SUBURBAN CONSOLIDATION: THE FUTURE OF THE AUSTRALIAN DREAM?

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This work contains no material which has been accepted for the award of any other degree or diploma in any tertiary institution and, to the best of the author's knowledge and belief, contains no material previously published or written by another person, except when due reference is made in the text.

ABSTRACT

It has become the conventional wisdom in planning that the Australian dream of a detached house on a large block is no longer an appropriate form of development to cater for the future housing and lifestyle needs of the urban population. For social, economic and environmental reasons, "urban consolidation" is promoted as a way of achieving a more compact, accessible and sustainable suburban form.

Consolidation aims to achieve improvements in the quality, price, efficiency and range of housing by:

- reducing urban sprawl;
- increasing the efficiency of infrastructure provision;
- making housing more affordable;
- providing housing diversity;
- improving the design of residential environments.

In addressing these issues, urban consolidation policy focuses on the density and form of suburban housing. These are the central issues for discussion in this project.

The project sets out to analyse the role and meaning of the Australian suburban form and, in that context, to investigate how policies of urban consolidation might be implemented to produce real improvements in the residential environment.

Space is the central issue. It is why suburbia exists and consolidation is promoted. Little research has been conducted on the changing role of space in the suburbs. Unless we understand the role of private suburban space, urban consolidation may provide simplistic and impractical solutions.

The following assertions arise from the analysis:

- There is an intimate relationship between the function of space on the suburban block and the culture and lifestyle of suburbia.
- The predominant forms of alternative housing currently being developed offer few of the advantages of the traditional suburban form.
- The methods used in planning practice which dictate the form of residential space do not lead to good design in residential development.

The main conclusion is that:

- ***The resultant forms of consolidated housing are a poor compromise which lose the advantages of suburbia without substantially delivering any of the supposed benefits of urban consolidation.***

Given the pressing need for a new approach to suburban planning, it is necessary to question what exactly is being done to achieve change in the outcomes of suburban development. Are the policies now being pursued sufficient to resolve the suburban problem? Or do they represent a form of planning compromise which creates more problems than it solves? Most importantly, alternative approaches are sought which might produce modern suburban environments that satisfy the Australian dream.

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"A home is not just a building or a location. It is a place in the heart."

(Robert Franti)

This work is dedicated to Fran and Eva Tilley, who share my home and a place in my heart.

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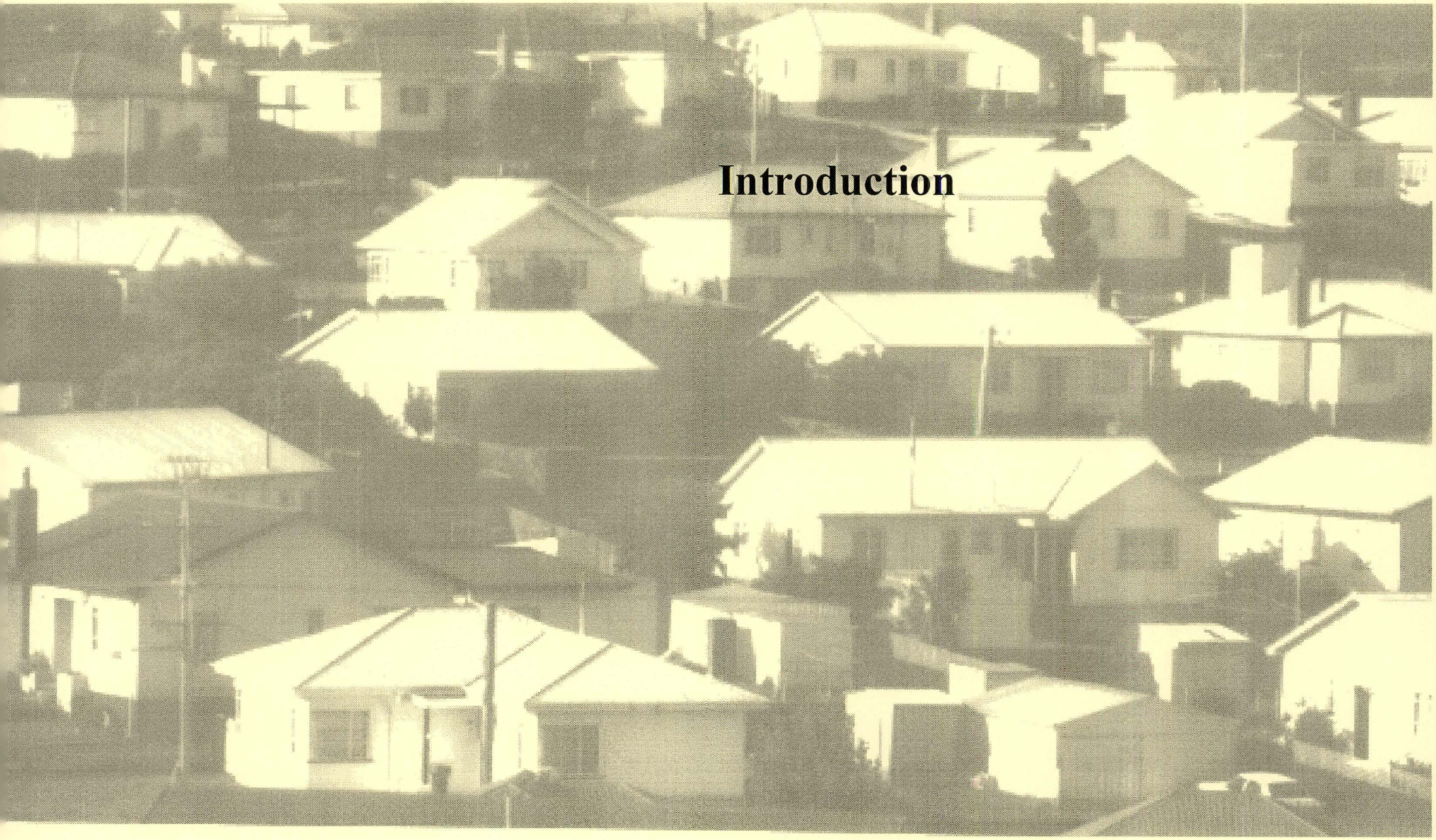


Introduction

Aim and Objectives

The aim of the project is to develop a rational approach to residential development in Glenorchy which provides for the needs of housing occupants and is consistent with the aims of urban consolidation.

The objectives which are identified to achieve this aim are:

1. To identify the historical and cultural factors which have influenced the form of residential development in Australia;
2. To investigate how the residential form provides opportunities and constraints for use of outdoor space;
3. To explore the theoretical basis of urban consolidation and the improvements that it is intended to achieve;
4. To gain an understanding of the role of personal perceptions and behaviour in determining housing choice and satisfaction;
5. To identify the problems and issues relating to suburban planning in Glenorchy;
6. To evaluate problems in the form of current residential development and identify appropriate design responses;
7. To investigate the effectiveness of existing planning policies and methods in providing suburban improvement;
8. To seek alternative planning approaches which are responsive to the issues of local residential development and the suburban problem in general;
9. To recommend action which promotes a comprehensive approach to residential planning.

Focus

The focus of the project is on the form and function of space on local suburban sites. The private yard is one of three major elements in the suburban landscape (street, house and garden). It is intended to gain a practical understanding of how residential sites are laid out, what form the open space takes, the elements which occupy the space, and how these factors provide opportunities and constraints for the use of open space by housing occupants. Particular attention is given to the comparison between traditional suburban sites and those developed for denser forms of housing.

Theory

This approach involves a theoretical understanding of:

(a) The social and cultural issues in suburban planning, those facets of everyday life that provide meaning and purpose to individuals and give them a sense of identity and community;

It is widely acknowledged that one of the biggest barriers to achieving urban consolidation is public resistance to change. It is important to understand the social and psychological factors which contribute to housing perception, choice and satisfaction, particularly in relation to space.

(b) The theoretical underpinnings of urban consolidation.

It is essential to understand the reasoning behind modern trends in suburban planning and the process by which that theory is translated into planning practice.

(c) The principles of urban design as they relate to environments for living.

The critical issue in the development of new forms of housing is proper design. Poor design is seen as one of the major problems in local suburban residential development.

Scope

The study is carried out against a backcloth of urban consolidation, but focuses on the outdoor space on individual suburban lots. Field investigation uses specific local examples of housing development to identify design problems and opportunities.

Detailed attention is not given to the macro-economic issues of urban consolidation, wider housing policy, or the economics of infrastructure and transport provision. Issues relating to the residential street and built form are considered only where they directly relate to the form and function of private outdoor space.

The specific setting for the project is the City of Glenorchy. Opportunities and constraints are viewed in the local development context and the outcomes focus on the opportunities for intervention by the local planning authority.

The project is about the attributes of private space in the residential environment that cater for people's needs. A human perspective is maintained, focusing on the needs of individuals in the changing suburban environment.

Content

The project consists of the following components:

1. A review of the historical development of Australian suburbs and the arguments for traditional suburbia versus a consolidated form.

   This provides the background to the project, describing the social and environmental issues which have led to the current debate about suburban housing. The discussion should include an enunciation of the pros and cons of traditional suburban development.

2. Identification of the relevant aims of urban consolidation.

   Arguments about the benefits of urban consolidation are critically examined. Specific issues include housing diversity, housing choice and sustainability and how these objectives can be furthered by a policy of urban consolidation.

3. Research of the issues involved in spatial perception and lifestyle choice.

   The residential environment is seen first and foremost as a setting for human behaviour. It is therefore important to understand the relationship between environment and behaviour. The role of individual perceptions of home environment, privacy and security is assessed in terms of how it shapes housing preference.

4. Documentation of current local issues and trends in suburban development.

   Historical issues, recent planning studies, demographic and development data are used to assess current planning

pressures and responses in the local context. Factors include subdivision trends, housing type, lot size, and changing composition of the suburban population.

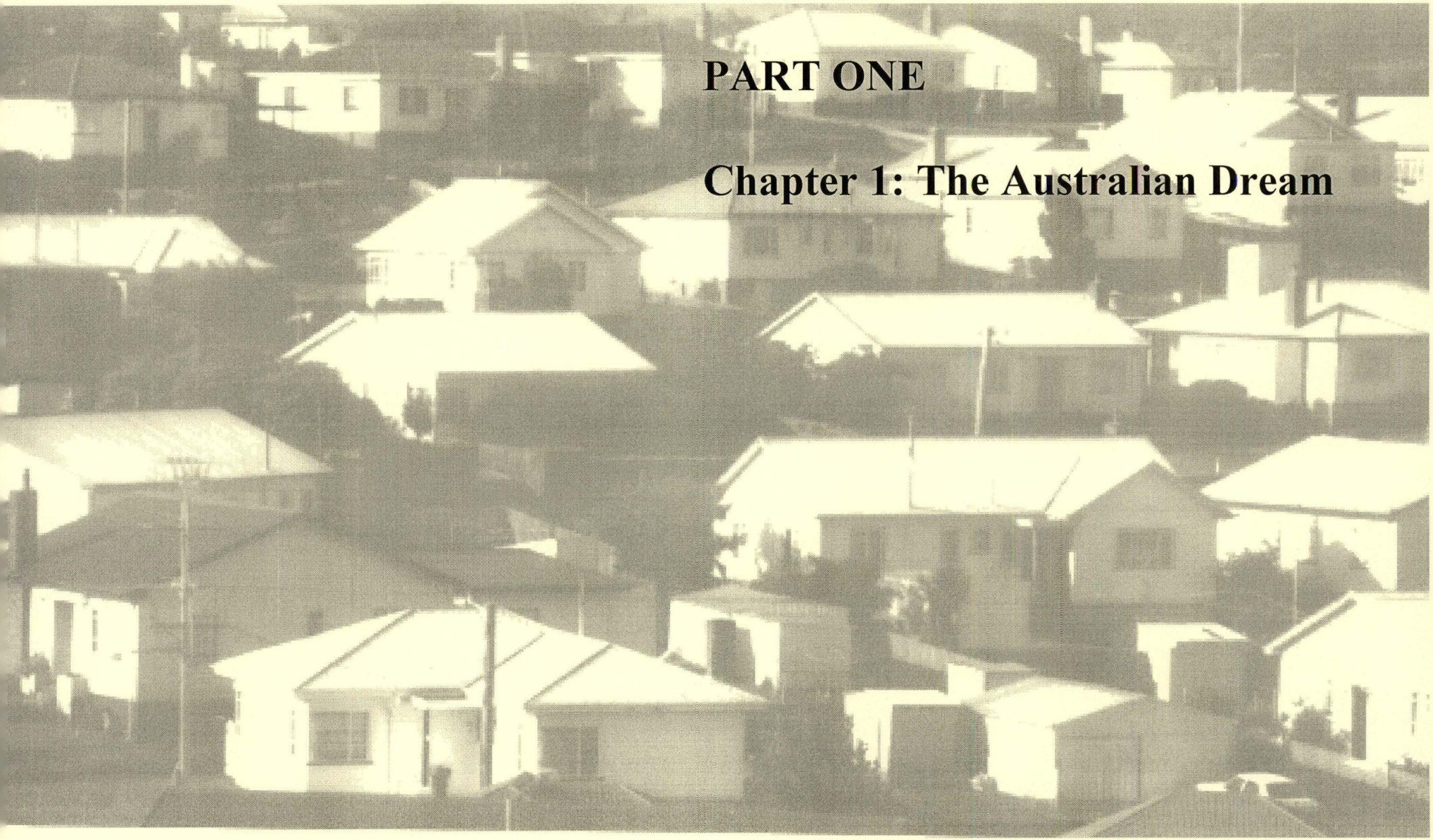
5. Analysis of consolidated housing forms.

   This component identifies and critically assesses the main typologies of consolidated residential form in Glenorchy, by reference to specific examples. This is the basis for an understanding of the developing suburban form, the constraints and opportunities provided by development, and the design issues which arise.

6. Conclusions and Recommendations.

   The conclusions aim to bring together each of the above issues by summarising the present status of urban consolidation policy and the approach which should be used to implement such a policy in a more positive and comprehensive fashion.

   Recommendations range from regional strategic planning actions to specific local intervention intended to achieve a holistic and coordinated approach to suburban residential planning.



PART ONE

Chapter 1: The Australian Dream

1.1 Historical Background

The historical development of suburbanisation in Australia can be viewed in terms of the following dominant factors:

- an anti-urban sentiment brought with the European settlers
- a pioneering ethos which included romantic notions of rural life
- vigorous promotion of healthy, spacious living conditions by social reform movements
- prolonged economic growth with accompanying high wages and low unemployment
- an ample supply of cheap land and a relatively good public transport system
- a strong central government and stable political environment.

Australia's modern settlement pattern began urban and quickly became suburban. Although the early urbanisation of Australia began as an extension of the British tradition of terrace and townhouse, the splendour of 18th Century townscapes was expressed in little more than the wide orderly streets of early Sydney and Melbourne. (Cox, 1983). Governor Arthur Philip's first town plan for Sydney required the streets to be laid out to afford free circulation of air with each house on its own sixty by one hundred and fifty foot allotment. (Davison, 1993)

Philip's ambition was not achieved in the haphazard development of early Sydney, but the cramped inner cities of the mid- 19th Century ultimately gave way to a manifestation of the developing social values of the nation - suburbia. (Gilbert, 1988). The suburbanisation of Australian cities was enabled by a ready supply of cheap land and the provision of efficient public transport systems which could take city-dwellers from their place of work in the city to their place of residence in the suburbs. The steady growth of building societies and the entrepreneurial abilities of real estate land-boomers encouraged Australians to participate in a quest for the ideal life - employment opportunity in the city and ample living space in the suburban hinterland.

The lure of the suburbs has been a persistent social force in Australia. That lure involved the transplanting of social values from England where a strong anti-urban sentiment and a puritanical suspicion of the city laid the foundations of suburbanism. These attitudes were reinforced in Australia by the symbolism of the bush imprinted in the Australian male psyche.

The suburbs became the compromise between the necessity of the city and the idealised dream of the country. It was a dream inspired in by the pursuit of social status, economic well-being and a private domestic life. (Davison, 1993). According to Davison, the suburban idea was strengthened by contemporary ideologies of evangelicalism, romanticism, sanitarianism and capitalism. The suburban ideal arrived in this country with its European settlers and has flourished ever since as successive waves of immigrants have sought to fulfil ambitions for land, space and independence.

Historically, these social factors occurring in economic and political circumstances which promoted home ownership and a consumption-based society brought about the rapid and continuing suburbanisation of Australian cities.

1.2 Planning for the Dream

From their beginnings in the late 19th Century, the urban reform and town planning movements promoted a population shift from the crowded living conditions of inner-cities to spacious, leafy suburban environments. The suburban ideals began to be put into more widespread practice at the beginning of the 20th Century with the arrival of the garden city movement. Planners and urban reformers extolled the virtues of space in cultivating healthy and harmonious social conditions in cities.

The "garden suburb" ideal became entrenched in Australian suburban planning as well as in its social and cultural tradition. The Garden City ideals of Howard and Unwin were based on a notion of amenity and living space, reflecting a principal concern for the physical health of the city-dweller. Garden city planners and urban slum reformers shared the conviction that a happy and harmonious life depended on plenty of outdoor and indoor living space. (Davison, 1993)

The first model by-laws and building regulations arising from this age of urban enlightenment were based on a combination of social, medical and moral precepts about the effects of urban living. This reformist ideology was derived from a strong environmental determinism. The spatial configuration represented by the garden suburb, with its ample space, sunlight and opportunity for social intercourse was seen as a means of improving the mental, physical and spiritual health of urban-dwellers. The garden city ideal stood for living environments that were healthy and disease-free and promoted moral decency and social stability (Freestone, 1989). This suburban ideal can be seen as a reaction to all that was regarded as evil, immoral and anti-social about inner-city living; what Davison refers to as "the logic of avoidance". (Davison, 1993)

Planning ideology throughout the 1930's and 40's continued to display a belief in the positive effect of comprehensively planned residential environments on the moral, social and physical health of suburbanites. But the post-war boom saw the end of a reformist era. As anti-liberal forces became stronger and planning adopted a "scientific" approach the link between planning and social reform was weakened. (Freestone, 1989) The pragmatic side of post-war planning took the technical and the rational components of the garden suburb in the form of housing standards, without taking the philosophical approach or a desire to achieve the social outcomes.

The sprawling growth of suburbia in Australian cities after the Second World War has been well-documented in both the contemporary criticism (Boyd, 1960) and in today's urban consolidation literature (Kirwan, 1992). Planning has been largely directed towards ensuring a ready-supply of cheap serviced land for suburban growth, imposing standards that produced a regularity of lots and housing forms and ensuring a basic level of infrastructure.

Governments of all persuasions have provided the moral and financial support for attainment of the dream:

- Federal governments have constantly pursued economic policies directed towards private home ownership in the suburbs, to the detriment of other forms of housing and tenancy; (Kemeny, 1983)

- Governments have provided physical and social infrastructure to reduce development costs and allow a relatively cheap and equitable distribution of housing;
- Royal Commissions and other government housing inquiries have consistently found in favour of the detached single-family house in the low-density suburb as a solution to housing problems;
- State housing authorities' major expenditure from the Second World War until the 1970's was on suburban housing projects.

Continued economic prosperity, the influence of the town planning movement and government housing policy have all contributed to the adoption of suburban living as the predominant feature of Australian life. This tradition of suburban development has produced a distinctive suburban form of single detached dwellings surrounded by large gardens. The "Australian Dream", ownership of a house on a "quarter-acre block" in the suburbs, has become an entrenched cultural tradition.

The vast majority of Australians have grown up and raised their families in a home environment characterised by a detached house surrounded by private space. It is therefore not surprising that a detached house on its own private allotment is still the predominant housing goal for most Australians. (Johnson-Owusu, 1991; Stevens et al, 1992) Today, about 80% of the existing national housing stock takes the form of a detached house on its own parcel of land. (Clare, 1991).

1.3 The Form of the Traditional Suburb

The "enlightened" condemnation of squalid inner-city housing conditions and concerns about land wastage, poor drainage, inefficiency of access and inadequate provision of open space worked at two levels to create the suburban ideal in town planning. Rudimentary government regulation of street widths, lot sizes, minimum room sizes and open space quotas created the first physical manifestation of the dream, but at a more sophisticated level, the idea of planned development beyond an uncoordinated grid formed the foundation of suburban planning. (Freestone, 1991)

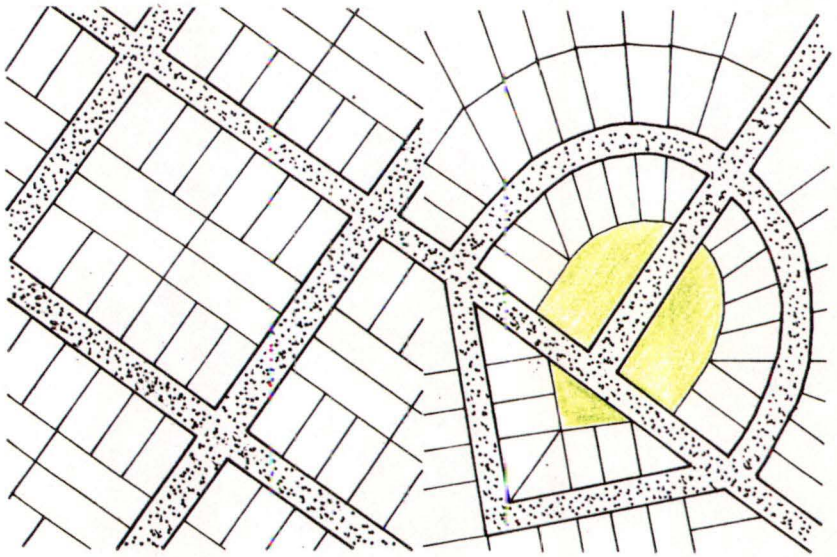


Figure 1: The 19th Century Grid Layout and the Garden Suburb

Through the adoption of garden city ideals in a watered-down form (from social ideal to pragmatic planning) garden city planning in Australia became a loose collection of planning principles based on:

- a special allocation of land for residential development
- freedom from congestion
- provision of parks and open spaces
- greater opportunities for family and social activities (Freestone, 1989)

The main focus of the pioneering planners was on refining the pattern of subdivision, based on notions of efficiency of street layout and open space provision. Surveyors played a major part in subdivision design and little weight was given to matters of architecture or urban design. The predilection for detached low-density housing and private ownership also became the raison d'etre of planners and any alternative housing forms were rejected as "slums of the future". (Freestone, 1991)

The earliest examples of garden suburb planning thus reflected the deterministic views of their patrician creators and shared most of the following features:

- detached houses surrounded by gardens to provide for plenty of air and sunlight;
- rejection of the grid layout in favour of curvilinear street patterns to provide visual stimulation and a reduced sense of monotony;
- unfenced allotments and planted streets;
- generous neighbourhood parks to provide for recreation and social interaction.

(Freestone, 1993; Hoskins, 1994)

But apart from the few examples of garden city design such as Daceyville (NSW), Garden City (Vic.) and Colonel Light Gardens (S.A.), the ideal was not transformed to reality other than in a watered-down form in the traditional suburb. The forces at play in the private market took the low-density form into a relatively unplanned, but regulated environment and reproduced it along the arterial roads and railway lines of Australian cities. The continuity of design, the concern for integrated subdivision and development, the infrastructure provision of the ideal garden suburb did not materialise in the booming suburban growth of Australian cities. The forces associated with land speculation and a strong demand for low-cost, low-density housing produced a singular, unsophisticated housing form.

The conventional suburban form is defined by the following attributes:

- A single house on its own allotment. From about the turn of the century the building of row and terrace housing ceased, semi-detached houses persisted in some suburbs until the 1920's and 30's, but the detached house, or the bungalow, became the predominant form until the present day. The popular myth of the standard "quarter-acre" (1000 m^2) block is a rarity in most cities and most suburban lots developed in the past 50 years have been in the range of 650-700 m^2.

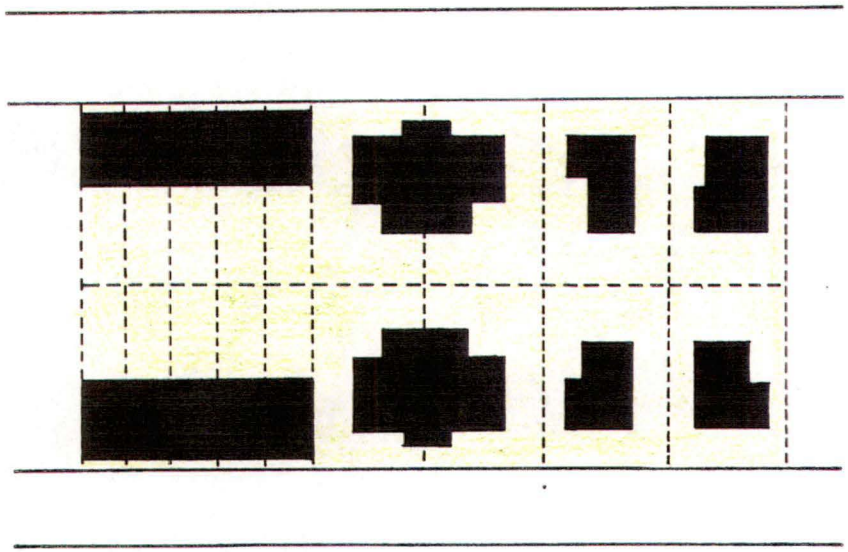


Figure 2: Three Types of House Form - Terrace, Semi-detached and Detached

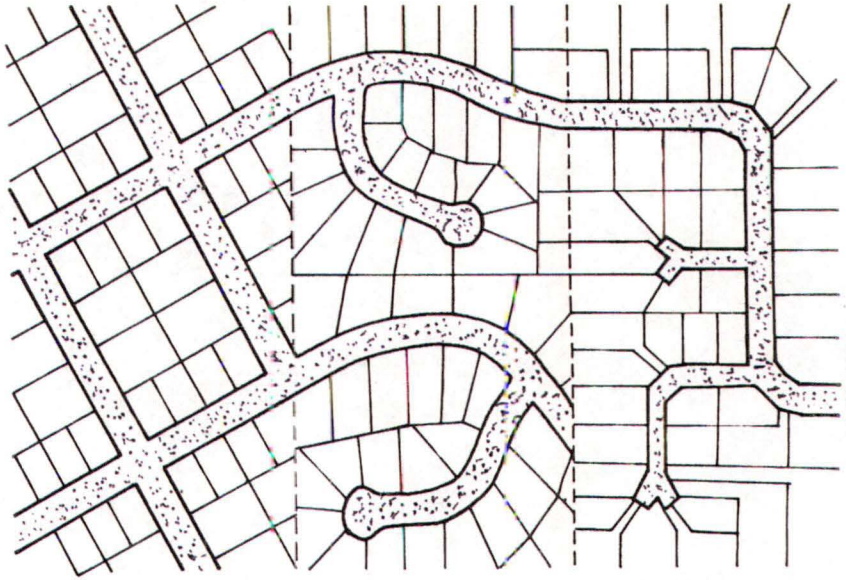


Figure 3: Evolution of Subdivision Layout - Grid, Curvilinear and Modern

- A wide frontage to the street. From the grid patterns of early suburbs to winding avenues and culs-de-sac, each suburban house has traditionally had a regular street frontage of between 15 and 20 metres. This provides a definable border between the private and the public domain and a space for contact with the street, display and access. Modern subdivisions, designed for land efficiency, have tended to lose this feature in favour of narrow frontages and battle-axe blocks intended to maximise the lot yield per metre of road frontage.

- Private space, fully or partly fenced, at the front and rear of the house. The raison d'etre of suburban living, the space on the Australian suburban lot has usually been defined by the ubiquitous paling fence. In the early period of suburban development, unfenced front yards were sometimes preferred, or enforced by covenant, to maintain an openness to the street, but this trend did not persist as it has in the United States. There are few local examples surviving today. More recently, unfenced front yards occur in sloping areas where the front yard has limited function as a useable space.

Figure 4: Good Fences Make Good Neighbours...

Figure 5: ...and No Fences...?

- A setback from the street and separation of dwellings by at least 3 metres. Regulations derived from health and fire regulations of late 19th Century England determine a standard minimum setback from the boundary of a lot, generally 4-5 feet (1.2-1.5 m) in Australia. The propensity to leave at least 10 feet (3 m) for vehicle access alongside the house means that generally dwellings are separated by somewhere between 3 and 6 metres.
- Car access alongside the house, usually to the rear, on a paved space along the side of the house, usually with a garage or carport.

Variations in subdivision layout, topography or architectural style produce variations on the above dominant characteristics, but in general these are the defining characteristics of the suburban form.

This predominant suburban form strongly reflects the privatised structure of suburbia, partly in response to the cultural desire to maximise private space, partly to fulfil the requirements of planning authorities for minimum lot sizes and building setbacks. The relatively large size of Australian houses can be seen as a part of the suburban "package" which provides few social, recreational or open space facilities for public use and requires a relatively high degree of self-containment on the suburban lot. (Kemeny, 1983, p. 97)

There is also the important and varied cultural embellishment which can be added to the physical framework of suburbia by its occupants. The building and block of land are available for a range of adaptations and displays either to reinforce accepted norms or as a means of independent self-expression. It is the

garages and outbuildings, the Hills hoists, the concrete driveways and footpaths and all of the iconography of front garden displays and letterboxes which define the archetype of suburbia.

In architectural terms, these are the objects of Boyd's criticism of suburban style, which denounces the featurism of suburban architecture and the sameness of its landscapes. In psychological terms, they are an expression of the suburban identity and, for better or worse reflect a set of social and cultural values which are demonstrably Australian.

> "Australia is the great suburban southland, we are a nation of suburban boys and girls, each with a fondness for our own quarter-acre; it's where most of us grew up and its icons are part of our collective psyche. They gave us individuality through conformity, and helped forge our identity." (Bedwell, 1992, p. 11)

1.4 Anti-Suburbanism

The suburban compromise between the city and the country has been celebrated as an ideal mixture of the best of both worlds. The anti-suburban view gives it the worst attributes of both worlds: neither traditional forms of community nor freedom of choice and association are attributes of suburban life. The basis of this criticism is "the suburb's tendency to isolate people in privatised family units and isolate the units themselves in tenuous communities of residence" (Gilbert, 1988, p.40). The notion of false consciousness lies at the heart of anti-suburbanism.

The playwright Essen wrote in 1912:

> "It stands for all that is dull and cowardly and depressing in modern life. It endeavours to eliminate the element of danger in human affairs. But without dangers there can be no joy, no ecstasy, no spiritual adventures. The suburban home is a blasphemy. It denies life." (Essen, 1912)

To the intellectual, suburbia seems too pleasant, too trivial, too smug. Gilbert casts the intellectual anti-suburban intelligentsia in the "ancient and precarious role of a prophetic minority", whose criticism makes a distinction between minority culture and mass civilisation.(Gilbert, 1988, p. 41) For the writers of the 1960's, suburban man was a failure for his anti-intellectual, short-sighted, hedonistic and mediocre lifestyle.

Marxism also takes an anti-suburban position on the grounds that its cultural and social values create a false consciousness and help to obscure class differences. Those who use 'suburbia' as a defining image of Australian society lend their support to this obscuring emphasis. They are "seduced by the relatively high degree of sameness that we Australians live outside the place of work."(Rowse, 1978, p. 12)

Feminist anti-suburbanism follows much the same line of argument as the Marxists do on class. The false consciousness for the feminist argument is the view that women are the beneficiaries of suburbia rather than the victims. Objectively, both views may be attractive to feminists because they recognise that suburban society tends to define the social and cultural lives of women (and children) more completely than men. There is much testimony of the bored, frustrated or alienated lives of women in the suburbs, and an obvious connection between the

development of suburbia and the gender relationships existing in mainstream society. Feminist intellectuals have decried the Australian suburban dream as a tool for the isolation and imprisonment of women, suburbia as a planning creation in the "masculinist image of the housewife". (Huxley, 1994). It has been suggested, however, that this impression of suburban women may be something of a myth, and that suburbia is a place where "thinking women are able to make sense of their lives". (Fiske et al, 1987)

As Stretton says:

> "You do not have to be a mindless conformist to choose suburban life. Most of the best poets, painters and inventors and protesters choose it too. It reconciles access to work and city with private, adaptable, self-expressive living space at home. Plenty of adults love that living space, and sub-divide it ingeniously. For children it really has no rivals." (Stretton, 1970, p.20-21)

These sentiments invite an attempt to distinguish the myths of suburbanism from the realities of suburban life. Anti-suburbanism involves a good deal of ignorance and misconception. Confronted with the apparently irreconcilable stereotypes of smug complacency and chronic depression, the empirical basis of anti-suburbanism is questionable.

1.5 Suburbia as a Cultural Landscape

Culture can refer to all of the things that contribute to a sense of identity and place, from the mundane to the spiritual. Suburbia can be an icon, a landscape, a backyard or a way of life. In cultural terms suburbia can be seen as a rich landscape, which can be read in many ways and which has a unique relationship with Australian images, values and ways of thought. The ordering of the cultural space has a dramatic impact on the lives of the people and vice versa. (Healy, 1994)

Australia has a long history of intellectual examination of the suburb, usually from the extreme positions of disdain and adoration. Intellectual debate has always made a connection between suburbia and Australian civilisation and focussed on suburbia as a cause for either alarm or celebration. Much of the suburban debate is driven by ideology of one kind or another which give different perspectives on the landscape and its inhabitants. (Rowse, 1978)

The history of suburban debate, whilst largely academic, identifies a number of important themes useful for a practical analysis of the suburb. These themes include:

- The suburb as a product of capitalist economic relations, where inequity and inefficiency are inherent; (Rowse, 1978, Kemeny, 1983)
- The suburb as representative of a conservative, family-based lifestyle and a set of middle-class values;
- The suburb as an accumulation of happy accidents in which people can express creativity and seek a sense of identity; (Richards, 1973)
- Suburbia as a form of mindless social and architectural conformity in which "there is little or no collective pride ... only a huge collection of individual prides"; (Boyd, 1960, p. 141)

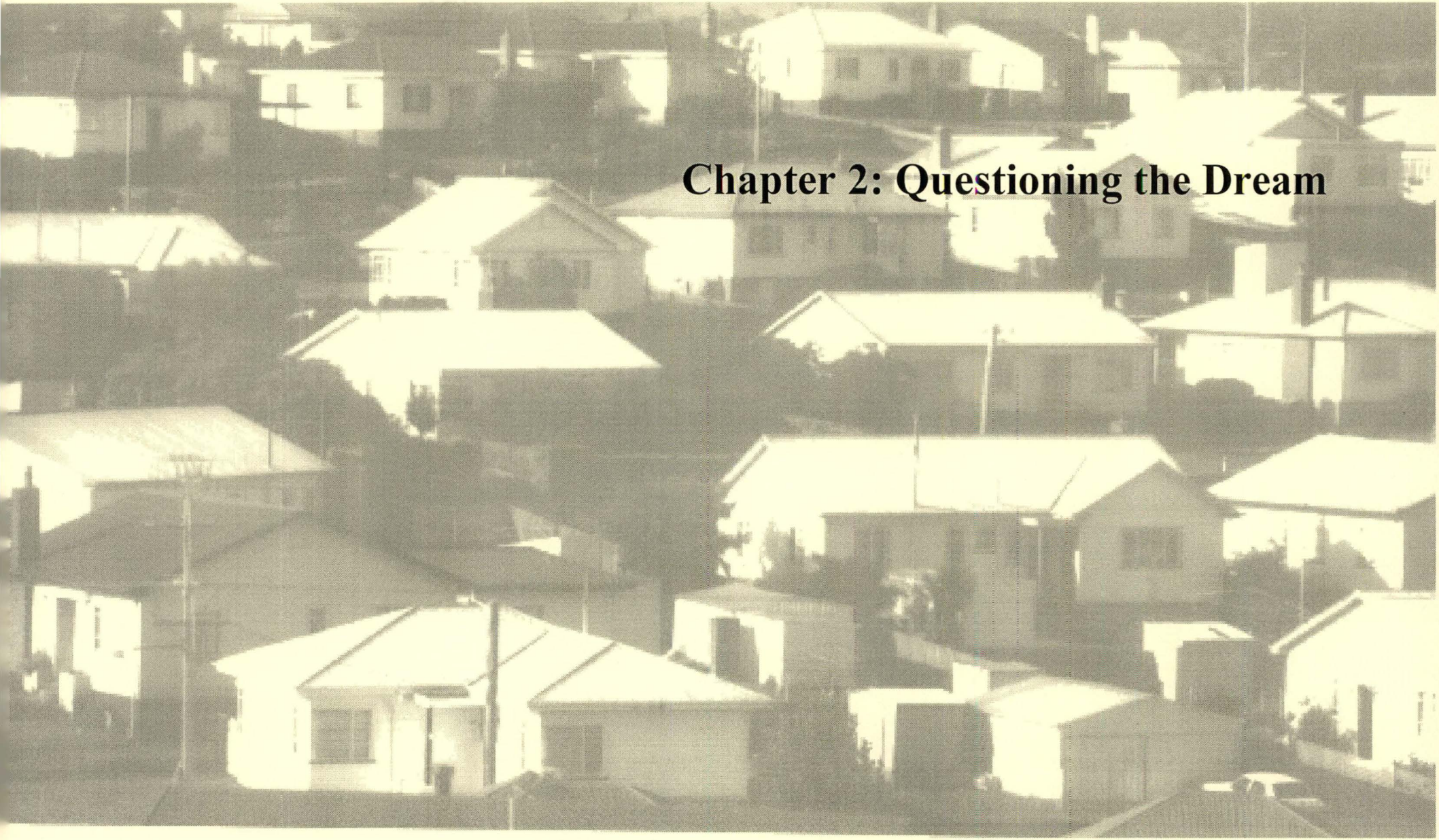
- The suburb as a productive, adaptable, freely available living environment which reconciles access to work with private, self-expressive living space (Stretton, 1970)

Combining each of these themes, the suburb can be viewed as a cultural landscape, "shaped by social forces both within and beyond control of its inhabitants". (Hoskins, 1994) That landscape is made up of physical elements (the house, the block and the street), social relations (family and community), economic elements (work and home-ownership) and personal images and values.

If we see the suburbs as a place where various cultural activities occur and a place which is also defined by those activities, then much of the obfuscation created by ideology disappears. An open-minded understanding of the relationship between the suburban landscape and the space- forming activities of its inhabitants is crucial to meaningful discussion of its future.

The suburbs should not be judged as a cultural generality, but as product of diverse individual influences which we know collectively as our culture. This leads to a point where it is possible, without making value judgements about the choice of a suburban lifestyle, to cater for as much diversity as possible within the suburban environment whilst protecting the very character which makes it attractive.

Figure 6: Suburban Backyards



Chapter 2: Questioning the Dream

2.1 A New Ideology

There is now widespread criticism by planners and social commentators of the traditional form of suburban development which their predecessors conceived and nurtured. In fact, the mass produced suburban form of a detached house on a large block is almost universally opposed by planners, architects, sociologists and economists alike. Australian suburbs have been described as drab, soulless wastelands which promote mindless conformity, isolation and deprivation. The sprawl created by continued development on the urban fringe leads to inefficiencies in the provision of transport, services and community infrastructure. The environmental costs of suburban sprawl, loss of productive agricultural land and increased emission of greenhouse gases, are paramount concerns requiring urgent measures to bring about change. (Bunker, 1985).

Since Boyd's critique of suburbia in The Australian Ugliness, anti-suburban sentiment has become the conventional wisdom of urban studies. The balance of professional opinion leads to the widespread conclusion that Australia's low-density suburbs are now a "national liability". (Myers, 1992). Others, however, have questioned the relevance of the intellectual attack on traditional suburbia and the substance of many of its claims. (Davison, 1993; Stretton, 1991; Troy, 1992, 1994)

2.2 The Problems of Suburbia

Changing social and economic conditions have contributed considerably to the re-assessment of the traditional suburban form and the lifestyle that it symbolises. Changes in the nature of employment, demographic trends, and the changing structure of households are leading to a society quite different to that of fifty or even twenty years ago. The population is ageing and single-person households are increasing, leading to potential changes in the structure of housing demand (Vipond, 1991).

The need for fundamental change in suburban development is generated by a number of urban problems, summarised as follows:

- The continued outward growth ("sprawl") of low-density suburbs creates enormous costs and inefficiencies in the provision of physical and social infrastructure to new housing development. The cost of servicing a residential block in outer Sydney is estimated at $60,000. (Roseth, 1991).
- Urban sprawl causes the continued degradation of natural resources, loss of productive rural land and promotes increased reliance on private transport with its associated environmental effects.
- The changing demographic structure of the population is bringing lower house occupancy rates and increasing proportions of aged, single-parent and childless households. These changes signify a changing demand for housing type, tenure and location and access to services and employment.
- The rising cost of housing is taking the dream of home ownership beyond the reach of average Australians. In times of recent recession, when interest rates and unemployment have been high, the cost of housing has become a much greater obstacle to the establishment of a traditional lifestyle in suburbia.
- Suburban policy needs to take account of the changing social values affecting the role of women and the nature of work.

Technology, employment patterns, and repeated periods of recession have had a major impact on the social aspirations of Australians, their desire and ability to afford a traditional private home in suburbia.

The search for a solution to these problems is focused on the issues of density and form of suburban housing. Proponents of urban consolidation often argue that the low-density suburb is a liability which must be eradicated and replaced with a denser, more efficient alternative. The quest for higher densities of suburban development, however, is predicated on a range of assumptions about the effect of consolidation. These are the central issues for discussion in the next chapter.

2.3 Defending the Suburban Faith

There is a wealth of critical writing on the Australian suburb, but only a few authors have explored the positive aspects of suburbia. Gans' study of the an American suburb shows a different perspective in an otherwise negative picture of suburban life in that country. (Gans, 1967). Gans' writings also challenge deterministic views about suburban lifestyles, identifying social and lifestyle characteristics as being the most important factors in housing location. (Gans, 1968). In the Australian context, suburbia is just as much a lifestyle setting and must be understood as such if it is to respond to and satisfy future lifestyle needs. (Badcock, 1993).

Amongst all the commentators on Australian suburbia, Stretton and Troy stand out as defenders of the traditional suburb, prepared to challenge many of the assumptions underlying the anti-suburban arguments.

The defence of suburbia occurs on a number of levels, namely that:

- "Australia's form of housing has flowed from and reflected a commitment to a relatively egalitarian society. Over the last thirty years we have been becoming more inegalitarian. The consolidation policy simply reflects a further drift from the commitment to egalitarianism." (Troy, 1992, p. 43)
- Traditional suburbs have a vital economic and social role. According to Stretton, the quest for private space is paramount in suburbia and that space has valuable productive and recreational capacities much sought after by suburban dwellers:

  "Intelligent critics don't blame the suburbs for the empty aspirations: the aspirations are what corrupt the suburbs. The car is washed on a Sunday mornings because its owner has been brought up to think of nothing better to do, not because suburbs prohibit better thought. As a matter of fact, high-fenced, overgrown quarter-acre gardens can be as free, private and self-expressive as any other private property. With or without the fences you can find in some of them the most creative arts, non-conformist squalor, fertile bohemia, funny eccentricity, busy business - and, sometimes, beauty." (Stretton, 1970, p. 10)
- The alleged savings of land and infrastructure costs as a result of urban consolidation are dubious and often unspecified. "Heroic" increases in residential density would be required to make modest savings in city size and infrastructure costs. These increases in residential density are likely to further reduce the space available for recreation

and circulation, having greatest impact on the suburban poor. (Troy, 1992, p. 37)

- The spare capacity assumed to be available in inner suburban infrastructure may not exist because of its age, design or cost of upgrading. This not only applies to physical infrastructure, but also to social capital such as schools, community facilities and open space areas. (Troy, 1992, p. 37)
- The argument that the present supply of housing does not offer sufficient choice and that many people are forced to live in housing inappropriate to their needs implies assumptions about the housing market and our suburban society which are not necessarily true. How is the housing need measured and against what criteria do we assess under-utilisation of housing? (Troy, 1992, p. 39-40)
- The traditional suburban house offers freedom and choice to adapt one's living environment according to personal needs.

  "Above all the house in garden is the most freely and cheaply flexible of all housing forms. ...Each owner has considerable freedom to choose his own degree of privacy, publicity or neighbourliness. This freedom to alter his house without changing his address is an underrated one. (Stretton, 1970, p. 15)

Instead of replacing suburbia with some high-density alternative, Stretton argues that it would be better for us to conserve the freedom of the traditional urban-suburban-country combination, build better centres and suburbs, diversify housing as much as people actually wanted, keep the countryside close but unspoiled and make cheaper and quicker connections between all three. Troy argues for a move away from physical solutions towards reform of the institutional arrangements which dominate urban development and the adoption of cultural development policies which create opportunities for cultural growth and expression.

2.4 Suburbia in Perspective

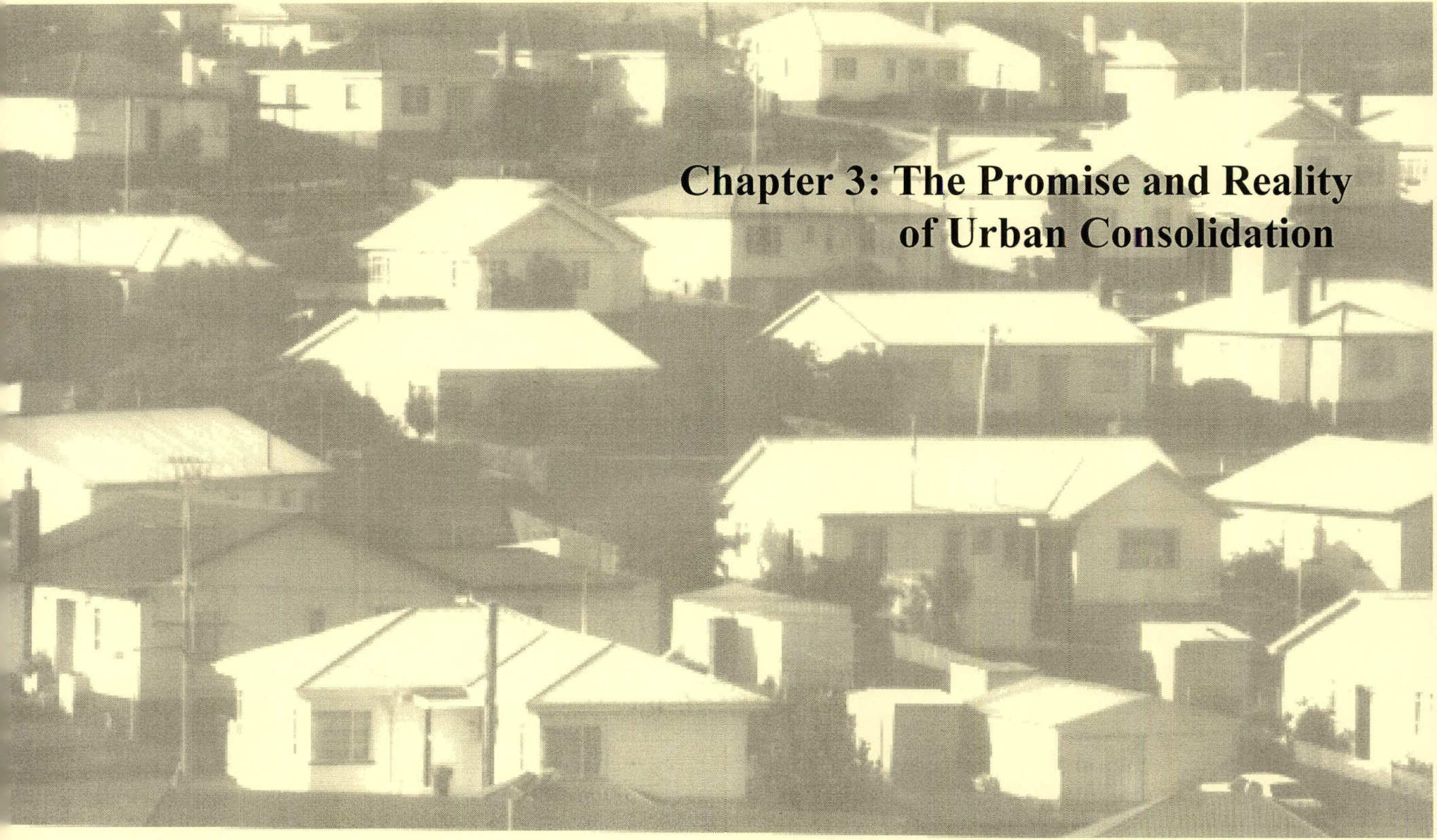
Suburbia should be put into perspective. The residential block has been the lifestyle setting for most Australians and forms a part of Australian cultural tradition. The private space attached to a house has significant attraction and performs a variety of roles: at the most basic level it facilitates and constrains residents' activities; intellectually it defines a part of the Australian identity.

Despite the demographic and economic changes taking place in Australian cities, there is still a large proportion of the population who apparently prefer to own a large house on a relatively large block of land. The assertion that the suburban backyard is a waste of space is not supported by the only detailed study into the use of the "quarter-acre block". (Halkett, 1976). The suburban residential allotment is a source of food and income. (ABS, 1992) It forms the basis of most private recreational activity and contains many of the cultural icons of the last three generations of Australians.

Most Australians have grown up and raised their families in a detached house on a large suburban block. It must have some advantages, but these are often overlooked by the anti-suburban school of thought. As long as economic growth and better standards of living are pursued, Australians are unlikely to accept less space and more crowded living conditions unless

they are accompanied by some considerable personal and/or economic benefits. There is no certainty that existing urban consolidation policies are delivering those benefits.

Low-density suburbia can also be seen as symbolic of a prosperous and egalitarian Australian society which should not be sacrificed in the name of urban efficiency. (Stretton, 1974; Troy, 1992). The most detailed and specific analysis of the suburban block is Halkett's work on the quarter-acre block in Adelaide. (Halkett, 1976). That study challenges many of the modern myths about wasted suburban space. It raises the question of what, if anything, will fulfil the important function of the traditional suburban backyard in a consolidated suburb. There is clearly a need for further investigation of the use and value of private suburban space within the context of urban consolidation.



Chapter 3: The Promise and Reality of Urban Consolidation

3.1 Background

Criticism of the Australian suburb is not new. In fact, for as long as suburbs have been with us, they have had their detractors.(Gilbert, 1988) But much of the past suburban debate has been at an intellectual level and has focused on the lifestyle and culture of suburbia as an Australian phenomenon.

It is only in recent years that the suburban debate has taken on some urgency and has been predicated on an intention to fundamentally change the development of suburbs. This recent movement for reform is not so much based on a desire to uplift the dreary, uninspired lives of suburbanites, but rather in response to economic, demographic and environmental imperatives.

It has become the conventional wisdom in planning that the Australian dream of a detached house on a large block is no longer an affordable, suitable or sustainable form of development to cater for the future housing and lifestyle needs of the urban population. (Badcock, 1993) Whether the desire to change suburban form is predicated on such strident criticism of the traditional form, or simply a recognition that suburbs could be better, more diverse and affordable places to live, it is clear that future suburbs will have to cater for a much wider range of needs than those of the past.

Given the pressing need for a new approach to suburban planning, it is necessary to question what exactly is being done to achieve change in the outcomes of suburban development. Are the policies now being pursued sufficient to resolve the suburban problem? Or do they represent a form of planning compromise which creates more problems than it solves?

3.2 Urban Consolidation

Throughout the 1980's a great deal of government and professional effort has been invested in the promotion of urban consolidation. Urban consolidation is defined by one source as:

> "...a process of planning and controlled development whereby the density of dwellings and/or population is increased and greater choice is provided in housing type, cost and location, providing access to services and employment so as to achieve more efficient use of existing infrastructure and economies in the provision of new infrastructure on the urban fringe." (Harris and Shearer, 1989)

The keywords in this definition encapsulate the positive aims of consolidation: density, choice, cost, location, access, infrastructure and economies. The problem is that consolidation is often seen simply in terms of densification. All the other benefits are assumed to accompany increased suburban densities as a matter of course.

Specifically, urban consolidation is intended to achieve the following objectives:

- Curbing urban sprawl
- Reducing infrastructure costs
- Making housing more affordable
- Providing more housing diversity
- Improving the amenity and liveability of cities.

Much of the pro-consolidation literature, however, has difficulty establishing the nexus between the main product of

consolidation policy - medium-density housing - and its intended aims. It is implied that urban consolidation is an end in itself which will automatically bring diversity, affordability and efficiency in suburban form. Put simply:

> "...we are led to believe that if we all shuffle up a bit we'll achieve huge benefits." (Troy, 1992, p. 36).

The question is how does consolidation actually achieve its aims? What forms of housing are being promoted to provide the benefits promised by urban consolidation and are the benefits guaranteed as we might be led to believe?

The evidence brought out in Chapter 5 indicates that the development which is occurring locally in the name of consolidation is no more than a process of slow incremental change, which compromises traditional suburban values and the aims of consolidation. Housing forms being developed under the banner of consolidation are merely scaled-down versions of the traditional suburban bungalow, displaying a lack of design innovation and an inability to break the attachment to traditional housing form. It is suggested that the existing process of urban consolidation relies on conservative planning and design approaches to urban development and, as such, will not transform the suburbs, but merely intensify their form with little or no social, economic or environmental benefit.

Looking specifically at the aims of consolidation, there must be doubts about the effectiveness of existing policies.

3.3 Urban Sprawl

The argument that the development of denser forms of housing will significantly restrict the continued outward growth of cities is seriously flawed. (Gutjahr, 1991). Detailed analysis of the relationship between net housing densities and land demand shows that the sorts of density increases contemplated by medium-density housing policies will contribute little to the restraint of urban spread. (McLoughlin, 1991). The certain failure of slight increases in density to restrain the outward growth of cities is caused by several factors, including:

- Urban land is not entirely devoted to residential use. Large tracts of land are reserved for roads, railways, utilities, schools, parks and a range and other non-residential uses. Increasing net residential densities produces "diminishing returns" in terms of land savings as long as the space for non-residential services is maintained. (McLoughlin, 1991, p. 151)
- Steadily declining household occupancy rates mean that it takes more dwellings to house the same number of people. Doubling dwelling densities will produce only a slight increase in population densities, especially while large houses are replaced by small ones.
- There will always be a demand for housing on cheaper land at the urban fringe, regardless of consolidation policies, as long as social and economic policies promote home-ownership and use of the private vehicle.

Planning policies which encourage slight increases in density throughout the suburban area cannot, therefore, be justified on the basis of their assumed impact on urban sprawl.

Net Residential Density (Persons per Hectare)	Overall Urban Area (km^2)	Radius (km.)
30	666	14.6
35	619	14.1
40	583	13.6
45	.555	13.3
50	533	13.1

Figure 7: Radius of a Hypothetical City of One Million Population (Source: McLoughlin, 1991)

3.4 Infrastructure

Urban consolidation has the potential to produce infrastructure savings in two ways: by reducing the need for new infrastructure on the urban fringe and by making use of under-used infrastructure in existing areas. These savings are only potential savings and require a detailed analysis of the comparative costs of providing new fringe infrastructure versus upgrading infrastructure in existing suburbs. (Burke, 1991).

A great deal of infrastructure expenditure continues to occur on the urban fringe, albeit to serve "consolidated" housing. But the spending is concentrated on roads, sewers, water supply, etc. (i.e. physical, not social infrastructure). Infrastructure cost savings is a hollow promise if it simply means not providing the social infrastructure which is needed to serve new residential areas. There is also something contradictory in the actions of planning authorities which support urban consolidation as a means of reducing the cost of infrastructure, yet continue to subsidise physical infrastructure on the urban fringe. (Dening, 1991).

The pro-consolidation view relies on an assumption that existing infrastructure within existing inner and middle suburbs is under-used. (Myers, 1992) Densification is occurring on the assumption that there is a surplus of infrastructure in these areas. Yet there is no certainty that the existing roads, schools, recreational and community facilities meet the demands of higher population densities. No infrastructure inventory has been provided to show a surplus. Existing inner-suburban infrastructure (schools, roads, drainage) has been allowed to decline and would require upgrading to support intensification of residential land use. (Troy, 1992).

Governments will not be able to simply stop funding urban infrastructure thanks to urban consolidation. They will need to re-allocate rather than reduce spending if housing development is to be adequately served by physical and social infrastructure.

3.5 Affordability

There is a common view that an increase in housing densities will lead to reduced house prices because of the land and infrastructure efficiencies involved. The development of medium-density housing is seen as a way of alleviating the acute difficulty experienced by many Australians in buying their own home. (Collie, 1990, p.30) Closer analysis of market forces, however, reveals that this is an overly simplistic view. A move to denser forms of housing in itself does not reduce the cost of housing to the consumer. (Dening, 1991, p.12)

The experience in the United States, where multi-unit development has been occurring on a massive scale for the past 10-15 years, has been that the overall affordability of housing has not been improved. (Burke, 1991, p.161)

The controls which are imposed on multi-residential development by local authorities contribute to greater delays and greater financial risk by investors in this type of development. Excessive regulation of higher density housing forms acts as a disincentive to developers. But changing development controls and zoning conditions to encourage medium-density housing is not sufficient to improve affordability. (Berkhout, 1992) To begin with, the rezoning of land in inner areas to allow greater densities automatically raises the land cost component of development. The unit cost of medium-density housing in inner areas is significantly higher than conventional housing. Savings in land cost are largely offset by greater construction costs for medium-density housing.

Furthermore, a market where demand exceeds supply will produce an encouragement for prices to rise and it is unlikely that developers will continue to build medium-density housing if there is a possibility that demand begins to weaken:

> "the notion that a new supply of medium-density housing in inner areas will lower the cost of the more land intensive forms of housing simply flies in the face of all we know about the economics of housing markets." (Kirwan, 1992, p.15)

It is clear from detailed analysis of the housing market that urban consolidation will not automatically produce more affordable housing. There is scope for improving the affordability of new housing in high-value inner-city locations, but this will need to involve a range of policy actions, including:

- more creative zoning policies which relate to the needs of the end user rather than the speculative purchaser;
- rationalisation of planning controls;
- use of new and innovative building techniques and materials;
- the adoption of infrastructure funding formula which recognise the failures of past pricing policies; (Spiller, 1992)
- changes to the negative gearing rules so that new housing is given an advantage over existing housing;
- the introduction of rate or tax incentives for more affordable housing;
- the granting of planning bonuses for medium-density housing where a guaranteed maximum price can be assured.

3.6 Diversity and Suitability

Due to the changing social structure of society, it has been widely argued that a single form of detached suburban housing is unlikely to meet the needs of a greater range of potential housing occupants. Consolidation is supposed to provide a greater housing mix, providing housing choice. Whilst consolidation certainly provides the opportunity for a wider range of housing types, there is no guarantee that more diversity will be produced unless more innovative housing designs are actively encouraged.

It is popularly assumed that the smaller households consisting of single persons, single-parent families and childless couples need less space and are more appropriately housed in smaller, low-maintenance, medium-density dwellings. This is an assumption which is largely untested and which makes a connection between household size and dwelling size which does not necessarily exist. (Burke, 1991, p. 158) Much of the argument about lack of choice in housing rests on the proposition that individuals occupy houses that are too large for their needs and that they would choose smaller houses if they could. This argument does not recognise the fact that dwelling size is a market response to demand and that the vast majority of households are happy with their dwelling. (Troy, 1994)

The design culture which clings to detached dwellings as an optimum form of medium-density housing produces scaled-down versions of traditional suburban houses with few of the space advantages that come with the low-density form. (Gutjahr, 1991) "Innovative" solutions such as zero lot line are hardly a radical departure from the standard model. Alternative housing models are available, but traditional developers seem unable to adopt new designs. (McDougall, 1991).

New ideas for the design of suburban housing at much higher densities, whilst maintaining a sense of space and community on the existing suburban grid have been suggested (Myers, 1992; Morris, 1992) but require a more visionary approach by the development industry and local decision-makers. These ideas are also very difficult to implement within the operation of the existing planning system, where land rationalisation or development across a number of lots is difficult to achieve.

3.7 Liveability

The problem of liveability is closely related to issues of suburban diversity and density. One of the understated aims of consolidation is to give suburbs more character and make them more interesting places to live. This is supposed to be achieved by creating focal points in suburbs where services are more accessible, ensuring that public spaces such as streets encourage social interaction and providing safe, convenient routes for pedestrians between house, shops, public facilities and public transport routes. (Morris, 1992) Increasing housing densities alone will not achieve this aim. It requires a commitment on the part of local authorities to ensure that private development contributes to suburban character and that public spending is directed towards improving the total suburban character.

Given that the response to consolidation policies tends to be reproduction of traditional forms of housing at a smaller scale, there is little likelihood that consolidated suburbs will become more interesting places to live or move around in. Furthermore, it is likely that the uncoordinated, site-by-site redevelopment of suburbs at higher densities could lead to even less legible and transparent residential environments as building densities increase, pedestrian accessibility is made more difficult and reliance on private transport is maintained.

The argument for urban consolidation includes a notion that increasing housing densities by consolidation will automatically produce living environments that are more interesting and enriching for their inhabitants. There is an underlying proposition that higher-density living is somehow more cultured and socially-interactive, yet there is little social analysis to support this view. Indeed, it would be impossible to explain the

success of Australian artists, writers, musicians and intellectuals under a theory that Australian suburbs discourage creativity and self-expression. It is crudely deterministic to argue that changing the form of our suburbs will encourage different kinds of social activity. (Troy, 1994)

There are, of course, other good reasons for improving the look and feel of the suburbs, but good urban design does not depend on medium-density housing and could equally be applied to improving, without densifying, existing suburbs.

Many of the planning problems associated with suburbs can be traced to the fact that they have largely been viewed as dormitories with no particular character or cultural activity of their own. (Morris, 1992). There is a growing trend to explore the inherent qualities of neighbourhoods to find meaningful ways of improving their environment, which need not just occur in areas set aside for densification. That sense of community and liveability sought after by the garden suburb planners is the social sustainability pursued today. Even where it is acknowledged that existing suburbs are rather uninteresting and uninspiring environments for living, the aim of consolidation should be to transform those environments rather than merely increasing the intensity of the existing suburban pattern.

3.8 Sustainability

The concept of "ecologically sustainable development" arises from the idea that we should only pursue and accept development that is in balance with environmental needs. Beyond that, the definition of the term and its application are very hazy.

It is logical that a commitment to sustainability requires a re-assessment of how we use resources such as water, land, air and vegetation both in existing forms of development and new. It is overly-simplistic to say that urban consolidation is more sustainable because it:

> "...will reduce the pressures to continue the energy wasting urban sprawl and will result in a more environmentally sound form of urban development". (Collie, 1990, p. 31)

There is little evidence available to suggest that denser housing will reduce energy consumption for heating and transport, change water consumption practices, preserve productive land or reduce the effects of urban stormwater run-off. Consolidation may produce some environmental benefits, but these benefits may be offset by environmental deterioration caused by other effects of intensified urban development. (Troy, 1994, p. 40)

The suburb has always been inextricably linked to the use of private motor vehicles. However, the move to urban consolidation is, in part, a response to the perceived problems of car-dominated environments and reliance on cars for commuting to work. Urban consolidation is supposed to lead to greater use of public transport and a shift in the balance away from cars towards pedestrianisation. It would be expected that urban consolidation should be specifically directed towards localities where the opportunity is available to walk to shopping and community facilities or to public transport nodes. There is, however, no overall strategy for the consolidation of key locations in the suburbs, but rather a shotgun approach towards densification. For the purposes of reducing reliance on private

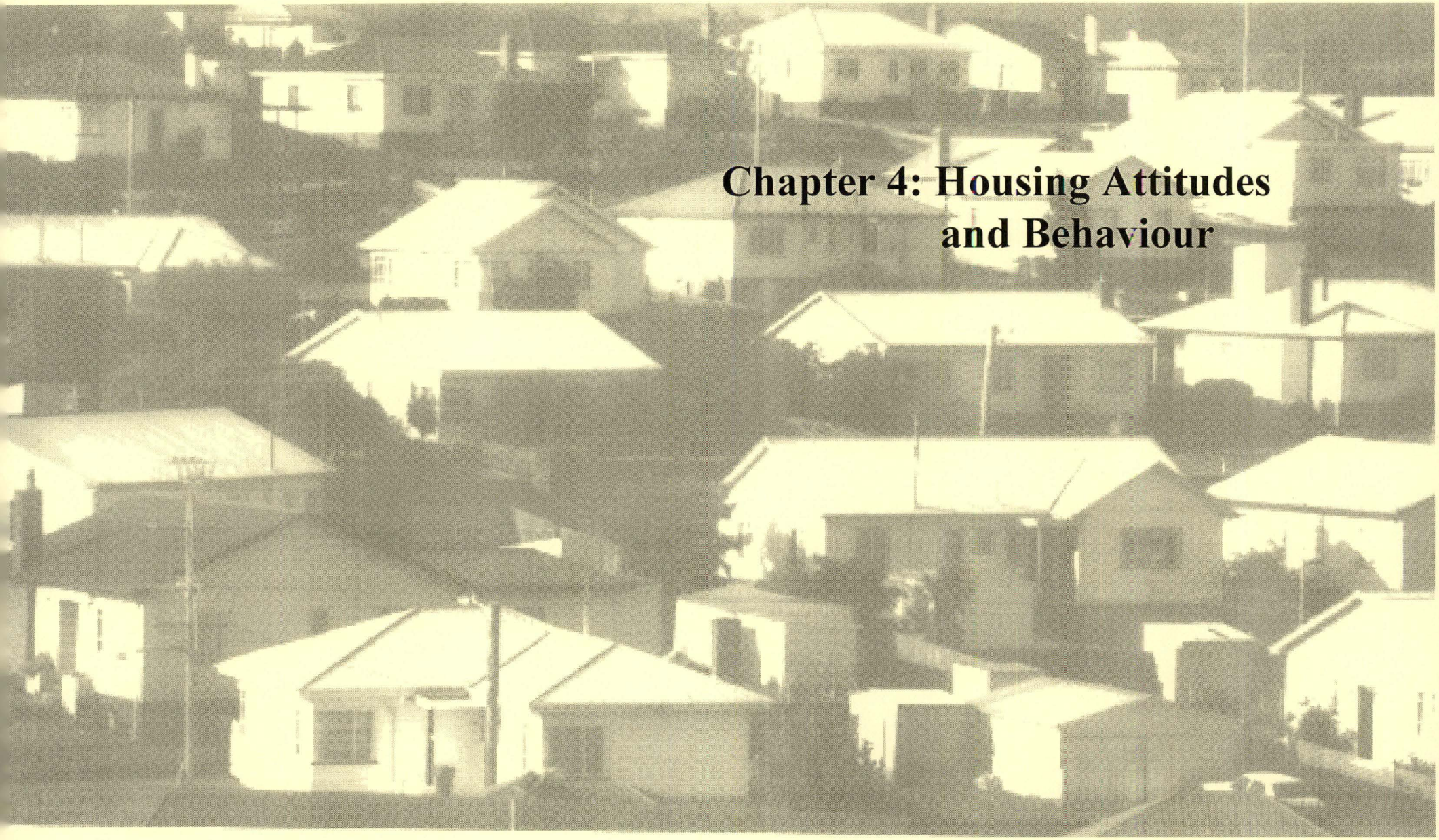
transport and reduction of vehicle emissions, this is a self-defeating approach.

It is also paradoxical that most new housing development is as much dominated by access roads and parking areas as any traditional form. Regulations require at least one, often two parking spaces for each dwelling accessed by minimum width driveways which produce a massive area of concrete or bitumen paving on residential sites. The needs of the pedestrian are often subordinated to the need for convenient car access to each dwelling by occupants and visitors. Meanwhile, wide expanses of suburban streets are reserved as traffic movers rather than potential parking areas.

Combined with the additional building area, such increases in the area of hard surfaces contribute to an increase in the amount of stormwater run-off generated by residential sites. Existing stormwater systems are unable to cater for unlimited increases in run-off and any increase in run-off must produce environmental costs. This is an issue which has not been adequately addressed by proponents of urban consolidation as it is now occurring.

There is also evidence that the suburban backyard is an important source of food production, industry and recreational use which must be counted in any assessment of sustainability. (ABS, 1993)

It must also be acknowledged that the reliance on the private motor car in today's suburban society is unlikely to change. Use of the private car may be reduced by job restructuring and information technology, but the flexibility offered by the car is unlikely to be abandoned. It is more likely that new sustainable fuels will be developed along with more efficient public transport systems. (Martin, 1991)



Chapter 4: Housing Attitudes and Behaviour

4.1 Introduction

The key to success for any new form of housing must be its acceptance as a suitable alternative to what is currently available in the traditional suburb. This means meeting community expectations for housing as well as satisfying basic individual and social needs in the design of new residential environments. Much of the local consolidated housing reviewed in the course of this project appears to be designed and built without regard for its function as a human living environment. Equally, much of the valid criticism of traditional suburbia exposes its inability to cater for a range of social and psychological needs other than a generalised and out-dated model of a traditional family, social and economic structure.

Attitudes toward housing and behavioural tendencies in the residential environment are culturally ingrained. As cultural values change over time, so too do houses change as expressions of societal values and individual needs within society. The introduction of the detached housing form coincided with massive social change and that form has developed with an emerging Australian culture. The home is more than a place of shelter and retreat, it is a reflection of lifestyle. (Brown, 1991)

Making buildings to live in is a process of social negotiation, balancing the values and objectives of all participants with the availability of resources. The use of space involves continuous negotiation between behaviour and physical elements, between the needs and intentions of the individual and the larger social group. The residential environment is very much a product of that interplay between social goals, individual behaviour and physical elements. (Joiner, 1989, p.13)

If suburban housing is to adequately balance these needs then some attempt must be made to elucidate the kinds of values and behavioural needs which are to be accommodated by the environment, how they arise and what design measures can be used to provide for those needs.

This first part of this chapter presents a discussion of those basic individual needs which we seek to satisfy in housing, ranging from individual needs for privacy and identity to group needs relating to community and a sense of belonging.

The second part of the chapter is a review and summary of attitudinal research which provides an overview of the housing values which exist in Australia and how those views colour housing preferences and tastes.

This exploration of the behavioural background to housing satisfaction is intended to identify the design factors important to the success of new suburban development. In a later chapter, design approaches are recommended which will create housing which is more flexible and responsive to human needs, including the more subtle needs of privacy and security and the more obvious ones of access, living space and warmth.

4.2 Behaviour and the Living Environment

The houses people live in can have varied effects on their behaviour. Opportunities for recreation, productivity, interaction and self-expression are determined by the quality of the living space provided. If housing is to be designed to suit those needs, it must be based on some knowledge of how people behave in their environment and what they feel about their domestic activities. Living environments must also be flexible enough to

be modified according to individual perceptions, lifestyles and aspirations. Planning is the method by which the interaction between environment and behaviour is manipulated.

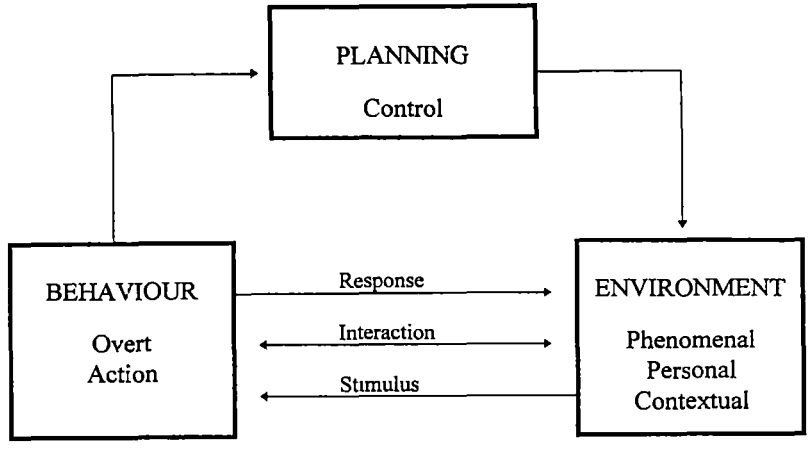


Figure 8: Interaction of Environment, Planning and Behaviour (Source: Porteous, 1977, p. 14)

There are a number of separately definable areas of human-environment interaction:

The Perceptual Area	The effect the environment has on our perception of it and on the formation of attitudes.
The Expressive Area	The colours, shapes and symbolic meanings given by the environment.
The Aesthetic Area	The way variety or simplicity affects our aesthetic perceptions.
The Instrumental Area	The tools and facilities for human activity provided by the environment.
The Ecological Area	The effect of the environment on overall patterns of spatial behaviour.
The Adaptive Area	The extent to which the environment hinders or aids our activities, such as learning behaviours and movement.
The Integrative Area	The relationship of the environment to social groupings and activities.

(Porteous, 1977, p. 182-3)

Each of these areas of human-environment interaction describes a complex array of direct and indirect environmental influences on human behaviour. The environment that affects people's behaviour is also more than the physical or built environment. It is made up of a vast array of encoded dimensions and messages, which are interpreted according to one's role, expectations and motivations.

A great deal of behavioural research has been carried out to assist with the development of design responses to housing problems. Even so, research in the United States has shown that designers are reluctant to use such behavioural approaches in the design of new housing, even though they acknowledge that the immediate living environment has an effect on people's behaviour at a micro-scale. (Marcus and Sarkissian, 1986, p. 5)

Little of this behavioural research has filtered through to housing standards, which more often reflect the expert views of professionals rather than any sound empirical evidence. Designers of the built environment rely to a large extent on their personal beliefs and intuition. Information on the behaviour of the users of the environment should be a more important input. Design of housing according to a set of standards or assumed household needs with little or no factual basis will invariably fail, because it represents the views of the designer about the living environment, rather than the perceptions and actual behaviour of the user.

The relationship between environment, perception and behaviour is a complex one, but must not be ignored in favour of assumptions about the needs of housing occupants. Well-conceived environment-behaviour research can provide information necessary for designing housing and can provide information to policy-makers as to what type of housing is desired by different members of the community. An extension of this kind of research, in the form of post-occupancy evaluation of housing, can test different housing products in the market to establish their level of acceptance. (Thorne, 1983)

4.3 Identifying Housing Needs

4.3.1 A Framework of Human Needs

In behavioural terms, people's needs have been identified as falling into the following categories:

Physiological Needs	Hunger, thirst, shelter
Safety Needs	Protection from physical and psychological harm, privacy, self-orientation
Affiliation Needs	Love, group membership, comfortable yet private inter-personal relationships
Esteem Needs	Personal integrity, related to ability to personalise one's environment
Actualisation Needs	Self-fulfilment - related to ability to control the environment
Cognitive/Aesthetic Needs	Relating to personal concepts of beauty and the need to learn

(Porteous, 1977, p.11)

These needs are expressed in many forms of human behaviour and in modifications of the environment designed by the user to manifestly satisfy the need. Housing has the ability to partly satisfy or influence almost all of the above human needs in one way or another. It plays an important part in our concepts of self, safety, integrity and freedom. Housing is therefore one of

the main avenues that we have for achieving personal satisfaction and self-expression.

4.3.2 Territoriality

Of particular relevance to the issue of housing need is the expression of territoriality which finds its outlet in and around the home. Without reducing the concept to extreme behaviourism, where people are seen merely as responding to sets of stimuli in a pre-conditioned manner, it is clear that humans express territoriality to some degree, heavily modified by cultural conditioning. (Altman, 1975, Chap. 8). Territoriality in humans need not be seen as a model of behaviour similar to the aggressive defence of a personal space attributable to animals, but rather as a complex set of behaviours varying according to cultural and environmental modifications. It need not be defined by the defence of space alone, but is rather an association of person with place, involving a sense of necessity, control, self-determination, freedom and identity. (Newman, 1983, p. 63)

The desire to satisfy territorial needs is deeply enshrined in people, yet subtly manifested in our in modern society. Our concepts of home, work, family and community create complex social and economic relationships which produce complex behaviour patterns. It is by no means within the scope of this project to analyse those patterns, but it is absolutely necessary to acknowledge the relationship between housing and human behaviour if a proper criticism of housing forms is to occur.

4.3.3 The Concept of Home

Home is much more than a house or a flat. It is a structure or area in which a person or group of people have made an emotional investment. It is an area which is personalised like no other. Personalisation does not just involve interior decoration, but includes the addition or modification of external features: colour schemes, gardens and garden furniture.

As the one sure refuge of the individual or family, the home is an actively defended territorial space. Fences and walls make the best territorial markers where their location is agreed between neighbours. The movement of strangers into the home territorial area constitutes an intrusion or trespass in both a legal and emotional sense. (Rapoport, 1969, p. 63)

4.3.4 Privacy and Security

Privacy and security are obtained at the core of the home base at the level of the house or room. The process of entering another's home base involves certain protocols and rituals, such as door knocking and bell-ringing. These behaviours recognise the sanctity of the threshold, which varies according to cultural norms, but essentially reflect the fact that the activities carried on within the home are private (rest, grooming, reproduction) and divert attention from the social interactions which occur outside the home. The strength of the boundary between private and semi-public space is expressed in the structures or spatial arrangements which exist at the boundary.

Architecture and boundary marking express cultural variations in the need for privacy and security. These variations are evident

in the prevailing forms of house architecture used in Moslem, North American and Anglo-Australian societies.

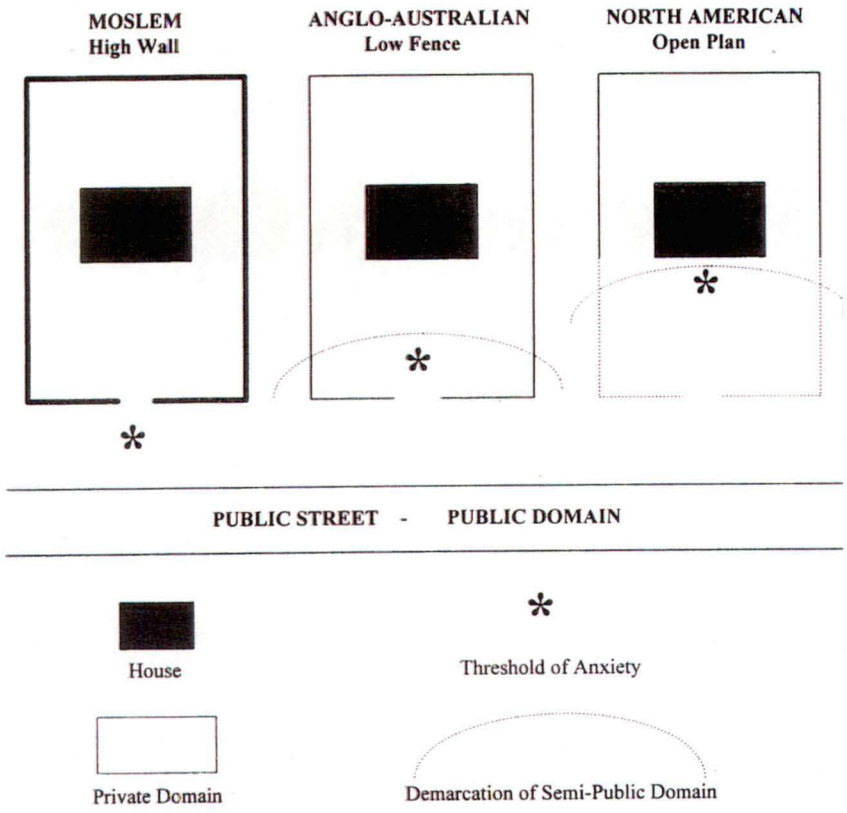


Figure 9: Cultural Variability in the Sanctity of the Threshold (Source: Rapoport, 1969)

4.3.5 Identity

Identity and individualism are valued by individuals because of the freedom and self-determination that they imply. The house and its immediate surrounds are a major vehicle for the expression of identity and are an important psychological symbol of the self. The quest for a suitable identity in one's house involves choices of physical separateness (detached house or apartment), architectural style (ostentatious, subdued, individualistic or conforming), garden composition, general appearance and boundary demarcation. For some, the total appearance of the house and its garden makes the identity statement; for others, identity is as simple as a name-plate.

Figure 10: Identity Statements: A Meticulously Clean Image and a Name

In the modern housing process, many people do not have a role in designing their own homes. This is particularly true for the occupants of consolidated project houses, who, even as purchasers, adopt a finished, standardised product. It is more difficult, therefore, to give the home some touch of uniqueness, a statement that "this is mine".

For the owners of new, detached houses, one of the first acts of identification is the demarcation of boundaries by fences or planting. (Marcus and Sarkissian, 1986, p. 64) For Australian suburbanites, the paling fence has historically been a very strong symbol of identification with a piece of space. Demarcation at the street boundary takes a wider range of forms, but can also make a powerful statement about the occupant's sense of identity.

In many denser forms of housing, where opportunities for space demarcation are more limited, personalisation is more difficult. Houses that are either replicated to create a sense of anonymity or designed with no opportunity for individual boundary demarcation or external display cannot be readily adopted or adapted as identity statements. This makes them unattractive both to occupants and neighbours as alien housing forms.

Figure 11: A Lack of Identity: Which House is Mine?

4.4 Attitudes to Housing

4.4.1 Introduction

In recent years, there has been a growing body of research into housing attitudes in Australia, aimed at discovering the actual attitudes and feelings that Australians have about various types of housing. As distinct from an assessment of the need for housing change based on demographic or economic arguments, a behavioural approach to housing must take account of the needs and attitudes of the individuals for whom suburban planning is intended.

The preceding part of this chapter discusses the behavioural factors which have a bearing on housing choice and the level of satisfaction gained by housing occupants. Complementary to an understanding of these housing "needs" is the issue of "wants"; that is, the stated preferences and desires of those people being planned for. No planning policy can be successful if it completely ignores public opinion, no matter how well-conceived it may seem to planners. An understanding of community attitudes is essential to policy analysis and change. This section aims to identify the basic parameters of housing attitudes within which a suburban housing policy must be framed.

Despite the concerted push by academics and planners throughout the 1980s for new forms of housing to be developed under the banner of urban consolidation, very little attempt was made to canvass the views of the population at large on housing preference. Whilst economic and environmental arguments have been advanced to support a change in the form of Australian suburbs, the difficult question of community acceptance has been largely ignored until recently.

Generally speaking, there has been a dearth of hard evidence of concrete social benefits of consolidation, with a lack of attention given to community sentiment about the form and mix of suburban housing that is appropriate for the future. (Yiftachel and Betham, 1991). Optimistic hopes that community attitudes will follow the "rational" views of the planner about suburban change are not generally reflected in the research which has been carried out.

4.4.2 Housing Preferences

Research in Australia consistently confirms the affinity of Australians for the single detached dwelling as the preferred mode of housing. (Loder and Bayly, 1991; Conner, 1991; Stevens, et al, 1992, Reid, 1994)

Surveys conducted in Australian capital cities show that up to 80% of the population would prefer to live in a detached house on its own lot. A vast majority of Australians also continue to cling to the goal of home ownership. (Clare, 1991, Conner, 1991)

A review of attitudinal research reported by the above authors in Sydney, Adelaide, Brisbane and Perth reveals the following general findings in relation to housing values and preferences:

- The detached house on its own lot is still by far the most preferred form of housing;

- Home ownership is preferred by a vast majority of Australians because of the security it offers;
- Affordability, locational familiarity and an attractive setting are major determinants of housing preference, indicating a continuing demand for housing at the urban fringe;
- Expectations of living in a detached house on its own lot are strongest in home-owners, married couples and people in the 35-45 age group;
- The demand for more varied housing is strongest in the elderly, with about a quarter of people over 65 anticipating a move to attached or multiple-housing of some form;
- Despite a greater tendency in young single people to choose non-traditional housing forms, the detached dwelling is the preferred form for almost 60% of that group;
- Price is a key factor in determining actual selection of a dwelling. A price ceiling forces purchasers to consider compromising on location or dwelling type;
- A garden is regarded as a necessary part of the residential environment by about 75% of people, and this view strengthens with age. Gardens are less important to people on higher incomes.
- Although they believe a garden to be important, older people are less likely to choose a house with a private garden because of the workload involved;
- People tend only to move within a limited suburban region. One of the main reasons for this is affordability within specific areas. People on higher incomes have greater housing mobility and tend not to be so locationally-restricted.

These findings indicate that the personal cost of suburban growth in terms of increased distance from employment, services and facilities has not significantly changed housing and location preferences. (Stevens et al, 1992) The fact that preferences have not changed markedly despite significant social changes may be attributed to either of two factors:

1. The community is slow to respond to those demographic and social changes; or
2. Changes in the nature of family and household structure are not the primary determinants of housing preference.

The high level of preference for detached housing amongst all age and social groups must partly be because of the ability of that form of housing to cater for a range of personal needs regardless of family status or age. Preferences indicate that attainment of private space, security and a sense of identity is most easily satisfied in the traditional housing form. Respondents to one survey showed an inclination to being persuaded that alternative forms and densities of housing might be acceptable, as long as they provide the same privacy, security and aesthetic qualities. (Johnson-Owusu, 1991, p.48) The pro-consolidation movement can take heart from this tendency, although a common response has been to argue that medium-density housing simply needs to be marketed better as an acceptable alternative to traditional housing. It also has to be proven as a suitable alternative, which is a much more difficult task. If new forms of housing are to be accepted by the community, they have to cater for the lifestyles and housing perceptions which are currently housed in single detached dwellings with large gardens.

4.4.3 Specific Attitudes to Housing

The much-vaunted adverse community reaction to higher densities of housing is verified by research and appears to be a reflection of entrenched attitudes about desirable housing form. (Conner, 1991) Resistance to medium-density housing is found to be strong in any surveys conducted, although the reasons for that resistance obviously relate to the perceived meaning of the term and the exposure that people have had to alternative house forms. (Greenstreet Joint Venture, 1991; Johnson-Owusu, 1991, p. 48) The Greenstreet literature argues that the attachment to traditional low-density housing may not be as deep-seated as it appears, with almost half of survey respondents recognising the need for change, despite being cautious about it happening in their own neighbourhood.

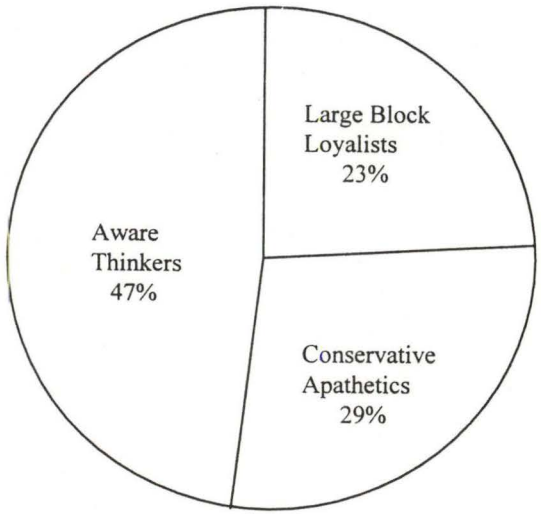


Figure 12: Segmentation of Community Attitudes (Source: Greenstreet, 1991, p. 13)

Despite this apparently high community awareness of the need for change, only 23% of respondents were supportive of increased housing densities in their own area. Promises of lifestyle benefits such as family closeness and improved local housing opportunities did not significantly increase the acceptance of higher density housing. (Greenstreet, 1991, p. 14)

Resistance to higher residential densities also appears to vary according to location and this has obvious implications for policy-makers in relation to suburban redevelopment. Research in Perth has found that resistance to medium-density housing increases with distance from the city centre; that is, there is a much higher level of acceptance of higher densities in inner and middle suburbs, partly due to exposure to denser housing forms and partly due to the variations in the lifestyle choices and cultural perceptions of residents in inner and middle suburbs.(Yiftachel and Betham, 1991)

The rating of factors considered important to house selection indicate the specific qualities most sought after in housing:

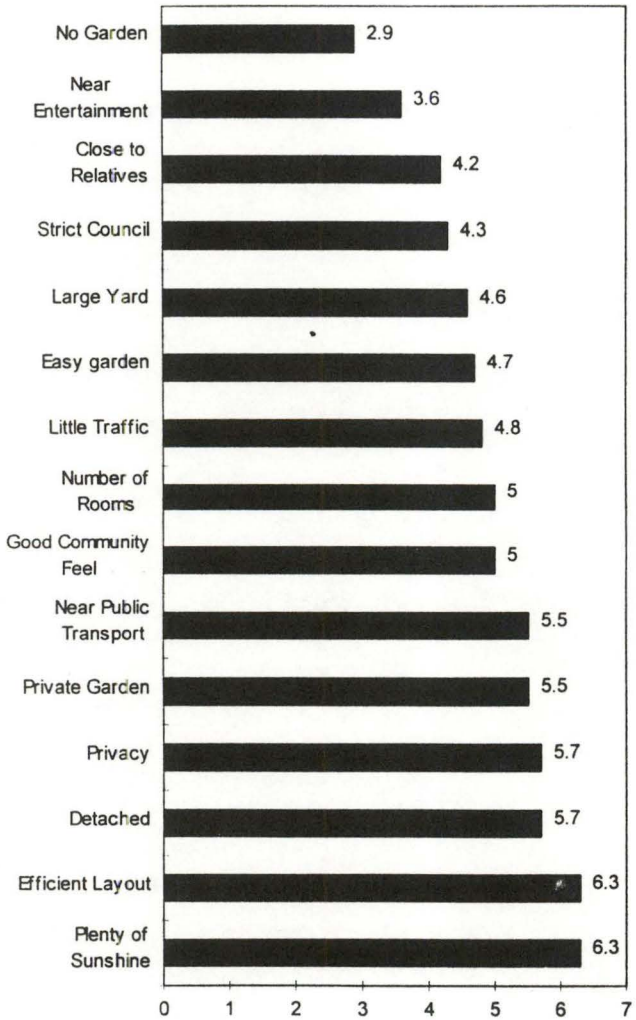


Figure 13: Rating of Factors in Housing Preference - On a Scale of 1 to 7 (Source: Greenstreet, 1991, p. 11)

Supporters of medium-density housing suggest that denser housing is capable of satisfying these stated preferences, however it is clear that the important site-specific factors (sunshine, layout, form, privacy and garden) are most easily accommodated in the traditional suburban house form. The evidence suggests that either:

- medium-density housing is not being presently being designed to satisfy these requirements; or
- there is a widespread community perception that it does not match the qualities of the traditional suburban house.

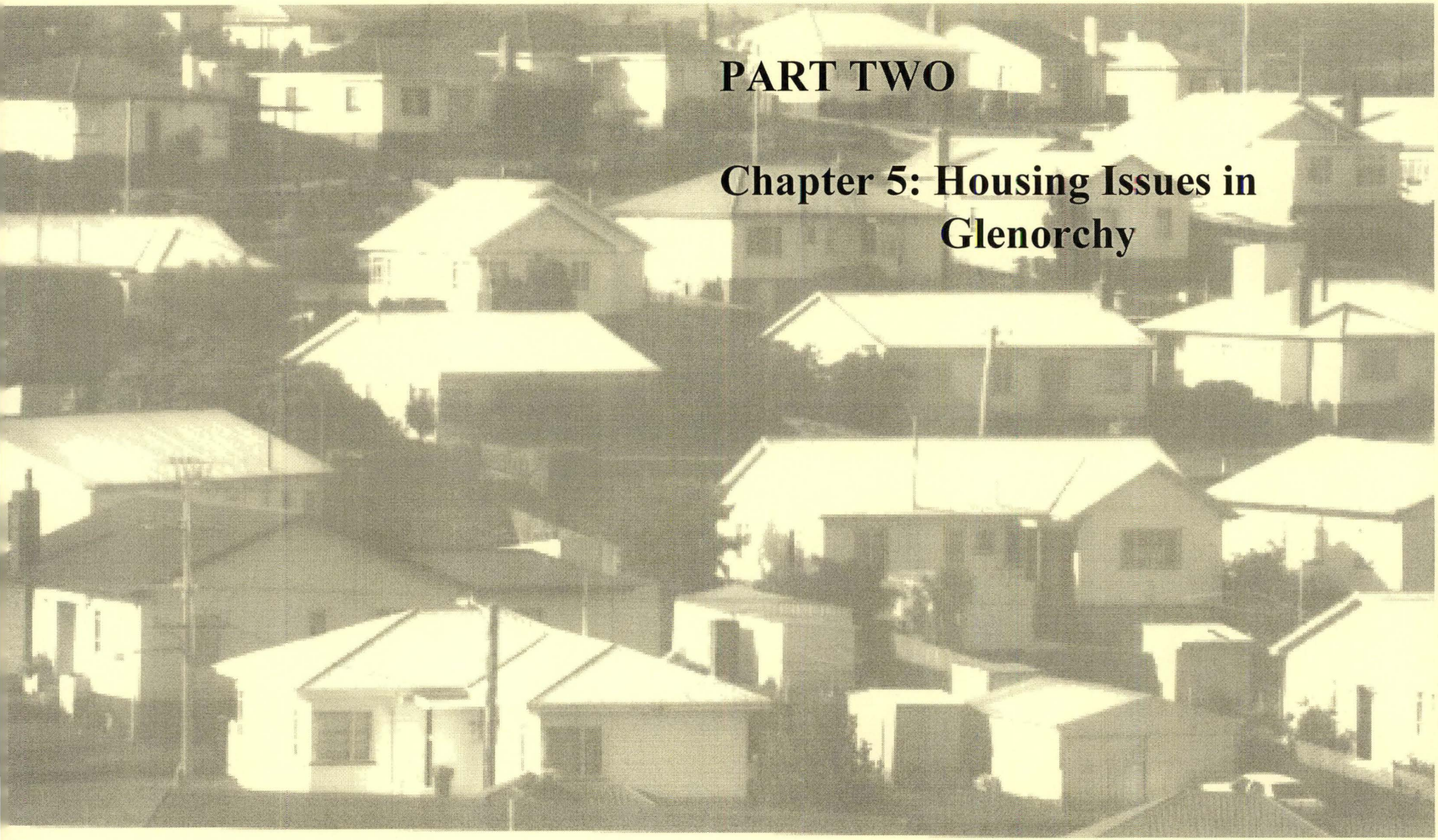
The pro-consolidation literature suggests, in a somewhat patronising manner, that only the latter is true and people simply need to be persuaded to accept the benefits of higher residential densities. (Greenstreet, 1971, p.14; Dening, 1991, p.13). It seems more likely that both are true and that people perceive medium-density housing as being inferior because it is.

4.5 Summary

The residential environment is made up of an array of direct and indirect influences on human behaviour. People respond to their environment in a variety of ways, but their responses can be studied and used as a basis for designing new environments that are meaningful and functional for their inhabitants.

Home has a deep meaning for people; it is the basis for family and other social relations, a place for intense personalisation and a statement of identity. Territory is strongly recognised, actively identified and defended. The desire for privacy and security on home territory has a strong influence on housing preference and housing choice.

Perceptions of the home environment and the preferences for house type are a manifestation of a social and cultural identity, and in Australia the housing culture leans strongly towards detached houses with their own garden space. Despite social and demographic changes that might be read as exerting a huge influence on housing preference, there is little evidence to suggest that Australians are seeking alternatives to the traditional housing form. This may be largely because the available alternatives are simply not attractive enough to warrant serious consideration.



PART TWO

Chapter 5: Housing Issues in Glenorchy

5.1 Historical Background

Suburban development in Glenorchy followed a course similar to much of urban Australia, from semi-rural beginnings through industrialisation and post-war boom, to the rationalism and re-structuring of the 1980s and 90s. The physical form of Glenorchy displays this history of suburban development, from colonial origins through industrialisation, public housing, private boom, suburban retailing to consolidation. It is not intended to explore these historic themes in any detail as this has been, and is being undertaken elsewhere. (Alexander, 1986, Glenorchy City Council, 1994).

There are distinctive features of the physical and cultural landscape which are critical in any planned improvement of the suburban environment. It is useful to briefly identify those features which have created the character of Glenorchy:

- Glenorchy began as a location for small farmlets, country houses and industries based on primary products. Remnants of the semi-rural lifestyle of the mid-19th Century remain at sites like Pitt Farm, Summerhome and Hamel, now surrounded by suburban development.
- The major road, and rail transport routes on the western shore of the Derwent assured a future for industrial and residential development as metropolitan Hobart grew. Geographical influences created the opportunity for growth around nodes spread along this transport corridor.
- Industrial development has had significant effects on local employment and housing growth. Relative prosperity in employment and the housing market has corresponded with the fortunes of local industry and an economy derived from the industrial base.
- Industries themselves had direct involvement in the development of "garden suburbs" at Cadbury and Lutana, providing rare physical examples of design for the suburban ideal of the early 20th Century, at least as seen by the industrialist benefactors responsible for these short-lived, utopian housing projects.
- Post-war industrialisation invaded established suburban areas and in many cases devastated the residential environment, but brought the economic growth which saw the City's low-density suburban landscape unfold.
- In the post-war boom years, Glenorchy hosted significant development of public housing for its expanding population. The social and physical character of entire suburbs was formed as a creation of State housing development from the 1950's to the 1980's.
- Through the 1980's, the private housing market began to respond to social and economic trends by providing increasing amounts of "consolidated" housing, commonly referred to as "units". This occurred in a somewhat laissez-faire regulatory environment, where basic standards were imposed, but there was little recognition of the wider implications of changing housing needs. (Hepper Marriott & Associates, 1989, p. 110)
- Development on the suburban fringe continues in a relatively unplanned manner as it has for the past 80 years. New housing leads the advance of suburbia across the rural paddocks and into the foothills as if nothing has changed in the demand for the suburban dream.

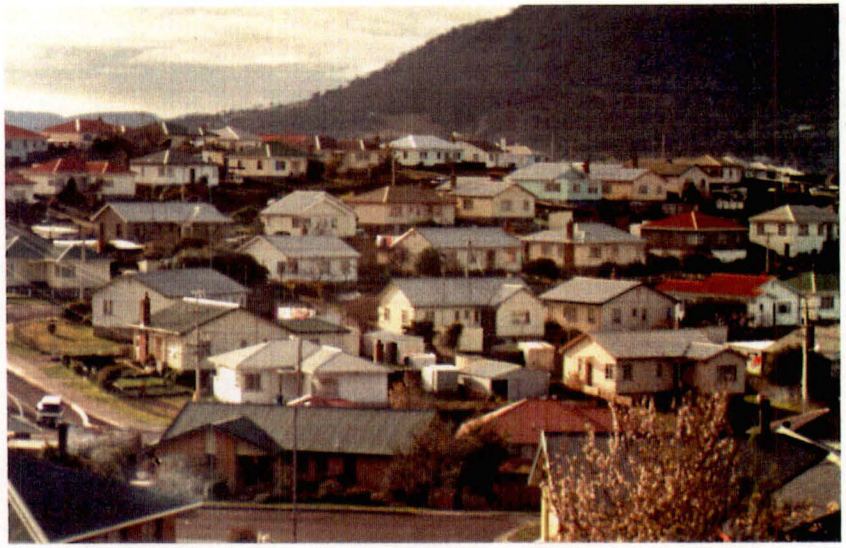


Figure 14: A Pictorial History of Housing Development in Glenorchy

Glenorchy's suburban fabric encompasses inner suburbs which experienced the birth of suburbia and its early growth, middle suburbs that developed in the immediate post-war boom years, and the continuously expanding suburban landscape of the developing urban fringe. The suburbs which make up the local government area display a remarkable diversity in historic terms, but share those general characteristics by which we identify traditional suburbia. These historical circumstances mean that Glenorchy is able to experience the processes of creation, decline and re-generation of suburbs all occurring at the same time. This presents certain challenges and opportunities for future suburban planning.

5.2 Strategic Overview

5.2.1 National Issues

Federal governments have continually nurtured the dream of home ownership in the Australian suburbs and have promoted investment in the private home on a scale unparalleled in the world. In the post-war period, the Commonwealth-State Housing Agreement, interest rate control, home-ownership incentives, exclusion of private home from capital gains tax are examples of how economic policy has been directed towards achieving national housing goals. (Kemeny, 1983) At a national level, the state of the housing industry, and the attitudes of Australians towards home ownership are intrinsically linked to economic policy. It must be recognised that the economic and social factors driving housing demand are often beyond the control of local authorities and are not within the ambit of local planning intervention.

Aside from these issues of broad economic and social policy, the Federal Government has in recent years taken an active role in funding housing research in projects such as the Green Street venture and Review of Residential Regulations to produce the AMCORD and AMCORD Urban housing manuals. These efforts are part of a national push to improve the efficiency and quality of housing throughout Australian cities.

In addition, the Federal Government has funded a variety of urban development projects through the States under its Better Cities Program, many of which involve re-development of land in existing suburbs for medium-density housing. One such project has been funded in Glenorchy, but after two years on the drawing board has shown little progress. A smaller-scale project, in Lefroy Street, North Hobart has proceeded to completion of the first stage and demonstrates some innovation in medium-density housing development, albeit funded from the public purse.

5.2.2 Regional Issues

There is no specific urban consolidation strategy in the Hobart region or Tasmania. No regional land use planning occurs in the Hobart region and the adoption of local planning schemes is uncoordinated. At the regional level there is a lack of information about development trends and no rational overall approach to urban expansion, transportation or the provision of urban infrastructure. (Hogue, 1992)

The adoption of a statewide residential code (Tascode) derived from the Amcord and Amcord Urban models is on the Tasmanian planning agenda, but is unlikely to occur in the

immediate future and is problematic in the current political climate. Problems with community acceptance of a similar urban consolidation policy in Victoria are likely also to be encountered in Tasmania. To date, there has been little public debate about urban consolidation - either within or outside the planning profession - and there is no specific strategy for urban housing on which to attach a statewide housing code.

State and local government has tended to take an ad hoc approach to urban consolidation, supporting various regulatory changes and public projects under the banner of urban consolidation without a detailed understanding of the housing market or stated regional strategic goals.

The following broad issues are identified as significant to the planning of suburban Hobart:

- There is no defined growth strategy for the region and little or no coordination of state and local authorities in the provision of suburban infrastructure;
- Relatively low levels of population increase mean that the rapid growth of outer suburbia experienced in larger mainland capital cities is not as significant a factor in Hobart;
- Notwithstanding the relatively slow growth, suburban sprawl is amply evident around the metropolitan area, exacerbated by topography and landscape destruction;
- A continuing demand for, and seemingly endless supply of rural residential blocks has a significant effect on development patterns on the urban fringe.

The State housing authority, once a major player in the provision of housing in suburban Hobart, has a much reduced role primarily as a provider and manager of welfare housing. The development of new suburban public housing has virtually ceased except for the odd infill development, spot purchasing of existing housing stock and involvement in the Better Cities projects.

5.3 Local Housing Issues

5.3.1 Housing Stock Assessment Study

The housing situation in Glenorchy was analysed in some detail in the Housing Stock Assessment Study carried out in 1985. (McNeill, 1985) That study provides an overview of housing in Glenorchy, summarised as follows:

- Generally, Glenorchy has a healthy housing situation. The population is generally well housed.
- There is no aggregate housing shortage in Glenorchy;
- There are increasing expectations by young people and newly-married couples to form their own households;
- There is a mis-match between housing stock and demand, with an under-occupancy of traditional suburban housing by the aged and a high demand for alternative housing forms;
- There is a high demand for, and an acute shortage of, affordable rental housing;

- The real social issue in housing policy is related to household income, not the state of the physical housing stock;
- There are, however, policy decisions which can be made at the local level to improve the quality and flexibility of housing to serve the needs of special groups in the community.

The study finds that assumptions about the nuclear family have restricted the availability of housing alternatives. The housing industry has failed to respond to life cycle factors and social changes by providing a range of housing to meet the needs of the community. Furthermore, the community itself has resisted change by opposing infill projects in established suburban neighbourhoods.

The study makes the following recommendations:

- The Commonwealth Government should introduce schemes for funding of joint State Government/Council housing projects;
- The State Government should continue to undertake medium-density housing projects through the Housing Department;
- The State government should continue to purchase rental housing, retain its existing rental stock and continue to fund housing projects for youth, aged and disabled housing.

Recommendations specific to the activities of the Glenorchy City Council were:

- Rezone areas around the existing commercial centres of Glenorchy and Moonah and other target areas for higher-density housing;
- Participate with the Housing Department in the development of land for medium-density housing;
- Provide encouragement and assistance to the elderly to find suitable housing and free up the under-occupied housing stock;
- Prepare and adopt a medium-density housing code which sets standards and provides incentives for medium-density development;
- Prepare detailed block plans for medium-density areas to provide for parking, access, pedestrian movement, street improvement and building siting and form, to resolve existing problems in key housing areas.
- A range of other recommendations relate to on-going research and data collection, community housing programs and the allocation of additional resources to housing strategy.

Few, if any, of these recommendations were pursued by the Council and strategic thinking on the housing issue lapsed for some time afterwards. Development of a new Planning Scheme focussed attention on statutory approaches to suburban development, rather than strategic ones.

5.3.2 Land Use and Development Study

In 1989, the Council also commissioned a strategic overview of land use and development in the City by Hepper Marriott and

Associates. (Glenorchy City Council, 1989) The study identified three broad strategic planning issues:

1. The need for a defined residential growth strategy.

   It was estimated that approximately 4,500 housing lots were potentially available in existing residential zones for future infill development. (Hepper Marriott & Associates, 1989, p. 115) This estimate is based on a gross housing density of 10 dwellings per hectare. Even if none of the reserved residential land on the urban fringe were available for new housing, this would be almost 20 years supply. There is a need for a strategy to manage this supply and to assist with the facilitation of infill development. Infill opportunities include:

   - dual occupancy;
   - resubdivision of existing lots;
   - rezoning of land to residential use;
   - development of vacant Council land;
   - comprehensive block planning and redevelopment.

2. The need to protect residential amenity.

   This is a vital factor in influencing why people choose to live in (or leave) an area and the image attached to that area. Amenity issues in Glenorchy include:

   - the creation of conflicts between mixed uses and building forms in the older inner areas, encouraged by ad hoc rezoning of residential areas;
   - increased pressure on the Council to provide improvements in established areas with limited resources;
   - the lack of planning control over development within and adjacent to residential areas;
   - the poor standard of design and amenity associated with older residential areas developed on the basis of cost-efficiency;
   - concern at the high level of unit development and the basic standard and image of such development.

3. The need to provide housing choice.

   Although the need for housing choice is acknowledged by the Land Use and Development Study, the recommendations for providing that choice are limited to broad statements about "encouraging" different housing forms by providing incentives for medium-density housing, facilitating land consolidation, improving design standards by regulation, and providing design advice to developers.

   There is an a degree of assumption here that promoting medium-density housing will of itself provide housing choice. The evidence appears to indicate that the choice offered by most medium-density housing in the city is very limited. Incentives for dual occupancy, resubdivision of lots to form development sites and the introduction of more detailed housing standards have tended to allow the development of villa unit complexes ranging from 2 to 50 units, but with standardised designs and remarkably similar building forms and layouts. The free operation of the market has produced a single medium-density form of a low standard, based largely on the perceptions of developers as to what is marketable, rather than any defined goals for a suitable housing mix or adequate quality control.

5.3.3 Consolidation Model for East Moonah

Research has also been carried out into the opportunities for urban consolidation in the suburb of East Moonah. (Hogue, 1992) The study provides a model for implementation of an urban consolidation strategy based on an assessment of the character of an established locality, its history, environment and physical form.

The starting point is that urban consolidation (increased housing densities) across the suburb are desirable, although it is acknowledged that this may not be the only solution for Australian cities or for other suburban localities. (p. 6) A detailed assessment of environmental character then provides the framework for a raft of improvements in traffic, streetscape, community facilities and open space to accompany consolidation.

The study continues to reinforce some of the dubious assumptions about the effect of urban consolidation on urban sprawl (p. 61) and the availability of infrastructure in existing suburban neighbourhoods (p.54), but emphasises the importance of local area analysis and planning in urban consolidation strategies. Whilst there is a range of recommendations to improve local amenity, increased housing densities are somehow assumed to be a pre-requisite for local area improvement. In identifying opportunities for urban consolidation, there is little indication of what form the consolidation will take and how it will relate to the existing spatial form of the suburb.

5.4 Development Trends

5.4.1 Occupancy Rates

Average occupancy rates continue to decline in Glenorchy in line with the national trend. Whilst the population has remained at just over 40,000 since 1976, the number of dwellings in the City has increased by over 30% in the same period.

	1976	1981	1986	1991	% Change 1976-91	% Change 1986-91
Houses	12690	13709	15331	16927	+33.4	+10.4
Persons	42437	41019	40883	42172	-0.6	+3.2
Persons per House	3.34	2.97	2.86	2.63	-21.3	-8.0

Figure 15: Changing Occupancy Rates (Source: ABS)

In 1976 Glenorchy's average dwelling occupancy rate of 3.34 persons per dwelling was higher than the average for greater Hobart and Tasmania. By 1991, the figure of 2.63 persons per dwelling was lower than Hobart and Tasmania.

	1976	1981	1986	1991
Glenorchy	3.34	2.97	2.86	2.63
Greater Hobart	3.25	3.01	2.89	2.75
Tasmania	3.28	3.07	2.93	2.79

Figure 16: Comparative Occupancy Rates - No. of Persons per Dwelling, 1976-91 (Source: ABS)

5.4.2 Dwelling Type

The increase in construction of dwellings other than detached houses on their own allotments is also evident in the housing data, which shows a slight decrease in the overall proportion of detached houses in the total housing stock. The traditional detached house nevertheless accounts for over 80% of all existing housing.

	1971	1981	1991
Separate House on its own lot	88.5	84.5	80.3
Other Form	11.4	15.4	18.7

Figure 17 Dwelling Type - Glenorchy (Source: ABS)

Glenorchy has a comparatively higher proportion of attached houses and 1 or 2 storey flats than Hobart or Tasmania as a whole, but a relatively lower proportion of higher density housing in the form of flats in blocks of 3 or more storeys.

	Glenorchy	Hobart	Tasmania
	%	%	%
Separate House	80.33	80.23	84.81
Semi-detached, Row/Terrace or Townhouse	9.12	7.56	6.08
Flat/apartment (1 or 2 storey)	7.89	6.78	4.75
Flat/Apartment (3 or more storeys)	0.24	2.27	1.03

Figure 18: Dwelling Type, 1991 (Source: ABS)

5.4.3 Recent Dwelling Construction Trends

Building approvals in recent years show a consistently high level of construction of houses other than traditional detached dwellings. The ABS data shows the proportion of units approved over the past 5 years, which peaked in 1990/91 at 75% of all dwellings. Since that time, the proportion of units has fallen to 50% of all dwellings approved. There is some evidence of a correction in the market as a result of an over-supply of units in 1991/92. (Spiller Gibbons Swan, 1995)

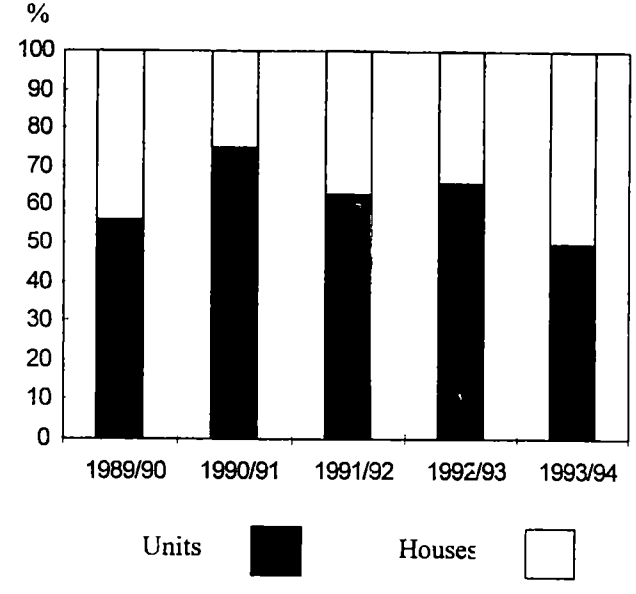


Figure 19: Dwelling Approvals - Glenorchy (Source: ABS)

5.4.4 Subdivision Trends

Subdivision of greenfields sites on the urban fringe continues in Glenorchy in a form which has not altered significantly over the past 30 years. The overall layout of subdivisions, street patterns

and lot arrangements and sizes is determined largely by the developer and designed by surveyors. Intervention by the planning authority constitutes informal consultation prior to subdivision approval, but this is generally aimed at achieving conformity with regulatory standards for lot size, access and road construction and resolving issues such as public open space contributions. Effective planning to ensure efficient layout, landscape management, housing mix and good amenity outcomes is the exception rather than the rule, due largely to a lack of resources and information and a degree of resistance to change by the development industry.

When examples of urban subdivisions are examined, it is found that the average lot size in subdivisions is approximately 700 square metres. Glenorchy City Council has approved about 310 new residential lots in the past 18 months. The following table shows the spread of lot sizes approved:

Lot Size	% of Total
< 500 m^2	6.6
500-750 m^2	48.7
750-1000 m^2	31.3
>1000 m^2	11.4

Figure 20: Residential Lots Approved Since January, 1994 - Glenorchy (Source: Glenorchy City Council)

The remarkable feature of these figures is that, despite a minimum lot size of 450 square metres, there is in fact a higher proportion of lots of greater than 1000 square metres than in the 450-500 square metre range.

When roads and local open space are taken into account, the average lot yield is approximately 10 lots per hectare, that is, about the same lot yield as the traditional suburban subdivision of the immediate post-war years.

Greater dwelling yields come about through the development of multiple dwellings on some lots, but again this is determined by the choices of developers and the element of chance, rather than planning intervention. Increased dwelling density occurs randomly, dependent on developer interest in building units, which in turn is a product of interest rate levels and the perceived demand for units, rather than any strategy for increasing the density of development. Unit development in new suburban areas has produced some neighbourhoods with a dwelling density of up to 20-25 dwellings per hectare.

Figure 21: Development in Hilton Road/Chatterton Court area: 10 and 25 Houses per Hectare

In one locality, a group of unusually large lots (>2000 square metres) were subdivided on a relatively steep hillside, apparently to provide for a very low density of development where roads and services were expensive to install and the land overlooked the Brooker Highway. Rather than acting as a constraint on development, these large lots provided an opportunity for placement of multiple dwellings in groups of 5 or 6 with steep internal driveways and units virtually stacked on top of one another up the hillside. These developments are examples of what the unrestrained market can produce, where the subdivision design is totally uncoordinated with the design and density of the dwellings subsequently built on the land.

Figure 22: Uncoordinated Development of Four Large Lots at Hilton Road

There are very few examples in Glenorchy of an integrated design process which produces subdivision lots intended for development in a controlled or managed fashion. One notable example of a development which involved the approval of residential lots and house designs met with considerable resistance from a segment of the market due to a perception that there was too little flexibility to vary designs according to purchaser requirements. On the other hand, approval of variations to those house designs was also criticised by purchasers who felt that the initial certainty as to what would be built had been compromised.

By and large, the subdivision of suburban lots and the subsequent building of houses are dealt with as two separate processes. This means that the market is allowed to determine how suburban land is developed as it essentially has for the past fifty years. The conservatism of the market produces suburban lots of a standard size and form; there is little place for innovation or a designed suburban character consisting of varied dwelling types, streetscape plans, local parks and pedestrian linkages. Private developers and their advisers are constrained by narrow economic rationalist perceptions of what suburban development should be, rather than a creative vision of what it could be.

5.5 Current Policy and Practice

5.5.1 Infrastructure Provision

The provision of physical infrastructure in Glenorchy is largely determined in response to the pressure of a relatively unconstrained private development market. Extension and upgrading of sewerage, stormwater and water services occurs where development pressure is greatest and according to narrow engineering and financial criteria. Coordination between planning goals and infrastructure provision is not a feature of the process of infrastructure planning. Moves towards a physical asset management system, which require a comprehensive inventory of infrastructure may lead to a better approach, however this will require far more comprehensive strategic planning for suburban growth than occurs at present.

As yet, there is no detailed strategy for the management of the road system, although again there are moves towards developing a detailed system of road classification which is the first step in a strategy for comprehensive road planning and traffic management.

Infrastructure spending occurs ad hoc and is this is unlikely to change until two major changes come about:

- a manageable system of recouping the cost of infrastructure provision to new fringe development (headworks charges) is put in place as a means of managing urban growth; and
- strategies are developed for the integration of zoning controls and infrastructure provision, so that development can be directed to areas where infrastructure is already available or cheaper to provide.

Social and recreational infrastructure in newly developing suburban areas is almost non-existent. Population levels are insufficient for the provision of new retail facilities, schools, childcare, and other social infrastructure. In addition, the continuing decline in population of older inner-suburban areas reduces the viability of existing services. Residents of new fringe subdivisions in areas such as Montrose, Berriedale, Claremont, Austins Ferry and Granton must travel to existing centres to access shopping facilities, schools and government services. While the isolation from facilities is nothing compared to that experienced in the outer suburbs of large mainland cities, this lack of basic services is bound to have an effect on the ability of new suburbs to satisfy their occupants needs. In the long-term, as the population of the outer areas ages and develops a range of social needs which may not currently exist, the lack of social infrastructure will become more noticeable.

5.5.2 Zoning and Development Control

Subdivision and development in Glenorchy was regulated until 1992 by a Planning Scheme introduced in 1964. In an era of rapid industrialisation, commercial expansion and population growth, planning policy involved a minimum of control. The political environment of the 1960s and 70s did not allow too much interference in the market; planning therefore had a marginal role other than to direct development to zoned locations and set basic standards. Development control consisted of a rudimentary zoning plan and minimum standards for lot size, setbacks and parking. In fact, most regulation of housing subdivision and development occurred through the Local Government Act 1962 and Building Regulations, which applied

subdivision and development occurred through the Local Government Act 1962 and Building Regulations, which applied minimum subdivision, house siting and open space standards inherited from legislation up to 80 years old.

Throughout its history, the 1964 Planning Scheme was amended in response to development pressures as more and more land was zoned for development on an ad hoc basis with little regard for an overall development strategy, cost-efficiency or environmental issues.

The Glenorchy Planning Scheme 1992 is a more sophisticated means of regulating development which provides a set of explanatory objectives and intents on which the quantitative standards are based. The Planning Scheme broadly takes the following approach to residential development:

- Residential zones establish the basic pattern of development by imposing minimum lot sizes, setbacks and dwelling densities according to a framework intended to provide a range of housing types. These standards, of course, cannot promote a variety of housing forms, but only provide a regulatory system within which variety might be possible.

- A Future Urban zone identifies those undeveloped areas which are available for subdivision and development, dependant upon the provision of services and adequate demand. The Planning Scheme provides the power to require overall development plans for these areas before allowing rezoning, but offers little guidance as to the form of these plans or the desired outcomes, other than broad statements about efficiency and amenity. A much-needed review of Future Urban zoning is currently being carried out which aims to establish a more rational approach to the development of land at the urban fringe in accordance with locational, topographical and servicing constraints.

- A Medium-Density Residential zone is provided in which normal dwelling densities are relaxed to "promote" more efficient development of land in selected locations. At present, only two sites are zoned for these higher densities of development. One of these is the Better Cities site in Tolosa Street/Clydesdale Avenue; the other is the ex-Telecom site off Amiens Avenue on which a multi-unit development is almost completed.

- Objectives and standards aim to protect residential amenity and character by controlling aspects of development such as:
  - Street frontage setbacks
  - Side and rear boundary setbacks
  - Open space location, accessibility, gradient and dimensions
  - Solar orientation and overshadowing
  - Privacy
  - Access and parking

In practice, these controls are flawed, mainly because there is no clear nexus between the objectives and the quantitative standards. A development can demonstrably meet the minimum standards without satisfying the general objective which that standard is intended to achieve. For example, building setbacks are intended to ensure adequate privacy and solar access to dwellings, but no account is taken of sloping sites, window

orientation of rooms. Private open space objectives aim to ensure good access and utility, yet the standards often produce minimum spaces, poorly located and unfunctional because of their size, lack of privacy or poor orientation.

These flaws are exemplified in the dual-occupancy policy of the Council, which has been written into its planning schemes since the late 1980s. Under the policy, two dwellings are permitted on a site where the development meets the basic quantitative standards. This means that two dwellings can be built one behind the other with relative ease on a standard residential allotment. Development design need take no account of the existing spatial arrangement of houses or streetscape, despite objectives intended to preserve those features. The normal suburban spatial arrangement is completely altered, often in areas which have a distinctive traditional character - houses address the street with large, leafy backyards. The two-unit policy has been a great success in promoting "urban consolidation" and in effectively destroying the existing character of suburban neighbourhoods.

5.6 Occupants of Consolidated Housing

A survey of Glenorchy residents was commissioned by the Glenorchy City Council in 1992, in which 415 residents were surveyed to establish a statistical community profile. In mid-1993, the Council sponsored a survey of 200 unit occupants and 200 of their neighbours to gather information relating to the make-up of this segment of the resident population and, in particular, their views about consolidated housing in the suburbs. This section discusses the results of those surveys.

5.6.1 Resident Profile

The following table illustrates the comparison of attributes of unit occupants with the general resident population.

	Unit Occupants	Resident Population
Age		
- Over 60	44%	18%
- Under 30	29%	43%
One or Two Residents	88%	46%
At least one child	14%	38%
Car Ownership		
- One	63%	90%
- Two or more	15%	51%
Employment		
- Full-time	38%	37%
- Retired/Pensioner	47%	37%
Resident of Glenorchy		
- more than 5 years	62%	79%
- less than 2 years	25%	11%
Previously from outside Glenorchy	55%	46%

Source: Glenorchy City Council, 1993

In relation to unit occupants, the following survey results are of interest:

- In general, the residents of units comprise a greater proportion of over 60 year-olds and fewer under 30 year-olds than in the wider population;
- Whilst units house a significant number of people under 30, only 1 in 7 units has resident children;
- Units are privately rented by 38% their occupants and 84% of these are under 30 years-old;
- 38% of unit occupants are employed full-time, compared to 37% of the general population;
- About 60% of unit dwellers have a household income of less than $20,000.
- Over two-thirds of unit dwellers previously lived in a detached house;
- The main reason for choosing a unit was that the previous house was too large.

(Glenorchy City Council, 1993)

These results have implications not only for the question of whether units suit the needs of their existing occupants, but also whether the units available at present are unattractive to segments of the population. Clearly, units are an attractive rental option for younger people establishing households, but not as a purchase option. This form of housing is being bought predominantly by older people to whom the traditional dwelling is no longer desirable because it is too large or expensive to maintain.

The indication is that units are not generally being adopted as an alternative to the traditional dwelling, except by older people whose choices are limited by their age and financial constraints. Furthermore, any variation that does occur in household structure, income, car ownership and other lifestyle-related factors is not reflected in the stock of housing units, which is remarkably homogenous, as if units were all occupied by people with the same needs.

5.6.2 Perceptions of Consolidated Housing

The survey cited above also dealt with questions of occupant satisfaction with unit design, which revealed the following points:

- General levels of satisfaction are surprisingly high, but this should be seen in the context that most residents would have little knowledge of alternative designs;
- The main areas of dissatisfaction with the unit itself are standard of construction, privacy, noise and size of dwelling;
- Dissatisfaction with parking and outdoor design features is relatively high;
- Almost a quarter of unit occupants across the suburbs are very dissatisfied with parking provision, vehicle access problems, size and quality of outdoor recreation space, landscaping and storage space;
- Levels of dissatisfaction are higher in the outer areas, where recent unit construction has been concentrated and larger unit complexes are more common.

(Glenorchy City Council, 1993)

These results further support the proposition that a significant proportion of units do not satisfy some specific needs of their occupants because of deficiencies in overall quality, parking, access, functional outdoor space, privacy and size.

In addition, the survey of neighbouring residents found a high level of dissatisfaction with the design of units, once again pronounced in the newer suburbs where occupants have certain expectations as to the character of their suburb. Up to 40% of neighbours in the suburb of Claremont were dissatisfied with the number of units in their area and the number on each lot. These concerns about general dwelling density issues are commonplace in new outer suburbs. Residents of established suburbs tend to be more accepting of units, probably due to the fact that the units have been there longer.

5.7 Summary

The recent research in Glenorchy spans a range of housing issues from social policy to street character, but pays little attention to the suburban house and garden and how it should be treated by planning policy. The consolidation which has been encouraged has gone largely unmonitored despite concerns about its poor design and effect on suburban character. These concerns are supported by the survey of residents' attitudes, which indicates some problems with the ability of the newer multiple-dwelling development to cater for occupants needs as well as the expectations of established residents.

Consolidation has become an end in itself, without too much concern for its role in the overall suburban scene. The evidence suggests that the design of consolidated housing leaves something to be desired and has an acceptance problem in the local community. In many ways, the direct impact of consolidation on suburban landscapes is the most easily managed, yet apparently most neglected housing problem in Glenorchy. The apparent failure of multiple-housing to satisfy the needs of occupants and the expectations of neighbours is also an issue which is largely in the hands of the Council, which needs to gain find some way of creating more diversity of housing and better mechanisms for feedback and review of housing design. The other planning issues are as urgent, yet further beyond the control of the local authority.

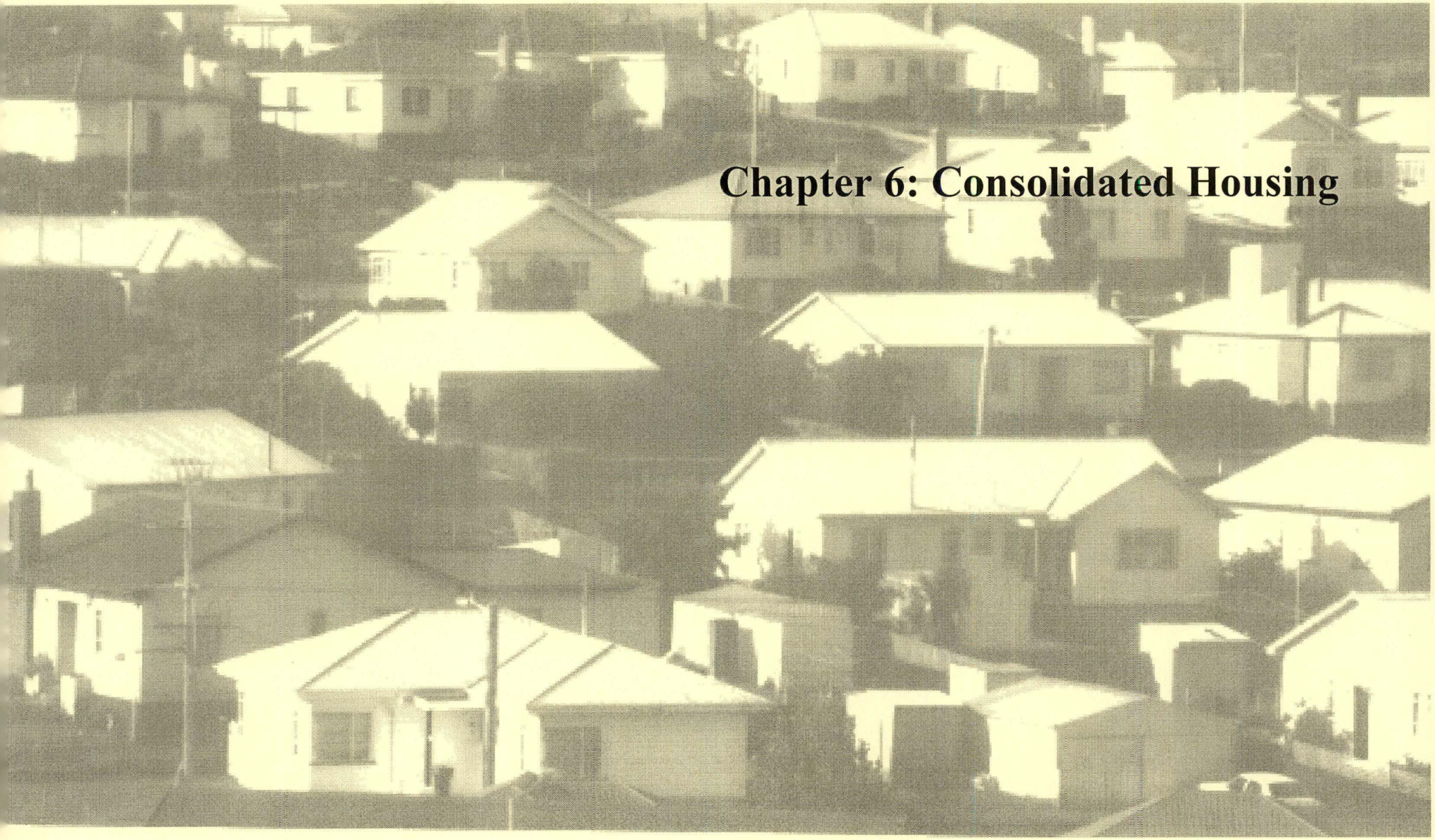
The studies outlined above have contributed to an understanding of the problems of residential development in Glenorchy and together provide a range of comprehensive recommendations for managing housing growth in general and consolidation in particular. The failure or inability of the Council to adopt many of those recommendations, however, has created a rather fragmented housing policy based on regulatory approaches and lacking in a comprehensive strategy for housing.

There is little basic information available on the dynamics of the local housing situation on which to base overall policy-making. There is also no on-going coordinated research to identify housing issues and problems, to establish the needs of particular social groups and to understand the workings of the private housing sector. Such a program of research and continuous monitoring of the housing market is required to ensure a proper implementation of suburban planning strategies.

But on a more basic level, an understanding of the specific local effects of consolidation is required. The forms of housing

encouraged in the name of consolidation continue being developed with little review of their impact on suburban neighbourhoods, the choice they offer or the lifestyle benefits they provide. A great deal of resources go into assessment and approval of residential development against standards which have not been rigorously tested or reviewed.

There is little consultation in suburban communities as to the prospects and opportunities for change and improvement to the local environment, and not much understanding of what local residents regard as important in their suburban environment.



Chapter 6: Consolidated Housing

6.1 Overview of Consolidation Types

The emphasis on consolidation of the suburbs has guided development away from the traditional low-density housing form (although this is still being developed in much of the municipality) to various forms of so-called medium-density housing. In the local experience, alternatives to low-density housing may not be providing the expected consolidation benefits. Are these suburban forms likely to contribute to more diverse and sustainable suburbs?

"Alternative" housing development in Glenorchy occurs in three main ways:

1. Small lot housing on the urban fringe or on large parcels of land in existing suburbs, loosely based on the Greenstreet/Amcord model. This is not a common form of housing development in Glenorchy, as private developers have been unwilling to devote the resources to the overall design process required for integrated subdivision and development of small suburban lots. There is also a reported low level of acceptance of this form of development by purchasers because of the constraints that it places on freedom to vary house design and siting.

   Where attempts have been made to adopt a Greenstreet-type approach, the developer has generally embraced the opportunity to make savings on road and infrastructure construction and to increase the overall lot yield, but has failed to provide the necessary design input to create a residential scale and character consistent with the Greenstreet model. Street landscaping has been neglected and lot purchasers have been allowed to modify house designs to suit their own personal desires, rather than conform to an overall design concept for the subdivision.

Figure 23: Small Lot Housing Development - Vermont Court

2. Infill development of larger vacant sites for multi-unit developments.

   This is a common form of new housing development in Glenorchy. Opportunities for such development arise from a number of factors:

   - the existence of larger than normal development sites in established residential areas as a result of historical accident rather than intention;
   - the sale of large lots held for many years by public authorities which are now excess to requirements;

- the consolidation of lots in new subdivisions to produce large development sites.

These developments are usually designed to provide a maximum yield of detached dwelling units within a regulatory framework of minimum standards controlling density, height, setbacks and private open space areas. Such standards produce standardised housing in an introverted spatial form centred on private internal streets and often dominated by parking areas. These developments present a sense of overcrowding and visual chaos, house orientation is apparently random and fenced private space is located with little functional relationship to the dwelling.

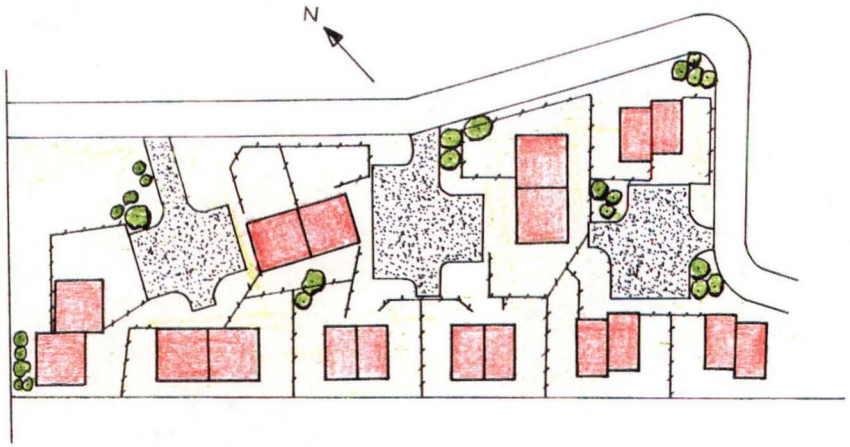


Figure 24: Site Plan - 315 Tolosa Street

3. Dual occupancy development involving either the construction of two units on a normal residential site or the addition of a housing unit at the rear of an existing house. These developments have been actively promoted by a planning policy which exempts dual occupancy from public scrutiny or objection, allowing a relatively quick and certain approval of infill development.

Development of two dwellings, rather than one, on a suburban block brings obvious benefits to a developer as a result of economies in land cost. As a rental proposition, a low-maintenance home unit in an established residential area is also attractive to the small investor, when the rental adequately covers the capital repayment.

Approval for a unit in the backyard is seen by many home-owners as an opportunity for a greater return on the sale of a suburban house. In many cases, the effect of the unit on the existing character of the neighbourhood is of little concern as the owner is intending to move from the neighbourhood.

A simple means of raising housing densities and utilising existing "under-used" suburban blocks, dual-occupancy housing often does nothing to improve the suburban landscape, introduces privacy problems and effectively doubles the building footprint on the site. It is questionable whether the addition of an extra house provides any net benefit in terms of consolidation aims.

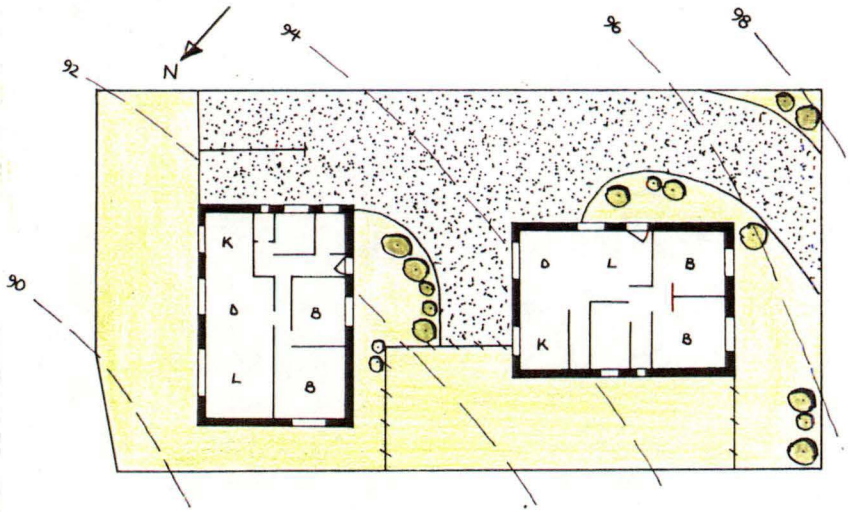


Figure 25: Site Plan - Two Unit Development - 3 Highfield Street

The most common forms of consolidated housing in Glenorchy are in the second and third categories described above. These forms of housing development share the following features:

- detached houses;
- exclusive, partly or fully fenced private gardens at the rear of dwellings;
- long concrete or bitumen vehicle access-ways;
- on-site parking, often provided in the open and occupying the space between dwellings;
- a repetition of standard house designs;
- standard construction materials and finishes.
- no clear demarcation between private and public space at the interface;
- minimal landscape treatment.

Examples of these housing forms have been examined and are assessed in the following sections.

6.2 Density, Form, Image and Orientation

There is a significant impact of buildings and associated development in a compacted form of suburban development. Visually the suburb appears more crowded as detached houses are cramped together at site densities of about twice the traditional standard.

The open space which characterises traditional suburbs is lost and opportunities for an effective landscaping replacement are limited by the need for vehicle access and parking areas. Soft garden space which normally surrounds a traditional suburban dwelling is sacrificed for hard-paved surfaces designed only for the movement and parking of vehicles.

Much of the legibility of the traditional suburban grid layout relies on the relationship of house to street and the clear distinction between public and private space. The infiltration of multiple housing development has obscured the strong relationship between houses and the street and imposed a greater sense of anonymity in those neighbourhoods where consolidation has occurred.

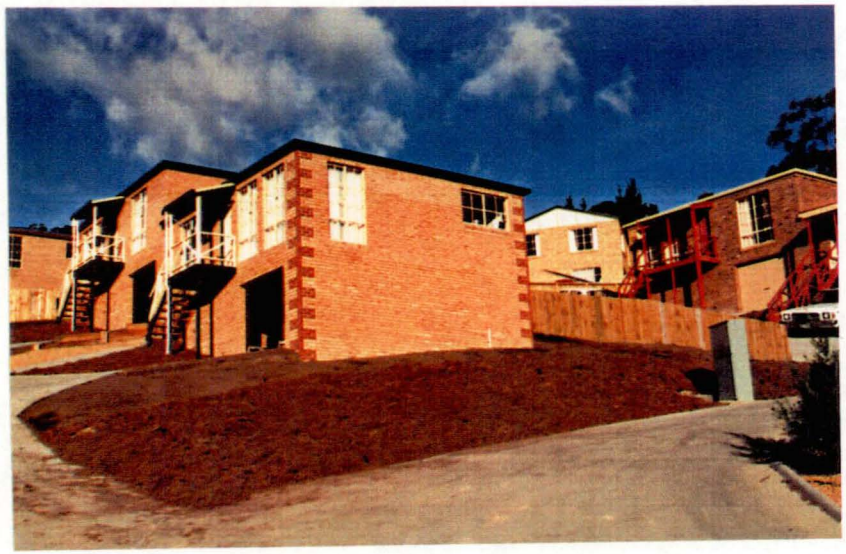


Figure 26: The Visual Confusion of Consolidated Housing

Infill and dual-occupancy developments can erode the public/private distinction with their private access roads and orientation of houses toward the internal space on the allotment rather than the street. They fill the available area with small, regularly-spaced buildings, often separated by paved vehicle space which creates a sense of crowding and visual hardness. These new forms of housing do not substitute for the existing traditional form, they add a sense of visual confusion, rarely making a positive contribution to the streetscape or general amenity of the suburb.

Figure 27: Effect of Unit Development on Streetscape

6.3 Outdoor Living Space

All occupants of housing require some outdoor living space. The amount and type of space is related to age, stage in the life cycle, mobility and lifestyle. Suburban housing generally caters for the family model of recreational activity, car ownership and a space consuming mode of domestic activity. It gives flexibility for modification to suit a range of needs. Outdoor space on sites developed for consolidated housing is generally provided on an assumption of minimal need and with little flexibility for modification to suit particular activities or lifestyles.

Recreational needs

The design of consolidated housing seems to reflect a general assumption that occupants have little need for outdoor activity in the private domestic sphere. Outdoor space on multiple dwelling sites provides little opportunity for outdoor social activity, hobbies and gardening. The diverse opportunities for outdoor recreation provided by the traditional suburban backyard are simply not available on consolidation sites observed in Glenorchy. This is not just a product of the reduced size of outdoor areas on consolidation sites, but also the poor accessibility, gradient, orientation and privacy of the outdoor space. In general, the minimum required quantity of open space is provided with little regard for quality, accessibility or anticipated use.

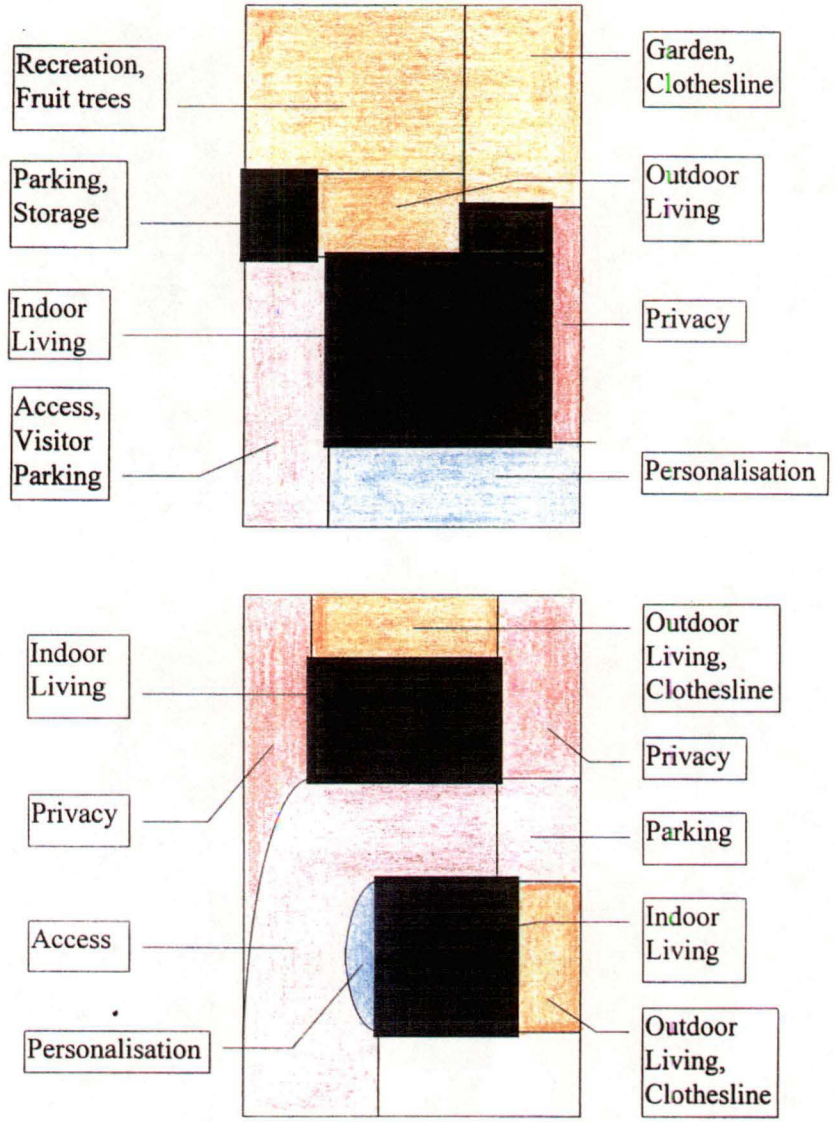


Figure 28: Function of Outdoor Space on Single and Dual-Occupancy Sites.

Figure 29: Useable Private Open Space?

Sunlight

Solar access to outdoor space is a necessity for clothes drying, outdoor entertaining and the general utility of outdoor living areas. On the traditional suburban block the space is large enough to ensure that large areas of private space receive sunlight. In small spaces enclosed by adjacent buildings there is much less likelihood of adequate sunlight and design becomes much more critical in ensuring good solar access. The evidence presented by most examples of consolidated housing is that orientation of outdoor space is a low priority compared to a formal arrangement of dwelling units around central driveway and parking areas. Outdoor space is dedicated more as a result of what is left over after siting a dwelling according to unwritten rules of orientation to a driveway. It is often the case that common driveways and parking areas have better solar orientation than private open space.

6.4 Privacy and Identity

Privacy is one of the primary needs of housing occupants and is one of the great advantages of the traditional detached house on a large block of land. Traditional suburban houses provide a clear distinction between private and public space, usually marked by the existence of boundary fences. The rear yard of the traditional suburban block is a haven from public view, where housing occupants are free to perform domestic recreational activities in a variety of ways without too much concern about observation from outsiders.

The front yards of traditional suburban dwellings provide a transitional area where private meets public space. The front yard can be modified to provide a greater or lesser degree of privacy, to make a statement about the personality of the occupant, to show conformity or individuality. These opportunities are not usually available to the occupants of consolidated housing, especially multiple dwelling sites, because:

- there is little if any private space at the front of the dwelling;
- the interface between common and private space occurs right at the threshold;
- standardised forms and materials are used to save on development costs.

Figure 30: No Opportunity for Privacy at Threshold

Separation

Physical separation of dwellings on multi-unit sites appears to occur at random, with little concern for the relationship between dwellings and their attached private spaces. Dwelling units with standardised floor plans are generally evenly-spaced around a site, on the assumption that such an arrangement will provide the best use of the space available, without considering the specific issues of privacy and individuality for the occupant.

The privacy and functionality of private space is often modified to reduce the effect of windows facing each other or open space areas being adjacent to semi-public access and parking areas. Solutions are often severe, including:

- removal of windows altogether;
- re-orientation of dwellings, producing other negative effects on visual appearance or solar orientation;
- erection of "screen" fences to block line of sight.

These modifications are made as a way of attempting to reduce privacy problems introduced by poor dwelling design and siting, reflecting a design process which creates a problem, then finds some way of "solving" it.

Figure 31: "Screen" Fencing Intended to Provide Privacy

Orientation

Orientation of dwellings is almost universally towards the common driveway, regardless of the aspect or topography of the site. The use of standard floor plans means that living areas almost always face onto a common driveway or a parking area

and access to private outdoor space is gained through a laundry at the back of the dwelling.

Anecdotal evidence suggests that designers have preconceived ideas about the desires of dwelling occupants in relation to dwelling orientation. The desire to provide a living area with a visual relationship to the "front" of the house may be correctly based on perceived security and surveillance needs, but this often leads to a loss of privacy and poor solar orientation of living areas. A lack of flexibility in unit design prevents the product from simultaneously satisfying the range of needs which may be met by good design and orientation.

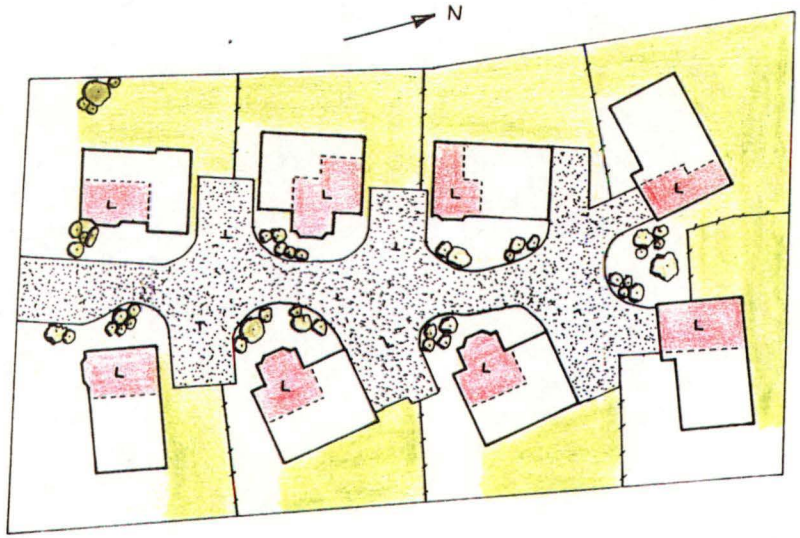


Figure 32: Poor Relationship Between Indoor and Outdoor Space

Personalisation and Identification

The design of consolidated housing provides little opportunity for personalisation of the dwelling or its adjacent private space. The examples observed throughout Glenorchy confirm a perception of monotonous design, where standardised units are replicated with no attempt to differentiate between dwellings.

Opportunities for personalisation at the entry to dwellings are limited by the lack of semi-private space which might allow for an entry statement, display garden, planters or outdoor furniture. Many examples exist where the occupants of units have made some attempt to personalise the space in front of their dwelling, but where that opportunity has been limited by the intrusion of hard-paved surfaces, parking areas or anonymous landscaping.

Even such simple devices as colour scheme variations or individualised porticos are conspicuously absent from the generally minimalist appearance of most multiple dwelling sites.

Figure 33: Repetitive Boxes Lacking any Sense of Identity

6.5 Landscaping

Development of consolidated housing usually involves the removal of vegetation from the sites previously occupied by suburban gardens. Large trees, either natives preserved in the original suburbanisation of the landscape or exotics since planted, do not usually co-exist with consolidated housing. The problem of falling litter and root interference with foundations becomes more critical as dwelling densities increase. The segmentation of suburban sites as a result of consolidation also makes it more unlikely that significant trees will be planted in the future. Suburban gardens containing productive fruit trees, shrubs and carefully tended boundary planting are sacrificed to make space for buildings and pavement.

Where landscaping is provided in new housing development it is the anonymous, low-maintenance plantings provided more as a response to planning scheme requirements than as a means of personalisation by garden-loving occupants. The poor arrangement of open space on multiple dwelling sites often provides little opportunity for effective garden planting, except for cosmetic plantings on "left-over" space.

There appears to be little positive use of landscaping to create a visual image for a housing development, provide summer shade, create interesting and varied boundary demarcation or assist with visual privacy. Landscaping is used as a response to Council conditions, as an add-on to satisfy minimum requirements.

Figure 34: The Contribution of Landscaping to Street Appearance

The variety of additional landscape features commonly found on traditional suburban sites are rarely prominent on consolidated sites. The common areas on many consolidation sites have an anonymous, vacant appearance and provide little opportunity for the addition of seating, decorative garden features (such as fountains or trellises) or trees.

Paving materials do not vary from plain concrete or bituminous surfaces which dominate the visual appearance of the site and contribute to uncontrolled stormwater run-off.

Figure 35: Dominance of Paved Surfaces (also see diagram below right showing hard space on multiple dwelling site)

6.6 Vehicle Access and Parking

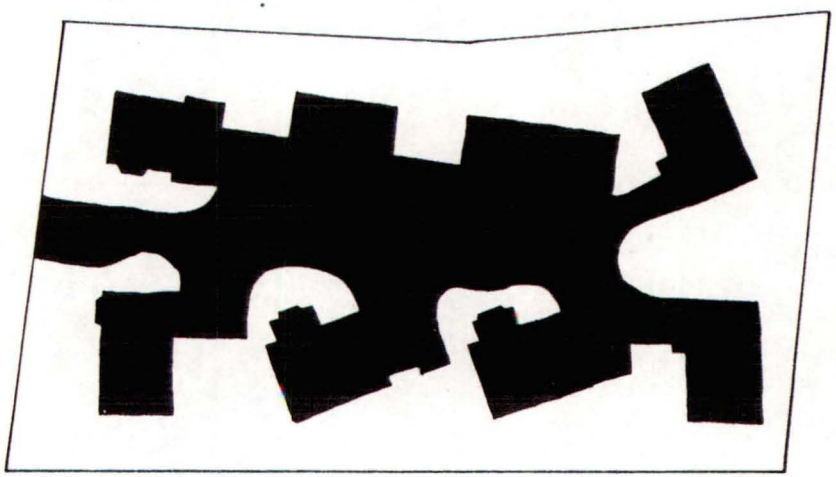
The outstanding feature of multiple dwelling development at first sight is the predominance of hard-paved areas intended for vehicle access, parking and manoeuvring. Vehicle access right up to the dwelling is apparently a primary concern for the designer of consolidated housing, regardless of the shape, size, topography or orientation of the site.

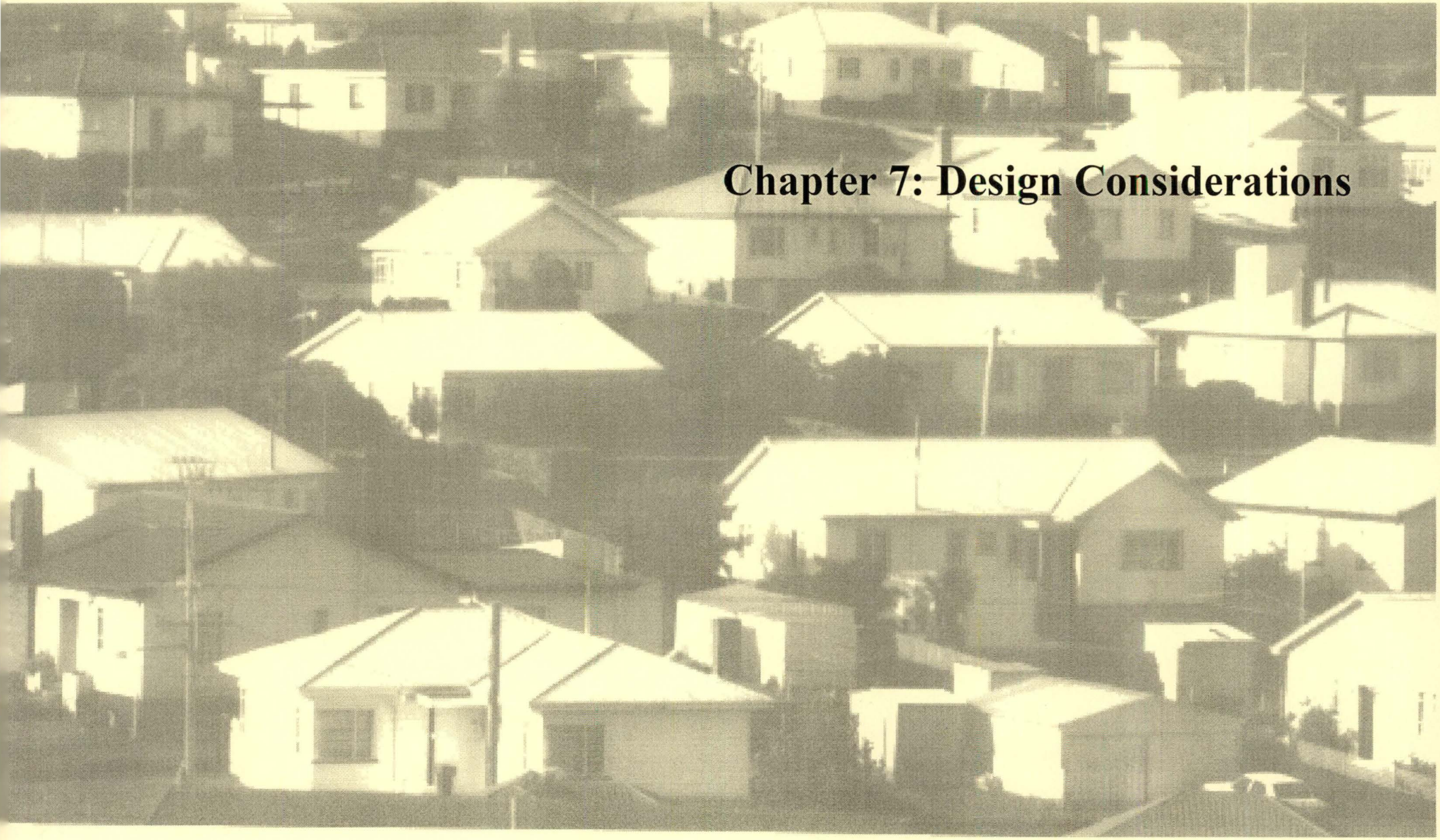
Whilst vehicle access may be a legitimate design influence based as it is on level of car ownership in the population, access and parking areas have the greatest impact on the visual appearance of consolidated housing and to a large extent predetermine the siting of dwellings, their orientation and the availability of space for outdoor activities.

Driveways and parking spaces generally abut dwellings with no spatial separation whatsoever, living room and bedroom windows face access and parking areas and there are very few examples of multiple dwelling development where pedestrian facilities are provided separately from driveway areas.

This predominance of space allocation for the private car produces a number of undesirable effects:

- poor visual image;
- reduced safety for pedestrians in the form of separately defined pathways;
- lack of acoustic privacy;
- lack of soft space for recreational activity;
- high volumes of stormwater run-off.





Chapter 7: Design Considerations

7.1 The Components of Design

In recognising that housing should be designed to satisfy needs such as identity, privacy, security and a sense of territorial control, it is acknowledged that there are specific ways of providing for such needs in design. The finished form of residential development is the product of a design process, whether it is explicitly planned that way or occurs by accident. There is always the possibility that happy accidents will contribute to housing quality, but a degree of planning and thoughtful design should ensure that those accidents produce positive rather than negative results. The first step should be to recognise the design factors which influence satisfaction with the finished housing product.

Elements within the process have a varying degree of interaction and overlap. Site density and layout affect the image of a development. These are determined by the number of dwellings and the physical characteristics of the site. Setbacks provide privacy and visual separation, yet the use of the space between buildings constrains opportunities for landscaping and access. None of these attributes can be treated in isolation.

This section looks at those basic design considerations which contribute to quality of housing, with special reference to consolidated forms of housing. This brings together issues arising from:

- the examination of behaviour in the residential environment (Section 4.4);
- an understanding of housing perceptions and preferences (Sections 4.4 and 5.6);
- the study of consolidated housing in Glenorchy, which critically examines the common features of consolidated housing developments (Chapter 6).

These design considerations are also partly derived from various housing design manuals and guidelines (Marcus and Sarkissian, 1986; AMCORD and TASCODE), in which many common approaches to achieving better housing design can be found.

The emphasis is on the issues regarded as important in satisfying people's housing needs in the physical, social and psychological sense at the level of the house and its immediate neighbours. Design issues are identified under separate headings and the issue is discussed in terms of a problem and a response. As stated above, design cannot be strictly compartmentalised and it is recognised that any design component is an interactive, not isolated, part of the whole.

7.2 Density, Form, Image and Orientation

Problem:

The overall perception of consolidated housing is that it creates a cramped residential environment in which there is little variety. Standardised box-like buildings are replicated around hard space which presents a drab, impersonal atmosphere.

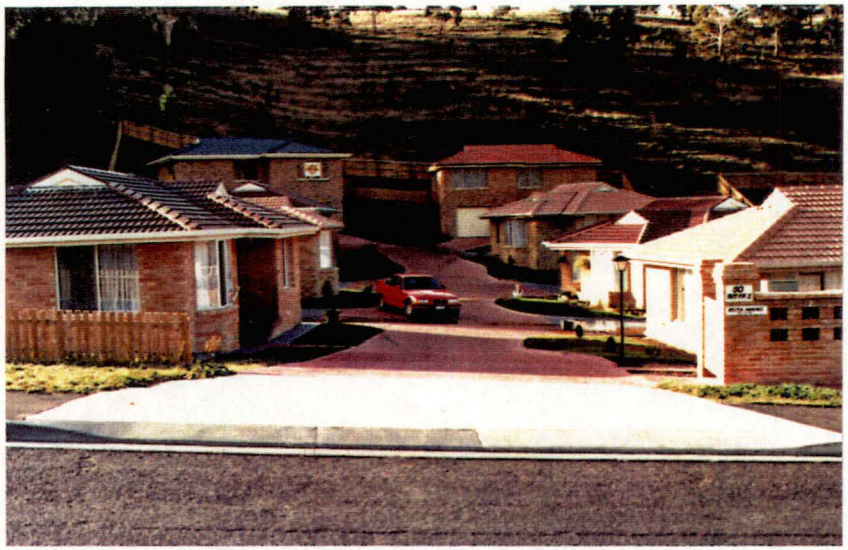


Figure 36: A Poor Residential Image

Response:

In the early stages of design, the basic attributes of the housing product are determined by decisions about density, form, image and orientation. The overall exterior impression of a housing site or neighbourhood can have a great effect on how people feel about their residential environment. That impression is largely determined by perceptions about the density of the houses and whether the building form presents an image of a familiar or alien environment.

The orientation of dwellings in relation to each other and to public streets and thoroughfares is also a significant determining factor in resident satisfaction. The relative ease of movement and recognition in the residential environment affects the sense of security and familiarity which residents have. These factors are outlined in more detail below.

Density

The relationship between housing density and satisfaction is not simple. There are a number of factors which combine with density to affect perceived density and the overall image of a housing development. These include:

- Overall size - large housing projects can create an institutional appearance if they take the form of mass-produced units;
- Unit spacing - a sense of density is often affected by the actual spacing between units and the way that space is treated. Landscape features designed to filter views between units can reduce the perceived density of the units;
- Visual and functional access to open space - open space needs not only to be accessible for use by dwelling occupants, but must be available as a visual component of the living environment to provide a sense of spaciousness;
- Privacy protection - the design of dwellings must limit the possibility of visual intrusions into private space caused by

proximity of public areas, access driveways, parking areas, etc;

- Division into clusters - large clusters or groupings of indistinguishable dwellings create a sense of greater density. When dwellings are subdivided down to smaller groupings there is a perception of lower density.;
- Variety of appearance - visual variety in dwellings helps to reduce perceived density as individual dwellings take on their own character;
- Access to dwellings - individual accesses to dwellings provide a greater density satisfaction than common access to large numbers of dwellings.
- Minimal noise intrusion - noise transmitted between houses increases the perception of density;
- Parking - large, institutional parking areas create a sense of increased density compared to individualised parking facilities;
- Private open space - any housing development which lacks private open space will appear to its occupants to be overcrowded.

It is inappropriate to consider dwelling density as a factor which should be controlled per se. It is the specific outcomes of development - image, visual appearance, unit spacing, access and privacy - that are contributors to perceived density and the general response that people have to the residential environment.

The setting of minimum density requirements or site cover formulae only has the effect of entrenching an arbitrary minimum standard with no regard for the other design factors. They do not give any greater guarantee of quality and limit the opportunity for dwelling variation.

Image and Building Form

Any residential design that contradicts people's image of "home" or departs from accepted norms of building style is less likely to receive acceptance by prospective occupants or other residents in the neighbourhood. To some extent the adverse community reaction to medium-density housing occurs precisely because it is perceived as being different. One of the great challenges for the design of alternative housing forms is to find designs which combine the most attractive features of traditional forms with design variations that achieve more flexible and diverse use of space to cater for various housing needs.

A pleasing image in housing form is not necessarily the product of a particular housing style, but comes from a combination of features: building height, colours, facades, landscaping, pleasing views, robustness and good maintenance.

Landscaping quality and site layout contribute greatly to resident satisfaction, but landscaping is often treated as an add-on to development, rather than an intrinsic design consideration. A considerable proportion of design time invested in landscape features would maximise the opportunities to use landscaping and site amenities to enhance satisfaction. Other design problems such as privacy, security and orientation can be avoided or mitigated through creative and integrated landscape design.

avoided or mitigated through creative and integrated landscape design.

Views, both from private and public space, form an important part of the user's perception of a home environment. Visual diversity is important; a combination of distant and near views, buildings and greenery, activity and separation provide that diversity. Such views must be visible from the most frequently-used rooms, but views from a dwelling should not be provided at the expense of lost privacy through the ability of strangers to see in. The monotony of views to blank walls, car park areas or open lawn should be managed through the orientation of buildings and placement of windows.

Figure 37: Redevelopment site in Orchard Road presenting a pleasant familiar image

7.3 Outdoor Living Space

Problem:

Private outdoor space is provided at a minimum level in order to satisfy regulatory standards of size and dimension. The space is rarely well-designed for any adequate function and often has problems of gradient, poor location or lack of visual privacy from neighbours.

Response:

Private open space provides a number of benefits. In functional terms, outdoor space provides a visual buffer between dwelling units, space for growing flowers or vegetables, for clothes drying, outdoor hobbies, extra storage, the keeping of pets or enclosure of small children at play. Outdoor space also provides the symbolic means of personalising one's territory which is either wholly or partially in the public view.

If the intended occupants have no need for outdoor space because of age or lifestyle, then it should not be provided at all, as it must surely be a burden in terms of maintenance. In these circumstances, detached dwellings surrounded by private space may not be appropriate form of housing. If a small area of private outdoor space is considered necessary, then the quality of the space should be a product of its necessity.

Dwelling design should provide for these needs, with the main issue being not the size of the space, but its adaptability for the range of uses to which outdoor space may be put. This leads to a number of design requirements:

- The space must be relatively flat to allow for easy access and a range of recreational uses;
- The space should provide a range of surfaces for different functions - paved areas for dining and entertaining, garden beds for productive or decorative gardening, lawn areas for children's play;
- A partially-roofed entrance to the dwelling for weather protection;
- Pergolas or trellises to provide opportunities for shade in summer;
- A clothesline in a suitable location;
- Taps and electrical outlets;
- Storage facilities for gardening equipment, outdoor furniture, bicycles, etc.

7.4 Privacy and Identity

Problem:

In most examples of consolidated housing, there is a very low level of resident privacy because of building height and orientation, location of windows, inadequate spatial separation of dwellings, proximity of common vehicle access and parking areas. Design is not used to solve privacy problems, to create a sense of identity, or allow for personalisation of each individual dwelling.

Response:

A sense of privacy is one of the primary determinants of satisfaction for housing occupants.

Privacy is created and enhanced by providing for the following needs:

- a sense that one's territory is defensible and secure, physically separated from public areas either by sufficient space or by physical means such as landscaping or fencing;
- a sense that activities carried out indoors and outdoors are free from visual and aural interaction with strangers.

Privacy within the dwelling is provided for by room layout, window placement and separation from the noise associated with other dwellings.

A clear identification and distinction between front and back of a dwelling unit is also important in achieving privacy and allowing the appropriate use of formal and informal entry to the dwelling.

Catering for personal identity is a complex issue, enhanced by such things as:

- the freedom and ability to alter the physical and perceptual environment in ways that provide a sense of control;
- the freedom to decorate and personalise buildings and space to improve self-esteem, a sense of ownership and general emotional comfort;
- a feeling of individuality derived from visual diversity, exclusivity of appearance in the dwelling, mixed with the sense of belonging that comes from having a living

environment that "fits in" with and is complimentary to the neighbourhood.

Dwelling occupants who participate in the design of the dwelling have opportunity to create personalisation in the physical features of the structure itself. Most consolidated housing is not designed for a particular client and is built to a standard design. It is therefore important that the design allows for modification and decoration to suit personal tastes.

Opportunities for giving identity to a dwelling are provided in two ways:

- Individual design - variations in facades, entries, colours and materials enable one dwelling to be easily distinguished from another, providing a sense of individuality;
- Space - an area of private space at the front of a dwelling provides an opportunity for the creation of an entry statement through planting, paving, placement of outdoor furniture or gates.

7.5 Landscaping

Problem:

Consolidated housing sites are usually provided with minimal landscaping which is located in areas leftover after the construction of dwellings and vehicle access and parking space. Landscaping is rarely integrated within the development design as a functional element and serves only cosmetic purposes. Little sense of variety or user comfort is evident through the use of different paving materials, seating or lighting.

Response:

Landscaping on consolidated housing sites can serve a range of functions if it is part of an integrated design. Landscaping is an essential element of denser forms of housing because it can offset some of the negative aspects of development that otherwise would be visually intrusive and psychologically uncomfortable. Residential sites that have minimal landscaping have an alien appearance compared to traditional suburban neighbourhoods with which most people are comfortable.

Landscaping features should be designed to complement and enhance development and should take account of features including:

- the size and scale of the development;
- the arrangement of communal and private open spaces;
- the size and appearance of car parking areas;
- the character of the existing streetscape and adjoining private gardens.

Well-designed plantings can also be placed to improve views from the interior spaces of dwellings.

Landscape design can also assist with the better functioning of consolidated housing sites by:

- reducing stormwater run-off and water consumption for gardening;

- minimising the need for fences to separate areas of communal and private space;
- softening the appearance of hard spaces and building edges;
- providing shade to car parks and private spaces.

Additional landscape features such as paving, trellises, seating and mailbox enclosures should be designed in accordance with the overall layout of the development. Creative design and placement of these features can make the difference between a cheap, standardised appearance and one which engenders a sense of quality and pride in the residential environment.

7.6 Vehicle Access and Parking

Problem:

Vehicle access and parking areas on multiple dwelling sites tend to be visually dominant and occupy virtually all of the available space viewed from the street. Hard paving is often constructed right to the building edge and the site boundary, with little or no provision for pedestrian separation, landscaping or visual interest.

Response:

The dominance of space allocated for vehicle access and parking is one of the major issues which arises from the examination of local consolidated housing development. This problem appears to arise as a result of three main factors:

- An overly generous supply of on-site parking;
- The poor visual appearance of driveway and parking areas because of the area allocated and the lack of detailing;
- The lack of separation between vehicle space and dwellings.

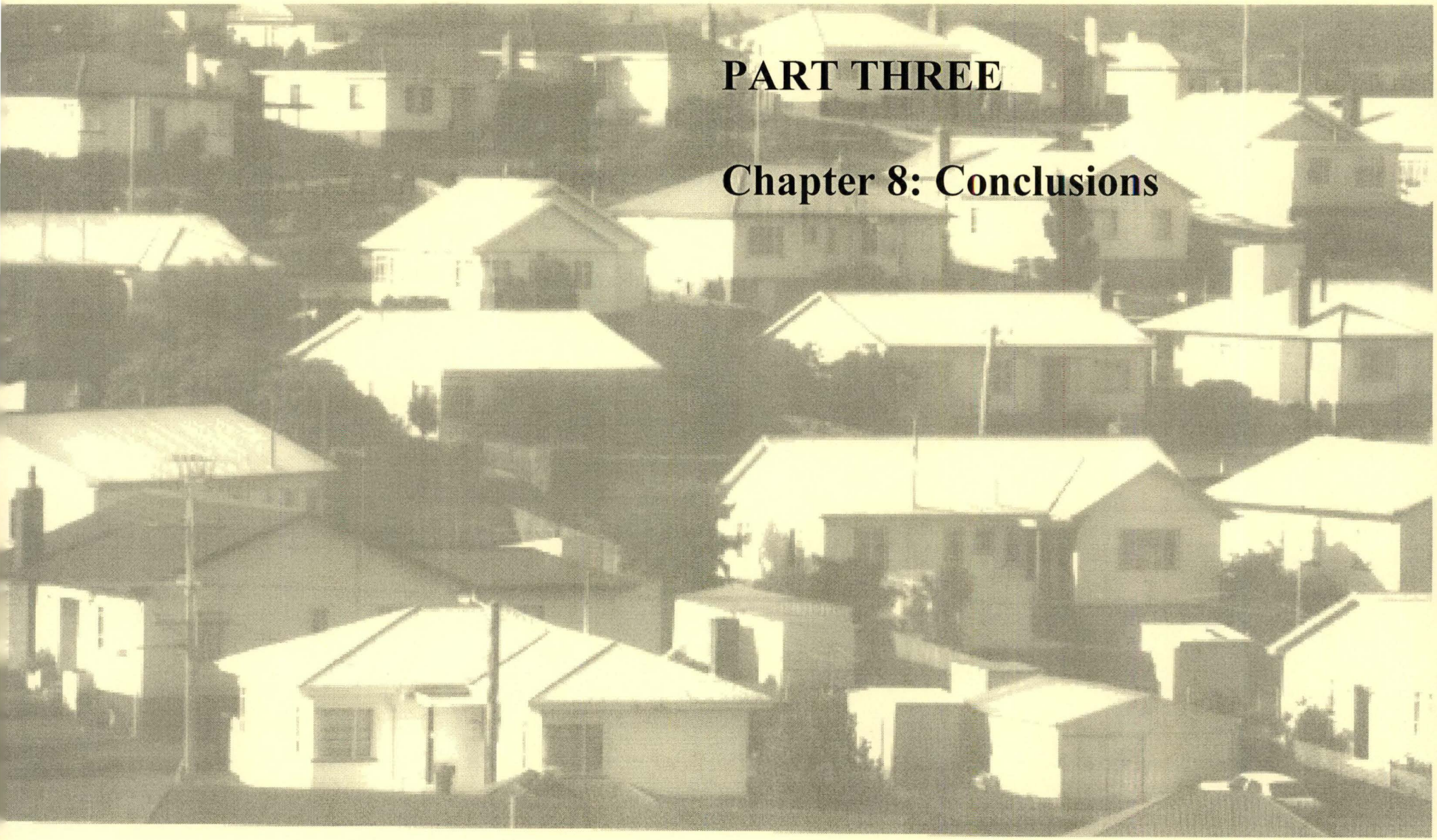
Multiple unit developments should only be required to provide on-site visitor parking where there is no availability of visitor parking space on the street. It is excessive to require permanent visitor parking on a residential site which is used only a part of the time and when suburban streets are capable of accommodating parked cars.

The use of different paving materials, such as interlocking concrete pavers or stamped concrete, can make a marked difference to the visual appearance of vehicle access driveways and parking spaces at very little extra cost.

Whilst it is appropriate to provide resident parking in close proximity to the dwelling for reasons of convenience and security, car spaces can be covered or detailed to give a more pleasing visual appearance and to distinguish them from common driveways.

Where large areas of paving must be provided for vehicle access or parking, they can be softened with appropriately placed trees or edge planting. Garden areas adjacent to pavements can also be designed to absorb stormwater run-off and provide physical separation between vehicle access areas and dwellings or the private space of neighbouring sites.

Pedestrian pathways should be provided either physically separate from vehicle driveways or so designed that they are clearly distinguishable as for the exclusive use of pedestrians.



PART THREE

Chapter 8: Conclusions

8.1 Preserving and Enhancing the Dream

8.1.1 The Future of the Suburban Dream

The Australian dream of owning a detached house in its own garden space in the suburbs remains entrenched as a feature of Australian culture and society. Despite the increasing difficulty of attaining that dream, primarily because of affordability, it has not faded or been replaced by more "realistic" preferences.

Economic, demographic and environmental imperatives might lead to the objective conclusion that alternative forms of housing at higher densities are more desirable, but this is clearly not how the wider population views the issue. Medium-density housing is not a practical alternative for most people. The traditional suburban house provides the best opportunity for satisfaction of housing needs for the vast majority of the population - it gives a sense of equality and identity, provides maximum flexibility for a range of lifestyles and satisfies the need for privacy, space and security in the home environment.

This is not to say that the suburban house and garden satisfies all needs; it clearly does not. Nor is it true that the traditional suburb cannot be improved, made more liveable or affordable. It is apparent, however, that improvement will not come simply as a result of increasing housing densities across the suburbs and building smaller houses closer together. Urban consolidation will surely fail if it continues with a narrow reliance on increased dwelling densities alone as a means of suburban improvement.

It has to be recognised that the "inevitable" increase in housing densities in established residential areas which is currently occurring is also leading to an inevitable reduction in environmental quality for those areas. The visual quality of the residential environment and its function as a behavioural setting for the satisfaction of privacy, security and self-fulfilment needs is being seriously eroded in the name of urban consolidation.

Figure 38: Erosion of Traditional Spatial Arrangement

8.1.2 A Holistic Approach to Suburban Planning

Suburban policy must take a wider and longer-term view. The production of housing occurs in the way it does because of a wide range of factors: the political process, financial policy, infrastructure pricing, the operation of the development industry, and the simple fact that as our standard of living increases we consume more, not less housing.

Housing production cannot rest on simplistic assumptions about individual and social needs derived from occupancy trends. Until there is a more sophisticated understanding of changing housing needs, "alternative" forms of development will continue to reflect poor guesswork at best, and a suburban strait-jacket at worst.

In the political sphere, consolidation translates into a rather narrow housing policy imposed on local governments by their federal and state counterparts. Until now consolidation has been justified a cost-saving measure by central government to reduce the pressure for new urban services and infrastructure. But increasing residential density by itself is a shallow and unresponsive policy. The kinds of institutional changes which one would expect to accompany a consolidation policy are not occurring. These might include financial incentives for housing mobility, greater investment in inner-city services such as schools, child care, libraries and the like, transport and employment policies designed to contain the outward growth of cities. Quite the opposite is happening at the same time as governments supposedly promote urban consolidation.

Governments unable to afford to service a suburban form which they have heavily subsidised and promoted in the past are seeing the error of their ways and desperately seeking a viable and marketable alternative. Economic rationalism demands a more "productive" use of urban services currently "under-utilised" and that means less public investment in new urban infrastructure and services. At the same time, there is a growing expectation that local communities will respond positively to the promotion of new, denser forms of housing, turning their backs on a deep cultural affinity for the traditional form of low-density living.

A holistic approach to suburban planning would not simply respond to the negative aspects of suburbia, but would acknowledge its positive features. As a setting for the satisfaction of human behavioural needs - safety, affiliation, esteem and self-actualisation - the traditional suburban environment provides a vast range of opportunities. It provides for:

- appropriate demarcation of private territory;
- a sense of belonging to a neighbourhood community which includes different social groups, ages and lifestyles;
- an ability to personalise home space;
- adequate control of the home environment;
- the opportunity to be productive in the generation of food and income;
- an environment in which children can play and learn.

To a large extent, the quality of the suburban environment depends on the flexibility that it gives to the residents to develop their own lifestyle aspirations; to raise families, enjoy peace and quiet, carry out productive leisure pursuits, use and contribute to community facilities. Designing residential environments to satisfy this range of social needs should be the priority for suburban planning.

This means taking stock of existing suburban environments, implementing practical measures to make them more attractive

and functional, and ensuring that new development occurs in a planned and coordinated fashion.

8.1.3 Getting More from Traditional Suburbia

It has to be accepted that the traditional model of a detached house on its own lot will remain the dominant feature of the suburban environment well into the future. The current wisdom of planning, which takes a somewhat negative view of low-density living, is unlikely to be accepted by the majority of the population who continue to aspire to that form of housing.

The possibilities for innovation in suburban planning appear to lay in two main directions:

1. Finding ways of ensuring that there is an appropriate mixture of housing to suit the needs of a given population, without compromising the values which make the suburb as an attractive living choice;
2. Facilitating the regeneration of inner-suburban areas to satisfy alternative housing needs which cannot be satisfied in middle and outer low-density suburbs.

Watering-down the traditional suburban ideal into a new form of compacted suburbia is a form of compromise which is not producing acceptable results.

Urban consolidation will not be achieved by a compromise approach involving the wholesale compaction of traditional suburban forms. By doing so, we lose the advantages that people want from the traditional suburban form, and we gain few, if any, of the advantages of consolidation.

In an era when the planning rhetoric is about innovation and transformation of the suburb as we know it, there is little evidence that any such transformation is occurring. The assumption of the urban consolidation lobby is that new medium-density housing will be well-designed and therefore must be a good thing. It is naive to assume that simply by increasing housing densities we will end up with better designed suburbs or that they will provide a reasonable quality of life. The examples observed and discussed in this project raise serious doubts about that assumption.

Urban consolidation is not an end itself. It is put forward as a means of making cities more liveable and affordable and reducing the social, economic and environmental costs of urban growth. Urban consolidation does not simply mean reducing the size of a traditional suburban form, putting another little house in the backyard, or building two houses on a block originally intended for one. A new paradigm is required. By merely adjusting the old one it is likely that we will lose most of the advantages of the traditional suburban form and gain very little from the new one.

It should be possible for existing suburbs to be upgraded and improved so that they can be better enjoyed by both existing and future residents. This will involve a long-term planning approach that includes the following strategies:

- detailed assessment of existing built character, physical infrastructure, landscape features and, not least, population characteristics in discrete neighbourhood areas;
- development of plans for streetscape enhancement, improvement of pedestrian linkages, opportunities for on-

street parking facilities and implementation of traffic management measures;

- consultation with local communities to determine how residents see their neighbourhood, its problems and opportunities;
- assessment of opportunities for re-development of existing sites and infill development where appropriate.

8.1.4 Flexibility and Change

There is a need for some change in the form of the suburb - inner, middle and outer - but that change must be determined and guided by and for the residents. The lack of diversity in housing stock throughout the suburbs may lead to a long-term problem for those suburbs, but a lack of planning for change is creating a short-term one.

As far as diversification is concerned, that opportunity should be taken up throughout the suburbs, but in a form suited to the character and location of specific neighbourhoods. This does not necessarily mean an exact replication of the existing spatial configuration of suburbia - that would achieve little - but there is an opportunity to develop suburban houses which are designed for a greater diversity of needs, yet complement the existing suburban street pattern and landscape. The opportunities for comprehensive change to existing suburban environments are clearly greater in the inner areas, where there is a more obvious decline in the existing housing stock, a mixture of land uses is possible and acceptance of new forms of housing is likely to be greater.

8.1.5 Strategies for the Urban Fringe

There is little in the way of present policy which will support a substantial relative increase in the demand for more intensive residential land use in inner areas. Supply of itself is unlikely to be enough. Present policy to increase densities in outer areas, however, will produce only marginal savings where land costs are lowest. Development of land at higher densities in the outer areas is likely to create a demand for lower densities even more distant.

Householders seeking more space and landowners seeing the prospect of suburbanisation will have an interest in maintaining the same pattern of outward growth as has occurred for the past 50 years. Little change will occur unless measures are imposed to contain urban growth and prevent the conversion of land to urban use at any density, including a requirement to pay the full cost of providing urban services. The demand for housing will be determined by the preparedness of people to trade off space for other benefits like cost, security, accessibility and a pleasant environment. Unless these benefits can be delivered, new forms of housing will not be chosen over traditional ones.

The emphasis on the urban fringe should not be an increase in densities per se, but an increase in diversity of housing as required by demand. Increasing housing densities to 15 or 20 dwellings per hectare will not succeed unless there is a demand for those houses on their 400-500 square metre blocks. The supply of housing has to be measured against demand. This requires a much greater understanding by local authorities of prevailing market conditions.

A good deal more planning and resources are required to provide a basic level of facilities and services for outer suburban residents. The residents of new outer-suburban areas are in a double jeopardy:

- they are the "victims" of more consolidated housing developments because they offer less initial resistance to multiple-dwelling development, usually because they are unaware of it or assume that their chosen neighbourhood is not a "unit area"; and
- they receive a disproportionately low level of social services - schools, parks, shops, etc. - due to their outer location and lack of a strong political voice.

Policies for the development of outer suburban areas must include plans for the adequate provision of social services to those areas, or should acknowledge that full social services will not be provided and thus consolidation and maximum housing diversity is not appropriate in those areas.

Development should only be allowed to proceed where it conforms to an overall plan for the creation of quality residential neighbourhoods with access to public transport routes, parks and local facilities. Chipping away at greenfield sites and allowing housing densities to be determined by the whims of the market is not producing liveable suburbs.

8.1.6 Design Alternatives

The culture of Australian suburbia demands detached houses with gardens. The notion of defensible private space containing houses with a legible street address is an entrenched part of suburban lifestyle. Urban consolidation is supposed to present a challenge to that culture, but more often than not produces housing which poorly mimics the suburban house in a garden and removes some of its most attractive features.

There is a general resistance to new housing forms and a real lack of design vision for suburban alternatives. The generally-adopted compromise position is to replicate the built and spatial form of suburbia in a scaled-down version. These little houses usually have two bedrooms, tiny back yards and paling fences in an attempt to copy the style of existing low-density houses. Alternatively, even larger houses are built on smaller blocks to satisfy the quest for more indoor and less outdoor space on the suburban block. This is weak response to the housing problems identified by the pro-consolidation lobby and serves only to support the argument that consolidation in practice is destroying the suburban fabric.

The problem with the design approaches contained in AMCORD is that this too can become a rigid model for development if used without regard to local circumstances. In an environment where reducing costs is paramount, minimum standards and minimum risk on innovation can become the norm. As a rational model, it may be seen to produce housing for a rational environment. But quirks of geography, government and social history create strong cultural links with traditional suburban designs and residents will only adjust slowly to change. The use of AMCORD approaches in effecting change relies on their adaptation to local circumstances. Innovation and diversity in housing therefore requires a level of planning intervention far beyond the current regulatory role into a role of managing cultural development and change.

Figure 39: Design "Solution" for a Sloping Block - An Excavator, Plenty of Bricks and a Set of Steps!

The term "innovation" has been used as a marketing tool by the pro-consolidation movement, but there is little evidence of innovative housing being developed. Few new siting, design or construction methods have been employed to produce a more affordable and flexible dwelling. There are very few examples of medium-density housing which challenge the traditional approach to residential development. High-density housing in prime inner-suburban locations is virtually non-existent.

The development of innovative housing alternatives is problematic in suburbs where low-cost is one of the prime determinants of resident location. This is the case in Glenorchy, but it is unacceptable to argue that therefore housing quality should be compromised. A proportion of housing consumers will accept alternatives to the traditional detached house in its own garden as long as other advantages such as central location and adequate public space and facilities can be provided. This provides the opportunity for innovative designs: semi-detached, terrace and town houses, conversion of existing non-residential buildings to residential use. As long as the market is adequately defined, there are opportunities for intensive use of prime inner areas for urban consolidation and rejuvenation.

Figure 40: Youth Housing Development in Recycled Inner-Suburban Warehouse - Gormanston Road

In inner suburbs where grid street patterns predominate, there is an opportunity to develop new housing and maintain the spatial integrity of the neighbourhood. More intensive use of the available space need not mean the loss of the traditional spatial

form, as long as building envelopes are defined to correspond with the existing pattern, retaining a street address and sense of "front" and "back" on the lot.

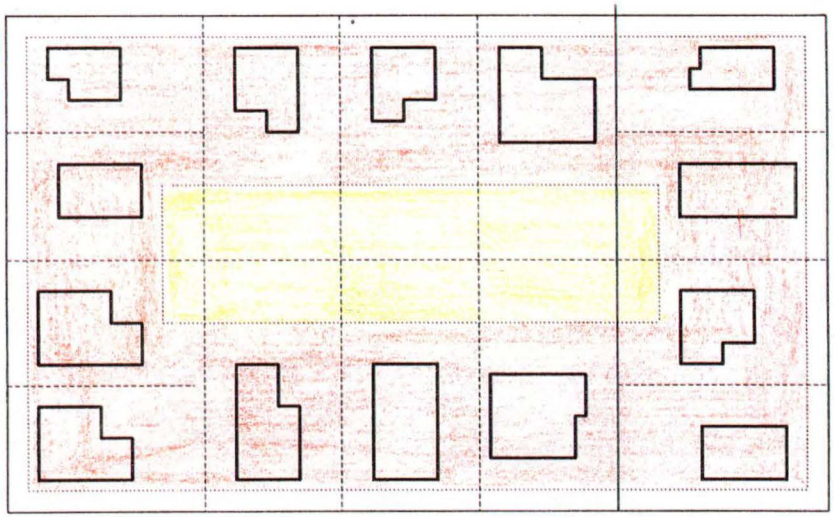


Figure 41: Defined Building Envelope on Existing Street Grid Maintains Spatial Character

Within these spatial parameters, semi-detached and row houses can be constructed whilst maintaining a detached feel, by varying setbacks, clearly delineating front space and detailing building facades.

Figure 42: Housing Department Infill Development in Central Avenue

Dual-occupancy housing doesn't require the placement of a house in the back yard. Specific sites can be tailored for dual-occupancy by reducing the depth of the lot and retaining the frontage. With sensitive design and adequate noise reduction measures, private space can be provided to satisfy reasonable outdoor living needs.

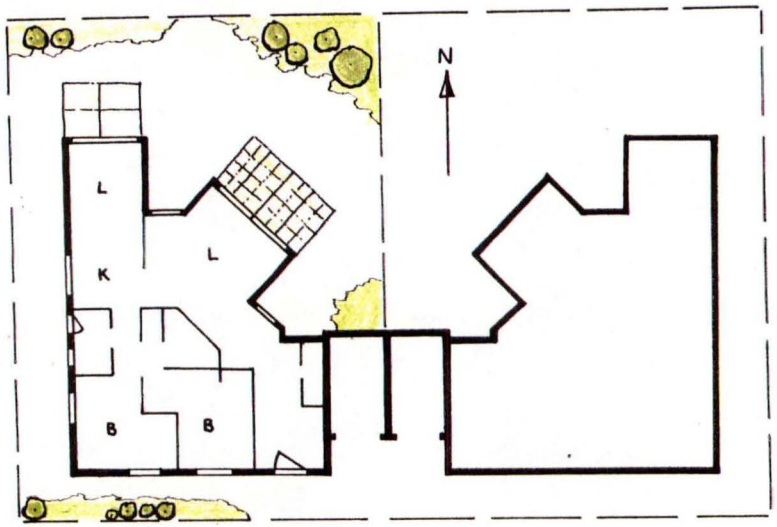


Figure 43: An Alternative Form of Dual-Occupancy Housing Maintaining Street Address and Private Outdoor Space

8.2 Opportunities for Consolidation

8.2.1 Locational Priorities

Consolidation by indiscriminately increasing densities is not a solution to the sustainability crisis being experienced by our suburbs. To the contrary, the evidence appears to show that unplanned consolidation is creating additional sustainability problems that have yet to be quantified. Certainly, the consolidated housing observed in the course of this project shows qualities that leave a lot to be desired both in its appearance and function for residential purposes.

Used creatively, a mixture of densities throughout the inner, middle and outer suburbs designed to concentrate on local centres and transport could provide greater energy savings and accessibility for those prospective residents who see the advantages in those locations.

The question of where to locate new forms of housing in order to take full advantage of urban services is also avoided by policies of encouraging regular infill housing throughout the suburbs. Simply adding to the existing fabric brings only slight increases in population density, at the cost of increasing the built area and its concomitant impact on open space, tree cover, visual amenity and overall liveability. This not only compromises the integrity of low-density suburbs, but poorly utilises the land most suitably placed for intensive development and most likely to suit the locational needs of the potential occupants.

In the local context, declining areas around centres at Glenorchy and Moonah are ripe for re-generation and are most suited to the

But each suburban neighbourhood has its own character and capacity for consolidation and this must be assessed before local plans for consolidation can be fully developed. Suburban areas such as East Moonah may be suitable for consolidation, but this does not necessarily apply to all suburban locations.

8.2.2 Government Intervention

For government authorities, both state and local, to have a meaningful role in the provision of housing to satisfy the community's needs a great deal more needs to be known about the operation of the local housing market, household preferences, and the cost of providing consolidated housing in different locations. From a regional perspective, a metropolitan-wide policy for urban consolidation requires a pre-determined growth strategy which identifies:

- areas of environmental sensitivity where urban development should not be allowed to occur;
- areas where services cannot be made available at a reasonable cost;
- locations where existing services have the capacity to cater for additional growth, or where upgrading and provision of new services will provide a net benefit;
- the means of coordinating service delivery by government authorities to minimise the cost of housing and infrastructure development;
- potential pricing structures for infrastructure services which discourages fringe development in favour of redevelopment of inner and middle suburbs.

In relation to public housing, it is unlikely that the state government, either now or in the foreseeable future, is likely to dedicate significant additional funds to new public housing. This is unfortunate, because it is through public funds that a greater degree of equity and accessibility to housing could be made possible:

> "For the better design and development of new suburbs and cities, as for the renewal of old ones, no single change would be as potent as the provision of revolving funds for public dealing in urban land and building. It is quite possible to shape the cities workably, control their costs, and offer wider choices of better bargains to a great majority of their users. But we must put our money where our good intentions are. Those old-established devices - ownership and free contract - can be the strongest but least oppressive of all planning powers." (Stretton, 1971, p. 31)

8.2.3 Local Planning Policy

It is well established that simply increasing densities of existing residential areas will do little to reduce the continued outward growth of cities. Much of the "under-utilisation" of land in urban areas can be attributed to non-residential land uses, such as industry, transport, roads, parking facilities and recreational areas. Replacement or relocation of these uses is often put in the too-hard basket or goes against the wishes of interest groups dedicated to their retention.

Although there has been some attempt made to identify sites in Glenorchy suitable for conversion to residential use, it has occurred in an ad hoc manner. A comprehensive review of land

use needs would provide the basis for a more visionary approach to inner area redevelopment and prevent the loss of available land to uses which may not necessarily require a central location.

Urban consolidation offers the opportunity for local authorities to become more involved in the development process, to assess local housing needs, to acquire and develop land either on their own or in conjunction with private enterprise. These opportunities have generally not been taken up, mainly due to a resistance on the part of the Council to become involved in areas outside its traditional role and the difficulty in coordinating resources between different government agencies.

There is a tendency for the local Council to be ambivalent about change in the suburban fabric, given that most public pressure comes from inhabitants and defenders of the traditional housing form. The vision of a transformed suburb that caters for a greater range of household needs is inevitably watered down by the political process. Ironically, the suburb is being transformed by the "steady as she goes" approach, but the hybrid form that is emerging is far from satisfactory in its land-efficiency or liveability.

The challenge is there for the Council to become more adventurous and to attempt to play its part in facilitating change, if change is what it wants. Where areas are identified as suitable for consolidation, it is the responsibility of the planning authority to plan for that change, not simply to respond to consolidation proposals on an uncoordinated site by site basis.

Three major problems are evident in the formulation of planning policy for suburban consolidation:

1. Many of the specific problems relevant to suburban growth are incapable of solution within the existing narrowly based planning policy;
2. Most planners, designers and government officials have no personal experience of the conditions for which they are planning; that is, alternative forms of housing at higher densities than traditional suburban housing;
3. There is little opportunity for the expression of consumer opinion or the review of consumer satisfaction with new forms of housing.

These are largely strategic planning and information problems. Improved access to information and adoption of a goal-oriented process for suburban planning would establish the basis for appropriate planning policy which can be monitored and reviewed.

8.2.4 Planning Strategies and Tools

Clearly there is a need for much greater control over the rate and direction of suburban growth.

If a city cannot deliberately choose its rate of growth, then it is restricted from using a whole range of other planning devices; for example, policies designed to promote development of one kind in selected areas over others inevitably reconstruct the land market, especially in areas where demand is high. Speculative withholding becomes possible as well as distortions in the market which may segregate populations or provide the greatest benefits to those who can afford them contrary to social planning policy.

Planning strategies at the local level need to embrace a range of policy areas:

- a better understanding of the character of suburban neighbourhoods and the aspirations of their inhabitants;
- the effect that the rating system has on housing demand and mobility;
- the influence of zoning and development controls on housing development, particularly how redevelopment of existing inner suburban sites is constrained;
- the allocation of resources towards infrastructure upgrading, streetscape improvements and improvements to the quality of public facilities such as parks;
- information sharing about alternative construction methods, energy efficiency, environmentally-friendly and socially attractive site development.

Because growth is relatively slow and redevelopment pressure is presently low in Glenorchy, it should be possible to tackle the problem on most, if not all fronts. This can be achieved by:

- identifying environmental character of established suburban residential areas through consultation and assessment;
- establishing sites and parameters for inner-area redevelopment and rezoning;
- identifying opportunities at local level for diversification of suburban form (lot amalgamation, demolition);
- preparing development plans for undeveloped fringe areas to provide for an appropriate variety of lot sizes, public open space, and pedestrian access to community facilities;
- establishing infrastructure plans for the fringe based on cost-benefits of servicing new subdivisions;
- developing infrastructure inventories and plans for upgrading in key areas inner and middle areas identified for housing redevelopment.

Housing is not just a physical product but a process which involves social, economic and cultural factors. When viewed as a process, the relationship between policy, standards, performance and evaluation is a crucial consideration.

A policy framework provides the basis for housing standards. Standards and guidelines must be assessed in terms of their performance and that involves evaluation of their ability to meet the needs of occupants, the housing industry and the general community in terms of social, environmental and economic goals. Evaluation of housing performance, which must involve consultation with the user, can then feed back into policy-making to complete the cycle.

Locally, the adoption of new guidelines and standards for housing development is imperative, as the existing standards which apply in Glenorchy are not serving their purpose. It is not possible, however, simply to adopt the draft Tascode as a replacement for those standards without considerable lead time to allow designers, developers and planning staff to become fully acquainted with its contents. This will require allocation of additional resources to that education process, as well as some

thought as to how the code will operate within the existing statutory framework.

It is desirable in the meantime to at least prepare clearer objectives based on nationally-accepted design approaches within the existing discretionary approval framework. This would at least improve the short-term ability of the Council to reject poorly-designed multi-unit development. Better processes for monitoring housing standards can also be established.

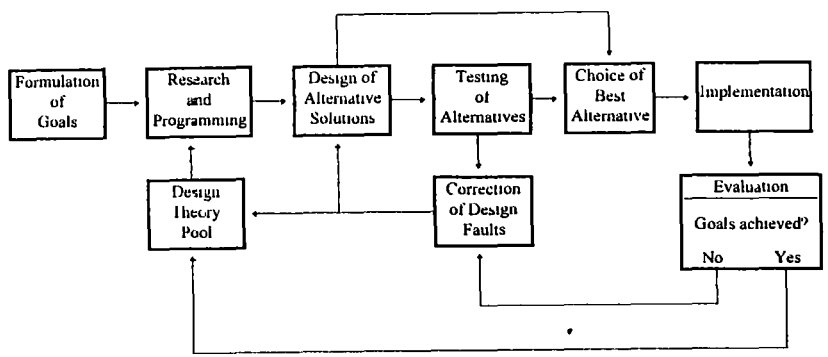


Figure 44: A Generalised Model of the Design Process (Source: Porteous, p. 312)

8.2.5 Education and Consultation

There is a common view in the development industry that the market for medium-density housing is well-defined and known. Developers and real estate agents often say that they know what buyers will or will not accept in medium-density housing. Stereotypes are created to define the market - little old ladies no longer able to maintain the family home, childless couples, separated marriage partners - and a steady supply of medium-density housing is provided to meet their "needs".

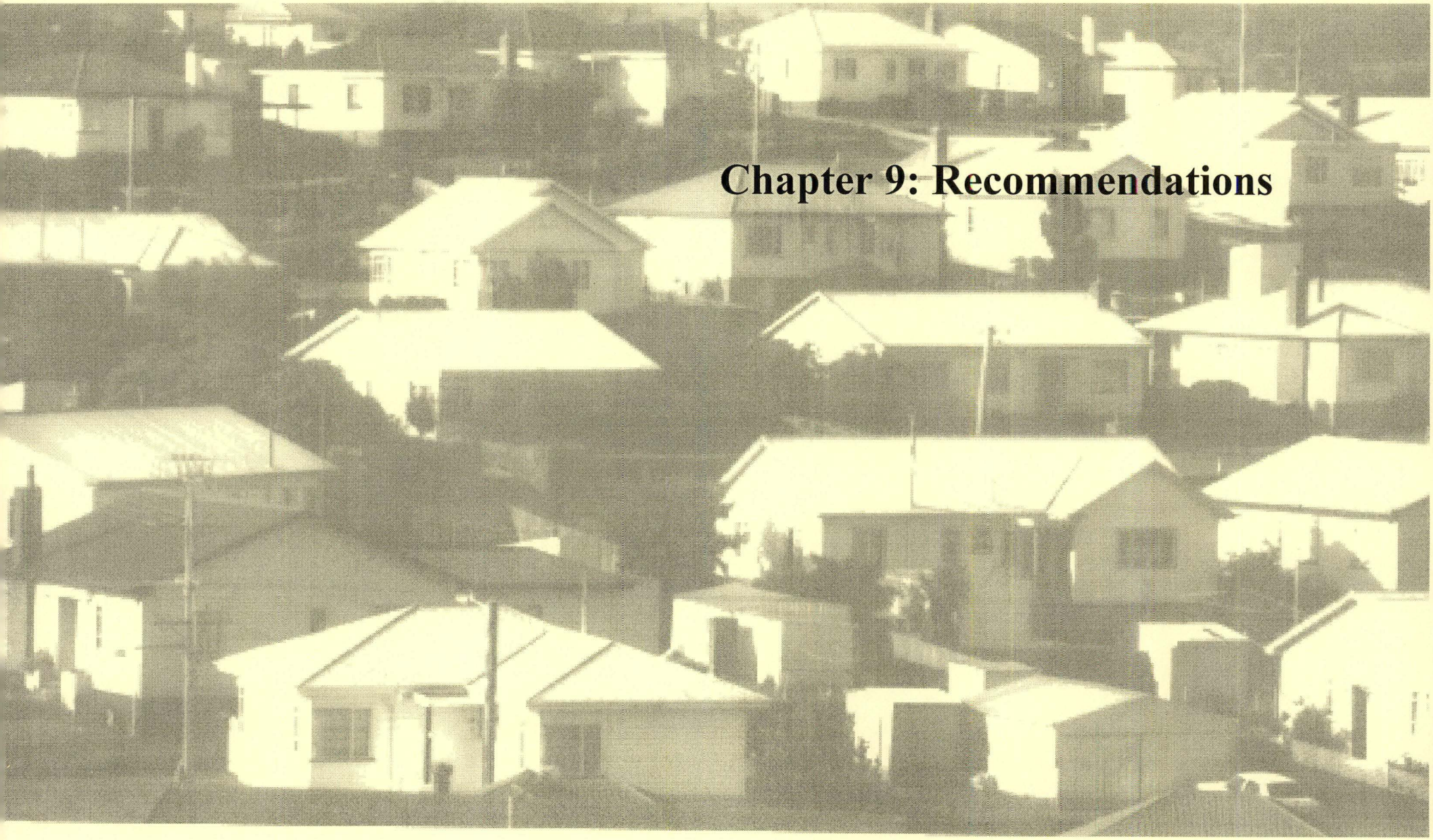
Little has been done to find out what these needs are, so residents are forced to occupy whatever the housing market churns out, whether or not it suits their locational and lifestyle preferences. The perception that a ready supply of homogenous medium-density housing will satisfy demand is a half-baked approach to the problem of limited housing choice. A reliance on conservative and unproven theories about the market will continue to stifle innovation and choice in the housing provision.

As well as taking steps to encourage a far better range and quality of medium-density housing, urban consolidation policies could be more effectively promoted by:

- promoting multi-unit housing more strongly as a means to home ownership;
- marketing multi-unit housing less as a substitute for detached housing and more as a logical solution to changing life-cycle needs;
- making consumers more aware of the potential for a more diverse range of housing types than is currently evident.

Consultation with the development industry is required to achieve a better understanding of the constraints to a more diverse housing product. Local councils should also be taking up a role in facilitating more sustainable development practices by:

- conducting forums to promote better site preparation practices, energy efficiency in house design and landscaping techniques;
- adopting approval systems which reward better design and documentation with faster approval times or reduced fees;
- encouraging greater consumer awareness of housing quality to alter patterns of demand in favour of better designed housing.



Chapter 9: Recommendations

9.1 Understanding Housing Needs

Planning for future urban and suburban housing needs requires additional information at two levels:

- the quantitative needs of the metropolitan area for cost-effective urban infrastructure and future suburban expansion; and
- the qualitative needs of local communities for suitable housing forms in specific locations.

To achieve this, the following recommendations are made:

Recommendation	Responsibility
1. Establish a regional data base to monitor housing and population growth and monitor the success of regional planning strategy.	State Government
2. Establish a local data base to monitor dwelling construction trends, population growth and variations in household structure and mobility within the municipality.	Glenorchy City Council
3. Carry out regular, comprehensive surveys of local residents to gain a better knowledge of housing preferences and choices on which to base local housing policies.	Glenorchy City Council
4. Establish a working party for housing development, consisting of representation from Council, the development/real estate sectors and the community as a means of developing common goals for housing development.	Glenorchy City Council Developers/Real Estate Agents Local Community

9.2 State Planning Policy

Effective urban consolidation is reliant on the coordinated provision of infrastructure and services at the metropolitan level. It is therefore necessary to establish a mechanism for regional planning to ensure that overall growth strategies are put in place, from which local plans can be developed. Public funds should also be used to acquire and manage the release of land at the urban fringe and to provide much greater access to housing for disadvantaged groups.

Recommendation	Responsibility
1. Implement a regional planning strategy for the greater Hobart region, which: • Identifies the environmental constraints on urban growth; • Promotes growth in areas already serviced by local suburban centres; • Establishes an infrastructure inventory including an assessment of the capacity of existing infrastructure to cope with intensification of use; • Sets pricing policies for the extension of new infrastructure on an equitable and cost-efficient basis.	State and Local Government
2. Ensure that the infrastructure and services are provided in accordance with the overall strategy and not according to the isolated policies of government agencies.	State Government
3. Promote the adoption of planning schemes which set clear goals for urban growth, including: • Statements as to the services which will be provided; • An unambiguous requirement for recovery of headworks costs through developer contributions.	Land Use Planning Review Panel Local Government
4. Establish a fund for the purchase of key land parcels at the urban fringe, so that there is greater control over the release of land for fringe suburban development.	State Government
5. Re-establish the role of a State Housing Department as a provider of substantial quantities of public housing for rental to groups unable to access private housing.	State Government
6. Investigate changes to taxation and stamp duty charges to enable greater housing mobility for the elderly and economically disadvantaged.	State Government

9.3 Education and Consultation

It is apparent that the concept of urban consolidation is grossly misunderstood by sections of the planning profession, the development industry and the wider community. There has been a real failure of communication between these groups which must be rectified. Appropriate policies on suburban development must be predicated on a better understanding of social, economic and environmental issues, the realities of the housing market, community aspirations and the specific housing needs of the population.

A cooperative approach to policy development is necessary to resolve conflict and ensure that all stakeholders play an equal role in the development process.

Recommendation	Responsibility
1. Improve communication and consultation between key professional groups and the private development industry through urban consolidation working groups and regular forums.	Professional Bodies Development Industry Groups
2. Carry out a public promotional campaign to communicate the problems of urban development and benefits of sensible urban consolidation policies.	State Government
3. Employ a professional with experience in design and construction to promote better housing design and to act as a resource in providing advice to developers, builders and Council staff.	Glenorchy City Council
4. Conduct local publicity campaigns to provide information to the community on specific local housing problems and issues.	Glenorchy City Council
5. Consult regularly with the local community to determine current attitudes on housing issues and to gather information on community perceptions and aspirations.	Glenorchy City Council
6. Establish a local housing consultative group consisting of key stakeholders to develop improved housing policies and review housing standards.	Glenorchy City Council Development Industry Local Community
7. Establish a procedure for community assessment of specific development proposals as an alternative to the present adversarial system.	Glenorchy City Council

9.4 Local Planning Policy and Practice

Glenorchy City Council has no overall housing policy and currently approaches the issue of suburban development on a program basis, under which real integration does not occur. A more comprehensive approach needs to be developed.

The Council does not actively participate in the facilitation of inner-suburban redevelopment and has insufficient knowledge of local conditions, infrastructure capacity or the location-specific constraints and opportunities for suburban consolidation. Additional resources and new approaches to planning are required to address these problems.

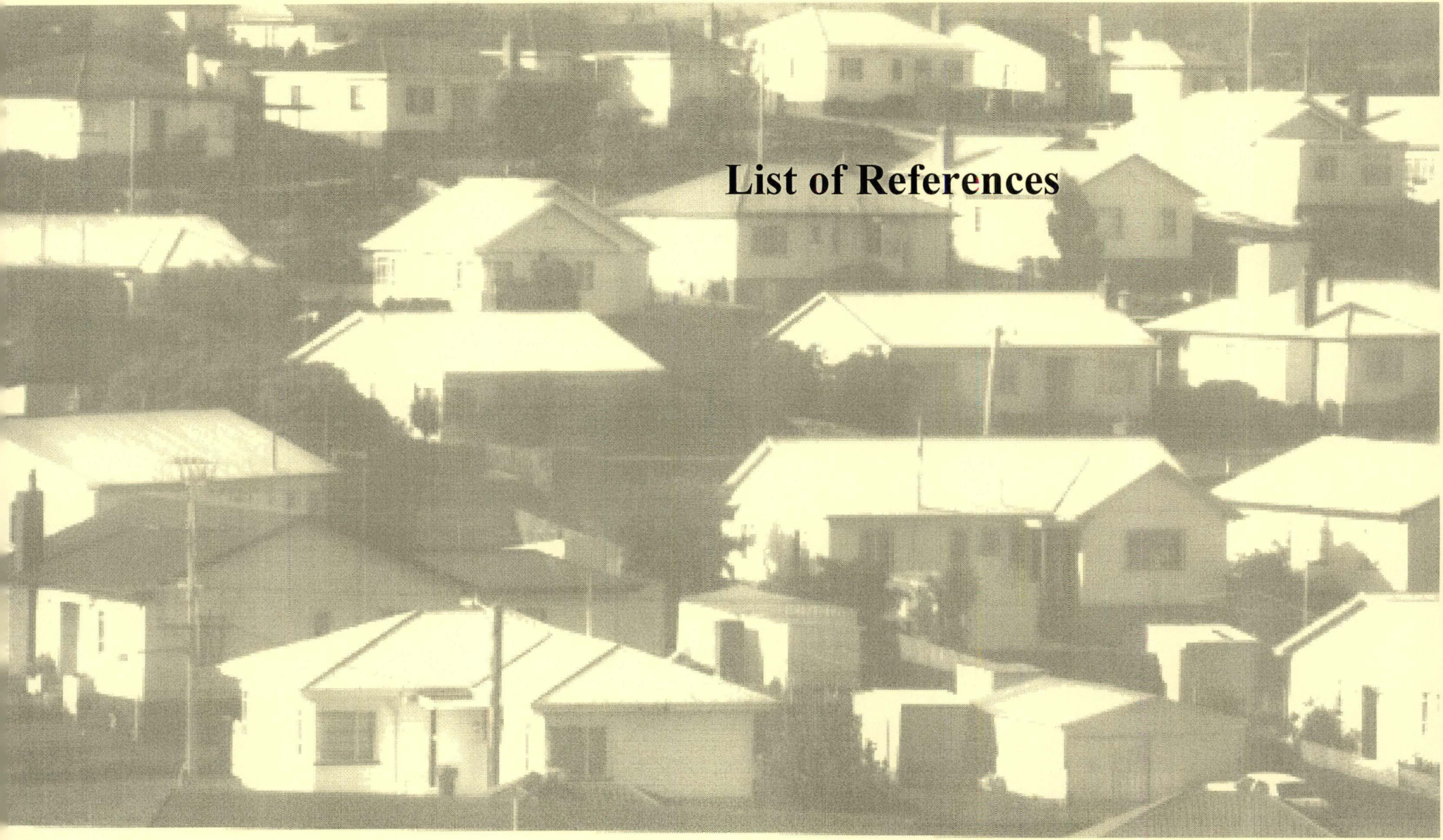
Infrastructure provision is not adequately linked to strategic planning objectives and those objectives are not clearly spelt out. The Glenorchy Planning Scheme fails to deliver as a tool for controlling urban growth through zoning and contains arbitrary housing development standards. A thorough review of fringe suburban zoning controls and planning scheme content is required to provide practical and flexible development control measures.

Recommendation	Responsibility
1. Allocate additional resources for strategic land use planning and suburban design, with priority for: • Research into specific housing needs of the local population; • Design advice to developers and builders; • Physical rejuvenation of inner-suburban areas.	Glenorchy City Council
2. Establish a cross-program working group to develop an integrated approach to suburban development, including; • Determining outward limits for suburban growth based on environmental constraints, landscape values and the limits of cost-effective service provision; • Linking of plans for new fringe infrastructure with zoning controls and targeting of new infrastructure according to timed release of land for development; • Developing a suitable method of recovering headworks costs through developer contributions; • Back-zoning of fringe areas which are excess to medium-term growth requirements; • Introduction of rating incentives for redevelopment of inner-suburban sites.	Glenorchy City Council: Planning Services Technical Services Finance

Recommendation	Responsibility
3. Develop local plans for suburban consolidation and redevelopment based on neighbourhood precincts, including: • Assessment of local suburban character, vacant land availability, housing stock condition and infrastructure inventories; • Prioritisation of locations for detailed development of neighbourhood plans; • Determination of appropriate methods for consultation with local communities; • Development of desired future character statements to direct design and development control; • Identification of opportunities for streetscape enhancement, rationalisation of public land and improvement to pedestrian linkages.	Glenorchy City Council: Planning Services Technical Services Property Management Local Communities

4. Review and amend Glenorchy Planning Scheme 1992:
• Introduce requirement for landscape management plans to be submitted with new subdivision applications in environmentally-sensitive areas;
• Introduce maximum lot size of 750 square metres in Urban Residential zones;
• Remove permitted status of two-unit developments pending implementation of performance-based development criteria;
• Prohibit multiple unit developments in localities which do not have reasonable access to public transport and community facilities and on sites with a slope of greater than 1 in 5.
• Insert separate objectives for multiple-unit development which include performance objectives:
  * respect for surrounding streetscape;
  * functionality of open space;
  * minimisation and diversification of paving;
  * clearly defined boundaries between private and communal space;
  * space and opportunities for personalisation of front entrance areas;
  * integrated landscape design;
  * variety in materials and finishes.
• Develop standards to support objectives for open space area and location, parking, paving and landscaping based on specific end-user requirements.
	Glenorchy City Council:
	Planning Services

Recommendation	Responsibility
• Introduce requirement for multiple unit applications to demonstrate compliance with objectives. • Identify opportunities for re-zoning of key inner-suburban sites to medium-density residential zone.	
5. Establish a framework for on-going monitoring and review of the housing product through post-occupancy evaluation.	Glenorchy City Council: Planning Services



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