



**Local Government Responses to Urban Consolidation  
Policy: Meeting Housing Targets in Northern Sydney**

**THESIS PROJECT**

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## **ABSTRACT**

Urban consolidation is the central housing policy guiding future residential development in the existing urban areas of Sydney. In accordance with the Sydney Metropolitan Strategy and subsequently elaborated in various Subregional Strategies, councils are required to achieve housing targets and accommodate higher density housing within their Local Government Areas. This thesis examines how councils are implementing these targets and achieving the urban consolidation objectives defined within strategic planning documents. It provides an analysis of council responses, primarily through the rezoning of land within revised Local Environmental Plans and local housing strategies. The thesis examines the factors which councils consider when selecting sites for higher density housing, such as proximity to town centres and public transport, the capacity of existing infrastructure and services, preserving the character of low density areas and determining appropriate building heights. The research indicates that councils are beginning to implement the housing targets and achieving many of the objectives suggested within the Sydney Metropolitan Strategy. In particular, the thesis identifies the issue of infrastructure provision as requiring further consideration by councils and state agencies. Higher density housing within existing urban areas needs to be appropriately located and planned in a way that responds to the unique characteristics of the locality.

## **ACKNOWLEDGEMENTS**

Special thanks go to Christine Steinmetz for her valuable advice, guidance and support which is much appreciated.

I would also like to thank the interviewees for their time and insights which have made a valuable contribution to this project.

Warmest thanks go to my family and friends for supporting me and always being there to listen.

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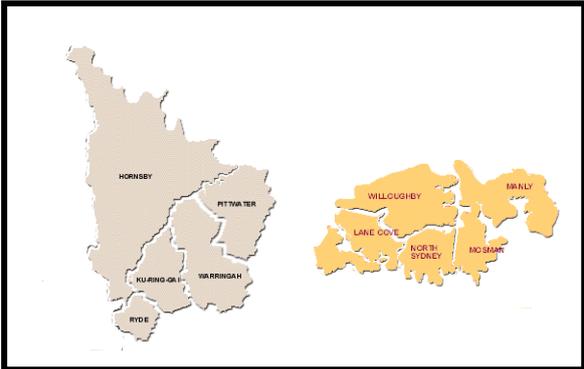
## LIST OF ABBREVIATIONS

DOP	Department of Planning
LGA	Local Government Area
NSW	New South Wales
LEP	Local Environmental Plan
DCP	Development Control Plan
Higher density housing	Medium and high density housing
Subregional Strategies	Draft Sydney Subregional Strategies
Metropolitan Strategy	Sydney Metropolitan Strategy 2005
Housing Strategy	Draft Hornsby Shire Housing Strategy 2009
Lane Cove LEP 2008	Draft Lane Cove Local Environmental Plan 2008
Ku-ring-gai LEP 2008	Draft Ku-ring-gai Local Environmental Plan 2008 (Town Centres)
Hunters Hill LEP 2008	Hunters Hill (Gladesville Town Centre) Local Environmental Plan 2008

Note: The source of all figures included within this thesis is listed below the image or table. Images included on the title pages are sourced from Baroukh (2009), Department of Planning (2005), Department of Planning (2008) and Hornsby Council (2009).



# Chapter 1: Introduction



# 1 INTRODUCTION

Urban consolidation is the central housing policy guiding the future of residential development in the existing urban areas of Sydney. This strategic direction is confirmed by the Sydney Metropolitan Strategy 2005 ('Metropolitan Strategy') and the Sydney Subregional Strategies published by the Department of Planning NSW ('DOP'). These strategies include a significant focus on the need to provide additional higher density housing in Sydney, in order to meet the needs of a growing and changing population structure. The Metropolitan Strategy requires that 445, 000 (70%) new dwellings are accommodated in the existing urban areas of Sydney by 2031 (Department of Planning 2005). Local councils will be required to accommodate these additional dwellings by achieving housing targets and providing higher density housing within their Local Government Areas (LGAs). It is pertinent to examine the current urban consolidation policy because it is a policy that will shape the urban form of Sydney over the next 25 years. Under the Metropolitan Strategy, suburban environments will evolve and "the higher density compact city [will] ...become an Australian urban norm" (Randolph 2006, 473). Increased higher density housing in existing urban areas is the crux of the DOP's housing policy and will in turn influence the direction of strategic planning in local councils.

This thesis provides an analysis of the overarching strategic approach towards urban consolidation in the northern suburbs of Sydney, and examines the role of councils in implementing the housing targets set by the DOP. These numerical targets have been formulated with reference to the classification of town centres and the available developable land in accessible and well connected areas. In consultation with the DOP, councils in the northern suburbs of Sydney are currently in the process of determining the most appropriate way to achieve the targets. In general, councils are implementing the targets through the rezoning of land for higher density housing around town centres and public transport nodes. These rezonings are being documented within detailed Housing Strategies or revised Local Environmental Plans (LEPs).

This research involves an analysis of the Housing Strategies and revised LEPs, which have been prepared to plan for the rezoning of land for higher density

housing. This thesis will provide a critique of the factors that the northern councils are considering when selecting sites for high density housing, such as suitable locations, proximity to public transport, appropriate building forms, the capacity of existing infrastructure and services and addressing the objectives set by the DOP. These issues are identified within the literature as the prime strategic and policy considerations when planning for increased dwelling density within existing urban areas. This research also examines how the urban consolidation objectives within the Metropolitan Strategy and Subregional Strategies are being implemented through statutory and strategic planning documents prepared by councils.

It is important to investigate the way the housing targets are being implemented on a local scale, as this provides an indication of how state policy is being implemented and interpreted in practice. This is an important issue because council decision making regarding higher density housing will alter the dominance of low density housing in many Sydney suburbs. There will be a shift from low density suburbs to suburban environments typified by higher density housing clustered around town centres. Councils need to select appropriate sites for higher density housing in order to ensure that the amenity of suburbs will be maintained, and that there is appropriate infrastructure and services to support the needs of additional residents.

### **1.1 Areas of Interest and Objectives**

The purpose of this thesis is to investigate the direction and implementation of the policy of urban consolidation in Sydney through a review of the strategic documents prepared by the DOP as well as Housing Strategies prepared by local councils. In order to understand the strategic context, I will investigate the approach towards urban consolidation as suggested within the Metropolitan Strategy and Sydney Subregional Strategies. In turn, I will conduct a detailed analysis of how the strategies are being implemented by councils in the northern suburbs of Sydney. This thesis has a particular focus on the Hornsby Council Housing Strategy 2009, which provides an insight into the detailed methodological approach undertaken in order to meet the housing targets. Hornsby's detailed Housing Strategy documents all the factors that were considered when selecting sites for higher density housing.

The overall outcome of this thesis will be to understand the ways in which councils are responding to the Metropolitan Strategy objectives and housing targets, as well as forming a picture of the factors that councils are considering when selecting

locations for urban consolidation. The main focus of this thesis can be summarised by the following research questions:

- What is the strategic approach to urban consolidation and the development of higher density housing as indicated within the DOP Sydney Metropolitan Strategy 2005 and the North, Inner North and North East Subregional Strategies?
- What is the role of state and local agencies in ensuring that this strategic approach is successfully implemented?
- What process and approach is being adopted by councils in order to meet the housing targets set by the DOP?
- How successfully and to what extent are councils implementing the urban consolidation objectives as set by the DOP?
- Are councils selecting appropriate locations for new higher density housing, and considering infrastructure capacity, access to transport, open space and available services?
- What issues and concerns have arisen during the process of councils implementing the housing targets?

## **1.2 Theoretical Context**

This section introduces the key themes that arise from a study of the literature on urban consolidation, with a particular focus on the experience of policy implementation in Sydney and Australia. These themes provide the basis for the critique throughout this thesis and are expanded upon in the literature review.

### ***Capacity to Support Urban Consolidation***

A significant concept to be investigated within this thesis is importance of providing sufficient infrastructure and services to support urban consolidation. This thesis intersects with the ideas of Troy (1996) and Searle (2004, 2007), who argue that not all inner areas have the capacity to support significant increases in population – in terms of infrastructure capacity, availability of services, road networks and open space.

My investigation into the housing targets is borne out of criticism within the literature that the numerical housing targets do not take into consideration the

appropriateness of accommodating these targets in different urban areas (Randolph 2005, 24). Similarly, the approach of Buxton and Tieman (2005, 154) is that “a more targeted program of nominating infill sites may be required”. The literature indicates that it is not sufficient to specify a housing/density target, without considering if it is feasible given the infrastructure, services and urban form of a particular LGA.

### ***Role of State Government and Councils***

A significant element of this thesis is reviewing the implementation of the Sydney-wide urban consolidation policy by councils. This relates to the comments made by Bunker and Holloway (2006) who question the extent to which the Metropolitan Strategy and the ‘strongly articulated’ housing targets will actually be implemented. This analysis intersects with the ideas of Buxton and Tieman (2005) and Dixon and Dupius (2002), who stress that council’s decision making process has a significant effect on the success of medium/high density housing. Similarly, Smith (1997, 17) argues that the success/failure of urban consolidation is influenced by the role played by councils because “under present procedures, local councils have an important part to play in the formulation and implementation of residential development strategies”.

### ***Critique of Strategic Approach to Urban Consolidation***

Bunker and Holloway (2006), Bunker (2007) and Searle (2004) provide a broad critique of the Sydney Metropolitan Strategy and comment on the approach to economy, employment, housing, water management and transport stated within the Metropolitan Strategy. Similarly, Pinneger (2007) provides a critique of the approach to the formulation of state-wide housing targets. This thesis significantly builds on this analysis - this thesis is not simply a critique of the Metropolitan Strategy in general, but of the issues arising from the implementation of the urban consolidation policy by local councils.

## **1.3 Structure**

The structure of this thesis can be summarised as follows:

- **Introduction:** Establishes the purpose, direction and theoretical context of this thesis.
- **Literature Review:** The literature review discusses the evolving approaches to urban consolidation in Sydney and the role of state and local agencies in implementing this policy. The literature review provides a

discussion of the main urban consolidation concerns including infrastructure capacity and appropriately located development.

- **Critique of State Policy:** Chapter three uses the theory from the literature review in order to analyse the over-arching state urban consolidation policy and housing targets. The review of state policy provides an important background for chapters four and five.
- **Analysis of Local Council Approaches:** Chapter four analyses the different approaches to addressing the housing targets by councils in the northern suburbs of Sydney, and considers the appropriateness and consistency of these responses with regard to urban consolidation policy.
- **Case Study:** Hornsby Council has prepared a detailed Housing Strategy which warrants consideration as a model for other councils. A discussion of the methodology and rationale for selecting this case study is included in section 1.4.
- **Findings and Conclusions:** Chapter six synthesises the themes and issues arising from this thesis.

#### 1.4 Research Methodology

I used qualitative research methods to conduct a literature review of theory and strategic and statutory planning documents. The thematic theoretical analysis of literature is found in chapter two, and comprises a review of the relevant urban consolidation themes. Chapter three provides an analysis and critique of the aims, objectives and guidelines for higher density housing that are contained within the Sydney Metropolitan Strategy 2005 and the Sydney Subregional Strategies. It was relevant to analyse these documents as they are the principal strategic documents guiding the implementation of urban consolidation in New South Wales. The literature review in chapter two provides a sound basis for the critique of urban consolidation policy contained in chapter three.

In order to research the implementation of urban consolidation policy on a local scale, I conducted a review of council Housing Strategies and LEPs for councils in the northern suburbs that are classified by the Inner North, North and North East Subregional Strategies. This includes Mosman, North Sydney, Manly, Willoughby, Lane Cove, Hunters Hill, Ku-ring-gai, Ryde, Warringah, Hornsby and Pittwater Councils. Further to this, I conducted an analysis of the Hornsby Housing Strategy 2009. This was chosen as a case study because Hornsby Council has prepared a detailed and comprehensive analysis of the sites selected for future higher density

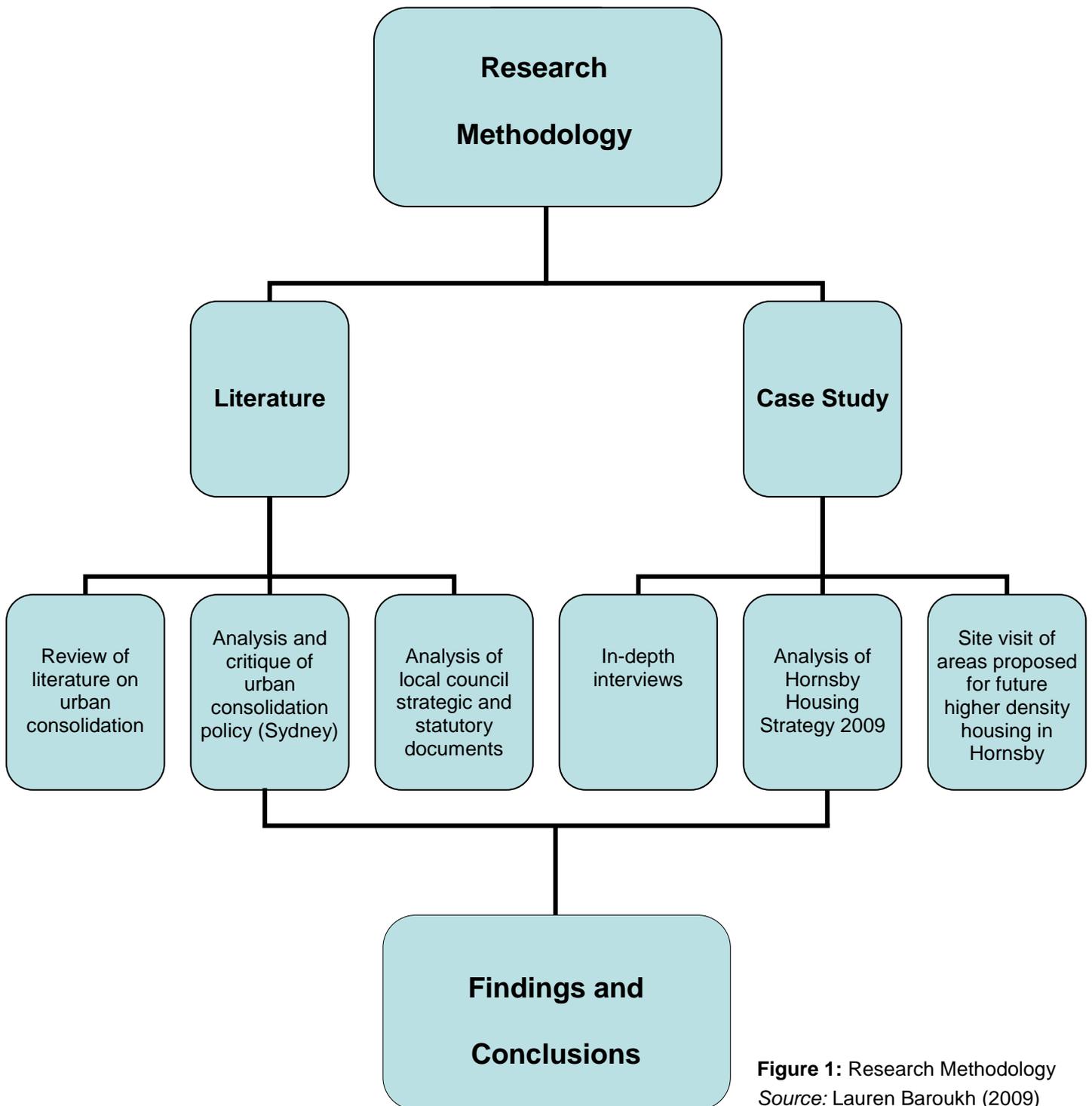
housing. The Hornsby Housing Strategy provides justification for every site that is identified for future residential development – this is a thorough approach, particularly when compared to many of the other councils in the northern suburbs of Sydney.

As part of my qualitative research, I conducted face-to-face in-depth interviews with James Farrington, the manager of strategic planning at Hornsby Council and Peter Fryar, a consultant planner with ten years experience as a manager at Hornsby Council. I selected these interviewees because of their expertise and detailed knowledge of housing policy in Hornsby. The interviews provided two different perspectives on the Hornsby Housing Strategy and broadened my understanding of the role of local councils in implementing and interpreting the urban consolidation policy. As discussed in Flick *et al* (2004, 3), the in-depth interviews provided a perspective on the issue “from the inside out”. Ideas and quotes from the interviewees are included throughout this thesis. These interviews were approved in accordance with my approval from the Human Research Ethics Advisory Panel, which is included at Appendix A. The Project Information Statement and Project Consent Form were provided to both participants and are included at Appendix B and Appendix C respectively. A summary of the details of the interviews is included at Appendix D.

I used standard qualitative protocol to conduct phone interviews with two employees at the DOP. However, their supervisors were not willing to provide letters of support and they suggested it would be more appropriate for me to quote official documents published by the DOP. The DOP publications include a very comprehensive rationale for the current approach to urban consolidation and housing targets in Sydney and this provided a very detailed basis for analysis.

An important component of my research was conducting a site visit of many of the sites selected for future higher density housing in the Hornsby LGA. I created a visual pro forma for my site visit, which is included at Appendix E. The purpose of this site visit was to examine the selected sites and the surrounding area, in order to develop an understanding of the existing form and character of the precincts. The site visit focussed on the identified sites in Waitara, Hornsby, Asquith and Mt Colah. These areas are located in close proximity to each other, but have slightly different approaches to accommodating additional housing. These precincts also represent town centres of different size within the hierarchy - the town centres range from being classified as ‘Major Centre’ (Hornsby) to ‘Neighbourhood Centre’

(Mt Colah). This provides a good cross section of the different urban areas that will be accommodating higher density housing. A visual representation of my research methodology is shown in Figure 1 below.



**Figure 1:** Research Methodology  
 Source: Lauren Baroukh (2009)

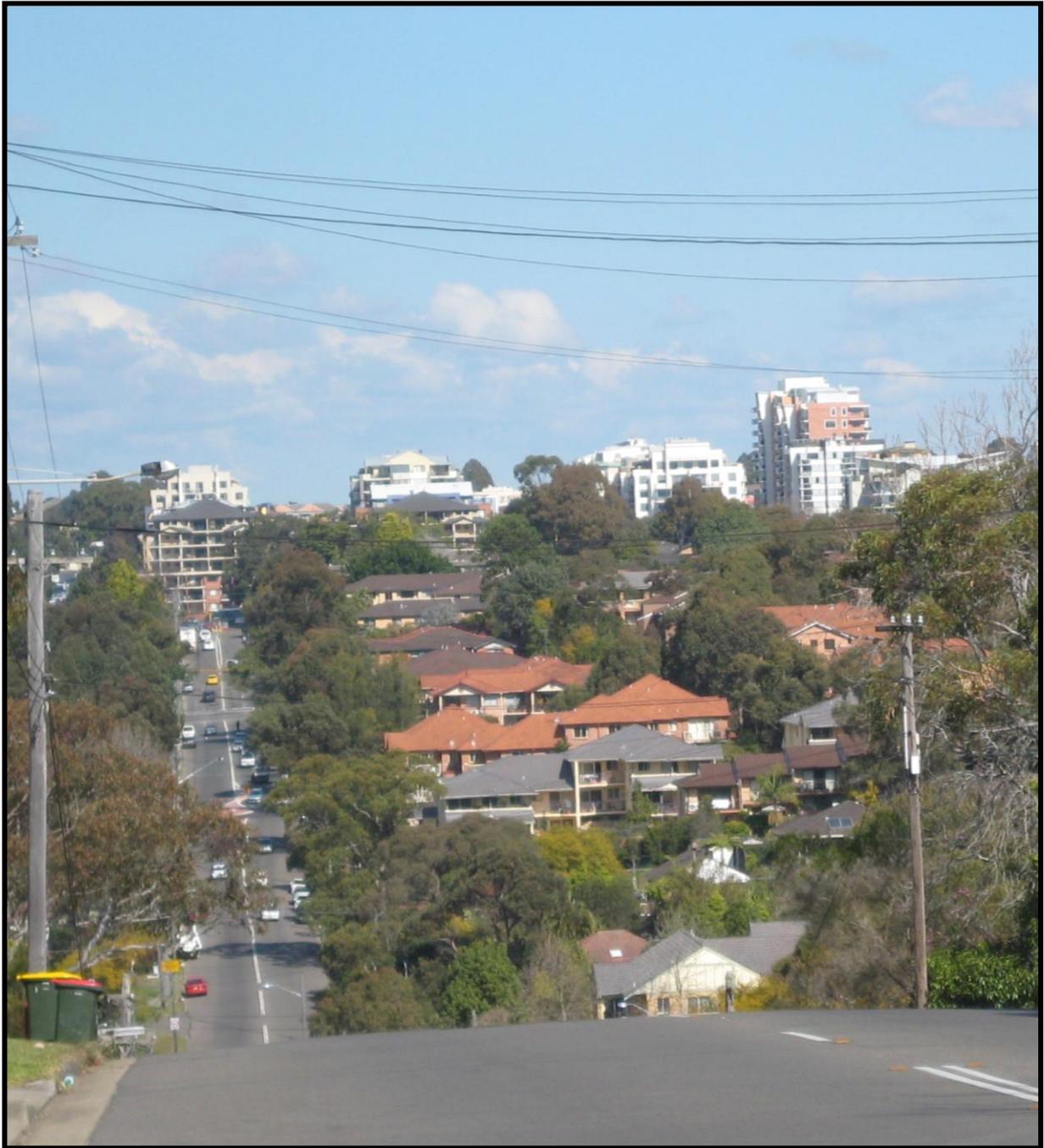
## 1.5 Research Limitations

Research limitations are introduced below and discussed further in chapter six.

- Time did not permit a comprehensive investigation of all the suburbs in Sydney. Nevertheless, the research provides a detailed discussion of the Northern suburbs of Sydney that are classified by the Inner North, North East and North Subregional Strategies.
- This thesis discusses the issue of housing in Sydney, with a focus on the implementation of the urban consolidation policy and housing targets. It is acknowledged that there are many other housing issues affecting Sydney, however the implementation of housing targets is an issue currently being addressed by councils and is considered to be worthy of discussion.
- This research is based on access to public documents only. Nevertheless, the two in-depth interviews provided an insider perspective from a council's and consultant's point of view.
- This research is predominantly a qualitative analysis of state and local responses to urban consolidation. While community responses to proposed higher density housing are discussed within this thesis, the main analysis is undertaken from the perspective of the State Government and local councils. This is considered to be an appropriate approach because these are the authorities primarily responsible for implementing the urban consolidation policy.

## 1.6 Summary

This chapter introduces the main issues being investigated within this thesis as well as the methodology adopted in order to conduct a detailed analysis of urban consolidation policy and housing targets in Sydney. The theoretical context introduced in section 1.2 of this chapter is a summary of the key themes arising from the literature review, and will now be discussed in further detail in chapter two.



## Chapter 2: Literature Review



## 2 LITERATURE REVIEW

This chapter examines the literature and theory relating to the implementation of urban consolidation, with a focus on the Australian experience. It is considered that this is most relevant to the analysis of urban consolidation policy in Sydney, which is the focus of this thesis. The literature review also draws on case studies from interstate and overseas. This literature review has informed the analysis of NSW's urban consolidation policy which is discussed in chapter three.

### 2.1 Defining Urban Consolidation

Urban consolidation can be defined as “the process of increasing and/or maintaining the density of housing in established residential areas in order to increase or maintain the population densities of those areas” (Smith 1997, 5). It has also been described as an intensification of built form and activity within a particular urban area (Buxton and Tieman, 2005). The concept of ‘intensification’ of urban land (resulting in increased pressure on infrastructure and services), is a recurring concern associated with urban consolidation. The intensification of urban land is achieved through increased development of medium and high density housing - which is referred to within this thesis as ‘higher’ density housing. The five principal housing types that constitute higher density housing include dual occupancy, multiple small lot housing, housing for the aged and disabled, town houses and terraces and residential flat buildings (Bunker *et al* 2002).

Urban consolidation has been a major planning policy in Australian cities over the past decades. It has been described as a “serendipitous solution to a range of pressing urban problems” including urban sprawl, car reliance and lack of housing diversity. The policy of urban consolidation, particularly in Sydney, has been implemented in order to manage low density urban sprawl (Searle 2004, Bunker *et al* 2004). The intention is that higher density housing in existing urban areas will reduce the demand for greenfield development and improve the long term sustainability of the city. Supporters of the urban consolidation policy claim that it is a sustainable approach to urban development as it supports the ecological need to preserve existing non-urban land.

Throughout the literature it is confirmed that one of the overriding objectives of urban consolidation is to maximise use of infrastructure services and facilities that

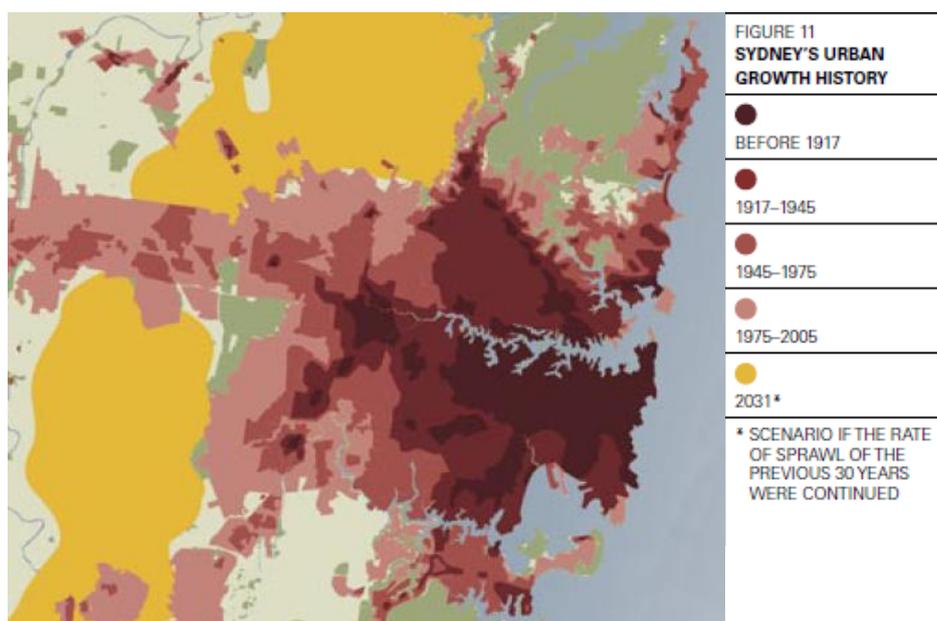
have already been provided in existing urban areas. This represents an economic advantage, as it requires reduced expenditure on new urban infrastructure. Similarly, O'Connor *et al* (1995, 41) confirms that the underutilisation of facilities in established areas as well as the “isolation and deprivation of suburbia”, are major drivers for urban consolidation. Urban consolidation has also been viewed as a means of creating vibrant, accessible and well connected urban environments.

Nevertheless, there has been much criticism of the implementation of the policy of urban consolidation in Australia, with suggestions that it has not always achieved its objectives (Searle 2007). This literature review discusses many of the policy, environmental, economic and social concerns that should be considered by state and local agencies.

## 2.2 Evolving Approaches to Urban Consolidation Policy in Sydney

This section provides an important insight into the approaches adopted by the NSW State Government in order to encourage Councils to zone land for higher density housing in the 1980's and 1990's. This section of the literature review examines the commentary on the nature of urban consolidation policy in Sydney during that period.

Throughout much of the twentieth century, Sydney's urban form predominantly consisted of low density detached dwellings (Bunker *et al* 2005). Growing population numbers and increasing ownership of motor cars resulted in urban sprawl becoming an overriding factor shaping urban development in Sydney (Figure 2). While planning policy in the 1950's recognised the need for more



**Figure 2:** Urban Growth of Sydney 1917 – 2001

Source: Department of Planning (2005)

compact development, low density housing remained the preferred form of housing. The general trend was to exclude residential development from larger centres in order to create ideal suburban environments (Department of Planning 2006).

In response to the pressures of urban sprawl, urban consolidation policies were officially introduced by the NSW State Government in 1980. During the 1980's, government policy was focussed on encouraging dual occupancy development (Searle 2007). In 1982 the State Government established a target for 12,000 medium density dwellings to be constructed across Sydney. Development incentives were introduced to encourage higher density housing but "there was little evidence that urban consolidation policies were having an effect on Sydney's housing structure" (Searle 2007, 2). Searle (2007) contends that strong community opposition to urban consolidation policies contributed to Sydney councils failing to implement State Government urban consolidation policies. By comparison, Bunker *et al* (2005) argues that the 1980's urban consolidation policy was effective and resulted in a 22% increase in the construction of attached houses between 1998/99 and 1993/4 (Urban Frontiers Program 2001 quoted in Bunker *et al* 2005, 775).

In 1995, the Department of Urban Affairs and Planning required councils to prepare Residential Development Strategies for additional residential development in existing urban areas. This heralded the beginning of a focus on residential development in town centres with good accessibility. This densification policy is described by Bunker *et al* (2002, 150) as "a more prescriptive approach to the location of higher density forms with the explicit promotion of development around key transport nodes and urban centres". The focus on higher density housing in town centres has intensified, and forms the crux of the Metropolitan Strategy. With reference to this strategy, it is clear that higher density housing in Sydney's existing urban areas will be the main source of residential growth in the coming decades.

Much of the literature on urban consolidation policy in Sydney is focussed on the implementation of the policy in the 1980's and 1990's. This thesis examines the future direction of urban consolidation policy in Sydney, guided by the 2005 Metropolitan Strategy. There is a gap in the literature in relation to analysing the current approach to accommodating additional dwellings in Sydney. The nature of the current strategic and policy approach does differ from that of the past, and is worthy of discussion.

### 2.3 The Role of State and Local Agencies

Urban consolidation in NSW over the coming decades will be guided by the Metropolitan Strategy and the Sydney Subregional Strategies which contain housing targets for LGAs throughout NSW. Councils will play an integral role in interpreting and implementing the urban consolidation policy. Buxton and Tieman (2005) confirm that a major drive for urban consolidation occurs when Governments identify suitable locations or centres that can accommodate growth. In turn Smith (1997, 17) agrees that “local councils have an important part to play in the formulation and implementation of residential development strategies”, and therefore need to have a detailed understanding of appropriate higher density development.

The significant role of councils in implementing urban consolidation strategies is confirmed by Dupuis and Dixon’s (2002) review of Auckland’s Regional Growth Strategy. This review indicated that the successful implementation of the Government strategy relied on councils selecting appropriate locations for medium density housing. Dupuis and Dixon (2002) confirm that councils should not plan developments in isolation, but need to consider the overall site development, roads, parking, playgrounds and open space. This reveals the importance of communication between state and local agencies, in order to ensure that the urban consolidation objectives are fulfilled.

There has been some criticism of the housing targets and urban consolidation policies prepared by state agencies. Bunker *et al* (2005, 24) criticises the fact that government housing targets are “broad planning imperatives specifying increased levels of urban consolidation”. Bunker *et al*’s (2005) critique of government housing targets is pertinent, particularly in view of the numerical housing targets recently provided by the NSW DOP. It is not sufficient to specify a housing/density target, without considering if it is feasible given the infrastructure, services and urban form of a particular LGA.

Buxton and Tieman (2005) present a similar criticism to Randolph (2005), through their critique of the Melbourne 2030 Strategy and its requirements for urban consolidation. The study is critical of the fact that selected areas for future consolidation are some of the most compact suburbs in Melbourne. Buxton and Tieman’s (2005) argument is that if urban consolidation sites are not appropriately located, many suburbs will not be able to support significant population increases.

Therefore, it is clear that state agencies need to consider the capacity of urban areas, before developing potentially unfeasible housing targets.

An underlying issue within the debate is how feasible it is for councils to implement State Government planning strategies. Bunker (2007) argues that the successful implementation of the Metropolitan Strategy will depend on three main factors: the degree to which the strategy reflects the planning issues being faced by Sydney, whether policies and funding will support implementation of the plan and the way that councils choose to interpret and implement the plan. It is essential that a dialogue between state and local agencies is established, in order to ensure a coordinated approach to the objectives and targets within the Metropolitan Strategy.

#### **2.4 Capacity Constraints in Existing Urban Areas**

The major push towards urban consolidation is based on the assumption that past development at low densities has resulted in urban infrastructure that is operating below peak levels (Bunker 1985 in Searle 2004). However, Woodhead (quoted in Troy 1996, 63) states that “the assumption that there is excess infrastructure capacity in inner city suburbs is frequently erroneous”. A recurring theme within the literature is that the location of urban consolidation must be carefully considered, because not all areas have spare capacity in the infrastructure services, such as the water supply, sewerage, drainage, and public transport (Troy 1996). Searle (2004) puts forward a strong argument stating that spare capacity is likely to be very limited and not capable of supporting significant population increases.

Infrastructure capacity should be a prime consideration before selecting suburbs for urban consolidation, as poor infrastructure services will detrimentally affect the quality of life for new and existing residents. Troy (1996, 67) argues that when urban consolidation increases the population of inner areas, “the residents of these areas will be required to accept lower standards of provision of open space and lower quality schools”. A comparable argument presented by Searle (2004) is that there is often inadequate open space in older urban areas, and the existing provision of open space would not be sufficient to support an increase in population.

Many of the inner suburb street networks have been designed to accommodate the population numbers associated with low density housing. Therefore traffic, congestion and road safety are potential issues if inappropriate sites are selected

(Troy 1996, Searle 2004). Supporters of urban consolidation often argue that higher density housing around public transport nodes will minimise traffic and congestion. However, Searle (2004, 44) maintains that “some increase in traffic congestion is almost certain, given that the modal split of incoming populations will retain a significant car component”. It is evident that the capacity of road networks needs to be considered before proposing the development of concentrated areas of higher density housing.

Dixon and Dupuis (2002) confirm that governments need to review their housing targets and assumed capacity for metropolitan areas. It's not sufficient to provide state-wide numerical housing targets – the infrastructure capacity of suburbs needs to be assessed on a case by case basis. In support of this viewpoint, Searle (2004, 42) argues strongly for the need for a “systematic assessment of capacity...to know how much more housing state governments can impose”. The recurring concerns identified within the literature reveal that an assessment of infrastructure capacity, as well as availability of services, hospitals, schools and open space, must be considered when earmarking sites for medium/high density development. The Total Environment Centre in NSW (1987) suggests that councils should have the power to refuse development for higher density housing when the proposed development will result in:

- Overcrowding of schools, day care centres, medical facilities and transport systems;
- Strain on local roads in terms of increased traffic and parking issues;
- Alter the existing amenity of the area.

The approach to urban consolidation in the United Kingdom (UK) reveals some similarities to the experience in Sydney. In 1996, the UK government stipulated that 60% of all new residential development would take place in existing areas by 2005 (Brehny 1997). Brehny (1997, 209) argues that this target raises issues such as “Can [the target] be achieved? Is it too tough?...What benefits and losses will ensue?”. Governments and councils need to have a detailed understanding of feasibility and infrastructure capacity before implementing the urban consolidation policy.

## 2.5 Higher Density Housing in Town Centres

A recurring theme in the literature is the notion that urban consolidation should be concentrated in existing urban areas, and achieved through infill, mixed-used and transit oriented development (Filion 2003, 3). It is considered appropriate to locate higher density housing in and around well connected and accessible activity centres (Bunker *et al* 2002). Searle (2004) suggests that higher densities are accommodated in accordance with Jacobs' (1961) description of an ideal community: residential flat buildings (five-six storeys) located within walking distance of shops and services. Jacobs (1961) supports the creation of urban environments with higher density housing around 'mixed primary uses' in order to ensure vitality, diversity and accessibility within the urban environment.

The notion of creating mixed-use town centres is markedly different from the approach to the creation of ideal suburban environments over the past decades. The introduction of land use zoning was in fact an attempt to separate residential, commercial and industrial land uses in suburbs. This was often necessary due to industrial activity, deterioration and crime in many city environments (Gupta 2008). However, the separation of land uses removed opportunities for walking to local shops and services and harboured solitary lifestyles. Mixed-use town centres today aim to re-establish connectivity within suburbs through the creation of walkable places, with a mix of housing choices, and "cosmopolitan environments and amenities" (Gupta 2008, 6). The Woodlands development (Figure 3) in Houston, Texas, is an example of a mixed-use development with a vibrant 'urban core'.



**Figure 3:** Mixed use town centre Houston, Texas  
*Source:* Gupta (2008)

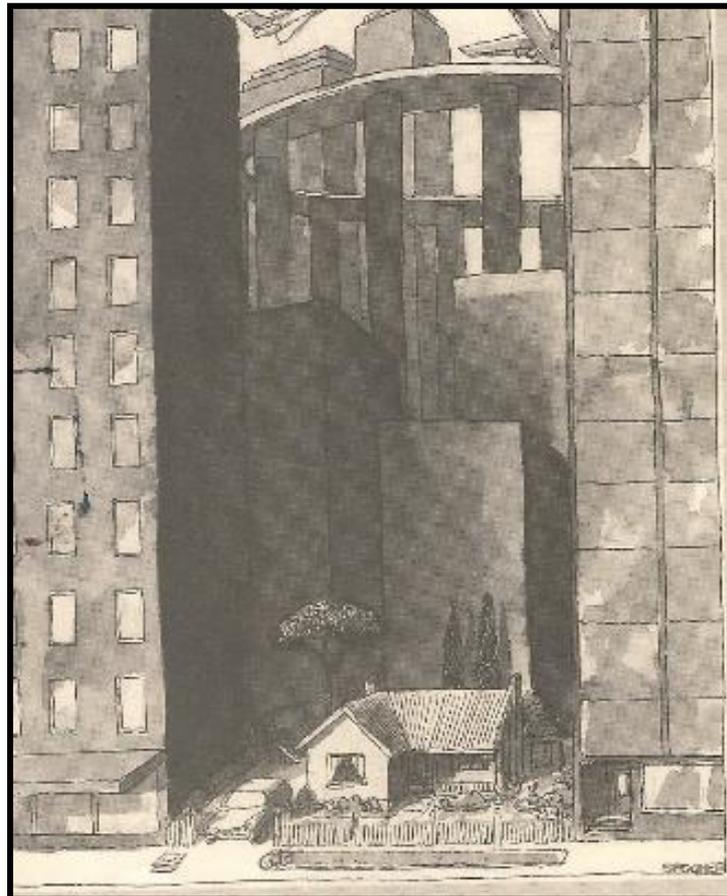
The built form of many European neighbourhoods, illustrates the concept of concentrating residential development around a mixed-use town centre. Nystrom (2006) defines neighbourhood centres as the central part of a housing district providing “basic services to the neighbourhood’s residents, such as schools, shops, recreation, health care”. It is interesting to note that the size of these centres varies depending on the size of the population. For example, the size of the population would be used to determine the number of schools, shops, community and health facilities (Nystrom 2006). This harks back to the issue of the necessity for sufficient infrastructure capacity to accommodate higher population levels.

Transit Oriented Development is one form of urban consolidation that involves the development of compact walkable communities with higher density residential development located around mixed-use transport ‘hubs’. Transit Oriented Development is one approach that facilitates the concentration of higher density housing in town centres. Orenco Station (Portland, Oregon) is a prime example of the benefits of concentrating housing around a well-connected town centre with good access to light rail, shops and employment opportunities (Kreyling 2001). Interestingly, Quinn (2006, 312) argues that new transit oriented communities are not feasible in existing urban areas because “the chance to plan new neighbourhoods in networks across a large area is fairly remote, given the problems of land assembly and competition from conventional developers”.

Buxton and Tieman (2005, 154) agree that higher density housing should be concentrated in ‘centres’ because “smaller scale dispersed development throughout the metropolitan area will have a more limited impact” on increasing dwelling density. Buxton and Tieman (2005) also suggest that dispersing medium density developments throughout suburbia and outside of activity centres, has “greater potential to cause local conflict through their greater impact on neighbourhood character” (Buxton and Tieman 2005, 154). The threat of inappropriately located higher density housing on suburban environments is epitomised by Figure 4 below.

Similarly, O’Connor *et al* (1995) agrees that dispersing medium/high density development throughout suburbia (instead of in concentrated hubs), creates inconsistencies within the existing urban fabric. This perspective is in accordance with the argument presented by Smith (1997, 10) that appropriate urban consolidation policies are required to avoid increasing housing densities “in the

wrong areas". On the other hand, Buxton and Scheurer (2007) discuss the flaws inherent in concentrating urban consolidation in inner areas only. This is a relevant consideration because it means that while urban consolidation improves access to services and facilities in inner areas, outer areas continue to have more limited accessibility to services and public transport. It's an interesting consideration that urban consolidation needs to occur in outer areas as well as inner suburbs. The premise of urban consolidation is the use of existing services and infrastructure; therefore it is possible to concentrate development around town centres in outer areas.



**Figure 4:** Effect of High Density Housing on Suburban Environments  
*Source:* Troy (1996)

## **2.6 Locational Concerns and Community Opposition**

It is often argued that higher densities have a series of social benefits including access to facilities and services and greater engagement with the community. This is achievable when councils have planned the location of new developments in the context of the existing urban fabric. However, inappropriately located higher density

housing is often perceived by councils and local residents as a threat to the character and amenity of the local area (Bunker *et al* 2002).

There is often local resistance to urban consolidation in inner ring suburbs (Searle 2004) and therefore councils must select locations that minimise potential impacts on the character and urban form of suburbs. Inappropriately located urban consolidation can have a particularly negative impact on the social fabric of an area. High rise developments have often been described as removing any sense of community and interaction between residents. Ohlin (2003, 14) agrees that urban consolidation needs to be “socially responsive”, by ensuring that developments occur in such a way that allows for the formation of social networks, community bonds and social organisation.

In some suburbs urban consolidation has been concentrated in areas of existing social disadvantage, therefore exacerbating the problem of spatial inequality. Site selection is important because “ambitious targets and zoning changes enlarge concentrations of...households in already difficult circumstances” (Randolph 2005, 24). This is not in accordance with the objectives of urban consolidation, and is likely to intensify social problems and “build slums of the future” (Randolph 2005, 24). Troy (1996) argues that urban consolidation is more likely to be socially regressive, and that people may have to pay ‘more for less’ in a higher density environment. Inappropriately located consolidation can further increase social problems, instead of creating housing diversity and good access to services for all residents.

The Australian mentality has generally favoured low density detached suburban housing, hence Troy’s (1996) argument that higher density housing will never be fully accepted by communities. Dupius and Dixon (2002, 422) describe a similar experience in New Zealand, where the value placed on detached housing is “so ingrained within the New Zealand ethos and identity”. There is agreement within the literature that communities are generally resistant to urban consolidation, and would only be accepting of very successful higher density urban environments. Howley (2008, 792) argues that for urban consolidation to be accepted by the public, it needs to provide better services, facilities and public transport and “these benefits [should] not be outweighed by the negative impacts of compact city living such as congestion and overcrowding”.

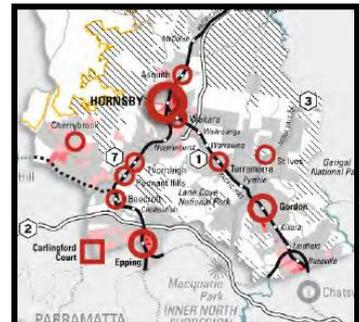
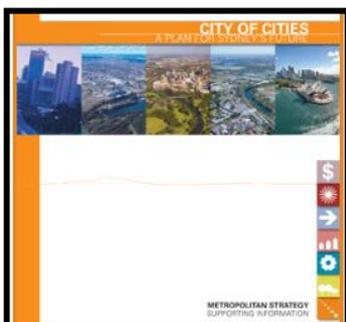
Searle (2004) questions the long term viability of urban consolidation and suggests that the current demand for higher density dwellings is not sustainable. Similarly, Wulff (2004) contends that even though there is a trend in Sydney towards smaller households, this does not necessarily translate into a demand for smaller dwellings. A recurring theme within the literature is that Australian households have a strong preference for owner occupation of detached dwellings, and therefore a proliferation of higher density housing is not necessarily an appropriate response to addressing housing need in Australia (Yates 2001).

## **2.7 Summary**

This literature review reveals the overriding urban consolidation issues are the need to ensure sufficient infrastructure capacity to support higher density housing, the importance of appropriately located development and the need for communication between state and local agencies. This thesis will examine the way local councils are responding to the urban consolidation policy and objectives set by the DOP in chapter four. I begin by critiquing the current Sydney-wide urban consolidation policy in chapter three, with regard to the themes identified within the literature review.



## Chapter 3: Strategic Approach to Urban Consolidation in Sydney

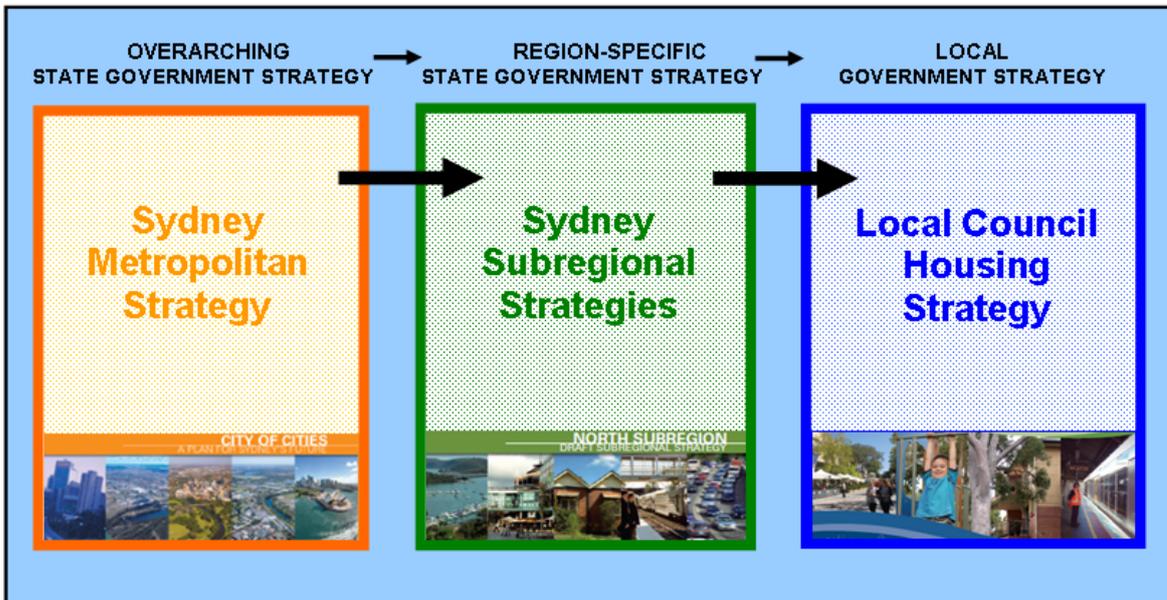


### 3 STRATEGIC APPROACH TO URBAN CONSOLIDATION IN SYDNEY

This chapter begins by examining the strategic documents that have been prepared by the DOP to guide the implementation of the policy of urban consolidation in Sydney. The second part of this chapter provides a critique of these strategies with reference to the themes identified within the literature review. This chapter analyses the objectives of the urban consolidation policy and provides a good basis for examining local councils' responses, as will be further discussed in chapters four and five.

#### 3.1 Sydney Metropolitan Strategy 2005

The Sydney Metropolitan Strategy was published by the DOP in December 2005. The strategic document is titled "City of Cities: A Plan for Sydney's Future", and establishes the social, environmental and economic policy that will guide development in Sydney for the next 25 years. The Metropolitan Strategy is the overarching document containing principles and objectives that have been used to inform the Subregional Strategies as well as the local council Housing Strategies, as shown in Figure 5.



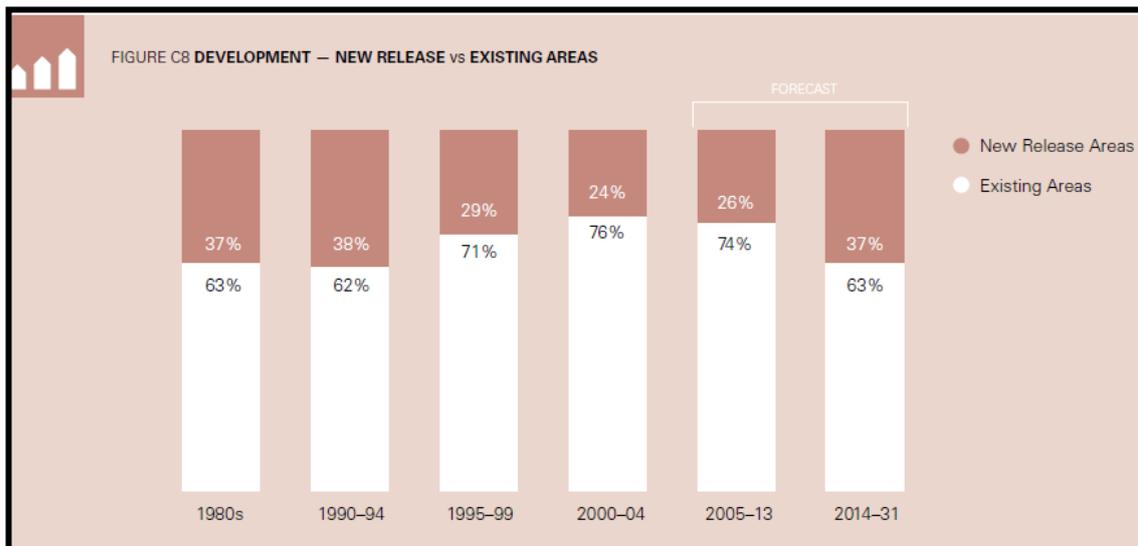
**Figure 5:** Hierarchy of Strategic Planning Documents

Source: Baroukh (2009)

The Metropolitan Strategy document is comprised of seven (7) individual strategies including Economy and Employment, Centres and Corridors, Housing, Transport, Environment and Resources, Parks and Public Places and Governance and Implementation. The focus of this thesis is on the aims, objectives and dwelling targets defined within the Metropolitan Strategy – Housing (‘Housing Strategy’). The Housing Strategy is an integral part of planning policy and addresses the housing challenges that will be faced as the Sydney population increases by 1.1 million over the next 25 years (Department of Planning 2005). The Housing Strategy is the principal planning document outlining the implementation of the policy of urban consolidation across Sydney. The central objectives for new housing in Sydney are:

- ensure adequate supply of land and sites for residential development;
- plan for increased housing capacity targets in existing areas;
- plan for a housing mix near jobs, transport and services;
- renew local centres;
- improve housing affordability;
- improve the quality of new development and urban renewal (Department of Planning 2005).

The policy of urban consolidation is reinforced within the Housing Strategy through the requirement that 70% of all new dwellings will be developed in existing urban areas by 2031, with only 30% of dwellings to be provided in new release areas.



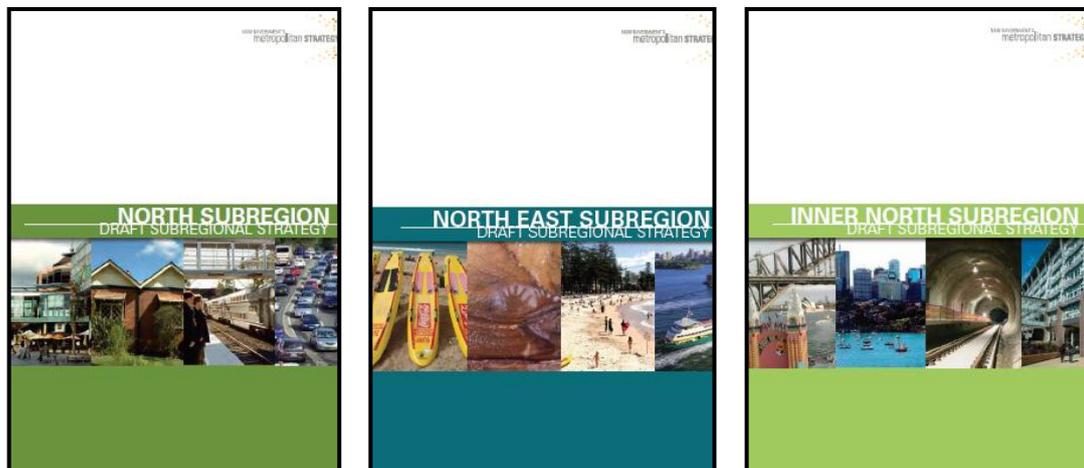
**Figure 6:** Shift towards development of new housing in existing urban areas

Source: Department of Planning (2005)

This translates to a figure of 445, 000 dwellings to be accommodated in existing suburbs. This will be achieved through housing targets to be accommodated by councils within LGAs. The shift away from housing development on greenfield sites, is intended to counter the trend of urban sprawl. This is represented by Figure 6 above which shows an increase in housing in existing areas from 63% in the 1980s to 74% in 2013.

### 3.2 Subregional Strategies

In 2008 the DOP released Draft Subregional Strategies for the ten (10) subregions of Sydney - City, East, South, Inner West, Inner North, North, North East, West Central, North West and South West. The Subregional Strategies build on the principles and objectives within the Metropolitan Strategy and provide guidelines for housing development, which are specific to each subregion. In relation to urban consolidation policy, the Subregional Strategies provide numerical housing targets that are to be accommodated within existing urban areas and town centres. This thesis is focussed on the targets delineated in the Inner North, North and North East Subregions (Figure 7).



**Figure 7:** North, North East and Inner North Subregional Strategies  
Source: Department of Planning (2008)

#### ***Inner North, North, North East Subregional Strategies***

The Inner North, North and North East Subregional Strategies set housing targets to be achieved in each of the northern LGAs by 2031. The LGAs classified as part of the northern strategies are Mosman, North Sydney, Manly, Willoughby, Lane Cove, Hunters Hill, Ku-ring-gai, Ryde, Warringah, Hornsby and Pittwater. The most significant initiative encouraged within the strategies is that future residential development should be concentrated in and around town centres that contain an

appropriate provision of services and access to public transport. Additional housing within the north subregion “will be almost largely accommodated through urban consolidation” (North Subregional Strategy 2008, 50).

The importance of the Subregional Strategies is that they classify the town centres within the northern region, based on the type of shopping and business services, recreation facilities and public transport available in the area, as shown in Table 1. The hierarchical classification of centres has been used to provide an indication of the capacity of the town centre to support additional dwellings. As discussed further in section 3.3, the hierarchy of town centres was used in the calculation of housing targets for each LGA.

### **3.3 Formulation of Housing Targets**

The housing targets within the Subregional Strategies were formulated with the METRIX Planning Tool, which has been used to indicate the ideal number of dwellings to be accommodated in a town centre of a particular size. METRIX has been utilised by councils in order “to agree on overall dwelling targets for each local government area and guide the detailed distribution of dwellings” (Department of Planning 2006, 3). The tool provides an indication of dwelling capacity in town centres by considering the following factors:

- the existing dwelling mix (e.g. number of detached, low rise, mid rise and high rise dwellings) near town centres,
- the existing average floor space ratio, development density and available developable area,
- the amount of residential, mixed use and commercially zoned land, and
- the classification of town centres within the hierarchy (Department of Planning 2006).

The classification of town centres is an important mechanism used to determine the targets. This is demonstrated in Table 1, which indicates the hierarchy of town centres and the average dwelling target for a town centre of that size. As indicated in Table 1, a ‘Major Centre’ is defined as a centre with a radius of 1000m, and is expected to be able to accommodate an average of 14, 821 dwellings (Department of Planning 2006).

Centre Type	Elements of Centre	Radius of Centre	Centre Dwelling Target (Expected Average)
<b>Major Centre</b>	One or two supermarkets, community facilities, medical centre, schools. Usually a residential area – as opposed to an employment destination.	1000 metres	14,821 dwellings
<b>Town Centre</b>	A strip of shops and surrounding residential area within a 5 to 10 minute walk. Contains a small supermarket, hairdresser, take-away food shops.	800 metres	7,863 dwellings
<b>Village</b>	A small strip of shops and adjacent residential area within a 5 to 10 minute walk.	600 metres	4,013 dwellings
<b>Small Village</b>	A small cluster of shops and services.	400 metres	1,699 dwellings
<b>Neighbourhood</b>	Located in rural zones outside metropolitan urban areas. Rural in character with a wider driving catchment.	150 metres	223 dwellings

**Table 1:** Classification of Town Centres

Source: Department of Planning (2006)

There is some flexibility with achieving this target, as METRIX indicates that the acceptable lower limit is 8,000 dwellings with an upper limit of 20, 000 dwellings. All Major Centres are expected to have a comparable level of facilities, retail services and access to public transport, and are therefore expected to accommodate a similar number of additional dwellings. It is evident that the classification of town centres (eg: Major Centre, Neighbourhood Centre) “provide[s] a common language and understanding about the places that make up Sydney” (Department of Planning 2005, 93), and facilitates communications between councils and the DOP.

In order to agree upon the distribution of 445, 000 new dwellings between Sydney LGAs, the DOP facilitated subregional planning exercises between councils within subregional groupings. The preparation of the draft subregional strategies and housing targets was finalised through cooperation and consultation between state and local agencies.

### **3.4 Critique of Current Urban Consolidation Policy and Housing Targets**

This section provides a critique of the approach to urban consolidation, as outlined within the Metropolitan Strategy 2005 and the Sydney Subregional Strategies. In the context of the critique found in the literature review, this section provides a further detailed analysis of the potential issues arising from the implementation of the urban consolidation policy and housing targets in accordance with the strategic documents.

#### **3.4.1 Formulation of Housing Targets**

This critique relates to the formulation of housing targets – which have been generated with the METRIX planning tool. METRIX calculates dwelling targets with reference to zoning and potential to increase the density of residentially zoned land (Department of Planning 2006, Hornsby Council 2006). However, this approach does not give any consideration to infrastructure capacity, availability of open space, access to schools and appropriateness of the road network to support an increased number of residents. Essentially, the housing targets are a numerical guide based on zoning opportunities that give little consideration to the service and infrastructure provision in unique town centres. This viewpoint is supported by Pinneger’s (2007, 469) comment that METRIX exposes the “‘urban-capacity’ driven nature of the approach”, with little consideration given to market demand and social factors.

Similarly, a Hornsby Council report discusses the fact that “the dwelling targets in METRIX do not take into consideration constraints such as flooding, bushfire prone land, heritage, bushland, property capitalisation and ownership” (Hornsby Council 2006, 9). The DOP has assumed that councils will conduct further analysis into the best way to accommodate additional dwellings, as METRIX provides limited guidance for doing so. With reference to Bunker et al (2002), there is a need for housing targets to be more locally sensitive and consider the impacts of higher density housing in particular localities. It is not sufficient to determine housing targets based on rezoning opportunities and general assumptions about the number of dwellings a town centre of a particular size could accommodate.

As discussed in section 3.3, the classification of town centres (Major Centre, Town Centre, Village, Small Village and Neighbourhood Centre), was also used to formulate the housing targets for LGAs in Sydney. It is assumed, for example, that all ‘Major Centres’ will be able to accommodate an average of 14,821 dwellings.

While the dwelling target allows for some flexibility, it is pertinent to question whether creating a standardised numerical housing target (that applies to a range of town centres), is an appropriate approach. Dixon and Dupuis (2002) support the argument that housing targets should be determined on a case by case basis, in conjunction with detailed analysis of the capacity of roads, public transport, open space, schools and utilities infrastructure in each unique town centre. These factors must be considered in order to determine which town centres can best accommodate additional residents.

It is not appropriate to assume that all town centres will have a relatively equal amount of services, open space, public transport capacity necessary to accommodate a population increase. The Metropolitan Strategy relies “heavily on prescriptive targets for employment and dwelling growth” (Bunker 2007, 32), with insufficient consideration of the qualities of different town centres. In accordance with the ideas of Bunker (2007), I would argue that the ‘prescriptive’ approach is not an appropriate way to plan for additional housing – housing needs to be planned in response to the way the urban environment evolves over time. Housing targets need to be based on ‘social context’ and provide opportunities for ‘local flexibility’ (Randolph 2004).

### 3.4.2 Locational Criteria for Higher Density Housing

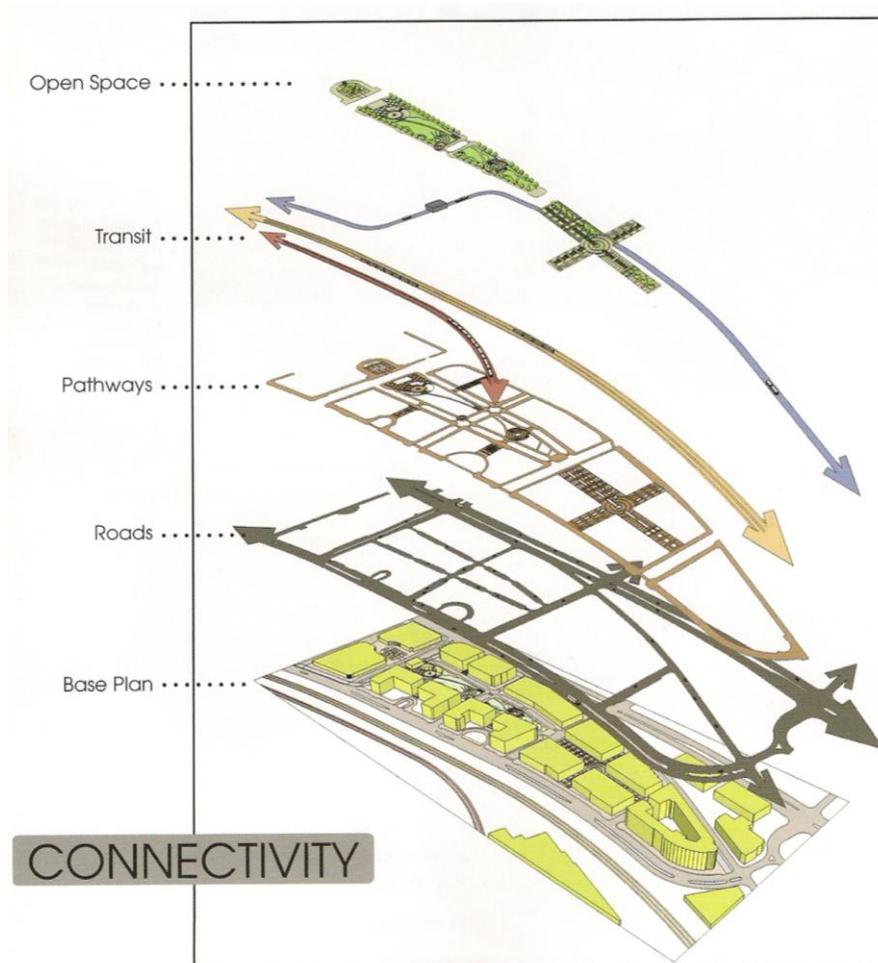
The ‘Centres Policy’ is a major focus of the Metropolitan Strategy – Bunker and Searle (2009, 107) note that Australian Metropolitan Strategies use town centres as “fulcrums to focus and articulate growth and change”. The Centres Policy suggests that the appropriate location for urban consolidation is within well connected town centres, with good access to employment, transport, retail, health, leisure and cultural facilities. This is indicated by the overriding objective of the Housing Strategy which states that:

*Over three-quarters of **new housing will be located in strategic centres**, smaller centres and corridors within walking distance of shops, jobs and other services concentrated around public transport nodes. As housing density increases in these places, **the character of Sydney's suburbs will be protected.**” [emphasis added]*

*(Department of Planning 2005, 118)*

This objective reveals that future urban consolidation will be concentrated in town centres, in order to create urban environments with high levels of accessibility and connectivity, while still protecting the amenity of suburban areas. This approach harks back to the theoretical context of Buxton and Tieman (2005) and Searle (2004), who argue the importance of maintaining the quality of suburbia by focussing higher density development in concentrated hubs. It is also anticipated that concentrating housing around town centres will create an improved housing mix and therefore support a wider range of housing needs.

The Centres Policy is consistent with contemporary ideas which suggest that including residential development within town centres creates more vibrant places to live (Gupta (2008), Jacobs (1961)). The Metropolitan Strategy is encouraging a trend towards the creation of mixed-use walkable town centres, incorporating higher density housing. Good linkages between walking/cycling paths, public transport and services/facilities, creates opportunities for people to interact in public spaces. Improved connectivity is a significant benefit of the centres policy, and is demonstrated by Figure 8. Additionally, locating services within walking distance of



**Figure 8:** Importance of connectivity in town centres

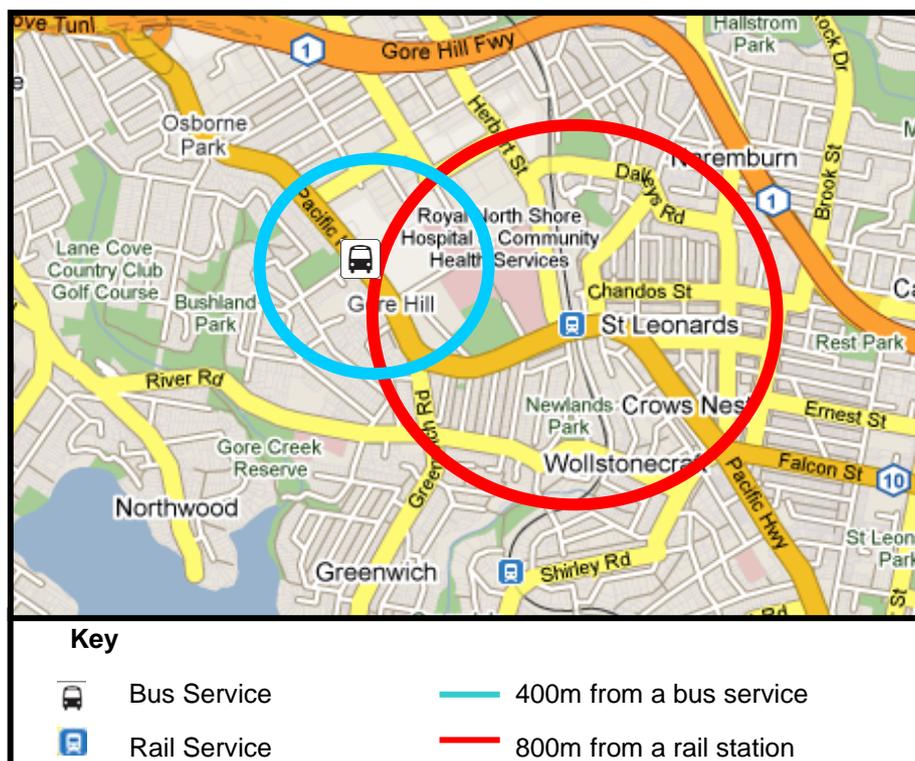
Source: Gupta (2007)

residential areas has the potential to reduce daily trip numbers. This is a good approach that contributes to improving vitality, activity and liveability of town centres.

The Centres Policy clearly challenges the 'separation of land uses' (achieved through land use zoning) which has been a defining element of suburban environments for many decades. The Centres Policy is reminiscent of Jacobs' (1961) argument in favour of creating urban areas with 'mixed primary uses' i.e. town centres containing offices, dwellings, places of entertainment, education and recreation facilities. The merits of mixed-use town centres is indicated in Figure 8, which demonstrates the benefits of connectivity and linkages between open space, transport, walking paths and roads within a town centre.

A component of the 'Centres Policy' is concentrating higher density residential development around transport nodes. This objective reflects the Transit Oriented Development approach, which encompasses the features of a mixed-use town centre with proximity to major public transport links. The Subregional Strategies provide one quantitative stipulation for the location of higher density housing - that it is situated in close proximity to public transport nodes (Figure 9) and defined as:

- 800 metres from a rail station
- 400 metres from a high frequency bus service in the morning peak.



**Figure 9:** Locational Criteria for Higher Density Housing

Source: Baroukh (2009)

Figure 9 represents the locational guidelines contained within the Metropolitan Strategy - that 80% of new dwellings will be located in close proximity to public transport nodes. Similarly, Figure 10 indicates the high percentage of new dwellings that are expected to be located near transport nodes by 2013. Figure 10 shows that some subregions are expected to accommodate between 80-100% of new dwellings in transport nodes (e.g. Inner West Subregion: 100% and North Subregion: 89%). This requirement reflects the fact that “the main rationale for major centres is their good access to public transport” (Bunker and Searle 2009, 107). By ensuring high levels of accessibility between housing, services and public transport, it is intended that public transport will be used by residents for trip-making activities. However, in order to encourage increased patronage of public transport, additional State Government funding will be required in many town centres to upgrade the services available. Residents will only alter their commuting habits in favour of public transport, if improvements are made to the reliability and efficiency of the public transport system.

SUBREGION	TOTAL NEW DWELLINGS 2004-2013	DWELLINGS NEAR TRANSIT NODES*	% IN NODES
SYDNEY CITY	31,793	27,149	85%
EAST	11,414	6,711	59%
SOUTH	29,215	21,085	72%
INNER WEST	11,022	10,995	100%
INNER NORTH	18,124	6,565	36%
NORTH	8,475	7,535	89%
NORTH EAST	8,544	1,242	15%
WEST CENTRAL	30,608	20,993	69%
NORTH WEST	15,813	9,340	59%
SOUTH WEST	6,841	6,793	99%
CENTRAL COAST	14,365	5,255	37%
<b>TOTAL</b>	<b>186,214</b>	<b>123,663</b>	<b>66%</b>

\* TRANSIT NODES ARE DEFINED AS AREAS WITHIN 800 METRES OF A RAIL STATION OR 400 METRES OF HIGH FREQUENCY BUS SERVICES IN THE MORNING PEAK.

**Figure 10:** Percentage of Dwellings to be Located in Public Transport Nodes  
*Source:* Department of Planning (2008)

The current approach to urban consolidation is a significant improvement from past approaches which have not always required higher density housing to be concentrated in centres (Searle 2007). In the 1988 Metropolitan Plan, town centres were considered as an appropriate location for office development and higher order retail, entertainment, commercial and public facilities. Previous policies did not distinguish between centres of different size and subsequently did not determine housing and employment targets for specific town centres. The current approach encourages the creation of mixed-use town centres that are walkable places, with a mix of housing choices and services, and “cosmopolitan environments and amenities” (Gupta 2008, 6). This analysis reveals that there is an improvement from the past approach to urban consolidation which was often dispersed throughout suburbia, to the detriment of small neighbourhoods. The current approach to urban consolidation in Sydney is in accordance with the principles of maximising public transport use, improving accessibility and connectivity in residential areas and creating town centres that are at the heart of residential communities.

### **3.4.3 Location and Infrastructure Capacity**

The Metropolitan and Subregional Strategies provide some guidance on appropriate locations for urban consolidation. As discussed, the main locational guideline is for new housing to be located in town centres and within 800 metres of a rail station and 400m of a high frequency bus service. However, the strategies do not provide any detailed requirements for the number and size of community services, schools, hospitals, parks and roads that are required to support an increased number of residents within an area. I suggest that the strategies should include comprehensive guidelines indicting the infrastructure and facilities that are required to support the pressures of urban consolidation. The importance of this issue is confirmed by Searle (2007, 12) who agrees that “urban consolidation’s implementation at the high levels proposed in the new metropolitan strategy is likely to become increasingly difficult as...local infrastructure such as road congestion, lack of public transport investment, and lack of local open space start to become even more apparent”.

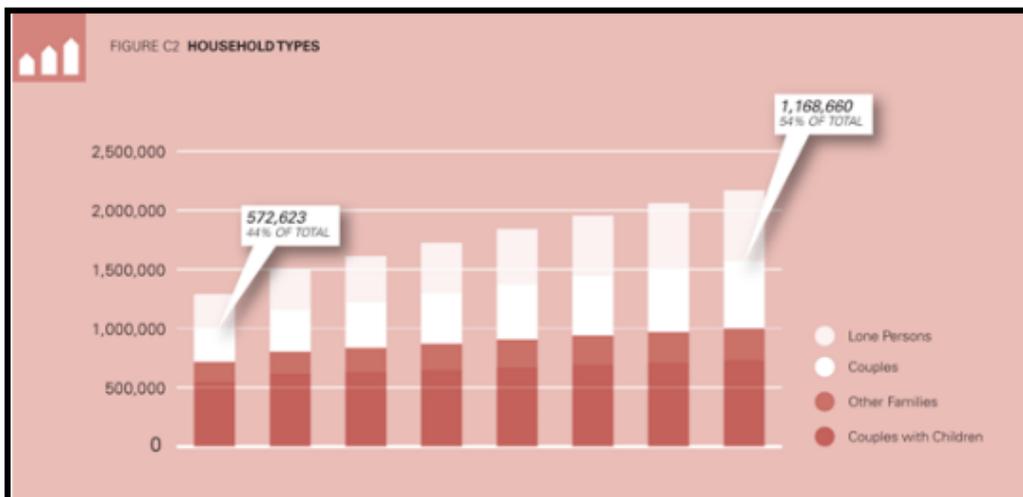
This analysis reveals that it is essential to understand the infrastructure capacity of existing urban areas before establishing housing targets (Troy 1996). While the Subregional Strategies include a broad study of town centres around Sydney, “detailed precinct-by-precinct analysis is required to establish the existence of

spare hydraulic infrastructure capacity, and consolidation levels which it could support” (Searle 2004, 43). It is evident that the infrastructure capacity of suburbs needs to be assessed on a case-by-case basis, in order to determine appropriate housing targets.

There appears to be an ‘assumption’ within the strategies that all town centres have the infrastructure capacity to support urban consolidation. While the Metropolitan Strategy includes some broad objectives for the provision of infrastructure (see section 3.5), the strategy does not make any specific commitments relating to the town centres that will be accommodating an increased number of dwellings and residents. As such, it is the responsibility of councils to decide how to accommodate the housing targets and to determine which town centres can best support intensified development. Discussions with Farrington (2009, personal communication) confirm that it is the responsibility of councils to consult with state service providers (e.g. RTA, Sydney Water) in order to determine if there are sufficient services to support an increase in population. This issue is discussed in detail in chapters four and five.

### 3.4.4 Household Types and Market Demand

One rationale provided for increasing higher density housing is that there is an imbalance in the market and that apartments are needed to provide a greater mix of housing. The Metropolitan Strategy states that “many are expected to be living alone or in small households and this will lead to greater demand for smaller housing with good access to shops, transport and services such as health” (Department of Planning 2005, 122). It is clear that there is an assumed greater demand for smaller households based on increasing number of people living alone, as shown in Figure 11 below. I question the validity of this assumption, particularly



**Figure 11:** Changing composition of household types  
 Source: Department of Planning (2005)

in light of Wulff's (2004) comments that the trend towards smaller households in Sydney does not necessarily translate into a demand for smaller dwellings. In support of this argument, a recurring theme within the literature is that the Australian lifestyle favours living in detached dwellings and it would be difficult to change this mentality (Yates 2001). It should not be assumed that there is an excessive supply of traditional detached dwellings, because this is in fact the type of housing that the market in Sydney demands (Troy 1996). Similarly, the proliferation of apartments does not necessarily address all the needs within the housing market. For example, the development of one and two-bedroom apartments does not meet the needs of families with children, and is therefore not socially sustainable (Randolph 2006).

Another concern is that the recent development boom and demand for higher density housing in inner areas is not sustainable and is expected to wither in about 10 years (Searle 2004). The dwelling targets are based on assumed ongoing market demand, which Pinnegar (2007, 467) describes as a "zone and they will build; build and they will come" mentality. It should not be assumed that there will be a guaranteed ongoing demand for this type of housing and any planning for higher density housing will need to be accompanied by detailed economic feasibility analysis.

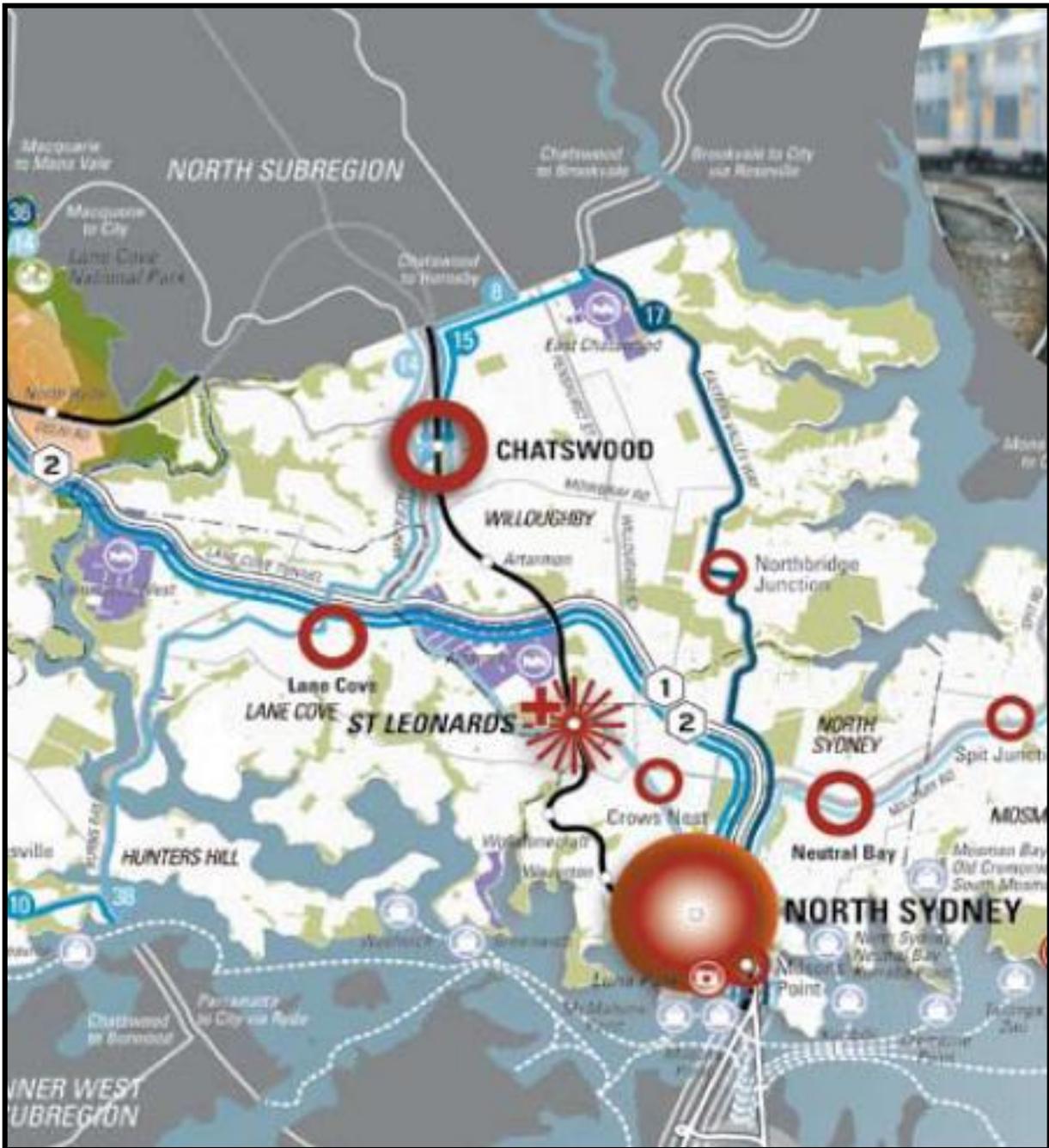
### **3.5 Implementation**

The Metropolitan Strategy and Subregional Strategies provide strategic and policy guidelines for accommodating additional housing in Sydney. Bunker (2007) questions the likelihood of the Metropolitan Strategy being implemented due to questions of politics, funding and appropriateness of the objectives of the plan itself. Bunker and Holloway (2006, 6) also raise the issue that the implementation of the Metropolitan Strategy will depend on "how these opportunities are realised...[by] developers, entrepreneurs, the market and governments" and that aspects of the Metropolitan Strategy may need to be reviewed over time. In particular Bunker and Holloway (2006) question the appropriateness of establishing 'strongly articulated' housing targets to be achieved over a 25 year period, as this does not allow for flexibility if changes occur in relation to the direction of planning in Sydney. As such, chapters three and four discuss how the housing targets are being implemented by councils, therefore discussing the implementation of a major component of the Metropolitan Strategy.

Both the Metropolitan and Subregional Strategies include a chapter on Governance and Implementation, which makes generic commitments about how the strategies will be implemented. Similarly, the Subregional Strategies include broad provisions for additional funding and infrastructure, which are predominantly directed at state significant projects. In addition, the Metropolitan Strategy required the preparation of the State Infrastructure Strategy which outlines plans for state-significant transport, urban development, health and education projects. However, the Infrastructure Strategy does not provide any specific commitments for funding and infrastructure to support the suburbs that will be accommodating higher density housing. Overall, it is evident that the strategies provide broad objectives for the augmentation of infrastructure and services across Sydney, but do not include specific provisions to manage the pressure that will be placed on those town centres that will be accommodating additional dwellings. Chapters four and five will discuss councils' perspectives on the issue of implementation, infrastructure and service provision.

### **3.6 Summary**

This chapter provides a detailed critique of the approach to urban consolidation and housing targets within the Metropolitan Strategy and Subregional Strategies. While these strategies provide some guidance for councils, it is evident that much responsibility is left with councils to translate the objectives of the strategies into local planning documents and LEPs. As such, chapters four and five examine how local councils are beginning to implement the objectives and housing targets within the Metropolitan Strategy and Subregional Strategies. The review of the Hornsby Housing Strategy in chapter five will provide a detailed indication of the degree to which the planning objectives within the strategies are being implemented at a local level.



## Chapter 4: Northern Sydney Councils' Response to the Housing Targets



➔ **Set the following local additional dwelling targets between 2004–2031:**

- + Hunters Hill 1,200
- + Lane Cove 3,900
- + Mosman 600
- + North Sydney 5,500
- + Ryde 12,000
- + Willoughby 6,800

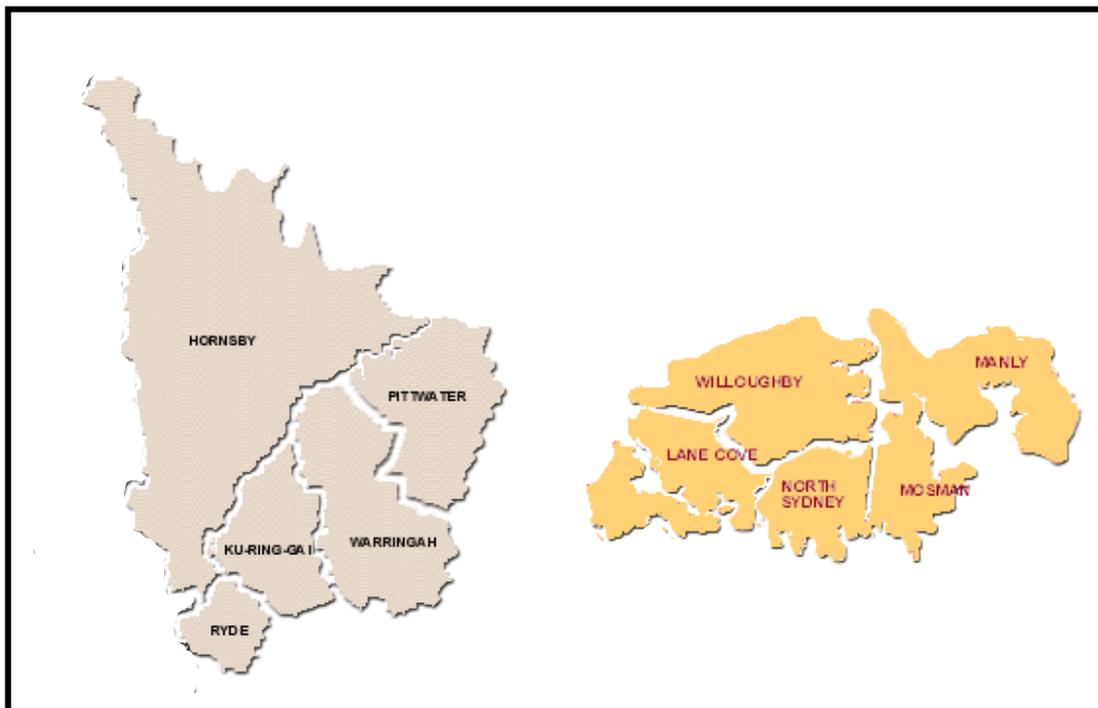


## 4 NORTHERN SYDNEY COUNCILS' RESPONSE TO THE HOUSING TARGETS

This chapter presents a discussion and analysis of the way that councils in the northern suburbs of Sydney are responding to the housing targets contained within the Metropolitan Strategy and Subregional Strategies. The successful implementation of objectives within these strategies is largely reliant on councils revising their planning controls and preparing housing strategies to plan for the provision of higher density housing (Bunker (2007), Pinnegar (2007)). This chapter provides insight into the issues that are being considered by different councils when attempting to accommodate higher density housing in existing urban areas. It is pertinent to examine councils' role in addressing the housing targets, particularly because in past decades Sydney councils often failed to meet these targets (Searle 2007, Total Environment Centre 1987).

### 4.1 Introduction

This chapter focuses on councils in the northern suburbs of Sydney, which are governed by the Inner-North, North-East and North Subregional Strategies. This includes the LGAs of Mosman, North Sydney, Manly, Willoughby, Lane Cove, Hunters Hill, Ku-ring-gai, Ryde, Warringah, Hornsby and Pittwater. This broad



**Figure 12:** Subject Upper North and Lower North Local Government Areas  
 Source: Department of Local Government (2009)

study of councils will provide a point of comparison to the Hornsby Council case study in chapter five. In accordance with the Subregional Strategies, Table 2 below indicates the varying housing targets for each LGA. The targets have generally been derived from the METRIX planning tool as well as communications between the DOP and councils to determine appropriate figures. It is evident that the housing targets for each LGA vary significantly – the targets depend on the current zoning and capacity of land around town centres as well as the role of the town centres within the hierarchy of Sydney.

<b>Local Government Area</b>	<b>Housing Target (2031)</b>
<b>Mosman</b>	600 dwellings
<b>North Sydney</b>	5,500 dwellings
<b>Manly</b>	2,400 dwellings
<b>Willoughby</b>	6,800 dwellings
<b>Lane Cove</b>	3,900 dwellings
<b>Hunters Hill</b>	1,200 dwellings
<b>Ku-ring-gai</b>	10,000 dwellings
<b>Ryde</b>	12,000 dwellings
<b>Warringah</b>	10,300 dwellings
<b>Hornsby</b>	11,000 dwellings
<b>Pittwater</b>	4,600 dwellings

**Table 2:** Housing targets for the northern LGAs of Sydney

Source: Department of Planning (2008)

#### **4.2 Liaison Between Department of Planning and Councils**

The literature review discusses the role of state and local agencies as part of the process of implementing the policy of urban consolidation. This section discusses the communications that are occurring between state and local agencies in the process of meeting the housing targets. The first point of discussion between the DOP and councils is in relation to the housing targets generated through the METRIX planning tool. As discussed in section 3.3.1, the METRIX targets are calculated based on zoning opportunities and do not take into consideration local factors, such as infrastructure capacity, amenity issues and access to services. It is

therefore the responsibility of councils to ensure that the proposed higher density housing is accommodated in a way that is appropriate in that particular LGA. The DOP requires that councils consult with state agencies, consultants and stakeholders, in order to form an understanding of the wide range of economic, social and environmental concerns that need to be considered.

The role of the DOP is generally to monitor councils' progress and ensure that they have investigated appropriate opportunities for development. The overriding expectation is that councils will accommodate housing close to public transport, and should not rely on possible new or additional infrastructure (Farrington 2009, personal communication). Councils are expected to include any rezonings or new planning controls within the new Comprehensive LEPs, which are to be reviewed by the DOP prior to public exhibition. Lane Cove is an instance where the DOP required amendments to the draft Lane Cove Local Environmental Plan 2008 prior to public exhibition. The DOP required changes to the zoning, height and FSR of certain sites and as a result seven sites are now "all are zoned R4 High Density at the direction of the Department. Height is to be 12 metres and FSR 2:1" (Lane Cove Council 2008, 5). This is an example of where the DOP influenced considerable changes to the zoning and development controls originally proposed by Lane Cove Council.

The example of Ku-ring-gai Council is an instance where the DOP became even more heavily involved in the process of accommodating housing targets. In 2008, the DOP appointed the Ku-ring-gai Planning Panel to prepare statutory and strategic plans for six major town centres within the LGA. A letter from Sartor (2008, 1) to Ku-ring-gai Council states that the establishment of the Planning Panel was necessary because of the "time in which the council has taken in exercising the functions in making LEPs and DCPs, particularly the draft Ku-ring-gai Local Environmental Plan 2006 (Town Centres)". Ku-ring-gai Council describes the Planning Panel as "undertak[ing] part of Ku-ring-gai Council's planning powers" (Ku-ring-gai Council 2009, 2). The DOP's involvement in the process has been heavily scrutinised; the deputy mayor of Ku-ring-gai Council is highly critical of "the impacts of state-imposed over-development on this beautiful part of Sydney" (Marr 2009, 8). The establishment of the Ku-ring-gai Planning Panel is a unique example of significant DOP intervention, particularly because the other northern councils have prepared their own rezonings and housing strategies as discussed in section 4.3 below.

### 4.3 Councils Response to the Housing Targets

Councils in the northern suburbs of Sydney are at varying stages of responding to the housing targets. This is indicated by Table 3 below which shows that some councils are rezoning land for higher density housing, preparing a new LEP or housing strategy while other councils do not need to rezone land to meet the targets. Table 3 indicates that at present, 30% of councils (including Manly, Willoughby, Warringah and Pittwater) have not yet published any documentation indicating how they will meet the housing targets.

<b>Councils Response to Accommodating Housing Targets</b>					
<b>Local Government Area</b>	<b>No need for new rezonings</b>	<b>Rezoning land for higher density development</b>	<b>Preparation of a detailed Housing Strategy</b>	<b>Provision for rezonings within the new LEP</b>	<b>No documents published at this stage</b>
<b>Mosman</b>	✓				
<b>North Sydney</b>	✓		✓		
<b>Manly</b>					✓
<b>Willoughby</b>					✓
<b>Lane Cove</b>		✓		✓	
<b>Hunters Hill</b>		✓		✓	
<b>Ku-ring-gai</b>		✓		✓	
<b>Ryde</b>		✓		✓	
<b>Warringah</b>					✓
<b>Hornsby</b>		✓	✓	✓	
<b>Pittwater</b>					✓

**Table 3:** Northern Councils Response to the Housing Targets

Source: Baroukh (2009)

As indicated in Table 3, 45% of councils (including Lane Cove, Hunters Hill, Ku-ring-gai, Ryde, and Hornsby) will rezone land for higher density housing, in order to meet the housing targets. As indicated within the table, these rezonings will be implemented through new LEPs. For example, both Ku-ring-gai and Lane Cove Councils have prepared revised LEPs containing zoning, height and FSR maps, which indicate the new planning controls for residential, commercial and mixed use development around town centres. By comparison, Hornsby Council has prepared a detailed Housing Strategy which identifies the most appropriate sites for higher density residential development. The Hornsby Housing Strategy 2009 (further discussed in chapter five), provides a detailed analysis of the merits of each individual site that is identified for rezoning. The rezonings and building controls suggested within the Hornsby Housing Strategy will be later translated into a revised LEP.

Another approach adopted by Ryde and Hunters Hill Councils is the preparation of a revised LEP that applies to the upgrading of one specific town centre. For example, the Hunters Hill (Gladesville Town Centre) Local Environmental Plan 2008 will govern the redevelopment of existing retail, commercial and residential areas. The purpose of this LEP is not solely to rezone residential land to meet the housing targets, but establishes a more holistic approach to the redevelopment and renewal of a town centre on a major transport corridor. The Hunters Hill LEP 2008 is only one part of the planning process and further LEPs will be required to meet the balance of the housing target applying to the Hunters Hill LGA.

By comparison, Mosman and North Sydney Councils are able to meet the targets through the housing provisions within council's existing LEP controls. For example, the purpose of the North Sydney Residential Development Strategy 2008 ('NRDS 2008') is to indicate that the new comprehensive LEP will be able to meet the housing target "without having to make significant policy changes, upzonings or increases in development potential" (North Sydney Council 2008, 2). Figure 13 below is an excerpt from the NRDS 2008 and shows that the land zoned for medium and high density development under the existing and proposed LEPs will remain the same (North Sydney Council 2008). This reflects the fact that the amount of land currently zoned for medium and high density residential, has not yet been developed to its full capacity.

Similarly, Mosman Council has stated that the required 60% increase in dwellings is consistent with the current rate of housing development within the LGA. Future residential development in Mosman differs from the other LGAs as it will not accommodate higher density housing, but will consider “maximising some of our present homes to provide housing for smaller families and singles instead of looking to build more flats and multi- storey apartments” (Wilton 2007, 2).

Residential Area	Developable Land (in m <sup>2</sup> ) by Zone			
	Existing LEP (NSLEP 2001)		Proposed LEP (Comprehensive LEP)	
	Res B	Res C	Medium Density Residential (R3)	High Density Residential (R4)
North Sydney Centre	1,579	7,640	1,579	7,640
St Leonards/ Crows Nest	19,578	5,546	19,578	5,546
Neutral Bay	35,692	31,948	35,692	31,948
North Cremorne	44,047	33,950	44,047	33,950
Cammeray	57,905	28,927	57,905	28,927
Lavender Bay/Milsons Pnt	30,864	6,087	30,864	6,087
Wavteron /Wollstonecraft	26,563	20,737	26,563	20,737
Kirribilli	3,637	8,797	3,637	8,797
South Cremorne	12,188	2,798	12,188	2,798
<b>Total</b>	<b>232,052</b>	<b>146,429</b>	<b>232,052</b>	<b>146,429</b>
*(includes 40% discount)				

No change in land zoned for medium or high density development

Figure 13: Excerpt from North Sydney Residential Development Strategy  
Source: North Sydney Council 2008

#### 4.4 Location and Form of New Higher Density Dwellings

As discussed in section 4.2, it is the responsibility of councils to determine the appropriate location and form of proposed higher density housing. The nature of proposed housing is summarised in Table 4, which includes an analysis of only those councils that are rezoning land in order to meet the housing targets. A Hornsby Council Planning Report (2006, 5) states that “the underlying proposition of the Metropolitan Strategy is that concentrating development around town centres has a number of benefits”. It is evident that the northern councils have endorsed the locational guidelines within the Metropolitan Strategy and Subregional Strategies, as all councils have proposed higher density housing that is clustered around town centres as shown in Table 4 below.

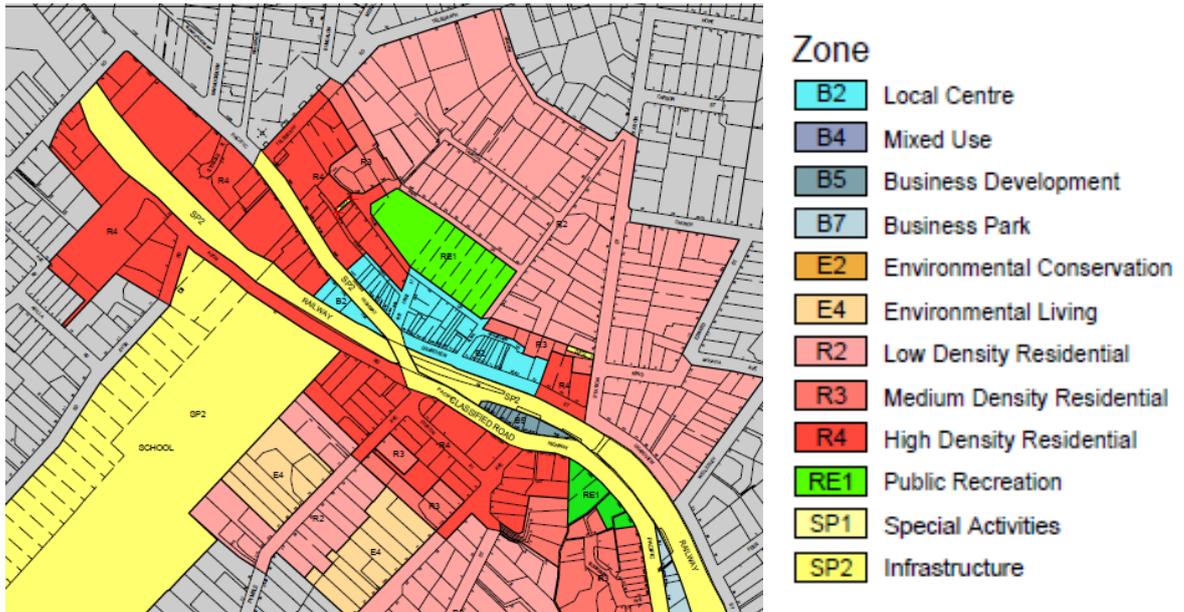
Local Government Area	Nature of Proposed Higher Density Housing			
	Housing clustered around town centres	Housing clustered around train stations	Majority housing 3-5 storeys	Majority housing 6 storeys or more
Lane Cove	✓	✗		✓
Hunters Hill	✓	✗	✓	Development up to 8 storeys is permissible on one site only
Ryde	✓	✗	✓	Development up to 8 storeys is permissible on one site only
Ku-ring-gai	✓	✓		✓
Hornsby	✓	✓	✓	Development between 8-10 storeys is permissible on two sites only

**Table 4:** Location and form of proposed higher density housing

Source: Baroukh (2009)

Table 4 indicates a definite commitment from Ku-ring-gai and Hornsby Councils to cluster housing around train stations and town centres. I see this is as particularly good response to accommodating housing, as it is consistent the objectives of the Metropolitan Strategy and the ideas of Bunker *et al* (2002) and Searle (2004). In Lane Cove, Hunters Hill and Ryde LGAs, development is instead clustered along major transport corridors. This remains consistent with the Metropolitan Strategy locational guidelines.

As indicated in Table 4, councils are significantly increasing the building heights in many low density areas in order to meet the housing targets. This will result in significant changes to the urban form of many LGAs, particularly because most of the town centres identified by Hunters Hill, Ku-ring-gai and Hornsby Councils are currently typified by low density development (approx 2 storeys). The most significant change will be in Lane Cove and Ku-ring-gai, where a majority of the proposed building heights are 6 storeys or more.



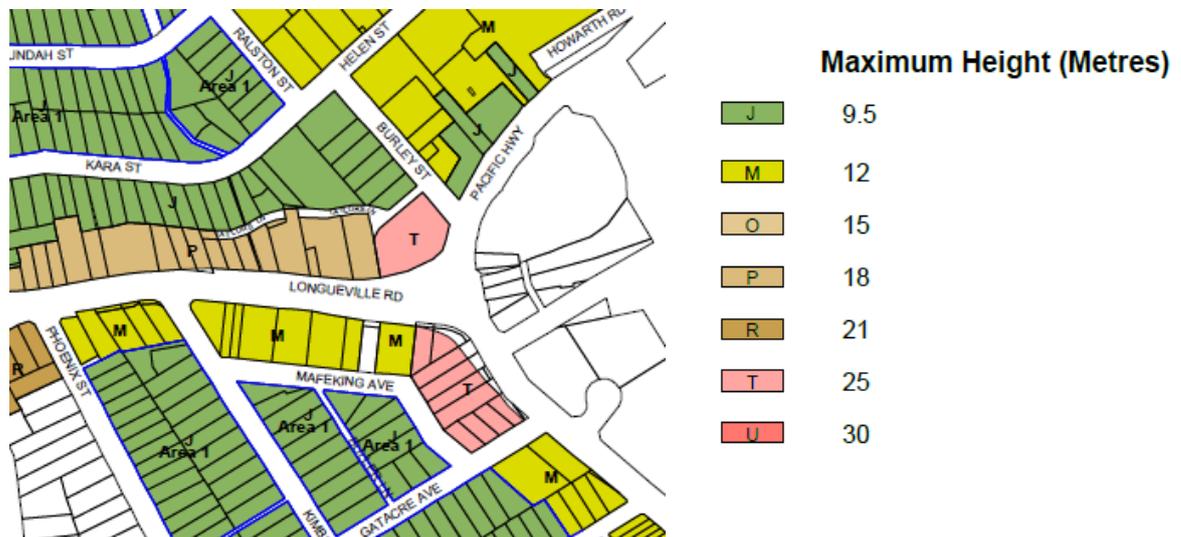
**Figure 14:** Extract from Ku-ring-gai LEP 2008 – Pymble Zoning Map

Source: Ku-ring-gai Council (2008)

The proposed clustering of housing around town centres is indicated by Figure 14, which is an extract from the Ku-ring-gai Zoning Map for the Pymble Town Centre. The zoning map indicates that High Density Residential (Zone R4) will be concentrated in areas closest to the commercial centre and train station. Residential buildings within the R4 zone will accommodate heights of 17.5 – 23.5 metres (approx 6-8 storeys). Building densities and heights decrease with distance away from the town centre, and those areas are zoned R2 (Low Density Residential) and will accommodate approximately 3-4 storey residential flat buildings. It has been determined by Ku-ring-gai Council (2008) that the proposed mix of low, medium and high density residential flat buildings is required to meet the housing targets. The proposed building forms have been criticised by members of the community, as further discussed in section 4.6.

By way of comparison, Lane Cove Council has adopted a similar approach and has also proposed high density residential zones, able to accommodate up to ten storeys. The Lane Cove ‘Submissions Summary’ justifies the 18 - 25 metre building height along Longueville Road (shown in Figure 15) with the rationale that “centralised urban consolidation [will reduce the] load elsewhere on low density areas within the municipality” (2008, 2). While this is consistent with the objective of the Metropolitan Strategy to concentrate higher densities in town centres and

preserve the character of suburban areas, it raises issue of community perception of overdevelopment (which is further discussed in section 4.6 and chapter five).



**Figure 15:** Extract from Lane Cove LEP 2008  
 Source: Lane Cove Council (2008)

#### 4.5 Infrastructure Capacity and Availability of Services

As discussed in the literature review, Troy (1996) and Searle (2004) agree on the importance of infrastructure capacity and service provision to manage the impacts of urban consolidation in existing urban areas. Councils should be conducting a detailed analysis of individual town centres, to determine the availability of infrastructure and open space, community, retail, medical, transport, educational and retail services available to the community. It has been found that many of the northern councils have considered these issues, but have not always made any detailed commitments to ensuring that existing infrastructure and services will be augmented to service the needs of additional residents.

This issue is evident in the North Sydney Residential Development Strategy 2008 ('NRDS 2008'), which does not provide an assessment of infrastructure and service capacity in the area. Rather, the NRDS 2008 provides a numerical analysis of the capacity of the land in North Sydney with regard to zoning opportunities. The NRDS 2008 provides information on the number of development applications approved in any one year as well considering any land that is currently underdeveloped, in order to provide an indication of expected dwelling yield over the next 25 years. This numerical approach is confirmed within the NRDS 2008 which states that; "It is estimated that under both the current and draft comprehensive LEP, Neutral Bay and Cremorne (North & South) have the capacity

to supply 1,013 and 833 additional residential dwellings respectively over the next 25 years. The vast majority of this development potential remains in high density zones situated along Military Road” (North Sydney Council 2008, 24). This type of analysis can be described as a “urban-capacity driven” approach (Pinnegar 2007, 469), as it focuses on the capacity of the land in terms of zoning opportunities, but does not discuss how council will ensure that development occurs in areas that have sufficient infrastructure capacity and appropriate service provision.

As discussed, a number of councils (including Lane Cove, Hunters Hill, Ryde and Ku-ring-gai) have prepared an LEP and zoning maps indicating proposed higher density housing; however these maps are not accompanied by an infrastructure and service delivery plan. A detailed infrastructure delivery plan should have been prepared by councils at the time of selecting sites for higher density housing. Councils need to make a commitment to improving infrastructure and services at the time of the rezoning, to give the community confidence that sufficient measures will be put in place to meet the needs of residents. The case study below examines the issue of infrastructure and provision in relation to the Ku-ring-gai LEP 2008.

### **Ku-ring-gai Council and Infrastructure Provision**



Ku-ring-gai Council has prepared the Draft Local Environmental Plan (Town Centres) 2008 (‘LEP 2008’), which provides an indication of zoning, heights and FSR of sites identified for higher density housing.

After the release of the draft Ku-ring-gai Town Centres LEP, Ku-ring-gai Council responded to community submissions in a ‘Submission Summary’ document, which addressed community concerns such as infrastructure, public transport, roads, traffic and overdevelopment. A particular community concern is that the LEP 2008 does not provide any certainty about the provision of infrastructure and that “a fully costed infrastructure plan should be prepared in relation to investment in roads, railways, utilities, parking and recreational facilities” (Ku-ring-gai Council 2008, 1). This is particularly important in the Ku-ring-gai LGA, which has a significant target of 10, 000 dwellings. Such a substantial increase in the number of residents, needs to be accompanied by substantial upgrades and improvements to infrastructure and services (Troy

At present, a detailed plan indicating commitments to infrastructure and services has not been prepared. Ku-ring-gai Council has a Development Contributions Plan for the entire LGA which will provide a general indication of which areas will benefit from service delivery. Residents of the area have commented that “the lack of traffic, retail and open space studies” reveals that Council has not properly assessed the most appropriate locations for additional housing (Cronin 2009, 7).

A major issue in terms of funding and infrastructure provision is the tension between state and local responsibility. It is the responsibility of Councils to select appropriate sites for higher density housing; however Councils cannot ensure funding for services such as public transport, schools, hospitals and electricity, water and sewerage infrastructure (which are the responsibility of the state). For example, Ku-ring-gai Council (2008, 2) comments on the issue of infrastructure provision by stating that “some infrastructure such as railways and utilities e.g. water & sewerage are not the direct responsibility of local government”. This reveals that Councils cannot always directly address the issue of infrastructure provision, but must rely on commitments from state agencies. Ku-ring-gai Council (2008, 2) comments that since the state agencies have given their approval to the draft LEP 2008, Council can “*infer* that State authorities can satisfy the demand for their services” [emphasis added]. It appears that state agencies have not provided much detail about how and when they will augment infrastructure services.

Nevertheless, the ‘Submissions Summary’ provides some information on the liaison that occurred between state and local agencies. For example, Energy Australia commented on the draft LEP 2008 and advised that increases in floor space would result in increased energy demand, which in turn would result in additional loads on Energy Australia's substations (Ku-ring-gai Council 2008, 4). Energy Australia has committed to addressing this issue and will conduct maintenance works and provide additional infrastructure in some developments. Therefore, while there is some tension between state and local responsibility, Ku-ring-gai Council has consulted with state service providers and has determined some solutions for the provision of additional infrastructure.

#### 4.6 Managing Community Concerns

Searle (2007, 2) identifies that “a major reason for the limited success of urban consolidation policies [in the 1980’s] was resistance by older suburban communities, through their local councils”. Councils recognise that proposals for higher density housing are often unpopular with residents, and may not be successful from a political point of view. Considering that councils are required to meet the housing targets, one method of managing community opposition is selecting appropriate locations as well as appropriate building heights.

From a review of the council rezoning proposals in section 4.4, it is evident that the majority of councils have limited the building height to a maximum of five storeys. stateResidential flat buildings with a maximum five storey height limit are preferable from a political point of view, because they often raise less community opposition than buildings that are 8-10 storeys in height. For example, the Ku-ring-gai Council ‘Submissions Summary’ states that “the majority of [community] submissions objected to buildings over five (5) storeys in height” (2008, 10). Similarly, the Lane Cove ‘Submissions Summary’ reveals that the community opposed the proposed seven storey height for residential buildings in Birdwood Avenue as well as the proposed eight storeys in Longeuville Road.

A good way of managing this issue is demonstrated by the Hornsby Housing Strategy which proposes a five storey height limit for 90% of the identified sites. This approach is a good model for other councils and is discussed further in chapter five. Another way of managing community concern is preparing a DCP in conjunction with the rezoning plans. For example, Hunters Hill Council has prepared the Gladesville Town Centre DCP in conjunction with the new LEP 2008 and zoning maps. The DCP provides a vision for the redevelopment of the area including public domain, built form, communal spaces and pedestrian connections (Hunters Hill Council 2008). Similarly, the Hornsby Housing Strategy is accompanied by a DCP which stipulates appropriate setbacks, design and façade articulation required in the development of residential flat buildings. A DCP guiding development of the sites is considered to be an important part of the process, as it provides an element of certainty for the community and confidence that the area will be redeveloped in accordance with appropriate design principles.

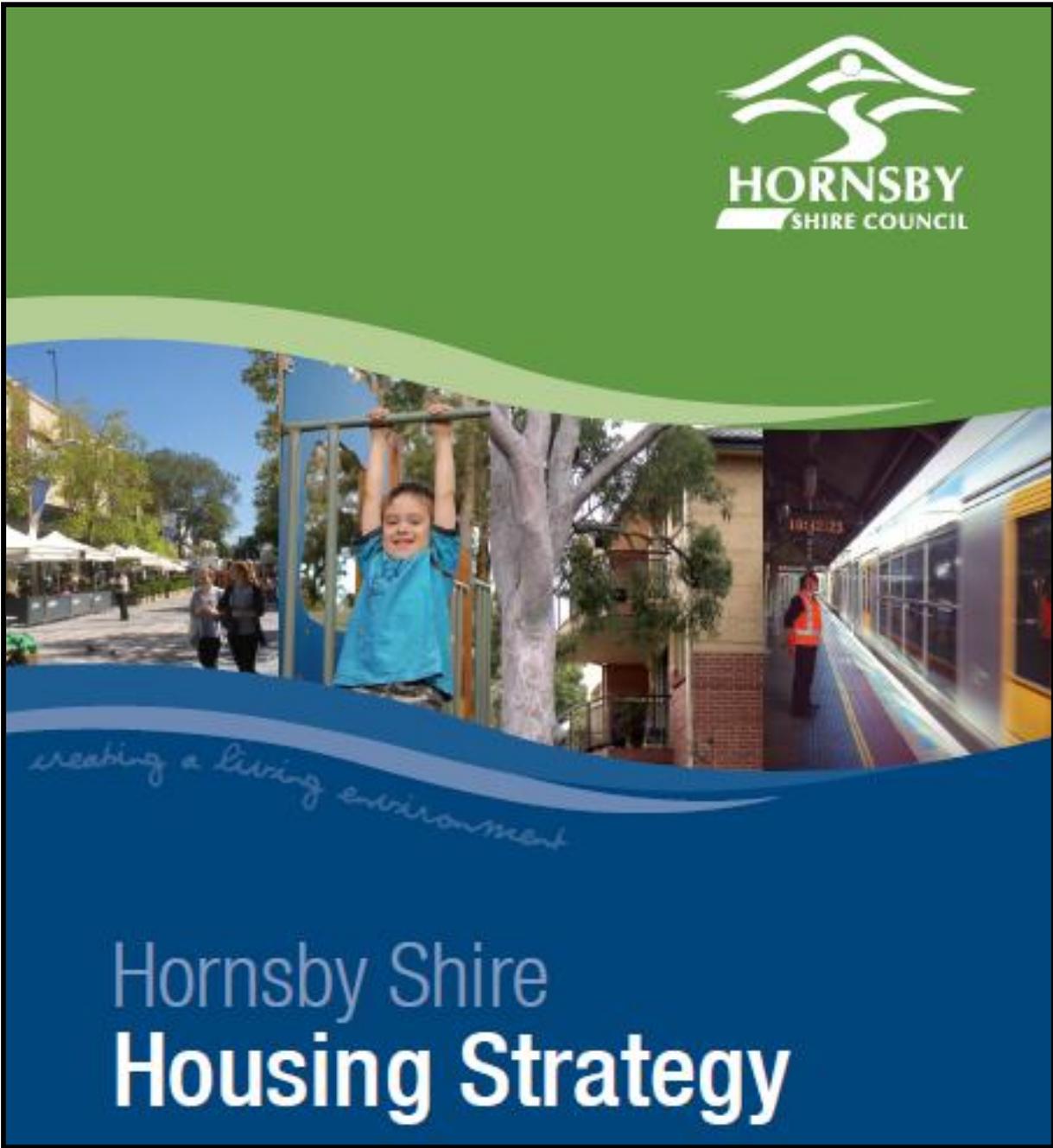
This relates to another common concern amongst residents, which is that poorly designed residential flat buildings will compound the impacts of urban consolidation. In a letter to the editor (Marr 2009, 6), a Ku-ring-gai resident commented that “We have tracts of urban-nightmare Stalin blocks so alienating that residents recoil from even walking down their own street”. Another article in the Sydney Morning Herald titled ‘Heritage Interests Out, Apartments In’ (Murray 2009) expressed concern that poor planning and design would be detrimental to the surrounding heritage items.

This is a valid concern as Ku-ring-gai Council has essentially prepared a map plotting the location of existing heritage items, but higher density housing is still proposed for many of these areas. In fact, Ku-ring-gai Council (2008, 1) states that “in some cases meeting the...housing targets and housing choice have taken precedence over some heritage conservation objectives”. While it is difficult to balance the preservation of existing areas with the requirement to meet the housing targets, councils need to make a commitment to managing the impacts of development around heritage items and low density areas. In the case of Ku-ring-gai Council, the DCP was not published at the same time as the LEP 2008, and therefore the community remains uncertain about how council will minimise adverse impacts on residents and maintain the character of the locality. Urban consolidation and infill development should occur in a manner that respects the value of the surrounding built form as well as the quality of existing suburban environments. As discussed further in chapter five, the Hornsby Housing Strategy is a good model as it includes a Key Principles Diagram that establishes a vision for the development of specific sites, including the management of heritage items, interface with surrounding areas and general development controls.

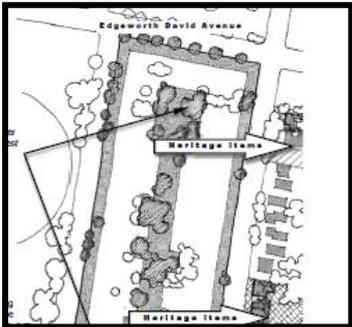
#### **4.7 Summary**

This chapter finds that in the northern suburbs of Sydney, Ku-ring-gai, Hornsby, Hunters Hill, Lane Cove, Ryde and North Sydney Councils have specifically identified how they will meet the housing targets. The most common response is through the rezoning of land to allow for higher density housing around town centres or transport corridors. In general, councils have achieved the objectives of the Metropolitan Strategy by locating higher densities around town centres, public transport nodes and transport corridors. The major difference between councils’ approaches is the variation in the proposed building heights deemed necessary to

accommodate the housing targets. An issue arising from this chapter is that councils need to make a plan for the provision of infrastructure and services in conjunction with their plans to accommodate higher densities. Hornsby Council is the only council to prepare a detailed Housing Strategy that contains a comprehensive site-by-site analysis, and has therefore been selected as an important case study and will be discussed further in chapter five.



## Chapter 5: Hornsby Case Study

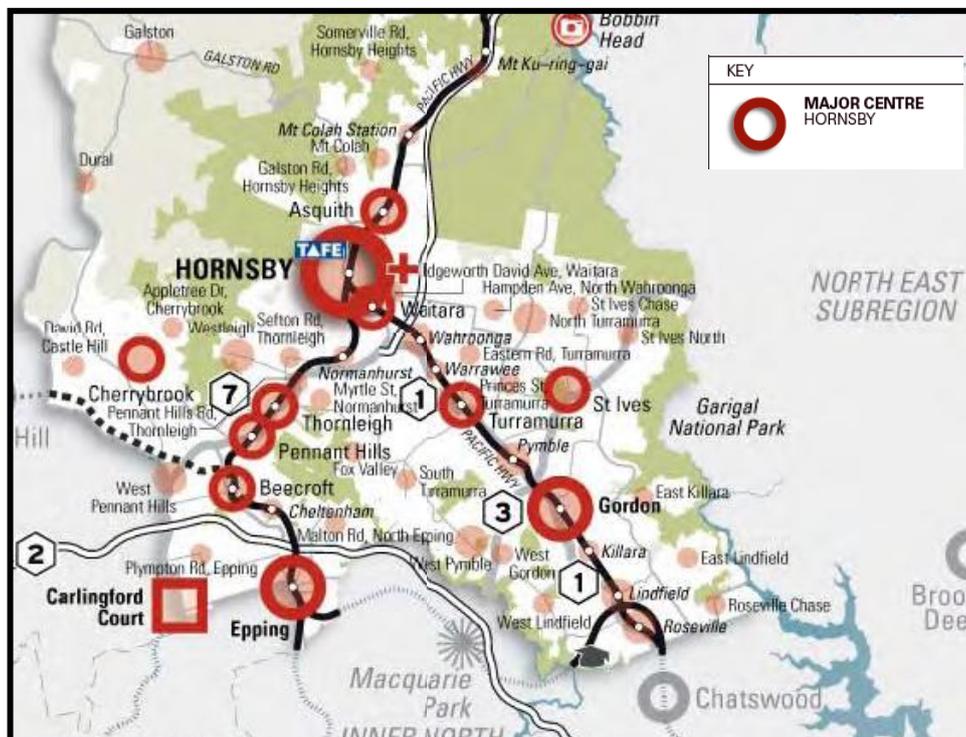


## 5 HORNSBY CASE STUDY

This chapter examines how Hornsby Council has implemented the urban consolidation policy objectives and the housing targets set by the DOP within the Metropolitan Strategy and North Subregional Strategy. The second part of the chapter provides an analysis and critique of the Draft Hornsby Shire Housing Strategy 2009 ('Housing Strategy'), and considers the possibility of using the Housing Strategy as a model for other councils. Hornsby Council provides an important case study because the Housing Strategy is detailed and comprehensive and thoroughly considers the selection of appropriate sites for higher density housing.

### 5.1 Introduction

The Hornsby Housing Strategy plans for the rezoning of land for higher density housing around town centres and transport nodes, in order to meet the housing targets. In accordance with the North Subregional Strategy, Hornsby Council is required to accommodate an additional 11,000 dwellings by 2031. The target of 11,000 dwellings is one of the highest in the Northern Subregion and reflects Hornsby's role as a 'Major Centre' within the town centre hierarchy, as indicated by Figure 16.



**Figure 16:** Hierarchy of Hornsby Town Centre

Source: Department of Planning (2008)

The Housing Strategy was prepared through detailed analysis of the town centres within Hornsby Shire, culminating in the selection of 25 sites that are considered to be suitable for accommodating higher density residential development. The 25 sites have the potential to yield 3,126 dwellings, which is 20% more than the target of 2,600 dwellings. This is a proactive way of ensuring that the target of 2,600 dwellings is actually achieved (considering that an average of 20% of land owners will decide not to sell and redevelop their land). Once finalised, the rezonings will be implemented through council's new comprehensive LEP and DCP. The Housing Strategy provides an analysis of each individual site identified for higher density housing, which is something that was not undertaken by any of the other northern councils.

## **5.2 Liaison between Council and the Department of Planning**

Bunker (2007) comments that the successful implementation of the Metropolitan Strategy will depend on the degree of communication between the state and local agencies, and how councils choose to interpret and implement the Metropolitan Strategy. It has been found that there was a good level of communication between Hornsby Council and the DOP throughout the process of preparing the Housing Strategy (Farrington 2009, personal communication), and this included the following actions:

- Council entered into a Memorandum of Understanding with the DOP, which confirmed the objectives of the Housing Strategy and a requirement for finalisation of the Strategy by March 2009.
- A target of 21,000 dwellings was established by the DOP to be accommodated by Hornsby and Ku-ring-gai Councils. The DOP advised Hornsby Council to communicate with Ku-ring-gai Council in order to agree upon the division of dwellings between the two councils. Accordingly, Hornsby Council participated in negotiations with Ku-ring-gai Council on 2 August 2006, to agree on the allocation of dwellings.
- Agreement between Hornsby and DOP that the 3,900 dwellings not accommodated within the current Housing Strategy, will be planned for at a later stage.
- Agreement between Hornsby and DOP that the Epping Town Centre would not be considered within the Hornsby Housing Strategy, but will be considered jointly by the DOP, Hornsby and Parramatta Council, the RTA and RailCorp.

- The DOP provided positive feedback on the location of the selected sites for rezoning.
- Council consulted the DOP to confirm it was appropriate to assume an 80% take-up rate of the rezoned land.
- Council consulted the DOP to confirm agreement on the density and dwelling yields for five-storey being adopted by council (Farrington 2009, personal communication).

Importantly, the DOP provided a degree of feedback to indicate that the Housing Strategy is in accordance with the objectives of the Metropolitan Strategy and an appropriate response to the housing targets. However, there was limited communication from the DOP regarding funding for the improvement of existing infrastructure. This issue will be discussed further in section 5.5.

Discussions between Hornsby and Ku-ring-gai Councils formed a pivotal part of allocating the housing targets. Negotiation between the two councils were based on consideration of “past provisions of dwellings, relative size of each local government area...dwelling capacity under existing strategies, [and] allocation of targets under the METRIX Planning tool” (Hornsby Council 2006, 2). This is a logical and reasonable approach, and ultimately allowed the councils to come to an agreement on allocation of dwellings - 10,000 dwellings to Ku-ring-gai and 11,000 dwellings to Hornsby. From the perspective of Hornsby Council, a target of 11,000 dwellings per year was considered by the planning officers and Councillors to be acceptable (Farrington 2009, personal communication). For the past 15 years, Hornsby Council has sought to accommodate 260 multi-unit dwellings per year. The development of 260 multi-unit dwellings per year over 25 years, (plus the potential for 4,500 dwellings under the existing LEP), is equivalent to achieving 11,000 dwellings by 2031. This reveals that the target of 11,000 dwellings is not an arbitrary figure, but represents a number that Hornsby Council feels can be accommodated through the selection of appropriate sites. Nevertheless, this numerical target is largely based on zoning opportunities, rather than the capacity of infrastructure and services to support the needs of additional residents.

It was important that the DOP facilitated ongoing communication and discussions between the two councils, as this resulted in an agreed negotiated outcome. The negotiated dwelling target was only included within the North Subregional Strategy after three rounds of workshops had been conducted between the two councils

(Hornsby Council 2006). This section reveals the importance of communication between state and local agencies in implementing the housing targets.

### 5.3 Process of Accommodating Higher Density Housing

#### 5.3.1 Selected Sites for Rezoning

The Hornsby Housing Strategy identifies opportunities for additional housing to be provided through the rezoning of land for higher density housing. As discussed, Council has selected 25 sites for rezoning that are located within the town centres of Berowra, Mt Ku-ring-gai, Mt Colah, Asquith, Hornsby, Waitara, Normanhurst, Thornleigh, West Pennant Hills and Carlingford.

The proposed higher density housing represents a significant change for many of the suburbs, including the areas of Mt Colah, Asquith, Berowra, Mt Ku-ring-gai and Thornleigh, because at present “detached dwellings are the dominant form of housing in Hornsby Shire, with some areas having little or no alternative accommodation” (Hornsby Council 2009, 76). Figure 17 indicates the predominantly low density nature of many of the suburbs in Hornsby Shire, including Waitara and Asquith. Nevertheless, Council agrees that an increase in apartments is required to support the needs of older people to ‘age-in-place’ as well as younger families entering the property market (Farrington 2009, personal communication).



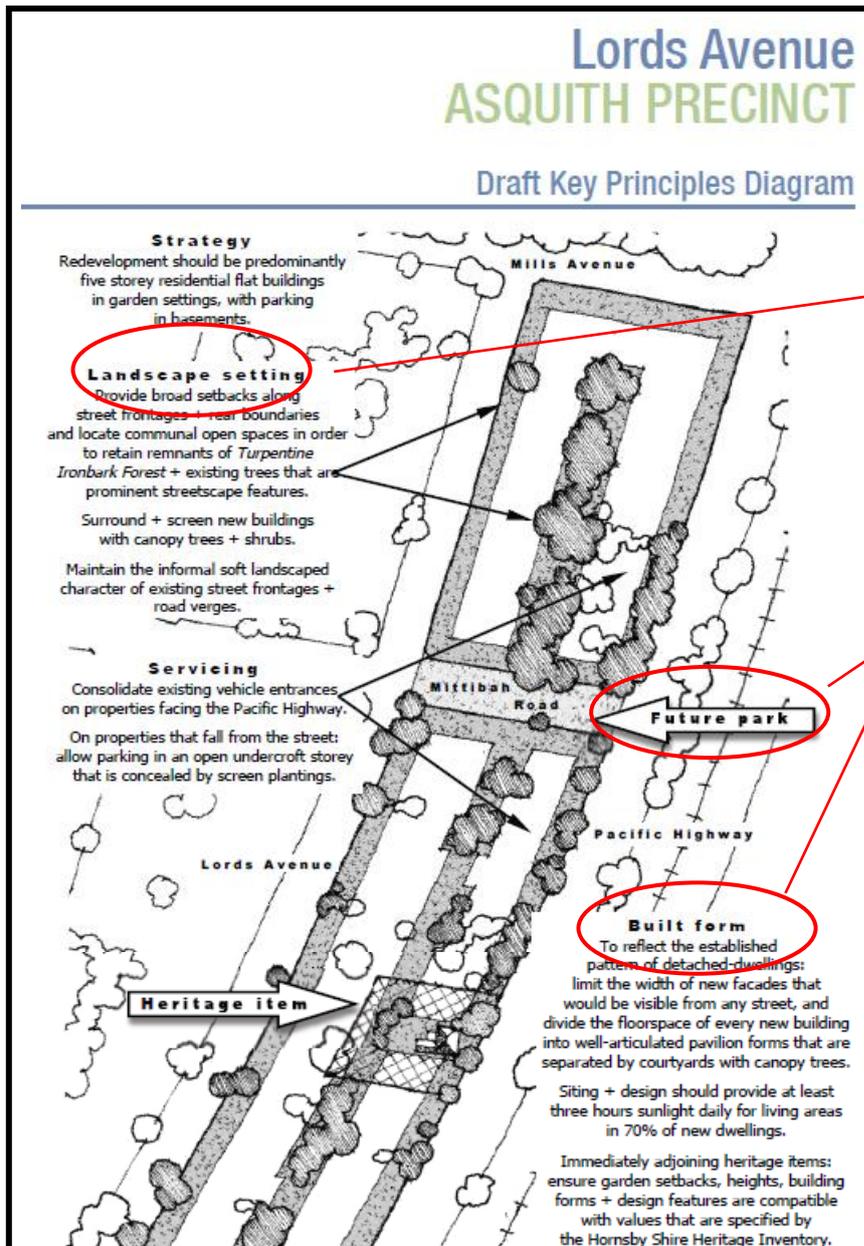
**Figure 17:** Existing low density areas in Waitara (left) and Asquith (right)

*Source:* Baroukh (2009)

The Strategy identifies only one site for rezoning within the Hornsby town centre, which reflects the fact that it is already the most densely developed town centre within the LGA. Many residents would like to see further intensification of higher densities within the Hornsby town centre, instead of development being spread throughout the suburban areas (Huffer 2009). Similarly, the Mayor of Hornsby

Council stated that “every unit built in the [Hornsby] CBD was one less that had to be constructed in Asquith, Normanhurst or Berowra” (Huffer 2009, 25). Nevertheless, Fryar (2009, personal communication) agrees with Council’s decision that over-intensification of higher density housing within the Hornsby CBD only is not a sustainable approach. I support the notion that there needs to be a more even spread of higher densities throughout a range of town centres in the Shire.

When compared to other councils, Hornsby has prepared the most comprehensive analysis of each individual site included within the Housing Strategy. In addition to the design guidelines within the DCP, the Housing Strategy includes a ‘Key Design Principles’ diagram (Figure 18) that suggests appropriate road layouts, building configurations, potential provision of open space as well as integration of existing heritage items within the new development. This depth of analysis was not



The ‘Key Principles’ suggest guidelines for development of the site, and provides some certainty about how the site will be developed.

This diagram presents the overall vision for the appropriate built form, landscaping and open space that would be required on site. Suggestions are also made for appropriate parking areas and vehicle entrances.

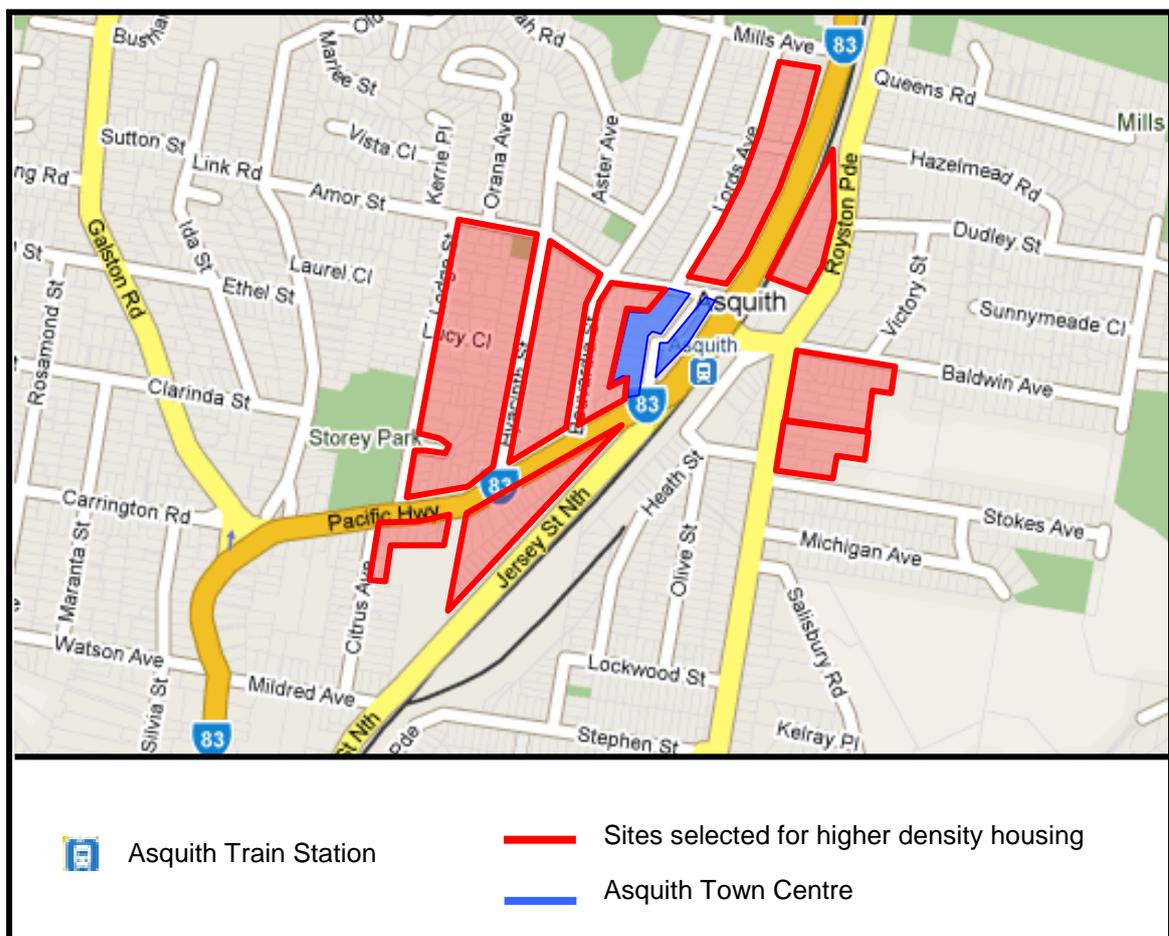
The diagram also suggests the location of a ‘future park’. This forward-planning is one way of ensuring that Hornsby LGA has sufficient open space to support an increased population.

**Figure 18:** Key Principles Diagram  
Source: Hornsby Council (2009)

prepared by any of the other northern councils, and therefore Hornsby’s approach is considered to provide a good model to other councils.

### 5.3.2 Locational Criteria Implemented in the Process of Site Selection

In accordance with the objectives of the Metropolitan Strategy, the selected sites are primarily located around town centres and public transport nodes. During the process of site selection, council decided that “centres outside transit nodes should be removed from further consideration...as they do not meet the selection criteria of encouraging increased densities in transit nodes, being well serviced by infrastructure and community services” (Hornsby Council 2009, 69). While participating in discussions with Hornsby Council, Fryar (2009, personal communication) noted that “proximity to town centres and transport is a major controlling factor that they used to select sites”. The focus of higher density housing around town centres is epitomised by the sites selected around Asquith Town Centre, as shown in Figure 19 below.



**Figure 19:** Proposed higher density housing around Asquith Town Centre  
 Source: Baroukh (2009)

Hornsby Council has actively facilitated the development of higher density housing in well connected and accessible town centres with good access to public transport. This is consistent with the Metropolitan Strategy objective to preserve the character of suburbs by limiting dispersion of higher densities throughout suburban areas. The intention is that this form of development will encourage walking, increase public transport patronage, reduce daily trip numbers by car, create a strong sense of place and vibrancy and improve the economic viability of town centres. This approach reveals strong consistency with the urban consolidation principles stated within the Metropolitan and Subregional Strategies, as indicated in Table 5 below.

***Consistency of Proposed Housing with Metropolitan Strategy Locational Criteria***

The following table indicates the extent to which Hornsby Council has implemented the locational objectives relevant to higher density housing, which are outlined within the Metropolitan and Subregional Strategies.

<b>Sydney Metropolitan Strategy Locational Criteria</b>	<b>Addressed within Hornsby Housing Strategy</b>	
New housing within Strategic Centres	✓	Hornsby CBD is classified as a 'Strategic Centre' and has been previously developed for higher density housing in accordance with the Hornsby LEP 1994. The current Housing Strategy only includes only one site for rezoning in the Hornsby CDB, to prevent overdevelopment of the area.
New housing within Smaller Centres	✓	The current Strategy makes significant provision for new housing within the 'Villages' of Asquith and Waitara, the 'Small Villages' of Berowra and West Pennant Hills and the 'Neighbourhood Centres' of Mt Colah, Normanhurst and Thornleigh.  Council has successfully dispersed higher density housing throughout the smaller town centres in the LGA, instead of concentrating development in larger town centres only.
New housing within walking distance of shops, jobs and services	✓	All sites identified for redevelopment are located within walking distance of town centres that provide a range of shops, jobs and services. However, many of the smaller rundown town centres will need to be upgraded to meet the needs of new residents.

Higher density housing concentrated around public transport nodes	✓	Twenty-four (24) out of the twenty-five (25) identified sites are located within 800 metres of a train station. Council has actively ensured that new higher density housing precincts have good access to public transport. Hornsby Council has placed particular emphasis on proximity of housing to public transport, and this is apparent in the Housing Strategy.
Housing located in areas that can maximise use of existing infrastructure	✓/x	All proposed higher density housing will be located within town centres with existing services and community facilities. Housing development around town centres also maximises use of existing transport, road, electricity and water infrastructure.  Nevertheless, some of the smaller town centres (e.g. Asquith, Mt Colah) do not have sufficient infrastructure and services and would need upgrading to support an increased number of residents in the area.
Housing in areas that can facilitate walking and cycling	✓/x	Opportunities for walking and cycling have been enhanced because of the proximity of proposed housing to services and transport.  However, the Housing Strategy is not accompanied by a specific cycling plan or proposed new cycle lanes. It cannot be assumed that residents will walk or cycle and an additional strategy may be required to ensure implementation of this objective.
New housing existing urban areas	✓	Rural town centres within the LGA were intentionally not considered for higher density housing. As such, housing is concentrated in existing town centres in urban areas only.
Create an improved housing mix within areas of primarily detached houses	✓	Hornsby LGA is primarily comprised of single detached dwellings. In addition, housing under previous strategies consisted of 3, 7 and 10 storey development. The current strategy proposes predominately 5 storey development which will improve the diversity of housing types available.
Concentrate higher densities in one area to preserve the character of other areas.	✓/x	Higher densities are concentrated within town centres and are not dispersed throughout the locality. This will generally preserve the amenity of suburbs.  However, many areas of low density detached housing will now be located adjacent to new higher density housing. This will have an impact on the neighbourhood character of the lower density areas. Council has attempted to manage this issue by limiting development to five storeys and implementing setbacks, landscaping and built form controls within the new DCP.

**Table 5:** Assessment of Consistency with Metropolitan Strategy

Source: Baroukh (2009)

### 5.3.3 Type of Housing Proposed

Twenty-three (23) out of twenty-five (25) identified sites are earmarked for a maximum of five storey residential development, representing a new approach to higher densities within the Shire. The proposed five storey height limit is a different approach, particularly when compared to the 1998 Hornsby Housing Strategy which generally proposed three storey or 8-10 storey residential flat buildings. Figure 20 shows the 8-10 storey residential flat buildings developed in Waitara in response to the 1998 Housing Strategy. As discussed in chapter four, Lane Cove and Ku-ring-gai Council have received much criticism for proposing a significant number of buildings over five storeys. This section comments on the merits of a five storey maximum height limit and analyses the model adopted by Hornsby Council.



**Figure 20:** Existing 8-10 storey development in Waitara

Source: Baroukh (2009)

It should be noted that Hornsby Council employed a detailed process in order to determine the five storey height limit, as follows:

- Councillors participated in a tour of previously developed housing precincts in Hornsby, including town houses, three storey and high density.
- Councillors completed an evaluation sheet identifying the strengths and weaknesses of the different building forms. Figure 21 below is a copy of part of the evaluation sheet filled out by Councillors, and reveals that Council considered issues such as design, streetscape, landscaping, privacy and parking issues when determining the most appropriate building form.

- In general Councillors felt that townhouses were not preferable because they result in large paved areas, gun-barrel driveways and lack of landscaping. Some of the higher density housing (around 8-10 storeys) was found to be too high (Farrington 2009, personal communication).

<b>HOUSING FORM</b>					
Place a tick in the box to indicate your satisfaction of the following elements of the precinct:		Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
Overall height of the precinct					
Height in relation to natural topography					
Height in relation to streetscape					
Height in relation to solar access					
Ratio of development to the site area					
Amount of private open space					
Amount of landscaped area					
Quality of landscaping					
Front Setbacks					
Side Setbacks					
Separation between buildings					
Privacy for occupants					
Privacy for adjacent developments					
Aesthetics					
Roof forms					
Provision of vehicular access					
Location of car parking					

**Figure 21:** Housing Evaluation Form  
*Source:* Hornsby Council (2009)

I agree that five storey development is appropriate, particularly because it is a way of maximising development opportunities on sites near town centres and rail stations, while also addressing access, design and amenity issues. The five storey housing choice also shows that detailed consideration was given to social factors; Farrington (2009, personal communication) comments that “choosing the five storeys was a combination of considering the ageing population and the younger people, as well as the urban design outcomes.” Council consulted demographers who found that housing in Hornsby needs to provide opportunities for older people to age in place as well as providing more affordable housing options for young families. Both these groups of people need lift access – however three storey buildings do not require a lift, and developers are often reluctant to build four storey developments with a lift (as it is not economically viable). Hence, the five

storey option was found to be the most suitable option from a social perspective, while also considering the economic viability of development.

Thus, it is understandable why the five storey height limit has been applied to most of the sites identified by the Housing Strategy. However, other height limitations could have been considered in some of the smaller town centres. For example, a five storey limit is proposed for sites around Berowra Waters Road and the Pacific Highway, Berowra. Fryar (2009, personal communication) suggests that townhouse style development or shop top housing would be more appropriate for this small town centre. Figure 22 shows some of the townhouses that have been previously developed in Berowra, which Fryar (2009, personal communication) considers to be more suitable for this area.



**Figure 22:** Townhouse-style development in Berowra

*Source:* Baroukh (2009)

The design aesthetic of the five storey built form is guided by the Draft Five Storey Development Control Plan (DCP), which has been prepared in conjunction with the Housing Strategy. As discussed in chapter four, the preparation of a DCP is considered to be an appropriate way of providing certainty for residents as well as ensuring that good design principles are adopted by developers. Fryar's (2009, personal communication) perspective on the DCP is that it provides generic controls for five storey housing development on flat land, but would not necessarily result in a good outcome for irregular sites. An example of this is a submission made to Hornsby Council regarding the Mt Colah Commercial Centre Precinct Site, suggesting the inclusion of additional properties outside the identified development boundary. In conjunction with the submission, the developer intends to prepare a unique DCP and Masterplan to govern development on the site. It is felt that the

existing DCP would restrict development opportunities on the Mt Colah site because “the site is constrained by topography, bushfire, and the DCP controls don’t respect the fact that it’s not a flat, regular block of land” (Fryar 2009, personal communication). It is argued that applying the standard DCP controls would result in development that is not most appropriate for that particular site.

If a landowner/developer is prepared to come up with more appropriate development controls that ultimately result in a better solution and response to the constraints of the site, I agree that council should be open to this. Nevertheless, Hornsby Council’s DCP includes commendable concepts, such as ensuring that residential flat buildings are restricted in bulk and scale, good separation between buildings through setbacks and landscaping and good articulation in the façade of the buildings. If a developer were to submit an independent DCP, it would need to uphold these principles (which have been put in place to minimise the impact of higher density housing on the locality). The Draft Five Storey Development Control Plan is consistent with the objectives of the Metropolitan Strategy as it will “improve the design quality of new development” (Department of Planning 2005, 150). The preparation of a DCP specifically guiding the development of higher density housing is considered to be a good approach that should be adopted by other councils.

#### **5.4 Analysis of Hornsby Council’s Approach – Elements of Success**

##### **5.4.1 Consistency with State Urban Consolidation Policy**

The previous analysis in Table 5 (section 5.3.2) provides a detailed indication of the significant extent to which Hornsby Council has satisfied the urban consolidation objectives within the Metropolitan Strategy and North Subregional Strategy. In particular, Hornsby Council has achieved the Metropolitan Strategy objective to “concentrate development to strengthen centres, towns, villages and neighbourhoods focused around public transport” (Department of Planning 2005, 119). This is epitomised by (see section 5.3.2) which demonstrates the plan to locate higher density housing around an existing town centre and train station.

Another important objective is to ensure that “the character of Sydney’s suburbs will be protected” (Department of Planning 2005, 118). Hornsby Council has definitely attempted to increase densities while preserving the character of the suburban environment in the following ways:

- Clustering housing around town centres and train stations, rather than dispersing higher density housing throughout low density suburban areas. This is in accordance with the ideas of Bunker *et al* (2002) and Searle (2004).
- Hornsby Council has selected sites that are bounded on all sides by a road. This reduces potential impacts such as privacy loss, overshadowing and visual amenity on surrounding residential uses.
- A particularly successful aspect of the Housing Strategy is limiting the height of most residential flat buildings to five storeys. As discussed in section 5.3.3, this is more compatible with the surrounding low density areas than 8-10 storey development that has been proposed by some of the other northern councils.
- The Housing Strategy ensures that there will be a greater diversity of housing available within Hornsby Shire, particularly in accordance with the needs of older people and young families. This is consistent with the objective of the Metropolitan Strategy to provide a mix of housing to meet a range of housing needs.

In order to protect the amenity of the existing suburban areas, there is a need for diversity in the design of higher density urban environments to prevent creating monotonous landscapes (Jacobs 1961). The DCP prepared in conjunction with the Housing Strategy not only stipulates numerical development standards, but also discusses the importance of appropriate building form, design, and façade articulation. The DCP will ensure that new residential flat buildings are appropriately setback, landscaped and designed in way that will attempt to minimise the impact on lower density areas.

Overall, it is evident that the Hornsby Housing Strategy is consistent with the aims of the Sydney Metropolitan Strategy, particularly in terms of location of higher density housing and attempts to protect the character of the existing areas. The current Housing Strategy also demonstrates many improvements from previous approaches, as discussed in section 5.4.2 below.

#### **5.4.2 Improvement from Previous Housing Strategies**

The current Housing Strategy involves two main improvements from the 1998 Hornsby Housing Strategy. The 1998 Strategy involved the development of higher

densities predominantly around Hornsby and Waitara only. While this is beneficial in terms of limiting the dispersion of higher densities through suburban areas, it can result in over-intensification of development (Fryar 2009, personal communication). This is associated with increased pressure on infrastructure and services in two town centres, instead of distributing the demand across various town centres. The current Housing Strategy reveals that “Council recognised that the most efficient form of urban consolidation relevant to the Shire is a concentrated model...rather than dispersed throughout urban areas” (Hornsby Council 2009 15). This comment shows recognition of the importance of preserving the character of existing areas, as well as distributing the pressure and demand of housing through different town centres. The distribution of housing throughout various town centres in the LGA is considered to be a more sustainable approach (Fryar 2009, personal communication).

Another significant change is that the proposed densities are not as high as they were in the past. Farrington (2009, personal communication) comments that “five storey development is not a housing form which has been previously facilitated by Council’s LEP or DCPs.” The benefits of five storey development is that is “it allows a higher density of housing and an appropriate built form, which can achieve underground car parking and quality landscaped area, while being a smaller scale than the 8-10 storey form” (Farrington 2009, personal communication). As discussed in section 5.3.3, the proposed building height demonstrates that Hornsby Council has considered the social, economic and design factors in the decision making process.

## **5.5 Analysis of Hornsby Council’s Approach – Elements Requiring Further Consideration**

### **5.5.1 Infrastructure Capacity and Funding**

The literature review identifies infrastructure capacity as a factor that needs to be considered *before* urban consolidation takes place. It is inappropriate to assume that all existing urban areas have the capacity to support a significant increase in population. This issue is particularly relevant to Hornsby because a relatively high housing target applies, and the Councillors and community members have raised concerns about whether Hornsby Shire has the capacity to support additional residents. In a recent letter to the *Northern District Times* (2009) Councillor Bruce Mills expressed concern that the construction of additional dwellings will not be accompanied by sufficient funding for road and transport infrastructure.

### **Capacity of Town Centres**

As previously noted, the rationale behind the Metropolitan Strategy is to concentrate housing around town centres. However, this approach will not be successful if the town centres do not have the services and facilities to support an increased population. During a site visit of Asquith and Mt Colah town centres (which are both planned to accommodate higher density housing), I was concerned about the likelihood of the town centres being able to meet the needs of a growing population. This is because the town centres are run down and provide limited services, as shown in Figure 23 below.



**Figure 23:** Asquith (top) and Mt Colah (bottom) Town Centres

Source: Baroukh (2009)

On the 'Bang the Table' Forum (an online forum that allowed community members to express their opinion on the Housing Strategy), residents describe Asquith Town Centre as "an almost dead, untidy and uninviting shopping precinct" (Bang the Table Forum 2009, 1). Council acknowledges that this is an issue and has previously upzoned the commercial land in the Asquith town centre to allow 5 storey mixed-use development. The intention of the rezoning was to make redevelopment of the land an attractive and economically viable option for landowners. However, the landowners have not yet chosen to redevelop any of the sites within the Asquith town centre. Farrington (2009, personal communication) comments that "the role of local government for private land is to provide planning controls that facilitate the development, but it's not the role of local government to actually be the land developer". Council's responsibility is to rezone land and create development opportunities, but the difficulty is that Council cannot guarantee that the landowners will choose to redevelop and upgrade the shops within the town centre. This problem is confirmed by a resident who questioned whether the Asquith town centre will ever be upgraded; "Who is going to invest in building a set of decent shops for a suburb that is slowly aging, decaying and dying?" (Bang the Table Forum 2009, 2). While Asquith Town Centre remains undeveloped, it is clear that Council has actively responded to this issue by upzoning the land and attempting to encourage redevelopment.

This issue reveals a tension between selecting appropriate sites for higher density housing and the conflicting private interests of private landowners. Council appreciates that many town centres are currently not suitably upgraded to accommodate additional residents (Farrington 2009, personal communication). While it is anticipated that new residential development around the town centres will encourage renewal of the commercial land, council cannot guarantee that this will take place.

### ***Capacity of Infrastructure and Services***

In the process of negotiating the housing targets, Hornsby Council determined the housing capacity of the Shire with regard to planning controls, minimum allotment size, bushfire prone land and bushland constraints (Hornsby Council 2006). Capacity of infrastructure and services is not mentioned as a factor considered at the forefront of these discussions. This issue has been given some consideration within the Housing Strategy, which analyses the merits of each identified site in terms of proximity to and capacity of open space, capacity of roads, dwelling mix in

the area, heritage considerations and community facilities. However, I would argue that this has been done at a surface level only. For example, the analysis of one site states that “there is little, if any, capacity within remaining land in public ownership to provide recreation facilities for an increasing population” (Hornsby Council 2009, 7). Regardless of this issue, this site is still selected for higher density housing. It is clear that Council has considered availability of services, but at the same time has not discounted sites that have insufficient facilities. Nevertheless, the Housing Strategy suggests that developer contributions may be necessary to ensure the provision of additional open space throughout the locality.

As discussed in chapter four, funding is a major issue in the provision of infrastructure and services. The Hornsby Housing Strategy needs to be accompanied by a detailed Infrastructure Delivery Plan, which directly addresses the needs of areas being redeveloped for higher density housing. At present, no definite commitment to the funding of infrastructure and services has been provided. The State Government has told Hornsby Council that “when they know where the housing will be provided, they will provide new facilities or services to meet that growing demand” (Farrington 2009, personal communication). Instead of a reactive approach, I believe that infrastructure and funding commitments should have been prepared in conjunction with the Housing Strategy. The problem arising from this is that infrastructure and services may not yet be upgraded by the time residents move in.

Another issue that was raised in chapter four is the tension between funding for areas of state and local responsibility. Farrington (2009, personal communication) confirms this problem by stating that “[Hornsby Council] will be meeting the housing target, but this requires that the other service providers augment their services to meet that demand. If they don’t augment their services, then there will be a problem.” For example, services such as schools and hospitals are the responsibility of State Government. Whereas, councils have a role to play in the upgrading of local facilities such as parks, libraries and local roads. This is an issue because Council has selected sites for higher density development, perhaps with more consideration of ‘local’ infrastructure as opposed to ‘state’ infrastructure. For example, on the Bang the Table Forum, one resident comments “Does the Council not realise that there are no public High Schools easily accessible from Normanhurst? Local Normanhurst teenagers have to bus and train it to either Turrumurra or Pennant Hills High Schools” (Bang the Table Forum 2009, 2). The

Housing Strategy does mention distance of the subject sites from schools, but does not assess the capacity of these schools to support additional residents. Council can only make commitments for areas that are within their jurisdiction, and as a result some issues have not been sufficiently considered.

Hornsby Council's funding commitments will be documented in an updated Development Contributions Plan which Council will prepare in the coming months to ensure the provision of services in areas that are accommodating additional residents (Farrington 2009, personal communication). I argue that this Contributions Plan should have been prepared in conjunction with the Housing Strategy, in order to confirm the services and facilities that would be provided to support the areas of higher density housing.

### 5.5.2 Amalgamation Potential

As part of the process of identifying appropriate sites, Councils need to consider ownership patterns in order to select sites that have good amalgamation potential. This means selecting sites that have less individual owners, and in some case may have large areas of land that are owned by one person. The highest and best use of the site will be achieved if all individual owners are prepared to sell their property to a single owner/developer. If some individual land owners are not willing to sell, this would only allow part of the site to accommodate higher density housing, which can create inconsistencies within the street fabric as well as limiting Councils ability to meet the housing targets. As shown in Figure 24, this issue occurred when



**Figure 24:** Single storey dwelling surrounded by higher densities.  
*Source:* Baroukh (2009)

Hornsby rezoned land under the 1998 Housing Strategy, and as a result there are freestanding homes remaining among the seven storey apartment buildings in Waitara (Huffer 2009).

The Housing Strategy identifies opportunities for the rezoning of many large sites that have high levels of individual ownership, which may limit the potential for the entire site to be redeveloped as a whole. Hornsby Council has attempted to manage this problem by assessing “the age and quality of the buildings – areas where people are less likely to want to stay” (Farrington 2009, personal communication). On the other hand, Fryar (2009, personal communication) noticed that “Land tenure and ownership was factored into Council decision making, but I don’t think there was great importance placed on that factor”. This observation is discussed further in the ‘Sherbrook Road Case Study’ in section 5.5.3.

Hornsby Council recognises that the only way to encourage people to sell their land is to make redevelopment an attractive option. Farrington (2009, personal communication) acknowledges that “there’s always going to be problems with amalgamation and people not wanting to sell, the only way you can encourage that is through making it economically attractive and feasible for developers.” In the preparation of the Housing Strategy, Council engaged a consultant land economist to conduct an economic feasibility analysis. As a result, the site selection process took into consideration factors such as current land value, development costs and potential profits, to ensure that development is economically viable.

### **5.5.3 Sites Not Considered for Higher Density Housing**

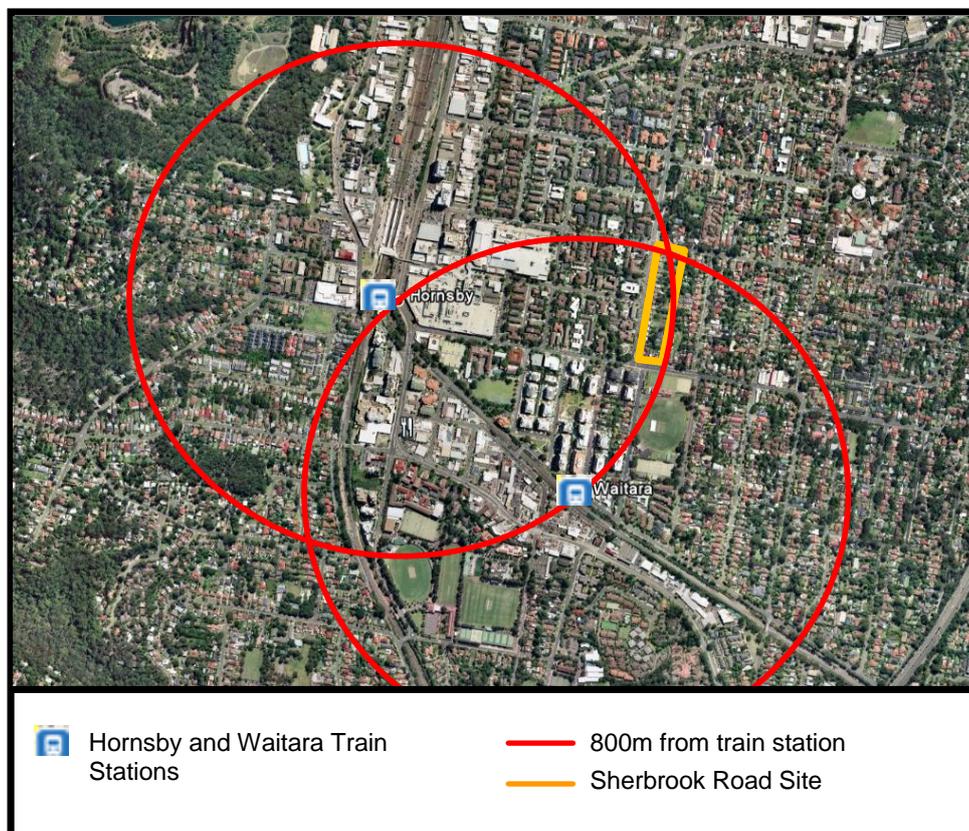
Hornsby Council’s process of site selection is thorough and well documented. Nevertheless, landowners and members of the community made submissions during the exhibition process and suggested alternate sites that may be more suitable for higher density housing. The Council will consider these submissions over the next few months, and may reassess some of the identified sites (particularly if they have been subject to significant community opposition).

The Housing Strategy reveals that a strict site selection process was adopted, and sites not within 800 metres of a rail station were not considered. While this approach is consistent with the objectives suggested within the Metropolitan Strategy, it has resulted in some potentially appropriate sites not being included within the Strategy. This issue is further discussed in the ‘Sherbrook Road’ Case Study below, which is an example of a site that was not included within the

Housing Strategy, but was suggested by a developer and consultant planner to be included as part of the rezonings.

### Sherbrook Road Case Study

The in-depth interview with Fryar (2009) revealed that he was involved in making a submission to Council, for the 'Sherbrook Road' site to be rezoned under the Housing Strategy. The subject site is bounded by Sherbrook Road to the west, Burdett Street to the North and Edgeworth David Avenue to the South (Figure 25). The Sherbrook Road site can be classified as part of the Hornsby Town Centre, as it is within a 1000m radius of the CBD.



**Figure 25:** Context and Location of Sherbrook Road Site

Source: Baroukh (2009)

From discussions with Council and a review of the Housing Strategy, it is evident that this site was not included within the Housing Strategy because it is located on the boundary of the 800 metre distance from Hornsby train station, as indicated in Figure 25. I would argue that it is too much of a hardline approach not to include sites that are on the periphery of the 800 metre requirement – if the site is appropriate for higher density housing.

The major advantage of this site is that one third of the properties fronting Sherbrook Road are under single ownership. In addition, the majority of landowners within the proposed precinct have forwarded letters of support to Hornsby Council for the inclusion of their property for rezoning as part of the Housing Strategy. As discussed in Section 5.5.2, sites that have less individual owners have better prospects of being redeveloped holistically. Fryar (2009) believes that the Sherbrook Road Site is suitable because the “single landowner will allow the developer to achieve a good consolidated development of the land” and remove conflicting interests. Because of the ownership patterns, the redevelopment of this site would result in a more guaranteed dwelling yield (that is not dependant on land owners’ decision to sell).

The site is considered to be appropriate for the following reasons:

- The bus routes service Sherbrook Road, Edgeworth David Avenue and Burdett Street;
- The site is approximately 800 metres from both Waitara and Hornsby train stations;
- Footpaths to the Hornsby CBD and Hornsby and Waitara train stations are of a relatively flat grade and allow good access to nearby transport and services;
- The subject site is within 400 metres of Willow, Neal and Waitara Parks, as well as 400 metres from Waitara Oval and Hornsby Bowling Club;
- Sloped topography of the site can be maximised so that development does not appear as 5 storeys in all parts of the site;
- There are no heritage items or conservation areas affecting the proposed precinct;
- One-third of the site is under single ownership and other landowners within the identified site have expressed interest at being included within the rezoning.

There has been community opposition to some of the sites identified within the Housing Strategy, and this site may be well regarded by Council because of consensus among the landowners. It is interesting to note comments made by residents on the 'Bang the Table' Forum. Many residents argued that Sherbrook Road should have been included within the Housing Strategy because "houses in Sherbrook Rd are practically falling down between Burdett and Edgeworth David and yet the Council is rezoning areas where nobody wants it, including my area!" (Bang the Table 2009, 2).

Therefore, Sherbrook Road (Figure 26) may be seen by Council as an appropriate site from a political point of view, particularly because of the level of support from landowners. During discussions with Hornsby Council, Fryar (2009, personal communication) noted that Council was open to considering the Sherbrook Road site for rezoning.



**Figure 26:** Existing dwellings fronting Sherbrook Road  
*Source:* Baroukh (2009)

The Sherbrook Road Case Study discusses the issue of site selection from the perspective of a consultant planner, a developer and members of the community. The case study importantly reveals the range of issues that need to be considered

when selecting sites for higher density housing, including appropriate locations, amalgamation potential, landform and surrounding land uses.

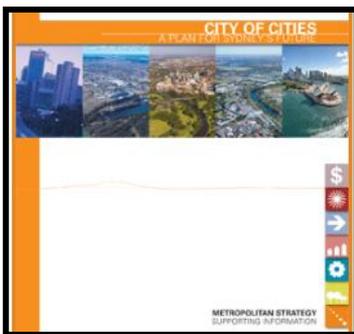
## **5.6 Summary**

This chapter provides an analysis of Hornsby Council's approach to meeting the housing targets and suggests that many aspects of the strategy provide a good model for other councils. As discussed, the Hornsby Housing Strategy provides a detailed consideration of the appropriateness of each site for higher density housing, and examines issues such as distance from public transport, services, amalgamation potential, appropriate built form, open space, nearby heritage items and road capacity. Nevertheless, this chapter also identifies elements that could have been given further consideration such as infrastructure and service provision, development controls for unique sites and the amalgamation potential of land.

The Key Design Principles and DCP for five storey development are an important aspect of the Housing Strategy and provide an element of certainty about how the sites will be developed in the future. The proposed five storey residential development around town centres is considered to be a good model for urban consolidation, and is consistent with the ideas of Jacobs (1961) and Searle (2004). Overall, the Hornsby Housing Strategy 2009 adopts a thorough and detailed approach to selecting appropriate sites for higher density housing, and could be used a model by other councils.



## Chapter 6: Findings and Conclusions



## 6 FINDINGS AND CONCLUSIONS

This chapter synthesises the research and findings borne out of this thesis and discusses how the research objectives and questions have been addressed. The overarching aim of this thesis was to investigate the direction and implementation of the policy of urban consolidation and the housing targets in Sydney. This has been achieved through a detailed analysis and critique of the Sydney Metropolitan Strategy, Sydney Subregional Strategies and statutory and strategic documents published by the northern councils. The headings within this chapter reflect the main findings and themes discussed within the thesis.

### 6.1 Strategic Approach to Urban Consolidation

The first objective of this thesis was to analyse the strategic approach towards urban consolidation contained within the Metropolitan Strategy and Subregional Strategies. This is achieved in chapter three which provides a detailed critique of the current urban consolidation policy with regard to locational criteria, formulation of housing targets, appropriateness of housing type and implementation issues. This section summarises the main issues that were borne out of this analysis.

As discussed in chapter three, the focus of the Metropolitan Strategy is the requirement for higher density housing to be located around town centres and public transport nodes. The rationale for this approach is that town centres provide good access to employment, public transport, retail, health, leisure and cultural facilities. I agree that this is an appropriate approach as it creates opportunities to increase activity and vitality in town centres, as well as limiting the dispersion of higher densities throughout low density suburban areas. As discussed in the literature review, this finding intersects with the ideas of Bunker *et al* (2002) and Searle (2004), which support the notion that housing around town centres increases accessibility and connectivity within the urban environment. Overall, it is considered that the Metropolitan Strategy suggests appropriate locational guidelines for urban consolidation in Sydney. Section 6.2 discusses extent to which councils achieved consistency with these guidelines.

Another significant element of the current urban consolidation policy is that councils are required to achieve the housing targets contained within the Subregional

Strategies. The analysis in chapter three is critical of the fact that the housing targets have been predominantly formulated with regard to zoning opportunities and potential dwelling yields. Further to this, a Hornsby Council report discusses the fact that “the dwelling targets in METRIX do not take into consideration constraints such as flooding, bushfire prone land, heritage, bushland, property capitalisation and ownership” (Hornsby Council 2006, 9). This thesis suggests that it would be more appropriate to calculate the housing targets with regard to infrastructure capacity and available services in different town centres. This argument is supported by Bunker *et al* (2002) who suggests that housing targets should be ‘locally sensitive’. In accordance with the ideas of Pinnegar (2007), I agree that the housing targets should not be driven by ‘urban-capacity’ alone, but should give more consideration to the social, environmental and economic considerations relevant to each LGA.

Following on from this, a review of the literature and the Metropolitan and Subregional Strategies revealed that the provision of sufficient infrastructure and funding to support urban consolidation is a pertinent issue. In the literature review, Troy (1996) and Searle (2004) confirm the importance of ensuring that existing urban areas have the capacity to meet the needs of increases in population. As discussed in chapter three, the infrastructure and funding commitments within the Metropolitan Strategy are broad and relate largely to state significant projects. Similarly, the State Infrastructure Strategy does not make any commitments that are specifically targeted at the town centres accommodating the housing targets. This viewpoint is supported by Pinnegar (2007, 468) who states that a weakness of the Metropolitan Strategy is that it is “necessarily restricted to ‘big picture’ economics and demographics”. This big picture approach means that the Metropolitan Strategy includes broad objectives and assumes that councils will conduct more detailed analysis to determine which services require augmentation. This thesis recommends that the Metropolitan Strategy and Subregional Strategy should include more specific commitments relating to infrastructure and service provision, to ensure that urban consolidation occurs in areas that have the capacity to support increases in population and intensification of activity. The issue is discussed further in section 6.3 below.

## 6.2 Implementation of Housing Targets by Local Councils

An important objective of this thesis was to understand the ways in which the northern councils are responding to the DOP urban consolidation policy and housing targets. This was worthy of investigation, particularly as Searle (2007) comments that in past decades councils failed to respond to urban consolidation policies. As discussed within chapter four, Bunker (2007) argues that the successful implementation of the Metropolitan Strategy is largely reliant on councils revising their planning controls and preparing housing strategies. Chapters four and five reveal that the northern councils *are* actively responding to the Metropolitan Strategy and are working towards meeting the housing targets. In order to understand the approach being adopted by councils to meet the housing targets, I conducted a detailed analysis of LEPs, Housing Strategies and council meeting minutes. This revealed that councils are generally meeting the housing targets through the rezoning of land to allow for higher density housing. In turn, the rezonings are being implemented through revised LEPs (for example; Lane Cove LEP 2008, Hunters Hill (Gladesville Town Centre) Local Environmental Plan 2008) and in the case of Hornsby Council a detailed Housing Strategy has been prepared.

In response to the fourth research objective, chapters four and five find that the northern councils have generally achieved consistency with the Metropolitan Strategy objectives. Firstly, councils are locating higher densities around town centres, public transport nodes and transport corridors. The Metropolitan Strategy requires that housing is located in major as well as neighbourhood town centres - in accordance with this requirement, councils are locating higher density housing in town centres of varying size, instead of over-intensifying development in one town centre only. I agree that this approach is more sustainable than overdevelopment of a select few town centres.

As discussed in the example of Lane Cove and Ku-ring-gai Councils in chapter four, the proposed rezonings will accommodate a mix of housing types and built forms, which will contribute to improving housing choice and housing affordability for Sydney residents. This thesis finds that the major difference between councils' approaches is the proposed heights of residential flat buildings, which vary from three storeys to eight storeys. The Hornsby Case Study provides an analysis of the merits of limiting residential flat buildings to a maximum of five storeys and is found to be a good model for other councils. The northern councils have considered a

wide range of issues in the decision making process, but only Hornsby Council has prepared a Housing Strategy that examines social, environmental and economic issues in detail for each site identified for future higher density housing.

In order to evaluate the implementation of the housing targets, chapter five analyses the merits as well as the issues relating to the Hornsby Housing Strategy. This thesis finds that the Housing Strategy provides a good model for other councils, largely because of the detailed and comprehensive site-by-site analysis of the areas identified for higher density housing. The Housing Strategy shows an understanding of the importance of considering issues such as distance from public transport, availability of services and open space, appropriate built form, amalgamation potential, heritage items and road capacity. As discussed, Hornsby Council is one of the few councils to limit the height of the proposed residential flat buildings to five storeys. In accordance with the comments made by Farrington (2009, personal communication) I agree that this is an appropriate height with regard to social and design considerations, as well as having less impact on the surrounding areas than buildings 8-10 storeys in height. Similarly, a discussion of the ideas of Jacobs (1961) and Searle (2004) in the literature review, suggests the appropriateness five storey residential/mixed-use buildings surrounding a town centre.

Overall, Hornsby Council has achieved a high level of consistency with the urban consolidation objectives within the Metropolitan and North Subregional Strategy and therefore it's approach is considered to provide a good model for other councils. In conjunction with the Housing Strategy, Hornsby Council has prepared Key Design Principles and a DCP, which provide a vision for how the higher density areas will be developed. It would be beneficial for other councils to include this detailed level of analysis when planning for urban consolidation. It is evident that Hornsby Council has determined the most suitable way of accommodating higher density housing within the LGA, while successfully balancing the range of issues that need to be considered.

### **6.3 Issues Relating to Implementation of Housing Targets**

One of the research objectives was to understand the issues and concerns that have arisen during the process of implementing the housing targets. This thesis identifies a range of issues including determining appropriate building form and locations, managing community opposition and the provision of infrastructure, which are summarised in more detail below.

### ***Infrastructure and Service Provision***

As discussed in section 6.1, a recurring theme identified within this thesis is the need for sufficient infrastructure and services to support urban consolidation. This issue is first identified within the literature review and confirmed by Searle's (2007, 12) comment which states that "urban consolidation's implementation at the high levels proposed in the new metropolitan strategy is likely to become increasingly difficult as...local infrastructure such as road congestion, lack of public transport investment, and lack of local open space start to become even more apparent". This thesis identifies the issue that the Metropolitan Strategy does not include any detailed infrastructure and funding commitments for specific town centres accommodating higher density housing. This issue was confirmed during an interview with Farrington (2009, personal communication) who stated that any funding from the State Government will only be provided *after* "they know where the housing will be provided." This thesis argues that detailed infrastructure and funding commitments from the State Government should be provided to councils at the time of planning for higher density housing. This would ensure that councils are selecting appropriate sites not solely based on zoning opportunities and land capacity, but are also considering the availability of infrastructure and services.

This thesis finds that most councils have considered infrastructure and service provision, but have not prepared a specific Infrastructure Delivery Plan to support the intensified development and an increased number of residents. Chapter four and five reveal that a major issue in the provision of infrastructure is the tension between state and local responsibility. For example, it is the responsibility of councils to select appropriate sites for higher density housing; however councils cannot ensure funding for services such as public transport, schools, hospitals and electricity, water and sewerage infrastructure (which are the responsibility of the state). Once again, this means that councils may select areas for urban consolidation without a definite commitment from state infrastructure providers about when particular services will be upgraded. This thesis recommends that councils prepare an Infrastructure Delivery Plan in conjunction with the plans for higher density housing, to ensure that the availability of infrastructure and services forms an important part of the decision making process.

Similarly, the Hornsby Case Study reveals that there is a tension between councils and private landowners in relation to land redevelopment. For example, Hornsby Council has proposed higher density housing to be located around some run down

town centres (e.g. Asquith Town Centre). The problem is that council cannot guarantee that the town centres will be upgraded, as the private landowners have not yet shown any interest in redeveloping the land. As discussed, councils are rezoning commercial town centres to support urban consolidation, but the redevelopment of the sites ultimately depends on the private landowners. Overall, it is important for councils to ensure that there is sufficient infrastructure and services available to support the pressures of urban consolidation.

### ***Implementation***

Another objective of this thesis was to understand the role of state and local agencies in implementing urban consolidation policy and housing targets. Essentially, the Metropolitan Strategy, Subregional Strategies and METRIX provide a point of discussion between the DOP and local councils. As discussed in chapters four and five, much responsibility is left to councils to meet the housing targets and the role of the DOP is to review draft LEPs and Housing Strategies. The roles of state and local agencies in implementing the targets is clearly defined, but this has been challenged in the case of Ku-ring-gai where the DOP intervened in the preparation of Ku-ring-gai LEP, as discussed in chapter three. Based on this example, it is evident that if councils are proactive in addressing the housing targets, then the DOP is not likely to intervene in the decision making process.

As discussed in chapter four and five, the northern councils *are* working towards the implementation of the housing targets and 60% of these councils have released documentation discussing how this will be achieved. The northern councils have received community feedback that has often been critical of proposed building heights, dwelling density, proposed locations and effect on the suburban and heritage character of certain areas. For example, the Lane Cove LEP 2008 and Hornsby Housing Strategy are still in draft form and it will be interesting to monitor the degree to which councils make changes to the documents in response to community opposition. Farrington (2009, personal communication) commented that Hornsby Council may reconsider some of the proposed sites; “We will have to work out which were the problem areas, which objections can be substantiated...determine which sites have too much community opposition.” The Sherbrook Road Case Study in chapter five provides an indication of some of the other sites that may be suitable for higher density housing. This case study reveals the importance of achieving a balance between the needs of the community, developers as well as considering planning outcomes.

Overall, despite questions about whether the Sydney Metropolitan Strategy would be implemented (Bunker 2007), this thesis reveals that the northern councils are actively responding to the requirements within the Metropolitan Strategy and Subregional Strategies and working towards meeting the housing targets. Councils are actively consulting with the DOP, state agencies and the community as part of the decision making process. Additionally, the northern councils are generally upholding the principles and objectives stipulated within the strategies. In order to further investigate implementation of the urban consolidation policy, further research could be conducted as discussed in section 6.4 below.

#### **6.4 Future Research**

As discussed, the purpose of this thesis was to research the northern councils' responses to the Sydney Metropolitan Strategy. Time did not permit a comprehensive investigation of all the suburbs in Sydney. Future research could be conducted to understand the different ways that all councils in Sydney are responding to the Metropolitan Strategy and housing targets and therefore examine the issue on a larger scale. There is also scope for future research to examine the responses to urban consolidation policy in other states around Australia.

This thesis discusses the issue of housing in Sydney, with a focus on the implementation of the urban consolidation policy and housing targets. It is acknowledged that there are many other housing issues affecting Sydney and future research could include a more detailed investigation of some of the other housing issues introduced within the Metropolitan Strategy such as affordability, housing needs for an ageing population and urban renewal. Nevertheless, the implementation of housing targets is an issue currently being addressed by councils and is considered to be worthy of discussion.

Given that infrastructure and service provision is identified as an important issue within this thesis, further research could be conducted to monitor the way in which councils address this issue in the future. It would be interesting to research whether specific infrastructure delivery plans are prepared for the town centres accommodating to urban consolidation as well as documenting the timeframe in which this occurs. This research could include further monitoring of any discussions between the state government and local councils about future commitments to the improvement of infrastructure.

As stated in chapter one, this research is predominantly a qualitative analysis of state and local responses to urban consolidation. Future research could focus on community responses and reactions to local government urban consolidation policy. It would be interesting to analyse community responses during the council decision making process, as well as their responses to the higher density housing after it has been built. While community responses to proposed higher density housing are discussed within this thesis, the main analysis is undertaken from the perspective of the State Government and local councils. Overall, the focus of this thesis has allowed for a detailed understanding of the issue of urban consolidation and housing targets from the perspective of state and local government.

## **6.5 Summary**

This thesis analyses the approach towards urban consolidation contained within the Metropolitan Strategy and Subregional Strategies. This thesis finds that the strategies encompass an approach to urban consolidation that is significantly improved from past approaches and focuses on concentrating housing in well connected and accessible locations. This thesis also investigates and critiques the way in which the northern councils are responding to the strategies and implementing the housing targets. As discussed, councils in the northern suburbs of Sydney are upholding the principles and objectives contained within the Metropolitan Strategy and are working towards achieving the housing targets.

This thesis finds that the Hornsby Housing Strategy provides a pertinent example of how councils can successfully plan for urban consolidation while considering a range of issues relating to design, built form, location, as well as social, environmental and economic concerns. An issue relating to all councils is the importance of preparing a detailed infrastructure and service delivery plan to support the demands that are generated by the pressures of urban consolidation. Ultimately, the northern councils are working towards translating the objectives of the Metropolitan Strategy in a manner that is generally sensitive to the unique constraints and opportunities within particular LGAs.

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**APPENDIX A**

THE UNIVERSITY OF  
NEW SOUTH WALES



FACULTY OF THE  
BUILT ENVIRONMENT  
HUMAN RESEARCH  
ETHICS ADVISORY  
PANEL

2 July 2009

Application No: 95031  
Project Title: Investigating Sydney councils response to the department of planning housing targets.

Attention: Lauren Baroukh

Dear Lauren,

Thank you for your application requesting approval to conduct research involving humans. The Panel has evaluated your application and upon their recommendation, has attached the decision below.

Please be aware that approval is for a period of twelve months from the date of this letter, unless otherwise stated below.

All further information/documentation (if any) is to be submitted to FBE HREAP via Student Centre. Please submit originals plus four copies. Email submission will not be recognised.

**Decision**

**Approved with conditions**

**Your application is approved; however, there are certain things you must do, before you may conduct your research. Please see below for details, and your responses will assist us in completing your file.**

<b>Items that must be completed before Research can commence</b>	<b>Item 1</b>	Your application indicates that you may need to obtain one or more Letters of Support before you conduct your research. Letters of Support are required whenever you involve any organisation (other than UNSW) or any individual (other than an employee of UNSW) in your research, whereby: (a) you intend to interview, survey or include employees in a focus group; or (b) your research is wholly or partly funded by any organisation (other than UNSW) or individual (other than an employee of UNSW). Please contact your Supervisor for further direction (if applicable). A Letter of Support <u>must</u> conform to one of the formats indicated in <b>Form 6</b> . Please forward all Letters of Support to HREAP to complete your file.
<b>Advisory Comments</b>	<b>2</b>	Any approval to conduct research given to the applicant Researcher is done so on the condition that the applicant Researcher is at the date of approval: (a) a Student undertaking an approved course of study in the FBE; or (b) a member of Academic Staff in the FBE. If, at any time subsequent to the date of approval and prior to completion of the research project the applicant Researcher ceases to be either of (a) and (b) above, then any prior approval given to the applicant Researcher to conduct will be deemed to be revoked forthwith. The applicant Researcher must inform the FBE HREA Panel immediately upon any change, or possible change, to the applicant's status that may affect any prior approval given by the Panel to the applicant Researcher to conduct research.

Evaluation Authority:

Michael Brand (Convener)  
FBE HREA Panel

Approving Authority:

Jim Plume  
Head of School  
Faculty of the Built Environment



**APPENDIX C**

FBE HREAP FORM 4 – PROJECT CONSENT FORM January 2007

**PROJECT CONSENT FORM**

Project Title: **Investigating Local Government Responses to the NSW Department of Planning Housing Targets.**

THE UNIVERSITY OF  
NEW SOUTH WALES



FACULTY OF THE  
BUILT ENVIRONMENT

You are making a decision whether or not to participate in a research project.

This PROJECT CONSENT FORM enables you to indicate your preparedness to participate in the project. By signing this form, your signature indicates that you have decided to participate.

You will be given a PROJECT INFORMATION STATEMENT that explains the project in detail, and that statement includes a revocation clause for you to use if you decide to withdraw your consent at some later stage. The PROJECT INFORMATION STATEMENT is your record of participation in the project.

This PROJECT CONSENT FORM will be retained by the researcher as evidence of your agreement to participate in this project.

Please complete the information in this box.

Please indicate which of the following options you agree to by ticking one of the following options:

- I consent to being quoted and identified
- I consent to being quoted but I do not consent to being identified
- I do not consent to being quoted and I do not consent to being identified

.....  
Signature of Research Participant

.....  
Please PRINT name

.....  
Date

Name of researcher: **Lauren Baroukh**

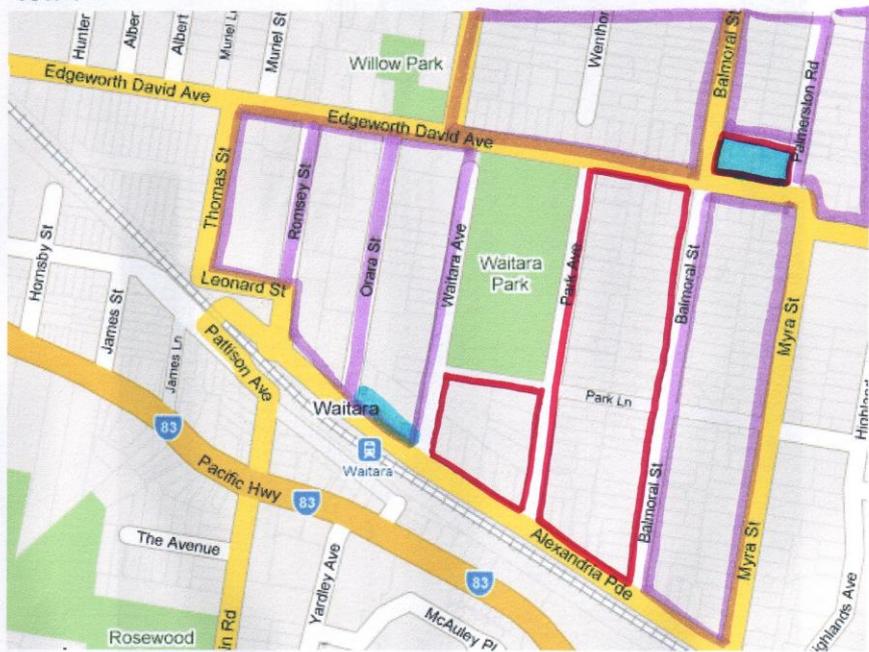
## APPENDIX D

Interviewee	Details of Interviewee	Purpose of Interview
<p><b>James Farrington</b></p>	<p><b>Manager of Strategic Planning at Hornsby Council</b></p> <p>Duration of Interview: 1 hour</p> <p>Date of Interview: 14 August 2009</p>	<p>James Farrington has much experience with the past and current Hornsby Housing Strategies. The purpose of this interview was to understand Hornsby Council's approach to addressing the housing targets and any issues arising from the preparation of the Housing Strategy.</p> <p>This interview also provided insight into the discussions that took place between the Department of Planning and Hornsby Council in the negotiation of housing targets, decision making within council and community consultation.</p>
<p><b>Peter Fryar</b></p>	<p><b>Consultant Planner</b></p> <p>Duration of Interview: 1 hour</p> <p>Date of Interview: 11 August 2009</p>	<p>Peter Fryar worked at Hornsby Council for 10 years in a managerial role. The interviewee now works as a consultant planner and has recently submitted an application to Hornsby Council for three additional sites to be included within the Hornsby Housing Strategy and considered for rezoning for higher density housing.</p> <p>This interview provided a consultant perspective on the Hornsby Housing Strategy.</p>

**APPENDIX E**

-  Visit of sites identified within Hornsby Housing Strategy
-  Inspect nature and form of surrounding development
-  Inspect built form and service provision in town centres

**Waitara**



**Hornsby**

