4	10.81
1996–97	739.0	833.7	1 572.8	7.87
1997–98	776.3	1 069.4	1 845.6	8.61
1998–99	923.1	1 109.4	2 032.5	8.65
1999–00	1 177.4	1 759.5	2 936.8	11.44
2000–01	984.7	1 552.4	2 537.1	10.75
2001–02	919.9	1 134.6	2 054.5	9.00
2002–03	955.0	1 468.4	2 423.4	9.77
2003–04	1 331.0	1 929.2	3 260.2	11.53
2004–05	1 711.5	1 573.7	3 285.3	10.40
2005–06	1 788.5	1 563.1	3 351.6	9.52
2006–07	2 065.1	1 860.8	3 925.9	10.60
2007–08	5 405.6	3 002.7	8 408.3	20.39
2008–09	5 057.4	3 158.2	8 215.6	17.27
2009–10	6 482.1	3 165.0	9 647.2	19.86
2010–11	6 292.1	3 749.8	10 041.9	19.53
2011–12	5 025.3	3 231.4	8 256.7	15.76
2012–13	4 035.6	2 967.1	7 002.7	12.91
2013–14	3 070.8	2 757.0	5 827.8	11.67
2014–15	2 323.8	2 011.6	4 335.4	9.62
2015–16	2 022.6	2 391.8	4 414.4	10.06
2016–17	2 459.5	2 161.9	4 621.4	9.94

Source: ABS (2017a), adjusted by chain volume index.

Table W 1.2a Stock of infrastructure—current value of Australian Urban Water infrastructure,[1,3,4] by state or territory—Urban Water infrastructure assets

End of financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				$ million				
2005–06	17 600	10 459	4 947	2 361	6 326		426	1 698
2006–07	10 187	8 265	2 149		4 865		493	1 261
2007–08	15 599	8 868	2 987		5 306		410	1 623
2008–09	17 600	10 459	4 947		6 326		426	1 698
2009–10	19 244	81 213	15 191		12 074		429	1 801
2010–11	20 246	187 245	40 696		63 461		481	2 094
2011–12	20 826	31 817	201 315		312 534		476	2 243
2012–13	21 661	134 593	136 100		256 768		517	2 321
2013–14	22 046	166 389	246 761	8 955	220 305	1 383	53 196	2 348
2014–15	19 963	17 352	79 195	9 047	275 868	1 378		2 398
2015–16	20 395	102 602	100 703	9 072	267 036	1 308	73 408	2 430

[1, 2, 3, 4] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 1.2b Stock of infrastructure—current value of Australian Urban Water infrastructure,[1,3,4] by state or territory—waste water and sewerage infrastructure assets

End of financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				$ million				
2005–06	17 318	9 233		2 230	4 702		164	427
2006–07	17 478	9 401	1 985		4 795		210	1 155
2007–08	24 768	10 104	2 608		5 003		212	1 269
2008–09	27 802	10 806	4 318		6 240		227	1 306
2009–10	28 832	11 261	4 875		6 627		233	1 274
2010–11	29 904	12 984	5 091		7 059		261	1 245
2011–12	30 880	13 046	6 436		7 274		272	1 234
2012–13	38 304	13 693	11 134		7 366		289	1 296
2013–14	40 463	14 182	11 032	3 838	7 412	1 307	324	1 293
2014–15	40 975	13 778	12 552	3 978	7 496	1 316		1 346
2015–16	41 888	14 693	12 772	4 098	7 604	1 320	346	1 382

[1, 2, 3, 4] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 1.3 Infrastructure capacity—major Australian water storage dams[5]

End of financial year	Storage capacity (accessible capacity)	Water held in dams at end of year (accessible volume)	Percentage of capacity used
	gigalitres		*per cent*
1972-73	52 771		
1973-74	65 644		
1974-75	66 211		
1975-76	68 491		
1976-77	68 700		
1977-78	68 738		
1978-79	72 816		
1979-80	72 966		
1980-81	73 900		
1981-82	74 365		
1982-83	76 153		
1983-84	77 061		
1984-85	78 293		
1985-86	78 615		
1986-87	80 997		
1987-88	81 138		
1988-89	81 210		
1989-90	82 860		
1990-91	82 876		
1991-92	82 972		
1992-93	83 016		
1993-94	83 109		
1994-95	83 111		
1995-96	83 112		
1996-97	83 292		
1997-98	83 296		
1998-99	83 297		
1999-00	83 312		
2000-01	83 312		
2001-02	83 853	48 684	58.1
2002-03	83 853	39 575	47.2
2003-04	83 853	44 164	52.7
2004-05	83 853	39 958	47.7
2005-06			
2006-07			
2007-08			
2008-09		37 144	
2009-10		47 529	
2010-11 [6]	79 383	61 154	77.0
2011-12	79 532	66 945	84.2
2012-13	80 406	55 194	68.6
2013-14	80 958	51 364	63.4
2014-15	80 962	47 688	58.9
2015-16	80 962	43 078	53.2
2016-17	80 860	54 053	66.8

[5, 6] See end notes.

Note: Data are not readily available for missing years.

Source: BoM (2017c).

Table W 1.4 Infrastructure capacity—water storage in major dams—accessible volume of major water storage dams, by state/territory

End of financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				gigalitres				
2001–02	12 206	6 083	6 226	115	11 254	12 494	237	69
2002–03	8 629	2 815	5 602	105	10 236	11 886	241	61
2003–04	7 970	4 371	6 287	111	11 352	13 744	251	78
2004–05	8 200	4 729	5 309	116	10 135	11 191	196	82
2005–06								
2006–07								
2007–08								
2008–09	5 636	1 908	7 447	998	10 871	10 044	204	36
2009–10	7 258	3 432	9 372	1 393	8 813	16 990	215	56
2010–11	14 924	9 455	10 014	2 148	10 723	13 541	269	80
2011–12 [6]	17 911	10 243	10 121	2 001	10 727	15 594	262	86
2012–13	13 455	8 981	9 679	1 977	8 453	12 377	215	57
2013–14	10 461	9 185	8 624	2 101	10 863	9 772	265	93
2014–15	9 591	7 250	8 265	2 052	9 858	10 321	260	101
2015–16	9 994	5 297	7 634	2 068	7 877	9 866	239	109
2016–17	12 851	9 889	7 403	2 173	9 867	13 625	239	126

[6] See end notes.

Source: BoM(2017c).

Table W 1.5a Flow of new infrastructure—capital expenditure on Australian Urban Water infrastructure,[a] by state or territory—Urban Water infrastructure assets

End of financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				$ million				
2006–07	471	428	127		396		10	25
2007–08	1 501	578	180		281		19	58
2008–09	2 129	1 222	2 043		392		36	105
2009–10	1 301	1 088	324		698		58	182
2010–11	541	690	278		661		35	236
2011–12	499	665	817		535		25	208
2012–13	402	607	378		456		31	116
2013–14	428	415	298	173	256	38	18	43
2014–15	324	414	389	116	195	51		26
2015–16	415	388	347	153	193	70	40	40

[a] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 1.5b Flow of new infrastructure—capital expenditure on Australian Urban Water infrastructure,[a] by state or territory—waste water and sewerage infrastructure assets

End of financial year	NSW	VIC	QLD	SA	WA	TAS[3]	NT	ACT
				$ million				
2006–07	561	593	167		241		15	13
2007–08	864	727	279		401		16	25
2008–09	856	811	370		524		18	61
2009–10	908	900	211		398		20	26
2010–11	757	1 130	340		175		27	24
2011–12	796	836	437		154		44	26
2012–13	640	588	555		176		47	29
2013–14	535	533	424	101	183	39	18	17
2014–15	636	576	372	101	262	53		24
2015–16	582	604	384	122	185	58	14	43

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 1.6 Stock of infrastructure—number of Urban Water treatment plants providing full treatment,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2005–06	57	152	1	6	11			2
2006–07	56	156	3		18			2
2007–08	56	163	4		18			2
2008–09	60	157	11		18			2
2009–10	76	152	58		18			2
2010–11	78	150	61		18			2
2011–12	79	166	77		22			2
2012–13	79	171	65		22			2
2013–14	81	174	66	42	22			2
2014–15	65	176	98	42	22	30		2
2015–16	91	175	99	42	23	43		2

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 1.7 Stock of infrastructure—length of Urban Water mains,[a] by state/territory

Financial year	NSW (utilities with 10 000+ customers)	VIC (utilities with 10 000+ customers)	QLD (utilities with 10 000+ customers)	SA (utilities with 100 000+ customers)	WA	TAS (metro only)	NT (utilities with 10 000+ customers)	ACT (utilities with 100 000+ customers)
				kilometres				
2008–09	44 697	44 193			15 610		1 705	3 059
2009–10	45 129	44 735			15 803		1 712	3 096
2010–11	45 518	45 300			16 072		1 706	3 134
2011–12	46 072	45 997			16 466		1 744	3 179
2012–13	46 842	46 815			16 861		1 786	3 189
2013–14	47 130	47 580		26 984	17 128		1 824	3 188
2014–15	47 415	48 175	37 812	27 078	17 263		1 849	3 202
2015–16	47 504	48 680	37 915	26 899	17 794	6 231	1 869	3 280

[a] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 1.8 Urban Water infrastructure—Average number of properties served per kilometre of water main, by state/territory

Financial year	NSW (utilities with 10 000+ customers)	VIC (utilities with 10 000+ customers)	QLD (utilities with 10 000+ customers)	SA (utilities with 100 000+ customers)	WA	TAS (metro only)	NT (utilities with 10 000+ customers)	ACT (utilities with 100 000+ customers)
2008–09	57.1	51.4	45.7		52.3		37.0	47.1
2009–10	57.9	51.7	46.3		53.0		35.6	47.2
2010–11	58.2	52.2	48.0		53.0		36.9	47.9
2011–12	58.0	52.5	47.4		53.1		36.7	48.4
2012–13	57.4	52.4	48.3		53.0		35.3	49.6
2013–14	57.1	52.7	49.2	27.9	53.8		36.2	50.8
2014–15	57.6	53.1	46.1	28.1	51.4		37.9	51.8
2015–16	58.3	53.7	46.7	28.6	54.2	32.4	38.0	51.5

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 1.9 Urban Water infrastructure quality—average number of water main breaks per 100 kilometres of water main,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2008–09	23.5	33.4			15.6		64.6	29.2
2009–10	20.8	35.1			14.0		58.0	23.6
2010–11	20.5	30.9			12.8		42.2	26.7
2011–12	17.2	30.2			12.1		40.9	24.7
2012–13	21.8	37.1			13.1		17.1	20.0
2013–14	22.0	33.1		11.4	12.9		21.6	11.5
2014–15	19.2	30.2	17.6	13.9	14.6		17.0	14.2
2015–16	22.8	27.8	13.3	14.9	9.1		12.8	13.8

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 1.10 Stock of Urban Water infrastructure—number of sewage treatment plants providing full treatment,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2006–07	153	121	11		14		7	2
2007–08	152	132	13		15		7	2
2008–09	152	197	39		15		7	2
2009–10	156	196	39		15		7	2
2010–11	146	196	83		19		7	2
2011–12	149	201	97		20		7	3
2012–13	152	202	98		22		7	5
2013–14	154	207	97	25	22	79	7	5
2014–15	155	210	145	24	22		7	5
2015–16	173	214	147	24	23	79	7	6

[a, 2] See end notes.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 1.11 Stock of Urban Water infrastructure—length of sewerage mains and channels,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				kilometres				
2006–07	36 694	33 533	5 729		11 926		877	2 993
2007–08	37 352	34 135	6 550		12 217		884	3 014
2008–09	37 726	34 500	8 922		12 443		913	3 059
2009–10	38 548	35 134	9 063		12 572		940	3 094
2010–11	38 982	35 623	19 933		13 031		954	3 134
2011–12	39 756	36 178	20 593		13 356		958	3 174
2012–13	39 713	36 685	26 161		13 778		965	3 206
2013–14	40 211	37 127	26 239	8 807	14 076		994	3 234
2014–15	40 690	37 734	31 046	8 853	14 581		1 007	5 000
2015–16	44 064	38 368	31 334	8 901	14 835		1 040	3 288

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 1.12 Urban Water infrastructure—average number of properties served per kilometre of sewer main, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2006–07	60.5	60.6	59.9	.	55.8	.	63.9	46.4
2007–08	60.1	61.0	58.9	.	56.2	.	65.6	46.8
2008–09	60.3	61.5	55.5	.	57.1	.	64.6	47.1
2009–10	59.9	61.6	56.2	.	58.2	.	60.6	46.9
2010–11	60.0	62.1	49.8	.	58.4	.	59.8	47.5
2011–12	59.4	62.7	51.7	.	58.3	.	62.6	48.2
2012–13	60.3	63.0	53.1	.	58.4	.	63.2	49.0
2013–14	60.0	63.8	53.5	66.5	58.6	.	64.4	49.8
2014–15	60.2	64.1	50.8	66.9	58.0	.	67.5	33.0
2015–16	60.1	64.6	51.5	67.3	57.7	.	65.4	51.1

[2] See end notes.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 1.13 Stock of Urban Water infrastructure—number of recycled water treatment plants,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2006–07	2	18		2	1		1	2
2007–08	2	20		3	1		2	2
2008–09	2	198	3	2	1		2	2
2009–10	2	45	13	3	1		2	2
2010–11	6	74	27	3	2		2	2
2011–12	5	60	27	5	2		2	1
2012–13	6	93	31	4	2		2	1
2013–14	5	80	25	9	2	2	2	1
2014–15								
2015–16								

[a,2] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 1.14 Infrastructure quality—average number of sewer main breaks and chokes per 100 kilometres of sewer main, by state/territory

Financial year	NSW	VIC	QLD	SA[a]	WA	TAS[1]	NT	ACT
2006–07	80.1	33.9	20.6	62.9	23.5		36.5	166.4
2007–08	56.6	31.0	16.6	55.3	22.4	57.8	33.8	166.9
2008–09	58.3	31.8	16.3	57.2	20.8		35.0	189.8
2009–10	51.3	30.4	15.9	46.4	22.1	0.0	16.3	105.0
2010–11	52.0	24.9	14.0	46.3	19.2	0.0	20.3	78.0
2011–12	44.0	18.2	16.5	49.2	18.5	0.0	20.6	42.0
2012–13	42.6	19.1	15.5	54.4	16.1	0.0	14.4	42.0

[a] South Australian data for 2008–09 includes data to conform with NWC definitions. Users should use caution when comparing with previous years.

[1, b] See end notes.

Note: Data are not readily available for missing years.

Source: BITRE estimates based on NWC (2014).

Table W 1.15a Stock of infrastructure—length of rural water supply and drainage networks,[a] by asset type—New South Wales

	Water supply					Drainage			
Financial year	Unlined channel	Lined channel	Regulated river	Natural waterway	Pipe	Unlined channel	Lined channel	Natural waterway	Pipe
					kilometres				
2006–07	4 274	716	7 820	0	96	4 415	20	70	5
2007–08	7 974	736	7 820	0	91	4 293	20	70	5
2008–09	7 972	730	7 920	0	113	4 455	20	70	5
2009–10	7 968	735	7 920	0	113	4 409	20	70	5
2010–11	7 968	732	7 920	0	118	4 515	20	70	111
2011–12	9 347	742	7 920	0	118	4 502	20	70	106
2012–13	9 347	742	7 920	0	118	4 515	20	70	106

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

Table W 1.15b Stock of infrastructure—length of rural water supply and drainage networks,[a] by asset type—Victoria

	Water supply					Drainage			
Financial year	Unlined channel	Lined channel	Regulated river	Natural waterway	Pipe	Unlined channel	Lined channel	Natural waterway	Pipe
					kilometres				
2006–07	11 520	343	6 486	521	5 124	3 141	8	27	260
2007–08	11 524	199	4 897	546	9 710	3 153	4	27	267
2008–09	7 383	190	4 897	737	10 278	3 142	4	27	267
2009–10	4 730	194	3 051	1 153	14 179	3 128	4	27	907
2010–11	3 993	246	3 051	3 893	14 840	3 042	2	0	901
2011–12	6 869	310	3 026	1 349	14 244	3 192	4	27	902
2012–13	9 937	336	3 075	3 831	15 044	3 196	4	27	901

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

Table W 1.15c Stock of infrastructure—length of rural water supply and drainage networks, [a] by asset type—Queensland

	Water supply					Drainage			
Financial year	Unlined channel	Lined channel	Regulated river	Natural waterway	Pipe	Unlined channel	Lined channel	Natural waterway	Pipe
					kilometres				
2006–07	712	163	3 637	0	1 087	736	0	0	0
2007–08	712	163	3 637	0	1 087	736	0	0	0
2008–09	697	163	3 254	0	1 061	736	0	0	0
2009–10	697	163	3 310	0	1 061	736	0	0	0
2010–11	697	163	3 310	0	1 061	736	0	0	0
2011–12	697	163	3 310	0	1 061	736	0	0	0
2012–13	697	163	3 380	0	1 061	736	0	0	0

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

Table W 1.15d Stock of infrastructure—length of rural water supply and drainage networks, [a] by asset type—South Australia

	Water supply					Drainage			
Financial year	Unlined channel	Lined channel	Regulated river	Natural waterway	Pipe	Unlined channel	Lined channel	Natural waterway	Pipe
					kilometres				
2006–07	0	0	0	0	391	0	0	0	335
2007–08	0	0	0	0	391	0	0	0	335
2008–09	0	0	0	0	391	0	0	0	339
2009–10	0	0	0	0	405	0	0	0	339
2010–11	0	0	0	0	405	0	0	0	339
2011–12	0	0	0	0	494	0	0	0	339
2012–13	0	0	0	0	494	0	0	0	339

[a] See end notes .

Source: BITRE estimates based on NWC (2014).

Table W 1.15e Stock of infrastructure—length of rural water supply and drainage networks, [a] by asset type—Western Australia

	Water supply					Drainage			
Financial year	Unlined channel	Lined channel	Regulated river	Natural waterway	Pipe	Unlined channel	Lined channel	Natural waterway	Pipe
					kilometres				
2006–07	501	127	0	50	340	0	0	0	0
2007–08	466	83	0	20	410	0	0	0	0
2008–09	466	83	0	20	430	0	0	0	0
2009–10	297	83	0	20	453	0	0	0	0
2010–11	341	85	0	20	469	0	0	0	0
2011–12	296	85	0	20	489	0	0	0	0
2012–13	296	85	0	20	489	0	0	0	0

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

Table W 1.15f Stock of infrastructure—length of rural water supply and drainage networks, [a] by asset type—Australia

	Water supply					Drainage			
Financial year	Unlined channel	Lined channel	Regulated river	Natural waterway	Pipe	Unlined channel	Lined channel	Natural waterway	Pipe
					kilometres				
2006–07	17 007	1 349	17 942	571	7 037	8 291	28	97	600
2007–08	20 676	1 181	16 354	566	11 688	8 181	24	97	607
2008–09	16 518	1 166	16 072	757	12 272	8 332	24	97	611
2009–10	13 693	1 175	14 280	1 173	16 211	8 272	24	97	1 251
2010–11	12 999	1 226	14 280	3 913	16 999	8 293	22	70	1 245
2011–12	17 208	1 300	14 256	1 369	16 512	8 430	24	97	1 242
2012–13	20 276	1 326	14 305	3 851	17 312	8 446	24	97	1 240

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

Table W 1.16 Stock of infrastructure—value of rural water supply and drainage networks, by state/territory—written down replacement cost of fixed assets [a]

End of financial year	New South Wales	Victoria	Queensland	South Australia	Western Australia
			$ million		
2006–07	1 036	2 437	2 951	181	88
2007–08	1 016	2 988	2 951	180	124
2008–09	1 008	3 016	2 738	180	125
2009–10	979	4 220	2 835	181	129
2010–11	1 050	5 770	2 891	177	127
2011–12	1 141	6 273	2 891	185	128
2012–13	1 211	6 358	2 891	182	112

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

CHAPTER 2
Water inputs

Table W 2.1 Inputs to water supply—total rainfall on Australian land[7], by state/territory

Calendar year	NSW[8]	VIC	QLD	SA	WA	TAS	NT	Australia
				gigalitres				
1990								3 212 189
1991								3 609 098
1992								3 479 872
1993								3 840 628
1994								2 619 903
1995								4 021 390
1996								3 614 482
1997								4 055 235
1998								4 349 840
1999								4 492 911
2000								5 594 409
2001								4 296 765
2002								2 604 519
2003	388 687	138 951	896 476	255 705	981 592	83 928	925 502	3 661 403
2004	400 733	132 356	1 079 924	212 432	1 173 862	83 860	868 839	3 946 008
2005	399 930	140 088	827 250	202 597	774 142	85 501	643 535	3 069 118
2006	280 272	83 462	1 050 503	150 473	1 226 989	59 988	926 852	3 769 092
2007	436 069	139 179	1 135 305	211 449	966 412	71 274	867 490	3 822 936
2008	420 007	114 618	1 159 534	184 895	974 002	67 717	724 482	3 646 019
2009	399 127	121 440	1 188 955	197 680	832 329	103 628	685 358	3 522 947
2010	654 504	196 487	1 960 824	360 938	855 098	95 077	1 269 530	5 392 109
2011	534 847	182 160	1 436 438	347 169	1 525 515	99 318	1 314 052	5 422 877
2012	456 145	143 045	1 166 457	171 126	938 584	90 289	696 151	3 661 403
2013	372 546	138 451	850 960	193 156	1 030 165	105 550	622 083	3 306 801
2014	375 276	125 056	985 777	204 171	1 026 876	79 756	931 978	3 719 094
2015	434 061	115 345	855 805	201 811	895 070	76 301	861 419	3 432 950
2016	530 743	179 177	1 109 986	367 350	1 075 475	124 456	858 127	4 241 536

[7,8] See end notes.

Note: Data are not readily available for missing years.

Source: BOM (2017c) GA (2010).

Table W 2.2 Inputs to Urban Water supply—volume of water sourced from surface water, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	665 903	549 377	112 618		102 734		37 815	44 950
2009–10	760 527	539 200	376 747		129 056		35 878	45 315
2010–11	910 796	542 386	375 753		91 515		32 635	40 945
2011–12	1 046 032	567 298	429 841		75 036		36 421	41 790
2012–13	1 037 198	625 961	445 342		47 490		37 804	47 838
2013–14	1 015 485	614 513	491 939	140 935	49 732		34 396	48 731
2014–15	1 064 788	616 385	513 371	184 243	48 075		40 530	47 114
2015–16	1 126 458	646 109	523 770	207 541	20 445	77 548	38 034	50 403

[1] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 2.3 Inputs to Urban Water supply—volume of water sourced from groundwater, [a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	22 766	25 513	1 800		155 992		15 119	
2009–10	27 918	25 030	13 355		130 919		15 606	
2010–11	18 275	10 363	11 489		168 961		13 602	
2011–12	20 817	12 200	15 474		164 029		14 329	
2012–13	26 252	9 318	16 807		168 050		14 114	
2013–14	27 361	8 810	16 790	11 968	154 682		15 537	
2014–15	26 481	10 469	24 744	11 907	153 070		13 797	
2015–16	35 487	11 240	21 820	12 515	167 845	248	14 199	

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 2.4 Inputs to Urban Water supply—volume of water sourced from desalination, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09								
2009–10								
2010–11	77 102				28 541			
2011–12	61 290				50 458			
2012–13		24 850	2 805		95 770			
2013–14			1 435	61 023	113 060			
2014–15			1 312	22 830	119 457			
2015–16			1 927	7 774	138 645			

[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 2.5 Inputs to Urban Water supply—volume of water sourced from recycling,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	16 328	26 223	6 437		5 951		1 159	4 207
2009–10	19 406	23 358	14 415		5 706		1 030	4 249
2010–11	16 296	24 971	32 986		5 939		490	4 305
2011–12	19 353	19 961	32 687		7 862		747	4 607
2012–13	49 239	31 147	35 833		9 891		1 027	4 416
2013–14	51 258	27 855	30 275	7 417	9 967		666	4 372
2014–15	48 423	24 863	29 755	7 290	9 871		883	4 352
2015–16	48 784	34 905	32 316	6 972	10 771		522	4 056

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 2.6a Urban Water treatment—volume of residential sewage, non-residential sewage and non-trade waste collected,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	593 972	325 655	108 536		128 343		17 105	30 051
2009–10	577 443	351 475	104 818		130 177		19 294	31 836
2010–11	644 057	201 180	277 628		129 811		22 088	35 441
2011–12	737 290	184 494	241 125		137 725		18 813	35 231
2012–13	625 703	406 977	308 745		140 225		17 609	32 135
2013–14	588 003	421 043	264 537	97 092	145 526		19 810	32 069
2014–15	699 067	405 510	326 259	91 578	144 465		18 894	32 971
2015–16	720 120	440 529	304 040	93 691	143 576		19 441	33 854

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 2.6b Urban Water treatment—volume of trade waste collected,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				megalitres				
2008–09	33 260	54 727	9 017		6 510		905	
2009–10	30 598	56 375	9 482		6 515		1 232	
2010–11	32 870	156 059	15 937		6 573		1 410	
2011–12	33 136	153 688	17 768		7 292		1 200	
2012–13	32 398	56 683	20 783		7 443		1 124	
2013–14	30 935	57 962	24 456	8 842	7 479		1 264	
2014–15	32 124	56 536	25 042	12 614	8 392		1 134	
2015–16	29 280	87 241	26 209	13 208	8 446		1 109	

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 2.6c Urban Water treatment—volume of total sewage collected,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[1]	NT	ACT
				megalitres				
2008–09	627 461	664 198	117 553		134 853		18 010	30 051
2009–10	608 041	689 766	122 848		136 692		20 525	31 836
2010–11	676 927	823 419	293 564		136 384		23 498	35 441
2011–12	770 426	804 585	258 893		145 017		20 013	35 231
2012–13	657 857	660 600	340 422		147 668		18 732	31 850
2013–14	618 652	789 923	295 989	105 934	153 005	56718	21 075	32 069
2014–15	731 190	763 216	359 661	104 192	152 858		20 027	32 971
2015–16	749 400	527 770	330 249	106 899	152 022		20 550	33 854

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 2.7 Urban Water prices—consumer price index, water and sewerage services,[a] index numbers by capital city

Average over financial year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Australia
				base of each index: 2011–12 = 100					
1998–99	47.4	38.9	38.1	45.9	56.3	53.7	49.0	36.9	43.5
1999–00	49.9	38.9	40.2	47.2	58.8	53.3	49.0	39.5	45.1
2000–01	49.9	38.9	44.1	47.6	60.2	55.9	51.5	41.7	45.9
2001–02	50.8	40.9	46.0	49.6	62.1	57.6	52.8	43.3	47.5
2002–03	52.2	42.4	48.0	52.2	63.9	61.3	54.8	45.0	49.2
2003–04	54.0	44.6	50.0	56.2	66.3	64.1	55.5	48.1	51.5
2004–05	55.4	46.7	51.7	57.9	66.3	67.4	55.5	50.5	53.2
2005–06	59.6	49.1	54.6	59.9	67.8	73.5	55.5	54.7	56.1
2006–07	63.9	51.8	57.9	61.9	70.6	76.9	57.0	65.2	59.5
2007–08	66.8	54.5	64.2	64.1	75.6	81.3	59.6	71.3	63.0
2008–09	77.0	64.1	68.3	69.7	82.6	85.3	61.7	80.3	71.3
2009–10	88.9	75.4	78.4	76.9	87.6	91.9	74.6	85.7	81.4
2010–11	94.7	88.2	94.1	87.7	96.6	95.5	83.2	89.2	91.8
2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012–13	101.0	100.4	101.6	110.5	111.0	106.3	114.7	105.7	103.2
2013–14	103.8	124.7	109.1	111.6	119.1	111.6	130.4	101.4	113.6
2014–15	106.2	112.1	120.6	114.9	124.7	117.6	136.6	104.6	113.4
2015–16	107.4	115.8	123.9	116.8	129.2	122.3	140.6	104.7	116.1
2016–17	99.4	115.2	127.2	109.5	134.5	127.0	141.2	105.4	114.0

[a] See end notes.
Source: ABS (2017e).

Table W 2.8 Inputs to rural water supply—power consumed to provide rural water distribution services, by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			kilowatt hours		
2007–08	4 956 344	18 065 716	36 531 867	15 666 171	683 875
2008–09	5 051 822	18 693 179	35 492 986	14 207 826	422 585
2009–10	6 320 225	18 476 739	56 946 073	16 383 896	2 294 798
2010–11	6 046 386	10 450 180	18 372 912	13 920 949	3 003 941
2011–12	6 971 082	29 042 654	18 372 912	22 416 052	2 919 338

Source: BITRE estimates based on NWC (2014).

Table W 2.9a Inputs to rural water supply—supply network intake volume for surface water source, by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			megalitres		
2007–08	1 677 102	372 327	622 979	79 854	298 652
2008–09	2 205 299	368 775	602 148	81 473	266 717
2009–10	2 732 428	354 939	821 479	82 123	239 214
2010–11	4 975 150	227 414	473 234	70 643	245 958
2011–12	7 219 133	335 618	473 234	99 087	231 528
2012–13	6 103 675	339 330	473 234	126 163	205 072

Source: BITRE estimates based on NWC (2014).

Table W 2.9b Inputs to rural water supply—supply network intake volume for groundwater source, by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			megalitres		
2007–08	5 896	32 093	27 908	0	0
2008–09	4 178	34 841	23 567	0	0
2009–10	3 900	31 290	35 569	0	0
2010–11	1 201	15 349	6 678	0	0
2011–12	2 025	540	6 678	0	0
2012–13	437	0	6 678	0	0

Source: BITRE estimates based on NWC (2014).

Table W 2.9c Inputs to rural water supply—supply network intake volume for treated waste water, by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			megalitres		
2007–08	0	12 521	0	0	0
2008–09	0	13 577	0	0	0
2009–10	0	12 729	0	0	0
2010–11	0	1 778	0	0	0
2011–12	0	23	0	0	0
2012–13	0	2 384	0	0	0

Source: BITRE estimates based on NWC (2014).

Table W 2.9d Inputs to rural water supply—supply network intake volume for other sources, by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			megalitres		
2007–08	0	12 445	0	0	0
2008–09	0	11 604	0	0	0
2009–10	0	12 887	0	0	0
2010–11	0	586	0	0	0
2011–12	0	0	0	0	0
2012–13	0	0	0	0	0

Source: BITRE estimates based on NWC (2014).

Table W 2.9e Inputs to rural water supply—total supply network intake volume, by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			megalitres		
2007–08	1 682 999	429 386	650 887	79 854	298 652
2008–09	2 209 477	428 797	625 715	81 473	266 717
2009–10	2 736 328	411 845	857 048	82 123	239 214
2010–11	4 976 351	245 126	479 912	70 643	245 958
2011–12	7 233 508	336 181	479 912	99 087	250 021
2012–13	6 104 112	341 714	479 912	126 163	205 072

Source: BITRE estimates based on NWC (2014).

Table W 2.10a Rural water markets—entitlements[9] on issue, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				gigalitres				
2007–08	11 058	4 295	4 717	1 333	2 515	1 471	117	65
2008–09	10 679	4 530	4 938	1 691	2 561	1 460	188	80
2009–10	11 094	5 701	5 604	1 374	2 437	1 650	258	76
2010–11	11 649	5 990	5 734	1 482	2 722	1 711	323	76
2011–12	13 280	6 664	5 870	1 747	2 634	1 794	311	76
2012–13	13 298	6 712	5 987	1 699	3 126	1 832	314	65

[9] See end notes.
Source: NWC (2014).

Table W 2.10b Rural water markets—total entitlement[9] trade, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				gigalitres				
2007–08		218	76	17	2	57	0	<1
2008–09	1 286	252	75	73	8	104	0	<1
2009–10	1 276	402	70	150	24	27	0	<1
2010–11	635	300	136	88	25	20	0	<1
2011–12	768	377	130	93	14	55	0	<1
2012–13	680	231	225	63	100	38	0	<1

[9] See end notes.
Note: Data are not readily available for missing years.
Source: NWC (2014).

Table W 2.10c Rural water markets—value of market turnover for water entitlements[9], by state/territory

Financial year	NSW	VIC	QLD	SA[b]	WA	TAS	NT	ACT
				$ million				
2007–08	470.5	277.4	57.7	38.3	1.0	na	0.0	na
2008–09	1 661.8	370.6	70.4	118.6	1.7	na	0.0	na
2009–10	1 564.2	733.2	91.6	227.1	0.7	na	0.0	na
2010–11	687.0	428.0	104.0	73.3	1.0	na	0.0	na
2011–12	730.0	491.0	142.0	80.4	1.0	na	0.0	na
2012–13	616.0	229.0	58.0	54.4	1.0	na	0.0	na

[b] The entitlement turnover value for 2007–08 is based on average prices and total volumes of whole-of-licence transfers, whereas for 2008–09 the entitlement turnover is based on permanent allocation trades, and for 2009–10, 2010–11 and 2011–12 and 2012–13 is based on transfers of water access entitlements. These three approaches may not be directly comparable.

[9] See end notes.

na: Not available.

Source: NWC (2014).

Table W 2.10d Rural water markets—value of market turnover for water allocations[9] by state/territory

Financial year	NSW	VIC	QLD	SA[b]	WA	TAS	NT	ACT
				$ million				
2007–08	384.0	270.5	na	181.3	0.3	na	0.0	0.0
2008–09	448.0	124.6	na	33.2	0.1	na	0.0	0.0
2009–10	217.9	127.7	na	20.4	0.3	na	0.0	0.0
2010–11	85.0	33.0	na	10.5	1.4	0.0	0.0	0.0
2011–12	38.9	28.0	na	11.4	0.0	na	0.0	0.0
2012–13	168.3	102.8	na	15.1	0.6	na	0.0	0.0

[b] The entitlement turnover value for 2007–08 is based on average prices and total volumes of whole-of-licence transfers, whereas for 2008–09 the entitlement turnover is based on permanent allocation trades, and for 2009–10, 2010–11 and 2011–12 and 2012–13 is based on transfers of water access entitlements. These three approaches may not be directly comparable.

[9] See end notes.

na: Not available.

Source: NWC (2014).

CHAPTER 3
Supply and use

Table W 3.1 Urban Water supply—Australian population receiving water supply services, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT[c]
				thousands				
2009–10	6 300	5 351			1 954		140	396
2010–11	6 486	5 438			1 983		142	403
2011–12	6 512	5 601			2 060		146	412
2012–13	6 545	5 686			2 107		149	420
2013–14	6 661	5 749		1 605	2 225	445	152	425
2014–15	6 759	5 867	4 179	1 664	2 260	447	154	428
2015–16	6 954	10505	4 221	1 684	2 304	434	157	393

[2] See end notes Table W 1.2.
[c] Prior to 2015–16 ACT population receiving water supply services includes some NSW residents in adjacent areas.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Victoria and NSW figures may not align with BOM data due to BITRE estimates minimising BOM double counting
Source: BOM (2017b).

Table W 3.2a Urban Water supply—number of residential properties connected to the urban water supply network,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2009–10	2 234	2 109	517		743		53	139
2010–11	2 258	2 157	1 007		759		54	142
2011–12	2 279	2 204	1 091		784		53	146
2012–13	2 313	2 246	1 415		798		53	149
2013–14	2 346	2 298	1 429	682	819		56	153
2014–15	2 383	2 342	1 626	689	842	179	61	157
2015–16	2 583	2 396	1 668	697	866	180	60	160

[a] See end notes
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.2b Urban Water supply—number of non–residential properties connected to the urban water supply network,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2009–10	189	207	43		95		8	7
2010–11	194	206	71		93		8	8
2011–12	200	209	76		93		10	8
2012–13	199	211	95		94		10	9
2013–14	179	214	97	71	100		10	9
2014–15	179	216	115	72	102	22	10	9
2015–16	188	218	114	73	98	22	11	9

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.2c Urban Water supply—Total number of properties connected to the urban water supply network,[a] by state/territory[d]

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2008–09	2 389	2 273	541	710	817		63	144
2009–10	2 445	2 314	560	721	838		61	146
2010–11	2 475	2 366	1 086	733	852		63	150
2011–12	2 501	2 413	1 168	740	875		64	154
2012–13	2 512	2 454	1 513	747	893		63	158
2013–14	2 522	2 509	1 526	753	921		66	162
2014–15	2 559	2 557	1 744	761	944	201	70	166
2015–16	2 768	2 613	1 781	770	964	202	71	169

[a] See end notes.
[1, 2, 3] See end notes Table W 1.2.
[d] Components may not sum to total due to rounding.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.3a Urban Water supply—volume of urban water supplied to residential properties, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	431 033	324 878	70 844		202 972		25 642	27 494
2009–10	444 300	321 327	78 816		206 237		25 164	27 609
2010–11	423 348	307 864	148 866		201 926		21 794	25 204
2011–12	417 580	331 219	189 031		198 018		24 756	26 326
2012–13	448 209	366 858	254 080		200 560		24 582	29 609
2013–14	470 549	366 439	266 106	121 600	209 735		23 494	30 993
2014–15	461 973	372 906	309 378	124 021	207 720	30 726	25 177	29 458
2015–16	499 233	399 457	306 191	139 074	210 367	31 768	25 057	31 272

[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.3b Urban Water supply—volume of urban water supplied to commercial, municipal, and industrial properties, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	195 762	156 366	37 495		64 026		20 280	11 223
2009–10	199 591	151 046	57 867		61 972		16 680	10 185
2010–11	196 816	142 546	95 461		62 666		15 034	8 822
2011–12	192 758	149 432	115 131		63 465		16 951	10 977
2012–13	202 311	205 445	138 131		63 634		16 924	12 738
2013–14	209 123	200 305	145 899	65 970	65 187		17 776	12 711
2014–15	197 828	202 161	167 621	68 030	64 665	22 017	20 006	11 387
2015–16	214 766	173 053	160 963	69 446	65 469	20 615	20 842	11 134

[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.3c Urban Water supply—volume of urban water supplied for other uses, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	70 265	57 634	2 974		23 496		1 061	3 080
2009–10	67 625	54 197	11 009		25 968		1 454	3 778
2010–11	122 540	54 901	25 712		26 252		2 003	3 345
2011–12	78 055	59 758	26 493		32 823		1 432	3 052
2012–13	91 758	64 385	60 882		32 731		1 580	3 485
2013–14	89 523	64 866	51 613	34 988	34 505		1 623	2 495
2014–15	81 774	64 324	50 369	37 078	35 874		1 584	3 841
2015–16	85 967	503 822	59 461	28 892	36 619		702	3 920

[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.3d Urban Water supply—total volume of urban water supplied, by state/territory[d]

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2008–09	696 376	538 878	183 542		290 494		46 730	41 797
2009–10	711 906	887 931	207 976		294 177		43 297	41 572
2010–11	1 176 688	857 070	287 113		290 844		38 829	37 371
2011–12	1 117 612	905 968	330 652		294 304		43 139	40 355
2012–13	1 279 227	1 047 251	739 270		296 927		43 084	45 832
2013–14	1 320 880	1 026 756	759 026	222 558	309 427		42 892	46 199
2014–15	1 280 047	1 042 584	821 489	229 129	308 258		46 765	44 686
2015–16	799 966	1 076 332	526 615	237 413	312 455		46 601	46 326

[2] See end notes Table W 1.2.
[d] Components may not sum to total due to rounding.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.4 Urban Water supply—Australian population receiving sewerage services, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2008–09	5 573	4 923	1 017		1 693		133	348
2009–10	5 698	4 919	1 210		1 771		135	355
2010–11	5 881	5 095	2 447		1 830		137	362
2011–12	5 895	5 344	2 572		1 889		141	371
2012–13	5 915	5 437	3 337		1 960		143	380
2013–14	6 046	5 466	3 336	1 281	2 062	409	145	384
2014–15	6 144	5 554	3 841	1 309	2 096	379	148	388
2015–16	6 643	5 674	3 881	1 324	2 107	383	151	393

[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.5a Urban Water treatment— number of residential properties connected to sewerage services,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2008–09	2 117	1 929	387		649		49	137
2009–10	2 145	1 970	465		668		51	138
2010–11	2 168	2 014	930		697		52	142
2011–12	2 191	2 065	999		716		51	146
2012–13	2 226	2 108	1 296		740		51	149
2013–14	2 260	2 162	1 319	555	755		54	153
2014–15	2 295	2 208	1 478	561	778	158	59	157
2015–16	2 492	2 264	1 520	567	790	159	58	160

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.5b Urban Water treatment—number of non–residential properties connected to sewerage services,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2008–09	158	171	37	.	60	.	10	7
2009–10	166	173	44	.	61	.	6	7
2010–11	170	175	63	.	64	.	6	7
2011–12	173	177	66	.	63	.	9	7
2012–13	173	181	92	.	64	.	9	8
2013–14	152	186	84	31	67	.	10	8
2014–15	151	194	97	31	67	19	9	8
2015–16	162	190	97	32	66	19	10	8

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 3.5c Urban Water treatment—total number of properties connected to sewerage services, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				thousands				
2008–09	2 274	2 099	495		710		59	144
2009–10	2 308	2 143	509		731		57	145
2010–11	2 337	2 192	993		761		57	149
2011–12	2 361	2 247	1 065		779		60	153
2012–13	2 396	2 290	1 388		805		61	157
2013–14	2 412	2 346	1 404	586	825		64	161
2014–15	2 449	2 398	1 578	592	845	176	68	165
2015–16	2 650	2 456	1 614	599	856	178	68	168

[a] See end notes.
[2] See end notes Table W 1.2.
Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 3.6a Urban Water treatment—volume of recycled water supplied to residential properties[11], by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				megalitres				
2007–08	1 415	123			0			
2008–09	1 704	213						
2009–10	2 209	1 404						
2010–11	2 373	0			0			
2011–12	1 993	2			0			
2012–13	2 721	8			0			
2013–14	2 188	0		208	0			
2014–15	2 138	853	337	410	0			
2015–16	2 554	1 385	328	342		0	0	0

[11] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 3.6b Urban Water treatment—volume of recycled water supplied to commercial, municipal, and industrial properties[11,12], by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				megalitres				
2007–08	15 486	6 151	3 870		7 420		974	3 736
2008–09	13 825	7 621	5 744		7 732		1 159	4 204
2009–10	17 551	4 264	8 024		6 040		1 030	4 151
2010–11	13 425	3 945	10 687		6 534		490	1 789
2011–12	15 908	4 916	15 858		6 856		747	1 857
2012–13	17 596	8 143	18 574		6 949		1 027	1 844
2013–14	20 708	7 800	18 946	4 180	7 106		666	1 711
2014–15	20 106	9 516	21 058	4 867	7 058		883	1 614
2015–16	21 592	11 458	21 420	4 252	7 490		522	93

[11,12] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 3.6c Urban Water treatment—volume of recycled water supplied for agricultural uses[13] by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				megalitres				
2007–08	8 448	51 377	785		1 900			53
2008–09	13 046	50 547	6 134		1 958			
2009–10	17 500	51 041	5 180		2 063			96
2010–11	20 542	25 865	5 273		1 993			0
2011–12	17 746	37 620	5 662		3 156			0
2012–13	17 370	35 180	9 685		3 364			0
2013–14	17 964	34 172	11 034	19 086	3 451			19
2014–15	16 584	37 370	12 528	21 444	3 431			0
2015–16	17 677	44 196	14 511	21 740	3 598		0	0

[13] See end notes.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 3.6d Urban Water treatment—volume of recycled water supplied for on–site use[14], by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				megalitres				
2007–08	19 484	15 873	4 733		2 075		295	0
2008–09	16 621	18 898	6 288		2 087		300	3
2009–10	16 992	20 473	4 408		2 404		0	2
2010–11	17 497	20 252	5 851		3 060		0	2 516
2011–12	16 313	19 806	6 265		2 834		0	2 750
2012–13	15 156	23 678	10 458		2 873		0	2 572
2013–14	15 671	19 360	10 613	610	2 774		0	2 642
2014–15	15 864	14 944	10 254	209	2 718		0	2 738
2015–16	16 585	18 341	9 356	248	3 194		0	3 960

[14] See end notes.

Note: Data are not readily available for missing years.

Source: BOM (2017b).

Table W 3.6e Urban Water treatment—volume of recycled water supplied for other uses, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
				megalitres				
2007–08	0	0	0		0			0
2008–09	0	0	0		0		185	0
2009–10	0	0	133		1 553		203	0
2010–11	38	0	0		2 270		294	0
2011–12	0	0	0		2 980		336	0
2012–13	0	0	4 649		2 991		506	0
2013–14	0	0	0	3 964	2 349		516	0
2014–15	0	9	618	4 736	1 886		520	0
2015–16	29	4	7	4 599	1 666	0	679	0

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 3.6f Urban Water treatment—total volume of recycled water supplied, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				megalitres				
2007–08	44 832	95 968	9 387		11 395		1 268	3 789
2008–09	53 415	98 739	18 155		11 777		1 645	4 207
2009–10	62 391	98 393	17 757		12 060		1 233	4 249
2010–11	79 348	56 240	31 564		13 857		785	4 305
2011–12	75 398	70 510	27 849		15 826		1 083	4 607
2012–13	80 986	65 631	43 799		16 176		1 533	4 416
2013–14	84 331	62 573	40 935	28 048	15 680	5 239	1 182	4 372
2014–15	79 161	80 237	44 796	31 666	15 093	4 814	1 402	4 352
2015–16	75 807	77 584	45 622	31 181	14 282		522	4 053

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 3.7 Urban Water treatment—percentage of effluent recycled, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
				per cent				
2008–09	7.84	14.87	15.44		8.73		9.13	14.00
2009–10	9.65	14.26	14.45		8.82		6.01	13.35
2010–11	11.35	6.83	10.75		10.16		3.34	12.15
2011–12	9.51	8.76	10.76		10.91		5.41	13.08
2012–13	11.19	9.94	12.87		10.95		8.18	13.86
2013–14	13.15	7.92	13.83	26.48	10.25	9.24	5.61	13.63
2014–15	10.42	10.51	12.46	30.39	9.87		7.00	13.20
2015–16	10.12	14.70	13.81	29.17	9.39		2.54	11.97

[2] See end notes Table W 1.2.

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.

Source: BOM (2017b).

Table W 3.8 Rural water use—volume of rural water used at customer service points,[a] by state/territory

Financial year	NSW	VIC	QLD	SA	WA
			megalitres		
2006–07	3 010 908	451 442	1 047 399	89 805	259 646
2007–08	1 405 459	634 991	861 623	76 793	199 853
2008–09	1 851 526	910 787	830 011	80 188	212 771
2009–10	2 329 787	831 463	1 114 916	77 793	183 087
2010–11	4 162 279	460 456	393 399	68 326	177 245
2011–12	6 621 017	226 289	393 399	97 786	164 912
2012–13	5 926 560	204 611	393 399	120 679	142 444

[a] See end notes.

Source: BITRE estimates based on NWC (2014).

Table W 3.9a Rural water use—water consumption by agricultural activity,[a] by State or Territory—irrigation water

Financial year	NSW[e]	VIC	QLD	SA	WA	TAS	NT	Australia
				megalitres				
2005–06	4 534 108	2 448 485	2 325 003	897 197	306 284	203 931	22 356	10 737 364
2006–07	2 605 019	1 648 914	1 840 252	966 057	293 186	263 029	19 737	7 636 194
2007–08	1 677 083	1 332 045	1 842 729	880 268	284 878	252 113	15 683	6 284 799
2008–09	1 910 033	1 194 501	2 058 471	827 230	226 085	262 296	21 962	6 500 577
2009–10	2 002 797	1 504 742	1 823 870	711 992	252 058	281 953	18 629	6 596 040
2010–11	2 746 189	1 134 701	1 693 994	621 308	253 759	172 709	22 713	6 645 375
2011–12	3 527 444	1 646 243	1 884 062	655 898	246 369	192 035	22 271	8 174 320
2012–13	4 975 661	2 449 685	2 359 653	769 097	239 225	248 786	17 892	11 059 999
2013–14	4 295 313	2 519 880	2 702 867	704 621	259 404	231 290	17 509	10 730 882
2014–15	3 196 461	2 305 061	2 232 053	705 406	258 199	225 126	27 992	8 950 298
2015–16	2 610 952	1 946 125	1 882 355	777 769	287 506	308 689	16 879	8 381 399

[e] Includes the Australian Capital Territory.

[a] See end notes.

Source: ABS (2017m).

Table W 3.9b Rural water use—water consumption by agricultural activity,[a] by State or Territory—other water use

Financial year	NSW[e]	VIC	QLD	SA	WA	TAS	NT	Australia
				megalitres				
2004–05	259 551	206 456	251 486	127 010	162 274	23 690	31 440	1 061 906
2005–06	262 364	192 653	255 633	78 378	121 241	25 789	15 369	951 428
2006–07	240 062	174 371	243 980	68 723	118 806	24 816	14 477	885 234
2007–08	178 691	138 822	196 442	53 685	85 026	18 795	32 994	704 455
2008–09	198 070	139 351	237 211	74 419	92 310	22 634	21 062	785 056
2009–10	202 053	139 366	213 380	60 291	88 207	23 413	36 006	762 716
2010–11	236 524	165 648	265 908	77 721	93 349	28 490	37 587	905 227
2011–12	223 787	166 683	224 189	65 628	90 221	25 922	35 823	832 253
2012–13	226 652	164 339	263 575	73 786	84 782	23 097	32 503	868 734
2013–14	211 085	157 755	254 978	58 611	84 481	24 391	39 670	830 971
2014–15	229 697	157 344	235 224	65 412	85 652	22 440	33 790	829 559
2015–16	194 741	148 844	212 614	80 988	85 110	23 456	30 140	775 892

[e] Includes the Australian Capital Territory.
[a] See end notes.
Source: ABS (2017m).

Table W 3.9c Rural water use—water consumption by agricultural activity,[a] by State or Territory—total

Financial year	NSW[e]	VIC	QLD	SA	WA	TAS	NT	Australia
				megalitres				
2004–05	3 976 108	2 570 220	2 864 890	1 004 828	429 372	255 448	45 638	11 146 502
2005–06	4 796 472	2 641 138	2 580 636	975 575	427 525	229 720	37 725	11 688 792
2006–07	2 845 081	1 823 285	2 084 232	1 034 780	411 992	287 845	34 214	8 521 428
2007–08	1 855 774	1 470 867	2 039 171	933 953	369 904	270 908	48 677	6 989 254
2008–09	2 108 103	1 333 852	2 295 682	901 649	318 395	284 930	43 024	7 285 633
2009–10	2 204 850	1 644 108	2 037 251	772 283	340 265	305 366	54 635	7 358 756
2010–11	2 982 713	1 300 349	1 959 902	699 029	347 108	201 199	60 300	7 550 602
2011–12	3 751 231	1 812 926	2 108 251	721 526	336 590	217 957	58 094	9 006 573
2012–13	5 202 313	2 614 024	2 623 228	842 884	324 006	271 884	50 394	11 928 733
2013–14	4 506 398	2 677 634	2 957 845	763 232	343 885	255 680	57 178	11 561 853
2014–15	3 426 159	2 462 405	2 467 277	770 818	343 851	247 566	61 781	9 779 856
2015–16	2 805 693	2 094 969	2 094 969	858 757	372 616	332 145	47 019	9 157 291

[e] Includes the Australian Capital Territory.
[a] See end notes.
Source: ABS (2017m).

Table W 3.10a Rural water use—area of irrigated crops and pastures, by agricultural activity—New South Wales[e]

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	np	np	[f] 112	0	[f] 43	25	[f] 22	[f] 5	34
2004–05	590	np	146	np	[f] 30	26	[f] 17	4	36
2005–06 [15]	595	101	169	0	29	30	18	5	44
2006–07	445	[f] 20	99	np	[f] 20	34	15	[f] 5	41
2007–08	385.8	2.1	36.7	[g] 0.9	15.5	29.6	12.3	[f] 3.2	35.8
2008–09	320.7	[f] 7.2	70.3	0.0	[f] 18.3	24.8	13.5	3.8	[f] 41.2
2009–10	342.7	np	80.1	np	[f] 21.1	26.5	14.8	[f] 3.9	[f] 37.3
2010–11	np	[f] 75.0	196.2	0.1	21.1	25.1	14.6	3.6	39.2
2011–12	353.7	[f] 101.9	[f] 235.6	0.0	[f] 17.9	23.4	12.8	2.8	33.4
2012–13	431.0	113.04	267.5	[g] 0.4	34.3	22.2	14.6	3.4	33.3
2013–14	447.9	72.48	212.3	0.6	27.7	20.9	14.5	2.8	30.4
2014–15	443.0	69.31	96.2	[f] 4.4	[f] 23.8	20.8	10.4	2.8	29.9
2015–16	400.9	24.32	134.3	[f] 0.5	[f] 29.8	26.7	17.3	3.4	27.4

[e] Includes the Australian Capital Territory.
[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.10b Rural water use—area of irrigated crops and pastures, by agricultural activity—Victoria

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	np	np	0	0	[f] 7	29	23	3	33
2004–05	np	np	0	0	[f] 9	30	25	3	36
2005–06 [15]	535	1	0	0	6	36	26	3	37
2006–07	330	0	0	0	[g] 2	35	22	3	[f] 44
2007–08	312.3	0.0	0.0	0.0	[g] 7	33.5	27.7	[f] 3.9	[g] 39.2
2008–09	267.5	0.0	0.0	0.0	[g] 2.2	35.0	24.7	2.7	[f] 36.6
2009–10	322.1	np	0.0	0.0	np	45.6	25.2	3.0	[f] 38.1
2010–11	np	[f] 0.2	0.0	0.0	5.6	46.1	25.6	3.1	30.0
2011–12	436.9	[g] 0.8	0.0	0.0	[f] 7.0	45.9	24.6	3.0	32.7
2012–13	493.2	[f] 0.5	0.0	0.0	[f] 16.8	46.6	25.1	2.7	33.1
2013–14	[f] 545.1	[f] 0.7	0.0	0.0	[g] 13.6	45.4	22.3	2.8	26.5
2014–15	[f] 528.1	[f] 0.2	0.0	0.0	[f] 11.5	38.1	23.8	3.2	27.3
2015–16	[f] 443.1	[f] 0.2	0.1	0.0	[f] 14.0	45.4	26.1	4.2	26.9

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.10c Rural water use—area of irrigated crops and pastures, by agricultural activity—Queensland

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	154	0	73	237	[f] 24	33	35	3	[g] 3
2004–05	122	0	[f] 124	209	[f] 11	31	31	4	[g] 4
2005–06 [15]	np	0	101	205	10	37	31	4	3
2006–07	141	0	35	196	9	37	31	4	1
2007–08	207.3	0.0	21.2	184.0	[f] 17.0	35.4	33.7	[f] 4.4	[f] 1.3
2008–09	185.0	0.0	[f] 71.6	191.9	[f] 20.7	34.9	29.4	3.9	[g] 3.1
2009–10	126.2	np	73.1	np	[f] 13.9	33.6	29.4	4.0	np
2010–11	np	0.4	163.0	129.4	13.8	35.1	34.9	3.3	2.8
2011–12	[f] 82.5	[g] 0.3	160.8	166.1	[f] 7.5	34.4	28.6	3.8	2.0
2012–13	[f] 113.7	[g] 0.1	170.3	169.8	[f] 13.5	37.1	28.0	2.6	[f] 2.5
2013–14	[f] 126.0	[g] 1.3	124.9	210.4	[f] 10.1	41.4	26.9	2.4	2.1
2014–15	[f] 149.1	[g] 6.5	66.5	210.7	[f] 12.6	38.5	25.3	2.4	1.7
2015–16	[f] 109.2	[g] 1.6	76.9	229.5	[f] 31.4	44.9	27.7	2.9	1.7

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.10d Rural water use—area of irrigated crops and pastures, by agricultural activity—South Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	87	0	0	0	[f] 2	17	14	[g] 2	64
2004–05	82	0	0	0	[g] 3	19	17	[f] 1	61
2005–06 [15]	95	0	0	0	np	19	15	1	85
2006–07	85	0	0	0	[g] 2	19	14	1	78
2007–08	103.5	0.0	0.0	0.0	[f] 7.7	16.4	15.5	0.8	77.2
2008–09	np	0.0	0.0	0.0	[g] 3.0	18.0	14.5	np	77.7
2009–10	75.1	0.0	0.0	0.0	[g] 1.4	14.9	11.8	[f] 0.8	[f] 71.9
2010–11	np	0.0	0.0	0.0	2.5	17.8	13.8	0.9	68.0
2011–12	[f] 73.8	0.0	0.0	0.0	[f] 2.6	16.1	14.7	[f] 0.8	58.6
2012–13	[f] 79.1	0.0	0.0	0.0	[f] 1.6	16.7	12.4	[f] 0.8	59.3
2013–14	[g] 66.0	0.0	0.0	0.0	[g] 1.7	14.6	11.2	[f] 0.7	61.1
2014–15	[g] 14.7	0.0	0.0	0.0	[g] 1.8	12.9	13.5	[f] np	61.4
2015–16	[g] 88.4	0.0	0.0	0.0	3.5	16.0	14.3	[f] 0.7	59.1

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.10e Rural water use—area of irrigated crops and pastures, by agricultural activity—Western Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	np	0	0	4	np	[f] 9	9	[f] 2	[g] 14
2004–05	np	0	0	np	np	[f] 9	7	[f] 2	[f] 8
2005–06 [15]	np	0	0	[f] 5	np	10	8	2	12
2006–07	np	0	0	4	1	9	8	2	[f] 13
2007–08	np	0.0	0.0	2.2	np	10.2	9.4	np	[f] 12.7
2008–09	np	0.0	0.0	0.0	1.4	8.5	8.5	1.4	[f] 12.5
2009–10	np	0.0	0.0	0.0	3.0	7.5	8.0	[f] 1.2	[f] 11.2
2010–11	np	[g] 0.2	0.0	0.0	[f] 3.8	8.1	9.3	1.5	10.5
2011–12	[g] 16.8	0.1	[f] 0.8	np	1.3	[f] 7.8	9.5	[f] 1.2	[f] 9.9
2012–13	[g] 30.1	0.0	[f] 0.0	0.0	6.2	7.7	9.6	[f] 1.2	[f] 7.9
2013–14	[g] 11.5	0.0	np	0.0	[f] 8.9	8.8	8.5	[f] 0.8	[f] 9.1
2014–15	[g] 16.9	0.0	0.0	0.0	[f] 4.3	9.1	7.6	[f] 0.9	[f] 8.5
2015–16	[g] 52.1	0.0	0.0	0.0	[f] 7.2	10.3	9.2	[f] 1.4	[f] 7.1

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.10f Rural water use—area of irrigated crops and pastures, by agricultural activity—Tasmania

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	49	0	0	0	[f] 12	[f] 4	19	0	[g] 1
2004–05	51	0	0	0	8	[f] 4	17	0	[g] 1
2005–06 [15]	56	0	0	0	5	3	15	0	1
2006–07	59	0	0	0	[f] 3	3	14	0	[f] 1
2007–08	63.1	0.0	0.0	0.0	7.1	2.6	14.2	0.3	1.1
2008–09	np	0.0	0.0	0.0	6.1	[f] 3.4	13.0	np	1.1
2009–10	np	0.0	0.0	0.0	17.1	[f] 3.1	14.6	np	[f] 1.3
2010–11	np	0.0	0.0	0.0	14.7	3.0	13.3	0.3	1.2
2011–12	[f] 49.3	0.0	0.0	0.0	12.5	3.3	13.5	0.3	[f] 1.2
2012–13	[f] 56.4	0.0	0.0	0.0	15.5	2.2	[f] 11.7	0.3	[f] 1.2
2013–14	[f] 58.5	0.0	0.0	0.0	6.4	2.1	[f] 10.4	0.2	[f] 0.6
2014–15	[f] 61.2	0.0	0.0	0.0	6.0	2.2	[f] 10.0	[g] 0.2	[f] 1.1
2015–16	[f] 74.8	0.0	0.0	0.0	10.0	2.5	[f] 11.8	[g] 0.4	[f] 1.1

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.10g Rural water use—area of irrigated crops and pastures, by agricultural activity—Northern Territory

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	np	0	0	0	np	3	0	0	0
2004–05	np	0	0	0	np	2	0	0	0
2005–06 [15]	np	0	0	0	0	6	np	0	np
2006–07	np	0	0	0	np	5	1	0	0
2007–08	np	0.0	0.0	0.0	np	[f] 3.1	[f] 1.0	np	[g] 0.3
2008–09	[g] 1.3	0.0	0.0	0.0	0.0	3.6	0.9	0.1	[f] 0.3
2009–10	np	0.0	0.0	0.0	np	3.2	0.7	np	np
2010–11	np	0.0	0.0	0.0	0.0	3.9	1.3	0.1	0.2
2011–12	[f] 0.3	0.0	0.0	0.0	0.0	3.7	1.5	1.5	0.1
2012–13	0.2	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.1
2013–14	0.3	0.1	0.0	0.0	np	3.2	np	np	np
2014–15	0.4	0.1	0.0	0.0	0.0	3.2	1.6	0.0	0.5
2015–16	np	0.1	0.0	0.0	np	2.9	1.2	np	0.2

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Note: 2013–14 estimates are based on information obtained from a new ABS survey called REACS combining two previous surveys called Agricultural Resource Management Survey and the Agricultural Commodity Survey.
Source: ABS (2017m).

Table W 3.10h Rural water use—area of irrigated crops and pastures, by agricultural activity—Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					'000 hectares				
2003–04	1411	65	185	241	89	120	121	16	149
2004–05	1387	51	270	213	63	122	114	14	147
2005–06 [15]	1445	102	270	210	55	139	114	15	183
2006–07	1077	20	134	202	37	141	105	15	178
2007–08	[i] 095.1	2.1	58.0	187.2	57.7	130.7	113.8	14.2	167.5
2008–09	932.3	[f] 7.2	141.9	191.9	51.8	128.0	104.6	12.9	172.3
2009–10	952.0	18.9	153.2	212.6	59.1	134.2	104.3	13.1	162.6
2010–11	np	75.8	359.3	129.5	61.5	139.0	112.7	12.8	151.9
2011–12	997.1	[f] 103.1	397.2	166.1	48.8	134.5	105.2	11.9	137.9
2012–13	[i] 203.6	113.6	437.8	170.2	87.9	135.3	102.9	11.0	137.5
2013–14	[f] 1 264.8	74.5	337.4	211.0	68.4	136.4	94.6	9.8	129.9
2014–15	[f] 1 258.6	69.7	162.8	211.2	60.0	124.9	92.2	10.2	130.5
2015–16	[f] 1 169.0	26.2	211.3	230.0	95.8	148.7	107.6	13.0	123.5

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[15, 16] See end notes.
Source: ABS (2017m).

Table W 3.11a Rural water use—volume of irrigation water applied, by agricultural activity—New South Wales[e]

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	np	np	[f] 792 122	[g] 27	[f] 154 582	135 723	[f] 104 528	[f] 38 594	168 133
2004–05	1 626 289	np	964 306	np	[f] 94 925	133 561	[f] 68 290	[f] 20 712	[f] 171 629
2005–06 [15]	1 635 232	1 240 626	1 127 730	1 501	95 887	138 815	74 303	24 776	185 320
2006–07	1 243 753	[f] 237 214	673 905	np	[f] 53 879	134 564	62 195	[f] 26 362	[f] 171 025
2007–08	1 061 431	26 664	204 646	[g] 3 569	[f] 36 704	135 259	48 081	[f] 16 270	135 294
2008–09	907 517	[f] 101 474	465 833	0	[f] 54 100	120 683	61 365	[f] 21 883	[f] 166 923
2009–10	876 999	np	468 843	np	[g] 42 314	116 531	68 552	[f] 18 629	150 649
2010–11	np	758 998	1 073 849	[f] 3	50 026	188 474	54 450	17 723	106 616
2011–12	791 054	1 131 541	1 280 129	[f] 0	f 40 288	92 966	46 332	9 106	[f] 123 311
2012–13	1 281 160	1 428 762	1 798 595	[g] 91	101 804	117 166	[f] 56 736	17 241	151 375
2013–14	1 222 520	899 664	1 767 844	3 868	60 236	105 591	[f] 60 655	14 308	140 298
2014–15	1 167 370	873 528	774 893	3 296	58 733	113 124	[f] 47 161	11 635	139 876
2015–16	903 801	301 799	989 586	2 673	56 140	139 634	[f] 64 517	18 192	125 511

[e] Includes the Australian Capital Territory.
[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.11b Rural water use—volume of irrigation water applied, by agricultural activity—Victoria

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	np	np	0	0	[f] 14 916	173 567	82 777	9 992	179 359
2004–05	np	np	0	0	[f] 15 367	159 047	78 746	11 262	[f] 198 234
2005–06 [15]	1 953 857	12 600	0	0	13 808	172 859	91 054	11 216	185 620
2006–07	1 151 782	np	0	0	[g] 3 268	190 622	73 213	11 529	[f] 214 835
2007–08	887 000	0	0	0	[g] 21 407	162 430	85 970	[f] 13 289	[f] 152 661
2008–09	775 214	0	0	0	g 4 621	159 302	84 726	11 376	[f] 152 588
2009–10	966 519	np	0	0	np	259 716	93 797	11 247	[f] 155 293
2010–11	np	[f] 1660	0	0	10 217	199 189	59 240	8 671	83 520
2011–12	[f] 1 122 219	np	0	0	[f] 11 935	281 054	74 789	9 100	123 663
2012–13	1 701 230	5 064	0	0	[g] 32 072	345 382	74 624	10 185	[f] 174 220
2013–14	1 732 569	7 006	0	0	[g] 28 415	509 503	75 428	8 056	[f] 144 801
2014–15	1 715 886	2 713	0	0	[f] 21 558	309 571	80 724	11 570	[f] 148 118
2015–16	1 254 871	231	766	0	[f] 23 198	408 329	88 133	13 020	[f] 146 121

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.11c Rural water use—volume of irrigation water applied, by agricultural activity—Queensland

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
				megalitres					
2003–04	502 288	0	[f] 456 802	1 141 173	[f] 62 444	128 163	97 564	15 030	[f] 9 599
2004–05	361 713	0	[f] 855 009	1 109 917	[f] 30 026	115 003	102 833	16 123	[f] 7 860
2005–06 [5]	437 840	0	606 761	988 643	29 022	125 564	90 756	23 664	15 107
2006–07	437 901	0	193 757	931 468	[f] 23 826	133 057	86 940	14 501	[f] 5 644
2007–08	600 316	0	104 796	834 414	[g] 44 434	106 655	[f] 112 980	16 110	[f] 4 700
2008–09	558 124	0	414 170	761 086	[f] 50 288	119 060	93 440	15 808	[g] 15 906
2009–10	383 401	np	383 107	np	32 416	122 668	87 576	18 438	[f] 16 279
2010–11	np	2 480	808 195	459 334	26 270	92 216	90 995	12 371	6 539
2011–12	186 485	[g] 1 390	780 650	668 195	[f] 12 065	113 517	74 937	[f] 17 776	6 399
2012–13	141 355	[g] 384	1 052 208	715 650	[f] 42 968	123 726	91 676	11 479	[f] 12 792
2013–14	351 298	[g] 9 124	1 003 692	1 048 228	[f] 16 904	134 066	91 589	11 213	[f] 11 359
2014–15	392 140	[g] 21	437 800	1 118 164	[f] 33 039	136 579	79 519	11 154	8 074
2015–16	289 274	[g] 14 465	441 716	1 293 103	[f] 71 394	206 494	79 748	12 311	8 109

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
Source: ABS (2017m).

Table W 3.11d Rural water use—volume of irrigation water applied, by agricultural activity—South Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	490 300	0	0	0	[g] 5 575	123 033	89 474	[g] 20 413	[f] 228 156
2004–05	435 268	0	0	0	[g] 9 373	143 808	79 905	[g] 5 515	[f] 200 821
2005–06 [15]	445 578	0	0	0	5 743	131 923	79 429	[g] 5 201	227 885
2006–07	509 119	0	0	0	[f] 3 202	130 052	85 945	[f] 3 534	224 606
2007–08	414 272	0	0	0	[f] 52 980	94 390	88 244	2 450	[f] 203 349
2008–09	400 783	0	0	0	[g] 9 094	131 280	88 606	np	[f] 188 369
2009–10	307 517	0	0	0	[g] 3 175	103 372	73 272	[f] 2 880	174 513
2010–11	np	0	0	0	6 287	108 831	79 117	3 057	142 384
2011–12	[g] 216 835	0	0	0	[g] 7 079	120 814	80 335	[f] 2 597	148 512
2012–13	[g] 302 980	0	0	0	[g] 6 328	125 739	63 267	[f] 3 644	179 648
2013–14	[g] 261 645	0	0	0	[g] 4 342	123 126	67 444	[f] 3 173	174 502
2014–15	[g] 51 965	0	0	0	[g] 4 478	100 702	70 942	np	189 635
2015–16	[g] 281 891	0	0	0	[g] 18 366	146 150	80 022	3 493	209 141

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.11e Rural water use—volume of irrigation water applied, by agricultural activity—Western Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	np	0	0	69 043	np	[f] 47 720	61 663	10 320	[g] 17 284
2004–05	np	0	0	np	np	[f] 39 124	51 610	11 427	[f] 8 982
2005–06 [15]	np	0	0	[f] 66 455	[f] 11 685	40 239	50 204	14 556	16 386
2006–07	np	0	0	45 708	16 748	40 838	57 686	14 135	[f] 17 892
2007–08	np	0	0	25 214	[f] 15 218	48 062	47 527	12 541	[f] 17 239
2008–09	np	0	0	0	10 536	47 936	56 300	12 565	[f] 16 060
2009–10	np	0	0	0	20 879	36 519	50 315	[f] 10 783	[f] 14 019
2010–11	np	[g] 3 057	[g] 199	[g] 69	19 933	40 047	54 850	11 297	13 431
2011–12	[g] 84 939	1 035	[g] 8 129	np	12 031	[f] 39 347	57 671	9 939	[f] 10 813
2012–13	57 402	0	0	0	[g] 25 971	32 725	[f] 65 788	[f] 10 960	9 842
2013–14	79 399	0	0	0	f 8 885	33 132	53 293	[f] 7 028	[f] 12 706
2014–15	95 200	0	0	0	44 062	38 967	54 906	[f] 10 080	[f] 12 670
2015–16	117 207	26	26	94	22 561	51 535	68 225	[f] 11 989	[f] 11 613

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.11f Rural water use—volume of irrigation water applied, by agricultural activity—Tasmania

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	137 851	0	0	0	28 678	[f] 8 273	51 872	775	[g] 1 575
2004–05	144 546	0	0	0	17 140	[f] 10 173	51 782	[f] 1 029	[g] 1 600
2005–06 [15]	np	0	0	0	10 528	4 950	42 931	1 543	1 167
2006–07	183 371	0	0	0	[f] 7 942	6 670	45 420	1 455	[f] 2 492
2007–08	np	0	0	0	np	6 218	43 816	np	[f] 1 356
2008–09	np	0	0	0	16 044	[f] 9 448	44 658	np	[f] 1 177
2009–10	np	0	0	0	34 616	[f] 7 649	44 322	896	np
2010–11	np	0	0	0	25 189	4 415	28 701	756	1 013
2011–12	112 220	0	0	0	25 794	7 479	35 861	840	[f] 1 423
2012–13	141 809	0	0	0	38 811	5 567	34 368	766	1 755
2013–14	[f] 63 031	0	0	0	[f] 13 650	5 418	30 885	643	[f] 612
2014–15	[f] 164 870	0	0	0	14 722	5 142	30 194	926	[f] 1 584
2015–16	[f] 215 593	0	0	0	27 941	8 360	42 059	867	[f] 1 912

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.11g Rural water use—volume of irrigation water applied, by agricultural activity—Northern Territory

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	np	0	0	0	np	9 333	1 117	259	2 977
2004–05	np	0	0	0	np	7 422	1 226	200	2 819
2005–06 [15]	np	0	0	0	0	15 257	np	531	np
2006–07	np	0	0	0	np	12 639	2 490	583	2 097
2007–08	np	0	0	0	np	[f] 6 910	[f] 4 031	np	[g] 2 191
2008–09	5 513	0	0	0	0	9 825	3 998	397	[f] 2 229
2009–10	np	0	0	0	np	8 208	1 395	610	np
2010–11	np	0	0	0	129	11 478	5 119	461	2 218
2011–12	[f] 2 267	0	0	0	0	11 451	6 239	735	1 502
2012–13	[f] 518	0	0	0	0	10 521	5 952	271	279
2013–14	[g] 857	0	0	0	0	11 419	np	np	np
2014–15	[g] 1 457	0	0	0	0	11 288	8 389	163	[h] 5 150
2015–16	[g] np	807	0	0	0	6 122	6 213	np	[h] 1 452

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[h] Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.11h Rural water use—volume of irrigation water applied, by agricultural activity—Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres				
2003–04	5 070 729	813 812	1 248 924	1 210 243	[f] 268 343	625 812	488 994	[f] 95 384	607 083
2004–05	4 539 687	618 964	1 819 316	1 171 933	177 339	608 138	434 391	66 267	591 945
2005–06 [15]	4 720 613	1 253 227	1 734 951	1 056 598	166 673	629 639	431 417	81 666	633 183
2006–07	3 627 630	[f] 239 432	867 662	977 611	108 939	648 443	413 889	72 099	638 590
2007–08	3 260 070	26 664	309 442	863 198	185 394	559 924	430 649	62 257	516 790
2008–09	2 915 937	[f] 101 474	880 003	761 086	144 683	597 535	433 093	65 425	543 252
2009–10	2 840 592	246 909	851 950	756 317	[f] 139 292	654 663	419 229	63 483	515 484
2010–11	np	286 156	1 882 243	459 405	138 052	550 422	372 472	54 337	355 719
2011–12	[f] 2 516 018	1 138 287	2 068 908	668 252	109 192	666 627	376 165	50 093	415 622
2012–13	3 083 503	1 434 209	2 850 803	715 741	247 953	760 826	392 411	54 546	529 912
2013–14	3 837 059	916 559	2 773 395	1 052 096	165 947	922 225	383 373	44 752	484 276
2014–15	3 833 380	878 347	1 212 693	1 121 460	176 591	715 372	371 835	49 236	505 106
2015–16	3 064 686	317 327	1 432 093	1 295 871	219 600	966 624	428 918	60 190	503 859

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[15, 16] See end notes.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.12a Rural water use—application rate for irrigation water, by agricultural activity—New South Wales[e]

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
	megalitres per hectare								
2003–04	np	np	7.1	0.2	3.6	5.5	4.8	7.3	4.9
2004–05	2.8	np	6.6	np	[f] 3.2	5.2	4.0	5.1	4.7
2005–06 [15]	2.7	12.3	6.7	3.4	3.3	4.7	4.1	5.3	4.3
2006–07	2.8	12.2	6.8	np	2.7	4.0	4.1	5.5	4.2
2007–08	2.8	12.9	5.6	[g] 3.9	2.4	4.6	3.9	5.2	3.8
2008–09	2.8	14.1	6.6	0.0	3.0	4.9	4.6	5.7	4.1
2009–10	2.6	np	5.9	np	[f] 2.0	4.4	4.6	4.8	4.0
2010–11	np	10.1	5.2	3.5	2.2	4.0	3.3	4.2	2.3
2011–12	2.2	11.1	5.4	0.0	2.2	4.0	3.6	3.3	3.7
2012–13	3.1	12.6	7.9	[g] 0.2	3.0	5.3	3.9	5.1	4.1
2013–14	2.7	12.4	8.3	[g] 6.9	2.2	8.0	4.2	5.2	6.0
2014–15	2.6	12.6	8.1	[f] 7.4	2.5	7.2	9.1	4.2	6.0
2015–16	2.7	12.4	7.4	[f] 5.1	1.9	5.2	3.7	5.4	4.6

[e] Pre 2015–16 includes ACT.
[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[h] Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).
[15, 16] See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.12b Rural water use—application rate for irrigation water, by agricultural activity—Victoria

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
	megalitres per hectare								
2003–04	np	np	0.0	0.0	2.3	5.9	3.6	3.3	5.5
2004–05	np	np	0.0	0.0	[f] 1.7	5.3	3.1	3.6	5.5
2005–06 [15]	3.7	12.6	0.0	0.0	2.4	4.9	3.5	3.7	5.0
2006–07	3.5	np	0.0	0.0	1.6	5.5	3.3	3.8	4.9
2007–08	2.8	0.0	0.0	0.0	3.1	4.9	3.1	3.4	3.9
2008–09	2.9	0.0	0.0	0.0	[f] 2.0	4.6	3.4	4.2	4.2
2009–10	4.3	np	0.0	0.0	np	5.7	3.7	3.7	4.1
2010–11	np	6.9	0.0	0.0	1.8	4.3	2.3	2.8	2.8
2011–12	2.6	[f] 5.4	0.0	0.0	[f] 1.7	6.1	3.0	3.1	3.8
2012–13	3.7	11.0	0.0	0.0	[f] 1.9	7.4	3.0	3.7	5.3
2013–14	3.2	10.5	0.0	0.0	[f] 2.1	11.2	3.4	2.9	5.5
2014–15	[f] 3.2	11.0	0.0	0.0	1.9	8.1	3.4	3.6	2.7
2015–16	[f] 2.4	1.3	8.0	0.0	1.7	9.0	3.4	3.1	5.4

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[15, 16] See end notes Table W 3.10.
Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.12c Rural water use—application rate for irrigation water, by agricultural activity—Queensland

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres per hectare				
2003–04	3.3	0.0	6.3	4.8	2.6	3.9	2.8	4.6	2.9
2004–05	3.0	0.0	6.9	5.3	[f] 2.6	3.7	3.3	4.3	[g] 2.2
2005–06 [15]	np	0.0	6.0	4.8	2.9	3.4	2.9	5.5	4.9
2006–07	3.1	0.0	5.5	4.7	[f] 2.5	3.6	2.8	4.0	[f] 4.7
2007–08	2.9	0.0	4.9	4.5	2.6	3.0	3.4	[f] 3.7	[f] 3.7
2008–09	3.0	0.0	5.8	4.0	2.4	3.4	3.2	4.0	5.2
2009–10	2.4	np	5.2	np	2.3	3.7	3.0	4.6	np
2010–11	np	6.7	5.0	3.5	1.9	2.6	2.6	3.7	2.4
2011–12	[f] 3.5	4.8	4.9	4.0	[f] 1.6	3.3	2.6	[f] 4.7	3.3
2012–13	[f] 2.3	[f] 2.8	7.7	4.2	3.2	3.3	3.3	4.4	5.2
2013–14	[f] 2.8	[f] 7.0	8.0	5.0	1.7	3.2	3.4	4.6	5.5
2014–15	[f] 2.6	3.3	6.6	5.3	2.6	3.6	3.2	4.7	4.6
2015–16	[f] 2.9	8.8	5.7	5.6	2.3	4.6	2.9	4.3	4.7

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.12d Rural water use—application rate for irrigation water, by agricultural activity—South Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres per hectare				
2003–04	5.6	0.0	0.0	0.0	2.5	7.1	6.4	9.4	3.6
2004–05	5.3	0.0	0.0	0.0	3.0	7.7	4.7	5.4	3.3
2005–06 [15]	4.7	0.0	0.0	0.0	np	7.0	5.3	5.0	2.7
2006–07	6.0	0.0	0.0	0.0	[g] 1.6	6.9	6.1	4.3	2.9
2007–08	4.0	0.0	0.0	0.0	6.9	5.7	5.7	3.2	2.6
2008–09	np	0.0	0.0	0.0	[f] 3.0	7.3	6.1	np	2.4
2009–10	6.0	0.0	0.0	0.0	[g] 2.2	6.9	6.2	3.7	2.4
2010–11	np	0.0	0.0	0.0	2.5	6.1	5.7	3.6	2.1
2011–12	[f] 2.9	0.0	0.0	0.0	[f] 2.7	7.5	5.4	[f] 3.3	2.5
2012–13	[f] 4.0	0.0	0.0	0.0	[g] 3.9	7.5	5.1	4.4	3.0
2013–14	[g] 4.0	0.0	0.0	0.0	[f] 2.5	8.5	6.0	4.8	2.9
2014–15	[g] 3.5	0.0	0.0	0.0	[f] 2.5	7.8	5.3	np	3.1
2015–16	[g] 3.1	0.0	0.0	0.0	[f] 5.2	9.1	5.6	5.1	3.5

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[15, 16] See end notes.
Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017m).

Table W 3.12e Rural water use—application rate for irrigation water, by agricultural activity—Western Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
				megalitres per hectare					
2003–04	np	0.0	0.0	16.0	np	5.2	6.9	6.4	1.3
2004–05	np	0.0	0.0	np	np	4.1	7.4	[f] 6.7	[f] 1.2
2005–06 [15]	np	0.0	0.0	[f] 13.9	np	4.2	6.3	7.5	1.3
2006–07	np	0.0	0.0	13.1	14.0	4.7	7.2	7.9	[f] 1.4
2007–08	np	0.0	0.0	11.3	np	4.7	5.1	np	[f] 1.4
2008–09	np	0.0	0.0	0.0	7.4	5.7	6.7	8.7	1.3
2009–10	np	0.0	0.0	0.0	6.9	4.9	6.3	9.3	1.3
2010–11	np	13.9	7.7	12.3	5.3	4.9	5.9	7.5	1.3
2011–12	[g] 5.1	12.4	[f] 9.9	10.0	9.3	5.0	6.1	[f] 8.0	1.1
2012–13	[g] 3.4	0.0	[f] 0.0	0.0	[g] 4.2	4.3	[f] 6.9	9.3	1.2
2013–14	[g] 6.9	0.0	11.4	0.0	[g] 4.8	3.8	[f] 6.3	8.5	1.4
2014–15	[g] 5.6	24.8	0.0	0.0	10.2	4.3	7.2	10.9	1.5
2015–16	[g] 3.8	10.0	10.0	13.2	3.2	5.0	7.4	8.7	1.6

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.

[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.

[15, 16] See end notes.

Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).

np: Not available for publication, but included in totals where applicable, unless otherwise indicated.

Source: ABS (2017m).

Table W 3.12f Rural water use—application rate for irrigation water, by agricultural activity—Tasmania

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
				megalitres per hectare					
2003–04	2.8	0.0	0.0	0.0	2.4	2.1	2.7	2.5	1.6
2004–05	2.8	0.0	0.0	0.0	2.2	[f] 2.3	3.0	3.6	1.3
2005–06 [15]	np	0.0	0.0	0.0	2.1	1.7	2.9	3.9	1.1
2006–07	3.1	0.0	0.0	0.0	[f] 2.7	2.4	3.2	4.2	[f] 2.1
2007–08	np	0.0	0.0	0.0	np	2.4	3.1	np	1.3
2008–09	np	0.0	0.0	0.0	2.6	2.8	3.4	np	1.1
2009–10	np	0.0	0.0	0.0	2.0	2.5	3.0	np	np
2010–11	np	0.0	0.0	0.0	1.7	1.5	2.2	2.3	0.9
2011–12	[f] 0.0	0.0	0.0	0.0	2.1	2.3	2.7	3.3	[f] 1.2
2012–13	[f] 2.7	0.0	0.0	0.0	2.5	2.5	2.9	3.0	1.4
2013–14	[f] 1.1	0.0	0.0	0.0	2.1	2.6	3.0	2.7	1.1
2014–15	[f] 2.7	0.0	0.0	0.0	1.5	1.6	2.9	2.4	1.0
2015–16	[f] 2.6	0.0	0.0	0.0	2.8	3.3	3.6	2.4	1.8

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.

[15, 16] See end notes.

Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).

np: Not available for publication, but included in totals where applicable, unless otherwise indicated.

Source: ABS (2017m).

Table W 3.12g Rural water use—application rate for irrigation water, by agricultural activity—Northern Territory

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres per hectare				
2003–04	np	0.0	0.0	0.0	np	3.5	2.6	4.1	7.9
2004–05	np	0.0	0.0	0.0	np	3.0	3.7	2.9	7.7
2005–06 [15]	np	0.0	0.0	0.0	0.0	2.6	np	5.7	np
2006–07	np	0.0	0.0	0.0	np	2.8	3.6	6.5	8.2
2007–08	np	0.0	0.0	0.0	np	[f] 2.2	[f] 4.0	np	7.0
2008–09	4.3	0.0	0.0	0.0	0.0	2.7	4.2	4.4	8.4
2009–10	np	0.0	0.0	0.0	np	2.6	2.1	np	np
2010–11	np	0.0	0.0	0.0	1.7	1.5	2.2	2.3	0.9
2011–12	8.3	0.0	0.0	0.0	0.0	3.1	4.1	9.5	10.8
2012–13	2.5	0.0	0.0	0.0	0.0	3.8	np	np	3.1
2013–14	3.1	10.0	0.0	0.0	0.0	3.6	np	np	np
2014–15	3.7	18.3	0.0	0.0	0.0	3.5	5.1	6.6	10.0
2015–16	np	11.7	0.0	0.0	np	2.1	5.0	np	8.6

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.

[15, 16] See end notes.

Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).

np: Not available for publication, but included in totals where applicable, unless otherwise indicated.

Source: ABS (2017m).

Table W 3.12h Rural water use—application rate for irrigation water, by agricultural activity—Australia

Financial year	Pasture, cereal and other crops for grazing, hay, silage, grain or seed[16]	Rice	Cotton	Sugar cane	Other broadacre crops	Fruit trees, nut trees, plantation or berry fruits	Vegetables for human consump–tion or seed	Nurseries, cut flowers and cultivated turf	Grapevines
					megalitres per hectare				
2003–04	3.6	12.4	6.7	5.0	3.0	5.2	4.0	6.1	4.1
2004–05	3.3	12.1	6.7	5.5	2.8	5.0	3.8	4.7	4.0
2005–06 [15]	3.3	12.3	6.4	5.0	3.0	4.5	3.8	5.4	3.5
2006–07	3.4	12.2	6.5	4.9	2.9	4.6	3.9	5.0	3.6
2007–08	3.0	12.9	5.3	4.6	3.2	4.3	3.8	4.4	3.1
2008–09	3.1	14.1	6.2	4.0	2.8	4.7	4.1	5.1	3.2
2009–10	0.0	13.0	5.6	3.6	2.4	4.9	4.0	4.8	3.2
2010–11	np	10.1	5.2	3.5	2.2	4.0	3.3	4.2	2.3
2011–12	2.6	11.0	5.2	4.0	2.2	5.0	3.6	4.2	3.0
2012–13	3.4	12.6	7.8	4.2	2.8	5.6	3.8	4.9	3.9
2013–14	[f] 2.4	12.3	8.2	5.0	2.4	6.8	4.1	4.6	3.7
2014–15	[f] 3.0	12.6	7.5	5.3	2.9	5.7	4.0	4.8	3.9
2015–16	[f] 2.7	12.1	6.8	5.6	2.3	6.5	4.0	4.6	4.1

[15, 16] See end notes.

Note: Figure for pasture, cereal and other crops for grazing, hay, silage, grain or seed is an average of given ABS statistics (2015–16).

np: Not available for publication, but included in totals where applicable, unless otherwise indicated.

Source: ABS (2017m).

Table W 3.13a Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—New South Wales

Financial year	Dairy production	Livestock, pasture, grains & other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers & turf	Grapes
					$ million				
2001–02	287.2	569.7	323.1	[f] 918.1	0.0	281.0	175.7	[f] 116.3	271.3
2002–03	[f] 263.6	np	np	[f] 658.7	0.0	329.8	156.4	[f] 107.1	196.9
2003–04	249.1	np	np	[f] 383.7	np	301.7	227.3	[f] 133.2	287.8
2004–05	268.0	np	np	[f] 514.4	np	328.3	[f] 215.7	142.5	255.2
2005–06	276.0	np	270.9	548.0	[f] 1.1	350.0	310.3	291.3	246.9
2006–07	264.0	np	[f] 54.3	371.9	np	417.4	350.4	303.8	217.7
2007–08	298.7	np	7.3	142.8	np	368.8	346.2	[f] 220.0	324.0
2008–09	386.5	399.4	[f] 34.5	309.6	0.0	333.9	252.1	[f] 241.8	223.2
2009–10	[f] 340.9	np	88.9	393.8	np	288.6	286.1	240.8	163.5
2010–11	292.5	[f] 452.8	171.9	927.6	[f] 0.1	313.8	348.7	233.2	162.8
2011–12	240.8	436.5	[f] 246.3	1237.5	0.0	315.4	268.4	191.5	167.8
2012–13	290^	[f] 424.0	[f] 301.0	1177.0	2^	394.0	343.0	218.0	394.0
2013–14	295^	[f] 576.0	[f] 273.0	1262.0	3^	440.0	308.0	164.0	149.0
2014–15	371.0	[f] 803.0	[f] 272.0	537.0	2.0	330.0	275.0	199.0	185.0

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[16] See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13b Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—Victoria

Financial year	Dairy production	Livestock, pasture, grains & other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers & turf	Grapes
					$ million				
2002–03	844.8	np	np	0.0	0.0	475.2	330.7	144.7	306.2
2003–04	932.8	np	np	0.0	0.0	514.4	350.0	188.5	346.4
2004–05	1 115.5	np	np	0.0	0.0	[f] 577.8	375.6	208.1	356.3
2005–06	1 134.7	np	2.8	0.0	0.0	611.3	505.8	315.1	320.5
2006–07	938.8	np	np	0.0	0.0	[f] 741.9	570.9	[f] 369.8	[f] 272.6
2007–08	1 363.8	np	0.0	0.0	0.0	636.6	662.2	[f] 396.9	374.3
2008–09	1 159.1	np	0.0	0.0	0.0	719.2	543.4	[f] 250.1	[f] 355.4
2009–10	[f] 906.5	412.5	[g] 0.1	0.0	0.0	732.0	511.2	323.8	[f] 367.4
2010–11	1 266.8	465.4	0.6	0.0	0.0	1025.8	573.1	272.1	277.0
2011–12	1 238.0	432.3	1.7	0.0	0.0	884.1	623.2	309.5	317.6
2012–13	1 125.0	[f] 374.0	1.0	0.0	0.0	1 009.0	597.0	253.0	306.0
2013–14	1 716.0	[f] 611.0	2^	0.0	0.0	869.0	630.0	285.0	282.0
2014–15	1 701.0	801.0	1.0	0.0	0.0	1 037.0	662.0	312.0	318.0

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[g] Estimate has a relative standard error of 25% to 50% and should be used with caution.
[16] See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13c Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—Queensland

Financial year	Dairy production	Livestock, pasture, grains and other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers and turf	Grapes
					$ million				
2001-02	147.6	321.1	0.0	f 364.4	465.6	528.7	475.8	109.6	f 20.1
2002-03	f 125.7	334.4	0.0	f 175.6	398.6	481.8	502.4	105.6	f 13.3
2003-04	f 141.1	492.9	0.0	f 274.4	398.0	530.3	695.6	137.2	f 16.0
2004-05	f 110.4	358.0	0.0	f 393.7	455.0	548.9	554.3	153.8	f 18.4
2005-06	131.2	np	0.0	321.8	490.3	643.7	815.0	265.5	29.6
2006-07	130.5	np	0.0	114.0	570.9	1 129.7	935.3	247.6	f 44.7
2007-08	f 143.6	np	0.0	65.4	446.7	f 802.1	904.3	f 308.0	30.9
2008-09	f 193.9	370.3	0.0	310.7	537.1	734.8	831.1	254.1	f 23.3
2009-10	f 177.6	299.9	f 0.9	270.5	np	699.8	721.2	261.2	f 31.0
2010-11	134.5	f 191.7	0.6	638.5	374.1	636.2	981.9	216.2	31.6
2012-13	f 103^	f 161.0	0.0	612.0	598.0	690.0	825.0	197^	50^
2013-14	f 92^	f 261.0	0.0	681.0	637.0	778.0	790.0	163^	53^
2014-15	f 143.0	410.0	0.0	370.0	734.0	854.0	785.0	179.0	49.0

f Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
g Estimate has a relative standard error of 25% to 50% and should be used with caution.
16 See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13d Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—Western Australia

Financial year	Dairy production	Livestock, pasture, grains and other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers and turf	Grapes
					$ million				
2001–02	f 35.4	np	0.0	np	5.9	101.1	160.0	65.6	f 61.5
2002–03	np	np	0.0	0.0	8.3	105.2	159.8	62.2	f 81.9
2003–04	np	np	0.0	0.0	7.2	119.6	177.2	72.8	g 114.8
2004–05	np	np	0.0	0.0	np	f 128.6	155.8	f 86.1	f 95.5
2005–06	48.7	np	0.0	0.0	f 5.6	150.3	244.5	172.4	79.1
2006–07	np	np	np	np	np	153.8	234.6	166.4	f 90.8
2007–08	64.4	np	0.0	0.0	3.6	161.5	315.0	np	110.7
2008–09	0.0	np	0.0	0.0	0.0	194.3	297.3	155.1	78.6
2009–10	f 64.6	np	0.0	0.0	0.0	150.0	253.4	132.9	g 109.3
2010–11	100.1	g 56.3	g 0.5	g 0.1	g 0.0	165.9	286.3	103.8	92.1
2011–12	71.5	52.2	0.0	0.0	0.0	f 158.2	304.0	f 90.1	f 106.6
2012–13	56^	f 38.0	0.0	0.0	0.0	f 327.0	327.0	f 92^	f 68.0
2013–14	72^	f 111.0	0.0	np	0.0	f 145.0	286.0	f 62^	f 94.0
2014–15	74.0	f 229.0	0.0	0.0	0.0	f 191.0	254.0	f 70.0	f 62.0

f Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
g Estimate has a relative standard error of 25% to 50% and should be used with caution.
16 See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13e Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—South Australia

Financial year	Dairy production	Livestock, pasture, grains and other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers and turf	Grapes
					$ million				
2001–02	138.8	119.4	0.0	0.0	0.0	240.1	251.7	35.7	639.8
2002–03	f 139.4	129.6	0.0	0.0	0.0	216.5	232.3	f 34.4	527.1
2003–04	144.4	143.9	0.0	0.0	0.0	238.8	246.4	37.5	696.1
2004–05	f 140.6	121.3	0.0	0.0	0.0	277.5	280.8	40.4	614.5
2005–06	154.5	np	0.0	0.0	0.0	304.7	374.9	70.9	556.3
2006–07	f 152.6	np	0.0	0.0	0.0	361.8	404.7	58.0	398.3
2007–08	f 195.0	np	0.0	0.0	0.0	224.3	519.1	60.1	728.8
2008–09	f 184.9	np	0.0	0.0	0.0	307.3	455.9	f 40.5	502.9
2009–10	f 140.8	141.8	0.0	0.0	0.0	260.0	392.9	48.6	376.0
2010–11	135.5	160.6	0.0	0.0	0.0	263.9	476.6	46.2	346.5
2011–12	f 152.7	115.8	0.0	0.0	0.0	304.4	490.6	32.6	343.0
2012–13	144.0	f 134.0	0.0	0.0	0.0	362.0	442.0	38^	416.0
2013–14	206^	f 219.0	0.0	0.0	0.0	383.0	335.0	33^	324.0
2014–15	207.0	f 296.0	0.0	0.0	0.0	368.0	446.0	np	393.0

f Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
16 See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13f Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—Tasmania

Financial year	Dairy production	Livestock, pasture, grains and other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers and turf	Grapes
					$ million				
2001-02	135.6	89.9	0.0	0.0	0.0	f 48.8	152.8	9.5	f 5.5
2002-03	81.7	109.5	0.0	0.0	0.0	f 54.0	149.9	10.4	8.3
2003-04	109.2	105.9	0.0	0.0	0.0	f 51.4	158.0	12.3	g 15.0
2004-05	126.8	108.2	0.0	0.0	0.0	f 56.3	155.0	13.1	g 13.3
2005-06	132.7	np	0.0	0.0	0.0	41.4	188.9	39.3	10.2
2006-07	162.5	np	0.0	0.0	0.0	56.5	167.6	33.3	10.5
2007-08	f 223.3	np	0.0	0.0	0.0	64.1	210.6	np	22.5
2008-09	254.2	np	0.0	0.0	0.0	f 74.5	217.3	f 27.3	f 13.7
2009-10	195.2	161.8	0.0	0.0	0.0	72.8	201.8	21.0	f 18.1
2010-11	213.9	120.0	0.0	0.0	0.0	79.6	170.4	27.3	14.8
2011-12	221.1	110.8	0.0	0.0	0.0	73.4	178.1	23.0	17.4
2012-13	191.0	102.0	0.0	0.0	0.0	96.0	174.0	23.0	22.0
2013-14	363.0	103.0	0.0	0.0	0.0	80.0	155.0	22.0	7.0
2014-15	335.0	130.0	0.0	0.0	0.0	87.0	np	np	16.0

f Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
g Estimate has a relative standard error of 25% to 50% and should be used with caution.
16 See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13g Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—Northern Territory

Financial year	Dairy production	Livestock, pasture, grains and other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers and turf	Grapes
					$ million				
2001–02	np	np	0.0	0.0	0.0	np	1.2	np	np
2002–03	np	np	0.0	0.0	0.0	np	1.1	np	np
2003–04	np	np	0.0	0.0	0.0	np	2.2	3.5	5.7
2004–05	np	np	0.0	0.0	0.0	np	np	4.0	8.1
2005–06	np	np	0.0	0.0	0.0	35.7	np	8.5	np
2006–07	np	np	0.0	0.0	0.0	52.0	np	6.1	np
2007–08	0.0	np	0.0	0.0	0.0	[f] 34.4	14.3	np	5.4
2008–09	np	np	0.0	0.0	0.0	np	np	[f] 10.3	[f] 3.2
2009–10	0.0	np	0.0	0.0	0.0	39.1	np	5.8	np
2010–11	0.0	[f] 3.7	0.0	0.0	0.0	37.6	40.6	6.6	3.8
2011–12	0.0	8.4	0.0	0.0	0.0	42.4	39.8	np	2.5
2012–13	0.0	2.0	0.0	0.0	0.0	42.0	np	np	1.0
2013–14	0.0	np	0.0	0.0	0.0	23.0	np	np	0.0
2014–15	0.0	np	0.0	0.0	0.0	16.0	47.0	3.0	4.0

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[16] See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

Table W 3.13h Gross value of irrigated agricultural production, by agricultural activity, experimental estimates—Australia

Financial year	Dairy production	Livestock, pasture, grains and other[16]	Rice	Cotton	Sugar	Fruit (and nuts from 2012–13)	Vegetables for human consumption	Nurseries, cut flowers and turf	Grapes
					$ million				
2001–02	1 891.2	1 591.1	326.8	1 283.1	471.5	1 644.1	1 593.2	505.3	1 384.1
2002–03	1 505.5	1 598.1	152.5	[f] 834.3	406.9	1 682.6	1 532.7	467.9	1 142.7
2003–04	1 627.4	1 858.6	179.8	658.1	405.5	1 779.2	1 856.8	588.0	1 482.2
2004–05	1 802.5	1 596.2	100.6	[f] 908.1	459.9	1 948.8	1 741.3	651.0	1 361.9
2005–06	1 877.7	np	273.7	869.8	496.9	2 137.2	2 453.2	1 165.9	1 251.5
2006–07	1 697.1	np	f 55.0	485.8	583.1	2 913.2	2 677.9	1 187.4	1 040.5
2007–08	2 288.8	np	7.3	208.1	451.6	2 291.9	2 971.9	1 171.8	1 597.2
2008–09	2 273.8	1 289.3	f 34.5	620.3	537.1	2 389.6	2 624.9	982.8	1 200.4
2009–10	1 825.6	1 420.4	89.9	664.3	750.4	2 242.3	2 385.8	1 036.5	1 069.5
2010–11	2 143.3	1450.6	173.6	1 566.2	374.2	2 522.9	2 878.1	908.6	928.6
2011–12	2 055.4	1 368.2	[f] 248.1	2 155.3	645.9	2 428.6	2 630.5	893.7	971.5
2012–13	1 908.0	[f] 1 236.0	[f] 302.0	1 789.0	599.0	2 801.0	2 745.5	824.6	1 074.0
2013–14	2 743.0	[f] 1 903.0	[f] 276.0	1 944.0	640.0	2 717.0	2 525.0	731.0	909.0
2014–15	2 831.0	2 677.0	[f] 273.0	907.0	737.0	2 882.0	2 676.0	833.0	1 027.0

[f] Estimate has a relative standard error of 10% to less than 25% and should be used with caution.
[16] See end notes Table W 3.10.
np: Not available for publication, but included in totals where applicable, unless otherwise indicated.
Source: ABS (2017b).

CHAPTER 4
Health and emissions

Table W 4.1 Urban Water quality—percentage of population in zones where compliance with microbiological standards was achieved, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
2005–06	99.96	99.80		100.00	100.00		100.00	100.00
2006–07	99.92	99.80		100.00	100.00		100.00	100.00
2007–08	99.59	99.97		100.00	100.00		100.00	100.00
2008–09	99.98	99.97		100.00	100.00		100.00	100.00
2009–10	99.99	100.00	99.10		100.00		100.00	100.00
2010–11	99.97	99.92	99.84	100.00	100.00		100.00	100.00
2011–12	99.99	99.98	99.99	100.00	100.00		100.00	100.00
2012–13	99.80	100.00	100.00	100.00	100.00		100.00	100.00
2013–14	100.00	99.99	100.00	100.00	100.00	99.00	100.00	100.00
2014–15	100.00	100.00	100.00	100.00	100.00	98.60	100.00	100.00
2015–16	100.00	99.60	100.00	100.00	100.00	99.20	100.00	100.00

Note: Data are not readily available for missing years.
Urban Water utilities refer to water utilities with over 10 000 connections.
Source: BOM (2017b).

Table W 4.2a Water quality—number of urban zones where microbiological compliance was achieved, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2005–06	82	334		8	35		4	4
2006–07	79	395		7	35		4	4
2007–08	86	398		7	35		2	4
2008–09	95	422		7	41		1	4
2009–10	91	433		0	36		3	3
2010–11	97	426		7	36		3	4
2011–12	102	418		5	37		3	4
2012–13	110	455		8	37		3	4
2013–14	112	437		64	37	75	3	4
2014–15	111	461		63	37	70	3	4

Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 4.2b Water quality—number of urban zones where microbiological compliance was measured, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2005–06	98	370		8	35	.	4	4
2006–07	97	431		8	35	.	7	4
2007–08	97	434		8	35	.	9	4
2008–09	103	463		8	41	.	3	4
2009–10	104	461		.	36	.	3	4
2010–11	102	475		8	36	.	3	4
2011–12	104	427		8	37	.	3	4
2012–13	113	465		10	37	.	3	4
2013–14	113	439		70	37	88	3	4
2014–15	111	470		68	37	88	3	4

Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 4.2c Water quality—percentage of urban zones where microbiological compliance achieved, by state/territory

Financial year	NSW	VIC	QLD	SA	WA	TAS[2]	NT	ACT
2005–06	83.7	90.3		100.0	100.0		100.0	100.0
2006–07	81.4	91.6		87.5	100.0		57.1	100.0
2007–08	88.7	91.7		87.5	100.0		22.2	100.0
2008–09	92.2	91.1		87.5	100.0		33.3	100.0
2009–10	87.5	93.9			100.0		100.0	75.0
2010–11	95.1	89.7		87.5	100.0		100.0	100.0
2011–12	98.1	97.9		62.5	100.0		100.0	100.0
2012–13	97.3	97.8		80.0	100.0		100.0	100.0
2013–14	99.1	99.5		91.4	100.0	85.2	100.0	100.0
2014–15	100.0	98.1		92.6	100.0	79.5	100.0	100.0

Note: Data are not readily available for missing years.
Source: BOM (2017b).

Table W 4.3a Energy emissions—wastewater handling greenhouse gas (carbon dioxide equivalent) net emissions,[a] by state or territory—from industrial wastewater

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT
			gigagrams of CO_2 equivalent				
1990	636.5	685.1	546.9	234.8	168.8	73.7	3.7
1991	623.3	673.9	530.7	228.2	164.7	71.1	3.7
1992	603.5	656.5	509.5	219.9	159.1	68.2	3.6
1993	576.6	633.2	488.0	209.7	151.8	64.9	3.5
1994	556.9	618.7	469.1	201.2	146.0	61.8	3.4
1995	518.2	580.5	438.5	186.4	135.5	57.0	3.1
1996	474.5	539.4	403.0	169.8	123.6	51.6	2.9
1997	449.4	518.6	375.4	157.1	115.8	46.6	2.8
1998	420.3	491.1	354.0	146.7	108.0	43.4	2.6
1999	400.1	475.7	335.9	138.7	102.5	40.7	2.5
2000	382.8	461.7	325.2	133.1	98.0	39.1	2.4
2001	422.9	499.1	359.3	152.8	109.2	44.8	2.6
2002	400.9	481.7	340.2	152.7	102.9	41.6	2.5
2003	361.9	436.1	310.1	139.5	92.2	36.6	2.3
2004	367.8	440.4	314.6	142.8	93.7	37.2	2.3
2005	368.5	441.3	313.9	144.6	93.8	37.3	2.3
2006	370.0	443.0	308.7	144.5	94.1	37.2	2.3
2007	376.9	446.8	314.3	142.6	95.9	37.9	2.4
2008	375.4	442.9	313.4	145.9	95.5	37.7	2.4
2009	370.2	451.9	343.0	119.2	88.0	36.6	2.0
2010	349.2	399.2	347.3	104.3	80.6	32.6	1.8
2011	402.3	349.4	312.5	92.3	71.5	27.3	1.5
2012	337.5	312.0	361.2	84.7	70.3	25.3	1.4
2013	380.3	336.7	456.1	124.1	84.4	29.2	1.6
2014	354.0	331.3	396.7	119.7	91.9	30.4	1.6
2015	300.9	288.4	306.8	93.2	69.6	23.6	nr

[a] See end notes

Source: Environment (2017).

Table W 4.3b Water emissions—wastewater treatment and discharge greenhouse gas (carbon dioxide equivalent) net emissions,[a] by state or territory—from domestic wastewater, sewered population

Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT
			gigagrams of CO_2 equivalent				
1990	507.3	724.9	223.9	77.1	152.7	73.3	18.6
1991	532.4	688.6	243.3	83.6	224.9	73.9	18.6
1992	537.0	703.9	247.2	82.4	221.3	74.6	18.3
1993	540.4	717.9	251.8	80.9	217.2	75.0	18.7
1994	540.7	727.8	255.6	78.6	212.3	75.0	18.4
1995	542.1	739.3	259.0	76.4	208.1	75.0	18.3
1996	548.9	756.5	264.6	75.0	205.2	75.2	18.2
1997	559.2	776.8	271.0	74.6	203.0	75.6	18.2
1998	564.1	793.5	274.1	73.2	198.9	75.5	17.9
1999	574.2	801.5	277.9	74.1	201.9	75.3	18.6
2000	581.3	431.1	282.0	74.5	204.7	75.2	18.7
2001	588.7	436.5	286.5	74.6	207.3	75.1	19.0
2002	596.5	442.0	292.7	75.4	184.5	75.1	19.1
2003	601.0	447.3	300.4	75.9	172.8	75.5	19.2
2004	605.2	452.6	307.2	76.4	176.0	76.3	19.1
2005	609.3	457.2	313.0	76.6	178.4	76.9	19.3
2006	631.5	466.9	324.8	77.5	183.3	77.7	20.1
2007	639.6	475.0	332.8	78.2	187.9	78.2	20.5
2008	670.0	494.8	335.5	80.1	189.1	78.9	21.0
2009	686.5	486.9	364.6	52.7	173.7	78.6	20.9
2010	713.7	538.4	329.4	66.9	250.9	77.7	19.3
2011	742.9	436.9	321.5	86.9	172.2	78.1	21.1
2012	612.8	229.3	325.7	88.0	197.9	79.0	19.8
2013	500.6	258.0	298.5	59.9	135.2	58.4	15.3
2014	710.3	270.2	316.1	75.0	86.0	54.2	16.7
2015	757.8	330.7	327.7	77.1	91.8	35.3	nr

[a] See end notes.

Source: Environment (2017).

Table W 4.3c Water emissions—wastewater treatment and discharge greenhouse gas (carbon dioxide equivalent) net emissions,[a] by state or territory—from domestic wastewater, unsewered population

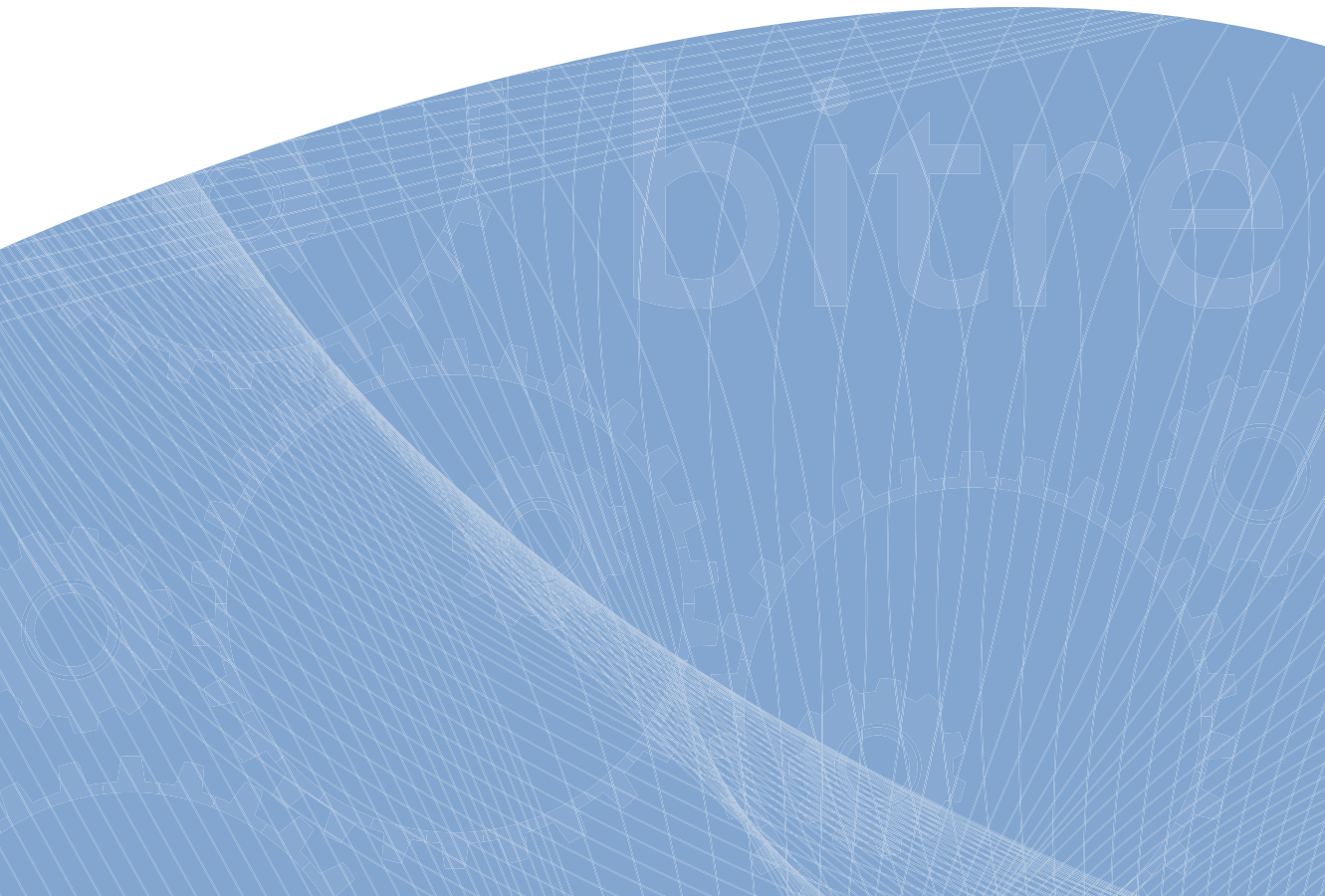
Calendar year	NSW	VIC	QLD	SA	WA	TAS	NT
			gigagrams of CO_2 equivalent				
1990	16.0	59.2	59.2	14.4	31.7	31.7	3.0
1991	15.4	54.8	54.8	12.9	28.9	28.9	2.7
1992	14.8	50.1	50.1	11.3	26.0	26.0	2.3
1993	14.1	45.2	45.2	9.6	22.8	22.8	2.1
1994	13.4	40.1	40.1	7.9	19.7	19.7	1.7
1995	12.7	35.0	35.0	6.2	16.4	16.4	1.3
1996	12.1	30.0	30.0	4.4	13.2	13.2	0.9
1997	11.4	24.9	24.9	2.7	9.7	9.7	0.5
1998	10.7	19.7	19.7	1.0	6.2	6.2	
1999	10.6	19.6	19.6	1.6	6.2	6.2	0.4
2000	10.9	19.4	19.4	1.7	6.4	6.4	0.4
2001	11.2	16.4	16.4	1.7	6.4	6.4	0.5
2002	11.7	14.9	14.9	2.3	6.5	6.5	0.6
2003	11.7	15.0	15.0	2.3	6.6	6.6	0.7
2004	11.5	15.0	15.0	2.5	6.8	6.8	0.7
2005	11.6	15.1	15.1	2.6	6.9	6.9	0.7
2006	11.7	15.5	15.5	2.6	7.2	7.2	0.7
2007	11.8	15.8	15.8	2.6	7.3	7.3	0.7
2008	12.0	16.1	16.1	2.7	7.6	7.6	0.7
2009	12.2	16.5	16.5	2.7	7.8	7.8	0.7
2010	12.4	16.8	16.8	2.7	8.0	8.0	0.8
2011	12.3	16.8	16.8	2.7	8.2	8.2	0.8
2012	12.5	17.8	17.8	2.8	8.5	8.5	0.8
2013	12.1	15.4	15.4	2.7	7.9	7.9	0.7
2014	12.5	16.4	16.4	2.7	8.3	8.3	0.8
2015	12.6	16.4	11.1	2.7	8.4	4.9	nr

[a] See end notes.

Note: For years where data are missing, emissions are either not estimated, included elsewhere or are not occurring.

Source: Environment (2017).

End notes and definitions



End notes and definitions

This publication presents annual estimates of activity related to major Australian economic infrastructure (transport, energy, communication and water infrastructure). These estimates are compiled from a range of sources. Where possible, statistics are presented on a financial year basis (year ended 30 June). Throughout this publication, end notes are numbered consecutively within each part. To avoid duplication, an end note is explained under the heading of the table in which it first occurs.

Part 1 Infrastructure and the economy

Industry statistics provided in this publication are based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) (Australian Bureau of Statistics 2008). Industry classification is allocated to businesses based on each business' predominant activity. As such, there is a distinct difference between industry statistics and activity statistics. For example, road transport gross value added is a measure of the economic production of Australian businesses for which the provision of road transport services is the major activity. Road transportation services provided by businesses classified to other industries (e.g. delivery services provided by the retail industry) are not included in these estimates and conversely, non–transportation activities undertaken by businesses classified to the road transport industry are included in these estimates.

Table 1 1.1

Gross value added is the value of output at basic prices minus the value of intermediate consumption at purchasers' prices. Gross value added is a measure of the contribution to gross domestic product by industry and by sector.

1. Chain volume measures are an application of the Consumer Price Index based on a reference year. Changes to current price production measures may be due to either price or volume changes. Chain volume measures are provided to allow analysis of variations in production volumes; however, component chain volume measures do not sum to a total in the way original current price components do.
2. Gross value added at basic values represents the amounts received by producers (including the value of any subsidies on products) but before any taxes on products. The difference between the sum over all industries of gross value added at basic prices and Gross Domestic Product at market (or purchasers') prices is the value of taxes less subsidies on products.
3. Water transport is included in the estimate under rail, pipeline and other transport industry.

Table I 1.2

Table I 1.2 provides estimates for total employment by major infrastructure industries in August each year, including both full–time and part–time employment. Total Transport and Storage employment includes some employees with no industry subdivision defined.

4. From 1986, the definition of employed persons was changed to include persons who worked without pay between 1 and 14 hours per week in a family business or on a farm (i.e. contributing family workers).

Table I 1.3

Average weekly earnings statistics provide an estimate of the average weekly income of wage and salary earners in key infrastructure industries. The estimates reflect the overall level of earnings of employees and the changes in the composition of the infrastructure industries' workforce (e.g. changes to the proportions of full-time, part-time and casual employees and changes to the proportions of occupations over time).

The Australian Bureau of Statistics (ABS) compiles average weekly earnings statistics on a quarterly basis in the Survey of Average Weekly Earnings and on a biennial basis in more detail in the Survey of Employee Earnings and Hours. The Australian Infrastructure Statistics Yearbook provides data sourced from the Survey of Employee Earnings and Hours as the Survey of Average Weekly Earnings does not provide adequate industry detail.

5. Estimates of average weekly earnings in Table I 1.3 exclude amounts salary sacrificed (the collection of salary sacrifice amounts are a relatively recent addition to the survey). Average weekly earnings represent gross earnings (before tax, superannuation and other items are deducted).
6. Caution should be exercised when comparing data across years. The Survey of Employee Earnings and Hours is not designed as a time series. In addition, the industry classification used in compiling average weekly earnings statistics changed in 2008. Earlier industry estimates were based on the 1993 version of ANZSIC, while the 2008 estimate was compiled based on an updated (2006) version of ANZSIC.

Estimates are compiled from a sample survey of employers and are subject to sampling variability. Table I 1.3 includes a number of estimates that are subject to high relative standard errors (greater than 25 per cent).

Table I 1.4

The indexes provided in Table I 1.4 relate to the prices received by businesses classified to major infrastructure industries. For the transport industry, indexes are only available for freight transport and storage services. Indexes for prices received by businesses providing passenger transport services are not currently available from the ABS.

Index numbers for financial years are simple averages of the four relevant quarterly index numbers.

Table I 1.5

State and territory population estimates are classified by capital city and rest of state on the last day of the financial year (30 June). Population estimates are based on census counts for census years. The estimates are derived and updated by adding estimates of natural increase and net overseas migration. After each census, population estimates are revised to remove discrepancies between census outcomes. In 2013, the ABS conducted a one-off exercise to revise (recast) population estimates for a longer time period back to 1991.

7. ACT capital city data include Queanbeyan (NSW) for the period 1971 to 1990.
8. Excludes Jervis Bay Territory from June 1994.
9. Data for 1991 to 1995 are based on 2001 Australian Standard Geographical Classification (ASGC) boundaries.
10. Data for 1995–96 onwards are based on 2006 Australian Standard Geographical Classification boundaries.
11. In June 2011 the ABS replaced the nation's official statistical geography, the ASGC with the new Australian Statistical Geography Standard (ASGS).
12. Rest of state estimates are calculated by subtracting the capital city population from the corresponding state/territory total population.

Table I 1.6

Table I 1.6 provides a number of measures of economic activity that may influence Australian infrastructure activity. Goods exports and goods imports figures provide measures of the flow of physical goods into and out of Australia, over the full financial year. The Consumer Price Index provides a measure of annual changes in the price of consumer goods for the June quarter of each financial year, while exchange rate and interest rate data were measured in respect of the last day of the financial year (30 June).

13. The exchange rate data provided represent the $US value of one Australian dollar.
14. The interest rate provided is the 90 day bank accepted bill rate at the close of trading at the end of the financial year (30 June).

Table I 2.1

Table I 2.1 provides estimates of engineering construction work done on major economic infrastructure by both private and public sector organisations. Estimates exclude the cost of land; the cost of repair and maintenance activity; the construction of buildings; the value of transfers of existing assets; the value of installed machinery and equipment not integral to the structure; and expenses for relocation of utility services.

Statistics are provided for the sector providing engineering construction services and the sector that is expected to own the project at the time of completion. Thus, statistics for work done by the private sector for the public sector summarise the work done by private sector engineering construction companies on projects that are owned by the public sector at the time of completion. When a project is undertaken as a Private Public Partnership (PPP) or similar arrangement, it is classified according to the expected ownership of the project at

completion. PPPs may be classified as private sector even if ownership eventually resides with the public sector.

ABS provides both current price and chain volume measures for the value of engineering construction work done by the private sector for the private sector; by the private sector for the public sector; and by the public sector. Deflators for these chain volume measures were calculated by BITRE and applied to estimates for transport construction to create approximate volume adjusted estimates for transport engineering construction.

Part T Transport infrastructure

Table T 1.1

Table T 1.1 provides estimates of engineering construction work done on transport infrastructure, providing transport detail to the data provided in Table 1 2.1. Estimates for the construction of airport runways are included in the roads and bridges measure.

Table T 1.2

BITRE prepares estimates of road expenditure based on unpublished ABS Government Finance Statistics (GFS) data and internal Department of Infrastructure and Regional Development data. There have been a number of methodological changes in the compilation of estimates over time, with the most significant being the ABS adoption of accrual-based accounting for GFS in 1998–99. Tables T 1.2a to T 1.2d aim to provide estimates of construction and maintenance expenditure by each jurisdiction on road infrastructure by:

- each level of government, net of identified road-specific contributions from other levels of Government
- the non-public sector; and
- national aggregates for the Non-financial Public Sector which includes expenditure by Public Non-Financial Corporations (PNFC).

The total public sector includes government expenditure and PNFC. Total government includes expenditure by departments of the Commonwealth Government, State governments and Local Government. It also includes agencies and government authorities under the departmental administration which are engaged in the provision of public administration, defence, law enforcement, welfare, public education and health. Also included are non-departmental bodies which independently perform the government functions of regulation (e.g. Nurses Registration Boards and the Australian Maritime Safety Authority), provision of non-market services (e.g. the Australian Broadcasting Corporation) and redistribution of income. Some of these bodies may be called 'corporations', but they are still considered part of the government sector if they perform general government functions. Public universities are also considered part of the government sector.

Enterprises in the PNFC sector differ from those in the government sector in that their production costs are more likely to be recovered from consumers, rather than being financed from the general taxation revenue of government. Some enterprises, however, do receive subsidies to make up for shortfalls incurred as a result of government policy, for example, in the provision of 'community service obligations' at concessional rates.

All the categories identified below relate to road construction and maintenance expenditure. The GFS Government Purpose Classification (GPC) code 121, employee expenses, is used for state government road expenditure. From the 2014 issue of the Yearbook onwards, GPC 1219, Other employee expenses [Road transport n.e.c. (not elsewhere classified)] is included in the calculation. Economic Type Framework (ETF) category 2221, Purchase of new non-financial assets, is included (ABS 2017h). GPC 1211, Aboriginal community road transport services is excluded from the calculation. The excluded GFS expenses categories are 123, Depreciation and amortisation, and 126, Property expenses. Road expenditure estimates presented here exclude payments from the Attorney General's Department through the Natural Disaster Relief and Recovery Arrangement (NDRRA), on advice from the Attorney General's Department that "the NDRRA does not fund road/bridge maintenance, rather it reimburses for replacement or restoration post a disaster".

Transfers of funding from Commonwealth to Local governments are netted out using data on Commonwealth road programs, and transfers of funding from State/Territory governments to Local government are netted out based on an estimate of such transfers from the GFS.

There have been two significant revisions to the methodology for this edition of the Yearbook, which impact the figures for Local Government and total road expenditure. The revisions have been applied to the full series back to 1998–99.

- In previous editions of the Yearbook, and in BITRE's separate publications on road-related expenditure, transfers from State/Territory governments were not netted out of Local Government expenditure (except for those for which funding originated from the Commonwealth). This resulted in double counting, as these grants were assigned to both to Local Governments and to states. For this issue of Australian Infrastructure Statistics Yearbook, figures have been revised to adjust for state grants to local governments, also derived from the GFS.
- An additional change in methodology for the 2017 edition is in the treatment of Financial Assistance Grants to local governments. Previously, it had been assumed that these were captured in transfer payment codes in the GFS, and so were fully netted out of State and Local Government expenditure. For this edition, for states where the total transfer payments in the GFS are less than the Financial Assistance Grants to that state (in a particular year), it has been assumed that none of the Financial Assistance Grants value was included in the GFS for that state, and the State and Local Government figures have both been revised upward by this amount (i.e., those grants are no longer netted off the State and Local Government figures).

Table A.1 shows the impact of the revisions in the State and Local Government totals, as well as in the total across all levels of government.

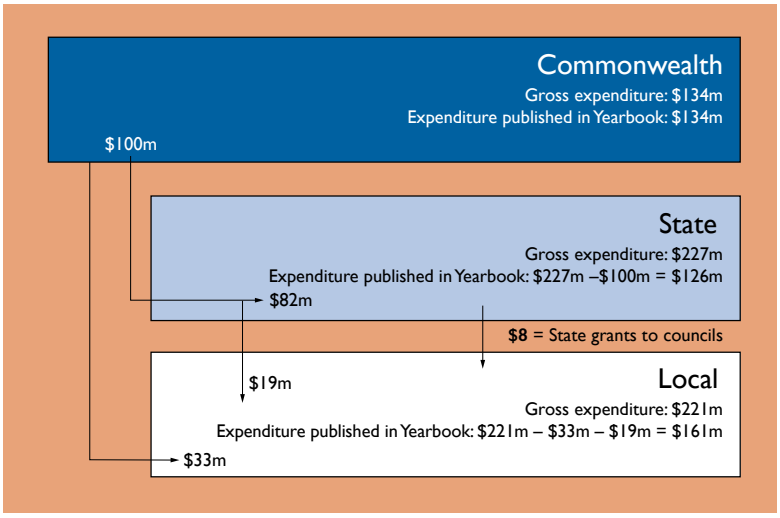
Table A.1 Impact of revisions to road expenditure figures in Table T1.2 (2015–16 prices)

Financial year	$ million				% difference			
	Common-wealth	State	Local government	Total government	Common-wealth	State	Local government	Total government
1998–99	-1.0	152.1	-287.1	-135.9	0.0%	2.0%	-5.5%	-0.9%
1999–00	-0.6	182.5	-679.8	-498.0	0.0%	2.3%	-13.0%	-3.2%
2000–01	-1.4	152.1	-617.0	-466.3	-0.1%	1.6%	-13.1%	-2.9%
2001–02	-2.0	252.2	-414.3	-164.1	-0.1%	3.0%	-8.6%	-1.0%
2002–03	-2.4	266.1	-420.5	-156.8	-0.1%	3.4%	-8.9%	-1.1%
2003–04	-1.3	298.0	-377.6	-81.0	-0.1%	4.0%	-8.3%	-0.6%
2004–05	0.5	330.0	-497.2	-166.7	0.0%	4.1%	-11.5%	-1.1%
2005–06	-2.7	216.4	-315.4	-101.7	-0.1%	3.5%	-7.9%	-0.7%
2006–07	-1.0	353.7	-550.1	-197.5	0.0%	3.7%	-13.0%	-1.1%
2007–08	0.2	368.1	-629.5	-261.2	0.0%	3.1%	-12.5%	-1.3%
2008–09	9.9	465.7	-440.1	35.5	0.2%	4.0%	-8.0%	0.2%
2009–10	-1.2	375.6	-281.4	93.1	0.0%	3.3%	-5.6%	0.4%
2010–11	-1.2	241.3	-358.9	-118.8	0.0%	1.9%	-6.2%	-0.5%
2011–12	-2.2	313.6	-928.0	-616.5	0.0%	3.0%	-17.0%	-2.6%
2012–13	1.7	238.0	-1304.2	-1064.5	0.0%	1.6%	-22.9%	-4.4%
2013–14	-1.0	146.4	-1707.2	-1561.9	0.0%	1.1%	-31.7%	-6.5%
2014–15	0.0	32.8	-924.1	-891.3	0.0%	0.3%	-17.1%	-3.9%

Source: BITRE estimates.

The schematic diagram below represents the flows of road funding expenditure diagrammatically, with figures for Tasmania in 2015–16. It highlights the flows of funds between different levels of government, and how these relates to the figures in our Yearbook.

Figure A.1 Schematic representation of flow of road expenditure funds for 2015–16 (Tasmania)



Source: BITRE estimates based on ABS data provided for the Yearbook in 2017.

Estimates adjusted for inflation and are presented at constant 2015–16 prices calculated using the Consumer Price Index with June quarter 2016 as the base period. Use of CPI is consistent with Treasury's approach in budget paper since 2008–09, as well as the Intergenerational Report. According to Treasury "the change from using the non-farm GDP deflator to the CPI provides a more accurate depiction of real government spending growth." This is due to volatility in the non-farm GDP deflator, driven by commodity price fluctuations (Treasury, 2016, 2008).

Table T 1.3

Table T 1.3 provides estimates of road expenditure adjusted by BITRE Road Construction and Maintenance Price Index 2016. It shows road expenditure in real terms as experienced by suppliers of road construction and maintenance services in Australia.

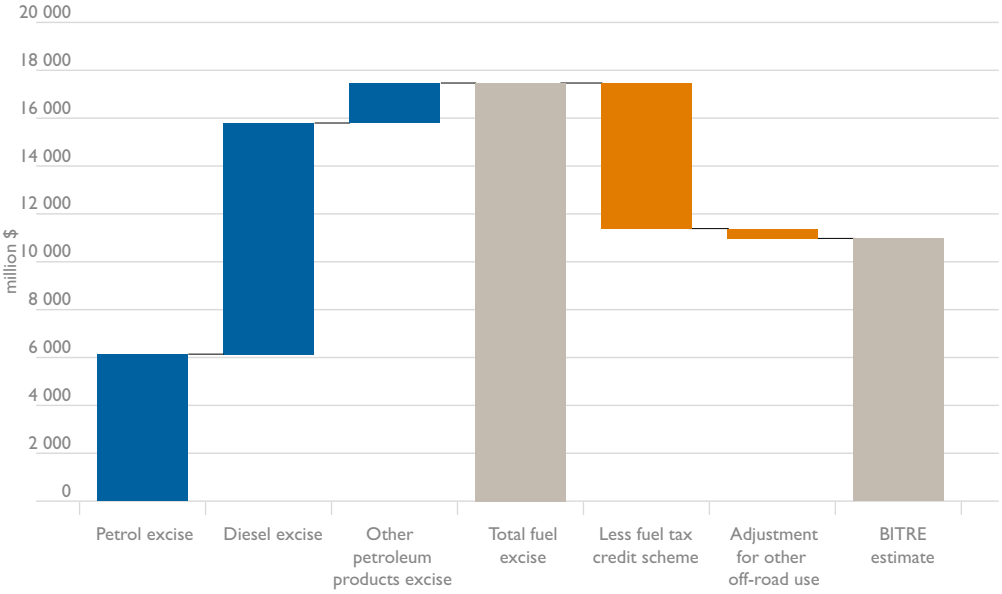
Table T 1.4

This table provides estimates of selected road-related taxes and charges in constant 2015–16 prices, adjusted by ABS Consumer Price Index (ABS 2017e). The following Commonwealth taxes and charges are included in the table:

- Net road-related petroleum products excise
- Road-related Goods and Service Tax (GST)
- Road-related Fringe Benefits Tax (FBT)
- Luxury car tax
- Passenger motor vehicles customs duty

Estimates of the road-related component of petroleum products excise are based on a combination of sources including Australian Taxation Office's (ATO) Taxation Statistics (ATO 2017b) and Commonwealth budget papers. The figures are net of rebates to industry through the Fuel Tax Credit Scheme and are modified using ABS survey of motor vehicle usage to net out excise on products for other off-road fuel use (including non-business use which is not eligible for rebates). Figure A.2 shows how the estimates of the road-related component relate to the total petrol and diesel excise revenue, as published by the ATO. Note that other components' excise, including on crude and condensate production, are not included.

Figure A 2 Composition of BITRE estimate of net road-related petroleum products excise, 2015–16



Source: ATO 2017b, BITRE estimates.

Federal Interstate Registration Scheme revenues are sourced from Department of Infrastructure and Regional Development's internal records.

Total road-related GST figures are sourced directly from the ATO, and are calculated as the sum of net GST for the relevant Business Industry Codes. Items included are Motor vehicle retailing, Motor vehicle parts retailing, Fuel retailing, Road freight transport, Road passenger transport, Other transport support services, Motor vehicle and transport equipment rental and hiring, Automotive repair and maintenance and Car park operations. Net GST for Motor vehicle insurance, Toll road operation and Driver training are excluded. It is not possible to extract the GST from their Business Industry Codes which include other non road-related items.

The total road-related FBT estimates are based on available data in ATO's Taxation Statistics publication. It is calculated as the difference between FBT payable for motor vehicles and the associated FBT rebates.

Luxury car tax (LCT) is a tax imposed on luxury cars, which is a car with a GST-inclusive value above the LCT threshold. Luxury car tax is collected when a luxury car is sold or imported, and the data series is sourced from ATO's Taxation Statistics publication. Customs duty is payable when passenger motor vehicles are imported into Australia, and data series is sourced from Australian Government's budgets and Treasury's internal records.

State and Territory Government road-related revenues include vehicle registration fees, driver license fees and stamp duty on vehicles. They are based on data supplied by relevant state and territory road agencies.

The time series on tolls is constructed from annual reports of various toll road operators such as Transurban. Where possible, information on total toll revenue collected is used, exclusive of GST. However, in many cases it is not possible to conclusively determine whether the figures presented in different companies' annual reports are comparable or not. This is an inherent limitation of this data.

Table T 1.5

The National Transport Commission (NTC) obtains arterial road construction and maintenance expenditure estimates from states and territories for the most recent financial year. This data is used in the annual adjustment procedure for heavy vehicle charges. The figures presented in Table T 1.5 are the arterial road and bridge maintenance expenditure estimates provided by each state and territory for the 2015–16 financial year, excluding Commonwealth-funded National Disaster Relief and Recovery Arrangements road expenditure and insurance-related expenditure as approved by transport ministers.

The definition of arterial roads used by the NTC differs from that used in Table T 1.6. The following table, provided by the NTC, lists the road classification types used in each state and territory for arterial roads:

Table A 2 Road classification types included in NTC definition of Arterial Roads.

NSW	State roads and regional roads.
Victoria	All State declared roads, i.e. Freeways, State Highways, Tourists' Roads, Forest Roads and Main Roads.
Queensland	National Network, State Strategic Roads, Regional Roads and some District Roads.
South Australia	NAASRA (Austroads) Classes 1 to 3 and 6 and 7 are considered arterials.
Western Australia	NAASRA (Austroads) Classes 1 to 3 and 6 and 7 are considered arterials.
	In applying the NAASRA classifications, a Key Town is defined as having a dominating influence over the surrounding region, with a population greater than 5 000 in agricultural areas or 3 000 in pastoral or arid areas.
	An Important Centre is defined as a town with a population greater than 500, or other significant traffic generator (e.g. mining development).
Tasmania	Category 1, Category 2 and Category 3 roads. (These are equivalent to NAASRA Functional Classes 1, 2 and 3 roads, but with definitions specific for Tasmania based on traffic levels and freight values).
Northern Territory	NAASRA (Austroads) Classes 1, 2, 3 and 7. * Note currently the NT has no class 2 roads.
ACT	NAASRA (Austroads) Functional Classes 1 to 3, 6 and 7 (including sub-arterial roads).

Source: NTC (2016b).

Road and bridge maintenance expenditure is calculated as the sum of the relevant road expenditure categories:

Road and bridge maintenance expenditure =
B1 Routine maintenance +
B2 Periodic surface maintenance of sealed roads +
C Bridge maintenance & rehabilitation +
D Road rehabilitation

Estimates are adjusted for inflation and presented at constant 2015–16 prices calculated using the BITRE Road Construction and Maintenance Price Index—Road maintenance sub-index. The 2015-16 index value was based on final values for seven of the eight RCMPI inputs. The bituminous materials component was estimated based on changes to petroleum prices over the same period.

Table T 1.6

1. Lengths are derived from the digital PSMA road layer centrelines and are estimates only. Changes to PSMA data from year to year, including but not limited to resolution and classification schema, may cause discontinuities in the series.
2. State boundaries are derived from the 2011 Australian Statistical Geography Standard (ASGS) (ABS, 2010). Urban/non-urban estimates are based on ASGS Significant Urban Areas.
3. Busway lengths are not available for 2010 and 2011 because PSMA did not classify 'Busway' as a road type until 2012. Small variations in busway lengths year on year may reflect re-classification of some segments such as interchanges.
4. Reported road lengths represent approximate total route-kilometres. Dual carriageway section lengths are the approximate length of the centreline between each carriageway. PSMA data was used to determine dual carriageway lengths for New South Wales, Victoria, South Australia, Tasmania and the Australian Capital Territory. Due to limitations in the PSMA data, OpenStreetMap data was used to estimate dual carriageway lengths for Queensland and Western Australia. Dual carriageway estimates derived from OpenStreetMap data are typically larger than equivalent PSMA estimates, and may vary more from year to year. Estimation of dual carriageway length was not necessary for Northern Territory or Other Territories.
5. Arterial and local roads are defined based on PSMA classifications, as based on the function roads play within the hierarchy of the road system. The definition of arterial roads differs from the definition used in Table T 1.5, and also will not in general be the same as in each State Government's classification. The definition of local roads differs from 'LGA-managed roads', the definition more commonly used by state and local road authorities, the Australian Local Government Association (ALGA) and previous BITRE publications.
6. Roads designated as either 'access only', of undetermined type, for non-vehicular use, or which are not openly accessible to the public (limited-access) are excluded from the road length counts. These include fire trails, forestry roads, military roads, agricultural and mining access and haulage roads, private driveways, bike paths and walking trails. Busways

are a special case: limited-access busways are included. Tollways are not considered to be limited-access roads.

7. The proportion of limited-access roads is determined from PSMA data in 2012 and 2013; an estimate is used for 2010 and 2011.

8. The decline in total road length in 2012 and 2013 is driven by a reclassification of several Queensland local roads as 'Undetermined', excluding them from the count. This effect reduced Queensland's non-urban local road total by an estimated 1,100 kilometres in 2011 (relative to 2010), a further 1,900 kilometres in 2012, and another 3,500 kilometres in 2013. This trend has continued at a reduced rate in subsequent years, with an estimated 350 kilometres reclassified in 2014, and 400 kilometres in 2015, for a cumulative total of approximately 7,250 kilometres in the period 2010–2015. Western Australia sees a similar pattern in the latest two years, with an estimated 350 kilometres of local roads excluded in 2014 (relative to 2013) and an additional 400 kilometres in 2015.

Table T 1.7

Table T 1.7 includes a mix of indexes from ABS and BITRE sources.

The ABS Producer Price Indexes presented here are the price of road construction facing the project owners (primarily governments), i.e. the price that road construction companies sell their services. In contrast, the BITRE RCMPI is a weighted average of input costs facing construction companies.

ABS Producer Price Indexes (ABS 2017e) for Australian road and bridge construction commence in September 1997 (base of index 2011–12 = 100), with state data only available from September 1998 for New South Wales, Victoria, Queensland, South Australia and Western Australia. The ABS does not publish road and bridge construction indexes for Tasmania, the Northern Territory or the Australian Capital Territory. The ABS Producer Price Index series is provided quarterly. Estimates provided in Table T 1.7 are a mean of the four relevant quarters. The 2016-17 BITRE index is preliminary, based on final values for seven of the eight RCMPI inputs. The June 2017 quarter bituminous materials component was estimated based on changes to petroleum prices over the same period.

Table T 1.8

From the 2014 issue of the Yearbook onwards BITRE publishes estimates of expenditure on rail infrastructure based on unpublished ABS Government Finance Statistics (GFS) data and internal Department of Infrastructure and Regional Development data. Tables T 1.8a to T 1.8c provide estimates of construction and maintenance expenditure on railway infrastructure:

- by Commonwealth and State/Territory government net of rail-specific grants from other levels of government; and
- national aggregates for the Non-financial Public Sector which includes expenditure by Public Non-Financial Corporations (PNFC). An example of a PNFC included in the rail expenditure aggregate is the Australian Rail Track Corporation (ARTC). These corporations may fund expenditure from their own revenue sources, such as fares or access charges.

It should be noted that in state expenditure table T 1.8b the difference between the expenditure totals for Non-financial Public Sector and General Government (GG) will not equal the expenditure total for Public Non-Financial Corporations, due to the existence of payments between General Government and Public Non-Financial Corporations. The sum of Public Corporations and Total Government in Table T 1.8c will not add to Total Public Sector for the same reason. Table T 1.8b, which presents net state rail expenditure, contains some negative values. This is due to some mismatch between Commonwealth expenditure, and reported state expenditure from the ABS GFS. Issues include some state expenditure being reported under GPC code 128 (Other Transport) which includes GPC 1281 (Multi-model Urban Transport).

Estimates adjusted for inflation and are presented at constant 2015–16 prices calculated using the Consumer Price Index with June quarter 2015 as the base period. Issues of BITRE's Australian Infrastructure Statistics Yearbook prior to 2016 used non-farm GDP deflator to adjust for price. This has been replaced with Consumer Price Index. This is consistent with Treasury's approach in budget papers since 2008-09, as well as the Intergenerational Report. According to Treasury "the change from using the non-farm GDP deflator to the CPI provides a more accurate depiction of real government spending growth." This is due to volatility in the non-farm GDP deflator, driven by commodity price fluctuations (Treasury, 2016, 2008).

Domestic freight transport

Tonne kilometres (TKM) is a measure of freight task. It is measured as the number of tonnes moved by a vehicle multiplied by the distance the load travelled in kilometres. Individual trips are aggregated to provide estimates for total TKM by mode.

Road Freight

The aggregate road freight estimates in this chapter are modelled by BITRE based on estimates from the Survey of Motor Vehicle Use (SMVU) by the Australian Bureau of Statistics.

The SMVU is not designed for time series usage, with the sample design and survey methodology changing several times since the survey commenced in 1963. In addition, the survey was only conducted annually between 1998 and 2007 (the survey was undertaken approximately triennially between 1971 and 1995, and biennially since 2007).

BITRE modelling modifies SMVU estimates to enable time series analysis by adjusting estimates to a common reference period, interpolating data for years when the survey was not conducted and imposing consistency requirements between SMVU and related data from other sources. An analysis of data discrepancies was undertaken in a joint ABS/BITRE project and published in an ABS research paper, Survey of Motor Vehicle Use—An investigation into coherence (ABS 2006a). A detailed description of BITRE modelling techniques for freight data is provided in Freight Measurement and Modelling (BTRE 2006a).

Rail Freight

From 2001 to 2003, the ABS published estimates of Australian rail freight in Freight Movements, Australia (ABS 2002) and Rail Freight Movements, Australia, Summary (ABS 2004). These data have been used in BITRE modelling to estimate the tonne kilometres moved by rail for 1970–71 through to 2001–02. Estimates of total tonnes moved by rail and tonne kilometres moved for 2002–03 to 2006–07 were based on the results of the 2007 Australian Rail Survey as published in the Australian Rail Industry Report 2007 (ARA 2008). The Australasian Railway Association Inc commissioned the Apelbaum Consulting Group to prepare the report. The Australian Rail Industry Report 2007 provides measures of bulk and non–bulk freight based on definitions that differ from BITRE models and, therefore, are only included in estimates of total rail freight in this publication. Estimates for state rail freight are derived from the Australian estimates using BITRE models (BTRE 2006a).

9. From the 2007–08 financial year, BITRE expanded the scope of direct collection activities to include businesses for which rail transport was not their primary activity (eg: large mining companies). Previously this information had been estimated using data from other sources. Recent estimates should not be compared with earlier data.

10. Estimates of tonne kilometres and tonnes moved by rail for 2010–11 and 2011–12 are based on the Australian Rail Industry Report 2012 (ARA 2013). Data from 2007–08 to 2009–10 are taken from *TrainLine 1* (BITRE 2012a). The calculation methodologies differ between publications. The values for 2014–15 and 2015–16 are as described in *Trainline 4* (BITRE 2016b) and *Trainline 5* (BITRE 2017b)and do not include traffic data for some of the smaller train operators.

Air Freight

For some time, estimates have only been available in respect of Australia's international air freight tonnage (Table T 6.2). Air freight statistics (Table T 2.1 and Table T 6.3) are compiled from surveys undertaken by the Aviation Statistics Unit of BITRE.

Sea freight

Australia's international freight task relies heavily on shipping in terms of tonnage moved, with all of Australia's international trade in bulk commodities transported by sea. Specific bulk shipping statistics are not readily available. For some time BITRE estimated bulk sea freight under the assumption that all non–liner freight transport was for bulk commodities (non–liner cargo consisted of all dry and liquid bulk cargo, but also comprised cargo not shipped on regular liner services such as charters, dedicated car carriers and passenger ships). Liner/non-liner statistics are no longer available from ABS.

Tables T 2.1–T 2.5

Measures of domestic freight moved by mode are provided in terms of tonnes moved and tonne kilometres, where data are available. For road and rail, figures refer to freight activity undertaken within each state. For interstate trips, components of the journey will be counted in each state or territory passed through. In the case of sea freight, the figures refer to the state or territory in which the freight was loaded.

11. The total road freight estimates in Tables T 2.2a and T 4.5 differ slightly because they were derived from independent methodologies. The main difference between the series is that the estimates in Table T 4.5 net out the transport of 'tools of trade'.

Passenger transport

Passenger kilometres (PKM) is a measure of total passenger travel. It is the number of kilometres travelled by a vehicle multiplied by the number of occupants in the vehicle. Individual trips are aggregated to provide estimates for total PKM.

Tables T 3.1–T 3.2

BITRE modelling uses data from a range of sources to provide a consistent time series of Australian passenger travel (PKM). Estimates of air passenger travel (Table T 3.1) differ from survey results for revenue passenger travel on domestic airlines (Table T 6.3) as Table T 3.1 also includes rough allowance for passenger travel by general aviation or charter aircraft. Vehicles not classified to passenger cars, buses, rail or air are included in 'other transport mode' (Table T 3.1).

12. The other transport mode represents primarily non–freight use of light commercial vehicles (with contributions from motorcycles, non–business use of trucks and ferries).

For intercapital city passenger travel, estimates of the land based component include travel between origin and principle destination, while the aviation component includes all travel between city pairs.

Table T 3.3

These estimates draw on BITRE models developed for estimating congestion costs and public transport trends in Australian cities (BITRE 2015b, 2015e and BITRE 2015g). Estimates of passenger kilometres travelled in commercial vehicles primarily represent non–freight use of light commercial vehicles. Data for cars, light commercial vehicles and motorcycles were drawn from successive Surveys of Motor Vehicle Use, updated where possible using information on fuel sales, vehicle registrations, city traffic monitoring and household travel surveys. Data on rail, light rail and buses up to 2 000 were drawn from quarterly surveys of state authorities with updates relying on performance results reported in each of the transit operators' Annual Reports.

Bus values refer to all bus use, both by urban transit operators (route buses) and by private buses (such as charter/hire).

Table T 3.4

Method of travel to work statistics are compiled every five years as part of the Population Census conducted by the ABS. These statistics show the method used to travel to work on the day of the Census by the entire Australian working population, attributed to the state or territory where each worker spent Census night.

13. Public transport and other method refers to the total number of persons who used more than one method of travel for the day which included bus or trains.

Road

Vehicle kilometres travelled (VKT) is a measure of the total distance travelled by vehicles in a year.

Figure T 4

A map of the National road network is provided. The National road network follows Australia's national land transport plan, linking cities, regions and communities.

Table T 4.1

Intercapital road distances are calculated from capital city GPO to capital city GPO using the fastest route as provided by whereis.com.au.

Tables T 4.2–T 4.5

Estimates for motor vehicle usage are modelled by BITRE, primarily from data compiled by the SMVU (ABS 2015b). In addition to the SMVU, modelling of passenger transport also incorporates fuel use statistics from the monthly Australian Petroleum Statistics published by the Office of the Chief Economist (OCE). Freight Measurement and Modelling (BTRE 2006a) provides an outline of modelling techniques used for freight estimation, while Greenhouse Gas Emissions From Transport (BTRE 2002 and 2006b) provide an outline of modelling techniques used for passenger estimation.

The total road freight estimates in Tables T 2.2a and T 4.5 differ slightly because they were derived from independent methodologies. The main difference between the series is that the estimates in Table T 4.5 net out the transport of 'tools of trade'.

Table T 4.6

The Australian motor vehicle producer price index reflects movements in the prices received by manufacturers for new motor vehicles. The motor vehicle retail price index reflects the prices consumers pay for new and used motor vehicles and vehicle hire and lease expenses (non–holiday). The other indexes in this table reflect changes in the prices consumers pay for a range of motor vehicle goods and services

Tables T 4.7–T 4.8

The ABS Motor Vehicle Census (ABS 2017i) is a census of all vehicles registered for use on public roads, excluding vehicles registered as vintage or historical cars, military vehicles and consular vehicles (in New South Wales, vintage or historical cars cannot be separately identified and are included in census results). The census date is 31 March each year, although this has varied in previous years (care should be taken when comparing movements over years). From 1991 onwards, data are not strictly comparable with previous surveys due to revisions to Australian Design Rules, which had an impact on the way vehicles were classified in ABS statistics:

- The classification of rigid trucks is restricted to only vehicles with a gross weight of 3.5 tonnes or more. Vehicles that had previously been classified as rigid trucks with a gross weight of less than 3.5 tonnes are classified as light commercial vehicles under the new standards.
- The classification of buses is restricted to only vehicles with seating for 10 passengers (including driver) or more. Vehicles that had previously been classified as buses with seating for less than 10 passengers are classified as passenger vehicles under the new standards.

Data from the Motor Vehicle Census are not available with a state disaggregation prior to 1982.

Tables T 4.9–T 4.10

Data for new motor vehicle sales are sourced from the Federal Chamber of Automotive Industries and presented in Sales of New Motor Vehicles, Australia (ABS 2017j). The scope of these statistics is different to motor vehicle registrations data (Tables T 4.7–T 4.8) as it may include defence force vehicles, consular vehicles and vehicles that are intended for off–road use that are not registered for use on public roads. New motor vehicle sales statistics do not include sales of new motor cycles.

Tables T 4.11

14. Licence count data include driver licences with an active status. They do not include driver licences with the following status;

- Cancelled;
- Suspended;
- Surrendered;
- Expired; or
- Disqualified.

Provisional and learner driver permits are included in licence counts.

Licence count data also include other classes of active car licences, so are not directly comparable to data in Table 4.12. Total licence holder counts for Victoria include licences where gender is not specified or not recorded as male or female.

Tables T 4.12

15. Licence count data include driver licences with an active status. They do not include driver licences with the following status;

- Cancelled;
- Suspended;
- Surrendered;
- Expired;
- Disqualified; or
- Restricted.

Where someone holds a car licence and a heavy vehicle licence, this is counted twice. Any heavy vehicle category between the car category and highest heavy vehicle category held is not counted.

For example, for full heavy combination (HC) licence holders, the following counting rules apply:

- Full Car Licence—(counted)
- Light rigid (not counted)
- Medium Rigid (not counted)
- Heavy rigid (not counted)
- Full Heavy Combination – (counted)

Where someone holds a full car licence and a full motorcycle licence, this is counted twice. Where a customer holds a car, motorcycle and truck licence, this is counted three times.

Provisional licence counts include all sub classes of provisional licence (e.g. P1 and P2 car licences).

WA Licence data by class are not available.

Rail

Table T 5.1

Intercapital rail distances can vary significantly depending on whether the distances are measured between freight terminals or passenger terminals and on the route chosen. The freight and passenger terminals used in compiling Table T 5.1 are provided below:

Sydney:

- Chullora South Junction (for the Chullora freight terminal).
- Sydney Central Railway Station (for regional and interstate passengers).

Melbourne:

- Tottenham Junction (for Tottenham yard, Dynon terminals and the Port of Melbourne).
- Southern Cross Railway Station (Spencer Street) for regional and interstate passengers.

Brisbane:

- Acacia Ridge freight terminal.
- Roma Street Railway Station for regional and interstate passengers.

Adelaide:

- Islington Freight Terminal.
- Adelaide—Parklands Terminal (Keswick) for interstate passengers.

Perth:

- Forrestfield freight yards.
- East Perth for regional and interstate passengers.

Darwin:

- East Arm Wharf.
- Darwin Railway Station, Berrimah, for interstate passengers.

Canberra:

- Railway lands adjacent to railway corridor, Queanbeyan–Canberra (Fyshwick).
- Canberra Railway Station, Kingston.

Where more than one route exists between capital cities, the route chosen is the one that is typically used by the given train type. Some city pairs do not have point–to–point services so routes have been assumed. The following routes have been used:

Cootamundra/Parkes route for:

- Sydney–Adelaide/Perth/Darwin freight
- Brisbane–Adelaide/Perth/Darwin freight
- Canberra–Perth/Darwin freight

Lithgow/Parkes route for:

- Sydney–Adelaide/Perth/Darwin passenger

Melbourne route for:

- Canberra–Adelaide

For the Brisbane–Melbourne passenger terminal calculations, the distance is calculated via North Strathfield and Granville, bypassing Sydney Central.

Table T 5.2

16. "Open" means operational. . There are some lines that are non-operational but closed. Non-operational railways are excluded from the totals. Also excluded are Queensland narrow-gauge (610 mm) sugar tram lines — estimated to be around 4 000 route-kilometres.

17. Railway route length refers to lines that are operational. There have been minor route length increases in Victoria and New South Wales due to the opening of the Regional Rail Link in Victoria and Glenfield to Leppington line in New South Wales. The estimate of the Queensland total route length has been revised, and is based on data which Aurizon has provided.

Table T 5.3

- Sydney's metropolitan network is defined here as being bounded by Waterfall, Macarthur, Emu Plains, Richmond and Berowra.
- Melbourne's metropolitan network is defined here as being bounded by Stony Point, Sandringham, Williamstown, Werribee, Sunbury, Flemington Racecourse, Craigieburn, Upfield, South Morang, Hurstbridge, Lilydale, Belgrave, Alamein, Glen Waverley, Pakenham and Cranbourne.
- Brisbane's metropolitan network is defined here as being bounded by Caboolture, Shorncliffe, Domestic Airport, Doomben, Cleveland, Beenleigh, Rosewood, Springfield Central and Ferny Grove.
- Perth's metropolitan network is defined here as being bounded by Midland, Armadale, Thornlie, Mandurah, Fremantle and Clarkson.
- Adelaide's metropolitan network is defined here as being bounded by Belair, Tonsley, Seaford, Grange, Outer Harbor and Gawler Central.

Table T 5.5

In Table T 5.5a, figures up to 2000–01 are estimates of patronage within metropolitan areas. From 2001–02 on, figures refer to all trips on suburban rail networks, defined as in the notes to T 5.3 above. These figures are taken from BITRE (2017b), and are based on reporting from the train operators.

In Table T 5.5b, figures up to 2003-04 include the Sydney monorail.

Aviation

Table T 6.1

Intercapital air distances are provided in terms of greater circle distances. These are distances that take into account the curvature of the earth.

Tables T 6.2–T 6.3

18. Revenue passengers are fare paying passengers uplifted from or discharged in Australia.

19. Number of international revenue passengers uplifted from or discharged in Australia as well as passengers carried via Australia by Australian Airlines, Qantas Airways, Emirates (for November 2011 onwards), China Airlines (for January 2014 onwards), Philippine Airlines (for December 2015 onwards), AirAsia X (for April 2016 onwards) and Singapore Airlines (for September 2016 onwards) divided by the number of available seats.

20. Revenue passenger kilometres are calculated by multiplying the number of revenue passengers travelling on each flight stage by the distance in kilometres between the airports. Modelled estimates of air passenger travel (Table T 3.1) differ from survey results for domestic airline revenue passenger travel.

21. Domestic revenue passenger kilometres divided by available seat kilometres.

Table T 6.4

22. Regular Public Transport (RPT) operations only. RPT is aircraft transport available to the public and operated to fixed schedules and between specified fixed terminals.

Table T 6.5

Airline on time measures are provided in terms of on time departures (flights that depart within 15 minutes of the scheduled departure time), on time arrivals (flights that arrive within 15 minutes of the scheduled arrival time) and cancellations (flights cancelled or rescheduled within seven days of the scheduled departure time).

23. 23. Participating airlines are Jetstar, Qantas, QantasLink, Regional Express, Tigerair Australia, Virgin Australia and Virgin Australia Regional Airlines.

Table T 6.6

Airfare indexes provided are the annual average of monthly indexes compiled by BITRE.

Shipping

Deadweight tonnage (DWT) is the measure of weight that a vessel can carry, including cargo, bunkers, water and stores, expressed in tonnes.

Table T 7.1

The main source of information on intercapital sea distances was The Ports of Australia (Australian Chamber of Shipping 1993). Where optional routes are available, the shorter distance was used.

Tables T 7.2–T 7.3

Tables T 7.2 and T 7.3 provide estimates of the number of ships that visit major ports or states and the number of vessel visits a port or state receive during a financial year.

24. Improvements have been made to the methodology used to compile estimates of port calls, with revisions back to 1998–99.

Tables T 7.4–T 7.6

Tables T 7.4, T 7.5 and T 7.6 provide estimates of the tonnes of cargo loaded or discharged from ships at Australian ports. Domestic cargo is recorded in these estimates at both the port of loading and the port of discharge, while international cargo is recorded only at the Australian port of loading or discharge.

25. Merchandise trade data have a different scope to the previously used cargo statistics with one of the differences being the inclusion of exports' ship and aircraft stores.

26. Port throughput data may differ slightly from data reported directly by port authorities.

Table T 7.8

Table T 7.8 provides the number of ships operating out of Australian ports for at least part of the financial year that are owned or operated by Australian entities. In any financial year, there may be ships managed by Australian registered companies that operate internationally without calling into Australian ports.

Tables T 7.9–T 7.10

A list of the Major Australian registered trading vessels (greater than 2 000 DWT) engaged in Australian coastal and international trade is provided in Tables T 7.9 and T 7.10. Australian Trading Vessels are defined as cargo ships that are owned or operated by Australian companies as at the end of the financial year. The trading fleet includes ships that carried cargo, or both cargo and passengers, but excludes ships that carried passengers only. Cargo ships in the trading fleet must have called at an Australian port during the reporting year. Vessels are classified to coastal or international trade based on their primary activity. Some predominantly international trading vessels occasionally engage in coastal trade and some predominantly coastal trading vessels occasionally engage in international trade.

Safety

Fatalities include injuries resulting in death within 30 days of the accident where death is attributable to injuries sustained during the accident.

Serious injuries are defined as injuries that require hospitalisation.

Table T 8.1

Table T 8.1 provides a cross-modal comparison of fatality accidents and fatalities. Road statistics are compiled by BITRE, while marine and aviation statistics are compiled by the Australian

Transport Safety Bureau (ATSB) and rail statistics are compiled by the Office of the National Rail Safety Regulator (ONRSR). ONRSR is an independent body corporate with regulatory safety oversight for South Australia, New South Wales, Tasmania, Northern Territory, Victoria and the Australian Capital Territory. Data are not currently available for the number of rail fatality accidents.

Marine accident and fatalities statistics only include occurrences reported to ATSB which take place in Australia's maritime jurisdiction. They include accidents and other safety incidents involving Australian registered trading vessels (cargo and/or passengers) and trading vessels flying foreign flags. They also include injuries on board recreational and fishing vessels drawn into accidents that also involved a ship.

Marine accidents are defined as an occurrence involving a vessel where:

- A person dies or suffers serious injury as a result of an occurrence associated with the operation of the vessel; or
- The vessel is destroyed or seriously damaged as a result of an occurrence associated with the operation of the vessel; or
- Any property is destroyed or seriously damaged as a result of an occurrence associated with the operation of the vessel (Transport Safety Investigation Act 2003).

Cross–modal comparisons should be undertaken with caution as level crossing accidents between trains and road vehicles are included in the estimates of both modes from 2001 (level crossing deaths were not included in rail fatality statistics prior to 2001). In addition, suicides are excluded from aviation casualty estimates and road estimates but included in rail estimates from 2001 to 2011.

1. Includes accidents and other safety incidents involving Australian registered trading vessels (cargo and/or passengers) and trading vessels flying foreign flags.
2. Only includes occurrences within Australia's maritime jurisdiction.
3. Includes injuries on board recreational and fishing vessels involved in accidents that also involved a ship.
4. Table 8.1a includes only accidents (see definition above).
5. Table 8.1b includes all fatalities (and missing persons) and serious injuries to both crew and passengers.

Tables T 8.2–T 8.9

Fatality rates and serious injury rates are presented for each mode using population data provided in Table I 1.5 and passenger kilometre data provided in Table T 3.1.

27. Between 1989 and 1997, statistics for hospitalised injury crashes were based on statistics compiled from police accident reports. Comparable national statistics are no longer available from these sources.

28. From 2000–01, serious injury statistics for roads are compiled on a financial year basis (year ended 30 June) from hospital records provided to the Australian Institute of Health and Welfare and maintained on their National Hospital Morbidity Database.

2012 calendar year data is not directly comparable with previous years due to a break in the hospitalised injury series in 2012. A large jurisdiction changed case inclusion criteria to exclude cases cared for solely in Emergency Departments from 1 July 2012. The National Injury Surveillance Unit (NISU) estimates this decreased admitted case counts in Australia by 2000 cases (-5.6 per cent) in 2012–13 compared to 2011–12. The estimated decrease in 2012 was approximately 1000 cases, or -2.8 per cent, with the reduction likely to differ by road user group."

Tables T 8.10–T 8.12

Rail safety statistics are sourced from the Office of the National Rail Safety Regulator (ONRSR).

Rail occurrence data for 2012 onwards include only heavy rail (excluding tram, non-heavy rail tourist and heritage operators) operations. Rail occurrence data from 2001 onwards excludes tram and monorail. Fatality and serious injury data excludes suspected suicide and trespass.

29. NSW records occurrences where transfers by ambulance were required (excluding a person being transported for non-rail safety related health reasons, e.g. heart attack, seizure) as proxies for serious injuries. Consequently, this information has been provided separately.

30. The Rail Safety National Law came into force in ACT on 20 November 2014. Prior to this there were no formal legal requirements for operators in ACT to notify rail safety occurrences.

The data are based on information provided by rail operators. The ONRSR cannot guarantee the accuracy or completeness of information provided by third parties.

Tables T 8.13–T 8.15

Aviation accident statistics include all occurrences associated with the operation of an aircraft which take place between the time any person boards the aircraft with the intention of flight until disembarking, in which a person is injured as a result of:

- being in the aircraft, or
- direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
- direct exposure to jet blast.

For aviation safety statistics, injuries include serious and minor injuries.

Casualties are excluded when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.

Energy and the environment

Tables T 9.1–T 9.2

Australian petroleum sales data include reporting companies' own use of petroleum products, but excludes refinery fuel.

31. Includes all LPG production and trade.

32. All diesel imports are included in automotive diesel.

Table T 9.3

Annual average retail petrol prices are calculated as a simple average of daily unleaded petrol prices at metropolitan and regional locations across Australia (where prices are available).

National averages are calculated as weighted averages of the state/territory prices, with weights based on vehicle numbers using petrol in each region.

Tables T 9.4–T 9.13

Emission estimates that are provided in terms of carbon dioxide equivalent emissions in Tables T 9.4 and T 9.5 follow the emission accounting framework of the National Greenhouse Gas Inventory (NGGI) and include only the directly radiative gases carbon dioxide, methane and nitrous oxide emitted from transport fuel combustion (with the exception of CO2 released from the in-vehicle combustion of biofuels), These estimates of carbon dioxide equivalent emissions do not include upstream emissions (from fuel or electricity supply), the indirect effects of gases such as carbon monoxide, nitrogen oxides and non–methane volatile organic compounds, or the direct effects of black carbon emissions or fluorocarbon releases. Emission estimates are available in Tables T 9.6 to

T 9.8 for carbon dioxide, methane and nitrous oxide without conversion to carbon dioxide equivalent. The carbon dioxide equivalent values (Tables T 9.4 and T 9.5) use conversion factors, Global Warming Potentials, for calculating the CO2 equivalent mass estimates for emissions of methane and nitrous oxide, using a reference period for warming effects of 100 years, from previous Intergovernmental Panel on Climate Change (IPCC) guidelines.

Greenhouse gas emissions presented in tables T 9.4 to T 9.8 represent emissions from end-use activity only. That is, they do not include emissions from 'upstream' activity (primarily fuel refining, electricity generation and biofuel production).

Estimates for maritime and aviation emissions only include domestic transport (coastal shipping and domestic aviation).

A discussion of the modelling techniques used is available in Greenhouse Gas Emissions from Australian Transport (BITRE 2009, BTRE 2006b) and Long-Term Projections of Australian Transport Emissions: Base Case 2010 (BITRE 2010).

Part E Energy infrastructure

Table E 1.1

Table E 1.1 provides estimates of engineering construction work done on energy infrastructure, providing energy detail to the data provided in Table I 2.1. The ABS definition of pipelines used in this table includes oil and gas pipelines, urban supply mains for gas, pipelines for refined petroleum products, chemicals, etc. Pipelines used for water supply are included in the category 'water storage and supply' (see Table W 1.1).

Table E 1.2, E 1.3 and E 3.6

Early statistics (up to 1993–94) presented in these tables were sourced from a Historical Data Disk produced by ESAA. ESAA also provided data from 1997–98, however data for 1994–95 to 1996–97 were not available. From 1997–98, measures of ACT activity were included with NSW and were not available separately.

Table E 1.4

Table E 1.4 provides reliability measures of electricity supply. In general, data have not been normalised to exclude distribution outages beyond the reasonable control of the network operator.

However, adjustments have been made to estimates for Queensland in 2005–06 to take into account the impact of Cyclone Larry, and estimates for New South Wales in 2006–07 to take into account extreme storm activity in that year.

Raw inputs to energy supply

Table E 2.1

Australia's economic demonstrated mineral energy resources are estimated by Geoscience Australia using a methodology based on the McKelvey resource classification system. It classifies identified mineral resources according to two parameters: the degree of geological assurance and the degree of economic feasibility of exploitation.

The degree of geological assurance is determined by the results of geological testing. A demonstrated resource is considered to exist where the tonnage, density, shape, physical characteristics, grade and mineral content of a deposit can be estimated with a reasonable level of confidence. Overlaying the measure of geological assurance is the economic feasibility of the extraction or production of the mineral. A demonstrated mineral energy resource is determined to be economic when 'profitable extraction or production under defined investment assumptions has been established, analytically demonstrated, or assumed with reasonable certainty' (GA 2013).

Table E 2.2 and E 2.3

These tables show the input fuels used to generate electricity (Table E 2.2) and gas (Table E 2.3) measured in terms of energy units (petajoules) and physical measures (units vary depending on input fuel type).

Energy production and usage

The majority of statistics provided in this chapter are sourced from the OCE Australian energy statistics (AES) database, as published on the OCE website. The AES uses a methodology which balances energy consumption estimates with production and trade estimates. As such, data from AES are internally consistent, but may differ slightly from individual source datasets.

Energy consumption estimates are provided as a net concept. That is, intermediate consumption of energy (energy used to produce energy products) is not included in estimates of total energy consumed (further explanation is provided in Australian Energy Statistics, Industry 2017b).

Where separate estimates for ACT are not provided in state/territory tables, ACT estimates are included with NSW estimates. Estimates of energy consumption by industry are compiled based on a modified form of the 1993 version of the Australia and New Zealand Standard Industry Classification (ANZSIC). The ANZSIC was updated in 2006, however the industry classification used for energy consumption estimates has not been updated to avoid breaks in time series and consequential breaches of confidentialised data.

For several detailed energy consumption tables, there are time series that are not published to preserve the confidentiality of individual responses. Where this has occurred, suppressed estimates have been included in totals.

Table E 3.10

State and territory based estimates of petroleum fuel consumption by the petroleum refining and basic chemicals manufacturing industries are not separately available for publication, but have been included in the other manufacturing industry. Estimates for the petroleum refining and basic chemical manufacturing industries are available at the national level.

NOTE: petroleum products includes: Crude oil and other refinery feedstock, LPG, auto-gasoline leaded, auto-gasoline unleaded, aviation gasoline, aviation turbine fuel, lighting kerosene, power kerosene, heating oil, automotive diesel oil (ADO), industrial diesel fuel (IDF), Fuel oil, petroleum products nec, Solvents, Lubricants and greases.

Table E 3.14

Annual world crude oil prices are presented as the average of quarterly prices compiled by OCE from posted or official selling prices with Rotterdam spot prices for Middle East and North Sea crudes.

3. Middle East crude, 32 American Petroleum Institute (API) gravity.
4. North Sea crude, 38 API gravity.
5. North American crude, 40 API gravity.
6. Australian crude, 42 API gravity.
7. Malaysia tapis blend, 44 API gravity.

API gravity is an international standard measure of crude oil density, with higher API gravities signifying lighter oils. Light crude oil has an API gravity higher than 30.

Energy safety and emissions

Table E 4.1

1. It is not meaningful to compare the data for 2014–15 and 2015–16 with data for previous years. In 2014–15 and 2015–16, the AIHW's figures reflect counts only for separations for which the principal diagnosis was an injury or poisoning. In previous year's the figures presenting external causes included counts for separations for which the principal diagnosis was not an injury or poisoning, and the external cause was related to an additional diagnosis (that is, a diagnosis that was not the cause of the hospitalisation, for example, a post-procedural complication).

There are few datasets available that provide quality estimates of health–related issues for the production or use of energy in Australia. Annual estimates of hospital admissions due to exposure to electricity, radiation, or extreme temperature/pressure have been provided in Table E 4.1. Further disaggregation of these estimates to measure admissions by states is not possible.

Table E 4.2 and Table E 4.3

Greenhouse gas emissions provided elsewhere in the Yearbook are presented as direct or 'Scope 1' (National Greenhouse Gas Inventory terminology) emissions. This excludes upstream or indirect emissions from the conversion of energy to its final form. The National Greenhouse Gas Inventory defines 'Scope 2' emissions as 'indirect greenhouse gas emissions from the generation of purchased electricity'.

The sum of all estimates of the direct (Scope 1) greenhouse gas emissions for the electricity generation industry that are presented in Tables E 4.2 and E 4.3 are equal to the sum of Scope 2 emissions for all industries.

Part C Communications infrastructure

Table C 1.1

Table C 1.1 provides estimates of engineering construction work done on telecommunications infrastructure, drawing together telecommunications data provided in Table I 2.1.

Table C 1.2

Table C 1.2 provides a number of broad indicators of capital investment by selected communications industries using the national accounts concepts gross fixed capital expenditure, net capital expenditure, and depreciation and amortisation.

Gross fixed capital expenditure represents the total value of producers' acquisitions less disposals of fixed assets during a financial year, where fixed assets are assets used repeatedly in processes of production for more than one year (e.g. vehicles, machinery, capitalised computer software, computers, electronics, houses, buildings and structures, mining exploration expenditure, etc).

Net capital expenditure represents the value of total capital expenditure less disposal of assets, while depreciation and amortisation represent the notional reduction in value (consumption) of an asset over the life of the asset, apportioned to the reference time period (depreciation usually refers to the reduction in value of tangible assets and amortisation usually refers to the reduction in value of intangible assets).

Investment in information technology

Table C 2.1 to Table C 2.3

These tables provide a statistical summary of investment in information technology assets by businesses classified to the information media and telecommunications industry, with assets classified by broad technology.

1. Gross fixed capital formation is a measure of total expenditure on new and second–hand fixed assets, less sales of fixed assets, which occur during the reference period.
2. Consumption of fixed capital represents the reduction in the value of fixed assets resulting from physical deterioration, obsolescence or accidental damage that occurs over the reference period.
3. Information technology net capital stock is a measure of the total value of all information technology capital assets held at the end of the reference period. The change in net capital stock from the end of one financial year to the next is equivalent to gross fixed capital formation (Table C 2.1) less consumption of fixed capital (Table C 2.2).

Subscribers and providers

Table C 3.1 to Table C 3.2

Statistics on communications subscribers and providers are classified according to the technology or medium used. For telecommunications, Table C 3.1 provides estimates of the number of public payphones, fixed voice telephones and terrestrial mobile phones (excludes satellite mobile phones), while Table C 3.2 provides recent estimates of total number of terrestrial mobile subscribers.

Table C 3.3 to Table C 3.4

Table C 3.3 provides a summary of internet subscribers by download speed and type of subscriber, while Table C 3.4 provides a summary of internet subscribers by type of access connection. In earlier years, statistics for both tables reflect information gathered from a complete census of all internet service providers, but for the December 2009 collection, information was gathered from a survey of only the internet service providers with more than 1000 active subscribers.

Price and activity

Table C 4.1

The numbers presented in Table C 4.1 are an annual average of the quarterly telecommunication services index that contributes to the Consumer Price Index estimation process. Indexes are available for capital cities only.

Table C 4.3

Table C 4.3 provides estimates of businesses undertaking internet commerce activity as a percentage of all businesses, including businesses with no internet connection.

Communications security

There is no known source for statistics on physical injuries associated with communications infrastructure. The Yearbook provides statistics on the number of telephone numbers listed on the ACMA Do Not Call register (covering unsolicited telemarketing calls and marketing faxes) and the number of 000 and 112 calls forwarded to emergency service organisations.

Part W Water infrastructure

Table W 1.1

Table W 1.1 provides estimates of engineering construction work done on water infrastructure, providing water detail to the data provided in Table 12.1. Pipelines used for water supply and

sewerage and drainage are included in this Table, however the ABS definition of pipelines used in Table E 1.1 includes oil and gas pipelines, urban supply mains for gas, pipelines for refined petroleum products, chemicals, etc.

Table W 1.2

Current value of water infrastructure assets are measured as the written down replacement costs of fixed water assets. This concept represents the 'current cost of replacing the service potential of fixed water and sewerage business assets based on current technology'.

1. BITRE estimates for Urban Water supply are sourced from utility reports in the National Performance Report 2014–15, published by BOM (2017b). BITRE aggregates reports only for those utilities with more than 10 000 connections.
2. For the majority of states there are relatively few water utilities with less than 10 000 customers; however, Tasmania were the exception to this rule, with most Tasmanian utilities falling below this threshold. This recently changed, with utilities amalgamating into three large water providers.
3. The number of utilities reporting on urban water services in 2014–15 (87 utilities) increased from that of 2013–14 (78 utilities). This is because of changes to Queensland State regulations that now require all utilities with over 10 000 connections to report through the NPR process. SA Water also merged with several smaller providers in 2013–14 resulting in more data being reported for this year and 2014–15.

   BITRE have not reported Urban Water data for years prior to 2014–15 for Queensland and 2013–14 for South Australia as differences in values over time are largely due to changes in the number of utilities reporting.
4. Historical values for all financial indicators have been adjusted by BoM using consumer price index (CPI) data to facilitate comparison in real terms.

Table W 1.3 to Table W 1.4

5. A definition of 'large dams' is provided by the Australian National Committee on Large Dams (ANCOLD): The dam wall must be more than 15 m in height, or more than 10 m in height, but with:

- a crest of at least 500 m in length,
- a capacity of at least 1 million cubic metres,
- a maximum flood discharge dealt with by the dam of at least 2000 cubic metres per second, or
- unusual design.

6. From 2010-11, data are sourced from Water Storage (BOM 2015c). Capacity measures on Water Storage measure accessible capacity (excludes "dead storage" - water at the bottom of the dam, below the take-off pipe that cannot be accessed)

Table W 1.5

Water and sewerage infrastructure capital expenditure includes all capital expenditure on new works, renewals or replacements, other expenditure that would otherwise be referred to as capital and recycling water assets.

Table W 1.6

Water treatment plants providing full treatment generally use multiple processes to achieve high quality water. In addition to filtration and disinfection, plants may also undertake processes for taste and odour reduction.

Table W 1.7

The length of urban water mains includes all transfer, distribution, and reticulation mains, but excludes connections between mains and property meter, mains delivering recycled water for non–urban use (e.g. agriculture re–use), disused pipe lengths, privately owned mains, mains associated with source works (e.g. borefield mains), interconnecting mains between schemes or sources, and on–site mains within water facilities.

Table W 1.9

This table provides estimates of the average number of water main breaks, bursts and leaks. Estimates exclude breaks in mains to meter connections and above–ground seepage that can be repaired without shutting down the main.

Table W 1.10

Estimates of the number of sewerage treatment plants include all primary, secondary and tertiary level treatment plants.

Table W 1.11

The length of sewerage mains and channels includes all trunk, pressure and reticulation mains, but excludes connections between mains and properties, and conduits carrying treated effluent downstream from treatment plants.

Table W 1.13

The definition of recycled water treatment plants used in Table W 1.13 includes sewerage treatment plants where the majority of treated water output has undergone additional treatment beyond tertiary standard for discharge to meet the requirements of the recycled water customer.

Table W 1.14

This table provides estimates of the average number of breaks or chokes to sewer mains, where a break is any failure of a sewer main leading to an interruption to service and a choke is a confirmed partial or total blockage.

Table W 1.15

A regulated river normally has a dam or weir structure that regulates or diverts the flow of water to storages or supply networks.

Table W 1.16

Table W 1.16 provides a measure of the current cost of replacing assets (excluding administration, buildings, furniture fittings, equipment, vehicles and corporate service networks). This measure does not take into account accumulated depreciation based on the age and remaining life of the assets.

Water inputs

Table W 2.1

The total volume of rainwater available each year is a function of the area averaged annual state and territory rainfall and the land area of each state/territory.

7. Includes mainland area and island area. Total Australian island area is 32,163 square kilometres.
8. NSW figures include estimates for New South Wales, the Australian Capital Territory and Jervis Bay territory.

Table W 2.2

Surface water sources include dams, rivers or irrigation channels.

Table W 2.3

The volume of water sourced from groundwater excludes water sourced from groundwater supplies that have been artificially recharged using sources of water already counted elsewhere, such as:

- rivers;
- desalination plants; and
- sewage treatment plants.

Other forms of artificial groundwater recharge (e.g. storm water) that have not already been counted are included.

Table W 2.5

The volume of water sourced from recycling includes all recycled water from direct or indirect reuse. This measure includes only recycled water used as a substitute for potable water.

Table W 2.6

The volume of residential sewage, non–residential sewage and non–trade waste includes volumes collected in the sewerage system due to stormwater, illegal connection inflow and infiltration to the sewerage system. Estimates of the volume of trade waste include liquid waste generated from any industry, business, trade or manufacturing process and stormwater collected in the trade waste system.

Table W 2.7

The Consumer Price Index for water and sewerage services provides a measure of annual changes in the price to consumers of water and sewerage services.

Table W 2.9

The measure of treated waste water intake by the rural water supply network (Table W 2.9c) complements the measure of urban water sourced from recycling (Table W 2.5) as it represents the volume of recycled water that is not used as a substitute for potable water.

Table W 2.10

9. Entitlement trading includes, but is not limited to, water access entitlements. Water access entitlements are 'a perpetual or ongoing entitlement to exclusive access to a share of water from a specified consumptive pool as defined in the relevant water plan'.
10. Water allocations are 'the specific volume of water allocated to water access entitlements in a given season, defined according to rules established in the relevant water plan' (NWC 2014).

Water supply and use

Table W 3.2 and Table W 3.5

Table W 3.2 provides estimates of the number of properties connected to the urban supply network, while Table W 3.5 provides estimates of the number of properties connected to urban sewerage services. To be included, properties must be connected to the networks as a separate entity. Properties that are connected but are non–rateable or non–metered are included, while properties that are rateable, but not connected are excluded. Strata title flats or units are counted as separate properties, but a site with no more than 10 per cent of its properties as non–strata title units may be counted as one property.

Table W 3.6

11. Recycled water would generally be provided via a third (non–potable, non–sewerage) pipe system.
12. Includes recycled water supplied to golf courses, heavy industry and commercial areas.
13. Recycled water used to irrigate forestry, pastures for livestock and other agricultural products.
14. Recycled water used on–site at water treatment plants that is external to the treatment process.

Table W 3.8 and Table W 3.9

Table W 3.8 provides an estimate of the volume of water supplied to customer service points by rural water service providers, while Table W 3.9 provides an estimate of the volume of water consumed by agricultural activity. Conceptually, the majority of the difference between the estimates in the two tables represents rural water extracted from sources other than the major rural water service providers.

Table W 3.10

15. The register of all farms in scope of the statistical collection prior to 2005–06 was maintained internally by ABS. From 2005–06 on, the register of all farms was derived from the Australian Business Register, maintained by the Australian Taxation Office.
16. This series groups several agricultural activities into the one measure. Relative standard errors were calculated for component series, but are not available for the new measure.

Table W 3.12

The application rate for irrigation water is calculated by dividing the total volume of irrigation water applied by the area of pasture or crop that is being irrigated.

Table W 4.3 and Table W 4.4

Greenhouse gas emissions of transport, energy, communication or water activities can either be measured in terms of the direct emissions of the activity or all greenhouse gas emissions resulting from the activity (direct emissions plus upstream emissions, in particular the emissions resulting from the generation of purchased electricity). To avoid double counting, the preferred Yearbook greenhouse gas measures are for direct emissions only, with Table E 4.2 electricity generation emissions, representing all upstream emissions for the economy. In National Greenhouse Gas Inventory terminology, direct emissions represent 'scope 1' emissions, while emissions from the generation of purchased electricity represent 'scope 2' emissions.

As direct emissions statistics are not available for water supply networks, Table W 4.3 provide estimates of greenhouse gas emissions from water supply and sewerage networks that include both end–use emissions and upstream emissions from the generation of purchased electricity. These estimates are not comparable with greenhouse gas emission estimates for other major

forms of infrastructure presented in Parts T, E and C of the Yearbook, which present direct emissions only.

Table W 4.4 provides estimates of scope 1 greenhouse gas emissions from wastewater handling sourced from the National Greenhouse Gas Inventory.

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ISBN 978-1-925401-94-3