



APPENDIX Q6

Benchmarking social services and living costs

Q6 BENCHMARKING SOCIAL SERVICES AND LIVING COSTS

This appendix benchmarks employment in social services and living costs in Roxby Downs with comparable mining communities across Australia. This information supports Chapter 19, Social Environment, of the Draft EIS.

Q6.1 APPROACH

The approach used to benchmark employment in social services and living costs in mining communities across Australia involved the following key activities.

A review was undertaken of mining communities around Australia to select areas that were most comparable to Roxby Downs based on (see Section Q6.3 for selection criteria details):

- mines operating in South Australia, Queensland, Western Australia, Northern Territory, New South Wales and Victoria, and the local government areas in which they operate
- the number of people employed in mining
- population size
- the degree of remoteness
- the number of towns (classified as an urban centre/locality or state suburb by the Australian Bureau of Statistics) in the identified local government area
- demography
- the size of the residential and long distance commute/fly-in fly-out populations.

Local government areas (LGAs) were used as the basis of the review, with the exception of Nhulunbuy Statistical Local Area (SLA), which falls within unincorporated land in the Northern Territory and is managed by a public corporation, and Groote Eyelandt (SLA), also part of the Northern Territory (see Figure Q6.4).

As there are relatively few large-scale mining operations in South Australia, population size was used as the basis for the initial selection of LGAs rather than employment in mining. The review was also confined to incorporated areas in regional South Australia (i.e. LGAs outside the Outer Adelaide Statistical Division), excluding the Kangaroo Island LGA.

Areas considered to be most comparable to Roxby Downs were chosen for this review. No comparable LGAs to Roxby Downs were identified in South Australia, and consequently, no South Australian LGAs have been benchmarked.

Social services, living costs and other community characteristics were benchmarked based on:

- employment by government/non-government employer, industry and occupation. Where data is available regarding hours worked, the number of full-time equivalent (FTE) positions has been calculated
- ratios of students per school and students per teacher
- housing costs (including monthly housing loan repayments, weekly rental costs, average house sales, the value of building approvals, and housing affordability for key public sector workers)
- the cost of purchasing 37 grocery items from the major supermarket in selected LGAs
- quality of life, as measured by 10 variables including health, the housing market, internet access, employment, income, education, volunteering and crime.

Comparisons between areas are generally made on a per capita basis (as a rate per 1,000 population), other standardised ratio (e.g. population per general medical practitioner or student to teacher ratios), or ranked score. Rates per capita are calculated on the basis of the estimated resident population (or children aged 5–16 years old for the student/school teacher comparison).

Sources of information used in this analysis include:

- Australian Bureau of Statistics (ABS 2007a, 2007b, 2007c, 2007d, 2007e and 2007f) government reports and websites
- mining company reports and websites
- local government reports and websites
- a survey undertaken for the Draft EIS of the cost of purchasing 37 common grocery items
- reports by BankWest on key worker housing affordability and quality of life (2008a and 2008b).

Further details on the methodology for selecting LGAs for comparative purposes can be found in Section Q6.3.

Q6.2 LIMITATIONS AND ASSUMPTIONS

There are a number of limitations in comparing employment in social services across communities.

While LGAs were selected on the basis of their similarity to Roxby Downs, inherent differences in social and economic characteristics, geographic location (including proximity to other towns) and state/territory policies, and models and standards of service delivery will affect the level of service provided.

Mining towns also vary in terms of the size of the residential population and the long distance commute/fly-in fly out (FIFO) workforce. This can influence the level and type of services that are provided. For example, policing, health and recreation services are likely to take into account the FIFO population, while schools, childcare and family services are more likely to reflect the resident population. In general, the estimated resident population (ABS 2007a) has been used to calculate employment rates per 1,000 people, except where services are only used by a specific population group.

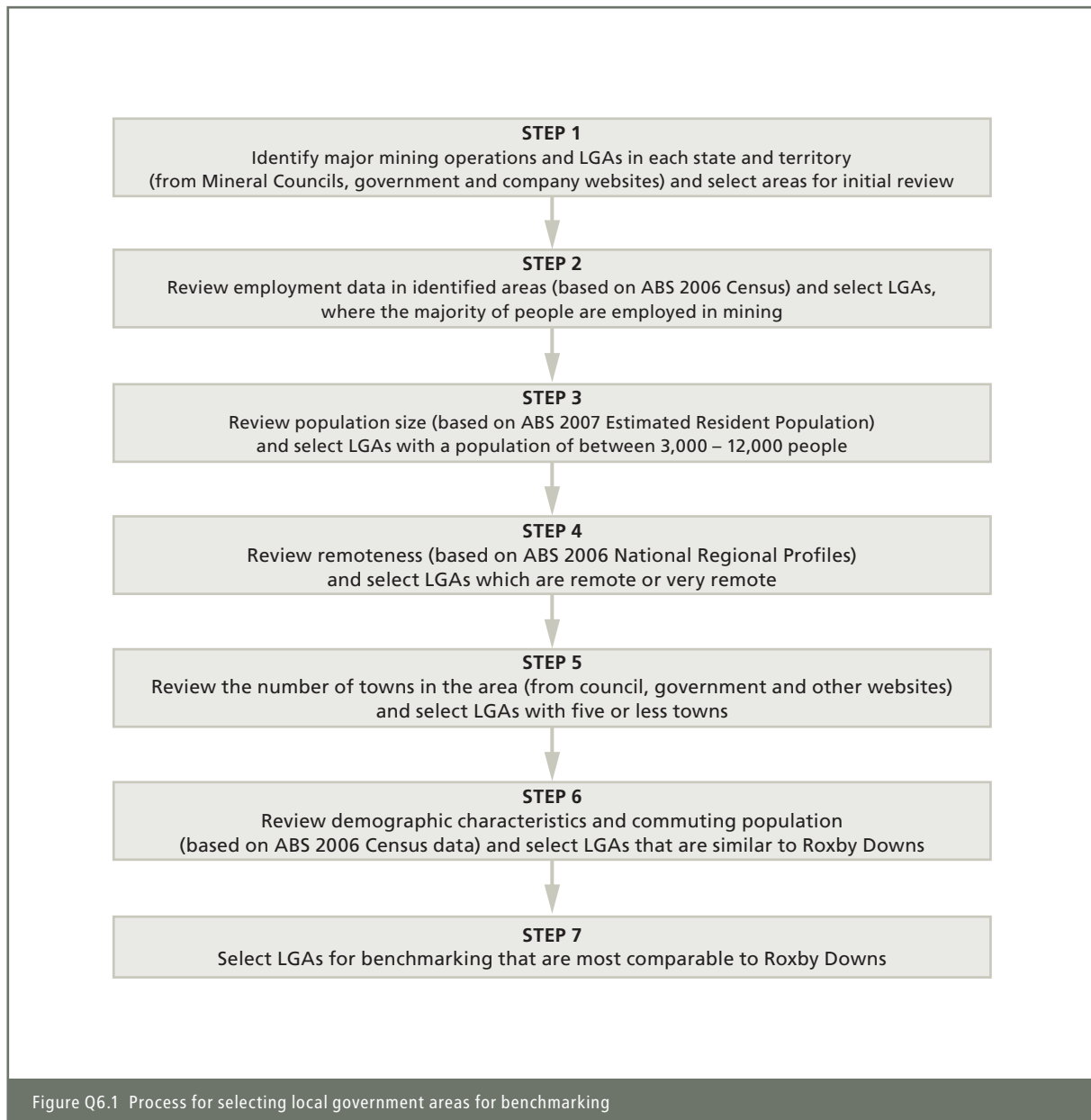
In addition, some services (e.g. some specialist health services and family welfare services supplied to Roxby Downs) may be provided on an outreach or visiting basis and will not be reflected in local employment data. The number of people employed in these industries who live locally may therefore not reflect the actual level of service provided. Employment levels will nonetheless indicate local service availability and have therefore been included in the analysis.

The opposite situation may also apply – where services (or people employed in those services) are located in one area – but serve a broader population catchment. LGAs, rather than towns, have therefore been used to compare areas, to maximise the likelihood of employment being within the area, and to take account of the broader catchment area of services.

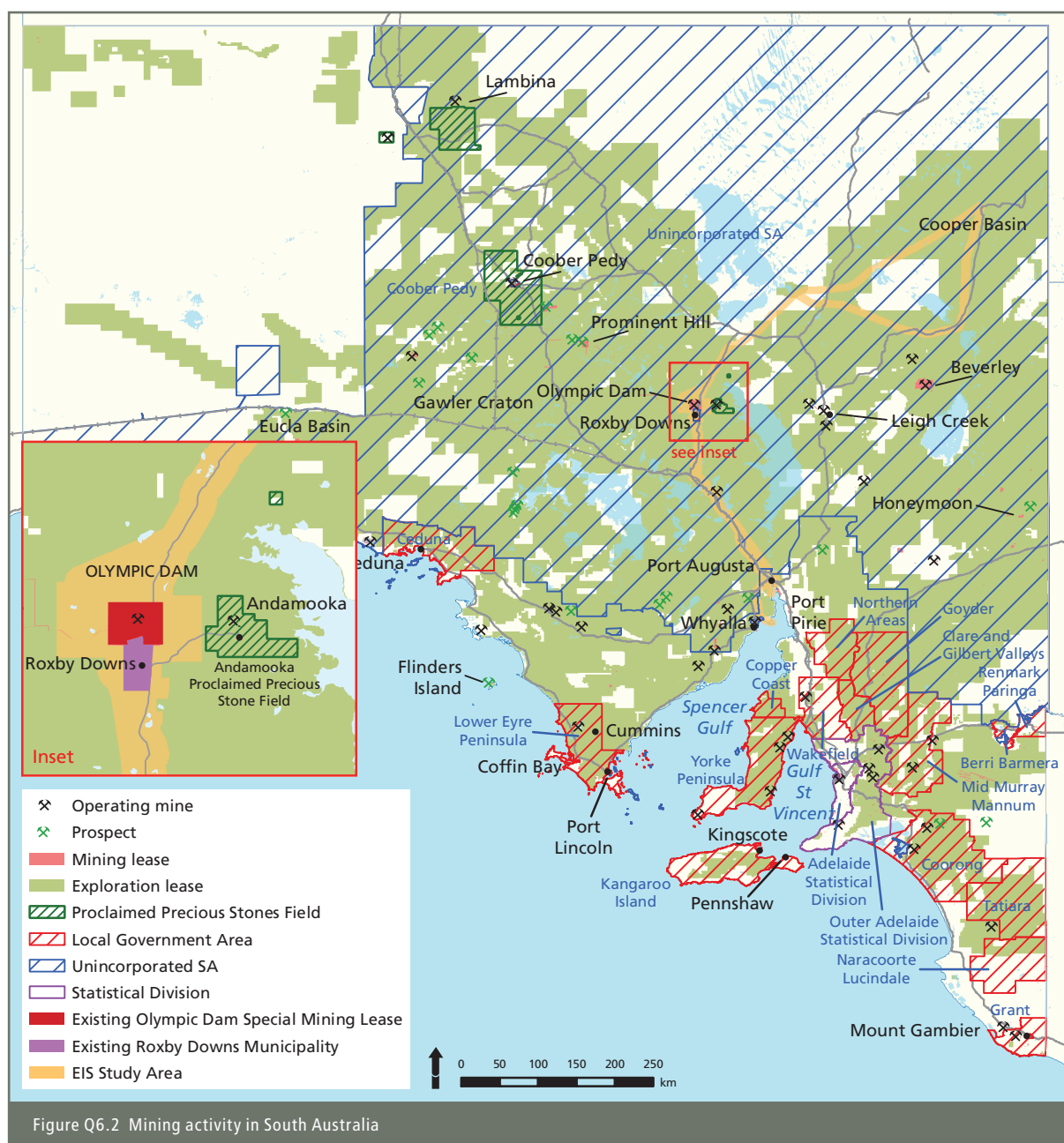
The review was undertaken using information available in the public domain and obtained from sources such as the ABS, local councils and mining companies. In some instances, data sets were incomplete, or could not be independently verified. In order to present the benchmarking information as consistently and accurately as possible, only data that comes from a citeable source has been used.

Q6.3 AREAS SELECTED FOR COMPARATIVE ANALYSIS

Figure Q6.1 outlines the process that was used to select LGAs for benchmarking, based on their comparability to the Roxby Downs LGA.



Figures Q6.2, 6.3, 6.4, 6.5, 6.6 and 6.7 show mining operations and exploration in South Australia, Queensland, Western Australia, the Northern Territory, New South Wales and Victoria respectively. These maps also show the areas selected for initial review, areas selected for benchmarking (highlighted), and the major towns or cities in selected LGAs and the state/territory.



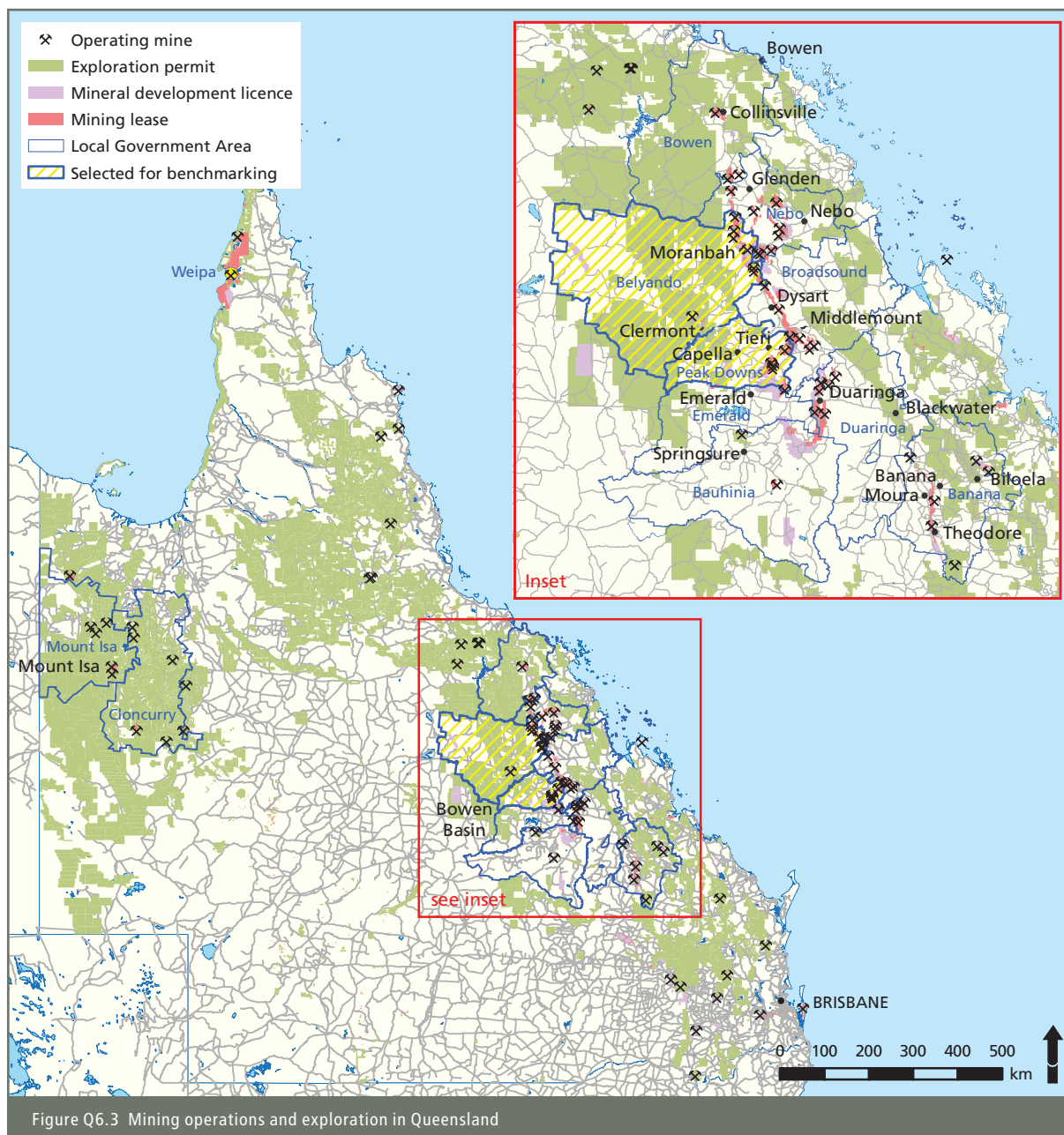
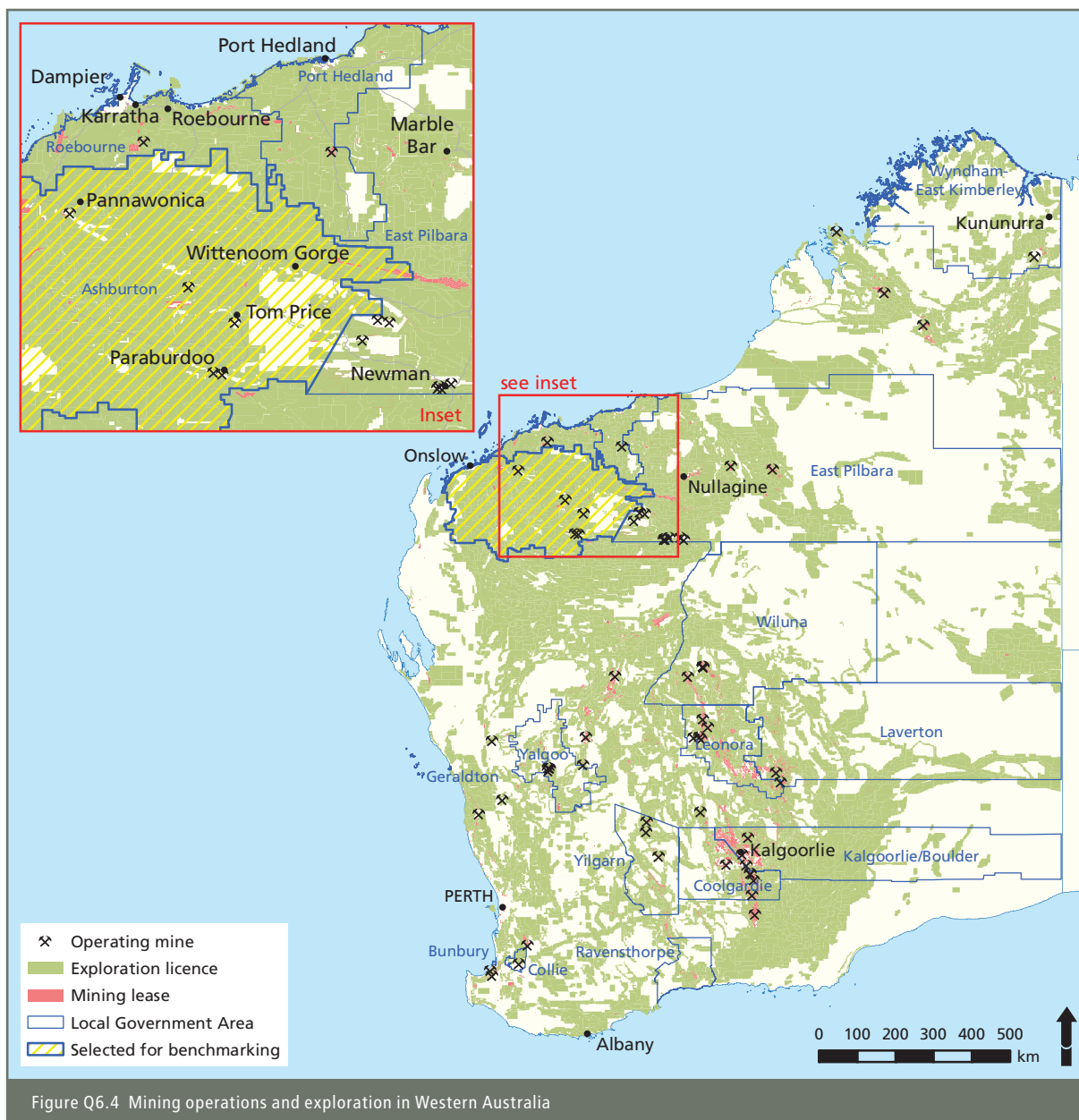


Figure Q6.3 Mining operations and exploration in Queensland



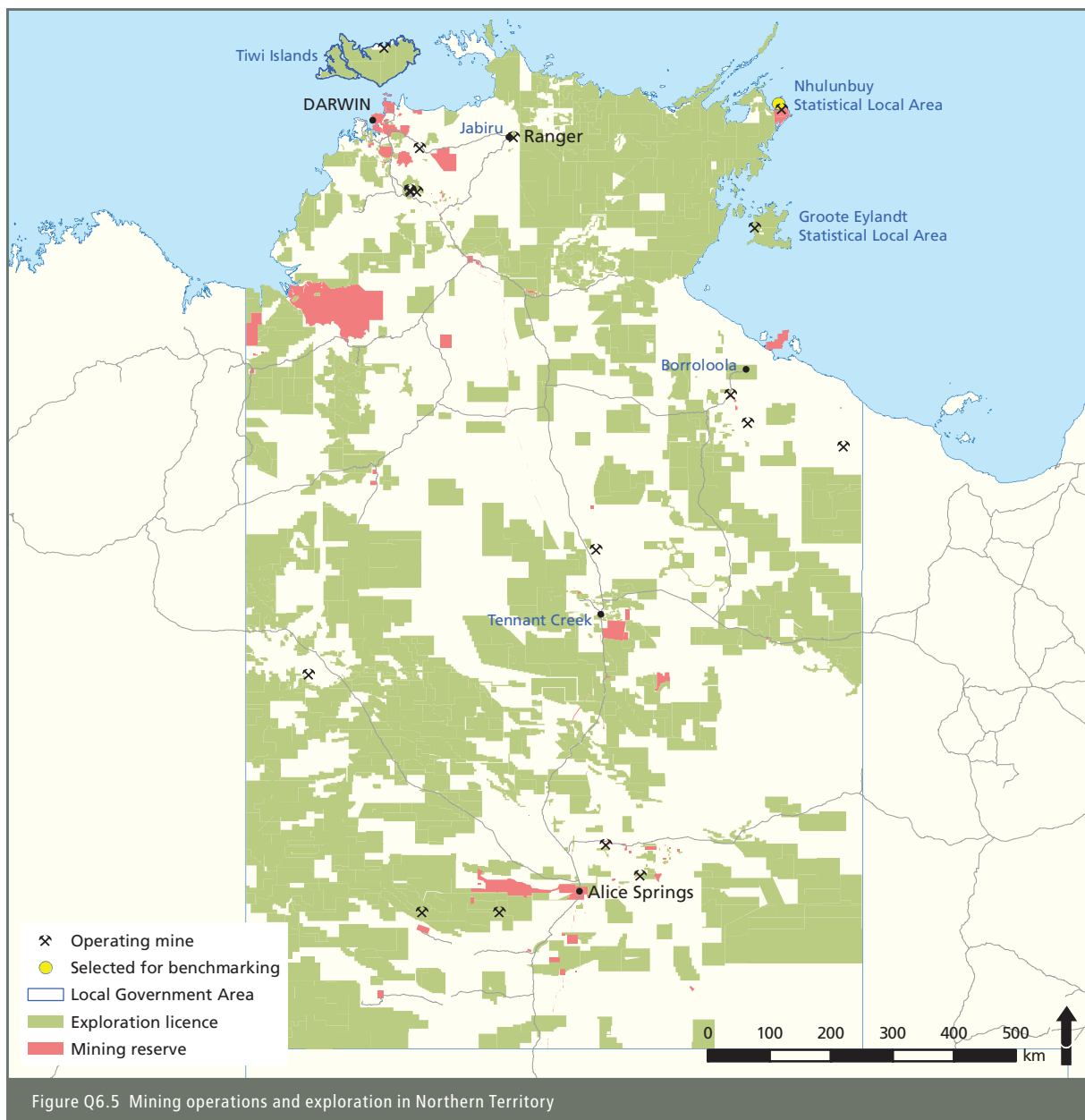


Figure Q6.5 Mining operations and exploration in Northern Territory

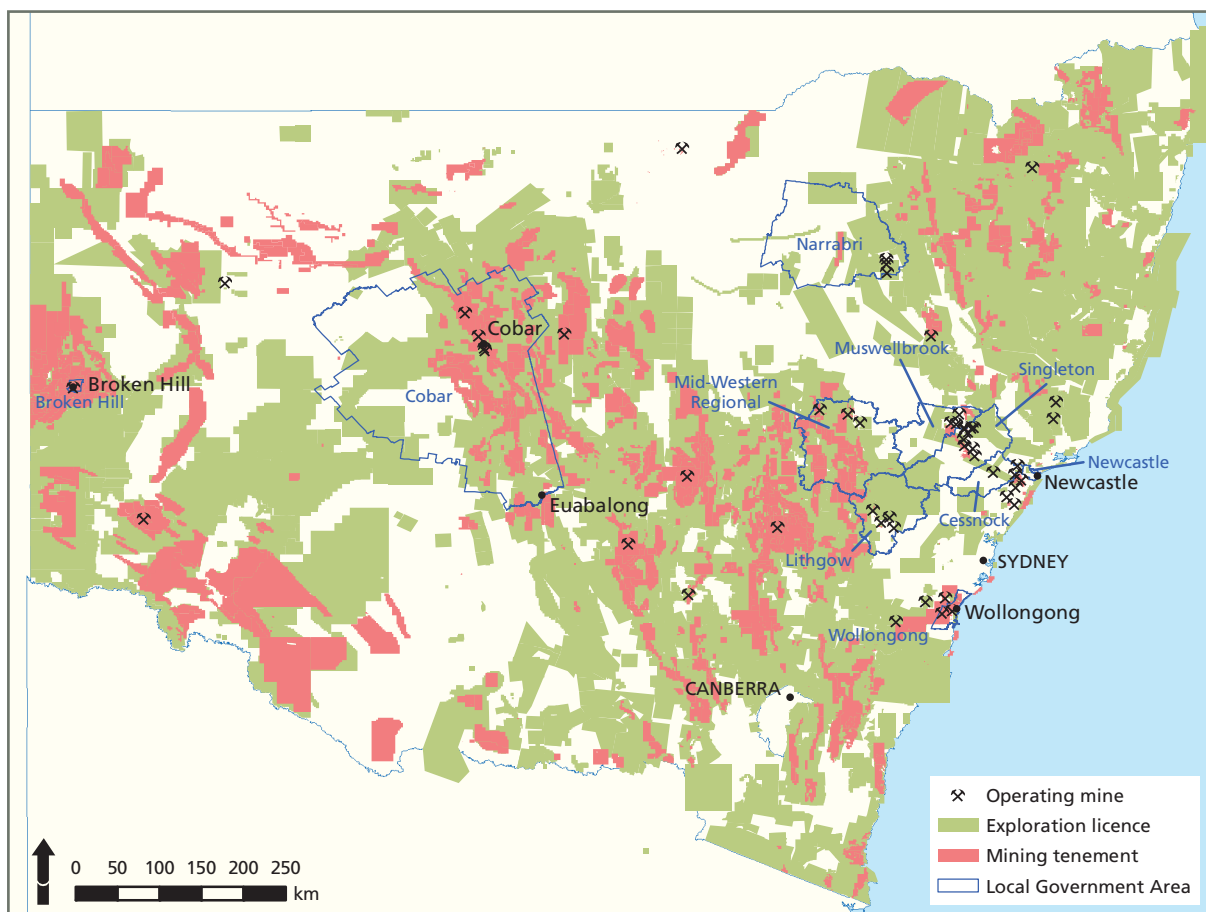


Figure Q6.6 Mining operations and exploration in New South Wales

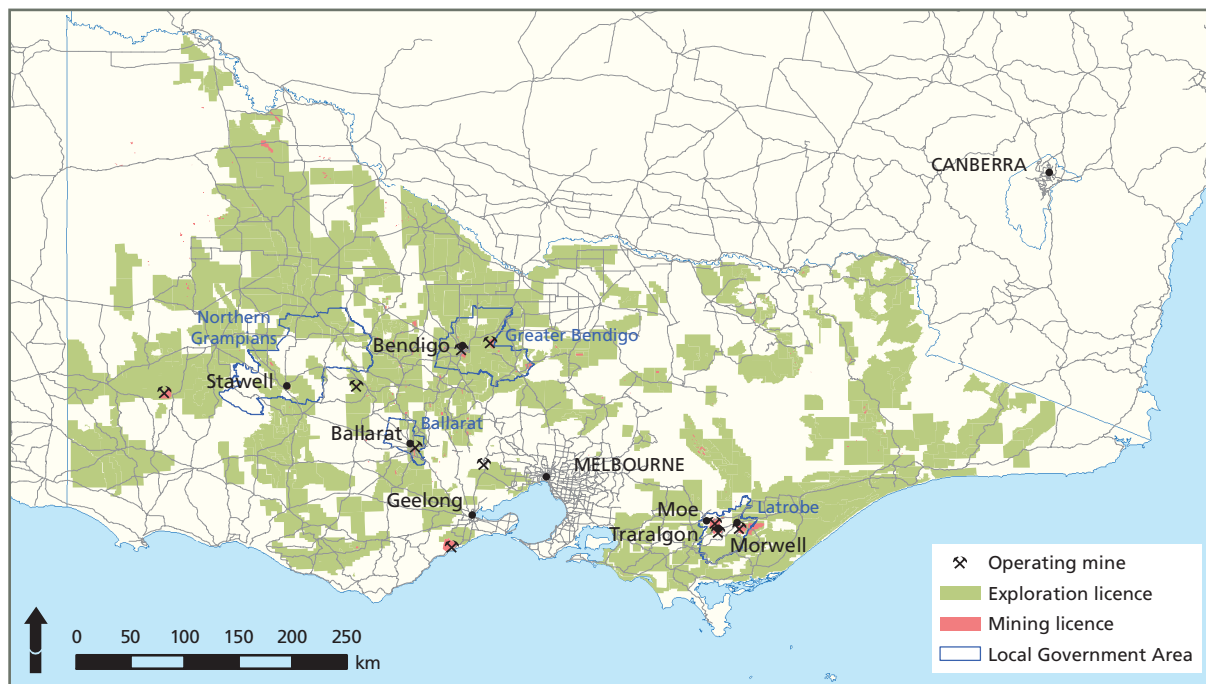


Figure Q6.7 Mining operations and exploration in Victoria

Table Q6.1 outlines the criteria that were used to compare areas.

Table Q6.1 Selection criteria for benchmarking

| Selection criteria | Mining/other (2006) ¹ | Population size (2006) ² | Remoteness ³ | Towns in the LGA/ SLA ⁴ | Demography (2006) ⁵ |
|-----------------------------|--|-------------------------------------|---|------------------------------------|-------------------------------------|
| Considered for benchmarking | Majority of the working population employed in mining or mining related (except in SA) | Between 3,000 and 12,000 people | Greater than 30% of the population living in a remote or very remote area | 5 or less towns in the LGA | High compatibility (see Table Q6.3) |

¹ 2006 Census of Population and Housing, place of usual residence, industry of employment by occupation (ABS 2007b) and industry of employment – mining related industries (Quickstats, ABS 2007c). This criterion was not applied in the selection of LGAs for benchmarking in South Australia.

² Estimated resident population (ABS 2007a). Only LGAs in regional South Australia (i.e. not in the Adelaide or Outer Adelaide Statistical Divisions) were included for review, with the exception of Kangaroo Island.

³ Proportion of the population living in a remote area, based on the 2001 Census of Population and Housing, National Regional Profiles (ABS 2006a).

⁴ Based on local government reports and websites, and identified as urban centres, localities or suburbs by the ABS.

⁵ 2006 Census of Population and Housing (ABS 2007b and 2007c).

Table Q6.2 outlines the areas that were initially reviewed for benchmarking and shows the basis on which areas were progressively selected (or rejected). Areas highlighted in Table Q6.2 have been selected for benchmarking, based on their comparability to Roxby Downs.

Table Q6.3 shows the demographic characteristics of areas initially considered most comparable to Roxby Downs, from which the final selection was made. These characteristics reflect the distinctive demographic features of Roxby Downs, and are key factors influencing the demand for social services. The final selection of areas was based on a weighted ranking of these demographic characteristics and their similarity to Roxby Downs.

Based on this review, the following mining areas were selected for comparison with Roxby Downs:

- Queensland: Peak Downs, Belyando and Weipa LGAs
- Western Australia: Ashburton LGA
- Northern Territory: Nhulunbuy SLA.

Table Q6.2 Comparison of Local Government Areas

| Local Government Area ¹ | Mining (%) / other (2006) ² | Population size (2006) | Remoteness (2001) | Towns in the LGA | Demography (2006) ³ | Selected for benchmarking |
|------------------------------------|--|------------------------|---|---|--------------------------------|---------------------------|
| Roxby Downs | Mining (48.6)* | 4,292 | Remote | Roxby Downs | | |
| Northern Territory | | | | | | |
| Jabiru | Mining (37.0)* | 1,247 | | | | X |
| Groote Eylandt (SLA) | Mining (34.7)* | 1,722 | | | | X |
| Nhulunbuy (SLA) | Mining (33.9)* | 4,433 | Very remote | Nhulunbuy | H | √ |
| Borroloola | Mining (6.4) | | | | | X |
| Tiwi Islands | Mining (3.3) | | | | | X |
| Tennant Creek | Mining (2.3) | | | | | X |
| Western Australia | | | | | | |
| Ashburton | Mining (49.9)* | 6,509 | Very remote | Tom Price, Onslow, Paraburdoo, Pannawonica, Wittenoom Gorge | H | √ |
| Wiluna | Mining (41.9)* | 770 | | | | X |
| Laverton | Mining (40.2)* | 822 | | | | X |
| Coolgardie | Mining (40.4)* | 4,053 | Outer regional (95.2%) Remote (4.8%) | | | X |
| East Pilbara | Mining (41.5)* | 7,160 | Very remote | Newman, Marble Hill, Nullagine | M | X |
| Leonora | Mining (37.9)* | 1,529 | | | | X |
| Yalgoo | Mining (23.3)* | 271 | | | | X |
| Roebourne | Mining (23.2)* | 17,671 | | | | X |
| Yilgarn | Mining (23.0) | 1,506 | | | | X |
| Kalgoorlie Boulder | Mining (21.6)* | 30,196 | | | | X |
| Port Hedland | Mining (18.9)* | 12,993 | | | | |
| Collie | Mining (16.7)* | 9,104 | Inner regional (100%) | | | X |
| Ravensthorpe | Mining (9.3) | | | | | X |
| Wyndham–East Kimberley | Mining (9.1) | | | | | X |
| Geraldton | Mining (4.1) | | | | | X |
| Bunbury | Mining (2.9) | | | | | X |

Table Q6.2 Comparison of Local Government Areas (cont'd)

| Local Government Area ¹ | Mining (%) / other (2006) ² | Population size (2006) | Remoteness (2001) | Towns in the LGA | Demography (2006) ³ | Selected for benchmarking |
|------------------------------------|--|------------------------|--------------------------------------|---|--------------------------------|---------------------------|
| Queensland | | | | | | |
| Broadsound | Mining (43.5)* | 7,311 | Remote (95%) | Dysart, Middlemount, Carmila, Clairview, Greenhill, St Lawrence | | X |
| Peak Downs | Mining (36.6)* | 3,401 | Remote | Tieri, Capella | H | √ |
| Weipa | Mining (38.8)* | 3,029 | Very remote (94%) | Weipa | H | √ |
| Belyando | Mining (37.7)* | 11,185 | Outer regional (62%) Remote (35%) | Moranbah, Clermont | H | √ |
| Duaringa | Mining (32.6)* | 7,187 | Outer regional (97%) Remote (3%) | | | X |
| Nebo | Mining (32.3)* | 2,682 | | | | X |
| Mt Isa | Mining (22.6)* | 21,082 | | | | X |
| Emerald | Mining (16.7)* | 15,364 | | | | X |
| Banana | Mining (16.1) | | | | | X |
| Cloncurry | Mining (13.2) | | | | | X |
| Bowen | Mining (6.8) | | | | | X |
| New South Wales | | | | | | |
| Cobar | Mining (30.7)* | 5,112 | Remote (91%) | Cobar, Euabalong | L | X |
| Singleton | Mining (19.9)* | 23,005 | | | | X |
| Muswellbrook | Mining (16.3)* | 15,944 | | | | X |
| Broken Hill | Mining (10.3) | | | | | X |
| Lithgow | Mining (10.0) | | | | | X |
| Cessnock | Mining (7.7) | | | | | X |
| Mid-Western Regional | Mining (6.9) | | | | | X |
| Wollongong | Mining (2.1) | | | | | X |
| Newcastle | Mining (1.0) | | | | | X |
| Narrabi | Mining (0.5) | | | | | X |
| Victoria | | | | | | |
| Northern Grampians | Mining (3.8) | | | | | X |
| Latrobe | Mining (1.1) | | | | | X |
| Greater Bendigo | Other (1.2) | | | | | X |
| Ballarat | Mining (0.4) | | | | | X |

Table Q6.2 Comparison of Local Government Areas (cont'd)

| Local Government Area ¹ | Mining (%) / other (2006) ² | Population size (2006) | Remoteness (2001) | Towns in the LGA | Demography (2006) ³ | Selected for benchmarking |
|-------------------------------------|--|------------------------|--|----------------------|--------------------------------|---------------------------|
| South Australia | | | | | | |
| Leigh Creek (urban centre/locality) | Mining (6.8) | 548 | n.a. | | | |
| Cooper Pedy | Mining (10.1) | 1,996 | | | | X |
| Berri Barmera | Other | 11,366 | Outer regional | | | X |
| Ceduna | Other | 3,672 | Very remote | Ceduna | L | X |
| Clare and Gilbert Valleys | Other | 8,525 | Outer regional (76.5%) Inner regional (23.5%) | | | X |
| Coorong | Other | 5,865 | Outer regional (67.5%) Inner regional (32.5%) | | | X |
| Copper Coast | Other | 11,888 | Outer regional | | | X |
| Goyder | Other | 4,327 | Outer regional (78.2%) Inner regional (21.8%) | | | X |
| Grant | Other | 8,193 | Outer regional | | | X |
| Kangaroo Island | Other | 4,446 | Remote | Kingscote, Penneshaw | L | X |
| Lower Eyre Peninsula | Other | 4,433 | Remote | Cummins, Coffin Bay | M | X |
| Mid Murray | Other | 8,325 | Inner regional (65.9%) Outer regional (34.1%) | | | X |
| Naracoorte-Lucindale | Other | 8,481 | Outer regional | | | X |
| Northern Areas | Other | 4,843 | Outer regional | | | X |
| Renmark Paringa | Other | 9,861 | Outer regional | | | X |
| Tatiara | Other | 7,194 | Outer regional (85.3%) Remote (14.7%) | | | X |
| Yorke Peninsula | Other | 11,581 | Outer regional (61.8%) Remote (38.2%) | Numerous | | X |
| Wakefield | Other | 6,642 | Outer regional (43.7%) Inner regional (56.3%) | | | X |

¹ Local Government Area, unless otherwise indicated.² *Indicates the majority of the working population aged 15 years or more who are employed in mining or mining related industry (including basic non-ferrous metal manufacturing, 2006 Quickstats (ABS 2007c).³ See Tables Q.6.3 for the basis of the demographic ranking with Roxby Downs.

Table Q6.3 Demographic characteristics of selected local government areas and compatibility ranking¹

| Local Government Area | Median age | Indigenous ² (%) | Family households (%) ³ | Children aged 0–14 years (%) ⁴ | Average household size | Ratio of males to females | Median household income (\$) | Unemployed (% labour force) | Limited English proficiency (%) ⁵ | Non-resident population (%) ⁶ | Weighted ranking ⁸ |
|---------------------------|------------|-----------------------------|------------------------------------|---|------------------------|---------------------------|------------------------------|-----------------------------|--|--|-------------------------------|
| Roxby Downs | 29 | 1.7 | 70.9 | 27.9 | 2.9 | 56:44 | 2,033 | 2.3 | 0.5 | 17.7 | |
| Nhulunbuy SLA (NT) | 33 | 5.7 | 73.7 | 26.1 | 3.1 | 56:44 | 2,220 | 1.4 | 0.6 | 27.0 | H |
| East Pilbara (WA) | 30 | 21.8 | 56.0 | 24.2 | 3.1 | 58:42 | 1,932 | 3.7 | 0.2 | 63.7 | M |
| Ashburton (WA) | 31 | 9.6 | 56.0 | 28.0 | 2.8 | 56:44 | 2,143 | 2.3 | 0.3 | 33.9 | H |
| Weipa (QLD) | 31 | 17.0 | 63.5 | 28.0 | 2.8 | 55:45 | 1,857 | 1.2 | 0.4 | 11.0 | H |
| Peak Downs (QLD) | 30 | 2.4 | 72.6 | 27.4 | 3.0 | 55:45 | 1,850 | 1.7 | 0.0 | 17.9 | H |
| Belyando (QLD) | 30 | 1.8 | 68.8 | 26.3 | 2.8 | 54:46 | 1,910 | 1.9 | 0.2 | 13.1 | H |
| Cobar (NSW) | 35 | 10.5 | 61.5 | 22.9 | 2.5 | 52:48 | 1,054 | 5.1 | 0.2 | 5.7 | L |
| Ceduna (SA) | 35 | 24.0 | 61.7 | 24.2 | 2.6 | 51:49 | 887 | 3.8 | 0.2 | 3.6 | L |
| Kangaroo Island (SA) | 43 | 0.7 | 62.4 | 19.6 | 2.3 | 51:49 | 749 | 4.2 | 0.0 | 4.6 | L |
| Lower Eyre Peninsula (SA) | 40 | 2.3 | 70.5 | 22.2 | 2.6 | 53:47 | 845 | 4.0 | 0.0 | –2.0 ⁷ | M |

¹ Based on data from the 2006 Census of Population and Housing (ABS 2007b and 2007c), local government area, unless otherwise indicated.

² The term Indigenous is used by the ABS for census purposes and refers to people who identify themselves as being of Aboriginal and Torres Strait Islander origin.

³ Includes visitor households and dwellings, as a percentage of all households.

⁴ Children aged 0–14 years as a percentage of the total population.

⁵ Speaks English poorly or not at all, as a percentage of the total population.

⁶ Difference in the population count based on place of usual residence and place of enumeration at the 2006 census, as a proportion of the usual residence population count, excluding overseas visitors (2007a and 2007d).

⁷ The place of enumeration population count was less than the usual residents count on census night i.e. some people usually resident in Lower Eyre Peninsula were counted elsewhere on census night.

⁸ Weighted ranking used to score comparability to Roxby Downs.

Q6.4 COMPARISON OF EMPLOYMENT IN SOCIAL SERVICES

The following tables and figures compare employment in social services in Roxby Downs LGA with other areas in Australia, based on the number of employed persons aged 15 years and over. Data on the number of people employed by government employer, industry of employment and occupation is based on the place of usual residence (ABS 2007b, 2007c and 2007e). A broad description of major occupational groupings and industry division classifications can be found in Section Q1.5.

Rates per 1,000 people are based on the estimated resident population (ABS 2007a). In benchmarking the number of schoolteachers, rates are based on the number of children aged 5–16 years (ABS 2007b). The difference in population counts for selected LGAs, based on place of usual residence, estimated resident population (ERP) and place of enumeration, is shown in Table Q6.4.

Table Q6.4 Population counts, 2006

| | Place of usual residence ¹ | Estimated resident ² | Place of enumeration ³ |
|-----------------|---------------------------------------|---------------------------------|-----------------------------------|
| Roxby Downs LGA | 4,054 | 4,292 | 4,770 |
| Peak Downs LGA | 3,188 | 3,401 | 3,759 |
| Belyando LGA | 10,456 | 11,185 | 11,823 |
| Weipa LGA | 2,830 | 3,029 | 3,140 |
| Ashburton LGA | 6,077 | 6,509 | 8,136 |
| Nhulunbuy SLA | 4,111 | 4,433 | 5,221 |

¹ Based on the address at which people live or intend to live for a total of six months or more, 2006 Census of Population and Housing (ABS 2007b).

² The estimated resident population (ERP) is the official Australian Bureau of Statistics estimate of the number of people who usually reside in an area, irrespective of where they were on the date of the estimate. The ERP is adjusted from the latest population census, to take account of net census undercounts, births, deaths, and interstate and overseas migration (ABS 2007a).

³ Based on where people were located and counted on census night. This may or may not be the place at which they usually reside, 2006 Census of Population and Housing (ABS 2007d).

Comparative data has also been sourced from the ABS National Regional Profile (ABS 2006a) on student–school ratios.

Table Q6.5 shows the number of employed persons per 1,000 people by government employer.

Table Q6.6 and Q6.7 shows the number of employed persons per 1,000 people by occupation (ABS 2007e).

Table Q6.8 shows the number of employed persons per 1,000 people by the industry of employment and hours worked. This includes all people who worked more than 35 hours in the week prior to census night; employed people whose hours of work were not stated; and the full-time equivalent of all employed people who worked less than 35 hours in the week, based on the average number of hours worked. It excludes employed people who worked zero hours in the week prior to census night.

The figures that follow present the data on employment in selected industry and occupations on a per capita basis.

Table Q6.5 Number of persons employed per 1,000 people by government employer, 2006¹

| | Roxby Downs LGA | Peak Downs LGA | Belyando LGA | Weipa LGA | Ashburton LGA | Nhulunbuy SLA |
|-------------------------|-----------------|----------------|--------------|-----------|---------------|---------------|
| Commonwealth Government | 1.6 | 2.6 | 0.6 | 6.6 | 2.0 | 9.9 |
| State Government | 22.6 | 28.5 | 37.6 | 58.8 | 36.7 | 56.2 |
| Local Government | 3.0 | 22.9 | 8.5 | 2.6 | 10.3 | 6.8 |

¹ Employment data is based on employment by government/non-government employment, place of usual residence (ABS 2007e) and the per capita population rate is based on the ERP (ABS 2007a).

Table Q6.6 Number of persons employed per 1,000 people by occupation (sub-major and minor occupational groups), 2006¹

| | Roxby Downs LGA | Peak Downs LGA | Belyando LGA | Weipa LGA | Ashburton LGA | Nhulunbuy SLA |
|---|--------------------|-------------------|-----------------|--------------|------------------|------------------|
| Health professionals | 10.3 | 6.5 | 8.8 | 10.2 | 7.8 | 24.8 |
| – Medical practitioners ² | 0.7 | 0.0 | 0.3 | 0.0 | 0.5 | 2.9 |
| – Midwifery and nursing professionals | 4.7 | 2.4 | 4.8 | 6.6 | 4.5 | 14.7 |
| Education professionals | 17.9 | 15.6 | 16.6 | 25.8 | 17.8 | 20.3 |
| Social and welfare professionals ³ | 1.4 | 0.9 | 1.0 | 4.0 | 0.9 | 3.4 |
| Health and welfare support workers ⁴ | 4.4 | 4.1 | 3.1 | 2.9 | 4.8 | 5.6 |

¹ Employment data is based on employment by occupation (sub-major and minor occupational groups, ABS 2006b), place of usual residence (ABS 2007e) and the per capita population rate is based on the ERP (ABS 2007a).

² Includes general medical practitioners, anaesthetists, psychiatrists, surgeons and internal medicine specialists and other medical practitioners.

³ Includes counsellors, ministers of religion, psychologists, social professionals, social workers and welfare, recreation and community arts workers.

⁴ Includes ambulance drivers and paramedics, dental hygienists, technicians and therapists, enrolled and mothercraft nurses, Indigenous health workers, massage therapists, welfare support workers, and therapists.

Table Q6.7 Number of persons employed per 1,000 people, by occupation (unit occupational groups), 2006¹

| | Roxby Downs LGA | Peak Downs LGA | Belyando LGA | Weipa LGA | Ashburton LGA | Nhulunbuy SLA |
|--------------------------------------|--------------------|-------------------|-----------------|--------------|------------------|------------------|
| General medical practitioners | 0.7 | 0.0 | 0.3 | 0.0 | 0.6 | 2.7 |
| Nurse managers and registered nurses | 0.7 | 0.0 | 0.9 | 0.0 | 2.3 | 0.9 |
| Schoolteachers ² | 86.8 | 82.1 | 90.7 | 119.5 | 79.6 | 91.9 |
| Police officers | 1.4 | 0.0 | 1.1 | 4.3 | 2.5 | 2.5 |
| Librarians and library assistants | 0.9 | 0.9 | 0.7 | 1.3 | 0.9 | 1.4 |

¹ Employment data is based on employment by occupation (unit occupational groups, ABS 2006b), place of usual residence (ABS 2007e) and the per capita population rate is based on the ERP (ABS 2007a).

² Includes early childhood, primary, middle school, secondary and specialist teachers. Rate is based on the number of children aged 5–16 years (ABS 2007b).

Table Q6.8 Number of persons employed per 1,000 people by hours worked and industry of employment, 2006¹

| | Roxby Downs LGA | Peak Downs LGA | Belyando LGA | Weipa LGA | Ashburton LGA | Nhulunbuy SLA |
|-----------------------------------|--------------------|-------------------|-----------------|--------------|------------------|------------------|
| Public administration and safety | 4.1 | 18.8 | 11.3 | 11.1 | 16.5 | 32.2 |
| Education and training | 22.1 | 20.7 | 20.3 | 40.4 | 24.2 | 27.7 |
| Health care and social assistance | 13.0 | 8.5 | 16.6 | 22.4 | 16.7 | 35.3 |
| Arts and recreation services | 3.0 | 1.8 | 0.9 | 1.0 | 0.0 | 0.0 |

¹ Employment data is based on industry of employment by hours worked by sex, place of usual residence (ABS 2007e), FTE; and rates per 1,000 people are based on ERP (ABS 2007a).

Government administration

Figure Q6.8 shows the number of people employed in government per 1,000 people in selected Australian LGAs at the 2006 census (ABS 2007e). It is recognised that LGAs have different responsibilities for service delivery across states and territories.

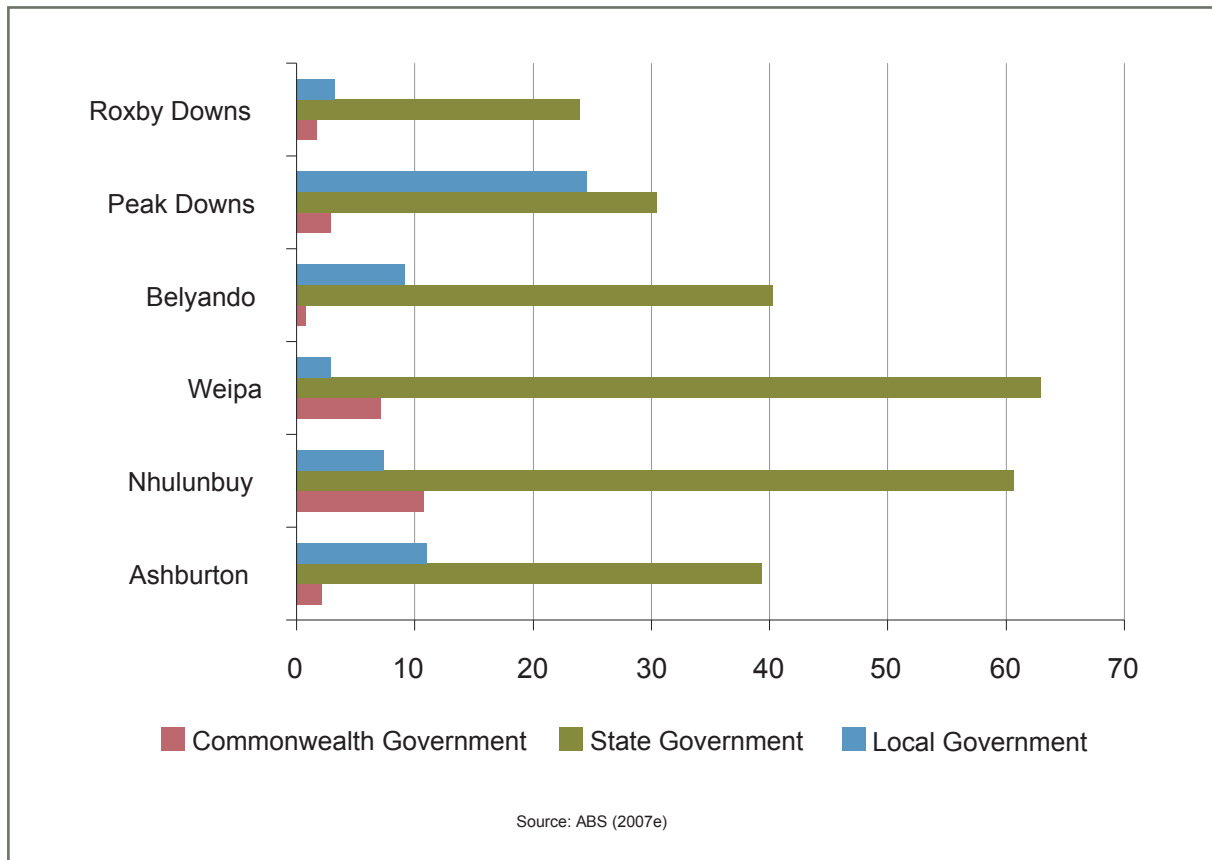


Figure Q6.8 Number of people employed in government per 1,000 people, 2006

Health services

Figure Q6.9 shows the number of people per employed general medical practitioner in selected Australian LGAs at the 2006 census (ABS 2007e).

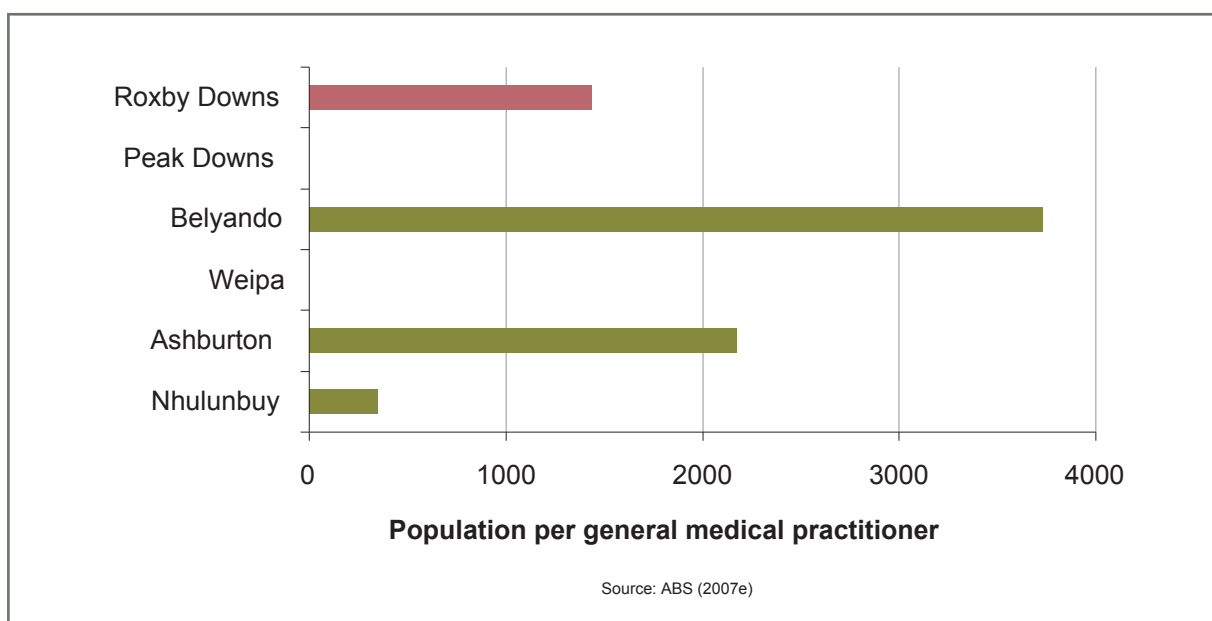
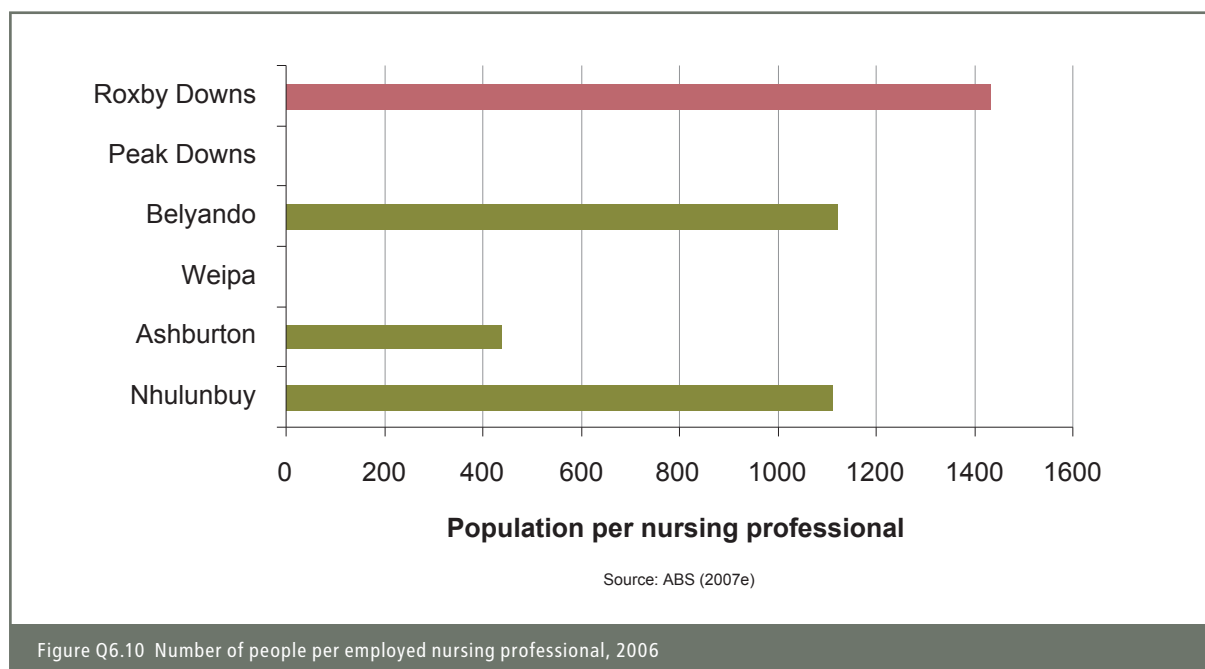


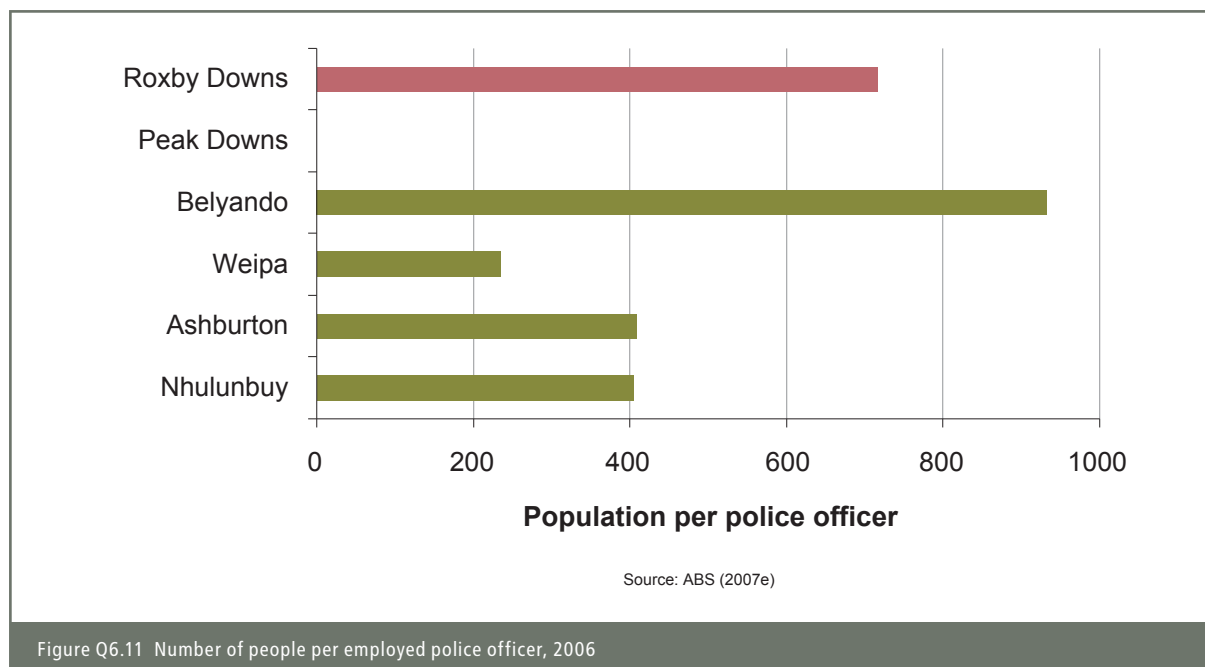
Figure Q6.9 Number of people per employed general medical practitioner, 2006

Figure Q6.10 shows the number of people per employed nursing professional (nurse manager or enrolled nurse) in selected Australian LGAs at the 2006 census (ABS 2007e).



Police

Figure Q6.11 shows the number of people per employed police per 1,000 people in selected Australian LGAs at the 2006 census (ABS 2007e).



Community services

Figure Q6.12 shows the number of people per employed social and welfare professional in selected Australian LGAs at the 2006 census (ABS 2007d).

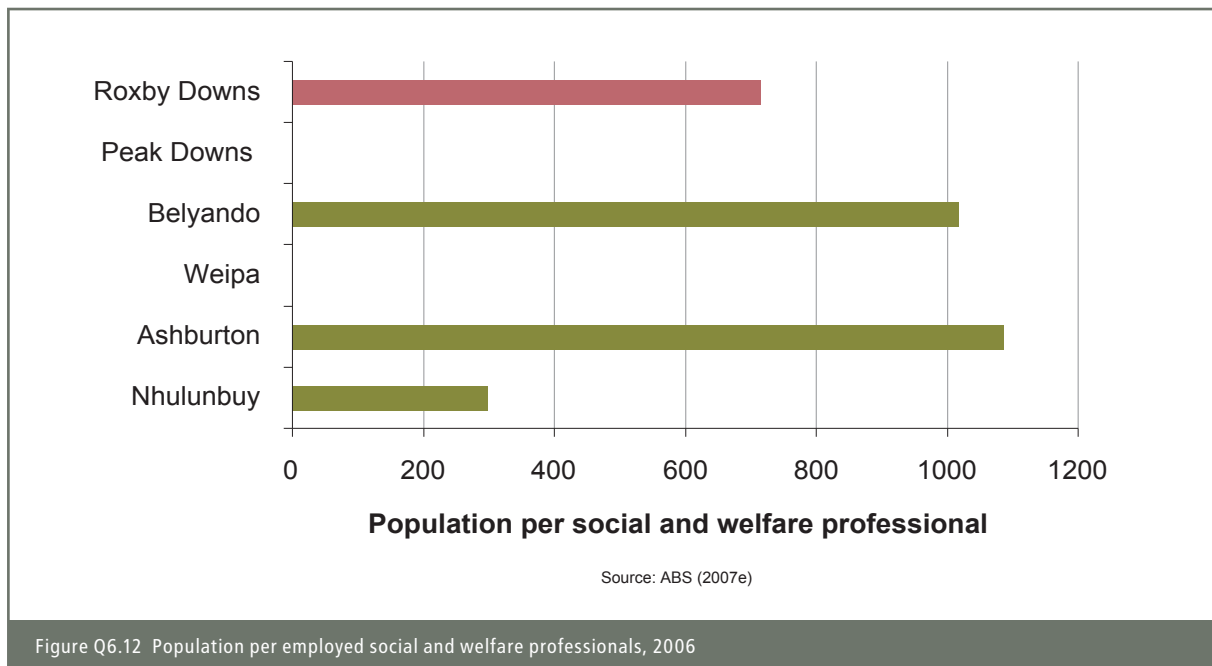


Figure Q6.13 shows the number of people per employed librarian and library assistant in selected Australian LGAs at the 2006 census (ABS 2007e).

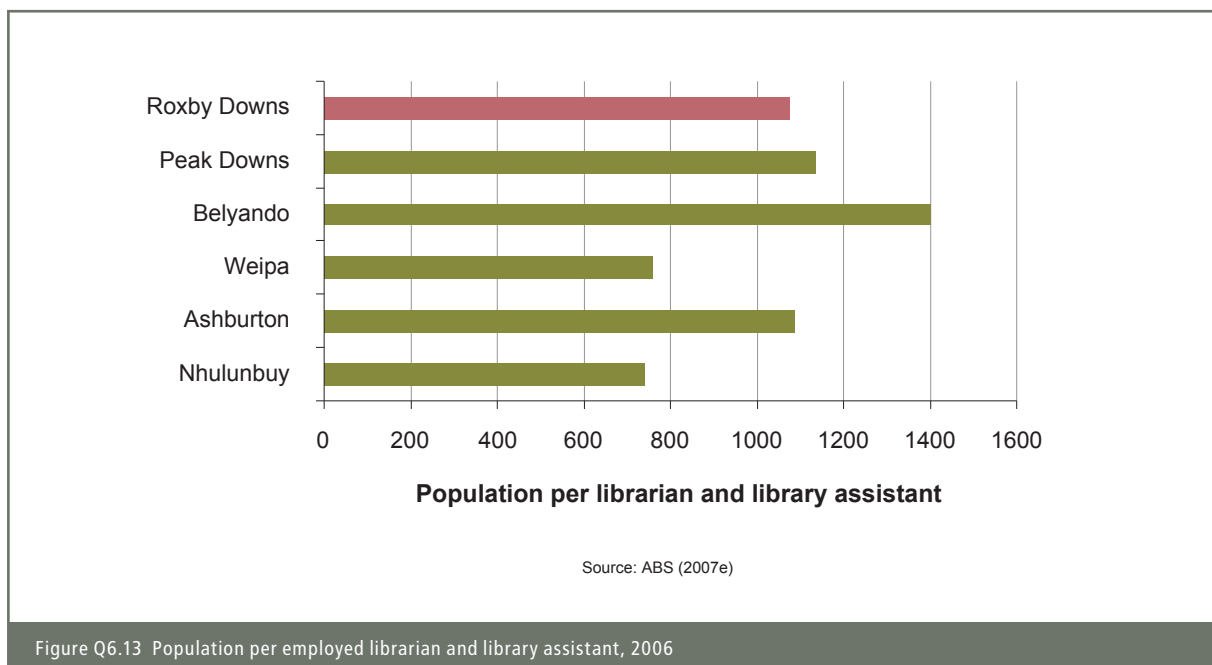


Figure Q6.14 shows the number of people per FTE employee in arts and recreation services in selected Australian LGAs at the 2006 census (ABS 2007e).

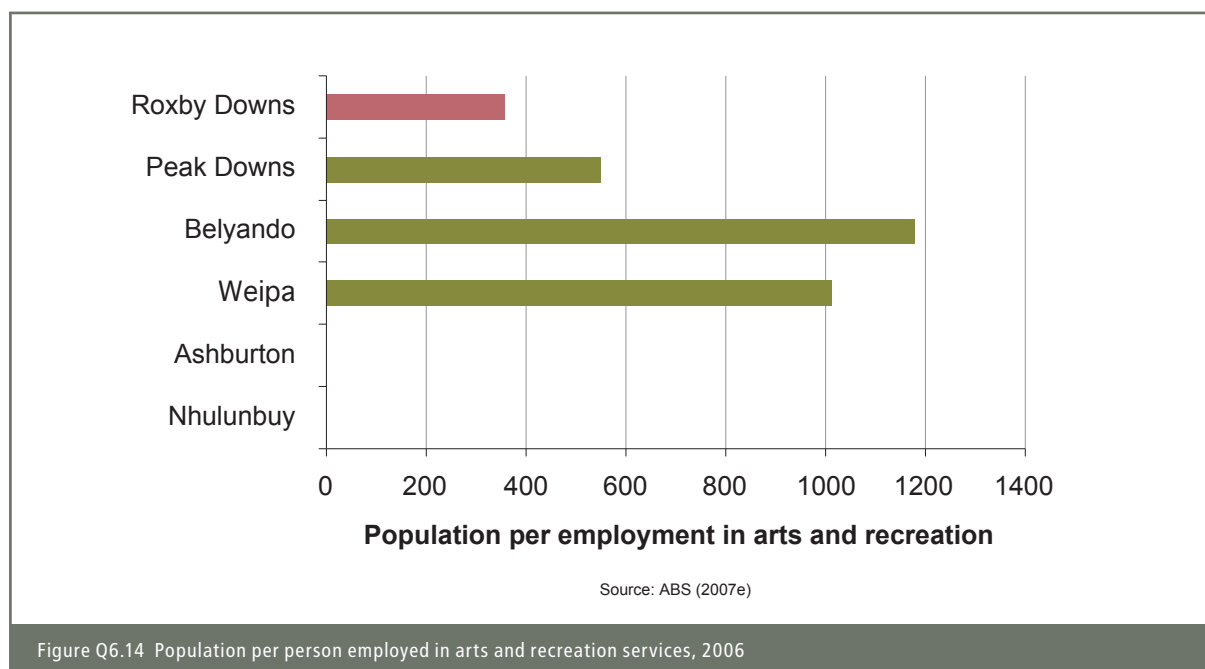


Figure Q6.15 shows the number of children aged 5–16 years per employed schoolteacher for selected Australian LGAs in 2006 (ABS 2007e).

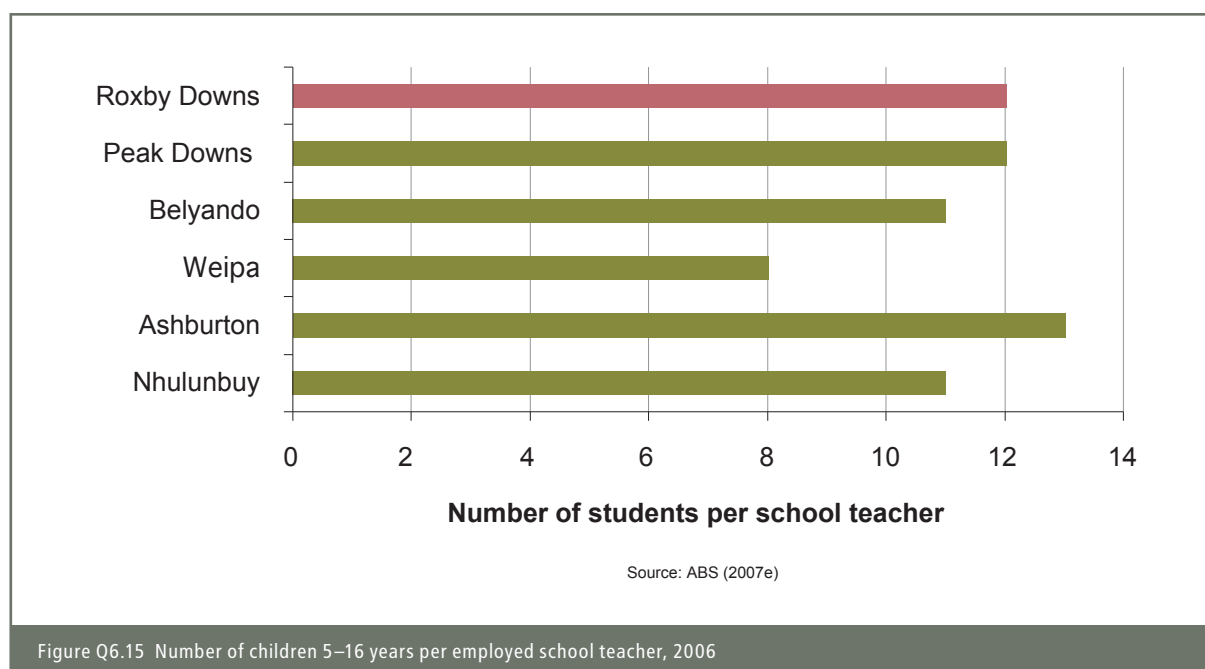
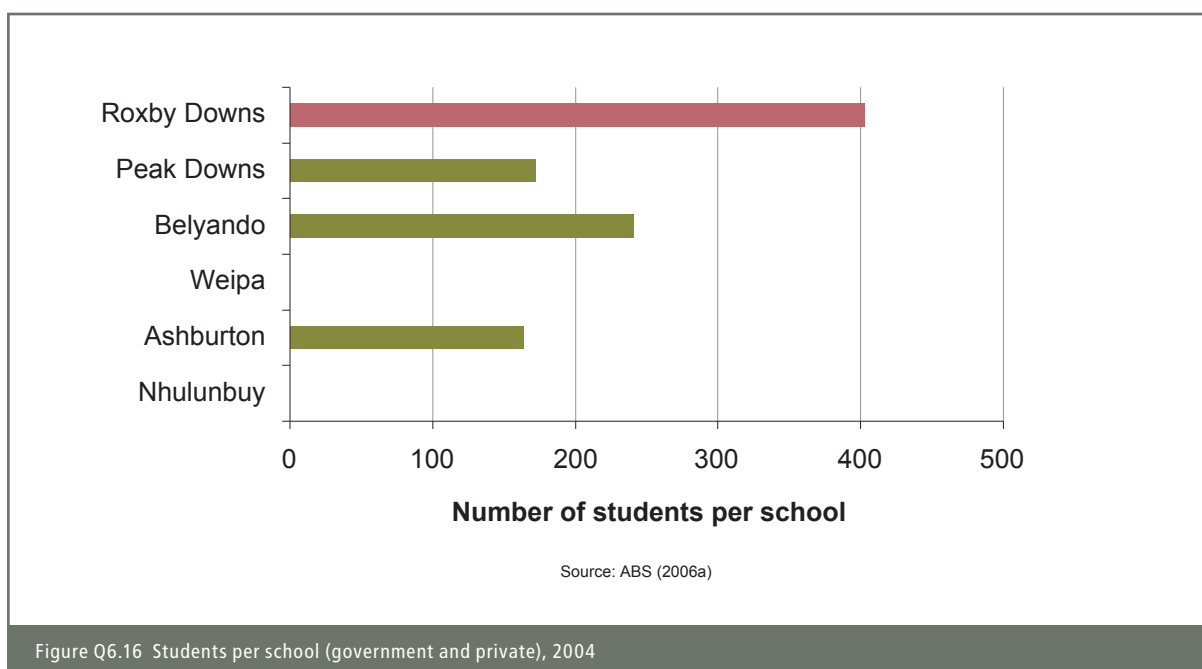


Figure Q6.16 shows the number of students per school (government and private) for selected Australian LGAs in 2004 (ABS 2006a).



Q6.5 COMPARISON OF HOUSING COSTS

The following tables compare housing costs in Roxby Downs LGA with other comparable LGAs in Australia. The comparison does not take account of the type of construction or building materials.

- Table Q6.9 shows the number of dwellings by tenure (i.e. being purchased or rented) and median housing costs (weekly rental and monthly housing loan repayments) in Roxby Downs and other selected Australian LGAs, based on 2006 census data (ABS 2007e).
- Table Q6.10 shows the number of house sales and average value of house sales in Roxby Downs and other selected Australian LGAs in 2004, based on the ABS National Regional Profiles (2006a). Data on the median value of house sales is not available for Roxby Downs, which would provide a measure of the midpoint value of all house sales (that is, where 50% of sales are above that value and 50% are below). This may provide a better indication of the 'typical' value of house sales, as it is less likely to be skewed by sales at either end of the market.
- Table Q6.11 shows the number and value of residential building approvals in Roxby Downs and other selected Australian LGAs from July 2006–07 (ABS 2007f). This does not necessarily indicate the actual value of houses when construction is finished, but provides an indication of estimated value.
- Table Q6.12 shows the number and proportion of dwellings being rented from a real estate agent/non-household member, or employer/residential park, and median rental costs, based on 2006 census data (ABS 2007b). This is based on the place of enumeration population count (i.e. where people are counted on census night, rather than where they usually live) to include dwellings rented by long distance commuters and the FIFO population, as well as residents. This shows the relatively high proportion of dwellings that are being rented from a real estate agent/non-household member in Roxby Downs compared to the other selected Australian LGAs, and the high median rent costs for both landlord types (i.e. real estate agent/non-household member, or employer/residential park). Figure Q6.17 illustrates weekly rental costs for households renting from a real estate agent or person not in the same household as a proportion of those rentals.
- Table Q6.13 outlines the house price to earnings ratio of key public sector workers (i.e. nurses, teachers, police officers, fire-fighters and ambulance officers) and change in affordability from 2002 to 2007, based on the *Key Worker Housing Affordability Report, Financial Indicator Series*, published by BankWest (2008a). An area is classified as unaffordable if its house price/key worker earnings ratio is above 5.0. The report was compiled using earnings data from the Australian Bureau of Statistics' Employee Earnings and Hours survey, along with information on workplace agreements from the Workplace Authority, and annual median house price data from Residex.

Table Q6.9 Number of dwellings by tenure and median housing costs, 2006

| | Number of dwellings being purchased | Median monthly housing loan repayment (\$) | Number of dwellings being rented (includes rent free) | Median weekly rent (\$) |
|-----------------|-------------------------------------|--|---|-------------------------|
| Roxby Downs LGA | 321 | 1,300 | 718 | 138 |
| Peak Downs LGA | 141 | 1,160 | 605 | 15 |
| Belyando LGA | 732 | 1,136 | 1,611 | 68 |
| Weipa LGA | 75 | 1,473 | 787 | 36 |
| Ashburton LGA | 196 | 253 | 1,546 | 37 |
| Nhulunbuy SLA | 30 | 1,145 | 971 | 18 |

Source: 2006 Census of Population and Housing (ABS 2007b)

Table Q6.10 Housing sales, 2004

| | Housing sales | |
|-----------------|---------------|--------------------|
| | Number | Average value (\$) |
| Roxby Downs LGA | 216 | 182,000 |
| Peak Downs LGA | 22 | 91,500 |
| Nhulunbuy SLA | n.a. | n.a. |
| Weipa LGA | 32 | 147,500 |
| Ashburton LGA | n.a. | n.a. |
| Belyando LGA | 343 | 170,000 |

Source: National Regional Profiles (ABS 2006a)

Table Q6.11 Building approvals, July 2006–07

| | Total dwellings | Average value of residential building (\$) |
|-----------------|-----------------|--|
| Roxby Downs LGA | 26 | 386,173 |
| Peak Downs LGA | 47 | 191,926 |
| Belyando LGA | 104 | 318,009 |
| Weipa LGA | 0 | 0 |
| Ashburton LGA | 19 | 343,637 |
| Nhulunbuy SLA | 52 | 494,646 |

Source: Building Approvals Australia (ABS 2007f)

Table Q6.12 Number and proportion of dwellings being rented from a real estate agent, or an employer or residential park by median weekly rental, 2006¹

| | Dwellings rented from a real estate agent | | | Dwellings rented from an employer or a residential park ² | | |
|-----------------|---|----------------------------------|---------------------------|--|----------------------------------|---------------------------|
| | Number | Per cent of all rental dwellings | Median weekly rental (\$) | Number | Per cent of all rental dwellings | Median weekly rental (\$) |
| Roxby Downs LGA | 247 | 34.4 | 275–349 | 383 | 53.3 | 100–139 |
| Peak Downs LGA | 15 | 2.5 | 225–274 | 471 | 78.1 | 0–49 |
| Belyando LGA | 232 | 14.4 | 225–274 | 988 | 61.3 | 50–99 |
| Weipa LGA | 41 | 5.2 | 50–99 | 652 | 82.7 | 0–49 |
| Ashburton LGA | 124 | 8.0 | 140–179 | 1,164 | 75.3 | 0–49 |
| Nhulunbuy SLA | 53 | 5.4 | 0–49 | 694 | 71.3 | 0–49 |

¹ 2006 Census of Population and Housing (ABS 2007d), place of enumeration, includes rent or landlord type not stated.² Includes occupied private dwellings being rented through a residential park (includes caravan park and marina) or employer housing.

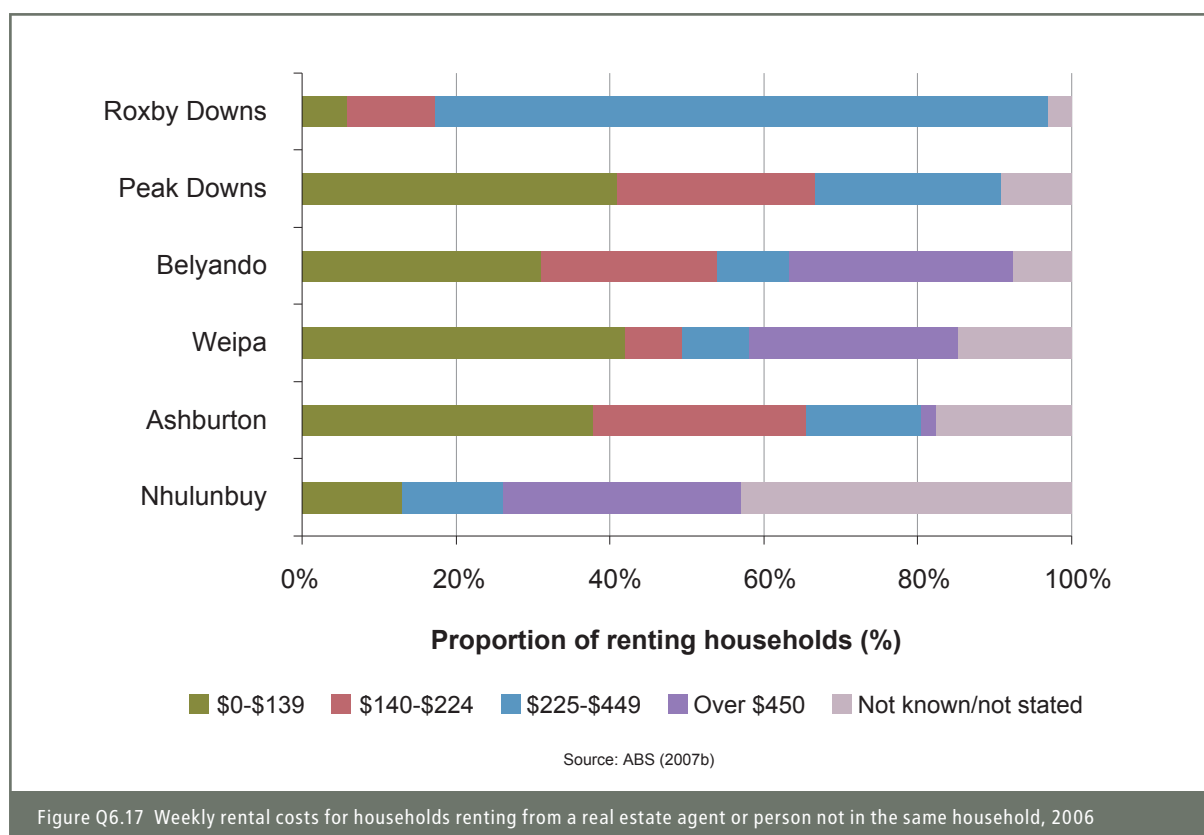


Table Q6.13 Housing affordability for key workers, 2002 and 2007

| | Affordable (2002) | Affordable (2007) | House price to earnings ratio (2007) |
|-----------------|-------------------|-------------------|--------------------------------------|
| Roxby Downs LGA | √ | X | 5.3 |
| Peak Downs LGA | √ | √ | 3.9 |
| Belyando LGA | √ | X | 5.2 |
| Weipa LGA | n.a. | n.a. | n.a. |
| Ashburton LGA | n.a. | n.a. | n.a. |
| Nhulunbuy SLA | n.a. | n.a. | n.a. |

Source: BankWest 2008a

In comparison to other mining communities, Roxby Downs has high housing costs based on the high median weekly rents (for private rental dwellings and private dwellings rented from a real estate agent, non household member, employer or residential/caravan park), high average house sales price and key worker housing affordability.

Q6.6 COMPARISON OF GROCERY COSTS

The cost of purchasing 37 grocery items in Roxby Downs and other comparable mining communities (excluding Nhulunbuy) was undertaken as a basis for comparing the cost of living. The groceries were purchased from the same supermarket chain operating in Roxby Downs, or the largest supermarket, in each LGA by local residents or workers between 13 and 17 December 2007. The same purchases were also made in Adelaide and Port Augusta to compare costs in South Australia.

The basket of grocery items was considered typical of the type of purchases that would be made by a family with young children, and included:

- nine fresh food items (fruit, vegetables and meat)
- five dairy items
- four frozen food items
- three baby-care products
- eight kitchen, cleaning or personal care items
- eight other general food and household items, including both brand-name and home-brand products.

A number of other items were purchased in some locations, but were excluded from the survey if they were not available in all locations, or were purchased in different quantities (where the dollar value per kilo could not be calculated).

Table Q6.14 ranks the cost of purchasing the grocery items (including and excluding meat, to account for the large variation in price of meat items) from the cheapest to most expensive, and shows the difference in costs (in dollars and as a percentage) across locations, compared to Roxby Downs.

Table Q6.14 Cost of purchasing groceries in seven Australian locations, 2007

| Town | Cost of purchasing 37 items (including meat) | | | | Cost of purchasing 34 items (excluding meat) | | | |
|--------------|--|--|--|---|--|--|--|---|
| | Cost (\$) | Ranking from cheapest to most expensive ¹ | Difference in cost from Roxby Downs (\$) | Difference in cost from Roxby Downs (%) | Cost (\$) | Ranking from cheapest to most expensive ¹ | Difference in cost from Roxby Downs (\$) | Difference in cost from Roxby Downs (%) |
| Adelaide | 145.71 | 1 | -16.60 | -10.2 | 123.05 | 1 | -6.36 | -4.9 |
| Port Augusta | 149.57 | 2 | -12.74 | -7.8 | 126.53 | 2 | -2.88 | -2.2 |
| Moranbah | 155.52 | 3 | -6.79 | -4.2 | 132.92 | 4 | 3.51 | 2.7 |
| Roxby Downs | 162.31 | 4 | - | - | 129.41 | 3 | - | - |
| Tieri | 169.66 | 5 | 7.35 | 4.5 | 142.69 | 5 | 12.28 | 10.3 |
| Tom Price | 170.10 | 6 | 7.79 | 4.8 | 147.47 | 6 | 18.06 | 14.0 |
| Weipa | 190.62 | 7 | 28.31 | 17.4 | 166.95 | 7 | 37.54 | 29.0 |

¹ The cheapest place to purchase groceries is ranked 1, and the most expensive is ranked 7.

Table Q6.15 ranks the cost of purchasing different types of grocery items in the various locations and shows the number of grocery items on special during the week the survey was conducted.

Table Q6.15 Ranked costs of grocery items (by type), 2007

| Town | Ranked costs of 20 general household items | Ranked costs of 6 fruits and vegetables | Ranked costs of 3 meat items ² | Ranked costs of 3 frozen foods ³ | Ranked costs of 5 dairy items | Number of items on special |
|--------------|--|---|---|---|-------------------------------|----------------------------|
| Adelaide | 1 | 1 | 3 | 1 | 2 | 11 |
| Port Augusta | 2 | 4 | 4 | =4 | 1 | 5 |
| Roxby Downs | 3 | 2 | 7 | =4 | 3 | 3 |
| Moranbah | 4 | 3 | 1 | 2 | 5 | 3 |
| Tieri | 5 | 7 | 6 | 3 | 4 | 8 |
| Tom Price | 6 | 5 | 2 | 6 | 6 | 4 |
| Weipa | 7 | 6 | 5 | 7 | 7 | 0 |

¹ The cheapest place to purchase groceries is ranked 1, and the most expensive is ranked 7.

² Cost difference between Moranbah, Tom Price and Adelaide is three cents respectively.

³ Cost difference between Tieri compared to Roxby Downs and Port Augusta is five cents.

In comparison to other mining communities, it was relatively cheap to purchase groceries in Roxby Downs, while the most expensive towns were Weipa (Qld), followed by Tom Price (WA) and Tieri (Qld). While meat was more expensive in Roxby Downs than any other town, most other types of groceries (including fruit and vegetables, dairy products and general household items) were cheaper in Roxby Downs.

Within South Australia, Roxby Downs was more expensive to purchase groceries than either Port Augusta or Adelaide (particularly for meat), and had fewer items on special, although 30 (out of 37) grocery items were the same price in Roxby Downs as one or both South Australian locations.

Q6.7 LIVING STANDARDS

Table Q6.16 compares the ranking of LGAs based on the BankWest Quality of Life Index (2008b). The index ranks 590 LGAs across Australia, based on 10 key criteria including employment levels, crime rates, internet access, health, education levels, earnings, home ownership rate, house size, proportion of empty homes and community involvement. The index is based on data from the Australian Bureau of Statistics, the Australian Tax Office, the Public Health Information Development Unit and various state police departments.

Table Q6.16 Quality of life index ranking, 2008

| | Quality of life ranking |
|-----------------|-------------------------|
| Roxby Downs LGA | 108 |
| Peak Downs LGA | 179 |
| Belyando LGA | 74 |
| Weipa LGA | 484 |
| Ashburton LGA | n.a. |
| Nhulunbuy SLA | n.a. |

Source: BankWest 2008b

Q6.8 FINDINGS AND CONCLUSIONS

The following findings are drawn from the comparative analysis of the data and information presented in the figures above.

In comparison to the five Australian LGAs selected for benchmarking, Roxby Downs:

- has relatively few people employed in government (Commonwealth, state and local) per capita. In the case of Commonwealth and state governments, services may be provided on a visiting or out-reach basis and are not reflected in local employment levels
- is relatively well served by local medical practitioners and other health professionals, with two LGAs (Peak Downs and Weipa) having no doctors or nurses living locally
- has a similar number of people employed in education on a per capita basis to most other LGAs, with the exception being Weipa, which has particularly high employment in education. However, Roxby Downs has a large number of students per school
- has fewer local police officers per capita than Weipa, Ashburton and Nhulunbuy, but more than Belyando and Peak Downs LGAs
- has relatively more people employed in arts and recreation services per capita
- has relatively high housing costs, including median monthly housing loan repayments, median weekly rentals, and average value of house sales and residential building approvals
- has a high proportion of households who are renting from a real estate agent or non-household member. These households, and others renting from an employer or caravan park, also pay relatively high weekly rentals.

In general, Nhulunbuy employs the greatest number of people per capita in most of the assessed service categories, which may reflect Nhulunbuy's role as a services base for a larger catchment area. While the average value of residential building approvals is high in Nhulunbuy, costs to households are relatively low, which suggests housing may be subsidised.

Roxby Downs is a cheap place to purchase groceries (except for meat) compared to other mining towns, but is more expensive than Adelaide or Port Augusta. In descending order, of the town's surveyed, Weipa, Tom Price and Tieri are the most expensive towns in which to purchase groceries.

Overall, Roxby Downs ranks second in terms of quality of life in comparison to three other mining communities, and is ranked at 108 out of 590 LGAs across Australia, based on the BankWest Quality of Life Index (2008b).

Q6.9 REFERENCES

Australian Bureau of Statistics 2006a, *National Regional Profiles*, Cat. 1379.0.55.001, ABS, Canberra.

Australian Bureau of Statistics 2006b, *Australian and New Zealand Standard Classification of Occupations, First Edition ANZSCO*, Cat. no. 1220.0, ABS, Canberra.

Australian Bureau of Statistics 2007a, *Regional Population Growth, Australia, 1996–2006, Table 4 Estimated Resident Population, Statistical local areas, South Australia*, Cat. no. 3218.0, ABS, Canberra.

Australian Bureau of Statistics 2007b, *2006 Census of Population and Housing: Basic Community Profile, Place of Usual Residence*, Cat. no. 2000.1, ABS, Canberra.

Australian Bureau of Statistics 2007c, *2006 Census of Population and Housing: QuickStats*, ABS, Canberra, viewed December 2007, <<http://www.censusdata.abs.gov.au/ABSNavigation/prenav/ProductSelect?collection=Census&period=2006&breadcrumb=P&navmapdisplayed=true&javascript=true&textversion=false>>.

Australian Bureau of Statistics 2007d, *2006 Census Community Profile Series: Basic Community Profile, Place of enumeration*, Cat. no. 2004.0, ABS, Canberra.

Australian Bureau of Statistics 2007e, *2006 Census Tables: 2006 Census of Population and Housing*, Cat. no. 2068.0, ABS, Canberra.

Australian Bureau of Statistics 2007f, *Building Approvals Australia*, July 2007, Cat. 87310D020, ABS, Canberra.

BankWest 2008a, *Key Worker Housing Affordability*, viewed August 2008, <http://www.bankwest.com.au/Media_Centre/BankWest_Research/BankWest_Key_Worker_Housing_Affordability/index.aspx>.

BankWest 2008b, *Quality of Life Index 2008*, viewed August 2008, <http://www.bankwest.com.au/Media_Centre/BankWest_Research/BankWest_Quality_of_Life_Index_2008/index.aspx>.

Bowen Basin Mining Communities Research Exchange 2003, *Operating Coal Mines*, viewed August 2007, <http://www.bowenbasin.cqu.edu.au/basin_data/coal_mines.html>.

Department of Industry and Resources 2004, *Iron Ore Industry 2003*, Department of Industry and Resources, Perth.

Department of Industry and Resources 2007, *Western Australian Mineral and Petroleum Statistics Digest 2006*, Department of Industry and Resources, Perth.

