

Context 2: Transport and Infrastructure



Infrastructure is a key enabler of progress across regions. By providing the right infrastructure, governments and private organisations can help regions capitalise on their comparative and competitive advantages; help people access work and other community services; and facilitate the movement of freight between locations. Other types of infrastructure provide the basic services and utilities that Australians require to maintain and enhance their standard of living.

The infrastructure information in the contextual section of this Yearbook can be used to provide context to the progress that we see across regions, and how infrastructure capacity constraints may be hampering the development of regions. This information can inform decisions on strategic investment in transport infrastructure and the development of policies and programmes across the regions of Australia.

Transport and Infrastructure			
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C 2.1 Moving People

C 2.1.1 Transport mode for journey to work

Many commuters use more than one mode of transport to get to work. This indicator provides a summary of the main mode used by commuter. Modes have been classified as public transport (e.g. bus, train or ferry), private vehicle (e.g. car, truck or motorbike), active travel (e.g. bicycle or walking), and working from home.⁶⁵

Table C 2.1.1.a Transport mode shares for journey to work by remoteness class

Remoteness Class	Public per cent	Private per cent	Active per cent	Other per cent	Work From Home per cent
2006					
Major Cities	14.2	76.3	4.8	0.5	4.2
Inner Regional	2.0	83.6	6.3	0.7	7.4
Outer Regional	1.8	78.8	8.5	1.4	9.5
Remote	3.1	71.5	12.9	1.9	10.6
Very Remote	4.7	51.8	31.2	2.6	9.7
AUSTRALIA	10.7	77.5	5.7	0.7	5.4
2011					
Major Cities	15.7	74.6	4.8	0.6	4.1
Inner Regional	2.6	84.8	5.3	0.8	6.5
Outer Regional	2.1	81.2	7.2	1.3	8.2
Remote	4.2	74.1	11.2	1.7	8.7
Very Remote	9.3	53.1	26.1	4.0	7.5
AUSTRALIA	12.1	76.8	5.4	0.7	5.0

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Private vehicle includes car as driver, car as passenger, truck, motorbike/scooter.

Public transport includes train, bus, ferry, tram, taxi.

Active travel includes bicycle and walking.

⁶⁵ BITRE, Research Report 132, Population growth, jobs growth and commuting flows in Sydney, 2012

Table C 2.1.1.b Transport mode shares for journey to work by major urban area

Major Urban Area	Public per cent	Private per cent	Active per cent	Other per cent	Work From Home per cent
2006					
Greater Sydney	21.0	68.8	5.3	0.5	4.4
Greater Melbourne	13.8	76.9	4.7	0.4	4.2
Greater Brisbane	13.4	77.0	4.5	0.4	4.6
Greater Perth	10.1	81.1	3.6	1.1	4.1
Greater Adelaide	9.7	81.4	4.6	0.6	3.7
Gold Coast - Tweed Heads	3.4	85.4	4.4	0.6	6.1
Newcastle - Maitland	3.6	87.9	4.5	0.3	3.7
Canberra - Queanbeyan	7.5	82.0	6.8	0.4	3.2
Sunshine Coast	2.3	84.2	5.0	0.6	7.9
Wollongong	6.5	85.6	4.2	0.3	3.3
Greater Hobart	6.7	80.6	8.4	0.5	3.9
Geelong	5.2	86.0	5.2	0.3	3.4
Townsville	2.6	85.9	7.2	1.6	2.7
Cairns	3.2	84.5	7.1	1.3	3.9
Greater Darwin	4.9	82.0	8.7	1.5	3.0
Toowoomba	1.5	88.1	6.1	0.5	3.8
Ballarat	2.2	87.5	6.1	0.3	3.8
Bendigo	1.5	87.3	6.7	0.4	4.1
Albury - Wodonga	1.0	88.2	7.0	0.4	3.4
Launceston	2.4	86.7	7.1	0.5	3.3
2011					
Greater Sydney	22.7	67.0	5.4	0.5	4.4
Greater Melbourne	16.0	74.6	4.8	0.5	4.1
Greater Brisbane	14.8	75.4	4.7	0.6	4.6
Greater Perth	12.4	78.5	3.9	1.3	3.9
Greater Adelaide	10.0	81.4	4.1	0.7	3.7
Gold Coast - Tweed Heads	4.4	84.6	4.2	0.7	6.0
Newcastle - Maitland	3.7	88.5	4.0	0.4	3.4
Canberra - Queanbeyan	7.4	82.0	7.1	0.5	3.0
Sunshine Coast	2.4	84.1	4.6	0.9	7.9
Wollongong	6.8	85.6	4.0	0.4	3.3
Greater Hobart	6.7	81.2	7.4	0.6	4.1
Geelong	6.5	85.1	4.7	0.4	3.3
Townsville	2.6	88.2	5.5	1.1	2.6
Cairns	3.1	84.6	6.6	1.4	4.2
Greater Darwin	4.9	82.3	8.5	1.4	3.0
Toowoomba	1.3	89.2	5.3	0.6	3.6
Ballarat	4.0	86.9	4.9	0.5	3.7
Bendigo	2.7	87.9	5.3	0.4	3.7
Albury - Wodonga	1.3	89.3	5.7	0.6	3.1
Launceston	2.7	87.0	6.3	0.6	3.5

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

The major urban areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin are based on Greater Capital City Statistical Areas. All other major urban areas are based on Significant Urban Areas.

Private vehicle includes car as driver, car as passenger, truck, motorbike/scooter.

Public transport includes train, bus, ferry, tram, taxi.

Active travel includes bicycle and walking.

Table C 2.1.1.c Transport mode shares for journey to work by sub-state region

Sub-State Region	Public	Private	Active	Other	Work From Home
	per cent	per cent	per cent	per cent	per cent
2006					
New South Wales					
Greater Sydney	21.0	68.8	5.3	0.5	4.4
Central Coast	10.5	81.0	2.9	0.4	5.3
Sydney - Baulkham Hills and Hawkesbury	9.9	80.6	2.0	0.4	7.1
Sydney - Blacktown	17.7	77.4	2.1	0.4	2.3
Sydney - City and Inner South	33.0	40.8	21.5	0.9	3.8
Sydney - Eastern Suburbs	30.9	53.9	9.0	0.7	5.6
Sydney - Inner South West	24.1	69.3	3.5	0.4	2.7
Sydney - Inner West	31.7	58.0	5.6	0.4	4.3
Sydney - North Sydney and Hornsby	30.1	55.3	7.3	0.5	6.9
Sydney - Northern Beaches	17.3	70.5	4.9	0.5	6.8
Sydney - Outer South West	14.4	80.0	2.0	0.4	3.3
Sydney - Outer West and Blue Mountains	11.5	80.5	3.2	0.5	4.3
Sydney - Parramatta	21.9	70.7	4.2	0.4	2.7
Sydney - Ryde	23.7	66.9	4.1	0.4	4.9
Sydney - South West	13.4	80.2	2.7	0.6	3.0
Sydney - Sutherland	15.6	76.6	3.1	0.4	4.3
Rest of New South Wales	2.0	83.3	6.5	0.7	7.5
Capital Region	1.3	83.0	6.7	0.8	8.2
Central West	1.0	80.8	7.8	0.9	9.5
Coffs Harbour - Grafton	0.8	83.2	7.4	0.7	7.9
Far West and Orana	0.9	77.5	10.0	1.3	10.2
Hunter Valley exc Newcastle	1.6	87.5	4.5	0.5	5.9
Illawarra	6.4	85.5	4.2	0.4	3.6
Mid North Coast	0.7	84.0	6.6	0.7	8.1
Murray	0.7	79.9	8.7	0.9	9.9
New England and North West	0.8	78.3	8.2	1.1	11.6
Newcastle and Lake Macquarie	3.9	87.3	4.8	0.3	3.7
Richmond - Tweed	1.1	83.4	6.2	0.6	8.7
Riverina	0.8	80.8	8.3	1.4	8.7
Southern Highlands and Shoalhaven	1.5	84.0	5.4	0.8	8.3
Victoria					
Greater Melbourne	13.8	76.9	4.7	0.4	4.2
Melbourne - Inner	26.8	52.5	15.9	0.4	4.4
Melbourne - Inner East	17.6	72.2	4.2	0.4	5.6
Melbourne - Inner South	16.8	73.3	4.2	0.4	5.3
Melbourne - North East	12.0	81.3	2.7	0.4	3.6
Melbourne - North West	10.5	84.1	2.1	0.5	2.9
Melbourne - Outer East	8.7	84.0	2.3	0.3	4.7
Melbourne - South East	9.8	83.7	2.3	0.4	3.8
Melbourne - West	12.6	82.0	2.4	0.4	2.6
Mornington Peninsula	4.8	86.3	3.0	0.5	5.4

(continued)

Transport mode shares for journey to work by sub-state region (continued)

<i>Sub-State Region</i>	<i>Public</i>	<i>Private</i>	<i>Active</i>	<i>Other</i>	<i>Work From Home</i>
	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
	2006				
Rest of Victoria	1.7	81.5	7.4	0.7	8.7
Ballarat	2.0	85.2	5.8	0.5	6.5
Bendigo	1.9	83.4	6.9	0.5	7.3
Geelong	4.3	85.7	4.9	0.3	4.7
Hume	1.0	80.2	8.9	0.8	9.1
Latrobe - Gippsland	1.1	82.4	6.5	0.9	9.0
North West	0.7	76.5	10.0	1.2	11.7
Shepparton	0.4	79.4	9.0	0.8	10.4
Warrnambool and South West	0.4	76.4	9.2	0.9	13.1
Queensland					
Greater Brisbane	13.4	77.0	4.5	0.4	4.6
Brisbane - East	9.8	81.7	3.0	0.5	5.0
Brisbane - North	16.9	75.2	3.6	0.4	3.9
Brisbane - South	17.4	74.2	3.7	0.3	4.4
Brisbane - West	18.1	70.8	5.1	0.4	5.6
Brisbane Inner City	22.0	59.8	12.9	0.4	4.8
Ipswich	8.0	83.9	3.1	0.5	4.5
Logan - Beaudesert	6.8	86.2	2.2	0.5	4.3
Moreton Bay - North	7.4	83.5	3.5	0.6	5.0
Moreton Bay - South	12.2	80.7	2.2	0.5	4.5
Rest of Queensland	2.5	82.3	7.1	1.0	7.0
Cairns	2.7	81.7	8.5	1.3	5.9
Darling Downs - Maranoa	0.8	72.8	9.4	1.3	15.7
Fitzroy	2.7	83.3	7.1	0.8	6.1
Gold Coast	3.5	85.1	4.5	0.6	6.3
Mackay	3.3	82.1	7.5	1.2	6.0
Queensland - Outback	2.1	61.2	24.0	2.6	10.0
Sunshine Coast	2.3	83.7	4.9	0.7	8.4
Toowoomba	1.2	88.1	5.6	0.6	4.5
Townsville	2.8	83.9	7.4	1.6	4.3
Wide Bay	1.3	82.8	7.0	0.8	8.1
South Australia					
Greater Adelaide	9.7	81.4	4.6	0.6	3.7
Adelaide - Central and Hills	9.5	76.5	7.9	0.6	5.4
Adelaide - North	9.4	84.8	2.4	0.7	2.7
Adelaide - South	9.7	82.2	3.6	0.6	3.7
Adelaide - West	10.4	80.7	5.5	0.5	2.9
Rest of South Australia	1.0	78.6	8.9	1.2	10.4
Barossa - Yorke - Mid North	0.7	76.4	9.2	1.4	12.3
South Australia - Outback	2.1	78.1	11.5	1.0	7.4
South Australia - South East	0.6	80.0	7.5	1.2	10.7

(continued)

Transport mode shares for journey to work by sub-state region (continued)

<i>Sub-State Region</i>	<i>Public</i>	<i>Private</i>	<i>Active</i>	<i>Other</i>	<i>Work From Home</i>
	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
	2006				
Western Australia					
Greater Perth	10.1	81.1	3.6	1.1	4.1
Mandurah	3.0	87.3	3.2	1.5	5.1
Perth - Inner	14.2	68.3	10.8	0.8	6.0
Perth - North East	9.4	82.6	2.9	1.1	4.0
Perth - North West	10.6	82.3	2.2	1.0	3.8
Perth - South East	10.6	81.5	3.2	1.0	3.8
Perth - South West	8.1	83.0	3.3	1.7	3.8
Rest of Western Australia	3.2	76.4	10.0	1.7	8.6
Bunbury	1.7	85.0	5.1	0.9	7.3
Western Australia - Outback	5.7	73.1	13.9	1.9	5.4
Western Australia - Wheat Belt	1.2	71.6	9.8	2.4	15.0
Tasmania					
Greater Hobart	6.7	80.6	8.4	0.5	3.9
Rest of Tasmania	1.4	84.2	6.8	0.9	6.8
Launceston and North East	1.7	84.6	7.0	0.7	6.0
South East	1.5	79.3	6.3	1.2	11.7
West and North West	1.0	85.1	6.6	1.0	6.3
Northern Territory					
Greater Darwin	4.9	82.0	8.7	1.5	3.0
Northern Territory - Outback	5.1	58.8	30.3	1.5	4.3
Australian Capital Territory	8.0	80.9	7.3	0.4	3.4

(continued)



Transport mode shares for journey to work by sub-state region (continued)

<i>Sub-State Region</i>	<i>Public</i>	<i>Private</i>	<i>Active</i>	<i>Other</i>	<i>Work From Home</i>
	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
2011					
New South Wales					
Greater Sydney	22.7	67.0	5.4	0.5	4.4
Central Coast	10.5	81.3	2.5	0.5	5.2
Sydney - Baulkham Hills and Hawkesbury	12.8	78.1	1.8	0.5	6.8
Sydney - Blacktown	19.8	75.6	1.8	0.4	2.3
Sydney - City and Inner South	34.8	36.8	23.6	0.7	4.0
Sydney - Eastern Suburbs	31.4	52.7	9.5	0.6	5.8
Sydney - Inner South West	26.0	67.6	3.1	0.5	2.7
Sydney - Inner West	33.6	55.8	5.6	0.5	4.5
Sydney - North Sydney and Hornsby	32.3	52.9	7.3	0.5	6.9
Sydney - Northern Beaches	18.7	68.6	4.9	0.6	7.3
Sydney - Outer South West	14.3	80.6	1.7	0.4	3.0
Sydney - Outer West and Blue Mountains	11.9	80.7	2.8	0.4	4.2
Sydney - Parramatta	25.0	68.1	3.8	0.5	2.6
Sydney - Ryde	27.3	63.2	4.4	0.4	4.7
Sydney - South West	14.2	80.1	2.5	0.5	2.7
Sydney - Sutherland	16.8	75.5	2.8	0.4	4.5
Rest of New South Wales	2.3	84.9	5.5	0.7	6.6
Capital Region	1.4	84.8	5.6	0.8	7.3
Central West	1.4	83.4	6.2	0.9	8.2
Coffs Harbour - Grafton	1.0	84.6	6.4	0.7	7.2
Far West and Orana	1.2	80.6	8.4	1.0	8.9
Hunter Valley exc Newcastle	1.8	89.0	3.8	0.6	4.9
Illawarra	6.6	85.5	4.0	0.4	3.4
Mid North Coast	1.0	85.3	5.6	0.7	7.4
Murray	1.0	82.9	6.8	0.9	8.4
New England and North West	1.0	81.5	6.6	1.0	9.9
Newcastle and Lake Macquarie	3.9	87.8	4.3	0.4	3.6
Richmond - Tweed	1.4	83.5	5.9	0.8	8.3
Riverina	0.9	83.6	7.1	1.2	7.3
Southern Highlands and Shoalhaven	1.9	84.9	5.0	0.7	7.4
Victoria					
Greater Melbourne	16.0	74.6	4.8	0.5	4.1
Melbourne - Inner	29.9	47.7	17.2	0.6	4.6
Melbourne - Inner East	20.1	69.3	4.4	0.5	5.7
Melbourne - Inner South	19.2	70.9	4.1	0.4	5.4
Melbourne - North East	14.1	79.2	2.7	0.5	3.6
Melbourne - North West	12.6	82.0	1.9	0.5	3.0
Melbourne - Outer East	10.0	83.0	2.0	0.4	4.6
Melbourne - South East	11.6	82.4	2.0	0.5	3.5
Melbourne - West	15.1	79.4	2.3	0.5	2.7
Mornington Peninsula	5.4	86.1	2.9	0.6	5.1

(continued)

Transport mode shares for journey to work by sub-state region (continued)

Sub-State Region	Public	Private	Active	Other	Work From Home
	per cent	per cent	per cent	per cent	per cent
2011					
Rest of Victoria	2.7	83.1	6.2	0.8	7.3
Ballarat	3.6	85.0	4.8	0.6	5.9
Bendigo	3.7	83.8	5.5	0.5	6.5
Geelong	5.6	84.9	4.4	0.5	4.6
Hume	1.7	81.8	7.6	0.9	8.1
Latrobe - Gippsland	2.0	83.7	5.6	1.0	7.7
North West	1.0	80.2	8.2	1.2	9.3
Shepparton	0.8	83.8	6.7	0.7	8.0
Warrnambool and South West	0.9	79.5	7.9	1.0	10.6
Queensland					
Greater Brisbane	14.8	75.4	4.7	0.6	4.6
Brisbane - East	10.7	81.0	2.5	0.6	5.1
Brisbane - North	19.0	73.0	3.7	0.5	3.8
Brisbane - South	19.5	71.6	4.2	0.5	4.2
Brisbane - West	19.8	67.9	5.8	0.5	5.9
Brisbane Inner City	23.7	56.5	14.2	0.6	4.9
Ipswich	8.9	83.7	2.7	0.6	4.1
Logan - Beaudesert	7.9	85.5	2.0	0.6	4.0
Moreton Bay - North	8.3	83.0	3.2	0.7	4.8
Moreton Bay - South	12.8	79.9	2.0	0.5	4.7
Rest of Queensland	3.0	83.4	6.1	1.0	6.5
Cairns	2.8	82.7	7.3	1.4	5.8
Darling Downs - Maranoa	0.8	76.7	8.3	1.2	13.0
Fitzroy	3.6	84.6	5.6	0.8	5.4
Gold Coast	4.6	84.3	4.2	0.7	6.2
Mackay	4.0	83.2	6.5	1.2	5.1
Queensland - Outback	2.6	65.3	20.5	2.3	9.3
Sunshine Coast	2.6	83.6	4.6	0.9	8.3
Toowoomba	1.2	89.1	4.8	0.6	4.3
Townsville	2.9	86.2	6.0	1.2	3.8
Wide Bay	1.6	84.3	5.8	1.0	7.3
South Australia					
Greater Adelaide	10.0	81.4	4.1	0.7	3.7
Adelaide - Central and Hills	10.3	76.0	7.6	0.7	5.4
Adelaide - North	9.4	85.1	2.2	0.7	2.6
Adelaide - South	9.6	82.7	3.2	0.8	3.8
Adelaide - West	11.6	80.3	4.4	0.7	3.0
Rest of South Australia	1.4	81.3	7.3	1.2	8.8
Barossa - Yorke - Mid North	0.9	80.2	7.3	1.3	10.3
South Australia - Outback	3.2	79.5	9.5	1.4	6.3
South Australia - South East	0.8	82.7	6.3	1.1	9.1

(continued)

Transport mode shares for journey to work by sub-state region (continued)

<i>Sub-State Region</i>	<i>Public</i>	<i>Private</i>	<i>Active</i>	<i>Other</i>	<i>Work From Home</i>
	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
	2011				
Western Australia					
Greater Perth	12.4	78.5	3.9	1.3	3.9
Mandurah	8.4	81.8	3.2	2.0	4.5
Perth - Inner	17.8	63.6	12.2	1.0	5.4
Perth - North East	10.4	81.6	3.0	1.2	3.8
Perth - North West	12.1	80.3	2.5	1.2	3.9
Perth - South East	12.6	79.5	3.2	1.2	3.5
Perth - South West	12.1	79.2	3.4	1.4	3.8
Rest of Western Australia	5.9	76.2	8.7	2.3	6.9
Bunbury	3.6	84.0	4.8	1.2	6.4
Western Australia - Outback	9.5	72.0	11.4	3.0	4.1
Western Australia - Wheat Belt	2.3	74.3	8.6	2.3	12.6
Tasmania					
Greater Hobart	6.7	81.2	7.4	0.6	4.1
Rest of Tasmania	1.8	85.5	5.8	0.9	6.1
Launceston and North East	2.0	85.5	6.1	0.7	5.7
South East	2.2	81.7	5.3	1.1	9.8
West and North West	1.3	86.6	5.7	0.9	5.5
Northern Territory					
Greater Darwin	4.9	82.3	8.5	1.4	3.0
Northern Territory - Outback	4.7	62.7	27.8	1.4	3.3
Australian Capital Territory	7.9	81.1	7.4	0.5	3.1

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Private vehicle includes car as driver, car as passenger, truck, motorbike/scooter.

Public transport includes train, bus, ferry, tram, taxi.

Active travel includes bicycle and walking.

Table C 2.1.1.d Transport mode shares for journey to work by capital city/balance of state

<i>Capital City / Balance of State</i>	<i>Public</i>	<i>Private</i>	<i>Active</i>	<i>Other</i>	<i>Work From Home</i>
	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
2006					
Greater Sydney	21.0	68.8	5.3	0.5	4.4
Rest of New South Wales	2.0	83.3	6.5	0.7	7.5
Greater Melbourne	13.8	76.9	4.7	0.4	4.2
Rest of Victoria	1.7	81.5	7.4	0.7	8.7
Greater Brisbane	13.4	77.0	4.5	0.4	4.6
Rest of Queensland	2.5	82.3	7.1	1.0	7.0
Greater Adelaide	9.7	81.4	4.6	0.6	3.7
Rest of South Australia	1.0	78.6	8.9	1.2	10.4
Greater Perth	10.1	81.1	3.6	1.1	4.1
Rest of Western Australia	3.2	76.4	10.0	1.7	8.6
Greater Hobart	6.7	80.6	8.4	0.5	3.9
Rest of Tasmania	1.4	84.2	6.8	0.9	6.8
Greater Darwin	4.9	82.0	8.7	1.5	3.0
Rest of Northern Territory	5.1	58.8	30.3	1.5	4.3
Australian Capital Territory	8.0	80.9	7.3	0.4	3.4
2011					
Greater Sydney	22.7	67.0	5.4	0.5	4.4
Rest of New South Wales	2.3	84.9	5.5	0.7	6.6
Greater Melbourne	16.0	74.6	4.8	0.5	4.1
Rest of Victoria	2.7	83.1	6.2	0.8	7.3
Greater Brisbane	14.8	75.4	4.7	0.6	4.6
Rest of Queensland	3.0	83.4	6.1	1.0	6.5
Greater Adelaide	10.0	81.4	4.1	0.7	3.7
Rest of South Australia	1.4	81.3	7.3	1.2	8.8
Greater Perth	12.4	78.5	3.9	1.3	3.9
Rest of Western Australia	5.9	76.2	8.7	2.3	6.9
Greater Hobart	6.7	81.2	7.4	0.6	4.1
Rest of Tasmania	1.8	85.5	5.8	0.9	6.1
Greater Darwin	4.9	82.3	8.5	1.4	3.0
Rest of Northern Territory	4.7	62.7	27.8	1.4	3.3
Australian Capital Territory	7.9	81.1	7.4	0.5	3.1

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Private vehicle includes car as driver, car as passenger, truck, motorbike/scooter.







Public transport includes train, bus, ferry, tram, taxi.

Active travel includes bicycle and walking.

C 2.1.2 Passengers through airports

This indicator provides a measure of how many people are travelling through airports within a region, including both domestic and international travellers. Data reflects passengers travelling on regular public transport (RPT) services including both arrivals and departures. Many regions are excluded as no airport that offers RPT services is available.




















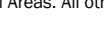
Table C 2.1.2.a Number of passengers through airports by remoteness class

Remoteness Class	2009 passengers ('000)	2011 passengers ('000)	2013 passengers ('000)	2009–2013 change passengers ('000)	Trend
Major Cities	101,971.7	111,454.7	119,709.2	17,737.4	
Inner Regional	8,187.1	8,500.9	9,248.8	1,061.7	
Outer Regional	8,142.5	9,237.4	9,996.7	1,854.2	
Remote	3,015.4	3,451.2	3,653.7	638.3	
Very Remote	1,114.7	1,431.6	1,561.4	446.6	
AUSTRALIA	122,431.4	134,075.8	144,169.7	21,738.3	

Source: BITRE Airport Traffic Data

Regular public transport operations.

Table C 2.1.2.b Number of passengers through airports by major urban area

Major Urban Area	2009 passengers ('000)	2011 passengers ('000)	2013 passengers ('000)	2009–2013 change passengers ('000)	Trend
Greater Sydney	32,998.0	35,673.9	38,150.5	5,152.5	
Greater Melbourne	24,912.9	27,697.2	30,247.4	5,334.5	
Greater Brisbane	18,713.1	20,333.9	21,444.8	2,731.7	
Greater Perth	9,615.8	11,365.5	12,902.0	3,286.3	
Greater Adelaide	6,841.7	7,021.4	7,373.9	532.1	
Gold Coast - Tweed Heads	4,882.8	5,297.2	5,767.5	884.7	
Newcastle - Maitland	0.0	0.0	0.0	0.0	
Canberra - Queanbeyan	3,148.4	3,208.2	2,956.4	-192.0	
Sunshine Coast	859.0	857.4	866.5	7.5	
Wollongong	0.0	0.0	0.0	0.0	
Greater Hobart	1,874.5	1,844.7	2,091.7	217.2	
Geelong	0.0	0.0	0.0	0.0	
Townsville	1,482.2	1,616.9	1,556.6	74.3	
Cairns	3,538.2	3,865.2	4,246.4	708.2	
Greater Darwin	1,523.8	1,890.1	2,005.4	481.7	
Toowoomba	0.0	3.3	19.2	19.2	
Ballarat	0.0	0.0	0.0	0.0	
Bendigo	0.0	0.0	0.0	0.0	
Albury - Wodonga	282.2	280.5	259.4	-22.8	
Launceston	0.0	0.0	0.0	0.0	

Source: BITRE Airport Traffic Data

The major urban areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin are based on Greater Capital City Statistical Areas. All other major urban areas are based on Significant Urban Areas.

Regular public transport operations.

Table C 2.1.2.c Number of passengers through airports by sub-state region

Sub-State Region	2009 passengers ('000)	2011 passengers ('000)	2013 passengers ('000)	2009-2013 change passengers ('000)	Trend
New South Wales					
Sydney - City and Inner South	32,998	35,673.9	38,150.5	5,152.5	
Capital Region	73	69.7	64.3	-8.5	
Central West	106	131.2	112.8	6.5	
Coffs Harbour - Grafton	339	353.6	400.8	61.4	
Far West and Orana	224	240.1	247.8	23.4	
Hunter Valley exc Newcastle	1,138	1,191.2	1,206.5	68.8	
Mid North Coast	256	263.5	279.2	23.1	
Murray	282	280.5	259.4	-22.8	
New England and North West	264	308.0	305.7	41.4	
Richmond - Tweed	375	357.3	415.4	40.0	
Riverina	280	287.2	283.4	3.3	
Victoria					
Melbourne - Inner South	12	9.7	9.8	-2.1	
Melbourne - North West	24,901	27,687.4	30,237.7	5,336.6	
North West	198	199.0	218.0	20.0	
Warrnambool and South West	11	11.1	7.6	-3.5	
Queensland					
Brisbane - North	18,713	20,333.9	21,444.8	2,731.7	
Cairns	3,538	3,865.2	4,246.4	708.2	
Darling Downs - Maranoa	44	77.4	214.6	171.0	
Fitzroy	1,058	1,212.2	1,493.2	434.9	
Gold Coast	4,883	5,297.2	5,767.5	884.7	
Mackay	1,608	1,819.0	1,977.2	368.8	
Queensland - Outback	363	485.4	504.3	141.5	
Sunshine Coast	859	857.4	866.5	7.5	
Toowoomba	-	3.3	19.2	19.2	
Townsville	1,502	1,643.4	1,582.6	80.6	
Wide Bay	278	277.7	303.8	25.6	
South Australia					
Adelaide - West	6,842	7,021.4	7,373.9	532.1	
South Australia - Outback	319	393.5	374.1	55.3	
South Australia - South East	151	134.8	119.1	-32.0	
Western Australia					
Perth - South East	9,616	11,365.5	12,902.0	3,286.3	
Western Australia - Outback	2,033	2,718.7	3,050.1	1,016.7	
Western Australia - Wheat Belt	50	58.4	58.9	8.5	
Tasmania					
Hobart	1,874	1,844.7	2,091.7	217.2	
Launceston and North East	1,156	1,144.8	1,277.1	121.5	
West and North West	232	236.9	229.8	-2.1	

(continued)

Number of passengers through airports by sub-state region (continued)

<i>Sub-State Region</i>	<i>2009 passengers (‘000)</i>	<i>2011 passengers (‘000)</i>	<i>2013 passengers (‘000)</i>	<i>2009–2013 change passengers (‘000)</i>	<i>Trend</i>
Northern Territory					
Darwin	1,524	1,890.1	2,005.4	481.7	
Northern Territory - Outback	1,165	1,079.2	1,067.9	-97.1	
Australian Capital Territory	3,148	3,208.2	2,956.4	-192.0	

Source: BITRE Airport Traffic Data

Regular public transport operations.

Excludes many small airports with charter flights.

Table C 2.1.2.d Number of passengers through airports by capital city/balance of state

<i>Capital City / Balance of State</i>	<i>2009 passengers (‘000)</i>	<i>2011 passengers (‘000)</i>	<i>2013 passengers (‘000)</i>	<i>2009–2013 change passengers (‘000)</i>	<i>Trend</i>
Greater Sydney	32,998.0	35,673.9	38,150.5	5,152.5	
Rest of New South Wales	3,338.7	3,482.1	3,575.4	236.6	
Greater Melbourne	24,912.9	27,697.2	30,247.4	5,334.5	
Rest of Victoria	209.1	210.1	225.6	16.5	
Greater Brisbane	18,713.1	20,333.9	21,444.8	2,731.7	
Rest of Queensland	14,133.5	15,538.1	16,975.3	2,841.9	
Greater Adelaide	6,841.7	7,021.4	7,373.9	532.1	
Rest of South Australia	469.8	528.3	493.2	23.4	
Greater Perth	9,615.8	11,365.5	12,902.0	3,286.3	
Rest of Western Australia	2,083.7	2,777.1	3,109.0	1,025.3	
Greater Hobart	1,874.5	1,844.7	2,091.7	217.2	
Rest of Tasmania	1,387.5	1,381.6	1,506.9	119.4	
Greater Darwin	1,523.8	1,890.1	2,005.4	481.7	
Rest of Northern Territory	1,165.0	1,079.2	1,067.9	-97.1	
Australian Capital Territory	3,148.4	3,208.2	2,956.4	-192.0	

Source: BITRE Airport Traffic Data

Regular public transport operations.

C 2.1.3 Dwellings with no motor vehicle

This indicator measures the proportion of dwellings with no passenger vehicle (other than a motorbike or scooter). It can provide some indication of the extent to which households in a region may encounter access difficulties through a lack of private transport. This also provides an indication of the extent to which households in a region may rely on public transport, bicycle and footpath infrastructure for travel.

Table C 2.1.3.a Dwellings with no motor vehicle by remoteness class

Remoteness Class	2006 per cent	2011 per cent	2006–2011 change percentage points
Major Cities	10.0	9.2	-0.83
Inner Regional	7.2	6.3	-0.85
Outer Regional	7.2	6.4	-0.75
Remote	7.6	7.2	-0.35
Very Remote	17.1	15.7	-1.42
AUSTRALIA	9.2	8.4	-0.82

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Motor vehicles includes vans and company vehicles kept at home but excludes motorbikes and scooters.

Table C 2.1.3.b Dwellings with no motor vehicle by major urban area

Major Urban Area	2006 per cent	2011 per cent	2006–2011 change percentage points
Greater Sydney	12.6	11.8	-0.85
Greater Melbourne	9.4	9.0	-0.38
Greater Brisbane	8.4	7.7	-0.79
Greater Perth	6.8	6.0	-0.73
Greater Adelaide	10.1	9.2	-0.94
Gold Coast - Tweed Heads	7.6	6.4	-1.14
Newcastle - Maitland	10.8	8.7	-2.13
Canberra - Queanbeyan	6.9	6.2	-0.76
Sunshine Coast	7.1	6.0	-1.15
Wollongong	11.4	10.0	-1.38
Greater Hobart	9.8	8.9	-0.83
Geelong	9.0	8.0	-0.96
Townsville	7.1	6.1	-1.02
Cairns	9.8	8.7	-1.05
Greater Darwin	7.2	6.5	-0.75
Toowoomba	8.8	8.4	-0.46
Ballarat	8.9	7.8	-1.12
Bendigo	8.5	7.4	-1.06
Albury - Wodonga	8.9	8.1	-0.71
Launceston	10.0	9.4	-0.64

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

The major urban areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin are based on Greater Capital City Statistical Areas. All other major urban areas are based on Significant Urban Areas.

Motor vehicles includes vans and company vehicles kept at home but excludes motorbikes and scooters.

Table C 2.1.3.c Dwellings with no motor vehicle by sub-state region

Sub-State Region	2006 per cent	2011 per cent	2006–2011 change percentage points
New South Wales			
Greater Sydney	12.6	11.8	-0.85
Central Coast	10.3	9.4	-0.95
Sydney - Baulkham Hills and Hawkesbury	2.8	2.7	-0.15
Sydney - Blacktown	10.7	9.5	-1.27
Sydney - City and Inner South	26.8	34.0	7.26
Sydney - Eastern Suburbs	18.0	19.4	1.39
Sydney - Inner South West	14.2	13.5	-0.68
Sydney - Inner West	15.7	15.5	-0.14
Sydney - North Sydney and Hornsby	11.0	11.0	0.06
Sydney - Northern Beaches	8.6	8.1	-0.48
Sydney - Outer South West	8.5	7.3	-1.15
Sydney - Outer West and Blue Mountains	8.8	7.9	-0.90
Sydney - Parramatta	14.3	13.5	-0.77
Sydney - Ryde	11.1	11.4	0.31
Sydney - South West	11.0	10.8	-0.20
Sydney - Sutherland	7.6	6.9	-0.62
Rest of New South Wales	8.9	7.6	-1.36
Capital Region	6.7	6.2	-0.50
Central West	9.1	7.9	-1.12
Coffs Harbour - Grafton	8.5	7.8	-0.73
Far West and Orana	10.8	10.1	-0.71
Hunter Valley exc Newcastle	7.4	6.2	-1.16
Illawarra	11.1	10.4	-0.73
Mid North Coast	8.9	8.1	-0.80
Murray	7.7	8.0	0.21
New England and North West	8.8	8.1	-0.69
Newcastle and Lake Macquarie	11.0	9.4	-1.60
Richmond - Tweed	8.5	7.9	-0.61
Riverina	8.0	7.5	-0.52
Southern Highlands and Shoalhaven	6.9	6.3	-0.57
Victoria			
Greater Melbourne	9.4	9.0	-0.38
Melbourne - Inner	20.1	23.4	3.30
Melbourne - Inner East	8.0	8.2	0.26
Melbourne - Inner South	9.4	9.0	-0.42
Melbourne - North East	7.6	7.4	-0.28
Melbourne - North West	7.2	7.1	-0.09
Melbourne - Outer East	5.1	4.9	-0.21
Melbourne - South East	6.7	6.6	-0.13
Melbourne - West	8.6	8.0	-0.59
Mornington Peninsula	6.6	6.2	-0.40

(continued)

Dwellings with no motor vehicle by sub-state region (continued)

Sub-State Region	2006 per cent	2011 per cent	2006–2011 change percentage points
Rest of Victoria	7.0	6.4	-0.61
Ballarat	7.4	6.9	-0.42
Bendigo	7.3	6.8	-0.46
Geelong	7.5	6.9	-0.58
Hume	6.4	6.2	-0.22
Latrobe - Gippsland	6.8	6.7	-0.17
North West	7.7	8.0	0.31
Shepparton	6.5	6.9	0.41
Warrnambool and South West	6.2	6.2	-0.06
Queensland			
Greater Brisbane	8.4	7.7	-0.79
Brisbane - East	6.7	6.3	-0.41
Brisbane - North	9.7	9.2	-0.49
Brisbane - South	9.3	8.7	-0.54
Brisbane - West	7.2	7.3	0.16
Brisbane Inner City	14.5	14.9	0.36
Ipswich	7.4	6.9	-0.50
Logan - Beaudesert	6.2	6.1	-0.09
Moreton Bay - North	8.1	7.9	-0.25
Moreton Bay - South	3.8	3.7	-0.05
Rest of Queensland	7.5	6.5	-0.96
Cairns	9.4	8.8	-0.56
Darling Downs - Maranoa	6.3	5.8	-0.48
Fitzroy	6.8	6.3	-0.47
Gold Coast	7.2	6.6	-0.60
Mackay	6.2	5.6	-0.51
Queensland - Outback	13.5	14.6	1.15
Sunshine Coast	7.2	5.9	-1.28
Toowoomba	8.2	7.8	-0.41
Townsville	8.0	6.8	-1.19
Wide Bay	7.9	7.3	-0.60
South Australia			
Greater Adelaide	10.1	9.2	-0.94
Adelaide - Central and Hills	10.9	10.3	-0.60
Adelaide - North	10.0	9.1	-0.88
Adelaide - South	9.1	8.0	-1.09
Adelaide - West	14.6	12.6	-1.97
Rest of South Australia	6.9	6.7	-0.25
Barossa - Yorke - Mid North	6.1	6.1	-0.09
South Australia - Outback	10.8	10.2	-0.52
South Australia - South East	6.6	6.3	-0.37

(continued)

Dwellings with no motor vehicle by sub-state region (continued)

<i>Sub-State Region</i>	<i>2006 per cent</i>	<i>2011 per cent</i>	<i>2006–2011 change percentage points</i>
Western Australia			
Greater Perth	6.8	6.0	-0.73
Mandurah	5.9	5.7	-0.22
Perth - Inner	12.6	11.8	-0.78
Perth - North East	7.1	6.1	-1.01
Perth - North West	6.0	5.2	-0.85
Perth - South East	7.4	6.4	-1.01
Perth - South West	6.9	6.1	-0.86
Rest of Western Australia	6.1	5.8	-0.33
Bunbury	5.1	4.8	-0.32
Western Australia - Outback	9.1	8.4	-0.65
Western Australia - Wheat Belt	5.4	5.1	-0.33
Tasmania			
Greater Hobart	9.8	8.9	-0.83
Rest of Tasmania	7.6	6.9	-0.71
Launceston and North East	8.7	8.0	-0.70
South East	4.8	4.1	-0.79
West and North West	8.3	7.4	-0.97
Northern Territory			
Greater Darwin	7.2	6.5	-0.75
Northern Territory - Outback	24.4	21.1	-3.29
Australian Capital Territory	7.3	6.4	-0.85

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Motor vehicles includes vans and company vehicles kept at home but excludes motorbikes and scooters.

Table C 2.1.3.d Dwellings with no motor vehicle by capital city/balance of state

Capital City / Balance of State	2006 per cent	2011 per cent	2006–2011 change percentage points
Greater Sydney	12.6	11.8	-0.85
Rest of New South Wales	8.9	7.6	-1.36
Greater Melbourne	9.4	9.0	-0.38
Rest of Victoria	7.0	6.4	-0.61
Greater Brisbane	8.4	7.7	-0.79
Rest of Queensland	7.5	6.5	-0.96
Greater Adelaide	10.1	9.2	-0.94
Rest of South Australia	6.9	6.7	-0.25
Greater Perth	6.8	6.0	-0.73
Rest of Western Australia	6.1	5.8	-0.33
Greater Hobart	9.8	8.9	-0.83
Rest of Tasmania	7.6	6.9	-0.71
Greater Darwin	7.2	6.5	-0.75
Rest of Northern Territory	20.9	18.5	-2.32
Australian Capital Territory	7.3	6.4	-0.85

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Motor vehicles includes vans and company vehicles kept at home but excludes motorbikes and scooters.



C 2.1.4 Kilometres travelled by passenger vehicles

This indicator measures road passenger vehicle use by the region's residents within the vehicles' state of registration. The area of operation of vehicle travel outside their state of registration is not presented in the ABS Survey of Motor Vehicle Use, but is around four per cent of the total in 2011–12. This measure includes passenger vehicles, motor cycles, light commercial vehicles, and buses.⁶⁶

Passenger vehicle use is a major component of the total road transport task. Changes in passenger vehicle kilometres travelled over time (alongside trends in the freight task) are important for assessing the extent of growth in the overall transport task in a region.

Table C 2.1.4.a Passenger vehicle kilometres travelled (on road) by capital city/balance of state

<i>Capital City / Balance of State</i>	<i>2001-02</i>	<i>2006-07</i>	<i>2011-12</i>	<i>2001-02 to 2011-12</i>	<i>Trend</i>
	<i>billion kilometres</i>	<i>billion kilometres</i>	<i>billion kilometres</i>	<i>change billion kilometres</i>	
Sydney	33.0	35.3	37.3	4.3	
Rest of New South Wales	25.4	27.1	28.6	3.3	
Melbourne	32.2	34.2	36.7	4.6	
Rest of Victoria	17.7	19.0	20.4	2.7	
Brisbane	16.1	18.4	19.4	3.3	
Rest of Queensland	21.7	25.2	26.9	5.2	
Adelaide	9.4	9.6	9.5	0.1	
Rest of South Australia	5.1	5.4	5.4	0.3	
Perth	13.4	15.0	16.2	2.8	
Rest of Western Australia	6.7	7.4	8.2	1.5	
Hobart	1.7	1.9	1.9	0.1	
Rest of Tasmania	2.8	3.0	3.1	0.3	
Darwin	0.8	0.9	1.0	0.1	
Rest of Northern Territory	0.8	0.9	0.9	0.1	
Australian Capital Territory	3.2	3.5	3.7	0.5	
AUSTRALIA	189.9	206.7	219.2	29.3	

Source: BITRE, 2013, Yearbook 2013: Australian infrastructure statistics, Statistical Report, Canberra

Includes cars, motorcycles, light commercial vehicles and buses. Excludes articulated trucks, rigid and other trucks.

Based on the Statistical Divisions (SD) structure under the Australian Standard Geographical Classification (ASGC). These estimates use the SD boundaries current at the time data was collected and may vary across reference periods.

Estimates are based on the location of the road, not the start point or destination of the driver or goods.

⁶⁶ BITRE, Research Report 127, Traffic Growth in Australia, 2012

C 2.1.5 Network delay due to congestion

This indicator measures the average minutes per kilometre travelled lost due to congestion, for each capital city. As well as impacting productivity, higher congestion reduces well-being through longer travel times, and reduced accessibility.

Table C 2.1.5.a Average network delay due to congestion by selected major urban area

	2002-03	2006-07	2010-11	2002-03 to 2010-11	
Major Urban Area	minutes per kilometre	minutes per kilometre	minutes per kilometre	change minutes per kilometre	Trend
Greater Sydney	0.77	0.82	0.89	0.12	
Greater Melbourne	0.73	0.82	0.72	-0.01	
Greater Brisbane	0.78	0.70	0.77	-0.01	
Greater Adelaide	0.66	0.81	0.84	0.18	
Greater Perth	0.44	0.59	0.75	0.31	

Source: Austroads, National Performance Indicators Data, Graph 7.3.1 AM peak congestion indicator (urban)

Represents the difference between actual and nominal travel time: the delay from traffic conditions which do not permit travel at the posted speed limit.

Data refers to the weekday morning peak congestion time, in each direction.

This data is better suited to comparisons over time for each region, rather than between regions.



C 2.2 Moving Freight

C 2.2.1 Road freight activity

This indicator measures road freight activity by region. Freight use represents a major component of the total road transport task. Changes over time in road freight tonne kilometres (alongside trends in the passenger vehicle task) are important for assessing the extent of growth in the overall transport task in a region.⁶⁷

Table C 2.2.1.a Road freight tonne kilometres by capital city/balance of state

Capital City / Balance of State	2001-02 billion tonne kilometres	2006-07 billion tonne kilometres	2011-12 billion tonne kilometres	2001-02 to 2011-12 change billion tonne kilometres	Trend
Sydney	9.7	11.2	12.5	2.8	
Rest of New South Wales	41.4	49.4	57.6	16.2	
Melbourne	9.8	11.2	12.5	2.7	
Rest of Victoria	22.4	28.2	32.2	9.8	
Brisbane	5.7	7.5	8.6	2.9	
Rest of Queensland	19.7	26.0	29.1	9.4	
Adelaide	2.1	2.6	2.9	0.8	
Rest of South Australia	8.3	11.7	13.7	5.4	
Perth	3.6	5.1	5.8	2.2	
Rest of Western Australia	18.1	23.9	26.1	8.0	
Hobart	0.3	0.4	0.4	0.1	
Rest of Tasmania	2.4	3.0	3.3	0.9	
Darwin	0.2	0.3	0.3	0.1	
Rest of Northern Territory	2.2	1.7	2.2	0.0	
Australian Capital Territory	0.3	0.3	0.3	0.0	
AUSTRALIA	146.1	182.4	207.5	61.4	

Source: BITRE, 2013, Yearbook 2013: Australian infrastructure statistics, Statistical Report, Canberra

Based on the Statistical Divisions (SD) structure under the Australian Standard Geographical Classification (ASGC). These estimates use the SD boundaries current at the time data was collected and may vary across reference periods.

Estimates are based on the location of the road, not the start point or destination of the driver or goods.

⁶⁷ BITRE, Research Report 112, Freight Measurement and Modelling in Australia, 2006

C 2.2.2 Volume of freight through ports

This indicator measures the volume of freight, both international and domestic, being loaded and unloaded at ports. The indicator is only presented for those regions that contain a port with significant and ongoing freight activity. The volume of freight through ports is associated with freight infrastructure needs in the regions near ports, and employment at ports and related industries.

Table C 2.2.2.a Volume of freight through ports by remoteness class

Remoteness Class	2008-09	2010-11	2012-13	2008-09 to 2012-13	Trend
	tonnes (million)	tonnes (million)	tonnes (million)	change tonnes (million)	
Major Cities	253.2	288.0	329.4	76.1	
Inner Regional	102.4	101.1	111.9	9.4	
Outer Regional	156.9	166.1	187.8	30.9	
Remote	233.4	300.0	395.1	161.7	
Very Remote	170.9	197.4	220.7	49.8	
AUSTRALIA	916.9	1,052.6	1,244.8	327.9	

Source: ABS, International cargo statistics (unpublished data), 2008-09, 2010-11 and 2012-13

Combined volume of Coastal and International weight.

Table C 2.2.2.b Volume of freight through ports by major urban area

Major Urban Area	2008-09	2010-11	2012-13	2008-09 to 2012-13	Trend
	tonnes (million)	tonnes (million)	tonnes (million)	change tonnes (million)	
Greater Sydney	25.3	28.4	28.2	2.9	
Greater Melbourne	32.7	34.3	36.0	3.3	
Greater Brisbane	31.3	32.6	37.9	6.6	
Greater Perth	28.1	26.0	30.3	2.1	
Greater Adelaide	9.2	12.5	14.7	5.5	
Newcastle - Maitland	95.6	115.0	148.7	53.1	
Wollongong	24.1	29.8	23.5	-0.5	
Greater Hobart	2.7	2.3	1.7	-1.0	
Geelong	9.7	11.9	12.8	3.1	
Townsville	9.0	10.5	12.0	3.1	
Cairns	0.6	0.6	1.2	0.5	
Greater Darwin	12.3	12.7	13.1	0.8	

Source: ABS, International cargo statistics (unpublished data), 2008-09, 2010-11 and 2012-13

The major urban areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin are based on Greater Capital City Statistical Areas. All other major urban areas are based on Significant Urban Areas.

Combined volume of Coastal and International weight.

Excludes regions where volume of trade through ports is zero.

Values for some ports with low volumes have been rounded to zero.

Table C 2.2.2.c Volume of freight through ports by sub-state region

Sub-State Region	2008-09 tonnes (million)	2010-11 tonnes (million)	2012-13 tonnes (million)	2008-09 to 2012-13 change tonnes (million)	Trend
New South Wales					
Sydney - City and Inner South	25.3	28.4	28.2	2.9	
Capital Region	1.2	1.1	1.0	-0.2	
Coffs Harbour - Grafton	0.0	0.0	0.0	0.0	
Illawarra	24.1	29.8	23.5	-0.5	
Newcastle and Lake Macquarie	95.6	115.0	148.7	53.1	
Victoria					
Melbourne - Inner	29.5	31.9	33.9	4.3	
Mornington Peninsula	3.2	2.3	2.2	-1.0	
Geelong	9.7	11.9	12.8	3.1	
Latrobe - Gippsland	0.0	0.0	0.0	0.0	
Warrnambool and South West	2.7	3.8	4.9	2.2	
Queensland					
Brisbane - East	31.3	32.6	37.9	6.6	
Cairns	1.3	1.0	1.6	0.3	
Fitzroy	79.1	76.6	86.1	7.0	
Mackay	99.2	105.4	116.4	17.2	
Queensland - Outback	21.6	23.1	29.7	8.0	
Townsville	9.6	10.9	12.3	2.7	
Wide Bay	0.3	0.3	0.2	0.0	
South Australia					
Adelaide - West	9.2	12.5	14.7	5.5	
Barossa - Yorke - Mid North	3.4	3.5	3.8	0.4	
South Australia - Outback	12.4	15.2	15.7	3.2	
Western Australia					
Perth - South West	28.1	26.0	30.3	2.1	
Bunbury	11.9	13.5	15.1	3.2	
Western Australia - Outback	384.3	476.4	595.8	211.5	
Western Australia - Wheat Belt	4.1	3.0	4.0	-0.1	
Tasmania					
Hobart	2.7	2.3	1.7	-1.0	
Launceston and North East	4.7	4.0	2.4	-2.3	
West and North West	9.6	9.3	8.9	-0.7	
Northern Territory					
Darwin	12.3	12.7	13.1	0.8	
Northern Territory - Outback	0.5	0.0	0.0	-0.5	

Source: ABS, International cargo statistics (unpublished data), 2008-09, 2010-11 and 2012-13

Combined volume of Coastal and International weight.

Excludes regions where volume of trade through ports is zero.

Values for some ports with low volumes have been rounded to zero.

C 2.3 Communication and Utilities

C 2.3.1 Dwellings with an internet connection

People living in a dwelling have access to the internet when their dwelling has an active internet connection, whether based on broadband, dialup, or another technology. Some dwellings may have access to an internet connection even if it is not paid for by the household, for example those who have an internet connection provided by their employer.

Internet access can vary based on characteristics of people living in the dwelling but can also be limited by the type and cost of internet access available in a region. Access to the internet can benefit households by enabling improved communications, access to online services, greater consumer choice through e-commerce, and savings from reduced travel.

Table C 2.3.1.a Dwellings with an internet connection by remoteness class

Remoteness Class	2006 per cent	2011 per cent	2006–2011 change percentage points
Major Cities	66.2	82.0	15.8
Inner Regional	57.3	74.9	17.6
Outer Regional	54.6	72.4	17.8
Remote	53.4	72.2	18.8
Very Remote	42.9	60.2	17.3
AUSTRALIA	63.0	79.4	16.4

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Internet connections include broadband, dial-up, and other types of connection.



Table C 2.3.1.b Dwellings with an internet connection by major urban area

Major Urban Area	2006 per cent	2011 per cent	2006–2011 change percentage points
Greater Sydney	68.2	82.8	14.6
Greater Melbourne	66.0	81.9	16.0
Greater Brisbane	68.2	83.8	15.6
Greater Perth	66.7	83.0	16.3
Greater Adelaide	60.2	77.5	17.4
Gold Coast - Tweed Heads	64.6	82.6	17.9
Newcastle - Maitland	58.8	76.1	17.3
Canberra - Queanbeyan	73.9	87.2	13.2
Sunshine Coast	64.0	81.8	17.8
Wollongong	59.6	76.3	16.8
Greater Hobart	58.0	75.5	17.5
Geelong	57.5	75.7	18.2
Townsville	64.5	81.5	17.0
Cairns	64.3	81.1	16.8
Greater Darwin	64.4	83.0	18.7
Toowoomba	58.9	76.0	17.1
Ballarat	56.4	75.3	18.9
Bendigo	56.9	75.2	18.4
Albury - Wodonga	58.7	75.9	17.2
Launceston	55.7	73.1	17.4

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

The major urban areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin are based on Greater Capital City Statistical Areas. All other major urban areas are based on Significant Urban Areas.

Internet connections include broadband, dial-up, and other types of connection.

Table C 2.3.1.c Dwellings with an internet connection by sub-state region

Sub-State Region	2006 per cent	2011 per cent	2006–2011 change percentage points
New South Wales			
Greater Sydney	68.2	82.8	14.6
Central Coast	59.2	76.1	16.9
Sydney - Baulkham Hills and Hawkesbury	81.2	90.3	9.1
Sydney - Blacktown	64.2	81.3	17.1
Sydney - City and Inner South	69.4	84.9	15.5
Sydney - Eastern Suburbs	72.2	85.8	13.6
Sydney - Inner South West	61.2	77.7	16.5
Sydney - Inner West	71.2	84.6	13.3
Sydney - North Sydney and Hornsby	79.6	90.0	10.4
Sydney - Northern Beaches	74.7	86.9	12.2
Sydney - Outer South West	65.8	81.9	16.1
Sydney - Outer West and Blue Mountains	66.5	81.7	15.2
Sydney - Parramatta	63.7	80.4	16.8
Sydney - Ryde	74.4	85.7	11.3
Sydney - South West	59.9	76.8	17.0
Sydney - Sutherland	71.6	84.6	12.9
Rest of New South Wales	55.9	73.1	17.2
Capital Region	58.5	75.0	16.5
Central West	53.6	70.7	17.0
Coffs Harbour - Grafton	55.2	73.3	18.2
Far West and Orana	49.2	66.2	17.0
Hunter Valley exc Newcastle	57.8	75.7	17.9
Illawarra	59.9	76.5	16.5
Mid North Coast	51.8	69.5	17.6
Murray	54.2	71.0	16.8
New England and North West	51.4	68.5	17.1
Newcastle and Lake Macquarie	58.8	76.0	17.2
Richmond - Tweed	56.6	74.3	17.7
Riverina	54.2	70.9	16.7
Southern Highlands and Shoalhaven	58.4	74.8	16.4
Victoria			
Greater Melbourne	66.0	81.9	16.0
Melbourne - Inner	68.5	84.7	16.2
Melbourne - Inner East	72.7	85.1	12.3
Melbourne - Inner South	69.1	83.3	14.3
Melbourne - North East	63.2	80.1	16.8
Melbourne - North West	60.0	78.1	18.1
Melbourne - Outer East	69.6	84.2	14.6
Melbourne - South East	64.7	81.4	16.6
Melbourne - West	61.5	79.6	18.2
Mornington Peninsula	61.9	79.4	17.5

(continued)

Dwellings with an internet connection by sub-state region (continued)

<i>Sub-State Region</i>	<i>2006 per cent</i>	<i>2011 per cent</i>	<i>2006–2011 change percentage points</i>
Rest of Victoria	55.0	73.0	18.0
Ballarat	55.7	73.7	18.0
Bendigo	57.2	74.9	17.8
Geelong	59.3	77.3	18.1
Hume	55.5	73.5	18.0
Latrobe - Gippsland	55.0	72.9	17.9
North West	49.9	67.3	17.4
Shepparton	51.9	70.2	18.3
Warrnambool and South West	52.0	70.4	18.4
Queensland			
Greater Brisbane	68.2	83.8	15.6
Brisbane - East	68.3	83.8	15.5
Brisbane - North	64.9	81.6	16.7
Brisbane - South	70.5	85.1	14.5
Brisbane - West	79.9	90.3	10.3
Brisbane Inner City	73.0	87.9	14.9
Ipswich	61.0	79.3	18.4
Logan - Beaudesert	65.5	82.5	17.0
Moreton Bay - North	59.4	78.1	18.7
Moreton Bay - South	75.1	88.5	13.3
Rest of Queensland	60.0	78.0	18.0
Cairns	59.6	76.8	17.2
Darling Downs - Maranoa	50.7	69.9	19.2
Fitzroy	58.7	76.9	18.2
Gold Coast	66.5	84.1	17.5
Mackay	60.3	78.8	18.5
Queensland - Outback	45.9	65.1	19.2
Sunshine Coast	64.3	81.9	17.6
Toowoomba	60.0	76.9	16.9
Townsville	60.4	78.4	18.0
Wide Bay	52.2	71.5	19.3
South Australia			
Greater Adelaide	60.2	77.5	17.4
Adelaide - Central and Hills	65.9	81.1	15.1
Adelaide - North	58.2	76.6	18.4
Adelaide - South	62.7	79.4	16.7
Adelaide - West	52.4	71.8	19.4
Rest of South Australia	50.6	69.2	18.6
Barossa - Yorke - Mid North	50.6	68.9	18.3
South Australia - Outback	48.8	68.1	19.3
South Australia - South East	51.5	70.0	18.5

(continued)

Dwellings with an internet connection by sub-state region (continued)

<i>Sub-State Region</i>	<i>2006 per cent</i>	<i>2011 per cent</i>	<i>2006–2011 change percentage points</i>
Western Australia			
Greater Perth	66.7	83.0	16.3
Mandurah	59.2	78.1	18.9
Perth - Inner	71.9	86.2	14.2
Perth - North East	64.6	81.6	17.0
Perth - North West	68.3	84.1	15.8
Perth - South East	65.4	82.3	16.9
Perth - South West	66.5	82.7	16.3
Rest of Western Australia	57.2	75.1	17.9
Bunbury	59.9	77.9	18.0
Western Australia - Outback	55.6	73.8	18.2
Western Australia - Wheat Belt	56.6	73.7	17.1
Tasmania			
Greater Hobart	58.0	75.5	17.5
Rest of Tasmania	52.6	70.8	18.2
Launceston and North East	54.1	71.7	17.6
South East	50.1	69.6	19.5
West and North West	51.4	69.9	18.5
Northern Territory			
Greater Darwin	64.4	83.0	18.7
Northern Territory - Outback	46.5	63.0	16.5
Australian Capital Territory	74.9	87.8	12.9

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Internet connections include broadband, dial-up, and other types of connection.

Table C 2.3.1.d Dwellings with an internet connection by capital city/balance of state

<i>Capital City / Balance of State</i>	2006 <i>per cent</i>	2011 <i>per cent</i>	2006–2011 <i>change percentage points</i>
Greater Sydney	68.2	82.8	14.6
Rest of New South Wales	55.9	73.1	17.2
Greater Melbourne	66.0	81.9	16.0
Rest of Victoria	55.0	73.0	18.0
Greater Brisbane	68.2	83.8	15.6
Rest of Queensland	60.0	78.0	18.0
Greater Adelaide	60.2	77.5	17.4
Rest of South Australia	50.6	69.2	18.6
Greater Perth	66.7	83.0	16.3
Rest of Western Australia	57.2	75.1	17.9
Greater Hobart	58.0	75.5	17.5
Rest of Tasmania	52.6	70.8	18.2
Greater Darwin	64.4	83.0	18.7
Rest of Northern Territory	46.5	63.0	16.5
Australian Capital Territory	74.9	87.8	12.9

Source: ABS Census of Population and Housing, retrieved using TableBuilder Pro, 2011, Third Release (cat. no. 2073.0) and ABS, TableBuilder, 2006 (cat. no. 2065.0)

Internet connections include broadband, dial-up, and other types of connection.

C 2.3.2 Residential electricity supply

Average electricity supply to households covers grid-connected households on residential tariffs, including those that provide some of their own electricity (e.g. through solar) as well as those that do not. Average electricity supply varies with climate zone, household income, and other household and dwelling characteristics.

Electricity is the dominant type of household energy supply, with almost every Australian household (99.8 per cent) using mains electricity as a source of energy inside their dwelling.⁶⁸ This indicator provides a guide to the average amount of electricity supplied to households in each region. The type and amount of energy supplied to the home also has implications for the environment.

Table C 2.3.2.a Average electricity supplied from the distributor network grid per residential meter by major urban area

Major Urban Area	2010 kWh	2011 kWh	2012 kWh	2006–2011 change kWh	Trend
Greater Sydney	6,861.4	6,678.8	6,237.0	-624.4	
Greater Melbourne	5,143.0	4,702.6	4,589.4	-553.6	
Greater Brisbane	6,754.5	6,507.9	6,242.2	-512.3	
Greater Perth	6,084.0	5,403.8	5,110.3	-973.7	
Greater Adelaide	5,308.7	4,857.2	4,723.2	-585.5	
Gold Coast - Tweed Heads	6,237.8	6,114.7	5,686.5	-551.3	
Newcastle - Maitland	6,998.5	6,756.1	6,465.2	-533.3	
Canberra - Queanbeyan	n.p.	n.p.	n.p.	n.p.	
Sunshine Coast	5,960.6	5,818.1	5,499.1	-461.6	
Wollongong	6,934.4	6,222.8	5,971.3	-963.1	
Greater Hobart	9,393.7	8,242.5	7,721.0	-1,672.6	
Geelong	9,376.8	8,221.5	8,254.5	-1,122.3	
Townsville	6,415.0	6,134.0	5,707.3	-707.7	
Cairns	9,178.8	8,850.3	8,642.9	-536.0	
Greater Darwin	n.p.	n.p.	n.p.	n.p.	
Toowoomba	8,442.9	7,960.1	7,698.1	-744.7	
Ballarat	5,257.4	4,453.6	4,685.5	-571.9	
Bendigo	5,865.5	5,093.3	5,210.4	-655.1	
Albury - Wodonga	7,495.0	6,454.7	6,208.7	-1,286.2	
Launceston	8,924.0	7,529.1	7,129.7	-1,794.3	

Source: ABS, Household Energy Consumption Survey, Australia: Summary of Results, 2012 (cat. no. 4670.0)

The major urban areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin are based on Greater Capital City Statistical Areas. All other major urban areas are based on Significant Urban Areas.

Mean electricity supplied was calculated by taking the mean across three classes of meter: gross, net and non-generating meters. In cases where data for gross and net meters is unavailable, the average for non-generating meters has been taken as the average for the region.

For dwellings with net meters, electricity generated is consumed by the dwelling in the first instance, with any excess generation exported to the electricity grid. This indicator only includes the shortfall of electricity that is imported to the dwelling (i.e. the energy supplied from the grid).

n.p. not published.

⁶⁸ ABS, Environmental Issues: Energy Use and Conservation, Mar 2011 (cat. no. 4602.0.55.001)

Table C 2.3.2.b Average electricity supplied from the distributor network grid per residential meter by sub-state region

Sub-State Region	2010 kWh	2011 kWh	2012 kWh	2010–2012 change kWh	Trend
New South Wales					
Greater Sydney	6,861.4	6,678.8	6,237.0	-624.4	
Central Coast	6,754.5	6,618.9	6,280.9	-473.6	
Sydney - Baulkham Hills and Hawkesbury	10,268.5	9,661.0	9,005.9	-1,262.6	
Sydney - Blacktown	7,214.1	6,905.3	6,465.3	-748.7	
Sydney - City and Inner South	4,571.7	4,517.9	4,173.0	-398.7	
Sydney - Eastern Suburbs	6,043.8	5,953.9	5,541.0	-502.9	
Sydney - Inner South West	6,229.6	6,193.1	5,781.0	-448.6	
Sydney - Inner West	5,621.3	5,406.9	5,060.3	-561.0	
Sydney - North Sydney and Hornsby	7,434.5	7,260.9	6,777.0	-657.5	
Sydney - Northern Beaches	6,821.0	6,696.3	6,315.1	-505.9	
Sydney - Outer South West	7,966.4	7,573.6	7,149.6	-816.8	
Sydney - Outer West and Blue Mountains	8,024.9	7,660.9	7,168.6	-856.3	
Sydney - Parramatta	6,271.8	6,027.5	5,679.0	-592.8	
Sydney - Ryde	6,968.7	7,233.7	6,233.7	-735.0	
Sydney - South West	7,573.4	7,270.1	6,827.3	-746.2	
Sydney - Sutherland	8,057.3	7,934.4	7,371.3	-686.0	
Rest of New South Wales	6,779.6	6,058.9	5,773.0	-1,006.6	
Capital Region	6,577.9	5,624.4	5,458.9	-1,119.0	
Central West	7,367.7	6,417.4	6,086.5	-1,281.2	
Coffs Harbour - Grafton	6,012.4	5,090.1	4,756.0	-1,256.4	
Far West and Orana	8,245.7	6,958.4	6,658.6	-1,587.1	
Hunter Valley exc Newcastle	7,517.7	7,358.8	6,823.0	-694.7	
Illawarra	5,898.9	5,702.8	5,383.5	-515.3	
Mid North Coast	5,930.9	5,134.0	4,842.3	-1,088.6	
Murray	7,519.6	6,205.6	6,059.4	-1,460.2	
New England and North West	7,747.7	6,626.3	6,330.7	-1,417.0	
Newcastle and Lake Macquarie	6,605.2	6,321.8	6,186.0	-419.2	
Richmond - Tweed	6,020.0	5,073.9	4,815.6	-1,204.4	
Riverina	7,753.0	6,373.9	6,191.0	-1,562.1	
Southern Highlands and Shoalhaven	6,268.4	6,049.8	5,781.2	-487.2	
Victoria					
Greater Melbourne	5,143.0	4,702.6	4,589.4	-553.6	
Melbourne - Inner	4,771.8	4,182.2	4,315.9	-455.9	
Melbourne - Inner East	5,577.5	5,190.2	5,166.7	-410.8	
Melbourne - Inner South	5,530.2	5,255.6	5,187.3	-343.0	
Melbourne - North East	5,051.6	4,622.4	4,272.7	-778.9	
Melbourne - North West	5,193.1	4,432.5	4,405.5	-787.7	
Melbourne - Outer East	5,669.9	5,325.8	4,813.2	-856.7	
Melbourne - South East	5,150.4	4,865.3	4,575.7	-574.6	
Melbourne - West	4,693.1	4,089.2	4,256.8	-436.2	
Mornington Peninsula	5,043.4	4,790.0	4,669.8	-373.6	

(continued)

Average electricity supplied from the distributor network grid per residential meter by sub-state region
(continued)

Sub-State Region	2010 kWh	2011 kWh	2012 kWh	2010-2012 change kWh	Trend
Rest of Victoria	6,130.6	5,428.9	5,333.3	-797.4	
Ballarat	5,665.6	4,874.7	4,936.3	-729.3	
Bendigo	5,869.1	5,030.5	5,186.9	-682.2	
Geelong	5,067.0	4,423.2	4,583.3	-483.7	
Hume	6,529.0	6,102.0	5,528.5	-1,000.5	
Latrobe - Gippsland	5,688.8	5,450.1	4,828.1	-860.7	
North West	7,866.3	6,653.2	7,054.1	-812.2	
Shepparton	7,524.7	6,251.2	6,335.4	-1,189.3	
Warrnambool and South West	6,327.7	5,471.1	5,528.4	-799.3	
Queensland					
Greater Brisbane	6,754.5	6,507.9	6,242.2	-512.3	
Brisbane - East	7,167.0	6,912.2	6,582.9	-584.1	
Brisbane - North	5,982.8	5,780.3	5,521.3	-461.5	
Brisbane - South	6,640.7	6,436.8	6,142.2	-498.5	
Brisbane - West	7,558.1	7,255.5	7,061.4	-496.7	
Brisbane Inner City	5,578.7	5,441.8	5,241.1	-337.7	
Ipswich	6,775.0	6,481.3	6,271.3	-503.6	
Logan - Beaudesert	7,537.0	7,240.1	6,902.3	-634.7	
Moreton Bay - North	6,584.4	6,295.3	6,043.3	-541.2	
Moreton Bay - South	7,478.2	7,191.7	6,872.2	-606.0	
Rest of Queensland	7,146.2	6,850.4	6,599.0	-547.2	
Cairns	7,447.3	6,995.7	6,839.3	-608.0	
Darling Downs - Maranoa	6,883.2	6,664.4	6,410.4	-472.7	
Fitzroy	7,128.3	6,972.0	6,829.8	-298.5	
Gold Coast	7,507.5	7,161.8	6,792.9	-714.6	
Mackay	7,529.5	7,423.2	7,264.1	-265.3	
Queensland - Outback	8,339.2	7,824.3	8,078.6	-260.5	
Sunshine Coast	6,737.2	6,445.4	6,143.3	-593.9	
Toowoomba	6,308.4	6,137.0	5,820.1	-488.3	
Townsville	8,277.6	7,805.0	7,582.1	-695.5	
Wide Bay	5,927.0	5,729.2	5,413.4	-513.6	
South Australia					
Greater Adelaide	5,308.7	4,857.2	4,723.2	-585.5	
Adelaide - Central and Hills	5,937.0	5,509.8	5,363.7	-573.3	
Adelaide - North	5,349.1	4,870.4	4,713.8	-635.3	
Adelaide - South	5,185.2	4,724.3	4,597.2	-588.0	
Adelaide - West	4,647.3	4,224.6	4,132.4	-514.9	
Rest of South Australia	5,597.2	5,225.7	5,017.2	-580.0	
Barossa - Yorke - Mid North	5,693.1	5,272.8	5,029.6	-663.6	
South Australia - Outback	5,810.4	5,412.8	5,225.1	-585.3	
South Australia - South East	5,458.7	5,126.7	4,931.2	-527.5	

(continued)

*Average electricity supplied from the distributor network grid per residential meter by sub-state region
(continued)*

<i>Sub-State Region</i>	<i>2010 kWh</i>	<i>2011 kWh</i>	<i>2012 kWh</i>	<i>2010–2012 change kWh</i>	<i>Trend</i>
Western Australia					
Greater Perth	6,084.0	5,403.8	5,110.3	-973.7	
Mandurah	5,422.6	4,741.1	4,552.8	-869.8	
Perth - Inner	6,320.6	5,615.1	5,390.1	-930.5	
Perth - North East	6,183.0	5,605.7	5,220.1	-962.9	
Perth - North West	6,156.1	5,506.3	5,167.5	-988.6	
Perth - South East	6,064.7	5,354.7	5,078.1	-986.6	
Perth - South West	6,020.0	5,293.6	5,031.3	-988.8	
Rest of Western Australia	6,448.0	5,769.2	5,212.1	-1,235.9	
Bunbury	5,383.6	4,743.4	4,558.6	-824.9	
Western Australia - Outback	8,282.5	7,512.1	6,259.1	-2,023.3	
Western Australia - Wheat Belt	5,529.8	4,888.8	4,721.1	-808.7	
Tasmania					
Greater Hobart	9,393.7	8,242.5	7,721.0	-1,672.6	
Rest of Tasmania	8,428.3	7,383.2	6,984.0	-1,444.4	
Launceston and North East	8,866.3	7,786.8	7,339.3	-1,527.1	
South East	6,494.1	5,722.4	5,392.6	-1,101.6	
West and North West	8,703.9	7,583.1	7,221.8	-1,482.1	
Northern Territory					
Greater Darwin	n.p.	n.p.	n.p.	n.p.	
Northern Territory - Outback	n.p.	n.p.	n.p.	n.p.	
Australian Capital Territory	n.p.	n.p.	n.p.	n.p.	

Source: ABS, Household Energy Consumption Survey, Australia: Summary of Results, 2012 (cat. no. 4670.0)

Mean electricity supplied was calculated by taking the mean across three classes of meter: gross, net and non-generating meters. In cases where data for gross and net meters is unavailable, the average for non-generating meters has been taken as the average for the region.

For dwellings with net meters, electricity generated is consumed by the dwelling in the first instance, with any excess generation exported to the electricity grid. This indicator only includes the shortfall of electricity that is imported to the dwelling (i.e. the energy supplied from the grid).

n.p. not published.

Table C 2.3.2.c Average electricity supplied from the distributor network grid per residential meter by capital city/balance of state

Capital City / Balance of State	2010 kWh	2011 kWh	2012 kWh	2006–2011 change kWh	Trend
Greater Sydney	6,861.4	6,678.8	6,237.0	-624.4	
Rest of New South Wales	6,779.6	6,058.9	5,773.0	-1,006.6	
Greater Melbourne	5,143.0	4,702.6	4,589.4	-553.6	
Rest of Victoria	6,130.6	5,428.9	5,333.3	-797.4	
Greater Brisbane	6,754.5	6,507.9	6,242.2	-512.3	
Rest of Queensland	7,146.2	6,850.4	6,599.0	-547.2	
Greater Adelaide	5,308.7	4,857.2	4,723.2	-585.5	
Rest of South Australia	5,597.2	5,225.7	5,017.2	-580.0	
Greater Perth	6,084.0	5,403.8	5,110.3	-973.7	
Rest of Western Australia	6,448.0	5,769.2	5,212.1	-1,235.9	
Greater Hobart	9,393.7	8,242.5	7,721.0	-1,672.6	
Rest of Tasmania	8,428.3	7,383.2	6,984.0	-1,444.4	
Greater Darwin	n.p.	n.p.	n.p.	n.p.	
Rest of Northern Territory	n.p.	n.p.	n.p.	n.p.	
Australian Capital Territory	n.p.	n.p.	n.p.	n.p.	

Source: ABS, Household Energy Consumption Survey, Australia: Summary of Results, 2012 (cat. no. 4670.0)

Mean electricity supplied was calculated by taking the mean across three classes of meter: gross, net and non-generating meters. In cases where data for gross and net meters is unavailable, the average for non-generating meters has been taken as the average for the region.

For dwellings with net meters, electricity generated is consumed by the dwelling in the first instance, with any excess generation exported to the electricity grid. This indicator only includes the shortfall of electricity that is imported to the dwelling (i.e. the energy supplied from the grid).









n.p. not published.



C 2.3.3 Residential water supply

Average water use of households is compiled from information from large urban water utilities with over 10,000 customers that provide water to about 85 per cent of Australia's population. Residential water supply is influenced by climate, rainfall, the prevailing water restriction policies, water conservation measures, the available water supply, housing density and the price of water.⁶⁹

Table C 2.3.3.a Average annual residential water supplied by major urban area

Major Urban Area	2006-07 kL/property	2009-10 kL/property	2012-13 kL/property	2006-07 to 2012-13 change kL/property	Trend
Sydney	199.0	204.6	198.0	-1.0	
Melbourne	170.4	142.3	152.0	-18.4	
South East Queensland	n.a.	n.a.	156.4	n.a.	
Perth	281.0	275.9	248.5	-32.5	
Adelaide	235.0	191.5	193.1	-41.9	
Newcastle - Maitland	195.0	184.0	175.8	-19.2	
Australian Capital Territory	240.0	198.6	198.7	-41.3	
Geelong	169.0	149.9	159.6	-9.4	
Townsville	n.a.	434.1	382.6	n.a.	
Cairns	n.a.	262.0	257.6	n.a.	
Darwin	483.0	458.2	454.0	-29.0	
Toowoomba	n.a.	n.a.	130.3	n.a.	

Source: National Water Commission, National Performance Report 2012-13 - Urban Water Utilities

Major urban areas have been classified according to the National Water Commission's Urban Water Utilities Boundaries. This is broadly comparable to the ASGS Significant Urban Area and Greater Capital City Area classification.

Includes only major utilities with 100,000+ customers.

n.a. not available.

⁶⁹ National Water Commission, National Performance Report 2012-13: urban water, 2014

C 2.4 Land Use

C 2.4.1 Land area and land use

Land area for each region is based on the Australian Statistical Geography Standard (ASGS), and provides a context for understanding the distribution and density of settlement, industry and infrastructure.

Land cover indicators identify changes to the extent of vegetation cover which highlight green space and tree cover within built up areas and of reserves of vegetation within larger regions. Land use indicators also identify the extent of agricultural and urban areas. This information provides the foundation for regional and urban development planning.

Table C 2.4.1.a Land area by remoteness class

Remoteness Class	Land area hectare
	2011
Major Cities	1,889,050
Inner Regional	24,639,671
Outer Regional	78,398,791
Remote	92,233,280
Very Remote	571,620,069
AUSTRALIA	768,780,861

Source: ABS, Australian Statistical Geography Standard (ASGS), 2011

Land use data for remoteness classes has not been calculated due to the inconsistency between this indicator and the population weighted concordance process used to calculate aggregate data from SA2s.

