

RESOURCE BOOM TIMES: BUILDING BETTER TOWNS AND CITIES IN REMOTE PLACES

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INTRODUCTION

Western Australia has always been city-centric and currently more than 75% of the State's population live in the capital city, Perth (Australian Bureau of Statistics 2008a). For those living in the non-metropolitan areas, the majority live in the lower half of the State (see Fig 1). The more remote regions of the Pilbara and Kimberley in the far north have, until the last decade, represented only about a tenth of the State's population. However, since 2001, the Australian mining and energy sector has experienced sustained growth and despite the Global Financial Crisis (GFC), resource exploration and mine expansions have continued, spurred along with strong demand from Japan, China and India. As a consequence of the strong demand for labour and high wages, the Western Australian population has been the fastest growing in the country (Australian Bureau of Statistics 2009a) putting considerable pressure on housing demand both in Perth and throughout rural, regional and remote areas of Western Australia (Western Australian Planning Commission 2010).



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Figure 1: Regions of Western Australia

The impact of the resources boom on some regional centres has been highlighted in a number of studies (Pick *et al.* 2008; Haslam McKenzie *et al.* 2009; Haslam McKenzie 2011a; Lawrie *et al.* 2011). Key themes include the high cost of housing, the poor quality of accommodation, the lack of land zoned for commercial purposes, the need for innovation in land and skilled labour supply, the impact of fly-in, fly-out (FIFO) or drive-in, drive-out (DIDO) work arrangements, the high cost of living and the effect of a mono-economy. The resources boom has sparked an overall labour shortage and mining and resource companies have successfully lured labour away from other industries, paying consistently higher wages. The Australian Bureau of Statistics (2009b) has reported that while the income levels vary across the Pilbara working population, gross individual incomes grew markedly from 2001 to 2006. In this period, the proportion of the workforce earning over \$1,000 per week increased from 27.5% to 36.2%. Of all regions in Western Australia, the Pilbara had the highest percentage of households with a gross weekly income over \$2,500. Small businesses and other industries, including government, cannot pay the same high wages as the mining industry and inevitably lose their workforce. Sectors such as tourism, retail, health, education and support service organisations have all complained of difficulties maintaining or attracting a workforce due to competition from the higher paying resources sector for labour and the lack of accommodation. Of particular concern is the lack of housing and the general un-affordability of the region for key workers such as police, teachers, medical staff and search and rescue personnel. As shown in Table 1, over the last five years Pilbara median house prices have outstripped those of Perth (which has also experienced one of the highest increases in the nation over the same period). Not surprisingly, rents in the Pilbara are also extraordinarily high. In the second quarter of 2011, the Pilbara Development Commission (2011) reported that the median rent in Port Hedland was \$1861 a week and \$1700 per week in Karratha. By comparison, for the same period, the Real Estate Institute of Australia reported that the median rent per week in Perth was \$390, \$400 in Sydney and \$526 in Darwin, the most expensive capital city for rental accommodation at the time.

Table I: Median House Price Growth in Western Australia

	Median House Price March 2010	Growth 2005-10	Population Growth 2005-09
Ashburton (Tom Price)	\$433,000	292%	3%
Newman (East Pilbara)	\$565,000	277%	20%
KARRATHA	\$800,000	171%	11%
PORT HEDLAND	\$685,000	156%	10%
REGIONAL WA	\$395,000	80%	11%
Perth	\$500,000	75%	11%

Source: REIWA Market Update (2010) and ABS Cat. No. 3218.0 Regional Population Growth (Rowley and Haslam McKenzie 2011)

Government's policy over the last decade has been to rent housing from the private sector rather than invest in the provision of housing. Government's lack of housing investment has therefore exacerbated the housing shortage in these remote communities which are experiencing unprecedented economic and population growth (Beer *et al.* 2011). Further, mining and resource companies are able to outbid competitors for housing and accommodation, driving up real estate prices, in the Pilbara particularly, to the point that they have consistently been the highest in the country for almost a decade (Kusher RP Data 2011). The negative outcomes have been the development of mono-economies with endemic labour poaching, service shortages and a collapse of the housing market under the weight of unprecedented demand and inadequate supply of land and housing (Senate Select Committee on Housing Affordability in Australia 2008; Rowley and Haslam McKenzie 2009).

In response to the growth pressures, especially in the resource rich region of the Pilbara, the Western Australia government announced in 2009 the Pilbara Cities Blueprint – a government plan to guide development and expansion of towns in remote communities to counter the consequences of mining overtaking other industries and absorbing the local labour force and housing. Government will invest most heavily in Port Hedland and Karratha which have been identified as the two centres which will be redeveloped to city-status through the Pilbara Cities Project.

The Pilbara Cities Project is not without considerable challenges. The Pilbara covers some 500,000 kilometres and is located in the North West of the State (see Fig 2), more than 1200 kilometres north of Perth. The region is prone to cyclonic events, particularly during the summer, and these events are critical for the regional water supply. The climate of the Pilbara is semi-arid and arid in the hinterland with high temperatures and low, irregular rainfall. Day time temperatures regularly exceed 32C during the summer

months and recordings exceeding 45C are not uncommon. The built environment is therefore challenging if it is to be comfortable, appropriate **and** cost effective for the climatic conditions. The region has four local government authorities and only two towns with more than 5,000 residents; Karratha and Port Hedland. Both towns are on the coast and are major FIFO and resource export hubs.



Source: The Pilbara Development Commission

Figure 2: The Pilbara region of Western Australia

This paper will report on research that has been conducted in these two resource boom towns as they plan for city status. It will commence by briefly describing the research followed by contextual information about the two towns. The next section will provide an overview of the Pilbara Cities Blueprint followed by a discussion of the intended introduction of a different town planning mindset which emphasises permanent communities and a commitment to enhancing liveability. The following section will focus on the people who have been largely marginalised by the rapacious growth of the minerals sector but who are very important if the communities are to be functional and sustainable in the long term. Included in this section is discussion about the inclusion of appropriate indigenous housing and different ways of providing housing for key and service workers. The final section will consider how the enlarged towns could adapt better to diverse challenges such as remoteness, the climatic conditions and resource sector work practices to ensure more liveable communities in remote boom towns.

The Research

Research on Karratha was conducted over a three year period (2007-9) as part of a study for the Australian Housing and Urban Research Institute (AHURI) examining housing markets in resource boom towns across Western Australia and Queensland. The research for Port Hedland was conducted in 2010-11 as background work for the Pilbara Cities Plan. The methodology adopted for this research was multi-disciplinary in nature including a comparative analysis of statistical data, anthropological data and relevant Australian and international literature, including census data and government and corporate reports. In-depth analysis of public policy decisions, industrial events and local housing practices was conducted and comprehensive interviews undertaken with mining industry representatives, public policy officers, business owners and community leaders in each of the case study sites. The findings relating to the towns and the damaging impact a mining boom can have on local communities suggest that their experiences are not isolated occurrences and can be translated to many other towns across the State borders in Australia and beyond. Options for rectifying the housing market failure were considered with the assistance of statutory and strategic town planning expertise.

Karratha

Karratha is situated in the Shire of Roebourne within the Pilbara region of Western Australia. The town contains about 70 per cent of the Shire's population (11,725 permanent residents), and 70 per cent of its residential dwellings. The town, a product of the 1960s mining boom, was established in 1968 by a joint agreement between the Western Australian government and Hamersley Iron. It is surrounded by a number of satellite towns, all of which are within 50 kilometres and serve as resource housing towns. The exception is Roebourne town, the original administrative centre of the Pilbara, 40 kilometres east, which is now dominated by Aboriginal and public housing. Historically, Roebourne is the oldest town in the Pilbara, founded in 1866. Administrative and service functions were gradually transferred to Karratha in the 1980s and 90s. The other towns are Dampier (14 kilometres west), Wickham (12 kilometres further east of

Roebourne) and nearby Point Samson. All of the towns are constrained by mining leases or native title (Haslam McKenzie *et al.*, 2009).

The commercial centre of Karratha is developed in a strip along the main road and an industrial estate is located several kilometres from the centre, separated from the town by a series of iron hills. Since being established, the majority of the Karratha housing stock has been developed to meet the demand of the mining, and more recently, the oil and gas industries. Consequently, the demand for housing stock fluctuates depending upon the resource cycle and commodity prices. The large scale and sustained boom conditions recently experienced has meant that resource company-owned housing has been withdrawn from the private sector to meet their own housing needs. It is then left to the government to release new land in an attempt to increase the supply of private sector housing. Government has consistently been slow to meet demand (Senate Select Committee on Housing Affordability in Australia 2008; Haslam McKenzie *et al.* 2009), arguing their reluctance is to avoid resource cycle and hence housing market volatility.

Port Hedland

European settlement at Port Hedland was established in 1863 as a port for the growing pastoral industry and later as a government administrative and small business and service town. It is located on low, flat land 1,760 kilometres north of Perth and 240 kilometres north of Karratha. In the 1960s, after major iron-ore deposits were discovered and the Australian government lifted the iron-ore export embargo, the port was expanded and it became an important export and transport hub, principally for the iron-ore industry. In 2009, the estimated resident population was almost 14,000 people (Australian Bureau of Statistics 2010b) but the town services a much larger, transient population of FIFO workers, indigenous people and tourists, although the latter have been largely squeezed out as the mining boom ramped up in the last five years. Over the last three census periods, Port Hedland has reported a below average population growth but the data is deceiving, given the high level of economic activity in and around the town. The low average population growth can be explained by the high proportion of FIFO and contract workers, transient indigenous and visitor populations and the lack of available accommodation for both residents and visitors. Further, in the 1970s, a new subdivision was developed 14 kilometres south of the port (see Fig 3) utilising the Radburn town plan which emphasised a nested street network and a series of cul-de-sacs cutting between the street networks (Birch 1980). This 'off the shelf' urban planning model was not appropriate and proved unpopular, principally because of its "physical determinist approach, the ignorance of the social and environmental context [of the Pilbara] and its lack lustre implementation" (Burkett 2009: 4). South Hedland became an inaccessible and unpopular ghetto of disadvantage, exacerbating the housing shortage. In addition, there is anecdotal evidence to suggest there are many people who would like to live in Port Hedland, particularly along the coastline, to take advantage of the mining boom but cannot because of the lack of both residential and commercial premises (Acil Tasman 2009).



Source: South Hedland [Images]. <http://maps.google.com.au/> (accessed July 7, 2011).

Figure 3: Port Hedland and South Hedland

Like Karratha, but more so, Port Hedland's resident population is divided by socio-economic prosperity (Australian Bureau of Statistics 2009b). A proportion of the population have benefitted from the strength and growth of the mining industry, earning incomes that significantly surpass the State and regional averages (Australian Bureau of Statistics 2010a) and often living in expensive homes that are provided by companies with living expenses underwritten by their employers (Haslam McKenzie *et al.* 2009). By contrast, there are also significant numbers of people who demonstrate socio-economic indicators of disadvantage. While the majority in this category are indigenous people, there are others, many of whom are employed in the retail and services industries, who struggle to make ends meet due to high accommodation and living costs (Haslam McKenzie *et al.* 2009).

Both Karratha and Port Hedland are dominated by a younger demographic than most other regional towns in Western Australia (Australian Bureau of Statistics 2008b; Australian Bureau of Statistics 2009a). Research conducted for Rio Tinto (URS 2008) suggests that due to lack of services for older people and the cost of living (Department of Local Government and Regional Development 2007), few people can afford to retire to the Pilbara. Further, secondary and tertiary education opportunities are limited so many families leave the region as their children reach this stage of life. The Pilbara has become a resource extraction mono-economy and hence it is vulnerable to global political, industry and economic fluctuations, over which it has no control. The lack of industry and social diversity is a concern for the long term sustainability and resilience of the region. Both towns are keen to break the sense of transience which has become the norm due to accommodation and infrastructure shortages and pursue innovative ideas to achieve housing and living affordability which has been largely absent from the region for two decades. A decision has been made by government to redevelop the two towns to capitalise on the continued growth in iron-ore and the oil and gas industries and hence, the opportunity to attract a multiplicity of people and businesses to the Pilbara to ensure a legacy that outlives the heyday of mining and resource extraction.

The Pilbara Cities Blueprint

When launching the Pilbara Cities Blueprint in late 2009, the Premier outlined the government's vision for this large and ambitious project, to "secure the Pilbara's future long after the resources sector had reached its peak.... and to create places that people choose to settle on a permanent basis; a place to bring up families with access to high standards of education, health and diverse employment and career opportunities" (Hon. Colin Barnett Media Statement 27th November 2009). He emphasised the need to

develop the towns differently to the way Western Australian remote towns have been developed in the past, which have, ostensibly, been based on an urban (Perth) framework. He stated that the Pilbara towns would promote high density centres with an emphasis on liveability, supported by the services and infrastructure expected in other Australian cities. Not only would services be upgraded but new schools, retail centres, enterprise centres, medical facilities and ancillary health services would be built as part of the Blueprint. The building program was to be fast tracked with joint ventures between the private and public sectors, principally Landcorp, (the Western Australian State government land development agency established under the Western Australian Land Authority Act 1992 (Parliament of Western Australia 1992) which develops state-owned property (usually with a private-sector partner) as required). The Premier said, “critical to this [plan] will be enticing people and businesses not involved in the mining, oil and gas sectors to the region” (Hon. Colin Barnett Media Statement 27th November 2009). The State government announced that funds would flow from a number of State budgets with a significant amount coming from the Royalties for Regions Revitalisation Plan in addition to funds sought from the Commonwealth Infrastructure Australia program for urgent works to upgrade airport, wastewater and accommodation services. (The Western Australian Royalties for Regions Scheme quarantines 25 per cent of the State’s mining and onshore petroleum royalties for additional investments in projects, infrastructure and community services in rural, regional and remote communities – over and above the State government service obligations. The Scheme aims to improve economic and social infrastructure and services throughout non-metropolitan Western Australia, thus stimulating employment, jobs and improving the quality of life in the regions. <http://www.royaltiesforregions.wa.gov.au/royalties/Pages/default.aspx>) It was recognised from the outset however, that the provision of housing was of critical importance, most particularly affordable housing for people not employed by the mining and resource companies, including government employees. At the same time that the Pilbara Cities Blueprint was announced by the Premier, the Minister for Regional Development; Lands (and the architect of the Western Australian Royalties for Regions Scheme), announced funding for the construction of villages in Karratha and Port Hedland specifically for service workers.

The government looked to the private sector to drive housing innovation and promised to facilitate greater density by engendering considerable flexibility into town planning schemes which, hitherto, had been restrictive, claiming climatic conditions to be the determining factor. If the private sector was to build townhouses, apartments, high rise and more dense, mixed use developments then local government had to be an integral partner too, because to date, local government bylaws had forbidden these building and planning arrangements. The private sector, particularly the large mining companies in the Pilbara, has an important role. When the Pilbara Cities Blueprint was announced in 2009, a Memorandum of Understanding was also signed with Rio Tinto with the intention of building tourism and marina facilities at Dampier, 14 kilometres west of Karratha and formerly a closed company town, (now in the process of being ‘normalised’). There was also an expectation that the large companies would be more forthcoming regarding project planning and anticipated developments to allow a suitable and measured land supply response.

The State government has multiple and prominent roles in the Pilbara. Much of the surrounding land is owned by the Crown and hence, when land is required for industrial or residential purposes, the State government is heavily involved. Landcorp are responsible for the release and preparation of public land for housing development throughout the Pilbara. However, the process of rezoning the land is time-consuming and onerous, requiring the involvement and co-ordination of multiple government departments, including Native Title, Environment and Conservation, Planning and Infrastructure, Planning Commission, Landgate, Heritage, Water Corporation and the local government authority (Haslam McKenzie *et al.* 2009). Consequently, even though State Ministers launched the Pilbara Cities Blueprint with the promise of immediate action, undertaking to alleviate the housing shortages as soon as possible, realistically, land had to be released and subsequently brought to developable status with head works and all the necessary clearances which in the past, has taken at least five years to achieve. The goal to achieve affordable housing and to build global cities in the Pilbara is indeed ambitious for a variety of reasons.

THE CHALLENGES

Several assessments of planning needs for the Pilbara have been undertaken (Government of Western Australia Department of Industrial Development 1974; Department of Planning and Urban Development 1992; Ministry for Planning 1997) in the past. The 1974 report projected that the Shire of Roebourne would require housing and infrastructure necessary to accommodate a residential population of 22,000 people by 1992 and Port Hedland 44,000 people. The reports identified the inability of Pilbara infrastructure to cope in the short-to-medium term with any increase in industry activity or population base. Unfortunately, there was minimal planning co-ordination across government jurisdictions and few of the recommendations were enacted by any level of government prior to the onset of the most recent resources boom. Housing and accommodation shortages are also not new phenomena and as early as 1993, there have been reports recommending the immediate release of crown land for housing. The Ministry of Planning report (1997) recommended a land release program of 200–300 lots per annum with the potential to accelerate the land

release program following native title clearance. That report also anticipated a big increase in demand for housing, particularly within Karratha as gas reserves were brought online. It would appear the advice was ignored as the level of land supply has not approached anywhere near the level suggested in the report. Landcorp argues that there was insufficient residential demand in the Pilbara at that time to support land release on such a scale. It is difficult to find foundation for this claim. The provision of a sufficient supply of undeveloped land zoned 'residential' could have facilitated rapid development when the land was needed. The lapse in preparing a consistent and timely supply of residential land in particular has had extensive ramifications for the accommodation market throughout the Pilbara, significantly contributing to the collapse of the housing market. Despite the Premier's and Minister's announcements in 2009, the cost of housing has continued to escalate in the Pilbara while other housing markets in Western Australia have contracted. In July 2011, Pilbara housing was once again the most expensive in the State, rising 1.6 per cent while the Perth market continued to retreat (RP Data 2011). It was also reported that the median cost of renting a house in the Pilbara rose 18.5 per cent and 325 per cent over the last five years. Not surprisingly, the Pilbara rental market is the most expensive in the nation at a median weekly rent of \$1,650 (RP Data 2011).

Despite the government's attempts to provide affordable housing, it has been insufficient and not timely. An important, but not well understood feature of the development of Crown Land in Western Australia is the role of the Western Australian Treasury. Landcorp must buy Crown land from Treasury at market prices. Consequently, in mining areas where demand for land is so high, the market has driven prices to unprecedented levels; government is perpetuating the high prices rather than doing anything to alleviate the price cycle (Haslam McKenzie *et al.* 2009).

Housing for indigenous residents in Pilbara has been particularly difficult. Most Aboriginal people in the Shire of Roebourne live in the town of Roebourne, 40 kilometres away from Karratha and without public transport access to the bigger town which is also the work centre. The town is dominated by ageing, poorly maintained public housing, much of which is overcrowded. The incidence of crime and lack of services in the town are disincentives for newcomers, creating a cycle of disadvantage with poor prospects for private investment, even though there is land available for development. Indigenous housing in Port Hedland has been centred in South Hedland although the ethnic segregation has not been as strict as that in Roebourne. The State government's policy of minimising their investment in public housing exacerbates the accommodation shortage for Aboriginal people. The lack of maintenance of public housing, partly due to the shortage of tradesmen and partly because of cost, means that the housing that is occupied is often sub-standard, attracting further vandalism and anti-social behaviour. The State government has invested in upgrading public housing in Port Hedland in line with the overall refurbishment plans for the town. A number of Homeswest houses have been demolished but not all have been replaced. The failure of Homeswest to re-establish homes may at least in part be due to the lack of available tradespeople. Over and above public housing, while the cost of housing and accommodation is so high in the Pilbara it is very difficult for Aboriginal people to find housing unless they are employed by one of the resource companies. Only a very small minority of Aboriginal people are employed and housed by mining companies. Upgraded Indigenous housing is part of the Pilbara Cities Plan but it is by no means a priority and the status quo is unlikely to change in the short term.

To date, a policy of increasing housing density has not been generally accepted by the community, although the housing crisis has forced many in the Pilbara community to reconsider their position. The Shire of Roebourne (the local government authority which includes Karratha) has endeavoured to provide the necessary framework to encourage a range of lifestyles and has gazetted changes to the Town Planning Scheme No. 8 to meet the following objectives:

- enhance built form, create an identifiable central focus and provide legibility;
- develop local commercial centres to provide convenience goods and services to the local communities; and
- encourage residential development that will accommodate a greater range of lifestyles and needs to reflect the broadening population base (Shire of Roebourne 2000).

The objectives being promoted within the Town Planning Scheme have yet to be met.

The majority of the land parcels zoned R20 within Karratha are too small for infill development or subdivision. There is some opportunity for subdivision in the areas zoned R30 although there is no great local appetite for redevelopment because:

- it does not make economic sense due to the returns available from existing properties; and
- while some lots have potential for battleaxe-configuration, minimum residential design requirements restrict development potential.

For example, the outdoor living area poses issues with many residents preferring to position their outdoor areas where they can maximise privacy and/or where they can capture the summer breezes rather than where the area best fits with local government planning requirements.

In Port Hedland, developable land parcels have been constrained by a number of physical and industrial considerations. The topography of the town is flat and it is therefore vulnerable to high tides and flooding, especially in the cyclone season. There are a number of flat, low lying areas which are quickly inundated during the wet season. Port Hedland has grown up around the port and large tracts of land close to the port and the old town have been used as iron-ore dumps, awaiting shipment. Finucane Island (see Fig 3), just off the port has been enlarged and the wharves deepened to enable expansion of the iron-ore loading and shipping facilities. The large dumps of red iron-ore have created a significant dust problem for residents; not only is it an aesthetic nuisance but there is evidence of associated health risks. Development of large areas of housing is therefore constrained in the Port Hedland townsite. As noted earlier, South Hedland has had a reputation for poor urban design, it is a considerable distance from the harbour and town centre and it has attracted an unsavoury reputation. However, the State government has decided that South Hedland is the least physically and commercially constrained and therefore has the most scope for improvement. Considerable funds are being directed there to upgrade facilities, access and generally liveability. Stage 1 included a realignment of the main street with a new town square and amphitheatre, public art installations and three mixed use sites for both residential and commercial development. In June 2011, it was announced that a further \$53.94 million would go to the South Hedland Town Centre Revitalisation program through the State government's Royalties for Regions funding in the 2011-12 State Budget. Vacant land in the centre of the town has also been released by the government for medium density commercial and residential lots with future plans to develop a new library, council offices, (releasing prime land on the Port Hedland seafront) and extending the aquatic centres.

Both towns are concerned that the current infrastructure is not capable of absorbing the intended population growth of up to 50,000 people. Without significant State and Commonwealth grants for infrastructure expansion and upgrades, both towns will not be able to expand. The reasons for this are multiple and complex. Pilbara local government authorities have struggled to achieve viability because of the State Agreements between the State and the resource companies. The agreements are multi-faceted but exemption from paying local government rates and charges has affected the revenue of the four shires and therefore their capacity to fulfil their planning and other civic obligations. The Pilbara Regional Council (PRC) was established under the Western Australian Local Government Act 1995, to assist local councils with the co-ordination and sharing of resources. The PRC also seeks to influence and liaise with local, state and Federal governments in the development of policies and legislation which are of benefit to the Pilbara region (Haslam McKenzie *et al.* 2009). Linked to this is the use of services and infrastructure by FIFO workers. The scale of the FIFO work force is not easy to ascertain as the Australian Census does not specifically capture this information and the fluidity of the workforce makes it difficult for local authorities to calculate the working population and its demands. FIFO employees do not contribute directly to local government rates and thus local infrastructure. The reason for this, as identified by the Australian Bureau of Statistics (Australian Bureau of Statistics 2008a), is that FIFO workers usually report their 'usual' address as their home address (where their partner and children live), but not the 'actual' or usual place of residence where they have or intend to spend six months or more, as required on the Census form. Therefore, some of these employees may not be counted according to their usual place of residence due to the respondent not interpreting the question correctly. This has significant implications for local government and the distribution of Commonwealth grants and means that local governments with mining and high FIFO activity are providing infrastructure and services for which they are not given resources commensurate with the resident population (Haslam McKenzie 2011a).

Perhaps the most challenging issue of all is, however, the cost of construction in remote communities, but particularly in Western Australia where there is evidence of a two speed economy, driven by the current mining boom (Chamber of Commerce and Industry Western Australia 2011). The construction industry is one of the best performing sectors in the Western Australian economy. Construction skills are highly sought after and there are skills shortages. The commercial sector is able to outbid the residential sector for construction labour as the projects tend to be larger scale, better paid and hence, lower risk; the mining companies are the worst offenders for labour and skills poaching. The residential construction sector has been further hampered by lack of accommodation for construction workers and the contraction of finance in the aftermath of the global financial crisis. Construction is especially expensive in the Pilbara for a variety of reasons including the cost of materials and transport, the additional costs associated with cyclonic and seismic construction ratings and, to date, the lack of economies of scales. The high costs therefore preclude many companies, especially small, locally based builders from operating in the Pilbara.

POTENTIAL SOLUTIONS

The urgent need to address the housing pressures requires flexible approaches to housing density, diversity and adaptability in order to respond to changing housing needs over time. It has been suggested that the rules governing the sale of Crown land to the government entity, Landcorp, could be relaxed to enable more affordable housing land in the Pilbara. To date there has been little movement regarding the sale of government land at market prices. If the legislation was changed to enable government land which is suitable for development to be transferred at no cost to the social housing and not-for-profit housing sectors, even if it was limited to the Pilbara and rules were put in place that quarantined land sale privileges, the land discount would make a significant difference to the cost of housing.

The release of the Western Australian government's new Affordable Housing Strategy (Department of Housing 2011) outlines opportunities for more flexibility, particularly through public-private partnerships and the engagement with non-government organisations such as community housing providers. Through partnerships with the private sector, the rules which limit access to public housing based on income are more flexible so that key workers and others on low incomes, which are above the threshold for public housing eligibility, are able to access affordable housing. One not-for-profit community housing organisation, Foundation Housing, has established an office in the Pilbara but the stakes are high for non-government-organisations while land and construction prices are so high. The advantage of not-for-profit affordable housing models is the capacity to retain affordable housing for social purposes over the longer term. Both the State and Commonwealth governments are offering affordable housing grants and assistance. Examples include the National Rental Affordability Scheme (NRAS) which provides tax incentives for up to ten years in return for discounting market rents for low to moderate incomes and the State initiative where the Department of Housing will offer attractive leasing terms for properties secured from landlords and real estate agents, thus mitigating the risks to some extent. Schemes such as NRAS have a role to play but may need to be supplemented with local or State investment of land or capital to ensure they are financially viable in high cost mining town markets. All of these initiatives will take time for the changes to be instituted and will not address the immediate housing and accommodation problems being experienced in the Pilbara.

The government has also offered to assist the community housing sector with finance and to stand as guarantor in some instances. Keystart, a Western Australian government initiative that helps low to moderate income earners enter the affordable housing market has been extended enabling shared equity opportunities with relatively low deposit loans. However, the Pilbara prices thresholds are currently still too high for most key workers and low to moderate income earners in the Pilbara region. Perhaps more importantly, land must first be available to enable the partnering, and it has not yet available in any quantity. If economies of scale are to be achieved then large tracts of land need to be released quickly.

The plethora of agency approvals required and the time taken heightens investment risk and undermines profitability. A development may require a proponent to seek approval from approximately ten government agencies depending upon the size and nature of the development (Haslam McKenzie 2011b). Developers complain that not all approvals can be applied for simultaneously; approval from one agency is a prerequisite for approval from another. To facilitate timeliness, the State government has introduced a number of initiatives. Perhaps the most contentious are the Development Assessment Panels (DAPs) which will take over the planning assessment role from local government, although local government will have representation on the five member panels. It is intended that DAPs will enhance planning expertise and timeliness in decision making by improving the balance between technical advice and local knowledge and mitigating the influence of NIMBYism and other stalling devices. It has been broadly recognised that local government has an integral role in facilitating the changes in the Pilbara and therefore must be a facilitator of change rather than an inhibitor. Flexibility is the key and both State and local government could be more innovative in land release and planning guidelines. With the intense demand for accommodation and the physical constraints in both towns, attitudes are changing towards greater density and different types of housing configurations, styles and materials are starting to appear on new Landcorp subdivisions. The Town of Port Hedland is reviewing the R-codes with a view to encouraging greater plot density. To date however, there are no incentives for greater density or innovative design. Design responses which address short term supply issues constrained by infrastructure shortfalls have not been encouraged. For example, the use of greywater and household power generation has been thwarted by agencies such as the Department of Health, the Water Corporation and Horizon Power. Interviewees reported that it is standard government practice to say 'no' first and then enter long negotiations. In their defence, government agencies claim that non-compliant initiatives are resource heavy and there is just not the staff available, especially in the Pilbara. This claim is arguable given the economic and social costliness of negotiations and time delays.

Another area of resistance, particularly within local government, has been ancillary housing provisions. Until now, ancillary housing has been restricted to family members however, through the State government housing and planning reforms, the provisions have been made more flexible. Ancillary housing flexibility in

the Pilbara would provide the opportunity for the private sector to both provide extra accommodation while also enhancing the value of the residence, albeit in an already high value housing market. Because the ancillary housing is attached to the main residence, it cannot be subdivided and therefore limits the profiteering which has been rampant in Pilbara towns for more than a decade. The private sector could be further incentivised to build ancillary housing through reduced local government rates and other, similar mechanisms, especially if an affordable rent ceiling is maintained. These mechanisms spread the development costs and opportunities across the community while also providing a more affordable rental option for small low to moderate households. Formalised ancillary housing would also give local government authorities the ability to control the quality of the built product and generally enhance the quality of housing in the region. Providing development incentives to the private sector prevents concerns about large scale 'sameness' that have been raised regarding large, commercial building companies whose profitability is derived from economies of scale. Other advantages of ancillary housing include the opportunities associated with both intergenerational housing for both younger and older Pilbara residents while also providing independence for both households.

FIFO and DIDO are now accepted practices in the Australian mining industry and have an ongoing role to play (Haslam McKenzie *et al.* 2009; Haslam McKenzie 2011a). FIFO and DIDO strategies have an important and legitimate role in meeting the workforce needs of the mining industry and are the preferred option for many workers. They are particularly suitable where the labour force requirements are time limited, such as during the construction phase of a project or the mine life is expected to be relatively short or the work site is remote with no nearby amenities. Other significant factors include the preference of workers and their families to be based in capital cities or other, usually seaboard, centres. Even though many towns view these arrangements as both a blight and often a local economic non-contributor, temporary work accommodation is an inevitable feature of a mining community. Their built form could be considerably improved and their location, often on the edge or removed from towns could be better integrated into communities. These high density complexes do not have to be temporary, although while mining industry is booming, mining companies usually retain their temporary accommodation for other projects or move it to other projects. Nonetheless, the amenities offered by the companies to their workforce could be more accessible to local people and relationships between the resource labour force and local people more open.

CONCLUSION

This paper highlights the interdependencies between housing, mining and the social and economic sustainability of mining communities. If we are to build better towns and even cities in remote places, such as have been outlined in the Pilbara Cities Blueprint, entirely new mindsets must be applied to overcoming entrenched challenges. Timely, responsive leadership and co-ordination of all stakeholders and shared goals is critical in the planning process. Successful housing strategies in mining communities depend on coordinated action involving a range of government, market and community stakeholders. This involves resolution of the diverse and conflicting interests of these stakeholders and agreement about who is responsible for what. Local and State government has a key role in providing leadership on these issues. Innovations such as ancillary housing and density incentives could encourage the private sector to assist in the provision of housing but again, local government guidelines would have to be more flexible. Ensuring low and moderate income households have access to affordable housing will draw a more diversified community. This is important so that low to moderate income earners such as key and service workers can live comfortably in the community and provide retail, childcare, medical ancillary, education and other services that contribute to a stable and functional community.

However achieving affordable housing in such an expensive environmental as the Pilbara will require the State government to consider changes to how they deliver land through agencies such as Landcorp and the legislative requirements regarding the purchase land at market prices. It is also important that there is co-ordination across government jurisdictions to enhance timeliness and minimise investor frustration. Encouraging spheres of government to be innovative and receptive to new design ideas and ways of achieving more liveable communities is critical.

The choked housing market in the Pilbara has been thwarted by lack of government responsiveness to reports which flagged the need for suitable land for housing and commercial development more than 30 years ago. There has also been a lack of timeliness and flexibility by agencies regarding land release and planning guidelines. Just as it is unreasonable to expect the private sector to take the lead on social development, government should not be expected to underwrite all regional economic development, including housing. The mining companies have a critical role to play. While their priority is to mine the resources and ship it to overseas customers, they also have an obligation to be more open regarding their workforce plans and to inform town planners and community decision makers. How and where staff will be deployed as operations expand and contract has considerable impact on the broader accommodation

markets. FIFO and DIDO work arrangements are inevitable for some facets of mine construction and operation but the temporary accommodation does not have to be a visual blight nor entirely closed from the community. Temporary accommodation facilities could be designed to ensure occupants engage with local communities who could also benefit from their disposable income, thus making a contribution to the local economy. It is important for mining companies, government agencies and community members to have access to the appropriate information and tools to accurately measure and transparently assess the social and economic impacts and contributions to local communities of different workforce practices and accommodation patterns. Together, sustainable and liveable towns in remote communities can survive and even thrive, long after the mines have closed.

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