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And a very special note of thanks and appreciation must be made to my wife Geraldine and my children, David and Claudia, for whom the prospect of home ownership is rapidly fading.

David Brown FRAIA is a Director of Wentworth Brown Pty. Limited, a design management, market research and policy development practice that meets the needs of organisations wishing to identify and develop new ideas and strategies for the initiation of urban development projects. The company focuses on identifying market-based outcomes that minimise risks, maximise returns and achieve the economic, social and environmental goals demanded by an increasingly sophisticated community. It has a commitment to improving the urban environment and identifying innovative housing solutions to emerging household needs, particularly those for whom housing affordability presents major challenges.

Wentworth Brown Pty. Limited Suite 206, 8 Clarke Street CROWS NEST NSW 2065

Telephone: 61 2 9437 4955 Facsimile: 61 2 9437 4966 E-mail: brown@tup.com.au

FOREWORD

The mountains of data on affordable housing, and its place in contemporary planning, accumulated over the past thirty years and used for this research, are a fraction of what could be mined. The causes and consequences of the inadequate supply and positioning of affordable housing are numerous and clearly articulated. The solutions to increasing supply, diminishing negative perceptions of the housing 'have nots', and delivering the price and product diversity a sustainable community demands are wide ranging. There are, nonetheless, a number of common threads found in the local and international studies.

- Urban development has a profound effect on society but the connections between
 urban sustainability, economic effectiveness, physical infrastructure and place are often
 lost on policy makers and those responsible for policy implementation. Insightful
 perspectives and appropriate blueprints for urban development will not be achieved
 unless the critical relationships between housing supply, health, education, law
 enforcement, economic growth, employment and the environment are understood.
- Achieving a shared view of the value urban development has to society is the key to creating economically, socially and environmentally sustainable communities. As a consequence, rhetoric must be replaced by informed, rigorous, harmonised and properly funded government, industry and community action.
- Successful developments bring together all stakeholders, including housing consumers. Success is not achieved by devising schemes in isolation, architectural determinism, arrogant designers or developers, poorly informed communities or local authorities more concerned with politics than improving life for their constituents.
- The greatest challenge to improving affordability, neighbourhood quality and design is removing the *anywhere*, *everywhere* approach to development policies. Good delivery demands a rational, place based planning system built from a clear understanding of the market, the motivations of all stakeholders and how the product is perceived.
- Each neighbourhood or site, new or revitalised, must be treated on its own merits because a solution for one situation is unlikely to be suitable in another. Integrated policies and actions, responsive to context, are required and the dull apparatus of minimum standards should be applied with enlightened and intelligent flexibility.
- Public intervention is the only answer to reducing market volatility and supporting
 housing innovation. State and local planning authorities, and the community, need to
 have a deep understanding of the processes that reduce housing choice or create
 unsustainable communities. Realising optimal outcomes demands expertise, vision and
 respect for the contribution each player makes to the initiation and delivery process.
- Creating affordable housing in the right location is as much a challenge as building
 enough in the first place. Low and moderate-income households must have access to
 affordable housing in their community or location of choice. Social housing must not be
 isolated from transport, community services or employment opportunities.
- Home ownership is an important, if not the most important, source of household wealth. It provides a place to live, strengthens a community's social capital, and helps create opportunities and choices. But not everyone aspires to own a home or has the resources, temperament or lifestyle. The provision of rental housing to expand choice or assist in location and employment mobility therefore demands equal attention in policies aimed at expanding the supply and diversity of affordable housing.

- Housing prices are determined by a broad range of factors including, but not limited to, housing supply. As a result, simply increasing supply is unlikely to make a substantial change on prices. It is the type of houses built, and their location, that is important.
- Developers and builders are driven by profit, a desire to repeat what has successfully sold in the past and production and market constraints. A concern for design is only evident if better design results in faster sales, higher prices or quicker approvals. Their product is the house. Its social, neighbourhood or street context is rarely considered.
- Buyers and renters are driven by value for money, functionality and size but also by perceptions of 'self' and lifestyle. For many, resale value comes before innovation.
- Financiers seldom care about the housing product, or its context, except when they perceive increased risk. Traditional construction is often a funding prerequisite.
- Carefully structured research will identify and define existing and future market needs and expectations. Research ensures the housing product is accurately fitted to market lifestyles and values, informs a development team, ensures buyers are satisfied and identifies messages that capture interest.
- Local authority planners and councillors, while conscious of the public interest, are under pressure to release land and approve development. Design quality is a concern but it is subjective, influenced by fashion and ignored when politically expedient.
- Mixed income/mixed tenure development can have an important role in expanding the stock of affordable housing, raising the quality of housing available to the 'have nots' and reducing concentrations of low income or disadvantaged households.
- Infrastructure and building construction costs are relatively unimportant if market value can be maintained by considerate, cost effective, market responsive design. Design excellence can achieve high value environments while increasing density and value.
- High quality management of the public and private realm in new or revitalised neighbourhoods is the key to their economic, social and environmental sustainability.

Threads of passion and compassion run through all the literature on affordable housing. But policy makers, designers, developers and local authorities often lack these essential human qualities. It is their children and grand children who will suffer if no action is taken.

This research was never intended to be a casual stroll through the hills and valleys of an important and familiar subject: affordable housing. It became, however, a progressive scramble over mountains of data accompanied by plummets into gorges of personal challenge. Diversions down unproductive paths, errors of judgement, or inadequate communications are entirely those of the author as all the information sources are highly respected and valuable contributors to the debate irrespective of their particular standpoint.

To all those, especially my family, who have waited for the journey to end: thank you for your patience. To those who think market forces alone will create affordable and accessible housing in sustainable neighbourhoods: think again and read on. To those who hope the problem will simply disappear: it won't, so be very fearful of the consequences of inaction.

David Brown FRAIA Sydney, June 2005

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OPINIONS ON HOUSING AND AFFORDABILITY 1991-2004

The major policy focus of the National Housing Strategy is how to maximise housing options in ways that enable all Australians to participate fully in economic and social life. A priority outcome of the Strategy is the establishment of a framework for ensuring that all Australians have access to quality housing which is appropriate to their needs, well located in relation to employment opportunities, transport and other services, and obtainable at an affordable price. This should be a basic right of all Australians.

The term 'affordable' housing conveys the notion of reasonable housing costs in relation to income: that is, housing costs that leave households with sufficient income to meet other basic needs such as food, clothing, transport, medical care and education.

There are two clear messages arising from the analysis in this paper which point to priorities for policy action:

- A high and increasing proportion of low-income people in the private rental market have high housing costs in relation to their incomes.
- Increasing difficulties are being faced by lower income people in attempting to fulfil their home ownership aspirations.

Debates in Australia on housing policy issues have often been hampered by the focus on the relative merits of different tenures. The result is often fixed ideological positions has meant there has not been a systematic consideration of what affordable housing choices may actually suit people's needs or how these needs may change over the course of their lives.

National Housing Strategy. Issues Paper 2: The affordability of Australian housing.

Commonwealth of Australia (1991). Canberra

During the last decade or so, the proportion of all lower income households who are paying more than 30% of their income on mortgages or rent has risen from about 15% to more than 20%. The number of households who are in this position has increased by 100,000 and is now in the vicinity of a quarter of a million.

The Task Force is convinced that the gravity of the unaffordability problem requires expansion of the supply and distribution of affordable housing to be placed at the centre of the attention and priorities of both the State Government and the general community of NSW during the next decade. It also requires closer attention and greater commitment of resources from the Commonwealth Government.

Failure to address this issue as a matter of high priority will not only cause serious personal hardship but will damage the economic and social strength of the entire NSW community, including its ability to compete within Australia and the region.

Affordable housing in New South Wales. The need for action.

Report of a Ministerial Task Force on Affordable Housing. NSW Government (1998). Sydney

Over the past few years, housing prices in many parts of Australia have surged to historically high levels. While some have welcomed the potential effect of rising prices on household wealth, the escalation of prices has also fuelled a debate about the implications for housing affordability and the stability of the wider economy.

While the rise in house prices has led to concerns about affordability, especially for first home buyers, the evidence on affordability is controversial. Some indicators show that affordability has deteriorated significantly below long-run levels in recent years. Other measures show affordability to have declined recently, but to be still above historically low levels.

First Home Ownership. Productivity Commission Issues Paper Australian Government (September 2003), Canberra

Owning a home is of fundamental importance to most Australians and we have among the highest rates of home ownership in the world. The 'family home' brings many people a sense of security and belonging and home ownership generates wider benefits for a nation's social capital. A house is therefore both a home and an investment.

It follows that most Australians have an abiding interest in house prices. When prices rise sharply, as they have done since the mid-1990s, existing homeowners — around 70 percent of Australian households — benefit from increased wealth. But the new generation of first homebuyers can find it more difficult to realise their dream. Because housing markets are inherently cyclical, concerns about first home affordability arise periodically.

First Home Ownership. Productivity Commission Inquiry Report
Australian Government (March 2004), Canberra

A presumption of continuing and strong appreciation in house prices appears to have been driving market outcomes. Yet realistic expectations about income and population growth, or other ongoing drivers of housing demand, cannot support a continuation of recent price growth. Moreover, recent interest rate rises, the likelihood of some catch-up in supply, and improved returns on investment in the stock market, all point to a softening of short-term price pressures.

This (Productivity Commission) assessment suggests that there is little scope for governments to improve affordability for first (and other) homebuyers in the short term. Sustained growth in household incomes and cheaper and more accessible housing finance have been of considerable benefit to the community generally, notwithstanding their effects on house prices and first homebuyers. The apparent overshooting of the market will be addressed by cyclical price adjustment. Though disadvantaging those who have recently purchased homes, such a market correction (together with further income growth) will in due course improve affordability for first homebuyers.

However, governments do have an important role to play in facilitating efficient housing outcomes. In particular, policy initiatives to address any structural factors that encourage excessive demand for housing, or that unnecessarily reduce the responsiveness of supply to increases in demand, will reduce 'average' house prices over future cycles and could provide enduring affordability benefits to both home buyers and renters.

First Home Ownership. Productivity Commission Inquiry Report
Australian Government (March 2004), Canberra

Housing affordability in Australia has reached its worst-ever level and the problem just won't go away if the market eases. Professor Julian Disney of the University of New South Wales ... says: "Affordable housing is crucial to Australia. Without it, people are impoverished, families and communities are eroded, jobs are lost and the economy is weakened. A creeping crisis of affordability has been developing for many years. But recent huge price increases around the country have made it even more serious. Farsighted action is needed to prevent a poisoned legacy of debt, insecurity and hardship being passed to future generations. The Summit hosts believe that governments around Australia must rise to this challenge, which is as great as any facing Australia's long term future."

National Summit on Housing Affordability

Parliament House, Canberra, 27-29 June 2004. Media release (22 June 2004).

Housing is a large part of Australian wealth and living standards. Its value underpins consumer confidence, its prosperity adds substantially to employment growth and the provision of secure, affordable and appropriate housing is central to community well being.

Resource Paper National Summit on Housing Affordability
Marion Powall and Glen Withers. (June 2004)

The kinds of people this (housing affordability) is affecting includes both the working poor who would not qualify for public housing, as well as those on average incomes who represent the key workers that the metropolitan economy relies upon — public sector professionals, health and emergency workers, transport workers, trades people and intermediate non-manual workers.

The anatomy of housing stress in Sydney.

Bill Randolph and Darren Holloway. Urban Frontiers Program, UWS (January 2002).

Affordable housing needs to be part of a vision for a more sustainable city. It needs to be built into plans for how we make better public transport corridors and better centres.

Professor Peter Newman

Professor of City Policy, Murdoch University. Sustainability Commissioner, NSW Government Paper to the National Summit on Housing Affordability (June 2004).

Sustainability has never had a higher profile. What is sustainability? Sustainability refers to the need to build homes that meet our immediate needs but will not deprive future generations of similar living standards. For those involved in building housing it means that at a macro scale we need to plan for efficient use of land and ensure there is sufficient population to support a mix of uses, amenities and public transport. At a micro scale, homes should be well designed, safe, accessible, adaptable and cost effective. A sustainable development will contribute to a higher quality of life by making effective use of natural resources, protecting the environment, promoting social cohesion, and strengthening the economy.

Why we must define and set a standard for sustainability. Building for Life. Newsletter September 2004. London.

The State Government's new Sydney Metropolitan Strategy will have to deal with a phenomenon that is changing the social map of Sydney's suburbs. As Sydney grows, our suburbs are undergoing a radical polarisation process, which looks likely to continue on present trends. Behind this trend is a planning and development process that is aggressively, if inadvertently, splitting the suburbs into new areas of the 'haves' and 'have-nots'.

... the outer fringe suburbs to the west and southwest of the city were areas of cheaper housing where families went to buy a modest new home. But no longer. As numerous media reports testify, the 'McMansions' of the new outer suburbs are places for the middle class and upwardly mobile, established families buying ever larger and more expensive homes. These newest suburbs are certainly socially exclusive — few renters, no affordable housing, no flats, and few old people or single people. If you are single, then there is little choice for you on the new urban frontier of Sydney. Instead, your new housing options are being created around the existing town centres or overlooking main roads and railway lines in high-density renewal projects. These new high-density developments are places for childless people who rent, not own.

The gleaming new blocks are high on style - and there appear to be plenty of young tenants for new flats let at affordable rents. But what happens in 20 years when the gloss has been knocked off the blocks, multiple landlords are unwilling to commit to upgrades, and management proves just too difficult or too expensive for standards to be maintained? We only have to look at the ageing walk-up blocks in many middling suburbs, no doubt smart and new in their day, to see what the future may bring to blocks hastily built in secondary or unfashionable locations.

But as well as the effective 'ghettoisation' of new housing choice, there is a wider process that is pulling the suburbs apart. All those aspirational households moving to the new outer fringe estates come from the older more established suburbs. Places as diverse as Fairfield and Campbelltown are losing their more economically active population in a process of social attrition. The areas of relative social disadvantage are growing as a result.

So we have a new scenario developing. The lack of diversity in the new-release areas means few non-conforming, that is, non-family centred, households live there.

The release of the Bringelly or Riverstone areas for new development will surely intensify this process ... unless plans are put in place to both stem the drain of upwardly mobile households from the older middle suburbs and also to ensure an appropriate mix of housing choice, and hence household types, in the new release areas.

The new Metropolitan Strategy will need to tread carefully through this social minefield. We do not need more polarisation in the suburbs of Sydney. How the proposals, both for new fringe development and town centre/transport corridor consolidation, deal with the polarisation being generated through the housing market is perhaps the most difficult of all the issues facing our planners as they work to put real flesh onto the strategy.

We have come a long way in the past decade in the way both planners and developers understand the need for environmental sustainability in our new developments. This positive approach needs to be turned to the next big question facing Sydney as it grows ever larger: how to plan, and build, for greater diversity and for the long-term social sustainability for all our suburbs.

Professor Bill Randolph

Former Director, Urban Frontiers Program, University of Western Sydney Sydney Morning Herald, 19 May 2004 Australia — Sydney in particular — is undergoing an urban revolution as challenging as the sexual and women's revolutions... It is the shift of swathes of the population from the free standing suburban home into flats, townhouses and villas...

The revolution is driven in part by demographics — families with children make up a smaller proportion of total population than in the past. It is also driven by consumer preference, affordability and environmental sustainability. And NSW Government policy has encouraged urban consolidation for years. There is no going back.

Some people — the well-housed in nice neighbourhoods especially — are finding the change hard, and politicians … play up the resistance to rationalise their own policy failures. Starting with singles, childless couples and people under 35 Australians are living more like Europeans. They can't afford or don't want the house in the far-flung suburb. At all costs they want to avoid the long, debilitating commute to work.

With baby boomers hitting retirement years, the demand for medium and high density is unlikely to abate. Rattling around in their huge houses (on tiny blocks) they will have financial motivation to downsize when the children leave. Between the under 35s and the over 55s, there will continue to be a need for a diverse range of housing, close to services.

The end of the mythical quarter-acre block. Adele Horin, *Sydney Morning Herald*, 9 April 2005.

Urban development practice will require the integration of new logics and skills to successfully implement tomorrow's projects. Aspects we feel will emerge are:

- The creation of competitive intellectual property to help manage the planning matrix through from local environment plans and community plans to local bylaws or 88B instruments.
- The realisation that current models for assembling the resources and distributing the products of urban development are unsustainable,
- A new range of multiple owners and multiple builder/developers will emerge as the integration of complex urban developments become the norm,
- A much larger market will emerge for developers and builders who provide leadership in product diversity, affordability, integration, adaptability and accessibility, and
- Brokering superior development outcomes must, and will, eventually pass to private sector initiators who can employ more flexible project organisation and delivery structures than those found in most public and semi-public agencies.

The private sector should not anticipate that these trends will happen without resolve. An entirely different set of outcomes could otherwise emerge.

A sustainable future urban development industry David Chandler OAM and David Brown. Principals of The Urban Partnership Urban Development Institute of Australia, NSW Conference, 12 September 1998

EXECUTIVE SUMMARY

Affordable and sustainable communities and neighbourhoods

The diverse philosophies of planning practice, and its academic literature, have held out a conflicting range of models that promise optimised and sustainable solutions for Sydney's urban development and housing challenges. Two things characterise these models. Firstly, nearly all are read as prototypes for a physical realm but few have regard for their social implications or have any grounding in behavioural studies or environmental psychology. Secondly, their proponents consider each to be the 'best' despite the fact contemporary society is largely driven by individual values and no single ideal fits everyone everywhere.

Despite the fact some models have proven to be less than successful, the concept of sustainable urban development is an explicit objective of most planning strategies. A sustainable community, according to the UK government, exhibits a number of key requirements. These are:

- A flourishing local economy to provide jobs and wealth,
- Strong leadership to respond positively to change,
- Effective engagement and participation by an active community sector,
- A safe and healthy local environment with well-designed public and green space,
- Sufficient size, scale and density to support basic amenities,
- Good public transport and other transport infrastructure,
- Buildings that can meet different needs over time,
- A mix of housing types and tenures to support a range of household profiles,
- Good quality local public services,
- A diverse, vibrant and creative local culture,
- A 'sense of place', and
- The right links with the wider regional, national and international community.

New and existing neighbourhoods are now expected to realise the benefits of offering some, if not all, of these components. However, while there is probably a very broad but common understanding within the planning and design professions of what the words 'sustainable development' and 'sustainable community' mean it is doubtful if anyone has come to grips with how to create a 'sustainable community' with a 'sense of place'.

A typical example of the outcomes expected from meeting sustainable development goals is housing diversity. An underlying view is that a broad range of housing types and price levels can bring people of diverse ages and income levels into daily interaction, strengthening the personal and civic bonds essential to an authentic community. More pragmatic justifications for communities exhibiting this diversity include a more balanced demand for community services and facilities, opportunities for people to move through their housing career without leaving familiar social networks, community self-help, improved surveillance of streets and open spaces, and the provision of affordable housing.

Sydney's Metropolitan Strategy

The most recent example of sustainable development and sustainable communities as explicit planning objectives is the Sydney Metropolitan Strategy being developed by the NSW Department of Planning, Infrastructure and Natural Resources (DIPNR). The Ministerial Directions for managing the inevitability of change include building liveable new communities and renewing old ones with a diversity of affordable housing for rent or purchase.

DIPNR's Director General, Jennifer Westacott, is quoted as saying that ...the issue of affordability ... is principally market driven. She believes requiring townhouses and units in the new planned suburbs planned for Sydney's north and south west will contribute

substantially to housing affordability and housing choice ...by giving people a range of products they can purchase from. She is reported to have said that: Our main objective was to get supply into the marketplace, which makes a big contribution to affordability.

A priority area of the Metropolitan Strategy appears to be that new communities achieve a mix of housing types to address Sydney's housing affordability problem. Unfortunately, no further detail is provided on how this is to be achieved or whether the same approach will be applied to the renewal or redevelopment of existing suburbs.

There is little doubt quickly increasing supply should have some impact on housing affordability. However, if delivering affordable housing is left up to the market, or is dependent on a simplistic view of the housing product that might be developed, a significant increase in lower cost stock is unlikely to occur. There are three simple reasons.

Firstly, the cost of the new land supply is to be burdened with social and transport levies. Secondly, and until convinced otherwise by demonstrably profitable and acceptable alternatives, home builders will continue to see their most viable market as being 'move-up' family households seeking large detached homes. And thirdly, once construction practices move beyond those commonly used by the builders of detached housing, a raft of industrial relations awards that add further cost come into play. It is probably also fair to assume that developers and builders will argue strongly against blunt mechanisms such as inclusionary zonings or levies to achieve any affordable housing goals a final Metropolitan Strategy might aspire to. Meanwhile, the problem continues to grow.

Sydney's affordable housing challenge

The ability to rent or buy affordable housing is a significant factor in the economic capacity and competitiveness of cities, states and nations. Evidence shows that quality urban design has a significant positive effect on investment returns, management and maintenance costs, workplace productivity, the diversity and adaptability of the building stock and other benefits at the neighbourhood and city level.

Housing is also integral to achieving sustainable development and the creation of sustainable communities. It is a basic human need and its cost, condition and availability are essential to an individual's quality of life. Well-designed and maintained housing helps support a sense of community just as run-down housing will tend to erode it. In addition, the location and quality of housing contributes to community spirit and identity.

But will meeting Sydney's projected housing demand offer inclusive and equitable access to jobs, affordable housing, services and community facilities for the young and old, low and high income households, the able and the disabled?

Over the next 20 years, ABS projections indicate that Sydney will probably require nearly 450,000 new dwellings for its traditional family, single person, childless couple and single parent households. Emerging changes in household structures and market attitudes means most will not seek or need the housing forms currently offered by the industry. Furthermore, if current planning regimes, price arrangements and industry behaviours fail to change, many of these people will have little chance to rent or buy homes they can afford in locations near familiar social networks, employment opportunities or community services.

Housing affordability, at its most basic level, refers to the purchase or rental price of houses. Prices are an outcome of supply and demand while household income and the availability and cost of finance affect demand and determine if a dwelling is affordable. A household is considered to be in 'housing stress' — and its housing to be unaffordable — if it pays more than 30% of its income in mortgage or rent payments. Furthermore, affordable housing should be:

- an appropriate size for the household it accommodates,
- offer a household the choice to rent or purchase the same type of dwelling, and
- be economically accessible to places of employment and education, community facilities and social networks.

Affordable housing, as defined in this research, is not social housing. Nonetheless, declining expenditures on public or social housing has forced people on low incomes to seek housing in the private sector. The consequent competition for a decreasing stock of lower cost rental housing is exacerbating the problem.

Comparisons between data obtained for the 1998 NSW Ministerial Task Force on Affordable Housing, analyses undertaken by the University of Western Sydney's Urban Frontiers Program and customised ABS 2001 Census data obtained for this research clearly illustrates the challenge facing all levels of government, the development industry and the community.

- In 1994, the base date for the 1998 NSW Ministerial Task Force on Affordable Housing's figures, Sydney had over 133,000 households (about 10% of the total) with incomes below the NSW median and in housing stress. Nearly 24% of these were purchasing a home and just over 71% were renting in the private market.
- The Urban Frontiers Program estimated that in 1999 the number of households living in private dwellings with below NSW median incomes and in housing stress had increased to just over 149,000 (about 11% of the households renting or buying private dwellings). Private renters remained the dominant proportion.
- The ABS data used for this research indicates that in 2001 just over 203,000 (about 14%) of the households renting or buying private dwellings in the Sydney region were in housing stress. Around 155,000 of these had incomes at or below the NSW median and represented about 11% of the households renting or purchasing private dwellings in the Sydney region.

These figures suggest that between 1996 and 2001 the number of households in Sydney with incomes at or below median levels and in housing stress had increased from around 127,000 to 155,000. The proportion of households in housing stress had risen from 10% to 11% of all the households purchasing or renting private dwellings in Sydney.

Households who rent private dwellings continued to dominate although the proportion had fallen from 70% of households in stress in 1994 to around 60% in 2001. There was a clear geographic divide in tenure: in 2001 the inner ring LGAs had a far higher proportion of renting households while the outer north and outer south ring LGAs had higher proportions of households purchasing private dwellings.

- In 2001 the incidence of housing stress fell proportionally hardest on those living in attached housing: semi-detached and terrace houses, flats and apartments in the inner, middle and outer south LGA rings. They represented around 39% of all the households in stress.
- The majority of households in stress in 2001, at 32%, were couples with children. They were concentrated, not surprisingly, in the 25 to 54 year old age cohorts. The traditional first homebuyer age group 25 to 34 years of age was well represented in all the regional LGAs but 35 to 44 year olds dominated the middle and outer ring LGAs.
- Lone person households, at 43%, dominated the inner ring LGAs but, at 23% to 26%, were also a significant proportion of the middle and outer ring LGA households in stress. Lone parent households had a proportionally higher representation in the outer

ring LGAs. Couple without children households, at 12% to 14%, were relatively evenly represented across all four LGA rings in 2001.

These figures need to be seen against selling price and rent trends. The table below shows the annual average movements in median sale and rent prices from June 1997 to June 2001 and from June 2001 to September 2004.

	June 1997 to June 2001			June 2001 to September 2004		
	Inner ring	Middle	Outer ring	Inner ring	Middle	Outer ring
	LGAs	ring LGAs	LGAs	LGAs	ring LGAs	LGAs
Median sale priceNon-Strata dwellingsStrata dwellings	10.5%	11.5%	10.7%	12.3%	13.4%	16.9%
	11.0%	11.8%	8.2%	6.1%	9.7%	14.9%
 Median rents One bed units Two bed units Two bed houses Three bed houses 	10.0%	7.5%	4.5%	1.9%	7.5%	5.6%
	6.8%	5.3%	6.1%	0.8%	2.3%	1.5%
	5.6%	4.5%	3.1%	0.8%	1.0%	2.9%
	5.7%	5.0%	4.7%	1.2%	0.9%	2.4%

The substantial number of medium and higher density housing built in the inner and middle ring LGAs appears to have had a stabilising impact on rents and the price of Strata dwellings. But it can also be argued that the First Home Owner's Grant, a lack of supply and continuing demand have been major influences on the higher rate of median sale price increases since 2001. At the same time, the higher rates of increase for one and two bedroom rental units and outer ring Strata dwellings suggests that there has been a shift toward smaller dwellings or outer urban locations in pursuit of more affordable housing.

As well as the relationship between housing stress, tenure and location identified by the Ministerial Task Force and the Urban Frontiers Program, the analysis of 2001 Census data confirmed that housing stress is widespread across the Sydney region. And, notwithstanding more stable rents, the price rises since 2001 can only lead to the assumption that many more than 155,000 very low to moderate income Sydney households are now in housing stress.

It might also be speculated that the high proportions of lower income (very-low to moderate) purchasing and renting households in stress identified in this research may chose to spend more on their housing to enjoy the perceived benefits of home ownership or to live in locations preferred for other tangible and intangible benefits. The inner and middle ring LGAs are a case in point. In these LGAs, higher proportions of renting households, across all the income bands, were in stress than in the outer ring LGAs. To these people, the perceived social status of particular suburbs, access to the CBD and the coast, proximity to workplaces, parents or other family members, are perhaps more important than having more disposable income after paying the mortgage or rent. On the other hand, the high proportions of purchasing households in housing stress in the outer ring LGAs suggest that others might place greater store on ownership than location.

The behavioural and lifestyle factors driving housing choice therefore need to be better understood if effective affordable housing policies are to be developed.

The need for a better understanding of the housing market

It was once enough to produce results by repeating past triumphs. But the contemporary market demands product with both a rational and an emotional impact on its potential customers. In this environment, traditional responses based on trailing data, anecdote or personal and professional precedents are no longer adequate. Separating the market by

simple demographic measures and socio-economic status is equally inadequate. To achieve commercial success, products and services must now have a distinct competitive advantage and be targeted at distinct market segments.

This is particularly the case for housing. Demographics only tell part of the story for developers and builders seeking to define their target markets. When the emotional factors of individual lifestyles, interests and values are analysed many more segments than commonly considered are revealed. Well-defined groups can be identified with each having qualities that can strongly influence neighbourhood planning, dwelling design, project advertising and selling methods. This kind of analysis clearly shows that the housing market is not homogenous and factors other than price influence purchase and renting decisions.

A lack of detailed information about the preferences of housing consumers can therefore result in meaningless conclusions and poor decisions. For example, the traditional numerical approach can determine how many homes people want, but not what kind of homes or what type of residential neighbourhoods people would select if given a choice. In this respect, there are indications segments of Sydney's population have housing desires very different to the product builders offer. Many are redefining the home as a *nest*, rather than a *monument* and their buying motivations and purchase decisions are more driven by individually defined lifestyles. Distinct market subcultures where the home is often used to define what is distinctive about its owners are emerging.

Identifying precisely what the market wants, and what it is prepared to trade off to meet those wants, is achieved through market research. It is an investment that can improve the present systems of housing delivery and more closely match the physical and emotional demands, and economic capacities, of an increasingly diverse market. Housing designed to meet the variety of consumer needs can fit their tastes, lifestyles and values with minimal compromise. Sound research can also reduce the perceived risks of financing and building the new forms of neighbourhood and dwelling needed by household types previously ignored by industry and government.

But government or industry rarely uses the sophisticated research tools that could improve policy, planning, design, marketing and commercial performance. As a result, the findings and valuable processes established through environment/behaviour research have not been introduced into the planning process in a wide-ranging or systematic way.

It should be understood, however, that there is often a disparity between what people say they want and what they actually do with their money. This is often observed in the inconsistent results of consumer preference studies where aspirations, not reality, are tested. In this respect, an individual's ideal may sit somewhere on a continuum of neighbourhood choices and be determined by their place in a housing career. Similarly, individual household preferences for an ideal dwelling may in fact include a spectrum of housing types, united by both pragmatic and emotional criteria.

Household and family growth

While a better understanding of buyer and renter motivations is required, housing demand and planning responses will be influenced by the dramatic changes that will occur in household demographics over the next 20 to 30 years. For example, ABS projections indicate that between 2001 and 2026:

• Couple families without children may increase between 45% and 62%, an increase of between 286,300 to 395,000 households or an average growth rate of 11,500 to 15,800 households a year,

- Lone parent families may increase between 25% and 54%, an increase of 71,600 to 154,000 households or an average growth rate of between 2,800 and 6,100 households a year,
- Lone person households may increase by 294,600 to 491,900 households or between 50% and 84%, an average annual increase of 11,800 to 19,600 households, and
- The number of couple families with children will only increase by an additional 44,200 to 139,900 households, an increase of between 5% and 16% and an average increase of between 1,700 and 5,600 households a year. (One ABS analysis suggests that by 2026 the number of traditional families might have declined by as much as 14%.)
- Sydney may possibly have around:
 - 165,000 more couple family without children households,
 - 187,000 more lone person households,
 - 49,000 more lone parent family households, and
 - 46,000 more couple with children family households.
- The average annual housing demand for each household group is likely to be around:
 - 8,250 couple family without children households,
 - 9,350 lone person households,
 - 2,450 lone parent family households, and just
 - 2,300 couple with children family households a year.

The ANU's Peter McDonald makes the point that:...it is important for policy makers to realise that most dwellings in the outer regions of Sydney will continue to be occupied by the same people at least to 2011, but the composition of households will change. This means that the number of dwellings being freed up for occupation by younger families will be relatively limited. In other words, there will continue to be strong demand for new housing for young families in the outer regions of Sydney. These young families will find it difficult, if not impossible, to find affordable housing if current price trends, largely driven by social and infrastructure charges, continue.

The likely age and structure of the fastest growing household groups suggest that much of NSW's new housing stock will need to cater for a wider range of income levels, equity capacities and physical capabilities than has been the case to date. Many will find the industry's current offers well beyond their financial capacity, far from employment or unsuitable for their physical and lifestyle needs.

Unfortunately there appears to be little recognition that the housing market will be increasingly characterised by a great diversity of smaller households with very different lifestyles, attitudes, financial capabilities and tenure preferences. As a consequence, *one size fits everyone everywhere* strategies present greater economic, environmental and social risks to government, industry and the community than deliberately planning, designing and building to more efficiently match need to household.

Home ownership

Any strategies that might lead to better matches between house and household also need to acknowledge falling homeownership rates because, despite a growing and ageing population, the proportion of occupied dwellings owned outright in the Sydney region dropped from about 41% to 39% between 1996 and 2001.

Some argue that this is primarily due to uncertainty about employment security and the cost of housing. Others believe it is due to delayed family formation rates and changing aspirations but those with the capacity to buy a home will do so later in life. Capacity is the key word because the gap between prices and the income required to save a deposit and meet mortgage repayments has increased.

Academic research is exploring the influence on the trajectory of individual housing careers of household formation decisions, interactions between housing demand and supply, changes in labour markets, wealth and consumption objectives and housing assistance, income support and welfare programs. The results may influence the development of policies to address Sydney's affordable housing challenge.

Affordable housing policies and programs

There are a number of issues to be considered when developing a policy mix or strategy to tackle the affordable housing challenge. They include:

- How the costs and benefits particularly the real returns to investors, land owners or developers — of supply or demand side interventions are equitably distributed.
- How the benefits of an increase in affordable housing stock to succeeding occupiers
 can be retained through caveats on resale or the use of non-profit intermediaries to
 hold the title or manage the property.
- How to overcome the generally negative perception of affordable housing among developers and the wider community because both tend to be wary of affordable housing in new developments despite the fact it is not social (public) housing and its inclusion does not necessarily create marketing problems.
- How to ensure renters have tenure certainty while maintaining financial institution and investor confidence.

Not all housing programs can simultaneously acknowledge all of these considerations but four principles that should be observed:

- Housing strategies should respond to local market conditions,
- Income policy is housing policy,
- Regulation is a powerful policy tool, and
- The quality of implementation is critically important.

Inclusionary zoning is a regulatory policy common in the US and the UK that requires a component of affordable or social housing to be provided in market rate housing projects. In Sydney such a policy, without compensatory incentives, may have the same direct and negative impact infrastructure and community facilities levies have on land, development and housing costs. A tested alternative that offers incentives to increase site yields in return for defined affordability and quality outcomes might be worth considering.

A planning gain model might introduce partnerships between public and private sector organisations to create mixed income/mixed tenure neighbourhoods. The merging of physical and social benefits makes this an appealing approach for many policy makers and planners. The idea is not new: urban neighbourhoods in Australia and elsewhere traditionally contained a mix of housing products suitable for a range of incomes.

Mixed income housing can have an important role in getting more affordable housing built, raising the quality of housing available to the 'have nots' and reducing concentrations of low income or disadvantaged community members. Good design can ensure lower priced homes are seamlessly compatible with more expensive ones. And a range of selling prices and house types reduces market risk because the project can appeal to a broader catchment of financial capacities and lifestyle needs.

There should be no ambiguity as to what is expected of developers in the implementation of mixed income/mixed tenure policies that ensure new and existing communities are more economically and socially sustainable. In this respect, the provision of housing diversity for a wide range of household types and financial capacities should be one of the heads of consideration in the relevant planning Acts. This would support the rhetoric for diversity and inclusiveness with a strong legal basis.

Financing affordable housing

Methods to expand and maintain an adequate stock affordable housing have become an issue for government and others concerned for those at the disadvantaged end of Australia's housing divide. In part, this interest has emerged from the realisation that public expenditure on social housing is unlikely to expand even though the number of low to moderate-income households in stress is growing.

Housing affordability is determined by household income, the purchase or rental cost of the dwelling, and who pays these costs. Policy instruments can modify affordability by:

- reducing dwelling and supporting infrastructure costs,
- improving the capacity to pay through subsidies or tax concessions,
- subsidising those most in need,
- ensuring there is a wide range of financing choices,
- reducing the costs and risks of defaults, and
- regulating to ensure housing quality and affordability.

Australian academics and financiers have developed a number of financial and process-based models for private investment in affordable housing. They clearly show that policies aimed at substantially increasing the stock of housing affordable to low and moderate-income households will depend on government intervention. This will require government recognition that an efficient and effective housing system underpins a dynamic and competitive economy. A coherent Commonwealth-State Housing Agreement that clearly allocates and shares responsibilities, provides realistic long-term funding for a wide range of programs and improves the delivery capacity, skills and flexibility of community housing associations will be required. A legislative framework that mandates local government involvement in the provision of affordable housing must then be established and enforced. And, finally, community awareness of the affordable housing issue must be raised and confidence in, and support for, the policy outcomes developed.

Reducing costs through smarter design and construction

It can be argued that the real cost of housing in NSW, and in Sydney in particular, has almost nothing to do with clever design because it has almost everything to do with land values, approval costs and housing supply. Architects and designers have almost no control over these costs except on the rare occasions when intelligent planning and high level negotiation skills results in planning gains that increase densities to levels where substantial unit land cost reductions are made.

Reducing construction costs through off-site manufacturing as well as a systematic and comprehensive analysis of conventional materials, construction techniques and the supply chain are ideas that periodically surface in construction reports and the architectural press.

According to John Miles, a Board Director of Arup Group, the key issue for transforming the home building industry into a manufacturing industry depends on convincing those asked to risk capital that it would be financially worthwhile. He said:

New products will not appear without high capital investment. Innovation can be costly, and so long as there goes on being relatively little sharing of research and development costs between manufacturers and suppliers, it will continue to be difficult to recoup initial investment. In the current climate, bespoke products are often a design requirement, undermining the affordability that can be ensured by moving towards ranges of standardised products and systems. Product availability will accelerate when house designs are tailored to the requirements of manufacturing processes.

In a report for Landcom, Bovis Lend Lease came to the conclusion that manufactured housing is not a feasible affordable housing solution in its current form unless capital is allocated to evaluating its medium and long term potential, developing product, overcoming related peripheral constraints and developing a marketable package. In Australia, therefore, it is likely to take courageous investors if change is to be made in an undercapitalised, site based home building industry where acceptable returns are made for minimal risk, even by the financially and managerially challenged.

Market driven solutions cannot be relied upon to meet the housing affordability challenge. For cost and productivity reasons alone it would appear that more emphasis should be placed on encouraging investment in developing housing typologies that can be delivered by project home or cottage builders.

The challenge of designing affordable housing within the strict materials, systems and cost limits of cottage builders does not mean designers lose their creative and innovative spark. Remaining innovative within restrictive marketing parameters or guidelines is creativity at its best, particularly if the exploration of new approaches within those constraints does not stop. As the design professions become more familiar with the constraints and opportunities they should be able to demonstrate that innovative, market responsive affordable housing can be built in urban and suburban locations.

Conclusions

For many, increasing the availability of accessible affordable housing appears to be a complex and almost intractable problem that should only be a social responsibility of government. This view fails to acknowledge that governments alone do not have the resources or have political difficulties in shifting their policy and spending priorities. It also confuses the difference between affordable housing and social housing. Partnerships between the public and private sectors are now required to find meaningful solutions.

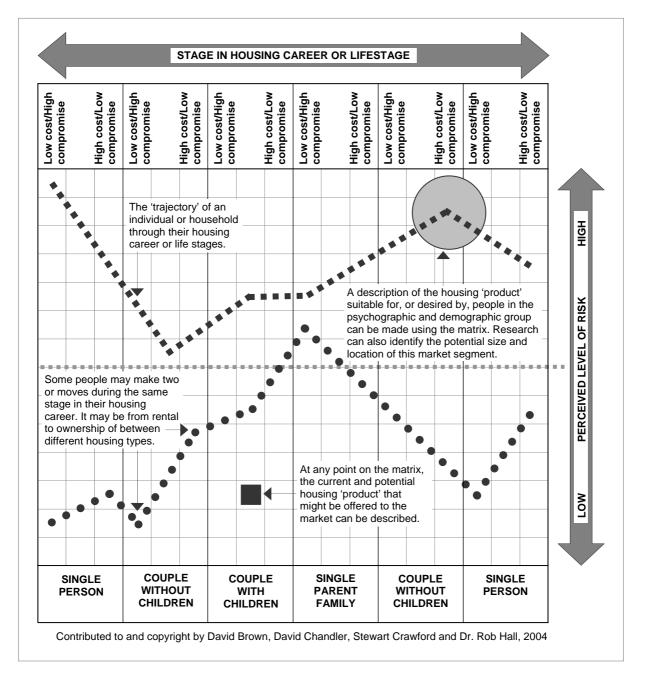
Partnership approaches to the needs of those at the tough end of Sydney's growing housing divide offer the building and development industry strategies to reduce the risks inherent in their current narrow market focus. The Commonwealth, State and local governments must take the initiative and pay more than just lip service to the issue. They have the opportunity to reduce the number of people likely to seek financial support and stimulate the creation of more socially, economically and environmentally sustainable communities. Addressing the issue of affordability offers an opportunity for potential industry leaders to demonstrate how commercially sound, sustainable approaches to housing can be realised.

Creating successful residential environments involves more than design. It is about responding to the needs of contemporary households and providing a framework within which communities can become established and prosper. Neighbourhoods with people of different ages, economic status, lifestyles and mobility offer important community benefits.

Mixing housing types and uses can also help create more attractive residential environments by facilitating a greater diversity of building forms and scales.

Unfortunately, most recent housing offers a limited range of tenure choices and frequently focuses on a narrow market segment or particular housing need. Even where more affordable housing is provided, it is often poorly integrated with homes developed for private rent or sale. Care therefore needs to be taken at all stages of the design process to ensure the range of housing needs is fully understood and any potential conflicts between different lifestyle or life stage groups are acknowledged.

This thinking led to the development of a sophisticated matrix emerged that enables the housing career trajectory of an individual to be plotted and their housing needs identified.



The matrix offers a framework for identifying a range of household types and household attributes and then visualising practical economic, spatial and tenure responses for testing. The basis is that every household has a psychographic and demographic profile and that

these can be grouped into identifiable market segments. When choosing a particular housing type, purchase, rental or investment decisions will be based on rational and emotional tradeoffs between financial capacity (high cost versus low cost) and product or locational attributes (most compromised versus least compromised). With a set of basic product models in place (the palette of solutions) market testing can be undertaken using commonly available quantitative and qualitative research tools.

Application of neighbourhood, street and dwelling models identified from this process can achieve superior urban design outcomes that reduce the need for 'and/or' choices and recognise the different levels of control people want over 'their world' and the world outside.

Understanding the current mismatch between housing need and supply and then developing practical housing solutions capable of transparent assimilation into new residential projects is not without risk. The possibility of making a mistake on untested models is not a risk developers, or their financiers, willingly take. Government intervention and its active financial and regulatory support for the testing and demonstration of new models are required.

Landcom and the Department of Housing both have a distinctive capacity to influence the shaping of new urban communities with a sufficient scale to achieve the reality of economic, social and environmental sustainability. They also have the ability, through collaborative partnerships with the private sector, or engagement with not-for-profit agencies, to actively participate in offering new housing models that significantly broaden the range of housing supply. Small scale, isolated and poorly promoted trials are no longer adequate. A circuit breaker to demonstrate and facilitate the necessary step changes in how the future supply of housing is planned, delivered and accessed is now required.

What is also required is a more widespread understanding that the ability to rent or buy affordable housing is a significant factor in the economic capacity and competitiveness of cities, states and nations. Evidence shows that quality urban design has a significant positive effect on investment returns, management and maintenance costs, workplace productivity, the diversity and adaptability of the building stock and other benefits at the neighbourhood and city level.

Creating a culture to realise the benefits of quality urban design cannot be achieved by political edict, doorstop statement, legislative action or short conferences. If overseas experience offers any lessons, properly addressing the issue of urban design, and achieving cultural change, demands leadership, coordinated thinking and a long-term structured approach. Realising the benefits of quality urban design requires action across a wide range of sectors, organisations and professions. The emerging Metropolitan Strategy for Sydney should be the catalyst for change. What NSW now needs is a network of 'design champions' lead by, and with high level political support from, the State government.

Some of the advocacy work is already being done in NSW but links across State government departments, statutory authorities, local governments, professional and industry organisations, individuals and community organisations needs to be established. CABE and the New Zealand *Urban Design Protocol* offer good examples of organisational structures that bridge the gaps to raise awareness and facilitate change. A carefully considered replication of these useful models should be implemented and funded as a priority.

There is no single solution to the affordable housing challenge. Meeting the needs of today's households demands leadership and partnership. A shared vision and a united effort between public and private interests are essential first steps. Without it, NSW will divide into a state of housing haves and have-nots. Without it, the economic competitiveness of the State will deteriorate. Without it, the housing opportunities and choices available to future generations will be severely limited.

SUMMARY OF KEY POINTS AND ISSUES

Affordable and sustainable neighbourhoods

- The widely different design philosophies of planning practice, and its academic literature, have held out a conflicting range of models that promise optimum solutions for Sydney's planning and housing challenges.
- Two things characterise these models. Firstly, nearly all have been read as prototypes for a physical realm but few have regard for their social implications or have any grounding in behavioural studies or environmental psychology. Secondly, their proponents consider each to be the 'best' despite the fact contemporary society is largely driven by individual values and no single ideal fits everyone everywhere.
- Despite the fact some models have proven to be less than successful, the concept of
 ensuring future development is sustainable has become a foundation objective of most
 planning strategies. Some call it 'smart growth'. Irrespective of titles, sustainable
 development, and the communities it is supposed to create, is an explicit social goal of
 contemporary Australian urban planning and now part of its lexicon.
- A sustainable community, according to the UK government, exhibits a number of key requirements. These are:
 - A flourishing local economy to provide jobs and wealth,
 - Strong leadership to respond positively to change,
 - Effective engagement and participation by an active community sector,
 - A safe and healthy local environment with well-designed public and green space,
 - Sufficient size, scale and density to support basic amenities,
 - Good public transport and other transport infrastructure,
 - Buildings that can meet different needs over time,
 - A mix of housing types and tenures to support a range of household profiles,
 - Good quality local public services,
 - A diverse, vibrant and creative local culture,
 - A 'sense of place', and
 - The right links with the wider regional, national and international community.
- A typical example of the outcomes expected from meeting these social goals is housing diversity, an expressed desire of most local government residential strategies. Mixing housing types and prices within a neighbourhood is, however, difficult to translate into common practice without high-level commitment from developers, builders, and local authorities and their constituents.
- Brendan Gleeson has observed that Australian governments have elevated the significance of 'community' as a high order policy in response to concerns with the dysfunctional outcomes of social and economic polarisation. 'Community' has become a key item in the marketing material of new developments.
- Gabrielle Gwyther found that residents of two estates in Sydney's south west were motivated to move by perceived threats associated with public housing estates. the perceived undermining of a 'common way of life' by new migrant settlement patterns, and the 'economic failure' of Sydney's middle ring western suburbs. The estates offered a wealth creation strategy, the security promised by a 'good neighbourhood' and the expectation of certainty and trust produced by a socially compatible, likeminded resident population.

- Implicit in Gwyther's findings is the challenge of developing affordable housing in new estates because less expensive and more dense housing is likely to be seen as having 'different' people without the same social values.
- Gleeson says that there must be efforts to achieve a socially representative diversity in new urban developments and in areas residualised by change. This requires collaborative leadership that draws its resources from everyone involved in the development process, including prospective residents.
- The Smart Growth and New Urbanism movements in the US have a great diversity of supporters, including politicians, homebuilders, and environmentalists.
- One key to successful Smart Growth and New Urban projects is the inclusion of higher density housing. Unfortunately, in too many local government areas higher density and mixed use development is difficult to construct because regulations favour low-density development with segregated uses and there is community opposition. Advocates say that well-designed higher-density development, properly integrated into an existing community, can be a community asset that adds to the quality of life, improves property values and addresses the needs of a growing and changing population. They argue that regulators and the community, influenced by past failures, have false impressions about higher density development and the people who choose to live in such housing.
- Contemporary New Urbanist planning approaches are increasingly structured around Andres Duany's concept of the Transect, an ordering system that arranges complementary elements of urbanism to preserve the integrity of different urban and rural environments. It offers a three dimensional planning and design framework that achieves the integrated residential environments practitioners and regulators now seek to achieve. Its concept of a continuum fits well with the social goal of providing different social environments within a cohesive but diverse neighbourhood whole.
- Smart Growth and New Urbanism both have their followers in Australia and the
 principles they promote are becoming more evident in the rhetoric, if not the reality, of
 government policy. The most recent of these is the Metropolitan Strategy being
 developed by the NSW Department of Planning, Infrastructure and Natural Resources.
 - Directions for managing the inevitability of change include building liveable new communities and renewing old ones with a greater variety of housing for rent or purchase. A priority area is ensuring new communities achieve a mix of housing types and choice. No further detail is provided on how these criteria are to be established or administered. It is probably fair to assume that the peak development and building bodies would argue strongly against mechanisms such as inclusionary zonings or affordable housing levies to achieve as yet unstated affordable housing goals.
- State and local governments are unlikely to have the political courage to mandate price
 ranges, affordable housing programs are put in place or adaptable housing built.
 Perhaps the vision is in place partly but the political and economic details need to
 be resolved if Sydney's affordable housing stock is to be substantially increased.

Defining 'housing affordability'

 Housing affordability, at its most basic level, refers to the purchase or rental price of houses. Prices are an outcome of supply and demand while household income and the availability and cost of finance affect demand and determine if a dwelling is affordable.

- A household is considered to be in 'housing stress' and its housing to be unaffordable — if it pays more than 30% of its income in mortgage or rent payments. Furthermore, affordable housing should be:
 - an appropriate size for the household it accommodates,
 - offer a household the choice to rent or purchase the same type of dwelling, and
 - be economically accessible to places of employment and education, community facilities and social networks.
- Affordable housing is not social housing although the decline in expenditure of public housing is forcing people on low incomes to seek housing in the private sector and exacerbating the problem.

Housing affordability in Sydney: 1994 to 2001

- In 1994, the base date for the 1998 NSW Ministerial Task Force on Affordable Housing's figures, Sydney had around 1.3 million households. Of these, over 133,000 households (about 10% of the total) had incomes below the NSW median and were in housing stress. Nearly 24% of these were purchasing a home and just over 71% were renting in the private market.
- If the additional costs of repairs, maintenance and council rates were taken into account, the number of households in housing stress in Sydney in 1994 increased to over 263,000 (about 20% of the total) with the burden, proportionally, continuing to fall on private renters.
- In their 2002 Research Paper, Randolph and Holloway of the University of Western Sydney's Urban Frontiers Program (UFP) estimated that in 1999 the number of households living in private dwellings with below NSW median incomes and in housing stress had increased to just over 149,000 (about 11% of the Sydney region households renting or buying private dwellings).
 - The number had increased from around 127,000 households since the 1996 Census when nearly 10% of the Sydney region households renting or buying private dwellings. Private renters remained the dominant proportion.
- Households who were renting and in stress were widely distributed across Sydney's sub-regions although the highest numbers were concentrated in the inner ring LGAs.
 The same pattern was evident for the stressed households purchasing a home with the outer ring LGAs containing the largest number.
- Analyses undertaken for the 1998 Ministerial Task Force and by the Urban Frontiers
 Program do not provide an up to date profile of the people to whom obtaining
 affordable housing is a significant challenge. As a result, customised ABS 2001
 Census data was obtained for this research.
 - Unlike the previous studies, households in occupied dwellings and housing stress was analysed for all income bands, rather than households with incomes at or below the NSW median. Expanding the scope of the analysis enables some broad conclusions to be made about the behavioural nature of housing choice particularly as it relates to purchasing as opposed to renting a dwelling and location preferences.
- In 2001, just over 203,000 (about 14%) of the households renting or buying private dwellings in the Sydney region were in housing stress.

Around 155,000 of these had incomes at or below the median and represented about 11% of the households renting or purchasing private dwellings in the Sydney region.

Between 1996 and 2001, therefore, the number of households with incomes at or below the median had increased from around 127,000 to 155,000 with the proportion of households in housing stress rising from 10% to 11% of all the households purchasing or renting private dwellings.

 There is a clear divide in tenure: in 2001 the inner ring LGAs had a far higher proportion of renting households while the outer north and outer south ring LGAs had higher proportions of households purchasing private dwellings.

Households who rent private dwellings continue to dominate although the proportion had fallen from 70% of households in stress in 1994 to around 60% in 2001.

- Renters in attached housing numerically and proportionally (56%) dominated the inner and middle ring LGAs in 2001 with purchasers of detached housing a majority (54%) in the outer north and south ring LGAs. A substantial proportion (27%) of the households in outer ring LGAs, however, were renting detached housing.
- In 2001 the incidence of housing stress fell proportionally hardest on those living in attached housing: semi-detached and terrace houses, flats and apartments in the inner, middle and outer south LGA rings. They represented around 39% of all the households in stress.

Numerically and as a proportion of the total, however, far more households in stress lived in separate houses in the outer north and outer south ring LGAs: 33% of the households in stress in those areas. While nearly 48% of households in stress live the 'Australian dream', a narrow majority lived in higher density housing (townhouses, flats and units) in 2001.

- The overall proportion of households in housing stress was highest in the inner ring (17.5%) and lowest in the outer north ring LGAs (13.1%). In all but the inner ring LGAs, couple with children households in stress were in the majority although lone person households represented a significant proportion of the households in stress across the whole metropolitan region. In the inner ring LGAs, over 43% of households in housing stress were lone person households. Lone parent family households represented over 20% of the households in stress in both the outer north and south ring LGAs.
- An analysis of dwelling utilisation an ABS measure of overcrowding indicated that
 in 2001 over 8% of the households in housing stress should have access to more
 bedrooms. About a third of these lived in the inner ring LGAs.
- The majority of households in stress in 2001, at 32%, were couples with children. They were concentrated, not surprisingly, in the 25 to 54 year old age cohorts. The traditional first homebuyer age group 25 to 34 years of age was well represented in all the regional LGAs but 35 to 44 year olds dominated the middle and outer ring LGAs. Lone person households, at 43%, dominated the inner ring LGAs but, at 23% to 26%, were also a significant proportion of the middle and outer ring LGA households in stress. Lone parent households had a proportionally higher representation in the outer ring LGAs. Couple without children households, at 12% to 14%, were relatively evenly represented across all four LGA rings in 2001.
- Of nearly 40,000 very low and low-income households purchasing a house in Sydney in 2001, just over 25,000 or 63% were in housing stress. Over 101,000 very low and

low-income households rented and nearly 82,000 of these (80%) were in housing stress. These very low and low-income households represented 53% of all the households in stress.

- Just over 26,000 moderate income households were purchasing and nearly 23,000 renting in 2001 about 24% of all the households in housing stress. These are the 'key workers' who provide many of the support services an economically competitive city requires. Many have little choice but to rent.
- Just over 61% of the heads of households in housing stress were employed in 2001 and 47% of the households in housing stress had two incomes. While the household heads employed in the 'other' industry of employment category were in the majority, the next most significant groups in the inner ring LGAs were in property and business services, health and community services and education. Major proportions of the second income earners in households in stress were also these 'industry of employment' categories.
- Since 2001, the median price of Non-Strata dwellings in Sydney has increased by an average of between 12% (middle ring LGAs) and 17% (outer ring LGAs) each year. The median price of Strata dwellings has increased each year by an average of between 6% (middle ring LGAs) and 15% (outer ring LGAs). While interest rates have, until recently, been relatively low and stable prices have increased faster than inflation.

Rent increases for flats/units and separate houses, however, have remained moderately low. Interestingly, the rent increases for one bedroom flats/units have been marginally higher than for other rental accommodation.

Two reasons might be proposed. Firstly, the increased production of higher density housing and, until recently, a strong investor market has resulted in a competitive rental market. Secondly, low interest rates and government incentives have encouraged people into home purchase.

 The analysis of 2001 Census data confirmed the relationship between housing stress, tenure and location identified by the Ministerial Task Force and the UFP. It also confirmed that housing stress is widespread across the Sydney region.

Furthermore, and notwithstanding the base cost of Sydney's housing, the high proportions of lower income (very low to moderate) purchasing and renting households in stress may have chosen to spend more on their housing in order to have the perceived benefit of home ownership or to live in a location preferred for its other tangible benefits.

The inner and middle ring LGAs are a case in point. Higher proportions of renting households, across all five income bands, were in stress than in the outer ring LGAs. To these people, the perceived social status of particular suburbs, access to the CBD and the coast, proximity to workplaces, parents or other family members, are perhaps more important than having more disposable income after paying the mortgage or rent. On the other hand, the high proportions of purchasing households in housing stress in the outer ring LGAs suggest that others place greater store on ownership than location.

The behavioural and lifestyle factors driving housing choice therefore need to be better understood if effective affordable housing policies are to be developed. However, as the UFP observed in their 2002 paper, if affordable housing initiatives are to make a contribution to a cohesive and inclusive future Sydney then significant numbers of

affordable homes should be built in high value suburbs where lower income workers are needed to help run essential services.

Household and family growth in NSW

- Analysis of ABS projections contained in its 2004 Household and Family Projections, Australia 2001 to 2026 report indicate that by 2026 the structure of households and families in NSW will be very different to what it is today.
- The ABS projected an increase in the number of households in NSW of between 33% and 38% from 2.5 million in 2001 to between 3.3 and 3.4 million by 2026.
- The average size of NSW households was projected to decline from 2.6 persons per household in 1996 to between 2.3 and 2.4 persons per household in 2026.
- Couple families without children are projected to have the highest proportional increases. This group is projected to increase by between 45% and 62% to between 917,100 and 1,025,300 households in 2026, an increase of between 286,300 and 395,000 households over the 25 year period or an average growth rate of between 11,500 and 15,800 households a year.
- Lone parent families are projected to increase at a faster rate than for families as a whole, with the increase projected to be between 25% and 54% or between 354,600 and 437,000 families in 2026. This is an increase of between 71,600 and 154,000 households over the 25 year period or an average growth rate of between 2,800 and 6,100 households a year.
- Lone person households are projected to increase between 294,600 and 491,900 households or between 50% and 84%. This represents an average annual increase of between 11,800 and 19,600 households.
- The number of **couple families with children** is projected to increase by an additional 44,200 to 139,900 households by 2026, an increase of between 5% and 16%. This is an average increase of between 1,700 and 5,600 households a year. A third Series analysis projects that the number of couple with children families will decline by 14% to 740,800 households in 2026.
- The ABS projections suggest that in 2026 Sydney may possibly have around:
 - 165,000 more couple family without children households,
 - 187,000 more lone person households,
 - 49,000 more lone parent family households, and
 - 46,000 more couple with children family households.
- The ABS projections indicate that couple without children, lone parent and lone person households in Sydney will need over 400,000 dwellings appropriate to their needs over the next 20 years or so — a possible average demand of 22,350 dwellings a year.
- The projected average demand for each household group between 2006 and 2026 is likely to be around:
 - 8,250 more couple family without children households,
 - 9,350 more lone person households,
 - 2,450 more lone parent family households, and just
 - 2,300 more couple with children family households a year.

- Work by the ANU's Peter McDonald reported in 2003 suggests that the growth in:
 - couple with children households will be fastest in the inner ring LGAs, and
 - couple without children, lone parent and lone person households will be fastest in the outer ring LGAs,
- The growth in couple without children in Sydney's outer regions is considered by McDonald to be largely due to children leaving home and their parents ageing in place. This is also the explanation for the substantial growth in lone person households in these, and the other two, Sydney regions.
- McDonald makes the point that:...it is important for policy makers to realise that most dwellings in the outer regions of Sydney will continue to be occupied by the same people at least to 2011, but the composition of households will change. This means that the number of dwellings being freed up for occupation by younger families will be relatively limited. In other words, there will continue to be strong demand for new housing for young families in the outer regions of Sydney.

These young families will find it difficult, if not impossible, to find affordable housing if current price trends, largely driven by social and infrastructure charges, continue.

- The likely age and structure of the fastest growing household groups suggest that much of NSW's new housing stock will need to cater for a wider range of income levels, equity capacities and physical capabilities than has been the case to date. Many will find the industry's current offers well beyond their financial capacity, far from employment or unsuitable for their physical and lifestyle needs.
- Unfortunately there appears to be little recognition that the housing market will be
 increasingly characterised by a great diversity of smaller households with very different
 lifestyles, attitudes, financial capabilities and tenure preferences. As a consequence,
 one size fits everyone everywhere strategies present greater economic, environmental
 and social risks to government, industry and the community than deliberately planning,
 designing and building to more efficiently match need to household.

Projected dwelling demand: 1996 to 2011

- McDonald predicted that most of Sydney's growth will be in the outer south and north LGAs with a demand between 1996 and 2011 for around 23,200 new dwellings a year.
- McDonald's demand projections are higher than the ABS household growth projections. There are no clues on how the difference has been derived. Nonetheless, the projections envisage a 65%:35% split between 'separate houses' and other dwellings' by 2011, about the same as in 1996 but different to the 63:37 split in 2001.
- These projections are curious aspects in that 'separate houses' are projected to increase more than 'other dwellings' in the inner ring LGAs. No distinction is made between the different sized land lots on which separate houses can be built. And, furthermore, McDonald's figures do not seem to acknowledge the diminishing proportion of traditional couple with children family households and the growth of other household types, all of whom different housing typologies might be more appropriate.

Dwelling types supplied to the Sydney market: 1996 to 2011

• The years between 1996 and 2001 saw relatively modest increases in the number of separate houses delivered to the Sydney market. This form of housing dominated the

outer ring LGAs but, surprisingly, there was also an increase in separate houses in the inner ring LGAs.

- The substantial increases in the number of medium to high-density dwellings, and the modest increase in separate houses, is largely due to State government urban consolidation polices and the shortage of land for detached dwellings. Their increasing acceptance by the market, if not by the community, suggests that higher density living is becoming an satisfactory alternative for many households.
- The highest growth has been seen in the two-storey villa/terrace/townhouse, and three storey and over four storey unit/apartment categories. High-density redevelopment of redundant industrial land in Inner Sydney dominates with modest increases around transport nodes contributing to this category's growth in the Middle and Outer South Sub-regions.
- Medium density villa and townhouse development dominates the sub-regional areas where, in the absence of high quality alternative models, this form of development is generally more acceptable to local communities. The higher construction costs for buildings over three stories and sale price limits are another significant influence.

Falling home ownership rates

- Home ownership has played a key role in Australian politics and culture for three basic reasons. Firstly, it offers owners the ability to create and personalise their own environment. Secondly, it is a source of wealth. And thirdly, it offers a sense of security, achievement and social status.
- Despite a growing and ageing population, the proportion of occupied dwellings owned outright in the Sydney region dropped from about 41% to 39% between 1996 and 2001. The proportion being purchased remained relatively stable at around 23%.
- Judith Yates argues that the fall in home ownership, particularly among younger people, is primarily due to uncertainty about employment security and the cost of housing. On the other hand, Merlo and McDonald, Baum and Wulff and McDonald and Baxter argue that the fall in home ownership is due to delayed rates of family formation due to changing aspirations but those with the capacity to buy a home will do so later in life and at least to the same levels as previous generations. Capacity is the key word because the gap between prices and the income required to buy has increased.
- Flatau, Hendershott, Watson and Wood are currently exploring these issues in more detail within a set of possible housing career drivers. These include household formation decisions, the interactions between housing demand and supply, changes in labour markets, wealth and consumption objectives and housing assistance, income support and welfare programs and events that force deviations from a housing career.
- Three key questions are being asked in this research, namely:
 - Are Australian households taking longer to undertake housing career transitions?
 - Are their housing career trajectories interrupted when unfavourable household formation, housing market and labour market shocks force a change in course?
 - Are changing career goals changing the direction of their housing careers?
- These questions are also being examined within the framework of an individual's housing career, the first stage of which is a move into independent living followed by an unbroken, or sometimes interrupted, period of mortgage payments and then ownership.

• This research may prove that higher home prices and greater economic uncertainty have created a situation where more people are finding it harder move on to and eventually up the housing ladder. Alternatively, it may reveal that tenure decisions based on aspirations and lifestyle choice now dominate the choice of tenure but that high levels of home ownership will still be achieved later in the housing careers of Australians. All of the research appears to be based purely on numerical data rather than a serious and parallel analysis of the psychological drivers of housing choice.

The need for better research

- To realise opportunities and achieve commercial success in any contemporary market place, products and services must have a distinct competitive advantage. However, where it was once enough to produce results by simply repeating past triumphs, today's competitive market place demands product that has impact on potential customers. Traditional responses that use forecasts based on trailing data, anecdote or personal and professional experiences are no longer adequate.
- In the Australian housing industry the conventional wisdom is that the market is relatively homogenous and housing is a commodity that can only be sold on price. Demographic analysis and segmentation plays some part when developers and builders define their target markets but, as illustrated above, demographics only tell part of the story. When integrated with demographic studies, values analyses reveal many more segments than commonly considered. These have characteristics that can strongly influence neighbourhood planning, dwelling design, project advertising and selling methods.
- Knowing precisely what the market wants, and what it is prepared to trade off to meet those wants is the primary aim of market research.
- Quality research is an investment that can be used to improve the present systems of housing delivery and more closely meet the physical and emotional demands, and economic capacities, of an increasingly diverse market. Housing designed to meet these diverse needs more accurately fits buyer tastes, lifestyles and values and reduces a common concern that compromises have to be made because a better fit is not offered.
- Housing and urban land use is an area where environmental psychology can play a
 role in policy development. But there has been very little government or industry
 investment in its sophisticated tools to improve policy, planning, design, marketing and
 commercial performance. As a result, relevant findings or valuable processes from
 environment/behaviour research have not been inserted into the planning processes in
 a wide-ranging or systematic way.
- It should be understood, however, that there is often a disparity between what people say they want and what they actually do with their money. This is observed in the inconsistent results of consumer preference studies particularly those exploring neighbourhood form. Part of the problem rests with the language used in the surveys.
- Conflicting preferences suggest that New Urbanism or conventional suburban development is not an either/or choice. Instead, an individual's ideal may between these two alternatives on the housing choice spectrum and differentiated by their place in a housing career. Similarly, individual household preferences for a single ideal housing type may in fact include a spectrum of types, united by key pragmatic and attitudinal criteria.

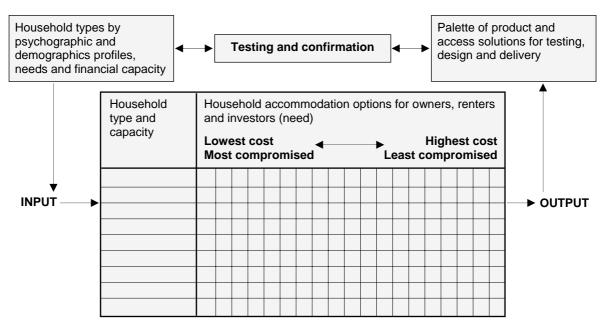
• A lack of detailed information about housing consumer preferences can result in superficial analysis and meaningless conclusions. The traditional, numerical approach tends to determine how many homes people want, but not what kind of homes or what type of residential neighbourhoods people would select if given a choice. Meeting the variety of consumer preferences for different housing types would be of enormous benefit to homebuyers and renters alike. Appropriate research would also reduce the perceived risk of financing and building new forms of neighbourhoods and housing that meet the demands of household types who, up till now, have been ignored.

Market segmentation

- A useful concept for structuring market research is market segmentation: the breaking down or building up of potential buyers into groups. Each segment is considered to possess homogenous characteristics relating to their lifestyle, attitude or consumption behaviours. A distinct communication message or product mix can be used to reach each group.
- Organisations seeking to refine their product development objectives and marketing strategies by targeting specific market segments generally look at segmentation by product, demographics and psychographics. The first two are commonly used by the development and housing industry while the last is only understood and used by a few.
- Until the 1970s market research was dominated by demographic segmentation the
 classification of consumers by age, income, level of education, and other quantitative
 variables. In the US, psychographic profiling is increasingly being used in the
 identification of housing market segments and there are a number of different models.

Towards a new product development model

- The built form of houses, schools, shops and workplaces, and the streets on which they sit, is certainly important. Built form is not, however, the ultimate determinant of social behaviour. Assumptions about aspirations and behaviour can be made from the statistics but the real issues can only be identified through personal engagement with the potential market. The real and perceived levels of control people have, and want, over their environment are the most important issues. In this respect, it can be demonstrated that some people want a high level of control and demarcation between 'their world' and the world outside while others prefer little or no control.
- Built environment research generally indicates that the quality and kind of social relationships within a neighbourhood contribute to resident satisfaction. In this context, physical elements are valued less for their innate qualities than for their social implications. For example, different people value different places because they are quiet or lively, restful or exciting, participatory or private. Obviously the difference between them should not be abrupt because people's experiential and social needs differ over time not everyone wants 'and/or' choices. And, furthermore, deliberately planning enclaves for particular social and economic groups, or indeed different land uses, is no longer acceptable to most authorities.
- During the research for this report, this thinking has led to the beginnings of a housing product development and assessment model that responds to household needs, lifestyles and financial capacity. This is illustrated on the diagram below.



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The critical methodology implicit in the matrix is identifying a range of household types and household attributes and visualising practical economic, spatial and occupancy access responses for testing. The basis is that every household has a psychographic and demographic profile and that these can be grouped into identifiable segments of the market. When choosing a particular housing product, their purchase, rental or investment decisions will be based on a balance or trade off between how much they can afford (high cost versus low cost) and the product or location attributes (most compromised versus least compromised). With a set of basic product models in place (the palette of solutions) market testing can be undertaken using commonly available quantitative and qualitative research tools.

Affordable housing policies and programs

- There are a number of issues to be considered when developing a policy mix or strategy to tackle the affordable housing challenge. They include:
 - How the costs and benefits particularly the real returns to investors, land owners or developers of supply or demand side interventions are equitably distributed.
 - How the benefits of an increase in affordable housing stock to succeeding occupiers can be retained through caveats on resale or the use of non-profit intermediaries to hold the title or manage the property.
 - How to overcome the generally negative perception of affordable housing among developers and the wider community because both tend to be wary of affordable housing in new developments despite the fact it is not social (public) housing and its inclusion does not necessarily create marketing problems.
 - How to ensure renters have tenure certainty while maintaining financial institution and investor confidence.
- The 2000 Sydney Housing Affordability Review classified and reviewed nine groups of potential policy options. These were:

Measures involving direct market interventions

- 1. Options that involve direct and indirect subsidies of various kinds.
- 2. Taking advantage of market cycles to redistribute or produce affordable housing when economic rents are low.
- 3. Developing planing instruments and initiatives to encourage or require affordable housing in new developments.
- 4. Capturing betterment and redistributing it to affordable housing production.

Measures involving changing the rules and regulations that govern the market

- 5. Reducing quality thresholds in building and subdivision standards.
- 6. Reducing market imperfections such as unnecessary regulations and policies.

Measures that are up to the market to act on

- 7. Technological advances or production efficiencies to reduce costs.
- 8. More emphasis on standardised or minimum quality housing within the regulations.

Measures that begin with institutional or macro economic policy review

- 9. Devising institutional frameworks that facilitate affordable housing.
- There are interesting parallels between the US, the European Union and Australia in the impacts social and demographic change are having on housing demand. There is a view that demand will not decrease because:
 - More people are living longer and staying longer in their homes, resulting in small households living in large dwellings and a lack of adequate housing for small, older households,
 - More people are living alone and women, in particular, have greater financial power and are often choosing to independent lives,
 - Budget constraints have meant housing subsidies are increasingly concentrated on the most vulnerable populations and the revitalisation of distressed urban areas, and
 - There has also been a 'social marking' of space.
- 'Social marking' as an issue is interesting. It appears that in a number of European countries, the middle class is choosing to live only in areas perceived to have low crime rates, good transportation and schools. This trend is seen to limit the number of places where housing can be built and acts as a constraint on supply. It is exacerbated when the areas people are moving from, or abandoning, have decent housing that no longer meets rising expectations. These expectations, reinforced by developers selling 'lifestyle' as well as desirable housing, are changing faster than existing communities can respond. This is often seen as an urban regeneration rather than affordable housing issue but the new housing is often far more expensive and exacerbates social and spatial polarisation.
- The Brookings Institution, drawing from seven decades of housing policy and practice, proposed seven objectives for affordable housing. These are:
 - Preserve and expand the supply of good quality housing units,
 - Make existing housing more affordable and more readily available,

- Promote social and economic diversity in residential neighbourhoods,
- Help households build wealth,
- Strengthen families,
- Link housing with essential supportive services, and
- Promote balanced metropolitan growth.
- Not all housing programs can simultaneously meet all seven housing objectives but there are four principles that should be observed:
 - Housing strategies should respond to local market conditions,
 - Income policy is housing policy,
 - Regulation is a powerful policy tool, and
 - The quality of implementation is critically important.

Inclusionary zoning

- Inclusionary zoning is the regulatory requirement to include a component of affordable or social housing in market rate housing projects.
- Almost all programs in the US and the UK offer incentives such as density increases or fee waivers to partially compensate for the cost of incorporating the affordable housing. In addition, communities carefully tailor their programs to their specific market — based on economic, political, and other conditions — so specific provisions vary greatly from one area to another. Most local governments also consider inclusionary programs as only part of a comprehensive effort to improve housing conditions.
- There are a number of key points for policy makers to consider when developing inclusionary zoning programs. These are:
 - Give affordable housing a significant role in growth management programs,
 - Build leadership and political will for affordable housing programs,
 - Start with small steps,
 - Implement a rigorous administrative process,
 - Integrate the program into a comprehensive overall effort,
 - Borrow ideas but not details from other communities,
 - Choose incentives that make sense locally, and
 - Engage all levels of government.
- Inclusionary zoning may have the same direct and negative impact infrastructure and community facilities levies have on land, development and housing costs in Sydney. The industry is hostile to these levies and uses them as an argument as to why housing in Sydney is not 'more affordable'. Introducing an additional housing levy through inclusionary zoning provisions in an expanded SEPP 70 for example will only lead to further conflict, delays and increased costs for market rate buyers and renters. A better model, with top to bottom government commitment, is required.

Planning gain

Planning gain, as used in this research, offers developers an incentive to increase
densities in return for an agreed set of outcomes such as affordable housing.
Developers may see this strategy as escalating market risk but, as discussed below,
the mixed income and mixed tenure housing outcomes can reduce market risk and
contribute to the creation of sustainable communities.

- The planning gain model is used by Waverley Council where explicit development incentives are available in exchange for the production of affordable rental housing. The incentives are, in essence, floor space bonuses or variations to planning standards that do not adversely affect the building's design or its environmental amenity. It has not resulted in a significant increase in the LGA's affordable housing stock.
- More recently, the planning gain concept was used in the Landcom/Cosmopolitan Developments Forest Glade project, a development that produced sixty three dwellings (21 dwellings per hectare) of which thirteen (20%) were offered to households that met specified moderate-income criteria.
- Changes to planning standards were sought in order to increase the site yield without reducing predetermined design objectives. Planning gain and better design were, together, seen as essential elements in reducing costs and convincing Blacktown Council that planning and design standards would not be reduced. Cardew says that ...the gains were made through value adding as much as cost cutting. The changes were accepted for the explicit purpose of providing moderate-income housing.
- A planning gain, properly applied, can increase development revenue while reducing market risk and offering a broad spread of price points and product types to the market.

Mixed income/mixed tenure housing

- One of the most interesting block-by-block, neighbourhood-by-neighbourhood programs to emerge from US affordable housing policy was the HOPE VI program launched in 1992. While primarily directed at improving the quality of distressed public housing, HOPE VI offers lessons in how public/private partnerships can be used to build more economically integrated communities and provide residents more choice in the private housing market. A key innovation was the incentives it created for public housing authorities to involve private developers in the creation of new mixed income neighbourhoods.
- A 2003 research paper examining the rationale for mixed income approaches found that ...mixed-income housing is not a silver bullet to overcoming the difficult challenges faced by families seeking to escape from poverty or the realities of housing markets. Because mixed-income developments are complex, present unique risks, and often house fewer needy families than other types of development, mixed-income approaches must carefully consider the local housing market, the population to be served, financing options, the scale of the project, and the community context.
- The research generated a useful checklist of questions for policy makers evaluating the merit of mixed income approach to developing affordable housing:
 - What is the market?
 - Who is being served by the development?
 - What is the tenure type?
 - What is the scale?
 - What is the wider community context?
 - What are the financial considerations?
 - Is a mix of incomes necessary for approval?
 - What defines success?
- The merging of physical (physical good) and social (social good) benefits makes mixed income housing an appealing approach for many policy makers and planners.

- The idea of mixing incomes and tenures in residential settings is not new: urban neighbourhoods in the UK and the US traditionally contained a mix of housing products suitable for a range of incomes.
- The literature, and the Landcom/Cosmopolitan Developments Forest Glade experience, indicates that there are a number of strategies and communication messages that could be used to help convince a sceptical community and industry of the value of introducing policies to encourage the development of mixed income and mixed tenure housing. The key communication messages to government, industry and the community are:
 - In the past, healthy communities offered a range of incomes and housing types. The provision of affordable housing is essential because it meets a diversity of needs and incomes, and allows 'key workers' to live in the community in which they work. A range of housing types and price points also accommodates the needs of different generations and makes the community more socially sustainable.
 - Regulations can be changed to help the private sector. Public policy at the state or local level in the form of regulations, incentives, or technical assistance is required if the supply of mixed income and affordable housing is to be expanded to meet the needs of emerging and existing household groups.
 - Mixed income and affordable housing can be profitable for the private sector.
 Developments that deliberately include a mix of housing types and price points have a reduce project risk profile, faster sales because the target market is wider and better responsiveness to changing market conditions.
 - Design standards can be raised and affordable housing seamlessly blended with neighbours. Affordable housing — housing that meets user needs, is responsive to context, enhances its neighbourhood and is built to last — can achieve high quality design outcomes. For mixed income developments, good design can be a competitive selling point that attracts market rate residents.
 - The private sector can help provide affordable housing. The market has not provided an adequate supply of decent affordable housing, especially in locations that are low in crime, have good schools, and are close to employment centres. The solution is a strategic and integrated approach, delivered and coordinated at the local level with properly funded government support. Success depends on stimulating private sector investment.
 - Property values are not affected by nearby affordable housing. Affordable housing does not have to mean social housing. There is no evidence higher density or affordable housing devalues nearby housing. In fact, studies appear to consistently indicate that affordable housing has a positive or sometimes just a neutral effect on neighbouring property values.
 - Community opposition is not an insurmountable obstacle. Attractive design, attention detail and an honest, transparent effort to build good community relations are important assets with which to leverage community support. Amenities such as more open space and better streets are elements that convert opposition to support. Evidence of good management practices, particularly if much of the housing is to rental, can also alleviate community concerns. In all cases, careful planning, education, examples of successful projects and good communication are essential to winning acceptance. Strong support from local government, in partnership with the developer and other respected advocates, is critical.

- Mixed income housing can have an important role in getting more affordable housing built, raising the quality of housing available to the 'have nots' and reducing concentrations of low income or disadvantaged community members. Good design can ensure lower priced homes are seamlessly compatible with more expensive ones. And a range of selling prices and house types reduces market risk because the project can appeal to a broader catchment of financial capacities and lifestyle needs.
- The lesson for Australian governments implementing mixed income/mixed tenure policies to ensure communities are more economically and socially sustainable is that there should be no ambiguity as to what is expected of developers. In this respect, the provision of housing diversity for a wide range of household types and financial capacities should be one of the heads of consideration in the relevant planning Acts. This would support the rhetoric for diversity and inclusiveness with a strong legal basis.

Financing affordable housing

- Methods to expand and maintain an adequate stock affordable housing have become
 an issue for government and others concerned for those at the disadvantaged end of
 Australia's housing divide. In part, this interest has emerged from the realisation that
 public expenditure on social housing is unlikely to expand even though the number of
 low to moderate-income households in stress is growing.
- Recent government policy responses have provided substantial funds for first homebuyers and assistance for households in rental housing. Subsidies for the latter vary according to household structure and, in high rent areas, reduce housing cost pressures. The First Home Owner Grant, on the other hand, has been geared toward improving access to home ownership but no income or house cost constraints are placed on recipients. Neither guarantee to increase the stock of affordable housing.
- Housing affordability is determined by household income, the purchase or rental cost of the dwelling, and who pays these costs. Because housing is an asset, any assessment of affordability is complicated because the owner or landlord has to fund the asset but has some ability to arrange the time at which payments are made. In addition, because housing often takes a large proportion of household income, variations in incomes and costs can generate risks for households and financiers that affect both cost and choice. Finally, affordability is determined by the quantity and quality of housing that people choose and what the community regards as acceptable housing conditions. Policy instruments can modify affordability by:
 - reducing dwelling and supporting infrastructure costs,
 - improving the capacity to pay through subsidies or tax concessions,
 - subsidising those most in need,
 - ensuring there is a wide range of financing choices,
 - reducing the costs and risks of defaults, and
 - regulating to ensure housing quality and affordability.
- A number of financial and process based models for private investment in affordable housing have been developed by Australian academics and financiers. Most require government financial support to reduce perceived risks or facilitate better outcomes.
- Work by the Affordable Housing National Research Consortium suggests that delivery, support and private financing options should:

- generate a significant and timely volume of private investment dramatically expand the stock of affordable housing,
- be accessible to housing providers and their target households,
- minimise subsidy costs through efficient targeting and risk management, and
- contribute to the desired housing outcomes in a range of economic and institutional circumstances while being simple and flexible to implement.
- Berry, Whitehead, Williams and Yates have identified a number of lessons from the UK's long involvement in affordable and social housing. These are that:
 - The more a government invests, the greater the economic and social returns, providing transparency, accountability and adequate risk management practices are in place.
 - It is very difficult to establish a private equity market for rental housing, especially at the affordable end. In this respect, private investors need to be confident that the risks are transparent and manageable so their involvement can be priced at levels that do not require politically impractical levels of subsidy or guarantees.
 - Australia might learn from UK experiments in different types of shared equity arrangements to improve access to owner occupation.
 - The planning system can be used to facilitate or require affordable outcomes, both in terms of land provision and cross subsidy from market housing.
 - In the current era of globalisation, housing has assumed a more central economic role that makes simultaneously achieving full employment, low inflation and external balance a challenging task.
 - Long term policy development and implementation requires bipartisan political commitment, based on workable alliances between key government, private sector and professional organizations.
- In Australia, there have been a number of small projects that have used or leveraged private funds to supplement government equity or subsidies. To date, no large scale attempts to replicate their successes have been made.
- Successful policies aimed at substantially increasing the stock of housing affordable to low and moderate-income households will depend on government intervention. In the first place, this demands that government recognises that an efficient and effective housing system underpins a dynamic and competitive economy. A coherent Commonwealth-State Housing Agreement that clearly allocates and shares responsibilities, provides realistic long-term funding for a wide range of programs and improves the delivery capacity, skills and flexibility of community housing associations will be required. A legislative framework that mandates local government involvement in the provision of affordable housing must then be established and enforced. And, finally, community awareness of the affordable housing issue must be raised and confidence in, and support for, the policy outcomes developed.

Reducing costs through smarter design and construction

 It can be argued that the real cost of housing in NSW, and in Sydney in particular, has almost nothing to do with clever design because it has almost everything to do with land values, approval costs and housing supply. Architects and designers have almost no control over these costs except on the rare occasions when intelligent planning and high level negotiation skills results in planning gains that increase densities to levels where substantial unit land cost reductions are made.

- Many believe that factory production has the potential to significantly reduce construction costs and improve quality but there is considerable market resistance. The problem may be that the word 'quality' almost always precedes 'affordable'. Few in government or the community regard smaller or lower cost homes as meeting their frequently subjective measures of quality. This view frequently surfaces when it is proposed that homes designed to reduce construction costs use off-site mass production techniques.
- Manufactured or prefabricated housing is an idea that periodically surfaces in construction reports and the architectural press.
- In his 1938 book, Buckminster Fuller *Nine Chains to the Moon* stated his belief that there were ...four overlapping applications and conflicting interpretations of the phrase 'mass production house':
 - Repetition of a number of standard house types by site based building trades,
 - Erection on site of sectional assemblies and integrated components from a catalogue,
 - Delivery of a volumetric unit prefabricated to be installed on a prepared site, and
 - Supply of a production run house with full dwelling service including a finance package.

Importantly, Fuller saw the finance package as being ...a competitive shelter service industry, similar to the hotel industry, and of the mechanical standard, scope and integration of the automobile industry, engaged in furnishing on a rental basis complete scientifically evolved individual family dwelling machines, whose design, economy, standard of adequacy, equipment, production, erection, land rent, service, maintenance, moving and removal, improvement and replacement rate are the entire responsibility of the industry's central competitive corporations, and are all included in one monthly rental charge.

The evolution of factory built structures from the caravans to the mobile home or trailer park has been one path, but the quality and depth of thinking behind Fuller's competitive shelter service industry has never been fully realised.

- In respect to 'quality', the principles of good urban design are understood even if their interpretation can be subjective and open to debate. The challenge for affordable housing, however, is as much one of context as it is of individual character and construction efficiency. The latter can emerge from off-site manufacturing as well as a systematic and comprehensive analysis of conventional materials, construction techniques and the supply chain.
- According to John Miles, a Board Director of Arup Group, the key issue for transforming the home building industry into a manufacturing industry depends on convincing those asked to risk capital that it would be financially worthwhile. He said:

New products will not appear without high capital investment. Innovation can be costly, and so long as there goes on being relatively little sharing of research and development costs between manufacturers and suppliers, it will continue to be difficult to recoup initial investment. In the current climate, bespoke products are often a design requirement, undermining the affordability that can be ensured by moving towards

ranges of standardised products and systems. Product availability will accelerate when house designs are tailored to the requirements of manufacturing processes.

- In Australia, it will take courageous investors to change an undercapitalised, site based home building industry where acceptable returns are made for minimal risk, even by the financially and managerially challenged. This reduces competition and innovation. It is exacerbated by a planning system unable to balance supply with demand by delivering sufficient land.
- In the UK, however, there is a belief the home building industry is changing as market forces pressure builders to reconsider customer service methods, and government action improves access, energy efficiency and acoustic performance. This has combined to force a reappraisal of housing design and the cost savings and site efficiencies obtained from offsite fabrication or manufacturing.
- Interest in off-site fabrication has also been stimulated by government funds being made available to social landlords partnering with selected suppliers through the Kick Start program.
- A similar incentive system could be put in place in Australia if substantial funding increases for social housing were made and a significant proportion of the funds directed into the development of manufacturing technologies. Without a major change in Commonwealth housing policies this is unlikely to occur. As a result, a significant motivation for industry investment in off-site manufacturing will be lost.
- However, a manufactured housing producer may find obtaining a financially viable share of the 25,000 dwelling per year Sydney market is an insurmountable challenge in. Arguments that manufactured housing can make a significant contribution to improving housing affordability need, therefore, to be very carefully weighed against the capital risks involved.
- Initiated by President Clinton and supported by HUD, the Partnership for Advancing Technology in Housing (PATH) program aimed to develop new or innovative technologies that improved housing durability, environmental efficiency and affordability. It was clearly recognised that a national effort was required and that both government and industry should be involved.
- Avi Friedman's Grow Home is a replicable idea and a clear demonstration of how thoughtful design, combined with knowledge of a local market and contemporary building technologies, can be used to create affordable housing. Design strategies balanced perceptions of housing quality with liveable area, environmental performance and the complexity of construction, finishes and fittings. Size was obviously the first consideration followed by the elimination of waste space and the avoidance of complex construction techniques and details.
- House designs emerging from the City of Portland's competition for innovative, affordable single-family detached houses on narrow lots offer some interesting lessons for renewal of the middle ring suburbs of Sydney. They are also relevant to greenfield subdivisions where attempts have been made to increase densities by developing narrow lots with detached housing.
- The competition clearly showed that smaller, narrow lots demand unique design approaches. The analysis questions, however, if more traditional forms of attached housing, economically built by cottage or project home builders, provide better living

and urban design outcomes than models that simply seek to partly replicate the perceived advantages of detached houses on lots with substantially greater widths.

- A catalogue similar to that developed from the Portland competition might demonstrate how small lot and infill housing in Sydney could be skilfully designed, harmonious with surrounding housing and economical to construct. It might stimulate local governments and the industry to develop better regulatory and built form alternatives to the familiar dual occupancy model. A significant increase in the stock of affordable housing more appropriate to contemporary household groups might be a beneficial consequence.
- Bovis Lend Lease explored a number of aspects of manufactured housing as it relates to the Australian context for Landcom. It found that a wider acceptance of manufactured housing would require a significant cost differential to conventional project builder housing, attractive and appropriate designs and the use of building materials consistent with buyer needs. The conclusion was that manufactured housing is not a feasible affordable housing solution in its current form unless capital is allocated to evaluating its medium and long term potential, developing product, overcoming related peripheral constraints and developing a marketable package.
- The Landcom/Cosmopolitan Developments Forest Glade project used modular designs, grid systems, standard units, common plumbing stacks and simple geometry to achieve both space and production cost efficiencies. Design dimensions were controlled to minimise waste, materials and labour. In a report on the project, Richard Cardew says that the savings obtained from this comprehensive approach were around 5% of construction cost.
- The challenge of designing affordable housing within strict materials, systems and cost limits does not mean that designers must lose their creative and innovative spark. Remaining innovative within restrictive marketing parameters or guidelines is creativity at its best, particularly if the exploration of new approaches within those constraints does not stop. And, as the design professions become more familiar with the constraints and opportunities they should be able to demonstrate that very innovative, market responsive affordable housing can be built in urban and suburban locations.
- It is commonly accepted that Australian project home or cottage builders build more efficiently and at less cost than their commercial or higher density housing counterparts. The cost differential becomes very critical when considering how best to build affordable housing and the form such housing should take. In this respect, assuming that encouraging the construction of townhouses and units in the new planned suburbs planned for Sydney's north and south-west would contribute substantially to housing affordability and housing choice may be naïve.

There are three simple reasons. Firstly, the cost of the new land supply will be burdened with social and transport levies. Secondly, and until convinced otherwise by demonstrably profitable and acceptable alternative, home builders will continue to see their most viable market as being 'move-up' family households seeking large detached homes. And thirdly, once construction practices move beyond those commonly used by small builders and independent trade contractors on detached housing, a raft of industrial relations awards come into play.

In other words, market driven solutions cannot be relied upon to meet the housing affordability challenge. For cost and productivity reasons alone it would appear that more emphasis should be placed on encouraging investment in developing housing typologies that can be delivered by project home or cottage builders.

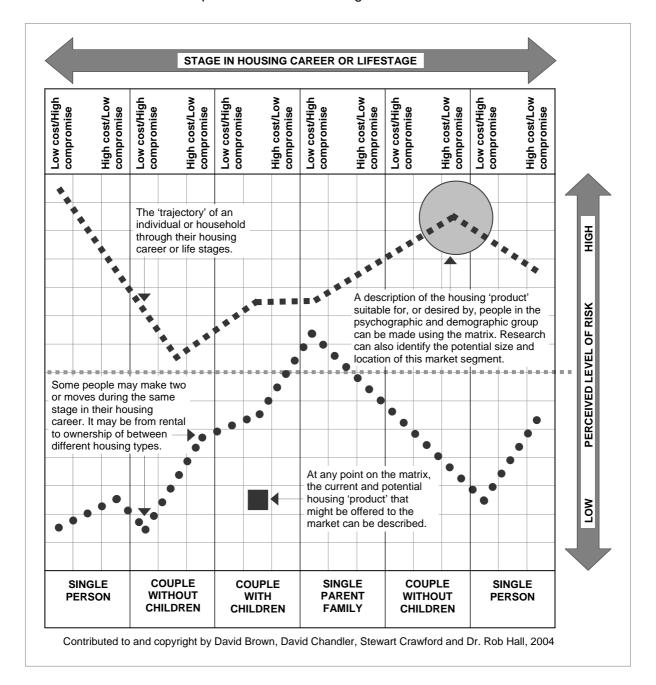
Bringing it all together

- Creating successful residential environments involves more than design. It is about responding to the needs of contemporary households and providing a framework within which communities can become established and prosper. Neighbourhoods with people of different ages, economic status, lifestyles and mobility offer important community benefits. Mixing housing types and uses can also help create more attractive residential environments by facilitating a greater diversity of building forms and scales.
- Unfortunately, most recent housing offers a limited range of tenure choices and frequently focuses on a narrow market segment or particular housing need. Even where more affordable housing is provided, it is often poorly integrated with homes developed for private rent or sale. Care therefore needs to be taken at all stages of the design process to ensure the range of housing needs is fully understood and any potential conflicts between different lifestyle or life stage groups are acknowledged.
- The housing typologies formerly used in neighbourhoods where mixed incomes and tenures have largely been forgotten by government and the industry. Many are simply unaware of the wide range of models that could be used.
- Four basic dwelling type groups can be described and further subdivided:
 - Detached houses, each with an external entrance from a street or shared court. This group ranges from single-family houses through to multiple family or household dwellings in a large house and detached houses or cottages on a single lot.
 - Attached buildings, each with an external entrance from a street or shared court, include row houses, vertically stacked units and accessory or home office units
 - Multiple unit building types, where dwellings are entered from common stair or hall, range from walk-up apartments to high-rise apartments.

Most can be built using a construction technique familiar to most buyers, renters, financiers and builders: brick veneer.

- When combined with the local context, site constraints, budgets and marketing considerations, an innovative design and development team will create variations of this basic range and plan forms within it. These should respond to a finely tuned understanding of the target lifestyle and demographic market niches. In the end, the goal should be to use multiple dwelling typologies to address multiple price points, achieve faster sales and reduce market risk, and develop a diverse and attractive neighbourhood.
- Mixing housing types within a single block presents a marketing and design challenge
 that should be handled with care. Even in areas where people are extremely
 comfortable with social diversity some arrangements, such as directly adjacent or
 opposing dwellings at different price points or with substantially different tenure
 structures, can create perceived problems.
- Irrespective of how well individual dwellings are planned and structured, a poor community outcome is likely if the public realm is poorly executed. The richness and sense of quality seen in the best neighbourhoods comes from building design and careful consideration of the spaces and interfaces between.

 From this research, the product development framework and discussion with associates, a sophisticated matrix emerged that enables the housing career trajectory of an individual to be plotted and their housing needs identified.



- This tool, backed by thorough research, can be used to establish:
 - The demographic (life stage) and psychographic (lifestyle) character of various household types as well as their size and location,
 - Household and individual housing preferences related to their income and willingness to 'risk' an engagement with different housing types, and
 - A briefing framework for a developer's design and marketing consultants.
- Understanding the current mismatch between housing need and supply and then
 developing practical housing solutions capable of transparent assimilation into new
 residential projects is not without risk. The possibility of making a mistake on untested

models is not a risk most developers, or their financiers, would willingly take. Government intervention and its active financial and regulatory support for the testing and demonstration of new models are required.

- Landcom and the Department of Housing both have a distinctive capacity to influence the shaping of new urban communities with a sufficient scale to achieve the reality of economic, social and environmental sustainability. They also have the ability, through collaborative partnerships with the private sector, or engagement with not-for-profit agencies, to actively participate in offering new housing models that significantly broaden the range of housing supply.
- The RealWorld project proposed at the Premier's Housing Forum in April 2004 is one way these necessary partnerships could be established and a demonstration project implemented. The RealWorld initiative emerged from the initial stages of this research and a realisation that the current housing supply model is unsustainable and constrained by historical entry points that discriminate against many existing and emerging demographic and attitudinal groups.
- Achieving RealWorld's objectives demands a proprietor's dedication to establishing its vision and bringing it to completion. The project's Mission could be stated as follows:

RealWorld is an innovative development initiative aimed at stimulating a better understanding of, and active interest in, how significant areas of housing market failure can be addressed through a partnership between government and industry. As such it will introduce new housing choices offering:

- Practical and commercially focused design, delivery, environmental and social benchmarks to assist the development and housing industry's future supply, and
- A market-tested base for planning guidelines aimed at improving the affordability, accessibility, choice and quality of housing and neighbourhoods in NSW.

RealWorld will provide Landcom and/or the Department of Housing with:

- A 'real life' framework for harnessing, testing and coordinating new ideas and management strategies, particularly the social dimensions of Triple Bottom Line management and reporting systems,
- A valuable store of intellectual property (market research data and housing designs)
 that it may make freely available to the industry to advance the improvement of
 future housing supply, and
- Recognition and respect for RealWorld's innovations and initiatives.

Creating a framework for change

- The ability to rent or buy affordable housing is a significant factor in the economic capacity and competitiveness of cities, states and nations. Evidence shows that quality urban design has a significant positive effect on investment returns, management and maintenance costs, workplace productivity, the diversity and adaptability of the building stock and other benefits at the neighbourhood and city level. In this respect, a sustainable and successful city or neighbourhood will offer inclusive and equitable access to jobs, affordable housing, services and community facilities for the young and old, low and high income households, the able and the disabled.
- Creating a culture to realise the benefits of quality urban design cannot be achieved by
 political edict, doorstop statement, legislative action or short conferences. All might be
 part of a communications mix but, if overseas experience offers any lessons, properly

addressing the issue of urban design, and achieving cultural change, demands leadership, coordinated thinking and a long-term structured approach. Realising the benefits of quality urban design requires action across a wide range of sectors, organisations and professions.

The emerging Metropolitan Strategy for Sydney should be the catalyst for change. What NSW now needs is a network of 'design champions' lead by, and with high level political support from, the State government.

Some of the advocacy work is already being done in NSW but links across State government departments, statutory authorities, local governments, professional and industry organisations, individuals and community organisations needs to be established. CABE and the New Zealand *Urban Design Protocol* offer good examples of organisational structures that bridge the gaps to raise awareness and facilitate change. A carefully considered replication of these useful models should be implemented and funded as a priority.

Conclusion

• There is no single solution to the affordable housing challenge. Meeting the needs of today's households demands leadership and partnership. A shared vision and a united effort between public and private interests are essential first steps. Without them, NSW will divide into a state of housing haves and have-nots. Without them, the economic competitiveness of this State will deteriorate. Without it, the housing opportunities and choices available to future generations will be severely limited.

1.0 INTRODUCTION AND BACKGROUND

Over the next 20 years, ABS projections¹ indicate that around 75,000 more dwellings for 'traditional' family households are likely to be required in NSW. Over the same period, more than 650,000 single person, childless couple, 'empty nester' and single parent households will need adequate housing. Many will have little chance to rent or buy homes they can afford in locations near familiar social networks, employment opportunities or community services. Most will not seek or need the housing forms currently offered by the industry.

Increasing the availability of accessible affordable housing appears, however, to be a complex and almost intractable problem. To many, affordable housing is a social responsibility of government. They believe that only government has the power, authority and resources to make more housing available to low, moderate and middle-income households. This view fails to acknowledge that governments alone do not have the resources or have political difficulties in shifting their policy and spending priorities. It also confuses the difference between affordable housing and social housing. Until partnerships between the public and private sectors emerge meaningful solutions will remain beyond reach.

Partnership approaches to the needs of those at the tough end of Sydney's growing housing divide offer the building and development industry strategies to reduce the risks inherent in their current narrow market focus. The Commonwealth, State and local governments must take the initiative and pay more than just lip service to the issue. They have the opportunity to reduce the number of people likely to seek financial support and stimulate the creation of more socially, economically and environmentally sustainable communities. Addressing the issue of affordability offers an opportunity for potential industry leaders to demonstrate how commercially sound, sustainable approaches to housing on greenfield estates and brownfield redevelopments can be realised.

Overcoming limited industry and community knowledge about the value and benefits of different housing options, and encouraging the industry to invest in new product development, will be critically important if Professor Julian Disney's² gloomy forecast is not to be realised. Unfortunately, as the preceding quotes illustrate, the challenge of affordable housing has been exhaustively analysed and discussed for at least fifteen years. More recently, the debate appears to have become more focused on shifting blame than finding adequate policy solutions.

Through my work on affordable housing for Landcom, the Joint Industry Housing Group and private clients I formed the view that influencing community attitudes on the housing mix now needed for contemporary and emerging households is crucial to the effective implementation of affordable housing policies and projects. Simply put, while ever there is a stereotypical view that affordable social or market housing is 'undesirable' in new or old neighbourhoods it will be very difficult to provide the quantity and quality of housing needed for low and moderate income households. Many of these people do not qualify for welfare or rent assistance. They include the police, teachers, nurses, bus drivers who provide an essential production base that keeps the State running, at all hours and across all services. 'Key workers' has become an internationally accepted description of this large group of people who, despite being largely ignored by conventional housing policy, have critical housing needs despite working at, or in the equivalent of, full time jobs.

The economic and social vitality of Sydney depends on these folk being able to buy or rent within reasonable distance of the communities they serve. At present, most earn moderate

Australian Bureau of Statistics (June 2004). Household and Family Projections. Australia 2001 to 2026.

Professor Julian Disney, Chair, National Summit on Housing Affordability. Media release, 22 June 2004

incomes and can only find appropriate housing some distance from their work places. This raises an overarching social equity issue within which integrating the creation of sustainable communities with the provision of affordable housing become important elements. Without a significant change in how these issues are addressed, NSW will divide into a state of housing 'haves' and 'have nots'. Single-issue solutions to the challenge are not the answer and directives that force private sector involvement will create conflict rather than stimulate the cooperation and united effort now required.

Meeting the housing affordability challenge involves much more than a simple understanding of how demographic change might influence more appropriate housing typologies. It requires an understanding of how affordable housing can play a critical role in the development and marketing of socially, economically and environmentally sustainable neighbourhoods. Both issues are related because contemporary marketing practice clearly demonstrates that demographics only tell part of the story. In my view, any endeavour to address the affordable housing issue will fail if the lifestyles, interests, values, expectations and symbols that cut across demographic boundaries are neglected. They will fail if the industry and the regulators do not appreciate that these drive buyer behaviour and, more importantly, community attitudes to the social, economic and built form changes if the stock of affordable housing is to be dramatically increased.

For these reasons, the work undertaken as part of the NSW Board of Architects 2004 Research Grant has taken a wider view of affordable housing. It aims to explore the trends and implications of the:

- More fluid and varied household groups and living arrangements emerging as the result of income polarisation, changing relationships and an ageing population,
- Structural shifts to rental housing being driven by competing lifestyle and asset creation opportunities, employment mobility and lower home ownership expectations, and
- Increasing resident opposition to government urban consolidation policies and their perceived negative social, economic and built form outcomes.

From this base, some of the transformations in traditional development practices now required to make housing more affordable, improve land take efficiency and create socially, economically and environmentally sustainable communities have been identified.

A particular focus has been on the broad divisions between Sydney's inner, middle and outer suburban rings. Inner ring suburbs are increasingly distinguished by higher density, single market focused housing developments, gentrification and price structures that exclude lower income households. The outer rings, both north and south, with their more traditional greenfields estates, are characterised by lower densities, detached homes, elevated prices and high degrees of social homogeneity. The older 'third city suburbs' in the middle are experiencing progressive social and economic restructuring, as their housing stock becomes obsolete and their original residents age.

Recognising these divisions is particularly important as the NSW government's Metropolitan Strategy for Sydney is developed. Its stated aim³ is to balance environmental, economic and social outcomes in response to growth and change in Sydney's greater metropolitan region. The widespread development of affordable housing is critical if the whole metropolitan area is to be a sustainable community.

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Department of Infrastructure, Planning and Natural Resources (September 2004). Planning for a Better Future. Metropolitan Strategy discussion paper.

However, regulatory policies and industry behaviours that entrench the rigid social hierarchies and exclusivity emerging in Sydney's neighbourhoods, and in the rest of NSW, will not achieve this aim. The social value, and economic good sense, of creating neighbourhoods with a finer grained mix of diverse land uses, businesses, households, housing types, economic capacities, age groups and lifestyle aspirations needs to be rediscovered. In this respect, we need to understand that informed business decisions and sound regulatory policies can no longer rely on the simple projection of historical trends. The uncertainties and risks, complexities and shifts now evident in the community demand the development of new tools and thinking.

Unfortunately much of the urban development industry is regulated by views, expectations and organisations that have reached their 'use by' date. Its housing bias often overlooks wider market opportunities and has lead to urban polarisation — a suburbia of enclaves that will have increasing difficulty dealing with the diverse needs and economic capacity of today's households and society. The industry has tended to ignore critically related elements such as how neighbourhoods and people connect, the role of neighbourhoods in providing robust social and employment networks, and how future generations of households can be appropriately housed.

In this environment, and in an ideal world, regulators should now be rejecting development proposals that do not make a credible contribution to the creation of economically, socially and environmentally sustainable neighbourhoods. We are already seeing far more rigour applied to the environmental sustainability of new developments. Meeting the diverse needs of the household groups likely to dominate the housing market in the foreseeable future have yet to be seriously addressed or assessed with equal thoroughness.

Burke, Slaughter and Veros⁴ recently made some worthwhile comments about these issues. They observed that: Recent studies and observed housing market processes have highlighted how the certainty that appeared to characterise housing for much of the post war era is dissolving in the wake of major social and economic changes.... Even conferences purportedly about housing futures are generally about current problems, with little attempt to tease out the longer-term implications.

In their paper, Burke, Slaughter and Veros identified eleven trends raised by other researchers and social commentators. Acknowledged by the authors as less than exhaustive, they are worth reproducing at this point because they illustrate the complex issues to be considered when exploring how to create affordable and sustainable neighbourhoods that respond to changes in the housing market.

1. The contraction in housing affordability

Implicit in the Productivity Commission⁵ report of its inquiry into first home ownership was a belief that a looming correction in the Australian housing market, particularly in the investment sector, would solve the housing affordability problem. The Productivity Commission appears to have presumed that an overhang of rental housing supply, combined with a tightening of finance for investment housing, would reduce established housing prices and cancel out the substantial increases that had occurred over the previous three years.

The HIA's Ron Silberberg has argued⁶ (as have others) that immigration policies, land supply management and development charges for urban infrastructure have meant that

⁴ Burke, T., Slaughter, R. and Veros, J. (April 2004). *Long-term Housing Futures for Australia: Using 'Foresight' to Explore Alternative Visions and Choices.* Research positioning paper for the Australian Housing and Urban Research Institute, Swinburne-Monash Research Centre.

Productivity Commission Inquiry Report (March 2004). First Home Ownership. Canberra

Silberberg, R. (2004). Address to the National Summit on Housing Affordability, Canberra, 27-29 June 2004.

a generation of Australians are faced with the prospect of not being able to realise the dream of home ownership. He says ...the housing affordability crisis is not due to forces beyond our control. It has come about because of wrong-headed policies, misplaced intentions and outright neglect. All levels of government have contributed... None wants to accept responsibility.

The question posed by Burke, Slaughter and Veros is whether housing affordability is a long term structural issue or a short term market phenomenon with a progression toward improved accessibility a real possibility for groups within the housing market.

2. The decline in home ownership and the growth in private rental Burke, Slaughter and Veros quote Phil Ruthven, the 'futurist' founder of IBIS Research, as saving in 2003⁷ that:

... younger people won't want home ownership in the same way that my generation did. You'll find that the 'Gen Xers' and the 'Net generation' will be much more in favour of leasing a home for perhaps five or ten years than ever owning it. The average person only owns their home for seven or eight years before they sell and buy something bigger or smaller or move somewhere else. The idea that you buy a dream home and live there forever was never true. Young people will say 'I can do more with my money, as long as I'm stable with a lease. And they won't throw me out in six months, I'm happy. I'll put my money where it works better — in shares.'

The quote illustrates one of the wide range of opinions held by social, planning and housing commentators. Declining home ownership rates and the growth in private rental among young persons might be a long term problem for policy makers and the community, particularly if equity is the major source of tax free pre-retirement wealth for those who own a home as opposed to other investments such as shares or property.

3. Changing lifestyles, housing diversity and the meaning of home Values slowly change but the past fifty years have seen the emergence of widely diverse lifestyles and behaviours. Burke, Slaughter and Veros state that ... housing is probably the ultimate consumer and investment commodity in which diversity and lifestyle manifest themselves, and do so in complex ways including locational choice, physical design, interior design, how we use a dwelling and any garden it might have — in other words, how we define 'home'.

They are quite correct. The lifestyles and expectations of homebuyers and renters are markedly different from those of ten or twenty years ago. Self-image has as much of a role as income in decisions about what and where to buy. Understanding the diversity of lifestyles, interests, values expectations and symbols, as well as demography, enables the housing market to be segmented in very sophisticated ways and houses, streets and neighbourhoods to be designed that appeal to the attitudes and behaviour of carefully defined social groups. But, contrary to most providers of consumer goods, few developers and builders really think about the way people live and what motivates purchase or rental decisions. The majority appear to think it all comes down to price and they design and promote their product accordingly.

Finding ways to accommodate the diversity of contemporary households, particularly those with ownership aspirations but challenged by prices, raises a wide variety of planning and policy issues. According to Burke, Slaughter and Veros for example: Is

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Phil Ruthven interview, George Negus Tonight, ABC Television, 16 October 2003 quoted in Burke, T., Slaughter, R. and Veros, J. (April 2004). Long-term Housing Futures for Australia: Using 'Foresight' to Explore Alternative Visions and Choices. Research positioning paper for the Australian Housing and Urban Research Institute, Swinburne-Monash Research Centre.

there a conflict between accommodating household and individual diversity and other goals such as environmental and economic sustainability? Does greater diversity create sharper social divisions and undermine social capital and local community, or is the opposite the case? How do the poor and low income earners have their specific housing needs and wants met, or is diversity simply about accommodating the housing needs of those who can pay for it?

These questions are fundamental to any analysis of how more affordable housing can be created in new and old neighbourhoods.

4. Changing housing preferences and locations

Bernard Salt⁸ and others have noted that some households have shifted from the large metropolitan cities to non-metropolitan, mainly coastal, locations. These decisions are based on lifestyle desires and housing costs and, according to Salt, represent a fundamental cultural change in Australian housing choices. At the same time, the number of people living in inner city areas and in new fringe estates has increased at the expense of older established suburban areas. The numerical evidence is clear but whether it is a long-term trend, or why these choices are made, is not clear.

5. An ageing population

Demographic change is a fact so it should be no surprise that in twenty years time a substantial proportion of households will be over sixty. ABS projections⁹ also suggest that the proportions and numbers of other household structures will change. What is unknown is how these changes will alter housing consumption patterns and what the industry will, or should, produce in response. Burke, Slaughter and Veros observe ...that some retirees seek out new locations, particularly along the coast, but we also know that this is linked with housing market processes in the cities they are moving from, for example, the Sydneysider who sells a \$600,000 property and buys a \$400,000 unit in northern New South Wales, or the Melburnian who does the same thing for the Gold Coast.

The question is whether this is a short-term aberration as house prices in coastal towns near parity with Sydney and Melbourne or whether people will choose to age in place. As Bill Randolph notes in the quote above, one consequence is likely to be challenges with the physical and financial ability of older people to undertake the continuing repair and maintenance of older homes and the blocks of land on which they stand.

6. The generational divide

The divide between income and wealth is, in part, generational as the 'baby boomers' (people born between 1946 and 1961) have enjoyed reasonably stable incomes, high home ownership rates and an increasing wealth base. Burke, Slaughter and Veros believe that younger households ('Gen X' or people born between 1961 and 1976) are unlikely to benefit from the same experience in the current labour and housing market. They also say that the generational divide is not exclusively one of wealth and income but also one of lifestyles and values. These will have an impact on housing affordability and consumption, creating new issues and choices for both generations and those to follow, including the so-called 'dot coms' born between 1976 and 1991.

Interestingly, NATSEM modelling¹⁰ suggests the massive transfer of wealth from their parents many 'baby boomers' expect (or are relying on) may not occur. Working against expectations are higher health and aged care costs, a reduced bequest ethic,

Salt, B. (2001). The Big Shift: Welcome to the Third Australian Culture. Hardie Grant Books, Melbourne.

⁹ Australian Bureau of Statistics (June 2004). Household and Family Projections. Australia 2001 to 2026.

You can't rely on the old folks' money. AMP.NATSEM Income and Wealth Report Issue 5, June 2003.

an uneven distribution of wealth and the chance grandchildren affected by high housing prices will be the main beneficiaries. NATSEM has also suggested¹¹ that high housing costs, tertiary education debts and job insecurity have, by choice or necessity, changed the social behaviour of 'Gen X': they are leaving the parental home later, working part-time, deferring the purchase of a home, less likely to have children and have less chance to accumulate wealth than their parents.

7. Growing inequalities in wealth and income

Australians appear to believe ¹² that there are growing inequalities between income and wealth. AMP-NATSEM quote an ABS report ¹³ that shows average weekly incomes received by the most affluent fifth of the population increasing by 17% between 1995/96 and 2000/01 while the average income of the least affluent fifth increased by 7% over the same period. AMP-NATSEM argue, using a postcode-based analysis of 1996 and 2001 Census data, that while the dollar gap between the most and least affluent areas increased, the proportional gap did not and, on average, all Australians benefited from five years of economic growth and falling unemployment with a 26% increase in average household income.

The AMP-NATSEM analysis does not take into account increases in house prices between 1996 and 2001, or the significantly higher increases seen over the past four years. This raises the question whether housing market processes will result in the emergence of social divisions by tenure and location.

8. Labour market change and housing consumption

Employment uncertainty and the increasing use of casual and contract arrangements are likely to shape housing consumption patterns for the foreseeable future. By way of illustration, SGS Economics and Planning has identified¹⁴ an increase in part-time and casual jobs, job sharing, and seasonal, temporary and fixed term contract employment. Using figures derived from ABS Census data, they show that the proportion of part-time workers increased from 22% of the labour force in 1991 to 30% in 2001 while the proportion of people working full-time declined slightly. Further, and despite falls in the unemployment rate, growth rate of part-time employment was almost 4% compared to 1% for full-time employment over the same period.

People affected by the decrease in 'traditional' forms of employment created by the 'new economy' find difficulty achieving their dream of home ownership because being a part-time or low wage earner limits access to mortgage finance. The question is whether these trends will affect tenure choice, home ownership rates and locational decisions for those seeking affordable housing.

9. Environmental sustainability

The delivery of all forms of housing is more than a simple balance of supply and demand. As noted above, it is part of a consumer society that has a growing diversity of needs and expectations. Industry and regulators should be responding to this multiplicity of needs and expectations but, instead, the activities and policies of both seem to result in increasingly expensive, unimaginative and socially homogenous houses, streets and neighbourhoods.

Generation Xcluded. AMP.NATSEM Income and Wealth Report Issue 6, November 2003.

Roy Morgan Research data (2003) quoted in *Money, money, money — is this a rich man's world?* AMP.NATSEM Income and Wealth Report Issue 8, September 2004.

ABS (2003) Household income and income distribution quoted in Money, money — is this a rich man's world? AMP.NATSEM Income and Wealth Report Issue 8, September 2004.

SGS Economics and Planning Pty. Ltd. (March 2003). The 'New Economy' and Changing Employment Structure. Urbecon Bulletin.

The question is whether this situation will be exacerbated as governments focus more attention on environmental imperatives such as water and energy consumption, loss of ecosystems through construction, and household waste. There is little doubt that new neighbourhoods will, at least in the short term, be more environmentally appropriate but their flexibility and adaptability to meet future household structures, housing needs or higher environmental standards might not be possible unless sustainability encompasses and integrates social, economic and environmental considerations.

In this respect, Professor Peter Newman has talked¹⁵ about sustainability as a global process that aims to create an enduring future by simultaneously considering environmental, social and economic factors. Using principles distilled from the Western Australian State Sustainability Strategy, Newman set out what sustainability could mean for housing by identifying three main tasks:

- Ensuring there is a roof overhead for the housing disadvantaged,
- Ensuring housing is more eco-efficient, and
- Ensuring housing is well located or is part of a project to improve locational amenity.

In his 2002 Paper, Newman set out eleven principles that should be applied to housing if it is to be sustainable. These are reproduced below as they inform much of the subsequent discussion in this report.

Principle 1: Long Term Economic Health

Housing is central to how the long-term future of the economy is being created. Housing has a 50 to 100 year operating life and thus we must consider all relative factors in ensuring long terms needs are considered.

Principle 2: Equity and Human Rights

Current and future needs for the housing disadvantaged need to be a high priority for development.

Principle 3: Biodiversity and Ecological Integrity

The housing agenda cannot afford to neglect the source of its materials, eg, structural timber should not be from old growth or vanishing rainforests. There needs to be a far more ecologically sympathetic housing sector.

Principle 4: Settlement Efficiency and Quality of Life

The urban planning context is that housing design, construction and resulting urban form needs to be more eco-efficient (i.e. less resource consuming, less waste producing) and yet simultaneously provide better quality of life outcomes.

Principle 5: Community, Regions, 'Sense of Place' and Heritage

Critical social dimensions of housing need to be considered so that people are part of a community and can belong to a 'place'. Car-dependent housing is increasingly seen as anathema to this.

Principle 6: Net Benefit from Development

All new housing developments need to be assessed by the criteria of 'net benefit' that applies to environmental, social and economic criteria. The ancient Athenians used to pledge: 'We will leave this city not less but greater, better and more beautiful than it was left to us.' We should aspire to no less in our housing projects.

Newman, Professor P. (31 October 2002). Written text for the 2002 Oswald Barnett Oration, Melbourne, kindly provided by the author.

Principle 7: Common Good for Planning

Sustainability requires common good outcomes from housing such as open space, community services and public transport.

Principle 8: Integration of the Triple Bottom Line

Reporting and accounting as well as assessment of housing, needs to show how the triple bottom line objectives are being met.

Principle 9: Precaution

Flexibility in housing is needed to enable different future options to be achieved as householders age and the economy changes. How an area can cope in an oil-constrained world is also an agenda that cannot be neglected by housing.

Principle 10: Accountability, Transparency and Engagement

Engaging the public in housing choices needs to go beyond project homes and their fashions, and beyond simplistic debates on infill, to community-based visions of how affordable and appropriate housing can be provided in each area.

Principle 11: Hope, Vision Symbolic and Iterative Change

Housing projects that are more sustainable need to be created so that the first steps can be demonstrated towards long-term visions.

Newman alludes to the potential additional costs of sustainable housing strategies. He points out that economies of scale are a critical factor in pricing eco-efficient products and the role government can play. He also argues that many of the items perceived by people to be essential elements in their homes may not be needed or might be willingly traded-off for other benefits. Dwelling size is one item where trade-offs can be made and money to pay for eco-efficient improvements. Research undertaken by Wentworth Brown and Environmetrics suggests that once unrealistic aspirations are dealt with many people are prepared to identify the real items of importance. In some psychographic groups these items include environmental performance improvements.

10. The revolution in information technology

Information technology revolution has impacted on urban form and housing planning and construction as well as on labour markets and household income. Burke, Slaughter and Veros note the volume of literature on how information technology is affecting urban form with one extreme being arguments that technology enables people to live and work more or less where they like. At the other extreme are arguments that the information revolution will require more personal contact, a spatial concentration of economic activity and the attractiveness of such areas influencing housing choice and costs. In an age of diversity both extremes of behaviour, and everything in the middle, are likely to be found. The urban structures created in response to emerging information technologies, be they concentrated or scattered, will still need to be economically, socially and environmentally sustainable and contain an appropriate range of affordable and accessible housing.

11. Future directions for social (public) housing and rent assistance

Current Australian public housing and rent assistance policies are largely the result of housing problems and social and economic structures that emerged after the end of the Second War. A number of commentators contend that these policy settings are no longer appropriate. National Shelter, for example, has pointed out¹⁶ that six of the nine State housing agencies have financially unsustainable operating deficits, Commonwealth capital funding for social housing fell 27.6% between 1996 and 2003,

Rebuilding the Australian Dream: A National Approach. National Shelter's Election Platform 2004. Paper to the National Summit on Housing Affordability, Canberra, 27-29 June 2004.

and the stock of social housing declined from 6.1% to 5.1% as a proportion of the total housing stock over those years. At the same time, fewer applicants are being accommodated in public housing, there are more homeless people and housing prices have increased dramatically. National Shelter believes the stock of social housing needs to grow by 400,000 dwellings or 3.5% a year over the next twenty years if it is to again reach the 6% mark.

As a consequence, the four non-government hosts of the National Summit on Housing Affordability¹⁷ called for a revitalisation of public housing, expansion of community housing, support for major increases in private investment in affordable housing, substantial improvements in assistance for low income renters, and stronger national leadership and cooperation in developing a national housing plan. Unfortunately, these changes need to be taken by governments with economically dry political ideologies and accepted by a community less tolerant of social and economic difference.

This research attempts to bring some of these disparate threads together to offer an insightful appreciation of the affordable housing opportunities and choices available to industry and government. For Landcom and the Department of Housing, two sponsors of this research, this assessment may influence how their brownfield and greenfield project development and asset renewal strategies can economically deliver high proportions of housing for moderate-income households. And, while many architects and designers are capable of designing affordable, flexible and adaptable housing, the work offers a basis for assessing the quality of client design briefs and a better understanding of how buyers and renters behave when making their housing choices.

Some Key Objectives. A 'Call for Action' prepared by the Housing Industry Association, Australian Council of Social Service, Australian Council of Trade Unions and the National Housing Alliance as an outcome of the National Summit on Housing Affordability, Canberra, 27-29 June, 2004.

2.0 AFFORDABLE AND SUSTAINABLE NEIGHBOURHOODS

2.1 Background

The widely different design philosophies of planning practice, and its academic literature, have held out a conflicting range of models that promise optimum solutions for Sydney's planning and housing challenges. All the models, from those promoting equitable, meaningful urban and regional planning to those demonstrating excessive faith in the free market but little appreciation of its limits, guarantee better social, environmental and built form outcomes. Two things characterise these models. Firstly, nearly all have been read as prototypes for a physical realm but few have regard for their social implications or have any grounding in behavioural studies or environmental psychology. Secondly, their proponents consider each to be the 'best' despite the fact contemporary society is largely driven by individual values and no single ideal fits everyone everywhere.

Despite the fact some models have proven to be less than successful, the concept of ensuring future development is sustainable has become a foundation objective of most planning strategies. Some call it 'smart growth'. Irrespective of titles, sustainable development, and the communities it is supposed to create, is an explicit social goal of contemporary Australian urban planning and now part of its lexicon.

Alternative definitions of sustainable development are plentiful so a consensus is not easily found. Nevertheless, it is important to be clear about what 'sustainable community' means in order to assess how approaches to creating or changing communities support sustainability. The most famous and common definitions of sustainable development are Brundtland's 18 ...development that meets the needs of the present without compromising the ability of future generations to meet their own needs..., and Caring for the Earth's 19 ...improving the quality of life within the carrying capacity of supporting ecosystems... These definitions are frequently quoted together. They illustrate that sustainable development needs to reconcile and integrate the environment and human welfare rather than trade one off against the other. In this respect, sustainable development is about constraining current behaviour for the sake of future goals. Ultimately, sustainable development and sustainability itself are all about collective values and their related choices.

These broad definitions are applicable to urban development where a sustainable community can be seen ...as a self-regulating and interconnected social, economic, and environmental system that meets its needs, and manages its impacts, internally or by fair reciprocal arrangements, and not by dumping its problems on other places.²⁰

A sustainable community, according to the UK government²¹, exhibits a number of key requirements. These are:

- A flourishing local economy to provide jobs and wealth,
- Strong leadership to respond positively to change,

World Commission on Environment and Development (1987), Our common future in Llewelyn-Davies, CAG Consultants and GHK Economics for Office of Deputy Prime Minister (1999) Millennium Villages and sustainable communities Consultation Paper.

¹⁹ Caring for the Earth (1991) in Llewelyn-Davies, CAG Consultants and GHK Economics (1999)

European Campaign for Sustainable Cities and Towns (1994) The Aalborg Declaration in Llewelyn-Davies, CAG Consultants and GHK Economics (1999).

²¹ Office of the Deputy Prime Minister (February 2003). Sustainable Communities: Building for the Future.

- Effective engagement and participation by local people, groups and businesses, especially in the planning, design and long term stewardship of their community, and an active voluntary and community sector,
- A safe and healthy local environment with well-designed public and green space,
- Sufficient size, scale and density, and the right layout to support basic amenities in the neighbourhood and minimise use of resources (including land),
- Good public transport and other transport infrastructure both within the community and linking it to urban, rural and regional centres,
- Buildings both individually and collectively that can meet different needs over time, and that minimise the use of resources,
- A well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes,
- Good quality local public services, including education and training opportunities, health care and community facilities, especially for leisure,
- A diverse, vibrant and creative local culture, encouraging pride in the community and cohesion within it.
- A 'sense of place', and
- The right links with the wider regional, national and international community.

New and existing neighbourhoods are now expected to offer some, if not all, of these components and realise their benefits. However, while there is probably a very broad but common understanding within the planning and design professions of what the words 'sustainable community' mean it is doubtful if anyone has come to grips with how to create a 'sustainable community' with a 'sense of place'. It is extremely doubtful if the words have any meaning to homebuyers.

Implicit in the listed components is the notion that achieving a sustainable community requires that a number of social goals be met. These might be summarised as being:

- Facilitating, through design and specific programs, the establishment of a 'community'
 with the varying levels of social interaction, social networks, emotional support and
 attachment to place people desire,
- Achieving, through physical planning, a spatial distribution of people and resources that is more socially equitable, and
- Balancing the benefits of individual freedoms with the 'common good' of social responsibility, civic engagement, health, education and safety.

A typical example of the outcomes expected from meeting these social goals is housing diversity. An underlying view is that ...a broad range of housing types and price levels can bring people of diverse ages, races and income levels into daily interaction, strengthening the personal and civic bonds essential to an authentic community...²² More pragmatic justifications for communities exhibiting this diversity include a better balanced demand for

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²² Congress of the New Urbanism. *Charter of the New Urbanism, Principle* 13

community services and facilities, opportunities for people to move through their housing career without leaving familiar social networks, community self-help and improved surveillance of streets and open spaces. Another recent consideration is the ability to affordably house 'key workers' within the communities they serve.

An expressed desire for housing diversity is evident in most NSW local government residential strategies. It represents an attempt to counter the perceived negatives of the social segregation and polarisation displayed in housing developments largely planned for, and purchased by, relatively affluent and homogenous market segments. Mixing housing types and prices within a neighbourhood is, however, difficult to translate into common practice without high-level commitment from developers, builders, and local authorities and their constituents. The improved knowledge of buyer and resident behaviour obtained through research does, however, make such commitments an easier 'sell'.

Housing is important to achieving sustainable development and contributing toward the creation of sustainable communities. It is a basic human need and its cost, condition and availability are essential to an individual's quality of life. Well-designed and maintained housing helps support a sense of community just as run-down housing will tend to erode it. In addition, the location and design of housing makes a contribution to the social dimensions of sustainable community that has spirit and identity. And the value of a balanced relationship between housing and health, as well as access to educational and employment opportunities, is generally understood.

Housing is vitally important but a sustainable community is more than just housing. Investing in housing alone, paying no attention to other needs, risks wasting money. A focus on the contribution housing makes to sustainable communities is, therefore, simplistic. Sustainable communities emerge from the synergistic relationships and connections between employment, entertainment, retail, education, public and private services, transport and residential facilities. In addition, many in the planning and design professions appear to misunderstand that successful communities grow out of the aspirations and behaviours of residents and their interaction with the outside world. The built form of houses, schools, shops and workplaces, and the streets on which they sit, is important. Built form is not, however, the ultimate determinant of social behaviour.

One writer, Emily Talen²³, has suggested, however, that physical design may affect social and political forms of organisation through the arrangement of public spaces. It may also affect social equity through the arrangement of public facilities and social encounters through the design of streets.

In this respect, any good physical planning model, and its realised dreams, must also understand and acknowledge its potential social effects. This objective can be linked to achievement of social goals such as the common good, social equity and the creation of communities. However, the degree to which these goals are promoted and explicitly incorporated as a layer in physical planning and implementation strategies needs to be understood by government, the development industry and the general public.

The major challenge is making a distinction between addressing social goals and solving social problems. Private development organisations can go some way in addressing a considered and widely accepted set of social goals — not to do so might be considered to be socially irresponsible. One social goal might be increasing the stock of affordable housing. How this might occur in the context of past and emerging Australian planning practices is the subject of this section.

²³ Talen, E. (2002). *Help for urban planning: The Transect strategy.* Journal of Urban Design, Vol. 7 No. 3.

2.2 Preferred urban forms: an introductory foray

Historically, one of the central goals of Australia urban policy has been to accommodate a growing population with aspirations to a high level of home ownership. Urban planning policy has also upheld the garden city ideal of ensuring residential areas have plentiful private and public open space. Because wage levels were relatively high and housing costs relatively low, the predominant urban form was characterised by detached houses on large lots and zoning systems that separated residential, retail, commercial and industrial. This became a measure of Australia's social progress and prosperity and, especially after the Second War, an explicit cultural goal²⁴.

The ready availability of land and a willingness of governments to fund transport and other infrastructure made metropolitan expansion possible. According to Healy and Birrell, the nation-building climate of the early federation period also provided a platform for a planning movement set in the local context. This movement, aware of the problems connected with unplanned, market-driven urban development, promoted town planning as a basis for social reform. The garden city ideal was integral to the promotion of a healthy and uncrowded balance of town and country life. As a result, open space and opportunities for contact with nature became important goals.

Most research suggests that the now-familiar suburban model remains the preferred urban form for the majority of Australians. Other data indicates that people are prepared to compromise. For example, a 1992 study²⁵ of 550 Sydney households found that 75% of the respondents aged 26-30 years preferred detached housing. Though 31% of all respondents were committed to detached housing, another 35% preferred detached housing but would consider multiple dwelling housing if other key factors, such as cost, design quality and location were acceptable.

Healy and Birrell use recent New Zealand research²⁶ to support their view that market acceptance of medium-density housing should not be taken as evidence of a shift in community preferences for higher residential densities. Morrison and McMurray conducted research to describe and account for the growing acceptance of city apartment living in Wellington, New Zealand. They compared a sample of recent buyers of inner city apartments with a sample of buyers of detached dwellings in the suburbs. The findings indicated that location was a primary factor in purchase decisions and that a majority of apartment buyers were already living close to the city. The two were linked by a common search for easy inner city access with trade-offs between the competing preferences of dwelling type and preferred location resulting in a new market demand. Morrison and McMurray believe that this demand does not demonstrate the buyer's first preference and conclude that:

The conversion of office blocks to apartments appears to have allowed a growing, pent-up demand among many Wellingtonians for location to be realised, rather than denoting the beginning of any reversal of the long-established preference for the single family unit per se. Single detached dwellings are simply unavailable within the CBD.

Healy and Birrell quote from an early 1990s study²⁷ to reinforce their view that demand for higher density dwellings and dwelling preferences should be differentiated when assessing

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Healy, E. and Birrell, B. (February 2004). *Housing and community in the compact city*. Australian Housing and Urban Research Institute, Swinburne-Monash Research centre

Australian Housing and Urban Research Institute (November 1997). Reshaping cities for a more sustainable future: Exploring the link between urban form, air quality, energy and greenhouse gas emissions, Research Monograph No. 6 in Healy and Birrell (2004).

Morrison and McMurray, *The inner city apartment versus the suburb: Housing sub-markets in a New Zealand city.* Urban Studies, Vol. 36 No. 2, 1999 in Healy and Birrell (2004)

Meligrana, J. Exercising the condominium tenure option: a case study of the Canadian housing market. Environment and Planning, Vol. 25, 1993 in Healy and Birrell (2004)

changes in market demand. Meligrana's Canadian research compared condominium owner-occupiers who moved from rental with those who moved from homeownership and concluded that transition through the condominium sector allowed economically constrained young tenant households to acquire dwelling equity before buying a detached dwelling. Both studies offer little evidence that a preference for low-density living dominates the housing market. They do, however, verify the passage of individuals and households through a housing career in which conscious trade-offs between lifestyle goals, economic capacity, location preference and different dwelling typologies are made. What they fail to examine is the underlying, and critically important, psychological dimension of why households make these trade-offs in their purchase decisions.

Perhaps the other side of the fence is the criticism of low-density suburban development — urban sprawl. The story is worth a brief review for its ultimate impact on housing affordability.

2.3 A growing focus on the consequences of urban sprawl

Disapproval of low-density suburban development surfaced during the 1960s and gained impetus in the late 1980s and early 1990s when the federal Labour government became directly involved in urban policy. Healy and Birrell, by exploring these criticisms, provide a basis for understanding Sydney's urban consolidation policies.

Unfavourable assessments of post war suburbanisation emerged when the water, energy and transport departments engaged in facilitating urban expansion were found to lack coordination and effective planning. In the early 1970s, for example, Prime Minister Whitlam²⁸ echoed a ten-year debate in the US by criticising urban sprawl as a product of unchecked speculation by private developers. He associated the development industry with ...poor planning of community services in outer suburbs... and ...the decay and desolation of inner-city life.... The problems of poorly regulated sprawl, he argued, included poor roads and transport, too few recreation facilities, scattered civic amenities, neurosis, delinquency and vandalism. Whitlam stated:

Government programs for housing renewals swim against the tide of private urban development. In the private housing market the greatest profits are made on the urban fringe. Inner-city areas are neglected.

Only governments, he contended, could reverse the trend of business involvement where the ...biggest and quickest profits [could] be made... The Whitlam government brought urban planning into the federal political sphere and research²⁹ supported its contention that urban planning smoothed the extraction of land development profits.

Healy and Birrell contend that Labour politician Don Dunstan³⁰ was an influential example in relating the supposed dissatisfactions of city life with a failure to identify with the natural environment. In his view, Australian urban architecture went from an environmentally inappropriate imitation of colonial English building styles to a conventional and inhospitable low-density suburbia that unnaturally separated residential, commercial and other activities and did not contribute to a sense of community. Dunstan is quoted as saying:

...the problem with a continued urban sprawl [whereby] people on the lower levels of income are forced far out to the edge of cities living in isolated places like the newer outer suburbs, with no local amenities...you don't have those people effectively living in

Whitlam, E.G (1985). The Whitlam Government 1972-1975. Viking, Melbourne in Healy and Birrell (2004).

Sandercock, L. (1975). Cities for sale: Property, politics and urban planning in Australia. Heinemann, London in Healy and Birrell (2004).

Dunstan, D. (1981). Australia: A personal view. Kangaroo Press, Sydney in Healy and Birrell (2004).

a community... In consequence you can face a real breakdown at every level of human existence...

The showpiece of the federal Labour government's involvement in urban policy was the Better Cities Program. Begun in 1991, its first phase was completed in 1997 after a second phase was approved in the 1995 federal budget. The Liberal-National Party Coalition has administered the program's demise.

The Better Cities Program targeted a diverse range of issues, including infrastructure renewal and efficiency, environmental works and ecological sustainability, improvements in transportation, higher-density and affordable housing and the development of new technology. Healy and Birrell believe the program represented an attempt to balance traditional Labour social justice and environmental management policies with dry economic objectives such as reducing government expenditure on housing and urban infrastructure. Further, it reflected the left-wing conviction that social justice issues, including locational disadvantage, could be integrated with market reform objectives. In this view, a consolidated city would be more just and more economically efficient.

Brian Howe³¹ reflected the hope that Labour's social justice concerns could be harmonised with small government objectives in the push for increased urban densities, saying that:

Some critics of the program saw it as being fundamentally about urban consolidation. I saw it as being much more about demonstrating the value of effective planning in the achievement of objectives to do with both economic efficiency and also superior social and environmental outcomes.

Healy and Birrell note that the link between low-density suburban fringe development and social disadvantage had not been verified when Howe embarked upon the Better Cities Program. Some commentators, they write, claimed that suburban sprawl and poorly serviced fringe locations was a key factor in the spatial patterning of disadvantage. Evidence of locational disadvantage on the suburban fringe would provide a social justice rationale to cut the cost to government of urban expansion and maximise the use of existing infrastructure.

Work carried out in 1994 by Maher at Monash University³², however, interpreted metropolitan fringe areas quite differently. He argued that the socially disadvantaged were not being channelled to urban fringe locations and that people made a considered trade-off between the inconvenience of distance and their perceived benefits of remoteness such as abundant open space and lack of congestion. Maher said that:

The coincidence of locational disadvantage and social disadvantage has been assumed rather than demonstrated, seemingly in an attempt to bolster arguments about the need to alter the predominant form of urban growth – outward extension of low density suburbia.

While social and locational disadvantage might have been common until the 1980s, the older, first home buyer urban fringe has been replaced by a new fringe catering almost exclusively for middle and higher income households with mature families dominating the social mix. The result, as Bill Randolph has argued³³, is an increasing social polarisation between the middle and outer suburbs.

Maher, C. (1994). Residential mobility, locational disadvantage and spatial equality in Australian cities. Urban Policy and Research, Vol. 12 No. 3 in Healy and Birrell (2004).

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Howe, B. (2001). Reflecting on better cities. Australian Planner, Vol. 38 No. 1 in Healy and Birrell (2004).

Randolph, B. and Holloway, D. (November 2002). Social polarisation in Sydney. Urban Frontiers Program, University of Western Sydney. Paper to the NSW Shelter Social mix in our cities seminar, 12 November 2002.

What might be called, to some, elitist derision of the suburbs and sprawl has been taken up in the mainstream³⁴ press:

Veer off the freeway and drive around the maze of new mansions crammed with McMansions ... and, at first, all of this raw, oversized housing feels overwhelming and bizarre. Streetscapes are virtual walls of neat, look-alike, fridge-magnet, big hair houses dominated by wow factors: big garage doors, big front doors with vaulted entries, feature porticos and columns, big windows with stick-on yellow fake window pane strips, stick on shutters, stick on chimneys, glassy towers, gazebos and gable ornamentation galore.

While the 'custodians of cultural taste' continue to have their say, a substantial amount of academic research has been undertaken into the sociological and ecological impacts of sprawl. There is little doubt sprawl has had, and could continue to have, a serious environmental impact if allowed to continue, particularly in the sensitive areas of the Sydney Region. But, as Randolph has argued, the character of the city's suburban fringe is increasingly socially and economically differentiated. The 54% of first homebuyers who purchased in urban fringe estates up until the late 1970s³⁵ had fallen to around 16% by 1999 with the new estates being designed, almost exclusively, for economically able and upwardly mobile groups. These households have outbid lower income and first homebuyers and displaced them to Gosford, Wyong, Shellharbour and middle ring Sydney suburbs.

Planned developments on the fringe are marked by below average number of low-income, single parent and unemployed households simply because they are unaffordable. Strong labour participation rates, particularly amongst females, political conservatism, and a degree of intolerance towards the ethnically and culturally diverse suburbs in which many of today's fringe buyers were raised, are other features. Meanwhile, the ageing middle ring suburbs created in the first wave of low-density suburban expansion are the centres of social and economic disadvantage³⁶. The economically and socially sustainable community ideal sought by government and planners has not been realised.

Yet, as Brendan Gleeson³⁷ has observed, Australian governments have elevated the significance of 'community' as a high order policy in response to concerns with the dysfunctional outcomes of social and economic polarisation. He quotes surveys that reveal that community, belonging, order, balance, stability and place have become social keywords and believes these have emerged from a desire for a secure place in trusting and respectful social networks. These desires are manifest in the movement by financial able households to master planned estates. 'Community' has become a key item in the marketing material of new developments but Gleeson asks:

Viewed from space, such estates seem like happy little ants' nests, but on closer inspection, do we find evidence of a healthy collective purpose and lasting social ties? Do such 'communities' nurture the social sensibilities that are crucial to their successful positioning in a diverse, multicultural democracy?

Research in the Camden LGA master planned estates of Harrington Park and Garden Gates by Gabrielle Gwyther³⁸ highlights the issues to be overcome in planning for diversity.

Hawley, J. (2003). Be it ever so humungous. The Age Good Weekend, 23 August 2003.

Cornish, R. and Kelly, M (2001). Fact, fiction and first home buyers. Macquarie Bank Property Outlook.

Randolph, B. (February 2004). Renewing the middle city: Planning for stressed suburbs. Issues Paper No. 15, Urban Frontiers Program, University of Western Sydney.

³⁷ Gleeson, B. (2004). *Deprogramming Planning: Collaboration and Inclusion in New Development.* Paper at the Delfin Debate, Brisbane, 14 May 2004.

³⁸ Gwyther, G. (2003). *Paradise planned: Socio-economic differentiation and the master planned community on Sydney's urban fringe*. Paper to the State of Australian Cities Conference, 3-5 December 2003.

Gwyther found that residents of the two estates were motivated to move by perceived threats associated with public housing estates (crime, incivility and effects on property values), the perceived undermining of a 'common way of life' by new migrant settlement patterns, and the 'economic failure' of Sydney's middle ring western suburbs. Harrington Park and Garden Gates offered wealth creation strategy, the security promised by a 'good neighbourhood' and the expectation of certainty and trust produced by a socially compatible, like-minded resident population. These perceptions were summed up by one of Gwyther's informants when talking about the area from which he had moved:

...it's changing, changing like a lot of the suburbs with the influx of different people. In some ways certain areas are being degraded, losing their character, due to the type of people who are taking over the place. ...you're getting different walks of life, different people from different countries, buying up shops and selling their wares. I think it's probably degrading — oh not degrading, changing, making the place look bad...

Implicit in this comment is the challenge to developing affordable housing in new estates, be they urban or suburban. Less expensive and more dense housing is likely to be seen as having 'different' people without the same social values: people who will not respect restrictive covenants, maintain gardens, supervise children's activities and or behave in ways believed to diminish efforts to create a 'community'. This is a very real issue for government and the developers who might choose, or be told by government, to spread their market risk by master planning for housing diversity and affordability.

If, as Gleeson³⁹ states, the urban community ...dissolves into a balkanised landscape of inward looking communities, urban leaders will find it very difficult to manage the cities that are reconstituted by such changes. Heightened communal insularity and fiscal opting out at the local scale are likely to make the task of sound urban management very difficult. He argues that a commitment to the provision and protection of a high quality public realm is the key to creating a balanced community. He also says that there must be efforts ...to achieve socio-cultural balance — meaning a socially representative diversity — in new urban developments and...in areas...residualised by change. This requires collaborative leadership that draws its resources from everyone involved in the development process, including prospective residents.

The question is whether the planning approaches and built form outcomes promoted by the advocates of Smart Growth or New Urbanism will achieve the desired result: community.

2.4 Smart Growth and affordable housing

The previous section briefly reviewed how the policies and approaches of public agencies and private industry influence the growth of cities and their suburbs. Counter-sprawl perspectives that gained a following in the US, the UK and Europe during the 1990s have influenced these policies in more recent times. A brief examination further illuminates the assumptions behind urban consolidation policy, particularly the presumed social equity benefits of higher urban densities and, consequently, improvements in housing affordability.

To date, traditional development patterns, characterised by a separation of uses, limited transportation options, and suburban expansion, have failed to adequately secure affordable housing, particularly for households earning up to 120% of median incomes. As a consequence, the current development market, with its multitude of overlapping local, state and private sector agendas, is not meeting Australia's current housing needs nor will it meet those now emerging. This is, in social and economic terms, market failure. Major symptoms of this failure include:

Gleeson, B. (2004). *Deprogramming Planning: Collaboration and Inclusion in New Development.* Paper at the Delfin Debate, Brisbane, 14 May 2004.

- Housing shortages faced by low income households and rapidly increasing shortages
 of dwellings for households on moderate incomes leading, as discussed in Section 2,
 to more households in stress.
- Income-based social polarisation between the more affluent inner urban and urban fringe areas and the older middle ring suburbs that, according to Randolph, has lead to unequal access to services and economic opportunities,
- Disinvestment in the lower income middle ring suburbs, leading to falling home values and loss of equity, fewer economic opportunities, and reduced investments in public infrastructure and private capital stock,
- The unintended consequences of urban consolidation and urban revitalisation approaches that have seen rapidly escalating housing costs and the displacement of lower income renters and older owners,
- A seemingly poor appreciation by local government and the development industry that
 the growth in couple without children, single-parent and lone person households, ethnic
 groups, and an aging population will significantly change the housing market, and
- Business and political behaviours and practices that make it unprofitable, or undesirable, for developers to serve the lower income markets and local governments to limit increases in their stock of affordable housing.

In the US, promoters of solutions to these problems have come together under the banner of Smart Growth. An unambiguous motivation for many has been to reassure people concerned with the environmental impacts of development that continued economic growth can be reconciled with the achievement of sound social and environmental outcomes. US advocates claim that, if managed properly, Smart Growth better serves the economy, the community, and the environment by adopting policies and practices that, as a package, provide better housing, transportation, economic, and environmental outcomes than do traditional development approaches.

A number of common characteristics of Smart Growth are seen in the literature⁴⁰ including:

- Development is economically viable and preserves open space and natural resources,
- Land use planning is comprehensive, integrated, and regional,
- Public, private, and non-profit sectors collaborate on growth and development issues to achieve mutually beneficial outcomes,
- Certainty and predictability are integral to the development process.
- Infrastructure is maintained and enhanced to serve existing and new residents,
- Redevelopment of infill housing, brownfield sites, and obsolete buildings is pursued,
- Urban centres and neighbourhoods are essential for a healthy regional economy,
- Compact suburban development is integrated into existing commercial areas, new centres and near existing or planned transportation facilities, and
- Development on the urban fringe integrates a mix of land uses, preserves open space, is fiscally responsible, and provides transportation options.

The measures sponsored under the Smart Growth banner include mixed land uses, urban growth boundaries, reuse of existing infrastructure and land, improved jobs and housing, compact commercial districts, denser suburban subdivisions, infill housing, more efficient mass transport, and neighbourhoods with well-defined centres and edges.

⁴⁰ Urban Land Institute (1999). Smart Growth: Myth and fact.

Because the benefits of Smart Growth are now commonly understood in the US, many initiatives are now labelled as such even when they address only a single issue such as open space, transportation, or affordability. These initiatives, however, can only contribute if linked to a community's broader goals. They do not, by themselves, represent a comprehensive smart growth approach and their narrow focus sometimes leads to conflicts about the perceived benefits and the costs incurred by a failure to consider broader issues during the development process. Specific conflicts have emerged around single issue initiatives and their negative impact on housing affordability, leading to claims that smart growth and affordability are inherently in inflict. Affordable housing, however, is an explicit goal of smart growth and policies that reduce housing affordability are not considered smart.

The Washington based Smart Growth Network maintains⁴¹ that the effect of development patterns and practices on the quantity and quality of affordable housing, is a critical part of the solution. They say that communities and states can use Smart Growth to:

- Increase the supply of affordable housing by reducing restrictions against low-cost housing such as townhouses, live/work spaces, accessory dwelling units and the like,
- Provide more scattered affordable units and promote mixed-income neighbourhoods,
- Reinvest in existing neighbourhoods to improve the tax base and the availability of jobs and amenities,
- Implement policies and revitalization practices that benefit existing residents and prevent their displacement,
- Reduce household transportation costs and increase transportation choices, and
- Create incentives for regional cooperation on affordable housing.

The Network argues that there are areas of common interest between advocates for Smart Growth and affordable housing. Smart Growth, they claim, stimulates innovation, innovation that is needed if communities are to overcome the mounting challenges posed by development pressures and housing needs.

Danielsen, Lang and Fulton⁴² believe that more research on the links between Smart Growth and housing is needed. They nevertheless support the contention that housing can be used to promote successful Smart Growth policies while recognising that unintended consequences can emerge when growth management policies limit land supply without permitting higher densities and reducing regulatory barriers. These consequences, many of which are evident to greater or lesser degrees in the Sydney housing market, include:

- A speculative market for land capable of development,
- The loss of affordable housing,
- Constraints on economic growth,
- An increase in 'local' congestion,
- A new form of segregation emerging when those less financially able are priced out of high-density areas, and
- Exclusionary planning regulations that effectively limit infill development.

⁴¹ Arigoni, D. (2001). *Affordable housing and smart growth: Making the connection*. Smart Growth Network and National Neighborhood Coalition, Washington.

Danielsen, K.A., Lang, R.E. and Fulton, W. (1999). *Retracting suburbia: Smart growth and the future of housing.* Housing Policy debate, Vol. 10, Issue 3. Fannie Mae Foundation.

Not unlike Sydney, increasing the stock of affordable higher density housing in most US cities is a Smart Growth goal. Escalating land costs and growth boundaries reduces lot sizes and contribute to rising prices. Regulatory barriers that restrict higher density infill development and lot consolidations remain in place. And regulations remain a significant challenge to making the production of higher density housing easier, irrespective of its form. A perception still exists among practitioners and policymakers that affordable housing and Smart Growth are contradictory rather than complementary. Studies⁴³ have sought to demonstrate that managing and directing growth has a detrimental effect on land prices and the availability of affordable housing. The most persistent criticism is that these policies limit the amount of land for development, drives up prices, displaces existing residents through revitalisation, interferes with the ability of the market to provide affordable housing, limits choice and forces all development to be high density. According to Arigoni, some of these criticisms are based on actual situations but are often the result of an isolated application of anti-growth management rather than a comprehensive Smart Growth strategy.

Interest in Smart Growth continues to grow in the US development community. Groups such as the National Association of Home Builders have switched positions and now, at least on the surface, support Smart Growth. According to Danielsen, Lang and Fulton ...the NAHB smart growth statement hardly embraces the type of growth management that most in the movement think is needed, the fact that the organization has offered a vaguely positive position on smart—growth is testament to how important the movement has become.

According to the ULI⁴⁴, the success of new Smart Growth communities has been supported by demographic trends and is causing market demand to shift in fundamental ways. It says that by delivering a vision of well-designed compact communities, mixed uses, and access to open space and transit, Smart Growth can shape a new market profile. This view, as noted previously, is supported by the research work of Volk and Zimmerman.

It is also supported by local research. For example, it has been found that potential buyers seeking more rural surroundings can choose homes on small lots adjacent to open space rather than large lots in the depths of a conventional subdivision. Empty nesters sometimes opt for a townhouse located in walking distance of a neighbourhood centre and first homebuyers choose small lot houses near bus stops or open spaces.

One of the keys to successful Smart Growth is the inclusion of higher density housing in new and existing neighbourhoods. Unfortunately, in too many local government areas higher density and mixed use development is difficult to construct because their regulations favour low-density development with segregated uses and there is community opposition. Smart Growth advocates say that well-designed higher-density development, properly integrated into an existing community, can become a significant community asset that adds to the quality of life and property values for existing residents while addressing the needs of a growing and changing population. They argue that regulators and the community, influenced by past failures, have false impressions about higher density development and the people who choose to live in such housing.

The ULI has addressed the myths and facts in a recent publication⁴⁵. The most relevant are briefly outlined below and are worth considering when developing affordable housing policies that depend on higher density housing in new and existing neighbourhoods.

⁴³ Arigoni, D. (2001). *Affordable housing and smart growth: Making the connection.* Smart Growth Network and National Neighborhood Coalition, Washington.

Corrigan, M.B. et al (2004). Ten Principles for Smart Growth on the Urban Fringe. ULI- the Urban Land Institute, Washington DC.

Haughey, R.M. (2005). *Higher-Density Development: Myth and Fact.* ULI – the Urban Land Institute, Washington DC.

- Myth: Higher-density development overburdens public schools and other public services and requires more infrastructure support systems. Fact: The nature of who lives in higher density housing — fewer families with children — puts less demand on schools and other public services than low-density housing. Moreover, the compact nature of higher-density development requires less extensive support infrastructure.
- Myth: Higher-density developments lower property values in surrounding areas. Fact:
 No discernible difference exists in the appreciation rate of properties located near
 higher density development and those that are not. Some research even shows that
 higher density development can increase property values.
- Myth: Higher-density development creates more regional traffic congestion and parking problems than low-density development. Fact: Higher density development generates less traffic than low-density development per unit because it makes walking and public transit more feasible and creates opportunities for snared parking.
- Myth: Higher-density development leads to higher crime rates. Fact: The crime rates in higher density developments are not significantly different from those in lower density developments.
- Myth: Higher density development is unattractive and does not tit in a low-density community. Fact: Attractive, well-designed, and well-maintained higher density development attracts good residents and tenants and fits into existing communities.
- Myth: No one in suburban areas wants higher density development. Fact: The
 population is changing and becoming more diverse. Many of these households now
 prefer higher density housing, even in suburban locations.
- Myth: Higher density housing is only for lower income households. Fact: People of all income groups choose higher density housing.

Unfortunately, all these logical arguments have been used in Sydney's urban consolidation debate and community opinion remains unchanged. The improved quality of residential flat buildings mandated by SEPP 65 may assist in reducing opposition. Fundamentally, however, the perception that people who live in higher density housing are 'different' has to change.

The rise of the Smart Growth movement has been matched by a great diversity of supporters, including politicians, homebuilders, and environmentalists. The challenge for policy makers in NSW is how to involve the broad community in developing a shared vision for the future. This requires a properly funded, carefully considered and comprehensive communication programs. It also requires that the vision's integrity be sustained over time and through political changes. If it has community understanding and support, continuity can be achieved. And, to encourage the right kind of development, the community and developers must clearly understand the standards, and good projects must be rapidly approved. Consistency and discipline in public policy is also necessary.

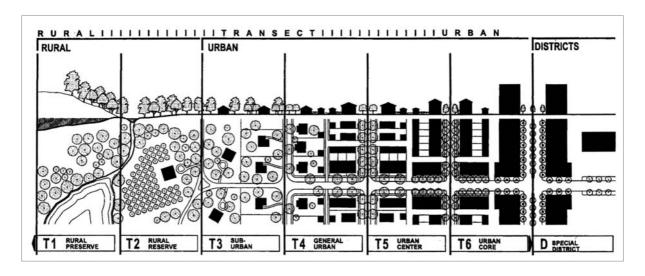
2.5 New Urbanism and housing choice

In the US, the movement now known as New Urbanism began to come together in the 1970s and 1980s. It built on currents in urban design that aimed to emulate and modernize historic urban patterns and emerged as an important alternative to prevailing patterns of low density, car dependent land development. New Urbanism shares a lot of common ground with the Smart Growth perspective although critics claim reformist social ideals are embedded in its rhetoric. While its ideas and ideals are strongly supported by many within the planning professions, there is still scepticism and even hostility to its aims.

New Urbanism synthesizes a range of urban design and spatial patterns that closely fit other important planning goals such as growth management, environmental protection and urban revitalization. Many of its advocates are inspired by earlier forms of urban development where walkable neighbourhoods facilitated the social and economic well being of residents. A revitalisation of community, they argue, is achieved by creating small-scale and space conserving districts that emphasise the integration of public and private space, frequent face-to-face encounters, and a high level of local economic self-reliance with sensitivity to environmental constraints. Such communities aim to be socially diverse, catering for a range of housing needs according to differences of income, age, and family type.

Contemporary New Urbanist planning approaches are increasingly being structured around Andres Duany's concept of the Transect. It is not a new idea, having being used as a conceptual and ordering tool by notable planners such as Geddes and McHarg.

The Transect⁴⁶ is formally described as an ordering system that seeks to arrange complementary elements of urbanism in ways that preserve the integrity of different types of urban and rural environments. These environments or sectors are viewed as variations on a continuum along which human environments vary in their level of built form impact and intensity. This approach has two broad goals: first, to link urban elements to natural ecologies in a conceptually integrated system and, second, to create environments with an integrity of place within that system. Each Transect sector is seen as providing an environment where the component elements are mutually reinforcing and contribute to a specific character. Several sectors within a neighbourhood are seen as having the potential to attract social diversity rather than social and physical homogeneity.



The Transect, as conceived, offers a three dimensional planning and design framework that achieves the integrated residential environments practitioners and regulators now seek to achieve. Proponents believe the Transect has intuitive appeal and resolves many of the conflicts inherent in western planning. The Transect also offers an opportunity for the physical form of streets, buildings and landscape to better respond to the distinctly different residential experiences and product typologies sought by today's households.

Built environment market research generally indicates that the quality and kind of social relationships within a neighbourhood contribute to resident satisfaction. In this respect, physical elements are valued less for their innate qualities than for their social implications. For example, places are valued by different people because they are quiet or lively, restful or exciting, provide opportunities for participation or privacy, or have the 'same sort' or a rich

⁴⁶ Duany Plater Zyberk & Co (2001). Smart Code

diversity of people. But the difference between such places should not be abrupt as people's experiential and social needs differ over time. Not everyone wants 'and/or' choices. And the deliberate planning of 'pods' or enclaves for particular social and economic groups, or indeed different land uses, is not conducive to the creation of sustainable communities.

The Transect and its concept of a continuum fit well with the social goal of providing different social environments within a cohesive but diverse neighbourhood whole. In this respect and across a Transect, part of each sector can be planned to provide a different social environment, the experience of which can be heightened, or made explicit, by different physical settings and housing types.

The Transect model, as conceived by Duany and others, is intended to allow housing diversity and choice within an ordered built environment. It also provides a framework within which the great diversity of household needs and lifestyles now evident in the market can be identified and profitably met by the development industry.

The New Urban goal of creating enduring, pedestrian, small-scale communities with a diversity of housing strongly influenced urban policy and planning practice in Australia during the 1990s. It has found expression in the term 'urban village', a concept characterised by higher residential densities and strengthened community oriented attitudes. Urban village policies sometimes incorporate a social reform program along with the sustainable development or sustainable community model.

Healy and Birrell quote a Victorian government report⁴⁷ that says the aim of urban villages is to provide a range of dwelling types and a cross-section of people, a high level of pedestrian amenity and surveillance and neighbourliness, a mix of land uses and a harmonious but diverse architecture, a variety of residential, commercial and community uses with 24/7 activities, and a range of dwelling sizes and types. The Victorian report argues that areas retaining their economic values had urban village features and maintained a 'sense of place.' Critics challenge the precepts of New Urbanism by asking: If the spatial patterns it advocates are so good, then why didn't they triumph long ago in the marketplace? They say that developers are smart and would presumably responded to demand by offering this model because real estate markets are sensitive to consumer choice. Further, because traditional patterns are not found in the urban landscape created over the past 60 years, New Urbanism is not what buyers and renters want.

While coming from a US perspective, Ellis⁴⁸ makes a case that this superficially persuasive argument obscures a more complicated story. He uses a number of credible sources to put the view that low density car dependent urban form has been heavily subsidized by government, aggressively promoted by industry and government as the highest rung on the ladder of life, and endorsed as the only contemporary planning solution by professional land planners, transportation planners and developers. In contrast, he says, mixed-use, higher density new urban development patterns have been illegal by many local authorities. Ellis further claims that not all Americans prefer the suburban sprawl model. He quotes a 1995 survey of American homebuyers⁴⁹ where two-thirds of respondents were found to be critical of the suburbs, although only 21% were clearly in favour of New Urban alternatives.

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Energy Victoria, Environment Protection Authority, Department of Infrastructure, and Energy Research and Development Corporation, *Urban Villages Project: Encouraging sustainable urban form.* Summary Report, Melbourne, 1996.

Ellis, C. (2002). *The New urbanism: Critiques and rebuttals.* Journal of Urban Design, Vol. 7 No. 3. Carfax Publishing.

Bookout, L. (1997) *Building communities in America's suburbs* in *ULI on the Future: Creating more liveable metropolitan areas*, Urban Land Institute, Washington in Ellis (2002).

Another 48% liked the basic new urban concept, but had reservations about the higher densities. He says even a critic recently found that 30% of the participants in a Florida survey were favourably inclined to trade off living on a smaller lot for an easy walking proximity to amenities such as open space and parks, shopping, employment and community centres.

These findings have been substantiated in studies undertaken by US researcher Brooke Warrick⁵⁰ who has said that conventional market analysis has seriously underestimated the demand for New Urban projects. Ellis declares that the demand for the New Urban option in the US is somewhere between 25% and 40% of the market. This demand is not being met by conventional suburban development and supply continues to be constrained by obstructive zoning codes, 'not-in-my-backyard' opposition, developers' unfamiliarity with new urban designs, and the conservatism of financial institutions.

A quote from a paper by market analysts Volk and Zimmerman⁵¹ sums up this situation:

We learned that builders who depend on the evidence of the past — and particularly the recent past when housing providers have become ruthlessly efficient and severely limit the range of housing options — are doomed to repeat it. They cling to the admittedly elegant current delivery mechanism in which each isolated real estate asset is perfectly matched with highly specific target markets. From zoning to the secondary mortgage market, and at every step in between, each asset type is unambiguous and well understood. The disadvantage, of course, is that once put in place, these assets have very little ability to adapt to changing economic or market conditions; they are essentially frozen in place until the economics of a new use are so powerful that the cost of simply scraping the site and starting over is justified.

Conventional builders are simply baffled by the ambiguity of a neighborhood with a wide mix of housing types and sizes that would appeal to a broad cross section of American households.

The ambiguity stems from the difficulty of definition: What makes a neighborhood New Urbanist? It also stems from the difficulty of finding a pure example: Built New Urbanist developments rarely incorporate all of the principles of the New Urbanism.

Another criticism of New Urbanism concerns its apparent superficiality of execution. One critic⁵², for example, argues that New Urbanism has merely become another way of selling houses — a shallow repackaging of existing suburban forms. As such, he labels the New Urbanism a grand fraud and challenges its apparent architectural determinism, arguing that historically specific economic and social forces that cannot be replicated by copying the architecture of earlier periods shape cities. Far from overcoming the class-segregated character of U.S. suburban life, he claims that New Urban developments have tended to be exclusive, sometimes gated and often low density.

Similar scepticism about the ability of New Urban models to deliver mixed neighbourhoods with affordable housing is emerging in Australia. For instance, it has been argued that a significant gap exists between the expectations for, and outcomes of, the East Perth urban village project. This was instigated in 1992 under the Better Cities Program and, when 75% complete in 2001, was promoted⁵³ as a ...world class 21st century urban village, providing for a ...diverse range of people with ...mixed residential developments and affordable housing.

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Warrick, B. pers comm. (1996).

Volk, L. and Zimmerman, T. (2001). In praise ... or at least acceptance ... of ambiguity. Housing Policy Debate, Vol. 12, Issue 4. Fannie Mae Foundation, Washington.

Mashall, A. (2001). Suburb in disguise in Healy and Birrell (2004).

Morgan, T. (November 2001). East Perth has become a classy urban village of the 21st century. Australian Property Journal in Healy and Birrell (2004).

By 2003, however, the project was being criticised⁵⁴ as having largely failed to meet its social equity objectives, particularly in the provision of affordable housing.

For example, one third of the housing was intended to be in public ownership but the completed project only created 56 social housing units or less than 4% of the total. Crawford concluded that the provision of a significant proportion of affordable housing would limit private investment. Academic and compact city advocate, Jeff Kenworthy⁵⁵ states that, while East Perth is a good example of a mixed use, compact suburb ...that can break away from the city's traditional dependence upon the car, it is ...priced well beyond most people. Adherents to, and critics of, New Urbanism are not only found in the US. In the UK, the desire for greater urbanity — or New Urbanism — is exemplified by the Urban Task Force report⁵⁶ Towards an Urban Renaissance and a new generation of planning guidelines⁵⁷ relating to the design quality of new residential environments.

Steven Tiesdell⁵⁸ makes the point that New Urbanism ...has generally been seen as a US phenomenon with a relatively minor impact and profile in other countries (with the notable exceptions of Canada and Australia — both countries with a deep tradition of US-style suburban sprawl). To identify points of convergence, his paper reviews the principles, aspirations and intended outcomes rather than the place and culturally specific implementation process. Tiesdell starts by reviewing the perceived failings of post-war residential environments. These are as equally applicable to Australian commentaries on recent planning and development practice as they are to the US and UK. The developments:

- Show little respect for, or are unresponsive to, the 'urban' and 'landscape' context,
- Fail to establish a 'sense of place' or create a 'sense of 'placelessness' through standardization and visual monotony,
- Lack the qualities of 'urbanity' such as coherent and legible urban environments,
- Fail to facilitate or engender a 'sense of identity' or a 'sense of community',
- Result in physical isolation and fail to facilitate neighbour interaction,
- Fail to create well-connected and permeable environments that provide for pedestrians and those without cars.
- Contain only residential lands uses and require a car to access other facilities,
- Fail to offer variety and choice in terms of house types and prices, resulting in social and visual monotony and homogeneity, and
- Fail to create mixed and socially diverse neighbourhoods, resulting in social polarization and social segregation.

Crawford, E. (2003). *Equity and the city: The case of the East Perth redevelopment*. Urban Policy and Research, Vol. 21, No. 1 in Healy and Birrell (2004).

Kenworthy, J. The West Australian, 24 September 2003 in Healy and Birrell (2004).

Urban Task Force (1999). Towards an Urban Renaissance. HMSO, London.

For example: Department of the Environment, Transport and the Regions (DETR) (1998). *Places, Streets and Movement*. DETR, (2000). *Planning Policy Guidance Note 3: Housing* and Department of Transport, Local Government and the Regions (DLTR) and the Commission for Architecture and the Built Environment (CABE) (2001). *By Design: Better Places to Live*.

Tiesdell, S. (2002). *The New urbanism and English residential design guidance: A review.* Journal of Urban Design, Vol. 7, No. 3. Carfax Publishing.

The latter two points are the most relevant to this discussion. The 13th principle of the *Charter* of the New Urbanism⁵⁹ states that ...within neighbourhoods, a broad range of housing types and price levels can bring people of diverse ages, races, and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community. This is social goal that attempts to reverse the trend towards social segregation and polarization by providing a diversity of tenure opportunities, lot sizes, housing types and prices within a neighbourhood. It has been central to New Urban thought and aspiration but is recognised as difficult to translate into practice.

The new English guides also encourage mixed communities. Planning Policy Guidance Note 3, for example, articulates the importance of creating mixed and inclusive communities, offering a choice of housing and lifestyle, and as a way to counter social exclusion. In particular, it asserts that the government ...does not accept that different types of housing and tenures make bad neighbours. Rather than the US New Urban aspiration of creating 'authentic communities' (whatever that means), the justifications are more practical. Better Places to Live, for example, sets out a range of potential benefits from developing mixed communities. These include a better balance of demand for community services and facilities, opportunities for 'lifetime' communities', more robust neighbourhoods, enabling community self-help, and assisting community surveillance.

Tiesdell concludes by asserting that the intended product outcomes of residential design guides in the UK are not dissimilar to the intended product of the CNU Charter. The same might be said of the principles underlying some new residential estates being planned by thoughtful developers and their consultants in Australia and urban design visions for regenerating established neighbourhoods. Like the US and the UK, however, the dream in Australia is often more powerful that reality.

There is, therefore, link between the physical planning approaches of New Urbanism and three social goals: community, social equity and the common good. Emily Talen⁶⁰ analysed these in a recent article on the social goals of New Urbanism. It is worth recounting her analysis because the provision of affordable housing raises issues of community, social equity and the common good. Australian developers and planners claiming to follow the New Urban agenda rarely consider or explicitly recognise these broader social responsibilities.

Policies that ensure affordable and diverse housing is included in new or existing neighbourhoods have a social as well as physical impact. Having an unambiguous context for these policies is therefore important. Talen states that: Almost every physical design proposal faces the dilemma of having to find the right balance between what design can and cannot achieve in social terms. Clearly a physical planning model must balance accusations of social engineering against ignorance of the impact physical design can have.

Talen defines 'community' as having social interaction and emotional response components. The social interaction component consists of social networks and emotional support generated by strong relationships as well as casual social ties. The emotional component includes need fulfilment, and shared emotional connections. She notes a contradiction between building 'community' through planning and community building efforts that promote social homogeneity and exclusion. She recognises ... that attachment to place, locally based resident interaction, and sense of community are generally positive social goals, whether or not they can be linked to specific design proposals.

'Social equity' is seen as having many different meanings including the equality of community involvement and the spatial distribution of people and resources. The latter is a common

Talen, E. (2002). The Social Goals of New Urbanism. Housing Policy Debate, Volume 13, Issue 1. Fannie Mae Foundation, Washington DC.

⁵⁹ Congress for the New Urbanism (2000). Charter of the New Urbanism. McGraw-Hill, New York.

argument for the inclusion of housing affordable to lower income households in new developments. Talen quotes a study that compared higher density and lower density cities in terms of their ability to improve public transport and access to facilities, reduce social segregation, and increase the supply of affordable housing. It concluded that higher urban densities might be positive for some aspects of social equity and negative for others.

The most familiar use of the term 'common good' promotes a view that actions should benefit all individuals, not just a privileged few. It is not a new idea and has come to be associated with social responsibility, civic engagement, and the protection of public goods like health, safety, and the environment. According to its proponents, a focus on protecting individual rights rather than the common good lessens the accountability of individual actions. Emphasizing the common good requires that private rights should sometimes give way to common concerns. The policy challenge is to identify who defines the 'common good' in a society where individual freedom and property rights are held in high regard.

Proponents of New Urbanism claim that walkable neighbourhoods, local parks, street front verandahs and housing diversity 'disguised' within a common architectural theme promote the casual social ties important to the creation of 'community'. Talen notes that research has indicated a relationship between design and a sense of community but believes many other variables, beyond the designer's control, have an impact. Nonetheless, a carefully considered relationship between the public realm and dwellings appears to assist in breaking down social boundaries between socio-economic groups living in the same neighbourhood who consider each other to be 'different'.

The fact most housing affordable to low and moderate income households is located far from their places of employment is a significant social equity issue. Simply put, equitable access to public services and employment is not available. In this respect, the New Urban principles of compact neighbourhoods, housing diversity and access to public transport are important contributors to meeting the social equity goal. In the New Urban design ideal, mixing a range of housing sizes, typologies and prices within the same neighbourhood is a basic principle. In Australia, however, this principle appears to be ignored as many developers consider this to be a commercial and marketing risk. Research evidence, such as that undertaken by Gwyther, could be used to reinforce this perception. Anecdotal evidence, however, indicates that clear communication of the forms of housing to be provided in a new estate, and the advantages to the future residents and their families, can overcome uninformed fears.

New Urbanism also promotes the concept of place based neighbourhood identity. Talen considers this to be related to the 'common good' social goal as it assists in creating a sense of sharing and belonging. As Gleeson has argued, the design of the public realm, particularly well designed and located public parks and clear spatial boundaries, is critical in achieving this goal. Sharing and belonging are reinforced by a strong sense of neighbourhood identity and are now both high on the design agendas of Australian planners and regulators. Ensuring an affordable diversity of housing is available and contributes to a sense of place appears, however, to be a test few really conquer.

2.6 Urban consolidation, affordable housing and Sydney

Household growth pressures are recognised as being particularly acute in Sydney with the main constraint being severe supply side problems driven by a shortage of available land for suburban expansion. As a result, the State government has had little choice but to implement urban consolidation policies and increase medium density residential development. According to the NSW Department of Planning⁶¹:

NSW Department of Planning (1998). Shaping our Cities: Planning strategy for the Greater Metropolitan Region of Sydney, Newcastle, Wollongong and the Central Coast in Healy and Birrell (2004).

To accommodate new homes, the choice between low density or more compact cities is clear. Rapidly expanding outer suburban areas will have dire environmental, social and financial consequences. Containing expansion is more sustainable and coincides with people's needs for a greater variety of housing and better access to jobs and services.

Though the government did not have much choice other than to pursue urban consolidation as an explicit policy, some commentators believe the positive outcomes originally envisaged have not materialised. These included sufficient and affordable housing, greater choice of housing types to better match people's needs, better environmental outcomes, greater equity through the provision of safe and pleasant places to live, better access between jobs and homes and better access to public transport.

The focus on urban consolidation in Australia during the 1990s reflected similar overseas urban policy approaches such as Smart Growth and New Urbanism. Both in Australia and overseas, however, some critics of urban densification emphasised the lack of empirical evidence in support of the policy shift.

Healy and Birrell quote Patrick Troy's argument⁶² that compact city policies have been adopted in Australia largely ... without translation or interpretation... and cite claims that the social and cultural benefits of urban densification may have been used as a device to legitimise the attempts of governments to reduce escalating costs of urban infrastructure. As a result, many of the problems that have been highlighted in debates over the smart growth and new urban perspectives in the UK and US appear to have been incorporated into Australian urban policy initiatives during the 1990s without being resolved. According to Healy and Birrell, these doubts go beyond academic critics or the Save Our Suburbs organisations to include concern at the local government and grass roots community level. While the predominantly Labour State governments pushed ahead with urban consolidation policies after the demise of the Federal Labour Government and the influence of Brian Howe:

There has been growing criticism across Australia, both within the policy and academic community, that consolidation policy is not achieving its aims ... and that it can be too readily appropriated as a panacea for urban problems⁶³.

Healy and Birrell claim that the Australian and overseas experience of compact city and urban consolidation policies raises questions about the credibility of the claimed social equity benefits, particularly their potential to increase affordable housing and create socially mixed neighbourhoods. While such policies stress the need for affordable housing, many do not address how increased densities, socially mixed neighbourhoods and an adequate provision of affordable housing can be reconciled with the tendency towards greater spatial inequality in Australia's cities.

US experience provides some insight into the difficulties of reconciling these goals. Danielson, Lang and Fulton⁶⁴ conclude that although there appears to be an interest in alternative suburban design principles this is overshadowed by the political and market reality of socio-economic ranking between neighbourhoods. They say that:

When people buy a house, they also buy a place. Consumers currently associate low-density housing with a bundle of desirable community characteristics such as good schools, low crime, and moderate taxes... Thus large-lot zoning requirements are the

Bunker, R. et all (2002). *The local impacts of urban consolidation in Sydney*. Urban Policy and Research, Vol. 20 No.2 in Healy and Birrell (2004).

⁶² Troy, P. (1992). *The new feudalism.* Urban Futures Journal, Vol. 2, No. 2 in Healy and Birrell (2004).

Danielsen, K.A., Lang, R.E. and Fulton, W. (1999). Retracting suburbia: Smart growth and the future of housing. Housing Policy debate, Vol. 10, Issue 3. Fannie Mae Foundation.

result not only of market preferences but also of local political pressure to maintain an area's exclusivity. Altering lot sizes therefore requires a change in the political climate even if it conforms to market reality.

Emily Talen⁶⁵ raises a related issue. She argues that the New Urban goal for a neighbourhood-orientated lifestyle appears to be odds with the preference for the geographically unconstrained interactions enjoyed by the more affluent sections of society. She suggests that people with the widest range of economic choice are less attached to their neighbourhoods than the less affluent.

The link between location and socio-economic status in Australian cities is similarly sensitive. For some residents, affordable housing is seen as introducing 'different' and 'undesirable' people into existing neighbourhoods and the potential for increased crime. Opposition to these perceived negative changes is invariably be articulated by claims that affordable housing creates undesirable increases in housing density and traffic, reduces property values and is inconsistent with the local character.

The core reasons for opposition are not complex because most communities have seen the outcomes of State and local government urban consolidation policies in NSW and have expressed considerable discomfort with the consequent physical and social changes. SREP 12 Dual Occupancy, SEPP 5, Housing for Older People and People with a Disability, SEPP 32, Urban Consolidation (Redevelopment of Urban Land) and the dual occupancy provisions of SEPP 53, Metropolitan Residential Development are examples. As a result, many people are sceptical that policies to increase the availability of affordable housing will positively benefit their communities.

The proposition that high urban densities, combined with urban design that promotes a 'sense of community', will create socially mixed and more universally affordable neighbourhoods is therefore likely to be a significant challenge in Sydney. As has been seen in Kuringai, for example, people who live in affluent suburbs are better able to resist (at least for a time) the impact of urban consolidation programs. As a result, and after the development potential of redundant industrial land is depleted, some of the highest planned increases in density are likely to occur in lower to middle socio-economic areas. If this happens urban consolidation may exacerbate the processes of spatial inequality and community unrest.

A broad recognition and acceptance of these issues by the community would make it much easier for political leaders, at all levels of government, to introduce and promote measures to improve housing affordability. It would also make it a lot easier to create the public and private sector partnerships required to seriously and urgently address the challenge of housing affordability.⁶⁶

Glen Searle⁶⁷ has said that the continuation of urban consolidation in Australian cities has appeared almost unlimited because only a fraction of older inner city properties have been redeveloped. Higher density development around suburban rail stations, urban village style, is infrequent and there are still large areas of modest low-density suburban housing in older suburbs with redevelopment potential.

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⁶⁵ Talen, E. (1999). Sense of community and neighbourhood form: An assessment of the social doctrine of New *Urbanism.* Urban Studies, Vol. 36, No. 8.

Joint Industry Housing Group (2003). Submission to the Productivity Commission Inquiry on First Home Ownership.

Searle, G. (July 2003). The limits to urban consolidation. Issues Paper 14, Urban Frontiers Program, University of Western Sydney.

Despite this apparently optimistic outlook, Searle suggests that there are ...significant limits on the extent to which urban consolidation can solve the range of urban growth problems now expected of it by strategic planners. He proposes that urban consolidation requires market support and, while assisted by a demand for inner city apartment living over the last ten years, cites Bernard Salt's view⁶⁸ that market demand will fall over the next ten years and cannot be taken for granted over the long term. It is a pity, however, that the only development models he reviews are medium rise at 500 dwellings per net hectare densities. Others, lower and higher, will be more appropriate answers for the local conditions he believes should be acknowledged.

There are also potential supply side limits in the capacity of local communities to absorb dramatic changes to their built environment and social fabric. Searle recommends that planners measure and factor in these parameters at a detailed spatial level when assessing urban consolidation potential. He rightly says that not doing so risks a failure to achieve the efficient and affordable redevelopment that underpins the vision for urban consolidation.

2.7 The Metropolitan Strategy and affordable housing

Smart Growth and New Urbanism both have their followers in Australia and the principles they promote are becoming more evident in the rhetoric, if not the reality, of government policy. The most recent of these is the Metropolitan Strategy⁶⁹ being developed by the NSW Department of Planning, Infrastructure and Natural Resources.

The May 2004 Ministerial Directions Paper provides a snapshot of Sydney that recognises its important place in the global economy and attractiveness as a place to 'do business'. The changing demographics of the region's households, and its population growth, are acknowledged as is housing affordability. In regard to the latter, it is interesting to note that in ...2001, 169,000 households in Sydney were experiencing financial stress, paying more than 30 percent of household income to meet their housing costs. This unqualified figure is substantially less than the 203,000 households in housing stress identified in the ABS data obtained for this research.

Fortunately, however, the Ministerial Directions Paper does make slightly more than passing reference to housing affordability. Simply increasing housing supply on the urban fringe is not accepted as a means to improve housing affordability or diversity. And, in light of Talen's analysis of the social goals in new planning approaches, conventional greenfield development is not seen as providing improved access to employment and services. The Directions Paper claims that the NSW Government has introduced policies to address changing and emerging housing needs but, if the outcomes of the 1998 Ministerial Task Force on Affordable Housing is a guide, real action has yet to be seen.

Nonetheless, the Directions Paper proposes that ensuring a suitable supply of affordable rental and owner occupied housing is available for low to moderate-income households is a challenge to be addressed. It then puts forward a number of areas for discussion relevant to Sydney's housing affordability challenge and asks:

- What is the best way of ensuring that centres and corridors with redevelopment capacity can provide housing supply to match emerging needs over time?
- Is the cost of building houses made higher than necessary through excessive local standards?

⁶⁸ Salt, B. (2001). The big shift: Welcome to the third Australian culture. Hardie Grant Books, South Yarra.

The Hon. Craig Knowles, Minister for Planning, Infrastructure and Natural Resources (May 2004). Metropolitan Strategy. Ministerial Directions Paper.

- Should SEPP 70 Affordable Housing (Revised Schemes) be extended to provide Local Government with the flexibility to increase the supply of affordable housing?
- What role could private sector shared equity schemes play in supporting moderateincome housing?
- Is there a need for affordable rental accommodation and homes for purchase for key workers such as nurses, police and train and bus drivers who deliver essential services to the community? If so, how can the community meet this need?
- How can planning and physical renewal strategies best complement and contribute to place management programs to revitalise socially and economically challenged communities?
- Would a housing lands SEPP that fast tracked the redevelopment of run-down public housing estates, facilitate enhanced renewal or regeneration?
- How can urban renewal and regeneration projects improve local employment?

In a speech to the Sydney Futures Forum⁷⁰ coinciding with release of the Ministerial Directions Paper the Chair of the Metropolitan Reference Panel, Professor Ed Blakely, succinctly set out the challenge say that:

Finally, we are going to have to do something about our housing mix and diversity. We have to provide more and different kinds of housing organisations and arrangements. We will have to look for affordability and, what I am going to say is, attainability in housing using new vehicles that we have not explored very much here, such as the non-profit housing corporations that do this in the United States, or cooperative housing. We have to look at these new tools and new mechanisms, and I ask you today to think of those that will work here.

In September 2004, after two Forums and public discussions, a Discussion Paper⁷¹ on the Metropolitan Strategy was released. Housing was noted as one of the key issues facing a city that should balance environmental, economic and social outcomes: a sustainable city.

Directions for managing the inevitability of change included building liveable new communities and renewing old ones with a greater variety of housing for rent or purchase. A priority area, at least for the new communities, was ensuring they meet strict criteria to achieve a mix of housing types and choice. No further detail was provided on how these criteria were to be established or administered. It is probably fair to assume that the peak development and building bodies would argue strongly against mechanisms such as inclusionary zonings or affordable housing levies to achieve as yet unstated affordable housing goals.

The NSW Government subsequently announced the release of land on Sydney's north and south-western fringes for urban development. In one of its Fact Sheets⁷² ...a wide range of housing choices to provide for different needs and incomes... was, along with a number of measures to provide equitable access to employment, services and transport, promised.

NSW Department of Infrastructure, Planning and Natural Resources (September 2004). *Metropolitan Strategy, Discussion Paper. Sydney Greater Metropolitan Region.*

Blakely, E. (18 May 2004). Keynote Address to the Sydney Futures Forum. Downloaded from www.metrostrategy.nsw.gov.au.

NSW Department of Infrastructure, Planning and Natural Resources (9 December 2004). Fact Sheet 1. A New Approach to Land Release. Downloaded from www.metrostrategy.nsw.gov.au.

Accompanying this announcement was an assessment⁷³ of the release areas against a set of sustainability criteria that had been undertaken by the NSW Sustainability Commissioner, Professor Peter Newman. Housing Diversity was the fourth of Newman's criteria and the release area plans were considered to represent 'best practice' ...though inevitably less than in older areas of the city.

While detailed planning and definition of the promised housing diversity is yet to occur, Newman's qualification is important. It implies that the planner's horizons do not encompass the housing diversity where most live — the older areas of the city. Instead, it appears they are more influenced by the status quo of industry practice than offering a new vision. Further, while Newman acknowledges that ...far more housing types are planned into the new areas than in normal subdivisions his assessment notes that: Although predominantly a second home buyer market a range of housing prices will be available through the range in housing types. A subsidised or regulated affordable housing program could still be added at later stages. Newman also states that: Sites for aged housing will be guaranteed by the SEPP standards and universal design will be encouraged though not yet required.

It is suggested these could be a very brave assumptions. Without more solid evidence, it is unlikely the State and local governments will have the political courage to mandate that a range of prices is available, affordable housing programs are put in place or adaptable housing built. Perhaps the vision is in place — partly — but the political and economic details need to be resolved if Sydney's affordable housing stock is to be substantially increased.

The next Section reviews some of the international literature to explore affordable housing policies and programs that might be considered by government, industry and the community.

2.8 Summary

- The widely different design philosophies of planning practice, and its academic literature, have held out a conflicting range of models that promise optimum solutions for Sydney's planning and housing challenges.
- Two things characterise these models. Firstly, nearly all have been read as prototypes
 for a physical realm but few have regard for their social implications or have any
 grounding in behavioural studies or environmental psychology. Secondly, their
 proponents consider each to be the 'best' despite the fact contemporary society is
 largely driven by individual values and no single ideal fits everyone everywhere.
- Despite the fact some models have proven to be less than successful, the concept of
 ensuring future development is sustainable has become a foundation objective of most
 planning strategies. Some call it 'smart growth'. Irrespective of titles, sustainable
 development, and the communities it is supposed to create, is an explicit social goal of
 contemporary Australian urban planning and now part of its lexicon.
- A sustainable community, according to the UK government, exhibits a number of key requirements. These are:
 - A flourishing local economy to provide jobs and wealth,
 - Strong leadership to respond positively to change,
 - Effective engagement and participation by an active community sector,
 - A safe and healthy local environment with well-designed public and green space,
 - Sufficient size, scale and density to support basic amenities,

Newman, P. (11 November 2004). *New Release Areas and Sustainability Criteria*. Downloaded from www.metrostrategy.nsw.gov.au.

- Good public transport and other transport infrastructure,
- Buildings that can meet different needs over time,
- A mix of housing types and tenures to support a range of household profiles,
- Good quality local public services,
- A diverse, vibrant and creative local culture,
- A 'sense of place', and
- The right links with the wider regional, national and international community.
- A typical example of the outcomes expected from meeting these social goals is
 housing diversity, an expressed desire of most local government residential strategies.
 Mixing housing types and prices within a neighbourhood is, however, difficult to
 translate into common practice without high-level commitment from developers,
 builders, and local authorities and their constituents.
- Brendan Gleeson has observed that Australian governments have elevated the significance of 'community' as a high order policy in response to concerns with the dysfunctional outcomes of social and economic polarisation. 'Community' has become a key item in the marketing material of new developments.
- Gabrielle Gwyther found that residents of two estates in Sydney's south west were motivated to move by perceived threats associated with public housing estates. the perceived undermining of a 'common way of life' by new migrant settlement patterns, and the 'economic failure' of Sydney's middle ring western suburbs. The estates offered a wealth creation strategy, the security promised by a 'good neighbourhood' and the expectation of certainty and trust produced by a socially compatible, likeminded resident population.
- Implicit in Gwyther's findings is the challenge of developing affordable housing in new estates because less expensive and more dense housing is likely to be seen as having 'different' people without the same social values.
- Gleeson says that there must be efforts to achieve a socially representative diversity in new urban developments and in areas residualised by change. This requires collaborative leadership that draws its resources from everyone involved in the development process, including prospective residents.
- The rise of the Smart Growth and New Urbanism movements in the US has been matched by a great diversity of supporters, including politicians, homebuilders, and environmentalists.
- One of the keys to successful Smart Growth and New Urban projects is the inclusion of higher density housing in new and existing neighbourhoods. Unfortunately, in too many local government areas higher density and mixed use development is difficult to construct because their regulations favour low-density development with segregated uses and there is community opposition. Advocates say that well-designed higher-density development, properly integrated into an existing community, can become a community asset that adds to the quality of life and property values while addressing the needs of a growing and changing population. They argue that regulators and the community, influenced by past failures, have false impressions about higher density development and the people who choose to live in such housing.
- Contemporary New Urbanist planning approaches are increasingly being structured around Andres Duany's concept of the Transect. This is an ordering system that arranges complementary elements of urbanism in ways that preserve the integrity of different types of urban and rural environments. It offers a three dimensional planning

and design framework that achieves the integrated residential environments practitioners and regulators now seek to achieve. Its concept of a continuum fits well with the social goal of providing different social environments within a cohesive but diverse neighbourhood whole.

- Smart Growth and New Urbanism both have their followers in Australia and the
 principles they promote are becoming more evident in the rhetoric, if not the reality, of
 government policy. The most recent of these is the Metropolitan Strategy being
 developed by the NSW Department of Planning, Infrastructure and Natural Resources.
- Directions for managing the inevitability of change included building liveable new communities and renewing old ones with a greater variety of housing for rent or purchase. A priority area, at least for the new communities, was ensuring they meet strict criteria to achieve a mix of housing types and choice. No further detail was provided on how these criteria were to be established or administered. It is probably fair to assume that the peak development and building bodies would argue strongly against mechanisms such as inclusionary zonings or affordable housing levies to achieve as yet unstated affordable housing goals.
- It is unlikely the State and local governments will have the political courage to mandate that a range of prices is available, affordable housing programs are put in place or adaptable housing built. Perhaps the vision is in place partly but the political and economic details need to be resolved if Sydney's affordable housing stock is to be substantially increased.

3.0 HOUSEHOLDS AND HOUSING AFFORDABILITY

3.1 Defining 'housing affordability'

What is now the most widespread and accepted description of the affordability challenge is found in the Issues Papers of the National Housing Strategy⁷⁴ program carried out in the early 1990s. The Housing Strategy papers identified the ratio of housing costs to income as being the most commonly used affordability measure in housing research. This resulted in the concept of 'housing stress' and a definition stating that:

Income units (households) are said to be in housing stress of they pay more than 30 percent of income on housing and are in the lowest 40 percent of the income distribution range.

Even this definition was considered by the National Housing Strategy to be far too narrow. It believed that such an affordability measure could not account for the fact housing expenditures purchase a location embedded in a neighbourhood and community characterised by the level of infrastructure and services. Furthermore, the definition does not reveal qualitative information about the nature of the housing or the extent to which the housing arrangements are satisfactory to those in residence.

While accepting the definition, the 1998 NSW Ministerial Task Force⁷⁵ recognised its limitations. Its analysis used the 30% benchmark but considered it to be conservative and with the potential to understate estimates of the affordability problem. A definition of affordable housing thus needs to acknowledge three basic attributes of housing, namely:

- Housing should be regarded as both shelter and a common good without which an acceptable standard of life is not possible,
- The concept of acceptable housing includes additional attributes such as access to childcare and other services, community facilities and employment, and
- Housing prices reflect the community's varying demand for these services and the industry's ability to supply them at a wide range of competitive prices.

In this regard, affordable housing should:

Be of an appropriate size for the household it accommodates,

- Offer the choice of rent or purchase for the same product, and
- Be located so travel costs, especially on public transport, enable easy access to social networks and community amenities and do not make working uneconomic.

In addition, the measures to define what is, and what is not, affordable housing suffer from a number of problems⁷⁶. These include:

The National Housing Strategy (1991). The affordability of Australian housing. Issues Paper 2. Commonwealth of Australia, Canberra.

Affordable Housing in New South Wales. The Need for Action. (May 1998). The report of a Ministerial Task Force on Affordable Housing. The Hon Craig Knowles, Minister for Urban Affairs and Planning and Minister for Housing.

Cardew, R., Parnell, A. and Randolph, B. (May 2000). Sydney Housing Affordability Review. Final report for the Joint Industry Housing Group and Landcom. University of New South Wales and University of Western Sydney.

- The choice of income measure,
- The type of household being measured (affordability may differ for households on the same income with children and those without),
- Whether the measure is only applied to households actively looking for housing or includes existing occupants paying more than 30% for their occupancy, and
- Whether the household is renting or buying.

All these approaches involve value judgements concerning the acceptable threshold below which housing is considered to be unaffordable. In addition, they take no account of the appropriateness of the dwelling. Appropriate housing includes housing of a suitable size, design, quality for the occupying household as well as its accessibility to amenities, family and friends, transport and employment. Unfortunately, the detailed sub-group data and analysis that would provide a more precise definition and better understanding of affordability is not available.

In the context of this research, it also important to understand that affordable housing is not social housing. Affordability depends on individual circumstances. This confusion creates some major problems because many in the industry and the wider community regard meeting the needs of those in housing stress as a complex and intractable problem ... 'a government problem'. Affordable housing is no longer a 'government problem' but self-imposed fiscal pressure on federal, state and local government budgets means their willingness to be the housing supplier to the 'have nots' is severely constrained.

3.2 Influences on housing affordability

In their background paper for a National Summit on Housing Affordability in 2004, Powall and Withers⁷⁷ state: At its most basic level housing affordability refers to the price of houses. They acknowledge that measuring housing affordability on the basis of house prices alone is inadequate as the availability of finance and household incomes are major determinants. Prices are an outcome of housing supply and demand while incomes and the cost and availability of finance affect demand and determine if a dwelling is affordable to a household. The discussion points below are taken from the Resource Paper as a useful background to the supply and demand influences on housing affordability.

Demand for housing comes from the size and structure of the population available to purchase or rent, its willingness to pay in terms of its housing preferences relative to other spending and investments, its capacity to pay directly from income, employment conditions and through borrowing, and any government incentives that alter that situation. The key direct government policies here are:

- income and capital gains tax provisions including rates and conditions
- finance and investment regulation
- home purchase grants and rent assistance
- stamp duty imposts.

Powall and Withers contend that housing demand has been stimulated and sustained by a long period of population expansion, economic growth and rising incomes. This, together with financial deregulation, low inflation and interest rates and innovative lending products, increased consumer confidence. However, while overall economic trends have been advantageous, selling prices and rents have risen to the point where housing has become

Powall, M. and Withers, G. (June 2004). Resource Paper. National Summit on Housing Affordability.

less affordable to many people. Lower income households are the most affected, particularly the increasing number in part time and contract employment who lack the security of income needed to meet their rent or mortgage commitments. They note that high land and development costs and low investment returns hamper the private sector's ability to increase the stock of housing for purchase or rent. The implication, and the National Housing Research Consortium's conclusion, is that government support is required if a substantial difference is to be made. In this respect, Powall and Withers, and others, argue that high-income households have been the major beneficiaries of government policy on income and capital gains tax concessions, homeowner grants and rent assistance.

Supply of housing depends upon the availability and price of land, associated infrastructure and the availability of established housing for sale or rent and the costs of construction for new housing. It also depends upon any government regulatory or fiscal activities that alter that situation. The key direct government policies here are:

- land release and planning approval processes
- infrastructure development charges
- building regulations and controls
- industry competition and training policies
- public housing provision.

Powall and Withers maintain that the home building industry's productivity is regarded as best practice, and that building cost increases have generally been in line with general price movements. Land shortages, together with infrastructure levies, fees, authority charges and taxes on new residential development, are therefore put forward as the major influence on the supply side of the housing affordability problem. Figures provided by the Housing Industry Association are used as an example. These indicate that indirect taxes account for \$124,000 of the cost of a house and land package in NSW. A further \$25,000 is added by social infrastructure levies with an additional \$15,000 transport levy now being applied.

3.3 The 1998 NSW Ministerial Task Force

Using the 30% cost benchmark for both purchasers and renters, the 1998 NSW Ministerial Task Force estimated that in 1994 nearly 250,000 lower income households in NSW were in housing stress. The Task Force estimated that in Sydney almost 75% of lower income renters and 50% of lower income purchasers were paying more than 30% of their household or individual income for housing.

The Task Force used the term lower income households in reference to households with an income less than or equal to the median household income for NSW. In other words, households with an income in the lower half of all households. The term 'very low-income households' refers to households with an income in the lowest quarter of all household incomes. In 1994, the base year⁷⁸ for data used by the Task Force, the median NSW income used to define lower income households was \$34,000 a year while the cut off for very low income households was an income \$16,000 a year. The median and lowest quartile household income figures for Sydney were \$40,000 and \$18,000 a year respectively.

The following tables, reproduced from Appendix A of the Task Force report, show the number and distribution of NSW and Sydney households with housing costs above the 30% benchmark in 1994. The Task Force also analysed the impact of housing cost benchmarks of 25% and 35% of gross household income and this data is reproduced as well. Unfortunately, the Task Force analysis focused on owners, purchasers and renters and no work appears to have been done to disaggregate the data by household type.

The Ministerial Task Force assessments of households paying above the 30% benchmark were based on actual household mortgage and rental costs obtained from the ABS 1994 Australian Housing Survey.

The Task Force assumed that owners and public and community housing residents have housing costs below the 30% benchmark. This is not to say, however, that owners, particularly older ones in ageing housing, may not have maintenance and other costs that consume more than 30% of what may be a low, pension based household income.

Very low income households with costs above 30% benchmark, 1994⁷⁹

		Sydney		Rest of NSW			
	Total households	Households above 30% cost benchmark		Total households			
Tenure	No.	No.	%	No.	No.	%	
Owner	176,770		0%	158,400		0%	
Purchaser	19,800	11,330	57%	15,180	13,640	90%	
Private renter	37,840	35,750	94%	41,580	37,510	90%	
Public/community	47,125		0%	29,750		0%	
Other	6,050	3,520	58%	3,630		0%	
Total	287,585	50,600	18%	248,540	51,150	21%	

Lower income households with costs above 30% benchmark, 1994

		Sydney		Rest of NSW			
	Total households		lds above benchmark	Total Households ab households 30% cost bench			
Tenure	No.	No. %		No.	No. %		
Owner	294,030		0%	275,000		0%	
Purchaser	67,870	32,340	48%	63,360	38,500	61%	
Private renter	129,580	96,030	74%	112,090	69,630	61%	
Public/community	75,485		0%	47,240		0%	
Other	12,760	5,170	41%	8,030		0%	
Total	579,725	133,540	23%	505,720	108,130	21%	

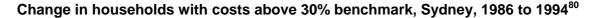
Very low & lower income households with costs above 30% benchmark, 1994

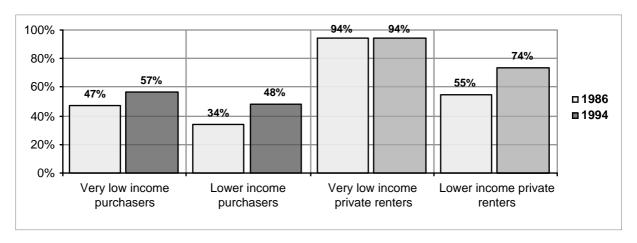
		Sydney		Rest of NSW			
	Total households		lds above benchmark	Total households	Households above 30% cost benchmark		
Tenure	No.	No. %		No.	No.	%	
Owner	470,800		0%	433,400		0%	
Purchaser	87,670	43,670	50%	78,540	52,140	66%	
Private renter	167,430	131,780	79%	153,670	107,140	70%	
Public/community	122,610		0%	76,990		0%	
Other	18,810	8,690	46%	11,660		0%	
Total	867,310	184,140 21%		754,260	159,280	21%	

Data provided in the Task Force report also enables a comparison to be made for the changing levels of housing stress between 1986 and 1994.

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Affordable Housing in New South Wales. The Need for Action. (May 1998). Report for the Hon. Craig Knowles, Minister for Urban Affairs and Planning and Minister for Housing of a Ministerial Task Force.





As noted, the Task Force also assessed the impact of housing cost benchmarks of 25% and 35% of gross household income rather than the 30% benchmark used in the tables above. These are shown in the tables below.

Very low income households with costs above 25%, 30% and 35% benchmarks, 1994

	Sydney			Rest of NSW			
		holds with ho the cost bend	•	% of households with housing costs above the cost benchmark			
Benchmark/Tenure	25%	30%	35%	25%	30%	35%	
Owner	0%	0%	0%	0%	0%	0%	
Purchaser	57%	57%	57%	90%	90%	81%	
Private renter	94%	94%	94%	92%	90%	84%	
Public/community	0%	0%	0%	0%	0%	0%	
Other	64% 58% 56%			0%	0%	0%	
Total	18% 18% 18%			22%	21%	19%	

Lower income households with costs above 25%, 30% and 35% benchmarks, 1994

		Sydney		Rest of NSW % of households with housing costs above the cost benchmark			
		olds with hou he cost benc					
Benchmark/Tenure	25%	30%	35%	25%	30%	35%	
Owner	0%	0%	0%	0%	0%	0%	
Purchaser	57%	48%	38%	71%	61%	51%	
Private renter	87%	74%	56%	78%	61%	49%	
Public/community	0%	0%	0%	0%	0%	0%	
Other	54%	54% 41% 40%			0%	0%	
Total	27% 23% 18%			26%	21%	17%	

These figures clearly show why one organisational outcome of the Task Force, the Centre for Affordable Housing, has focused most of its efforts on the rental sector. Landcom, on the other hand, has sought to find affordable solutions for potential homeowners. However,

Affordable Housing in New South Wales. The Need for Action. (May 1998). Report for the Hon. Craig Knowles, Minister for Urban Affairs and Planning and Minister for Housing of a Ministerial Task Force.

recognising the market realities of Sydney housing costs and its core land development business, it has focused on moderate-income households.

In addition to the analyses of mortgage and rent costs, the Task Force also analysed other housing costs such as repairs, maintenance and council rates. The results for 1994 are reproduced in the tables below.

Very low income households with rent and mortgage and other housing costs above 30% benchmark, 1994⁸¹

	Sydney				Rest of NSW			
	above the cost benchmark Rent & With other			% of households with housing costs above the cost benchmark				
Tenure				Rent & mortgage costs only	With other housing costs	Estimated number		
Owner Purchaser Private renter Public/community Other	0% 57% 94% 0% 58%	17% 65% 94% 0% 58%	30,050 12,870 35,570 3,520	0% 90% 90% 0% 0%	13% 95% 90% 0% 0%	20,590 14,420 37,510		
Total	18%	28%	82,010	21%	29%	72,520		

Lower income households with rent and mortgage and other housing costs above 30% benchmark, 1994

		Sydney		Rest of NSW			
	% of households with housing costs above the cost benchmark			% of households with housing costs above the cost benchmark			
Tenure	Rent & mortgage costs only	With other housing costs	Estimated number	Rent & mortgage costs only	With other housing costs	Estimated number	
Owner	0%	12%	35,835	0%	9%	24,750	
Purchaser	48%	65%	44,115	61%	73%	46,250	
Private renter	74%	74%	96,030	61%	62%	69,495	
Public/community	0%	0%		0%	0%		
Other	41%	41%	5,170	0%	0%		
Total	23% 31% 181,150			21% 28% 140,495			

These figures show that when other housing costs are added, the number and proportion of very low and lower income Sydney households in 1994 with rent or mortgage and other housing costs above the 30% benchmark increased from 184,810 (21%) to 263,160 (30%) of all households. For the whole of NSW in 1994, the number and proportion increased from 343,420 households (21%) to 476,145 very low and lower income households (29%) with total housing costs above the 30% benchmark.

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Affordable Housing in New South Wales. The Need for Action. (May 1998). Report for the Hon. Craig Knowles, Minister for Urban Affairs and Planning and Minister for Housing of a Ministerial Task Force.

The estimated number of households paying rent or mortgage and other housing costs over the 30% benchmark in both tables has been derived by multiplying the number of households in Sydney and NSW (Task Force figures shown in the first tables of this sub-section) by the % noted in 'With other housing costs'.

When all housing costs are included, housing affordability becomes an issue for owners, particularly those more likely to be on pension based incomes. Anecdotal and survey evidence routinely supports the view that older people prefer to age in place. As a result, moving from an ageing home requiring maintenance is a serious challenge for many of these people. Few wish to move from established social networks or what was a family home. And SEPP 5, Housing for Older People, does not provide a viable option as only a few development industry specialists have seen it as a major opportunity, land assembly is difficult and resident opposition inevitably needs to be overcome.

The Ministerial Task Force also examined, by mortgage and rent payments, the distribution of affordable housing in Sydney and NSW in 1997. The result of this work, as it applies to Sydney, is reproduced in the tables below and serves as a base for later assessments of the situation in 2001.

Areas of Sydney where mortgage payments⁸³ for quartile and median priced dwellings are below 30%, 35% and 40% cost benchmarks, 1997⁸⁴

	Areas* where quartile payments are below benchmark for quartile household income			Areas where median payments are below benchmark for median household income			
	Below	Below	Below	Below	Below	Below	
	30%	35%	40%	30%	35%	40%	
City and East North Inner West South South West West Total Sydney Region	None	None	None	None	None	None	
	None	None	None	None	None	None	
	None	None	None	None	None	None	
	None	None	None	None	1 of 5	2 of 5	
	None	None	None	None	None	4 of 7	
	None	None	None	None	1 of 42	6 of 42	
% of LGAs Rest of the GMR	0%	0%	0%	0%	2%	14%	
	None	1 of 11	1 of 11	2 of 11	3 of 11	8 of 11	

^{*&#}x27;Areas' refers to local government areas within Sydney and the rest of the Greater Metropolitan Region including Hawkesbury, Gosford, Wyong, Newcastle and Wollongong.

This provides clear evidence that purchasing a home in Sydney, without voluntarily being in housing stress, was beyond most households in 1997. However, some measures, particularly those that emphasise interest rates, indicate that despite this evidence affordability levels have been very favourable. There is little doubt the low interest rate regime enjoyed by purchasers and investors in recent years, together with the Commonwealth government's First Home Owner Grant, has benefited many households. But lower interest rates and government grants have been accompanied by strong rises in house prices. These have eroded the advantages gained from recent low interest rates. And there is little doubt buyers put themselves into housing stress in pursuit of the ownership dream. Continually rising housing costs will, however, continue to exacerbate the problem.

For private renters in 1997, housing affordability in Sydney was slightly less of a problem providing their residence was appropriate for their household needs and accessible to transport, services and employment. For some this may not have been the case.

The level of mortgage payment was calculated on the basis of a 25 year mortgage on 905 of the dwelling value at a 9% per annum interest rate.

Median sales figures used by the Task Force were based on data provided by the Valuer General and compiled by the Department of Urban Affairs and Planning.

Areas of Sydney where weekly quartile rents⁸⁵ are below 30%, 35% and 40% cost benchmarks for quartile household income, 1997

		ere quartile re nits are below		Areas where quartile rents for two bedroom units are below benchmark			
	Below 30% (\$100 pw)	Below 35% (\$115 pw)	Below 40% (\$130 pw)	Below 30% (\$100 pw)	Below 35% (\$115 pw)	Below 40% (\$130 pw)	
Oit and Foot	Nana	4 - 4 - 5	4 - 4 - 5	Nana	Nana	Nana	
City and East	None	1 of 5	1 of 5	None	None	None	
North	None	None	1 of 12	None	None	None	
Inner West	None	1 of 9	3 of 9	None	None	None	
South	None	None	1 of 5	None	None	None	
South West	2 of 3	2 of 3	3 of 3	None	1 of 7	3 of 4	
West	4 of 7	6 of 7	All	None	None	4 of 7	
Total Sydney Region	6 of 39	10 of 39	16 of 39	None	1 of 41	7 of 41	
% of LGAs	15%	26%	41%	0%	2%	17%	

Areas of Sydney where weekly median rents are below 30%, 35% and 40% cost benchmarks for median household income, 1997

		ere median re nits are below		Areas where median rents for two bedroom units are below benchmark			
	Below 30% (\$100 pw)	Below 35% (\$115 pw)	Below 40% (\$130 pw)	Below 30% (\$100 pw)	Below 35% (\$115 pw)	Below 40% (\$130 pw)	
	_	_			_	_	
City and East	2 of 5	4 of 5	All	None	None	1 of 5	
North	6 of 11	All	All	1 of 11	4 of 11	7 of 11	
Inner West	All	All	All	3 of 9	6 of 9	7 of 9	
South	All	All	All	3 of 5	All	All	
South West	All	All	All	All	All	All	
West	All	All	All	All	All	All	
Total Sydney Region	31 of 39	38 of 39	All	19 of 42	27 of 42	32 of 42	
% of LGAs	79%	97%	100%	45%	64%	76%	

As noted earlier, the Ministerial Task Force did not explore the household types more or less likely to be in rental or purchasing stress. The following sub-sections update the Task Force analysis to 1999 and 2001 to track changes in housing affordability and, ultimately, put a more human and localised face on those affected.

3.4 Urban Frontiers Program: The Anatomy of Housing Stress in Sydney.

While it used the best data available at the time of writing, there are limitations to using the Ministerial Task Force report. Randolph and Holloway from the Urban Frontiers Program (UFP) at the University of Western Sydney published a Research Paper in early 2002⁸⁶ in an effort to update estimates of households in stress, analyse the geography and discuss the likely impact of an affordable housing State Environmental Planning Policy then being considered. This sub-section draws heavily from the UFP research paper.

Randolph, B and Holloway, D. (January 2002). Research Paper No. 6. The anatomy of housing stress in Sydney. Urban Frontiers Program, University of Western Sydney, Campbelltown.

Rental figures were based on new bonds lodged with the Rental Bond Board in the June quarter of 1997 and compiled by the Department of Urban Affairs and Planning.

The Ministerial Task Force estimated that in 1994, 133,540 households, or 23% of households in Sydney with below median incomes, had rent or mortgage payments that consumed in excess of 30% of their gross income. In 1994, 32,340 of households in 'stress' in Sydney were homebuyers and 96,030 were private renters. In their Research Paper, the UFP estimates that two years later (in 1996), the numbers of Sydney households experiencing housing stress had risen to 138,600, of whom 31,600 were thought to be buyers and 107,000 renters. They analysed data from the 1999 ABS Housing Survey to find that the number of Sydney households experiencing housing stress, excluding social housing and other tenants, had risen further to 149,251. Of these, 42,538 were homebuyers and 106,713 were privately renting. The UFP figures, excluding social housing and other tenants, for 1999 are shown below.

Lower income⁸⁷ households in housing stress by tenure, Sydney, 1999

	Home buyers	Private tenants	Total
Total number of low income households	86,605	167,300	253,905
Households in stress % households in stress	42,538 49.1%	106,713 63.8%	149,251 58.8%

The UFP analysis suggests that the numbers of low-income households in housing stress in Sydney increased by 51% between 1986 and 1999 or by 53,000 households. Of these, the numbers renting privately and paying rents above the 30% benchmark increased by 70% or 44,000 households. Low-income homebuyer households in housing stress increased by a quarter or 9,000 households.

The trends in the tenure of low-income households between 1986 and 1999 were also considered by the UFP and are shown in the table below. The main finding was a steady increase — from 61.1% in 1986 to 68.5% in 1999 — in the proportion of privately renting low-income households in stress in Sydney. The proportion of households in stress buying homes dropped from 32.6% in 1986 to 27.3% in 1999 with a low of 22.8% in 1996. Households renting social housing were excluded from the UFP source table, as were low-income owner households, the proportion of whom was around 50% of all households. The UFP notes that a higher income benchmark was used for the 1999 figures and, as a result, the trends may conceal a continued drop in the proportion of low-income households buying their homes and the increase in those privately renting.

Tenure of low-income households in housing stress, Sydney SD, 1986 to 199988

Form of	Form of 1986		1994		1996		1999	
tenure	No.	%	No.	%	No.	%	No.	%
-								
Home buyers	33,500	32.6%	32,340	24.2%	31,600	22.8%	42,538	27.3%
Private renter	62,700	61.1%	96,030	71.9%	95,600	69.0%	106,713	68.5%
Other	6,400	6.2%	5,170	3.9%	3,900	2.8%	2,677	1.7%
Total	102,600		133,540		138,600		155,689	

Like the NSW Ministerial Task Force before it, the UFP Research Paper confirms that the housing market for low-income households is predominantly, but not exclusively, a private

The UFP used a definition of low-income household as a household earning less than the median household income of \$36,400 per annum in NSW in 1996 and \$42,800 in Sydney in 1999.

⁸⁸ Urban Frontiers Program (January 2002). The Anatomy of Housing Stress in Sydney. Adapted from Table 2.

rental market. The UFP Research Paper, using 1996 Census data, sheds some light on the characteristics of those in housing stress. Their findings for renters and buyers are reproduced by statistical sub-region⁸⁹ below. The sub-regional basis is useful in that it enables a somewhat more precise picture of the geography of housing stress to be obtained.

Low-income buying and renting households in stress, Sydney sub-regions, 1996⁹⁰

Sydney statistical sub-region	Total households	Low Income buyers and renters	Low income buyers and renters in stress	% of all households in stress	% of all low income buyers and renters in stress
Inner Sydney and Eastern					
Suburbs	251,900	50,500	27,700	11.0%	54.9%
St. George/Sutherland	154,900	20,700	11,000	7.1%	53.1%
Canterbury/Bankstown					
and Fairfield/Liverpool	204,400	45,300	21,800	10.7%	48.1%
Outer South Western and					
Western Sydney	180,300	39,700	16,700	9.3%	42.1%
Inner Western and					
Central Sydney	167,200	34,000	18,100	10.8%	53.2%
Blacktown/Baulkham Hills	118,600	20,500	8,400	7.1%	40.9%
Lower Northern Sydney					
and Northern Beaches	217,800	28,200	16,200	7.4%	57.4%
Hornsby/Kuringai and					
Gosford/Wyong	208,900	32,500	18,700	9.0%	57.5%
Total	1,504,000	271,400	138,600	9.2%	51.1%

The table above sets out the total number of households, the number of low-income households and the estimated number of households in housing stress for households buying and renting in the eight Sydney statistical sub-regions in 1996. The total number of households in stress in the low-income group was estimated to have been 138,600 households or 9.2% of all households. Stress was relatively widespread across the eight sub-regions and varied from 7% to 11%. Overall, just over half of all low income buying or renting households were in housing stress.

The Inner Sydney and Eastern Suburbs had the highest number of low-income households in stress followed by Canterbury/Bankstown and Fairfield/Liverpool. However, as a proportion of all households, housing stress was more significant in Inner Sydney and the Eastern Suburbs, Canterbury/Bankstown and Fairfield/Liverpool, and Inner Western Sydney and Central Western Sydney. In these three areas 11% of all households were estimated to be in housing stress. The proportion of low-income households in housing stress was highest in the two northern Sydney statistical sub-regions: Lower Northern Sydney and Northern Beaches (57%) and Hornsby/Kuringai and Gosford/Wyong (58%).

⁹⁰ Urban Frontiers Program (January 2002). *The Anatomy of Housing Stress in Sydney*. Adapted from Table 4.

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Sydney statistical sub-regions. Inner Sydney and Eastern Suburbs: Botany, Leichhardt, Marrickville, Randwick, South Sydney, Sydney City, Waverley, Woollahra. St. George/Sutherland: Hurstville, Kogarah, Rockdale, Sutherland. Canterbury/Bankstown and Fairfield/Liverpool: Bankstown, Canterbury, Fairfield. Liverpool. Outer South Western and Western Sydney: Blue Mountains, Camden, Campbelltown, Hawkesbury, Penrith, Wollondilly. Inner Western and Central Western Sydney: Ashfield, Auburn, Burwood, Concord, Drummoyne, Holroyd, Parramatta, Strathfield, Baulkham Hills, Blacktown. Lower Northern Sydney and Northern Beaches: Hunter's Hill, Lane Cove, Manly, Mosman, North Sydney, Pittwater, Ryde, Warringah, Willoughby. Hornsby/Kuringai and Gosford/Wyong: Kuringai, Hornsby, Gosford, Wyong.

The UFP concluded that the pressure on low income households was clearly high in the high value northern Sydney area, but that the inclusion of Gosford/Wyong suggested it might also be a function of concentrations of low incomes households in disadvantaged areas. To explore this last point in more detail, the data was disaggregated into buyers and private renters within the statistical sub-regions with social renters and those renting from other sources being omitted for clarity.

Privately renting low-income households (LIH) in stress, Sydney sub-regions, 1996⁹¹

Sydney statistical sub-region	All private renters	All LIH private renters	LIH renters in stress	% of all private renters in stress	% of all LIH private renters in stress
Inner Sydney and Eastern					
Suburbs	74,500	29,400	22,300	29.9%	75.9%
St. George/Sutherland Canterbury/Bankstown	25,400	11,500	7,900	31.1%	68.7%
and Fairfield/Liverpool Outer South Western and	37,500	20,700	13,700	36.5%	66.2%
Western Sydney Inner Western and	27,400	15,600	9,200	33.6%	59.0%
Central Sydney	38,800	17,800	12,600	32.5%	70.8%
Blacktown/Baulkham Hills Lower Northern Sydney	13,900	6,000	4,200	30.2%	70.0%
and Northern Beaches Hornsby/Kuringai and	53,100	17,300	13,000	24.5%	75.1%
Gosford/Wyong	30,800	16,300	12,700	41.2%	77.9%
Total	301,400	134,600	95,600	31.7%	71.0%

Randolph and Holloway estimated that 71% of low-income private renters, almost a third of all private renters, were experiencing housing stress in 1996. They were widely distributed across the sub-regions, with the highest numerical concentrations in the Inner Sydney and Eastern Suburbs. Canterbury/Bankstown and Fairfield/Liverpool, Inner Western Sydney and Central Western Sydney, and Hornsby/Kuringai and Gosford/Wyong were other areas where relatively high numbers of private renters in stress were located.

They also argued that this distribution reflects the general distribution of privately renting households. The table makes it clear that the relative incidence of housing stress among private renters is particularly prominent in the Inner Sydney and Eastern Suburbs with the two northern Sydney sub-regions — Lower Northern Sydney and the Northern Beaches (75%) and Hornsby/Kuringai and Gosford/Wyong (78%) — close behind. In the generally lower priced Outer South Western and Western Sydney, the proportion of low-income households in stress reached 59%. The impact of housing stress among private renters appears to be concentrated in the Canterbury/Bankstown and Fairfield/Liverpool sub-regions where 37% of all private renters were in stress. In the northern Hornsby/Kuringai and Gosford/Wyong sub-region the figure rose to 41%.

The next table presents the UFP's results for the estimated 59,500 low-income homebuyers in Sydney in 1996. Of these, 53% or 31,600 households were estimated to be in housing stress. While just 2% of all households in Sydney at this time, they represented 10% of all homebuyers.

⁹¹ Urban Frontiers Program (January 2002). *The Anatomy of Housing Stress in Sydney*. Adapted from Table 5.

Low income buying households (LIH) in stress, Sydney sub-regions, 1996⁹²

Sydney statistical sub-region	All buyers	All LIH buyers	LIH buyers in stress	% of all buyers in stress	% of all LIH buyers in stress
Inner Sydney and Eastern					
Suburbs	30,500	4,900	2,700	8.9%	55.1%
St. George/Sutherland	31,300	4,600	2,400	7.7%	52.2%
Canterbury/Bankstown	,	,	,		
and Fairfield/Liverpool	38,500	10,200	5,800	15.1%	56.9%
Outer South Western and	·	·			
Western Sydney	60,000	12,800	6,200	10.3%	48.4%
Inner Western and					
Central Sydney	29,800	7,100	4,000	13.4%	56.3%
Blacktown/Baulkham Hills	36,800	5,500	3,000	8.2%	54.5%
Lower Northern Sydney					
and Northern Beaches	36,300	5,000	2,600	7.2%	52.0%
Hornsby/Kuringai and					
Gosford/Wyong	45,200	9,400	4,900	10.8%	52.1%
Total	308,400	59,500	31,600	10.2%	53.1%

Low-income buyers in stress were fairly widely distributed with the highest numbers in Canterbury/Bankstown and Fairfield/Liverpool and the Outer South Western and Outer Western Sydney sub-regions. Proportionally, housing affordability problems were most significant in Canterbury/Bankstown and Fairfield/Liverpool, and in the Inner Western and Central Western Sydney sub-region.

Using 1996 Census data, Randolph and Holloway presented a profile of renters and buyers in housing stress.

A profile of low income buying households in rental stress, Sydney, 1996⁹³

	Number in stress	% of all in stress	Sydney SD	% of all LIH in stress
Dwelling structure Separate house Semi-detached, row and terrace house	362	33.8%	63.8%	11.6%
	123	11.5%	10.1%	22.1%
Flats and units Other	523	48.9%	23.0%	34.8%
	31	2.9%	1.0%	34.8%
Household type One family household Two family household Lone person household Group household	571	53.4%	69.4%	19.0%
	3	0.3%	1.6%	10.0%
	387	36.2%	21.7%	18.2%
	88	8.2%	4.4%	48.6%
Number of bedrooms None One bedroom Two bedroom Three bedrooms Four or more bedrooms	49	4.6%	1.1%	41.9%
	166	15.5%	6.5%	28.1%
	511	47.8%	26.7%	27.0%
	274	25.6%	41.4%	12.7%
	69	6.4%	20.8%	29.9%

⁹² Urban Frontiers Program (January 2002). The Anatomy of Housing Stress in Sydney. Adapted from Table 6.

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⁹³ Urban Frontiers Program (January 2002). *The Anatomy of Housing Stress in Sydney*. Adapted from Table 8.

A key finding was that just under half lived in flats and units with the majority of these low-income households in stress renting one or two bedroom properties (63% compared to 30% for Sydney as a whole). As a third of all households renting a flat or unit were in housing stress the UFP concluded that the affordability problem among renters appears to be disproportionately associated with medium density housing. Over a third of households in rental housing stress were lone person households with a more detailed analysis showing that nearly 60% these lived in flats or units.

A profile of low income buying households in mortgage stress, Sydney, 1996⁹⁴

	Number in stress	% of all in stress	Sydney SD	% of all LIH in stress
Dwelling structure	245	77.50/	C2 00/	7.00/
Separate house Semi-detached, row and terrace house	245 18	77.5% 5.7%	63.8% 10.1%	7.9% 3.2%
Flats and units	46	14.6%	23.0%	3.1%
Other	2	0.3%	1.0%	0.0%
Other		0.576	1.076	0.076
Household type				
One family household	254	72.4%	69.4%	8.5%
Two family household	5	1.4%	1.6%	16.7%
Loner person household	86	24.5%	21.7%	4.0%
Group household	4	1.1%	4.4%	2.2%
Number of bedrooms				
None	0	0.0%	1.1%	0.0%
One bedroom	14	4.0%	6.5%	2.4%
Two bedroom	81	23.1%	26.7%	4.3%
Three bedrooms	197	56.1%	41.4%	9.1%
Four or more bedrooms	59	16.8%	20.8%	21.2%

In contrast to renters in stress, 78% of the buying households lived in separate houses with just 15% living in flats. This is reflected in the concentrations of this group living in the low-density fringe release areas. Over a half of the homes being purchased had three bedrooms compared to 37% in Sydney as a whole. Over 72% of households in mortgage stress were one family households while a further 25% were lone person households with more detailed analysis showing that around a third of these in mortgage stress lived in flats.

In summary, Randolph and Holloway found that in 1996 in Sydney:

- Renters in housing stress were concentrated in the \$200 to \$800 per week income range and a narrow band of low to medium rents of \$125 to \$224 per week. Half lived in flats (two thirds with one or two bedrooms) and a significant number were single.
- An income of around \$20,000 appeared to be the lower threshold for ownership for buyers in housing stress. Around 80% lived in separate houses of which the majority had three bedrooms.

They believe two key points emerge from their analysis. First, although there are significant numbers of households in housing stress living in high value inner suburbs, housing stress is widespread across Sydney. They took the view that in high value areas planning based approaches such as density bonuses aimed at delivering affordable housing could provide value gains and were worth pursuing. In low value areas, however, similar planning

⁹⁴ Urban Frontiers Program (January 2002). *The Anatomy of Housing Stress in Sydney*. Adapted from Table 9.

incentives were considered to deliver marginal benefits to developers and were unlikely to be adopted. Second, some of Sydney's inner and eastern suburbs have relatively few low-income households in housing stress. These areas, however, need low-income workers to help run essential private and public services. Unfortunately planning based affordable housing initiatives have not resulted in major additions to the affordable housing stock.

As a consequence, Randolph and Holloway question whether the planning system can improve housing affordability for the households in stress who live in low value areas. Furthermore, the case for providing affordable housing for low income workers in high value areas has been acknowledged as important in other major cities such as London. Therefore, if affordable housing initiatives are to make a contribution to a cohesive and inclusive future Sydney then significant numbers of affordable homes should be built in high value suburbs. They maintain that, as a consequence, the question of community balance and the economic impacts of imbalance should be debated.

The context for this picture is the structural change in western market economies from industrial to service-based economies. While industrialisation offering employment to a blue collar workforce has declined at the other end of the spectrum the exponential growth in the highly paid financial services industries is creating a pattern of polarised neighbourhoods. Anna Minton⁹⁵, a journalist and writer engaged in a number of projects for UK think tanks, has observed that in the US polarisation is most clearly reflected by the 15% of the population trapped in ghettos and the 12% or so who live in gated communities. She notes that while the UK has a growing number of gated communities, polarisation is seen in a growing pattern of 'hot spots' and 'cold spots' around in every town and city in the country. The housing affordability crisis in the 'hot spots' is now affecting cities other than London while the 'cold spots' are vulnerable to market collapse and social exclusion.

One outcome in the UK has been a higher level of government interest in creating balanced communities and combating social exclusion. Planning policy and area-based regeneration, which brings the economically active back into low-income areas, are the two key mechanisms being used to create greater balance by integrating affordable housing and social mix into towns and cities. To succeed, both rely on clear planning guidance and encouragement from the Office of the Deputy Prime Minister, the department currently responsible for the urban environment in the UK.

To date, an equally high level intervention to address housing affordability by either the Commonwealth or State governments has been more rhetoric than action. It remains to be seen if Sydney's Metropolitan Strategy contains evidence of a change in the State government's thinking.

3.5 The housing affordability problem. An update to 2001

A common basis for analysing geographic variations in affordability involves a comparison of the 30% benchmark with the level of mortgage payments or rents likely to be required in a particular location. This can be done, for example, by comparing the cost benchmark for a household on a median income with the payments for a median priced dwelling in that area. A summary of the household structures, and their annual household incomes, recorded in the Sydney Region in 2001 is shown in the table below.

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Minton, A. (2002). *Building balanced communities: The US and UK compared.* RICS Leading Edge Series. Royal Institute of Chartered Surveyors, London.

Australian Bureau of Statistics (2001). Basic Community Profiles, Sydney Statistical District.

Household structures and annual household incomes, Sydney Region, 200197

Income Household type	Very low income Less than \$25,999 pa	Low income \$26,000 to \$35,399 pa	Moderate income \$36,400 to \$51,999 pa	Middle income \$52,000 to \$77,999 pa	High income Over \$78,000 pa
Couple with children Couple without children Lone parent families Other families Non-family households ⁹⁸	29,952 78,829 53,801 4,906 160,647	34,900 31,666 21,871 2,455 42,634	65,030 35,852 23,277 3,411 49,181	109,410 54,062 21,037 4,140 41,942	198,132 102,768 14,583 4,455 41,190
Total Sydney Region % Sydney Region	328,135 26.7%	133,526 10.9%	176,751 14.4%	230,591 18.7%	361,128 29.4%

At the time of the 2001 Census, 322,015 households stated their monthly mortgage repayments for the purchase of an occupied private dwelling. A further 333,589 households stated the weekly rents they were paying for an occupied private dwelling. Based on the available data, the number of purchasing and renting households can be sorted into categories that approximate the household incomes tabled above.

Mortgages and rents for occupied private housing, Sydney Region, 2001

	Very low Less than \$599 pw	Low \$600 to \$999 pw	Moderate \$1,000 to \$1,399 pw	Middle \$1,400 to \$1,799 pw	High Over \$1,800 pw
Monthly mortgage payments Number	35,589	71,543	84,225	53,816	76,833
% purchasing households	11.1%	22.2%	26.2%	16.7%	23.9%
Weekly rent payments					
Number % renting households	36,143 10.8%	70,185 21.0%	124,844 37.4%	60,442 18.1%	41,975 12.6%
Total households % all Sydney households	71,732 5.0%	141,728 9.9%	209,069 14.5%	114,258 7.9%	118,808 8.3%

The NSW Department of Housing¹⁰⁰ reported that in the September Quarter of 2001 (around the time of the 2001 Census) dwelling sale prices in the Sydney Region were:

- First quartile Non-Strata dwelling sale price \$238,000
- Median Non-Strata dwelling sale price\$328,000
- Third quartile Non-Strata dwelling sale price\$476.000
- First quartile Strata dwelling sale price \$220,000
- Median Strata dwelling sale price\$300,000
- Third quartile Strata dwelling sale price\$389,000

These figures exclude households who did not state, or only partially stated, their income.

ABS income figures are not provided for lone person households within the non-family household group.

Based on a total of 1,438,385 households in occupied private dwellings.

Housing & Data Analysis Service (2001). Rent & Sales Report No 57. Rents: September Quarter 2001 and Rent & Sales Report No 58. Sales: September Quarter 2001. NSW Department of Housing, Sydney.

Based on a 90% mortgage at 6% per annum, and using the 30% affordability benchmark, the minimum annual income required to purchase at the prices noted above is estimated to be:

- First quartile Non-Strata dwelling sale price \$42,840 per annum
- Median Non-Strata dwelling sale price\$59,040 per annum
- Third quartile Non-Strata dwelling sale price\$85,680 per annum
- First quartile Strata dwelling sale price \$39,600 per annum
- Median Strata dwelling sale price\$54,000 per annum
- Third quartile Strata dwelling sale price\$70,020 per annum

The Department of Housing also reported that Sydney Region dwelling rents were:

- Median rent for one bedroom dwelling\$240 per week
- Median rent for two bedroom dwelling\$260 per week
- Median rent for three bedroom dwelling\$260 per week

The minimum annual income required to pay, without exceeding the 30% affordability benchmark, the rents noted above would have been:

- Median rent for one bedroom dwelling\$41,600 per annum
- Median rent for two bedroom dwelling\$45,070 per annum
- Median rent for three bedroom dwelling\$45,070 per annum

The annual incomes required to rent or buy the dwellings noted above can be compared with the household income figures. A rough picture of the household income groups largely excluded from the Sydney housing market in 2001 emerges.

Theoretical ability to buy or rent by household income, Sydney Region, 2001

	Very low income Less than \$25,999 pa	Low income \$26,000 to \$35,399 pa	Moderate income \$36,400 to \$51,999 pa	Middle income \$52,000 to \$77,999 pa	High income Over \$78,000 pa
Ability to buy	No ability to buy	No ability to buy	First quartile Strata only	First quartile and median Strata only	Third quartile Non-Strata only
Ability to rent	No ability to rent median	No ability to rent median	Non-Strata and median rental only	Non-Strata and median rental only	Able to pay median rent

This preliminary analysis does not provide a more up to date profile of the people to whom obtaining affordable housing has become such a problem.

3.6 A detailed assessment of housing affordability in 2001

In an attempt to rectify this situation, customised ABS data on households in occupied private dwellings was purchased for this research. The brief, reproduced below, envisaged a progressively more detailed analysis of ABS 2001 Census data encompassing the commonly accepted clustering of Sydney's inner, middle and outer LGAs.

ABS 2001 CENSUS DATA Households in privately occupied dwellings

Inner Ring LGAs

Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney City, Waverley, Woollahra

Middle Ring LGAs

Auburn, Bankstown, Burwood, Canterbury, Concord, Hunter's Hill, Hurstville, Kogarah, Kuringai, Manly, Parramatta, Rockdale, Ryde, Strathfield, Willoughby

Outer North LGAs

Baulkham Hills, Gosford, Hawkesbury, Hornsby, Pittwater, Warringah, Wyong

Outer South LGAs

Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Holroyd, Liverpool, Penrith, Sutherland, Wollondilly

Very low income

Less than \$399 per week or \$20,749 pa

Low income

\$400 to \$699 per week or \$20,750 to \$36,349 pa

Moderate income

\$700 to \$1,199 per week or \$36,400 to \$62,349 pa

Middle income

\$1,200 to \$1,499 per week or \$62,3500 to \$77,949 pa

High income

Over \$1,500 per week or over \$77,050 pa

Households purchasing private dwellings

Households renting private dwellings

Households paving more than 30% of their income in mortgage or rent payments

Dwellings

Type of dwelling

Separate house Villa, semi- or townhouse Flat, unit or apartment Flat or unit attached to house or shop Other dwelling

Number of bedrooms

Sequence of 2000 Census data sets customised for Wentworth Brown Pty. Limited by the Australian Bureau of Statistics and supplied on 18 July 2004.

Households

Age of First **Reference Person**

15 - 2425 - 3435 - 44

45 – 54

55 - 64Over 65 years old

Household type

Couple with children Couple without children Lone parent Lone person Multiple family, group and other

Household income

Single or double

Industry of **Employment**

Manufacturing Construction Retail trade Property & business services Education Health & community services Other industry Not in workforce or unemployed

To provide an initial overview, data for the four LGA rings is tabulated below. It should be noted that the weekly and annual income figures differ slightly from those used in Section 2.6 above but are more in line with accepted practice.

Household incomes: Occupied private dwellings, Sydney GMR, 2001¹⁰¹

Number and proportion of households in income band in LGAs	Very low	Low	Moderate	Middle	High
	Less than	\$400 to	\$700 to	\$1,200 to	Over
	\$399 pw	\$699 pw	\$1,199 pw	\$1,499 pw	\$1,500 pw
Inner ring number	44,977	35,933	58,280	16,489	95,385
Inner ring %	14.7%	11.7%	19.0%	5.4%	31.1%
Middle ring number	67,771	58,199	75,801	28,288	98,833
Middle ring %	17.4%	14.9%	19.5%	7.3%	25.4%
Outer ring north number	47,666	44,710	57,158	24,032	79,065
Outer ring south %	16.3%	15.2%	19.5%	8.2%	27.0%
Outer ring south number Outer ring south %	72,518	69,703	98,820	43,936	99,187
	16.2%	15.9%	22.0%	9.8%	22.1%
Total households % of all GMR households ¹⁰²	232,932 16.2%	208,545 14.5%	290,059 20.2%	112,745 7.8%	372,470 25.9%*

Annualised weekly income figures

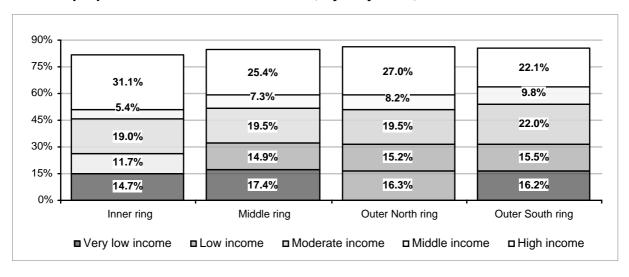
 Very low-income
 Low-income
 Moderate income
 Middle-income
 High income

 Less than \$20,749 pa
 \$20,750-\$36,349 pa
 \$36,400-\$62,349 pa
 \$62,3500-\$77,949 pa
 Over \$77,050 pa

Inner Sydney: Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney City, Waverley and Woollahra. **Middle Sydney**: Auburn, Bankstown, Burwood, Canterbury, Concord, Hunter's Hill, Hurstville, Kogarah, Kuringai, Manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby. **Outer North Sydney**: Baulkham Hills, Gosford, Hawkesbury, Hornsby, Pittwater, Warringah and Wyong. **Outer South Sydney**: Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Holroyd, Liverpool, Penrith, Sutherland and Wollondilly.

* Note that the % figures do not total 100%. Households not stating, or partially stating their incomes have been excluded. They comprised between 18% (inner ring) and 14% (outer north ring) of households in 2001.

Relative proportions of household incomes, Sydney GMR, 2001



The inner ring LGAs are clearly where a substantial proportion of Sydney's higher income households reside. It is interesting to observe, however, that there is a similar distribution of

¹⁰¹ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

¹⁰² In all the following tables this is based on a total of 1,438,371 households reported in occupied private dwellings (customised ABS data).

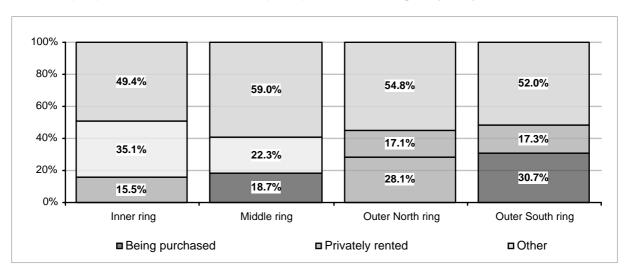
moderate income earning households across the rest of the Greater Metropolitan Area with lower concentrations of very low-income households in the inner ring LGAs. If one of the 'planks' of a sustainable city is a reasonably balanced distribution of households on different incomes it could be argued, on the basis of these figures, that Sydney appears to be doing reasonably well. This, however, is a very simplistic view and takes no account of the distribution of the city's households by tenure, housing stress, age or employment.

Forms of tenure: Occupied private dwellings, Sydney GMR, 2001¹⁰³

	Being purchased	Privately rented	Other*	Total
Inner ring number	47,544	107,833	151,627	307,004
Inner ring %	15.5%	35.1%	49.4%	21.3%
Middle ring number	72,931	86,740	229,822	389,493
Middle ring %	18.7%	22.3%	59.0%	27.1%
Outer ring north number	82,165	50,280	160,791	293,236
Outer ring north %	28.1%	17.1%	54.8%	20.4%
Outer ring south number	137,891	77,655	233,092	448,638
Outer ring south %	30.7%	17.3%	52.0%	31.2%
Total households % of GMR households	340,531 23.7%	322,508 24.4%	775,332 51.9%	1,438,371

^{* &#}x27;Other' includes fully owned private dwellings.

Relative proportions of tenure: Occupied private dwellings, Sydney GMR, 2001



This distribution should come as no surprise, particularly the high proportion of renting households in the inner ring LGAs and purchasing households in the outer ring LGAs. At first glance, the high proportion of households with 'other' forms of tenure, which include fully owned dwellings, might be a surprise until it is realised that substantial areas of the outer ring LGAs were developed and occupied between 1945 and 1970. Parts of these LGAs have older populations, many of whom now own their homes outright.

¹⁰³ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

The principal objective of this section is, however, to explore the housing affordability challenge existing in Sydney's four LGA rings in 2001.

The customised ABS 2001 Census data indicates 203,149 of the 1,438,371 households in privately occupied dwellings paid more than 30% of their income to keep a roof over their heads. Just over 14% of the Sydney households in private dwellings were therefore in housing stress. While the proportion of renters and buyers has changed, these figures confirm that the strategic position taken by the Ministerial Task Force in 1998 and subsequent work by the Department of Housing's Centre for Affordable Housing was correct. Their distribution across Sydney is consistent with the tenure pattern identified above.

Household stress by tenure: Occupied private dwellings, Sydney GMR, 2001¹⁰⁴

	Being purchased	Privately rented	Other ^A	Total
Total households in private dwellings in GMR % of GMR households	340,531 23.7%	322,508 24.4%	775,332 51.9%	1,438,371
Households in stress Inner ring number Inner ring % of total % of GMR households	12,053 22.5% 3.5%	37,564 70.2% 11.6%	3,914 7.3% 0.5%	53,531 3.7%
Middle ring number Middle ring % of total % of GMR households	18,318 34.1% 5.4%	31,117 57.9% 9.6%	4,331 8.1% 0.6%	53,766 3.7%
Outer ring north number Outer ring north % of total % of GMR households	16,843 45.3% 4.9%	18,434 49.6% 5.7%	1,891 5.1% 0.2%	37,168 2.6%
Outer ring south number Outer ring south % of total % of GMR households	27,766 47.3% 8.2%	25,572 43.6% 7.9%	5,346 9.1% 0.7%	58,684 4.1%
Total households in stress % of households in stress ^B % of GMR households ^C	74,980 36.9% 5.2%	112,687 55.5% 7.8%	15,482 7.6% 1.1%	203,149 14.1%

Notes:

A 'Other' includes fully owned private dwellings.

B Proportion based on 203,149 households in stress in the GMR.

C Proportion based on 1,438,371 households in privately occupied dwellings in the GMR.

The first revelation from these figures is the 58% increase between 1994 and 2001 of the number of households in stress. The Ministerial Task Force estimated that in 1994, 128,370 of Sydney's households were in stress. Around 25% were purchasing and 75% renting. The UFP estimated that five years later, in 1999, the number of Sydney households in stress had increased by nearly 8% to 149,250 with 28.5% purchasing and 71.8% renting privately occupied dwellings. By 2001, just two years later, the number of purchasing and renting households in stress had increased by a further 25.7% to 187,667 households. This excludes the 15,482 households in housing stress who\, in the main, lived in fully owned dwellings.

¹⁰⁴ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

Importantly, the split between buyers and renters in stress had shifted between 1994 and 2001. The proportion of purchasers increased to 39.9% while renters decreased to 60.1% of households compared to a split of around 25% and 75% respectively in 1994. The figures above also show that the proportion of purchasing households in stress in the inner ring LGAs was far lower than in the outer rings. In other words, households in stress are still dominated by renters in the inner ring LGAs and by purchasers in the outer ring LGAs.

The next element of the mosaic to be explored is the type of private dwelling occupied by households in stress.

Household stress by dwelling type: Occupied private dwellings, Sydney GMR, 2001¹⁰⁵

		Semi- detached, terrace	Flat, unit	Flat or unit attached	
	Separate house	and town house	or apartment	to a house (ADU ^A)	Other dwelling ^B
Total households in occupied					
private dwellings in GMR	907,206	162,368	337,725	5,725	11,908
% of all GMR private dwellings ^C	63.7%	11.3%	23.5%	0.4%	0.8%
Inner ring LGAs	75,926	61,619	160,703	1,324	3,235
Number of households in stress	7,516	9,745	34,490	339	812
% in stress ^D in dwelling type	9.9%	15.8%	21.5%	25.6%	25.1%
Middle ring LGAs	243,101	36,657	102,925	1,286	2,292
Number of households in stress	23,364	6,070	23,022	309	587
% in stress ^D in dwelling type	9.6%	16.6%	22.4%	24.0%	25.6%
Outer ring north LGAs	229,733	23,485	31,103	1,854	4,046
Number of households in stress	25,611	3,797	6,336	493	677
% in stress ^D in dwelling type	11.1%	16.2%	20.4%	26.6%	16.7%
Outer ring south LGAs	358,447	40,607	42,994	1,261	2,335
Number of households in stress	40,981	7,005	9,598	239	501
% in stress ^D in dwelling type	11.4%	17.3%	22.3%	19.0%	21.5%
Total households in stress	97,472	26,617	73,446	1,380	2,577
% in stress ^E in dwelling category	10.7%	16.4%	21.7%	24.1%	21.6%
% of GMR households in stress	48.0%	13.1%	36.2%	0.7%	1.3%
% of all GMR households ^c	6.8%	1.9%	5.1%	0.1%	0.2%

Notes

- A ADU means Accessory Dwelling Unit or 'granny flat'
- **B** The 13,439 privately occupied dwellings classified by the ABS as 'not stated' have been excluded from this table for simplicity. Some 1,657 (12.3%) of these households are in stress.
- C Proportion based on 1,438,371 households in privately occupied dwellings in the GMR.
- **D** Proportion of households in stress in dwelling type in LGA ring.
- E Proportion of total dwelling type in GMR (eg. % of households in stress in 'separate houses').
- **F** Proportion based on 203,149 households in stress in the GMR.

These figures indicate that in 2001 the incidence of housing stress fell proportionally hardest on those living in attached housing: semi-detached and terrace houses, flats and apartments in the middle and outer south LGA rings: 45,695 households or 22.5% of the total in stress. Numerically and as a proportion of the total, however, far more households in stress lived in

¹⁰⁵ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

separate houses in the outer north and outer south ring LGAs: 66,592 households or 32.8% of the total. While nearly 48% of households in stress live the 'Australian dream', a narrow majority live in higher density housing (townhouses, flats and units). Reasons might include lower entry prices, lower rents or household locational preferences.

For example, at the time of the 2001 Census the median sale price of a non-Strata dwelling in the Sydney region 106 was \$317,000 and prices ranged from a first quartile \$230,000 to a third quartile \$450,000. Sale prices for Strata dwellings ranged from a first quartile \$212,000 to a third quartile \$372,000 with the median price of \$288,000. At the same time, the median weekly rent for two and three bedroom houses was \$220 and \$235 respectively. On the other hand, median weekly rents for one and two bedroom flats were higher at \$250 and \$265 respectively. This suggests that lower rent levels and sale price differentials may not have a lot to do with the housing typology in which households in stress live. The linkages between household stress, tenure and dwelling type therefore need to be reviewed.

Household stress by dwelling type and tenure: Occupied private dwellings, Sydney GMR, 2001¹⁰⁷

	Separate house	Semi- detached, terrace and town house	Flat, unit or apartment	Flat or unit attached to a house (ADU)	Total ^A
				(1.2.5)	
Inner ring LGAs Number being purchased	3,873	3,425	4,574	18	11,890
% being purchasedNumber being rented% being rented	32.6% 3,396 9.6%	28.8% 5,551 15.3%	38.5% 27,134 74.6%	0.1% 303 0.5%	36,384
-	3.070	13.370	74.070	0.570	
Middle ring LGAs Number being purchased % being purchased	12,453 68.7%	2,168 12.0%	3,483 19.2%	31 0.1%	18,135
Number being rented % being rented	9,496 31.2%	3,198 10.5%	17,479 57.5%	246 0.8%	30,419
Outor ring porth I CAs					
Outer ring north LGAs Number being purchased % being purchased	14,857 88.9%	828 4.9%	973 5.8%	49 0.4%	16,707
Number being rented % being rented	10,008 56.1 %	2,545 14.3%	4,873 27.3%	396 2.3%	17,822
Outer ring south LGAs					
Number being purchased % being purchased	24,576 89.1%	1,691 6.1%	1,297 4.7%	9 0.1%	27,573
Number being rented % being rented	13,732 55.3%	3,843 15.5%	7,242 29.1%	210 0.1%	24,838
Total households in stress					
Number of purchasers in stress ^A % of purchasers in stress	55,759 75.0%	8,112 10.9%	10,327 13.9%	107 0.1%	74,305
Number of renters in stress ^A % of renters in stress	36,632 33.5 %	15,137 13.8%	56,692 51.8%	1,155 1.1%	109,463

A st the numbers are relatively small, this total excludes 'other dwellings' and 'not stated' in the ABS data.

¹⁰⁶ NSW Department of Housing Rent & Sales Report. Rent: June Quarter 2001 (Issue No. 56) and Sales: June Quarter 2001 (Issue No. 57).

¹⁰⁷ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

An important consideration in any comparison of renting and buying households is their differing behaviour. In general, renters only rent what they need whereas owners tend to buy more than they need. Clearly, the number of different dwelling types available for rent or purchase in an LGA influences the choice of dwelling type available to potential purchasers or renters. Their ultimate choice will be further influenced by their financial capacity relative to the cost of different forms of housing and their willingness to put themselves into stress to live in a preferred location.

For example, just over 72% of dwellings in the inner ring LGAs are classified by the ABS as semi-detached, townhouses, flats or units compared to just over 18% in the outer north and south ring LGAs. The figures above suggest that in the inner ring LGAs significant proportions of the purchasing and renting households are voluntarily putting themselves in stress for lifestyle or employment reasons. At the same time, they appear willing to compromise on the type of dwelling by renting or buying higher density housing to achieve this objective. In the outer ring LGAs, where detached housing is the prevalent housing form, significantly higher proportions of the households in stress are purchasing or renting separate houses rather than higher density housing forms.

The question is whether the choice of dwelling type and location has some relationship to household size. Two data sets provided by the ABS — household type and dwelling utilisation — cast some light on this issue.

Household stress by type: Occupied private dwellings, Sydney GMR, 2001¹⁰⁸

	Couple with children	Couple without children	Lone parent family	Lone person household	Total ^A
Inner ring LGAs Total households in LGA ring Households in housing stress % of households in stress	8,727 19.2%	7,452 13.9%	5,202 9.7%	23,137 43.2 %	307,004 53,599 17.5%
Middle ring LGAs Total households in LGA ring Households in housing stress % of households in stress	19,349 40.0 %	6,701 12.5%	8,470 15.7%	13,772 25.6%	389,493 53,795 13.8%
Outer ring north LGAs Total households in LGA ring Households in housing stress % of households in stress	12,629 34.0%	4,866 13.1%	7,681 20.7%	9,464 25.5%	293,236 37,164 12.7%
Outer ring south LGAs Total households in LGA ring Households in housing stress % of households in stress	20,716 35.3%	7,052 12.0%	13,578 23.1%	13,595 23.2%	448,638 58,638 13.1%
Total households Number in stress % of households in stress % of total households in GMR	61,421 30.2% 4.3%	26,071 12.8% 1.8%	34,931 17.2% 2.4%	59,968 29.5% 4.2%	1,438,371 203,149 14.1%

A Total includes 'multi-family', 'other family' and 'group' households, and 'visitors/not classified' ABS categories.

¹⁰⁸ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

These figures indicate that the overall proportion of households in housing stress is highest in the inner ring and lowest in the outer north ring LGAs. In all but the inner ring LGAs, couple with children households in stress are in the majority although lone person households represent a significant proportion of the households in stress across the whole metropolitan region. Whether this is related to age or household income will be further explored below but, before doing so, it is useful to examine the issue of overcrowding.

Overcrowding might be regarded as an indication that households are willing to compromise on dwelling amenity (the house and lot size, and dwelling type, for example) and put themselves in housing stress to gain other location or lifestyle benefits. As a consequence, the ABS was asked to provide data on housing utilisation in the LGA rings.

The concept of housing utilisation in the table below is based on a comparison of the number of bedrooms in a dwelling with a series of household demographics, such as the number of usual residents, their relationship to one another, age and sex. There is no single standard measure for housing utilisation but the ABS uses a Canadian model considered by the National Housing Strategy and the Australian Institute of Health and Welfare to conform reasonably to social norms in Australia¹⁰⁹.

The Canadian National Occupancy Standard for housing appropriateness is sensitive to both household size and composition. The measure assesses the bedroom requirements of a household by specifying that:

- No more than two persons should share a bedroom,
- Children less than 5 years of age of different sexes may reasonably share a bedroom,
- Children 5 years of age or older of opposite sex should have separate bedrooms.
- Children under 18 and of the same sex may reasonably share a bedroom, and
- Single household members over 18 should have a separate bedroom, as should parents or couples.

Households living in dwellings where this standard cannot be met are therefore considered by the ABS, the National Housing Strategy and the Australian Institute of Health and Welfare to be overcrowded.

Another measure of overcrowding is the occupancy standard for overcrowding currently in use by the Council ff Australian Government Ministers (COAG). This measure specifies the bedroom requirements of a household as follows.

- For a single adult (a person aged 15 or over) or a single adult in a group household, one bedroom per adult,
- For a couple with no children or sole parent or couple with one child, two bedrooms,
- For a sole parent or couple with two or three children, three bedrooms, and
- For a sole parent or couple with four or more children, four bedrooms.

Where a dwelling contains more than one of these household groups, the needs of these groups are summed for the dwelling. For example, a couple with two dependents aged under 15 and a dependent student over 15 years would be treated as 'sole parent or couple family with two or three children' requiring three bedrooms plus a 'single adult' requiring one bedroom. Four bedrooms would therefore be required in a dwelling for this household.

When a household requires two or more extra bedrooms their dwelling is classified as being overcrowded. The data provided by the ABS is summarised in the table below.

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¹⁰⁹ Advice from Rob Destradi, ABS Victoria Client Services, 18 July 2004.

Household stress and utilisation: Occupied private dwellings, Sydney GMR, 2001¹¹⁰

	One or more extra bedrooms needed	No extra bedrooms needed	One bedroom spare	Two or more bedrooms spare	Total ^A
Inner ring LGAs Total households in LGA ring					307,004
Households NOT in stress % NOT in stress	13,448	63,121	73,519	37,812	216,099
	4.4%	20.6%	23.9%	12.3%	70.4%
Households in housing stress % of households in stress	6,260	20,396	18,532	6,146	53,531
	2.0%	6.6%	6.0%	2.0%	17.4%
Middle ring LGAs Total households in LGA ring					389,493
Households NOT in stress % NOT in stress	18,155	64,400	99,663	82,349	282,674
	4.7%	16.5%	25.6%	21.1%	72.6%
Households in housing stress % of households in stress	5,728	18,377	19,630	8,317	53,766
	1.5%	4.7%	5.0%	2.1%	13.8%
Outer ring north LGAs Total households in LGA ring					293,236
Households NOT in stress % NOT in stress	6,139	37,279	73,583	90,450	217,742
	2.1%	12.7%	25.1%	30.8%	74.3%
Households in housing stress % of households in stress	1,705	9,924	13,916	10,508	37,168
	0.6%	3.4%	4.7%	3.6%	12.7%
Outer ring south LGAs Total households in LGA ring					448,638
Households NOT in stress % NOT in stress	17,450	67,156	110,033	117,454	216,099
	3.9%	15.0%	24.5%	26.2%	48.2%
Households in housing stress % of households in stress	3,252	15,258	21,972	16,484	58,684
	1.1%	3.4%	4.9%	3.7%	13.1%
Total households ^A Number in stress % of households in category % of all households in stress % of total households in GMR	86,361 16,945 19.6% 8.3% 1.3%	335,257 63,955 19.0% 31.5% 4.4%	480,213 74,050 15.4% 36.5% 5.1%	407,390 41,455 10.1% 7.1% 2.9%	1,438,371 203,149 14.1%

A Total includes 'not stated', 'unable to determine' and 'not applicable' ABS categories.

These figures indicate that most of the households in stress, and households not in stress, are not living in overcrowded dwellings. Nonetheless, over 86,000 Sydney households, nearly 17,000 of whom are in stress, should have access to more bedrooms. Employment, family or lifestyle requirements might mean that households in stress and in overcrowded accommodation do so by choice. Others are clearly purchasing or renting the space they need or, as they move further from the city's centre, more than they need. It can be assumed, therefore, that dwelling size plays a role in housing choice and, in some cases, compromises are made between housing cost, location and space needs.

It was observed above that higher proportions of couples with children living in the middle and outer ring LGAs are in housing stress. Lone parent families are a significant proportion of

110 Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

the households in stress in the outer ring LGAs while lone person households are the major proportion of households in stress in the inner ring LGAs. The question is whether the incidence of housing stress is falling on the young or old.

Household stress by household type and age: Occupied private dwellings, Sydney GMR. 2001¹¹¹

		Couple with children				one parent family		Lone person household	
	No.	%	No.	%	No.	%	No.	%	Total ^A
Inner ring 15 to 24 25 to 34 35 to 44 45 to 54 55 to 64 Over 65	110 2,012 4,157 1,878 440 130	1.5% 13.3% 30.3% 22.2% 11.0% 4.3%	768 2,864 1,491 962 782 585	10.6% 19.0% 10.9% 11.4% 19.6% 19.3%	176 1,036 1,979 1,401 373 237	2.4% 6.9% 14.4% 16.6% 9.3% 7.8%	2,946 7,025 5,303 3,772 2,169 1,933	40.6% 46.6% 38.7% 44.6% 54.3% 63.7%	7,258 15,074 13,707 8,456 4,000 3,035
Sub-total Middle ring	8,727	16.3%	7,452	13.9%	5,202	9.7%	23,137	43.2%	53,599
15 to 24 25 to 34 35 to 44 45 to 54 55 to 64 Over 65 Sub-total	318 4,908 8,998 3,954 877 294 19,349	7.6% 35.5% 52.2% 41.7% 21.7% 8.4% 36.0%	541 2,265 1,219 876 889 911 <i>6,701</i>	12.9% 16.4% 7.1% 9.2% 22.0% 26.1% 12.5%	449 2,139 3,340 1,770 422 350 8,470	10.7% 15.5% 19.4% 18.7% 10.5% 10.0% <i>15.7%</i>	1,476 3,387 3,053 2,469 1,623 1,764 13,772	35.1% 24.5% 17.7% 26.1% 40.2% 50.4% 25.6%	4,208 13,834 17,254 9,474 4,035 3,497 53,795
Outer ring north 15 to 24 25 to 34 35 to 44 45 to 54 55 to 64 Over 65 Sub-total	264 3,623 5,899 2,256 495 92 12,629	10.8% 37.3% 48.0% 35.0% 15.9% 3.8% 34.0%	342 1,365 778 843 905 633 4,866	14.0% 14.1% 6.3% 13.1% 29.2% 26.4% 13.1%	479 2,278 3,183 1,307 267 168 7,681	19.6% 23.5% 25.9% 20.3% 8.6% 7.0% 20.7%	837 1,973 2,099 1,852 1,287 1,416 <i>9,464</i>	34.3% 20.3% 17.1% 28.7% 41.5% 59.1% 25.6%	2,440 9,703 12,289 6,442 3,102 2,394 37,164
Outer ring south 15 to 24 25 to 34 35 to 44 45 to 54 55 to 64 Over 65 Sub-total Total in stress	616 7,049 8,948 3,219 679 205 20,716 61,421	13.6% 38.4% 49.2% 35.7% 16.6% 6.5% 35.3%	677 2,212 982 1,155 1,122 904 7,052 26,071	15.0% 12.1% 5.2% 12.8% 27.5% 28.8% 12.0%	1,257 5,045 4,785 1,708 416 367 13,578 34,931	27.8% 27.5% 26.3% 18.9% 10.2% 11.7% 23.2%	1,372 3,333 3,026 2,647 1,685 1,532 13,595 59,968	30.4% 18.2% 16.7% 29.4% 41.2% 48.9% 23.2%	4,513 18,348 18,174 9,018 4,084 3,134 58,638

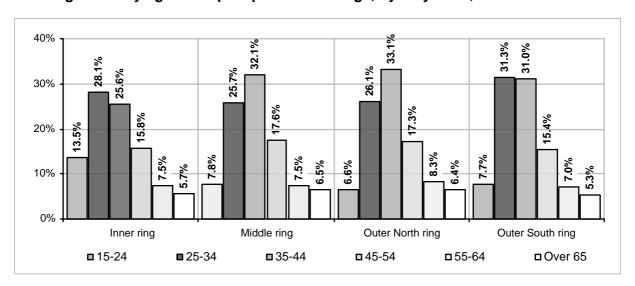
A Total includes 'multi-family', 'other family' and 'group' households, and 'visitors/not classified' ABS categories.

This is a complex data set that is partially simplified by the **bold** highlights in the table and the graph below. These show that the majority of households in stress are couples with children concentrated, not surprisingly, in the 25 to 54 year old age cohorts. The traditional

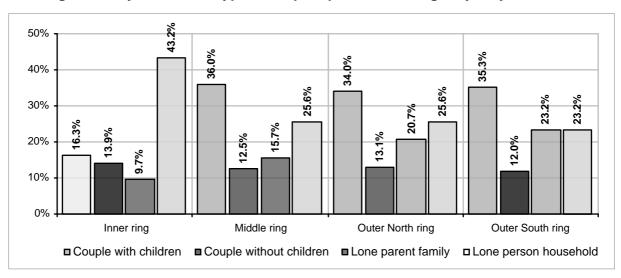
¹¹¹ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

first homebuyer age group — 25 to 34 years of age — is well represented in all the regional LGAs but 35 to 44 year olds, possibly purchasing their second home, dominate the middle and outer ring LGAs. Lone person households, many of whom are in the younger age groups, dominate the inner ring LGA household types but are also a significant proportion of middle and outer ring LGA households. Lone parent households, most probably due to lower housing costs, have a proportionally higher representation in the outer ring LGAs. Couple without children households are relatively evenly represented across all four LGA rings and, not surprisingly, over 55 year old households are proportionally higher.

Housing stress by age: Occupied private dwellings, Sydney GMR, 2001



Housing stress by household type: Occupied private dwellings, Sydney GMR, 2001



It will be interesting to see the dynamics of these age groups and household types between 2001 and the next Census in 2006. An upward shift in the proportion of older couple without children households living in the inner ring LGAs is likely. Given the high cost, and singular market focus, of new housing the age profile of couple with children households in the outer ring LGAs is likely to be older. The number and proportion of lone parent households is likely to diminish as housing costs in the inner and middle ring LGAs continue to increase.

Further clues as to the pattern of housing stress across the Sydney region LGAs are seen when household income levels, the number of households in stress and forms of tenure are compared. Like the data in previous tables, this customised data also presents a complex

communication challenge. The presentation therefore focuses on the households paying more than 30% of their income for housing within the four LGA rings and whether they are purchasing or renting.

Household stress by household income and tenure: Occupied private dwellings, Sydney GMR, 2001¹¹²

Households purchasing a private dwelling	Very low	Low	Moderate	Middle	High
	Less than	\$400 to	\$700 to	\$1,200 to	Over
	\$399 pw	\$699 pw	\$1,199 pw	\$1,499 pw	\$1,500 pw
Total households in GMR Purchasing households % of households in GMR	232,932	208,545	290,059	112,745	372,470
	11,819	27,938	79,260	41,026	144,712
	5.1%	13.4%	27.3%	36.4%	38.9%
Inner ring LGAs Total households Households in stress % in LGA in stress % of all purchasing households in GMR	1,389	2,543	9,692	2,996	26,651
	981	1,569	3,907	820	4,706
	70.6%	61.7%	40.3%	27.4%	17.7%
	8.3%	5.6%	4.9%	2.0%	3.3%
Middle ring LGAs Total households Households in stress % in LGAs in stress % of all purchasing households in GMR	2,782	6,247	15,697	7,383	33,209
	2,019	4,084	6,066	1,641	4,467
	72.6%	65.4%	38.6%	22.2%	13.5%
	17.1%	14.6%	7.7%	4.0%	3.1%
Outer north ring LGAs Total households Households in stress % in LGAs in stress % of all purchasing households in GMR	2,547	6,202	18,022	10,155	36,089
	1,682	3,543	5,877	1,896	3,793
	66.0%	57.1%	32.6%	18.7%	10.5%
	14.2%	12.7%	7.4%	4.6%	2.6%
Outer south ring LGAs Total households Households in stress % in LGAs in stress % of all purchasing households in GMR	5,101	12,946	35,849	20,492	48,763
	3,559	7,600	10,433	2,820	3,274
	69.8%	58.7%	29.1%	13.8%	6.7%
	30.1%	27.2%	13.2%	6.9%	2.3%
Total households in stress % in stress of purchasing households in GMR % of households in GMR	8,241	16,796	26,283	7,177	16,240
	69.7%	60.1%	33.2%	6.9%	2.3%
	3.5%	8.1%	9.1%	6.4%	4.4%

It comes as no surprise that the majority of very low and low-income households are in housing stress. A possibly surprising finding is that reasonably high proportions of middle to high-income households, particularly those living in inner and middle ring LGAs are in this situation. This suggests that many households choose to spend more on their housing in order to have the perceived benefit of home ownership or to live in a location preferred for other tangible benefits. The inner and middle ring LGAs are a case in point. Higher proportions of households, across all five income bands, were in stress than in the outer ring LGAs. To these people, the perceived social status of particular suburbs, access to the CBD,

¹¹² Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

harbour and coastal beaches, proximity to workplaces, or nearness to parents or other family members, are perhaps more important than having more disposable income after paying the mortgage. The behavioural and lifestyle factors driving housing choice need to be understood if effective affordable housing policies are to be developed.

Notwithstanding these comments, the table above clearly indicates that moderate-income households purchasing a dwelling in 2001 were also significantly affected by housing stress. These are the 'key workers' who provide many of the support services an economically competitive city requires. Many have little choice but to rent.

Household stress by household income and tenure: Occupied private dwellings, Sydney GMR, 2001¹¹³

Households renting a private dwelling	Very low	Low	Moderate	Middle	High
	Less than	\$400 to	\$700 to	\$1,200 to	Over
	\$399 pw	\$699 pw	\$1,199 pw	\$1,499 pw	\$1,500 pw
Total households in GMR Renting households % of households in GMR	232,932	208,545	290,059	112,745	372,470
	42,089	59,319	83,923	25,830	78,145
	18.1%	28.4%	28.9%	22.9%	21.0%
Inner ring LGAs Total households Households in stress % in LGA in stress % of all renting households in GMR	10,592	14,629	26,646	7,382	37,832
	9,742	11,798	11,151	1,116	3,612
	92.0%	80.6%	41.8%	15.1%	9.5%
	23.1%	19.9%	13.3%	4.3%	4.6%
Middle ring LGAs Total households Households in stress % in LGAs in stress % of all renting households in GMR	11,822	16,437	22,521	7,149	18,890
	11,035	12,479	5,647	454	1,375
	93.3%	75.9%	25.1%	6.4%	7.4%
	26.2%	21.0%	6.7%	1.8%	1.8%
Outer north ring LGAs Total households Households in stress % in LGAs in stress % of all renting households in GMR	7,465	10,447	12,978	4,176	10,347
	6,769	7,208	3,476	372	559
	90.7%	69.0%	26.8%	8.9%	5.4%
	16.1%	12.2%	4.1%	1.4%	0.7%
Outer south ring LGAs Total households Households in stress % in LGAs in stress % of all renting households in GMR	12,210	17,806	21,778	7,123	11,076
	11,201	11,485	2,385	172	231
	91.7%	64.5%	11.0%	2.4%	2.1%
	26.6%	19.4%	2.8%	0.7%	0.3%
Total households in stress % in stress of renting households in GMR % of households in GMR	38,747 92.1% 16.6%	42,970 72.4% 20.1%	22,659 27.0% 7.8%	2,114 8.2% 1.9%	5,777 7.4% 1.6%

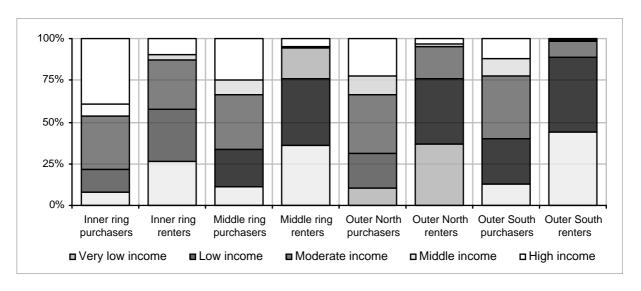
Households who rent, by choice or necessity, represented 22.4% of Sydney's households in 2001. Of these, 35% were in housing stress compared to the 22% of purchasing households

¹¹³ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

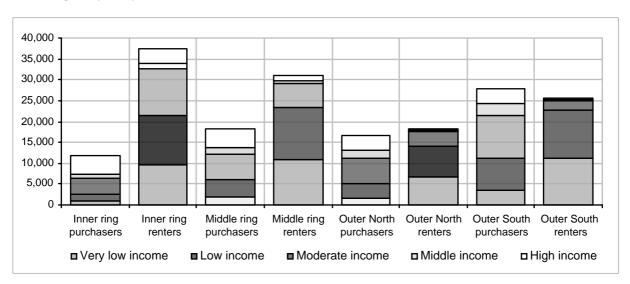
in this position. While moderate-income households are affected, very low and low-income households feel the major impact of Sydney's housing costs. A relatively small number of households at the other end of the income range are in stress but this appears to be more prevalent in the inner ring LGAs where lifestyle, social status and location factors may have more influence than cost on the choice of dwelling and tenure.

Comparisons between purchasing and renting households in housing stress across the Sydney region are more easily summarised graphically 114.

Proportional comparison of housing stress by income and tenure: Occupied private dwellings, Sydney GMR, 2001



Numerical comparison of housing stress by income and tenure: Occupied private dwellings, Sydney GMR, 2001



The pattern is clear: in 2001 households in housing stress were dominated, proportionally and numerically, by very low to low-income renters and low to moderate-income purchasers.

A final element of the 2001 housing stress profile can be seen in the industry where the First Reference Person (FRP) and First mentioned Other Person (FMOP) in a household in stress

¹¹⁴ Note that these figures do not include 'other' households, many of whom own their homes outright.

are employed. In essence what they show is that of the 203,149 households in stress, the households heads (FRP) of 61.4% (or 124,709 households) are employed. They also show that of the households in stress, the FMOP in 52,709 households (or 47.3% of working households or 25.9% of all households in stress) was employed. The ABS figures for both the FRP and FMOP are tabulated below and key areas highlighted.

Household stress by industry of employment of FRP: Occupied private dwellings, Sydney GMR, 2001¹¹⁵

	Inner ring LGAs	Middle ring LGAs	Outer North LGAs	Outer South LGAs	Total
Manufacturing Number in housing stress % of total in category % of LGA ring total	2,628 17.5% 4.9%	3,877 25.6% 7.2%	2,764 18.4% 7.4%	5,784 38.5% 9.9%	15,053 7.4%
Construction Number in housing stress % of total in category % of LGA ring total	1,358 14.2% 2.5%	2,359 24.7% 4.4%	2,512 26.3% 6.8%	3,310 34.8% 5.6%	9,539 4.7%
Retail trade Number in housing stress % of total in category % of LGA ring total	4,041 23.6% 7.5%	4,442 25.9% 8.3%	3,627 21.2% 9.8%	5,026 29.3% 8.6%	17,136 8.4%
Property & business services Number in housing stress % of total in category % of LGA ring total	6,963 37.7% 13.0%	4,829 26.1% 9.0%	3,344 18.1% 9.0%	3,321 18.1% 5.7%	18,457 9.1%
Education Number in housing stress % of total in category % of LGA ring total	2,267 37.9% 4.2%	1,352 22.6% 2.4%	1,110 18.5% 3.0%	1,260 21.0% 2.1%	5,989 2.9%
Health & community services Number in housing stress % of total in category % of LGA ring total	2,970 28.9% 5.5%	2,431 23.7% 4.5%	2,236 21.8% 6.0%	2,635 25.6% 4.5%	10,272 5.1%
Other industry Number in housing stress % of total in category % of LGA ring total	15,369 31.8% 28.7%	12,409 25.7% 23.1%	8,326 17.3% 22.4%	12,154 25.2% 20.7%	48,258 23.7%
Total employed FRPs in housing stress % of total employed FRPs	35,596 28.5%	31,699 25.4%	23,919 19.2%	33,490 26.9%	124,704
Unemployed/not in workforce Number in housing stress % of total in category % of LGA ring total	18,003 22.9% 33.7%	22,096 28.2% 41.1%	13,245 16.9% 35.6%	25,148 32.0% 42.9%	78,492 38.6%

¹¹⁵ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

As with the FRP employment figures, there is evidence of a distribution pattern for households in stress with a second income as measured by the presence of an employed FMOP. Some key areas are identified in the simplified analysis below.

Household stress by industry of employment of FMOP: Occupied private dwellings, Sydney GMR, 2001¹¹⁶

	Inner ring LGAs	Middle ring LGAs	Outer North LGAs	Outer South LGAs	Total
Manufacturing Number in housing stress % of total in category % of LGA ring total	971 16.4% 6.9%	1,583 26.7% 11.2%	1,188 20.0% 9.8%	2,185 36.9% 14.1%	5,927 10.6%
Construction Number in housing stress % of total in category % of LGA ring total	522 15.0% 3.7%	701 20.1% 5.0%	1,050 30.1% 8.6%	1,217 34.9 % 7.9 %	3,490 6.3%
Retail trade Number in housing stress % of total in category % of LGA ring total	2,162 22.8% 15.4%	2,438 25.7% 17.3%	2,232 23.5% 18.3%	2,664 28.1% 17.3%	9,496 8.4%
Property & business services Number in housing stress % of total in category % of LGA ring total	2,638 32.8% 18.8%	2,018 25.1% 14.3%	1,787 22.2% 14.7%	1,590 19.8% 10.3%	8,033 14.4%
Education Number in housing stress % of total in category % of LGA ring total	781 26.4% 5.6%	749 25.4% 5.3%	661 22.4% 5.4%	762 25.8% 4.9%	2,953 5.3%
Health & community services Number in housing stress % of total in category % of LGA ring total	1,232 21.0% 8.8%	1,563 26.6% 11.1%	1,348 22.9% 11.1%	1,732 29.5% 11.2%	5,875 10.5%
Other industry Number in housing stress % of total in category % of LGA ring total	5,720 28.7% 40.8%	5,021 25.2% 35.7%	3,901 19.6% 32.1%	5,293 26.6% 34.3%	19,935 44.5%
Total employed FMOPs in housing stress % of total employed FMOPs	14,026 25.2%	14,073 25.3%	12,167 21.8%	15,443 27.7%	55,709

The first table shows that a significant number the heads of households in stress (78,492 or 38.5%) living in privately occupied dwellings are unemployed, not in the workforce or were unable to be classified by the ABS. Of these, other data obtained from the ABS indicates that just 12,114 had a household head (FRP) over 65 years of age and possibly not in the workforce. While no cross tabulations of income and employment data were undertaken, it might be assumed that most of these are in the 58,115 purchasing and renting households in stress reporting incomes of less than \$399 per week. Others are likely to be among the

¹¹⁶ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

59,766 households in stress with incomes between \$400 and \$699 per week. The housing type and location choice dynamics of these very low and low income households, over 20% of whom are struggling to purchase a home, is worth further study as they are quite definitely the housing 'have nots' of the Sydney market for whom social housing is beyond reach.

The ABS classifications of 'industry of employment' categories were limited to six plus 'other industry' for this study. The majority of employed FRPs and FMOPs in households in stress fall into the latter. It is important to note, however, that FRPs in the 'key worker' employment categories of 'education' and 'health and community services' figure in the inner LGAs as having above average numbers of households in stress. On the other hand, FMOPs employed in 'education' and 'health and community services' are less concentrated although those in 'education' are seen in the inner, middle and outer north LGA rings and those in 'health and community services' more prominent in the middle, outer north and outer south.

Most of the households in stress with an employed FRP (28.5% or 35,596) live in the inner ring LGAs. A lower proportion (19.2%) are found in the outer north LGAs while 25.4% and 26.9% live in the middle and outer south LGAs respectively. The second income earners in households in stress are reasonably evenly distributed with a majority living in the outer south LGAs where the proportion of purchasing households in stress is highest.

On a final note, there is a view¹¹⁷ that over 65 year old households who occupy three and four bedroom separate houses have the potential, if not the desire, to convert or redevelop their existing homes into two dwellings. It is also believed that the propensity to redevelop or alter a dwelling might increase as household income decreases and lower income earners seek to supplement or top up modest retirement or pension incomes. To test this proposition, without breaching the commercial confidentiality of the Landcom study, customised data was obtained from the ABS for this research. The results are tabulated below.

Household stress by household income and FRP over 65: Occupied private dwellings, Sydney GMR, 2001¹¹⁸

NA: -| -| |

	Very low	Low	Moderate	Middle	High
	Less than	\$400 to	\$700 to	\$1,200 to	Over
	\$399 pw	\$699 pw	\$1,199 pw	\$1,499 pw	\$1,500 pw
Inner ring LGAs Households in stress % in LGA in stress	1,953	655	307	30	95
	64.2%	21.5%	10.1%	1.0%	3.2%
Middle ring LGAs Households in stress % in LGA in stress	2,360	751	294	45	64
	67.2%	21.4%	8.4%	1.3%	1.7%
Outer ring north LGAs Households in stress % in LGA in stress	1,666	507	170	33	38
	69.0%	21.0%	7.0%	1.4%	1.6%
Outer ring south LGAs Households in stress % in LGA in stress	2,287	625	185	23	26
	72.7%	19.9%	5.9%	0.7%	0.8%
Total in stress % of total in stress	8,266 68.2%	2,538 20.9%	956 7.9%	131 1.1%	223 1.9%

¹¹⁷ The Urban Partnership Pty. Ltd (September 2003). Study into the market potential for Accessory Dwelling Units. Unpublished research report for Landcom.

Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

The majority of households in stress with a FRP over 65 are clearly very low and low-income earners. Irrespective of income, the question is how many of their homes might be considered as 'under-utilised' and available for conversion. Some direction is provided by examining the number of residents in households in stress against the number of bedrooms in their homes.

Household stress by number of bedrooms and number of residents and FRP over 65: Occupied private dwellings, Sydney GMR, 2001¹¹⁹

	One bedroom	Two bedrooms	Three bedrooms	Four plus bedrooms	Residents in stress
Inner ring LGAs					
One resident	1,128	648	90	26	1,929
Two residents	138	555	167	34	897
Three residents	3	74	61	18	156
Four plus residents	3	25	13	17	58
Middle ring LGAs					
One resident	821	733	170	27	1,764
Two residents	115	772	317	65	1,276
Three residents	-	141	101	40	282
Four plus residents	-	38	92	63	192
Outer ring north LGAs					
One resident	666	545	165	32	1,412
Two residents	65	362	304	98	829
Three residents	6	19	58	35	118
Four plus residents	-	9	18	28	55
Outer ring south LGAs					
One resident	560	592	334	39	1,534
Two residents	65	497	577	123	1,268
Three residents	-	40	128	48	218
Four plus residents	-	12	66	50	128
Total 'under-utilised'	_	2,602	2,124	585	5,311
Total 'overcrowded'	12	84	-	-	96

Note: Numbers highlighted in bold are households in dwellings that might be considered as 'under-utilised'. Numbers highlighted in italics are households in dwellings that might be considered as 'overcrowded'.

Obviously, 5,311 'under-utilised' dwellings occupied by households in housing stress is a very small proportion (just 0.4%) of Sydney's total housing stock. Many of these people may choose to occupy more than they need for a variety of family or social reasons. Nonetheless, these dwellings provide an opportunity to accommodate some of Sydney's housing 'have nots' through wholesale redevelopment or the construction of accessory dwellings.

The 'under-utilised' dwellings owned by older households in stress are not the only potential source of an additional affordable housing supply. For example, it is known 120 that in 2001 there were 87,163 three and four bedroom detached houses in the Sydney region fully owned by over 65 year old lone person and couple without children households. Of these, 20,684 three and four bedroom dwellings occupied by one person and could also be considered to have redevelopment potential for one or two additional dwellings.

¹²⁰ The Urban Partnership Pty. Ltd (September 2003). Study into the market potential for Accessory Dwelling Units. Unpublished research report for Landcom.

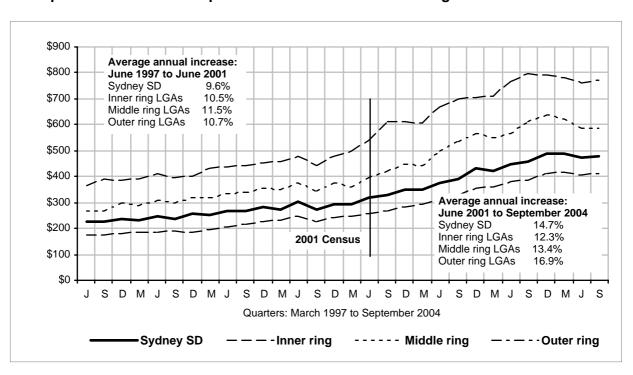
¹¹⁹ Australian Bureau of Statistics, 2001 Census data customised for Wentworth Brown Pty. Limited (June 2004)

3.7 Movements in sales prices and rents: 1997 to 2004

The analysis above, although limited by its 2001 Census base, is based on various reports and the customised data obtained by Wentworth Brown. Before drawing some conclusions from the analysis, it is worth looking at the movements in dwelling prices and rents up to the June Quarter of 2001 (when the Census was undertaken) and from then to the most recent available data. For this purpose, the quarterly *Rent & Sales Report NSW* produced by the Department of Urban Affairs and Planning (up to the March Quarter of 1999) and the Department of Housing (from the June Quarter of 1999) has been used. The report provides extensive data based on notices of sale lodged with Land and Property NSW (formerly the Land Titles Office) and rent bonds lodged with the Office of Fair Trading. For purposes of this research, the analysis only covers median 'Non-Strata' and 'Strata' dwelling sales prices, and rents for one and two bedroom units and two and three bedroom separate houses, in the inner, middle and outer ring LGAs.

The first graph shows the growth in Non-Strata dwelling prices for the seven and a half years from the June Quarter of 1997 to the September Quarter of 2004. Over this period, the median price for a Non-Strata dwelling across the Sydney region LGAs moved from a low of \$225,000 to \$480,000, an average annual increase of 15.1%. The peak of \$490,000 occurred in the December Quarter of 2003. The inner ring median price peaked at \$795,000 in the September Quarter of 2003. Middle and outer ring median prices peaked at \$639,000 and \$416,000 in the December Quarter of 2003 and the March Quarter of 2004.

Sales prices June 1999 to September 2004: Non-Strata dwellings¹²¹



In the inner ring LGAs — ignoring the 19.2% average annual increases in Sydney's premium priced LGAs of Woollahra and Mosman — the highest price increases averaged over the seven and a half years were seen in Marrickville (17.4%), Botany (16.7%) and Randwick (15.2%). Lane Cove and Leichhardt were not far behind with 13.9% and 13.4% respectively. In the September Quarter of 2004, South Sydney and Ashfield had the lowest median prices at \$575,000 and \$578,000 respectively.

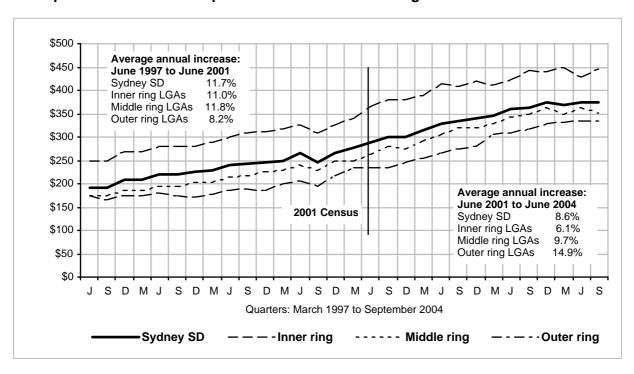
Department of Urban Affairs and Planning (Number 41 to 47) and Department of Housing (Number 48 to 70). Rent & Sales Report NSW, Sales price data from June Quarter 1997 to September Quarter 2004.

Non-Strata sale prices in the middle ring LGAs increased faster than those in the inner rings with Auburn and Hurstville seeing the highest annual averages of 20.2% and 19.2%. In the September Quarter of 2004, the median price for a Non-Strata dwelling in these two LGAs was \$477,000 and \$615,000. Price increases of between 16% and 18% a year over the 1997 to 2004 period were also seen in Bankstown, Canterbury, Parramatta and Rockdale where median prices ranged from a low of \$450,000 (Parramatta) to \$612,000 (Rockdale). All these LGAs have generally good transport networks.

However, it was in the outer ring LGAs where the highest rates of price increases have been seen over the past seven years or so. The development of new greenfield estates in Blacktown, Camden, Liverpool, Penrith and Wyong obviously had a significant impact as these LGAs recorded average price increases of over 20% a year compared with more established LGAs such as Sutherland and Hornsby. Median sale prices for Non-Strata dwellings in the 'greenfield' LGAs moved from between \$135,000 (Wyong) and \$163,000 (Liverpool) to between \$338,000 (Wyong) and \$424,000 (Liverpool).

Two points are worth making from the graph below, which charts the movement in Strata dwelling median prices since June 1997, and the previous graph. Firstly, the growth in median prices for Strata dwellings has generally not been as high (an annual average of 12.7% over the seven and a half years compared to 15.1% for Non-Strata dwellings). Secondly, for both Non-Strata and Strata dwellings and particularly since the September Quarter of 2000, the highest rate of price growth has been in the outer ring LGAs.

Sales prices June 1997 to September 2004: Strata dwellings¹²²



One reason for this pattern will have been the increase higher density (mostly Strata title) housing available in across the Sydney region and consequent competitive pricing regimes. On the other hand, the severe shortage of land for detached housing in the outer ring LGAs has enabled developers and builders to increase prices in response to both demand and higher development costs and social infrastructure levies. However, the substantial rate of increase in Strata dwelling prices in the outer ring LGAs is particularly interesting in light of

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¹²² Department of Urban Affairs and Planning/Department of Housing. *Rent & Sales Report NSW.*

what many observers see as these being the mainstay of the 'aspirational' and 'move up' household detached housing (Non-Strata) markets. If it is assumed rising prices reflect rising demand, this pattern may reflect a growing demand for higher density (Strata) accommodation in the outer ring LGAs or simply a willingness by prospective buyers to compromise their choice of dwelling type for a preferred location.

Cost combined with the desire to get a foot on the housing ladder may have a lot to do with this pattern. Inner and middle Strata prices are beyond the reach of most but outer ring Strata dwellings are relatively affordable and, with luck and capital gains, a short stop on the way to buying a detached house. For example, the median price of a Strata dwelling in the outer ring LGAs was \$335,000 in September 2004 compared to \$411,000 for a Non-Strata dwelling. In some outer ring LGAs, notably Campbelltown, Camden, Fairfield, Liverpool and Penrith, median prices for Strata dwellings ranged from \$227,000 to \$283,000. A dwelling in this price range, with a 10% deposit and a 30 year mortgage at 6.75%, is affordable (without housing stress) to a household with an income of between \$52,000 and \$66,000 a year.

This pattern of demand for higher density housing in the outer ring LGAs may also be another example of lifestyle and location preferences, rather than simple demographics, influencing the dynamics of the Sydney housing market. These dynamics are poorly understood and should have an influence in shaping the form and location of affordable housing in greenfield and brownfield developments and existing neighbourhoods.

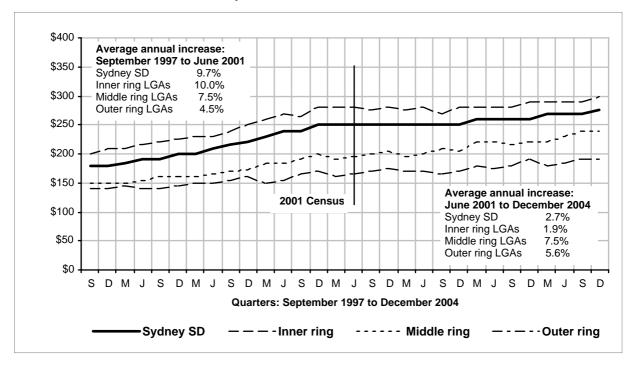
This history of inexorably rising prices, with significant increases since the middle of 2000 and a more recent 'dip', is common knowledge. Therefore, given that wages and salaries have not increased in line with prices, there can be little doubt the number of purchasing households in housing stress will have increased despite a relatively benign interest rate and borrowing climate. By way of rough example: buying a Sydney region median priced Non-Strata dwelling (\$480,000) in September 2004 (10% deposit and a 30 year mortgage at 6.75%) would have required an annual household income of around \$110,000 to avoid being in housing stress. In June 2000 the median priced Non-Strata dwelling was \$305,000 and would require a household to have an annual income of around \$65,000 (10% deposit and a 30 year mortgage at 6.25%) to avoid being in stress. Around 33% of Sydney's households were in this position at the time of the 2001 Census.

The challenge is that many people appear willing to put themselves into housing stress in pursuit of the dream purchase: a detached house. Unfortunately, the typical new detached house has grown in size and, it can be argued, provides more space than a younger family, single person or childless couple needs. Developers and builders contend that their subdivisions and houses are a response to buyer desires. But their offers are, in many respects, a careless acceptance of the idea that current production and marketing mechanisms meet the physical and emotional needs of all buyers and will do so well into the future. They are also a commercially understandable 'line of least resistance' response to outdated planning regulations. The result maintains a cycle of blandness in both low and high-density projects, a lack product of diversity and an inability to find innovative responses to existing and emerging market needs.

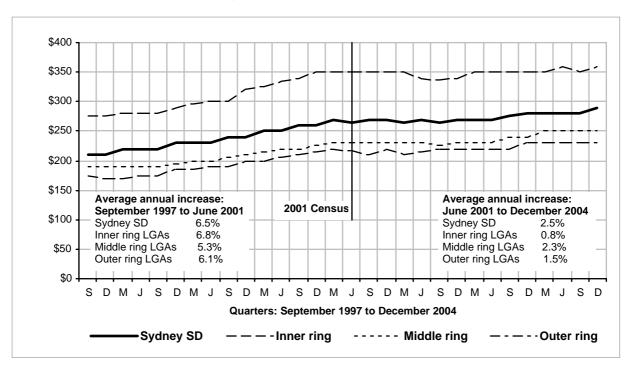
Despite the fact a high proportion of Sydney's households rent, rental growth has been significantly lower than selling price growth over the period recorded in the Department of Housing's Rent & Sales Report. Two reasons might be proposed. Firstly, the increased production of higher density housing and, until recently, a strong investor market has resulted in a competitive rental market. Secondly, low interest rates and government incentives have encouraged people into home purchase and possibly reduced the number of households seeking rental accommodation.

The trends in the flat/unit and house rental market are shown on the following graphs.

One bedroom flat/unit rents: September 1997 to December 2004¹²³



Two bedroom flat/unit rents: September 1997 to December 2004¹²⁴



Between the September Quarter of 1997 and the December Quarter of 2004, the average annual increase in one and two bedroom flat/unit rents was between 8.0% (middle ring LGA one bedroom flats/units) and 4.1% (inner ring LGA two bedroom flats/units). For Sydney overall, the average increase was 7.0% and 5.1% for one and two bedroom flats/units. As the graphs above show, most of the increase occurred in the three years up to the December

 $^{^{123}}$ Department of Urban Affairs and Planning/Department of Housing. Rent & Sales Report NSW.

Department of Urban Affairs and Planning/Department of Housing. Rent & Sales Report NSW.

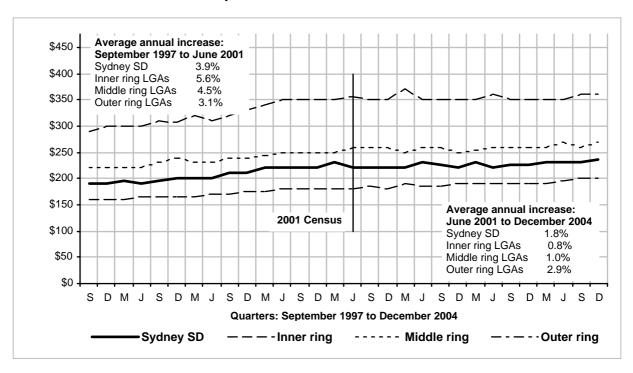
Quarter of 2000 with the rate tending to rise, fall slightly and flatten since then. Much of this may be due to the number of units targeted at the investment market in recent years.

The most interesting comparison is between one and two bedroom flat/units where rents for the former have increased at higher rates across all the LGAs. This may reflect a more balanced supply and demand situation in the two-bedroom rental market, an emerging trend for singles preferring to live alone or a combination of both. What is most interesting are the substantially different rates of rent increases between one and two bedroom flats/units in the middle and outer ring LGAs. Cost may only be one reason. For example, the median rent of a one-bedroom flat/unit in the outer ring LGAs was \$190 per week in the December Quarter of 2004 compared to \$230 for a two-bedroom flat/unit — a difference of around 16%. However, in the middle ring LGAs where the rate of increase has been higher, the cost differential in the same Quarter was only \$10 per week or 4% (\$240 against \$250 per week).

A comparison of the relative affordability of these dwelling types, using the 30% of household income 'rule', is useful. In the outer ring LGAs, a household renting a one-bedroom flat/unit for \$190 per week would require a weekly income of around \$630. Some low-income, and all moderate income, households could afford this rent without stress. A two-bedroom flat/unit would be theoretically beyond the reach of low, and some moderate, income households. A one or two bedroom flat/unit (renting for \$240 and \$250 per week respectively) would require a weekly household income of \$800 to \$835 and would therefore be affordable to some moderate-income households. To avoid housing stress, middle to high household incomes of \$1,000 and \$1,200 per week are required to rent median priced one and two bedroom flats/units (\$300 and \$360 per week respectively) in the inner ring LGAs.

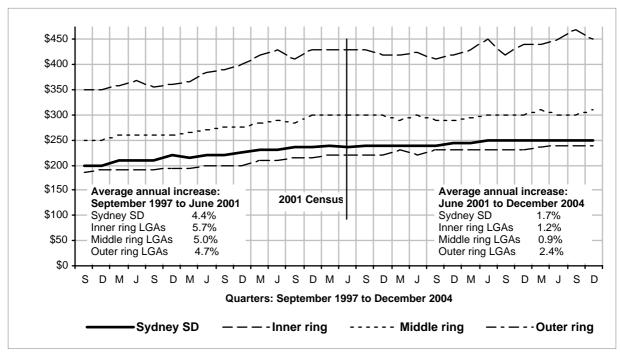
If it is assumed that renters only rent what they need, and the 'laws' of supply and demand operate in the Sydney rental market, the movement in median rents for two and three bedroom houses shown in the following graphs is revealing.

Two bedroom house rents: September 1997 to December 2004¹²⁵



Three bedroom house rents: September 1997 to December 2004¹²⁶

¹²⁵ Department of Urban Affairs and Planning/Department of Housing. Rent & Sales Report NSW.



Like the market for flats/units, the period up to the June Quarter of 2001 saw a higher annual rate of median rent increases than in the following three and a half years. One reason may have been the stimulus to move from renting to purchasing brought about by relatively low and stable interest rates, introduction of the First Home Owners Grant (FHOG) in July 2000 and the March 2001 and June 2002 increases in that Grant. If it is accepted that higher demand leads to higher prices, rough evidence for this is found by comparing the rate of median sale price increases between the June Quarter of 1997 and the June Quarter of 2001 to the higher rates in the following four and a half years. In simple terms, with demand stimulated by the FHOG, selling prices increased dramatically from the middle of 2000 while rents tended to increase at or near the low National inflation rate.

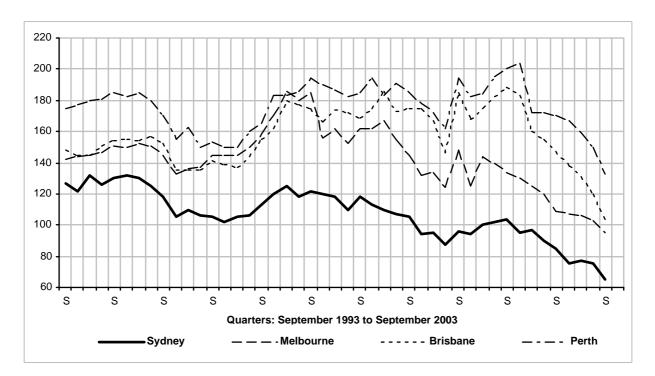
Nonetheless, and despite the increase in investment stock noted above, the rate of increase of rents for flat/unit rents was generally higher than that for separate houses. This is not explained by substantial cost differentials forcing people to compromise size for an affordable price. For example, in the December Quarter of 2004, the median rent for two-bedroom flat/unit in the inner ring LGAs was the same as that for a two-bedroom house. In the middle ring LGAs, there was a \$20 difference (\$250 per week against \$270 per week). And in the outer ring LGAs, the median rent for a two bedroom flat /unit was \$30 more than that for a two bedroom house. Interestingly, in the outer ring LGAs, where rent increases have been higher, the spread between the median weekly rent for a one-bedroom flat/unit (\$190) and a three-bedroom house (\$240) in the December Quarter of 2004 was \$50. In contrast, the spread was \$120 and \$160 in the middle and inner ring LGAs respectively. There again appears to be a market dynamic operating here that has not been explored in any of the extensive literature reviewed for this research.

From the perspective of housing affordability, sale prices and rent trends obviously have an impact on most households and certainly on those earning less than moderate incomes. This is clearly seen in the data analysed in this section and summarised below.

An interesting adjunct to these figures is a comparison of the home loan affordability index for Sydney, Melbourne, Brisbane and Perth between the September Quarters of 1992 and 2003. The graph, sourced from a paper delivered by Dr. Deborah Dearing to the 2004 UDIA

¹²⁶ Department of Urban Affairs and Planning/Department of Housing. Rent & Sales Report NSW.

National Congress, illustrates how Sydney's rising house prices have had an impact on housing affordability and, more than likely, Sydney's economic attractiveness.



3.8 Summary

A recurring theme in the affordable housing debate is that unless action is taken significant numbers of households will be excluded from society and growing industries will have difficulty attracting workers. But, despite numerous investigations into the issues, the industry and government policy have both failed to develop adequate responses. The three tiers of government either blame one another or lack the individual and collective political resolve to take positive action. The industry, driven by finding the path of least resistance through a complex and costly planning system, continue to take a narrow view of their business opportunities and the markets in which they operate.

In their report to the National Housing Research Consortium¹²⁷, Berry and Hall claim that ...significant market failure characterises segments of the Australian housing system. Based on their research and experience, they believe there are severe shortages of affordable and appropriate housing for lower income households. SGS Economics & Planning¹²⁸ claim to have identified what they call the 'two Sydneys' phenomenon: an east housing affluent knowledge workers, and a west largely dominated by lower paid production and service workers. They argue that ...the city risks increasingly unproductive fractures (in alienated and insular communities, longer journey to work times and increasing cycles of misfortune and denial of opportunity) which cost the community greatly in the long run. SGS further claim that the residential divisions implicit in Sydney's divisions will alienate ...communities and classes of people and call for a prolonged effort ...to ensure social diversity in new inner and middle ring housing developments. Affordable housing is a key to ensuring social diversity across the whole of Sydney.

SGS Economics & Planning (June 2004). *Sydney's Economic Geography. Trends and Drivers.* Report for the Department of Infrastructure, Planning and Natural Resources.

Berry, M. and Hall, J. (September 2001). *Policy Options for Stimulating Private Sector Investment in Affordable Housing Across Australia. Stage 1 Report: Outlining the Need for Action.* Prepared for the National Housing Research Consortium by the Australian Housing and Urban Research Institute.

A clear understanding of the demographics of affordability is therefore essential. This section has reviewed two reports on housing affordability in NSW — the 1998 report of a Ministerial Task Force on Affordable Housing and a 2002 Urban Frontiers Program research paper — and drawn on customised 2000 Census information, and Department of Housing rent and sales data, to identify trends in housing affordability over the past ten years or so. The findings are briefly summarised below.

Defining 'housing affordability'

- Housing affordability, at its most basic level, refers to the purchase or rental price of houses. Prices are an outcome of supply and demand while household income and the availability and cost of finance affect demand and determine if a dwelling is affordable.
- A household is considered to be in 'housing stress' and its housing to be unaffordable — if it pays more than 30% of its income in mortgage or rent payments. Furthermore, affordable housing should be:
 - an appropriate size for the household it accommodates,
 - offer a household the choice to rent or purchase the same type of dwelling, and
 - be economically accessible to places of employment and education, community facilities and social networks.
- Affordable housing is not social housing although the decline in expenditure of public housing is forcing people on low incomes to seek housing in the private sector.

The 1998 NSW Ministerial Task Force on Affordable Housing

- The 1998 NSW Ministerial Task Force on Affordable Housing Report claimed that: The grave shortage of affordable housing, especially in Sydney, is causing hardship to hundreds of thousands of NSW households. The hardship is not confined to those areas where the shortage is most acute; it also affects many other people who want to move to those areas for employment, health or family reasons. Many of the households affected by lack of affordable lousing have to live in unhealthy or relatively inaccessible conditions. Many try to obtain adequate housing but are then left without adequate resources to feed, clothe and educate their families.
- In 1994, the base date for the Task Force's figures, Sydney had around 1.3 million households. Of these, over 133,000 households (about 10% of the total) had incomes below the NSW median and were in housing stress. Nearly 24% of these were purchasing a home and just over 71% were renting in the private market.
- If the additional costs of repairs, maintenance and council rates were taken into account, the number of households in housing stress in Sydney increased to over 263,000 (about 20% of the total) with the burden, proportionally, continuing to fall on private renters.
- According to the Task Force report, in 1997 only seven of the Sydney region's forty-two
 local government areas had housing that could be purchased without stress. At the
 same time, over three quarters of the LGAs contained affordable one-bedroom units
 but less than half had affordable two bedroom units.

The Anatomy of Housing Stress. Urban Frontiers Program Research Paper No. 6

- In their 2002 Research Paper, Randolph and Holloway of the University of Western Sydney's Urban Frontiers Program (UFP) estimated that in 1999 the number of households living in private dwellings with below NSW median incomes and in housing stress had increased to just over 149,000 (about 11% of the Sydney region households renting or buying private dwellings). The number had increased from around 127,000 households since the 1996 Census when nearly 10% of the Sydney region households renting or buying private dwellings. Private renters remained the dominant proportion.
- Households who were renting and in stress were widely distributed across Sydney's sub-regions although the highest numbers were concentrated in the inner ring LGAs.
 The same pattern was evident for the stressed households purchasing a home with the outer ring LGAs containing the largest number.
- The UFP Paper presented a social profile of renters and buyers in stress. For the renting households their key findings were that:
 - nearly half lived in flats and units and a third in separate houses,
 - over half were family households and about a third single person households, and
 - nearly half lived in two bedroom and a quarter in three bedroom dwellings.

Of the purchasing households in stress:

- over three quarters lived in separate houses,
- nearly three quarters were family households, and
- over half lived in three bedroom dwellings.
- Randolph and Holloway held that two key points emerged from their analysis. First, housing stress is widespread across Sydney. Second, while some of Sydney's inner and eastern suburbs have relatively few low-income households in housing stress they need low-income workers to help run essential services.
- They suggested that in high value areas planning based approaches aimed at delivering affordable housing could provide value gains and were worth pursuing. In low value areas planning incentives were unlikely to be adopted because they only deliver marginal benefits to developers and questioned whether the planning system can improve housing affordability for the households in stress who live in these areas. Furthermore, if affordable housing initiatives were to make a contribution to a cohesive and inclusive future Sydney then significant numbers of affordable homes should be built in high value suburbs.

2001 Census data customised for this research

- Analyses undertaken for the 1998 Ministerial Task Force and by the Urban Frontiers
 Program do not provide an up to date profile of the people to whom obtaining
 affordable housing is a significant challenge. As a result, customised ABS data was
 obtained for this research.
 - Unlike the previous studies, households in occupied dwellings and housing stress was analysed for all income bands, rather than households with incomes at or below the NSW median. Expanding the scope of the analysis enables some broad conclusions to be made about the behavioural nature of housing choice particularly as it relates to purchasing as opposed to renting a dwelling and location preferences.
- In 2001, just over 203,000 (about 14%) of the households renting or buying private dwellings in the Sydney region were in housing stress. Around 155,000 of these had

incomes at or below the median and represented about 11% of the households renting or purchasing private dwellings in the Sydney region.

Between 1996 and 2001, therefore, the number of households with incomes at or below the median increased from around 127,000 to about 155,000 with the proportion of households in housing stress increasing from 10% to 11% of all the households purchasing or renting private dwellings.

 While SGS Economics & Planning claim that there are 'two Sydneys', the 2001 Census household income figures for occupied private dwellings indicate that this might be more a divide of perception, attitude and industry of employment.

The distribution of households earning very low, low, moderate, middle and high incomes was divided in 2001 but not as sharply as the SGS report (*Sydney's Economic Geography*) might imply. The inner ring LGAs had a higher proportion of high-income households compared to the middle outer north and outer south ring LGAs. The middle and outer south ring LGAs had marginally higher numbers and proportions of Sydney's higher income households. On the other hand, the middle and outer south ring LGAs had the highest proportions, and the highest numbers, of very low and low-income households. Moderate-income households were reasonably evenly distributed but there are more in the outer south ring LGAs.

- There was, however, a clear divide in tenure. In 2001, the inner ring LGAs had a far higher proportion of renting households while the outer north and outer south ring LGAs had higher proportions of households purchasing private dwellings.
- Households who rent private dwellings continued to dominate although the proportion had fallen from 70% of households in stress in 1994 to around 60% in 2001.

The ability to shift from renting to purchasing brought about by lower interest rates and more readily available finance is probably the main reason for this shift. Pursuit of the ownership dream, and the perceived tenure security and capital gain advantages, thus appears to outweigh the lifestyle and social disadvantages of being in housing stress.

• Renters in attached housing numerically and proportionally (56%) dominated the inner and middle ring LGAs while purchasers of detached housing were a majority (54%) in the outer north and south ring LGAs. A substantial proportion (27%) of the households in outer ring LGAs were, however, renting detached housing.

The 2001 Census data suggests that significant proportions of the purchasing and renting households in the inner ring LGAs may be voluntarily putting themselves in stress for lifestyle or employment reasons. They may have been, and perhaps continue to be, willing to compromise on the type of dwelling by renting or buying higher density housing to achieve this objective.

• In 2001 the incidence of housing stress fell proportionally hardest on those living in attached housing: semi-detached and terrace houses, flats and apartments in the inner, middle and outer south LGA rings: 39% of all the households in stress.

Numerically and as a proportion of the total, however, far more households in stress lived in separate houses in the outer north and outer south ring LGAs: 33% of the households in stress in those areas. While nearly 48% of households in stress lived the 'Australian dream', a narrow majority lived in higher density housing (townhouses, flats and units). Reasons might include lower entry prices, lower rents or household locational preferences.

- The overall proportion of households in housing stress was highest in the inner ring (17.5%) and lowest in the outer north ring LGAs (13.1%) in 2001. In all but the inner ring LGAs, couple with children households in stress were in the majority although lone person households represented a significant proportion of the households in stress across the whole metropolitan region. In the inner ring LGAs, over 43% of households in housing stress were lone person households. Lone parent family households represented over 20% of the households in stress in both the outer north and south ring LGAs.
- An analysis of dwelling utilisation an ABS measure of overcrowding indicated that in 2001 over 8% of the households in housing stress should have access to more bedrooms. About a third of these lived in the inner ring LGAs.
- The majority of households in stress in 2001, at 32%, were couples with children. They were concentrated, not surprisingly, in the 25 to 54 year old age cohorts. The traditional first homebuyer age group 25 to 34 years of age was well represented in all the regional LGAs but 35 to 44 year olds, possibly purchasing their second home, dominated the middle and outer ring LGAs.
 - Lone person households, at 43%, dominated the inner ring LGAs but, at 23% to 26%, were also a significant proportion of middle and outer ring LGA households in stress. Lone parent households, most probably due to lower housing costs, had a proportionally higher representation in the outer ring LGAs. Couple without children households, at 12% to 14%, were relatively evenly represented across all four LGA rings in 2001.
- Of nearly 40,000 very low and low-income households purchasing a house in Sydney in 2001, just over 25,000 or 63% were in housing stress.
 - Over 101,000 very low and low-income households rent and nearly 82,000 or 80% were in housing stress. These very low and low-income households represented 53% of all the households in stress.
- Just over 26,000 moderate income households were purchasing and nearly 23,000 renting in 2001 about 24% of all the households in housing stress. These are the 'key workers' who provide many of the support services an economically competitive city requires. Many have little choice but to rent.
 - The high proportions of lower income (very low to moderate) purchasing households in stress suggests that many may choose to spend more on their housing in order to have the perceived benefit of home ownership or to live in a location preferred for its other tangible benefits. The inner and middle ring LGAs are a case in point. Higher proportions of households, across all five income bands, were in stress than in the outer ring LGAs. To these people, the perceived social status of particular suburbs, access to the CBD, harbour and coast, proximity to workplaces, parents or other family members, are perhaps more important than having more disposable income after paying the mortgage. The behavioural and lifestyle factors driving housing choice need to be understood if effective affordable housing policies are to be developed.
- Just over 61% of the heads of households in housing stress were employed in 2001 and 47% of households in housing stress had two incomes. While the household heads employed in the 'other' industry of employment category were in the majority, the next most significant groups in the inner ring LGAs were in property and business services and the 'key worker' categories of health and community services and education. Major proportions of the second income earners in households in stress were also these last two 'industry of employment' categories.

• Since 2001, the median price of Non-Strata dwellings in Sydney has increased by an average of between 12% (middle ring LGAs) and 17% (outer ring LGAs) each year. The median price of Strata dwellings has increased each year by an average of between 6% (middle ring LGAs) and 15% (outer ring LGAs). While interest rates have been relatively low, sale prices have increased faster than inflation. Rent increases for flats/units and separate houses, however, have remained moderately low. Two reasons might be proposed. Firstly, the increased production and supply of higher density housing and, until recently, strong investor interest in the residential market has resulted in competitive rents. Secondly, low interest rates and government incentives have encouraged people into home purchase.

An interesting statistic to emerge from the analysis of 2001 Census data was the high proportion of lone person households in housing stress. A 1999 report¹²⁹ identified that ...more than three quarters of all household growth is now due to lone persons households, couples without offspring and single parent families. Notwithstanding net household growth in excess of 40,000, two parent families only increased by under 2.9%, and actually fell by 3% in Established Areas of Western Sydney...

Two later reports¹³⁰ by the Urban Frontiers Program also carried the same message. In reference to the LGAs of Campbelltown, Camden and Wollondilly, Randolph and Holloway noted that: *In all three LGAs there is expected to be a continued proportional shift towards couples without children and lone person households and a shift away from couples with children.* The shift away from the traditional family (couples with children) will be most pronounced in Campbelltown in the next two decades.

Similar shifts in the demography of Penrith were acknowledged. Randolph and Holloway identified that: Changes to household structure over the five years 1996 to 2001 saw a low percentage increase in couples with children ... contrast to a very substantial percentage increase in lone person households. Couples without children and lone person households accounted for over half of the ... increase in household numbers ... In fact, lone person households had the largest absolute increase ... of all household types in Penrith during this period. Proportionally, the largest increases were recorded for lone person households (58 per cent) and one-parent families (53 per cent). Couples without children grew by 35 per cent over the period, while couples with children only increased by just 4 per cent. Between 1996 and 2001 there was no proportional shift in couples with children in Penrith, whereas there were significant increases in lone person households (22 per cent), one-parent families (12 per cent) and couples without children (11 per cent).

These findings are important when looking at where the housing affordability problem might have the greatest impact over the next twenty years. In broad terms it can be concluded that two strategies are required, one to increase the stock of rental housing in the inner and middle ring LGAs and another to increase the stock of housing for owner-occupiers in the outer ring LGAs. However, given that both areas require affordable owner- occupied and rental housing to encourage diversity crude approaches such as this would be a poor response. Two questions then arise:

Randolph, B. and Holloway, D. (August 2003) *Macarthur Regional Profile*. Report for Campbelltown City Council. Urban Frontiers Program, University of Western Sydney.
Randolph, B. and Holloway, D. (December 2003) *Urban Growth in Penrith – A Research Report*. Report for Penrith City Council. Urban Frontiers Program, University of Western Sydney.

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The Planning Research Centre at the University of Sydney and Scott Carver Pty. Ltd (February 1999).
Western Sydney Affordable Housing Study. Final report for the Western Sydney Regional Organisation of Councils (WSROC).

Firstly, do the forecasts of dwelling production, particularly the balance between separate and attached dwellings, match the predicted split of household types? And secondly, is the simple definition of 'separate' and 'attached' dwellings an adequate description of the forms of housing those for whom finding affordable housing will be a challenge?

The following section examines projections of housing demand in pursuit of some answers.

4.0 HOUSEHOLD GROWTH PROJECTIONS

4.1 Background

In the past, the Indicative Planning Council (IPC) prepared projections of Australia's households and dwellings for the housing industry. According to a recent Australian Housing and Urban Research Institute (AHURI) report¹³¹, the IPC's methodology was challenged in the early 1990s because:

- Census definitions had changed,
- Academics and the industry required more detailed information, and
- The influence of economic variables on the establishment of new households was not being taken into account.

Alternative methodologies were called for but no action was taken until 1998 when a methodology was developed that enabled projections of the number of individuals to be made and classified according to household type. The Australian Bureau of Statistics (ABS) subsequently adopted the methodology and issued a report¹³² in 1999 presenting numerical projections of households, families and living arrangements for Australia, and its states and territories, from 2001 to 2026.

The ABS developed their projections from trends identified through analysis of the 1986 through to 2001 Census counts. Three scenarios, based on different assumptions about the rate of change in different living arrangements, were produced. These were that:

- The family types and living arrangements in which people chose to live would remain constant from 2001 to 2026 (Series I),
- A progressively lower rate of change would be evident from 2006 (Series II), or
- The change evident between 1986 and 2001 for each family type and living arrangement would continue at the full rate between 2001 and 2026 (Series III).

In all three scenarios, the growth in household numbers was projected to be between 39% and 47%, a faster rate than Australia's projected population growth of 25% for the 2001 to 2026 period. The average household size is projected to decline from 2.6 per household in 2001 to between 2.2 and 2.3 people per household in 2026.

Lone person, mainly older female, households were projected to increase by between 57% and 105% or from 1.8 million households in 2001 to between 2.8 and 3.7 million households in 2026. The number of children living in two parent families is projected to decline from 4.0 million in 2001 to 3.8 million in 2026 although the number of couple families with children may increase by between 5% and 19% or decrease by 19%. In contrast, the number of single parent families is projected to increase by between 29% and 38% between 2001 and 2026. Of all the family types, couple families without children were projected to increase most rapidly — in two of the three scenarios they are projected to become the most common family type by either 2011 or 2010. These changes were considered by the ABS to be the result of declining fertility and an ageing population.

The 15 to 34 year old age group — the traditional first homebuyer group — is considered by the ABS to be particularly important when making family and household formation

McDonald, P. (June 2003) Medium and long term projections of housing needs in Australia. Australian Housing and Urban Research Institute, Melbourne.

Australian Bureau of Statistics (June 2004) *Household and Family Projections, Australia 2001 to 2026.* ABS Catalogue No. 3236.0, ABS, Canberra.

projections. In this respect, between 2.2 and 2.4 million young adults are expected to be living with one or both parents in 2026, around the same number as in 2001. In two of the three scenarios, the number of young adults with children is projected to decline while the number living as couples without children is projected to increase by between 9% and 18%.

The ABS noted that its projections are not a conclusive set of numbers but an indication of likely changes in the structure of Australian households over the 25 year projection period. In this respect, relatively unpredictable patterns of immigration, marriage, fertility, divorce and separation, interest rates, personal debt levels, and employment and household formation rates would affect the numbers of households and families. Nonetheless, the trends are evident: more couple without children and single parent households, far more single person households and potentially fewer couple with children households.

4.2 Household and family growth in NSW

The ABS projected that the number of households in NSW was likely to increase by between 33% and 38% — from 2.5 million in 2001 to between 3.3 and 3.4 million by 2026. This increase is lower than the projected Australia-wide household growth.

Family households, including couples with and without children, single parents with children and multiple family households, were projected to have the largest numerical rise. Lone person households were, however, projected to have the fastest percentage growth. The average size of NSW households was projected to decline from 2.6 persons per household in 1996 to between 2.3 and 2.4 persons per household in 2026. This is slightly larger than the projected national household size.

Analysis of the ABS projections over the 20 year period from 2006 indicate that by 2026 the structure of households and families in NSW will be very different to what it is today. The differences in the ABS series projections are summarised in the graph and table below.

ABS projections of households by living arrangement (NSW 2006-2	ngement (NSW 2006-26)	ng arrangemei	hv livin	olds	housel	ions of	Sproject	AR!
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	Series I		Serie	es II	Series III	
	Change 2006-26 ('000s)	% change 2006-26	Change 2006-26 ('000)	% change 2006-26	Change 2006-26 ('000s)	% change 2006-26
Couple family with children	97.6	10.8%	56.3	6.7%	(104.0)	(12.3%)
Couple family without children	232.7	34.0%	258.1	36.6%	320.9	45.6%
Single parent family - Male parent - Female parent	54.8 10.8 43.9	18.3% 21.6% 17.6%	69.1 12.9 56.0	21.8% 24.7% 21.1%	119.8 19.1 100.6	37.8% 36.5% 37.9%
Other families	6.2	17.6%	1.7	5.2%	1.5	4.6%
Lone person households - Male - Female	243.0 76.4 166.6	38.0% 27.2% 46.6%	279.8 102.0 177.8	41.5% 33.6% 47.8%	403.8 189.3 214.5	59.8% 62.4% 57.7%

To contrast the projected changes in each of the series, the projected changes in households and their living arrangements is illustrated in the graph below.

4

Australian Bureau of Statistics (June 2004) *Household and Family Projections, Australia 2001 to 2026.* ABS Catalogue No. 3236.0, ABS, Canberra. Extracted from Tables 6.13 and 6.14.

1250 1078. 1025.3 8.966 954.8 962. 917.1 1000 881 Number of households ('000) 844. 844. 740.8 704.4 750 437.0 500 386. 354 317 317 299. 250 0 Series I: 2006 Series II: 2006 Series II: 2026 Series III: 2006 Series I: 2026 ■ Couple family with children ■ Couple family without children ■ Lone person households □ Single parent families

Comparison of ABS projections of households by living arrangement (NSW 2006-26)¹³⁴

The following growth rates for various household types are important to an understanding of the basic changes in the population structure of NSW foreshadowed in the WSROC and UFP reports noted above. Not unexpectedly, given Australia's ageing population, the projections for couple without children and lone person households all show significant increases.

• Couple families without children are projected to have the highest proportional increases. From 630,800 households in 2001, this group is projected to increase by between 45% and 62% to between 917,100 and 1,025,300 households in 2026. This is an increase of between 286,300 and 395,000 households over the 25 year period or an average growth rate of between 11,500 and 15,800 households a year.

The number of couples without children households is projected to exceed the number of couples with children households in 2018 (Series II) or 2013 (Series III).

• Lone parent families are projected to increase at a faster rate than for families as a whole, with the increase projected to be between 25% and 54%, from 283,000 families in 2001 to between 354,600 and 437,000 families in 2026. This is an increase of between 71,600 and 154,000 households over the 25 year period or an average growth rate of between 2,800 and 6,100 households a year.

There were 456,000 children of all ages living in lone parent families in NSW in 2001. In Series I, the number is projected to decrease by 3% to reach 445,000 in 2026 but Series II and III project 14% to 48% increases and between 520,000 and 674,000 children. Children in lone parent families are likely to comprise between 6% and 9% of the NSW population in 2026.

• **Lone person households** are projected to increase from 586,900 households in 2001 to between 881,500 and 1,078,800 households in 2026, an increase of between

¹³⁴ Australian Bureau of Statistics (June 2004) *Household and Family Projections, Australia 2001 to 2026.* ABS Catalogue No. 3236.0, ABS, Canberra. Extracted from Tables 6.13 and 6.14.

294,600 and 491,900 households or between 50% and 84%. This represents an average annual increase of between 11,800 and 19,600 households.

Female lone person households are projected to increase by between 61% and 81% from 325,000 in 2001 to between 24,000 and 586,000 in 2026, while male lone person households are projected to increase by between 36% and 88%, from 262,000 in 2001 to between 358,000 and 493,000 in 2026. As a result, lone person households are projected to increase from around one quarter (24%) of all households in NSW in 2001 to between 27% and 32% in 2026.

These are substantial increases that should have considerable influence on the form of new housing and consequences for the revitalisation of the older suburbs in which these people currently live.

In two of the three Series, **couple families with children** are projected to increase although at much slower rates than for the other household groups. From 856,900 households in 2001, the projected growth rate of this group is between 5% and 16% to between 901,100 and 996,800 households by 2026. This is an additional 44,200 to 139,900 households or an average growth of between 1,700 and 5,600 households a year. A third Series projects that the number of couple with children families will decline by 14% to 740,800 households in 2026. The underlying housing demand from this group will therefore be significantly lower than for the others.

In 2001 there were an estimated 1.7 million people living as children in couple families, accounting for 26% of all people in NSW. In all three projection Series this number is projected to decline by between 5% and 10% to reach between 1.55 million and 1.64 million people in 2026. This will be between 20% and 21% of the NSW population.

The number of households in NSW is projected to increase by between 33% and 38% (between 803,000 to 936,000 households) to reach a population of between 3.3 and 3.4 million in 2026. The growth rates of the different household types are not, however, what many in the industry would like to expect given their singular market focus on couples with and without children households who have high equity or middle to high incomes.

While they represent relatively small numbers, the growth rates for other household groups and individuals are of passing interest.

- The population living in **group households** is projected to increase from 219,400 in 2001 to between 247,800 and 262,700 in 2026, a reasonably high growth of between 13% and 20%. Group households are defined as households consisting of two or more unrelated people aged 15 years or over. The population living in group households is projected to increase more slowly in NSW than in the rest of the country. No reasons are put forward for this outcome although the ABS notes that group household living arrangements are projected to remain most common among the young adult age groups of 15 to 34 years. The ABS projections may therefore be understated given Sydney's housing costs and the fact younger people will continue to leave the parental home, sometimes temporarily, for an independent lifestyle.
- In two Series, the population living in **non-private dwellings** is projected to increase from 108,200 in 2001 to between 175,800 and 132,500 in 2026, growth of between 22% and 62%. In the third Series, the number is projected to drop 33% to 73,000. Non-private dwellings are usually residential dwellings with accommodation that are not included in the Census list of private dwelling categories. They include hotels, motels, hospitals and other communal dwellings, and complexes such as retirement villages, which have a combination of self-contained units, hostel and/or nursing home

accommodation. As the ABS expects most of these people to be over 75 years old, the eventual number could well depend on funding levels for nursing home beds and health care policies that promote ageing in place. A further and no less important influence will be the emotional willingness of older people to move into 'institutional' retirement accommodation and their financial capacity to fund such a move.

• The number of households classified by the ABS as 'other families' is projected to increase modestly from 33,400 households in 2001 to between 34,300 and 41,400 households in 2026. An 'other family' is defined as a family of related individuals residing in the same dwelling but not forming a couple or a parent-child relationship with any other person in the household.

It is interesting to note in passing that preliminary projections published by the Department of Urban Affairs and Planning in 1999¹³⁵ suggested that the NSW population would increase by around 690,000 people between 2006 and 2021. The ABS projects an increase of 768,000 people over the same period. The difference is an increase of about 3,900 people a year over the 20 years. It is significant because, at 2.4 persons per household it represents a hypothetical demand difference of over 1,600 more dwellings each year.

If the three series of ABS projections for 2006 through to 2021 are averaged it is feasible to assume that NSW will have around:

- 270,000 more couple family without children households,
- 306,000 more lone person households (an average of 9,350 a year),
- 81,000 more lone parent family households and
- 77,000 more couple with children family households, although this could be substantially lower if the Series II projections prove to be correct.

In 1996, according to the ABS, around 61.6% of the households in NSW lived in Sydney. By 2011 the proportion is expected to be between 60.4% and 61.6%. In 1996 the State government projected that Sydney would contain 60.5% of the State's population. If 61% is taken as a crude basis for distributing the increased number of households across the State, the ABS projections suggest that between 2006 and 2026 Sydney may possibly have:

- 165,000 more couple family without children households (an average of 8,250 a year),
- 187,000 more lone person households (an average of 9,350 a year),
- 49,000 more lone-parent family households (an average of 2,450 a year), and
- 46,000 more couple with children family households (an average of 2,300 a year).

These projections indicate that in Sydney alone couple without children, lone parent and lone person households will need nearly 400,000 dwellings appropriate to their needs over the next 20 years or so. The likely age and structure of these households suggest that much of NSW's new housing stock will need to cater for a wider range of income levels, equity capacities and physical capabilities than has been the case to date. Many will find the industry's current offers well beyond their financial capacity, far from employment or unsuitable for their physical and lifestyle needs.

¹³⁵ NSW Department of Urban Affairs and Planning (1999). *Population Projections for NSW (Preliminary).*

The number of couple with children family households — the traditional target of most project homebuilders — represents just over 10% of the total increase in household numbers for Sydney. This should be of considerable concern to those in industry and government who continue to promote regulatory, planning, product and promotion models appropriate for what is likely to be a declining set of household structures.

Unfortunately there appears to be little recognition that the housing market will be increasingly characterised by a great diversity of smaller households with very different lifestyles, attitudes, financial capabilities and tenure preferences. As a consequence, one size fits everyone everywhere strategies present greater economic, environmental and social risks to government, industry and the community than deliberately planning, designing and building to more efficiently match need to household.

In government there has been some recognition of these trends but, apart from projects such as the Landcom/Cosmopolitan Homes Forest Glade project at Parklea, the development and building industry has yet to respond with new product alternatives.

4.3 Projections by the 1998 Ministerial Task Force

The 1998 Ministerial Task Force on Affordable Housing¹³⁶ recognised that the structure of households in NSW was changing. It is worth quoting from part of this report and comparing some of its comments and assumptions with the 2004 ABS projections discussed above.

The number and composition of households in NSW have changed considerably over the last two decades as a result of a complex range of factors including the general ageing of the population, changing immigration patterns, trends towards later marriage and child bearing, and a higher incidence of divorce and single-parent families. These factors have contributed to a greater diversity of housing needs and an increase in the proportion of smaller households.

The population of NSW has increased at a rate of about 1% per annum over the last decade. The total level, which is now approximately 6.25 million, is highly influenced by levels of migration to Australia (almost half the people migrating to Australia locate initially in NSW). This high settlement rate has meant that the population of Sydney has continued to grow despite significant net losses from internal migration to other parts of the State and Australia. During the last five years, lower rates of migration from other countries have contributed a slight reduction in population growth in NSW.

The 2001 Census¹³⁷ recorded 6,311,168 people, excluding overseas visitors, in New South Wales. This represented an increase of 333,049 people (5.5% or an annual average of 1.1%)) since the 1996 Census, and an increase of 639,713 people (11.2% for a ten year annual average of 1.1%) since the 1991 Census. In its Household and Family Projections report, the ABS stated that there were around 6.57 million people in NSW in 2001. This number is projected to increase to 7.14 million in 2011 and 7.85 million in 2026, an annual average growth rate of 0.9% to 2011 and about 0.7% between 2011 and 2026.

In the Ministerial Task Force report, the Department of Urban Affairs and Planning predicted a decline in the growth rate to about 0.6%. The Premier, the Hon Bob Carr, in a speech at

Pages 8-9. Affordable Housing in New South Wales. The Need for Action. (May 1998). The report of a Ministerial Task Force on Affordable Housing. The Hon Craig Knowles, Minister for Urban Affairs and Planning and Minister for Housing.

Australian Bureau of Statistics (November 2002). 2001 Census, Basic Community Profile and Snapshot, NSW. (Downloaded 6 May 2004.)

Australian Bureau of Statistics (2004). *Household and Family Projections, Australia.* 2001 to 2026. ABS Catalogue No. 3236.0, Canberra.

the launch of the Metropolitan Strategy Planning Process¹³⁹ stated that Growth in Sydney is likely to hover around 45,000 to 50,000 a year in the foreseeable future... At the same event, the Minister for Planning and Natural Resources, the Hon Craig Knowles¹⁴⁰, put the figure at 1,000 people per week or 52,000 a year.

Extrapolating this weekly increase out to 2011 suggests that the NSW population growth rate might be around an annual average of 0.8% and somewhat higher than the 1998 Department of Urban Affairs and Planning prediction. The difference is about 140,000 people over the 10 years between 2001 and 2011.

The ageing of the population has been one of the greatest influences on changing household needs. During the last decade, the population aged over 45 years has been growing at a significantly faster rate than younger age groups. The largest proportional increase (more than 50%) occurred in the over 85 years group. In terms of absolute numbers, the greatest growth was in the 45-49 years group (an increase of approximately 140,000 persons).

The median age of people in NSW has increased from 32 years in 1991 to 35 years in 2001. In 1996, just over one-fifth (21.4%) of the State's population were under 14 years old, 14.2% were aged between 15 and 24, 30.6% were aged 25 to 44, 21.1% were aged between 45 and 64, and 12.7% were over 65 years old. In 2001, 20.8% of the State's population were under 14 years old, 13.4% were aged between 15 and 24, 29.8% were aged 25 to 44, 22.9% were aged between 45 and 64, and 13.1% were over 65 years old.

Increased proportions of single-parent families, non-family households and smaller households generally are also affecting housing needs within NSW. More people are remaining single, or are delaying marriage and child rearing. During the last decade, the average age for first marriages has risen by two years, and the average age of mothers having their first child has risen from 26 years to 28.5 years. There has also been a long-term trend towards smaller families and an increase in the rate of divorce.

The recorded changes in household structure between 1996 and 2001 provide evidence for this assertion. The numbers and relative proportions for NSW are shown in the table below.

Growth of households by type in NSW: 1996 to 2001¹⁴¹

Family and household type	Number and % 1996 Census		Number 2001 Ce	% change	
Couple families with children Couple families without children Lone-parent families Other families Group households	764,381 505,953 216,067 28,111 87,310	36.8% 24.3% 10.4% 1.4% 4.2%	791,475 577,401 255,859 29,848 85,243	35.0% 25.5% 11.3% 1.3% 3.8%	3.5% 14.1% 18.4% 6.2% (2.4%)
Lone person households	476,246	22.9%	522,487	23.1%	9.7%

As a result of these trends, during the last decade or so the proportion of the population which is under 30 years old has fallen (from 47% to 43%) and the proportion of households which consist of only one person has increased (from about 20% to 23%).

 $^{^{139}}$ The Hon Bob Carr, Premier of NSW (22 April 2004). Launch of the Metropolitan Strategy Planning Process.

¹⁴⁰ The Hon Craig Knowles, Minister for Planning and Natural Resources (22 April 2004). Launch of the Metropolitan Strategy Planning Process.

Australian Bureau of Statistics (1996 and 2001) Basic Community Profiles, NSW.

The changing pattern in the sizes of households appears to have accentuated the degree of mismatch between supply and demand in relation to size of dwelling. The match appears to be somewhat better for larger than smaller households. An assessment some five years ago suggested that in the Greater Metropolitan Region about 5% of one-bedroom and 3% of two-bedroom dwellings were overcrowded, while about 6% of dwellings were under-occupied in that the number of bedrooms was more than double the number of occupants.

A 'conventional wisdom' is that over 65 year old 'empty nesters' and 'retirees' who own and occupy three and four bedroom separate houses are living in under-utilised dwellings. In 2001, there were 87,163 three and four bedroom detached houses in the Sydney SD fully owned by over 65 year old lone person and couple without children households¹⁴². An ageing population will see an increase in dwellings that are theoretically under-utilised. By way of example, from 1996 to 2001 there was a 30.0% increase in over 65 year old lone person households living in three and four bedroom plus houses. Couple without children households in this age group increased by 28.7%.

The Department of Urban Affairs and Planning predicts that population growth for Sydney and NSW as a whole will continue over the next decade but at a reduced rate. The average annual growth rate in NSW is predicted to decline from 1% to about 0.6% over the next two to three decades. Whilst the rate of growth of the number of households (currently over 1.5% per annum) has tended to be higher than the growth of the overall population over recent decades, this difference is expected to diminish over the next two decades. It is anticipated that the average household size will decline from about 2.9 at present to approximately 2.6 in 2021. It is also anticipated that during the next 25 years or so, the ageing of the population will continue, with the proportion of people in NSW who are aged 55 years or more being expected to increase from 21% to 32%.

In Household and Family Projections 2001 to 2026, the ABS provides a table comparing its 2001 based projections of household numbers with 1996 based projections by the States. The number of households projected by the ABS to reside in NSW in 2011, averaged across the three series, was nearly 2.82 million. This represents an annual average growth of 1.5% from a base of 2.3 million households in 1996. Although a 1996 based projection, the Department of Urban Affairs and Planning projection was for a little less than 2.58 million or an annual average growth rate of 0.8%.

Such a comparison may appear pedantic but a difference in the projections of over 240,000 households — 576,000 people at 2.4 people per dwelling — has significant consequences on the forward planning of housing and urban infrastructure.

4.4 Population and demographic trends

In June 2003, research undertaken by Peter McDonald of the Australian National University for the Australian Housing and Urban Research Institute was published¹⁴³. It examined the future demand for housing in Australia using new methods of projection of households and dwellings. The new projection methods were developed by McDonald and Kippen¹⁴⁴ in 1998 and subsequently used by the ABS to develop its 2004 household and family projections. A description of the projection methods is unnecessary but McDonald claims that

¹⁴² The Urban Partnership Pty. Ltd and Colleen Coyne Property Research Pty. Ltd. (2003). Study in to the Market Potential for Accessory Dwellings. Final Report. A report for Landcom.

McDonald, P. (June 2003). *Medium and long term projections of housing needs in Australia*. Australian Housing and Urban Research Institute, Melbourne.

McDonald, P. and Kippen, R. (1998). Household Trends and Projections: Victoria 1986-2011. Demography Program, Australian National University, Canberra.

...cursory examination of the projected number of dwellings in 2001 against the 2001 Census ... suggests a high degree of accuracy ... at least over a five-year period.

The key findings of McDonald's research relevant to NSW are reviewed below.

Between 2001 and 2011, the population of NSW and the ACT is projected to grow by 529.000 of whom 441.000, or 83%, are expected to be in four defined areas of Sydney. McDonald believes that most of Sydney's growth will be focused on city's outer southern and northern regions with the majority of residents being in the 30 to 49 year age group. He expects that 20 to 24 year olds will drive growth in the inner urban areas. Between 2002 and 2011, McDonald predicts that this will lead to around 440,600 more households (or around 183,000 new dwellings) distributed in Sydney's regions as follows:

- 68,300 more people in inner Sydney (15.1% of the increase),
- 84.350 more people in middle Sydney (19.1% of the increase).
- 111,700 more people in the outer northern areas (23.5% of the increase), and
- 176,250 more people in the City's outer southern areas (41.9% of the increase).

It is interesting to speculate on the projections for the outer northern and southern areas. The NSW State government is anticipating 145 that between 60,000 and 90,000 new dwellings will be created in the North West (Marsden Park) and South West release areas (Bringelly) respectively. This represents an increase of around 162,000 people in the North West and 243,000 in the South West. It is unclear whether McDonald factored the new release area into his projections. Nonetheless, McDonald's projections of the distribution of household types within the four areas of Sydney are important.

Projected growth in household types

The number of couple with children, couple without children and lone-parent families, and lone person households in 1996 (McDonald's base year) were extracted from Census data¹⁴⁶ for the LGAs of Sydney's inner, middle, outer north and outer south regions. By then applying the growth ratio of households in 2011 to households in 1996 from McDonald's 2003 report, a projection can be made of the number of households likely to be found in each region of Sydney in 2011. It provides a hypothetical snapshot of the growth of households in each region but assumes current planning policies, development practices and the key variables remain unchanged.

Projected growth of households by type (Inner Sydney 1996-2011)¹⁴⁷

Family/household type	1996	%	Ratio	2011	%	1996-2011	% change 1996-2011
Couple with children	59.195	22.8%	1.18	69.850	22.2%	10.655	18.0%
Couple without children	59,990	23.2%	1.09	65,390	20.8%	5,400	9.0%
Lone-parent families	22,765	8.8%	1.17	26,635	8.5%	3,870	17.0%
Lone person households	89,930	34.7%	1.34	120,505	38.3%	31,000	34.0%

Inner Sydney: defined by McDonald as the 1996 LGAs of Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney City, Waverley and Woollahra

(June 2003) Medium and long term projections of housing needs in Australia. Projections by David Brown.

¹⁴⁵ NSW Government (October 2003). Submission to Productivity Inquiry into First Home Ownership.

¹⁴⁶ Australian Bureau of Statistics. 2001 Census, Basic Community Profile and Snapshot, NSW. ¹⁴⁷ Australian Bureau of Statistics. 1996 Census, Basic Community Profile and Snapshot, NSW. McDonald, P.

Projected growth of households by type (Middle Sydney 1996-2011)

Family/household type	1996	%	Ratio	2011	%	1996-2011	% change 1996-2011
Couple with children	136.640	39.4%	1.11	153.300	37.6%	16.660	11.0%
Couple without children	80,860	23.3%	1.11	89,755	22.0%	8,895	11.0%
Lone-parent families	35,185	10.1%	1.23	43,280	10.6%	8,095	23.0%
Lone person households	80,630	23.2%	1.30	104,820	25.7%	24,190	30.0%

Middle Sydney: defined by McDonald as the 1996 LGAs of Auburn, Bankstown, Burwood, Canterbury, Concord, Hunter's Hill, Hurstville, Kogarah, Kuringai, Manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby

Projected growth of households by type (Outer Sydney North 1996-2011)

Family/household type	1996	%	Ratio	2011	%	1996-2011	% change 1996-2011
Couple with children	104,810	41.1%	1.12	117,390	34.9%	12,580	12.0%
Couple without children	65,530	25.7%	1.35	88,465	26.3%	22,035	35.0%
Lone-parent families	24,380	9.6%	1.28	31,205	9.3%	6,825	28.0%
Lone person households	52,380	20.5%	1.67	87,475	26.0%	35,095	67.0%

Outer Sydney North: defined by McDonald as the 1996 LGAs of Baulkham Hills, Gosford, Hawkesbury, Hornsby, Pittwater, Warringah and Wyong

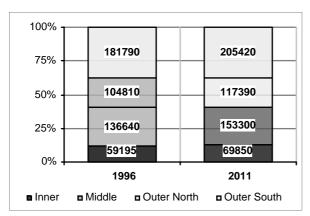
Projected growth of households by type (Outer Sydney South 1996-2011)

Family/household type	1996	%	Ratio	2011	%	1996-2011	% change 1996-2011
Couple with children	181,790	47.2%	1.13	205,420	39.9%	23,630	13.0%
Couple without children	80,885	21.0%	1.39	112,430	21.9%	31,545	39.0%
Lone-parent families	48,920	12.7%	1.29	63,105	12.3%	14,185	29.0%
Lone person households	62,420	16.2%	1.86	116,100	22.6%	53,680	86.0%

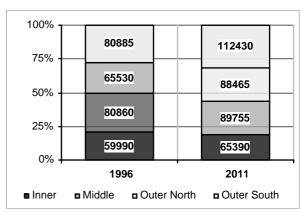
Outer Sydney South: defined by McDonald as the 1996 LGAs of Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Holroyd, Liverpool, Penrith, Sutherland and Wollondilly

A graphical comparison of the projected distribution of households for the four Sydney regions from a 1996 Census base through to 2011 is useful.

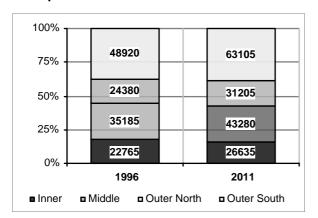
Couple with children



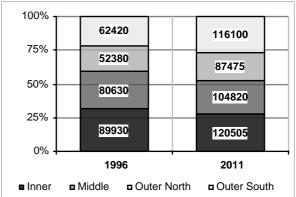
Couples without children



Lone parent families



Lone person households



In light of the previous discussions regarding the ageing population, lower fertility rates and higher divorce and separation rates, the trends illustrated on these graphs are not surprising. It is interesting to note the proportional decline of couples without children living in Inner and Middle Sydney and the substantial increases of lone person households in the northern and southern regions of Outer Sydney.

The growth in couple without children in Sydney's outer regions is considered by McDonald¹⁴⁸ to be largely due to children leaving home and their parents ageing in place. This is also the explanation for the substantial growth in lone person households in these, and the other two, Sydney regions. McDonald makes the point that

...it is important for policy makers to realise that most dwellings in the outer regions of Sydney will continue to be occupied by the same people at least to 2011, but the composition of households will change. This means that the number of dwellings being freed up for occupation by younger families will be relatively limited. In other words, there will continue to be strong demand for new housing for young families in the outer regions of Sydney.

Based on the projections developed above, it is possible to provide an indication of the rate of change for the Sydney Region is illustrated on the table below.

Projected growth of households by type (Sydney Region 1996-2011)

Family/household type	Number	%	Number	%	Increase	% change
	1996	1996	2011	2011	1996-2011	1996-2011
Couple with children Couple without children	482,435	38.7%	545,960	34.7%	63,525	13.2%
	287,265	23.1%	356,040	22.6%	68,775	23.9%
Lone-parent families Group households Lone person households	131,250	10.5%	154,225	10.4%	32,975	25.1%
	59,900	4.8%	78,770	5.0%	18,870	5.8%
	285,360	22.9%	428,900	27.3%	143,540	50.3%

At least for the period between 1996 and 2001, is also possible to test the projections against the Census data. The Census data tabulated below confirms the more rapid relative increases projected for couple without children and lone parent households. Lone person households did not grow as quickly and, while the number of couple with children households grew more rapidly than projected, their relative increase was lower. In line with the

McDonald, P. (June 2003). Medium and long term projections of housing needs in Australia. Australian Housing and Urban Research Institute, Melbourne.

projections, couples with children declined as a proportion of all households. The number of couple without children and lone parent households grew faster than projected and, in 2001, were proportionally higher than might have been expected. On the other hand, lone person households did not grow as quickly and represented a lower than projected proportion of households in the Sydney Region.

Projected and actual growth of households (Sydney Region 1996-2001)

Household type	Number 1996 ¹⁴⁹	Projected % increase	Projected number 2001	Actual number 2001 ¹⁵⁰	% 2001	Actual % increase 1996-2001
On the Minds Hann	400 405	4.40/	500.000	540.070	07.00/	7.00/
Couple with children	482,435	4.4%	503,660	516,970	37.8%	7.2%
Couple without children	287,265	8.0%	310,245	332,080	24.3%	15.6%
Lone parent families	131,245	8.4%	142,270	154,135	11.3%	17.4%
Lone person households	285,355	16.8%	333,295	305,670	22.3%	7.1%

As it is based on the difference between 1996 and 2001 this table cannot be taken as evidence projected long term household growth rates will not be realised. It is useful nonetheless to briefly examine the differences between actual and projected growth for the four key household groups, as there appears to be differences between the projections if averaged over their respective periods.

Comparison of average annual household growth rates (Sydney Region)

Household type	2006-2026 ABS projections	1996-2011 projections (derived from McDonald)	1996-2001 actual
Couple with children Couple without children	2,300 pa 8,250 pa	4,250 pa 4,600 pa	6,900 pa 8,950 pa
Lone parent families	2,450 pa	2,200 pa	4,600 pa
Lone person households	9,350 pa	9,600 pa	4,050 pa
Total	22,350 pa	20,650 pa	24,500 pa

How close are these projections to reality? And will they be achieved?

- The difference between the 2006-26 and 1996-11 projections is about 8% which, given the multitude of variables, probably not significant for the period. Actual growth, however, was 9.6% to 18.6% higher than either projection.
- McDonald projected a demand for an additional 228,000 additional dwellings between 2002 and 2011¹⁵¹, an average of around 25,300 a year. This is 8.6% higher than the ABS projections and just 3.3% more than the actual 1996 to 2001 growth rate.
- If the average migration into Sydney continues to be 50,000 people a year between 2001 and 2011, and occupancy rates are around 2.5 people per dwelling, the underlying demand from these new households would be around 20,000 dwellings a year. Internally generated household formation would add substantially to that number.

¹⁴⁹ Australian Bureau of Statistics (1996). *Basic Community Profile, Sydney Statistical District.*

¹⁵⁰ Australian Bureau of Statistics (2001). *Basic Community Profile, Sydney Statistical District.*

¹⁵¹ McDonald. P. (July 2003). Medium and long term projections of housing needs in Australia: final narrative report (Page 10). McDonald states that there will be demand for an additional 335,000 dwellings in NSW and the ACT between 2002 and 2011 of which 68% would be in Sydney (335,000 x 68% = 228,000).

However, while the downturn in sales from around late 2003 might be a correction of the market and reflect lower levels of inward migration, demand for a housing supply largely limited by land availability is likely to remain high. As a result, higher income earners, particularly those with equity or substantial savings, will outbid lower income earners seeking housing in a market characterised by increasing price rises. The ability to purchase or rent affordable housing will consequently continue to be out of reach for low to moderate income households and Sydney's affordability problem will continue to grow.

There is some doubt if the 50,000 a year figure touted by the NSW Premier and the Minister for Planning, Infrastructure and Natural Resources¹⁵² is likely to be a long-term trend. Research by Parr and Culpin¹⁵³ claims that: Contrary to popular belief, Sydney does not have a net gain of people from other parts of Australia. Their study found that 51,000 people from overseas moved into the city in 2001 but that this had dropped to 39,000 people in 2002. They also found that the rate of natural increase (the difference between births and deaths) had remained relatively stable over the past 20 years and around 32,000 more people left the city in 2002 than moved in from the rest of Australia. Interestingly, the authors do not examine the rate of household growth created by young people leaving (or returning) home, divorce or the formation of couple households. These are significant drivers of housing demand and, as seen in the ABS projections, higher than the natural growth in population.

Parr and Culpin say that the reasons for this level of out migration are not known but suggest it may be due to a combination of factors including changing economic conditions and employment opportunities, changes in personal circumstances, lifestyle aspirations and, importantly for this research, relative housing affordability. Evidence for this, they imply, is found in the age profile of those leaving: young adults aged 25 to 39 and children aged 5 to 9 years. The authors also note that in proportion to the rest of NSW, Sydney has a ...greater concentration of people in the younger working age groups and proportionally fewer in the older age groups. The young family age group aspire to owning a detached house but find achieving their dream in Sydney is beyond their financial capacity. Those without children may or may not aspire to home ownership but can find renting, particularly close to their work places, expensive.

These researchers believe recent trends point to a possible change in overseas migration dynamics that may be reinforced by economic development programs in other states, traffic congestion, Sydney's high cost of living and housing affordability.

In a 2003 paper, Birrell and Healy¹⁵⁴ addressed the issue of overseas migration and its impact on housing affordability observing that the ...escalation in house prices and the associated drop in affordability ... has focussed attention on overseas migration as a contributing factor. The connection, they say, has been denied by the Commonwealth government and the housing industry but, as noted above, challenged by the NSW Premier. While Parr and Culpin appear to argue their case on the 2001 Census and ABS estimates for 2002, Birrell and Healy take an historic view and look at household and population growth between 1996 and 2001. Their view is that, over time, Sydney is ...unlikely to experience a shard increase in net out migration as it is the focal point of job generation in NSW and that ...immigration cannot be wished away as a factor in the creation of (an) underlying population growth component of housing demand.

Based on 1996 and 2001 Census data, Birrell and Healy claim that 54% of the 77,000 additional households in Sydney had overseas born household heads. While most ...would have been renters rather than purchasers... they nonetheless contribute to housing demand

The Hon Bob Carr, Premier of NSW and The Hon Craig Knowles, Minister for Planning and Natural Resources (22 April 2004). Launch of the Metropolitan Strategy Planning Process.

Parr, A. and Culpin, A. (2005). Sydney at the Millennium. People and Place, Vol. 13, No. 1.

¹⁵⁴ Birrell, B. and Healy, E. (2003). *Migration and the housing affordability crisis*. People and Place, Vol. 11, No. 3.

and the purchase of investment property, a major driver of demand in recent years. They claim that there is no evidence to suggest recently arrived migrants will move out of Sydney irrespective of their ability to buy housing. The implication is that if overseas migration into Sydney were to drop there would be a significant reduction in the gap between housing supply and demand and, consequently, an improvement in housing affordability.

McDonald and Temple countered this line of argument in a later article in the same journal Using a newly developed model for regional housing demand projections called *Ozhouse*, the authors assert that ...changing the level of international migration is an extremely blunt instrument if the purpose is to prick a relatively short term housing bubble. They say that an ageing population drives much of Sydney's housing demand and while ...some of Sydney's future aged people will retire outside (the city), most will simply age in place in the same house or in the same locality in which they live now. At the same time, the new generation of younger people that Sydney will need to remain a global city (many of whom will be immigrants) will be seeking housing. As a result, housing demand in a city with jobs for skilled and unskilled workers, family support, community networks and a cosmopolitan character, but constrained by its geographic and environmental setting, is unlikely to fall significantly.

The consequence will be demand driven increases in housing prices. And, while a global city requires skilled 'knowledge' workers, it still requires people to educate their children, maintain security, keep them healthy, clean their offices and drive public transport. Housing affordability will remain a problem for these 'key worker' households unless all levels of government and industry take concerted action. For the former, such action is essential if Sydney is to remain globally competitive. For the latter, it is crucial for its viability.

It remains to be seen if the migration and housing price growth pattern between 1996 and 2001 (and 2003) is still evident when data from the 2006 Census is analysed.

4.6 Projected growth in dwelling types

McDonald's research casts some light, in broad terms, on the likely distribution of dwelling types across the four Sydney regions. He believes that between 2002 and 2011 there will be a demand for an additional 228,000 dwellings in Sydney with 90,000 new dwellings (the current DIPNR target for Bringelly) in Outer Sydney South. McDonald's projections are only for 'separate houses' and 'other dwellings'. The latter category includes the conventional, but perhaps limited, categories of townhouse, villa and apartment built forms as well as shop top housing, caravans and the like. No consideration is given to other housing typologies that might, or should, be available for an increasing diversity of households.

These projections also provide a projection of the number of separate houses and other dwellings for each of Sydney's four regions. In this, the 1996 figures for the number of occupied private dwellings (McDonald's base year) were extracted from Census data for the LGAs of Sydney's inner, middle, outer north and outer south regions. McDonald's projected ratio of dwellings in 2011 to dwellings in 1996 was then applied to generate the following projections of the potential number of dwellings in each region in 2011.

McDonald's underlying assumption appears, again, to be that current planning policies, development practices and the underlying variables remain unchanged. In light of the State government's continued commitment to urban consolidation, and the limited potential for redeveloping existing lots for multiple separate houses, it is curious that the increase in separate houses for Inner and Middle Sydney is around the same as the increase in other dwellings. However, as the redevelopment for lower density villa and town house and higher

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McDonald, P. and temple, J. (2003). International migration and the growth of households in Sydney. People and Place, Vol. 11, No. 4.

density multi-storey apartments has resulted in high levels of local public and political opposition across the metropolitan area, the growth ratios may prove to be optimistic.

Projected growth of dwelling types (Inner Sydney 1996-2011)

Dwelling type	1996	%	Ratio	2011	%	1996-2011	% 1996-2011
Separate houses	71,210	27.2%	1.22	86,875	27.4%	15,665	22.0%
Other dwellings	190,575	72.8%	1.21	230,600	72.6%	40,025	21.0%

Inner Sydney: defined by McDonald as the 1996 LGAs of Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney City, Waverley and Woollahra

Projected growth of dwelling types (Middle Sydney 1996-2011)

Dwelling type	1996	%	Ratio	2011	%	1996-2011	% 1996-2011
Separate houses	242,920	65.4%	1.17	284,215	65.2%	41,295	17.0%
Other dwellings	128,450	34,6%	1.18	151,785	34.8%	23,335	18.0%

Middle Sydney: defined by McDonald as the 1996 LGAs of Auburn, Bankstown, Burwood, Canterbury, Concord, Hunter's Hill, Hurstville, Kogarah, Kuringai, Manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby

Projected growth of dwelling types (Outer Sydney North 1996-2011)

Dwelling type	1996	%	Ratio	2011	%	1996-2011	% 1996-2011
Separate houses	210,025	78.8%	1.30	273,030	77.1%	63,005	30.0%
Other dwellings	56,560	21.2%	1.43	80,880	22.9%	24,320	43.0%

Outer Sydney North: defined by McDonald as the 1996 LGAs of Baulkham Hills, Gosford, Hawkesbury, Hornsby, Pittwater, Warringah and Wyong

Projected growth of dwelling types (Outer Sydney South 1996-2011)

Dwelling type	1996	%	Ratio	2011	%	1996-2011	% 1996-2011
Separate houses	326,485	80.3%	1.32	430,960	78.8%	104,475	32.0%
Other dwellings	79,890	19.7%	1.45	115,840	21.2%	35,950	45.0%

Outer Sydney South: defined by McDonald as the 1996 LGAs of Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Holroyd, Liverpool, Penrith, Sutherland and Wollondilly

Projected growth of dwelling types (Sydney Region 1996-2011)¹⁵⁶

Dwelling type	1996	%	2011	%	Increase 1996-2011	% increase 1996-2011
Separate houses	850,635	65.1%	1,075,080	65.0%	224,445	26.4%
Other dwellings	455,475	34.9%	578,890	35.0%	123,415	27.1%

¹⁵⁶ Australian Bureau of Statistics (1996). *Basic Community Profiles, Sydney Statistical District*

McDonald's projections are only for 'separate houses' and 'other dwellings'. It is curious that notwithstanding the growth in smaller households projected by the ABS using McDonald's methodology, 'separate houses' are projected to increase more than 'other dwellings' in the inner ring LGAs. Furthermore, no distinction is made between the different sized land lots on which separate houses can be built or the variety of other dwellings (apartments, townhouses, villas and the like) that might be offered. The possible 'ideal' relationship between household type and dwelling form is one of the subjects of this research and is dealt with in later sections of this report. Before doing so, it is worth comparing the changes in the forms of dwelling supplied to the Sydney market between 1996 and 2001.

4.7 Dwelling types supplied to the Sydney market: 1996 to 2001¹⁵⁷

At the time of the 1996 Census, the Sydney region (excluding group and other ABS household categories) contained:

- 482,436 couple with children households,
- 287,267 couple without children households,
- 131,245 lone parent households, and
- 285,356 lone person households

living in 1,186,304 occupied private dwellings. Some 64.6% of these were separate houses and 35.4% classified as 'other dwellings'. By 2001, the number of households, excluding group and other households, had increased by 9.8% and comprised:

- 516,969 couple with children households (an increase of 7.1%),
- 332,080 couple without children households (an increase of 15.6%),
- 154,133 lone parent households (an increase of 17.4%), and
- 305,672 lone person households (an increase of 7.1%).

living in 1,308,854 occupied private dwellings (an increase of 122,550 dwellings or 10.3%). The impact of government urban consolidation policies had resulted in a shift in the proportion of separate houses to other dwellings with 63.1% of dwellings being separate houses and 36.9% 'other dwellings'. The following tables show how this growth was distributed across the four regions of Sydney¹⁵⁸.

Growth of private occupied dwellings by type (Inner Sydney 1996-2001)

Dwelling type	1996	% of total	2001	% of total	1996- 2001	% change 1996-2001
Separate house Villa, terrace, townhouse	71,245	26.7%	75,960	24.7%	3,715	6.7%
- 1 storey	27,580	10.3%	25,485	8.3%	(2,095)	(7.6%)
- 2 storey	30,715	11.5%	36,110	11.8%	5,395	17.6%
Flat, unit or apartment						
 1 or 2 storey block 	29,705	11.1%	31,000	10.1%	1,295	4,3%
 3 storey block 	42,840	16.0%	51,730	16.8%	8,890	20.8%
 4 or more storey block 	50,870	19.0%	77,980	25.4%	27,110	53.3%
- attached to house/shop/office	5,180	1.9%	4,170	1.4%	(1,110)	(19.5%)
Other dwellings/not stated	8,500	3.5%	4,600	1.5%	(3,900)	(45.9%)
Total	266,635		307,035		40,400	15.2%

¹⁵⁷ 1996 and 2001 Census data. Australian Bureau or Statistics.

¹⁵⁸ Refer to the tables above for the LGAs within each sub-region.

Growth of private occupied dwellings by type (Middle Sydney 1996-2001)

Dwelling type	1996	% of total	2001	% of total	1996- 2001	% change 1996-2001
Separate house Villa, terrace, townhouse	242,920	65.4%	243,110	62.4%	190	0.1%
- 1 storey	15,060	4.1%	17,890	4.6%	2,830	18.8%
- 2 storey	12,390	3.3%	18,745	4.8%	6,355	51.3%
Flat, unit or apartment						
 1 or 2 storey block 	31,090	8.4%	33,830	8.7%	2,740	8.8%
- 3 storey block	33,060	8.9%	41,210	10.6%	8,150	24.7%
 4 or more storey block 	24,715	6.7%	27,890	7.2%	3,175	12.8%
- attached to house/shop/office	3,780	1.0%	3,280	0.8%	(500)	(13.2%)
Other dwellings/not stated	8,360	2.3%	3,600	0.9%	(4,760)	(56.9%)
Total	371,375		389,555		18,180	4.9%

Growth of private occupied dwellings by type (Outer Sydney North 1996-2001)

Dwelling type	1996	% of total	2001	% of total	1996- 2001	% change 1996-2001
Separate house Villa, terrace, townhouse	210,025	78.8%	229,715	78.3%	19,690	9.4%
- 1 storey	8,875	3.3%	11,760	4.0%	2,885	32.5%
 2 storey Flat, unit or apartment 	8,355	3.1%	11,725	4.0%	3,370	40.3%
- 1 or 2 storey block	11,490	4.3%	12,135	4.1%	645	5.6%
- 3 storey block	9,965	3.7%	14,035	4.8%	4,070	40.9%
 4 or more storey block 	6,090	2.3%	4,960	1.7%	1,130	(18.6%)
- attached to house/shop/office	2,730	1.0%	2,425	0.8%	(305)	(11.1%)
Other dwellings/not stated	9,055	3.4%	6,440	2.2%	(2,615)	(28.9%)
Total	266,685		293,195		26,610	10.0%

Growth of private occupied dwellings by type (Outer Sydney South 1996-2001)

Dwelling type	1996	% of total	2001	% of total	1996- 2001	% change 1996-2001
Separate house Villa, terrace, townhouse	326,485	80.3%	358,415	79.9%	31,930	9.8%
- 1 storey	14,550	3.6%	18,380	4.1%	3,830	26.3%
- 2 storey	15,920	3.9%	22,225	5.0%	6,305	39.6%
Flat, unit or apartment						
 1 or 2 storey block 	12,960	3.2%	14,375	3.2%	1,415	10.9%
- 3 storey block	14,715	3.6%	19,000	4.2%	4,285	29.1%
 4 or more storey block 	8,670	2.1%	9,625	2.1%	955	11.0%
- attached to house/shop/office	2,255	0.6%	2,100	0.5%	(155)	(6.9%)
Other dwellings/not stated	10,825	2.7%	4,490	1.0%	(6,355)	(58.5%)
Total	406,380		448,610		42,230	10.4%

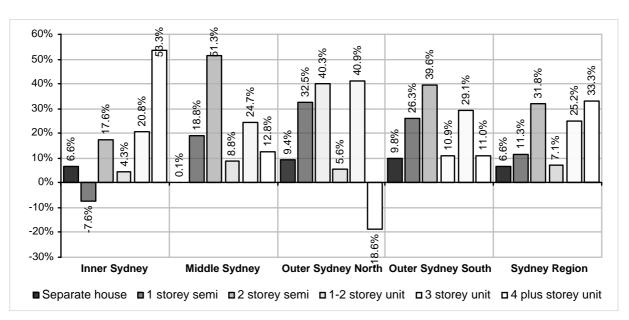
Dwelling type	1996	% of total	2001	% of total	1996- 2001	% change 1996-2001
Separate house	850,675	64.9%	907,200	63.0%	56,525	6.6%
Villa, terrace, townhouse - 1 storey	66,065	5.0%	73,515	5.1%	7,450	11.3%
 2 storey Flat, unit or apartment 	67,380	5.1%	88,805	6.2%	21,425	31.8%
- 1 or 2 storey block	85,245	6.5%	91,340	6.4%	6,095	7.1%
- 3 storey block- 4 or more storey block	100,580 90,345	7.7% 6.9%	125,975 120,455	8.8% 8.4%	25,395 30,110	25.2% 33.3%
- attached to house/shop/office	13,945	1.1%	11,975	0.8%	(1,975)	(14.1%)
Other dwellings/not stated	36,740	2.8%	19,130	1.3%	(17,610)	(48.0%)
Total	1,310,975		1,438,395		127,420	9.7%

Overall, the substantial increases in the number of medium to high density dwellings, and the modest increase in separate houses, is not surprising given State government urban consolidation polices and the shortage of land for detached dwellings.

The highest growth has been seen in the two-storey villa/terrace/townhouse, and three storey and over four storey unit/apartment categories. High-density redevelopment of redundant industrial land in Inner Sydney dominates with modest increases around transport nodes contributing to this category's growth in the Middle and Outer South Sub-regions. There is no explanation, other than classification changes or data entry errors, for the numerical decrease in the number of over four storey flats/units in Sydney's Outer North. Medium density villa and townhouse development dominates the sub-regional areas where, in the absence of high quality alternative models, this form of development is generally more acceptable to local communities. The higher construction costs for buildings over three stories and sale price limits are another significant influence.

The relative 1996 to 2001 change rates for the various dwelling types across the Sydney Region can be more clearly seen in the graph below.

Change in private occupied dwellings (Sydney Region and Sub-regions 1996-2001)



An interesting outcome of the analysis above is the number of dwellings *attached to a house, shop or office*. The colloquial name for these is granny flats, Accessory Dwelling Units (ADU) another. These were the subjects of a detailed, but as yet unpublished, study undertaken for Landcom by The Urban Partnership¹⁵⁹ and completed in 2003. This form of housing is described by the ABS as *a flat or unit attached to a house*. In 1996, 6,095¹⁶⁰ occupied ADUs were recorded in the Sydney region. The number had dropped to 5,750 by 2001¹⁶¹. However, The Urban Partnership study did not pick up another form of ADU, a dwelling defined by the ABS as a house or flat attached to a shop or office. In 1996, the Census recorded 7,850 of these dwellings as being occupied but by 2001, the number had decreased to 6,225. The TUP analysis established that the primary demand for ADU accommodation came from privately renting single parent, couple without children and lone person households in housing stress and aged between 30 and 39. It concluded that the accessory dwelling model is a viable and affordable supply option for the low to moderate-income household rental market and that it had far wider application as accommodation for other household types.

This leads to two questions. Firstly, given the varying distribution of household types and dwelling types across the Sydney Region, and their respective projected growth and demand rates, is it possible to develop a method by which households and dwelling type can be matched? And, secondly, as housing affordability, and housing stress, is a critical issue can a profile be established of where the problem is greatest and who is most affected?

4.8 Summary

Household and family growth in NSW

- Analysis of ABS projections indicate that by 2026 the structure of households and families in NSW will be very different to what it is today.
- The ABS projected an increase in the number of households in NSW of between 33% and 38% from 2.5 million in 2001 to between 3.3 and 3.4 million by 2026.
- The average size of NSW households was projected to decline from 2.6 persons per household in 1996 to between 2.3 and 2.4 persons per household in 2026.
- Couple families without children are projected to have the highest proportional increases. This group is projected to increase from 2001 by between 45% and 62% to between 917,100 and 1,025,300 households in 2026, an increase of between 286,300 and 395,000 households over 25 years or an average growth rate of between 11,500 and 15,800 households a year.
- Lone parent families are projected to increase at a faster rate than for families as a whole, with the increase projected to be between 25% and 54%, from 283,000 families in 2001 to between 354,600 and 437,000 families in 2026. This is an increase of between 71,600 and 154,000 households over 25 years or an average growth rate of between 2,800 and 6,100 households a year.
- Lone person households are projected to increase from 586,900 households in 2001 to between 881,500 and 1,078,800 households in 2026, an increase of between 294,600 and 491,900 households or between 50% and 84%. This represents an average annual increase of between 11,800 and 19,600 households.

¹⁵⁹ The Urban Partnership and Colleen Coyne Property Research (2003). *Study into the market potential for Accessory Dwellings* for Landcom (unpublished).

Australian Bureau of Statistics (1996). Basic Community Profiles, Sydney Statistical District.

¹⁶¹ Australian Bureau of Statistics (2001). Basic Community Profiles, Sydney Statistical District.

- From 856,900 households in 2001, the number of **couple families with children** is projected to grow to between 901,100 and 996,800 households in 2026, an increase of between 5% and 16%. This is an additional 44,200 to 139,900 households or an average increase of between 1,700 and 5,600 households a year. A third Series analysis projects that the number will decline by 14% to 740,800 households in 2026.
- The ABS projections suggest that in 2026 Sydney may possibly have around:
 - 165,000 more couple family without children households,
 - 187,000 more lone person households,
 - 49,000 more lone parent family households, and
 - 46,000 more couple with children family households.
- The ABS projections indicate that couple without children, lone parent and lone person households in Sydney will need over 400,000 dwellings appropriate to their needs over the next 20 years or so — a possible average demand of 22,350 dwellings a year.
- The projected average demand for each household group between 2006 and 2026 is likely to be around:
 - 8,250 more couple family without children households,
 - 9,350 more lone person households,
 - 2,450 more lone parent family households, and just
 - 2,300 more couple with children family households a year.
- Work by the ANU's Peter McDonald reported in 2003 suggests that the growth in:
 - couple with children households will be fastest in the inner ring LGAs, and
 - couple without children, lone parent and lone person households will be fastest in the outer ring LGAs,
- The growth in couple without children in Sydney's outer regions is considered by McDonald¹⁶² to be largely due to children leaving home and their parents ageing in place. This is also the explanation for the substantial growth in lone person households in these, and the other two, Sydney regions. McDonald makes the point that:

...it is important for policy makers to realise that most dwellings in the outer regions of Sydney will continue to be occupied by the same people at least to 2011, but the composition of households will change. This means that the number of dwellings being freed up for occupation by younger families will be relatively limited. In other words, there will continue to be strong demand for new housing for young families in the outer regions of Sydney.

These young families will find it difficult, if not impossible, to find affordable housing if current price trends, largely driven by social and infrastructure charges, continue.

- The likely age and structure of the fastest growing household groups suggest that much of NSW's new housing stock will need to cater for a wider range of income levels, equity capacities and physical capabilities than has been the case to date. Many will find the industry's current offers well beyond their financial capacity, far from employment or unsuitable for their physical and lifestyle needs.
- Unfortunately there appears to be little recognition that the housing market will be increasingly characterised by a great diversity of smaller households with very different

McDonald, P. (June 2003). Medium and long term projections of housing needs in Australia. Australian Housing and Urban Research Institute, Melbourne.

lifestyles, attitudes, financial capabilities and tenure preferences. As a consequence, one size fits everyone everywhere planning strategies present greater economic, environmental and social risks to government, industry and the community than deliberately planning, designing and building to more efficiently match need to household.

Projected dwelling demand: 1996 to 2011

- McDonald predicted that most of Sydney's growth will be in the outer south and north LGAs with a demand between 1996 and 2011 for around 23,200 new dwellings a year.
- McDonald's dwelling demand projections are somewhat higher than the ABS household growth projections. There are no clues in the literature as to how the difference might have been derived. Nonetheless, the projections envisage a 65%:35% split between 'separate houses' and other dwellings' by 2011, about the same as that in 1996 but different to the 63:37 split in 2001.
- McDonald's projections have some curious aspects not least of which is that 'separate
 houses' are projected to increase more than 'other dwellings' in the inner ring LGAs.
 No distinction is made between the different sized land lots on which separate houses
 can be built. And, furthermore, McDonald's figures do not seem to acknowledge the
 diminishing proportion of traditional couple with children family households and the
 growth of other household types, all of whom different housing typologies might be
 more appropriate.

Dwelling types supplied to the Sydney market: 1996 to 2011

- The years between 1996 and 2001 saw relatively modest increases in the number of separate houses delivered to the Sydney market. This form of housing dominated the outer ring LGAs but, surprisingly, there was also an increase in separate houses in the inner ring LGAs.
- The substantial increases in the number of medium to high density dwellings, and the
 modest increase in separate houses, is not surprising given State government urban
 consolidation polices and the shortage of land for detached dwellings. Their increasing
 acceptance by the market, if not by the community, suggests that higher density living
 is becoming an satisfactory alternative for many households
- The highest growth has been seen in the two-storey villa/terrace/townhouse, and three storey and over four storey unit/apartment categories. High-density redevelopment of redundant industrial land in Inner Sydney dominates with modest increases around transport nodes contributing to this category's growth in the Middle and Outer South Sub-regions.
- Medium density villa and townhouse development dominates the sub-regional areas where, in the absence of high quality alternative models, this form of development is generally more acceptable to local communities. The higher construction costs for buildings over three stories and sale price limits are another significant influence.

5.0 CHANGES IN OWNERSHIP ASPIRATIONS

5.1 The debate on falling home ownership

Home ownership has played a key role in Australian politics and culture. Explanations for consistently high rates of homeownership focus on the role of government policy (favourable tax rates and incentives such as the First Home Owners Grant), sustained economic growth, and social and demographic change. According to Merlo and McDonald¹⁶³, the reasons fall into three categories:

- Use value homeowners can 'do what they want' with their property and are able to create and personalise their own environment,
- Exchange value owning or buying a home is an investment and source of wealth that can be transferred to children, and
- Symbolic value home ownership offers a sense of security, a sense of achievement and social status.

At the same time, and despite the dominant place of home ownership in the national psyche, it is apparent that purchase rates, and outright ownership rates, among younger households are declining¹⁶⁴.

Despite improved affordability, the Australian dream of owning a home is increasingly becoming a reality for higher income households... Two incomes (are) now the norm required to pay off a mortgage... About 80% of households buying or paying off a home were in the top 60% of income earners... There are clear signs that owner occupation, once the common aspiration of an overwhelming majority of Australians, is becoming the preserve of the 'better off'... The rate of purchase by young first homebuyers appears to be on the decline in spite of falling interest rates. Having a middle to high income and a secure job are increasingly necessary to get into — and stay in — home ownership in Australia. There (is) a widening gap between renters and buyers, with 70% of low income tenants paying more than 30% of their wages for rent, compared with only 40% of home buyers paying more than 30% of their wages towards a mortgage. Purchasing a house on a mortgage depends strongly on a household having two or more incomes. Over 60% of purchasers are in this situation, compared with a third of private tenants. 165

Evidence is found when comparing the 1996 and 2001 Census tenure data for the Sydney region. The number of dwellings owned outright increased from 539,533 in 1996 to 561,232 in 2001 and the number of dwellings being purchased increased from 302,227 to 329,158 over the same period. However, the proportion of dwellings owned outright dropped from 40.6% to 39.0% of the occupied dwellings in the Sydney region between 1996 and 2001 while the proportion being purchased remained relatively stable at 22.8% and 22.9%.

Judith Yates (1998) provides evidence for the decline in ownership by younger people, observing that in 1994 some 55% of those under 35 were homeowners, down from nearly 70% in 1975. She states that the decline occurred entirely among households reliant on

Merlo, R. and McDonald, P. (February 2002). Outcomes of home-ownership aspirations and their determinants. Australian Housing and Urban Research Institute.

Yates, J, (1998) and Baum, S and Wulff, M. (February 2003). *Housing aspirations of Australian households*. Australian Housing and Urban Research Institute.

Australian Financial Review, 4 June 1997 in Yates, J. (1998)

mortgage finance to buy a home and notes that in 1975 just over 58% of households under 35 had a mortgage but that this proportion had decreased to fewer than 49% by 1994. As a result, Yates asserts, there is no reason why the high home ownership rate enjoyed by Australians will be sustained.

Until the 1990s, housing research indicated that the majority of Australians followed a fairly stable pattern of movement between housing tenures. This started with a move from the family home into rental accommodation, followed by parenthood and home purchase and then outright ownership. Reasons for reducing home ownership rates have been the subject of academic research and debate over the past few years.

In her 1998 report for the NSW Department of Urban Affairs and Planning, Yates¹⁶⁶ noted the fall in home purchase rates among young couples with children in the middle income groups and amongst young couples in the top income group. She proposed two principal reasons:

- For middle income households, the impact of increasing housing costs has reduced their ability to buy a home, and
- For those with less of an income constraint, a change in preference away from home ownership resulting from different economic and social circumstances, not least of which was a desire to be flexible in the choice of employment location.

Uncertainty about employment security, interest rates and future trends in dwelling prices were also put forward as reasons. Her main conclusion was that housing has become less affordable and that the lack of affordable housing will extend over the whole housing career of many Australians without policy interventions.

Yates also made the general observation that:

These factors in concert with social trends, which have led to a postponement of marriage and a delay or foregoing of child bearing, may have contributed to the emergence of a new generation. This is a generation which no longer has the need for the security provided by home ownership, the willingness to undertake the long term commitment associated with home purchase nor the economic incentives which encouraged home ownership. Home ownership is increasingly becoming the domain of those with sufficient wealth to own their homes outright; it has become a luxury for those who face the uncertainties and volatility of a global economy.

On the other hand, in their Housing aspirations of Australian households study¹⁶⁷, Baum and Wulff observed that:

What is not known is whether in recent (age) cohorts, the decline in the purchaser rate stems from changing demographic patters or a change in housing preferences, particularly among young households.

While apparently reliant on 1977 and 1991 surveys, the research examined home purchase expectations. Respondents to surveys analysed by Baum and Wulff reveal a decline in home purchase expectations among 25 to 34 year olds between the late 1970s and early 1990s. Their report states that:

... between 1977 and 1991, the proportion of non-home owning 25 to 34 year olds who expected to purchase within five years fell from approximately 63 to 50 percent.

¹⁶⁷ Baum, S and Wulff, M. (February 2003). *Housing aspirations of Australian households*. Australian Housing and Urban Research Institute.

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¹⁶⁶ Yates, J. (September 1998). *Trends in Home Ownership*. Department of Urban Affairs and Planning, Sydney.

Moreover, when interviewers asked respondents 'why did you rent instead of buy', life style explanations overtook financial factors... Respondents in 1991 were far more likely than the earlier 1977 cohort to answer 'l'm not ready'.

Lifestyle explanations were found to be more important, and financial factors less important, as reasons for not stepping on the ladder of home ownership. They also observed that the ownership aspirations of this group were likely to have been affected by an increase in part-time and full-time casual work and a decrease in full-time work. Both have an impact on the ability to find mortgage finance as part-time or casual work is considered to be non-standard employment. Those in such employment are considered by many lenders to be a precarious risk unless they qualify for mortgage insurance or have substantial savings.

In an earlier study, Merlo and McDonald¹⁶⁸ claimed that home ownership as a goal was independent of income or relationship status but, not surprisingly, employment status and income determined if it could be achieved. Furthermore, they found that aspirations were largely irrelevant to the actual achievement of home ownership.

The reasons for, and potential impact of, these trends might have on policies aimed at increasing the stock of housing for stress free purchase by low to moderate income households have been the theme of a number of academic research papers since 1998. The basic question is whether the fall in home ownership rates is due to:

- Increasing housing affordability problems, the consequence being the inability of an increasing proportion of households to purchase a place of their own at any time in their lives (Yates¹⁶⁹), or
- Delayed rates of family formation due to changing aspirations but with those able to buy a home doing so later in life and at least to the same levels as previous generations (Merlo and McDonald, Baum and Wulff and McDonald and Baxter¹⁷⁰).

The debate whether declining home ownership rates result from the high cost of housing or changing aspirations appears to centre around alleged deficiencies in tenure data collected by the Census and the benefits of time-based surveys comparing the behaviour of different age cohorts. The technical arguments for either are irrelevant to this research. The respective findings and suggested policy implications are of particular interest and, using extracts from AHURI Research & Policy Bulletins, are outlined below.

5.2 Housing affordability and falling home ownership rates

Yates¹⁷¹ leads the argument for housing affordability being the primary reason for declining home ownership rates by stating that Australia's home ownership rate fell by 2.2% — from 68.2% in 1986 to 66% in 1996. This decline comprised a 5.5% fall in the home purchase rate and a 3.3% rise in the outright ownership rate. This clear distinction — between the home purchase (using a mortgage) rate and the outright (or fully owned) ownership rate — is an important basis of her research.

¹⁶⁹ Yates, J. (July 2002). *Housing implications of social, spatial and structural change*. Australian Housing and Urban Research Institute.

Merlo, R. and McDonald, P. (February 2002). Outcomes of home-ownership aspirations and their determinants. Australian Housing and Urban Research Institute.

Merlo, R. and McDonald, P. (February 2002). Outcomes of home-ownership aspirations and their determinants. Australian Housing and Urban Research Institute. Baum, S and Wulff, M. (February 2003). Housing aspirations of Australian households. Australian Housing and Urban Research Institute. Baxter, J. and McDonald, P. (April 2004). Trends in home ownership rates in Australia: The relative importance of affordability trends and changes in population composition. Australian Housing and Urban Research Institute.

Yates, J. Has home ownership in Australia declined? Australian Housing and Urban Research Institute Research & Policy Bulletin, Issue 21, May 2003.

Levels of overall home ownership, home purchase and outright ownership vary by age, income and household type. They also vary between non-metropolitan areas and within the capital cities. In inner Sydney, for example, the overall home ownership rate fell 2.2% to 52.1% and in outer Sydney it fell 3% to 67.4%. Yates' key findings, particularly for people in the traditional first homebuyer 25 to 44 year old group, are summarised below.

Age

People aged 25 to 44 are those most likely to be actively forming new households. They are also households whose housing circumstances are most likely to be shaped by current economic, social and political circumstances. For these reasons the 25-44 year old age group is particularly important to understanding contemporary change in Australian housing markets.

For example, the overall home ownership rate for 25 to 44 year old households fell 5.5% to 58.7% between 1986 and 1996. Importantly, the home purchase rate fell 7.5% to 39% while the outright ownership rate increased just 2.0% to 19.7%. For 45 to 65 year olds, most of whom have had their housing experiences and current circumstances shaped by past events, overall home ownership fell only 0.5% to 77.4%.

The declines in the overall rate of home ownership amongst 25-44 year old households were found to be greater in metropolitan than non-metropolitan regions. In the former, the overall rate of home ownership fell 6.7% to 59.5% while in the latter, the rate increased 1.0% to 28.4%. The home purchase rate for this age group fell in metropolitan areas by 10.3% to 40.5% but increased in non-metropolitan areas by 1.4% to 20.2%.

Income

The home purchase rate of 25 to 44 year old households fell across all income categories. For those on incomes of less than \$300 per week, the fall between 1986 and 1996 was 4.6% to 12.7%. For those with incomes above \$1200 per week, it fell 7.0% to 51.8%.

Household type

Amongst 25 to 44 year old couples with children (the group commonly associated with the housing career transition from rental to purchase) the overall rate of home ownership fell 2.7% to 72.4%. For 25 to 44 year old single person households, the overall home ownership rate increased 0.2% to 41.2%.

Housing market constraints

Yates claims that a detailed statistical analysis of changes in home ownership outcomes for households in the 25 to 44 year old age group identified the impact of demographic and socio-economic change as opposed to housing market constraints. The results suggest that housing market constraints (primarily house prices) are the dominant explanation for declines in home ownership rates. One example was the large (7.4%) decline in home ownership rates among 25 to 44 year olds that occurred in Sydney. Less than one quarter of these declines could be attributed to the changing demographic and socio-economic composition of households in each city. The remaining three quarters were believed to be attributable to changes in housing market constraints such as house prices. Other factors that affect tenure choice such as changes in consumption and investment preferences were also considered to be reasons for the decline in ownership rates.

The continuous rise in house prices since 1996 could mean that declines in the home ownership rate may have continued although the First Home Owners Grant might have had a positive impact on the rate of entry to home purchase.

Income differences arising from the labour market and social security system between 1986 and 1996 were increasingly reflected in, and reinforced by, the tenure differences within the housing market between home purchasers, outright owners, public renters and private renters. There was an increasing gap in household incomes between those in home ownership and those in rental. As a result Yates states that income and housing tenure circumstances are aligning to mean those most disadvantaged in the labour market are also the most disadvantaged in the housing market.

There are a number of caveats on this research. The first is that low mortgage interest rates in recent years and the associated increases in house prices may have affected the rate of entry to home purchase. While low interest rates provide an opportunity for increases in the entry rates into home, higher house prices and housing market competition may have had a negative impact upon the rate of entry to home purchase. The second is that Yates' research measures households in home ownership at points in time, not the flow of households in and out of home ownership. The rate of exit from home ownership, or the rate of entry to home ownership, cannot be deduced from the findings although existing research on housing careers suggests that the rate of exit from home ownership is very low.

Nonetheless, Yates makes the point that a decline in the home purchase rate means increased demands elsewhere in the housing system that can be manifest in the alternative tenures of private and, depending on stock and circumstances, public rental. They can also be found in a slowing of household formation rates (typically younger people living with their parents for longer), or an increase in the rate of households sharing a dwelling. Both are, in fact, a form of deferred decision.

Importantly, according to Yates, a sustained decline in the rate of home purchase may lead to fewer outright owners in the future. If it is assumed that the currently perceived benefits of home ownership persist, a number of potential of policy issues arise. These include the impacts of:

- A decline in the economic well-being of an ageing or retired population unable to release equity in their homes,
- An increase in the demand for income support by those renting in their retirement,
- A reduced capacity to deliver an 'ageing in place' strategies (although longer term tenure arrangements may be a simple solution), and
- Fewer households with the equity required to support entry to a self-care retirement village or nursing home.

Yates' four scenarios assume that declining home purchase rates are primarily driven by constraints rather than choices. If this situation changes and households choose not to become home owners rather than simply defer their purchase decisions, she questions whether these households will have alternative investments that match the financial benefits of home ownership in retirement.

The decline in home purchase rates was observed to be greatest in the metropolitan areas. The point is made that this affects the ability of key workers, such as teachers and nurses, to locate close to the communities they serve (as is the case in London). If this remains the case, policies that support entry to home ownership in high cost cities may be required. The design of these would need to consider the impact of assistance on house prices, whether to focus on the entry to home purchase or on sustaining mortgage repayments, and how to determine household eligibility.

5.3 Falling home ownership: changing aspirations and deferred decisions

Other research undertaken by Baum and McDonald and Merlo and Wulff¹⁷² contends that when different demographic cohorts enter the housing market they experience distinctive economic and housing environments and this influences the extent to which they aspire to home ownership. In effect, home ownership aspirations fluctuate over time with changing social, economic and demographic conditions.

Baum and Wulff¹⁷³ found that a higher percentage of baby boomer cohorts (born between 1943 and 1961) aspired to home ownership than later cohorts. The proportion of non-home owning 25 to 34 year olds who aspired to home ownership fell from 63% in 1977 to 42% (women) and 49% (men) in 1986. Aspirations alone, however, do not predict achievement. Over the period between surveys on which the research was based few of the households aspiring to home ownership achieved their goal.

It is argued that such fluctuations can be associated with having children. Merlo and McDonald¹⁷⁴ reveal that, regardless of ethnic origin, employment, and income status, a majority of renters believed it was important to ...buy a home in the next three years. Having a young child, or wanting to have a child, was the most influential factor in this desire. People who reported that having a child in the next three years was important or very important, were almost seven times as likely to want to buy a home than those without strong childbearing intentions. The factors identified as being strongly associated with not achieving home ownership were:

- Age: 84% of younger people aged under 25 failed in their goal of home ownership compared to a failure rate of 55% for those aged between 25 and 34 and 63% for those 35 and older,
- Household income: 79% of those households with a net annual household income under \$20,000 failed to enter home ownership by 2000, compared with 43% of those with incomes above \$30,000.
- Number of employed adults: 76% of single or no-income households were more likely to fail in becoming homebuyers than dual-income households (43%), and
- Changes in employment or relationship status, and/or the birth of a child had no significant impact on the failure rate.

Other statistically significant factors associated with aspiring to enter home ownership were living in a more recently formed household or having two incomes in the household. This last point raises the importance of household income in the ability to purchase a home.

Like Yates' research, there are caveats on the research findings. Merlo and McDonald analysed home ownership aspirations reported in a survey of 789 Australians, who, when interviewed in 1997, were not living in owner occupied housing. A follow-up survey in 2000 assessed the extent to which these Australians achieved their housing goals. The research by Baum and Wulff used several social surveys from the 1970s to the 1990s in their analysis of the housing preferences and aspirations of young households. They found that different

¹⁷² Home ownership in Australia: the gap between aspiration and achievement. Australian Housing and Urban Research Institute Research & Policy Bulletin, Issue 23, June 2003.

¹⁷³ Baum, S and Wulff, M. (February 2003). *Housing aspirations of Australian households*. Australian Housing and Urban Research Institute.

Merlo, R. and McDonald, P. (February 2002). Outcomes of home-ownership aspirations and their determinants. Australian Housing and Urban Research Institute.

definitions and interpretations of the concept of 'home ownership aspirations' from survey to survey limited the analytical potential of the exercise.

Ultimately, the researchers came to the same conclusion as Yates: a long-run decline in home ownership could have significant policy consequences for Australia's growing older population as they retire.

5.4 A more recent contribution to the falling home ownership debate

Research by Baxter and McDonald published in 2004¹⁷⁵ offers evidence for the case that those wishing to become homeowners will be able to do so later in life and at least to the same levels as previous generations. Their report analyses data from two surveys: the 1999 ABS Australian Housing Survey and the 1997 and 2000 waves of the Negotiating the Life Course Survey. The findings are summarised below.

- Once other characteristics are controlled, there is no indication at all of falls in home ownership across birth cohorts. If anything, more recent birth cohorts are more likely to be homeowners than earlier cohorts, especially among males.
- The most significant factor associated with home ownership is marriage, meaning formal marriage.
- Those who are cohabiting (living together but not married) and those who are single
 but not living with their parents are much less likely to be home owners than those who
 are married but much more likely to be so than those who are single and living with
 parents.
- Having controlled for relationship status, home ownership rates fall as the number of children rises.

Baxter and McDonald say that more than any other factor, trends in home ownership rates among Australians under 35 are related to changes in relationship status and living arrangements. It is an issue of deferral rather than lifetime achievement. They say that since the mid 1970s, young Australians have been deferring other life cycle events previously associated with home purchase. The conventional framework is that first home purchase is associated with the achievement of a secure income stream, family formation, marriage and first birth. Researchers have demonstrated that a classic sequencing of life cycle events (marriage to first child to home ownership) has been replaced by variation in the sequencing of these events. Others conclude that the housing cycle — where a person would typically leave the parental home and move to a form of rental then to purchase and finally outright ownership — remains the dominant pattern.

The Baxter and McDonald analysis shows that there has been falls in home ownership rates at young ages but their study implies that these falls are associated with delays of relationship formation, especially marriage. They believe it is premature to see relatively small falls in home ownership among people in their twenties as a 'crisis' in home ownership among young people. Their main concern, however, is a finding that having children delays home purchase, and the more children a couple have the longer is the delay. The analysis conducted in Baxter and McDonald's research is up to the year 2000. By way of acknowledging Yates' point of view, they believe it is possible that changes in affordability since then may contribute to lifetime falls in levels of home ownership.

¹⁷⁵ Baxter, J. and McDonald, P. (April 2004). Trends in home ownership rates in Australia: The relative importance of affordability trends and changes in population composition. Australian Housing and Urban Research Institute, ANU Research Centre

The impact of changes in the labour market

A study completed in June 2002 by South Australian researchers Kupke and Marano 176 considered how change in the labour market, particularly the lack of job security resulting from more casual and contract employment, might influence the characteristics, attitudes to home ownership and housing opportunities of new purchasers. The researchers believe this is an important research issue given the evidence that the proportion of homebuyers — as distinct from outright owners — has fallen over the last ten years. They argue that, to date, there has been no attempt to identify the attitudes and behaviour of first homebuyers in an environment of significant labour market change.

The research was, perhaps, limited by its focus on South Australia where the project team had immediate access to, and familiarity with the necessary data. Their findings are, however, relevant to the discussion because the State has a rapidly ageing population, very high levels of levels of public housing stock has been sold off, and casual and part time employment levels are the highest in the country.

Kupke and Marano claim that Australia's welfare and housing polices have been predicated for 50 years on the perceived merits of home ownership. Welfare benefits both during employment and on retirement have been based on household investment being extended over time through home ownership. They believe home ownership levels, particularly among younger households, may be compromised if the risks of home purchase in a changing job market are perceived as exceeding the long held doctrine of ownership offering capital gain, security of tenure, and an inflation hedge. For an ageing population any change in purchaser behaviour particularly in the group who would traditionally have entered home ownership as early as possible is significant.

They start with a review of trends in Australian labour markets. Relevant key points, extracted from the Executive Summary of their report and a paper prepared for the ACTU, are summarised below.

- The 2001 ABS publication Australian Social Trends indicates that the two main trends in Australian labour markets between 1990 and 2000 were increasing concentrations of the workforce in the service sector (from 68% to 73% of employees) and increasing levels of part time employment (from 21% to 26% of employees).
- Another significant trend has been the increasing levels of casual employment particularly in the male work force. In the 10 years between 1988 and 1998, 69% of net growth in the number of employees in Australia was in casual employment. Over the same period there was a 115% increase in the number of male casual employees. In 2002, according to the ACTU, 27% of employees were casuals and 29% worked part time compared to 16% and 18% respectively in 1984.
- Casual workers are not entitled to paid holiday or sick leave and should have no expectation of ongoing employment. However they may receive higher pay rates to compensate for the lack of job security and paid leave.
- A rise in casual employment has been accompanied by increasing levels of labour turnover as a result of more casual employment. ABS findings quoted in the report indicate that some 14% of the Australian workforce changes their job or business, or the location of their workplace, approximately every 12 months. Of this group, some 25% are aged between 20 and 24.

¹⁷⁶ Kupke, V. and Marano, W. (June 2002). *The implications of changes in the labour market for the ownership* aspirations, housing opportunities and characteristics of first home buyers. Australian Housing and Urban Research Institute, Southern Research Centre

- While about 38% of employed persons work worked for their current employer for over five years, 21% of employed persons worked for their current employer for less than one year and a further 21% worked for their current employer for only one to two years. The same findings show that the majority of self identified casual workers and other employed persons work for their current employer/business for two years or less. Kupke and Marano use these figures to assert that security of employment for more than two years does not exist for over 40% of the Australian workforce.
- In Australia between 1973 and 1993, part time jobs grew by 16.4% while full time jobs grew by only 4%. According to the ACTU, permanent full time employment fell from 74% of employees in 1984 to 61% in 2002. ABS figures show that some 50.3% of part time workers are working part time for the reason there is no other employment available.
- As well as changing employer or business, more Australians are changing occupation.
 Of the 1 million Australian who changed their employer or business in 2000, 37.6%
 also changed occupation while of the 27% who left work involuntarily almost two thirds were retrenched.
- There has been an increase in mobility in terms of job location and job type particularly for those under 30 years. It is argued by Kupke and Marano, and generally accepted, that school leavers can expect to change their career, not just their job, three times in their working life while a graduate can expect to change jobs seven times of which four changes will be involuntary.

The changes prompted the ABS to comment in 2005¹⁷⁷ that: Working life in Australia continues to change. There are more diverse employment arrangements, more flexible working time patterns, and more people working pan-time hours.

5.6 The concept of life-cycle stages and housing careers

In September 2003, researchers from the AHURI Western Australian Research Centre¹⁷⁸ announced their intended contribution to the debate on what propels tenure decisions in the Australian housing market. While only at the 'positioning statement' stage, their research aim is to present government policy makers with an understanding of what drives housing outcomes in Australia and what determines the structure of Australian housing careers.

In their paper, Flatau, Hendershott, Watson and Wood reviewed the driving forces influencing the housing stages an individual moves through over a lifetime. These include:

- Housing tenure preferences and housing market signals (house prices, rents etc.),
- Household formation aspirations and outcomes,
- Labour market effects (wages, employment, unemployment, and retirement),
- Lifetime wealth accumulation objectives, and
- Housing assistance, income support, tax, and welfare programs.

From this base, they intend mapping how these drivers, and hopefully others that may be identified, influence the trajectory of Australian housing careers with attention being paid to three distinct life-cycle stages. For these — early adulthood, middle age and maturity — they are interested in exploring the degree to which present day Australian housing careers

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¹⁷⁷ Australian Bureau of Statistics (2005). *2005 Year Book Australia*. Canberra.

Flatau, P., Hendershott, P., Watson, R. and Wood, G. (September 2003). What drives housing outcomes in Australia? Understanding the role of aspirations, household formation, economic incentives and labour market interactions. Research Positioning Paper. Australian Housing and Urban Research Institute, Western Australian Research Centre Research & Policy Bulletin, Issue 23.

conform to a sequence where individuals move from the parental home through the private rental market and into home ownership.

Australian housing careers in the immediate post-war decades followed this particular housing career pathway and it became the traditional housing career for most. Some housing market commentators, however, suggest that this pattern is becoming less common. The ABS¹⁷⁹, for example, notes ...a slight decrease in home ownership among young adults between 1981 and 2001, which may be related not only to changing economic and social circumstances, but also to changing housing preferences among young adults.

The Western Australian researchers will seek to explore three hypotheses related to this line of argument namely that Australians are either:

- Taking longer to undertake key housing career transitions than they previously did,
- Experiencing interrupted housing career trajectories when unfavourable household formation, housing market and labour market shocks force a course reverse in their housing careers, or
- Changing their career goals or aspirations and consequently changing the direction of their housing careers.

To provide a base on which to model the housing career drivers three lifecycle stages are to be considered. These are:

Young adulthood — the 15 to 34 year age group

The first independent housing-career transition that individuals make is to leave the parental home and move into independent living. In the traditional housing career, a relatively quick movement is then made into home ownership. Flatau, Hendershott, Watson and Wood are interested in whether delays have been experienced in both leaving the parental home and entering homeownership and the role housing career drivers play in these outcomes.

Middle age — the 35 to 49 year age group

In the traditional housing career, those aged 35 to 49 are thought to be engaged in a process of home ownership consolidation involving mortgage reduction or moving up in the housing market. While many will follow these traditional housing career paths some will be experiencing an interrupted housing career profile and a reduction in the wealth accumulated through home ownership.

Mature age — the 50 to 69 year age group

The final stage of the housing career involves what the researchers refer to as the 'mature age group'. In this age group, some will follow the traditional path and remain in their homes for as long as possible before seeking supported accommodation. Others are likely to follow different housing career pathways depending on their ability to release home equity, maintain their existing homes or remain in good health.

Underpinning these lifecycle stages the researchers intend exploring seven possible drivers of an Australian's housing career. These are:

Household formation decisions

Key household formation decisions are thought to include:

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¹⁷⁹ Australian Bureau of Statistics (2004). *Australian Social Trends 2004*. Canberra

- staying in, or leaving, the parental home to begin an independent housing career;
- deciding to cohabit with a partner (or leave a partner); and/or
- deciding to have children.

A range of demographic determinants, educational outcomes, economic and other constraints, and social, economic and housing aspirations are believed to play roles.

Housing demand and supply

As individuals form into households they also decide whether to own or rent housing. Anecdotal evidence suggests that some households are also deciding whether rent and then invest in the private residential accommodation market. The first set of decisions relate to the demand side of the housing market while the latter relate to the supply side of the housing market.

Labour markets

Individuals not only make household formation and housing tenure decisions they also decide whether or not to work. Those deciding to participate may not find work, work fewer hours than they wish or not find a job appropriate to their skill base and location. In these situations, incomes can fall below the desired or necessary level with the result that they run into borrowing constraints and liquidity problems that influence housing tenure choices.

Housing assistance, income support, and welfare programs

Housing assistance programs directly affect the demand side of the housing market by influencing the relative prices of various housing options.

Wealth and consumption objectives

Flatau, Hendershott, Watson and Wood claim that individuals are forward-looking. They suggest, for example, that those who wish to maintain high consumption levels in retirement or provide bequests to their children must accumulate wealth during their lifetime. As a result, they cannot consume all their current income because their future consumption will be substantially reduced.

Interactions

The interaction between housing demand and the existing stock of housing determines outcomes in the housing market while the demand and supply of labour determines employment and real wage outcomes in the labour market. There are substantial feedbacks from the housing market to the labour market and vice versa. Income support programs, housing assistance programs and tax measures all impact on the labour market/housing market interface.

Negative shocks

The proposed model of housing careers also aims to take into account the impacts of negative shocks that force individuals down housing career ladders. Often these have long-lasting effects with individuals being unable to return to their original housing career position. This is particularly the case for those in the middle and mature phases of the life cycle who are retrenched and unable to find subsequent employment.

By analysing the structure of Australian housing careers and evaluating the drivers that influence these careers, Flatau, Hendershott, Watson and Wood hope to add to the knowledge base necessary for good policy development.

Their research is being undertaken in an environment where the pattern of relatively rapid movement from the parental home to private rental accommodation and then home ownership remains dominant but appears to have slowed. This research may prove that

higher home prices and greater economic uncertainty have created a situation where more people are finding it harder move up the housing ladder or consolidate their position once the upward move has been achieved. Alternatively, it may prove that tenure decisions based on aspirations and lifestyle choice will remain the norm and high levels of home ownership will still be achieved later in the housing careers of Australians.

Either way, the outcomes may well be based exclusively on subjective assessments of numerical data and ignore researched evidence on the psychological drivers of housing choice. These psychological drivers must be understood if appropriate, locally based, affordable housing strategies are to be developed and implemented effectively.

5.7 Summary

- Home ownership has played a key role in Australian politics and culture for three basic reasons. Firstly, it offers owners the ability to create and personalise their own environment. Secondly, it is a source of wealth. And thirdly, it offers a sense of security, achievement and social status.
- Despite a growing and ageing population, the proportion of occupied dwellings owned outright in the Sydney region dropped from about 41% to 39% between 1996 and 2001. The proportion being purchased remained relatively stable at around 23%.
- Judith Yates argues that the fall in home ownership, particularly among younger people, is primarily due to uncertainty about employment security and the cost of housing. On the other hand, Merlo and McDonald, Baum and Wulff and McDonald and Baxter argue that the fall in home ownership is due to delayed rates of family formation due to changing aspirations but those with the capacity to buy a home will do so later in life and at least to the same levels as previous generations. Capacity is the key word because the gap between prices and the income required to buy has increased.
- Flatau, Hendershott, Watson and Wood are currently exploring these issues in more
 detail within a set of possible housing career drivers. These include household
 formation decisions, the interactions between housing demand and supply, changes in
 labour markets, wealth and consumption objectives and housing assistance, income
 support and welfare programs and events that force deviations from a housing career.
- Three key questions are being asked, namely:
 - Are Australian households taking longer to undertake housing career transitions?
 - Are their housing career trajectories interrupted when unfavourable household formation, housing market and labour market shocks force a change in course?
 - Are changing career goals changing the direction of their housing careers?
- These questions are also being examined within the framework of an individual's
 housing career, the first stage of which is a move into independent living followed by an
 unbroken, or sometimes interrupted, period of mortgage payments and then ownership.
- This research may prove that higher home prices and greater economic uncertainty have created a situation where more people are finding it harder move on to and eventually up the housing ladder. Alternatively, it may reveal that tenure decisions based on aspirations and lifestyle choice now dominate the choice of tenure but that high levels of home ownership will still be achieved later in the housing careers of Australians. All of the research appears to be based purely on numerical data rather than a serious and parallel analysis of the psychological drivers of housing choice.

6.0 CHANGES IN MARKET BEHAVIOUR

6.1 The need for better research

In his book Thriving on Chaos, Tom Peters¹⁸⁰ quotes a finding of the American Strategic Planning Institute that, in market segments of less than US\$100 million, the returns on investment averaged 27%, while larger market segments produced returns on investment of approximately 11%. This suggests that precisely targeting well-defined market segments delivers more profit than trying to dominate market share in larger, poorly defined markets where price competition is more intense.

To realise opportunities and achieve market success in any contemporary market place, products and services must have a distinct competitive advantage. However, where it was once enough to produce results by simply repeating past triumphs, today's competitive market place demands that success is directly linked to the development of product that has impact on potential customers and is based on distinct points of difference. Traditional responses that use forecasts based on trailing data, anecdote or personal and professional experiences are no longer adequate.

While they may be less tangible, successful cities, communities or neighbourhoods must also have competitive advantages. Market realities, and contemporary responses, are therefore equally appropriate in land use planning and housing design This leads to one conclusion: the most important questions about a city, neighbourhood or business are those that try to penetrate the real world of their residents and customers.

In the Australian housing industry the conventional wisdom is that the market is relatively homogenous and housing is a commodity that can only be sold on price. Demographic analysis and segmentation plays some part when developers and builders define their target markets but, as illustrated above, demographics only tell part of the story. When integrated with demographic studies, values analyses reveal many more segments than commonly considered. These have characteristics that can strongly influence neighbourhood planning, dwelling design, project advertising and selling methods.

The housing industry has access to volumes of statistics on the economics of home buying behaviour in Australia but:

- Why are they not used more effectively? Why are modern methods of efficiently identifying and reaching prospective customers rarely used?
- Why do builders continue to provide for an 'average buyer' rather than search for smaller, carefully defined, more profitable market segments?
- What are the underlying values which drive purchase decisions? How does the market reconcile the conflicts between the desired types, styles and images of 'home' with the more functional needs of cost, location, convenience and security?
- Why are purchasers so cynical about sales people rather than seeing them as a source of solid information and help during the purchase process?

A search for the answers is rarely, if ever, undertaken. One reason is because the Australian housing industry is extraordinarily conservative. Another is that it is dominated by a multiplicity of small companies oriented to building rather than marketing housing. The

¹⁸⁰ Peters, T. (1989). *Thriving on Chaos.* Pan Books, London.

industry is mostly content to play 'follow the leader' with its product and neighbourhood planning models. Unfortunately, the leaders may not know where they should be going and few, if any, appear to be positively responding to the market's rapidly diversifying and changing needs.

New Urbanism, for example is a strong, well-articulated planning model, the principles of which now have wide appeal in Australia. But social and marketing disaster lies ahead for those who naively take the seductive and romantic images of the streets and houses of Seaside, Kentlands or Celebration and blindly apply them to Australia's economic environment and culture.

A much better understanding of the attitudes and behaviour patterns that influence our way of life and home purchase decisions is needed¹⁸¹ if these problems are to be avoided. If it is known, from comprehensive research, how the different dreams of a highly fragmented and polarised market are constructed, then:

- The innovations implicit in new planning models can be tested with the people most likely to live in a development and the most desirable mix of lot sizes, housing forms and urban environments properly identified and planned for,
- The lifestyles, interests, values, expectations and symbols important to home buyers can also be identified, incorporated in project plans and used to better inform builders of market requirements and the segments they should address,
- A better appreciation of the sales rates, sales prices, staging and delivery methods for housing and community infrastructure can be obtained and project risk assessment and feasibility studies made more accurate, and
- Advertising and promotional messages can be far more effective and less costly to deliver because the 'hot buttons' and promotion channels to which the market responds will be clearly understood.

Obviously core housing markets must be acknowledged and satisfied. But knowing more about the people dissatisfied with current offerings means price becomes only one competitive factor and better value can be added. This may mean creating markets by identifying where growth opportunities exist, finding elements of the total house, land and environment package which can expand a market, or improving the overall delivery process to create more satisfied buyers.

Knowing precisely what the market wants, and what it is prepared to trade off to meet those wants is the primary aim of market research.

The first question that must be answered is:

What kinds of people are in the market and how many of them are there?

The answer comes from conventional quantitative demographic market segmentation models. These identify the core of active buyers. What is often forgotten, however, is that a pool of potential buyers who represent hidden opportunities surround the core market. There may also be people not currently in the market who could be encouraged to buy if the offer better met their needs.

The next questions ar	е)
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⁸¹ Brown, D. (1996). Extract from *Market research: Understanding what people and making sure they get it.* Paper to the RAIA New Urbanism Conference, November 4, 1996.

- What brings people into the housing market?
- When people are deciding to buy what kind of urban environment and housing best satisfies their individual needs?
- Why do they want it and what are they willing to pay?

Answers to these questions come from sophisticated qualitative and quantitative value and lifestyle research that provides clues on how different market segments respond to alternative design and promotion strategies. It delivers:

- Detailed insight into people's response to conventional suburban development and housing models and their response to the new alternatives.
- An appreciation of what the innovations implicit in these new approaches mean to existing and potential buyers and how it is seen to fit their lifestyles.
- Recognition of how purchase barriers such as:
 - lack of access to information
 - awareness of alternative urban forms
 - whether the alternative meets desired lifestyle or investment needs
 - the 'packaging' and delivery of housing and community infrastructure
 - sensitivity toward housing and street forms, or
 - cynicism toward advertising promises\

might be removed.

- Buyer demographic and attitude profiles including their housing preferences, location priorities, purchase timetable, house design and urban environment 'hot buttons', recreational activities, preferred housing delivery channels and the most effective promotional language.
- Estimates of the potential market by both demographic and lifestyle/values segment for a new as opposed to a conventional model.
- The community services, employment and recreational amenities that should be provided and the expectations of buyers as to who should pay for these.
- Clear directions as to the value the market places on different features which could be built into a development so comparisons can be made between the costs of providing various combinations of features,
- Directions for positioning the development in the market which may include responses to possible project names and merchandising themes.
- Recommendations on the optimum 'sales track' from receipt of initial promotional
 material through to the information contained in information centres and display homes
 which makes the house and land purchase process less threatening and more
 comfortable.

Quality research is an investment that can be used to improve the present systems of housing delivery and more closely meet the physical and emotional demands, and economic capacities, of an increasingly diverse market. Housing designed to meet these diverse needs more accurately fits buyer tastes, lifestyles and values and reduces a common concern that compromises have to be made because a better fit is not offered.

This thinking suggests that policies and commercial decisions based on a belief traditional housing career paths and ownership aspirations dominate the housing market may be only partly on target. Examples might be policies simply aimed at increasing the stock of housing for purchase by low and moderate-income households or commercial decisions weighting the distribution of housing densities toward the low end of the range.

An example of research that appears to have been influential¹⁸² in guiding the currently planned dwelling mix for Sydney's North West and South West release areas was undertaken by MacroPlan Australia. Elements of the research results were published in 2003 after the HIA *Building Green Smart Communities* Conference in Perth. While the research methodology was not revealed, the results seem to be based on questionnaire responses from around 400 people. The number or respondents is such that a telephone survey would more than likely have been used. The principal finding — that respondents aspired to a detached house on a large block of land either in an established suburb or in a secure estate on Sydney's edge — was predictable. While aspirations are relatively easy to test with simple questionnaire techniques it is nearly impossible to predict actual behaviour, particularly with housing where the purchase decision is influenced by many variables. Research that does not assess buyer motivations and how they might behave when given a number of options is only telling part of a very complex story.

In other words, the relationship between housing preferences in the absence of constraints (intent) and housing choices made when faced with those constraints (behaviour) appear to be weak at best. A similarly weak relationship between the desire to live in a detached home on a large block and purchase behaviour may be found if research was undertaken into the trade-offs households aspiring to ownership were prepared to make to achieve their goal. However, it is the 'rear vision mirror' approach to research that is in large measure responsible for the homogeneity of contemporary housing and the neighbourhoods in which they are located. When development programs are based on what has succeeded in the past, they are susceptible to market shifts. This is like steering a car by carefully aligning the road in the rear vision mirror: the first curve could prove fatal.

In today's housing market today there is evidence of a growing hunger for variety. It seems that increasing numbers of households are no longer responsive to what the market offers. Developers and builders are at risk if they ignore qualitative research results that suggest new home buyers, even in very conservative markets, believe that: We buy it (conventional new housing) because it's the only thing being offered, not because we like it.

Quantifying the demand for new housing is a relatively simple task because it equals the growth in household numbers plus the existing and occupied dwellings removed from the market. Housing markets, however, are tending to be changeable and borderless, so even defining the market area can often be challenging.

Determining the character of the demand for new housing is, however, another matter because household projections at the local level can be wrong. Projections, by definition, depend upon baseline data but when significant shifts occur in a local or regional economy, baseline data becomes irrelevant. Valid, as well as statistically significant, housing demand determinations must include both conventional supply-side and demographic analysis as well as detailed analysis of consumer preferences,

For example, a typical supply/demand analysis might find limited demand for new housing in an area, particularly demand for a housing option that has not been offered. However, other ways of looking at demand put human faces on the numbers. These techniques enable the potential for untested housing types to be explored. Unique household types according to

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¹⁸² Department of Urban Affairs and Planning presentation, 2003

life-stage, lifestyle and values can be identified with each group having its own economic and demographic characteristics, consumption patterns and housing preferences.

Taken as a whole, these household groups describe the demand for different housing options. When placed within the price and rent context of the specific marketplace, these options, which may not exist in the marketplace, become an optimum housing mix. Such a specific mix and proportion of housing types should, however, recognise that the dynamics of a new community evolve over time. This is a contrast to the typical developer and builder reliance on offering neighbourhoods and housing types that lack the flexibility to respond to changing social and economic conditions.

An important outcome of this brief review of current research thinking is the concept of a housing career being driven by a multitude of interacting factors including household aspirations. Most developers and builders appear, however, to be focused on the numbers and trailing edge data. For one reason or another they largely ignore the psychological factors behind most housing decisions that work in environmental psychology reveals.

6.2 Environmental psychology

Environmental psychology — or environment/behaviour research — can be viewed as one way in which a culture formalizes the explanations it gives about the relationship between people and their physical environment. One obviously important element of the physical environment is the built environment. Unfortunately, the academic focus on this area in the 1970s and 1980s appears to have waned. During this period the built environment was analysed at many levels, from the perception of whole buildings to studies into the way people integrate design information into their cognitive structure and how this information is used when making choices about preferred residential environments.

In 1990 Thorne and Hall¹⁸³ identified housing and urban land use as an area where environmental psychology could play a role in policy development. Their paper contends that the earliest built environment research into slums and urban problems led, not without reason, to enforceable subdivision and construction standards. When combined with emerging aspirations to own a detached house on a large block of land, this deterministic view of regulating out social problems led to the low-density suburbs of Australia's capital cities and country towns. Thorne and Hall note that subsequent research found social problems in the suburbs and, with great hindsight, question whether suburban sprawl was not ill conceived and ultimately undesirable. Correctly, they observe that the 'right' to own a house and land has become such a strong part of Australian culture that governments put a lot of effort into minimising the political consequences of high interest rates or high prices. In the late 1980s and early 1990s, post occupancy evaluation of buildings was one outcome of the environmental psychology agenda. It too waned with changes in government and funding reductions. Since then little government or building industry investment in the sophisticated tools of environmental psychology research to improve policy, planning, design, marketing and commercial performance. As a result, relevant findings or valuable processes from environment/behaviour research within the social sciences have not been inserted into the planning processes in a wide-ranging or systematic way.

All this leads to the conclusion that there is a real need to develop a far more comprehensive understanding of the housing market and the most effective means of measuring aspirations, preferences, intentions and actual behaviour and how they change over time. There should be an industry wide product and market evaluation process with an explicit goal to provide meaningful information into the design process so neighbourhoods and housing improve their social and economic performance. Another should be input into communication and

Thorne, R. and Hall, R., Environmental psychology in Australia in Stokols, D., and Altman, I. (Eds.) (1987) Handbook of Environmental Psychology, New York, Wiley.

marketing initiatives designed to shift market aspirations and expectations toward more sustainable goals.

One audience that should be interested in better research is government — local and State — particularly the agencies involved in regulating and facilitating development, infrastructure and services. These agencies should recognise the potential for changing household demands to sustain infill development and reinvestment in existing communities, the implications for infrastructure and services, and better balancing resource allocations between development on the urban periphery and improving and enhancing existing communities. Unless the public sector acknowledges, and deals with, these issues housing consumers will light on solutions that impose significant external costs. It is happening already with middle ring gentrification and disinvestment.

In the past, housing research often involved simply asking consumers what they thought about a product. The insight gained may, or may not, have been incorporated into advertising copy or a product development brief. Many developers continue to use this technique and many architects simply believe the mark of the truly creative designer is the instinctive knowledge of what to produce. If the use of market research becomes more widespread the struggle between architects and researchers with their tables and profiles will become more intense. Irrespective of this struggle, modern market research offers developers the assistance of some very sophisticated techniques in their struggle to better match product with market needs.

6.3 Evidence from the US

At a 1996 Builder Design Symposium in Orlando, Florida, two directions of urban development practice were clearly demonstrated to those in attendance¹⁸⁴. They saw Disney's *Celebration* before the first residents had moved in. Most of the town — dwellings, shops, offices, a movie theatre, hospital and schools — was largely complete. Tom Lewis, who spent five years over-seeing *Celebration's* planning, is reported as saying ...we could have gone in any direction. It could have been a second home community or a resort or a retirement village. Instead we decided it would be a place where families would have their primary residence. We wanted it to be a real town.

There is no question *Celebration's* first phase was successful. The power of the brand, Disney's fanatical attention to consistency and detail, and a strong vision played a vital role. Exceptional marketing, the availability of good schools, health care, safe neighbourhoods and a promised 'sense of community' were also important elements. Don Killoren, general manager of the Celebration Company, said: *We did a lot of research. We knew the type of houses that people wanted.*

In the rest of Orlando, the Symposium participants saw a planning emphasis on the house rather than community infrastructure. This is the conventional model evangelical New Urban advocates believe should be discarded. But which alternative do the people who actually buy houses consider the best?

If the results of a 1996 study¹⁸⁵ undertaken by researchers Brooke Warrick and Toni Alexander are a guide, both models have appeal. Warrick and Alexander contrasted eight key elements of the New Urban model against conventional neighbourhood planning patterns to clarify what buyers and prospects thought about the alternatives. They reported that attitudes and reactions polarised three ways:

¹⁸⁵ Warrick, B. and Alexander, T. (1996). Changing consumer preferences in community features and amenities.

¹⁸⁴ Brown, D. (1996). Extract from *Market research: Understanding what people and making sure they get it.* Paper to the RAIA New Urbanism Conference, November 4, 1996.

- For and against the eight New Urbanism design elements of
 - town centre
 - community gathering places
 - parking and cars in town
 - residential area density
 - street pattern
 - neighbourhood look and feel
 - housing types and resident age mix, and
 - architectural style.
- Liking and disliking the suburbs.
- Concerns about, versus acceptance of, higher densities, smaller lots closer to narrower streets and the potential problems of noise, privacy, children's safety and less auto mobility.

The market was segmented using these contrasts and three groups were identified:

- 20.8% liked the whole new urbanism concept, including the higher densities;
- 30.8% liked the suburbs the way they are and rejected new urbanism; and
- 48.4% liked the image of new urbanism but, while not liking the suburbs, hated the density and the reduced mobility it appeared to represent.

Warrick and Alexander concluded that New Urbanism, with its neo-traditional small town design approach, is broadly appealing to buyers and prospects. But they had concerns with the higher densities and street patterns of New Urban planning.

Most people, they said, are not ready to make significant sacrifices for the New Urban ideal. Relinquishing the mobility and convenience of their cars, having small front yards and a house close to the street, and living on streets not perceived to be absolutely safe for children were not acceptable. The perception that higher density housing compromises privacy was also a problem.

It should be understood, however, that there is often a disparity between what people say they want and what they actually do with their money. In this respect, to quote Warrick and Alexander's study:

- If developers and builders go very far into being 'design purists' they could lose out big. The all-out neo-traditional town is not yet what buyers want.
- If developers or builders think they can just stay with conventional suburban designs (they need to) think again. Most people are unhappy with the suburbs the way they are. Conventional could lose big too. A 'cookie cutter' suburb is no longer a safe bet at all.
- On the other hand, there is a very promising niche for a few ... New Urbanism small towns. Careful testing of the waters is the way to go.

This example clearly shows that care is needed. The findings of US research projects are important to the debate about housing aspirations, housing preferences, housing choice, affordable housing and the creation of sustainable communities. The reason is that very little detailed research into these areas has been undertaken in Australia. However, based on commercially confidential research projects, it is believed that similar and sufficiently robust

findings would emerge and ultimately encourage industry and local government support for different housing models.

In this respect, US market researchers and new urban advocates Volk and Zimmerman¹⁸⁶ make some worthwhile points. They say that as a result of confusion between the perceptions of ...urban and rural environments, it is the middle ground — those places that are not urban cores and not rural countryside — that defies categorization. This middle ground — the much-maligned sprawling suburbs — is where the majority of Americans live. Some studies have found a marked inconsistency in the way respondents express contempt for suburban sprawl but seem unaware of either its consequences or causes.

Volk and Zimmerman argue that this confusion is observed in the inconsistent results of consumer preference studies. American households, they say, cannot respond reliably to hypothetical questions about neighbourhood form. Similarly confused responses are often seen in local research. Although surveys consistently suggest that the monocultural subdivision is the preferred form, it appears buyers in the US quickly bid up housing values within integrated-use, traditional neighbourhood developments when the alternative is available. For example, a 1999 study¹⁸⁷ found that the price differential between single family homes in new traditional neighbourhood developments and in surrounding areas were between 4% and 25% and averaged 11%.

Part of the problem, according to Volk and Zimmerman, rests with the surveys themselves. In a survey conducted in 1999 by the National Association of Home Builders, respondents were given the hypothetical choice between a ...\$150,000 townhouse in an urban setting close to public transportation, work and shopping or a larger, detached single-family home in a suburban area, with longer commutes to work. Over 80% of the random sample chose the detached house. Response to this carefully worded question, and many others like it, are often used to support low-density subdivision patterns and the ineffectiveness of residential revitalisation efforts.

Volk and Zimmerman point out that these responses have less to do with preferences than with the survey language. The language — *townhouse versus single-family home*, for example — is believed to have a powerful subliminal impact. Even the word *public*, as in *public housing*, can carry negative connotations for many respondents. Thus the apparent uniformity of US household preferences is linked to both the undifferentiated environments in which most find themselves, and, correspondingly, an inability on the part of researchers to clearly differentiate the complexities of housing preferences and establish demand patterns. Demand, according to Volk and Zimmerman¹⁸⁸, can be a misleading idea when applied to urban neighbourhoods. They claim conventional supply and demand analyses ignore the potentially significant impact of housing specifically targeted to match the housing preferences and economic capacity of households in a project's catchment. Their alternative is to obtain a better understanding of household characteristics through research.

Like Australia, the status quo in the US since the 1980s has consisted of builders delivering product that targets the perceived middle of the market, mainly the baby boom generation seeking large detached houses. A consequence is that competitive sales data, analysed on the assumption that past trends will continue, has resulted in a disturbing similarity in the plans offered by the builders. Lack of choice in the market is, accordingly, due to the industry's failure to acknowledge that following demonstrable sales successes is not always

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¹⁸⁶ Volk, L. and Zimmerman, T. (2002). *American households on (and off) the urban-to-rural Transect.* Journal of Urban Design, Vol. 7 No. 3. Carfax Publishing.

Eppli, M.J and Tu, C.C (1999). Valuing the New Urbanism: The impact of the New Urbanism on Prices of Single Family Homes. Urban Land Institute, Washington DC.

Volk, L. and Zimmerman, T. (2000). Confronting the Question of Market Demand for Urban Residential Development. Fannie May Foundation

the right path. The range of the households likely to be dominant in the future, and their subtle differences, is rarely considered.

Work by Myers and Gearin¹⁸⁹ in the US assessed the likely future demand for denser, more walkable neighbourhoods. The basis for their research was the role higher density housing was believed to play in achieving public policy goals such as smart growth and liveable cities. Their aim was to connect demographic trends with market preference surveys in order to project likely changes in demand for denser, more walkable residential environments.

At the outset, Myers and Gearin observe that there is no clear definition of what constitutes pedestrian-oriented neighbourhoods and no source of data neatly labelled 'walkable neighbourhoods, demand for'. Surveys are available, but the overall evidence for housing demand is general in its findings and context with some only relating to homebuyers and others to new construction. Furthermore, the language used in survey questions vary with the generous application of positive connotations that skew responses, as well as queries for housing preference rather than housing consumption. These observations reinforce the Volk and Zimmerman view regarding market confusion about alternative models of urban development and the potentially manipulative language of surveys.

Like Volk and Zimmerman, Myers and Gearin note that although most current surveys appear to support detached housing on large lots as being the single dominant housing preference, the same data¹⁹⁰ also highlights significant demands for alternatives. First, a varying proportion (17% to 33%) of housing consumers prefer an urban or town residential to a conventional suburban residential style. Second, despite a widespread preference for single-family homes, a consistent share of housing consumers prefers alternative residential styles such as townhouses (15% to 17%), duplexes (10%) and condominiums (9% to 14%) of survey respondents. Thirdly, contrary to conventional wisdom, is that some consumers (37% to 57%) prefer the higher densities of smaller lots or clustered development. Fourthly, in direct conflict with the desire for low density living, nearly 50% of respondents to a number of surveys favour a decrease in the vehicle dominance of conventional subdivisions. And, finally, enough housing consumers regard higher density and walkable neighbourhoods as representing such added value over competing offers that they are prepared premium prices. The surveys show that many people hold internally inconsistent preferences, for example the desire for low-density living and less reliance on the car. The conventional preferences may also be general ideals that are not pursued through a lifetime of trade-offs between changing personal preferences and circumstances. As noted earlier, ideal preferences are likely to differ from preferences when real circumstances come into play.

Conflicting preferences suggest that New Urbanism or conventional suburban development is not an either/or choice. Instead, an individual's ideal may between these two alternatives on the housing choice spectrum and differentiated by their place in a housing career. Similarly, individual household preferences for a single ideal housing type may in fact include a spectrum of types, united by key pragmatic and attitudinal criteria. Some of these criteria may be embedded in larger residential stereotypes, making their differentiation and identification difficult. Researchers have yet to make a distinction in the nuances of what are highly complex sets of housing preferences.

An interesting Volk and Zimmerman research finding, relevant to any thinking about fine distinctions in the housing market, is that the baby boomers will not replicate the patterns of

Myers and Gearin use data from surveys by the National Association of Homebuilders (*Smart Growth Survey*, 1999, and other surveys), American LIVES (*Community preferences: What the buyers really want in design, features and amenities*, 1999 and other surveys), Professional Builder (1998, not referenced) and Fannie Mae Foundation (1997, not referenced).

¹⁸⁹ Myers, D. and Gearin, E. (2001). *Current preferences and future demand for denser residential environments*. Housing Policy Debate, Vol. 12, Issue 2. Fannie May Foundation, Washington DC.

predecessor generations. They believe that very few are likely to congregate together in agequalified master-planned communities and suggest that when contemplating retirement baby boomers are much more interested in all-age communities, particularly those in a traditional neighbourhood form. This is despite the baby boomers being the generation that popularised the 'McMansion' — where value is defined as the most interior space per dollar — and the 'Toorak Tractor' — the mass-market version of the truck.

The habit of thinking that baby boomers are, like first homebuyers, a monolithic group will be very hard to break. The baby boomers are, in fact, very diverse in their attitudes, lifestyles and buying behaviour. Successive generations will be even more so. The industry, and government, has largely failed to recognise and accommodate this diversity. Furthermore, as a result of decades of mass-marketing and limited product development, the home building industry is now led by unwieldy organisations that see housing value as being exclusively measured by size and novelty. Genuine housing innovations have been mostly limited to the areas of production efficiency and risk management, rather than any meaningful improvement of the product offered to both buying and renting consumers.

The Myers and Gearin research explores a more sophisticated approach to designing, building and selling homes than the use of aggregate housing supply and demand data traditionally used to crudely assess future sales. In these conventional studies, homes are treated as generic commodities rather than complex consumer products that vary greatly according to a wide variety of economic and cultural preferences. Lending institutions perpetuate this dynamic with a bias toward standardization because conventional development is understood, relatively easy to finance, simple to build and with little relationship to the surrounding environment. Despite their best efforts at analysing extremely limited behavioural data, their core conclusion — that US homebuyers aged 45 and older who prefer denser, more compact housing alternatives will account for 31% of total homeowner growth between 2000 and 2010 — appears to be weak and simplistic.

The work of Volk and Zimmerman and Myers and Gearin illustrates that a lack of detailed information about housing consumer preferences and the practical limitations can result in superficial analysis and meaningless conclusions. The traditional, numerical approach tends to determine how many homes people want, but not what kind of homes or what type of residential neighbourhoods people would select if given a choice. Meeting the variety of consumer preferences for different housing types would be of enormous benefit to homebuyers and renters alike. Appropriate research would also reduce the perceived risk of financing and building new forms of neighbourhoods and housing that meet the demands of household types who, up till now, have been ignored.

6.4 Market segmentation

A useful concept for structuring market research is market segmentation: the breaking down or building up of potential buyers into groups. Each segment is considered to possess homogenous characteristics relating to their lifestyle, attitude or consumption behaviours. A distinct communication message or product mix can be used to reach each group.

Organisations seeking to refine their product development objectives and marketing strategies by targeting specific market segments generally look at segmentation by product, demographics and psychographics. The first two are commonly used by the development and housing industry while the last is only understood and used by a few.

 Product segmentation means, for example, identifying low density detached housing versus medium and high density multiple owner occupied housing versus rental, with the key being how or why the consumer uses the product. It is a simplistic approach that fails to acknowledge the diversity of housing models that might be accepted.

- Demographic or household segmentation is determined by using social and economic data from the target audience. It is the most familiar as the identification of potential buyers is generally based on selling to specific age, income or marital status groups.
- Psychographic segmentation defines attitudes, behavioural patterns, tastes, values and lifestyles. Depending on the market area, the size of the community and depth of the audience, this form of segmentation goes well beyond the use of statistical data. It requires the use of consumer interviewing via focus groups, on-site surveys and tradeoff analyses that identify what motivates people to buy into one neighbourhood and dwelling type than another.

A useful approach to market segmentation is to develop a 'product/market grid'. This device can enable a market planner to evaluate for each product/market segment its degree of market attractiveness relative to company profit targets and available resources. A similar approach might be appropriate when considering the most appropriate housing product range for those in housing stress. A hypothetical example ¹⁹¹ is shown below.

Appropriate and profitable dwelling types Possible target market segment	High rise apartment	Medium rise apartment	Low rise apartment	Retirement apartment	Boarding house	Townhouse	Villa or semi- detached house	Small lot house	Detached house	Detached house in gated community
Young adult singles										
Young married, no children										
Young married, children										
Compact family										
Move-up family										
Mature family										
Luxury family										
Move-down family										
Divorcee										
Single parent, children										
Empty nester couple										
Retiree couple										
Single older person										
Appropriate for organisation's skills and profitable in the current market				ginally fitable			propria			

Another example is a matrix to define the design elements a market segment might want in a home as illustrated in the table sourced from The Goodkin Group below 192.

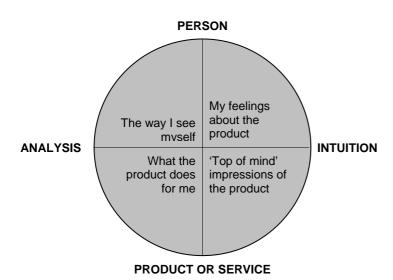
Brown, D. (September 1989). Market research and the design brief in medium density housing. RAIA/Sisalation Research Scholarship Report. Pers comm. with Sandy Goodkin.

¹⁹¹ Brown, D. (September 1989). Market research and the design brief in medium density housing. Royal Australian Institute of Architects/Sisalation Research Scholarship

Segment:	Demographic characteristics:	Design implications:			
Young singles	1 or 2 people under 30. Gregarious, active, and mobile, many interests. Entertain informally. Career experimentation and enhancement with loyalty to career not employer. Few possessions but spend generously on clothes and personal growth. Frequent travel. Enjoy physical activity and leisure time.	Colour, excitement, variety, experimentation. Interior privacy for bath and sleeping. Emphasise living room and master bed suite.			
Adult singles	1 to 2 people over 30 (single, widowed, separated, divorced). Serious relationships require privacy. Mature but experimenting, appreciate quality. Oriented to career and leisure interests. Active with peers in sports and leisure.	Design animation in ceiling, floor and room shapes. Serious courting for serious reasons, so need interior privacy. Minimal maintenance because workplace is the centre of peer group time and effort. Appreciate good design in features such as fire, bathrooms, built-ins and study. No garden space required.			
Young couples without children	Mature 2 person household with discretionary or dual income. Physically active and travelled, independent and ambitious, planning for the future - financial, career goals, family planning. Friendships at work. Entertain often, formally and informally.	Look of success - entry, and indoor/outdoor links. Feature good wardrobe and storage space, combined living/dining room, master bed suite, study or family room. Key is usable, dramatic space with potential.			
Young couples with children	Under 35, child under 5, spouses work. Entertain informally, amateur gardeners. Focus on child, planning more.	Emphasise kitchen, informal dining area, master bedroom, similar second bedrooms, family room with fire, large garden. Space for pets, children and interior 'messy' area.			
Compact family	Couple aged 35 plus with one child.	Design around adult activities, informal dining with formal living, separation of master bedroom from large second bedrooms.			
Move up family	3 to 4 in household. Transitional 'monthly payment' group with one spouse not working. Focus on casual, informal family activities. Interests mostly child oriented.	Emphasise kitchen, informal dining, master bedroom, smaller second bedrooms, fireplace in family room, garden space.			
Mature family	3 to 5 plus in house with older teenagers. Making payments comfortably with discretionary income and approaching economic/social peak. Formal entertaining, many interests, prefer limited maintenance.	Separate formal living and dining, study or family room, separate master bed suite, large second bedrooms, more formal garden.			
Luxury family	2 to 4 in household. High income. Teenagers and possibly small child. Infrequent formal entertaining, dine out often. Less physically active. Minimal maintenance and privacy mandatory. Flexible in house and location choice, will not compromise on space, quality or prestige.	Formal entry, separate living and dining rooms, study, master bed plus retreat, guest room. Security and privacy important. Large walk-in wardrobes, 'gourmet' kitchen, wine store and 'wet bar', formal entertainment room. Wood panelling in staircase, kitchen and bath cabinets. Strong window/roof treatment.			

Segment:	Demographic characteristics:	Design implications:				
Move down family	40 to 50 years old with one child still at home. Leaving large family house for one with limited maintenance. Travel often, occasional visits from family or guests. Focused active and passive recreation.	Quality not quantity. Focus on living room and master bed suite, large second bedrooms, study, dining room and breakfast nook/informal eating. Accumulated so storage important. Fire, 'wet bar', reading nook, skylights are features, as is nearby recreation and status neighbourhood.				
Divorcee	Re-establishing social life, experimenting and may be looking for serious relationships. Want freedom to travel or pursue leisure interests. May be career oriented with social life focused on workplace.	Home may be starting place for social experimentation. Small, fully equipped kitchen, master bed suite. Need potential to 'put down roots'. Traditional room configurations. Provide wardrobes, a sense of pampering, spa tub and low maintenance.				
Single parent with child	2 or 3 in household. Must be suitable place to live with child as child is focus of limited social life and lifestyle.	Privacy from child but ability to monitor. Bright, informal, easily maintained eating area with kitchen and area for interior play. No dining room but area for infrequent formal meals. Luxury not expected but materials above price range appreciated. Separate wardrobes in master and second bedroom.				
Empty nester of never nested	Mature, self-sufficient couple with no debts. Occasional overnight guests, active in leisure activities, entertain often. Want privacy and minimal maintenance. Mobile in attitude but permanent residence.	Formal living and dining areas, study and guest suite, large master suite and retreat, informal eating nook in kitchen, low maintenance garden.				
Active retiree	Entertainment at home. Privacy is important, rarely travels.	Quality rather than quantity. Second bedrooms for hobbies. Room configuration should be functional yet formal and traditional.				
Passive retiree	Not physically able to engage in active sports, prefers walking, family and group activities, card playing, reading and travel.	Avoid stairs and heights. Conservative one storey and end units preferred. Grab bars and safety features subtle in design. Interior privacy is important, also separate and equal bedrooms. Include garden or patio area and well-lit, full but compact kitchen with lower appliance shelves, pantries and switches. Good window treatments.				
Widow or widower	Initial period of severe readjustment followed by 'life goes on', review of friends and purpose in life. Budget conscious and will listen to advice. Privacy and comfort are important.	Interior privacy with no fanciness unless buyer is affluent. Requires a full kitchen and has time for maintenance. Feeling of 'home' with fire. Rarely uses formal areas so living and dining rooms can be smaller but must fit possessions that link to the past. Security features appreciated, as is a hobby or work area, extra sleeping area for visiting children or guests. Neighbourhood important.				

This segmentation is a relatively fine, research-based assessment of the life stage of each group and the design implications. But, as will be seen, life stage is only part of the story. Even within small and easily identified market segments, lifestyles and values play a major part in the design clues and features to which people within the groups respond. It requires an understanding of how people think about, and respond to, a product or service.



This can be explained by way of the diagram at left. It illustrates the distinction between the rational analysis component of a purchase decision and the emotional factors that also play a role. For example, some people thoroughly analyse a product or service before making a considered purchase decision, others simply 'do it' because it feels right. The degree of analysis or intuition applied to the decision depends on many factors including familiarity with the product, cost, the product's reputation or brand and an individual's personality.

The same process applies when people rent or buy housing, and the type and location of the house purchased or rented. At one extreme will be those who analyse what is offered in great detail. At the other extreme will be people whose decision will be influenced by their emotional response. Most will fall somewhere between the two.

Until the 1970s market research was dominated by demographic segmentation — the classification of consumers by age, income, level of education, and other quantitative variables. Dr. Joseph Plummer, who conducted what he called 'lifestyle analysis' for consumer products in the late 1960s, is said to have pioneered psychographic research or research into how people think about products and services. Around the same time, a marketing analyst named Arnold Mitchell had been working on various models which, he hoped, would account for the 'baby boom' generation's notions of what constituted success. He was also producing reports on the long-range business implications of social values for the Stanford Research Institute's (SRI) Long Range Planning Service.

A 1974 report by Mitchell¹⁹³, Consumer Values, predicted America would be a more affluent society in the 1990s than it was in the early 1970s. It would be more diverse, offering greater opportunities for leisure and self-expression. Consumers in this progressive, 'person-centred' period would be ...less receptive to mass produced goods, more aware of their values and increasingly able emotionally as well as financially to buy in accord with them. The old acquisitive, conformist values would give way to individualism, experimentalism, direct experience, naturalism, appreciation of diversity, and taste... Marketers would face the paradox of an affluent society aware of ecological issues and disapproving of conspicuous consumption. The central problem for advertising, he believed, would be how to sell to values increasingly geared to processes, not things. Sales appeals directed toward the values of individualism, experimentalism, direct experience and some forms of pleasure and escape would have to tap intangibles such as human relationships, feelings, dreams and hopes rather than tangible things or explicit actions. Mitchell suggested that advertising messages would need to convey genuine warmth, emotional content, and a sense of reality. He

¹⁹³ Brown, D. (September 1989). *Market research and the design brief in medium density housing.* RAIA/Sisalation Research Scholarship Report.

believed they must be 'value sensitive' and addressed to the distinctive qualities of individual consumers. He believed the old status and wealth focus of selling had to change.

This thinking led Mitchell and others to take account of psychographic profiling in the identification of housing market segments. One model, developed by researcher Brooke Warrick of Holen North America¹⁹⁴, proposed four profiles differentiated by their values rather than demographics. They are reproduced below, along with Holen's research based assessment of the design features to which move up buyers within each value set are most likely to respond.

Conventional Heartland

Conventional, conservative buyers for whom the plain vanilla house is just fine, thank you, but whose critical need is for a neighborhood that is a safe haven in an uncertain world. Key design words: Safe haven.

Suburban Conservatives

While they are conservative like the Heartland folks, they are defining a more comfortable lifestyle for themselves, based on greater ambition and affluence. Family and work are more important than for the Heartland, partly because they are younger, in the prime childrearing years. What they want is the comfortable family enclave, with a house that has moderate status, in a neighborhood distant from the city and its problems. Key design words: Family enclave.

Person-Centered

They are more affluent, better educated and self-confident than the previous two types, and much more flexible and accepting of diversity in their environment. Their values center on experiences and psychological growth more than owning material possessions. The home is a setting to support that. They want a home that is a Nest, quite personalized to their discriminating tastes. It is expensive but not showy, rather hidden away from the world, where what is valuable is inside. Key design word: Nest.

Winners with Heart

They are the classical business people: practical, wanting measurable attainment and success in life. Their home is a castle that shows off their status, with 'the jewel on the hill' as the ideal. Status is part of showing 'how well you have played the life game.' They are striving for steady improvement of their place in life and in their financial condition. Work and family are the sources of meaning in their lives. ...there is something more than status going on for these buyers: family life is also crucial to them. And the additional value, family, adds the 'heart' to what could otherwise be a one-sided emphasis on just the values of career success and status display. Key design word: Monument.

Underlying these profiles are three values dimensions that influence what is, or is not, important for these groups. Holen argue that understanding the differences is the key to successfully developing and selling new neighbourhood and housing product. The three sets of values are described below.

Winner Values are basically accomplishment and success centered with a heavy dose of the work ethic. They include such values as 'making it", a combination of the need to own and accumulate; achievement motives (the need to accomplish great things); 'looking good'; and a life centered around a career, hard work and living out the American Dream. People who score high on such dimensions frequently surround themselves with tangible things that are symbols of their accomplishment. They are

¹⁹⁴ Holen North America Inc. (1989). *The Builder's Guide to Moveup Buyers*.

status oriented, in both the things they do and the things they buy. Winners' values can be blended with either of the next two values groups. That creates refined types that go beyond just 'making it'. People often have more than one set of values operating in their lives, but for some people Winner values tend to dominate.

Person-Centered Values emphasize the process aspects of living by prizing the feeling, intuitive side of people more than their intellectual, logical side. Personcentered people are often altruistic and unconcerned with making a lot of money, although many have very high incomes. They are seriously concerned with self-actualization and self-expression and enjoy mastering new ideas. In spite of their individualism, they are often concerned about their community, the environment, the effects of urban growth, and social issues. They may want to achieve, but the symbols of their achievements are not so much tangible things as with the Winners. Rather their achievements are more internal. They are likely to be friendly with foreigners, and to keep track of what is going on in the world. They have an appreciation of diversity that gives them an acceptance of each person, thing and way of life on its own terms. This allows them to reach out in many directions and extend the limits of what is acceptable.

Of course there are people who have both of the above values: Winners who blend the success ethic with a concern for world affairs and social trends: like ecology and slow growth; and who also focus on family and personal relationships: like personal development.

But there are also people who are low on Winner values and Person-Centered values, especially people who subscribe to a third major values group — The Heartland.

Heartland Values are culturally conservative, family-oriented, doubtful about civil liberties, and religiously conservative. People who espouse them are often unhappy about the direction modern society is taking, and hearken back nostalgically to our small town past, to a time that was simpler and easier to fathom. The name, 'The Heartland', comes from Republican political analyst Kevin Phillips' book of the same title: it suggests the culturally conservative values found in the heartland of the Middle West and in the South. Heartlanders are often strongly opposed to Person-Centered values, and the feeling is mutual.

An overall pattern of product design elements was developed by Holen¹⁹⁵ to reflect how, for the 'move up buyer' market segment, each type feels about their homes and what they expect to get out of the home experience. A selection is set out below.

	Conventional Heartland:	Winner with Heart:	Person-Centered	Suburban Conservative:
Neighborhood entry	Safe.	Formal and forbidding.	Natural and welcoming.	Good boundaries.
Front Yard	Discourage intruders.	Manicured.	Abundant natural landscaping.	Neat. Keep up with neighbors.
Entry	Secure.	High impact first impression.	Warm but unobtrusive.	Welcome.
Back yard	Maintain and enjoy.	Private, luxury pursuits.	Natural play — private.	Family play.

¹⁹⁵ Holen North America Inc. (1989). *The Builder's Guide to Moveup Buyers*

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	Conventional Heartland:	Winner with Heart:	Person-Centered	Suburban Conservative:
House exterior	Solid and enduring.	Grand impression.	Unobtrusive.	As nice as any other on block.
Family room	Favorite chairs, read, watch TV.	Where all come together to live.	Adult play room.	Family meeting place.
Living/dining	Proper time and place for special occasions.	Formal 'do not touch' display.	More functional than showy.	Slightly formal.
Master bedroom	Sane and sober.	Indulgent and luxurious.	Indulgent, private.	Roomy and private.
Kitchen	Snacks and Sunday meals.	Focal point of family activities.	Serious cooking capacity.	Family gatherings.

While distinctly American, these segment descriptions and values sets resonate with Australian psychographic profiles developed over the past fifteen years by the Sydney research firm Environmetrics. Their profiles are reproduced 196, with permission, below.

Discerning and purposeful

Achievement oriented, enjoy company and appreciate some of the finer things in life. Although they like to potter at home, they wouldn't call themselves a 'homebody'. Like a challenge and are interested in ideas and education. They enjoy having people around them whether family or friends. Although they like to get out on a Saturday night, having people over for dinner or a BBQ is also a pleasurable pastime for them. Their strong sense of individualism means they may buy or participate in 'fashionable' things, but they would like to think that their decision to do so is based on good judgment, rather than an urge to follow trends.

Wide age spread, but with a 25-49 and white collar bias. Likely to have a family at home. Live in northern Sydney, but also the inner city and some western suburbs

Practical and organised

Achievement oriented in terms of home projects (will garden and potter). Enjoy building and making things. Like routine and have an organised approach to life - will write lists of things to do and approach them methodically. Would rather have a BBQ than eat at a restaurant, and would watch TV on a Saturday night rather than go out. A strong emphasis on their family and immediate surroundings. The home and the local neighbourhood are the focal points for much of their life.

A 35-59 year old and blue collar bias. Likely to have a family at home. Live in the western and outer regions of Sydney and are likely to have been born in Australia.

Gregarious, Out and About

Very fashion conscious and like getting dressed up. Like to stand out in a crowd, but also like to feel part of the social group. They enjoy indulging themselves and like to experiment with new things. Want to get somewhere in life: job, money, and material possessions. Life for them has a strong social component. They measure their own achievements and status against their peers. Very conscious of what is 'in', yet are

¹⁹⁶ © Environmetrics Pty. Ltd. (2005). Psychographic segmentation developed from their annual *LeisureScope* survey of 2,000 Sydney households.

more likely to be trend followers than setters. Quick to adopt new fashions and ideas, but also quick to move onto the next one.

The youngest of the segments. Reasonably well-educated and likely to have a non-English speaking background. Live in most areas of Sydney, but especially inner and southern suburbs.

Individualistic, Out and About

Also very achievement and socially oriented, but without the fashion consciousness of their Gregarious counterparts. However, still like to get dressed up now and then and will make their presence felt in a crowd. Like to feel they are different to everyone else. They don't feel they are guided by the latest trends and fashions (although in fact they may be). Generally appreciate life on a more 'cerebral' level. They like to be challenged and to learn and they look for originality in the world around them.

Also younger, and live in the inner and northern parts of Sydney. Have a white collar bias and the highest education level of any segment.

Social pleasure seekers

The group most interested in 'fashion'. Enjoy indulging themselves and like to have other people around (and preferably, like to make their presence felt when in a crowd). Like to potter, but want to get dressed up and either go out with friends or entertain at home. Enjoy going to places to be seen. They are quite 'aspirational' in their outlook to life — they may be happy with what they have, but are still trying to better themselves and their surroundings. Material acquisitions are often seen as the best way to do this.

Older than other segments with a bias towards over 50 retirees and females who concentrate on 'home duties'. Likely that children have left home. Many have a non-English speaking background. Live in most areas of Sydney, but especially the inner south and western suburbs, Central Coast and Blue Mountains.

Conventional suburban

Call themselves 'homebodies', but don't necessarily engage in the more energetic home activities such as gardening or making and fixing things. But they are achievement oriented, possibly on a more material level. They want to get ahead with their job, their income and their lifestyle. They will take an interest in the family and enjoy a BBQ with friends, but also like to get out on a Saturday night.

Slightly younger than the rest of population (a bias towards being under 35 years of age). Likely to be starting a family and have a slight bias towards non-English speaking backgrounds and blue collar occupation groups. Live in most areas of Sydney although not as prominent on the north shore or inner city areas.

Self-contained, go with the flow

While they do enjoy the company of family and friends, this segment doesn't necessarily need company to have a good time. They consider themselves 'homebodies' and enjoy pottering around the house and gardening. They have time on their hands and enjoy some of the simple pleasures of life (reading, walking, cooking). They are 'wanderers' who appreciate and absorb the world gradually. Their hobbies can include painting and music. They do say they 'want to achieve a lot' and they will try something new, but usually because someone else has recommended it.

Tend to be between 35 and 59 years of age, white collar and from an Anglo/Australian-background. Some have young children, but for most their children have left home.

Moderate and unhurried

Consider themselves 'homebodies'. Like to garden and potter around the house. They don't say they want to 'achieve a lot', probably because they tend to be older and are reasonably set in their ways. However, they are content with what they have and still want to enjoy themselves. They enjoy company, but are also happy being alone. Will watch TV on a Saturday night rather than go out. They do not have extravagant taste. They have a relaxed attitude to life and enjoy comfortable surroundings and the pleasures brought from extended family and friends.

One of the older segments (a high proportion are over 60 years). Most likely to be retired and unlikely to have children still at home. Generally, come from an Anglo/Australian background and live in the middle ring suburbs.

Battlers

Battlers claim they have little interest in achievement or experiencing anything new. They generally 'get by' in life. While they may want more, they perhaps can't see themselves getting much more or are content enough with what they have. They don't like getting dressed up and are not very social. Life is focused on the home and the local area.

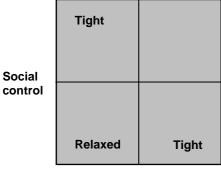
An older group (mostly over 60 years of age), who are likely to be retired or on a pension. Their children have left home and they tend to live in the outer and western suburbs or on the Central Coast.

The principles of segmentation and definition by customer values have enormous value when developing and designing affordable housing product and the sustainable communities in which it should be located.

6.5 Towards a new product development model

Housing diversity counters the trend towards the social segregation and polarisation evident in housing estates largely planned for, and purchased by, single market segments. Unfortunately, without high level commitment from developers, builders and approval authorities, mixing housing types and prices within a neighbourhood seems to be difficult to achieve. A major reason is that few in the industry, including government and the design professions seem to understand that successful communities grow out of the aspirations and behaviours of residents and their interaction with the outside world.

The built form of houses, schools, shops, workplaces, and streets is important. Built form is not, however, the ultimate determinant of social behaviour. Assumptions about aspirations and behaviour can be made from the statistics but the real issues can only be identified through personal engagement with the potential market. The real and perceived levels of control people have, and want, over their environment are the most important issues.



Environmental control

This diagram helps explain the point. Drawn from built environment and behavioural research and environmental psychology, it suggests that some people want a high level of control and demarcation between 'their world' and the world outside while others prefer little or no control. An example might be the difference between an impeccably maintained gated community with walls and security guards and an 'alternative' community in a bush retreat. The people defined in the Holen North America values segments discussed above all demonstrate various aspects of this 'tight' versus 'relaxed' level of control.

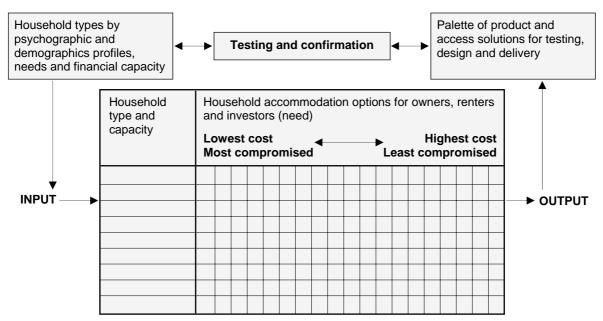
These differences, it should be noted, are in shades of grey, not black and white. So, while physical transitions between different parts of a neighbourhood can be quite distinct, the attitudinal transitions can be more subtly reflected in the built form of streets, houses and open spaces. They can even be acknowledged in different advertising messages, selling scripts and the layout of homes in a model sales environment.

Reality is considerably more complex, but this diagram offers a basic framework within which to explore affordable housing issues and develop housing and neighbourhood models that recognise household needs, capabilities and product responses.

Built environment research generally indicates that the quality and kind of social relationships within a neighbourhood contribute to resident satisfaction. In this context, physical elements are valued less for their innate qualities than for their social implications. For example, different people value different places because they are quiet or lively, restful or exciting, participatory or private. Obviously the difference between them should not be abrupt because people's experiential and social needs differ over time — not everyone wants 'and/or' choices. And, furthermore, deliberately planning enclaves for particular social and economic groups, or indeed different land uses, is no longer acceptable to most authorities.

For example, a neighbourhood can be designed so it has areas that appeal to sociable people with opportunities for casual meetings and interaction. These can transform into other areas for people who prefer independence and self-sufficiency. The approximate size of each area, and the mix of housing typologies and spatial experiences, can be identified through research, 'planned in' and promoted from the outset. The necessary ability to respond to changes in the market and vary the mix comes from the connectivity and flexibility inherent in the planning models now being used in most significant urban developments.

During the research for this report, this thinking has led to the beginnings of a housing product development and assessment model that responds to household needs, lifestyles and financial capacity. This is illustrated on the diagram below.



© David Brown and David Chandler, 2004

The critical methodology implicit in the matrix is identifying a range of household types and household attributes and visualising practical economic, spatial and occupancy access

responses for testing. The basis is that every household has a psychographic and demographic profile and that these can be grouped into identifiable segments of the market. When choosing a particular housing product, their purchase, rental or investment decisions will be based on a balance or trade off between how much they can afford (high cost versus low cost) and the product or location attributes (most compromised versus least compromised). With a set of basic product models in place (the palette of solutions) market testing can be undertaken using commonly available quantitative and qualitative research tools. One such tool is the Environmetrics HomeZone¹⁹⁷ evaluation process.

HomeZone uses focus group techniques overlaid with a trade off game to concentrate the participants' attention on specific neighbourhood, street or dwelling attributes. Participants are selected to represent market segments defined by financial capacity and psychographic profile. The process unfolds in two stages.

In the first stage, participants work with a portfolio of carefully selected images appropriate to the project to build a collage representing the kind of development to which they aspire. As this occurs they explain the reasons behind their choices. The second stage uses a technique developed in the early 1970s by academic researchers working in environmental psychology. Participants are presented with a shopping list of neighbourhood, street and dwelling attributes and are given a notional budget with which to 'buy' levels of each attribute. Importantly, as in real life, the budget does not permit all the attributes or even the high levels of some. Basically they are forced to make similar trade offs to those made when purchasing. The process, and the trade-off negotiations, are a revealing simulation of what happens in the market that allow qualitative measurement to be blended with qualitative information.

Product models developed using the matrix and tested in research can then be fed into the planning and design process and, on larger projects, tested and refined using 'real life' models and real buyers.

Similar forms of trade-off analysis are seen in research undertaken in the UK for the Joseph Rowntree Foundation¹⁹⁸. This research started with the basic, and obvious, assumption that if the private sector was responsible for most of the homes built in the UK it was particularly important that new housing met the needs of those who purchase it. The researchers observed, however, a common perception that the industry was not particularly responsive to consumer needs and preferences. Not unlike Australia, they believe this is because:

- Housing studies tend to be dominated by 'big picture' factors such as the number of bedrooms required and location preferences,
- There is little fine-grained data available that casts light on what makes one (similar) house preferable to another, and
- Most household satisfaction surveys fail to account for the post-purchase rationalisation of decisions and the fact few people are willing to admit their choice of house might have been less than ideal.

Leishman, Aspinall, Munro and Warren point out that understanding what people want and value in new housing has potentially important policy implications and, in particular:

The impact planning and building controls have on buyer preferences,

¹⁹⁷ Environmetrics Pty. Limited (2004). *HomeZone* leaflet from www.environmetrics.com.au.

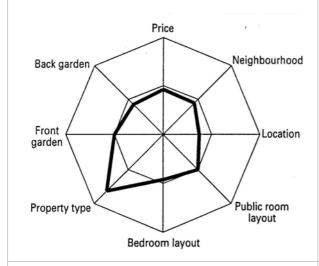
¹⁹⁸ Leishman, C., Aspinall, P., Munro, M. and Warren, F.J. (2004). *Preferences, quality and choice in new-build*housing. Heriot-Watt University for the Joseph Rowntree Foundation.

- How households can be encouraged to buy, and local communities support, higherdensity urban housing, and
- The key factors driving such things as tenure, location, character and spatial
 preferences as well as the process by which consumers trade-off various factors such
 as price to arrive at their choice of housing.

The results of their research exemplify how sophisticated research tools can be used to develop better knowledge of housing market preferences. What they call 'cobweb' charts were used to graphically illustrate the importance different groups placed on, in this case, eight housing attributes. While only relevant to the UK, four of the charts are reproduced below to show the type of information that can be obtained.

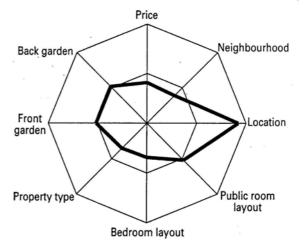
Group One:

Predominantly younger single households and couples with two incomes and no children.



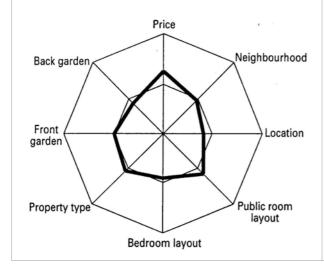
Group Two:

Similar to Group One but with a slightly higher prevalence of couples and non-professional occupations.



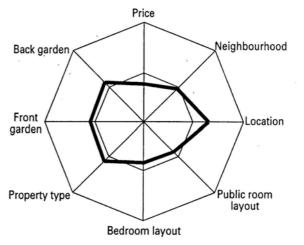
Group Three:

Middle socio-economic group of older buyers, most with children.



Group Four:

Higher socio-economic group with more single person households and a greater predominance of professional occupations.



The research did not split the groups by attitude but nonetheless it illustrated how each puts a different value on the eight attributes analysed. The overall conclusion was that many new homebuyers (particularly Groups Two and Four) in the UK have a strong preference for lower density suburban locations. Price is the major determinant for Group Three while well-

designed urban and suburban higher density housing appeals to younger couples without children (Group One). The common belief that location is the critical decision factor is not necessarily true for the UK buyers surveyed.

Interestingly, Leishman, Aspinall, Munro and Warren reinforce comments made elsewhere in this report regarding the Australian housing industry. They state that, unlike other major industries in contemporary society, the UK's private house building industry is production led and takes little account of consumer needs and preferences. They cite other writers who claim that the industry is reluctant to innovate, is insular and myopic and builds the houses it wants to make rather than thoroughly researching their markets. This behaviour is contrasted with the car industry where a substantial investment is made in improving the knowledge of buyer behaviour and preferences. Like Australia, very little consumer research is conducted and many companies fail to collect even the most basic consumer data.

Builders argue that their standard house designs are close to what they think the market wants. They also argue that this approach enables them to offer the competitive price advantages they also believe are the only determinants of buying decisions. The UK research indicates that this is not always the case and that the continued use of standard designs can have a major impact on buyer choice. In other words, there are dissatisfied buyers in the market who may be prepared to pay more, or make quicker decisions, if they felt fewer compromises needed to be made.

This thinking led to a 2004 proposal¹⁹⁹ for a demonstration project euphemistically called RealWorld. It started with the suggestion that if the local market was dissatisfied with the industry's current offers, opportunities must be found to identify and then demonstrate alternatives the market might prefer. RealWorld was put forward as a way to show the step changes needed to create sustainable communities with a wider choice of affordable, accessible and environmentally sound housing.

The RealWorld initiative emerged from the early stages of this research and a view that the current housing supply model is unsustainable, constrained by historical entry points and driven by builders not consumers. All of these clearly discriminate against the existing and emerging demographic and attitudinal groups discussed in preceding sections.

The investment in research, design, construction and marketing for such a project was acknowledged as being significant. However, as a demonstration project it would have to be profitable and easily replicable otherwise its potential to be a benchmark will be lost. RealWorld was seen as an opportunity to be a viable demonstration of new housing forms appropriate to the household structures, financial capacities, multiple values and lifestyle needs of future generations. After considering the proposal Landcom decided, mistakenly, that it was implementing the ideas anyway. It did not appreciate that RealWorld could address significant areas of market failure, the main one being housing affordability and the integration of affordable housing into new neighbourhoods.

6.6 Summary

The need for better research

 To realise opportunities and achieve market success in any contemporary market place, products and services must have a distinct competitive advantage. However, where it was once enough to simply repeat past triumphs, today's competitive market demands product that has both an emotional and rational impact on potential

¹⁹⁹ Brown, D. (7 April 2004). *Providing a wider choice of accessible, affordable housing in sustainable neighbourhoods*. Paper to the Premier's Forum on Improving New Housing Design.

customers. Traditional responses that use forecasts based on trailing data, anecdote or personal and professional experiences are no longer adequate.

- In the Australian housing industry the conventional wisdom is that the market is relatively homogenous and housing is a commodity that can only be sold on price. Demographic segmentation plays some part when developers and builders define their target markets but demographics only tell part of the story. When integrated with values analyses many more market segments are revealed. These have characteristics that strongly influence neighbourhood planning, dwelling design, advertising and selling.
- Knowing precisely what the market wants, and what it is prepared to trade off to meet those wants should be the primary aim of market research. It is an investment that can be used to improve the present systems of housing delivery and more closely meet the physical and emotional demands, and economic capacities, of an increasingly diverse market. Housing designed to meet these diverse needs more accurately fits buyer tastes, lifestyles and values and reduces a common concern that compromises have to be made because a better fit is not offered.
- Environmental psychology can play a role in housing and urban land use policy development. But there has been very little government or industry investment in its sophisticated tools to improve planning, design, marketing and commercial performance. As a result, the findings of environment/behaviour research are not been incorporated into the planning processes in a wide-ranging or systematic way.
- It should be understood, however, that there is often a disparity between what people say they want and what they actually do with their money. This is observed in the inconsistent results of consumer preference studies particularly those exploring neighbourhood form. Part of the problem rests with the language used in the surveys.
- In this respect, an individual's ideal may lie between alternatives on the housing choice spectrum and influenced by their stage in a housing career. Similarly, individual household preferences for a single ideal housing type may in fact include a spectrum of types, united by rationally pragmatic as well as emotional or attitudinal criteria.
- A lack of detailed information about housing consumer preferences can result in superficial analysis and meaningless conclusions. The traditional, numerical approach tends to determine how many homes people want, but not what kind of homes or what type of residential neighbourhoods people would select if given a choice. Meeting the variety of consumer preferences for different housing types would be of enormous benefit to homebuyers and renters alike. Appropriate research would also reduce the perceived risk of financing and building new forms of neighbourhoods and housing that meet the demands of household types who, up till now, have been ignored.

Market segmentation

- A useful concept for structuring market research is market segmentation: the breaking down or building up of potential buyers into groups. Each segment is considered to possess similar lifestyle, attitude or consumption behaviour characteristics. Each group can be reached with different communication messages or product typologies.
- Until the 1970s market research was dominated by demographic segmentation the
 classification of consumers by age, income, level of education, and other quantitative
 variables. In the US, psychographic profiling is increasingly being used in the
 identification of housing market segments and there are a number of different models.

 Organisations seeking to refine their product development objectives and marketing strategies by targeting specific market segments generally look at segmentation by product, demographics and psychographics. The first two are commonly used by the development and housing industry while the last is only understood and used by a few.

Towards a new product development model

- The built form of houses, schools, shops, workplaces and streets is important. But built form is not the ultimate determinant of social behaviour. Assumptions about aspirations and behaviour can be made from statistics but the real issues can only be identified through engagement with the potential market. The real and perceived levels of control people have, and want, over their environment are particularly important. It can be demonstrated that some people want a high level of control and demarcation between 'their world' and the world outside while others prefer little or no control.
- Built environment research generally indicates that the quality and kind of social relationships within a neighbourhood contribute to resident satisfaction. In this context, physical elements are valued less for their innate qualities than for their social implications. For example, different people value different places because they are quiet or lively, restful or exciting, participatory or private. Obviously the difference between them should not be abrupt because people's experiential and social needs differ over time not everyone wants 'and/or' choices. And, furthermore, deliberately planning enclaves for particular social and economic groups, or indeed different land uses, is no longer acceptable to most authorities.
- During the research for this report, this thinking has led to the beginnings of a housing product development and assessment model that responds to household needs, lifestyles and financial capacity.
- The critical methodology implicit in the model is identifying a range of household types and household attributes and visualising practical economic, spatial and occupancy access responses for testing. The basis is that every household has a psychographic and demographic profile and that these can be grouped into identifiable segments of the market. When choosing a particular housing product, their purchase, rental or investment decisions will be based on a balance or trade off between how much they can afford (high cost versus low cost) and the product or location attributes (most compromised versus least compromised). With a set of basic product models in place (the palette of solutions) market testing can be undertaken using commonly available quantitative and qualitative research tools.

7.0 AFFORDABLE HOUSING POLICIES AND PROGRAMS

7.1 Overview of affordable housing programs and policies

In the discussion in Section 2, the factors affecting the cost of housing production and investment were, in broad terms, identified as being scarcity of inputs, market imperfections, regulatory regimes and quality thresholds. The difference in nature between production and investment sectors were noted with:

- land supply
- materials and labour
- dwelling quality
- the cost and availability of capital
- technological change and innovation, and
- transaction costs

being identified as areas where action could be taken on the production side to address specific issues relating to the costs of supply. On the consumption side:

- changing income distributions
- completing claims to expenditure on housing
- labour market factors
- demographic changes
- financial barriers to rental or purchase
- interest rates, and
- intra-market and inter-generational wealth transfers

are issues to be addressed.

Others need to be considered when developing any policy mix or strategy to tackle the affordable housing challenge. They include:

- How the costs and benefits particularly the real returns to investors, land owners or developers — of supply or demand side interventions are equitably distributed.
- How the benefits of an increase in affordable housing stock to succeeding occupiers
 can be retained through caveats on resale or the use of non-profit intermediaries to
 hold the title or manage the property.
- How to overcome the generally negative perception of affordable housing among developers and the wider community because both tend to be wary of affordable housing in new developments despite the fact it is not social (public) housing and its inclusion does not necessarily create marketing problems.
- How to ensure renters have tenure certainty while maintaining financial institution and investor confidence.

Addressing housing affordability by influencing demand and supply in the market is a problem of income distribution and spatial inequalities. This is an important counter to the view, reflected in the Productivity Commission report of its Inquiry into First Home Ownership, that increasing affluence and buoyant markets reduces the need for government intervention. This was reflected in two comments in the 'key findings' where it said:

²⁰⁰ Australian Government Productivity Commission (2004). *First Home Ownership*. Report No. 28. Melbourne.

- Sustained growth in household incomes and cheaper and more accessible housing finance have been of considerable benefit to the community generally, notwithstanding their effects on house prices and first homebuyers.
- The apparent overshooting in the market will be addressed by cyclical price adjustment. Though disadvantaging those who have recently purchased homes, such a market correction (together with further income growth) will in due course improve affordability for prospective first homebuyers.

Good quality and affordable housing in places where people need it reduces the social, economic and environmental problems associated with the decay and revitalisation of existing urban areas and their generally socially homogenous spread. The Productivity Commission's view was that government have a role to play in ...facilitating efficient housing outcomes... This is a simplistic view because if Sydney and other Australian Cities are to retain its economic competitiveness and social balance, all levels of government must get involved in coordinating responses to affordable housing issue.

A number of possible responses were canvassed in a review of housing affordability²⁰¹ (the SHAR report) undertaken for the Joint Industry Housing Group and Landcom. This review acknowledged that many worthwhile statistical studies had addressed the issue but few had looked at the broader canvass of policy and practice options.

The SHAR authors used an economic and social policy approach to identify the major causes of the housing affordability problem and evaluate the existence and success of alternative solutions. Major findings were that too little is known or understood about the:

- complexity and spatial distribution of housing sub-markets,
- range of integrated strategies that could make housing more affordable,
- likely effectiveness of such strategies, and
- potential impacts of strategies that remain untested, or appear to have fallen out of favour.

The SHAR report provides a base for a better understanding of the housing affordability problem and offers a range of feasible strategies that could have positive impacts. It recommended that an integrated and wide ranging framework of options — from tax reform to local planning initiatives — was needed if significant improvements in housing affordability were, and are, to be made.

The report examined solutions that involve direct interventions in the market, solutions that involve changing the rules and regulations governing building and development, solutions that the market and industry can act on, and solutions that demand macro economic policy review by government. The approaches to producing affordable housing were classified and reviewed in nine groups of options that were not mutually exclusive.

Measures involving direct market interventions

- 1. Options that involve direct and indirect subsidies of various kinds.
- 2. Taking advantage of market cycles to redistribute or produce affordable housing when economic rents are low.
- 3. Developing planing instruments and initiatives to encourage or require affordable housing in new developments.
- 4. Capturing betterment and redistributing it to affordable housing production.

²⁰¹ Cardew, R., Randolph, B. and Parnell, A. (2000). *The Sydney Housing Affordability Review.* A report prepared for the Joint Industry Housing Group and sponsored by Landcom.

Measures involving changing the rules and regulations that govern the market

- 5. Reducing quality thresholds in building and subdivision standards.
- 6. Reducing market imperfections such as unnecessary regulations, delays and policies.

Measures that are up to the market to act on

- 7. Technological advances or production efficiencies to reduce costs for a given quality.
- 8. More emphasis on standardised or minimum quality housing within the regulations.

Measures that begin with institutional or macro economic policy review

9. Devising institutional frameworks that facilitate affordable housing.

In all, the research identified fifty-nine options that could be explored to address components of affordability in the Sydney housing market. The overall conclusion was that no single option, or group of options, would provide a solution. Some require action at the Federal level, others changes in practice in the financial and development sectors. Most were considered to be beyond the scope of one tier of government to implement. Given the demographic diversity of households, increasing market segmentation and the extensive spread of metropolitan Sydney the SHAR authors suggested that the most effective strategies were likely to incorporate a mix of measures acting over diverse geographical scales and over varying time scales.

These points are not surprising given the complexity of the housing market, the relationship between demand and supply and other aspects of economic and social policy, and the role played by the housing industry. Nevertheless, the range of options put forward in the SHAR report offered a continuum of options that cut across the current divisions between market led and public intervention approaches to affordable housing while amalgamating the critical economic and social aspects of housing into the policies.

The SHAR report also explored several more specific areas.

- The capture of publicly generated land betterment through levies, inclusionary zoning or planing gain were suggested as needing careful and fully consideration. It is interesting that the Metropolitan Strategy Ministerial Direction Paper questions whether the Affordable Housing SEPP should be extended but that no further mentions of this significant intervention have been made. If inclusionary zoning becomes more widespread, a vehicle for managing the affordable housing it creates should be put in place. Ideally, such a vehicle would retain the benefit in the public domain and provide developers with surety that their contributions were allocated in a consistent way across the metropolitan area. A model for this already exists in the City West Housing Company set up to build or buy affordable housing in the Pyrmont-Ultimo area.
- A mechanism to encourage developers to extend the spread of product choice may require a range of incentives to deal with issues such as alternative approaches to project feasibility, risk management and government acceptance of innovations inconsistent with current rules. As suggested earlier, a project that demonstrates the commercial, planning and social benefits of new housing models would be worthwhile.
- There is a critical role for market leaders to implement affordable housing projects and undertake their critical evaluation so others are encouraged to participate in a growing market. Examples that expand the price, size and tenure range offered are essential if developers are to explore housing demand outside the middle and upper income segments of the market. The RealWorld model might again be an appropriate vehicle.

- Despite it being an issue of almost timeless concern there is a case for agencies to more rapidly resolve the environmental issues claimed to restrict supply and err on the generous side in the provision of zoned, planned and serviced land.
- As observed in the earlier discussions, there is little publicly available research into the dynamics of the market, the relationship between developer and buyer behaviour or the impacts design has on the creation of community.
- The absence of long term leases in a residential market that includes, by choice as well as circumstance, an increasing number of long-term renters.

Ultimately, the SHAR report reinforced a belief that the private sector and all levels of government must 'own' the housing affordability problem and agree on a set of realistic, integrated and lasting policy solutions. Leadership, a shared vision and a united effort between public and private interests are essential first steps if the discussion is to move beyond rhetoric towards action.

7.2 A brief review of the international experience

The literature on affordable housing policies and programs is vast and its detailed analysis is well beyond the scope of this research. It is worth, however, briefly examining the situation in Europe and the US because there are parallels with the Australian situation and, more importantly, growing efforts to address housing affordability. Clearly there are housing market and policy differences among the regions and countries. These differences could be taken by those developing policies for Australia as an easy excuse for ignoring their positive outcomes, not undertaking any detailed review of their local potential and a time wasting reason to 'reinvent the wheel'. This should not be the case as lessons can be drawn from the international experience.

A primary difference among countries is the rate of homeownership. According to information provided at a ULI Policy Forum²⁰² held in 2003, the homeownership rate ranges from more than 80% in Spain to just over 40% in Sweden. In the United States, the rate currently is just, over 68%. Variations among countries are caused by different national policies and cultural preferences as outlined below.

Germany

Some 60% of the housing in Germany is generally of high quality, private, market rate rental housing and renting is widely accepted. Rental housing is less expensive than owned housing, and there is no government push to get people to buy homes. There is a view that Germany may be over protecting tenants, and it may be time to balance these protections with incentives for home ownership because protection is believed to have reduced profits and housing production.

There has been an overall decline in housing prices in Germany, and a sharp decline in eastern Germany. Despite this trend, there are places in western Germany where prices are rising rapidly. The cost of land is reportedly around 25% of the total cost of a dwelling but it varies from location to location. Most housing is regarded as affordable.

The priority in Germany has been to build up the overall supply of housing rather than meet long term affordability needs. For this reason, and because the amount of social housing is thought to be adequate, Germany is allowing housing to pass in to the private market without affordability restrictions. The main problem is a concentration of the very poorest in social housing.

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McIlwain, J. (2003). Housing for Moderate Income Households in the European Union and the United States. ULI Land Use Policy Forum, Paris, 21-22 January 2003. ULI-the Urban Land Institute, Washington DC.

United Kingdom

There is a heavy bias toward homeownership in England reinforced by the sale of much of the social housing to its occupants during the 1980s. Like Australia, rental housing, whether social or market rate, is perceived by some to be of lower quality and ownership has come to represent income and status. Despite the fact that rental lousing is less expensive, many feel it is just 'burning money', given the high rate of home price appreciation. Again like Australia, capital gains are commonly seen as the retirement nest egg.

The cost of housing in London and other major cities is so high that moderate-income families need more than low interest rates to afford a home. The average age of the first homebuyer in England has risen from 27 to 35, a sign people are being priced out of the market. The reason is similar to that in other countries — inadequate supply. The ULI reports that home building has slowed to the point it takes twenty years to build what once took one. Compounding the problem is the fact larger homes are being built for the move up market and they are not affordable for first time buyers. At the same time, salaries and wages, especially in the 'key worker' categories, are not keeping up with rising housing costs.

Like Germany, the amount of social housing has remained relatively stable after declining during a period when much of the stock was sold at a discount to promote home ownership. Overall housing supply, however, has fallen to its lowest level since 1945 and it is reported²⁰³ that only 37% of new households can now afford to buy a property. The Barker Review claims that meeting twenty year demographic projections and keeping house price rises contained would require production to almost double.

In response to housing supply and cost problems, there has been a major effort since 1998 to rationalise the construction process, improve quality and introduce new technologies. Stimulated by government support, some efforts have been made to set up factories to produce homes and components but lenders are sceptical about durability and there have been problems with the new technologies.

The Barker Review set out a wide range of issues and recommendations and, importantly, acknowledged that ...we need to integrate economic considerations into the planning system, that we need a better means of assessing the costs and benefits of development and land use and that we need to acknowledge market signals and use the information provided. Recommendations covering the planning system, land development, industry relationships and the taxation system were made by Barker and it will be interesting to see what progress, if any, is made.

Netherlands

Tax laws in the Netherlands allow a mortgage interest deduction, which provides a real incentive for ownership. In addition, banks recently have expanded their facilities for lending to homeowners. Housing for homeownership is built mostly by the private sector, though it is expensive and is frequently rented if it cannot be sold. Most rental housing is produced by housing associations, although the private sector is beginning to produce luxury rentals due to growing demand by the same demographic group that is moving into the US luxury rental market and high cost apartments in Australia: empty nesters with high equity.

For many families in the Netherlands, particularly those in social housing, the main barrier to buying an affordable home is the cost of starter homes and the cost of moving. Costs are largely driven by a lack of supply.

²⁰³ Barker, K. (2004). *Review of Housing Supply. Delivering stability: Securing our Future Housing Needs.* Report to the Deputy Prime Minister. London.

National planning determines what land is to be developed and often supports the building of affordable housing. This is sold to local governments but has resulted in high land prices as they are responsible for building the required infrastructure and include its costs, plus the acquisition cost, in the sale price. A program to build new housing using tax incentives, a concept borrowed from the UK, is currently under way. Sceptics claim that while it aims to make building simpler and faster in reality it slows the system down and makes it more complex.

France

In France, rental housing is less expensive than ownership and many people rent by choice because it is well accepted and rentals generally provide more space for the same cost as ownership. As a lesson to those in Australia who believe a mix of incomes and rental and owned housing in a single neighbourhood does not work the French have found that if there is no visible difference housing can easily be rented instead of sold. In the 1990s, some subsidies for homeownership were eliminated, with the effect that the rate of homeowners under 40 declined although the economic crisis at the beginning of the 1990s also may have been a factor.

The fastest price rises are for existing homes outside of Paris although, largely due to different land costs, there are wide variations in prices for homes around the country.

The French have a housing program that uses tax incentives to encourage individual investment in moderately priced rental housing. This program, begun in 1984, currently allows an investor to take depreciation of 8% a year for the first five years and 2.5% a year for the following five years as long as the property remains rented in accordance the program conditions. Mortgage interest is also deductible, the property must be rented for at least nine years and a 50% capital gains tax discourages selling. The program has been successful in stimulating lower cost housing production, particularly for moderate income households, but the rents permitted under the program effectively limit production to less expensive areas, where a lot of rental housing already exists. In Paris, where the program is most needed, the permitted rents do not cover the higher land and construction costs and makes the program less effective.

According to the ULI, it takes at least three years to change land zonings in France. As the community can only begin challenging once permission is obtained there is a lot of risk and cost in the approval process. Marseilles and several other cities are reported as developing long term city growth planning strategies and engaging the public with sophisticated computerised simulations and projections. Officials claim this strategy is working well and hope that it will reduce opposition to development.

United States

Like Australia, home ownership has long been the dream of most households in the United States. This is reflected in longstanding national policy and is supported by banking and tax laws. In recent times, record low interest rates and a weak stock market have stimulated a home buying surge. The children of the baby boomers — known in the US as echo boomers — constitute an even larger demographic cohort reaching the age of household formation, and the influx of immigrants over the past decade also will be moving into the market.

US housing prices have also been rising but, as in the European Union, there are regional differences with the rapidly growing US cities having the greatest problems. Policy makers are becoming increasingly concerned with the growing disparity between home prices and incomes, particularly in California and the northeast.

US affordable housing programs are covered in more detail later in this Section.

There are interesting parallels between the US, the European Union and Australia in the impacts social and demographic change are having on housing demand. There is a view that demand will not decrease because:

- More people are living longer and staying longer in their homes, resulting in small households living in large dwellings and a lack of adequate social housing for small, older households.
- More people are living alone and women, in particular, have greater financial power and are often choosing to independent lives,
- Budget constraints have meant housing subsidies are increasingly concentrated on the most vulnerable populations and the revitalisation of distressed urban areas, and
- There has also been a 'social marking' of space.

This last point is interesting in light of Randolph's comments²⁰⁴ about Sydney's middle ring suburbs. It appears that in a number of European countries, the middle class is choosing to live only in areas perceived to have low crime rates, good transportation and schools. This trend is seen to limit the number of places where housing can be built and acts as a constraint on supply. It is exacerbated when the areas people are moving from, or abandoning, have decent housing that no longer meets rising expectations. These expectations, reinforced by developers selling 'lifestyle' as well as desirable housing, are changing faster than existing communities can respond. This is often seen as an urban regeneration rather than affordable housing issue but the new housing is often far more expensive and exacerbates social and spatial polarisation.

Given the reasonably social housing structure in most of the Europe, the majority of those affected by poor access to affordable housing are moderate income households, many of whom provide essential community services as teachers, nurses, police, public transport operators and clerical workers. Their housing is often described as 'work force', 'intermediate' or 'key worker' housing. In the US, these households can only find affordable housing on the urban fringe and consequently contribute to urban sprawl. In most European cities the concerns are more to do with economic and community development. The economy of London, for example, is believed to be threatened because it is hard to find housing affordable to 'key workers' within two hours of the city.

At the ULI Policy Forum²⁰⁵, Mark Stephens from the Department of Urban Studies at the University of Glasgow, put forward six basic alternatives for how housing affordable to moderate income households might be created.

- Low-income housing tax credits are provided to developers in the US to develop moderate-income housing. An advantage is that developers can sell the credits to private investors to raise equity and bring private capital to this market. The program is reported as popular and working well. However, family incomes are limited to between 50% and 60% of the local Area Median Income (AMI) and, as a result, many workforce families with higher incomes (up to 120% of AMI) are unable to buy in their locations of choice. The income limitation prevents it from serving much of the workforce in the US.
- Mortgage interest subsidies or grants for deposits can be provided to key workers or new employees in high cost areas. An advantage of targeted subsidies is that they

McIlwain, J. (2003). *Housing for Moderate Income Households in the European Union and the United States.* ULI Land Use Policy Forum, Paris, 21-22 January 2003. ULI-the Urban Land Institute, Washington DC.

²⁰⁴ Randolph, B. (2004). *Renewing the middle city: planning for stressed suburbs*. Urban Frontiers Program, University of Western Sydney, Campbelltown.

reduce the costs when compared with subsidising all families in a particular income group. There is, however, the problem of equity. For example, if applied only to certain public employees, then other public and private employees with similar housing problems do not get assistance. Equally, it gives an advantage to certain regions at the expense of others. This implicit discrimination requires hard political decisions even if they are justifiable.

- Subsidies that encourage and support savings have been advocated. They do not
 provide a short-term solution, as they are helpful only when sufficient funds have been
 saved. When rents are high this can be extremely difficult. It also appears that the tax
 treatment of these subsidies may create problems. In the United States, several nonprofit organizations are reported to be experimenting with programs of this type on a
 very limited basis and targeted only to low income families.
- Some employers provide assistance to employees by helping them buy homes or by building rental housing and leasing it at below market rents. Prudential²⁰⁶ is apparently building an industrial park in the UK where first time home owner and moderately priced rental units, along with retail facilities, are to be included. Employer provided housing could be a valuable tool, but few companies are able to do this or believe it is important especially when unemployment is high. The only companies likely to be interested are believed to be ones unable to move relocate jobs to areas of lower cost housing or to far lower cost locations offshore.
- Reducing the value added taxes or local real estate taxes on home purchase or building costs are always proposed as a solution to increasing the supply of good quality, reasonably priced housing. It is a strategy few governments appear willing to adopt and was rejected by Australia's Treasurer when put forward as one of the Productivity Commission's recommendations.
- The supply and cost of land is a fundamental issue in the US, Europe and Australia. Providing land for 'key worker' housing is believed to be an important way governments can increase the supply of affordable housing, but it raises many issues and is often politically challenging. Many communities resist further development of any kind and can be especially resistant when local governments acquire land for housing they believe might reduce land values or introduce 'different' people.

Often the success of affordable housing programs is determined by the extent to which they meet a narrow set of objectives. Some are even developed with very specific outcomes in mind such as creating a certain number of new dwellings or reducing the proportion of households in housing stress. Although important, these approaches do not reflect the view of most commentators that affordable housing policies and programs must help promote healthy communities. The Brookings Institution, drawing from seven decades of housing policy and practice, proposed seven goals for affordable housing. These are:

- Preserve and expand the supply of good quality housing units,
- Make existing housing more affordable and more readily available,
- Promote social and economic diversity in residential neighbourhoods,
- Help households build wealth,
- Strengthen families,

Link housing with essential supportive services, and

Promote balanced metropolitan growth.

²⁰⁶ Katz, B. and Turner, M.A. (2003). Rethinking local affordable housing strategies: Lessons from 70 years of policy and practice. The Brookings Institution Centre on Urban and Metropolitan Policy and The Urban Institute, Washington DC.

These seven goals provide a comprehensive framework by which policy makers can evaluate the effectiveness of affordable housing programs.

7.3 Strategy principles from the Brookings Institution

Although not all housing programs can simultaneously meet all seven housing objectives, the Brookings Institution list provides a framework for aligning desirable community outcomes with housing policy. In essence, Katz and Turner argue for unique, locally crafted responses. The findings of their research are summarised into four principles.

Housing strategies should respond to local market conditions

Housing needs and policy priorities should differ from place to place, due to differences in housing market conditions, history, and political realities. The Brookings Institution report put forward a comprehensive set of affordable housing goals and tools to achieve them. It makes clear, however, that there is no sense implementing the same strategy everywhere — an important lesson for Federal and State government policy makers in Australia.

Just as cities and regions are different, neighbourhoods within the same local government area often have very dissimilar housing conditions and needs. So, although policy makers need to craft strategies for a whole city or region, they may call for different program approaches in different neighbourhoods. For example, a low income neighbourhood with moderate rents and house prices and relatively high vacancy rates may not need new affordable housing, but could benefit from low cost rehabilitation loans or deposit assistance to first home buyers. In contrast, it might be possible to boost the supply of affordable housing in a high-cost, high-demand neighbourhood through inclusionary zonings.

That said, it is clear the social and economic polarisation of Sydney is leaving a disproportionate share of households in stress in some areas. There is a spatial divide between employment and housing that exacerbates traffic congestion and diminishes the reliability and productivity of employees forced to tolerate long commutes. There is, therefore, strong logic in developing a Metropolitan Strategy that integrates policies and programs for transport, infrastructure, community services, employment growth, housing development and the conservation of natural resources. For Sydney, the challenge is to get all the players — industry and government — on the same track and on the same train.

A local — or metropolitan — housing strategy should be crafted to address current and expected market conditions. It is not sufficient simply to identify local housing problems because local policymakers need to understand what is happening in the wider housing market to cause problems. To match program approaches to neighbourhoods, decision makers need information about current market conditions and trends. From this information they can then settle on the goals that make sense, their implementation priorities and a crafted mix of appropriate program initiatives.

Given the magnitude of the housing affordability problem, and competing priorities, most programs are likely to stretch available public funds. Local market conditions and political reality will force local communities to adopt different strategic approaches that align with local needs and community expectations. For example, one local government area might target the bulk of its resources on a few top priorities and for an extended period of time. Another might focus on more narrow or short-term goals such as providing service-linked housing for all disabled people. A third strategic approach could focus on leveraging other government resources and from the private sector.

Income policy is housing policy

Most affordable housing strategies address the supply of affordable housing and focus on stimulating the construction, rehabilitation, and renovation of housing so it is affordable to low and moderate-income households. Production is a necessary component of a responsible affordable housing policy but a lack of income remains the principal barrier to households seeking affordable housing.

Household incomes are determined by economic, demographic, and government forces and housing prices are determined by market and regulatory factors. Because these structural issues are complex and appear insurmountable, housing policy makers and advocates often conclude nothing can be done at either the Federal or State level to raise incomes. As a result, the focus continues to be on programs that subsidise some of the development and building costs or supplement what lower income households can afford to pay.

As reported to WSROC in 1999²⁰⁷ ...the range of important housing issues are not really responsive to detailed dwelling design options. Rather they are broader scale financial assistance and strategic planning questions. To date, and despite recommendations that action is taken, the Federal and State governments have not reached any agreement on the quantum of funds that might be available for housing or the programs to which the money should be allocated. There are alternatives.

In the US, for example, state and local leaders are raising the incomes of working households by enhancing access to federal programs such as the earned income tax credit, nutrition assistance, health care, and childcare. Outreach programs, supporting free tax preparation services and helping families access financial services and savings have been used to great advantage. Other initiatives to help low income households find and keep jobs, build skills, and advance economically are also be incorporated into strategies for making housing more affordable.

Regulation is a powerful policy tool

Most affordable housing strategies in the US try to subsidize the gap between what low-income households can pay and what it costs to produce and maintain decent housing. For example, rental housing production programs often provide grants or low cost loans for constructing new units or offer investors tax credits to offset below market rent levels. Similarly, homeownership programs provide down payment assistance to supplement what low and moderate income households can afford to pay. However, scarce resources mean housing subsidies only serve a small proportion of those in need. The majority of households with serious housing problems do not receive assistance even though they are eligible.

Most local governments in the US have the delegated authority to regulate the private housing market by establishing and enforcing zoning policies, development fees, design requirements and building codes. Many also have the ability to implement rent controls and other regulations that reflect local priorities and objectives. Like Australia, these regulations help determine whether and where different types of housing can be developed and how much it costs. Although sometimes overlooked in discussions on affordable housing policy, regulatory policies play a critical role. As noted above, SEPP 70 on NSW is one such attempt although it has limited geographic application at present and is not linked to other fiscal and planning policies.

The traditional approach to land use and development regulation has resulted in policies that explicitly or implicitly limit or prevent the development of affordable

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The Planning research Centre and Scott Carver Pty. Ltd. (February 1999). Western Sydney Affordable Housing Study. Report to the Western Sydney regional Organisation of Councils.

housing. However, many regulations that raise housing costs have legitimate goals that should not be abandoned. Nonetheless, local governments can and should reassess their regulatory policies to ensure more affordable rental and homeowner housing is available. Eliminating or moderating exclusionary regulatory barriers to affordable housing development can be effective but, given the likelihood of community opposition, they demand careful development and implementation.

Regulatory strategies can also create incentives for private developers to produce more affordable housing where it is most needed. In the US, states, regions and local governments have employed inclusionary zoning and other regulatory reforms aimed at increasing the number of affordable units, especially in more affluent suburbs where they are traditionally scarce. Using a combination of mandates and/or incentives, inclusionary zoning can help redress local exclusionary practices or can balance the effects of growth controls and other policies that may indirectly limit the development of affordable housing. The most frequently used inclusionary zoning tools require a certain percentage of units in a new residential development to be affordable and available to low and moderate-income households.

However, it has been found in the US that inclusionary zoning, while producing affordable homes, tends to produce more housing for ownership than for rent, and the dwellings are often not affordable to the poorest households. Rent controls, by definition, promote housing affordability by regulating annual rent increases and have been found to benefit low-income renters. But rent control is often inefficient because it reduces housing costs for both lower and higher income households.

Inclusionary zoning, particularly in affluent areas, is seen as a tool to expand the availability and accessibility of affordable housing for lower income households, promote social and economic integration, and provide these households with more location choices. Existing community attitudes to the perceived threat of mixing incomes in a neighbourhood are obviously a challenge to be overcome when developing inclusionary zoning regulations. The issue of mixed income housing is discussed later in this Section.

The quality of implementation is critically important

Even the best housing strategy will fail if it is not effectively implemented. The history of housing policy in the US is full of examples of programs that produced harmful outcomes because of poor administration. For example, some of the local housing authorities responsible for implementing federal housing voucher programs failed to effectively perform basic administrative functions such as inspecting units when subsidy recipients apply for lease approval, making rental payments to landlords on time, and responding effectively to landlord questions and complaints. As a result, landlords have become unwilling to participate in these programs, leaving subsidy recipients with limited choices about where to live and contributing to the concentration of poor households in distressed neighbourhoods.

The Brookings Institution recommends that when new programs are launched, local policymakers should critically assess the capacity of the organisations charged with their implementation. Staff and resource levels, skills and experience, incentives for effective administrative performance and overall organisational capacity are critical issues to be addressed in the quest to improve policy outcomes. Furthermore, implementation agencies must have clearly defined performance measures and systematic performance monitoring.

Partnerships between organizations with complementary strengths are one way to effectively implement programs, particularly when a diverse range of skills and

experience is needed to meet local circumstances and needs. In several US communities, for example, local housing authorities have collaborated with non-profit counselling organizations and fair housing advocates to link housing vouchers with effective housing search assistance and mobility counselling. Recipients have received housing assistance, help in finding suitable accommodation and counselling to prepare them to succeed in the private housing market. As will be seen in the review of the HOPE VI program, considerable effort, time and resources is required to establish and sustain effective partnerships but they can have a substantial impact.

The Brookings Institution concluded its analysis by arguing for locally crafted responses within a framework of metropolitan management policies aimed at ensuring ...future growth is environmentally and fiscally sustainable, promotes economic prosperity, and benefits all residents, including low income households. Henry Cisneros, Secretary of the US Department of Housing and Urban Development (HUD) under President Clinton, summed up the challenge, saying²⁰⁸: The truth is, after all the comprehensive solutions and sweeping ideas, I've learned that the way to solve the biggest problems is block by block, neighborhood by neighborhood, city by city. There is no substitute for the magic of persistent, untiring, day-to-day work.

7.4 **Inclusionary zoning**

In the UK and the US, local authorities have been experimenting with ways of using the planning system to secure affordable housing at least since the 1970s. Inclusionary zoning — the regulatory requirement to include a component of affordable or social housing in market rate housing projects — is mentioned above as a tool in pursuit of increasing the stock of affordable housing accessible to a community. Inclusionary zoning (sometimes termed 'inclusionary housing' in the US) requires or encourages residential developers to incorporate affordable units in their market rate projects. Inclusionary programs are commonly structured to shift part of the price premium earned from strong market interest in residential development to underwrite the costs of affordable housing. This process is seen as a way to not only increase the supply of affordable housing, but also to more widely distribute the units in a community. Unfortunately, while good in principle, if incentives and benefits are not available the additional costs are passed on to end buyers.

In the US, most programs incorporate similar provisions regarding the threshold size of projects where affordable housing units are to be provided, the required proportion, the desired price and rent ranges and provisions concerning dwelling appearance, timing, resale controls, and other elements unique to the particular locale. Almost all programs offer incentives such as density increases or fee waivers to partially compensate for the cost of incorporating the affordable housing. In addition, communities carefully tailor their programs to their specific market — based on economic, political, and other conditions — so specific provisions vary greatly from one area to another. Most local governments also consider inclusionary programs as only part of a comprehensive effort to improve housing conditions.

Suburban inclusionary programs are reported²⁰⁹ to have generated only a fraction of the units needed for lower-income households and have not succeeded in providing desirable housing for former inner city minority households. However, although most serve existing residents they have mixed affordable units within developing neighbourhoods and boosted the lower cost housing stock. Some large cities, in the hope of retaining a proportion of affordable units for existing residents, are experimenting with applying inclusionary zonings to neighbourhoods where infill and redevelopment are escalating home prices.

²⁰⁸ Quoted in Stegman, M.A. (1999). State and Local Affordable Housing Programs. ULI-the Urban Land Institute, Washington DC.

²⁰⁹ Porter, D.R. (2004). *Inclusionary zoning for affordable housing.* ULI–the Urban Land Institute, Washington DC.

Virtually all inclusionary programs appear to have been implemented in strong housing markets where profit margins are wide enough for developers to make economic concessions. Somewhat dated anecdotal evidence²¹⁰ indicates that 'voluntary programs' based on 'guidelines' or local government resolutions requesting voluntary compliance have produced much more affordable housing than mandatory requirements. It appears that although there is no absolute authority to make developers comply, voluntary programs are harder to assail in court and their administration can be more flexible.

The Forum that contributed to ULI's publication on inclusionary zoning²¹¹ recommended a number of key points for policy makers to consider when developing inclusionary zoning programs. These are summarised below.

- Give affordable housing a significant role in growth management programs
 It was observed that growth management programs rarely attend to affordable housing
 needs from the outset and subsequent attempts to rectify the situation often fall short of
 satisfying demand. The ULI Forum suggested that a local government setting out to
 improve the quality of community development should recognize the important role of
 adequate affordable housing in meeting its social and economic goals. As a
 consequence, affordable housing programs, including inclusionary zoning if
 appropriate, should be included in a collection of policies, programs, and regulations
 that collectively make up the growth management system.
- Build leadership and political will for affordable housing programs
 Creating support for affordable housing is fundamental if inclusionary zoning programs are to be undertaken. In this respect, leadership should establish a unified commitment to support efforts aimed at increasing the stock of affordable housing and reinforce the benefits. The strongest argument for supporting any affordable housing program, apart from the equitable treatment of all households in a community, is the negative impact the lack of such housing has on economic development.

Start with small steps

It was reported that many of the communities administering effective programs began to experiment with the concept well before full-scale programs were adopted. They began by educating community leaders about the need for affordable housing and the benefits of inclusionary zoning. Many then applied the lessons by negotiating affordable housing agreements with developers of large projects or those in significant locations before moving on to legislate voluntary or mandatory programs.

Inclusionary zoning demands a rigorous administrative process

The body responsible for an inclusionary zoning program must have the skills and resources to define the numbers and types of affordable units required for a given project, determine affordable price and rent levels for a range of dwelling types, work with developers to determine the optimum site plan and home designs, establish household eligibility under any specified income limits, arrange sales and rentals to eligible households, monitor housing conditions and resales, and handle maintenance. All these require the dedicated attention and support from elected officials. It is also suggested that local governments can use non-profit housing organisations to help with technical and administrative tasks.

Integrate the program into a comprehensive effort

To produce the best results, inclusionary zoning policy should be carefully integrated within an interactive and mutually supportive array of housing programs. Experience in

²¹⁰ Werwath, P. (1995). *Inclusionary zoning: Program design considerations*. The Enterprise Foundation.

²¹¹ Porter, D.R. (2004). *Inclusionary zoning for affordable housing*. ULI–the Urban Land Institute, Washington DC.

the US suggests that a good mix enables the overall program to respond to economic changes and evolving housing needs.

Borrow ideas but not details from other communities

Local regulatory provisions are a source of information for communities considering adoption of inclusionary zoning. These, however, should be unique to each and shaped in response to local needs and legal frameworks, community interests, trends in housing markets, and other factors. Simply using elements of other programs or policy statements is therefore risky. The recommendation is that a community developing an inclusionary zoning program should observe practical approaches and useful ideas that can be adapted to meet local objectives and needs and then craft policies and provisions appropriate for their particular circumstances.

Choose incentives that make sense locally

Most inclusionary zoning programs in the US provide incentives to offset the cost of providing lower priced housing in market rate projects. They need, however, careful development and calibration. For example, the ULI notes that density bonuses for projects in neighbourhoods with well-established density zonings or influential opponents of higher density housing usually will not permit much assistance. Policy makers, supported by independent development expertise, should therefore identify meaningful incentives through discussions with local developer and builder interests. The ULI Forum suggested that one of the most important incentives was the cost saving results of a proactive and supportive approval process.

Engage all levels of government

Participants in the ULI Forum urged that a leadership role in raising local consciousness about the importance of affordable housing should be taken by state governments. They further recommended that state program incentives and sanctions be adopted to encourage action by all local jurisdictions and observed that state financial resources are critical to establishing effective programs to increase the stock of affordable housing.

In the UK, inclusionary zoning policies are not dissimilar to those in the US and generally require developers and landowners to fund part of the shortfall in the provision of social rented or other affordable housing. The contribution can be in the form of free land or a lower land price, housing units, a reduced transfer prices or direct contributions. There is, in effect, a cross subsidy from the market rate to the affordable housing that can be paid from:

- The developer paying a lower price for the land which is simply a financial redistribution from landowners to affordable housing,
- The developer's profits, or
- A price increase for the market rate houses although a developer would normally seek the highest possible price in any event.

This is not unlike the direct and negative impact infrastructure and community facility levies have on land, development and housing costs in Sydney. Understandably, the industry is hostile to these levies and uses them as an argument as to why housing in Sydney is not 'more affordable'. When they are accepted, albeit reluctantly, the negotiations on detail create conflicts and consume valuable time. Introducing an additional housing levy — through an expanded SEPP 70 for example — will only lead to further conflict, delays and increased costs for market rate buyers and renters.

A better model, with top to bottom government commitment, is required.

7.5 Planning gain

One way to offset the additional costs of an affordable housing levy is to reduce construction costs through building efficiencies of lower building standards. This is discussed in the following Section. Another is by requiring the mix of housing to change in response to wider market needs not appreciated by the developer. This option is particularly difficult, as it requires the acquisition of sophisticated market information that is beyond the capabilities of most local governments and developers. Yet another is offering developers an incentive to increase densities in return for an agreed set of outcomes: an inclusionary zoning policy that offers a planning gain in return for affordable housing. Developers will see this strategy as escalating market risk but, as discussed below, the mixed income and mixed tenure housing outcomes can reduce market risk and contribute to the creation of sustainable communities.

The planning gain model was first seen in Sydney when Waverley Council adopted its Multi-Unit Housing Development Control Plan in 1998. The DCP laments the loss of affordable housing in the LGA and blames increasing land values, construction costs and the attractiveness of Waverley for investment. It then goes on to make explicit the development incentives available in exchange for the production of affordable rental housing. The incentives are, in essence, floor space bonuses or variations to planning standards that do not adversely affect the building's design or its environmental amenity.

A component of any additional floor space created as a result of applying the development incentives is required to be provided as individual dwelling units and placed under Council's Affordable Housing Program. This requires that the units:

- Are retained for rental for a period negotiated with and determined by Council,
- Are rented at or below the first rental quartile for the Waverley area, and
- They provide accommodation for people considered to be in housing need and requiring rental housing at reduced rates.

The floor space bonus can be as much as 25% but 15% is the most commonly quoted figure. This can be provided as an additional floor in high-density areas, a partial additional floor or use of roof space, expansion of the building footprint or reconfigurations of the building to more efficiently use a site. Excess site area can be used for a new building in high-density areas but not in areas where townhouses are permitted, a strategy that effectively prohibits the construction of accessory dwellings. The DCP provides a series of diagrams explaining the solutions it considers acceptable and the floor space, height, streetscape, overshadowing and view factors it would take into account in assessing applications for the bonus.

Waverley Council applies its incentives to buildings but there appears to be little reason, apart from funding, for not extending the principle of planning gain to larger developments.

More recently, the planning gain concept was used in the Landcom/Cosmopolitan Developments *Forest Glade* project. The *Forest Glade* project was a development on three hectares of land owned by Landcom that produced sixty-three dwellings (21 dwellings per hectare). Of these, thirteen (20%) were offered to households that met specified moderate-income criteria. The project aimed to explore how a partnership approach could be used to produce moderate income housing for owner occupation by investigating ways to reduce production costs through site planning, design, construction and regulatory change. The savings that might be obtained by using different financing mechanisms, value capture, tax benefits and infrastructure financing were not considered.

Landcom and Cosmopolitan recognised that innovation was required if the stock of moderate income housing on Sydney's urban fringe was to be increased. Cardew²¹² recognises that ... innovation does not necessarily mean radical change. It can simply involve changes to existing practices, which result in significant improvements in outcomes and advances in present knowledge, and/or practice.

In his report, Cardew observes that:

Innovation has not been a strong feature of the builders within the building industry, because essentially they are assemblers of other organisation's products. Materials suppliers have more often provided the innovations with new products such as raft slabs, prefabricated frames and trusses, nail guns, and panel flooring. Yet, market acceptance is often slow. Regulatory authorities, financiers, insurers and end developers combine to hold back market acceptance of new products.

Innovations are resisted because of the cost of implementation at the scale at which many builders work and the spatial scale of development. They can be difficult to capture because they affect supply-and-fix trades, who may continue to charge on the basis of units installed regardless of the design. New products may also be priced only marginally below existing products and thereby not pass on the full savings achieved in the innovation.

Forest Glade was a demonstration project designed to explore the potential for moderate-income housing commercially integrated into a broader project mix and to be perceived as ...entirely consistent with the physical and social fabric of the subdivision.

According to Cardew, the project team elaborated its objectives as being to:

- Realise a leading edge design solution for a subdivision and its buildings,
- Meet predefined market, urban quality, housing diversity, innovative construction and design, and sustainability criteria,
- Provide a commercial return from the overall project in line with the contributions made by the participating organisations, namely Landcom and Cosmopolitan Developments,
- Deliver 20% of the dwellings at a price affordable to moderate income earners,
- Construct all dwellings for less than comparable market costs, and
- Demonstrate a replicable method for achieving its objectives.

In achieving these objectives, it was assumed that:

- The subdivision and houses would be designed to meet functional and aesthetic criteria as well as meet best practice social and environmental standards,
- Competent producers who were willing to be innovative could achieve the same outcomes at middle to low volumes of production, and,
- Changes to planning standards would be sought in order to increase the site yield without reducing predetermined design objectives.

²¹² Cardew, R. (2003). *Smart Housing Project Review.* Unpublished draft report for Landcom.

This last point is important because planning gain and better design were, together, seen as essential elements in reducing costs and convincing Blacktown Council that planning and design standards would not be reduced. Cardew says that ...the gains were made through value adding as much as cost cutting.

The development process was divided into urban design and construction. Urban design encompasses a thoughtful integration of land subdivision and building design and involved a change to the Development Control Plan (DCP) for the site. This enabled significant density increases without compromising public open space provision or building design. The construction component involved systematic and comprehensive attention to building design and the optimisation of the materials and labour components.

The existing DCP set a minimum lot size of 300 square metres. Under normal circumstances a 10% increment on this minimum might reasonably have been expected. A higher lot yield was obtained by developing house designs that worked best for the target markets then a subdivision layout that efficiently allocated land to these designs and their ideal orientations. The resulting higher yield was important to the project's commercial success as it created greater value from the site than could be obtained under the existing regulatory standards. It could also be seen as reducing the underlying land value on a per dwelling basis.

As Council acknowledged that the design met the original DCP's underlying performance objectives it was agreed with that a site specific DCP would be developed to formalise the planning gain. As the development had support its path through Council was relatively smooth although it took more time than originally anticipated because a development application could not be considered until the DCP was approved. According to Cardew, some of the additional time was due to design team inexperience and some to gaps in communication within Council. In this respect, it is understood that while senior staff were supportive some line staff needed a degree of convincing.

Cardew believes there is a lesson in this, saying that there ...would be significant advantage for similar future projects for a dedicated, albeit ad hoc, multi disciplinary team to exist in Councils to take affordable housing projects through all approval stages rather than a sequential process of assessment.

The DCP concessions were accepted for the explicit purpose of providing moderate-income housing. This policy stance, not unreasonably, preserved a planning gain that, if accepted by Council at the design stage, would otherwise be captured by the original owners from the higher price they might achieve for their land.

In his report, Cardew makes the observation that ...the things that matter to local authorities seem to be of a relatively minor nature... However, they reflect community and councillor concerns and have been the subject of recent policy change. He also suggests ...that at the suburban fringe, the thrust of policy is to create property outcomes that enhance property values, and maintain the image of an area. These can work against the provision of moderate income because simply the smaller scale development and lower prices, regardless of design quality, can be perceived be potentially disadvantageous by surrounding property owners. There is a view that such development is inferior and that the occupants will be less satisfactory citizens. It appears that the community consultation process confirmed these perceptions. As noted, Gwyther made a similar interpretation.

Cardew also suggests that smaller scale development (which is taken to mean smaller houses and lots) is being offered to the market because land values are escalating and that household structures are changing. Experience indicates that the latter is, at the moment, an uncertain proposition: the industry would prefer to continue building familiar housing typologies and not risk the perceived danger of innovation. Nonetheless, Cardew says that

...the project clearly demonstrated the 'ordinariness' of working households of service workers, administrative officers, trades, nuclear families, single parent families, young couples and adults with aged parents. It also demonstrates, albeit in a 'boom' market, that housing type and price diversity is possible to achieve with minimal buyer resistance.

The principles and financial outcomes behind the following crude example are being further explored on projects managed by Wentworth Brown. It suggests that a planning gain, properly applied, can increase development revenue while reducing market risk and offering a broad spread of price points and product types to the market.

The development example:

An area of 88 hectares with the potential for around 1,300 dwellings at a net density of around 14.5 dwellings/hectare is available for residential development. The developer is obliged to offer at least 5% of the dwellings (65 in total) into the moderate-income housing (MIH) market.

Potential planning gain:

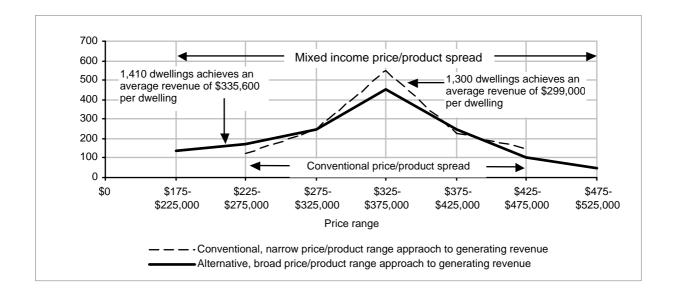
The first question is: Does increasing the density to (say) 16 dwellings per hectare make the MIH equation work better? For example:

- At 14.7 dwellings per hectare (1,300 in total) the MIH component of 5% would be 65 dwellings (in reality a token gesture) but
- At 16 dwellings/hectare the development potential would be 1,410 dwellings and the 5% MIH component would be 70 dwellings (still a token in light of the potential market).

However, if the equation is rearranged so the target is 1,235 market price dwellings (1,300 less 65 dwellings) and the planning gain is achieved 175 dwellings might be available for moderate income or community housing (65 plus 110 dwellings). This is 12.4% of the total of 1,410 dwellings and a substantial increase on the potential stock of affordable housing.

Land and house pricing strategy

Can a land and house pricing strategy that uses the revenue from higher priced and a higher number of dwellings to reduce the cost of the product without an impact on the bottom line provide affordable housing? This can be confirmed as the graph shows.



The social, political and, for the developer, financial advantages of offering a broader mix of prices and products (with 12% of the product specifically for the moderate market rather than the notional target of 5%) clearly appear to be positive.

A careful land planning, design and pricing strategy such as this requires a method by which windfall gains obtained from increasing the density do not accrue to the moderate buyers who sell out within a certain period, the original land owner or the developer. One method for qualifying moderate-income buyers was established by Landcom at *Forest Glade*.

7.6 The HOPE VI Program

One of the most interesting block-by-block, neighbourhood-by-neighbourhood programs to emerge from US affordable housing policy was the HOPE VI program launched in 1992. While primarily directed at improving the quality of distressed public housing, HOPE VI offers lessons in how public/private partnerships can be used to build more economically integrated communities and provide residents more choice in the private housing market.

A key innovation of the HOPE VI program was the incentives it created for public housing authorities to involve private developers in the creation of new mixed income neighbourhoods. HOPE VI, together with other finance programs, allowed public housing funds to be combined with other public and private development funds to increase the level of financial and service resources to revitalisation projects. The program encompassed policies aimed at reducing concentrations of poor households in public housing, mixing incomes and tenures in redeveloped neighbourhoods, using New Urban principles to improve neighbourhood and housing design, reforming public housing management, introducing crime reduction strategies and changing the way public housing was financed. While most aspects of HOPE VI are valuable for policy makers, the mixing of households with different incomes is important for the main thread of this research: affordable housing and sustainable neighbourhoods.

The past problems of inner urban public housing projects in the US are well known and documented. It would be easy to say similar problems do not exist in Sydney but there is clear evidence — recent events in Minto for example — that pockets of entrenched social disadvantage do exist and demand attention. Notwithstanding the special circumstances of these areas, it is believed their revitalisation and the success of any affordable housing policies will depend finding solutions to the problem of 'social marking' discussed above.

In developing the HOPE VI program, researchers and policymakers hoped that targeting occupancy to residents with a wider range of incomes would reverse a public housing policy that concentrated the poor and aggravated their physical, economic and social problems. The expectation was that projects would be better managed and maintained over time if they attracted and retained higher income residents. It was further believed that a mix of income levels creates a healthier social environment and brings better government and private sector services to the surrounding neighbourhood. The challenge was, and continues to be, convincing higher income tenants and buyers that their lifestyle or accumulation of housing wealth would not be threatened.

According to a 2004 Urban Institute report²¹³, research indicates that mixed income public housing developments can be successful in creating well-managed communities that attract a mix of market rate, affordable and low-income tenants. There is also evidence that these developments may have economic benefits for the surrounding communities. Popkin reports that HOPE VI developments have successfully incorporated market rate rental and homeowner housing alongside public housing to create a much wider range of incomes in

Popkin, S.J. et al (May 2004). A decade of HOPE VI: Research findings and policy challenges. The Urban Institute and the Brookings Institution, Washington, DC.

single residential communities. She also reports that a 2003 evaluation of the program for HUD found that mixed income projects offered more amenities, greater market appeal, larger rooms, and more innovative design features.

US policy makers see an important advantage of mixed income housing is its ability to diversify a project's cash flow sources. This reduces its reliance on subsidies as a source of revenue for operations and debt service but, it appears, does not necessarily reduce the subsidies needed to serve households at a particular income level. A second argument for a mixed income strategy is that it creates strong incentives for high quality management and maintenance, potentially improving the quality and sustainability of the housing reserved for the poorest households. To attract higher income households, mixed income developments must be well maintained and have a reputation for being safe and secure: failing to meet these criteria may cause the development to fail financially.

The policy makers and developers involved in HOPE VI anticipated that mixed income housing would also yield long term socio-economic benefits for low-income residents. There are several theories about how these benefits could occur. For example, living in a neighbourhood where most residents work may provide low-income children and adults with positive role models and social networks. Popkin notes research that suggests moving to neighbourhoods with lower levels of crime and risky—behaviour may reduce stress, promote mental and physical health, improve adolescent outcomes and ultimately lead to better educational and employment outcomes. Creating healthy mixed income development that attract higher income residents and provide a pleasant and safe community for all residents therefore appears to be a feasible proposition. The caveat is that the policy and management conditions required to ensure that living in these communities will have substantial social and economic benefits for low-income households are less clear.

A 2003 research paper²¹⁴ examining the rationale for mixed income approaches to housing development found that ...mixed-income housing is not a silver bullet to overcoming the difficult challenges faced by families seeking to escape from poverty or the realities of housing markets. Because mixed-income developments are complex, present unique risks, and often house fewer needy families than other types of development, mixed-income approaches must carefully consider the local housing market, the population to be served, financing options, the scale of the project, and the community context.

Smith's research generated a useful checklist of questions for policy makers evaluating the merit of mixed income approach to developing affordable housing. It is reproduced below.

What is the market?

The starting point for any development is the market, and for mixed income developments it is particularly important. Attracting moderate or high-income households, particularly into a rental development, may not be possible in many markets.

Who is being served by the development?

If the housing is for an extremely low-income population, there may be a stronger case for a mix of incomes. A mix of incomes may be necessary even within this group to ensure that not all of the tenants are nonworking or have serious social service needs that could overwhelm the social-service provision and management capacity of the development. Conversely, a development might also be specifically designed to efficiently help a population with serious social-service needs, such as formerly homeless individuals. Focusing on a mix of incomes may ultimately detract from meeting the goal of assisting families who truly need housing assistance.

²¹⁴ Smith, A. (October 2003). *Mixed-income housing developments: Promise and reality.* Joint Center for Housing Studies of Harvard University and the Neighborhood Reinvestment Corporation.

What is the tenure type?

The tenure type (rental, home-ownership or cooperative) is determined in large part by the population and market being served. Home-ownership units may eventually become unaffordable as these homes appreciate in value, making the initial mix of incomes in a development a temporary phenomenon. In contrast, a mixed-income rental development remains generally remains affordable to low-income households for at least 20 years, if not the life of the development. Thus, a mixed-income rental development may help to maintain a mix of incomes within a community over a longer period.

What is the scale?

As developments take on a larger scale, the need for a mix of incomes seems to grow. Creating a mix of incomes in small developments may create needless marketing and management challenges.

What is the wider community context?

Large-scale, all-very-low-income developments will always pose problems. Yet the need to provide a mix of incomes within one development appears to decline, particularly in a small development in a community that already has a mix of higher-income households. Conversely, mixed-income housing in a distressed neighborhood might be part of a larger revitalization strategy.

What are the financial considerations?

In limited instances, a mixed-income approach can reduce the subsidy needed and provide financial stability, particularly in tight markets. However, a mixed-income approach will also require that the lower-income units are built to a very high standard, and it will require that those units fit into the neighborhood. Both are desirable, but come at a cost. Moreover, if the wrong mix is attempted, the property might actually fail. In others it can increase the risk and cost of the development. Accordingly, mixed-income housing should be pursued carefully, with good analysis of the market, neighborhood, costs and potential benefits.

• Is a mix of incomes necessary for approval?

Even if all of the preceding factors suggest that a mix of incomes is not necessary for a successful development, city regulations or community objections may require that higher-income households be included.

What defines success?

Any housing development represents the push and pull of a variety of factors, most notably financial realities and community concerns. However, the final product may 'serve far fewer needy families than the original vision, and in some cases at a higher cost. Thus, it is important to begin the process with a definition of what will meet the threshold for a successful development. While a public subsidy may be reallocated to another development, time, land and equity are all scarce inputs. If a sufficient number of families are not being served, the investment should be reconsidered.

The coming together of physical (physical good) and social (social good) benefits makes mixed income housing an appealing approach to many policy makers and planners. However, Smith concludes by saying that the mixed income approach has a varied record of success in accomplishing its goals. Its clearest success seems to be in alleviating community objections to low-income housing, while the most questionable results are in achieving positive social or economic gains for low-income families through interaction with their higher income neighbours. And, while it offers potential benefits, it also presents additional costs and risks. Ultimately, a mixed income approach is one tool among many for addressing the

housing needs of low-income families and building healthy communities. It is an effective tool in some situations and inappropriate in others.

7.7 Mixed income and mixed tenure housing in the UK

Since 1997, the Joseph Rowntree Foundation has supported a policy of voluntary sales on its New Earswick estate by selling 50% of properties becoming vacant and reletting the other half. Sales proceeds are used to replace stock. The aim is has been to attract a greater social and economic mix of residents, support the sustainability of local shops and services and improve employment prospects for community members. This program is seen as a way to rebalance communities by introducing a variety of household types, tenures and incomes similar to neighbouring market rate communities.

A 2003 report by Martin and Watkinson²¹⁵ reviewed the Foundation's approach, and similar initiatives, aimed at reversing the process of those on the lowest incomes in identifiably social housing being unfairly marginalised. The authors found that oversupply of rented housing or falling demand were the main reasons for local councils actively engaged in mixed tenure activities. Housing associations who actively mixed tenures and incomes were also largely driven by financial considerations. It was found, however, that property values improved, turnover was reduced, demand increased, stigmatisation was reduced, and the area's reputation and household mix was enhanced. These benefits of a pragmatic solution to selling properties were often not anticipated although staff scepticism about the outcomes was found to be a challenge. Exemplars include:

- Gloucester County Council has had a policy of promoting and developing mixed tenure
 estates since the 1970s. The outcome has been that areas are not stigmatised or
 labelled and, in many, differentiating one tenure from another is difficult. The authority
 is reported as saying that there are a number of other features that go toward
 sustainable communities: environmental layout, a good age and housing mix, good
 liaison with other service agencies and choice based lettings.
- An area called Sandwell has an active policy of introducing mixed tenure on its existing
 estates where over 30% of housing is council owned. The policy was introduced to
 address an oversupply of social housing but the council has found that encouraging
 mixed incomes has made some areas more attractive and sustainable.
- The Newcastle 'Going for Growth' approach apparently attempts to introduce radical solutions to urban regeneration and new build. New housing development will involve changing the traditional housing mix by incorporating private rental, owner occupation, housing association landlords and shared equity homes. It is claimed this will achieve a vibrant mix of tenure and type for cosmopolitan living.

Martin and Watkinson observe that critics of mixed income communities tend to concentrate on whether owners and tenants share a common social life. Many do not. But the authors says this misses the point and quote Richard Best, Director of the Joseph Rowntree Foundation, as saying: It is the stigmatising effect of having a tenure that identities its occupants with failure and poverty that has contributed to the decline in the value of social housing, difficulties in filling the homes and loss of morale on the part of the residents.

7.8 A way forward: mixed income, mixed tenure housing

The idea of mixing incomes and tenures in residential settings is not new: urban neighbourhoods in the UK and the US traditionally contained a mix of housing products

²¹⁵ Martin, G. and Watkinson, J. (2003). *Rebalancing communities: Introducing mixed incomes into existing rented housing estates*. Joseph Rowntree Foundation, York.

suitable for a range of incomes. As evidenced by the HOPE VI and Joseph Rowntree Foundation programs, mixed income housing has become recognised as a way to provide a secure, high quality, well maintained living environment and increase affordable housing options for lower and moderate income households by leveraging market forces. As a result, mixing incomes seems to be a viable way to supply affordable housing options, increase sales rates in large planned developments, revitalise urban neighbourhoods, and decrease the concentration of poverty in public housing estates.

The UK government, among others, has adopted income and tenure diversification as one way to tackle social exclusion in troubled social housing estates. These estates are often termed 'socially excluded' because few people work and some argue that their sense of community breaks down. Increasing the proportion of owners is seen as a way to change an area either actively through the development of social capital, or passively through tenure 'dilution'. Social interactions between owners and social renters are thought to increase social capital because, for example, working owners may provide social renters with job opportunities. Passive change occurs because increasing the proportion of owners reduces the proportion of social renters. Thus the economic status of an area may change because a higher proportion of owners work not because of changes in social capital.

The results of studies of tenure diversification in various countries quoted in one report²¹⁶ suggest that although introducing owners may reduce the proportion of social renters in an area, the social capital of such areas tends not to be enhanced because cross-tenure social networks are not a common feature. Hiscock found, however, that residents are more neighbourly in mixed tenure/mixed income areas and more likely to join the working customs in owner dominated areas. Other research by Smith²¹⁷ in the US indicates similar findings. He found that the success of mixed income developments varied greatly by geography, demographics, market and the developer. Some of the common findings about the ability of affordable housing developments to meet the three primary motivations were:

Alleviating concentrations of poverty

- There is evidence to support the importance of living in a healthy, mixed income community in breaking the cycle of poverty than simply living in an isolated mixed income development. Such a development may have an important role in achieving a healthy neighbourhood but other housing strategies may be more effective.
- There is little evidence that tenants in mixed-income developments interact in a meaningful way, limiting any potential social benefits.
- Property managers apply strict screening and management practices regardless of the mix of incomes, greatly curtailing the incidence of negative social behaviour.

Producing high quality developments

 Market pressure is the most reliable force in ensuring high standards although community pressure can also be a powerful force in ensuring high standards, regardless of the mix of incomes.

Meeting the shortage of affordable housing

- Generally, mixed-income developments do not reduce the need for subsidies although in very tight housing markets a cross subsidy is possible for developers

²¹⁶ Hiscock, R. (2001). *Are mixed tenure estates likely to enhance the social capital of their residents?* Paper reporting work in progress to a Housing Studies Association Conference, Cardiff, September 2001.

Smith, A. (October 2002). *Mixed-income housing developments: Promise or reality*. Joint Center for Housing Studies of Harvard University, Cambridge MA, supported by the Neighbourhood Reinvestment Corporation, Washington DC.

- with low return thresholds. In weak markets and transitional neighbourhoods, additional investments must be made to attract higher income households.
- A mixed-income approach does appear to be effective in overcoming political and community barriers to moving a project forward. It is unclear if a mixed-income approach will build future political support for affordable housing.

Smith's conclusion is that a mixed income approach can be an important way to increasing affordable housing stock, ensuring high quality housing, and reducing concentrations of poverty. However, he says, it cannot alone be relied upon to achieve all of these goals. As a result, policy makers and developers must be clear about what they are trying to achieve. Further, because mixed income developments are almost always complex, present unique risks, and often house fewer needy families, it should not be casually adopted as an approach. Careful consideration of factors such as the housing market, population trends, financing, number of units and community context, must be evaluated before deciding if mixed income housing is needed or appropriate, and what mix of incomes is feasible.

There are also challenges in communicating the benefits and overcoming misconceptions held by people who believe this form of housing might have detrimental impacts on existing communities and new neighbourhoods. It appears, however, to be a potentially valuable tool which, when combined with other regulatory, financing and service policies, can meet the challenge of providing affordable housing to low and moderate income households.

The literature, and the Landcom/Cosmopolitan Developments *Forest Glade* experience, suggests that there are a number of strategies and communication messages that could be used to help convince a sceptical community and industry of the value of introducing policies to encourage the development of mixed income and mixed tenure housing.

• In the past, healthy communities offered a range of incomes and housing types

New developments in the US and the UK that mix households with different incomes
take a variety of forms, from all market rate housing to a combination of market rate
and assisted affordable housing for rent or sale. While the strategies used to achieve a
compatible living environment vary, there is proof that mixed income households can
live with one another. In these developments, affordable housing is essential because it
meets a diversity of needs and incomes, and allows 'key workers' to live in the
community in which they work. It has also been found that a well located, well
managed and high quality development will appeal to higher income residents despite
the fact if offers a choice of housing options.

A range of housing types and price points also accommodates the needs of different generations and makes the community more socially sustainable. Furthermore, design controls and careful placement of different housing offers can ensure the community has an appealing and shared aesthetic in which lower priced homes are, for all intents and purposes, the same as more expensive homes.

Developers of larger planned communities who target a broad market with a range of price points often include housing for sale or rent to a diverse range of household types. This is becoming an accepted risk management strategy that can improve project cash flows. The many communities whose planning has been influenced by New Urbanism principles have successfully aimed to build balanced neighbourhoods and also meeting market demand.

Regulations can be changed to help the private sector
 Overseas it is becoming generally recognised that an inadequate supply of affordable
 housing limits economic growth because when people pay too much for housing, they
 spend less on other goods and services. At the same time, businesses cannot expand

and contribute to economic growth if suitable housing is not available for their employees. This appears to be accepted in Sydney's emerging Metropolitan Strategy.

However, public policy at the state or local level — in the form of regulations, incentives, or technical assistance — is required if the supply of mixed income and affordable housing is to be expanded to meet the needs of emerging and existing household groups. Inclusionary zoning, density bonuses, and even land assembly assistance are some of the ways public policy can help achieve this aim.

The issue of land assembly is a particularly interesting as overseas experience seems to suggest that affordable housing strategies are more likely to be successful when introduced into larger scale developments.

The ideal is to bring owners together, reach agreement on a strategic plan for their land and ensure all support, and participate in, orderly development of their collective holdings. This process often fails because individual owners cannot afford the land and infrastructure conversion costs. Financially stronger buyers then enter the market, accumulate large land holdings and attempt to subvert the original planning principles. Unfortunately, public agencies often fail to test their capacity for creative influence when the interests and perceived rights of individual owners come into play. Piecemeal development and poor community outcomes are the inevitable consequence. Perhaps it is time multiple owner development, facilitated or mandated by government, becomes a requirement as pressure for more integrated neighbourhoods and better urban outcomes increases.²¹⁸

• Mixed income and affordable housing can be profitable for the private sector Planned communities that include a mix of housing types and price points improve affordability simply by offering product at the lower end of the price scale. Informed developers appreciate that this approach because it reduces the overall project risks. It can also help increase sales rates as the target market is widened and the project can have a more flexible response to changing market conditions. These strategies can, and do, improve project profitability.

In the US, private sector developers develop mixed income housing with the help of a variety of federal, state, and local housing finance programs, incentives, or regulatory initiatives that support the provision of affordable housing. An increasing number are partnering with public sector agencies and non-profit organisations to successfully build mixed income communities combining market rate and publicly assisted units. These collaborations encourage the partners to share and cultivate their areas of expertise, provide access to conventional financing as well as to government grants, tax credits, and other incentives.

Design standards can be raised and affordable housing blended with neighbours
 Many people associate affordable housing with the unfortunate results of single
 purpose public housing projects. The reality is that affordable housing — housing that
 meets user needs, is responsive to context, enhances its neighbourhood and is built to
 last — can achieve high quality design outcomes. For mixed income developments,
 good design can be a competitive selling point that attracts market rate residents.

There are US and UK examples of high quality design being used facilitate faster approvals, attract the support of future residents, and overcome the fears of neighbours uncertain about the prospect of affordable housing in their community. In the UK, the Commission for Architecture & the Built Environment champions good design through

²¹⁸ Chandler, D. and Brown, D. (1997). *Identifying and implementing opportunities for multiple owner urban development*. Unpublished discussion paper for Liverpool and Camden Councils.

its publications and awards. In the US, HUD, the National Endowment for the Arts and the American Institute of Architects co-sponsor a Web site (www.designadvisor.org) that provides developers with information and resources to improve the design quality of affordable housing projects.

A result of these efforts is that design guidelines and regulations for mixed income housing typically require human scale buildings, architectural features responsive to the community context, walkable neighbourhoods and attractive landscaping. There are reports of mixed income housing projects making the neighbourhoods more resilient to economic and social change and more likely to succeed over the long term. In these circumstances, good design contributes to an attractive, architecturally compatible community with visually integrated and different housing typologies.

The private sector needs help provide affordable housing

In theory, the market place should provide housing that is affordable through the process of filtering: the older stock becomes affordable to lower income households as they decrease in value and higher income households move to new housing.

In reality, the market has not provided an adequate supply of decent affordable housing, especially in locations that are low in crime, have good schools, and are close to employment centres. Randolph has persuasively argued²¹⁹ that the reverse has occurred. He says that while the middle ring suburbs of Sydney offer an affordable housing alternative to the gentrified inner suburbs and the increasingly unaffordable aspirational urban fringe, the physical fabric of housing in these areas is wearing out and is no longer appropriate to modern living or environmental standards. As a result, these areas are now becoming some of the city's most disadvantaged communities.

The solution, Randolph believes, is a strategic and integrated approach, delivered and coordinated at the local level by properly funded government support. Success, however, will depend on stimulating private sector investment to start a renewal and revitalisation process that creates socially, economically and environmentally sustainable communities with a range of affordable housing.

These communities might see mixed income housing as a way to allow 'key worker' households to live in the communities in which they are employed while augmenting the market's inadequate supply of affordable housing. Government policies and developer incentives such as inclusionary zoning tied to density bonuses, expedited reviews, rebates in infrastructure levies, and better coordination of government grant programs can add value to one another and support the construction of more affordable housing where it is needed.

Property values are not affected by nearby affordable housing

Neighbours of higher density housing proposals often express concern about the impact of these developments, particularly of there is an implication that they are for low to moderate income households, on their property values. Numerous studies in the US and some in the UK appear to consistently indicate that affordable housing has a positive or neutral effect on neighbouring property values.

Mixing more affordable housing types with higher end residential development also can generate concerns about property values — such as the perception that town houses and apartments will have negative effects on the property values of neighbouring detached family homes. Again, it appears that there is no evidence that higher density or affordable housing models lead to a devaluation of nearby housing.

²¹⁹ Randoph, B. (February 2004). Renewing the middle city: Planning for stressed suburbs. Urban Frontiers Program, University of Western Sydney, Campbelltown.

There appear to be no similar studies in Australia. In the face of continuing opposition to urban consolidation, and the requirement for housing diversity and higher densities in greenfield developments, it is time such research was undertaken and communicated to a sceptical public and local governments.

Community opposition is not an insurmountable obstacle

Proposed mixed income housing developments often face significant challenges from NIMBY (Not In My Back Yard) neighbours concerned with the perceived fiscal, social, and environmental impacts of affordable housing units. These objections can come, depending on the neighbourhood, from low income as well as affluent residents. Their expressed fears include poor design, higher densities, traffic, increased crime, and lower property values (in higher income areas) or a disproportionately high share of affordable housing (among lower income residents). Sometimes, negative stereotypes about low and moderate-income families and new immigrants can arouse community opposition. While neighbourhood concerns vary, a confident and knowledgeable developer or builder with a good reputation for producing good quality housing should be capable of winning community support

In this regard, attractive design, attention detail and an honest, transparent effort to build good community relations are important assets with which to leverage community support. In overseas examples, mixed income developments that include market rate housing are a politically acceptable solution to providing affordable housing. Negotiated amenities such as the addition of more open space and better streets often prove to be winning elements that convert opposition to support. Evidence of good management practices, particularly if much of the housing is to rental, can also alleviate community concerns. In all cases, careful planning, education, examples of successful projects and good communication are essential to winning acceptance of a proposals that change the social and household mix in a neighbourhood.

Strong support from local government, in partnership with the developer and other respected advocates, is critical to reducing or overcoming community opposition to affordable housing. Local planning and zoning regulations aimed at fostering the construction of affordable housing can also help make affordable housing a natural and accepted part of residential development.

For the private sector, addressing affordable housing is a unique opportunity to supply a poorly serviced, but expanding market. Ideally it should happen with minimal government funding. Minton²²⁰ quotes the UK National Housing Federation's belief that in future it expects to see nearly all affordable housing provision come through the planning system.

Mixed income housing can have and important role in getting more affordable housing built, raising the quality of housing available to the 'have nots' and reducing concentrations of low income or disadvantaged community members. Good design can ensure lower priced homes are seamlessly compatible with more expensive ones. And a range of selling prices and house types reduces market risk because the project can appeal to a broader catchment of financial capacities and lifestyle needs. The issues are complex but mixed income and mixed tenure housing is one approach forward.

Minton also argues that if planning policy and regulation is used to create more balanced mixed-income/mixed tenure communities the mechanisms of implementation must be clear and unequivocal. She cites examples in the UK where, remains as strong as ever. despite the rhetoric of government policy, councils and builders can and do get away with building minimal amounts of affordable and social housing.

²²⁰ Minton, A. (2002). Building balanced communities: The US and UK compared. RICS Leading Edge Series. Royal Institute of Chartered Surveyors, London.

This situation has emerged because the key planning guide, PPG 3, states that: Local planning authorities should encourage the development of mixed and balanced communities: they should ensure that new housing developments help to secure a better social mix by avoiding the creation of large areas of housing of similar characteristics.

'Encourage' is the key word and, it appears, is taken to mean that local authorities need not insist on developers meeting their obligation to create mixed and balanced communities. As a result, developers frequently negotiate their contributions. At the same time, planning departments have no real power to reject applications for socially homogenous communities that do not include any affordable housing.

The lesson for Australian governments implementing mixed income/mixed tenure policies to ensure communities are more economically and socially sustainable is that there should be no ambiguity as to what is expected of developers. In this respect, the provision of housing diversity for a wide range of household types and financial capacities should be one of the heads of consideration in the relevant planning Acts. This would support the rhetoric for diversity and inclusiveness with a strong legal basis. To reduce challenges and help inform the community as to why such a policy is being implemented, however, each local government should have a detailed residential strategy. These are required in NSW but the few briefly examined for this research demonstrate a woefully inadequate level of research into the social, economic and psychological drivers of housing demand and supply in the local area.

Because mixed income developments are more complex and present unique or unfamiliar risks, they must carefully consider the local market, the resident base, financing options, the project's scale and community context. But they do offer an opportunity to establish the network of public/private partnerships now needed to address housing affordability.

Such housing combines market rate housing with housing at a number of price points or publicly assisted housing. In other words, large planned estates, neighbourhood based revitalisation efforts or single projects designed to contain dwellings affordable to households with different income levels. What you do, with highly skilled design and promotion, is use the premiums obtained for market rate housing to significantly reduce the price point of dwellings that might be purchased by moderate-income households or community housing association. For example, some of the profit from housing sold to people earning 120% to 150% of an area's median income can be used to reduce the costs of housing affordable to people earning 60% to 100% of an area's median income. The sums can work to everyone's benefit.

This approach to residential development, in its most simple form, requires:

- The developer to work in partnership with local government to achieve a planning gain in return for the delivery of clear community benefits (a broad range of housing price and product types and better design outcomes for example),
- The application of high level design and marketing skills, and
- Conscious use of the premiums obtained for attractive and well-located market rate
 housing to significantly reduce the price point of dwellings that might be available to
 moderate income households or a community housing association.

Not surprisingly to those who understand the property development game, risk reduction and return optimisation are the key factors considered by developer and financier alike. In this respect, the answer to getting the land development, building and finance industry involved in affordable housing is conceptually simple: get a foot on the land, show financiers that an

acceptable return on investment can be made, and get the necessary authority approvals. Reality is, of course, considerably more complex.

7.9 Summary

Affordable and sustainable neighbourhoods

- The widely different design philosophies of planning practice, and its academic literature, have held out a conflicting range of models that promise optimum solutions for Sydney's planning and housing challenges.
- Two things characterise these models. Firstly, nearly all have been read as prototypes for a physical realm but few have regard for their social implications or have any grounding in behavioural studies or environmental psychology. Secondly, their proponents consider each to be the 'best' despite the fact contemporary society is largely driven by individual values and no single ideal fits everyone everywhere.
- Despite the fact some models have proven to be less than successful, the concept of
 ensuring future development is sustainable has become a foundation objective of most
 planning strategies. Some call it 'smart growth'. Irrespective of titles, sustainable
 development, and the communities it is supposed to create, is an explicit social goal of
 contemporary Australian urban planning and now part of its lexicon.
- A sustainable community, according to the UK government, exhibits a number of key requirements. These are:
 - A flourishing local economy to provide jobs and wealth,
 - Strong leadership to respond positively to change,
 - Effective engagement and participation by an active community sector,
 - A safe and healthy local environment with well-designed public and green space,
 - Sufficient size, scale and density to support basic amenities,
 - Good public transport and other transport infrastructure.
 - Buildings that can meet different needs over time.
 - A mix of housing types and tenures to support a range of household profiles,
 - Good quality local public services,
 - A diverse, vibrant and creative local culture,
 - A 'sense of place', and
 - The right links with the wider regional, national and international community.
- A typical example of the outcomes expected from meeting these social goals is housing diversity, an expressed desire of most local government residential strategies. Mixing housing types and prices within a neighbourhood is, however, difficult to translate into common practice without high-level commitment from developers, builders, and local authorities and their constituents.
- Brendan Gleeson has observed that Australian governments have elevated the significance of 'community' as a high order policy in response to concerns with the dysfunctional outcomes of social and economic polarisation. 'Community' has become a key item in the marketing material of new developments.
- Gabrielle Gwyther found that residents of two estates in Sydney's south west were motivated to move by perceived threats associated with public housing estates. the perceived undermining of a 'common way of life' by new migrant settlement patterns, and the 'economic failure' of Sydney's middle ring western suburbs. The estates

offered a wealth creation strategy, the security promised by a 'good neighbourhood' and the expectation of certainty and trust produced by a socially compatible, likeminded resident population.

- Implicit in Gwyther's findings is the challenge of developing affordable housing in new estates because less expensive and more dense housing is likely to be seen as having 'different' people without the same social values.
- Gleeson says that there must be efforts to achieve a socially representative diversity in new urban developments and in areas residualised by change. This requires collaborative leadership that draws its resources from everyone involved in the development process, including prospective residents.
- The rise of the Smart Growth and New Urbanism movements in the US has been matched by a great diversity of supporters, including politicians, homebuilders, and environmentalists.
- One of the keys to successful Smart Growth and New Urban projects is the inclusion of higher density housing in new and existing neighbourhoods. Unfortunately, in too many local government areas higher density and mixed use development is difficult to construct because their regulations favour low-density development with segregated uses and there is community opposition. Advocates say that well-designed higher-density development, properly integrated into an existing community, can become a community asset that adds to the quality of life and property values while addressing the needs of a growing and changing population. They argue that regulators and the community, influenced by past failures, have false impressions about higher density development and the people who choose to live in such housing.
- Contemporary New Urbanist planning approaches are increasingly being structured around Andres Duany's concept of the Transect. This is an ordering system that arranges complementary elements of urbanism in ways that preserve the integrity of different types of urban and rural environments. It offers a three dimensional planning and design framework that achieves the integrated residential environments practitioners and regulators now seek to achieve. Its concept of a continuum fits well with the social goal of providing different social environments within a cohesive but diverse neighbourhood whole.
- Smart Growth and New Urbanism both have their followers in Australia and the
 principles they promote are becoming more evident in the rhetoric, if not the reality, of
 government policy. The most recent of these is the Metropolitan Strategy being
 developed by the NSW Department of Planning, Infrastructure and Natural Resources.
- Directions for managing the inevitability of change included building liveable new communities and renewing old ones with a greater variety of housing for rent or purchase. A priority area, at least for the new communities, was ensuring they meet strict criteria to achieve a mix of housing types and choice. No further detail was provided on how these criteria were to be established or administered. It is probably fair to assume that the peak development and building bodies would argue strongly against mechanisms such as inclusionary zonings or affordable housing levies to achieve as yet unstated affordable housing goals.
- It is unlikely the State and local governments will have the political courage to mandate that a range of prices is available, affordable housing programs are put in place or adaptable housing built. Perhaps the vision is in place partly but the political and

economic details need to be resolved if Sydney's affordable housing stock is to be substantially increased.

Affordable housing policies and programs

- There are a number of issues to be considered when developing a policy mix or strategy to tackle the affordable housing challenge. They include:
 - How the costs and benefits particularly the real returns to investors, land owners or developers of supply or demand side interventions are equitably distributed.
 - How the benefits of an increase in affordable housing stock to succeeding occupiers can be retained through caveats on resale or the use of non-profit intermediaries to hold the title or manage the property.
 - How to overcome the generally negative perception of affordable housing among developers and the wider community because both tend to be wary of affordable housing in new developments despite the fact it is not social (public) housing and its inclusion does not necessarily create marketing problems.
 - How to ensure renters have tenure certainty while maintaining financial institution and investor confidence.
- The 2000 Sydney Housing Affordability Review classified and reviewed nine groups of potential policy options. These were:

Measures involving direct market interventions

- 1. Options that involve direct and indirect subsidies of various kinds.
- 2. Taking advantage of market cycles to redistribute or produce affordable housing when economic rents are low.
- 3. Developing planing instruments and initiatives to encourage or require affordable housing in new developments.
- 4. Capturing betterment and redistributing it to affordable housing production.

Measures involving changing the rules and regulations that govern the market

- 5. Reducing quality thresholds in building and subdivision standards.
- 6. Reducing market imperfections such as unnecessary regulations and policies.

Measures that are up to the market to act on

- 7. Technological advances or production efficiencies to reduce costs.
- 8. More emphasis on standardised or minimum quality housing within the regulations.

Measures that begin with institutional or macro economic policy review

- 9. Devising institutional frameworks that facilitate affordable housing.
- There are interesting parallels between the US, the European Union and Australia in the impacts social and demographic change are having on housing demand. There is a view that demand will not decrease because:

- More people are living longer and staying longer in their homes, resulting in small households living in large dwellings and a lack of adequate housing for small, older households.
- More people are living alone and women, in particular, have greater financial power and are often choosing to independent lives,
- Budget constraints have meant housing subsidies are increasingly concentrated on the most vulnerable populations and the revitalisation of distressed urban areas, and
- There has also been a 'social marking' of space.
- This last point is interesting. It appears that in a number of European countries, the middle class is choosing to live only in areas perceived to have low crime rates, good transportation and schools. This trend is seen to limit the number of places where housing can be built and acts as a constraint on supply. It is exacerbated when the areas people are moving from, or abandoning, have decent housing that no longer meets rising expectations. These expectations, reinforced by developers selling 'lifestyle' as well as desirable housing, are changing faster than existing communities can respond. This is often seen as an urban regeneration rather than affordable housing issue but the new housing is often far more expensive and exacerbates social and spatial polarisation.
- The Brookings Institution, drawing from seven decades of housing policy and practice, proposed seven objectives for affordable housing. These are:
 - Preserve and expand the supply of good quality housing units,
 - Make existing housing more affordable and more readily available,
 - Promote social and economic diversity in residential neighbourhoods,
 - Help households build wealth,
 - Strengthen families,
 - Link housing with essential supportive services, and
 - Promote balanced metropolitan growth.
- Not all housing programs can simultaneously meet all seven housing objectives but there are four principles that should be observed:
 - Housing strategies should respond to local market conditions,
 - Income policy is housing policy,
 - Regulation is a powerful policy tool, and
 - The quality of implementation is critically important.

Inclusionary zoning

- Inclusionary zoning is the regulatory requirement to include a component of affordable or social housing in market rate housing projects.
- Almost all programs in the US and the UK offer incentives such as density increases or fee waivers to partially compensate for the cost of incorporating the affordable housing. In addition, communities carefully tailor their programs to their specific market based on economic, political, and other conditions so specific provisions vary greatly from one area to another. Most local governments also consider inclusionary programs as only part of a comprehensive effort to improve housing conditions.

- There are a number of key points for policy makers to consider when developing inclusionary zoning programs. These are:
 - Give affordable housing a significant role in growth management programs,
 - Build leadership and political will for affordable housing programs,
 - Start with small steps,
 - Implement a rigorous administrative process,
 - Integrate the program into a comprehensive overall effort,
 - Borrow ideas but not details from other communities.
 - Choose incentives that make sense locally, and
 - Engage all levels of government.
- Inclusionary zoning may have the same direct and negative impact infrastructure and community facilities levies have on land, development and housing costs in Sydney. The industry is hostile to these levies and uses them as an argument as to why housing in Sydney is not 'more affordable'. Introducing an additional housing levy through inclusionary zoning provisions in an expanded SEPP 70 for example will only lead to further conflict, delays and increased costs for market rate buyers and renters. A better model, with top to bottom government commitment, is required.

Planning gain

- Planning gain, as used in this research, offers developers an incentive to increase
 densities in return for an agreed set of outcomes such as affordable housing.
 Developers may see this strategy as escalating market risk but, as discussed below,
 the mixed income and mixed tenure housing outcomes can reduce market risk and
 contribute to the creation of sustainable communities.
- The planning gain model is used by Waverley Council where explicit development incentives are available in exchange for the production of affordable rental housing. The incentives are, in essence, floor space bonuses or variations to planning standards that do not adversely affect the building's design or its environmental amenity. It has not resulted in a significant increase in the LGA's affordable housing stock.
- More recently, the planning gain concept was used in the Landcom/Cosmopolitan Developments Forest Glade project, a development that produced sixty three dwellings (21 dwellings per hectare) of which thirteen (20%) were offered to households that met specified moderate-income criteria.
- Changes to planning standards were sought in order to increase the site yield without reducing predetermined design objectives. Planning gain and better design were, together, seen as essential elements in reducing costs and convincing Blacktown Council that planning and design standards would not be reduced. Cardew says that ...the gains were made through value adding as much as cost cutting. The changes were accepted for the explicit purpose of providing moderate-income housing.
- A planning gain, properly applied, can increase development revenue while reducing market risk and offering a broad spread of price points and product types to the market.

Mixed income/mixed tenure housing

One of the most interesting block-by-block, neighbourhood-by-neighbourhood
programs to emerge from US affordable housing policy was the HOPE VI program
launched in 1992. While primarily directed at improving the quality of distressed public
housing, HOPE VI offers lessons in how public/private partnerships can be used to

build more economically integrated communities and provide residents more choice in the private housing market. A key innovation was the incentives it created for public housing authorities to involve private developers in the creation of new mixed income neighbourhoods.

- A 2003 research paper examining the rationale for mixed income approaches found that ...mixed-income housing is not a silver bullet to overcoming the difficult challenges faced by families seeking to escape from poverty or the realities of housing markets. Because mixed-income developments are complex, present unique risks, and often house fewer needy families than other types of development, mixed-income approaches must carefully consider the local housing market, the population to be served, financing options, the scale of the project, and the community context.
- The research generated a useful checklist of questions for policy makers evaluating the merit of mixed income approach to developing affordable housing:
 - What is the market?
 - Who is being served by the development?
 - What is the tenure type?
 - What is the scale?
 - What is the wider community context?
 - What are the financial considerations?
 - Is a mix of incomes necessary for approval?
 - What defines success?
- The coming together of physical (physical good) and social (social good) benefits makes mixed income housing an appealing approach to many policy makers and planners.
- The idea of mixing incomes and tenures in residential settings is not new: urban neighbourhoods in the UK and the US traditionally contained a mix of housing products suitable for a range of incomes.
- The literature, and the Landcom/Cosmopolitan Developments Forest Glade experience, indicates that there are a number of strategies and communication messages that could be used to help convince a sceptical community and industry of the value of introducing policies to encourage the development of mixed income and mixed tenure housing. The key communication messages to government, industry and the community are:
 - In the past, healthy communities offered a range of incomes and housing types. The provision of affordable housing is essential because it meets a diversity of needs and incomes, and allows 'key workers' to live in the community in which they work. A range of housing types and price points also accommodates the needs of different generations and makes the community more socially sustainable.
 - Regulations can be changed to help the private sector. Public policy at the state or local level — in the form of regulations, incentives, or technical assistance — is required if the supply of mixed income and affordable housing is to be expanded to meet the needs of emerging and existing household groups.
 - Mixed income and affordable housing can be profitable for the private sector.
 Developments that deliberately include a mix of housing types and price points have a reduce project risk profile, faster sales because the target market is wider and better responsiveness to changing market conditions.

- Design standards can be raised and affordable housing seamlessly blended with neighbours. Affordable housing — housing that meets user needs, is responsive to context, enhances its neighbourhood and is built to last — can achieve high quality design outcomes. For mixed income developments, good design can be a competitive selling point that attracts market rate residents.
- The private sector can help provide affordable housing. The market has not provided an adequate supply of decent affordable housing, especially in locations that are low in crime, have good schools, and are close to employment centres. The solution is a strategic and integrated approach, delivered and coordinated at the local level with properly funded government support. Success depends on stimulating private sector investment.
- Property values are not affected by nearby affordable housing. Affordable housing does not have to mean social housing. There is no evidence higher density or affordable housing devalues nearby housing. In fact, studies appear to consistently indicate that affordable housing has a positive or sometimes just a neutral effect on neighbouring property values.
- Community opposition is not an insurmountable obstacle. Attractive design, attention detail and an honest, transparent effort to build good community relations are important assets with which to leverage community support. Amenities such as more open space and better streets are elements that convert opposition to support. Evidence of good management practices, particularly if much of the housing is to rental, can also alleviate community concerns. In all cases, careful planning, education, examples of successful projects and good communication are essential to winning acceptance. Strong support from local government, in partnership with the developer and other respected advocates, is critical.
- Mixed income housing can have and important role in getting more affordable housing built, raising the quality of housing available to the 'have nots' and reducing concentrations of low income or disadvantaged community members. Good design can ensure lower priced homes are seamlessly compatible with more expensive ones. And a range of selling prices and house types reduces market risk because the project can appeal to a broader catchment of financial capacities and lifestyle needs.
- The lesson for Australian governments implementing mixed income/mixed tenure policies to ensure communities are more economically and socially sustainable is that there should be no ambiguity as to what is expected of developers. In this respect, the provision of housing diversity for a wide range of household types and financial capacities should be one of the heads of consideration in the relevant planning Acts. This would support the rhetoric for diversity and inclusiveness with a strong legal basis.

8.0 FINANCING AFFORDABLE HOUSING

8.1 Background

Methods to expand and maintain an adequate stock affordable housing have become an issue for government and others concerned for those at the disadvantaged end of Australia's housing divide. In part, this interest has emerged from the realisation that public expenditure on social housing is unlikely to expand even though the number of low to moderate-income households in stress is growing. In NSW it is strongly influenced by policies that target a limited stock of social housing to people on very low incomes or with multiple social disadvantages, an under-resourced community housing sector, an inadequate land supply and boom conditions that have reduced the need for private sector developers and builders to seek profits at the lower cost end of the market.

But those who require social housing are not the only focus. In more recent times, some commentators have expanded the affordable housing market to include employed households with incomes above the levels necessary for income support but below those needed to save a deposit and finance a mortgage. Terms like 'working poor' and 'key sector workers' are used to describe these people in the US, the UK and Australia. Affordable housing has, as a result, become a term that covers the need for new housing that meets the needs of traditional social housing tenants as well as those who need help to meet their home ownership aspirations.

In this respect, recent government policy responses have provided substantial funds for first homebuyers and assistance for households in rental housing. Subsidies for the latter vary according to household structure and, in high rent areas, reduce housing cost pressures. The First Home Owner Grant, on the other hand, has been geared toward improving access to home ownership but no income or house cost constraints are placed on recipients. Neither of these responses guarantees to increase the stock of affordable housing.

Notwithstanding these interventions, much of the attention remains focused on expanding the amount of private finance available for buyers. This is despite the higher level of private rental sector housing stress that has been a consequence of competition for the diminishing stock of low-cost housing. A number of studies have explored ways in which government funds, either directly or indirectly, might be used to leverage institutional funds into investment in affordable housing. Most appear to have fixed their sights on shared equity solutions where institutions and owners share the financing risks and capital gain rewards.

Berry, Whitehead, Williams and Yates²²¹ observe that housing affordability is determined by household income, the purchase or rental cost of the dwelling, and who pays these costs. Because housing is an asset, any assessment of affordability is complicated because the owner or landlord has to fund the asset but has some ability to arrange the time at which payments are made. This increases the range of those who potentially can be required to pay. In addition, because housing often takes a large proportion of household income, variations in incomes and costs can generate risks for households and financiers alike. These affect both cost and choices made. Finally, affordability is determined by the quantity and quality of housing that people choose and what the community regards as acceptable housing conditions. Policy instruments can modify affordability by one, preferably all, of the methods summarised below.

²²¹ Berry, M., Whitehead, C., Williams, P. and Yates, J. (November 2004). Financing Affordable Housing: A Critical Comparative review of the United Kingdom and Australia. Australian Housing and Urban Research Institute, RMIT-NATSEM Research Centre and Sydney Research Centre.

Reduce housing costs

The cost of housing includes dwelling and supporting infrastructure construction costs, management and maintenance and the supply of land. In Sydney, land supply has been the most significant constraint and, at a time of rising demand, has led to rising prices rather than production increases. The lower costs resulting from improvements in construction efficiency have, as a result, have been of little benefit to consumers. These problems are common in the major urban areas of both Australia and the UK. In Australia, the emphasis has been on improving regulatory frameworks, and addressing issues of land supply. The UK has focused on both as well as developing economical off-site construction techniques useful in its far larger market.

Improve the capacity to pay

The ability of a household to pay for its housing is obviously related to income and either borrowing criteria or rents. The latter are particularly important when assessment standards or rents can be set at levels above those households on lower incomes can afford. The general tax system is commonly regarded as a means to improve income distribution but economic development and government policy is having a negative impact on post-tax income distribution. Housing specific subsidies can be cost-effective but the UK's experience suggests that demand subsidies are more effectively targeted when complemented by rent regulation and administrative allocation.

Subsidise those most in need

In the UK, government subsidies that reduce rents for those in social housing have been supplemented by cross subsidy between the existing stock and new building because inflation has increased the existing stock's value and meant that current rents, even when below market, have more than covered the original development costs and maintenance. Introducing private finance has been an effective mechanism for realising the notional capital gains and allowing costs to be borne by current and future tenants. Equally, refinancing has allowed government to recoup past. Assistance for homeownership has largely come from tax benefits rather than direct subsidy but there is a growing emphasis on subsidies for lower income homebuyers. A different source of subsidy funding has come from the economic rent charged to landowners who benefit from the higher land values resulting from increased demand. Variations on all these approaches could be applied in Sydney.

Ensure there are financing choices

An individual household can fund housing through:

- their own equity,
- the equity of others through private renting or shared equity home ownership,
- private debt finance, and
- government funding.

In the past, governments have provided funding for social housing, while private finance (sometimes with government help such as the First Home Owners Grant) has funded both owner-occupation and private renting. Governments can borrow funds more cheaply than the private sector but spending priorities, a drive for efficiency and other economic objectives and constraints, are putting more reliance on the private sector. Private funding can enable all investment to be undertaken providing market rates or return are available and the asset being funded has a positive value. However, private investors often aim to minimise construction and operating costs to maximise the net present value of their investments. As a result, policies aimed at expanding the stock of privately funded affordable housing require a trade-off to be made between the cost of finance and the cost of production, management and maintenance.

Reduce the costs associated with defaults

Insurance against mortgage defaults or lost rent can be provided by owners, the market provided or through a government safety net.

Regulate to ensure housing quality and affordability

Government, in consultation with the industry and the community, sets the base standards for housing quality. Higher income households can choose to go beyond these standards and some (environmental and energy efficiency standards for example) can be applied because individuals or the industry will not meet them for cost or other reasons. Housing affordability is influenced by quality standards as well as those determined by the market its self. A case in point is the substantial increase in dwelling size seen in recent years. This has an influence on what regulators see as 'quality housing' and could, if enshrined in new standards, exacerbate affordability problems at the lower end of the housing system.

A few of the major finance oriented proposals for increasing the stock of affordable rental housing, or making housing more accessible for buyers, are reviewed in this section. All the models have their supporters and critics but all point to the need for government intervention.

8.2 Affordable Housing National Research Consortium bond model

Initially brought together by William Kirkby-Jones, the current Chair of Landcom, the Affordable Housing National Research Consortium was a committee comprising representatives from the building and development industries, the trade unions and not-for-profit organisations. In early 2000, the Consortium commissioned research to define the nature and scope of the housing affordability problem, identify and evaluate policy options and cost a preferred approach²²². The preferred approach is outlined below. The Consortium identified the challenge as finding an effective and sustainable solution to delivering relief to households in stress. Stimulating private sector investment in affordable housing was the solution. In searching for that solution, the Consortium took account of:

- The well-established mechanisms of rental assistance and public housing funded through the Commonwealth-State Housing Agreement,
- The Commonwealth Government's First Home Owners Grant initiative, and
- Overseas experiences, policies and practices.

In its final report, the Consortium expressed the view that rent assistance alone was not a solution because those who relied on subsidies had no guarantee their housing would remain affordable and governments could be faced with expanding housing allowance claims as the market fluctuated. Furthermore, rent assistance did not address the essential issue of housing supply. It was also considered unlikely that the Commonwealth-State Housing Agreement, as a consequence of falling resource commitments and rationalisation, could resolve the low-cost rental housing crisis. Similarly, the First Home Owners Grant was not seen as a way to close the deposit gap for the large proportion of households in stress who aspired to home ownership.

The Consortium's examination of low cost housing policies in the US, the UK and the Netherlands illustrated:

²²² Berry, M. (Australian Housing and Urban Research Institute), Hall, J. (Jon Hall & Associates) and Carter, G. (Allen Consulting Group) (September 2001). *Policy Options for Stimulating Private Sector Investment in Affordable Housing Across Australia*. Reports for the Affordable Housing National Research Consortium.

... the range and diversity of approaches to the resolution of a complex, but by no means unique, problem. Innovation and creativity, along with multi-party approaches supported where necessary or appropriate by legislation — have produced beneficial and long-lasting results.

Its research identified a number of significant barriers hindering the expansion of individual and institutional investment in affordable housing. These included the perceptions of high risk, high management costs, low liquidity and the absence of a supportive track record in Australia. With a funding requirement considered to be in the billions of dollars over time, the Consortium looked at avenues for partnerships between the public and private sectors and how government could access private and superannuation investment funds.

A recognised prerequisite was the need for private sector investors to obtain returns equal to those earned from alternatives with comparable risk profiles. A real rate of return of about one to two percent above a risk free rate was considered to be an adequate justification for an investment in residential real estate, providing government bridged the gap between the actual and required rates of return. Irrespective of the method, the Consortium took the view that expanding the supply²²³ of new affordable housing should be the main objective.

With the assistance of finance and taxation specialists, a comprehensive investigation of delivery, support and private financing options was undertaken. This paid particular attention to options that:

- Would generate a significant and timely volume of private investment dramatically expand the stock of affordable housing,
- Were accessible to housing providers and their target households,
- Minimised subsidy costs through efficient targeting and risk management, and
- Contributed to the desired housing outcomes in a range of economic and institutional circumstances while being simple and flexible to implement.

The preferred option envisaged a direct, but capped, government subsidy for private investment in affordable housing. In this, finance for affordable housing would be raised through the issue of a bond with a guaranteed minimum after-tax return. The funds would then be distributed to State and territory housing authorities or other eligible housing providers (community housing associations for example) providing they were used to construct affordable rental dwellings to be owned and managed by housing authorities or other approved providers. The subsidy would be provided through tax concessions or a Budget outlay and the perceived investment risk transferred to the government.

Berry, Whitehead, Williams and Yates²²⁴, in their assessment of the Consortium's model, noted that it was cost effective, closely targeted and had the potential to leverage a large volume of private investment using existing financial instruments. It also provided strong incentives for authorities to efficiently manage an expanded stock of public housing. The disadvantages were the financial and operational risks imposed on the State and territory housing authorities, the reliance on public borrowing in a climate of public debt reduction, and a reliance on the housing authorities to introduce new management systems.

The Consortium noted that supply side interventions aim to increase the stock of dwellings available for assisted purchase or rent as opposed to demand side measures that subsidise households.

Berry, M., Whitehead, C., Williams, P. and Yates, J. (November 2004). Financing Affordable Housing: A Critical Comparative review of the United Kingdom and Australia. Australian Housing and Urban Research Institute, RMIT-NATSEM Research Centre and Sydney Research Centre.

Modelling indicated that the gross cost to the Commonwealth would be \$220 million for every \$1 billion raised with the net cost being \$90 million after taking into account tax receipts. It was estimated that 7,450 renting households would benefit. On this basis, the net cost to the Commonwealth would be around \$12,100 per household.

This does not, at first glance, appear to be much. However, to put it in perspective, in 2001 there were over 100,0000 low to moderate income privately renting households in housing stress in the Sydney region. At that time, \$1 billion would have purchased around 3,150 median priced non-Strata dwellings or around 3,450 median priced Strata dwellings²²⁵ and cost the Commonwealth around \$40 million. Providing affordable housing to all 100,000 households, a private sector investment of about \$30 billion, at a cost to the Commonwealth of around \$1.2 billion, would have been required. Finding the land in an extraordinarily tight land supply environment and persuading the Commonwealth to fund the tax concessions would have been the major challenges.

Such expenditure would obviously be over a number of years. But, together with existing rent assistance measures and capital expenditure under the Commonwealth-State Housing Agreement, was seen by the Consortium as a low cost way to stimulate an expansion of affordable housing stock.

8.3 Macquarie Bank pooled funds and taxation exemption models

In 2002, Macquarie Bank developed proposed a models aimed at aggregating the savings of individual investors seeking commercial returns from residential property. These pooled funds would be managed by a professional funds manager and used to acquire housing for rental. Community housing associations would provide, for a fee, property and tenancy management services for moderate-income households receiving Centrelink payments. The model assumed that the rental yield would be between 6% and 6.5% and that investors would receive an overall return based on rental returns and capital gains. Macquarie Bank took the view that professional investors would require pre-tax returns in excess of 10% to cover the risks and property market inefficiencies. To make this work, government subsidies far higher than those promoted in the Consortium model would be required. These subsidies could be in the form of equity gifts, operating subsidies paid to the housing association or tax concessions.

While this model could bring together large volumes of small savings, provide finance for professionally managed housing associations and provide investment opportunities similar to commercial property trusts it basically did not work. It required government subsidies, was not targeted at households earning less than \$30,000 a year and required a community housing association with far higher skill levels than were available.

An alternative model was based on providing small investors with incentives to leave their savings in affordable rental housing. The incentive was a tax concession on part of the rental income providing their investment dwellings were leased to a community housing association for a minimum period. State governments would also offer land tax and rate exemptions. The savings would, in theory, be passed on in the form of lower rents.

Berry, Whitehead, Williams and Yates²²⁶ identified a number of problems with this approach not least of which were the opportunity for fraudulent benefit claims, high compliance and

According to the Department of Housing's *Rent and Sales* Report, in the June Quarter of 2001 a median priced non-Strata dwelling in the Sydney Statistical District cost \$317,000. The median priced Strata dwelling was \$288,000. In the December Quarter of 2004 the median prices were \$485,000 and \$382,000 respectively.

Berry, M., Whitehead, C., Williams, P. and Yates, J. (November 2004). *Financing Affordable Housing: A Critical Comparative review of the United Kingdom and Australia*. Australian Housing and Urban Research Institute, RMIT-NATSEM Research Centre and Sydney Research Centre.

surveillance costs and, again, a shortage of suitable community housing associations. They also believed the proposition would face political difficulties as special tax concessions are not favoured by government.

8.4 Wood tax credit model

Berry, Whitehead, Williams and Yates also reviewed an incentive model proposed by economist Gavin Wood. This was based on the recognised decline in the low cost rental housing stock, a decline due to the lower after-tax returns obtained from low-cost dwellings. Three reasons were put forward for this decline. Firstly, negative gearing is more beneficial to high marginal tax rate investors than lower income investors who, through necessity, trade at the low rent end of the market. Secondly, the management and associated costs of high value rental dwellings are relatively lower than those for cheaper rental dwellings. And, thirdly, the low rent stock tends to be older and requires more maintenance than newer high value dwellings.

To overcome these problems, Wood suggested that a tax credit should be available to investors in dwellings renting below a particular threshold and that there should be a threshold on capital gains taxation. He assumed that lower rents would reflect the savings and, to obtain the tax benefits, landlords would rent to lower income tenants.

In their analysis, Berry, Whitehead, Williams and Yates saw similar disadvantages to those in the Macquarie Bank model and considered that normal market forces would not bring about the desired rational response unless checked by rigorous, efficient and ultimately costly administrative procedures.

8.5 Caplin Joye and Gans King shared equity ownership models

In June 2003, the Menzies Research Centre published a report²²⁷ prepared for the Prime Minister's Home Ownership Task Force. Two models were proposed. The Caplin Joye model aimed to reduce home ownership costs, especially in the early high commitment years, by allowing a household to buy in partnership with an investor. Equity would be shared and the household would only have to contribute a deposit and borrow to finance its share. Caplin and Joye argue that servicing a smaller debt would enable any surplus income to be invested in other assets and, in retirement, the household would have generated more overall wealth.

Under the shared equity arrangement, the household decides when to sell and the selling price as well as how the property is maintained, renovated and used. The investor receives an agreed share of the sale proceeds but sacrifices any notional rental payment on its share in favour of receiving all its return at the end. In essence, the investor exchanges rental income for a share of any realised capital gain in the dwelling.

In their assessment, Berry, Whitehead, Williams and Yates saw the Caplin Joye model having the advantages of:

- Not requiring government subsidies,
- Allowing households to diversify any savings and potentially increasing their wealth over the long term by diversifying their investments across other asset classes,
- Reducing the initial barriers to home ownership and housing stress,

²²⁷ Joye, C., Caplin, A., Gans, J. and King, S. et al (June 2003). *Summary of Findings for the Prime Ministerial Task Force on Home Ownership.* The Menzies Research Centre Ltd.

- Creating a large secondary market in bundled equities, and
- Delivering greater security of tenure than private rental.

On the other hand, they identified a significant number of disadvantages not least of which would be the sophisticated understanding of modern finance theory a household would need to acquire before assessing the benefits. Intuitively there is also some doubt traditional household preferences for outright ownership could be overcome. Furthermore, the model:

- May stimulate demand but fail to increase supply with the consequence that house prices would continue to rise,
- Is likely to require government facilitation in order to overcome market barriers,
- Has limited relevance for low to moderate income households,
- Is driven by a promise of future capital gains that may not be realised unless applied to proven high value/high gain areas, and
- Ignores the potential for conflict between owner and investor over issues such as maintenance, renovations and additions, the timing of a sale and selling price.

There is also the possibility owners might be left with little or no equity after distributing the proceeds of a sale. Experience with schemes where retirement village operators take a proportional share of the selling price suggest that there would be high levels of resistance in the wider market to shared equity arrangements.

A second proposal from the Prime Minister's Task Force emerged from Gans and King. Their approach emerged from a view that market-based solutions required a household to have access to the market. A typical example of a household without access would be one dependent on part-time or casual income and thus unable to insure against what is seen by financiers to be an unpredictable risk. Gans and King proposed a 'housing lifeline' that provides a form of housing benefit to cover rent or mortgage costs in the event of a short-term fall in household income. This is a protective approach that would have little impact on the supply of affordable housing.

8.6 The Chandler cooperative development model

During 1996 and 1997, David Chandler, a member of the NSW Ministerial Task Force on Affordable Housing, developed a cooperative model for medium and higher density housing development. While not a financial model *per se*, it was based on a view that new challenges were being presented to the creators of housing. This came from increased pressure for urban consolidation and environmentally sustainable development, disenchantment with conventional suburban planning, more dynamic household arrangements and a growing shift from owner-occupation to rental. All were seen as trends that would have a significant impact on homebuyer choice in the future. At the forefront of market expectations were the need for more affordable housing and greater flexibility to meet individual owner or renter needs.

These challenges were being, and continue to be, multiplied by escalating land values and an increasing use of multiple dwelling solutions. As a result, the traditional house and land package buyer, or the smaller investor who successfully operated in the two to three unit market, were disadvantaged.

Chandler's view was that multiple dwelling projects typically involved between four and twenty units. In these circumstances, financially strong developers purchase the land, obtain

authority approvals, construct the building and ultimately sell the completed dwellings. However, unlike the buyer of a single lot house/land package, multi-dwelling development buyers pay the developer a margin for performing these functions. Developers maximise this margin, normally in the order of 20% to 25% of the total project cost.

Customers are denied the ability to make decisions about the external character, interior space arrangements, finishes and inclusions. The developer normally determines these because total completion is required before individual property titles can be created. Without these titles an owner/occupier or small investor cannot arrange finance and undertake the purchase of their dwelling. As a consequence, the traditional multi-dwelling development process forces buyers to compromise and carries avoidable duplicated costs. An innovative alternative that overcomes many of these problems and passes on more value to the eventual owner is required.

The Combined Development Group (CDG) was the outcome. This organisation, through the creation of cooperative development model, aimed to allow individual owner/occupier or investor buyers to participate with minimal risk in the land purchase, design, building and financing of a development. The model was called 'CoDEL' and was seen as a syndicated development solution that enabled CDG customers to acquire an apartment or townhouse as if they were buying a traditional house/land package. The developer's profit margin was taken out of the purchase equation.

'CoDEL' was intended to help homeowners and residential investors to increase their equity while giving them an opportunity to participate in choosing internal layouts, finishes and fittings to suit their individual household needs.

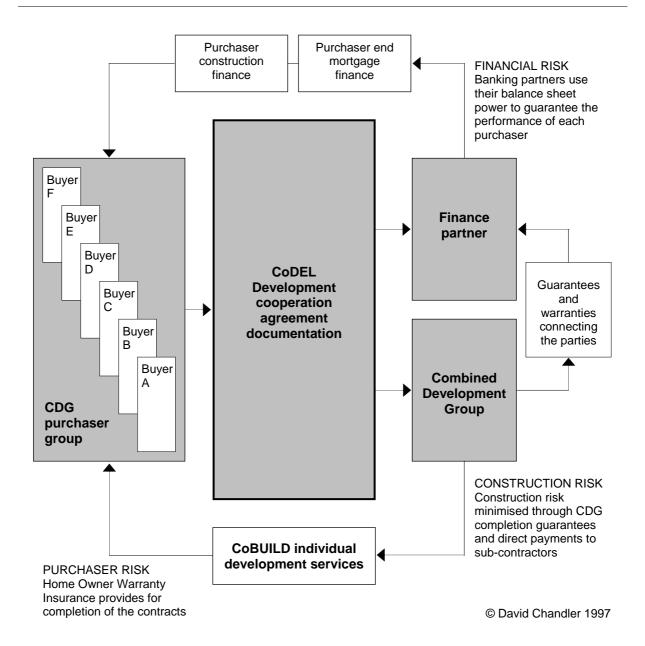
These initiatives provided opportunities to create new ownership, occupancy and building types to meet the lifestyle and housing demands of an increasingly diverse market. More accessible quality housing for owners, investors, renters and people disadvantaged by today's market challenges were to be the result. Owner-occupier buyers, investors and community housing organisations interested or involved in multi-dwelling housing were the primary market target. Its innovations were also seen as presenting a superior value proposition to purchasers as well as individuals and organisations such as financial advisors, real estate agents, land developers, solicitors, architects, local governments, trade contractors and suppliers and financiers.

The CDG 'CoDEL' model did not, in the end, reach the market but it offered a very different solution to creating affordable housing that is worthy of review.

At its base was the Combined Development Group, a specialist provider of multiple dwelling housing and urban development management expertise to private syndicates and public cooperative customers. The company had two proprietary financing and building tools.

- 'CoDEL' was created to cut out the developer, offers custom design solutions, establish an equitable 'plain English' link between standard financial documents and building contracts, and
- 'CoBUILD' was to deliver the benefits of volume purchasing, create homes with internal flexibility, manage building risks and warrant performance.

It's Your Choice was the CDG commitment because it believed customers should have the ability to actively participate in the design and building of their apartments or townhouses. With this capacity came choice and new homes to better satisfy their individual space and fit out needs and decorating preferences. The critical relationships between CDG, its client base and other stakeholders are outlined on the diagram below.



Chandler believed that affordable housing for the traditional client base of community housing associations would become more difficult to produce in an environment of rising costs and reduced government funding. As a result, opportunities would emerge for the involvement of 'not for profit' organisations and innovative equity structures in the provision of quality, well located housing for renters or lower income owner-occupiers. The model would offer the flexibility for a housing association, its clients, financiers and government to participate in the same development and increase the leverage of limited public funds, achieve equitable housing outcomes and provide an acceptable rate of return to private investors. CoDEL and CoBUILD would also offer housing associations the opportunity to:

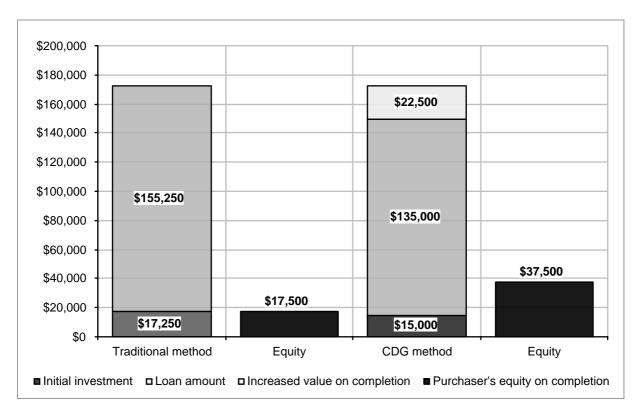
- Accumulate equity or cash reserves, improve their financial strength and increase their ability to initiate more projects,
- Develop alternative equity and tenure structures for traditionally dependent people to improve their access to affordable rental or owner/occupier housing,
- Build small projects in locations closer to their clients without the need to 'spot purchase' and pay developer margins, as well as the

- Ability to 'build to order' using an efficient proprietary initiative to pass on the benefits of volume purchasing, improve design and construction quality, reduce development time and encourage individual participation in the design of multi-unit housing, and
- Fixed time and cost contracts, reduced risk, single point responsibility and highly competent design, building and development management expertise.

A number of financial models were developer to illustrate the benefits. The one used for a multiple unit development undertaken by a private owner-occupier group is reproduced below. Note that the costs and completion values are in 1997 dollars.

CoDEL created value model for owner-occupiers

•	Development cost per dwelling	\$150,000
•	Value on completion or purchase price	\$172,500
•	Assumed interest rate	9.50%



Summary table

	Traditional Method:	CDG Method:
 Purchase amount or development cost Required equity Cash required or initial investment Loan amount 	\$172,500 10.00% \$17,500 \$155,250	\$150,000 10.00% \$15,000 \$135,000
Monthly mortgage repayment, orRepayment period	\$1,447 20 yrs @ \$1,447/mth	\$1,258 14 yrs @ \$1,447/mth
Increased value on completion	\$0	\$22,500
Purchaser's equity on completion	\$17,500	\$37,500

Chandler also developed a set of key messages for each of the potential beneficiaries of the CDG model. These are reproduced below because, despite the passing of time, the market environment in which they were set has changed very little.

Potential beneficiary

Key message

Private owner/occupier syndicates

People brought together through CDG's promotional activities — or through professional advisors and real estate agents — to design and develop multi-dwelling projects principally for their own occupation.

Developers who sell to owner/occupiers at retail prices undertake the majority of multi-dwelling apartment and townhouse projects. Besides the developer's margin, buyers also pay other costs arising from the double transfer of land and buildings. These factors affect housing affordability. Buyers have no opportunity to 'customise' the exterior or interior of a dwelling to suit their personal tastes or lifestyles, and their ability to make internal spatial changes over time is also restricted.

Micro developer syndicates

People who wish to act as 'small' residential property developers but lack the income, equity, expertise or confidence to undertake the task themselves.

Most multi-dwelling apartment and townhouse projects built today contain between 4 and 20 units. Developers who sell to owner/occupiers or investors at retail prices and make a profit undertake the majority of these projects. Poor developments increase local government and resident opposition and, eventually, reduce long-term capital gain potential. At the same time, demands for a better urban environment are increasing. Government urban consolidation and environmentally sustainable development policies, together with changing lifestyles and social attitudes, are encouraging the development of more suitable multi-dwelling housing in Australia's cities.

Landlord syndicates

People who wish to purchase residential property as a long term investment and maximise their rate of return. Many conventional developments do not suit the needs of rental households and result in higher vacancy rates or average rents. Poor construction also increases maintenance costs while reducing capital gain potential. These factors reduce owner equity, influence rates of return and make residential investment less attractive. At the same time, investors have the opportunity to benefit from government urban consolidation policies and the growing acceptance of renting. These will encourage the development of more multidwelling housing and new forms of short and long term lease arrangements.

Bank representatives

Customer service personnel who handle housing and investment lending for their bank's customers and want to build long term relationships with them. They key financial partners in the process. CDG offered the opportunity for traditional banks to establish a customer relationship 'upstream' from where they would normally compete against the non-banks. It also offered the banks access potential clients otherwise unable to participate in the residential market as a result of current lending criteria or development methods.

Potential beneficiary

Key message

Real estate agents

Individuals and organisations to who people turn for advice on improving their wealth creation activities through property investment. The agents were seen as another key distribution channel and 'decision influencer' for CDG.

Real estate agents involved in the development process are often 'cut out of the loop' by developers once a land sale is made. Many also have access to land with potential for 4 to 20 units and which is either too small for 'major' or too large for 'small' developers. There should be an opportunity for agents to retain control of the 'sales loop' and take advantage of the growing acceptance of, and encouragement of, multidwelling housing in urban concentrations.

Financial and other advisors

Individuals and organisations such as solicitors and accountants to whom high net worth or high income people turn for advice on improving their longer term wealth creation activities. These advisors were also seen as one of CDG's key distribution channels and 'decision influencers'.

Investors buying apartments and townhouses pay a premium to cover developer profit margins and the costs arising from the double transfer of land. This reduces their equity and return on funds. Poor design or construction often increases maintenance costs and vacancy rates while reducing capital gain potential. At the same time, government urban consolidation policies, the growing acceptability of renting and disenchantment with outer urban detached housing is encouraging the development of multidwelling housing for rent or owner/occupation.

Land developers

The owners and development managers of urban and rural areas to be developed for housing or mixed use development.

Buyers of single lot house/land packages become disadvantaged if their preferred choice of housing is an apartment or townhouse. They cannot purchase until the development is completed and titles issued. In addition, the developer's profit margin, and costs arising from the double transfer of land, is added to the purchase price. This creates a significant marketing challenge for developments where multi-dwelling housing is required to meet urban consolidation, environmental planning and affordable housing goals. It also increases the retail price of housing developed on larger infill sites and, as a result, the broad market appeal that creates a desirable, diverse community is reduced.

Architects

The design professions were to play an integral and important role in delivering the design quality demanded by CDG's initiative.

The opportunity for architects to be involved at the volume end of the density housing market has been limited because, for some developers, their professional fees are not believed to add value. However, if owners and investors buying apartments and townhouses could avoid paying the developer's margin and costs arising from the double transfer of land, funds would be available for better design and substantial savings still delivered. At the same time, urban consolidation, the growing acceptability of renting and disenchantment with outer urban detached housing is encouraging the development of multidwelling housing for rent or owner/occupation.

Potential beneficiary Key message Local government Local government officers and councillors were If buyers, owners and investors buying clearly a critical influence on CDG's ability to apartments and townhouses could avoid paying obtain rapid approvals and the introduction of the normal developer profit margin and costs innovative new housing forms. arising from the double transfer of land, money would be available for better design and building solutions while substantial savings would still be delivered to buyers. This would improve housing choice, substantially improve the quality of the urban environment and reduce the challenges local government faces when trying to achieve urban consolidation objectives. Suppliers and sub-contractors

In order to achieve its cost and quality objectives, trade suppliers and sub-contractors were also seen as critical partners in CDG's team structure approach to delivering high quality affordable housing to a wide range of niche markets.

The volume density housing market is being reshaped. Significant features over the next few years will be increased urban densities, higher capital adequacy requirements for developers and contractors, and greater pressures on affordability. In addition, the chain in which suppliers and trade contractors participate is fragmented and prone to abuse by developers and builders. Poor trade co-ordination and supervision also lead to buyer and trade disenchantment with the finished product and long-term maintenance problems.

The CoDEL and CoBUILD models failed to excite the market because the majority of its potential stakeholders were absorbed by the profits and challenges of a robust economic and development market. Current conditions could be such that resurrection of the models, or at least discussion about their benefits, might be opportune.

8.7 Lessons from the UK affordable housing experience

Perhaps the most important aspect of the review of affordable housing finance undertaken by Berry, Whitehead, Williams and Yates is the lessons gained from the UK's long experience in social and affordable housing. An important aspect of this assessment is based on the greater scope and scale of housing policy in the UK. This involves a commitment to:

- Relatively generous levels of housing benefit for tenants.
- A high level of social housing grant (to local authorities and housing associations),
- A robust regulatory framework and an effective central government guarantee to private lenders to housing associations, and
- An aggressively interventionist land use planning system that mandates private developer contributions to affordable housing outcomes.

The level of future government funding for housing in the UK is, however, similar to that in Australia. In both countries, the challenge of ensuring there is adequate public funding for major policy areas like housing is intensifying.

The lessons derived by Berry, Whitehead, Williams and Yates from their comparative research are quoted below.

- 1. The more a government invests, the greater the economic and social returns, providing transparency, accountability and adequate risk management practices are in place.
- 2. It is very difficult to establish a private equity market for rental housing, especially at the affordable end. In this respect, private investors need to be confident that the risks are transparent and manageable so their involvement can be priced at levels that do not require politically impractical levels of subsidy or guarantees. However, the relatively successful UK experience indicates that both demand side and supply side subsidies are required at substantial and sustained levels to attract large, sustained inflows of private finance to the sector. The other basic problems with attracting private equity investment are:
 - The basic contradiction between affordability and making a profit: equity investors normally accept risks in return for unconstrained returns, and
 - The required subsidies from government will be higher than those necessary to attract debt finance.
- 3. If the full equity approach is too difficult to negotiate, Australia might learn from UK experiments in different types of shared equity arrangements to improve access to owner occupation.
- 4. Australia might learn from the debate in the UK around the role of employers in providing housing for certain public sector employees in high cost regions like London.
- 5. If housing prices are not to be driven beyond affordable levels in situations of constrained supply like those currently experienced in Sydney, the planning system can be used to facilitate or require affordable outcomes, both in terms of land provision and cross subsidy from market housing.
- 6. In the current era of globalisation, housing has assumed a more central economic role that makes simultaneously achieving full employment, low inflation and external balance a challenging task. Australian housing and economic policy makers can therefore learn from the UK's growing focus on the macroeconomic significance of housing markets and policy both in both in terms of the market's effect on interest rates and macro volatility and an increasing concern about competitiveness.

Berry, Whitehead, Williams and Yates sum up by observing that:

...perhaps the most important lesson from the UK experience is that housing is and will always be a central concern of good government, especially with increasing disparities in incomes and housing costs. The development of appropriate institutional forms takes time. Long term policy development and implementation requires ... bipartisan political commitment, based on workable alliances between the key government, private sector and professional organizations. In relation to the private financing of affordable housing, potential private investors, especially the key institutions like the banks, need to be consulted and comfortable with the emerging policy regime, especially where changes are proposed. Political risk must be minimised in order to get private investors of all types — financial institutions, institutional equity and individual equity — to the table and to keep them there at a low cost to government.

In Australia, there have been a number of small projects that have used or leveraged private funds to supplement government equity or subsidies. These include Sydney's City West Housing Company, the Brisbane Housing Company, the City of Port Phillip and Community

Housing Canberra. All have used combinations of Commonwealth and State government funding, developer contributions, limited private debt finance and rental cross subsidies to deliver a very modest amount of lower cost housing to the market. To date, no large scale attempts to replicate their successes have been made.

It appears, however, that successful policies aimed at substantially increasing the stock of housing affordable to low and moderate-income households depend on government intervention. Any commitment demands that government firstly recognises that an efficient and effective housing system underpins a dynamic and competitive economy. In Australia it will then require a coherent Commonwealth-State Housing Agreement that clearly allocates and shares responsibilities, provides realistic long-term funding for a wide range of programs and improves the delivery capacity, skills and flexibility of community housing associations. A legislative framework that mandates local government involvement in the provision of affordable housing must then be established and enforced. And, finally, community awareness of the affordable housing issue must be raised and confidence in, and support for, the policy outcomes developed.

8.8 Summary

- Methods to expand and maintain an adequate stock affordable housing have become
 an issue for government and others concerned for those at the disadvantaged end of
 Australia's housing divide. In part, this interest has emerged from the realisation that
 public expenditure on social housing is unlikely to expand even though the number of
 low to moderate-income households in stress is growing.
- Recent government policy responses have provided substantial funds for first homebuyers and assistance for households in rental housing. Subsidies for the latter vary according to household structure and, in high rent areas, reduce housing cost pressures. The First Home Owner Grant, on the other hand, has been geared toward improving access to home ownership but no income or house cost constraints are placed on recipients. Neither guarantee to increase the stock of affordable housing.
- Housing affordability is determined by household income, the purchase or rental cost of the dwelling, and who pays these costs. Because housing is an asset, any assessment of affordability is complicated because the owner or landlord has to fund the asset but has some ability to arrange the time at which payments are made. In addition, because housing often takes a large proportion of household income, variations in incomes and costs can generate risks for households and financiers that affect both cost and choice. Finally, affordability is determined by the quantity and quality of housing that people choose and what the community regards as acceptable housing conditions. Policy instruments can modify affordability by:
 - reducing dwelling and supporting infrastructure costs,
 - improving the capacity to pay through subsidies or tax concessions,
 - subsidising those most in need,
 - ensuring there is a wide range of financing choices,
 - reducing the costs and risks of defaults, and
 - regulating to ensure housing quality and affordability.
- A number of financial and process based models for private investment in affordable housing have been developed by Australian academics and financiers. Most require government financial support to reduce perceived risks or facilitate better outcomes.

- Work by the Affordable Housing National Research Consortium suggests that delivery, support and private financing options should:
 - generate a significant and timely volume of private investment dramatically expand the stock of affordable housing,
 - be accessible to housing providers and their target households,
 - minimise subsidy costs through efficient targeting and risk management, and
 - contribute to the desired housing outcomes in a range of economic and institutional circumstances while being simple and flexible to implement.
- Berry, Whitehead, Williams and Yates have identified a number of lessons from the UK's long involvement in affordable and social housing. These are that:
 - The more a government invests, the greater the economic and social returns, providing transparency, accountability and adequate risk management practices are in place.
 - It is very difficult to establish a private equity market for rental housing, especially at the affordable end. In this respect, private investors need to be confident that the risks are transparent and manageable so their involvement can be priced at levels that do not require politically impractical levels of subsidy or guarantees.
 - Australia might learn from UK experiments in different types of shared equity arrangements to improve access to owner occupation.
 - The planning system can be used to facilitate or require affordable outcomes, both in terms of land provision and cross subsidy from market housing.
 - In the current era of globalisation, housing has assumed a more central economic role that makes simultaneously achieving full employment, low inflation and external balance a challenging task.
 - Long term policy development and implementation requires bipartisan political commitment, based on workable alliances between key government, private sector and professional organizations.
- In Australia, there have been a number of small projects that have used or leveraged private funds to supplement government equity or subsidies. To date, no large scale attempts to replicate their successes have been made.
- Successful policies aimed at substantially increasing the stock of housing affordable to low and moderate-income households will depend on government intervention. In the first place, this demands that government recognises that an efficient and effective housing system underpins a dynamic and competitive economy. A coherent Commonwealth-State Housing Agreement that clearly allocates and shares responsibilities, provides realistic long-term funding for a wide range of programs and improves the delivery capacity, skills and flexibility of community housing associations will be required. A legislative framework that mandates local government involvement in the provision of affordable housing must then be established and enforced. And, finally, community awareness of the affordable housing issue must be raised and confidence in, and support for, the policy outcomes developed.

9.0 REDUCING COSTS THROUGH SMARTER DESIGN AND CONSTRUCTION

9.1 Introduction

It can be argued that the real cost of housing in NSW, and in Sydney in particular, has almost nothing to do with clever design because it has almost everything to do with land values, approval costs and housing supply. Architects and designers have almost no control over these costs except on the rare occasions when intelligent planning and high level negotiation skills results in planning gains that increase densities to levels where substantial unit land cost reductions are made.

At one end of the house construction spectrum is conventional brick veneer or concrete framed construction. At the other is the mobile home assembled entirely in a factory and delivered in one piece to a block of land. In between are variations of prefabrication and modular housing where whole or partial segments of a house are factory produced. Cabinet work, wiring, plumbing and other fittings are all in place before house or apartment modules are shipped to a building site, craned into place, joined to other modules and finished. Many believe that factory production has the potential to significantly reduce construction costs and improve quality but there is considerable market resistance.

The problem may be that the word 'quality' almost always precedes 'affordable'. Few in government or the community regard smaller or lower cost homes as meeting their frequently subjective measures of quality. This view frequently surfaces when it is proposed that homes designed to reduce construction costs use off-site mass production techniques.

This section examines aspects of manufactured housing and off-site production as a way to increase the supply of affordable housing in NSW. It explores the long-term development of manufactured housing in the US, the more recent stimulus for its application in the UK, a Bovis Lend Lease Consulting investigation for Landcom of the potential for manufactured housing in Australia and the continuous efforts of Australian production builders to enhance their production efficiencies.

For most Australians, manufactured housing is not a common product they willingly embrace. While there are no problems with mass-produced cars or furniture, a factory built house, trucked to a suburban building site and assembled by crane appears to have little appeal. The negative bias may come from equating manufactured housing with its predominant use for low cost housing, a perception they simply do not look like 'home' or simple unfamiliarity.

Manufactured or prefabricated housing is an idea that periodically surfaces in construction reports and the architectural press. In Japan and Europe, for example, prefabrication is quite common. Toyota produces factory built housing. In Sweden, Ikea has sold more than a thousand of its Bo Klok (Live Smart) apartments while the engineering firm First Penthouse uses cranes to lower apartments onto London rooftops. Manufactured housing has evolved in the US to the point where the product cannot be distinguished from site built housing and a number of American architects are exploring prefabrication as a way to offer modern design to a market stylistically dominated by historic references. In Sydney, the NSW Government Architect, Chris Johnson, has championed the use of production line technologies in housing construction.

Interestingly, the idea of prefabrication captured the imagination of many 20th century architectural visionaries. Most, however, approached the issue with a characteristic lack of interest in public taste or market reality. Le Corbusier wrote an essay endorsing the potential of mass produced houses but never actually built one. Buckminster Fuller spent years

tinkering with his Dymaxion House but, being circular, steel walled and looking like a flying saucer, it did not fit the more familiar image of home and did not, in fact, fly in the market.

Some architects, particularly those who were undergraduates when Buckminster Fuller was fashionable reading, regard mass production as one answer to making housing more affordable for more people. English writer Ian Abley²²⁸ quotes from Fuller's 1938 book *Nine Chains to the Moon* to paraphrase his belief that there were ...four overlapping applications and conflicting interpretations of the phrase 'mass production house':

- Repetition of a number of standard house types by site based building trades,
- Erection on site of sectional assemblies and integrated components from a catalogue,
- Delivery of a volumetric unit prefabricated to be installed on a prepared site, and
- Supply of a production run house with full dwelling service including a finance package.

Importantly, Fuller saw the finance package as being ...a competitive shelter service industry, similar to the hotel industry, and of the mechanical standard, scope and integration of the automobile industry, engaged in furnishing on a rental basis complete scientifically evolved individual family dwelling machines, whose design, economy, standard of adequacy, equipment, production, erection, land rent, service, maintenance, moving and removal, improvement and replacement rate are the entire responsibility of the industry's central competitive corporations, and are all included in one monthly rental charge.

The evolution of factory built structures from the caravans to the mobile home or trailer park has been one path, but the quality and depth of thinking behind Fuller's competitive shelter service industry has never been fully realised. However, the supply side affordable housing strategy that could be offered by lower construction costs suggests it is time to reconsider the value of manufactured housing systems. Perhaps it is also time to explore the potential of the single-source, vertically integrated housing service industry envisaged by Fuller.

9.2 Good design, quality and the housing consumer

It is a common view that well-designed housing improves the quality of life for its residents and the wider community, helps reduce crime, fosters community cohesions and significantly reduces whole of life costs.

In a MORI poll commissioned by CABE in the summer of 2002, an overwhelming 81% of people said they are 'interested in how the built environment looks and feels', with over a third saying they are 'very interested' and another third wanting more of a say in the design of buildings and spaces. 85% of people agreed with the statement 'better quality buildings and public spaces improve the quality of people's lives' and thought that the quality of the built environment made a difference to the way they felt.²²⁹

Unfortunately, when demand outstrips supply, builders and developers believe they have few commercial incentives to offer more innovative designs. This creates inbuilt conflicts in the delivery system. These conflicts can be exacerbated, particularly when manufactured housing systems are considered, because consumers and builders are generally more accepting of traditional styles.

²²⁸ Quoted from Abley, I. (2002) *Activity: Living Space*. Audacity Limited, downloaded from www.audacity.org on 27 November 2003.

²²⁹ Bartlett School of Planning, University College London (2003). *The value of good design.* Commission for Architecture and the Built Environment, London.

Two questions therefore need to be addressed when discussing the use of innovative construction techniques. Firstly: What is meant by 'good design' and 'quality'. And secondly: what influence should the housing consumer have in defining 'good design' and 'quality'.

Bob Carr, Premier of NSW, took up the issue in March 2000. He convened a Forum aimed at finding ways to improve the quality of residential flat design. This resulted in a new State Environmental Planning Policy (SEPP 65), the establishment of design review panels in a number of LGAs, a design code²³⁰ and a guiding pattern book²³¹. The Premier's view was that: Better design is about improving where we live, work and spend our time. It is a vital public issue. There is no reason why well-designed apartment buildings cannot help enhance our suburbs. While the Premier is conscious of the aesthetic aspect of 'design', its wider influence on quality of life is equally important. Interestingly, while their environmental performance will be improved through the introduction of BASIX, the Premier's interest in improving the quality of project housing appears to have disappeared.

In exploratory study carried out by international property consultants FPD Savills in 2002 indicated that volume house builders who had invested in higher quality design in residential schemes could expect to yield a residual value per hectare of up to 15% more than conventionally designed schemes.²³²

The University of Bristol carried out a survey of 600 households on a large suburban housing estate with little or no distinctive design quality. The researchers found that these residents exhibited more difficulties in selling and experienced more negative equity than those living on more distinctively designed developments.²³³

In SEPP 65, good design innovative responses to technical, social, aesthetic, economic and environmental challenges are seen as serving the public interest. It is regarded as a creative process for which the skills of architects are mandated. Many builders and developers, however, believe the majority of architects define design in very narrow terms, have a poor understanding of market needs and ignore development economics. There is also view that the profession has an unjustified opinion of its housing, particularly mass-market housing, design skills. This is perhaps a reasons architect play an insignificant role in this market and why, without a shift in attitude and skill, the industry would resist mandating a role for them.

Criticisms aside, the principles of good urban design are understood even if their interpretation can be somewhat subjective and therefore open to debate. The challenge for affordable housing, however, is as much one of context as it is of individual character and construction efficiency. The latter can emerge from off-site manufacturing as well as a systematic and comprehensive analysis of conventional materials, construction techniques and the supply chain. Addressing the former is another matter.

High performance can be achieved using off-site or on-site production techniques but the challenge is to understand whether the architectural qualities will have a negative impact on consumer acceptance. No publicly available research on this subject appears to have been undertaken in Australia. Some guidance, however, is available in recent research²³⁴ undertaken for the UK Commission for Architecture and the Built Environment (CABE).

²³⁰ Planning NSW Urban Design Advisory Service (2000). *Residential Flat Design Code.*

Planning NSW Urban Design Advisory Service and NSW Government Architect (2000). *Residential Flat Design Pattern Book.*

Bartlett School of Planning, University College London (2003). *The value of good design.* Commission for Architecture and the Built Environment, London.

²³³ Bartlett School of Planning, University College London (2003). *The value of good design.* Commission for Architecture and the Built Environment, London.

Mulholland Research and Consulting (2004). What home buyers want: Attitudes and decision making among consumers. Commission for Architecture and the Built Environment, London.

The increase in home building required by a significant undersupply in the UK, together with a demand for quality design and a belief consumer attitudes are not being recognised, was the foundation for this research. Like Australia, consumer aspirations are for detached houses with views from the back and local services readily available at the front. It also appears consumers express reservations about the type of housing being delivered. Clearly reality means that the contradictions need to be addressed and trade offs made.

The Popular Housing Forum used over 800 interviews and discussion groups across the UK to explore public attitudes to the appearance and site layout of new housing. Appearance of the neighbourhood was considered a more important factor than the design of the home itself.²³⁵

Neighbourhood character is clearly important but, for the purposes of this discussion, the CABE research findings about house type preferences, appearance and internal planning are relevant. Similar findings have been observed in local commercial research.

House type preferences

Not surprisingly, family circumstances, life stage and affordability influence the type of house preferred by research participants. Families with children aspire to owning a detached house because of privacy, security, ease of access and the amount of space inside and outside the home. Older couples also expressed a preference for detached homes for similar reasons. However, it appears there is increasing evidence significant proportions of first homebuyers would be prepared to live in higher density housing. Affordability and location choice are probably the main issues driving this trade off.

Outside the home

A crucial factor was found to be the provision of outside space, gardens in particular, and its usability and size. The demand for a useable outdoor space is common to all life-stage groups and all types of dwelling. It is a high priority for families, and studies testing the market for higher-density housing have found a great resistance to small balconies and gardens. It has been found, however, that the careful design and placement of spaces for different age groups could reduce the dissatisfaction with small balconies and gardens.

... nearly three quarters of those interviewed (72%) said that they believe well designed houses will increase in value quicker than average with less than one in ten (9%) disagreeing with this statement. When asked to list two or three things which they considered important in the design of new houses over half the respondents (59%) said security against crime was a key factor; 56% said that new homes should be built to last: 45% said they should be designed to be safe from accidents and fires; 41% mentioned ease of maintenance; and 35% thought that energy efficiency was important.²³⁶

External appearance

The CABE research suggests that the overall appearance of a neighbourhood is more important for UK homebuyers than external appearance. Individuality is desirable but houses should look similar to those nearby. Like Australia, traditional architectural styles are, in general, favoured because they are seen as a safe strategy for resale. However, while support for modernist design came from younger people with inner urban aspirations, an architectural character combining modern and traditional elements was identified as becoming more acceptable. When asked what sort of

Bartlett School of Planning, University College London (2003). *The value of good design.* Commission for Architecture and the Built Environment, London.

²³⁵ Bartlett School of Planning, University College London (2003). *The value of good design.* Commission for Architecture and the Built Environment, London.

housing future generations would like to live in, a majority of respondents chose a modern or what Mulholland called 'neo-vernacular' character.

Extensive international research by the University of California in the 1970s and 1980s using post-occupancy surveys discovered that not only did the overall impression of the exterior of a house and its surrounding dwellings have an impact on how people felt about their homes but also in many cases those residents' personal sense of worth.²³⁷

This shift has been observed in local research where the desired benefit of 'character' and individuality is derived from features that prevent a house appearing like a featureless box. The key to acceptability appears to be not the style *per se* but rather the richness of the detail. The conflict may not one of modern versus traditional but between different approaches. The comparisons might be between modern designs rich in detail, crude distortions of traditional designs and considered interpretations of a local vernacular. This can be seen in the positive local reaction to generous verandas and effective sun shading on houses with an otherwise contemporary or modern character. This presents a challenge to the delivery of more affordable housing where extraneous detail can add substantially to construction costs.

Internal planning

An absurdity of Australian housing is that while the average number of people in a household has diminished, the size of houses has expanded. The average floor area of new residential buildings increased 37.4% (from 149.7 square metres to 205.7 square metres) between 1984 and 2005. In pursuit of higher densities, affordability and market preferences for detached or low-rise housing, the reverse appears to have occurred in the UK. A search of UK house builder web pages indicates that three and four bedroom family houses offered to the general market are between 100 and 125 square metres in area. It is no surprise, therefore, that new homes are perceived as having smaller rooms, very small bedrooms and no storage space when compared to older houses. This has led to high levels of dissatisfaction with the amount of space builders offer. Interestingly, some evidence suggests that size may be less important than how the room is to be used.

This is also a clue for designers of affordable housing. Careful design that permits rooms to have multiple functions could reduce the apparent passion Australian households have for many single purpose spaces. The requirements of a more diverse market might start to have an impact on the subdivision of interior space. It might also convince builders that there are alternatives to competition based purely on how much area can be provided for the consumer's budget.

Australia has a long history of suburban living so rejecting consumer aspirations is simply not possible. History has created expectations and generated practices now embedded in community attitudes and planning regulations. Homebuyers and renters will not abandon them unless their loss yields tangible and perceived benefits. Consumer preferences are complicated and must not be casually ignored. Most planners and practitioners do not know what consumers see as the benefits of different housing forms and construction methods or what trade offs people are prepared to make.

For housing designers, less importance appears to be placed on style although most people want to live in a house that is distinctive and has character. Local and UK research suggests that neither bland traditional or minimal modernist styles are desired. Instead, an architecture rich in character and detail is preferred.

²³⁷ Bartlett School of Planning, University College London (2003). *The value of good design.* Commission for Architecture and the Built Environment, London.

Australian Bureau of Statistics (2005). 2005 Year Book of Australia.

However, in creating sustainable communities and affordable housing the cosmetics of style are secondary. Thoughtful changes to neighbourhood planning and home design, based on a clear understanding of end consumers, need to be promoted. It requires a culture change in the community, government and the industry where a balance between individuality and the common good is struck. If the sustainable communities envisaged by policy makers and professionals are to be attractive to consumers, the streets, housing types and construction performance specifications must incorporate features clearly seen as consumer benefits.

These people are sharp. It is not a matter 'education' (although better information, clearly communicated would help), but of ensuring the potential benefits of change are made real. To increase the stock of affordable housing, Australia's suburban history, as well as buyer and renter aspirations, must be recognised and reconciled with supply side strategies that must inevitably be based on higher densities. In the face of public opposition, the benefits of higher densities must be well-designed, high quality and delivered at the right cost.

9.3 Affordable housing and the prefabrication debate in the UK

The Barker Review²³⁹ of housing supply was conducted at a time when new housing construction in the UK had fallen to its lowest level since 1945. Demand, driven primarily by demographic trends and rising incomes, has been increasing created a volatile housing market. Barker reported that one of the factors leading to this instability had been a weak supply response to demand changes. As a result, only 37% of new households could afford to buy a property compared to 46% in the late 1980s.

While the Blair government has taken steps to address housing supply through proposals for new growth areas and reforms to the planning framework, Barker considered that housing market reforms directed at achieving a higher rate of home building would be required if housing in the UK is to become more affordable to more people. As a guide, Barker estimated that the 2003-03 base line level of private sector building of 140,000 gross starts and 125,000 gross completions would require an additional:

- 70,000 private sector homes per annum to reduce the trend in real house price increases to 1.8%, or
- 120,000 private sector homes per annum to reduce the trend in real house price increases to 1.1%, and
- 17,000 to 23,000 homes a year in the social housing sector.

She concluded that an annual increase of between 50% and 95% in private sector home building, and between 80% and 110% in social housing, would be required at a time of restricted labour mobility and industry capacity. Mitigating the environmental and economic costs of urban sprawl would be an additional constraint. One necessary industry response was identified as improved production techniques, including mass production.

Writer James Woudhuysen²⁴⁰, in a January 2004 article in The Times, observed that higher divorce rates and the age of first-home buyers moving from the late twenties to the early thirties would mean that Britain faced many years of house price inflation irrespective of any short term slowdowns. He used a decrease in annual housing production from 400,000 in 1960s to a more recent 130,000, to support his contention that the decline in housing supply was largely due to a lack of innovation in the building industry.

²³⁹ Barker, K. (March 2004). Review of housing supply. Delivering stability: Securing our future housing needs. HM Treasury, London.

²⁴⁰ Woudhuysen, J. (30 January 2004). *The Times*, London.

He further argued that despite government exhortation that builders move into mass production, just £4 billion (18%) of a £22 billion funding program was allocated to affordable housing. This, he maintained, indicated a …bizarre system of priorities… particularly when compared to Japan where a Toyota factory in Kasugai …mass-produced 3,500 large, spacious homes in 2002, and it is only one of three run by the group's construction arm. This should be compared to the UK Sustainable Communities initiative where just 4,000 of 16,000 new homes were likely to be factory produced.

Some important aspects of the debate on manufactured housing have been taken up by a number of writers on www.audacity.com, an interesting, confidently opinionated and critically thinking UK web page. Their arguments appear to be largely built around the question:

Why do construction professionals choose resource efficiencies over labour productivity, rather than aspire to achieve both. Such a supposedly sustainable approach considers human labour as the renewable resource?²⁴¹

In his article, Abley continues by saying:

This unnecessary polarisation favours savings in resource use, including land use, to the point that increasing urban density is now an obsession while construction remains a site based chore. So, will our children thank us for sustainable development? Will the pursuit of sustainability turn construction into a resource efficient and capital-intensive manufacturing industry, or just modernise the construction site?

The productivity gains through capital-intensive manufacturing as the measure of improvement needed in construction promoted in the Egan *Rethinking Construction* report is used to support this view. Audacity's lan Abley²⁴² believes that the ability to raise productivity through mass production research and development is critical for ...our daily needs and quality of life. He argues that a backward construction industry is accepted as prudent economic policy and that the capital investors needed to solve the UK's low labour productivity and resource efficiency problems are lacking. Abley goes on to say that:

It is clear that everyone wants to provide quality affordable homes. The Greater London Authority, as any regulating authority might be expected to do, will set quality and sustainable construction standards. In response, those authorities trying to tackle the spiralling cost of housing will be met with bespoke designs from the array of talented architects and designers now employed by a quality minded house building industry.

In a response that might be familiar to Sydney's development and building industry, David Birbeck, the CEO of Building for Life, a non-profit organisation promoting residential design, notes that ...house builders have shifted towards bespoke design in response to the inability to obtain planning approvals on sufficient greenfield land for standard housing types²⁴³.

There is no doubt design and construction standards should be raised the world over. The question is whether designing fewer and smaller homes better is an adequate response. Abley contends that people need and should expect an adequate supply of spacious high quality accommodation but attempts to tackle the affordability problem by building smaller is compounding the inadequacy caused by the under-supply of new homes. He maintains that

Abley, I. (10 July 2002). Resourcing the future. Will our children thank us for sustainable development? Introduction to a speech by Martin Pawley, columnist for the Architects' Journal, Building Audacity Conference, The Building Centre, London. Transcript downloaded 27 November 2003.

Abley, I. (29 July 2002). *The point of prefabricated building is productivity.* Audacity Limited, downloaded from www.audacity.org on 28 November 2003.

²⁴³ Birbeck, D. (22 February 2002). *Boom not bust.* Building Design, London.

building smaller and cheaper homes on an industrial scale might help redress the numbers but they will still be a fraction of the size of the homes enjoyed by previous generations.

Ultimately, and irrespective of the designer's talent and prefabrication technologies, there is a limit to producing even smaller living and sleeping spaces in response to rising underlying land values and housing affordability problems. The point is reached where residents as uninhabitable and overcrowded regard the resultant buildings. Substantially smaller dwellings means the natural clutter of life — furniture, clothes and books for example — has to be carefully managed to suit available space. Most people accumulate 'stuff' and there is always scope to accumulate more. Not having the ability to do so was once called poverty. The manufactured housing challenge is, therefore, as much about the quality of design as it is about the quantity of dwellings produced.

The keynote speaker at a 2002 seminar²⁴⁴ on The Housing Forum report Homing in on Excellence was John Miles, a Board Director of Arup Group, Director of The Housing Forum and CABE Commissioner. In his opening remarks, he identified the key issue: transforming the home building industry into a manufacturing industry would depend on convincing those asked to risk capital it would be financially worthwhile. He said:

New products will not appear without high capital investment. Innovation can be costly, and so long as there goes on being relatively little sharing of research and development costs between manufacturers and suppliers, it will continue to be difficult to recoup initial investment. In the current climate, bespoke products are often a design requirement, undermining the affordability that can be ensured by moving towards ranges of standardised products and systems. Product availability will accelerate when house designs are tailored to the requirements of manufacturing processes.

For some designers or architects, largely trained to view the house as an individually crafted work of art, the prospect of involvement in manufacturing may, he said, be abhorrent. The reasons include a fear their design talents might be compromised, the prospect of only being paid once for multiple iterations of a single concept, and the possibility customer choice and quality might be sacrificed for low cost.

John Miles, in rebutting this line of thought, pointed to Japan ... where you select your (manufactured) house from a portfolio of designs... and ...the number of options you are given is almost infinite, based on the flexibility that comes from building in a factory. He went on to make the point that in volume site built housing the choice of form, function and finish is too narrow, quality is low, insufficient numbers are produced, components are often not assembled in a sensible order, and there are high levels of inaccuracy and waste. His view is that quality depends on investing in the way choice can be repeatedly delivered. From the capital investor's point of view, promoting the myth of bespoke design and hand crafting evades the fact that narrow, site based optimisation of the building process does not deliver quality. He claims the idea of bespoke site built architecture flatters the designer, but the lack of capital investment in production efficiency and quality is frustrating.

The situation is little different in Australia. The large home building companies are as disaggregated as their UK counterparts. Most operate as managers who pass the majority of site based work to sub-contractors. The largest builders regard supply chain management, particularly volume purchasing, as important but the rest operate loose supply chains and, due to market volatility, are rarely in a position to arrange volume discounts. While some are fortunate enough to have land banks, the fixed asset investment levels of most are very low. This is a simple response to fluctuating demand and is focused obsessively on reducing the initial construction cost rather than long term operational costs, quality, flexibility or customer

²⁴⁴ Summary of *The Pre-Fabulous Home* seminar in July 2002 sponsored by The Building Centre Trust, The Housing Forum and Design for Homes. Downloaded from www.audacity.org on 27 November 2003.

service. The result is a resilient, extremely low-cost housing delivery system with few demands on risk capital. Some of the builders are close to being 'virtual companies', employing little direct labour and working at geographic locations that can change quickly in response to the availability of land or economic conditions.

In Australia, it will take courageous investors to change an undercapitalised, site based home building industry where acceptable returns are made for minimal risk, even by the financially and managerially challenged. This reduces competition and innovation. It is exacerbated by a planning system unable to balance supply with demand by delivering sufficient land.

9.4 Rethinking Construction and manufactured housing in the UK

The world's manufacturing industries have undergone a revolution over the past 50 years that has improved quality, productivity per worker, and product availability. Many in the UK, stimulated by the Egan *Rethinking Construction* report, believe advantage can be taken of these benefits within the home building industry. The Egan report is claimed to have been the single biggest factor in renewing interest in new methods of construction in the UK.

Since the days of a half century ago of '...you can have any colour you like as long as it's black...' the achievements of reliability, customer choice, and affordability have been delivered through a revolution in the manufacturing industries. The importance of good design, and the culture of continuous improvement, pervade the domain of consumer product development in a manner strikingly absent from house building.²⁴⁵

While this may be the case, building houses faster, to higher standards and at competitive costs poses some challenges. More than any other consumer product, housing influences how people feel, how they behave and society as a whole. Design quality, therefore, is just as important as the production technology and product reliability found from manufacturing. Like Australia, the traditional process of building using component based systems and relatively unskilled labour complemented by skilled trades has been the predominant form of house construction. As a result, it is felt that the UK home building industry ... would be hard pressed to match a single one of the boasts made by the manufacturing industries. It remains predominantly craft-based, relying on itinerant, site-based staff to create its products and deliver customer satisfaction.

The Housing Forum, an outcome of the Egan report, claims that the UK home building industry is changing as market forces pressure builders to reconsider customer service methods, and government action improves access, energy efficiency and acoustic performance. This has combined to force a reappraisal of housing design and the cost savings and site efficiencies obtained from offsite fabrication or manufacturing. Three things have stimulated this new thinking:

- Reductions in apprenticeship training programs and negative perceptions of the building industry as a place to work have resulted in fewer skilled tradesmen and production blockages,
- The belief home building rates must dramatically increase over the next 25 years to fulfil the twin demands of stock replacement and changes in lifestyle patterns, and
- Government interest in creating a more modern construction industry and its desire to highlight high quality housing as the foundation of its social housing program.

²⁴⁵ Chowdery, M. et al (2002). *Homing in on Excellence. A commentary on the use of offsite fabrication methods for the UK housebuilding industry.* The Housing Forum, London.

The Housing Forum presents two challenges: Will customers enjoy the benefits of greater choice, higher quality, greater reliability, quicker delivery and lower costs if manufactured housing was to become more common? Will homebuilders see advantages in reducing the skilled labour shortage and site-based construction time, improving site safety and business margins, and increasing customer satisfaction levels? It argues that the widespread adoption of offsite manufacturing technology would change the industry in four fundamental ways.

Industry restructuring

Manufacturing would shift jobs from sites to factories and emphasise the builder as the 'retail interface' and the fabricator as the 'product supplier'. This split will allow each to focus on their specialities with home builders able to respond to customer desires (both presales and post-sales), and fabricators able to concentrate on delivering functional performance and reliability at the right price. It is felt that offsite fabricators would emerge as a powerful and influential sector of the industry, building purpose-designed production facilities using the modern and agile production systems.

Increased customer focus

Like Australia, homebuilders in the UK are largely focused on construction and sales. Marketing, in the real sense of the word, is either low on the priority list or seldom considered. Manufacturing would provide a great opportunity for builders to become the 'retail interface' in the development of client-focused designs, post-sales services, and lifetime client care.

Significantly reduced site operations

Again like Australia, the average house in the UK takes twelve to fifteen weeks to complete using traditional site-based methods. It is believed this could be reduced to between two and three weeks if volumetric methods (the delivery of whole spatial components) are used, or between six and ten weeks if panellised systems are used. The consequence would be that the number of people employed on site might be significantly reduced and production significantly increased over the next ten years.

Supply chain consolidation

The Housing Forum contends that purchasing large sub-assemblies would allow homebuilders to deal with limited or even single sources of supply. This would greatly simplify their activities while manufacturers would need to manage their sources of supply with manufacturing industry standards of performance. This requires a new approach for the industry and major changes for component suppliers both of which might be difficult to implement.

The Housing Forum argues that prefabrication can offer significant improvements in quality and speed of construction compared to 'traditional' site-based methods, reduce levels of defects and waste, improve efficiency in the production process, and enhance environmental performance. In addition it believes there are health and safety benefits because more of the construction process would be carried out in the relative safety of controlled factory conditions. It acknowledges that prefabrication has often been associated with higher costs and a reduction in flexibility and choice for designer, client and end user. Significant market resistance has, as a result, prevented more widespread adoption of the technology in the UK, despite numerous international examples that illustrate its technical feasibility.

9.5 Outcomes of The Housing Corporation's Kick Start initiative

As an outcome of the Construction Task Force report, *Rethinking Construction*, The Housing Corporation in the UK developed a way to promote off-site manufacturing (OSM) techniques in new housing developed by Registered Social Landlords (RSLs). The initiative provides special *Kick Start* funds for social landlords partnering with selected suppliers of largely off-

site manufactured homes. The program contributes to the implementation of the *Rethinking Construction* report's recommendations.

Off-site manufacturing (OSM) was highlighted by the Construction Task Force as an opportunity for achieving improvements in the cost, time and quality of construction projects. However, it was also noted that prefabrication requires long-term commitments from builders or developers to ensure manufacturers have the confidence to invest in production facilities. As a result, the Housing Corporation examined ways in which its overall development program resources could be allocated to projects making—use of prefabrication techniques.

The Corporation's background studies found that a rapid take up of off-site manufacturing would be achieved by funding a special program for housing schemes using its techniques. The Corporation selected a small number of suppliers of steel and timber frame systems that its funded social housing landlords would use. This was intended to ensure suppliers had sufficient throughput to make an investment in production facilities worthwhile. The suppliers had to meet a range of selection criteria to ensure their systems were robust, provided good value for money and met all the normal requirements of publicly funded social housing.

RSLs selected to participate in the programme were expected to demonstrate a commitment to implementation of the Construction Task Force principles across their construction program. Achieving consistency of quality and continuous improvement in cost and time predictability will be key features of this initiative.

The main objectives of the Kick Start program were to:

- Recognise the potential for quality, cost and time improvements through the use of offsite pre-assembly techniques,
- Confirm the acceptability of homes using non-traditional techniques to UK financiers and certification bodies, and
- Stimulate the establishment and growth of a sustainable UK manufacturing capacity for off-site pre-assembled homes.

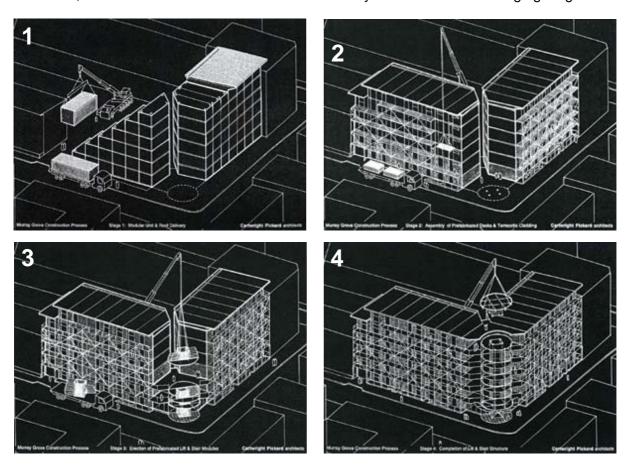
The Housing Corporation also aimed to demonstrate the opportunities for improving supply chain management, reducing waste and component delivery times, and achieving zero defect objectives. It allocated £80 million to *Kick Start* over the 2001/02 and 2002/03 financial years. Depending on the number of bids received, and the commitment to implementation of the Construction Task Force principles, it was likely to extend over subsequent years

A recognised example of prefabrication is the *Murray Grove Apartments* on Shepherdess Walk, East London, developed by the Peabody Trust. The Peabody Trust, one of Britain's oldest housing associations, is a social housing provider. The organisation was increasingly frustrated with the results of its conventional building projects. These structures were taking far too long to build and, once completed, were not regarded as high quality. Dickon Robinson, the Trust's director of development and technical services, is reported²⁴⁶ as saying: What we are planning her is entirely different from the system building of the 1960s. System building was a crude matter of casting heavy concrete panels on a muddy site. In contrast we are using a genuinely industrialized method where the flats are almost entirely pre-assembled and fitted out in a factory.

For the project, Cartwright Pickard Architects developed a volumetric prototype that were built by Yorkon Limited, a company specializing in the fabrication of budget hotels and fast

²⁴⁶ Arieff, A. and Burkhart, B. (2004). *Prefab.* Gibbs Smith, Salt Lake City.

food restaurants. The light, steel framed boxes were designed with the same dimensions as Yorkon's standard hotel room modules so they could be manufactured on the company's existing production lines. Once fabricated, the modules for *Murray Grove* were delivered to the site and hoisted by crane into place. The five storey building's thirty-two one bedroom and three, three bedroom units were erected in ten days as shown on the staging diagrams.



Source: Reproduced from Arieff, A. and Burkhart, B. (2004). Prefab. Gibbs Smith, Salt Lake City

The key to the Kick Start program was its implementation through the UK's social housing system where around 30,000 homes are built or rehabilitated each year. The simple reason for this is that only a few major clients, such as the Peabody Trust, commission most of the social housing. It was expected, however, that improved performance in this sector would affect expectations, activity and innovation in the wider housing market. The reported outcomes, *Murray Grove* being one, offer innovative approaches that could be considered in Australia if adequate production volumes could be achieved.

A similar incentive system could be put in place in Australia if substantial funding increases for social housing were made and a significant proportion of the funds directed into the development, or purchase from overseas, of manufacturing technologies. Unfortunately, capital funding under the Commonwealth State Housing Agreement has fallen 27.6% in real terms from \$1.5 billion in 1996/97 to \$1.28 billion in 2003/04. National Shelter²⁴⁷ believes that to increase the proportion of social housing as a proportion of total housing stock from its current 5.1% back to its 1996 proportion of 6.1%, capital funding for social housing should immediately increase to \$2.0 billion a year and be \$6.0 billion a year by 2025. Without a major change in Commonwealth housing policies this is unlikely to occur. As a result, a significant motivation for industry investment in off-site manufacturing will be lost.

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Pendergast, P. (2004). *National Shelter's Election Platform 2004*. Presentation to the National Summit on Housing Affordability, Parliament House, Canberra, 27-29 June 2004.

9.6 The next generation of manufactured housing products

The Housing Forum report²⁴⁸ observes that many in the UK home building industry remains sceptical about the future of off-site manufacturing. They argue, however, that the materials and components now used are substantially different to those used in the past. In addition, changing demands for housing raise questions as to whether existing technologies are appropriate to meet future needs. Construction time, energy efficiency, and the availability of site management and trade skills, plus new demands from legislation — in particular, increased insulation values and sound reduction targets — could stretch traditional materials and methods beyond their physical limits. At the same time, the UK government is exhorting the industry to reduce construction costs and improve delivery times and quality.

Two basic systems — 'component' and 'integrated' systems — are seen to have the greatest potential. The former involves the development of individual components (usually in isolation from other housing related products) and the assembly of a limited range of components to form specialist sub-systems (for example, plumbing, heating and the like). The latter involves the development of a coherent set of components that together comprise a complete house built in a factory (either as panels or volumetric modules) and delivered for assembly on site.

Some of The Housing Forum's forecasts are summarised below.

Component systems

The range of standardised factory-made components has expanded over the last 30 years. Most components are relatively small and it is expected that industry standard interfaces will be developed in the future, leading to more interchangeability and greater flexibility. At the same time, standard forms of attachment are also likely to become more prevalent and will increase installation efficiency.

Larger components such as door sets, wall panels and floor cassettes will become more widely used, putting increasing pressure on tradesmen to build accurately. As a consequence, site-based operations will become more like a manufacturing process, with each part expected to fit without modification. The emphasis is predicted to shift from tailoring components to accommodate adjacent elements to organisation and systematic control of the build process.

Suppliers of components are likely to develop more ambitious products that stray into the systems area. Examples of this are the plumbing and heating systems available in Europe and Australia. As these systems become more complex and expensive they will influence the design of dwellings with designs incorporating particular plumbing or ventilation systems and the component suppliers will become essential parts of the design process and supply chain. Through a combination of standardised parts builders will be able to provide a higher level of customer choice without incurring unreasonable design or installation costs. This is already happening, with some of the more progressive builders encouraging the adoption of lean manufacturing techniques.

Integrated systems

The logical extension of component-based systems above construction of the whole house in a factory and delivery as a kit to site. Panellised systems have been used for many years but more advanced systems have been devised where services and interior finishes are factory applied to the panels. The volumetric producers such as Yorkon, who have developed modular systems with factory-fitted interiors for hotels, fast-food restaurants, and nurse, student and armed forces accommodation, have adopted a more ambitious approach. The distinguishing feature of these 'integrated

²⁴⁸ Chowdery, M. et al (2002). *Homing in on Excellence. A commentary on the use of offsite fabrication methods for the UK housebuilding industry.* The Housing Forum, London.

systems' is that the high value-add activities of services, finishes and fittings are completed in the factory. This leads to the virtual elimination of wet and other skilled trades on site and results in significant reductions in site-based construction.

The factory of the future

The *Homing in on excellence* report observes that the current volumetric manufacturers show how manufactured housing will evolve in the future. Their products are termed 'first generation' housing systems and are characterised by their development for other applications and subsequent adaptation to suit the housing industry's special needs. Some of these systems have been successfully demonstrated but the production processes are relatively inflexible and the products are more expensive (in first-cost terms) than their traditional counterparts.

'Second generation' products are designed as integrated housing systems from the outset. When the report was written, few of these existed although Westbury Homes had started production in a new, purpose-designed factory capable of building some 6,000 houses per year. The key to these products lies in the design of the factory, and its associated production systems, so they meet the twin (and sometimes conflicting) demands of 'lean' and 'agile' production, with systems carefully balanced to deliver:

- Flexibility so different house types are delivered despite unpredictable demand,
- An elasticity of production to cope with peaks and troughs of demand, and
- A low capital cost that recognises the UK demand at 180,000 units a year as a small volume over which to amortise the investment.

The Housing Forum states that only the simultaneous achievement of these three goals would allow cost-effective products to flow into the market place and become widely accepted by builders. This is a very significant challenge for production engineers and factory process designers. Very few manufacturing systems demonstrate the simultaneous achievement of these objectives and their success is not guaranteed. Factors that permit some optimism include the proven ability of engineers and systems designers to deliver effective solutions to manufacturers and the introduction of the low-cost computer and information systems are crucial to the control of agile manufacturing facilities.

It is noted that further development of integrated systems will require a number of issues to be addressed within the industry. These include:

Delivery of products at the right price

Historically, there has always been a 'first cost' premium to pay for panel and volumetric systems. This is a blockage to their wider uptake and requires manufacturers to become as 'lean' as their automotive and white-goods counterparts in terms of manufacturing capability and supply chain management.

Customer-oriented products

Conventional practice allows a degree of customisation to take place late in the production cycle. Factory-based methods will need to display a significant level of 'agility' if the flexibility expected by the industry is to be delivered.

House builders and off-site manufacturers

It is believed that the off-site manufacturers of integrated systems will become the dominant players in the supply chain. This will lead to changes in relationships within the industry and bring focus to the need for co-ordination between off-site manufacturing and on-site installation. Pre-planning is a prerequisite of any factory-based method of building and the importance of lead times have to be appreciated

because installation completion is governed by the latest delivery of any of the sitebased tasks. Poor site organisation and planning can therefore wreck the competitiveness of a manufactured housing project.

Off-site manufacturers and material/component suppliers

The relationship between off-site manufacturers and material/component suppliers will become a managed domain of coordinated orders and supplies, and collaboration in product development and research. Common information systems and shared data will be a prerequisite to establishing long-term supply chain relationships that realise the benefits of new production processes.

Technical innovation

The Housing Forum suggests that the high level of investment capital required will promote the development of new ideas. It is likely that more will be spent on innovation and new product development but this will be measured against precise requirements to improve the marketability of the housing product.

Training

They also say that the industry must attract young people into factory-produced housing by creating a sector that employs advanced technologies such as CAD and advanced information systems, and offers work opportunities and conditions comparable to those in the manufacturing industries. This will require new recruits and existing employees to be trained in new skills.

Ultimately, however, The Housing Forum sees manufactured housing as a way to enhance customer choice and maintain product quality in the face of economic pressures and skill shortages, rather than as a means of lowering unit costs based on volume repetition.

Notwithstanding recent advances, they are seen as an ad hoc response to immediate pressures rather than a move towards product and process based competitive strategies. Lie Australia, the pattern of innovation in the UK appears to have been one of incremental change while competition does not mean the best available production technologies and products are used. Market knowledge also remains a challenge for homebuilders. While there is an awareness of articulated customer needs from sales staff, mechanisms for identifying the unarticulated needs and dissatisfactions that can lead to the greatest rewards for innovators need to be improved.

A significant share of the UK's 180,000 dwelling per year market, demand response flexibility and production elasticity appears to be a prerequisite to financial success. For a manufactured housing producer, obtaining a financially viable share of the 25,000 dwelling per year Sydney market may be an insurmountable challenge. Arguments that manufactured housing can make a significant contribution to improving housing affordability need, therefore, to be very carefully weighed against the capital risks involved.

9.7 Factory and site built housing in the US

Merchandisers, not elite architects, were the first to exploit the potential of prefabrication, mostly in traditional styles. As early as 1906, the Aladdin Company was mailing out factory made *Readi-Cut* house kits of precut, numbered pieces. Between 1908 and 1940, Sears Roebuck shipped out nearly 100,000 of its *House by Mail* kits that contained some 30,000 pieces of timber, nails, shingles, windows, hardware and house paints. It included a 75 page assembly manual, undoubtedly the most welcome part of the package.

After World War II, when many defence plants turned to producing prefab wall systems but by the 1950s prefabrication was in decline because mobile homes had emerged as the more

popular low cost alternative to stick built housing. William Levitt, however, used prefabricated structures to capitalize on the post war housing demand. Levittown, perhaps the most idealized and maligned planned housing development, was one outcome. The Case Study Houses program promoted in Arts and Architecture magazine between 1948 and 1962 was another significant influence on contemporary manufactured home production.

In 1995, the Urban Land Institute published a working paper²⁴⁹ that challenged developers and local government to consider the possibilities of manufactured housing as a way to meet the demand for affordable housing. The ULI observed that the demand for affordable housing had resulted in a manufactured housing industry then worth US\$9.5 billion in annual sales. In 1993, according to the ULI, manufactured homes accounted for 28% of all new home sales with over 250,000 houses being produced by 250 plants.

It was acknowledged that 'mobile homes' had attracted a reputation for poor construction and installation, and were typically located in the least expensive areas of US cities. However, the ULI also pointed out that they were increasingly being used in creative ways to meet the goals of housing authorities and private developers. Furthermore, a wide variety of floor plans, sizes, finishes and site-built additions were available and had made manufactured homes practically impossible to differentiate from site-built homes.

The ULI accepted the US Department of Housing and Urban Development (HUD) definition of a manufactured home as:

... a structure, transportable in one or more sections, which ... is 320 or more square feet (about 30 square metres), and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes plumbing, heating, air conditioning, and electrical systems contained therein.

It argued that manufactured homes have unique advantages, in particular the fact a strict national code dictates construction standards and enables homes produced in one location to be accepted in another. The most important advantage was their affordability.

Arieff and Burkhart²⁵⁰ observe that:

Most prefab buildings today are inexpensive and functional. But they need to be more than that, and, with precious few exceptions, they aren't. The reasons for this are many and varied, ranging from financial institutions' unwillingness to finance them, developers' reluctance to alter a fairly successful formula, and some architects' fears that the further proliferation of prefabrication will put them out of business. As result of these factors and a host of others, from bad mortgages to big egos, the history of prefabrication can be seen from some perspectives as a long continuum of noble failures. The projects that have prevailed are not the most innovative or comfortable or attractive but rather are those that furnish the highest profit for developers and manufacturers.

For architects, Buckminster Fuller offered a challenge. He is quoted by Arieff and Burkhart as saying in 1929 that:

The architect's efforts today are spent in the gratification of the individual client. His efforts of tomorrow, like those of the composer, the designer of fabrics, silver, glass and whatnot may be expanded for the enjoyment of vast numbers of unseen clients.

²⁴⁹ Suchman, D.R (March 1995). *Manufactured housing: An affordable alternative.* Working Paper 640, ULI-the Urban Land Institute, Washington, DC.

²⁵⁰ Arieff, A. and Burkhart, B. (2004). *Prefab.* Gibbs Smith, Layton UT.

Industrial production of housing, as contrasted with the present industrial production of raw materials and miscellaneous accessories, calls for more skill and a higher development of the design element, not its cessation.

Architects around the world have accepted the challenge. In their book, Arieff and Burkhart illustrate some twenty-five examples of production, concept and custom houses that use prefabrication or system building to a greater or lesser extent. Jill Herbers has another fifteen in her book Prefab Modern²⁵¹. With few exceptions, however, the examples selected for both books are highly modernist in character and mostly sited on isolated blocks of land. A small number would fit the consumer-oriented notion of 'good design' discussed above and even fewer would be useful in the higher density housing needed if neighbourhoods are to be sustainable and affordable.

9.8 Partnership for Advancing Technology in Housing

The Partnership for Advancing Technology in Housing (PATH) is a private/public effort in the US aimed at developing, demonstrating and obtaining market acceptance for a 'Next Generation' of American housing. Initiated by President Clinton and supported by HUD, the program aimed to develop new or innovative technologies that improved housing durability, environmental efficiency and affordability. It was clearly recognised that a national effort was required and that both government and industry should be involved.

Cutting housing costs was seen as one of the basic, and obvious, strategies because lower development and production costs translate into more affordable prices. The program actively encouraged the adoption of innovation through awareness and education. This included an award program created to identify housing projects using innovative technology, design and development. The first award projects were published in 1998²⁵². For a project to be eligible, it had to use generally available technologies and techniques that varied significantly from conventional housing construction approaches. Projects also had to be below the median cost of new single family housing in the region where they were constructed. The awards program sought a range of applicants and technologies with non-profit developers and others serving the needs of low-income households being encouraged to apply. Industrialised housing as well as site-built technologies qualified.

Sixty-three projects, nearly half of which used factory built components and systems, were awarded. The innovative systems included modular construction, energy-efficient design and construction, structural insulated panels, innovative site design or development, steel framing, sharing of resources through co-housing, panel construction, innovative masonry and concrete construction, sustainable or 'green' design and construction, and HUD Code manufactured housing. Unfortunately, the promotional publication is very poorly designed and does little to make a compelling case for any of the systems. The main message is that manufactured housing does not have to look any different to housing built using conventional site-based techniques. Interestingly, the awarded projects were all low scale detached and town house typologies and none demonstrated technologies that could be used in higher density developments such as *Murray Grove*.

9.9 The *Grow Home* and the City of Portland *Living Smart* competition

While manufactured housing remains an area of interest for US architects and builders, a number have explored the use of 'cottage builder' construction for housing on small lots. Their main assumption appears to be that small lots generate acceptable densities and conventional techniques are more economical. Two examples are explored below.

²⁵² Steven Winter Associates Inc. (April 1998). *Building innovation for homeownership*. US Department of Housing and Urban Development (HUD), Washington DC.

 $^{^{\}rm 251}$ Herbers, J. (2004). $\it Prefab\ Modern.$ Harper Collins International, New York.

Avid Friedman's Grow Home

Friedman is the Director of the Affordable Homes Program at Montreal's McGill University. In 1999 he received the United Nations World Habitat Award for his *Grow Home*, a replicable idea that has been adopted as an innovative new way to build affordable housing and solve some of the problems of urban sprawl. The concept and its evolution are thoroughly documented in Friedman's book²⁵³ and briefly covered in the following discussion. It is a clear demonstration of how thoughtful design, combined with knowledge of a local market and conventional building technologies, can create affordable housing.

The first full scale model of the *Grow Home* was unveiled in June 1990 A year long research and design process helped Friedman, and affordable housing program co-founder Witold Rybczynski, establish basic design principles. A grant from Dow Corning enabled construction of the first house and its display at McGill University. Some six months, in the middle of a housing downturn, later a local builder offered the designs to the market and successfully sold out the first project. Friedman claims: *The Grow Home has inspired developments and projects across North America and earned numerous accolades and awards. It was more than a mere academic experiment and a local success in affordable housing. The Grow Home demonstrated that efficiently designed, well-built homes can be affordable and also appeal to buyers' aspirations and, as such, should be considered as a valuable option among other major solutions.*

Friedman believes, and the market confirms, that the *Grow Home* is a sound response to changes in lifestyle, the use of internal space and affordability. These changes include the:

- Decline of the traditional family and the emergence of other households seeking smaller and more affordable housing,
- Increased female workforce participation and the need to balance work and leisure,
- Efficient use of space within the home in response to limited maintenance time and less need for formal entertainment spaces,
- Desirability of offering single person or single parent family households the opportunity to purchase a home and build equity before moving up,
- Need for flexibility within the home, and in its construction, that allows adaptation as household circumstances change,
- Growing use of the home as a place of part or full time work,
- Expressed desire by some homebuyers for a more intimate role in deciding the design best suited to their individual needs,
- Focus of production builders on providing larger feature-laden homes for households with high incomes or substantial equity, and
- Significantly reduced government involvement in social housing programs and their belief affordable housing could be more efficiently developed by the private sector.

Friedman's design strategies incorporated the logical and fundamental principles of balancing perceptions of housing quality with liveable area, environmental performance and the complexity of construction, finishes and fittings. Size was obviously the first consideration followed by the elimination of waste space and the avoidance of complex construction techniques and details. He also recognised that using a familiar and traditional architectural language was essential. A final and important principle was developing a design that permitted growth and adaptability by adding space on to the house or completing spaces unfinished at the time of completion.

While environmentally sound and energy efficient materials and components that would perform over the building's life were selected, Friedman recognised that savings could be realised by using low cost finishes capable of later replacement during upgrading. He also

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²⁵³ Friedman, A. (2001). *The Grow Home.* McGill-Queen's University Press, Montreal

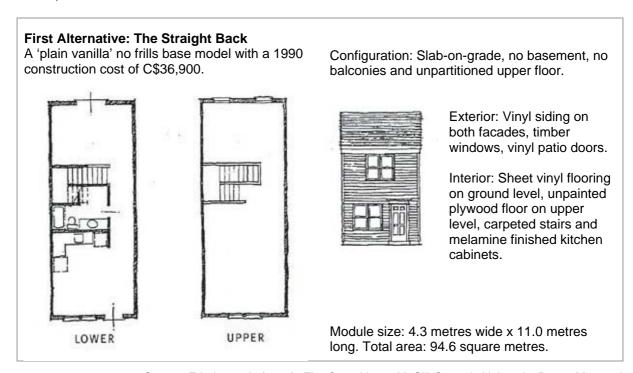
recognised that prefabrication, particularly of wall and floor components (or the whole house) might also be a way to reduce costs. In this respect, he observed that: The Japanese experience indicates that prefabrication has the greatest chance for success when it is part of a comprehensive approach to housing delivery that integrates marketing, customer relations, design, manufacturing, erection, and post-occupancy servicing in one organization. It is not clear if he had read or acknowledged Buckminster Fuller's Nine Chains to the Moon when writing this comment.

A final cost saving consideration was the degree of attachment to other houses. Friedman argues that row and terrace house typologies are a traditional urban housing solution that achieves high densities but incorporates the advantages of detached housing: a private front door, easy access to the ground, and a clear definition of a public street side and a private rear garden. He considers the land use efficiency of attached row housing is the most effective cost reduction strategy while acknowledging the constraint of only having two external walls for light and ventilation.

The design of the Grow Home began with assumptions about the trade-offs homebuyers would be willing to make, what they would settle for, and what they really wanted. The ultimate users were thought to be small families, probably first time buyers with or without children, single people or single parent families. The selling price was based on the income of a young couple or a single earner working in Montreal at the time. It was further assumed they would also want at least two bedrooms, a living room, dining area, study and at least one bathroom but preferably two. More importantly, it was assumed they would be willing to accept smaller proportions for these spaces, add them later or complete some of the finishing work such as upper floor partitions or basement fitouts.

The resulting prototype balanced each principle and tailored it to the aspirations, space needs and financial capacity of a young, first time homebuyer family. It was constructed in panels and delivered to the site. According to Friedman the total construction time was about three weeks.

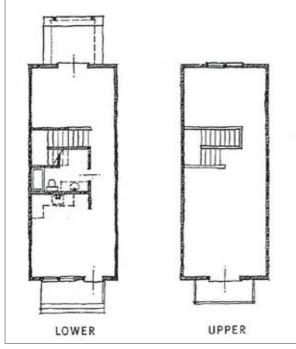
Four alternative designs were initially developed and the illustrations from Friedman's book are reproduced below.



Source: Friedman, A. (2001). The Grow Home. McGill-Queen's University Press, Montreal

Second Alternative: The Windsor

This arrangement was the demonstration home built on the McGIII campus at a 1990 construction cost of C\$42,800.



Configuration: Slab-on-grade, no basement, rear deck and pergola, lower front porch and upper floor balcony and no partitions on the upper floor.



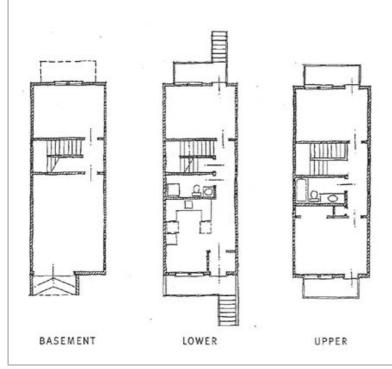
Exterior: Stucco on both facades, vinyl clad timber windows, vinyl patio doors, decorative architectural mouldings and dormer.

Interior: Sheet vinyl and carpet flooring on ground level, unpainted plywood floor on upper level, carpeted stairs, kitchen and bathroom vanity provided by owner.

Module size: 4.3 metres wide x 11.0 metres long. Total area: 94.6 square metres.

Third Alternative: The Ottomane

A larger model that included a basement and a 1990 construction cost of C\$48,200.



Configuration: Unfinished basement, balconies front and rear, no balconies on the upper floor, single partition on the upper floor and a flat roof.

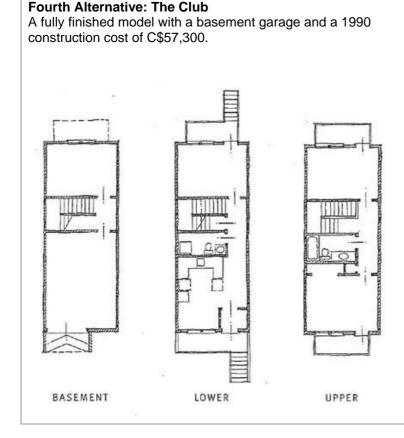


Exterior: Siding boards on both facades, vinyl clad timber windows and patio doors and window shutters.

Interior: Sheet vinyl and carpet flooring on ground level, unpainted plywood floor on upper level, carpeted stairs and melamine finished kitchen cabinets.

Module size: 4.3 metres wide x 11.0 metres long. Total area (including unfinished basement): 141.9 square metres.

Source: Friedman, A. (2001). The Grow Home. McGill-Queen's University Press, Montreal



Configuration: Unfinished basement with garage, upper and lower balconies front and rear, partitions and wardrobes on the upper floor and an entry lobby.



Exterior: Brick to both facades, vinyl clad timber windows and patio doors and dormer with window.

Interior: Strip flooring on ground level, vinyl tile in bathroom, carpet floor on upper level, timber stairs and timber kitchen cabinets.

Module size: 4.3 metres wide x 11.0 metres long. Total area (including basement garage): 141.9 square metres.

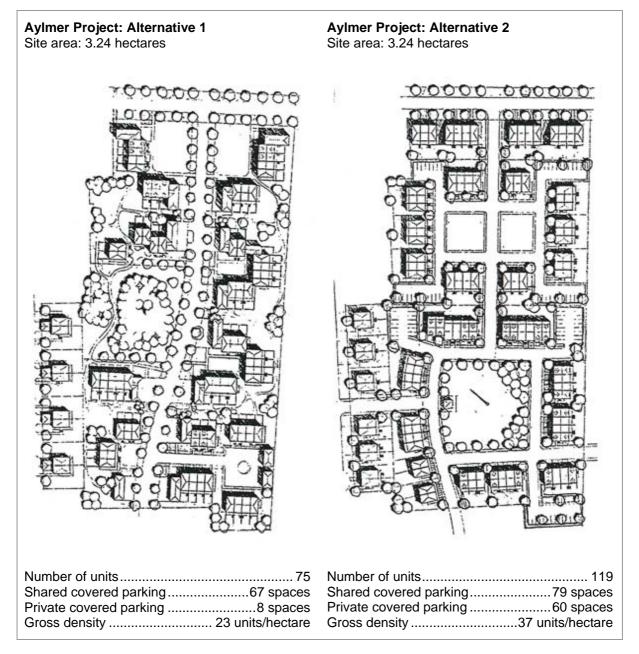
Source: Friedman, A. (2001). The Grow Home. McGill-Queen's University Press, Montreal

Friedman says that over ten thousand people visited the demonstration home. Just over six hundred of these, randomly selected, completed a questionnaire and were split into two groups, based on age. The first and largest group was made up of young (under the age of thirty-five) first homebuyers actively looking to buy a house. The second group were people who already owned a home aged between 45 and 64 and retirees who planned to trade a large home for a smaller one. The respondents were also divided into a further two groups based on income level. The key findings of this research were that:

- Around 84% of people in the lower income range were prepared to trade space, and about 66% were prepared to trade locational preference, for affordability and reduced commuting times, and
- Lower cost finishes were expected in a lower cost house while the opportunity to upgrade finishes and complete the fitting out was like by over 90% of respondents.

Friedman has subsequently been involved in a number of private sector projects in which *Grow Home* principles and designs have been used. One of these was a 3.2 hectare site in Montreal and near the Ottawa River that was thought to be a good location for government employees. The initial community response to the prospect of affordable housing was resistance and over a six-month period over ten alternative schemes were developed and presented. Pressures to reduce densities were overcome and the Grow Home principles were retained. The architect and developer argued for changes to development standards to achieve an affordable outcome. These included reducing minimum site cover, front setback and footpath widths. The 115 dwellings were sold in two months for an average C\$68,000.

Two of the site plan alternatives are reproduced below.



Source: Friedman, A. (2001). The Grow Home. McGill-Queen's University Press, Montreal

The second alternative clearly achieves more dwellings and, based on the limited information in Friedman's book, a higher quality public realm appears to have been achieved. It is interesting that even in Quebec's extreme climate, external parking some distance from the dwellings is acceptable at the project's price point.

The *Grow Home* is seen as the overlapping of three layers. Society and the demographic changes that have created new household types and lifestyles and forced designers to consider flexibility and spatial relationships is the first. The second is a volatile job market and reduced job security that has made purchasing a home a major challenge for many households. Environmental sustainability and the need to measure all design decisions against their environmental consequences is the third layer considered by Friedman. These are the social, economic and environmental components of a sustainable community.

Friedman concludes his monograph by describing, but not illustrating, his *Next Home* concept. It is not unlike the Big House model explored on projects in the US and Sydney

where, rather than providing a single household accommodation within the *Grow Home* three storey module, the possibility of purchasing a single level is offered. In other words a vertically flexible arrangement where one or more 'slices' could be purchased to suit the needs of different sized households. A further development takes advantage of the ability of open web floor joists to easily span a module width to offer a catalogue of internal parts and partitions that can be located anywhere on a floor.

The *Grow Home* and *Next House* ideas seem to be simple concepts. In fact they illustrate the outcome of a carefully considered response to market needs, construction economy and urban design. The integration of these three key elements is critical to the development and community acceptance of innovative affordable housing models.

The City of Portland Living Smart competition

In June 2004, the City of Portland launched a two stage open competition seeking designs for innovative, affordable single-family detached houses on narrow lots. The City's goal was to identify and promote creative options for infill housing within its urban growth boundary. It grew from opposition to permissible infill development that was often out of character with the surrounding neighbourhood but met a growing need for affordable entry-level housing. The *Living Smart: Big ideas for small lots* competition was the outcome. It provides a useful model for encouraging designers and builders to think more carefully about new approaches to affordable housing, particularly where current regulations result in the destruction of familiar neighbourhoods, dramatic social change or the loss of affordable housing stock.

The competition process and the designs that emerged from the competition are relevant to the middle ring suburbs of Sydney where the historic pattern of 15 to 18 metre (50 to 60 feet) wide lots lends itself to further subdivision. Many of these areas are subject to redevelopment pressures to which the market has responded in various ways. In some locations, particularly around transport nodes, lot consolidations for flats, townhouses and villas are permitted and have occurred. Other renewal activities involve demolition of the original dwelling and construction of a substantially larger new house. These new houses are dramatically changing old and familiar streetscapes and, because many have smaller households, they do not always 'top up' the original population. The built form outcomes and social changes are increasingly questioned or resisted by local communities and politicians. It is also relevant to greenfield subdivisions where attempts have been made to increase densities by developing narrow lots with detached housing. Few of these attempts have successfully met environmental performance objectives, responded to a range of lifestyle choices or created high quality streetscapes.

Infill housing on vacant or under utilised land is established neighbourhoods is a very efficient way of accommodating growth or increasing densities. But infill and small lot development raises difficult questions. For example: How can the car be accommodated without creating blank, garage dominated facades? Will there be usable outdoor space? Can active engagement with street activities be encouraged without compromising resident privacy? How do you avoid a small lot house feeling like a constricted corridor?

Success depends, in part, on design quality. Small lot housing that increases densities and makes more effective use of infrastructure must fit elegantly with existing houses or be compatible with conventional detached dwelling forms in new neighbourhoods. The typical builder response of modifying existing house designs to make them suitable for narrow lots will simply not work. Portland recognised that new approaches are needed and if the local industry remained unwilling to invest in its future the City would need to raise community awareness of alternative possibilities.

Many of Portland's early neighbourhoods were developed using a 15 metre wide by 30 metre deep (50 feet by 100 feet) subdivision module. Early Sydney suburbs were based on a 15

metre wide by 45 metre deep (50 feet by 150 feet) lot module while newer areas typically contain smaller 15 by 30 metre (450 square metres) lots. In the Sydney region, 450 square metres is often the mandated minimum lot size for complying development. Development on smaller lots requires substantially more documentation and a costly and often lengthy approval process. A set of development standards, and even model house designs, for lots as small as 225 square metres might overcome these time and cost limitations.

The City of Portland's competition aimed to go beyond showcasing new ideas to creating an exchange of ideas between builders and designers. It sought environmentally sound concepts that could be delivered at prices affordable to median income, first time buyers. The basis for the designs was a 7.6 metre wide by 30.4 metre deep (25 foot by 100 foot) lot with a maximum 7.6 metre (25 foot) height limit, no minimum front setback and 1.5 metre (5 foot) side and rear setbacks. A 50% maximum site cover and front-loading garage requirement also applied. In addition to these development standards, competition entrants were expected to comply with the following set of 'design values'.

- Ensure that the pedestrian entrance, rather than the one for automobiles, is prominent, and clearly identifiable from the street.
- Create a pleasant pedestrian environment by:
 - providing visual variety and interest
 - preventing large expanses of blank facades along streets
 - preventing garages and vehicle areas from dominating the views of the neighbourhood from the footpath.
- Enhance public safety by providing residents the opportunity to survey their neighbourhood from inside their homes, while preventing garages from blocking views to the street.
- Use clear transitions from public to private areas and place windows to ensure privacy for the building inhabitants and neighbouring residents.
- Provide opportunities for community interaction among residents, visitors and neighbours through creative use of public, semi-private and private areas.
- Strive to create houses with interior spaces that accommodate modern amenities and a range of lifestyle choices and family configurations.
- Seek to incorporate sustainable technologies in construction.

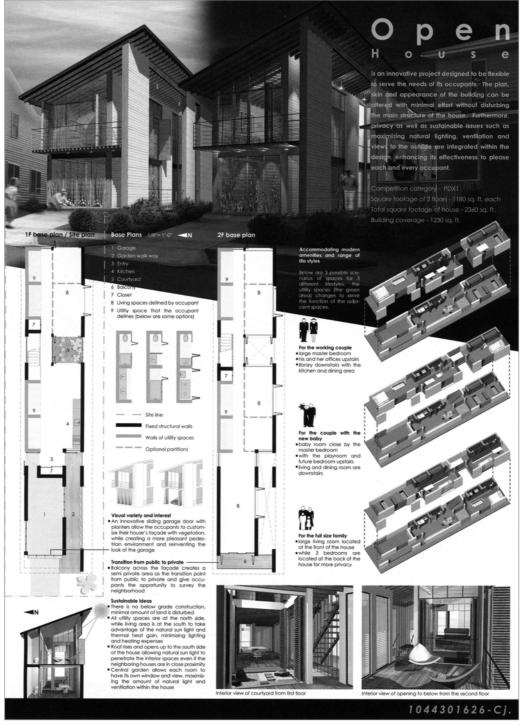
The first competition stage involved the submission and judging of anonymous entries followed by wide circulation of an idea book of about 50 designs. A judging panel of local architects, developers and builders then selected just over 20 of the submissions for inclusion in a catalogue of endorsed designs. The City Commissioner responsible for the competition observed²⁵⁴ that:

The range of architectural styles ... as well as the versatility of the designs, should prove that narrow-lot in-fill development can work for many lifestyles in almost any neighborhood. Some designs will work well for growing families while others would be perfect for smaller household units; some designs are flexible and can be added onto over the years or can be modified for differing topographies or locations. Potential residents can look to these designs for both inspiration and guidance in constructing

²⁵⁴ Commissioner Randy Leonard (December 2004). *Portland Catalogue of Narrow House Designs*. City of Portland, Oregon.

houses that fit their needs today and that will become valuable assets to Portland's housing stock. Good design can go hand in hand with affordability, livability, and convenience.

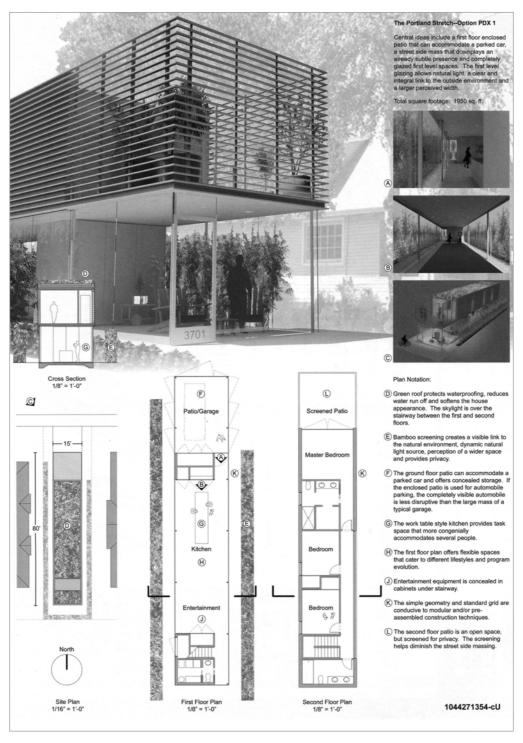
A selection from the awarded schemes in the first stage is reproduced below²⁵⁵. The first three are *People's Choice Awards*, selected after a six-week exhibition period during which the public were invited to examine the schemes and vote for their favourite design. They represent a range of styles from modern to traditional.



© 2004 Tony Wai. Vancouver, British Colombia, Canada

²⁵⁵ Source: *The Portland Catalogue of Narrow House Designs*. The City of Portland, Oregon. December 2004.

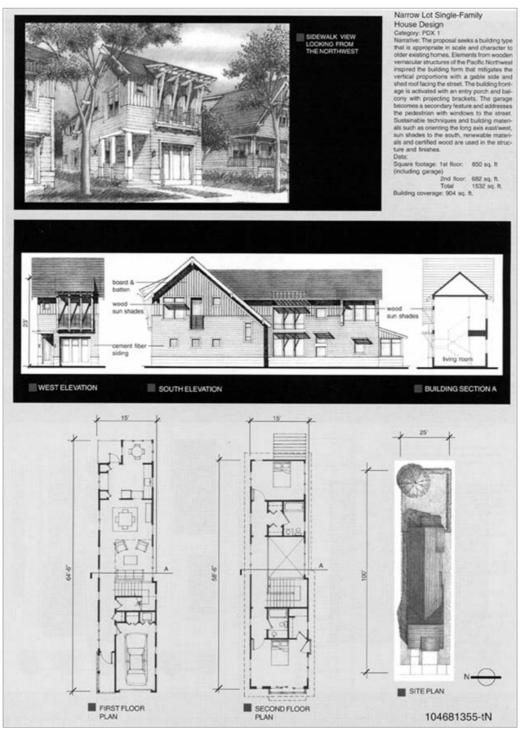
Unlike many other entries, the first scheme reproduced saved costs by avoiding below grade construction and disguised the garage with a (perhaps impractical) sliding door incorporating planting boxes. Particularly noteworthy is a design approach with fixed structural and utility services walls that permit the occupants to alter the internal arrangements to suit their particular household structure and lifestyle. The room dimensions and proportions that might emerge from this strategy are, however, less than convincing.



© 2004 Jill Dau, Blair Payson and Scott Passman. Portland, Oregon, USA

The second scheme, a jury and resident selection, is dramatically modern in character and potentially alien to a more traditional streetscape. The design ignores the northern hemisphere's most desirable south orientation and would probably have solar access

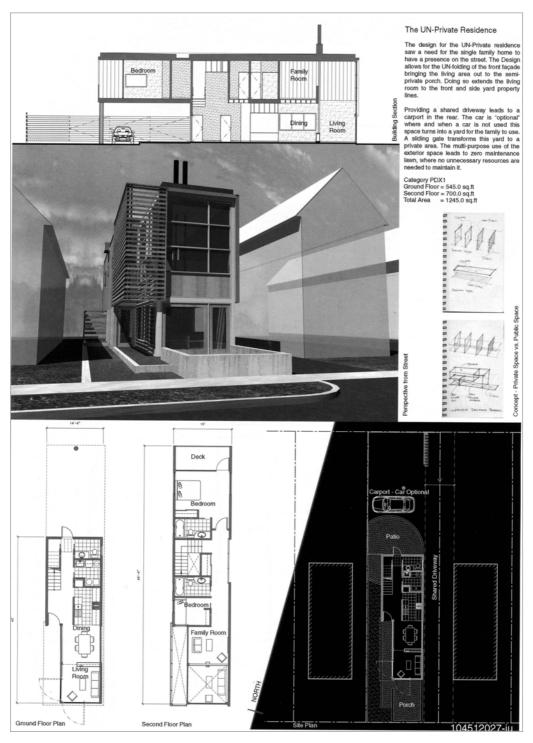
problems if the house had its long axis in an east/west direction. The completely visible car parking space is claimed to be less intrusive than a fully screened space. This may be correct given the visual strength of the screened patio off the main bedroom although the designer's argument would have been better served by showing a car in its allocated space. Bedroom and bathroom spaces are conventional in their size and proportion while a large and flexible space is provided for household activities on the ground level. The latter, to its detriment, has limited access to an external courtyard or living space.



© 2004 Roxana Vargas Greenan and Trent Greenan. Berkeley, California, USA

The third jury and resident choice is more traditional in its scale and architectural character. A visually dominant balcony reduces the impact of the front-loaded garage but, it could be

argued, compromises on the 'design value' of providing residents with the ability to survey the street from inside the dwelling. A relatively narrow hall from the front door is also accepted but the house has access to a generous rear private courtyard. A double height volume enlivens the ground floor living space and could, if necessary, be replaced by a third bedroom. The house is designed to have its long axis aligned east/west and would also be suitable for a lot on the southern side of an east/west street.

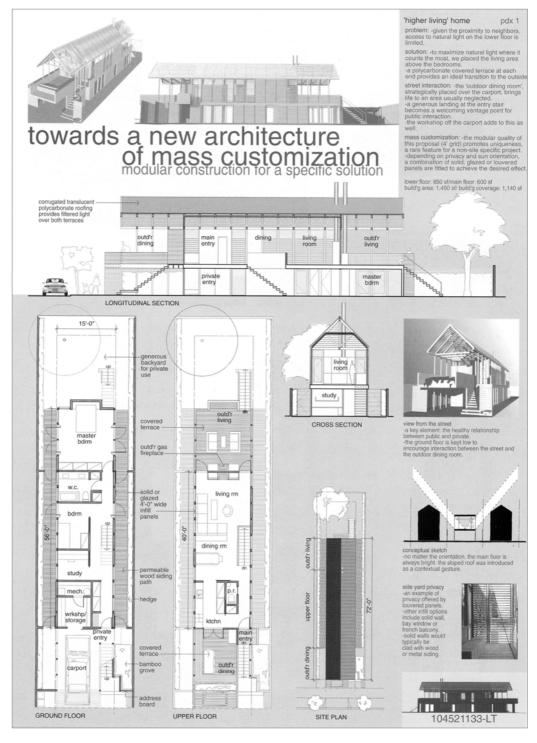


© 2004 Patrick Cheung. Markham, Ontario, Canada

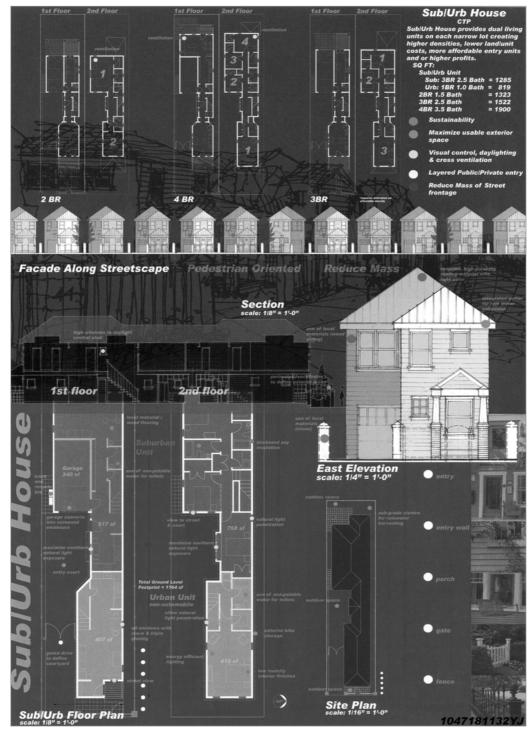
The fourth example of the awarded designs is also uncompromisingly modern. Its distinctive idea, however, is based on the fact that developing narrow lot houses in an existing neighbourhood requires further subdivision and, as a result, the opportunity to create a

shared driveway and parking at the rear of the lot. The benefit is improved street surveillance and identity but access to a private outdoor area from the living spaces is limited. The house, at around 250 square metres, encloses a large area for its two bedrooms. One bedroom is very small although a second full bedroom could replace the upper floor family room.

The 'modular' house below reverses the normal placement of living and bedroom spaces in order to maximise the natural light and sun available to internal and external living spaces. While care would need to be taken to ensure the privacy of neighbours was not disturbed, this approach offers a variety of ground and upper level private open spaces and could be located on both sides of north/south and east/west streets.



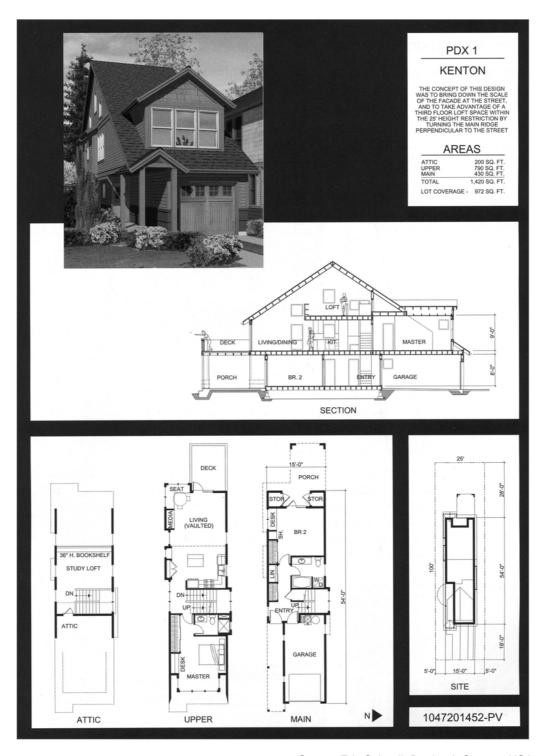
© 2004 Michel Laflamme and Jim Ralph. Vancouver, British Colombia, Canada



© 2004 Jim Kudrna, Casey J. Hull and Mack Caldwell. Norman, Oklahoma, USA

The final jury selected scheme offers two, three or four bedrooms and, as shown on the larger plan, a street facing accessory dwelling. The external character is relatively traditional. Its distinguishing feature is an internal garage located well to the rear and accessed off a driveway that doubles as a south-facing courtyard. This space may be in shade during winter but is a useful strategy for maximising light into the depth of a long, narrow house. The design appears, however, to be limited to lots either side of a street aligned north/south.

Portland's Mayor, Vera Katz, and a Commissioner, Randy Leonard, also selected their favourite scheme. In comparison with the *People's Choice Awards*, it illustrates how different the tastes and preferences of elected officials can be from their constituents.



© 2004 Eric Schnell. Portland, Oregon, USA

The design is not without merit but is the most conventional looking of all the catalogue designs. While the scheme opts for an upper floor living space it would appear there is some flexibility and this could be replaced by what is shown as the ground floor bedroom. A third bedroom or study is usefully located in the roof space. And, due to the house having a limited footprint, a generous private courtyard is available.

These illustrations show that smaller, narrow lots demand unique design approaches if they are to be compatible with more traditional housing. Compatibility is not, however, all about architectural style. Scale, massing and siting are critically important because, more often

than not, setback and space requirements result in two storey solutions. The height to width ratio must therefore be carefully handled so the house appears balanced and its narrowness and inevitable verticality is not overstated. Ensuring there is privacy between dwellings, providing adequate private open space and creating functional inside/outside relationships are equally important challenges. At the same time, residents should have a comfortable and energy efficient home appropriate to their household size and lifestyle.

The primary question is whether more traditional forms of attached housing, economically built by cottage or project home builders, provide better living and urban design outcomes than models that simply seek to partly replicate the perceived advantages of detached houses on lots with substantially greater widths.

Development standards for this form of housing in Sydney might be written to ensure new housing is compatible with an existing neighbourhood character. But no single design is appropriate for all circumstances because Sydney has a diversity of architectural styles. However, a similar catalogue of community endorsed detached house designs for lots half the width of those commonly provided might go a long way to ensuring increased density targets for new and old areas of Sydney can be met. This was the argument used to justify dual occupancy development but the design outcomes are now recognised as being poor.

Nonetheless, a catalogue that demonstrated how small lot and infill housing could be skilfully designed, harmonious with surrounding housing and economical to construct, might stimulate local governments and the industry to develop better regulatory and built form alternatives to the familiar dual occupancy model. A significant increase in the stock of affordable housing more appropriate to contemporary household groups might be a beneficial consequence.

9.10 Landcom: Manufactured homes for moderate income groups

In May 2002, Bovis Lend Lease Consulting concluded a market and product potential study into manufactured homes for Landcom²⁵⁶. Their challenge was to assess the viability of lower cost manufactured housing options that might satisfy the aesthetic and functional demands of Australian moderate-income households. The brief was based on the sensible view that demographic and economic change presents an opportunity to deliver lower cost housing product. Against this background, Bovis Lend Lease explored a number of aspects of manufactured housing as it relates to the Australian context. The following outline of the study's findings and conclusions is drawn from the report's Executive Summary.

Product assessment

Australian manufactured housing is predominantly sold for use as holiday homes, in manufactured housing estates and as rural accommodation. Bovis Lend Lease asserts that the current product range is not designed for moderate-income earners, is not cost competitive and does not have the design attributes offered by project homebuilders. A comparative assessment of 2001 prices revealed that manufactured homes are generally more expensive than conventional project homes and did not provide the brick and tile appearance favoured by new homebuyers. Conversely, manufactured homes in the US are on average 50% cheaper than site built housing. Focus group research undertaken by Bovis Lend Lease revealed that prospective new homebuyers would seek a cost advantage over project homes of at least 30% before they would consider purchasing a manufactured home.

Although the reasons for the cost advantages enjoyed by the manufactured housing sector in the US were not spelt out, Bovis Lend Lease speculated that the production

²⁵⁶ Bovis Lend Lease Consulting (May 2002) for Landcom. *Manufactured homes for moderate income groups: Market and product potential study.*

and procurement economies of scale and cheaper labour sources made off-site manufacture a more cost effective option. They also observed that although the US market has experienced strong demand for manufactured housing over the past 20 years, the market for manufactured housing had contracted in more recent times. The reason seemed to be that substantial stock inventories and loan defaults had resulted in a flood of second hand stock onto the market with consequent factory closures and withdrawal from the market by some companies.

The US provided the most relevant examples for an Australian manufactured housing product competitive with project homes in design, functionality and price. Apart from the US, Bovis Lend Lease claimed that the international experience of affordable manufactured detached housing was negligible. European and Asian examples, they said, were largely based on high-density construction and did not provide useful lessons that could be transferred to an Australian context. This is a very curious conclusion in light of the manufactured product developed in the UK under the *Kick Start* program. Most of the projects are indistinguishable from site built product and suitable for lower density attached and detached housing estates.

Market analysis

Australia's residential construction market is broadly segregated into project homes, custom built homes and manufactured homes. Project homes dominate the market due to their competitive pricing and market acceptance.

Bovis Lend Lease believes that to facilitate a broader acceptance of manufactured housing, four parameters must be satisfied. In this respect:

- Manufacturers must provide a cost effective, functional and aesthetically acceptable product,
- Consumer demand (government or private) must create an adequate critical mass to make investment in production capacity worthwhile,
- Statutory constraints must be eased to allow development on small lots and initiate land tenure reform, and
- Finance constraints by lenders should be modified to allow for different land tenure forms.

The Bovis Lend Lease analysis revealed that the majority of purchasers in the US located their homes in rural areas or manufactured home communities. Households earning substantially less than average weekly incomes and without a savings history generally chose this housing option for its lower cost. On this basis they appeared to conclude that manufactured housing would be more successful in Australian rural and satellite town communities where negative perceptions and price disadvantages would be mitigated by better integration of the housing into the streetscape and a reduction in the price advantages enjoyed by project home builders in metropolitan areas.

The consumer focus group research undertaken by Bovis Lend Lease also indicated that renting and saving to buy an existing or project home, rather than purchasing a 30% cheaper manufactured home, was preferred by participants starting their housing careers. The report's Executive Summary does not contain the stimulus material provided to focus group participants. It may be that their views were coloured by illustrations of manufactured 'homes' that looked more like site sheds than some of the better looking and better designed product available in the US and Europe.

Financial assessment

Bovis Lend Lease considered that the assessment of manufactured housing as a workable risk profile would be essential factor to ensure consumer acceptance and the

availability of finance solutions. Australian lenders do not have specific policies or guidelines that exclude manufactured housing from their lending profiles. Furthermore, the major banks had indicated that their primary assessment criteria are repayment capability, satisfactory credit history and the value of security offered. Beyond satisfying these criteria, the method of house construction was irrelevant.

However, Australian lenders were believed to have some reluctance about expanding into uncertain and potentially higher risk markets such as manufactured housing. The escalation in defaults by manufactured housing borrowers in the US had, it was stated, started a withdrawal of major lenders from the financing of manufactured housing.

Manufactured housing design

Bovis Lend Lease noted, rightly, that any analysis of manufactured housing design should consider issues associated with urban design as well as production. They go on to say that Australian manufactured housing has been traditionally associated with caravan parks and manufactured housing estates. This had led to the consumers having negative perceptions of the product and its place in more traditional neighbourhoods. These poor perceptions, they claim, are reinforced by the cheaper cladding systems and simple external designs of existing manufactured housing.

These attitudes are further reinforced by the absence of acceptable benchmarks for local manufactured housing communities or integrated manufactured housing developments. Existing developments are generally outside metropolitan area, occupied by retirees and demonstrative of the negative lot size, density and appearance attributes that make them unacceptable to mainstream buyers.

While not wishing to denigrate the quality of the Bovis Lend Lease work, these perceptions may have also influenced the structure of their research and its outcomes. Nonetheless, they correctly identify a goal in developing more attractive and acceptable manufactured housing would be to reflect the appearance of conventional project homes. This requires designs that meet the needs of families as well as small household groups combined with the use of innovative materials and design modules.

Planning review

Bovis Lend Lease briefly reviewed the NSW planning framework as local controls have a substantial impact on housing character and affordability. They noted the recent shift from prescriptive to performance-based codes and the opportunity this might provide for increased planning flexibility and innovative design solutions. The development of manufactured housing solutions in areas where this was not previously feasible might be a positive outcome of these changes.

Manufactured housing development model

A wider acceptance of manufactured housing amongst moderate income groups would, according to Bovis Lend Lease, require a significant cost differential to conventional project builder housing, attractive and appropriate designs and the use of building materials consistent with buyer needs. Designs that enable manufactured houses to be located on small lots would need to be one of the primary goals of any new model. And, they believe, success in more conventional housing estates can only be achieved if the house and land package is affordable to moderate income households.

This states the obvious. In putting forward a manufactured housing development model Bovis Lend Lease do not appear to have adequately explored the market acceptability and cost effective production of the sophisticated manufactured housing alternatives common in the US and Europe. There is no doubt the success of manufactured

housing demands a significant expansion of the local market. How this might occur is not examined in any depth.

Key findings and recommendations

The Bovis Lend Lease study generated a number of findings that did not support manufactured homes as an affordable housing option in the short to medium term. Negative consumer sentiment and reluctance by manufacturers to develop and promote suitable products were seen to be the major restraints currently preventing growth of a manufactured housing market. Other reasons were noted as being the:

- Cost differential between project homes in metropolitan Sydney and off-site manufactured homes,
- Strong negative perceptions consumers have of manufactured housing,
- Lack of designs that address the functional needs of families or small lots,
- Inability of existing manufactured houses to integrate into the streetscape as a result of their external appearance,
- Existing market and production levels that do not offer manufacturers a motivation to pursue and develop new markets, and
- Limited land tenure options that restrict the development of affordable land ownership alternatives.

Bovis Lend Lease claim that it would be inherently difficult to shift the manufactured housing industry into a different position and that without an active and positive intervention the market will lack the motivation to innovate, compete and grow. They recommended that Landcom invest in research and development to initiate this growth but note that this would clearly be a high-risk endeavour with uncertain consequences.

Bovis Lend Lease's conclusion was that manufactured housing is not a feasible affordable housing solution in its current form unless capital is allocated to evaluating its medium and long term potential, developing product, overcoming related peripheral constraints and developing a marketable package. If this was done, they recommended Landcom implement a number of actions. These, and comments relevant to this research, are outlined below.

- The first recommendation was that Landcom should encourage the State government
 to develop a SEPP for small lot housing and lobby local government to initiate its
 implementation. The Housing Industry Association had started this process when Bovis
 Lend Lease was preparing its report. As an outcome of the 2004 Premier's Forum on
 Improving New Housing Design and the trend toward smaller lot sizes there will be an
 increasing focus on this issue.
- A second recommendation was to implement a strategy to drive land tenure reform and improve land affordability. Bovis Lend Lease did not spell out why this was important. Furthermore, in light of the market's current perception of manufactured housing it is doubtful whether combining a new and different form of tenure with a different construction technique would be the optimum marketing approach.
- Bovis Lend Lease recommended that Landcom examine the commercial feasibility of using manufactured housing in non-metropolitan areas.
- They also recommended that Landcom develop manufactured housing designs for small lot developments that appealed to a broader range of households (for example, families and baby boomer couples) and mimicked the character of project homes.

Based on a reading of the Bovis Lend Lease report's Executive Summary, it would appear that their analysis lacks depth and intellectual rigour. They seem to accept the conventional

wisdom that families and baby boomer couples are the only market segments worth worrying about. Landcom is seen as the only source of development funds and no examination appears to have been undertaken of other funding options. There is no discussion on how to achieve the economies of scale or the supply chain modifications needed to make manufacturing a viable affordable housing proposition in metropolitan areas. And, in light of the fact a significant proportion of the contemporary project house is constructed off-site as components anyway, there is no exploration of how this basic expertise could be expanded into the manufacture of larger volumes or elements of houses.

Perhaps Jon Rouse, CEO of the Commission for Architecture and the Built Environment, offers a challenge to the Australian home building industry.

The answer is that the house building industry is like any other industry. If you set the right framework, if you set the right quidelines, if you set the right rules, if you give the right incentives, if you equalise supply and demand, they will respond. They will employ the skilled people, they will do the offsite manufacture, they will do the good urban design, they will do the decent layouts and they will do it for the very simple reason, because they will make more money that way in a competitive market. The analogy of the car industry is very good. If the car industry operates in a situation where actually you have two buyers for every single car that came on to the market do you think we would have the variety and the complexity of provision, the amount of segmentation in that market, the amount of customer choice? Of course we wouldn't²⁵⁷.

The local industry, however, is fragmented. Very little direct labour is employed because most companies operate as management contractors, passing the majority of site-based work to mostly self-employed sub-contractors. With the exception of the few builders who have land banks, investment in fixed assets is very low. While some have started to address supply chain issues, most builders operate loose supply chains with little in the way of formalised management and committed volumes.

This industry structure has emerged from decades of free-market responses to a fluctuating demand. It is focused obsessively on first cost rather than running costs, quality, reliability or any of other manufacturing mantras. The result is a highly elastic, relatively low-cost delivery system that makes no demands on risk capital unless the builders are engaged in speculative construction. Some of the better organised medium-sized builders come close to being the ideal 'virtual company', employing few workers of their own but operating at numerous locations.

However, around 180,000 new homes are built each year in the UK — a market within a land area not much more than the state of Victoria. The travel distances between factory and site are consequently significantly smaller making the logistics of moving volumetric or panellised system components easier and cheaper. For the Sydney GMR, with an underlying demand of around 25,000 new homes a year, it is unlikely that the investment in manufacturing facilities would be risk free. Modular systems such as the platform 1234 system, are available but if a recent report²⁵⁸ is correct they are hardly affordable. A platform 1234 one bedroom studio of 45 square metres is quoted as costing \$189,000 (\$4,200 per square metre) while a 135 square metre three bedroom pack is \$499,000 (\$3,700 per square metre). When land costs are included this is hardly affordable housing for the average household.

These are the economic, cultural and logistical changes that would have to be made if offsite manufacturing is to become a more mainstream building method in Australia.

²⁵⁷ Jon Rouse, CEO of CABE, in *Building for Life*. Transcript of the Urban Summit Fringe Debate *That this house* believes that British house builders do not possess the skills necessary to build the quality or quantity of new homes we require. Ikon Gallery, Birmingham, 31 October 2002

²⁵⁸ Galvin, N. (17 March 2005). *Upgrade to cabin class*. Sydney Morning Herald, Domain

9.10 Australian production building principles and techniques

The Housing Industry Association claims that the Australian housing is one of the country's most dynamic, innovative and highly efficient service industries. Sceptics might question the industry's capacity and real willingness to innovate without external stimulus. Nevertheless, HIA commissioned research²⁵⁹ suggests the structure of small businesses and independent subcontractors is 13% more productive and its costs 19% lower than that of the commercial construction industry. The validity of the HIA's modelling cannot be checked but it is commonly accepted that the project home or cottage builders — a mainstay of the housing industry — build more efficiently and at less cost than their commercial or higher density housing counterparts. The cost differential becomes very critical when considering how best to build affordable housing and the form such housing should take.

A recent *Sydney Morning Herald* report²⁶⁰ illustrates the dilemma. The Director General of the Department of Infrastructure, Planning and Natural Resources, Jennifer Westacott, is quoted as saying that ...the issue of affordability ... is principally market driven. The Director General commented that requiring townhouses and units in the new planned suburbs planned for Sydney's north and south west would contribute substantially to housing affordability and housing choice ...by giving people a range of products they can purchase from. She is reported to have said that: Our main objective was to get supply into the marketplace, which makes a big contribution to affordability.

There is little doubt quickly increasing supply should have some impact on housing affordability. However, if delivering affordable housing is left up to the market, or is dependent on building townhouses and units, the significant increase in lower cost stock now required is unlikely to occur. There are three simple reasons. Firstly, the cost of the new land supply will be burdened with social and transport levies. Secondly, and until convinced otherwise by demonstrably profitable and acceptable alternative, home builders will continue to see their most viable market as being 'move-up' family households seeking large detached homes. And thirdly, once construction practices move beyond those commonly used by small builders and independent trade contractors on detached housing, a raft of industrial relations awards come into play. The HIA argues²⁶¹ that these are prescriptive, inflexible and, by extension, unnecessarily costly. Accordingly, the HIA submitted that the ...serious adverse consequences to housing affordability... should be identified before there was legislative intervention to ...adopt the less flexible and demonstrably more costly industrial relations system prevalent in commercial construction.

In other words, market driven solutions cannot be relied upon to meet the housing affordability challenge. Furthermore, claiming that the answer is to increase the quantity of higher density housing in greenfield estates and redevelopment areas is equally simplistic. For cost and productivity reasons alone it would appear that more emphasis should be placed on encouraging investment in developing housing typologies that can be delivered by project home or cottage builders.

Irrespective of the building approach used there are a number of simple principles that should be kept in mind when designing housing at construction prices close to or less than those achieved by project home builders. They are briefly outlined below.

• Keep the floor plan as modest as possible. An open plan is less expensive to build and simple rectangles are always cheaper than curves or angles.

²⁶¹ Housing Industry Association Ltd. (February 2004). Response to the Productivity Commission's draft report on first home ownership.

²⁵⁹ Housing Industry Association Ltd. (July 2003). *Restoring Housing Affordability – The housing industry's perspective.*

²⁶⁰ Dick, T. (25 April 2005) *Low-cost housing is left to the market.* Sydney Morning Herald.

- Minimise the quantity of material used to create each square metre of floor space.
- Rely on simple, straightforward detailing that can be achieved with minimal training and supervision of labour and avoid complex and expensive details and methods.
- Cutting construction costs is not about complete sacrifice. Builders often offer practical, and impractical, features to catch the eye without going over budget.
- There is an intrinsic elegance in using basic, low cost materials and working with their standard dimensions to avoid cutting and waste.
- Locally available or produced materials reduce transport costs.
- Expensive finishes and finishing techniques work against a budget. In some cases
 rafters, joists, and trusses can be turned into design elements at no extra cost or
 provide the owner an opportunity to invest 'sweat equity' in completing a space.
- Affordability should consider both short-term and long-term benefits. Materials chosen for their durability, life span and low maintenance can cost more but over time savings will accumulate.
- Ensure the siting, floor plan and window arrangement encourages natural ventilation and helps with winter heating.

It is in the details, however, where more cost savings can be made. Project homebuilders constantly, sometimes rigorously, examine how to use common materials and systems more efficiently and effectively. The following checklist outlines some of the lessons learned.

Room dimensions	Preferred o	limension:	Minimum o	dimension:
Living Dining Bedroom Kitchen Laundry Toilet	3.6 metres 3.3 metres 3.0 metres 2.4 metres 1.65 metres 0.9 x 1.5 metres		3.2 metres 2.8 metres 2.7 metres 1.8 metres	
External walls	Wall width:	Studs:	Bricks:	Cavity:
Single storey	220mm	70mm	110mm	40mm
Double storeyLower floorUpper floor	240mm 240mm	90mm 70mm	110mm 110mm	40mm 60mm

External walls should be dimensioned to a 120mm horizontal module (joint plus a half brick bond for 230mm) and an 86mm vertical module (joint plus 76mm). Window and door openings should be dimensioned to fit standard aluminium frames within the brick module.

Ceiling heights are generally 2.4 metres although BASIX compliance may require 2.7 metres.

Floor slabs are generally priced as waffle pod rafts to suit M class soil conditions on flat sites. Buyers pay the additional costs incurred when a site has more reactive soils and for 'non-standard' elements such as grading, downturn edge beams and retaining walls.

Internal walls	Studs:	Lining:		
Single storey	70mm	10	10mm plasterboard	
Double storeyLower floorUpper floor	90mm 70mm	10mm plasterboard 10mm plasterboard		
Upper floors	Flo	or:	Span:	
F7 pine joists at 450mm centres	19mm particleboard or 14mm plywood		4.8 metres continuous 4.5 metres single span	

Lintels supporting upper floor joists and trusses and over windows are limited to 3.0 metres to allow flush ceilings and avoid hampers or bulkheads. F7 pine or F17 and F27 kiln dried hardwood are the preferred material. Hyspan joist and other systems are also commonly used but the same principles of avoiding bulkheads and minimising joist depth are observed.

Roofs and roof trusses	Span:	Module:	
Designs minimise the number of different spans and a 21.5° pitch is generally preferred.	600mm centres and a maximum span of 8.1 metres	300mm module precisely to minimise the number of trusses used.	

Gables are avoided where possible but when they are required are clad with flat fibre cement or fibre cement boards. Eaves are generally lined with 450 mm fibre cement although BASIX compliance may change the minimum width to ensure sun shading is adequate.

Plasterboard	Ceilings:	Walls:
MDF (preferred) or timber reveals are used at windows and doors.	10mm and no battens 55mm scotia cornices	10mm

Skirtings and architraves are generally painted 40 x 12 mm MDF. Door frames are also MDF.

Light outlets and power points are generally limited to one per room although the living room, main bedroom and kitchen frequently have two power points.

Doors sizes are also standardised with 820 x 2040mm being the preferred dimensions for external and internal doors except in bathrooms and laundries where a 720mm wide door is generally required. All doors are finished with a paint grade board.

Wall tiling	Tiling height:
Bathroom and ensuite	1800mm to shower over 900 x 900mm acrylic base 450mm over bath and bath riser 150mm over vanity and skirting
Kitchen	300mm over benches
Laundry	300mm over trough 150mm skirting

Kitchen and bathroom cabinet work is also carefully considered with cost and ease of fitting uppermost in mind. Carcasses and shelves are melamine finished, with 600mm kitchen bench tops and doors in simple laminate finishes. Space, but no plumbing or electrical outlet, is allowed for a dishwasher. Overhead cupboards are generally an optional extra. Bathroom vanities are standardised at 750, 900 and 1200mm wide with no drawers.

The staircase in two storey houses is generally limited to 15 risers of 179mm with 250mm minimum width treads and a going not less than 240mm.

While these are broad guidelines most builders also relate the length of kitchen and vanity benches, floor and wall tiling, extras and equipment (pantries, wall ovens, stoves), hot water system size and often the area of windows and doors to the house area. All these limits are intended to allow accurate costing of designs as they are developed as well as providing base building costs for marketing purposes.

The Landcom/Cosmopolitan Developments *Forest Glade* project demonstrates how these guidelines are used in practice. It shows that careful attention to design and materials efficiencies can further reduce construction costs.

Cardew²⁶² reports that to reduce total building costs the size of the houses were, at 100 to 170 square metres, generally lower than market average of 250 to 300 square metres. Modular designs, grid systems, standard units, common plumbing stacks and simple geometry were used to achieve both space and production cost efficiencies while dimensions were controlled to minimise waste, materials and labour. He further reports that while most of the designs were unique to the development, cost savings were anticipated and achieved. It would appear that the houses were built for around \$710 per square metre (September 2003 prices) as opposed to \$880 per square metre for standard project homes.

Cosmopolitan undertook a systematic review of the materials costs related to the benefits offered by the products and systems selected. The houses designs were measured against the lowest cost approach. Cardew says that the savings obtained from this comprehensive approach were around 5% of construction cost. The cost savings justified the additional time taken for the review. It is important to note that the builders did not seek radical innovations in materials and design but examined how familiar materials and systems could be used with greater efficiency.

It appears that a number of decisions that increased costs were made to achieve 'best practice' urban design outcomes. The external character created from façade variations and finishes, driveways, pergolas and the like was the main concern. The houses for the moderate-income households were not, however, stripped to minimum possible in pursuit of cost savings and the real or perceived quality was not reduced.

Cardew understand that buyer variations were permitted in order to provide as much choice as possible. This increased costs through the time required to process the variations and resolve buyer indecisions. He also observes that Landcom's experience on low and high priced projects in Campbelltown and Oatlands show that purchasers generally accept the design elements and colours offered and providing options to buyers is not necessary. Interestingly, Cardew also reports that feed back from the developer supports the findings of the UK research discussed above in that the inside of house appears to be more important than the exterior.

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²⁶² Cardew, R. (2003). Smart Housing Project Review. Unpublished draft report for Landcom.

9.11 Design for affordability

The challenge of designing affordable housing within strict materials, systems and cost limits does not mean that designers must lose their creative and innovative spark. Remaining innovative within restrictive marketing parameters or guidelines is creativity at its best, particularly if the exploration of new approaches within those constraints does not stop. And, as the design professions become more familiar with the constraints and opportunities they should be able to demonstrate that very innovative, market responsive affordable housing can be built in urban and suburban locations.

Regardless of whether the focus of the design is the individual dwelling, a cluster of dwellings or a whole neighbourhood, the house or apartment itself must work well. The planning principles behind building forms and building placement on a site are obviously important but people have to live inside them. If the dwellings are unpleasant, inefficient or inappropriate for the resident's needs the housing will fail.

House planning seems like an easy task and books, manuals and standards recommend minimum room sizes, appropriate room layouts and idealised dispositions of furnishings and equipment within them. Few, however, offer advice about what makes the interior of a home special. The designer's challenge, therefore, is to translate basic requirements into opportunities. In this respect, the patterns of people's lives should inspire the plan. But in housing that will accommodate different people, unknown to the designer, this is easier said than done. Market research and guidelines can help prevent disastrous mistakes but they cannot replace an understanding of how the home will be used.

Notwithstanding these comments, it is worthwhile briefly covering a number of issues²⁶³ that should be addressed when designing what will inevitably be, for the affordable housing market, smaller dwellings. The simple reason is that clumsy or inefficient circulation, inadequate light and ventilation and a poor use of space are often the major criticisms of housing designed to tight budgets.

Open Planning

Providing separate rooms for eating, cooking and gathering is unlikely to be possible at the lower end of the size and price range. Nevertheless, open floor plans, spatial variety and expansive views can make multipurpose rooms feel and act bigger than they really are.

The biggest design problem is defining spaces without resorting to walls that restrict views. Main living areas should open to each other and borrow space while remaining distinct. Varied ceiling heights can define two areas while maintaining openness and volume. Similarly, benches and different floor materials can be used to contain areas for specific uses while keeping them part of a larger space. Columns and beams can also be used to define functional areas while enhancing spaciousness and views.

View lines can be used to expand small spaces, particularly from the entry. A view from the entry through the length of the dwelling to an outdoor area stretches the perceived space as does a diagonal view through side windows. A house will look smaller if the initial sight line leads to a solid wall or, worse, to the kitchen sink.

• Efficient Circulation

It is critically important to develop floor plans with efficient circulation patterns so they feel as large as possible. Circulation between rooms should be simple and logical and the floor space used for traffic reduced. Minimising hallways and directing traffic around

²⁶³ Brown, D. (September 1991). *Designing denser housing.* Lecture to students at the University of NSW.

the perimeter of rooms increases the amount of usable space and, with careful design, stairs and entries can make small spaces look larger and more interesting.

The entry provides the first clue to interior circulation patterns so it should be carefully designed and properly located. Even if a separate space is not possible a raised floor or dropped beam can define the entry and signal the beginning of the home's traffic pattern. While there is a cost implication, a change in ceiling or floor height is a subtle but effective way to define areas of a room which doubles as a circulation path. Another way is a change in floor coverings. Timber or tile, for example, can define the circulation area in a carpeted room.

Obviously traffic should not be routed through private spaces or work areas such as kitchens. The less space devoted to hallways the better but if they are unavoidable use the walls for storage shelves or cupboards to maximise their usefulness.

It sounds simple and logical and in larger houses such fundamental errors of planning and design might be acceptable. But in smaller houses they cannot be ignored.

Stairways

Stairways can be used to create drama in a small house and improve its impact. Stairs located in the entry give the impression there is more room than immediately meets the eye. Open treads or railings or a rise into a volume draw the eye and add to the perceived space. Dog leg stairs provide the greatest design impact and the easiest vertical circulation because the landing makes climbing more comfortable. A window seat or open rail at the landing can open the stair to internal or external views that make it more interesting.

Light and Views

The best floor plans acknowledge light and views, especially in smaller houses where light and air can make a small plan seem to grow.

Windows are the main source of light and views in houses both large and small. But the reduced wall space in smaller dwellings means windows must be carefully used. A window that wraps around a corner, for example, has several benefits: it provides a wider view to the outside, admits more light to the inside and makes the size of the room difficult to judge. Another device is floor to ceiling windows — especially in volume spaces where the eye is led upwards as well as out.

Kitchens

Smaller houses appeal to households with lifestyles that sometimes preclude elaborate meal preparation and formal entertaining. As a result, kitchens can be smaller. But they must feel spacious by opening up to, and borrowing the space of, other areas of the house. Devices such as eating counters, pass throughs and islands help define the space without interfering with function. This also allows light and air to be borrowed from other spaces and for the kitchen to be positioned on an internal wall.

Open kitchens are always on view so the quality and placement of appliances, cabinet work and bench tops must be carefully thought through so they become part of the furnishings. If they look good the adjacent spaces will also be upgraded.

Bathrooms

Buyers and renters may settle for less, or even prefer less, when it comes to the size of a house. However, many still want spaces with some impact. Kitchens are one such space, bathrooms, particularly ensuites, are another.

External Character

Notwithstanding the constraints of construction methods and materials, there is more that can be done to enliven the exterior of smaller houses placed closer together and create interesting streetscapes. For example: breaks in a roofline, gable ends and verandas break up what can otherwise be uninteresting roofs. The impact of garage doors must be reduced by setting the garage back, turning it to face away from the street or detailing a shadow line. Courtyard walls and pergolas between the street and house can also be used to create interest and privacy. This is, of course, providing the local authority can be convinced to vary rules about what can and cannot be placed in front of the building line.

Outdoor Space

For most Australians the space around and behind the house is why they buy a detached house. But with reduced lot sizes this area becomes limited and skill is needed to maximise its value and create outdoor rooms. A small pergola covered courtyard, for example, can accommodate outdoor eating while a small area of front yard can be landscaped as an elegant entry statement. Decks and terraces are also valuable for casual outdoor activities. Privacy is critical and the design of outdoor spaces must recognise neighbouring houses.

In the end, affordable housing is a complex endeavour that is more than simply designing a dwelling, a cluster of dwellings or a whole neighbourhood. Regulatory and cost constraints are part of the challenge, but many others need or demand input into the final outcome. A level of flexibility that does not yield to each new criticism and maintains the design integrity is needed to resolve conflicts and unite competing influences. In all cases, resolving the varying aspirations, viewpoints, and expectations should inspire the designer to new heights.

9.12 Summary

- It can be argued that the real cost of housing in NSW, and in Sydney in particular, has almost nothing to do with clever design because it has almost everything to do with land values, approval costs and housing supply. Architects and designers have almost no control over these costs except on the rare occasions when intelligent planning and high level negotiation skills results in planning gains that increase densities to levels where substantial unit land cost reductions are made.
- Many believe that factory production has the potential to significantly reduce
 construction costs and improve quality but there is considerable market resistance. The
 problem may be that the word 'quality' almost always precedes 'affordable'. Few in
 government or the community regard smaller or lower cost homes as meeting their
 frequently subjective measures of quality. This view frequently surfaces when it is
 proposed that homes designed to reduce construction costs use off-site mass
 production techniques.
- Manufactured or prefabricated housing is an idea that periodically surfaces in construction reports and the architectural press.
- In his 1938 book, Buckminster Fuller *Nine Chains to the Moon* stated his belief that there were ...four overlapping applications and conflicting interpretations of the phrase 'mass production house'.
 - Repetition of a number of standard house types by site based building trades,
 - Erection on site of sectional assemblies and integrated components from a catalogue,

- Delivery of a volumetric unit prefabricated to be installed on a prepared site, and
- Supply of a production run house with full dwelling service including a finance package.

Importantly, Fuller saw the finance package as being ...a competitive shelter service industry, similar to the hotel industry, and of the mechanical standard, scope and integration of the automobile industry, engaged in furnishing on a rental basis complete scientifically evolved individual family dwelling machines, whose design, economy, standard of adequacy, equipment, production, erection, land rent, service, maintenance, moving and removal, improvement and replacement rate are the entire responsibility of the industry's central competitive corporations, and are all included in one monthly rental charge.

The evolution of factory built structures from the caravans to the mobile home or trailer park has been one path, but the quality and depth of thinking behind Fuller's competitive shelter service industry has never been fully realised.

- In respect to 'quality', the principles of good urban design are understood even if their interpretation can be subjective and open to debate. The challenge for affordable housing, however, is as much one of context as it is of individual character and construction efficiency. The latter can emerge from off-site manufacturing as well as a systematic and comprehensive analysis of conventional materials, construction techniques and the supply chain.
- According to John Miles, a Board Director of Arup Group, the key issue for transforming the home building industry into a manufacturing industry depends on convincing those asked to risk capital that it would be financially worthwhile. He said:

New products will not appear without high capital investment. Innovation can be costly, and so long as there goes on being relatively little sharing of research and development costs between manufacturers and suppliers, it will continue to be difficult to recoup initial investment. In the current climate, bespoke products are often a design requirement, undermining the affordability that can be ensured by moving towards ranges of standardised products and systems. Product availability will accelerate when house designs are tailored to the requirements of manufacturing processes.

- In Australia, it will take courageous investors to change an undercapitalised, site based home building industry where acceptable returns are made for minimal risk, even by the financially and managerially challenged. This reduces competition and innovation. It is exacerbated by a planning system unable to balance supply with demand by delivering sufficient land.
- In the UK, however, there is a belief the home building industry is changing as market forces pressure builders to reconsider customer service methods, and government action improves access, energy efficiency and acoustic performance. This has combined to force a reappraisal of housing design and the cost savings and site efficiencies obtained from offsite fabrication or manufacturing.
- Interest in off-site fabrication has also been stimulated by government funds being made available to social landlords partnering with selected suppliers through the Kick Start program.
- A similar incentive system could be put in place in Australia if substantial funding increases for social housing were made and a significant proportion of the funds directed into the development of manufacturing technologies. Without a major change

in Commonwealth housing policies this is unlikely to occur. As a result, a significant motivation for industry investment in off-site manufacturing will be lost.

- However, a manufactured housing producer may find obtaining a financially viable share of the 25,000 dwelling per year Sydney market is an insurmountable challenge in. Arguments that manufactured housing can make a significant contribution to improving housing affordability need, therefore, to be very carefully weighed against the capital risks involved.
- Initiated by President Clinton and supported by HUD, the Partnership for Advancing Technology in Housing (PATH) program aimed to develop new or innovative technologies that improved housing durability, environmental efficiency and affordability. It was clearly recognised that a national effort was required and that both government and industry should be involved.
- Avi Friedman's Grow Home is a replicable idea and a clear demonstration of how thoughtful design, combined with knowledge of a local market and contemporary building technologies, can be used to create affordable housing. Design strategies balanced perceptions of housing quality with liveable area, environmental performance and the complexity of construction, finishes and fittings. Size was obviously the first consideration followed by the elimination of waste space and the avoidance of complex construction techniques and details.
- House designs emerging from the City of Portland's competition for innovative, affordable single-family detached houses on narrow lots offer some interesting lessons for renewal of the middle ring suburbs of Sydney. They are also relevant to greenfield subdivisions where attempts have been made to increase densities by developing narrow lots with detached housing.
- The competition clearly showed that smaller, narrow lots demand unique design approaches. The analysis questions, however, if more traditional forms of attached housing, economically built by cottage or project home builders, provide better living and urban design outcomes than models that simply seek to partly replicate the perceived advantages of detached houses on lots with substantially greater widths.
- A catalogue similar to that developed from the Portland competition might demonstrate how small lot and infill housing in Sydney could be skilfully designed, harmonious with surrounding housing and economical to construct. It might stimulate local governments and the industry to develop better regulatory and built form alternatives to the familiar dual occupancy model. A significant increase in the stock of affordable housing more appropriate to contemporary household groups might be a beneficial consequence.
- Bovis Lend Lease explored a number of aspects of manufactured housing as it relates
 to the Australian context for Landcom. It found that a wider acceptance of
 manufactured housing would require a significant cost differential to conventional
 project builder housing, attractive and appropriate designs and the use of building
 materials consistent with buyer needs. The conclusion was that manufactured housing
 is not a feasible affordable housing solution in its current form unless capital is
 allocated to evaluating its medium and long term potential, developing product,
 overcoming related peripheral constraints and developing a marketable package.
- The Landcom/Cosmopolitan Developments *Forest Glade* project used modular designs, grid systems, standard units, common plumbing stacks and simple geometry to achieve both space and production cost efficiencies. Design dimensions were controlled to minimise waste, materials and labour. In a report on the project, Richard

Cardew says that the savings obtained from this comprehensive approach were around 5% of construction cost.

- The challenge of designing affordable housing within strict materials, systems and cost limits does not mean that designers must lose their creative and innovative spark. Remaining innovative within restrictive marketing parameters or guidelines is creativity at its best, particularly if the exploration of new approaches within those constraints does not stop. And, as the design professions become more familiar with the constraints and opportunities they should be able to demonstrate that very innovative, market responsive affordable housing can be built in urban and suburban locations.
- It is commonly accepted that Australian project home or cottage builders build more efficiently and at less cost than their commercial or higher density housing counterparts. The cost differential becomes very critical when considering how best to build affordable housing and the form such housing should take. In this respect, assuming that encouraging the construction of townhouses and units in the new planned suburbs planned for Sydney's north and south-west would contribute substantially to housing affordability and housing choice may be naïve.

There are three simple reasons. Firstly, the cost of the new land supply will be burdened with social and transport levies. Secondly, and until convinced otherwise by demonstrably profitable and acceptable alternative, home builders will continue to see their most viable market as being 'move-up' family households seeking large detached homes. And thirdly, once construction practices move beyond those commonly used by small builders and independent trade contractors on detached housing, a raft of industrial relations awards come into play.

In other words, market driven solutions cannot be relied upon to meet the housing affordability challenge. For cost and productivity reasons alone it would appear that more emphasis should be placed on encouraging investment in developing housing typologies that can be delivered by project home or cottage builders.

10.0 BRINGING IT ALL TOGETHER

10.1 Introduction

The creation of successful residential environments is about much more than attractive design. It is about providing opportunities that respond to the needs of contemporary households and a framework within which communities can become established and prosper. Neighbourhoods with people of different ages, economic status, lifestyles and mobility offer a number of important community benefits. Mixing housing types and uses can also contribute to the creation of more attractive residential environments by facilitating a greater diversity of building forms and scales.

Most of the housing produced in Sydney offers a limited range of tenure choices and frequently focuses on a narrow market segment or particular housing need. Even where more affordable housing is provided, it is often poorly integrated with homes developed for private rent or sale. Care therefore needs to be taken at all stages of the design process to ensure the range of housing needs is fully understood and any potential conflicts between different lifestyle or life stage groups are acknowledged.

The demand for different types of housing and for different uses in a neighbourhood clearly evolves over time in response to changing socio-economic circumstances and the perception of an area. As a result, dwellings and neighbourhoods must be adaptable to these changes.

Unfortunately, the housing typologies formerly used in neighbourhoods where mixed incomes and tenures have largely been forgotten by government and the industry. Many are simply unaware of the wide range of models that could be used. Furthermore, those with some knowledge have had great difficulty convincing the community of their viability and desirability. As discussed in earlier sections of this report, the perceived implications of unfamiliar densities are more often than not the main concern. These can be overcome. But what housing typologies constitute a 'mix' and how appropriate are they to the different households now emerging in contemporary society?

This final section explores the wide variety of housing types that might be considered when planning and developing sustainable neighbourhoods. It then goes on to explore how each might provide appropriate and affordable housing to contemporary lifestyles and household types and concludes with a discussion on how these old prototypes might be revived in Sydney's new and old communities.

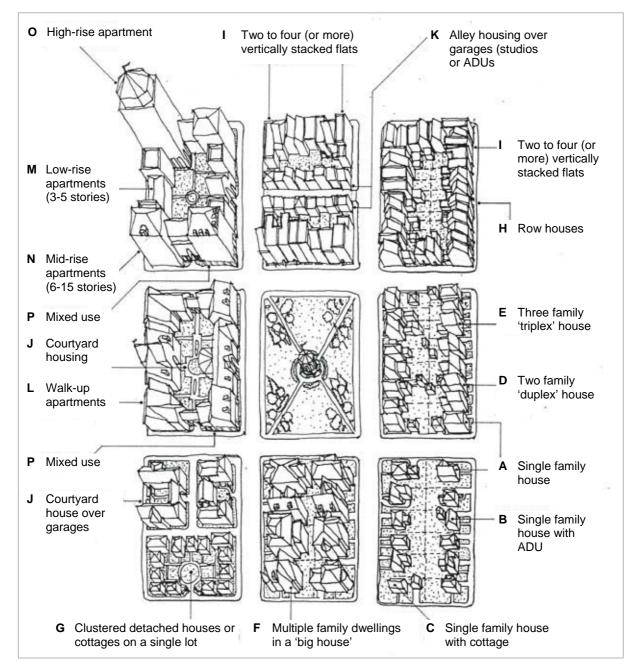
10.2 The mix of housing types

Although the single-family house, detached on its own lot, is often characterised as the typical Australian dwelling. Australians have, however, always lived in a diversity of dwelling types including detached and houses, houses and in units above one another as 'walk-ups' or in lift serviced buildings. Flats over shops and accessory dwellings, while not common, are also seen in new and old neighbourhoods. Each has its value to households with different economic abilities or family structures.

The diagram below, while sourced from a US publication²⁶⁴, provides a framework within which to review the range of available housing types. It shows, within a hypothetical block pattern, that affordable housing can relate to house types traditionally seen in Australian

²⁶⁴ Jones, T., Pettus, W. and Pyatok, M. (1997). Design for Living. Good neighbours: Affordable family housing. McGraw-Hill, New York.

cities and that it can be a pragmatic and creative response to accommodating all levels of household income and household types on less land.



Source: Jones, T., Pettus, W. and Pyatok, M. (1997). Good neighbours: Affordable family housing.

Four basic dwelling type groups can be described and further subdivided as follows:

Detached houses, each with an external entrance from a street or shared court

- A Single-family house
- B Single-family house with an accessory dwelling or home office unit
- C Single-family house with a small cottage on title
- D Two family 'duplex' house
- E Three family 'triplex' house
- **F** Multiple family or household dwellings in a large house
- **G** Clustered detached houses or cottages on a single lot.
- Attached buildings, each with an external entrance from a street or shared court

- H Row houses
- I Two to four (or more) vertically stacked units
- J Courtyard housing
- K Alley housing over garages as accessory or home office units
- Multiple unit buildings where dwellings are entered from common stair or hall
 - L Walk-up apartments
 - M Low-rise apartments (maximum 5 stories)
 - **N** Medium or mid-rise apartments (6 to 15 stories)
 - O High-rise apartments (over 16 stories)
- Residential use above other uses (commercial premises or shops)
 - P Mixed use

Importantly, all but the lift-serviced apartment forms can be built using a construction technique familiar to most buyers, renters, financiers and builders: brick veneer. Building Code of Australia requirements for fire resistance, emergency escape and noise separation must be obviously met but systems to handle most circumstances are now readily available.

When combined with the local context, site constraints, budgets and marketing considerations, an innovative design and development team will create variations of this basic range and plan forms within it. These should respond to a finely tuned understanding of the target lifestyle and demographic market niches. In the end, the goal should be to use multiple dwelling typologies to address multiple price points, achieve faster sales and reduce market risk, and develop a diverse and attractive neighbourhood.

The diagram shows a hypothetical block pattern and mix that raises a cautionary note. Mixing housing types within a single block presents a marketing and design challenge that should be handled with care. Even in areas where people are extremely comfortable with social diversity some arrangements, such as directly adjacent or opposing dwellings at different price points or with substantially different tenure structures, can create perceived problems. The New Urban principle of changing prices, dwelling types and tenures at the mid-block boundary helps address this issue. In other words, neighbourhoods that offer a successful mix of housing types should not be arranged at random. They should have subtle, comfortable hierarchies, be unified by a consistent architectural character, and should have carefully planned shifts between different housing types.

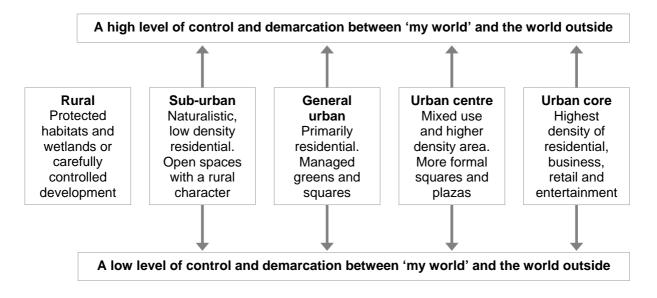
Irrespective of how well individual dwellings are planned and structured, a poor community outcome is likely if the public realm is poorly executed. The richness and sense of quality seen in the best neighbourhoods comes from building design and careful consideration of the spaces and interfaces between. There are many appropriate design responses and quality is perceived in many ways. In order to be responsive and properly fit the different context of each site, a diverse range of approaches must be recognised and assessed. All the components that make up a place must be designed and constructed with a clear vision of its ultimate character and quality in mind.

The best neighbourhoods do not comprise buildings, road and the bits in between. Instead, when elements fit seamlessly with one another they contribute to a sense of quality and place. When combined in a coherent way — be it deliberately uniform or deliberately varied — they build up to a larger scale that is understood at, and connected with, the human scale. The same can be said of the need for a seamless fit between house, life stage and lifestyle.

10.3 Fitting house type to life stage and lifestyle

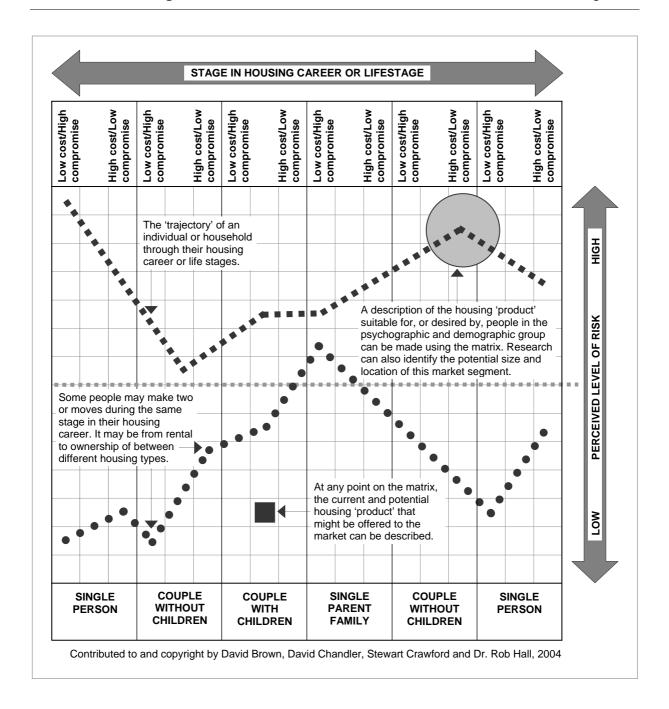
The simple demographic categories that were once the foundation of design briefs and marketing strategies have become less relevant and extremely unreliable. The challenge now is to distinguish between market segments defined by their demographics — sometimes called life stage or housing career — and the subcultures cutting across demographic and socio-economic classifications and are defined by their lifestyle values. Differentiating and segmenting the population by these values subcultures helps designers understand and accommodate the meanings placed on house and community by each.

The Transect model, discussed above, provides a framework within which the diversity of household needs and lifestyles now evident in the market can be profitably accommodated by the development industry. It does not, however, acknowledge the differences between people in the level of control and demarcation they want between 'their world' and 'the world outside' outlined in Section 5.5. Because reality is always more complex, there are many other differences across a wide spectrum of issues that could be incorporated. Nonetheless, the horizontal planning model can be overlaid with vertical elements that respond to the current and future economic, social and housing needs of a constantly changing market. A basic framework, reflecting the desired levels of social and environmental control, is expressed in the diagram below.



The same thinking can be applied to the product development matrix also discussed in Section 4.11 where it was recognised that when choosing a particular housing product, a household's purchase, rental or investment decisions will be based on a balance between how much they can afford (high cost versus low cost) and the product or location attributes (most compromised versus least compromised). This decision framework is relevant for any household irrespective of their stage in a housing career, their life stage. These were discussed in Section 4.6 and can be most easily distinguished by the traditional transition through different relationships from the time they leave home: from being single to forming a couple relationship (without and with children) and back to being single. In between, an individual might return home, become single after a relationship breakdown or become a lone parent. At each point in their housing career, however, they will need accommodation that is appropriate for their financial resources and household size.

From this thinking, and discussion with associates during the course of this research, a more sophisticated matrix emerged that enables the housing career trajectory of an individual, or group of like-minded individuals, to be plotted and their housing needs identified.



It is not difficult to imagine how this tool might be used to establish a research brief that will:

- Define the demographic (life stage) and psychographic (lifestyle) character of various household types as well as their size and location,
- Identify household and individual housing preferences related to their income and willingness to 'risk' an engagement with different housing types, and
- Provide valuable information to a developer's design and marketing consultants.

For example, a research brief might test a number of product propositions among groups of young single people. Some, for reasons of location and cost might rent, despite what others might see to be the risks, a single room occupancy unit in an inner urban location. Another more risk averse group, with slightly higher incomes might be comfortable renting a suburban accessory dwelling. Others might be able to afford to move from home but, for a number of

reasons, see renting or purchasing as threatening their security or well-being and elect to live in the parental home. And individuals on high incomes might see the purchase of a small apartment in an inner urban high-rise or a 'big house' unit in a greenfield development.

Speculations of this nature are very useful at the beginning of a project when the possible mix of dwelling types and target markets are being considered. An experienced team aiming to develop innovative mixed income/mixed tenure will canvass all the options and undertake the necessary research to determine the mix that maximises development yield or minimises the project mix.

10.4 Creating new models of affordable and accessible housing: RealWorld

Understanding the current mismatch between housing need and supply and then developing practical housing solutions capable of transparent assimilation into new residential projects is not, however, without risk. Clearly, the possibility of making a mistake on untested models is not a risk most developers, or their financiers, would willingly take. Government intervention and its active financial and regulatory support for the testing and demonstration of new models is now required.

Landcom and the Department of Housing both have a distinctive capacity, if not the will, to influence the shaping of new urban communities with a sufficient scale to achieve the reality of economic, social and environmental sustainability. They also have the ability, through collaborative partnerships with the private sector, or engagement with not-for-profit agencies, to actively participate in offering new housing models that significantly broaden the range of housing supply. The RealWorld project discussed earlier was one way these necessary partnerships could be established and a demonstration project implemented²⁶⁵.

Central to the theme of such a project would be a recognition of, and response to, the diverse needs of contemporary and emerging household groups. Many of these, through traditional stereotyping, are often not considered as a viable market by the industry and government. They are thus denied access to what should be an attentive, innovative and inclusive mainstream housing market supply.

A core thread of an initiative such as RealWorld would be to ensure a thoughtfully graded and balanced set of new housing choices is created. Commercial success, however, should not be overshadowed by the competitive financial capacity of higher income earners or those with substantial equity from the sale of an existing dwelling. Conversely, a disciplined approach would be needed to ensure that RealWorld offers a thoughtful range of product and price entry points for a wide range of owner, renter and investor income profiles. Some product solutions would present pathways to the later enhancement or expansion of dwellings. Others would aim to enshrine desirable longer-term outcomes by exploring tenure and occupancy options that may need certain concessions as long as they remain in their initial configuration. No solution should be so inflexible that it fails the test of adaptability.

An additional planning consideration must be to avoid creating socially and economically homogenous enclaves or the clustering of household types such as the aged or disabled. The aim would be to permit, or encourage, housing for these groups to enjoy active engagement with the general community. Technology may, in the aged and disabled housing context for example, provide innovative, locally delivered 'back of house' care services linked to more intensive and regional support networks when needed.

The RealWorld initiative emerged from the initial stages of this research and a realisation that the current housing supply model is unsustainable and constrained by historical entry points

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²⁶⁵ This section draws from a detailed proposal put to Landcom by Wentworth Brown Pty. Limited in April 2004.

that discriminate against many existing and emerging demographic and attitudinal groups. These include young and old singles, aged couples, and low to moderate-income earners such as teachers, nurses and doctors. This discrimination is presented in the physical, economic and social barriers created by public (regulatory) and private (industry culture) approaches to neighbourhood planning and dwelling design. A poor understanding of social and demographic trends and a consequent low interest in inspiring alternatives mostly defines these approaches. For example:

- Physical discrimination is seen in the size, design and accessibility of many houses.
 Most lack an internal response to ethnic or cultural requirements or they ignore the
 needs of particular occupant groups. Most of the industry's offers currently reflect the
 perceived needs of a diminishing but financially secure market segment prepared to
 outbid those less able.
- Economic discrimination occurs through a lack of targeted entry points for both owners and renter occupiers. This effect creates a focus on a completed physical outcome rather than the pursuit of viable tenure alternatives such as long leases, communal ownership or partial fit outs and adaptability. Solutions that might be considered in this context should not contemplate equity participation with financial institutions or tax driven alternatives, as these require broader scale responses than necessary in RealWorld.
- Social discrimination initially occurs from a perceived market resistance driven by the NIMBY syndrome. Regulatory and industry responses are found where new projects are proposed in developing areas as well in existing urban areas in the process of change. Social stereotyping and intolerance of difference has historically (and hysterically) been governed by what may have been the occupants of assisted housing. The RealWorld challenge is to stimulate the community, and housing providers, to identify with less fortunate households who do not qualify for assisted housing or those experiencing changed social, physical or economic circumstances.
- Key dwelling inclusion or design criteria must embrace adaptability, accessibility and sustainability while key neighbourhood design criteria must include transparent occupancy and the avoidance of enclaves. Both must ensure residents have choice in the level of control they have over their internal and external environments.

Government and industry have recognised, and are addressing, the issues of environmental sustainability and are pursuing better urban design outcomes. The social, economic and spatial planning aspects of sustainability, and the Triple Bottom Line business approach, must now be brought to the forefront. Those who provide leadership and innovation in this regard will establish new performance benchmarks for the industry and regulators.

It is not, however, desirable, or possible, to simply assign the design or development of built outcomes to any specific group of housing providers because the majority will tend to fall back on traditional models. The critical methodology would be to identify the range of household types/household attributes and to imagine a range of practical economic, spatial and occupancy access responses that can then be tested using trade-off research techniques. The matrix outlined above would provide the necessary framework for this work.

A palette of diverse product opportunities that would help shape the inclusive and responsive thrust of the RealWorld initiative would emerge from the rigorous process of analysing and completing the matrix. The project, and its planning, design and delivery models, would create an insightful, learning and evolutionary demand by mainstream consumers and an industry response that offers more examples of practical and viable alternatives.

It requires, however, a level of longer term and creative thinking beyond many in government and the development industry. Few wish meet, or even contemplate, the policy and design challenges required. These include how to design 'things' such as:

- Public spaces that, depending on their behaviour and social preferences, bring people together or permit them to remain apart,
- Clusters of homes that maximise or minimise chance encounters.
- Higher density housing that does not feel overcrowded but helps achieve the wider aims of housing diversity and public transport viability,
- Residential environments that encourage collective identity and responsibility,
- 'Walk to' neighbourhood centres that residents prefer over major shopping centres for their day-to-day needs,
- Establishing safe street environments, and
- Optimising Triple Bottom Line and infrastructure outcomes.

In order to address these issues, and many more, it is necessary to expand the traditional scope of 'design' to include the expertise of many. Effective urban planning can no longer be done by some creative genius, or even elected officials, sitting in isolation from the economic, social and environmental drivers of a community. Developers and government can no longer seek the middle ground and create new paradigms of homogeneity. Straddling the fence in a rapidly changing and fragmented market will not maximise profits and value, minimise competition or achieve broader social and environmental goals. The RealWorld initiative would aim to address these issues.

Both Landcom and the Department of Housing are, or can be, key players in the Sydney housing market. Both should show in all their projects how better planning, social and environmental outcomes can be delivered. One their major challenges, however, is the resistance of housing providers to respond to broader community needs through the development of new product and access solutions. Landcom, to date, has avoided direct involvement with construction of the final product as it is sensitive to industry attitudes and its potential exposure to consumer dissatisfaction and complaint. The Department of Housing can, and does, produce housing units but only for its immediate client base.

A circuit breaker is now required to facilitate the necessary step changes in how the future supply of housing is planned, delivered and accessed. There is potential to create a lift in industry knowledge and intellectual property. And there is a need for a clear commitment to the delivery of models such as RealWorld. This offers Landcom and the Department of Housing an opportunity to be leaders, facilitate change, share market risk and leverage through partnerships new design and delivery approaches.

Achieving RealWorld's objectives will, however, demand a proprietor's dedication to establishing its vision and bringing it to completion. To help achieve this end, a Mission Statement and an initial set of objectives are outlined below.

Mission Statement

RealWorld is an innovative development initiative aimed at stimulating a better understanding of, and active interest in, how significant areas of housing market failure can be addressed through a partnership between government and industry. As such it will introduce new housing choices offering:

- Practical and commercially focused design, delivery, environmental and social benchmarks to assist the development and housing industry's future supply, and
- A market tested base for planning guidelines aimed at improving the affordability, accessibility, choice and quality of housing and neighbourhoods in NSW.

RealWorld will provide Landcom and/or the Department of Housing with:

- A 'real life' framework for harnessing, testing and coordinating new ideas and management strategies, particularly the social dimensions of Triple Bottom Line management and reporting systems,
- A valuable store of intellectual property (market research data and housing designs) that it may make freely available to the industry to advance the improvement of future housing supply, and
- Recognition and respect for RealWorld's innovations and initiatives.

Objectives:

- A. Develop a matrix of housing and access options that fit with evidence based needs. Use the matrix to establish a set of planning and design principles that maximise the inclusive potential of the RealWorld proposition.
- B. Employ leading edge research techniques to identify and confirm the housing and access options and the market segments that should be able to find accessible and affordable housing solutions. Create a high level interest in the future supply of housing based on the practical application of the matrix.
- C. Implement a partnership approach with key stakeholders (a Council, housing providers, industry organisations and user groups) to both inform and invite compatible contributions. Ensure that the stakeholders see their inputs are recognised through a credible response to the potential threats and barriers that may create resistance to RealWorld's desired outcomes.
- D. Develop a palette of desired product solutions or outcomes that determine the initial principles and planning disciplines for the new neighbourhood and housing formation approach envisaged. But, in doing so, avoid over-prescription by setting owned goals and understandings that maximise the potential for design innovations and their practical adoption.
- E. Provide proprietorial leadership by matching rhetoric with action. Be prepared to create and deliver a range of housing models that will make future access to such product easily available (with conditions). And show that the market responds to solutions that may have previously not been contemplated or considered as impossible or risky by the industry and regulators.
- F. Explore collaborative product development and delivery arrangements to encourage new market players (including financiers/investors), shape the evolution of existing developers and builders, develop a market interest in leading edge responses and leverage the efforts of single champions by creating many champions.
- G. Develop a set of message packages that guide the recipient through the matrix of product solutions and the work being undertaken to develop the RealWorld model.

Create wide community and market interest in its reality, and useful feedback, through newsworthy and informative promotion techniques.

- H. Continually expand and personalise the matrix of household types that RealWorld responds to by building sets of personal stories of real circumstances that allow the community to identify and support the project's Mission. In doing so, ensure that the product is seen to be mainstream, not threatening and, above all, that it creates social, physical and economic value.
- I. Establish an early display environment that shows the physical realisation of RealWorld's objectives by creating a 'street of life' rather than a 'street of dreams' that might quickly break down in the neighbourhood proper. In doing so, engender an enduring commitment to all aspects of the product and its delivery methods.
- J. Establish a debt of recognition and respect for RealWorld's initiatives such that Landcom or the Department of Housing are regarded as credible custodians of similar urban developments in the future. In this endeavour, create the initial market 'stretch' that encourages a gradual 'raising of the bar' towards even higher levels of market responsiveness and the inclusion of real world households in future projects.

Landcom or the Department of Housing can establish both recognition (the debt of gratitude) and ongoing innovative leadership through an investment in research, product development, market innovation and supply chain education. This will add value to their portfolios and, through the trust generated, encourage greater flexibility from consent authorities as both the organisation continues to make a credible contribution to the real world's future housing supply. This will reduce the growing pressure for government to provide support to households falling through the gaps as a result of market failure.

10.5 Creating a framework for change

The Foreword to this report comments on the common threads found in local and international studies on housing affordability, demographic and attitudinal change, and the creation of sustainable urban environments. All outline the challenges to be overcome if sustainable communities with equitable access to affordable housing and community amenities are to be created. A number suggest a framework for change.

- Urban development has a profound effect on society but the connections between
 urban sustainability, economic effectiveness, physical infrastructure and place are often
 lost on policy makers and those responsible for policy implementation. Insightful
 perspectives and appropriate blueprints for urban development will not be achieved
 unless the critical relationships between housing supply, health, education, law
 enforcement, economic growth, employment and the environment are understood.
- Achieving a shared view of the value urban development has to society is the key to creating economically, socially and environmentally sustainable communities. As a consequence, rhetoric must be replaced by informed, rigorous, harmonised and properly funded government, industry and community action.
- Successful developments bring together all stakeholders, including end consumers.
 Success is not achieved by devising schemes in isolation, architectural determinism, arrogant designers or developers, poorly informed communities or local authorities more concerned with politics than improving life for their constituents.
- The greatest challenge to improving affordability, neighbourhood quality and design is removing the *anywhere*, *everywhere* approach to development policies. Good delivery

demands a rational, place based planning system built from a clear understanding of the market, the motivations of all stakeholders and how the product is perceived.

- Each neighbourhood or site, new or revitalised, must be treated on its own merits because a solution for one situation is unlikely to be suitable in another. Integrated policies and actions, responsive to context, are required and the dull apparatus of minimum standards should be applied with enlightened and intelligent flexibility.
- Public intervention is the only answer to reducing market volatility and supporting
 housing innovation. State and local planning authorities, and the community, need to
 have a deep understanding of the processes that reduce housing choice or create
 unsustainable communities. Realising optimal outcomes demands expertise, vision and
 respect for the contribution each player makes to the initiation and delivery process.
- Creating affordable housing in the right location is as much a challenge as building
 enough in the first place. Low and moderate-income households must have access to
 affordable housing in their community or location of choice. Social housing must not be
 isolated from transport, community services or employment opportunities.

Underlying each is a view that all the stakeholders must work collectively to develop a shared view of the issues. identify solutions and achieve the desired outcomes. However, long-term policy development and the implementation of actions to create a more equitable urban environment demands a bipartisan commitment based on alliances between government, private sector and professional organisations and the wider community. If urban development and housing are a central concern of government, government must therefore take a leadership role in creating the necessary commitments. The development of a Metropolitan Strategy for Sydney offers a catalyst for change and leadership. But the Department of Infrastructure, Planning and Natural Resources cannot do it alone. A 'whole of community' approach is required.

But how can a workable alliance between the State government, local government, private sector and professional organisations, and Sydney's varied communities be established? How can communication settings be created to ensure, among other things, that:

- There is a healthy and sustained debate on urban development and housing issues,
- Proposals likely to change, or have an impact on, fundamental community beliefs are thoroughly considered rather than dismissed through fear or lack of knowledge,
- The State government and local governments develop, coordinate and promote their visions of better urban outcomes in ways that clearly demonstrate a considered response to community concerns,
- Builders, developers and the design professions are prepared to invest in new product that is economically, environmentally and socially sound, and
- Resistance to change is reduced by positioning and communicating new approaches to housing and urban development from an evidence base that proves they offer superior outcomes for home buyers and renters?

Changing beliefs and building partnerships will not happen overnight. There are, however, a number of leadership and process models that might offer a framework on which to establish a robust change process. The two most interesting and relevant are the UK's Commission for Architecture and the Built Environment (CABE) and New Zealand's *Urban Design Protocol*.

Commission for Architecture and the Built Environment

CABE calls itself an executive non-Departmental public body and is funded by the Office of the Deputy Prime Minister and the Department of Culture, Media and Sport. According to its website, the organization will soon be established as a statutory body. The organisation ...inspires people to demand more from their buildings and spaces²⁶⁶ and believes well-designed homes, streets, parks, workplaces, schools and hospitals are a fundamental human right. Good architecture, landscape architecture, urban design and spatial planning are seen to have ...a positive impact on every person every day. As the national champion for better places, CABE draws on the expertise and experience of a broad range of individuals and organisations. It makes the case for change, gathers and promotes evidence, and provides education opportunities and direct help on individual programs and projects.

We motivate those responsible for providing our buildings and spaces to design and develop well. We demonstrate to those clients that investment in excellence will pay back many times over through a more productive workforce, more contented customers and a healthier bottom line.

Its aims are to:

- Breathe life back into places suffering from economic and social decline, restoring community identity and civic pride and attracting investors and visitors,
- Help deliver better public services, through a direct impact on the quality of healthcare, education and welfare services.
- Promote value for money by reducing the lifetime costs of buildings and improving their performance,
- Help reduce crime and anti-social behaviour by creating places that foster community ownership and eliminate physical opportunities for vandalism, violence and theft, and
- Promote more environmentally friendly ways of living.

Links and strategic partnerships with central and regional governments, local authorities and housing associations are fundamental to CABE's activities. Publicly funded or promoted projects are the major focus of its work although it does become involved in private sector projects through a design review program. Partnerships involve assistance with projects forming part of a single programme, or funded through the same organisation, as well as advice to the funding body about issues of policy and process. Formal programs include:

- Support to public and private organisations, particularly people charged with delivering or procuring new facilities or buildings and those involved in setting the policy context for development and the built environment,
- Advice and design reviews to authorities and others on the design of development projects and proposals likely to have a significant impact on their environment,
- Research to identify and promote compelling examples of how good design improves economic outcomes and builds community,
- Policy development across a range of connected themes such as planning, construction, public buildings, commercial offices and sustainability so design is at the heart of government and industry decision-making,

 $^{^{266}}$ Commission for Architecture and the Built Environment web page: www.cabe.org.uk.

- Building capacity and competence across the professions and agencies that change and manage the public realm, and helping people understand the nature and value of well-designed buildings and spaces, through an extensive catalogue of publications, conferences and education activities,
- Ensuring CABE's activities are responsive and relevant to local issues in different parts of the country, and
- Building for Life, a joint initiative between CABE, the Civic Trust, and the House Builders Federation to promote design excellence and celebrate best practice within the house building industry.

CABE, as a single organisation, engages in activities undertaken in NSW by a number of different individuals and organisations. For example, the Government Architect is, and should always be, a 'design champion' within the State government, regional design review panels have been established under SEPP 65, the Urban Design Advisory Service published a number of credible urban design primers, various government departments undertake studies of relevance to the built environment, and statutory bodies and local governments commission research. There appears to be no common framework for managing and coordinating all this work, or promoting the results and benefits outside government. Some worthwhile work probably never sees the light of day. But public funds that should benefit the community are being spent. A consequence is that healthy debate on, and public awareness of, urban development and design quality in NSW is limited by the lack of an adequately funded body similar to CABE.

New Zealand Ministry for the Environment *Urban Design Protocol*

Another model worthy of consideration, by itself or associated with a NSW 'design champion' organisation, is New Zealand's recently promoted *Urban Design Protocol*⁶⁷. Developed as part of a program to establish public sector goals for socially, economically, environmentally and culturally sustainable development. Four of the relevant, 'motherhood', goals are to:

- Grow an inclusive, innovative economy that benefits all by adapting to change, increasing employment and reducing inequalities,.
- Maintain trust in government by working in partnerships with communities, providing strong social services, building safe communities and promoting community development,
- Reduce inequalities in health, education, employment and housing, and
- Protect and enhance the environment.

The *Urban Design Protocol* aims to provide a platform to make New Zealand's towns and cities more successful through quality urban design. The definition of 'urban design' is extended well beyond that traditionally used by the design professions and is seen to seven essential and integral elements. These are quoted below.

- Context: seeing buildings, places and spaces as part of whole towns and cities.
- Character: reflecting and enhancing the distinctive character, heritage and identity of the urban environment.

²⁶⁷ Ministry for the Environment (March 2005). New Zealand urban Design Protocol. Government of New Zealand, Wellington.

- Choice: ensuring diversity and choice for people.
- Connections: enhancing how different networks link together for people.
- Creativity: encouraging innovative and imaginative solutions.
- Custodianship: ensuring design is environmentally sustainable, safe and healthy.
- Collaboration: communicating and sharing knowledge across sectors, professions and with communities.

The *Urban Design Protocol* is a voluntary commitment to undertake specific urban design initiatives by central and local government, property developers and investors, design professionals, educational institutes and other groups. Parties to the *Protocol* agree to support and demonstrate its principles and make demonstrable progress towards achieving its vision. Their collective actions, it is believed, will make a significant difference to the quality of New Zealand's towns and cities. In support, the Government has committed to provide leadership with supporting resources and an action program. These will endeavour to build the capacity of organisations to deliver quality urban design, provide guidance, raise community awareness, and ensure the *Protocol's* key messages are clearly understood and implemented. The *Protocol* has no force in law but depends on cooperative action built from an understanding of the evidence that quality urban design has economic, environmental, social and cultural value.

Not unlike CABE's objectives and established programs, the *Protocol* aims to:

- Create a national cross-sector commitment to quality urban design,
- Provide a national resource of tools, actions and experiences,
- Set up partnerships between government, the private sector and individuals, and
- Increase the awareness of quality urban design and demonstrating its value.

Some might question the relevance of urban design to the affordable housing issue. But, as argued at various places in this report, the ability to rent or buy affordable housing is a significant factor in the economic capacity and competitiveness of cities, states and nations. Evidence shows that quality urban design has a significant positive effect on investment returns, management and maintenance costs, workplace productivity, the diversity and adaptability of the building stock and other benefits at the neighbourhood and city level.

Urban design is about making the connections between people and places, between public and private space, between the natural and built environment, between movement and urban form, and between the social and economic purposes for which urban space is used²⁶⁸.

In this respect, a sustainable and successful city or neighbourhood will offer inclusive and equitable access to jobs, affordable housing, services and community facilities for the young and old, low and high income households, the able and the disabled.

It might also be argued that the UK, with its significantly larger population, can afford to fund an organisation to advocate the benefits of quality urban design. But NZ, with a population of four million in 2003, appears to have put an equally substantial effort into initiating the

²⁶⁸ Ministry for the Environment (March 2002). *People + Places + People: A design guide for urban New Zealand.* Government of New Zealand, Wellington.

necessary cultural changes within government, the urban development industry, the professions and the community.

However, creating a culture to realise the benefits of quality urban design cannot be achieve by political edict, doorstop statement, legislative action or short conferences. All might be part of a communications mix but, if overseas experience offers any lessons, properly addressing the issue of urban design, and achieving cultural change, demands leadership, coordinated thinking and a long-term structured approach. Realising the benefits of quality urban design requires action across a wide range of sectors, organisations and professions.

The emerging Metropolitan Strategy for Sydney should be the catalyst for change. What NSW now needs is a network of 'design champions' lead by, and with high level political support from, the State government. As the NZ Ministry for the Environment recognises, 'urban design champions' need to be:

- Passionate about achieving a quality urban environment,
- Able to influence people to make urban design a core value of their organisations,
- Respected for their opinion,
- Good communicators with links inside and outside their organisations,
- Able to call on urban design technical and professional support, and
- Prepared to promote the long-term picture and develop an urban design vision within their organisations²⁶⁹.

Some of the advocacy work is already being done in NSW but links across State government departments, statutory authorities, local governments, professional and industry organisations, individuals and community organisations needs to be established. CABE and the New Zealand *Urban Design Protocol* offer good examples of organisational structures that bridge the gaps to raise awareness and facilitate change. A carefully considered replication of these useful models should be implemented and funded as a priority.

10.6 What happens if nothing is done?

There is no single solution to the affordable housing challenge. But what happens if governments and industry cannot develop a cohesive partnership to address the challenge of ensuring affordable housing is available within the sustainable communities Sydney's Metropolitan Strategy aims to create? Among many other impacts:

- There will be an increasing mismatch between what developers and builders supply and what the market demands.
- The middle and upper income markets on whom many builders and developers depend will shrink and this will inevitably lead to an industry shakeout and the loss of jobs.
- There will be many more households in stress and a consequent increase in social and neighbourhood stress.
- The economic competitiveness of NSW will be reduced and fewer jobs will be created.

²⁶⁹ Ministry for the Environment (May 2005). *New Zealand Urban Design Protocol* — *Appointing an Urban Design Champion*. Government of New Zealand, Wellington.

 The pressure for government intervention will increase, more regulations will encumber the industry, the increased costs will be passed on to buyers, and land and housing prices will continue to rise.

It is hard to develop and design affordable housing. But government and the industry are ignoring an increasingly important market. Unfortunately, many in the industry, regard it as a complex and intractable problem ... 'a government problem'. Single-issue solutions are not the answer. And directives that force private sector involvement will create conflict rather than stimulate cooperation with those who can deliver the affordable housing NSW needs now what it will need over the next 20 years.

There is a demand to recognise the diverse housing needs of today's households and expand the range of product offered. Straddling the fence in a rapidly changing and fragmented market will not increase profits or reduce competition. Straddling the fence will not achieve the social, environmental and urban quality goals government and the community now demands. Straddling the fence will slowly destroy your business.

By responding to the needs of those at the tough end of a growing housing divide the industry has the chance to grow. Affordable housing represents a huge, untapped market for its design, construction and financing skills.

Meeting the needs of today's households demands leadership and partnership. A shared vision and a united effort between public and private interests are essential first steps. Without them, NSW will divide into a state of housing haves and have-nots. Without them, the economic competitiveness of this State will deteriorate. Without it, the housing opportunities and choices available to future generations will be severely limited.

10.7 Summary

- The creation of successful residential environments is about much more than attractive design. It is about providing opportunities that respond to the needs of contemporary households and a framework within which communities can become established and prosper. Neighbourhoods with people of different ages, economic status, lifestyles and mobility offer a number of important community benefits. Mixing housing types and uses can also contribute to the creation of more attractive residential environments by facilitating a greater diversity of building forms and scales.
- Unfortunately, most recent housing offers a limited range of tenure choices and
 frequently focuses on a narrow market segment or particular housing need. Even
 where more affordable housing is provided, it is often poorly integrated with homes
 developed for private rent or sale. Care therefore needs to be taken at all stages of the
 design process to ensure the range of housing needs is fully understood and any
 potential conflicts between different lifestyle or life stage groups are acknowledged.
- The housing typologies formerly used in neighbourhoods where mixed incomes and tenures have largely been forgotten by government and the industry. Many are simply unaware of the wide range of models that could be used.
- When combined with the local context, site constraints, budgets and marketing
 considerations, an innovative design and development team will create variations of
 this basic range and plan forms within it. These should respond to a finely tuned
 understanding of the target lifestyle and demographic market niches. In the end, the
 goal should be to use multiple dwelling typologies to address multiple price points,

achieve faster sales and reduce market risk, and develop a diverse and attractive neighbourhood.

- Mixing housing types within a single block presents a marketing and design challenge
 that should be handled with care. Even in areas where people are extremely
 comfortable with social diversity some arrangements, such as directly adjacent or
 opposing dwellings at different price points or with substantially different tenure
 structures, can create perceived problems.
- Irrespective of how well individual dwellings are planned and structured, a poor community outcome is likely if the public realm is poorly executed. The richness and sense of quality seen in the best neighbourhoods comes from building design and careful consideration of the spaces and interfaces between.
- From this research, the product development matrix and discussion with associates, a sophisticated matrix emerged that enables the housing career trajectory of an individual to be plotted and their housing needs identified.
- This tool, backed by thorough research, can be used to establish:
 - The demographic (life stage) and psychographic (lifestyle) character of various household types as well as their size and location,
 - Household and individual housing preferences related to their income and willingness to 'risk' an engagement with different housing types, and
 - A briefing framework for a developer's design and marketing consultants.
- Understanding the current mismatch between housing need and supply and then
 developing practical housing solutions capable of transparent assimilation into new
 residential projects is not without risk. The possibility of making a mistake on untested
 models is not a risk most developers, or their financiers, would willingly take.
 Government intervention and its active financial and regulatory support for the testing
 and demonstration of new models is required.
- Landcom and the Department of Housing both have a distinctive capacity to influence
 the shaping of new urban communities with a sufficient scale to achieve the reality of
 economic, social and environmental sustainability. They also have the ability, through
 collaborative partnerships with the private sector, or engagement with not-for-profit
 agencies, to actively participate in offering new housing models that significantly
 broaden the range of housing supply.
- The RealWorld project proposed at the Premier's Housing Forum in April 2004 is one way these necessary partnerships could be established and a demonstration project implemented. The RealWorld initiative emerged from the initial stages of this research and a realisation that the current housing supply model is unsustainable and constrained by historical entry points that discriminate against many existing and emerging demographic and attitudinal groups.
- Achieving RealWorld's objectives demands a proprietor's dedication to establishing its vision and bringing it to completion. The project's Mission could be stated as follows:

RealWorld is an innovative development initiative aimed at stimulating a better understanding of, and active interest in, how significant areas of housing market failure can be addressed through a partnership between government and industry. As such it will introduce new housing choices offering:

- Practical and commercially focused design, delivery, environmental and social benchmarks to assist the development and housing industry's future supply, and
- A market-tested base for planning guidelines aimed at improving the affordability, accessibility, choice and quality of housing and neighbourhoods in NSW.

RealWorld will provide Landcom and/or the Department of Housing with:

- A 'real life' framework for harnessing, testing and coordinating new ideas and management strategies, particularly the social dimensions of Triple Bottom Line management and reporting systems,
- A valuable store of intellectual property (market research data and housing designs)
 that it may make freely available to the industry to advance the improvement of
 future housing supply, and
- Recognition and respect for RealWorld's innovations and initiatives.
- The ability to rent or buy affordable housing is a significant factor in the economic capacity and competitiveness of cities, states and nations. Evidence shows that quality urban design has a significant positive effect on investment returns, management and maintenance costs, workplace productivity, the diversity and adaptability of the building stock and other benefits at the neighbourhood and city level. In this respect, a sustainable and successful city or neighbourhood will offer inclusive and equitable access to jobs, affordable housing, services and community facilities for the young and old, low and high income households, the able and the disabled.
- Creating a culture to realise the benefits of quality urban design cannot be achieved by
 political edict, doorstop statement, legislative action or short conferences. All might be
 part of a communications mix but, if overseas experience offers any lessons, properly
 addressing the issue of urban design, and achieving cultural change, demands
 leadership, coordinated thinking and a long-term structured approach. Realising the
 benefits of quality urban design requires action across a wide range of sectors,
 organisations and professions.

The emerging Metropolitan Strategy for Sydney should be the catalyst for change. What NSW now needs is a network of 'design champions' lead by, and with high level political support from, the State government.

- Some of the advocacy work is already being done in NSW but links across State government departments, statutory authorities, local governments, professional and industry organisations, individuals and community organisations needs to be established. CABE and the New Zealand *Urban Design Protocol* offer good examples of organisational structures that bridge the gaps to raise awareness and facilitate change. A carefully considered replication of these useful models should be implemented and funded as a priority.
- There is no single solution to the affordable housing challenge. Meeting the needs of today's households demands leadership and partnership. A shared vision and a united effort between public and private interests are essential first steps. Without them, NSW will divide into a state of housing haves and have-nots. Without them, the economic competitiveness of this State will deteriorate. Without it, the housing opportunities and choices available to future generations will be severely limited.