

**NSW PARLIAMENTARY LIBRARY
RESEARCH SERVICE**

**A Suburb Too Far? Urban
Consolidation in Sydney**

by

Jackie Ohlin

Briefing Paper No 4/03

RELATED PUBLICATIONS

Swain, Marie: *Urban Consolidation and Dual Occupancy Development*, NSW Parliamentary Library Briefing Note, No 012/95

Smith, Stewart: *Urban Consolidation: Current Developments*, NSW Parliamentary Library Research Service, Briefing Paper, No 23/97

ISSN 1325-5142
ISBN 0 7313 1729 7

March 2003

© 2003

Except to the extent of the uses permitted under the *Copyright Act 1968*, no part of this document may be reproduced or transmitted in any form or by any means including information storage and retrieval systems, without the prior written consent from the Librarian, New South Wales Parliamentary Library, other than by Members of the New South Wales Parliament in the course of their official duties.

NSW PARLIAMENTARY LIBRARY RESEARCH SERVICE

David Clune (MA, PhD, Dip Lib), Manager..... (02) 9230 2484

Gareth Griffith (BSc (Econ) (Hons), LLB (Hons), PhD),
Senior Research Officer, Politics and Government / Law..... (02) 9230 2356

Talina Drabsch (BA, LLB (Hons)), Research Officer, Law (02) 9230 2768

Rowena Johns (BA (Hons), LLB), Research Officer, Law..... (02) 9230 2003

Roza Lozusic (BA, LLB), Research Officer, Law (02) 9230 3085

Stewart Smith (BSc (Hons), MELGL), Research Officer, Environment ... (02) 9230 2798

John Wilkinson (BA (Hons), MA), Research Officer, Economics (02) 9230 2006

Should Members or their staff require further information about this publication please contact the author.

Information about Research Publications can be found on the Internet at:

www.parliament.nsw.gov.au/WEB_FEED/PHWebContent.nsf/PHPages/LibraryPublications

Advice on legislation or legal policy issues contained in this paper is provided for use in parliamentary debate and for related parliamentary purposes. This paper is not professional legal opinion.

CONTENTS

EXECUTIVE SUMMARY

BACKGROUND.....	1
URBAN DEVELOPMENT.....	1
DEMOGRAPHIC CHANGES	2
HOUSING AFFORDABILITY AND DRIVERS OF CHOICE	2
IMMIGRATION TRENDS	3
URBAN CONSOLIDATION	4
CURRENT ISSUES.....	4
ENVIRONMENTAL SUSTAINABILITY	6
ECONOMIC SUSTAINABILITY	7
SOCIAL SUSTAINABILITY	10
SMART GROWTH	12
CONCLUSION	14

Acknowledgements: The author would like to acknowledge PlanningNSW officers who assisted with the provision of information for the development of this paper. The advice and assistance provided by Stewart Smith and David Clune of the NSW Parliamentary Library is also acknowledged.

The Author: Jackie Ohlin is a Project Officer working with the Legislative Assembly Committees Secretariat of the NSW Parliament. She is a geographer who has previously worked as a planner and community development practitioner in Local Government.

EXECUTIVE SUMMARY

The imperative for urban consolidation is the need to house people in more compact cities. In Australia and around the globe, proponents of consolidation have struggled against cultural and economic forces which have seen urbanisation lead to sprawl in our major cities.

It is now clear that environmental constraints upon the growth of Sydney, at the urban fringes will drive the need to seek more sustainable solutions to city growth. At the same time, social changes such as household size and structure and immigration trends will continue to have a strong impact on urban growth. Further, Sydney's role as a Global City will exert its own pressures for ongoing growth.

If that growth is to be sustainable, it will inevitably include strategies of urban consolidation. Key to the success of these strategies will be:

- achieving consensus upon targeted consolidation;
- managing partnerships between government, community and industry that contribute positively to models of quality urban consolidation;
- focusing policy outcomes upon 'triple bottom line' measures in environmental, economic and social terms; and
- bringing it all together locally in such a way that trade-offs and benefits of urban consolidation are understood.

This paper explores these dimensions in some detail. It examines the potential for urban consolidation in Sydney, concentrated upon the heavy rail network. It also outlines the current interest in 'smart growth' as a strategy for managing the containment of urban sprawl and promoting urban consolidation within that process.

BACKGROUND

The context for policies supporting urban consolidation arises from a desire to address housing needs through an objective of more compact cities which integrate residential development with transport, employment and other services.

Urban consolidation strategies have a chequered history among methods or instruments designed to influence urban policy outcomes. The sum of that history helps to inform current policies and methods and offers some insight into their analysis. Critical to that analysis is the interrelatedness of urban consolidation with other strategies, policies and outcomes. Principal among these are population policy, environmental management, economic development, urban design issues and social policy and outcomes.

The imperative to address urban housing needs is based upon a number of factors. These include:

- the historic determinants of urban development in Australia, including a concentration of population in major capital cities from the very beginning of European settlement;
- massive recent demographic changes in household size and structure;
- strong economic impacts upon housing affordability;
- the factors driving choice of housing types; and
- the effects of immigration trends.

These factors will be discussed below.

Urban Development

In spite of the popular myth of a nation built largely on its rural population, since European settlement Australia has always been highly urbanised. Clinging to the coast with apprehension and an instinct for survival, constrained by geography and the technology to conquer it, our first cities grew quickly to domination¹. Sydney is now at the forefront of urban development across the country through its economic dominance and migration trends.

Sydney's emergence as an economic powerhouse is due both to historic antecedents and also to the advantages of agglomeration. Of the regional head offices of the top 20 firms in the fields of accounting, advertising, management consulting and international real estate, 39 per cent are in Sydney. Ten per cent are in other Australian States and the remainder are located in Hong Kong, Tokyo or Singapore. Head offices of overseas banks are predominantly in Sydney. Sydney accommodates 85 per cent of merchant banks and is the prime hub of international air traffic within Australia². These strengths have enabled Sydney to better withstand the shocks associated with economic restructuring (for example from job losses in the manufacturing sector), and indeed the diversity of the city's economy may have made it more attractive for employment growth than other urban areas. Sydney's economic success has, in turn, led to its further expansion as a regional economy within a city.

¹ Powell, JM: *Environmental Management in Australia, 1788-1914*, Oxford University Press, Melbourne, 1976, pps 10, 11

² Murphy, P: 'Sydney Now: Going Global in the Space of Flows', in O'Connor, ed, *Houses and Jobs in Cities and Regions*, University of Queensland Press, Brisbane, 1999

Sydney has gone through particular growth 'spurts', and from 1995, Sydney recorded its strongest growth since the 1960s. There were 4.15m people in Sydney in 2001; projections now indicate that Sydney's population will reach 4.5m by 2010 and not 2021 as earlier forecast.³ This trend poses a particular challenge for planning, and imposes certain constraints in terms of finite parcels of land available for development within the Sydney Basin.

Demographic Changes

The most dominant demographic changes affecting urban growth are as follows:

Decreasing household size.

Household size has fallen from 2.9 persons to 2.6 persons in the space of two decades, and this trend shows no sign of abating. The Australian Bureau of Statistics forecasts an average household size of 2.3 persons per household by the year 2021.⁴

Women in the workforce.

The current participation rate in the workforce for women is 55.2%, up from 51.8% in 1990. The participation rate for women in the workforce with children aged 0-14 years is 49.8%.⁵ The role of women in the workforce indicates a complex set of relationships around choices about family structure, household size and the factors driving housing affordability.

The ageing of the population.

The proportion of older people in Australia will increase by over 50% in the next 15 years, increasing pressure upon planners to provide the range of housing choices necessary to accommodate the diverse and changing needs of older people as life expectancy extends and individual needs change. The planning challenge is to optimise integration of housing for older people with related human services and transport infrastructure.

Housing Affordability and Drivers of Choice

The interaction between demographic changes and housing choices (or constraints) have produced a variety of remarkable intra-city results. For example, by 1996, more younger households (most without children) were located in the inner city, compared with the previous decade. In Sydney, 84 per cent of the increase in younger households were housed in higher density developments across the city. While 'lifestyle choice' may have been a driver for some of these households, research indicates that housing affordability constraints may have also 'displaced' households from lower density housing.⁶

Home ownership rates among younger households declined by 7 per cent from 1986 to 1996, but ownership rates for single households (particularly single women) have

³ PlanningNSW: *Managing Sydney's Urban Growth*, Sydney 2002

⁴ Australian Bureau of Statistics: *Australian Social Trends*, 2001

⁵ *ibid*

⁶ Yates, J: 'The Rhetoric and Reality of Housing Choice: The Role of Urban Consolidation' in *Urban Policy and Research*, vol 19, No 4, December 2001

increased. In the 'middle ring' suburbs of Sydney, home ownership rates fell by 10 per cent between 1986 and 1996, and again, this trend is attributed to housing affordability⁷.

While home ownership rates fell in the middle ring suburbs, average household income increased for younger people in the inner suburbs over the period 1986 to 1996. This influx of high disposable incomes has had effects, in turn, upon the 'high end' of the inner city rental market, increasing unit and housing prices in general, and upon the 'spatial polarisation' of housing types.

In the five-year period to 2002, housing supply was distributed across Sydney as follows:

Inner City	24% of new housing stock
Middle ring suburbs	22% of new housing stock
New Outer suburbs	27% of new housing stock
Established Outer suburbs	25% of new housing stock.

(Inner City suburbs accommodating new housing development include: South Sydney, Sydney, Randwick, Botany and North Sydney. Middle Ring suburbs with the highest levels of dwelling production include: Parramatta, Canada Bay, Rockdale, Hurstville and Ryde. Outer Ring (established) suburbs include Holroyd, Hornsby, Wyong and Gosford, while new outer suburbs are located at Castlebrook, Rouse Hill, Spring Farm Camden and St Mary's-Blacktown).⁸

New outer suburbs have continued to provide a high level of housing growth, although this share has fallen since 1994, from 42 per cent to 27%⁹.

Housing choice is not simply a matter of preference, but is also dictated by supply, as evidenced by the types of housing dwellings proposed for Sydney over the next five years. This includes:

32,460 in the inner city (98% of which are multi-unit dwellings)
 39,427 in the middle ring (87% of which are multi-unit dwellings)
 32,930 in outer established suburbs (71% of which are multi-unit dwellings)
 34,580 in outer new suburbs (94% of which are detached houses)¹⁰.

Immigration trends

Of all current population trends, immigration has arguably the greatest impact upon Sydney's growth. Immigration to Sydney and Melbourne has always been markedly ahead of other Australian cities and regions. The Australian Bureau of Statistics notes that immigrants are more highly urbanised than the Australian-born population – in 1999, 83% of recent arrivals were located in one of the capital cities. In 1999, 37% of immigrants were located in New South Wales and 26% in Victoria¹¹. Sydney's receipt

⁷ *ibid*

⁸ Planning NSW: *Managing Sydney's Urban Growth – Housing Forecasts*, Sydney, 2002

⁹ *ibid*

¹⁰ *ibid*

¹¹ Australian Bureau of Statistics: *Australian Social Trend*, 2001

of a disproportionate share of recent arrivals is attributed to family/community support networks and to Sydney's role in both the Australian and the global economy¹².

The spatial effect of immigration trends upon regions within the city is apparent. The Western Sydney Regional Organisation of Councils (WSROC) has found that 41 per cent of overseas born residents live in Sydney's west. The population of the west has risen 40 per cent in 20 years and a further 500,000 people are expected to move to the west by 2019¹³.

The population of western Sydney is also predominantly younger, requiring a focus on services which include education, training and employment for young people as well as physical infrastructure needs.

Urban Consolidation

Urban consolidation is essentially an approach to planning which allows more compact, higher density development, usually in selected locations across the city. Ideally, these locations will be chosen to integrate with transport networks, employment opportunities and social infrastructure. Some recent urban consolidation projects have taken advantage of 'brownfields' sites (old industrial land) to develop completely new, consolidated developments. Some of the claimed benefits of urban consolidation include: environmental benefits through a smaller 'footprint' on the landscape; better integration with and use of public transport services; improved ease of access by residents to employment and to local services; and improved entry into the housing market with more affordable real estate than detached dwellings.

CURRENT ISSUES

The combination of the factors described above contributes to a projection of 27,000 new dwellings needed across Sydney each year¹⁴.

Each one of these factors has environmental, economic and social implications which need to be assessed by policy-makers and planners who determine and put into effect urban policy objectives. If one of those objectives is to check unfettered growth, a key question must be how much urban consolidation is possible or desirable.

The limits to urban sprawl have been highlighted in ongoing studies over recent decades. In the 1970s, this discussion was characterised as opportunity mixed with caution. By the 1990s, household equity issues and housing affordability focused the urban consolidation debate. In the new millennium, the focus of discussion is city sustainability.

Although the 'ecological footprint' of urban sprawl is a fact, its sustainability along with the sustainability of urban consolidation are yet to be comprehensively addressed in terms of 'triple bottom line' evaluations – that is, taking into account economic, environmental and social considerations.

¹² Murphy, P: 'Sydney Now: Going Global in the Space of Flows', in O'Connor, ed, *Houses and Jobs in Cities and Regions*, University of Queensland Press, Brisbane, 1999

¹³ WSROC: *Western Sydney Regional Profile*, Sydney 2002

¹⁴ PlanningNSW, *Managing Sydney's Urban Growth – Housing Forecasts*, Sydney, 2002

Work is proceeding, however, through Government Departments such as the Department of Land and Water Conservation (DLAWC) and the Environment Protection Authority (EPA) in relation to catchment protection indicators. Local Councils, State and Federal governments have been involved in developing increasingly sophisticated State of the Environment Reporting indicators; pollution is estimated through vehicle kilometres travelled; other specific urban pollutants are measured by the EPA, and biodiversity is recognised in protected communities and monitored by some of the measures described above.

In relation to evaluating the economic development impacts of urban sprawl, some work is being undertaken by Government on the real costs of transport; the scale of resource usage in different urban settings; the life-cycle costs of building materials (where both Government and industry have been involved) and the costs of providing services to different urban areas.

Similarly, community development is being evaluated in terms of housing affordability across different suburbs and human service cost provision. This effectiveness of and cost-savings through investment in 'place' development is also being undertaken by Councils and by PlanningNSW. ('Place development' is a planning term used to describe an integrated planning focus on a given locality, usually to revitalise or provide a boost to a community centre.)

The Australian Bureau of Statistics has investigated 'progress indicators' in a project titled *Measuring Australia's Progress*. The project seeks to address and link measures of human capital, natural capital, produced and financial capital and social capital. A report is due in late 2003.

The Total Environment Centre has just released a report titled *Sydney – The Urban Sustainability Challenge* which suggests that previous attempts to contain Sydney have failed, and argues for a better urban vision, management and reduction of our ecological footprint or the consequence will be 'an unwelcome and observable reduction in the quality of life'.¹⁵ The Total Environment Centre further suggests the need to introduce sustainability benchmarks, investment in key infrastructure and a range of incentives to change old habits.

A key planning challenge will be to assess and integrate all of these triple bottom line considerations into a truly 'whole-of-government' and whole of community approach. Academic Valerie Brown concludes that the 'hoped-for' integration will depend upon the quality of synthesis across four dimensions: the consensus between management sectors, the cooperation across work areas, the compatibility of policy goals and the focus at a given place and scale. Brown concludes that: 'Only an economics of diversity could provide decision-makers with the information they need in all (these) dimensions.'¹⁶ No one dimension of a 'triple bottom line' can be knocked out of consideration because it is perceived to be without an economic number.

The 'triple bottom line' will be examined below in turn in terms of environmental, economic and social sustainability.

¹⁵ Total Environment Centre: *Sydney – the urban sustainability challenge*, Sydney, January 2003

¹⁶ Brown, Valerie A (ed): *Managing of local sustainability: policy, problem-solving, practice and place*, University of Western Sydney, Hawkesbury, 1997, p 135

Environmental Sustainability

The natural limits to growth within the Sydney Basin provide a stark backdrop for consideration of urban consolidation policies. Some very real physical limits to growth were defined in the 1950s in the Cumberland Plan, that is, Sydney Basin is essentially contained, in a geographic sense. Subsequent plans and urban consolidation strategies have focused on catchment protection and air pollution as primary environmental concerns. With the current focus of urban planning on sustainability, the protection of biodiversity, including protected communities, becomes a particular issue in those areas identified for possible urban development.

More recently, the vulnerability of Sydney as a metropolis abutting bushland has gained media prominence, and has raised a query about the ‘sustainability’ of extending urban development into heavily forested areas prone to bushfires.

There is little dispute that urban development impacts significantly on the environment. Proponents of urban consolidation have indicated that a focus on consolidation will help to reduce environmental damage, provided that consolidation is accompanied by related strategies, such as reduced car use, expansion of public transport and inner city revitalisation¹⁷.

Critics of urban consolidation have queried its ‘simplistic initiatives’, suggesting these offer few overall environmental benefits and are, in fact ‘more likely to intensify environmental stresses rather than ameliorate them.’¹⁸

At the 2001 Forum on Sydney’s Population Future, Dr Tony Recsei, President of ‘Save Our Sydney Suburbs’ argued that the calculable area of farmland and bushland saved by urban consolidation in Sydney (700 metres on Sydney’s 40km diameter, on his figures) is both disproportionate to the total loss of bushland and farmland across the State. Further, he claimed that the area of bushland saved fails to take into account the loss of amenity and air cleansing provided by trees in an urban environment.¹⁹

At the same Forum, Mayor of North Sydney Council, Councillor Genia McCaffery queried whether the ‘removal of backyards from our cities’ was desirable.²⁰ Councillor McCaffery highlighted a contentious issue in terms of environmental considerations, because although there may be a perception of emotional attachment to the suburban backyard, the reality for many suburban dwellers is that their houses are increasing in size upon progressively smaller blocks. The *Sydney Morning Herald* recently reported that the average new home now has floor space of 267 square metres, compared with 169 square metres in 1990.²¹

At the same time, Councillor McCaffery indicated the need for a more comprehensive debate about the consequences of urban consolidation policies.

¹⁷ Newman P and Kenworthy J, 1999 *Sustainability and cities: Overcoming automobile dependence*, Island Press, Washington DC

¹⁸ Troy P N, 1996 *The Perils of Urban Consolidation*, p129, The Federation Press, Sydney

¹⁹ Recsei T, 2001 *Dictatorship of the high density bullies*, Proceedings of Sydney’s Population Future Form, 3 March 2001

²⁰ McCaffery G, *Urban Consolidation – Local Government Experience?*, Proceedings of Sydney’s Population Future Form, 3 March 2001

²¹ Sydney Morning Herald: *I’ll see your fibro and double it*, 23 December 2002

Still other environmental factors enter the discussion but remain unresolved – is the environmental balance sheet improved by consolidation, or is the changing role of the city affecting issues such as air pollution, waste management and water management?

There are other environmental factors such as the profligate use of water in Australian's urban centres (350 litres per person per day, regarded by the Senate Committee on the Environment as 'unsustainable').²² Water use and management is inexorably changed by urban consolidation, but is it made worse or better? Stormwater runoff increases, but new urban infill projects, such as Green Square in the inner Sydney can become prototypes for innovative stormwater management. Similarly the Rouse Hill development focus on recycling of 'grey water' indicates new solutions for water re-use at the urban fringe. As the Senate Environment Committee states, Australia does have the technology, resources and know-how to 'fix the problems', but 'the real need is to force the pace of change'.

In Vancouver, British Columbia, authorities concerned about the environmental impact of urban sprawl invited citizens to engage in scenario-building to envision the effects of various lifestyle decisions on the environment and develop policy goals accordingly, based upon expressed preferences and values.²³ Community members participated in large number in focus groups which used simulation techniques to envision the effects at 20 years, 30 years, etc, on their city and environs. Trends such as household size, ownership of 'weekenders', car ownership and useage, consumption and recycling, etc were examined for their potential impact. The object of the exercise was to enable community members to see first-hand the latent effects of current lifestyle choices, rather than to speculate remotely about the potential effects of the choices made by 'others'. The focus group outcomes fed into policy decisions by local and State authorities regarding land management.

Economic Sustainability

Assessing the economic development impact of urban consolidation must include the whole issue of land economics and the intervention of respective spheres of government in the process. This includes: taxation, tax concessions, land purchase, market subsidies, joint ventures, sales of government land and even less tangible features such as 'consumer confidence'. These affect principally the supply side of the housing market. However, the current rental unit boom indicates there is a spillover effect and a correlation with factors affecting the demand for housing which can also accelerate or retard growth in particular parts of the city.

A further economic consideration is the extent of savings relating to infrastructure costs through urban infill. Debate about the quantum of these savings against the cost of servicing new lots at the urban fringe has persisted since the earliest manifestations of urban consolidation. First among the critics of these savings was Patrick Troy, who in the early 1990s deplored the manner in which figures for estimates of lot development were compiled. He noted that some calculations included *all* infrastructure (such as

²² Senate Environment, Communications, Information Technology and the Arts References Committee *The Value of Water: Inquiry into Australia's management of urban water*, Parliament House, Canberra, December 2002

²³ For further information, see the following websites:

-Envision Sustainability Tools: www.envisiontools.com

-Sustainable Development Research Institute, University of British Columbia: www.sdri.ubc.ca

human services as well as engineering works) while others were more selective.²⁴ These various ‘costings’ were then used to justify greater urban consolidation or greater urban fringe development, depending on the motivation of the players.

Instances of ‘spare capacity’ in geographic areas marked for urban consolidation have also been queried. Troy indicated that for areas such as education investment, its costs and how these are allocated are more appropriately the role of ‘social policy rather than urban policy directed at the form of development’.²⁵

Water supply, sewerage, drainage, road works, electricity supply and communications networks are all examples of infrastructure where proponents of urban consolidation have implied savings through consolidation. Troy noted that earlier studies had reported savings as high as 44% of the cost of provision.²⁶ There is now less of a focus on such claims. Opponents of urban consolidation have indicated that savings are nonetheless overstated because there are greater costs associated with construction in higher density areas, the cost of loss of amenity is not factored in, and existing infrastructure needs to be redesigned to build in ‘over-capacities’.

There has also been concern about the equity of allocating certain infrastructure costs for new housing to the private sector, a process which is perceived by opponents of urban consolidation as inflating the cost of construction at the urban fringe in favour of the inner city. They suggest that the historical location of services (for example hospitals) and public subsidies (for example public transport) accrue to and advantage the costs of inner urban infrastructure provision.

Academic Chris Maher noted that implicit in the concept of ‘locational disadvantage’ at the urban fringe is ‘a view of the urban form that sees the current low density of Australian cities as inefficient, excessively costly to service, environmentally damaging and socially unjust’.²⁷ He considered, however, that many of the perceived servicing problems occurred as a result of both the concentration and the centralisation of resources in cities, and poor adaptation from a manufacturing/production economy to an information economy. Maher concluded that a trend toward decentralisation of all activities is the result of the changing role of cities globally. This change in role affects both the nature and location of work and the housing choices of families, in particular. He suggested, therefore, that ‘attempts to restructure urban areas in spatial terms by emphasising a greater densification and centralisation of activity is unlikely to succeed.’²⁸ Maher believed that a planning response should guide an urban form which is multi-centred, coordinated and well-serviced.

The current focus of PlanningNSW is on strengthening spatial relationships through Regional Structure Planning, Integrated Land Use and Transport initiatives, a series of ‘Place’ initiatives and the roll-out of PlanFirst integrated local planning approaches. It is indicative of a planning response attempting to strike a balance between suburban spread and densification. The approach is sometimes termed ‘smart growth’ with a

²⁴ Troy PN, 1996 *The Perils of Urban Consolidation*, p 58, The Federation Press, Sydney

²⁵ *ibid* p 62

²⁶ *ibid* p 74

²⁷ Maher C, ‘Locational Disadvantage and Concentration: A Review of the Findings’, in *Houses and Jobs in Cities and Regions*, Kevin O’Connor (ed) University of Queensland Press, Brisbane, 199, p 53

²⁸ *ibid*, p 53

focus on sustainability, rather than seeking, necessarily, to stop or limit growth. Smart growth is explored in more detail below.

In the discussion about the economic benefits of integrating transport and urban consolidation, it has been suggested that some proponents of urban consolidation are arguing far too simplistically the benefits of increasing density and increasing the proportion of travel by rail. Does it follow that residents of higher-density developments clustered around railway stations will use that form of public transport? Sydney-based Transport Planner George Pund indicates that there is a need to more critically examine variables such as service quality for public transport in order to understand why simple equations do not necessarily work.²⁹

Other research cited by Pund has shown that greater accessibility to local services and facilities does not necessarily reduce travel by car out of the local area.³⁰ Inner urban areas subject to urban consolidation are struggling with policies to curb car ownership. Current work is under way within PlanningNSW to determine whether car ownership is on the decline in areas marked for urban consolidation. However, car ownership rates, in general, have risen relative to the Australian population. In 1971, there were 3.3 persons per motor vehicle and in 2002 the figure was 1.9 persons per motor vehicle.³¹

Car use has defined our modern city, and as urban sprawl increases, so does car dependency and in turn energy consumption. Current measures to assess the efficiency or otherwise of urban consolidation focus specifically on savings in vehicle kilometres travelled. Urban researchers Newman and Kenworthy have studied the relationship between energy uses and density in 'global cities' over many years, and have illustrated that private transportation energy use declines as population density increases – and walking, transit and bicycles claim some mode share from cars. Thus they suggest that 'trading in sprawl development patterns for greater density should help to slow the increase in energy consumption'. United States' planner and academic, Oliver Gillham indicates that while their hypothesis is sometimes contested, the case they put still remains strong when counter arguments are examined in detail.³²

The Property Council of Australia calls for a 'boost' to major CBDs/centres across Sydney, including Sydney CBD, North Sydney, Parramatta and Liverpool. This, it proposes, needs to occur by way of an economic plan for Sydney, which reinforces and builds upon the viability of Sydney's rail network and helps Sydney fulfill its role as Australia's Global City. The Property Council suggests there is a need to boost investment in infrastructure and jobs in key centres to support residential populations in those centres.³³

To this extent, the Property Council has an ally in Greenpeace. In the lead-up to the Sydney Olympics, Greenpeace published the *Strategy for a Sustainable Sydney* which indicated the capacity for 'targeted consolidation' (that is a 400m/5 minutes walking and a 1500m/5minute cycling radii around stops on the existing rail network).

²⁹ Pund G, *Urban form, level of service and bus patronage in eastern Sydney*, paper prepared for 25th Australasian Transport Research Forum, Canberra, October 2002.

³⁰ Pund G, 'City Density and Public Transport: A review of three recent publication', *Australian Planner*, vol 38, no 2, 2001, pps 75, 76

³¹ Australian Bureau of Statistics: *Motor Vehicle Registrations*, 2002

³² Gillham O, *The Limitless City*, Island Press, Washington DC, 2002, p 110

³³ Property Council of Australia: *Initiatives for Sydney*, Sydney, November 2002

Greenpeace saw the strategy as a means of reducing, not eliminating car dependency, promoting health and mobility, saving time and reducing pollution.³⁴ The *Strategy* envisaged that through targeted consolidation, model re-development of inner-city sites and construction of urban villages there would be sufficient capacity for Sydney's growth until well past 2013.

A 'twist in the tail' of the economic sustainability of urban sprawl is the issue of declining household size. Scientists are now indicating that smaller households of one or two occupants are inefficient users of natural resources, adding considerably to the number of houses that need to be built to accommodate the same number of people, and thus adding to urban sprawl, to the destruction of vulnerable habits and to increased energy use and costs. One possible solution, suggested for 'biodiversity hotspots' (that is, regions where native species are threatened by human activity), is for tax incentives to encourage people to share their houses.³⁵ An alternative to such social engineering may be the urban consolidation path to integrated planning for anticipated trends, changing housing stock to suit needs and requiring far greater energy efficiency in new building design and materials.

Social Sustainability

A query which hangs over the phenomena of ongoing growth at the urban fringe is the sustainability, in social terms, of a megalopolis. How equitable or accessible can services or lifestyles be if they are accompanied by overwhelming challenges in terms of transport, distance and associated cost issues? Similarly, how participatory can a community's life be when constrained by the logistics of negotiating these challenges on a daily basis? 'Mum's (or Dad's) Taxi' is a very real phenomena for urban fringe dwellers. Car dependency is high, and accessibility to some of the most fundamental human services is governed by this. Individuals without access to cars may end up both cash-poor and time-poor as they wait for intermittent public transport. The social divide created by those with green space and with the means of access to it is potentially one of the tests of a sprawling city's sustainability.

Critics of urban consolidation counter this vista of car-dependent suburbs with descriptions of 'unlivable' inner-city environments accompanied by noise, pollution, alienation and crime.

The discussion about social sustainability, like the issues of environmental and economic sustainability relies upon something of a balance. Planning capacity needs to be created to allow, within reason, for peoples' choices in lifestyles. If, for example, housing affordability locked individuals and families into particular distributions, this could be deemed unsustainable.

Housing affordability is only one factor affecting the dynamic of the market, and thus social sustainability. The boom in inner-city apartment construction to meet a perceived demand, but also to satisfy a trend in investment properties as wealth creation opportunities, has placed pressure upon cheap housing stock in inner suburbs. Cheaper housing stock has traditionally been the preserve of people on low incomes, including boarding house residents. As this stock is either refurbished or demolished to make way

³⁴ Greenpeace Australia, *Strategy for a Sustainable Sydney*, Surry Hills, 1993, pps 8-13

³⁵ Sydney Morning Herald: *Single lifestyle threatens species*, 14 January 03 (quotes article in scientific journal 'Nature')

for apartments, low income residents are displaced. In spite of planning instruments such as State Environmental Planning Policy (SEPP) 10, which seeks to preserve current boarding house stock, little can be done to stem the inexorable loss of this form of housing from areas earmarked for development. How sustainable is a community that displaces its most needy residents? What other creative solutions can be offered to ensure the retention of forms of low income housing *in situ*?

What of the question of choice? While the *desire* for a particular housing type may drive the expectations of housing consumers, they will be constrained by both income and housing prices. However, if one form of housing tends to dominate over another, choices may also be constrained by what is currently on offer in the market. For example, are one bedroom apartments to be the choice of entrants to the housing market? Similarly, do families choose to maximise their real estate footprint in the suburbs, or are large houses on small lots all that is on offer to them? How effectively are changing housing needs being anticipated by industry and by urban planners?

Underpinning much of the discussion about social sustainability within cities is the concept of community. Sociologist Robert Putnam suggests that this is evident through surveys in which respondents say they wished they lived 'in a more civil, more trustworthy, more collectively caring community'.³⁶ Proponents of urban growth extol the virtues of a relaxed, united suburban community, while advocates for inner-city dwelling refer to vibrant, diverse and 'cutting-edge' communities. While echoes of these *styles* of community exist, the realities for many urban dwellers, wherever they live can vary markedly from the idealised image. Putnam believes that in America, suburbanisation has led to a loss of community. In *Bowling Alone* he traces the decline in 'social capital' that has occurred since the 1960s. Social capital refers to connectedness between people, including social networks and the norms of reciprocity and trust arising from them. Community involvement and civic engagement derive from these. Putnam concludes that Americans are right that the bonds of communities have withered, and 'right to fear that this transformation has very real costs'.³⁷

In Australia, academics and local community development practitioners alike have sought to understand and apply concepts of social capital in our societal context. Strong evidence of social capital may be found where there are community development processes investing in communities – that is, investing 'existing community resources, acquired money and the economy of joint effort'.³⁸ Local Government practitioner groups conclude, however, that the building of social capital must genuinely encourage and develop existing social networks, community bonds and ties, social organisation and the exercise of trust. Social capital is a truly public good, transacted voluntarily – it cannot be contrived.³⁹

At the present time, many traditionally close-knit inner-city communities have undergone immense and far-reaching changes which have profoundly affected community cohesiveness. Parts of the community of South Sydney, for example, are so highly mobile that people are changing residences on an average of once every eight

³⁶ Putnam, Robert: *Bowling Alone: The Collapse and Revival of Middle America*, Simon and Schuster, New York, 2000, p 402

³⁷ *ibid*

³⁸ Local Government Community Services Association of Australia: *Working together to develop our communities*, Townsville, 1999, p 8

³⁹ *ibid*

months. A boom in high-density flat development offers advantages of a 'city lifestyle' for some, but many of the cashed-up, educated older singles making the move to the city fringe are relocating from the eastern suburbs or from interstate. How can social networks be nurtured for new residents in such an environment? Part of the challenge involves using new tools to foster community engagement, building a bridge between high-technology and 'high-touch' or the need to connect with neighbours on a practical and human level. Cutting edge Council libraries can bring Internet access within reach of broad populations, maintain a focus on traditional services and integrate other Council service functions such as payment of rates, obtaining development consents, etc. Urban consolidation sites offer the capacity for broadbanded services to connect new community members and to connect new members with old.

Robert Putnam suggests that to build bridging social capital can also involve team sport and art and cultural activities, which do not require shared ideology or shared social or ethnic background. He challenges his countrymen and women to find new ways 'to participate in (not merely consume or 'appreciate') cultural activities'.⁴⁰

Critically, the social sustainability of urban consolidation will depend upon the extent to which people in communities are ready for or can tolerate change. The catch-cry of communities caught up in the change process is 'over-development'. While perceptions of 'over-development' may be relative, human nature suggests that peoples' poor experiences of urban consolidation will most clearly define their negative responses to it. To date, much of the NIMBY(Not In My Back Yard)ism associated with urban consolidation has pivoted upon fear about falling property values, street congestion, rising crime rates and poor design. Hence, it will be important for the success and acceptance of urban consolidation projects that they emphasise planning aspects such as quality and energy efficient design, high building standards, attention to noise attenuation, a focus upon visual impact and access to open space, relationships with public transport and jobs and genuine social integration.

Proponents and opponents of urban consolidation alike have suggested that resistance to urban consolidation requires an improved process of 'selling the message' both to consumers but also to government agencies responsible for planning new developments. What is involved in such a process? Might it involve community members discussing issues of housing choice and quality, community expectations, trade-offs and opportunities, or might it be seen as a more cynical draught of propaganda?

For government agencies, what opportunities could they take up or develop to pursue sustainable practice? To what extent can the frustrated desire for a truly 'whole of Government' approach to urban planning, which embraces sustainability, be achieved?

Smart Growth

PlanningNSW's policy focus for the city has included both sustainability and PlanFIRST policy reforms (for a 'city of cities'). But there has also been particular and expanding interest in the planning approach known by the term 'smart growth'.

Smart growth encompasses a number of elements. It seeks to:

- conserve open space

⁴⁰ *op cit*, p 411

- provide boundaries limiting the outward extension of growth
- provide compact, mixed use developments amenable to walking and transit
- revitalise older downtown areas, inner-ring suburbs and rundown commercial areas
- provide reliable public transport to reduce car dependence and support alternative development patterns
- coordinate regional planning
- equitable share resources and burdens (including affordable housing) across the metropolitan area.⁴¹

There is a growing body of literature describing examples of smart growth, in cities such as Boston, Barcelona, Dublin, Boulder and Vancouver, to name a few. Some of these examples are included in Gillham's recent book. As might be expected of material describing new planning approaches, they provide both food for thought and fuel for skeptics.

Importantly, where some early studies of urban consolidation exhibited the bias of their authors, Gillham's work applies rigour to the study of smart growth. For example, he describes a study undertaken in the Salt Lake City region. Entitled *Envision Utah*, it examines different scenarios for future urban growth examining the infrastructure costs of accommodating a growing population for different patterns of growth from urban sprawl to compact development. Analysis of the study indicates that there are savings to be gained in infrastructure costs (roadways, transit systems, utilities and water and sewer systems) through increasing density. However, while a sprawling city is most expensive to service, the scenario with the highest urban density is more expensive to service than the next level of density down the scale. The authors of the study attribute these costs to spending on transit in the most dense city scenario. Gillham suggests that 'there may be some as yet unidentified level of density lying somewhere between typical post-war sprawl and dense high-rise urban environments that is optimal in terms of infrastructure costs'⁴². Gillham suggests that the boundaries of this optimal level have not as yet been defined.

Meanwhile, a number of authors from Rutgers University have suggested that while the future of smart growth is promising, its success is far from assured. They indicate that inhibiting factors include its lack of adoption across governments, ongoing market support for urban sprawl, car dominance and the need for better implementation techniques.⁴³

Some of the smart growth initiatives evident in Sydney are intended to provide examples of 'good practice' for the building industry, but these can strike rocky ground when industry feels ignored or agencies overlook consultation in the haste for results. The best chances for success are instances in which agencies from all spheres of government and industry work in problem-solving partnerships to achieve better urban planning outcomes. In projects such as Green Square, a 'brownfields' inner-city

⁴¹ Gillham O, *The Limitless City*, Island Press, Washington DC, 2002, p 158

⁴² *ibid*, pps 124, 125

⁴³ Burchell, Robert W, David Listokin and Catherine C Galley: 'Smart Growth: More Than a Ghost of Urban Policy Past, Less Than a Bold New Horizon' in *Housing Policy Debate*, Volume II, Issue 4, Fannie Mae Foundation, 2000

redevelopment, for example, the role of Council and the South Sydney Development Corporation in negotiating for better sustainability outcomes requires recognition and support if it is not to be overridden by the drive for industry profit.

Industry leaders suggest that while they are not opposed to urban consolidation, they would prefer to see a 'balance' in relation to PlanningNSW's approach to new lot production. Accompanying this, they say, should be increased certainty for an industry with long lead times⁴⁴.

There is support from both critics and proponents of urban consolidation for a more comprehensive, new Strategy Plan for metropolitan Sydney. Such a Plan is mooted by PlanningNSW, and may address the sorts of process issues which would need to embrace partnership development; truly integrated, 'whole of Government' commitment to sustainable urban planning solutions; and, creative responses to housing affordability.

CONCLUSION

Sydney is a city geographically bounded in a natural basin which gives planners and decision-makers pause for thought in terms of what is a desirable or sustainable pattern of urban growth.

In this climate, Sydney is absorbing the population equivalent of a city the size of Wagga Wagga every ten months, both through natural growth and immigration. In this climate, urban consolidation is presented as one clear option to counter sprawl and meet growth demands.

A Global City in the truest sense, Sydney must now confront the reality of the dynamism that status brings. In embracing growth, the city's planners and decision-makers can also shape its future.

Historians conclude that the industrial revolution brought with it the re-shaping of our cities in dramatic new ways. Can the opportunities presented by post-industrial society, coupled with the urgency of sustainable solutions to untrammelled growth provide us with pointers toward smarter urban growth? Gillham suggests, for example, that the industries which have a stake in suburbanisation may be able to modify their plans of development – specifically in brownfields sites linked to viable transit systems⁴⁵. There are tremendous opportunities for industry, with peer encouragement and government incentives, to contribute more substantially to energy reduction in materials used and in more practical and attractive building design and use.

In Sydney, the specific opportunity presented for urban consolidation is that of the city's heavy rail network. To provide sustainable solutions, the need for the direction that integrated planning can provide has been identified. This will need to be accompanied by committed partnerships among government, industry and community members.

⁴⁴ Interview with Wayne Gersbatch, Director and Rachel Short, Assistant Director, Planning and Environment, Housing Industry Association, 16 January 2003

⁴⁵ Gillham O, *The Limitless City*, Island Press, Washington DC, 2002, p 256

Sustainable urban consolidation will not replace the suburban landscape, and will present some challenges for affected parties. Sustainable urban consolidation will need to strive for outcomes which show results across the 'triple bottom line': environmentally responsible, focused upon building economic development and socially responsive.