Liveability of Australian cities

Chapter 6

Introduction

Liveability refers to the degree to which a place, be it a neighbourhood, town or city, supports quality of life, health and wellbeing for the people who live, work or visit. Cities considered to have a high degree of liveability tend to have a high level of, and widespread accessibility to, amenity. Amenity includes features such as open and green space; educational, social, cultural and recreational facilities. High-amenity places have not only higher financial value (property prices and rents) but also social, environmental, public health and cultural value (CABE 2007). High-amenity locations have been shown to be associated with better physical and mental health (Berry 2007).

Liveability encompasses these features of amenity as well as other characteristics of the built environment that reflect the way places are planned, constructed and connected. These characteristics of the built environment include the arrangement, design and construction of dwellings and other buildings, public transport systems, road networks and public spaces, walkability and accessibility to goods and services, and high quality communication technology. Liveability also refers to the elements of natural environment, such as low air pollution, the presence of parklands, trees, water or a view.

Apart from the physical features of cities and localities, a range of social factors contribute to liveability, such as political stability, social cohesion, lower risks to personal safety, conviviality and social inclusiveness, aesthetics, diversity among the population, and heritage. While opinions vary about the precise characteristics of liveability, liveable cities are widely perceived to be healthy, attractive and enjoyable places for people of all ages, physical abilities and backgrounds.

This chapter describes some of these aspects of liveability in Australian cities. As discussed in Chapter 2, Australian Cities in the International Context, Australian cities rank highly in terms of liveability compared to many other cities, but there are aspects of liveability that can be improved, often in specific locations within the cities.

Summary indicators

Dimension	Indicators
Health	The proportion of people not engaged in sufficient physical activity to confer a health benefit The rate of overweight persons and obesity
Amenity	Access to quality open space
Housing	Housing affordability index Rental stress
Living affordability	Vulnerability Assessment for Mortgage, Petrol and Inflation Risks and Expenditure (VAMPIRE) index
Accessibility	Proportion of households that can access main facilities and services (e.g. employment, education, health and cultural facilities) by public transport within 60 minutes

Key findings

- The design of urban environments can contribute to the health and wellbeing of communities by supporting active living, physical activity through walking, cycling and using public transport, and opportunities for social interaction.
- There is growing evidence that attractive, well-designed public open space is restorative, reducing mental fatigue and stress.
- Regular physical activity promotes physical and mental health. Research in Perth showed that adults who had access to large, attractive public open spaces were 50 per cent more likely to undertake high levels of walking.
- The most commonly reported health conditions among children and young adults were respiratory conditions. Exposure to urban air pollution in Australia accounts for 2.3 per cent of all deaths.
- Sydney and the Gold Coast have the largest gap in low cost private rental dwellings to meet the demand of the very low income households. In Sydney this means that there is one affordable and available dwelling for every 15 very low income households.
- Analysis of the distribution of vulnerability to fuel, mortgage and inflation risks and expenses shows very high vulnerability is distributed across large tracts of the outer areas of Australia's cities.

Health

Public health refers to populations rather than individuals. The focus of public health is to prevent rather than treat disease. Major public health achievements in the 20th century included reductions in infant mortality, control of infectious diseases, dental hygiene, better nutrition, and improvements in vehicle and workplace safety.

Urban environments are strongly associated with public health concerns, with contributing factors being water and air quality, noise, temperature, access to open and green space, opportunities to exercise, and opportunities to have social interaction.

There is a strong socio-economic dimension to public health outcomes. A higher proportion of people in the lowest socio-economic groups have poorer health. Higher proportions are overweight, physically inactive and suffer mental illnesses.

A higher proportion of people in the lowest socio-economic groups live in areas characterised by poor urban design, inadequate infrastructure and facilities, and lack of healthy, affordable food options (Giles-Corti & Donovan 2002).

Convivial neighbourhoods and civic centres have attractively designed streets, buildings and public open space that encourage physical activity for people of all ages and range of abilities. They increase the opportunities for positive social interaction between people. Creating convivial neighbourhoods and centres can support a sense of community and wellbeing among residents and has been associated with positive mental and physical health (Giles-Corti 2006).

Conversely, real and perceived crime, traffic and noise, monotonous streetscapes and building types, streets and locations that are not welcoming or create physical barriers for pedestrians, and a lack of other pedestrians in the area, all serve to heighten people's anxiety, reduce the likelihood of incidental exercise, and reduce sense of community.

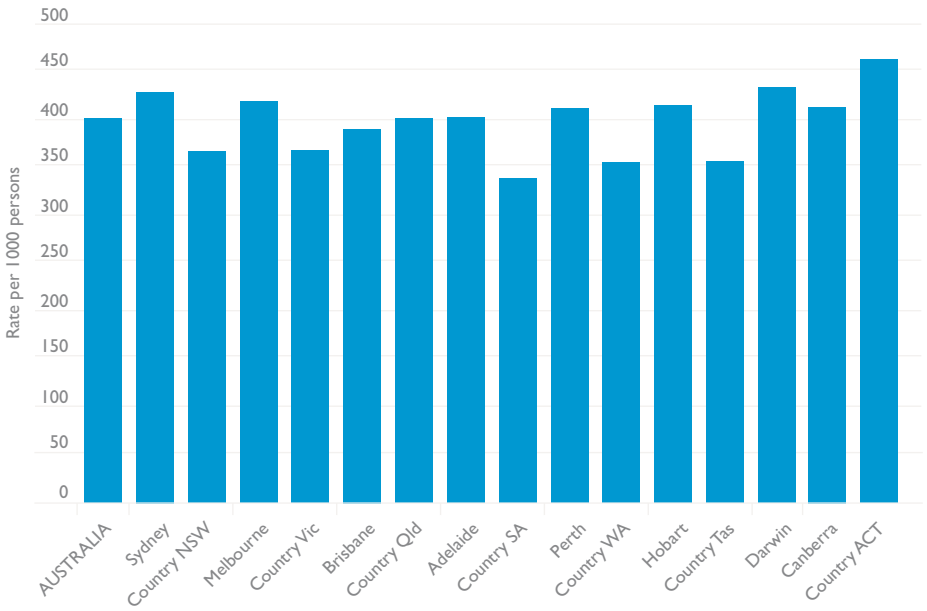
Contemporary debates about the link between urban environments and public health are particularly focused on levels of physical activity, obesity, mental health and respiratory illnesses.

Obesity

The proportion of the population who are either overweight or obese is a critical public health issue in Australia as identified in the House of Representatives report on obesity (2009). The annual financial cost of obesity is estimated at $8.3 billion, with additional costs of lost wellbeing of $49.9 billion, totalling $58.2 billion annually (Access Economics 2008). The National Health Survey 2007–08 found that 61 per cent of Australian adults and 25 per cent of children are overweight or obese (ABS 2009). Over 6 million Australian adults are overweight and another 4.1 million are obese.

Although overweight and obesity is a problem nationwide, there is evidence that rates of people who are overweight and obese are lower in metropolitan areas than in regional areas (PHIDU, 2008). As a broad indicator of the people who are of healthy weight, Figure 6.1 shows estimated number of people in the normal weight range per 1,000 people in capital cities and their respective state and territory.

Figure 6.1 Rate of persons in normal weight range, 2004–05



Note: Rate of persons in normal weight range is estimated number of people 15 years and over in normal weight range, per 1,000 persons, 2004–05

Source: PHIDU 2008
Data compiled by the Public Health Information and Development Unit, University of Adelaide, using data estimated from the 2004–05 National Health Survey (NHS) ABS (unpublished); and ABS Estimated resident Population, average of 30 June 2004 and 2005

The House of Representatives' report on obesity, *Weighing it up (2008),* identified that the way land use has been planned in the Australian urban environment is a significant contributor to the high levels of obesity in Australia.

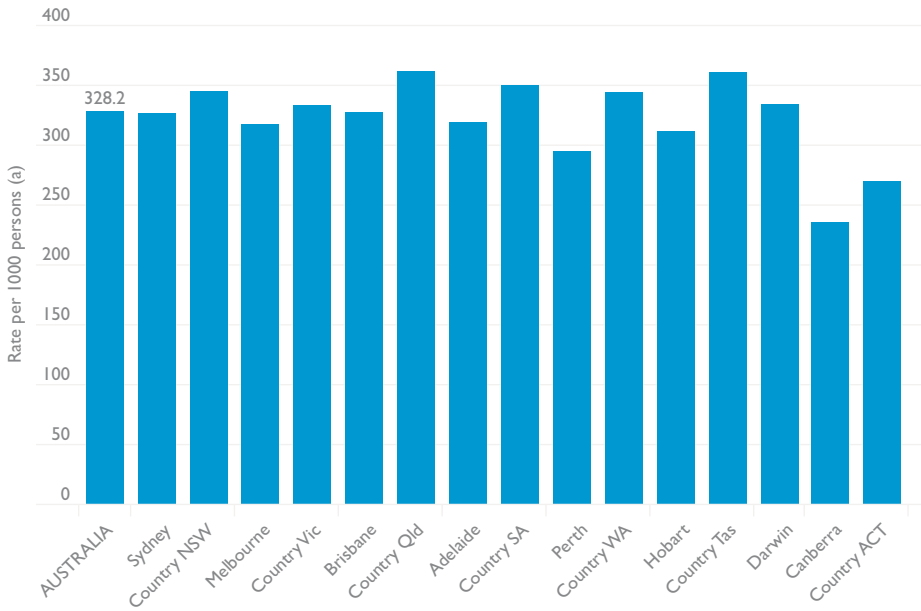
Physical activity

There is a correlation between increasingly sedentary lifestyles and higher levels of obesity. The 2007–08 National Health Survey revealed that almost three quarters (72.8 per cent) of adults report sedentary or low exercise levels, up from 69.4 per cent in 2001 (ABS 2009).

Regular exercise and physical activity decreases the risk of obesity and related illnesses like diabetes and heart disease, and also mental illness (Frank & Schmid 2004).

Figure 6.2 shows data for the rate of physical inactivity for people over 15 years of age for the metropolitan areas of each state and territory. Physical inactivity in these data is defined as those people who did not exercise in the two weeks prior to interview for the 2004–05 NHS through sport, recreation or fitness (including walking). All capital cities have lower rates of physical inactivity than the rest of their respective states and territories.

Figure 6.2 Rate of physical inactivity in metropolitan and country areas, states and territories, 2004–05



Note: Rate of physical inactivity is estimated number persons aged 15 years and over, not physically active per 1,000 persons) 2004–05.

Source: PHIDU 2008.
Data compiled by the Public Health Information and Development Unit, using data estimated from the 2004–05 National Health Survey (NHS) ABS (unpublished); and ABS Estimated resident Population, average of 30 June 2004 and 2005.

There is an increasing amount of Australian research showing that people's access to, and perceptions of, urban environments that support physical activity are associated with increased levels of physical activity (see Burke, Hatfield & Pascoe 2008; Giles-Corti & Donovan 2002). Research in Perth showed that adults who had access to large, attractive public open space were 50 per cent more likely to undertake high levels of walking (Giles-Corti et al. 2005).

For individuals, a lack of walkable urban environments, increased dependency on car use, and concerns about safety (for example, traffic safety or personal safety) have decreased opportunities for incidental exercise. Incidental exercise associated with the use of public transport is often under-reported. One Australian study has shown that walking to and from public transport adds up to about 2 km per day for an average Brisbane commuter (Burke & Brown 2007).

Mental health

Every year around 1 in 5 Australian adults suffers from a mental disorder such as depression or anxiety. Factors of the built environment that influence mental health include:

- opportunities that enable individuals to interact with others and feel part of a community

- visual and physical access to open space
- opportunities to exercise and relax (Giles-Corti 2006).

Rates of mental illness are higher in neighbourhoods where there are also high levels of socio-economic deprivation and overcrowding (Berry 2007).

Physical environment

Policies to deal with air and noise pollution (for example, restrictions on motor vehicle emissions) have been effective in reducing localised pollution. However, there are still significant health costs attributable to ambient air pollution, especially particulates. In Australia, exposure to urban air pollution accounts for 2.3 per cent of all deaths and 1 per cent of disability adjusted life years (Jalaludin et al. 2009).

Heat-related illnesses and death have also been associated with the 'heat island' effects in urban environments. The rates of these illnesses are likely to increase with the increasing temperatures associated with climate change.

Safety

Concerns about crime, whether real or perceived, and traffic safety reduce the likelihood of people cycling, walking and interacting with others.

Injuries or fatalities to cyclists and pedestrians are also related to the built environment and the priority given to motor vehicles over other modes of transport.

Housing

Access to suitable, quality housing is a human right and a basic need for health and wellbeing (CSDH 2008). The majority of Australians in cities live in high-quality housing by world standards. Securing suitable and affordable housing in the major cities can, however, be difficult for many lower-income households.

Appropriate housing

Accommodating an ageing population requires housing suitable for the physical needs of household members as well as located in accessible neighbourhoods, to ensure people of all abilities can fully participate in their communities throughout their lives. With the population above the age of 65 reaching 8 million by mid-century, and most of the existing housing stock not being accessible to people with mobility difficulties, an increasing proportion of housing will need to be made accessible or adaptable for older people.

Universal design is a set of planning and design principles that aim to create environments that are comfortably useable by people from childhood into their older years to the greatest extent possible, inclusive of the range of physical abilities and without the need for major adaptation or specialised design. Such modifications at a later stage can add substantially to the cost of housing for the household.

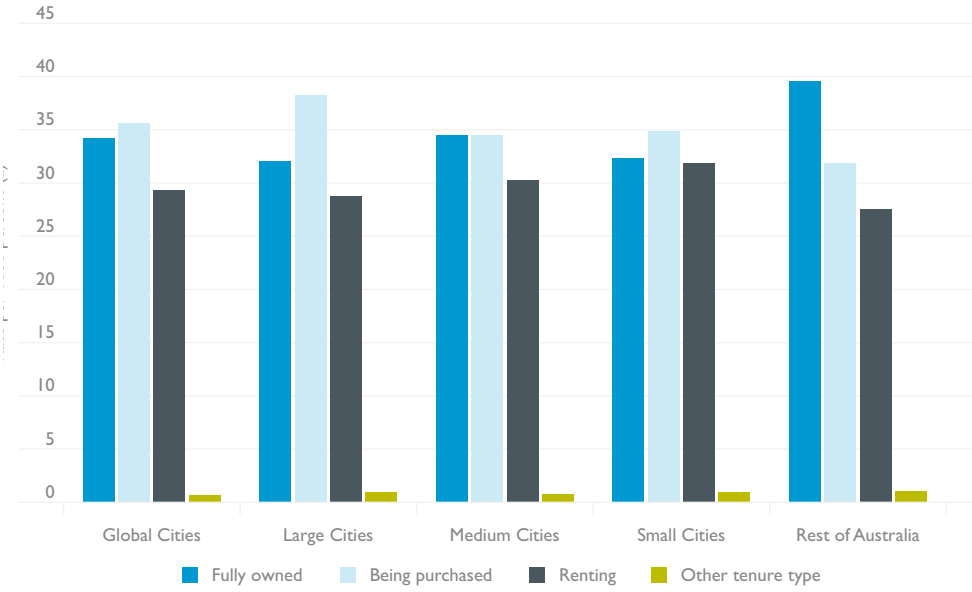
Tenure

The proportion of households who either own or are purchasing a home has remained at around 70 per cent since 1961 (Kyger 2009). However, there has been a change in the balance in the proportion of owners and purchasers in the decade to 2007 with a decline in the proportion of owners without a mortgage from 41.3 per cent to 34.3 per cent with a corresponding increase in those with a mortgage (ABS 2008a). In 2007, 22 per cent of households were renting from a private landlord and 4.7 per cent of households were renting from a state or territory housing authority.

Home ownership has been supported by government policy for decades because the social benefits of secure, adequate, affordable housing include improved health and educational outcomes and a productive workforce. Moreover, there is evidence that home ownership is related to energy conserving behaviours as home owners are more likely to install energy efficient appliances in their homes (Kelly & Fielding 2009).

Figure 6.3 demonstrates the difference in home tenure across the different sizes of Australia's major cities. In the largest cities of Sydney and Melbourne, there are slightly more homes being purchased than are fully owned. In the large cities of Brisbane, Perth and Adelaide, this gap is larger. This may be a result of the growth that Brisbane and Perth are currently experiencing. Outside the major cities there are more homes fully owned than being purchased, and the lowest percentage of renters. This may reflect the move of younger people to cities, as well as the higher housing costs.

Figure 6.3 Home tenure according to city size, 2006



Source: ABS 2006.

Because home ownership provides more security of tenure than renting, the benefits of housing for owner-occupier households tends to be greater than for renter households. In 2006 renters were three times more likely than owner-occupiers to have changed address

within the previous 12 months, with 35 per cent of renters households having lived at a different address within the past year compared to 10 per cent of owner-occupiers.

Not all of these moves were voluntary. The 2006 General Social Survey showed that the main reasons given by renters for moving house were the desire to have a bigger or better home (15 per cent) and employment reasons (14 per cent). A third main reason reported by a similar proportion of people (14 per cent) was that they moved house as a result of being given notice by a landlord (ABS 2008). The cost of moving house on a household's budget is considerable, increasing the cost of living over time and detracting from the social benefits associated with housing, especially for family households.

There is a substantial difference in the distribution of wealth and income between home owners and purchasers as a group and private and public tenants. Owners and buyers aged between 25 and 64 years have the highest incomes and are the wealthiest Australians, their wealth being six times higher than non-homeowners. Tenants of public housing have the lowest wealth and incomes (Australian Government 2008), but can have more secure tenancy and are less vulnerable to rising rental costs than households in private rental.

There are distinct differences in the social profiles of home owners and buyers and renters. In 2005–06 renters tended to be younger (61 per cent of people aged under 35 were renting), and more likely to be single (56 per cent of lone-person households aged between 35 and 44 years were renting). Following the common pattern of progression from renting to home ownership across the life course, less than 6 per cent of couple-only households aged over 65 years were renting.

For many lower-income households, renting is their only housing option throughout their life. Around half (49 per cent) of households in the lowest household income quintile were renting, 56 per cent of Indigenous households were renting (compared to 26 per cent for non-Indigenous households) and 59 per cent of lone-parent households were renting (compared to 20 per cent of couples with dependent children). In contrast, over two-thirds of first home buyer households with a mortgage were couples or couples with children.

Dwelling structure and tenure

Tenure and dwelling structure are closely related to each other in the Australian private residential market, with the majority of owner occupied housing being detached dwellings in contrast to the majority of rented dwellings, of which most are units, flats or apartments.

Living affordability

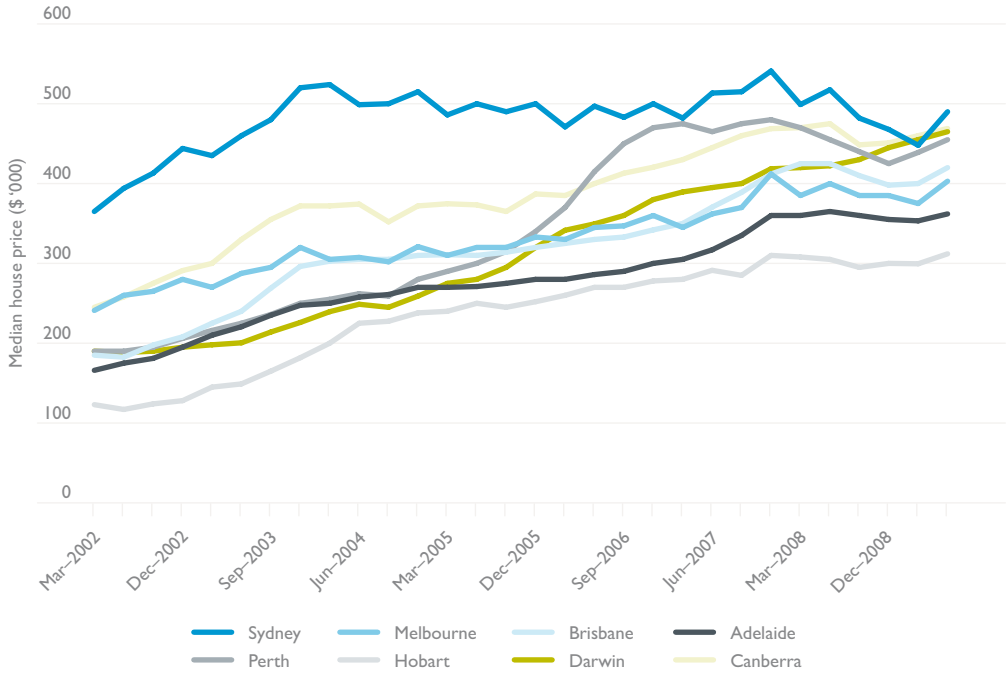
Living affordability refers to the combination of housing costs and other living expenses for households, like the costs of transport, energy and water utilities. Some of these costs for households vary depending on where people live. This is especially the case for the relationship between housing and transport. For example, by locating new housing a long way from jobs, people have to travel further for longer and usually by car.

Living affordability appears to have declined in many parts of Australia's major cities over the past decade because a growing number of households are experiencing financial stress related to rising housing and living costs (Miranti & Nepal 2008).

Affordable housing

House prices have increased by in excess of 50 per cent in real terms since 2000. Average house prices in capital cities have increased to the equivalent of over seven years of average earnings, up from three years in the post-war period to the 1980s (The Senate 2008). Rental prices have also risen substantially, increasing by 17 per cent since 2000 with a steep increase in rents in the past two years as rental vacancy rates have declined. House prices in all capital cities continued to rise over the period 2002 to 2008, except in Sydney where they were relatively stable from around December 2003 (Figure 6.4).

Figure 6.4 Median house prices in capital cities, 2002–2008



Source: ABS 2009a.

The 2008 Senate Select Committee Report on Housing Affordability in Australia (The Senate 2008) found the pressures on affordability are a function of strong demand and limited supply driven by strong population growth underpinned by a range of factors: higher immigration rates; the rate of increase in number of households being greater than the population growth rate; a decline in standard home loan interest rates from the mid-1990s; and greater availability of credit and the taxation system's incentives that have encouraged investment in residential property (through negative gearing provisions and the 50 per cent capital gains tax discount).

The National Housing Supply Council's *State of Supply Report 2008* has estimated that, as at June 2008, there was a shortfall in supply of 85,000 dwellings, including the number required to shelter the homeless and to provide additional rental units to bring vacancy rates to 3 per cent. The report concludes that under medium growth projections, there will be a cumulative gap of 431,000 dwellings by 2028 (NHSC 2009).

The National Housing Supply Council reported limited development of new dwellings for lower-income first home buyers in major cities because of land and construction costs and lower yield from an affordable product (NHSC 2009).

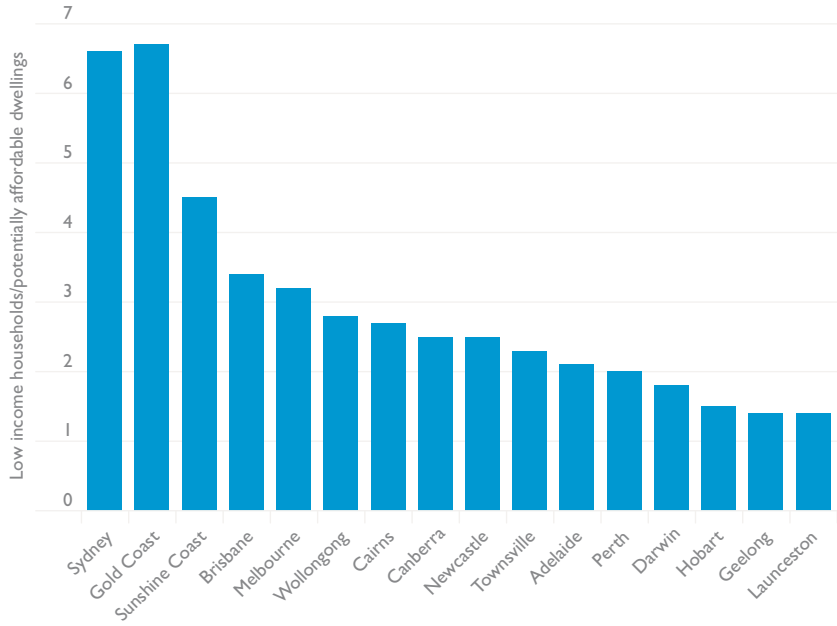
The Council will update these data in its 2010 report, which is expected to show the undersupply of housing becoming more acute due to the effects of the global financial crisis restricting housing finance while there is continued high population growth across Australian cities.

The Commonwealth and state and territory governments made a substantial commitment to improve the supply of affordable housing. The success of the strategy will become evident over the next decade. The commitment was supplemented by considerable investment in social housing as part of the 2009 stimulus expenditures. This included funding under the Social Housing Initiative for the construction of 20 000 new homes and refurbishments to 47 000 existing social housing dwellings by 2012; savings to over 300 000 new private dwellings from reforms under the $512 million Housing Affordability Fund and construction of an additional 50 000 affordable rental dwellings under the National Rental Affordability Scheme.

Rental affordability is a particular concern for low-income households in our major cities. The National Housing Supply Council report noted a shortfall of 202,000 dwellings for renter households within the lowest 20 per cent of income and a decline of some 90,000 social housing dwellings in the period 1996 to 2008. Again this problem is expected to be exacerbated by the effects of the global financial crisis and an associated reduction in housing investments.

Research investigating the change in the private rental market between 2001 and 2006 showed that the private rental stock expanded most at the higher rent brackets while the proportion of rental stock in the four lowest categories declined from 50 to 37 per cent (Wulff et al 2009). This has created a shortage of 71,000 dwellings for renters in the three lowest income categories. Using data from this research, Figure 6.5 shows that the number of low income households is greater than the supply of affordable private rental dwellings throughout Australia.

Figure 6.5 Index of affordable private rental dwellings



Source: Wulff, M et al. 2009

Operating costs

The operating costs of housing include the cost of energy and water consumed by the household. Household energy and water consumption is closely related to housing size. Along with the trend to increased house sizes has been an increase in the energy consumption of households. A range of grants and rebates are available to households to encourage the use of renewable energy and water savings but renter households are unable under existing tenancy arrangements to take up these options, unless the landlord provides them, and therefore are less able to benefit from reduced energy or water consumption costs.

Locational costs

The relationship between where a home is located, and where jobs, facilities and services are located, generates transport demand. The preference for single detached dwellings among home buyers has increased the demand for this type of housing, resulting in the expansion of the urban fringe. Many of these outer urban areas are at greater distances to centres of employment and services, thus increasing the distance and time of travel by household members. In many instances these outer urban areas have few public transport options and so the majority of household travel is by car.

Transport costs are the second-largest cost to households. The impact of the rising price of fuel will be felt most acutely in the outer suburbs of cities where car dependency is highest as a result of the combination of the dispersed residential development and limited public transport. Research into the distribution of households vulnerable to rising oil prices concluded that households in the middle and outer suburban areas of our cities will likely face the highest additional costs from higher fuel prices (Dodson & Sipe 2008).

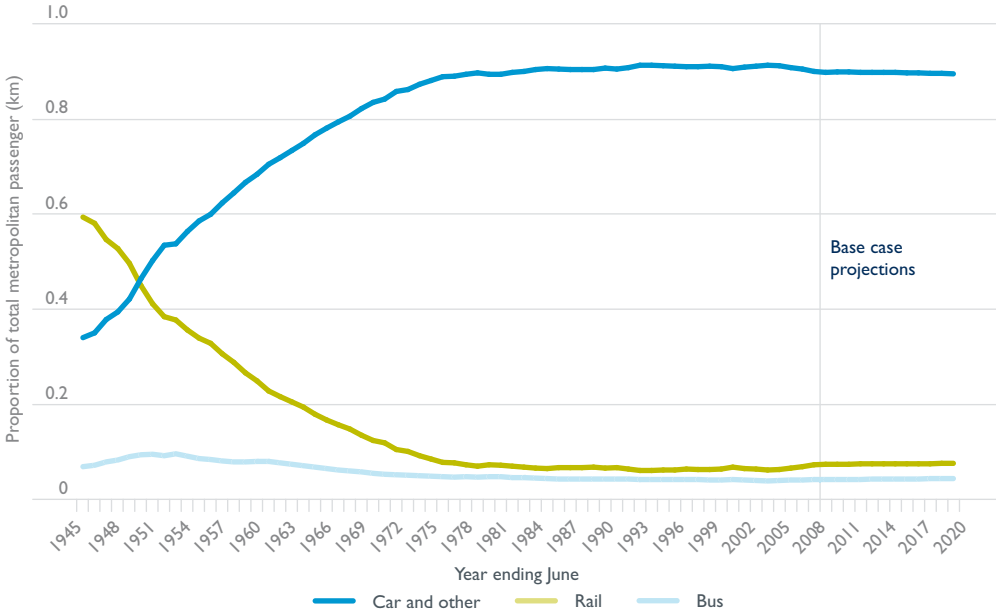
Transport accessibility and mobility

In addition to the cost of transport, the time spent travelling can have an impact on quality of life. Time spent commuting takes away from time spent with family and friends or participating in community, cultural and recreational activities.

A consequence of outward urban expansion has been an increased distance (spatial separation) between residential areas and locations of employment, resulting in long-distance commuting for workers, although there is evidence that commuting distances have been stable or even declining since the 1990's in a number of capital cities (BITRE 2009b). However, there is also evidence that commuting travel times have been increasing over the past decade for Brisbane, Sydney and Adelaide (Melbourne Institute 2009; Milthorpe 2007; NSW Transport and Infrastructure 2009).

The levels of car dependency in Australian cities has increased vehicle kilometres travelled at a rate faster than population growth. As discussed in Chapter 4 (Productivity), car dependency has created problems associated with high levels of traffic congestion, especially in the larger capitals of where infrastructure and public transport provision have not kept pace with growth rates.

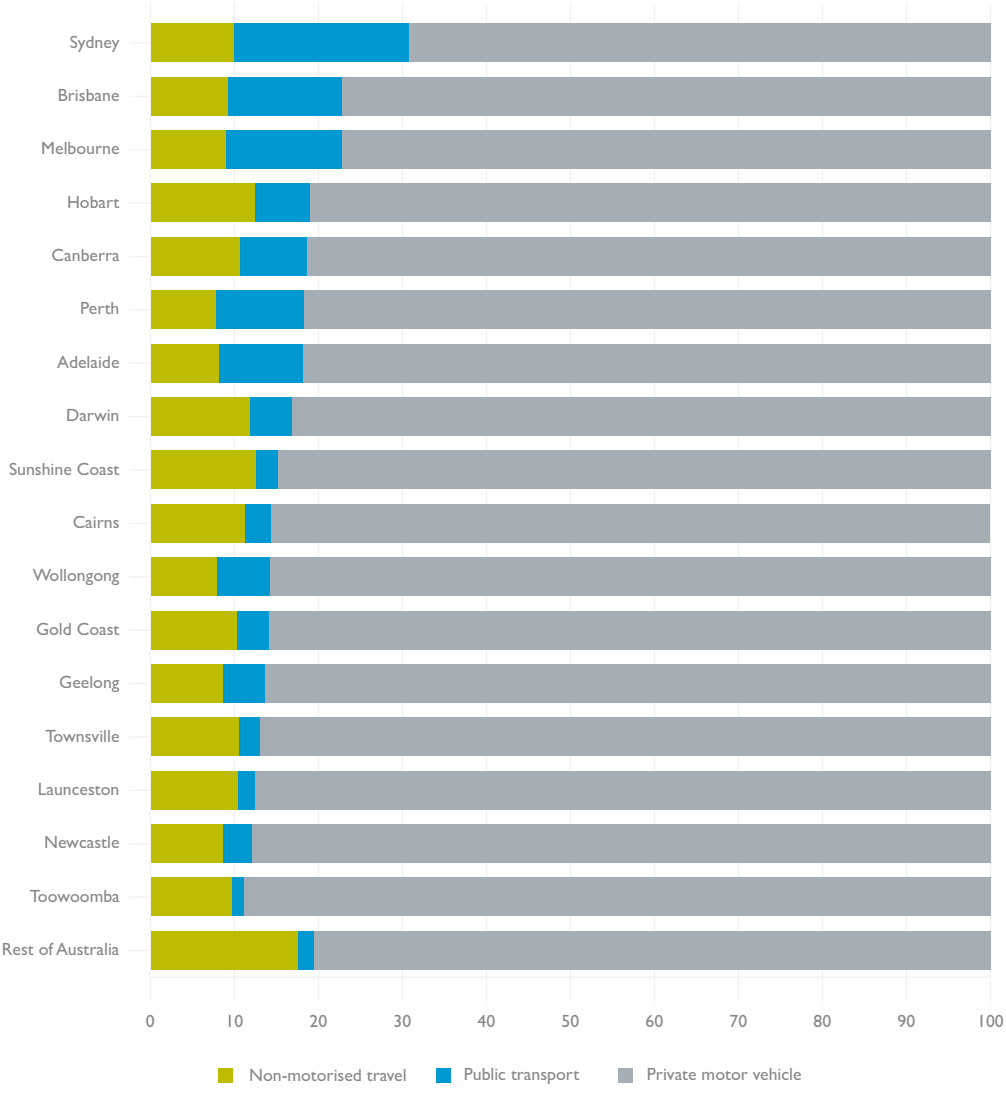
Figure 6.6 Capital cities motorised mode share of travel



Source: BITRE (2009) Information paper 31, Urban passenger transport. How people move about in Australian cities.

Figure 6.6 illustrates that private motor vehicles have been the dominant mode of travel for trips to work throughout Australia since the 1950s. Sydney has the highest share of public transport (Figure 6.7). Non-motorised travel (including walking, cycling, other self-propelled modes and working from home) has the highest share outside our major cities.

Figure 6.7 Modal shares of travel to work in major cities



Source: ABS 2006

Oil and mortgage vulnerability

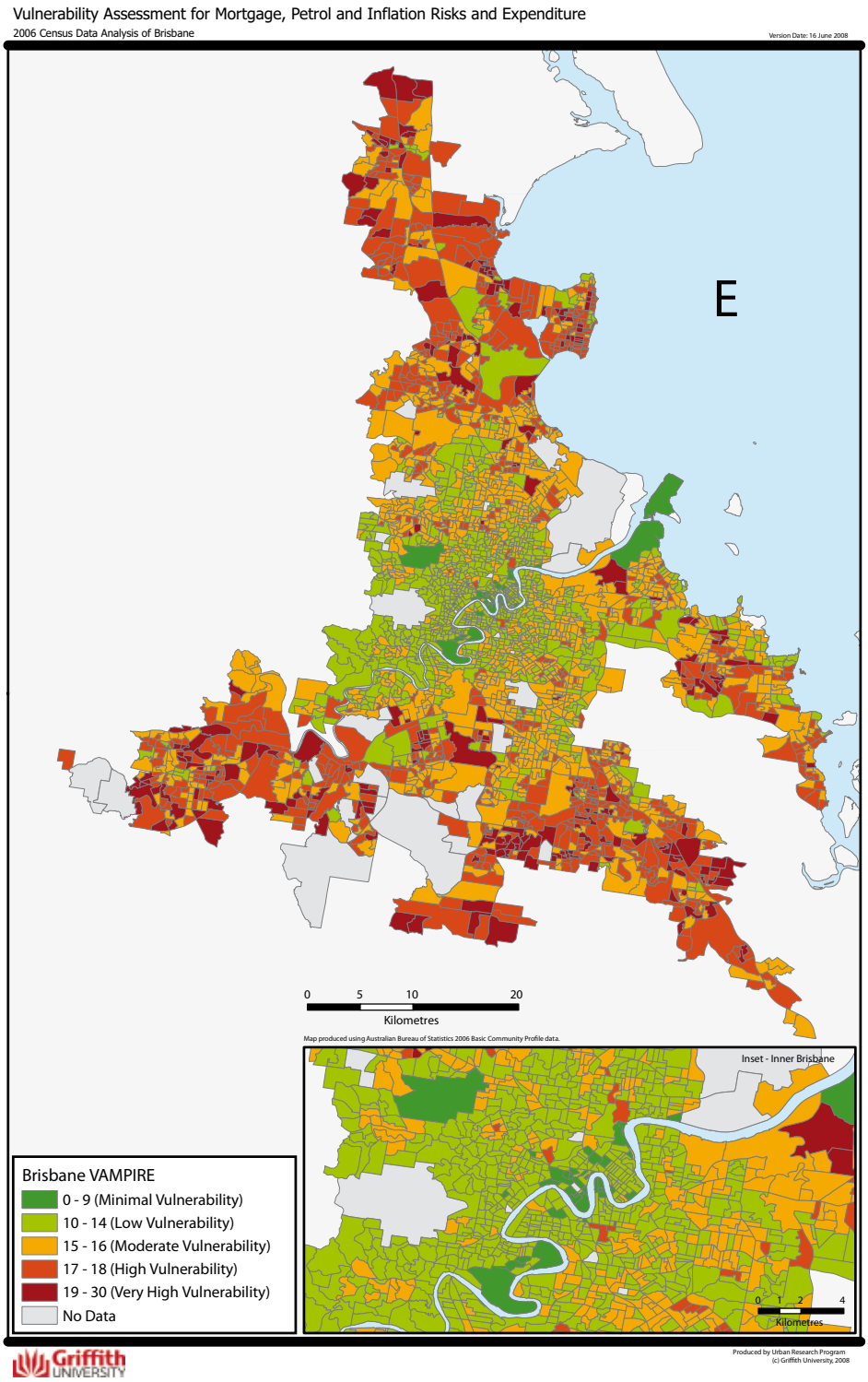
There are considerable spatial variations in living affordability based on cost of housing and the availability of transport alternatives to the private motor vehicle and the accessibility of places to the range of facilities and services within cities.

At the same time there are concentrations of lower-income households who may not have as high housing costs but have higher transport costs because of the location in which they live and the distances they need to travel to access jobs and services.

Indices such VAMPIRE (Vulnerability Assessment for Mortgage, Petroleum and Inflation Risks and Expenses) index developed at Griffith University by Jago Dodson and Neil Sipe (2008) identify the relative degree of stress in localities across the major cities. The VAMPIRE index is an indicator of relative vulnerability to increased petrol prices, interest rates and inflation. The index uses ABS Census data for households by four variables: journey to work by car, car ownership, income and home purchasing.

The distribution of vulnerability based on the VAMPIRE index for households in Brisbane is shown in Figure 6.6. This analysis shows that very high vulnerability is distributed across large tracts of the outer areas of Australia's cities. Other cities show a similar pattern.

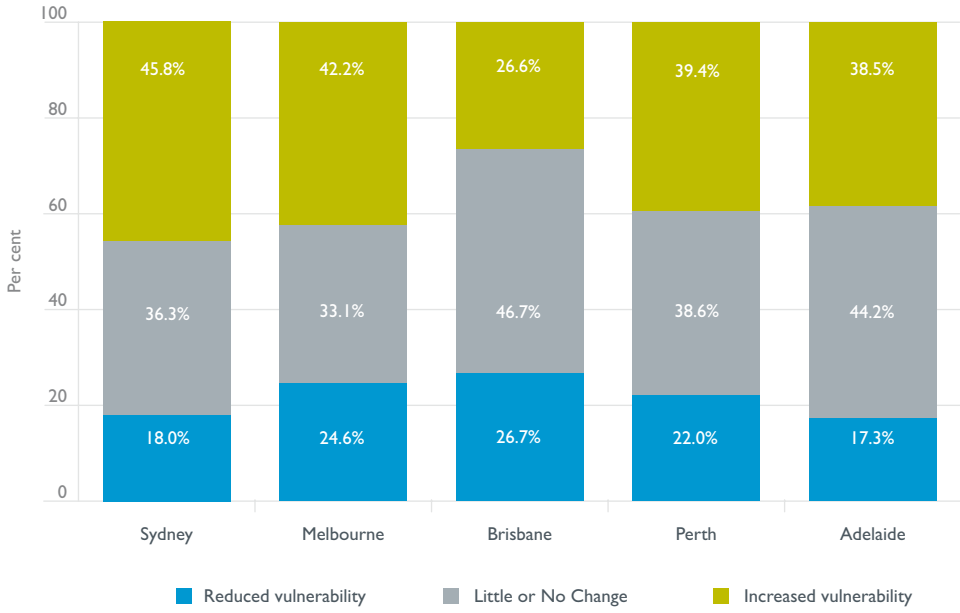
Figure 6.8 Oil and mortgage vulnerability in Brisbane, 2006



Source: Dodson & Sipe 2008 based on ABS 2006 Census data

In their analysis, Dodson and Sipe ranked vulnerability of ABS Census collection districts for 2001 and 2006 for the five largest cities. They then identified the change over that time. The results summarised in Figure 6.9 show that all cities except Brisbane had a greater proportion of collection districts that increased their vulnerability to oil and mortgage price rise than reduced their vulnerability. Of the five cities, Sydney had the greatest proportion of collection districts which increased their level of vulnerability.

Figure 6.9 Change in oil and mortgage vulnerability at the Census Collection District Level, 2001–2006



Source: Adapted from Dodson & Sipe 2008 based on ABS 2001 and 2006 Census data

This is not to say that all households in these areas became more vulnerable because change in the vulnerability index may also reflect some changes in the household composition and internal movements of households within cities. For example, where adult children leave home the number of cars at the dwelling may fall and this would be registered as a reduced vulnerability level. Nevertheless, the broader trend between the cities, and the distribution of vulnerability within cities, gives a good indication of likely localities that have relatively higher levels of vulnerability and, therefore, relatively lower levels of living affordability.

Inequalities between places within cities and issues of locational disadvantage are further discussed next in Chapter 7 Social Inclusion.

Communication technology

Increasingly, connectivity in and between cities and accessibility to goods and services for businesses and individuals is related to access to digital technologies and the internet. Access to high-speed broadband is now an essential part of the way Australians communicate socially as well as to do business. Already employment patterns are changing with the ability to work remotely via the internet. Internet communication is also becoming progressively more important to the delivery of education and health services.

The availability and coverage of affordable, reliable and fast broadband is therefore another aspect of the liveability of cities. It has the potential to reduce the tyranny of distance, particularly in relation to work and education, and provide greater equity of access to employment and leisure opportunities. It also offers greater flexibility to manage family and work life.

The Australian Government is establishing a National Broadband Network which aims to connect 90 per cent of all Australian homes, schools and workplaces with fast, affordable broadband. It is therefore likely that the proportion of dwellings connected to the internet in all cities and regional centres will increase over the next decade.

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