

6. Housing and infrastructure

At the end of the 1960s, and into the 1970s, the migration of Indigenous people off pastoral properties across the Pilbara into emerging urban areas (and consequently away from the inland towards the coast) placed considerable strain on available housing stock in the region and added to the pressures for new dwelling construction (Edmunds 1989: 32). At the 1971 Census, a total of 270 Indigenous dwellings were identified across the Pilbara providing shelter for a total of 2323 residents to produce an average occupancy rate of 8.6 persons per dwelling. Since Indigenous post-censal population estimates were not available at that time, it can only be assumed that this figure represented an undercount of the true occupancy rate.

In the ensuing three decades, difficulties in overcoming the backlog in housing need have been compounded by rapid growth of the Pilbara Indigenous population, as well as increased population dispersion across some 33 or so discrete communities and homeland settlements, 60 per cent of which have fewer than 50 residents. Not surprisingly, in 1991, the first nation-wide normative measure of Indigenous housing need found that the South Hedland and Warburton ATSIC Regional Council areas had relatively high levels of family 'homelessness' and overall housing need (defined for statistical purposes as families in improvised homes, or sharing overcrowded dwellings) in relation to the 36 ATSIC regions nationwide (Jones 1994: 61–4).

The major response to such inadequacies was led by the Commonwealth and developed out of the National Aboriginal Health Strategy (NAHS) in 1990. This recognised an essential link between health outcomes and the provision of housing and infrastructure to acceptable minimum standards. Accordingly, funding allocations in the initial years of the NAHS primary health and environmental health programs included amounts directed at housing and infrastructure services within ATSIC's Community Housing and Infrastructure Program (CHIP). However, a review of CHIP in 1994 identified a range of problems, including a failure to address housing and infrastructure needs in a holistic way. Because of the short-term nature of the program-based approach to funding, communities were being required to structure housing needs to the CHIP program rather than the other way around. A key response to these criticisms was the establishment in 1994 of the Health Infrastructure Priority Projects (HIPP) program to pilot new delivery arrangements for the construction of Indigenous community housing and infrastructure.

In Western Australia, elements of NAHS/HIPP were incorporated into a 1997 bilateral agreement between the State government and ATSIC for the provision of housing and related infrastructure to Indigenous people in the State. This arrangement was updated after review in 2000 with an agreement to pool funding

from the Commonwealth, ATSIC and the Western Australian government for the provision of Indigenous housing and infrastructure under the auspices of an Indigenous Housing and Infrastructure Council.

Housing in 2001

The five-yearly census is an enumeration of population and housing. It provides a range of details regarding the number and structure of dwellings and it is possible to classify these according to Indigenous or non-Indigenous occupancy and other housing-related variables. Table 6.1 shows the number, type, and occupancy rate of Indigenous and non-Indigenous dwellings in the Pilbara, with the former classified as such if one or more adults in a dwelling are Indigenous. Because occupancy rates are so directly affected by numbers in each dwelling, the population included in Table 6.1 is the ERP, in an attempt to overcome census undercount and reflect more accurately the adequacy of housing provision, certainly in respect of Indigenous dwellings. The census distribution by dwelling type is simply inflated in line with the ERP.

Table 6.1. Structure of dwellings and occupancy rates for Indigenous and non-Indigenous households: Pilbara SD, 2001

Dwelling type	Indigenous dwellings			Non-Indigenous dwellings		
	Dwellings	Persons ^a	Occupancy rate	Dwellings	Persons ^a	Occupancy rate
Separate house	1007	5426	5.4	6973	26 668	3.8
Town house/apartment	257	853	3.3	1984	4749	2.4
Improvised and other dwellings	56	114	2.0	544	1,270	2.3
Total ^b	1343 ^b	6516	4.9	9603 ^b	32 947	3.4

^aERP-based

^bIncludes structure of dwelling not stated.

Source: ABS 2002b.

In 2001, a total of 10 946 dwelling units were recorded by the census in the Pilbara SD. Of these 1343 (12%) were Indigenous dwellings, most of which were separate houses, with 4 per cent recorded as improvised dwellings (a low proportion when compared to many other parts of remote Australia). While most non-Indigenous dwellings were also separate houses, the key point of distinction is the higher average occupancy rate in Indigenous dwellings – 4.9 per cent higher than recorded for non-Indigenous dwellings (4.9 compared to 3.4). As a benchmark, it is also interesting to compare this rate with the average of 3.8 persons per Indigenous dwelling recorded for Western Australia as a whole in 2001. Compared to the situation 30 years earlier, however, this is a much lower rate of Indigenous occupancy than the figure of 8.6 recorded by the 1971 Census. While this points to a substantial overall decline in the number of Indigenous persons per dwelling in the Pilbara over the past 30 years, it nonetheless also masks a good deal of internal variation (see Interview segment 40, p. 111; Interview segment 42, p. 112).

Indigenous occupancy rates are presented by IA in Table 6.2 p. 99 and ranked from highest to lowest. Once again, these are based on Indigenous ERPs as in Table 2.3. A clear urban/rural divide emerges with all of the remote inland parts of the Pilbara (where a higher proportion of the Indigenous population lives in discrete communities and homeland settlements) reporting occupancy rates well above the Pilbara average, and most of the more urbanised coastal regions reporting below average rates. Thus, the number of persons per dwelling in the Jigalong IA is almost twice the Pilbara average. Against this model, the main exception is Roebourne town which has relatively high occupancy. Thus, 30 years on, there remain locations within the Pilbara where housing occupancy rates appear to have barely altered.

Table 6.2. Indigenous housing occupancy rates by IA: Pilbara SD, 2001

Indigenous Area	Indigenous occupancy rate ^a
Jigalong	8.0
East Pilbara West	7.9
Roebourne (excl. Roebourne town)	7.7
Marble Bar	6.1
Yandeeera	5.8
Port Hedland (ex urban)	5.8
Roebourne	5.4
East Pilbara East	5.4
Ashburton	4.3
Port Hedland	4.0
Karratha	4.0
Pilbara	4.9

^aBased on ERP.

Source: ABS 2002b.

While the continuance of high Indigenous occupancy rates reflects larger Indigenous household size and a cultural preference for extended family living arrangements, it is also a measure of the inadequacy of housing stock available to accommodate the regional population. To acquire a better sense of the adequacy of housing, occupancy rates must be set against dwelling size, and one measure of this is provided by the ratio of available bedrooms to the population in dwellings. Overall, in the Pilbara, the census recorded a total of 32 331 bedrooms in 2001. Of these, 3715 (11%) were in Indigenous dwellings. Using the number of persons per dwelling inflated to match the ERP, this produces an average figure of 1.8 persons per bedroom in Indigenous dwellings. The equivalent figure for non-Indigenous dwellings is 0.9 – exactly half the Indigenous occupancy rate.

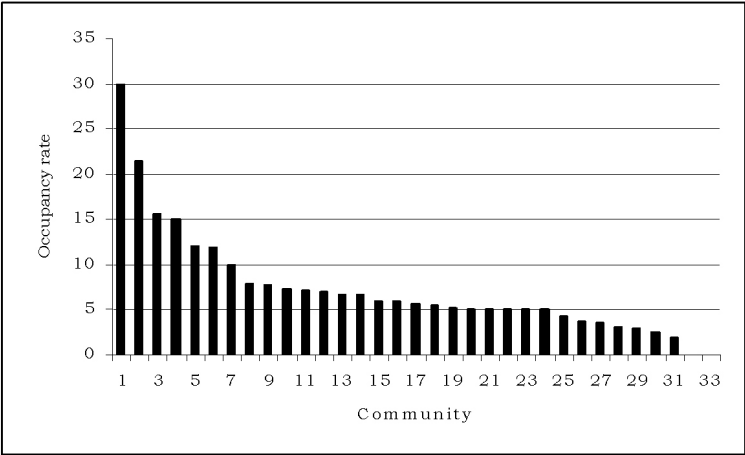
More refined measures also include an indication of housing affordability as well as functionality from an environmental health perspective. Unfortunately these complex calculations are only available at the ATSIC regional level. As far as the population of the Pilbara region is concerned this includes the whole of

South Hedland ATSIC Region, but only the northern part of Warburton ATSIC Region including settlements from Newman eastwards. In order to make use of these data, we assume here that the measures observed for the Warburton Region as a whole apply also to that component located within the Pilbara. Applying basic overcrowding measures, Jones (1994) identified the Warburton ATSIC Region as ranked second, and South Hedland ranked sixteenth highest out of 36 ATSIC Regions across the country in 1991 in terms of the size of their unmet housing need. This was calculated on the basis of additional bedrooms required to meet an accepted occupancy rate. By 2001, Warburton had moved to fourth place while South Hedland remained unchanged at sixteenth (National Centre for Social Applications of GIS 2003: 66).

In terms of the actual number of extra bedrooms required to reduce overcrowding to an acceptable standard level, this actually increased between 1991 and 2001 for both ATSIC regions – from 605 to 731 in Warburton, and from 192 to 504 in South Hedland – as a consequence of population growth in relation to available housing stock (Jones 1994: 55; National Centre for Social Applications of GIS 2003: 66). In 2001, a total of 215 Indigenous households were in overcrowded dwellings in Warburton ATSIC Region, and 180 in South Hedland (National Centre for Social Applications of GIS 2003: 66). As for housing affordability, a total of 24 Indigenous households were paying more than 25 per cent of their household income on rent in 2001 (a relatively low figure due to the high proportion of Indigenous community rental housing), but in South Hedland the equivalent figure was 207 households (National Centre for Social Applications of GIS 2003: 71). In the latter case, one-third (32.4%) of all Indigenous rental households in the lowest two quintiles of household income (482 households) were paying more than 25 per cent of their income as rent (National Centre for Social Applications of GIS 2003: 70).

The depth of this imputed housing need is supported by data from the 2001 CHINS for discrete Indigenous communities across the Pilbara. This reveals an overall occupancy rate for these communities of 7.1 persons per dwelling. However, as Fig. 6.1 indicates, this masks considerable diversity of circumstance, with occupancy rates ranging from 30 persons per dwelling in one instance, to zero in others. Of course, these data reveal nothing of the quality of housing stock.

Figure 6.1. Persons per dwelling at discrete Indigenous communities in the Pilbara, 2001



Source: ABS 2001 CHINS.

However, for the first time, the 1997 Western Australia Environmental Health Needs Survey (EHNS) provided for a more refined (and meaningful) measure of occupancy based on persons per functional dwelling (defined against minimum environmental health criteria). This re-calibration produced some excessively high occupancy rates. For example, at Woodstock there were 68 persons per functional dwelling. Overall, communities that were found to have occupancy rates substantially above the regional average, using the stock of functional housing as the base, included Woodstock, Mingullatharndo, Ngalakura, Warralong, Jigalong, Kunawarriji, and Punmu. It is interesting to compare these findings with results from the more recent 2003 EHNS as this later survey suggests a much reduced level of adjusted occupancy levels (Table 6.3).

Table 6.3. Adjusted EHNS population density measures for dwellings in discrete Indigenous communities^a: Pilbara SD, 2003

Community	Population	Crude PDM	Adjusted PDM
Joongnardhi	15	15.0	15.0
Woodstock	30	7.5	10.0
Cheeditha	58	8.2	9.7
Kunawarritji	110	7.3	8.5
Warralong	50	5.5	7.1
Yandeyarra	320	6.2	6.8
Kiwirrkurra	155	6.2	6.2
Punmu	83	4.9	5.9
Murturakarra	50	5.0	5.6
Bindi Bindi	110	4.1	5.0
Marta Marta	15	5.0	5.0
Youngaleena	30	4.2	5.0
Jinparinya	30	4.2	4.3
Parngurr	104	4.3	4.3
Bellary	25	3.5	4.2
Jigalong	196	4.0	4.2
Tjalka Wara	33	3.3	3.3
Ngurawaana	22	2.2	2.4
Tjalka Boorda	56	2.1	2.2
Pipunya	25	1.6	1.7
Punju Ngamal	7	0.8	0.9

^aWakathuni not included.

Source: Government of Western Australia 2003 EHNS.

Further measures of the quality of housing stock are provided by the 2001 CHINS that included an assessment of the condition of dwellings owned or managed by Indigenous Housing Organisations. For the Pilbara, such dwellings were categorised according to the extent of repairs needed in the following way:

- Minor repairs – repairs of less than \$33 000
- Major repairs – repairs of between \$33 000 and \$100 000
- Replacement – repairs of over \$100 000

Of the 318 permanent dwellings listed as managed by an Indigenous housing organisation in the Pilbara, all were found to be in need of minor repairs, 131 (41%) needed major repairs, and 25 (8%) required replacement. In effect, according to the 2001 CHINS, a major component of the Indigenous-owned and managed housing stock in the region was in need of significant upgrading, while additional dwellings were also required to reduce overcrowding. If we apply similar grounds as the 1997 EHNS to define functional housing and exclude houses needing major repair or replacement from the available stock, occupancy rates would reach excessively high levels in Cheeditha, Tjalkliwarra, Punmu, Parnngurr, Mugarinya, Wakathuni, Bellary Springs, Strelley, Bindi Bindi, and Youngaleena.

Housing tenure

The Pilbara region is somewhat unusual within the state, indeed within Australia, for having such a high proportion of its private dwellings as company-owned rental housing. In 2001, more than one-quarter of the rental housing stock (27%), and 14 per cent of housing overall was company-owned. This is a legacy (and current reality) of direct corporate investment in the provision of regional infrastructure in order to initiate and support resource development. Initially, of course, a much greater share of the Pilbara housing stock was company-owned as Hamersley Iron constructed the 'closed' towns of Dampier, Tom Price and Paraburdoo, Robe established Pannawonica and Wickham, and Newman Mining invested in the town of Newman. Resource companies also held a major stake in the development of Karratha, Port Hedland and South Hedland.

Since the 1980s, the tenure situation has become more complex as the process of normalising urban tenurial arrangements has gathered pace. However, company ownership of housing remains significant. For example, in 2003, as part of the Pilbara Workforce Delivery Strategy (Hames Sharley 2004: 13–15), the tenure situation with regard to Hamersley Iron was identified as follows: Hamersley Iron owned 531 dwellings in Karratha, of which 293 were available to Hamersley Iron staff and 221 were leased on to the market. Other major corporate home owners in Karratha included Woodside (665 dwellings), as well as Robe and Dampier Salt. In addition to this, a total of 2262 single person transportable temporary accommodation units were identified as required in Karratha for temporary workforces associated with major corporates (Pilbara Development Commission 2004). In Dampier, Hamersley Iron owned 459 out of a total of 575 dwellings; in Tom Price, there were 1372 dwellings with 1038 owned by Hamersley Iron; and they also owned 620 of the 700 dwellings in Paraburdoo. Similar scales of corporate ownership are found in other Pilbara towns such as Newman, Port Hedland and South Hedland.

Home ownership

One consequence of this 'company town' legacy is a relatively low level of home ownership in the Pilbara. Australia as a whole has one of the highest home ownership rates among OECD countries and, in line with this, 67 per cent of all Western Australian households in 2001 lived in a dwelling that was either fully owned or mortgaged. The situation in the Pilbara is outlined in Table 6.4. Less than half (46%) of non-Indigenous dwellings are fully owned or being purchased, and far fewer Indigenous dwellings (14%). Consequently, the predominant form of tenure is rental which accounts for half of all non-Indigenous dwellings, but as much as 80 per cent of Indigenous dwellings. However, the implications of this are likely to be quite different for the two populations. While this limits access to the property market for Indigenous people as a means of improving their financial security, it is also symptomatic of their relatively low economic

status as well as some cultural focus on communal forms of tenure. For non-Indigenous people it is far more likely to reflect their preference for investing in housing markets elsewhere (notably Perth) using the proceeds of earnings gained in the Pilbara.

Table 6.4. Indigenous and non-Indigenous dwellings by tenure type:^a Pilbara SD, 2001

	Fully owned	Being purchased	Being rented	Other tenure type	Total
Indigenous dwellings					
No.	56	131	1028	74	1289
%	4.3	10.2	79.8	5.7	100.0
Non-Indigenous dwellings					
No.	985	3222	4697	520	9424
%	10.5	34.2	49.8	5.5	100.0

^aExcludes tenure type not stated.

Source: ABS 2002b.

Rental housing

According to 2001 Census data, a total of 5725 dwellings in the region were rented, and Table 6.5 shows the distribution of those for which a landlord type classification was available. Clearly, Indigenous people depend far more on state-provided rental housing than do non-Indigenous people. According to these census data, more than half (55%) of Indigenous dwellings in the Pilbara are rented from the Western Australia Department of Housing and Works (DHW). This compares to only 11 per cent of non-Indigenous rental dwellings. The main reason for this contrast is the much greater access to employer-owned accommodation for non-Indigenous workers, especially in the non-government sector (see Interview segment 35, p. 109; Interview segment 36, p. 110). Almost one-third of non-Indigenous rental dwellings are provided by non-government employers. Also of note is the greater use of private rental among non-Indigenous households, with one-third renting from a private landlord or real estate agent compared to just 11 per cent of Indigenous households. Once again, this reflects the temporary nature of many non-Indigenous households, but it also reflects relative housing affordability judging by median household incomes shown in Table 4.1. Partly for this same reason, Indigenous households are largely restricted in their housing options to the state rental sector, while in discrete communities Indigenous community housing association dwellings predominate (see Interview segment 35, p. 109; Interview segment 36, p. 110; Interview segment 38, p. 111).

**Table 6.5. Indigenous and non-Indigenous rental housing by landlord type;^a
Pilbara SD, 2001**

	Private landlord	Real estate agent	State housing	Community housing	Govt. Employer	Other Employer	Other landlord	Total
Indigenous dwellings								
No.	37	73	564	203	75	54	16	1022
%	3.6	7.1	55.2	19.9	7.3	5.3	1.6	100.0
Non-Indigenous dwellings								
No.	442	1,057	526	35	1000	1464	134	4658
%	9.5	22.7	11.3	0.8	21.5	31.4	2.9	100.0

^a Excludes landlord type not stated.

Source: ABS 2002b.

Given the more complex rental options evident in urban settings, it is interesting to compare these census data on rental accommodation with tenancy data for 2004 made available by the DHW (Table 6.6). Basically, DHW funding arrangements provide for three types of urban rental outcomes – mainstream public rental, Indigenous specific rental, and rental dwellings made available to State (or Commonwealth) public servants under the Government Employees Housing Authority (GEHA). As indicated, the DHW currently manages 1489 dwellings across Pilbara towns, a figure which is considerably higher than the 1090 reported by the 2001 Census because it includes elements of other census rental categories, especially government employer housing. As at 31 May, 2005, a total of 1286 public housing dwellings were available in Pilbara towns, a total of 253 dwellings were designated as state owned and managed Indigenous housing, and 1099 GEHA dwellings were available. The distribution of Indigenous tenants in dwellings within the first two of these categories (in 2004) is shown in Table 6.6 using actual DHW tenants data.

**Table 6.6. Number of Indigenous and non-Indigenous DHW rental dwellings:^a
Pilbara SD, 2004**

	Indigenous (no.)	Non-Indigenous (no.)	Total (no.)	Indigenous (%)
Roebourne	93	6	99	93.9
Karratha	132	322	454	29.1
Wickham	52	28	80	65.0
Onslow	29	8	37	78.4
Tom Price	13	5	18	72.2
Newman	41	18	59	69.5
Paraburdoo	4	1	5	80.0
Marble Bar	21	3	24	87.5
Port Hedland	502	195	697	72.0
Total	887	586	1473	60.0

^aIncludes public housing and Aboriginal-specific public housing. Excludes GEHA and vacant dwellings.

Source: Western Australia Department of Housing and Works.

Overall, 60 per cent of state-owned public housing dwellings are occupied by Indigenous tenants. By far the lowest rate of Indigenous tenancy is found in Karratha, but for the most part Indigenous people are the primary occupants of State-owned public housing, especially in towns such as Roebourne, while Port Hedland also stands out for the sheer number of Indigenous tenancies. However, there are also large numbers of households on waiting lists for housing and these are shown in Table 6.7. Overall, the number of Indigenous households (at least as defined by those applicants for housing who identified to DHW as Indigenous) is 210 which, scale-wise, is almost one quarter (23%) of the total number of Indigenous households already in such housing. However, the number of non-Indigenous households on waiting lists is also relatively large in proportion to the existing number of non-Indigenous occupants (33%). Table 6.7 indicates that the bulk of applications for housing from Indigenous households are in Port Hedland, followed by Newman, whereas for non-Indigenous households, Karratha is the location with the highest demand, followed by Port Hedland. There are two steps in the process of acquiring public housing – first, a management review of the application, and then placement on a waiting list. Table 6.7 reveals that around three-quarters of applicants are wait-listed at any one time, with little significant difference between locations or between Indigenous and non-Indigenous applicants.

Table 6.7. Indigenous and non-Indigenous applications for DHW housing in the Pilbara SD by preferred location and application status, 2005^a

Preferred location	Indigenous		Non-Indigenous	
	No.	% wait listed	No.	% wait listed
Port Hedland	159	69.8	52	65.4
Marble Bar	5	60.0	3	66.7
Karratha	9	55.6	70	72.9
Roebourne	6	100.0	21	76.2
Newman	22	72.7	19	84.2
Tom Price	6	66.7	4	100.0
Wickham	1	100.0	20	95.0
Paraburdoo	2	100.0	0	0.0
Onslow	0	0.0	7	85.7
Total	210	70.5	196	75.5

^aAs at February 2005.

Source: Western Australia Department of Housing and Works.

Clearly, there is some imprecision in all this, not least because of issues surrounding Indigenous identification in housing records. However, some facts seem assured. First, Indigenous families have fewer urban housing options than others because of their low incomes and relative lack of access to employer housing, either GEHA or company, due to poor labour force and occupational status. Second, their access to urban housing is dependent on continued expansion of the state public housing stock, and a guaranteed major share of this. Third, there is a sizeable unmet need in public housing for both Indigenous

and non-Indigenous residents of the Pilbara (see Interview segment 37, p. 110; Interview segment 38, p. 111; Interview segment 39, p. 111), an issue that can also apply to mine workers (see Interview segment 43, p. 112)

Environmental health infrastructure

The idea that Indigenous community housing and infrastructure should be designed, constructed and maintained to support healthy living practices is now firmly embedded in policy following the pioneering work of Pholeros, Rainow and Torzillo (1993) in the Pitjantjatjara Lands. A total of nine such practices are identified, in descending order of priority in terms of impact on health outcomes: capacity to wash people, wash clothes and bedding, remove waste safely, improve nutrition, reduce crowding, separate people from animals, reduce dust, control temperature, and reduce trauma. Each of these refer to different aspects of the functionality of dwellings and their related infrastructure. For example, if the focus is on improving nutritional standards and practices, then 'healthy home hardware' refers to the provision of adequate facilities to store, prepare, and cook food. It also extends to water quality and quantity as a lack of these may lead individuals to purchase bottled water or other beverages, thereby adding to expenditure and increasing reliance on soft drinks and cordials.

The National Indigenous Housing Guide (Commonwealth of Australia 1999) includes a range of detailed design and functionality guidelines to address each of these nine healthy living practices. The key functional area with most guidelines is that involving the supply, usage and removal of water: six of the nine healthy living practices are dependent on these. However, even seemingly obscure health-related housing functions include a wide range of design, maintenance and infrastructural features that require attention (Commonwealth of Australia 1999: 49–57).

As with the measurement of housing need, the status of environmental health infrastructure requires a detailed assessment of functionality and adequacy set against agreed normative criteria. The 2001 CHINS includes information on such issues as water supply, sewerage, drainage and solid waste disposal, but this is more in the form of simply noting the existence or otherwise of infrastructure rather than assessing its functionality and adequacy. Likewise, CHINS data do not allow for the proper assessment of activities related to such issues as dust control, animal health and quality of waterways. For example, with regard to dust control, all that is available from the CHINS is the fact that a certain number of permanent dwellings in communities are on sealed roads. While this provides some indication of the likely extent of dust mitigation as an issue, it is far from adequate as an indicator of progress.

The main, and most recent, source of data regarding the functionality of Indigenous dwelling facilities in discrete Indigenous communities in the Pilbara

is the Western Australian Government's 2003 EHNS. Unfortunately output on the functionality of dwelling facilities is reported only for all communities collectively within each ATSIC Region. Thus, we have data for all discrete communities in the Ngarda Ngarli Yarndu ATSIC Region, and for the Warburton ATSIC Region, but as only a fraction of the communities within the latter region fall within the Pilbara SD, results are presented here for the Ngarda Ngarli Yarndu ATSIC Region only.

In this region, 15 per cent of dwellings had no external sanitary plumbing and as many as 54 per cent had no on-site sewerage disposal (Table 6.8). The other absent key dwelling facilities related mostly to temperature control with no ceiling insulation, heating, or air conditioning in 29 per cent, 82 per cent and 57 per cent of all dwellings respectively. Even where dwelling facilities were present, more than 20 per cent of showers and toilets were not working, while between 10 and 16 per cent of hot water systems and laundry facilities were also defective. Overall, 35 per cent of dwellings were either without facilities or had facilities that were not working. Among the communities that stood out as having more than 10 per cent of their dwellings with more than three facilities not working were Pipunya, Tjalka Wara, Youngaleena, Yandeyarra, Jinparinya, Warralong, and Murturakarra, with by far the highest percentages of defective dwellings in the first two, although problems with housing functionality are clearly more widespread (see Interview segment 35, p. 109; Interview segment 40, p. 111). In the Warburton ATSIC Region, of the localities falling within the Pilbara SD, only Kunawarritji had more than 10 per cent of its dwellings with more than three defective facilities.

Table 6.8. Functionality of dwelling facilities in Ngarda Ngarli Yarndu ATSIC Region, 2003

Functionality of dwelling facilities	Dwellings with facility absent		Dwellings with facility working		Dwellings with facility not working		Total dwellings surveyed (no.)
	(no.)	%	(no.)	(%)	(no.)	(%)	
External sanitary plumbing	28	14.6	149	77.6	15	7.8	192
On-site sewerage disposal	103	53.6	81	42.2	8	4.2	192
Hot water system	8	4.7	140	81.4	24	14.0	172
Kitchen sink	5	2.9	150	87.2	17	9.9	172
Bath and/or shower	5	2.9	120	69.0	49	28.2	174
Toilet cistern	6	3.4	122	68.9	49	27.7	177
Toilet bowl	6	3.3	136	75.6	38	21.1	180
Laundry trough	9	5.1	138	78.9	28	16.0	175
Laundry floor waste outlet	24	13.7	132	75.4	19	10.9	175
Ceiling insulation	54	28.7	128	68.1	6	3.2	188
Heating	158	81.9	31	16.1	4	2.1	193
Air conditioning	108	57.4	75	39.9	5	2.7	188
Ceiling fan	20	10.8	128	69.2	37	20.0	185

Source: Government of Western Australia 2003 EHNS.

As a summary device, the EHNS provides information on the number of communities reporting particular identified infrastructure needs. Because these are grouped for all communities in each ATSIC Region, only information for the Ngarda Ngarli Yarndu ATSIC Region is presented here (Table 6.9). Thus, out of the 17 communities surveyed in this region, 41 per cent identified housing and municipal services as key needs, 35 per cent identified health hardware, water power and sewerage, 29 per cent identified recreational facilities, 23 per cent identified plant and vehicle workshop equipment, and 18 per cent identified environmental programs such as dust control.

Table 6.9. Identified infrastructure needs: discrete Indigenous communities in the Ngarda Ngarli Yarndu ATSIC Region, 2003

Identified need	No. of communities	% of communities
Housing (new, repairs, housing for visitors and workers)	7	41.2
Municipal Services (street lighting, rubbish disposal, drainage)	7	41.2
Health Hardware (ablutions, hot water systems, washing machines)	6	35.3
Health Services (medical centre, detox centres, first aid kit)	6	35.3
Water, Power, Sewerage (improvements or provision)	6	35.3
Recreational facilities (sporting grounds, play grounds)	5	29.4
Plant/Vehicle Workshop (tools, machinery, tractors, equipment)	4	23.5
Environmental Programs (greening, dust suppression)	3	17.6
Access (internal and access roads, vehicles, boats, airstrips, fuel)	2	11.8
Fencing (houses, tips, sewerage ponds)	2	11.8
Meeting Areas (administration facilities, general purpose buildings)	1	5.9
Telecommunications (phones)	1	5.9
Training (employment and business development)	1	5.9

Source: Government of Western Australia 2003 EHNS.

Of course, these data refer only to dwellings in select discrete Indigenous communities and mostly to housing stock managed by Indigenous housing organisations. No information is available on the quality of other rental accommodation, although Indigenous people do raise issues about this (see Interview segment 35, p. 109).

Indigenous perspectives

Interview segment 35

There are hardly any Homeswest houses here in Tom Price, it's all for mining, and we got to go through real estate to get accommodation. Where are people going to get money for bond? They want bond and two weeks rent in advance. Then you have to fit their criteria. Most of the houses in Tom Price are private rentals. I got my daughters here but they need another house because they got kids too you see. There are no houses when kids grow up and have their own kids and they have to live with us. My kids they don't want to live like that, they want to have their own house. We also get a lot of family visitors, but Aboriginal people are close-knit families, we don't tell family to go away.

My house isn't really a good house, it's got no air-conditioning, I have to buy my own, and it's small for a three bedroom house. You notice round here that all the houses that Aboriginal people get are small but have a look at the mining houses, they get carport, verandah all around, and shed. When people come to visit me they have to chuck their swag on the porch.

With Aborigine people, if they miss a rent they'll be on their back straight away. But when they want repairs or anything to be done they take months and months maybe even 12 months to start doing stuff you know, even if it's emergency stuff, they won't jump. You gotta put up front money, and I say, 'I'm willing to pay for it, if you start to upgrade my house'. We had that thing with the water bill, these taps are buggered and we had a leak, and Homeswest can't even come and fix the washer or whatever is wrong and that's where the water bill is going upper and upper. No wonder our water bills get high.

Another thing again, we had a busted pipe, and anyway water was coming through the bedroom now, and also through the kitchen and one of the relations came around and had a look for me and said you got busted pipe, they had to make a hole in the wall to find where the water was coming from. There is no main office here where the people can go to report anything urgent. We had to go through Hedland. Centrelink got a sub office here, it wouldn't hurt for Homeswest to do the same eh? You ring up to Hedland and they tell you, you got to wait for them people when you get burst water pipe after-hours. So every night I gotta go to the street tap to turn my water off so I don't have to hear the water running when I go to sleep. We gotta put all the drinking water in bottles. This been happening for two months. That's bad, that's really bad. We just want them to fix the houses up so we can stay in good houses.

Interview segment 36

There are not enough houses in Tom Price. Aboriginal people are stuck up in one house. They can't get another house, but the company building more houses for the boom coming up, more houses for them. But the workers gonna fly-in-fly-out, what about the bloomin' local all stuck up in one house? We can't even get a Homeswest house in town. Some out on blocks, but even they have the same problem out on the block. They not fixing up the community and people then come to town to find a roof.

Interview segment 37

A big problem is not enough housing. When kids grow up and get married, start having their own families, they got nowhere to move. So they end up all in one house and overcrowding. Sure they could move somewhere else, but then they have to leave family. A lotta family arguments start like that too, if one not putting in enough money for rent or bills or whatever. And that stress starts

with some and they start drinkin'. Sometimes hard to get a good night's sleep too, which makes it hard for kids going to school you know?

Interview segment 38

People in Tom Price feel neglected being in an isolated place and not having the same benefits as the growth area, which would be Karratha and Port Hedland. And lack of housing here because you find that you have to be working for a mining company to obtain housing here. I'm in that situation because I am only doing private work on my family thing, but I can't get housing here because the amount of rent you have to pay is above my level of income. So I'm the same I get disheartened and want to pack up and leave.

Because there's not enough housing that's when you get the pile in and that's where stress is the biggest problem of all because you get the arguments in there and the shares of your financial income to go towards food, electricity, water, oh yeah, and that's where your family rifts are caused, you know family arguments ... and they turn to alcohol just to shut off from it, or the drugs, and that is an issue, it's a big issue. We also understand on the mining part of it that we can't go out and build anything until our native title is all complete. Land access is one of the biggest issues otherwise we could go and build about 50 Homeswest houses out there at Bellary or Wakathuni, but because of the restrictions of land issues, and you know that's all red tape stuff with the politics and the Native Title Act restricts that.

Interview segment 39

Housing has always been a big problem across the board. Very much so for Aboriginal people, because you got to use Homeswest. The waiting lists are long. The locals found that other people coming from out of town were getting housed sooner. We found Homeswest were giving people who may have been on waiting lists in other places in Roebourne houses. People don't want to move out of Roebourne, but since mining decreased a bit a while ago, Homeswest acquired houses in Wickham which used to be a mining town. The housing requirement for miners has decreased in this area.

Interview segment 40

We are all focusing on the one aim which is to bring our oldies and our children back to our homeland, educate them, live on the land so they got more experience and learning because we take em out see? And we'll teach them and they will listen to how we gotta talk to the mining company and anthropologist and that's their learning process. And that's how we're proceeding and that's how we have been all these years. We got 30 people living in one house. I called to one of the housing mob. We got no access to funding or health things and no one servicing us for rubbish or water or anything. Sometimes they come out to check the water

quality. A lot of money gets spent on surveys and studies but nothing ever gets followed up.

Interview segment 41

I got kicked out of my Homeswest house. I been go away for three days and them kids been go right through there and breaking thing and making hole everywhere. They broke in through that aircondition window, that's how they got through. Windows broken, doors smashed up everywhere. I went and reported it to police and Homeswest when I come back. Then they sent me a bill for \$3000. They still wanted me to pay for it, even though it wasn't me. I lost a lot of furniture too, and I can't get anything for that. I got nothing. They take \$100 everytime pay week, and I only get \$400 each pay. I got no house. Stay here with family until I pay for damage. Then they give me house back. I gotta look after my son too. He no good in the head. He was a sniffer and now I gotta look after him all the time.

Interview segment 42

Well it happens to old people all the time, they get kicked out. Young fellas come round when no one looking and break everything. They starving all the time, or looking for blanket or something. My mum she's cripple, in a wheelchair you know, and them young fellas broke her door when she was out at a meeting. Well she got kicked out, and got a big debt too. Housing is a real problem. Young people boss the old people around trying to get a swag and smoke and it's very bad. Young people got no home. They like the birds, they got no home, just wander around. They walk camp to camp. Drinking is a big problem for young people in Hedland. I've got four old people living at my house because they got kicked out like that. They can't get a house until they pay that debt. Some of them will pay that debt for the rest of their lives. We also get a lot of family visitors staying. We got 16 people living here in this house. It's OK, as long as everyone buys a little bit of tucker for the fridge.

Interview segment 43

I know a lot of young Banyjima fellas who belong up here, marrying Ngarluma Yindjibarndi girls and they don't like living out here. The wives of the men would rather they stay and work up there on the coast. Fly-in-fly-out is very hard way to work. Ask anyone with wife, and kid, it's very hard. Some locals bring their family with them, but sometime you can only get single quarters. I was here for six months before my family came because I could only get single quarters.