

### 3. LOCAL HOUSING STRATEGIES — RESPONDING TO THE AFFORDABILITY CRISIS

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Local housing strategies have typically included an analysis of local housing supply and demand, future oriented demographic and market trends, as well as policy statements and recommendations for planning processes, town planning schemes and development controls. As outlined by Gurran (2004: 3) internationally and in Australia, local housing strategies have been promoted as a way of achieving a comprehensive framework for local government housing activities, including sustainability and affordability.

In line with the developing national research and policy agenda focusing on leading and resourcing multi-level housing reform in Australia, this chapter explores the role and potential of local housing strategies developed by Western Australian planning authorities in addressing the critical need for housing reform. We discuss the limitations of current practice and outline several of the more effective housing initiatives developed by Western Australian local governments.

This discussion is presented within Western Australia's broader housing market and policy context where we outline the scope of the needs and argue for more focused intervention, particularly regarding current concerns over affordability. In this respect, our analysis serves to illustrate how local housing strategies can and should respond to what is increasingly recognised as a protracted and widespread crisis with housing affordability.

The potential diversity and complexity of local housing is explored through the analysis of two very different Western Australian communities: the Town of Vincent in inner city Perth and the mining town of Karratha in the Pilbara region of the state's north-west. As different as these two communities are, both are experiencing major housing affordability and sustainability issues, and require significant interventions to reform current planning practice and development outcomes. In our analysis of these communities we consider the particular characteristics of the local and regional context that generate the housing issues identified, and we also outline the potential scope for local strategic and statutory intervention.

Although there are some positive signs of a broadening acknowledgement within policy circles and the wider community of the depth and scale of the problems related to housing, our investigations suggest that there is a long way to go before there is the kind of integrated response necessary to meet the challenges. Local housing strategies are one of the ways by which communities can identify and address their respective housing needs, but it is also clear that the role of housing and the management of housing demand and supply are not

only a local responsibility. The situation is complex and requires a coordinated approach across all spheres of government.

#### *The role of a local housing strategy*

Local government planning and building guidelines are shaped by state government policy and legislation and in Western Australia, the Department for Planning and Infrastructure's Guidelines for the Preparation, Form and Content of Local Housing Strategies (1992) remain the most current guideline. The principles of Liveable Neighbourhoods (enhancing walkability and public transport access, attractive streetscapes that encourage community interaction, building diversity and efficient urban environments) and a general sensitivity to sustainable development has influenced some local government authorities to consider housing strategies that will contribute to more sustainable forms of residential development by facilitating more compact residential areas, greater housing diversity and more efficient use of infrastructure.

In 2006, the Western Australian state government developed a Draft Housing Policy which suggested the broad development of local and regional housing strategies. The policy has not been enacted but the concept of a local housing strategy has been investigated by a number of local government authorities in Perth including the City of Gosnells and the Town of Vincent.

Communities are constantly under pressure due to market forces, population fluctuations, demand for infrastructure, urban amenity trends and increasing environmental awareness which inevitably create stresses and strains for planners and community leaders. A thorough understanding of the housing stock and an analysis of housing demand and supply is a fundamental feature of a local housing strategy.

Properly informed, a local housing strategy can be useful in guiding how a municipality will develop into the future: articulating densities and housing mix and ensuring that particular housing needs or groups in a community are accommodated. For example, quarantining development opportunities for special needs groups such as the disabled or the aged, or providing housing specifically to meet affordability guidelines. A local housing strategy can also provide the structure within which to undertake such work and dovetail the strategy with other planning guidelines and bylaws. As identified by the New South Wales Department of Housing, a local housing strategy will usually combine three key elements:

- analysis of local or regional housing needs and conditions
- an aim (or aims) and a more detailed set of objectives
- commitment to implement those objectives



Once the current housing and land supply and demand is examined, the objectives can be developed with specific implementation and monitoring plans to ensure the strategy provides a cohesive framework. As well as articulating a framework to help guide council action, the local housing strategy communicates councils' housing-related objectives and responsibilities to the community. It provides clarity and certainty about future residential development trends and policies for councillors, staff, the community and developers.

### *Current practice*

Collectively, prior research suggests that on the one hand, local level coordination of resources and institutional arrangements can deliver a host of housing benefits, including those that address affordability and sustainability (Gurran 2004). On the other hand, the research also suggests that these instances are the exception in Australia, rather than the norm as is the case in the United Kingdom, North America, Western Europe and elsewhere (Gurran et al. 2007). The research by Gurran (2004) focused on the east coast of Australia and examined the extent of local government involvement in social housing. What she found were pockets of local initiative and coordination that yielded significant affordable housing and sustainability outcomes.

Looking more specifically at the activities of local planning departments, it is clear that they are primarily concerned with reviewing development applications and structure plans in terms of an increasing array of criteria aligned with housing densities, neighbourhood amenity, urban design and environmental sustainability. Despite the Department of Housing and Works 1992 policy directive obliging all Western Australian local government jurisdictions to have a local housing strategy, a review of these (Osipowicz, 2003) suggests that in the main they are largely undeveloped documents with little in the way of concrete objectives or outcomes.

Currently in Western Australia there are no fully operational and comprehensive local housing strategies. The City of Gosnells does have a relatively active if not comprehensive housing strategy in that it is referred to regularly in council deliberations on development applications. The strategy integrates such aspects as energy efficiency and designs out crime principles, but other important aspects such as housing diversity and affordability remain to be further developed and activated.

The City of Subiaco under Mayor Costa (1995–2005) was Western Australia's pioneering local government when it came to a planning-led housing reform agenda. The Sustainable House Initiative and the Affordable Housing components of their housing strategy at that time were examples of an active rather than passive approach. Regulations associated with ancillary housing

resources were channelled and affordable and sustainable housing models were built and occupied during this period. However, Subiaco's housing reform agenda ended abruptly with the resignation of Mayor Costa, underscoring Gurran's (2004) finding that strong and stable council leadership and support is paramount for the success of local housing strategies.

More recently, researchers associated with the Australian and Urban Research Institute have identified many working examples from around the nation and overseas of planning based housing initiatives (Gurran et al. 2007, 2008). The explicit intent of this research is to provide local planners in Australia with a plethora of potential planning responses to housing reforms. This research also illustrates how critical federal and state level planning policy reforms are for local level innovation and enablement.

In Western Australia, recent policy moves in relation to metropolitan level planning suggest that a stronger housing reform agenda will be pursued through the Network City framework. Preliminary work on this front has yielded several important insights about the responsibilities and challenges that lay ahead. Among some planners, councillors and the broader community there appears to be a widespread lack of understanding of core housing concepts and relationships. This lack of housing knowledge among Australian planners and institutions has been identified as a peculiar feature of the Australian planning profession (Paris 1993).

In the case studies we discuss later in this chapter we highlight evidence of:

- the generally poor understanding of both housing diversity and regional diversity and how they may interrelate in practice
- the generally poor understanding of the interrelationship between sustainability and affordability in housing
- how the social and economic relationships between people and housing tends to be overlooked compared to the focus on the largely spatial relationships between the house and the site, and the house and the street
- how the role and nuances of the housing market and its indicators are often poorly appreciated and rarely considered in the planning process.

Addressing this basic lack of professional and intuitional knowledge is fundamental to enabling the process of local housing reform. Developing the professional and intuitional confidence and willingness to reconsider and change long-established practices represents another set of challenges.

### *The housing market*

The housing markets in most of the nation's large cities and in many regions are currently experiencing a host of housing problems from which they are





unlikely to recover in the medium future. There are many interrelated issues, but affordability, diversity and resource efficiency are prominent public policy concerns for all spheres of government. In particular, the affordability and sustainability concerns can be summarised as follows:

- The next generation of homebuyers are being denied the prospect of homeownership due to the prohibitively high cost of both land and housing on the one hand (see Temov 2007, D'Hart 2007), while on the other, the spiralling rise of rents erodes the potential for saving a deposit and creates homelessness (Yates et al. 2007, Yates, Randolph & Holloway 2006). The risk of market stagnation and mortgage foreclosures is also a concern in some newer outlying areas.
- The mismatch between the need for smaller, more affordable and energy efficient homes, and the increasing size and cost of houses, has continued unabated (ABS 2006a, Salt 2001). The latent demand for more housing diversity continues to be met with yet more supply-driven uniformity across ever expanding urban development fronts.

Housing affordability, or rather unaffordability, in Australia has reached unprecedented levels in the last decade. This is the result of a variety of factors, including increased net overseas migration and natural increase (ABS 2008b); a strong economy in a time when major economies such as Japan and the United States have experienced downturns; sharp increases in world prices for the commodities Australia exports in large quantities; and inadequate land supply (Beer 2007, Residential Development Council 2007, Urban Development Institute of Australia/Matusick 2007, Yates et al. 2007). While incomes have, on average, doubled since 1985, housing prices have increased 400 per cent (AMP-NATSEM 2008).

The Western Australian population has been increasing for more than fifty years but the last two years have seen unprecedented growth with the increase in 2006–07 the highest in the nation (2.4 per cent) (ABS 2008b). The Western Australian economy has doubled in size over the past 16 years, with Gross State Product in chain volume terms rising 107 per cent between 1990 and 2006 (ABS 2007a).

Since the 1970s, mining has consolidated its position as the major generator of export income for Western Australia, currently some 70 per cent of total exports revenue (ABS 2007b). Coinciding with the current resources boom has been a sustained increase in the number of employed persons in Western Australia. While the mining industry has been at the forefront of the resources boom and has seen job creation soar, most of the new positions created have been Perth based as administrative and fly-in fly-out positions have increased. Income growth has also consistently risen, but not at the same rate as the cost of housing.

The cost of housing has increased, on average, to 7.4 times the average annual disposable income, up from 4.6 times in 1995–96. It is therefore not surprising that census data is showing increasing numbers of Australians entering home ownership at a later age, or not at all (ABS 2007a, Baxter & McDonald 2005).

### **Housing policy**

The stock of public housing has undergone a significant decline in Australia over the last 15 years. In 1994 public housing represented 6.2 per cent of the national stock, but was down to 4.9 per cent by 2003. Funding for public housing through the Commonwealth State Housing Agreement (CSHA) has been reduced by 20 per cent over the last decade, while funding for Commonwealth Rental Assistance (CRA) has increased by 66 per cent. The CRA assists low-income households to pay private rental costs, however the gap between rents and the government ceiling has continued to increase, forcing more and more people into rental stress when more than 30 per cent of their weekly income goes towards paying for accommodation.

Under current market conditions the housing shortage, the very low vacancy rates, and the high levels of debt that must be serviced by the raising of rents, have conspired to deliver a housing crisis for a growing proportion of renters in the private market, and a windfall for established landlords. Although local government constituencies encompass homeowners, investors and residents who are renting, councillors and councils largely remain true to their roots and dedicated to servicing local property owning interests (Dollery, Crase & Johnson 2006).

The Rudd federal government was elected in November 2007 on a platform that included commitment to a range of housing affordability initiatives including the establishment of a national housing working group to coordinate housing affordability responses and measures to increase housing supply, subsidise the development of affordable rental housing and assist first home purchasers and homeless people. A new National Affordable Housing Agreement with the states is proposed to replace the Commonwealth State Housing Agreement from July 2009. Indications are that there will be 'greater attention to a wider range of issues affecting buyers and renters including the impact of government's economic, taxation, infrastructure, planning and regional development policies' (Disney 2008: 255). It is mooted that the agreement will also encourage the participation of housing associations and other not-for-profit housing investment providers.

At the state level, housing policy and planning policy are formulated separately through technically and administratively differentiated bureaucratic networks



between the Department of Housing and Works (DHW) and the Department for Planning and Infrastructure (DPI). In practice, the social housing agenda adopted by the DHW is pursued irrespective of the sustainability (resource efficiency) of the land release agenda pursued by the DPI, and vice versa.

At the local level, the influence of industry and community pressure groups and the conservative interpretation of regulations have all been identified as regressive factors. Local planning departments are a focal point for such tensions but notwithstanding the examples cited earlier, they have rarely taken a leadership role in housing issues beyond density and neighbourhood amenity, in particular streetscapes.

The resources and capacity for a more comprehensive local housing response generally lie somewhere between, and outside of, local government planning departments in terms of responsibility for land holdings and community partners and so forth. Accordingly, although the Rudd government's housing reform agenda can be coordinated within the scope of local housing strategies, the potential breadth of these housing related initiatives will need to draw on the focused efforts and resources of a broader network of community partners and government agencies.

The following case studies draw attention to very different local government contexts with diverse housing stock, accommodation needs and policy directions. Despite their differences, in our view they demonstrate that local housing strategies would assist local jurisdictions understand their current requirements and facilitate the necessary planning for future housing and accommodation needs.

### Case Study One

#### *The Town of Vincent*

The Town of Vincent was created in 1993 through the division of the former City of Perth into four local government jurisdictions. The town lies to the north of central Perth with Newcastle Street as its southern boundary (see Figure 1). It has a typical inner city mixture of old and new commercial and residential land uses, tending to the more suburban with distance from the core.

A population of 25,900 people is distributed across five distinctive neighbourhoods, each with their own active commercial village hubs. As with other inner city areas in Perth and elsewhere the older industrial and warehousing sites and much of the older housing stock has been subject to ongoing regeneration for the past twenty-odd years. There are, however, still significant sections of the community that reflect the Australian working class and migrant families (Italians, Greeks, Macedonians, Vietnamese and others) who have traditionally lived in and flavoured the town. There have also been

fluctuating levels of homeless and marginally homeless people reflecting the economic conditions of the times.

The prescribed housing densities for the Town of Vincent are defined and set out under the Local Planning Scheme. The scheme's accompanying zoning table defines the permitted uses, including those that relate to different housing typologies. Development approvals are also informed by the Western Australian Residential Design Codes (the R Codes), which detail the design parameters that local planners use to consider applications and, in particular, their impact on neighbourhood amenity. There are also local policies that council has developed to help supplement and enforce provisions under the R Codes. These cover such aspects as group housing, ancillary housing and multi-unit developments.

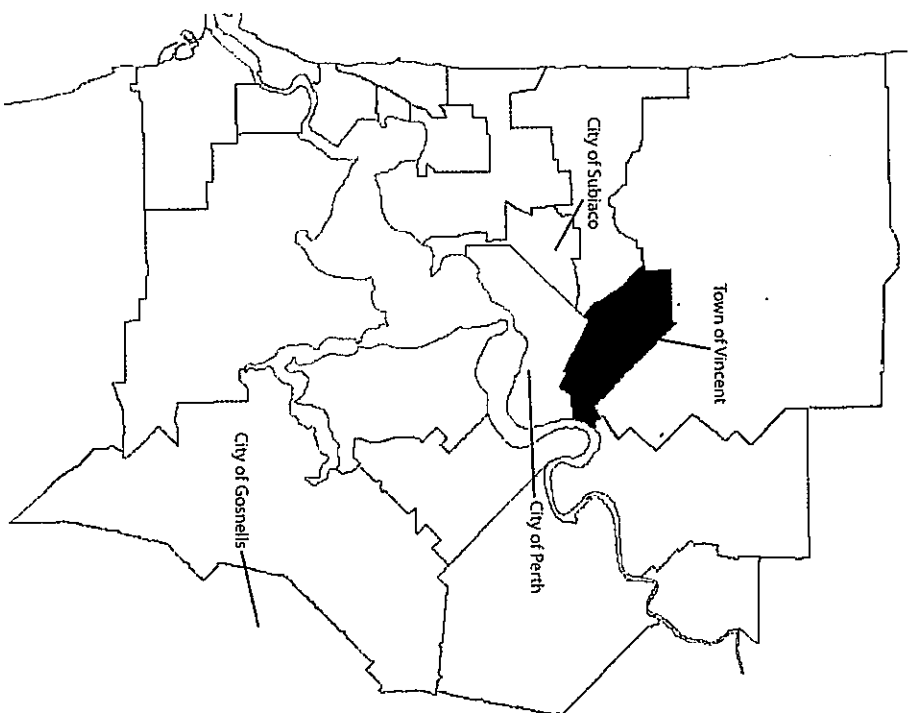


Figure 1 Figure 1 Town of Vincent location map





A draft of a new Local Planning Strategy is being prepared to provide the direction for reshaping and amending the Local Planning Scheme. It identifies strategic development sites within the town, those considered appropriate for density increases, with a view to encouraging a greater variety of housing typologies and the provision of affordable housing.

Accordingly, in 2007 the town commissioned a report to provide a resource for the development of an Affordable Housing Strategy 'to ensure an adequate provision and diversity of housing is provided for its residents.' This strategy is intended as a supplement to the Housing Strategy, and focuses on resourcing and directing actions including policy reforms and development that address the town's needs for affordable housing. Although the report focused on the current and future needs of residents, it also considered the local housing market, the impact of government policy and the operations of allied housing support agencies and community organisations.

The research behind the Affordable Housing Strategy revealed significant levels of housing stress being experienced by residents, and a strong case for local strategic intervention. Specifically:

- Housing affordability is a widespread concern among the town's residents. At least half of the ABS census collector districts within the town have between 15 and 35 per cent of households paying more than 30 per cent of their gross income on housing. Based on standard definitions, housing costs for these residents are unaffordable, leading to housing stress.
- The gentrification associated with long-term and current development patterns continues to undermine housing affordability, diversity and access. This finding to some extent links the deteriorating level of housing affordability with the town's development approval processes, and the impact of council's plans, policies and decisions.
- The planning framework and legislation in general has worked against housing affordability and diversity, despite the fact that 'housing diversity' is a stated objective within the Residential Design Codes.
- There is ample opportunity within the existing framework to adopt a proactive role in encouraging and facilitating affordable housing diversity.
- The town's networks of community service providers and agencies have a high degree of capacity and experience, and also the willingness to support council initiatives in affordable housing (Greive et al. 2008).

Figures 2 and 3 illustrate the rapid rise in housing costs within the town. The very rapid rise in rents between 2005 and 2007 is influenced by the wave of new and relatively expensive apartments that were developed during this period. Such developments generally replace older cheaper rental housing and displace existing tenants — a process termed 'gentrification'. It is noteworthy

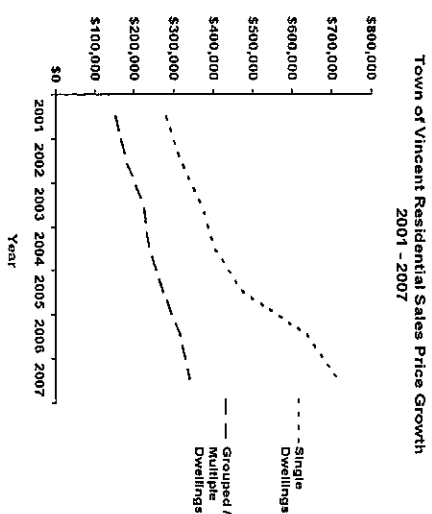


Figure 2 Town of Vincent residential sales price growth 2001-2007

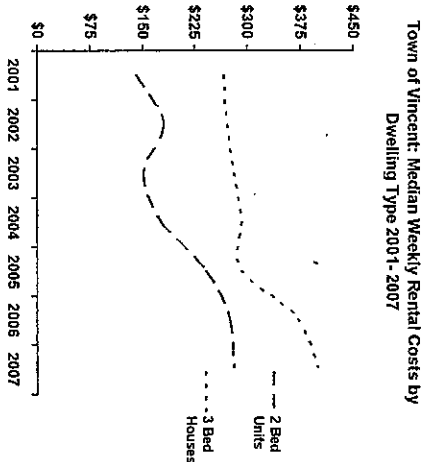


Figure 3 Town of Vincent: Median weekly rental costs by dwelling type 2001-2007

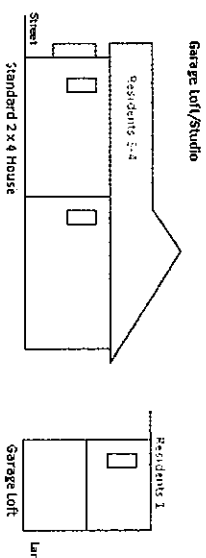


Figure 4 Studios and other ancillary housing formats



that even basic housing data on such key indicators as rents is rarely monitored by most local government planning departments.

The importance of the tension between local diversity (demographic, housing, physical), and the interplay between state and local planning framework was revealed when the analysis drilled down into context and policy details.

The general objectives of the R Codes are:

- 1.3 (a) To provide for a full range of housing types and densities that meet the needs of all people.
- 1.3.2 (a) To provide local government with the full range of choices for housing type and design, to meet the needs of their communities.

A closer examination of how these objectives play in practice makes it clear that both the R Codes and the local policies made under its provisions act to 'exclude' the prospects for housing diversity appropriate to servicing the needs of residents.

The town's local policies currently exclude multiple dwelling developments, single bedroom dwellings and group housing from much of the town, including areas where they could be appropriately sited based on Network City principles, servicing the residents' needs for housing diversity and remain in keeping with neighbourhood amenity. The R Codes generally do not adequately recognise the diversity of inner city neighbourhoods or of housing types (e.g. lodging houses and hostels) that may remain even after decades of gentrification. In practice, this means that in parts of the town, if developers want to redevelop a block of dilapidated one bedroom apartments, they would not be permitted to develop to the same density or include any one bedroom apartments at all on the site.

In another pertinent example, the R Codes specifically excludes the possibility of ancillary housing being used as affordable rental housing for low to moderate income singles, where ancillary housing is defined as:

Self-contained living accommodation on the same lot as a single house that may be attached or detached from the single house occupied by members of the same family as the occupiers of the main dwelling.

In other words, affordable housing opportunities that may already exist within the housing stock, such as granny flats, cannot be rented to non family members, such as a student nurse or even a family friend. Demographic analysis identifies an extraordinary 22 per cent of the town's population aged 15 and over are full or part time students, many of whom would no doubt appreciate

the low cost benefits of a granny flat. There are also requirements for an extra parking bay in the case of new developments. The town had created its own policies to enforce these requirements, and it is these local policies that are now being considered for reform by council.

It is also the case that many of the houses and streets are chronically under occupied by some 30–50 per cent compared to when they were originally designed. Over 60 per cent of all single detached houses are occupied by 1–2 person households, and 25 per cent of all single detached houses are sole person households.

Such statistics highlight the important distinction between housing density and population density and the need for planners to consider how such relationships may play out in practice. Increased housing density does not necessarily translate into higher population density, and nor does the house or lot size necessarily relate to household size. The implications of such relationships are fundamental in both affordability and sustainability concerns in planning new and existing communities.

As we go to press in 2009, the Town of Vincent's Affordable Housing Strategy is feeding into the review of the Local Planning Strategy. The Department for Planning and Infrastructure has also recognised the potential value of using comprehensive local housing strategies to deliver more resource efficient and affordable housing models appropriate for various local contexts. One of the challenges involves reforming the state level planning framework to enable and practically assist local governments with the necessary planning reforms at the local level. There is some way to go before there is the kind of integration of these different levels of planning, but there has been more progress in metropolitan planning recently than there has been in a long while.

## Case Study Two

### *Town of Karratha*

The town of Karratha, 1535 kilometres north of Perth in the Shire of Roebourne in the Pilbara region (see Figure 5), was established in 1968 by joint agreement with the Western Australian government and Hamersley Iron from land excised from Karratha Station pastoral lease. It was a purpose built government and supply town to service the burgeoning iron ore industry. Roebourne town, 40 kilometres east of Karratha, was established as a pastoral town in the late 19th century and is now dominated by Aboriginal and public housing.

The port of Dampier, 15 kilometres west of Karratha, is the biggest tonnage port in the country and contributes significantly to Australia's export income. The massive North West Shelf Gas project is situated on the nearby Burrup Peninsula and managed by Woodside Offshore Petroleum. This locality has



been in growth mode (with a couple of short-lived slumps) since the 1960s and housing pressures have reached crisis point in the last three years as Woodside, Rio Tinto and other smaller operators announce operation expansion programs to meet the almost insatiable needs of India and China.

Housing demand has put extraordinary pressure on the housing market. Between 1991 and 2006, Karratha house prices increased by over 400 per cent (Pilbara Development Commission 2007, 2006, 2004). In the July 2007 quarter the average price of a four bedroom house to rent was \$2000 per week (Pilbara Development Commission 2007), and government agencies have been known to pay in excess of \$2500 per week to secure accommodation for staff. The home pictured right is typical of homes being built in Pilbara housing developments. The design, notable for its lack of shade and the lightweight construction materials used, is entirely inappropriate for families living in Karratha's harsh desert environs with searing 45 degree heat.

Further, this three bedroom, one bathroom house is aesthetically boring and in Perth would not attract a premium purchase or rental price, but in Karratha, where housing and land are in short supply, this house was for sale in 2008 for over a million dollars. The lack of imagination in the built form in these Karratha suburbs augers for a short-term future when these homes will be slums, such as has been the history of South Hedland, further north in the Pilbara region, and where poor town planning and social problems have been difficult and expensive to resolve.

Not only is there a lack of affordable housing, there is a serious lack of available land and housing of any price (Haslam McKenzie et al. 2008). All

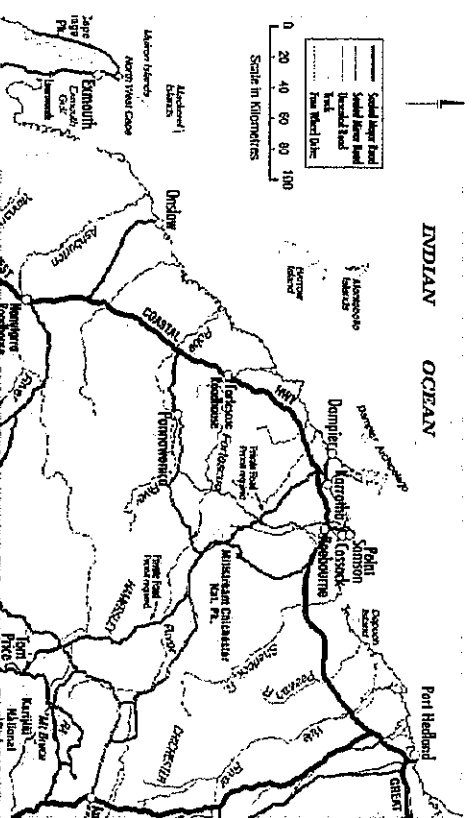


Figure 5 The Pilbara region

of the Pilbara towns are constrained by mining leases or native title, and the housing crisis in Karratha has led to some people flouting regulations. The accommodation pictured below is located in the Karratha light industrial area, an area designated for commercial and industrial activity rather than residential. While land supply and consequently housing in the town is in such short supply, the local council has made exception to what would otherwise be unacceptable arrangements. As can be seen in the photograph, the accommodation is unplanned, haphazard, climatically inappropriate and not at all conducive to a sense of community or commitment to place.



New home in Karratha, 2008



Housing in the Karratha light industrial area





Overcrowding, sub-letting, 'hot-bedding' (several people using the same bed in shifts), people living in caravans, tents and garages on other people's properties, and illegal occupation places a section of the population into a class of people who do not want to be seen or counted by any authority, including the Australian Bureau of Statistics (2007c, 2006b).

An enduring issue in remote communities is the inability to attract and retain staff (Hasslam McKenzie 2007). Combined with the nature and locations of mining operations and industry cost structures, this leads to an increase in long-distance commuting, labour force 'cannibalism' and poaching. New development is stymied by a lack of a locally resident workforce and the shortfall is provided through fly-in fly-out (FIFO) arrangements which come with their own set of challenges.

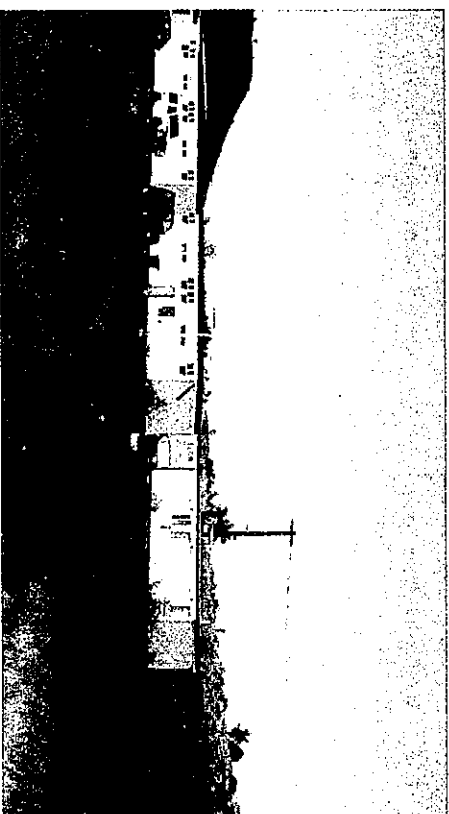
A significant proportion of the Pilbara workforce is FIFO, usually from Perth. While employees are away from home, they live in single persons' quarters (SPQs) which are not dissimilar to the relocatable accommodation units in the Karratha light industrial area. Clearly there is no attempt to encourage labour permanence in the region.

Fly-in-fly-out arrangements are not popular with local residents or business owners as the SPQs are usually separate from the town, thus limiting the opportunity for workers to patronise local businesses, while at the same time they are using town infrastructure and resources. It is vehemently argued by the locals that FIFO workers do not 'give back' to the community and essentially 'sit outside' the residential community. Given that they live in such blatantly temporary accommodation, perhaps it is not surprising that their commitment to the community is also 'temporary'.

The rapid onset of the current resources boom, and in particular the scale of this boom, has placed enormous pressure on infrastructure, human resources and public service provision. Housing is an important and integral factor in responding to these challenges and is arguably a critical component of social and economic infrastructure such as hospitals, schools, roads, railways, ports and essential service utilities. A range of skilled workers for the resources industries and for services such as child care, retail, health and education are in short supply.

The flats in Dampier were built several decades ago. Like much of the housing in the Pilbara, they are outdated, uncomfortable and unattractive. It is not surprising that the Pilbara region has struggled to attract and retain long-term residents and hence build a sense of community and social capital. There is a need for different housing models, not just single residences, but diverse, affordable housing has not, to date, been built due to limited land that has been zoned for greater density, a shortage of construction labour, and other factors.

Government has not responded to the housing and land shortages in the region in a timely way. The dominant approach of Australian governments, especially over the past three decades, has been to rely on market forces to deliver housing outcomes, with minimal direct government intervention (Hillier, Fisher & Tonts 2002).<sup>10</sup> It has been suggested that the government has obstructed the operation of the land market economy in the Pilbara by dribbling available land onto the open market (Senate Select Committee on Housing Affordability in Australia 2008). The operation of the land market in the Pilbara has been thwarted by the lack of private land ownership, with most land owned by the crown with restrictive mining and native title covenants.



### Single person's quarters



## Housing in Dampier



The release of land has also been slow due to multiple government agencies being involved in bringing the land to a serviced status, and delays associated with compliance, native title and mining constraints, skilled labour shortages and a super-charged economy. While land release has been slow to respond to land demand and supply issues it is almost impossible for non-mining businesses to provide housing or other accommodation options for themselves and their staff, and consequently, under current resource-growth conditions, it is almost impossible for non-mining businesses to grow and prosper (Housing and Urban Research Institute of Western Australia 2008).

Regardless of how much money is earned in the Pilbara, the day to day business of living is not always easy and money does not solve all the problems. Housing has generally been built with limited consideration for future community, good design or climatically sensitive orientation. From its dearth of variety and limited aesthetic appeal it is evident that lessons have not been learnt from the inappropriate planning and built form in South Hedland, where there is a ghetto-feel to the suburb, with high crime rates, vandalism and a general unwillingness of company employees to live there. Searipple Estate has all the hallmarks of a subdivision that has been built to satisfy immediate demand but with no ambition for creativity or prescient planning. It is unattractive and unimaginative.

Almost all houses in Karratha must be air-conditioned all of the time to be liveable, and they need shade far more than they need to be north facing (as encouraged by the R Codes). The cost of cooling homes in the Pilbara is very high. For those who do not receive large salaries or government employee rebates, housing and the cost of living are prohibitively expensive and it is usually for this reason that many in the private sector leave the Pilbara. The cost of living has also marginalised local Aboriginal people, pushing them out of the towns and into communities where access to skills development and high paying jobs are limited.

The Shire of Roebourne does not have a local housing strategy. Due to persistent staff shortages and turnover, the shire struggles to meet its day to day priorities. Karratha could clearly benefit from a local housing strategy. A comprehensive analysis of current and future housing supply and demand would be a very helpful start. In a region where the economy has become dominated by the resources industry, housing demand fluctuates but given the expansion plans already before government, it is clear that demand will persist.

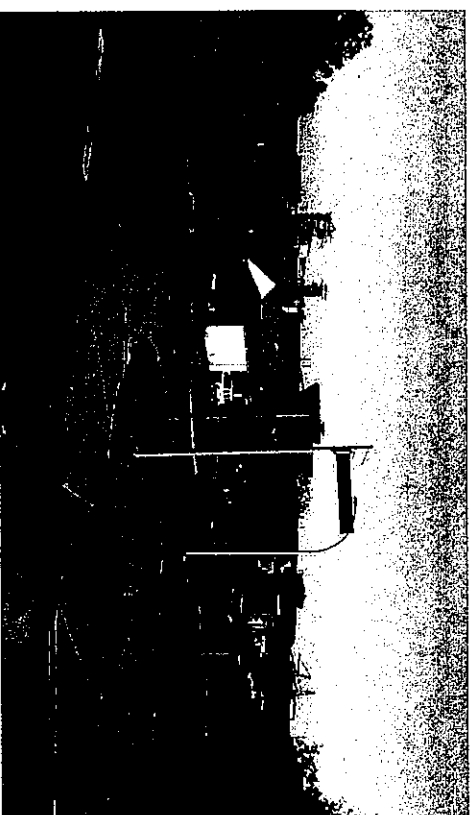
A clear understanding of what housing styles and types the market could offer to ensure maximum density and the range of community housing options would provide local government and regional development commission planners with greater product choice over a range of price settings. It would

also indicate the potential stresses on head works and trigger prescient infrastructure replacement, upgrade and maintenance planning.

An increase in multiple dwellings rather than single residences would increase densities and ensure more efficient use of infrastructure. Higher density housing is likely to meet the needs of residents who work long shifts and whose leisure time is spent indoors for more than six months of the year due to the climate. Greater densities in the short term should also at least stabilise market prices and entice a broader cross-section of residents back to the towns.

A local housing strategy presents an opportunity to investigate more sustainable housing design and could incorporate more sensitive designs to the harsh climatic conditions of the Pilbara. A local housing strategy would identify what elements are missing in the community and seek ideas about how to be inclusive of people who are marginalised by high accommodation and living expenses, most particularly the semi-skilled and unskilled sector whose labour is highly sought after. It is this workforce that underpins the retail and services sector which ensures the functionality of a community. Karratha and the surrounding towns are expensive places in which to age and unless you already own a home it is unlikely an ageing or disabled person could live in the region. Without a diverse population, these places cannot claim to be communities.

A local housing strategy would encourage local decision makers and residents to revisit the layout of towns which are dominated by dysfunctional 'spaghetti' town planning which hinders access and separates residents rather than drawing them together. The planning processes, land use plans



Searipple Estate



and development regulations could also be reviewed to ensure that optimal housing and planning strategies are developed and implemented in a responsive framework, thus meeting the needs and objectives of everyone who lives and wants to live in the region.



These case studies demonstrate that the diversity of housing needs in terms of affordability and sustainability, as experienced on the ground in different urban and regional contexts, is not something that can easily be centrally planned. Although there is a common need for capacity building, education and regulatory reform, the types of issues, the prospects for ready and able local partners, and the range of resources available at the local level are all too different to be satisfactorily recognised or adequately responded to by higher levels of government.

While there is increasing public attention and policy concern about a broad range of housing affordability and sustainability issues, there also appears to be very limited institutional capacity at the state or local level to respond to these issues in any sort of integrated or comprehensive way. The question remains whether the positive signs at the federal level and among West Australian state planning and housing agencies will deliver the sort of strong, unified planning framework that Gurran et al. (2008, 2007) are calling for.

Although local housing strategies have great potential, they are unlikely to be an effective instrument of change without a pronounced shift in the knowledge base and institutional culture within state and local government planning departments. Clearly there is a need to bridge this gap between the need for housing reform and the lack of knowledge and institutional capacity in planning agencies. It is also critically important that local initiatives are enabled and resourced by higher tiers of government in some sort of coordinated way.

The growing knowledge base is there, but it needs to be absorbed and integrated into practice. Research can explicitly link in and collaborate with the current round of national level research and policy initiatives aligned with similar objectives. Studies by Gurran et al. (2008), and Milligan et al. (2007), are the most recent contributions towards enabling and facilitating locally appropriate housing reforms and action.

Also urgently required is a range of working examples where local planning authorities take a stronger role in coordinating locally appropriate housing reforms. The required culture shift can be facilitated and resourced by higher levels of government, but it is not until the local efforts produce sustained positive results that many more local governments can be expected follow.

#### **4. WATERING A THIRSTY CITY: PLANNING FOR PERTH'S WATER REGIME**

**DAVID MEDDCCOCK**

The history of development on the Swan coastal plain has demonstrated a constantly changing relationship between the water regime and settlement opportunities and lifestyles. Early settlers were confronted by winter flooding of their homes and pastures and invested heavily in filling and draining wetlands and other low lying areas. By contrast later generations dammed streams and rivers flowing onto the coastal plain and later still embraced the natural environmental integrity of our wetlands through reservation, acquisition and management. Currently Perth is challenged by water shortages; floods are a distant memory, the dams are half full, the protected wetlands are often dry and the emerging water source of the 21st century is the Indian Ocean!

This chapter will investigate the reasons behind these changes. It will look at the changing public attitudes to water and the reasons behind these shifts and identify the institutional drivers behind the artificial engineering of the hydrology of the Swan coastal plain.

This analysis will be used as a basis for understanding our current water dilemma: in which a form of development and a value system built on the assumption of plentiful water is now faced with severe water shortages caused by an increasing population and declining rainfall. If Perth is to take the mantra and concept of sustainability seriously the water environment must take centre stage. The longer term survival of the ecosystems that support the hydrology of the coastal plain, the viability of a growing city and the quality of life to be enjoyed by future Perth residents all require intervention and adaptation to protect the quality and quantity of our water supplies. For this to be effective the evidence supporting the foundations of change should be apparent in contemporary values and processes. The following analysis provides that frame of reference.

##### **Perth's water environment**

Perth has a Mediterranean climate characterised by hot dry summers and mild wet winters. Under this climatic regime the rainfall that drives the hydrological cycle occurs over the winter months, primarily during June, July and August. Rain during this period is of a significant volume and on an annual basis Perth receives as much rainfall as more temperate cities such as London. The high volume of winter rainfall is of course in stark contrast to the summer months when typically six months of drought prevail (interrupted only by some isolated cyclonic events). This rainfall pattern has always produced a significant challenge in the settlement and development of the

