THE NEED FOR MODERATE INCOME HOUSING IN THE GREATER SYDNEY REGION

Prepared for Landcom

by

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September 2004

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EXECUTIVE SUMMARY

Chapter 1 INTRODUCTION

This report was commissioned by Landcom to assist in the development of its Moderate Income Housing Policy. This policy aims to develop market based affordable housing options for households with moderate incomes. For the purposes of this report, Moderate Income Households (MIHs) are defined as households with incomes between the 40th and 60th percentile of household incomes, which equated to approximately $42,000 to $65,000 per year in Sydney in mid-2003.

This report also aims to identify the characteristics of the moderate income housing market in Sydney and establish its current position with regard to housing affordability. In particular, the report sets out to address the following three tasks:

> Task 1: An historical assessment of the emergence of increasing 'unaffordability' in home ownership for moderate income households in Sydney.
>
> Task 2: An analysis of the current extent and nature of moderate income 'housing stress' in Sydney.
>
> Task 3: An assessment of the impact of housing affordability in Sydney on "key workers" on moderate incomes.

Chapter 2 BACKGROUND: THE HOUSING AFFORDABILITY ISSUE IN SYDNEY

Affordable housing is one of the most pressing, and perplexing, issues facing policy makers in Sydney. While there is little doubt that the increase in house prices in recent years in Sydney has left many Sydney-siders with significant increases in their housing equity, adding to overall levels of wealth, many others, in particular first home buyers, are experiencing major difficulties in finding affordable housing.

Following the release of the NSW Ministerial Task Force on 'Affordable Housing in 1998, Landcom has established a lead role in the development of innovative approaches to affordable housing provision. This has been realised through a body of research of which the current study is an example, together with 'supply' side demonstration projects for Moderate Income Housing (MIH). Landcom's MIH initiative aims to address the affordability issues facing substantial numbers of households in the middle of the income spectrum who are nevertheless experiencing the squeeze on their ability to afford appropriate housing in the current housing market.

Chapter 3 WHAT IS A MODERATE INCOME HOUSEHOLD?

There were 232,376 households in Sydney in 2001 with income between $40,000 and $62,000 (the moderate income band in 2001). The areas of high concentrations of moderate income households (MIH) are relatively dispersed, including both outer suburban and inner city local government areas (LGAs), although lowest proportions were found on the north shore and northern suburbs. Nevertheless, MIHs are found in significant proportions across the city.

Chapter 4 THE EMERGENCE OF UNAFFORDABILITY IN HOME OWNERSHIP IN SYDNEY

Trends in Housing Affordability in Sydney

Between 1981 and 2003 the median house price in Sydney rose from $78,800 to $470,000, and for flats from $65,000 to $360,000. In 1981 the median house price in Sydney was 4.6 times that of median Sydney household income. By 2003 median Sydney house prices were 8.7 times that of median household income. The comparable figures for flats were 3.8 and 6.7 respectively. But trends were worse for those at the bottom of the MIH range: over the same period, at the 40th percentile household income level median house prices increased from being 5.6 times higher than the relevant income level to 11.1 times higher.

Affordability Trends by Local Government Area

The ratio of median house and unit prices to median household incomes has consistently worsened over the 1981 to 2003 period across all LGAs in Sydney. But the relationship has deteriorated most significantly in the inner and eastern suburbs, especially those on the coast, where property price increases have been most pronounced.

Other Measures of Affordability

Other published affordability indexes point to a longer term 'structural' decline in affordability in Sydney over the last two decades or so. While there are clearly cyclical influences at work, most notably the property crash of the early 1990s, leading to fluctuations in affordability levels, the overall trend is one of declining levels of affordability. It does not appear from these published data, therefore, that the current affordability problem is simply a cyclical one that will correct itself once prices have stabilised.

Chapter 5 MODELLING HOUSING AFFORDABILITY

Overall, the ratio of Sydney wide median household income to median house prices increased from 1.8 to 2.2 between 1981 and 2003. The relevant ratios for units were 1.5 and 1.7. However, using a standardized interest rate averaged across the whole period (11.3 per cent), which controls for interest rate fluctuations, a much starker picture emerges. Between 1981 and 2003 the ratio of median house prices in Sydney to median weekly income at the standardised rate increased from 1.7 in 1981 to 3.2 in 2003. Despite falling between 1981 and 1986, this ratio has increased consistently

since then, but most significantly between 2001 and 2003. A similar story emerges for flats, where the price:income ratio, assuming a standardized interest rate, increased from 1.4 in 1981 to 2.4 in 2003, again with a fall between 1981 and 1986.

These findings highlight how vulnerable moderate income households are to a potential upward movement in interest rates. A substantial downward adjustment in property prices would be required to maintain even the current high income to house price ratios.

Chapter 6 A PROFILE OF MODERATE INCOME HOUSEHOLDS AND THE EXTENT OF HOUSING STRESS

The social and geographic profile of MIHs in Sydney

The analysis of the profiles of MIHs in Sydney and their geography indicates that the MIH market is far from homogenous and is clearly spatially differentiated. In terms of their social profile, while the MIH sector broadly reflected city-wide social characteristics. Compared to Sydney as a whole, MIHs were more likely to comprise of couples with dependents or lone persons and to be in the middle age cohorts, especially the 35 to 44 year old group. As a result, MIHs tended to be comprised of either single persons or three or four people compared to households in Sydney as a whole..

While they all share comparable income levels, there are a number of fairly well defined sub-markets within the MIH group. Primary among these is the difference between those who rent and those who are buying their homes. The former predominate in the inner and eastern Sydney suburbs, while the latter are predominantly an outer suburban characteristic. Having said that, large numbers of MIH rent in the middle and outer suburbs and the largest absolute group among the MIH were those who owned their homes outright, implying a substantial middle and older aged population among this group. A preponderance of flat dwellers in the inner and eastern suburbs was also apparent, reflecting the distribution of this kind of dwelling.

Overlaying these housing market characteristics are differences between household types, with lone persons and group households over-represented in the inner and eastern suburbs, while those with children are predominantly suburban in location. MIHs headed by persons aged 25 to 44 are found in both the inner suburban areas and in the outer and fringe suburbs – a possible reflection of the split between those where life-style and renting predominates and those engaged in child rearing and home buying. MIHs in the middle age groups are over-represented in a middle band of suburbs and in the northern suburbs. Older MIH households are predominantly a feature of the northern suburbs.

The segmented nature of the MIH market suggests that new forms of provision for this group should include a range of housing and tenure opportunities in a range of locations.

The prevalence of housing stress among MIHs in Sydney

In 2001, 36,136 MIHs were estimated to be in housing stress in Sydney – paying more than 30 per cent of their household income in housing costs (rent or mortgage). This represents 16 per cent of all MIHs in Sydney in 2001. Of these households, 57 per cent (20,600) were purchasing their dwelling and 42 per cent (15,500) were renting from a private landlord. This represents a substantial potential market for future affordable housing product.

In *absolute* terms, housing stress was a feature of the outer suburbs for moderate income home purchasers, clearly reflecting the large numbers of home buyers in these areas at an early stage of the home purchase cycle where incomes have been stretched to the maximum to buy as first time buyers, or where existing owners have traded up to a new home on the urban fringe. In both instances, the mortgage repayment to income ratio is likely to be high for many such households. But in *proportional* terms, moderate income home buyers in the higher value inner city and northern suburbs are much more likely to be experiencing housing stress compared to their suburban compatriots. This finding may be an outcome of higher proportions of early housing career purchasers in these inner areas compared to the middle and outer suburbs, where home ownership is more ubiquitous across a wider age range. For renters, housing stress is undoubtedly an inner city experience for our MIH group in Sydney. In both absolute numbers and proportionally the incidence of housing stress among MIH renters was greatest in the higher value inner city, eastern and northern suburbs.

From this analysis of housing affordability, it is clear that while significant numbers of MIH home buyers face high housing costs pressures in the outer suburbs, the relative incidence of unaffordable housing for both MIH buyers and, especially, MIH renters is greatest in the inner, eastern and northern high value suburbs of Sydney.

Trends in social profile

Comparison of data from two ABS sample surveys indicated that trends in the social profile of the MIH sector in Sydney between 1994 to 2000-01 underwent a proportionally greater shift towards private renting, living in a flat or unit, comprising lone person and childless couple households, and in the proportion of the household reference person not in the labour force and not Australian born, compared to trends in the Sydney population as a whole. These trends imply both a greater ageing of the MIH population and a greater shift away from families with children than has happened in the population as a whole.

Chapter 7 THE REALITY OF AFFORDABILITY: MODERATE INCOME HOUSEHOLDS AND HOUSING COSTS IN OUTER SYDNEY

Affordable home purchase in outer Sydney

A point-in-time survey of real estate agents in Blacktown, Liverpool and Campbelltown (three of the more affordable LGAs in Sydney) revealed 1,624 properties to be on the market in these three LGAs on the survey date – 13th

December 2003. The properties ranged in price from $159,950 to $1,550,000, with the average price being $410,378. The median price was slightly lower at $379,950. Separate houses constituted 78 per cent of the property market, while 12 per cent were townhouses and the remaining 10 per cent were units, apartments or flats. Three bedroom homes were the most common (44 per cent), however, there was also a substantial number of 4 bedroom homes, which made up one third (32 per cent) of the market. Two bedroom properties were in the minority (15 per cent).

Assuming limited equity (10 per cent of purchase price) and a housing cost to income ratio of 30 per cent, it was found that only 11 per cent of the 1,624 properties were affordable to anyone at the top of the MIH income range, while a household earning at the 40th percentile would have been able to afford just 5 properties across all three LGAs. At prevailing price levels, no moderate income household could have afforded the median priced property at $379,950. The 'buying opportunity' facing a family on $65,000 per annum in Campbelltown, Liverpool and Blacktown in 2003 was just 11% of what was on offer, and of this 76% was just two bedrooms and 63% were units. The Liverpool LGA had the highest proportion of affordable moderate income housing on the market (14 per cent), due the greater number of flats on offer there. Individual suburbs with the most properties affordable to moderate income housing at the 60th percentile were Liverpool CBD (40 per cent), Mount Druitt (16 per cent), Warwick Farm (6 per cent) and Macquarie Fields (6 per cent).

Given that around two in five MIHs in Sydney comprised households with children, and given the largely family orientated character of the outer suburban housing market in Sydney, then the lack of affordable housing for this group in what are three of the more affordable areas of Sydney is clearly worrying. Moreover, given that the great majority of properties for sale at an affordable price were flats or had two bedrooms only, then the limited choice available for family households on moderate incomes in the case study areas is again of concern. So even in areas where the previous analysis of prices suggests that moderate income households had a better chance of more affordable housing, it is clear that the availability of such accommodation is limited, at least without imposing significant costs on household incomes.

Affordable home rental in outer Sydney

The point-in-time survey also revealed that 1,175 properties were available for rent in the three case study LGAs. The average rent across these LGAs was $223 per week, with the median being slightly lower at $220, with relatively little variation across the LGAs. Separate houses comprised 55 per cent of the rental market, while units made up 26 per cent and townhouses 19 per cent. Three bedroom properties were the most common (55 per cent), however, 2 bedroom properties made up 31 per cent of the rental market.

The affordability of rental properties for MIHs was much more favourable than for purchase. Assuming an affordable rent would not exceed 30 per cent of household income, then the outcome affordable rents for the MIH group ranged from $245 to $378 per week, with the median of $220 being affordable to a household earning $38,100 p.a. or more. Households with incomes at the 40th percentile could have afforded to rent 73 per cent of properties in the rental market of the three LGAs at this

time, while households at the top end of the moderate income bracket (60th percentile) would have been able to afford 98 per cent of the properties on the market. Rental housing in the three LGAs is therefore affordable to the majority of moderate income households, with a range of choice in terms of both type of property and location. Blacktown's rental market was most affordable to the MIH market, with Liverpool's being least affordable. The rental market in Campbelltown was dominated by separate houses, while units were much more common in Liverpool.

Chapter 8 AFFORDABILITY AND KEY WORKERS

Key workers and moderate income households

Key workers are broadly defined as occupations that are deemed essential for the effective functioning of a city economy. Although there is no clear definition of these groups, it is clear they work in both the public and private sector. For this report, a pragmatic choice of five occupational groups was made based on an analysis of the larger occupational group among MIHs in Sydney, and to achieve a broad public-private sector split. The five occupational groups selected for detailed analysis of their home and job locational characteristics were: computer professionals, registered nurses, primary and secondary teachers, truck drivers and sales assistants.

Location of workplace and residence for the case study groups

The more dispersed employment patterns of, for example, nurses, teachers, means that the bulk of these workers will have a lower degree of separation between job and home, or at least less pressure over their choice of residential location overall. The more highly constrained workplace locations of computer professional and to a lesser extent, truck drivers, resulted in a much greater degree of work-home separation. For some groups, therefore, the spatial concentrations of employment opportunities (shop workers in the Sydney CBD and computer professionals in central and North Sydney, for example) mean that there is a greater dislocation between home and jobs for those working in these job rich locations.

The significance of the concentrations of the case study key worker occupations was explored through an analysis of the workplace and residence at the LGA level. A significant number of suburban LGAs were clearly net exporters of workers from moderate income households (i.e. they were home to more workers than were employed there) – Campbeltown, Camden, Sutherland, Blue Mountains, Gosford and Wyong, for example. But some inner LGAs also showed consistent surplus of residents over workers: Drummoyne, Leichhardt, Hurstville and Rockdale, although this is in part due to their small size. Others LGAs, usually in higher income or job-rich locations, were net importers across most groups – Auburn, Botany, Ku-ring-gai, and Willoughby, for example, although South Sydney and Sydney City are stand-out net importers of MIH workers across the board.

Among the individual key worker groupings analysed here, the concentration of MIH computing professional jobs in LGAs associated with Sydney's 'Global Arc' clearly led to significant home-work dislocations for many of these workers. The more dispersed job market for sales assistants meant lower numbers of LGAs with net deficits, but there were clear concentrations of sales jobs in excess of residents in the

Sydney CBD area. Truck drivers had a predominately outer suburban pattern of residence, but there were clear indications that LGAs associated with middle ring and inner industrial concentrations imported substantial numbers of this group. Teachers showed a range of locational choice, as relatively lower cost areas where schools were concentrated were net importers of this group: Bankstown, Blacktown, Fairfield and Liverpool, for example. On the other hand several higher cost locations also had net deficits of teachers: for example, Strathfield and City of Sydney. Finally, turning to registered nurses, several LGAs with concentrations of jobs also had concentrations of nurses: Gosford, Parramatta, Penrith, Randwick and South Sydney, for example. This may reflect the location of nursing accommodation in some cases. However, LGAs with hospital concentrations generally were also considerable net importers of nurses, particularly Parramatta and South Sydney.

While is it clear that house prices are unaffordable for most MIH workers in key workers groups in the inner and eastern suburbs, many live in these higher cost areas. A key generalisation is that MIH key workers in Sydney tend to rent in the inner city and buy in the suburbs. The location of home purchasers for each of the individual key worker groups were remarkably similar, with high concentrations of purchasers in the western parts of Sydney. Among the exceptions were relatively higher proportions of nurses and sales assistants who were purchasing in Botany Bay, while teachers were characterized by a higher proportions of buyers in Burwood and Marrickville.

With regards to renting, the analysis pointed to strong concentrations of MIH renters in the inner city, inner west and inner north suburbs for computing professionals, truck drivers and sales assistants. There were also moderate concentrations of truck drivers and sales assistants renting in the Manly, Warringah and Pittwater (North Shore) areas. The eastern suburbs, the inner west and Warringah and Mosman in the north were areas where a approximately half or more of resident moderate income nurses were renting. There was also a relatively high proportion of moderate income nurses renting in Liverpool, associated with the hospital there. Moderate income school teachers had the most diverse renting patterns, with concentrations in the inner city suburbs (eg. South Sydney and Woollahra) and the inner west, along with outer western areas such as Liverpool and Penrith. This is most probably due to the fact that school teachers have one of the most diverse locations for work.

Breaking the MIH key worker groups down by age showed a clear pattern, with those under 35 years old proportionally more prominent in inner city and eastern LGAs as well as some outer suburban areas, those aged between 35 and 49 most prominent in the middle suburban areas, and those aged over 50 accounting for high proportions of MIH living in northern suburbs, in the waterfront LGAs and in the far west in the Blue Mountains.

Age and housing tenure relationships

An explanation of variations in the location and tenure patterns among the five key worker groups was sought by looking at the relationship between their age and tenure profiles in more detail. This analysis indicated that the age composition of each group was a potentially significant factor in understanding why some groups had a higher propensity to rent than others. But the findings also implied that some key worker

groups were less likely to rent across all age categories than others, possibly due to the wider distribution of their workplaces, which allowed greater locational choice without incurring long work journeys.

The age by tenure analysis confirms that the geography of the tenure distribution of the five MIH key worker groups is related to their age profile. Younger workers are much more likely to rent, while the middle age group were predominantly buyers, and outright home ownership predominated among the older groups.

There were some important difference between the five MIH key worker groups. Computer professionals were noticeably more reliant on private rental than the other groups, with almost half this group renting from a private landlord. This in part reflected age differences between the groups, with computer professionals and, to a lesser extent, sales assistants, much more likely to be under 35 years old compared to the other groups. In contrast teachers were much less likely to rent than the other groups, with home purchase being their most common tenure. Truck drivers were also less likely to rent and more likely to be buying their home. Again, both these characteristics reflect the locations in which these two groups were found to be living. Nurses had a more 'balanced' tenure profile, but here, there was a split between renting among younger nurses and home purchase or ownership among older nurses.

The analysis also highlighted the significant dependency on private rental and home purchase among these MIH key workers compared to the wider Sydney population. From Landcom's position, the prevalence of rental among this group, particularly among the younger workers, suggests a substantial market for affordable home purchase options if these can be brought forward in appropriate locations.

1 INTRODUCTION

This report was commissioned by Landcom to assist in the development of its Moderate Income Housing Policy. This policy aims to develop market based provision of housing for households in moderate income, where this is commercially feasible.

Moderate Income Households are defined as households with incomes between approximately $42,000 to $65,000 per year (or between the 40th and 60th percentile of household incomes in Sydney in 2003). Concern over the rising unaffordability of housing costs, especially in Sydney, in the recent past has focused attention on the options for improving housing affordability for households on medium to lower incomes. While a range of housing products and policy proposals have been put forward to address the housing affordability issues, it is clear that this problem affects a wide range of households, not just those on the lowest incomes or dependent on fully subsidised housing.

Landcom is seeking to develop a range of product options for addressing the housing affordability problems for households at or around the median income level, who, as this study shows, are having increasing difficulty in affording property to buy in Sydney. Such households can include:

- Locally born residents looking for affordable housing in the area they grew up in;
- Households who have gone through separation and divorce;
- Older residents looking to retain a residence in the area they have lived;
- Local essential service workers;
- Households with just one income.

and they may range in size from single persons to parents with dependent children.

Clearly, these households require different kinds of housing to meet their needs, but an overriding factor is that they should be affordable to them.

The importance of the Landcom initiative is that is offers options to assist in lowering the net price of housing for target households on modest (median) incomes using market based solutions, working in partnership with developers and local councils. The Moderate Income Housing Policy has been developed using demonstration projects, research and liaison with industry and government. The aim is to develop commercially sustainable housing options.[1]

The objectives of this report

This report has been commissioned to assist Landcom in identifying the market and location of the MIH in Sydney. In particular, the report sets out to address the following three tasks:

[1] For more details on this policy see the Landcom website: www.landcom.nsw.gov.au

Task 1

1.1 An historical assessment of the apparent emergence of increasing 'unaffordability' in home ownership for moderate income earners in Sydney together with a discussion and considered extrapolation of existing trends to clarify the affordability issue confronting moderate income earners, especially aspiring first home buyers. It will clarify the increasing burden (or not) of home ownership and the compromises this involves.

1.2 Measures of moderate income housing affordability from the 1986 census to date to identify median household incomes matched against median dwelling prices and additionally assess the relative burden on moderate income households of securing a loan to purchase a median income home in Sydney, measured against the affordability benchmark of 30% of gross income applied to housing costs (for both houses and flats). The analysis should allow for a testing of the hypothesis that an increasing affordability burden on MIH exists, especially for new housing market entrants.

Task 2

An analysis of the current extent and nature of moderate income housing stress using the 2001 Census: geographically by local government area (LGA); by household and family type; by tenure; by the intensity of housing stress and by housing type. This will include a current (2003) assessment of MIH affordability based upon current estimated median incomes, matched against current median dwelling prices/rents. Additionally a 'point in time' survey of actual availability of what housing, affordable to MIH, was actually for sale/rent should be conducted, so that the real options available to MIH can be demonstrated.

Task 3

An assessment of the impact of current housing affordability levels on key workers in the moderate income bracket is to be made. This will clarify what key workers are in the moderate income bracket and allow consideration regarding the potential impacts upon them of any growing housing unaffordability and hence upon how available they may or may not be in the future in local economies.

Structure of the report

Chapter 2 first sets out a background discussion of the affordability issue, with particular relevance to the Sydney and NSW situation. Chapter 3 briefly explores the definition and distribution of moderate income households in the Sydney context.

Chapter 4 establishes the trends in affordability over the period since 1981 and 2003 for Sydney.

Chapter 5 presents a series of findings derived from modelling the affordability position of the moderate income group over the last two decades in Sydney.

Chapter 6 describes the social profile of the moderate income household population in Sydney in detail, including its geographical characteristics, and also analyses the extent of housing stress this group has experienced, using 2001 Census data, as well as trends over time.

Chapter 7 presents the findings from a point in time survey of the housing market in Blacktown, Liverpool and Campbelltown in mid-December 2003, illustrating the capacity of a moderate income household to afford to either purchase or rent in these lower priced areas at this time.

Chapter 8 then turns to the issue of moderate income "key workers". Here an extensive analysis of five key work groups is presented: Teachers, Registered Nurses, Sales Assistants, Truck Drivers and Computer Professionals. The aim of this chapter is to explore the extent to which the residential and work place locations of these groups show any evidence of a housing market 'displacement' factor, especially from higher cost areas in the city. The tenure characteristics of these groups are also examined and its relationship to their residential location.

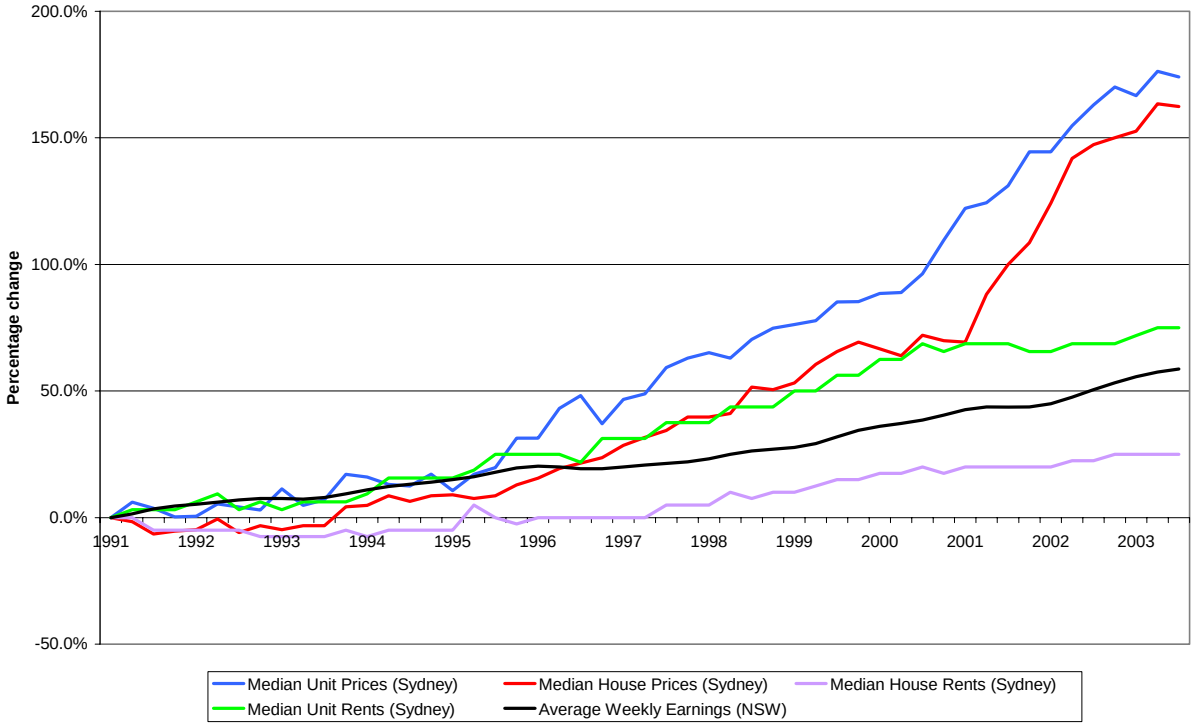
Chapter 9 – This short chapter summarises the main implications for housing opportunities for moderate income households in Sydney drawn from the study.

2 BACKGROUND: THE HOUSING AFFORDABILITY ISSUE IN SYDNEY

2.1 Introduction – the drivers of unaffordability

Affordable housing is one of the most pressing, and perplexing, issues facing policy makers in Sydney. While there is little doubt that the increase in house prices in recent years in Sydney has left many Sydney-siders with significant increases in their housing equity, adding to overall levels of wealth, many others, in particular first home buyers, are experiencing major difficulties in finding affordable housing, despite recent indications that the heat has gone out of the housing market (Figure 2.1 to 2.3).

Figure 2.1: The Change in Sales Prices, Rents and Earnings in Sydney, 1991-2003



Source: Rent and Sales Bulletins, various years, NSW Department of Housing.
Real Estate Institute of Australia.
Australian Bureau of Statistics.

House prices are significantly higher in the eastern and northern suburbs of Sydney compared to the west and Central Coast and the price differential has grown over the two decades or so to 2003. In particular, the greatest percentage increase was seen in the inner and eastern suburbs of Randwick, South Sydney, Woollahra, Drummoyne, Strathfield, Leichhardt and Botany, although the largest percentage increases were recorded for the Blue Mountains, from a very low base, and Manley. Wollondilly also saw large percentage increase, again for a low base.

While there is little hard empirical evidence on the drivers of prices in the Sydney housing market, most commentators agree that house prices are influenced by a range

of reinforcing influences that operate on both the demand and supply side. These include the increasing globalising of Sydney's economy and the polarisation of incomes that this has generated, high levels of immigration, the increasing prevalence for dual income home purchase, the increasing spatial concentration of 'winners' and 'losers' in the new economy (Figure 2.4 and 2.5), and a culture which sees the majority of household wealth concentrated in property. The increasing role of investment in rental housing in a period of stock market uncertainty, together with historically low costs of borrowing, has also fuelled effective demand and ratcheted up prices further, although there is now evidence that the investment market is now waning. Supply side constraints on new housing output stemming from the scale of land release on the urban fringe, mounting development charges and costs and delays in the planning process have been voiced.

In addition, the issue of housing demand and supply mismatch and housing consumption inefficiencies, particularly the increasing propensity for smaller households to consume ever larger quantities of housing, has added to the concern over the ability of the Sydney housing market to provide affordable housing to meet a wide range of household needs and incomes. Finally, affordable housing has come to the fore as a significant policy issue due to the inability of the public housing system in Australia to respond to the increasing demand for low cost housing.

2.2 The policy response

Current strategies aimed at increasing the number of affordable housing units across Sydney are the outcome of a number of policy and research initiatives. In particular, the 1991 National Housing Strategy, which examined affordability measures and identified household types which generally could be regarded as facing unacceptably high housing costs. The study found that private renters, social security recipients and single households (sole parents and lone person households) were the largest group in housing stress.

In NSW, the 1998 Ministerial Taskforce on Affordable Housing brought the issue of affordable housing on to the policy agenda in NSW. The Taskforce estimated that in 1994, 133,540 low to medium income households were living in stress (i.e. paying more than 30 per cent of their income in rent or mortgage payments) in Sydney (NSW Ministerial Task Force, 1998). This number had increased to 155,689 by 1999 (Randolph and Holloway, 2002). A series of subsequent reports have also built a picture of the growing crisis of housing affordability facing Sydney at the present time (Hall 1998; Cardew, Parnell and Randolph 2000, Berry and Hall 2001).

The Ministerial Taskforce led the NSW government to establish the Affordable Housing Advisory Service and an Affordable Housing Strategy in 1999 to promote and facilitate the provision of affordable housing with key stakeholders by identifying new project opportunities and supporting their development. A series of affordable housing planning initiatives have been developed, based largely on contributions from developers or around planning bonus approaches.

Landcom's role within the Strategy was to lead industry in the development of innovative approaches to affordable housing provision. This has been realised through

a body of research of which the current study is an example, together with 'supply' side demonstration projects for Moderate Income Housing, as at Forest Glade near Blacktown, and partnering with other developers in the development of 'demand' side solutions.

In 2001, the release of a report by Berry and Hall (2001) for the Affordable Housing National Research Consortium (sponsored by Landcom) has also placed the issue of subsidised private funding of low cost housing back onto the national political agenda. The aim is not to replace public housing, but to supplant the lower value segments of the private rental market where rents are unaffordable and housing standards are generally poorer. The need to find a way to provide lower income households with a wider continuum of affordable housing options in NSW has also been proposed by Darcy and Randolph (2000).

The concern over affordable housing has now been fuelled by the increasing realisation that housing in Sydney has simply become unaffordable for a wide range of people. At June 2003, the Housing Industry Association (HIA)/ Commonwealth Bank housing affordability index fell to its lowest level in 13 years. In February 2004 the ABS reported the proportion of first time buyers in NSW had fallen to a record low of 10.5% of total sales. Realisation of the problems some households are having in entering the housing market lead the Commonwealth government to announce an inquiry to evaluate the affordability and availability of housing for first time home buyers by the Productivity Commission, which reported in 2004 (Productivity Commission, 2004).

One of the main concerns over the lack of affordable housing is it's repercussions on labour market mobility. The kinds of people that are affected by the increasing unaffordability of housing include the low to moderate income workers that the metropolitan economy relies on – public sector professionals, health and emergency workers, transport workers, trades people and intermediate non-manual workers. As such, in 2004 all public servants in NSW who are transferred from one town to another will get a stamp duty waiver that could see them save up to $14,000 when buying a house in Sydney (Sydney Morning Herald 2003). The requirement for many households to have two incomes to buy without assistance from family or other sources is becoming a major impediment for many single adult households, as well as those households on low to moderate incomes.

It is in this context that Landcom has developed its Moderate Income Housing Policy. The policy aims to address the affordability issues facing substantial numbers of households in the middle of the income spectrum but who are nevertheless experiencing the squeeze on their ability to afford appropriate housing in the current housing market.

Figure 2.2: House prices in Sydney by local government area, 2003

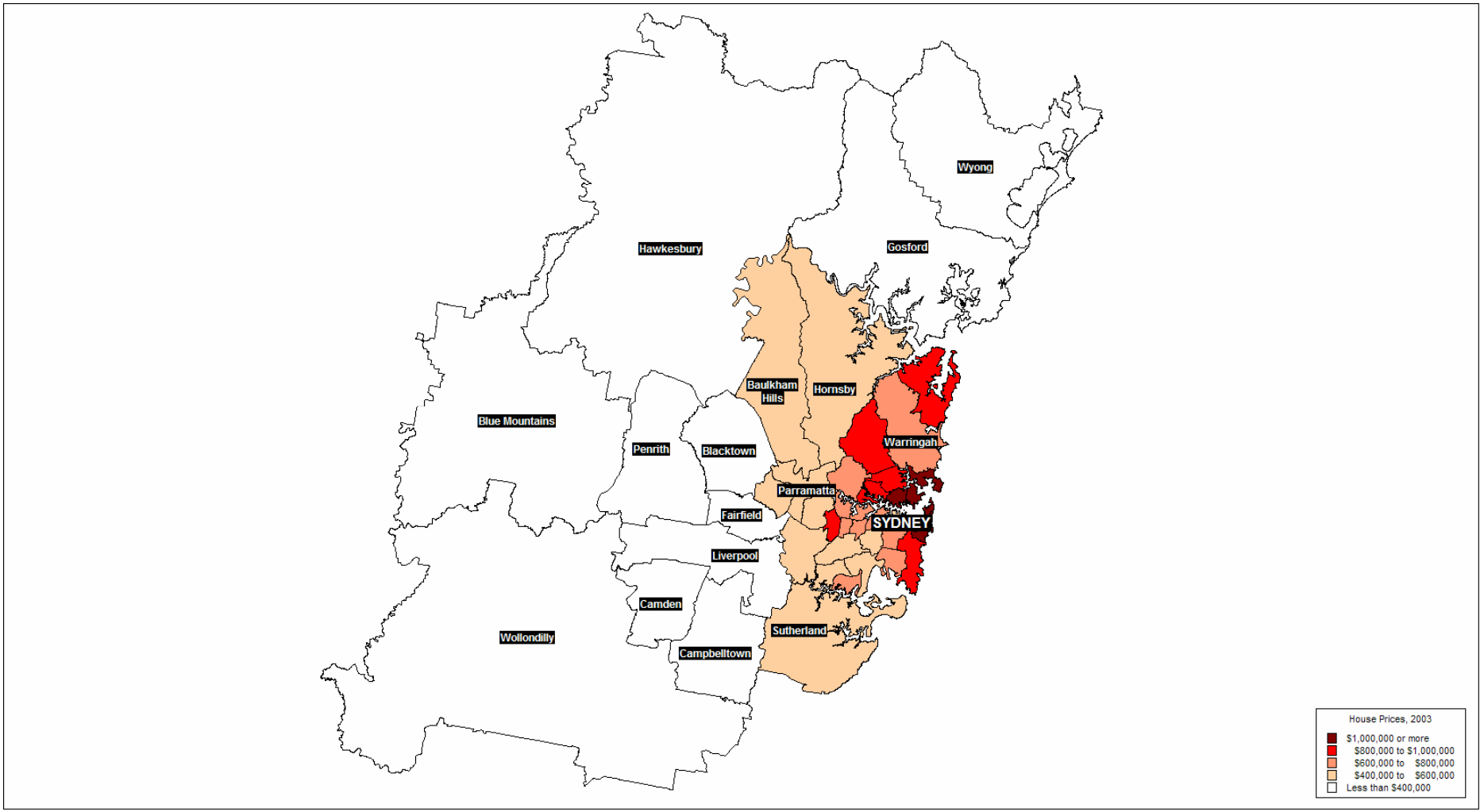


Figure 2.3: Change in house prices by local government area in Sydney, 1981-2003

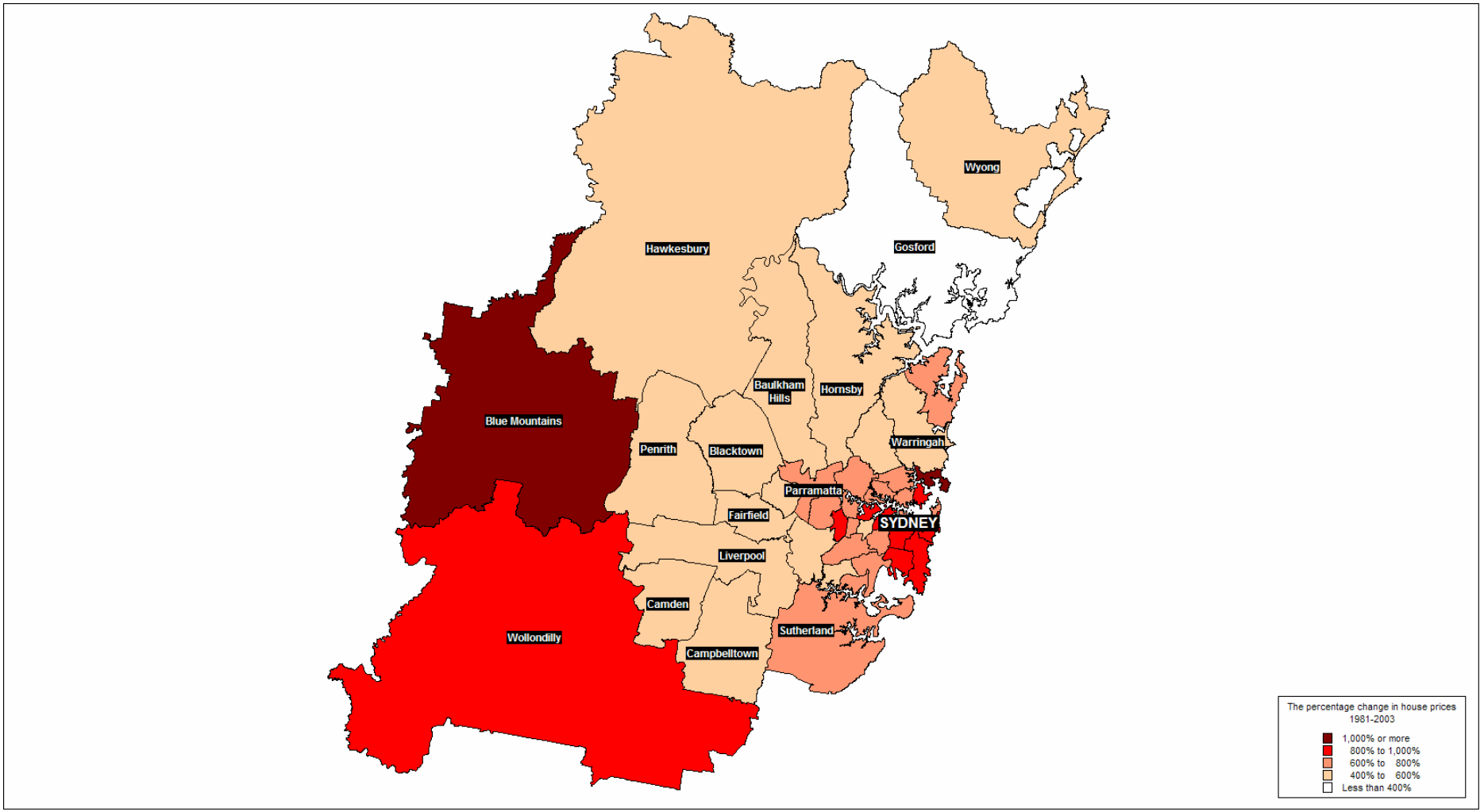


Figure 2.4: Household incomes in Sydney by local government area, 2003

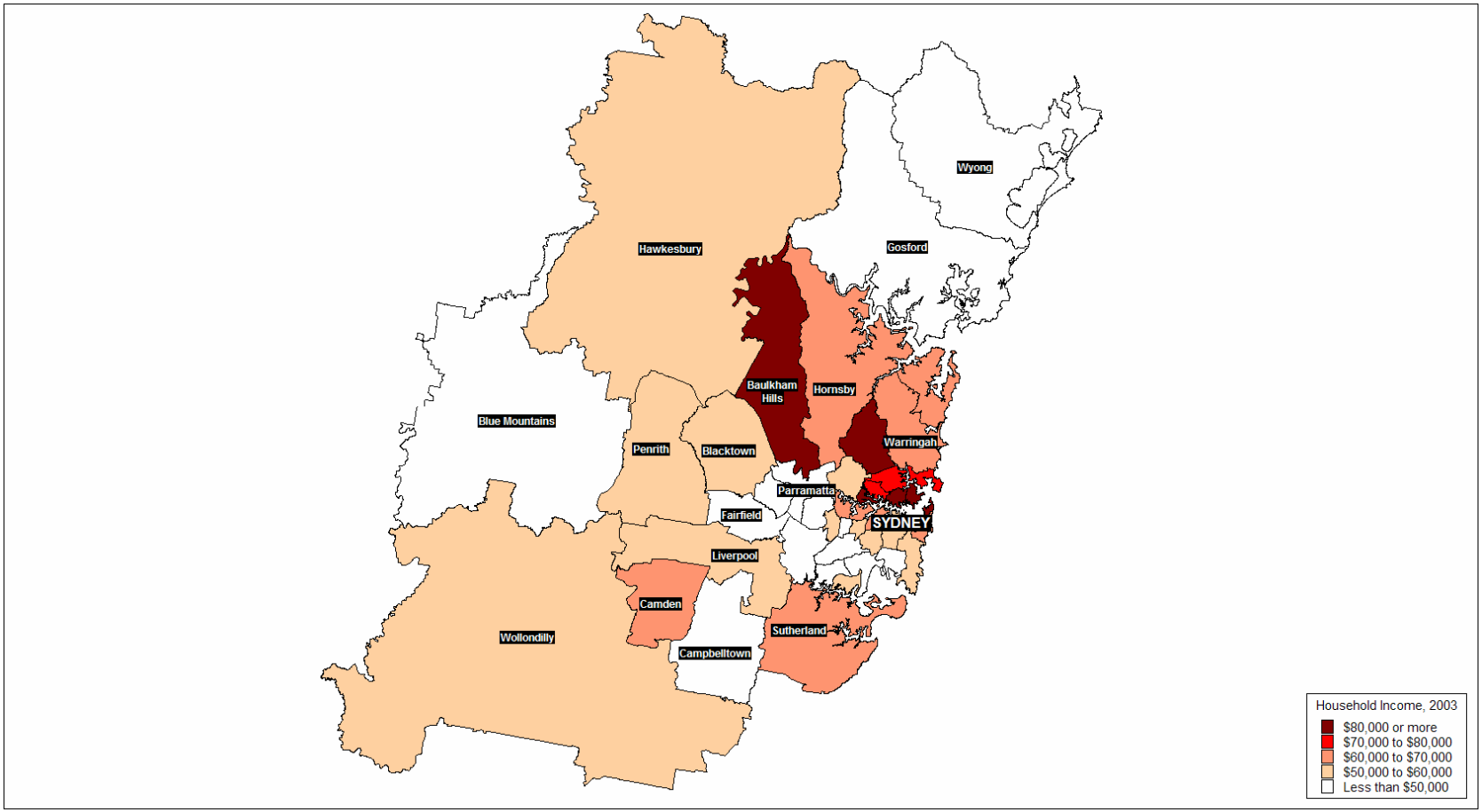
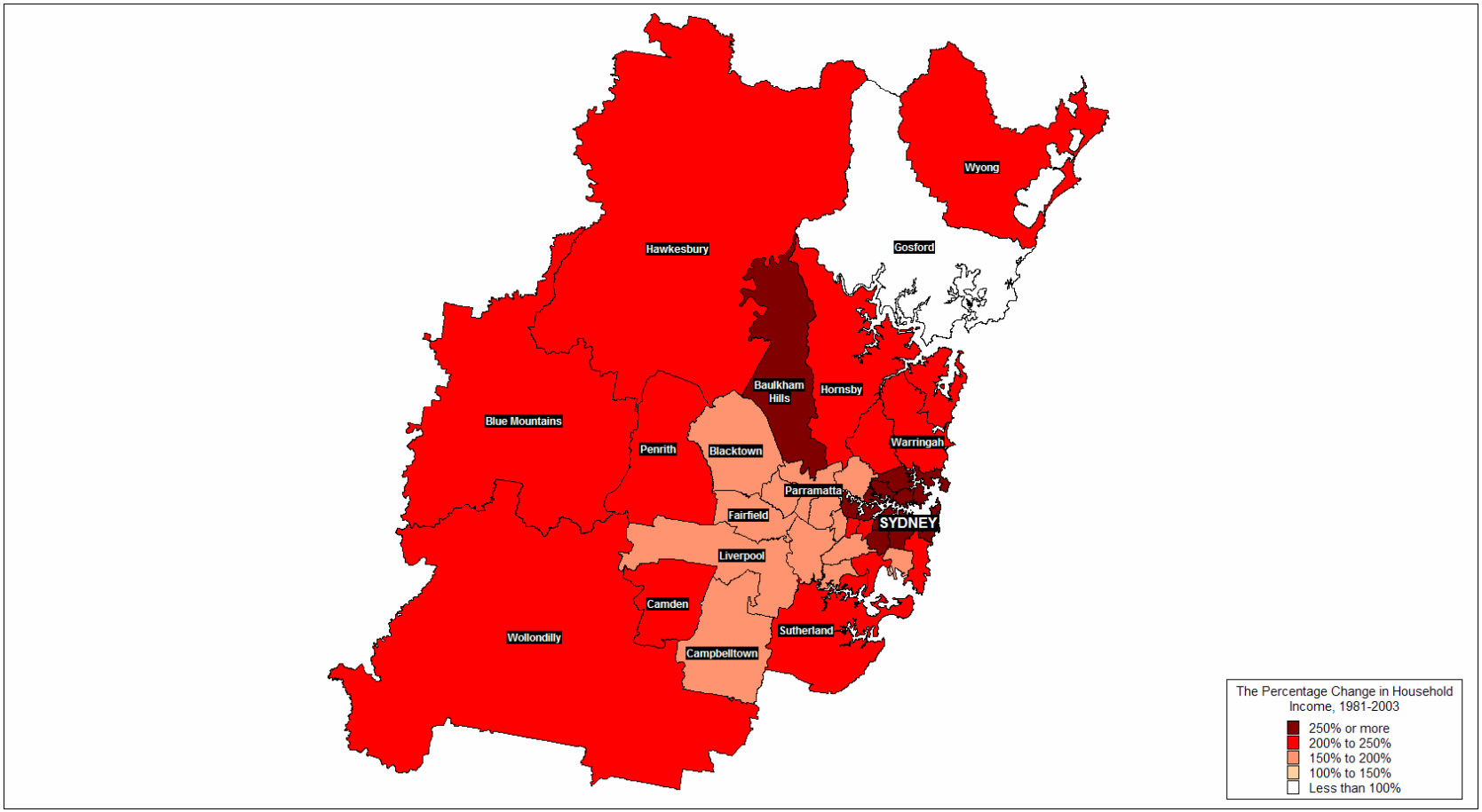


Figure 2.5: The change in household incomes by local government area in Sydney, 1981-2003



3 WHAT IS A MODERATE INCOME HOUSEHOLD?

In this report a moderate income household (MIH) is defined as a household whose income lies between the 40th percentile and 60th percentile of all household incomes, i.e. an income which lies either side of median household income. Table 3.1 below shows the cut-off incomes for MIHs in Sydney at each census between 1981 and 2001. The results for 2003 has been inflated using CPI figures. The corresponding weekly income cut-off points from the 2001 Census are $800-$1,199.

TABLE 3.1: Income cut-off points from moderate income households in Sydney, 1981-2001

	40th Percentile Annual Household Income ($)	Median Annual Household Income ($)	60th Percentile Annual Household Income ($)
1981	$13,964	$17,151	$20,535
1986	$20,425	$25,375	$30,452
1991	$27,876	$35,102	$42,714
1996	$31,564	$39,520	$48,568
2001	$40,456	$51,376	$62,244
2003	$42,548	$54,032	$65,462

Table 3.2 gives the numbers of MIHs in Sydney by local government area in 2001. Overall there were 232,376 MIHs in Sydney SD in 2001. In absolute terms, the highest number of MIH were found in the larger outer suburban LGAs such as Blacktown, Sutherland and Penrith. Nine of the top 10 LGAs were in Western Sydney or Gosford and Wyong. Nevertheless, just outside the top 10 are areas such as Randwick and Warringah. Figure 3.1 illustrates these data.

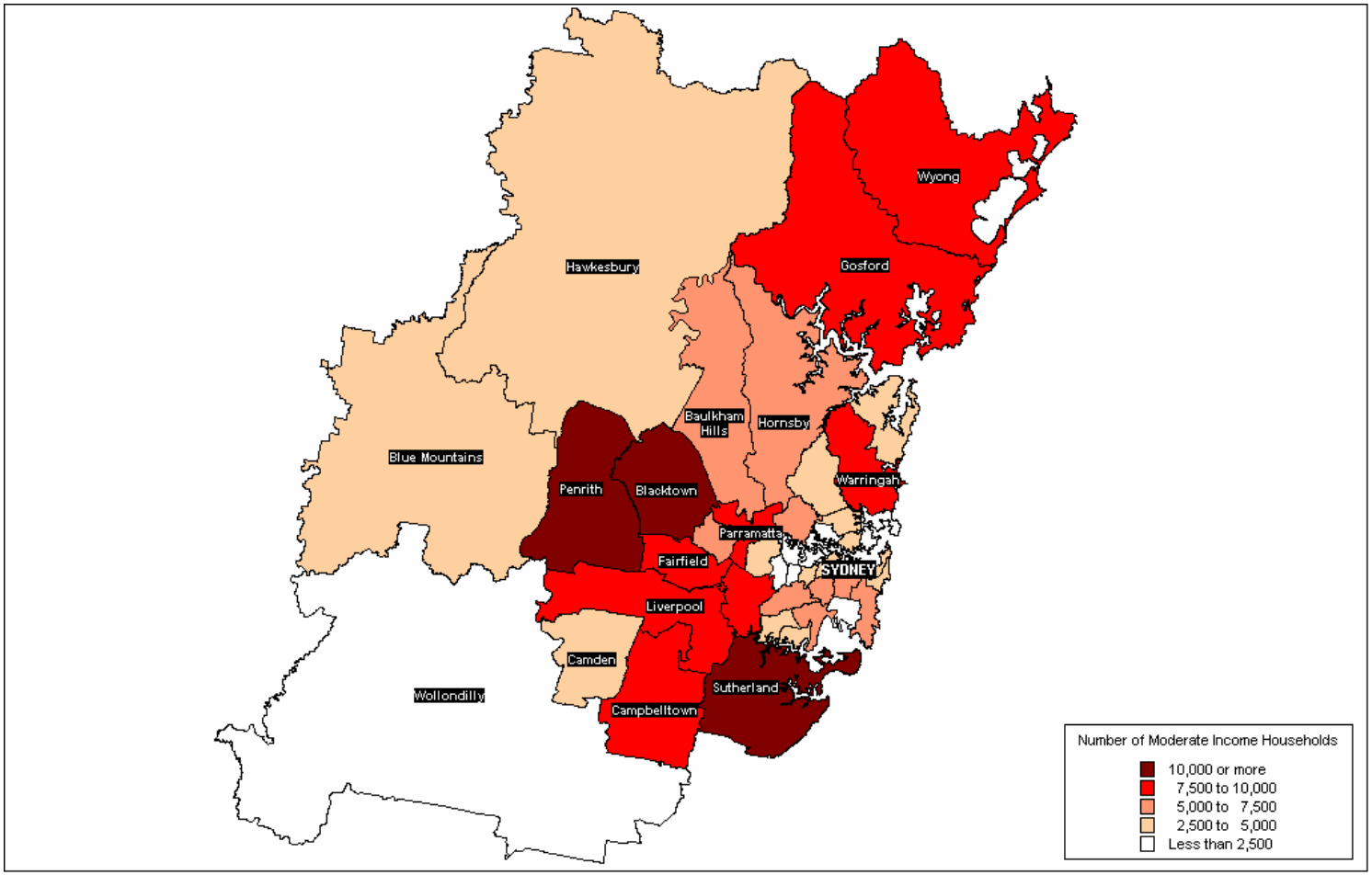
In relative terms, however, the areas of high concentrations of MIH are more dispersed. Among the top ten by percentage of total households falling in the MIH category, the Macarthur LGAs all feature as well as several inner west areas, such as Ashfield and Marrickville. At the other end of the spectrum, the proportion of MIH was lowest in Ku-ring-gai and Hunters Hill.

However, it is worth noting that the range of MIHs as a proportion of total households does not vary tremendously across Sydney, from 19.1 per cent (Penrith) to 11.8 per cent (Ku-ring-Gai), with an average of 16.2 per cent. In other words, MIHs are found in significant proportions across the city.

TABLE 3.1: Numbers and percentage of MIH by local government area, Sydney, 2001 (Top 10 shaded)

LGA	MIHs	Total Households	MIH % of Total Households
Blacktown	14,909	82,460	18.1%
Sutherland Shire	11,753	73,530	16.0%
Penrith	10,943	57,243	19.1%
Gosford	9,894	59,868	16.5%
Fairfield	9,052	55,123	16.4%
Bankstown	8,642	55,008	15.7%
Liverpool	8,563	48,543	17.6%
Campbelltown	8,554	46,736	18.3%
Parramatta	8,440	51,433	16.4%
Wyong	8,040	50,824	15.8%
Warringah	7,575	48,385	15.7%
Randwick	7,347	47,864	15.3%
Canterbury	7,312	45,946	15.9%
Hornsby	7,200	49,688	14.5%
South Sydney	6,437	43,155	14.9%
Ryde	6,197	36,801	16.8%
Baulkham Hills	6,134	43,990	13.9%
Rockdale	5,487	33,226	16.5%
Holroyd	5,401	30,771	17.6%
Marrickville	5,369	29,941	17.9%
Blue Mountains	4,887	27,748	17.6%
North Sydney	4,644	28,507	16.3%
Hurstville	4,249	26,099	16.3%
Leichhardt	4,197	27,914	15.0%
Hawkesbury	3,963	20,782	19.1%
Ku-ring-gai	3,959	33,673	11.8%
Waverley	3,952	26,850	14.7%
Woollahra	3,190	22,745	14.0%
Willoughby	3,180	22,863	13.9%
Pittwater	2,987	19,656	15.2%
Kogarah	2,986	18,148	16.5%
Auburn	2,792	17,139	16.3%
Ashfield	2,743	15,457	17.7%
Camden	2,668	14,277	18.7%
Wollondilly	2,284	12,179	18.8%
Manly	2,176	15,530	14.0%
Botany Bay	2,089	13,113	15.9%
Drummoyne	1,983	13,970	14.2%
Sydney	1,806	14,125	12.8%
Lane Cove	1,802	12,103	14.9%
Mosman	1,692	11,281	15.0%
Burwood	1,579	10,543	15.0%
Concord	1,471	9,464	15.5%
Strathfield	1,347	9,439	14.3%
Hunter's Hill	501	4,249	11.8%
Sydney SD	**232,376**	**1,438,389**	**16.2%**

FIGURE 3.1: The location of moderate income households in Sydney, 2001



4 THE EMERGENCE OF UNAFFORDABILITY IN HOME OWNERSHIP IN SYDNEY

4.1 Trends in housing affordability in Sydney

Between 1981 and 2003 the median house price in Sydney rose from $78,800 to $470,000. During this same period the median priced flat/unit increased from $65,000 to $360,000 (Table 4.1). Importantly though, median household income has not increased in line with house and unit prices over this time. In 1981 the median house price in Sydney was 4.6 times that of median household income. However, by 2003 median house prices in Sydney were 8.7 times that of median household income. This is despite a decrease between 1981 and 1986. Similarly, median flat/unit prices in Sydney have risen from 3.8 times median household income in 1981 to 6.7 times median household income in 2003.

Table 4.1: Ratio of Sydney House and Unit Prices to Median Household income, 1981-2003

	Median Dwelling Price	**Median Annual Household Income**	**Ratio of Dwelling Price to Household income**
Houses			
1981	$78,800	$17,151	4.59
1986	$100,900	$25,375	3.98
1991	$186,000	$35,102	5.30
1996	$215,000	$39,520	5.44
2001	$315,000	$51,376	6.13
2003	$470,000	$54,032	8.70
Flats			
1981	$65,500	$17,151	3.82
1986	$73,500	$25,375	2.90
1991	$135,000	$35,102	3.85
1996	$177,300	$39,520	4.49
2001	$300,000	$51,376	5.84
2003	$360,000	$54,032	6.66

Notes

- Household income is derived from each Census year. Source: ABS
- Household income for 2003 has been inflated using CPI
- Sydney house and unit prices courtesy of REIA[2].

The trends for the moderate household income range paralleled these trends. But the outcome was worse for households at the lower end of this range and worse for houses compared to flats, as Table 4.2 indicates. Between 1981 and 2003 median house prices increased from 5.6 times the 40th percentile household income to 11.1 times the 40th percentile household income, despite a decrease between 1981 and 1986. For those MIHs who earn the 60th percentile income, median house prices increased from 3.8 times the 60th percentile household income in 1981 to 7.2 times the 60th percentile household income in 2003.

[2] Real Estate Institute of Australia

The time series indicates an improvement in affordability in the mid-1980s, which reversed in the early to mid-1990s and then deteriorated rapidly in the early 2000s. Similar trends were also evident for the sales price of flats/units during this period, although the relative increase in the price to income ratio appears to have been more recent for houses. These tends are illustrated in Figures 4.1 and 4.2.

Table 4.2: Ratio of Sydney House and Unit Prices to the Moderate Income Household range, 1981-2003

	Median Dwelling Price ($)	**40th Percentile Annual Household Income ($)**	**Ratio of Dwelling Price to 40th Percentile Household income**	**60th Percentile Annual Household Income ($)**	**Ratio of Dwelling Price to 60th Percentile Household income**
Houses					
1981	78,800	$13,964	5.64	$20,535	3.84
1986	100,900	$20,425	4.94	$30,452	3.31
1991	186,000	$27,876	6.67	$42,714	4.35
1996	215,000	$31,564	6.81	$48,568	4.43
2001	315,000	$40,456	7.79	$62,244	5.06
2003	470,000	$42,548	11.05	$65,462	7.18
Flats					
1981	65,500	$13,964	4.69	$20,535	3.19
1986	73,500	$20,425	3.60	$30,452	2.41
1991	135,000	$27,876	4.84	$42,714	3.16
1996	177,300	$31,564	5.62	$48,568	3.65
2001	300,000	$40,456	7.42	$62,244	4.82
2003	360,000	$42,548	8.46	$65,462	5.50

Notes

- Household income is derived from each Census year. Source: ABS
- Household income for 2003 has been inflated using CPI
- Sydney house and unit prices courtesy of REIA.

Figure 4.1: Ratio of Sydney House Prices to Income for Moderate Income Households, 1981 to 2003

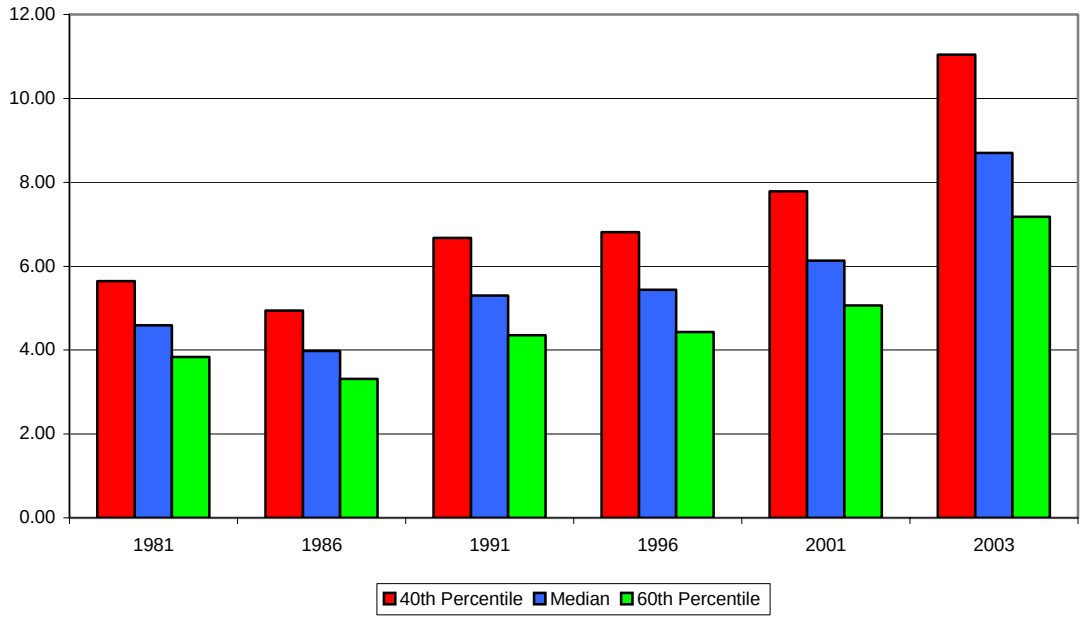
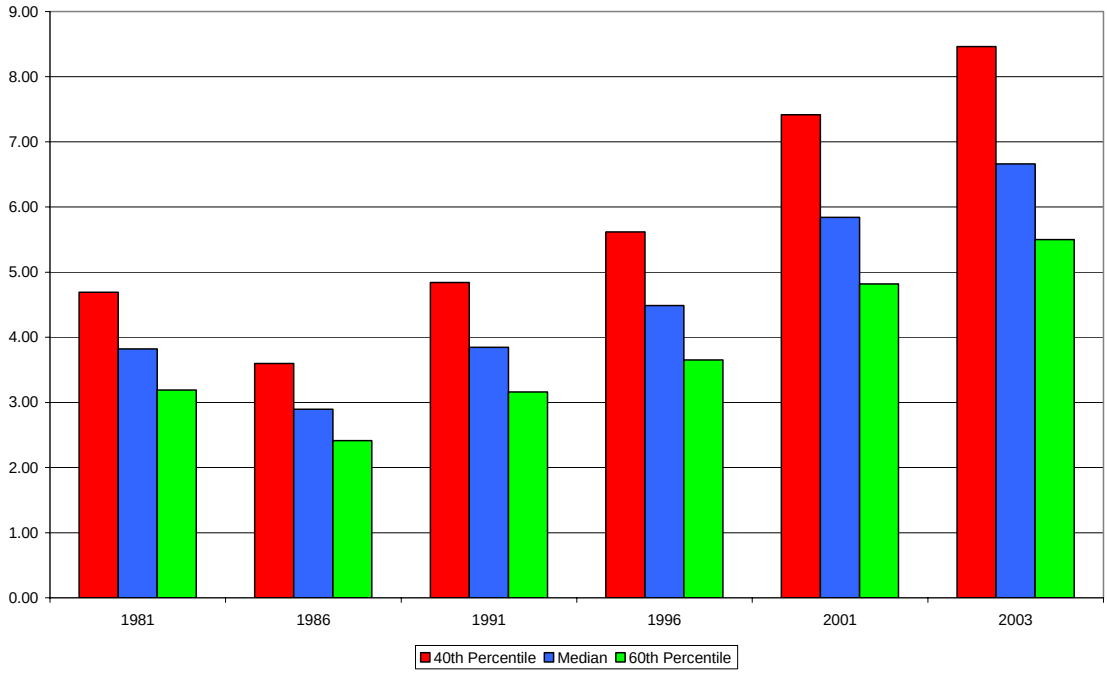


Figure 4.2: Ratio of Sydney Unit Prices to Income for Moderate Income Households, 1981 to 2003



4.2 Affordability trends by local government area

4.2.1 An analysis of LGA incomes and Sydney wide sales prices, 1981 and 2001

This section examines whether a household on the median household income for each LGA in Sydney in 1981 and 2001 could affordably purchase the median priced house or unit across Sydney. Households on the 40th and 60th percentile incomes within each LGA are also examined.

In 1981, the median house price in Sydney was $78,800 while the median unit price was $65,500. To affordably purchase[3] the median priced house in Sydney in 1981 without substantial equity, a household would have needed to have been earning at least $30,141 annually[4]. To affordable purchase the median priced unit in Sydney in 1981 ($65,500) a household would needed to have earned $25,054.

In 2001, the median priced house in Sydney had risen to $315,000. To affordably purchase at this price a household would need to have been earning $77,831 annually. The median priced unit across Sydney in 2001 was $300,000, which would mean that a household would need an income of $74,125 per year to affordably purchase it.

However, in both years, median household incomes were not able to fully fund this level of purchase. In 1981 median incomes would have been able to affordably purchase a house priced at $44,800, leaving an "equity gap" of $34,000, or just under twice the average income of that time (Table 4.3). Clearly, the bulk of house buyers were purchasing with substantial equity from previous homes or other sources, or were paying in excess of 30 per cent of their income in mortgage costs. The equivalent equity gap for units was $20,700 at this time (Table 4.4).

While these amounts represent substantial sums, the position has changed significantly over time, as Table 4.3 indicates. In fact, by 2003 the average equity gap for houses – the amount needed to fund the gap between the price a household on median incomes could affordably pay (without substantial equity) – had ballooned to $251,000, or 53 per cent of prevailing median house prices. For flats the gap stood at $141,300, or 39 per cent of median unit prices. The equity gap in 2003 was at the level previously reached at the top of the housing boom of the early 1990s.

[3] An affordable dwelling is one in which the household does not pay more than 30% of their income on mortgage repayments.

[4] This based on the standard variable interest rate on a bank loan in the September quarter of that particular year, assuming a 25 year repayment period, with the total amount borrowed being 90% of the purchase price.

Table 4.3: The amount of Equity ($) Needed to Purchase the Median Priced House in Sydney 1981-2003

	Median House Price	Median Household Income	Price at which the Median Household Income Could Affordably Purchase a Dwelling	Equity Gap	Equity Gap as a Proportion of Median House Price
1981	78,800	17,151	44,800	34,000	43%
1986	100,900	25,375	53,100	47,800	47%
1991	186,000	35,102	85,800	100,200	54%
1996	215,000	39,520	126,800	88,200	41%
2001	315,000	51,376	207,900	107,100	34%
2003	470,000	54,032	218,700	251,300	53%

Notes:

- Term of Loan is 25 years, Amount borrowed is 90% of the purchase price.
- Interest rates were collated from the RBA and are based on the standard variable housing loan from a bank in the September quarter of each year.
- The affordability benchmark has been set at 30%.
- Median weekly incomes were sourced from the ABS for the relevant census years. The 2003 median household income has been inflated from the 2001 figure.
- Median house and unit prices courtesy of REIA.

Table 4.4: The amount of Equity ($) Needed to Purchase the Median Priced Unit in Sydney 1981-2003

	Median Unit Price	Median Household Income	Price at which the Median Household Income Could Affordably Purchase a Dwelling	Equity Gap	Equity Gap as a Proportion of Median Unit Price
1981	65,500	17,151	44,800	20,700	32%
1986	73,500	25,375	53,100	20,400	28%
1991	135,000	35,102	85,800	49,200	36%
1996	177,300	39,520	126,800	50,500	28%
2001	300,000	51,376	207,900	92,100	31%
2003	360,000	54,032	218,700	141,300	39%

Notes:

- Term of Loan is 25 years, Amount borrowed is 90% of the purchase price.
- Interest rates were collated from the RBA and are based on the standard variable housing loan from a bank in the September quarter of each year.
- The affordability benchmark has been set at 30%.
- Median weekly incomes were sourced from the ABS for the relevant census years. The 2003 median household income has been inflated from the 2001 figure.
- Median house and unit prices courtesy of REIA.

4.2.2 Where can a moderate income household afford to buy?

One way of illustrating the relative geographical purchasing power of moderate income households in Sydney is to calculate where they could afford to buy without undue housing stress (i.e. without paying over 30 per cent of income in mortgage) in relation to the average property prices in each LGA. Trends over time will show if this situation has changed for the better or worse.

This section presents an analysis of the LGAs in which a household on the 40th, 50th (median) and 60th percentile income for Sydney as a whole in 2001 and 2003 could affordably purchase a median priced house or unit in that LGA. That is, where Sydney's moderate income households could afford to buy without substantial equity. The distribution of relative purchasing power, as shown in Figures 4.3 to 4.14, shows clear geographical outcomes. These figures show the ratio between the price households at the 40th, median and 60th household income percentiles for Sydney as a whole could afford to buy without stress or equity, and the prevailing median property price in each LGA in 2001 and then 2003. In effect, a ratio of less than 100% indicates that the average house or unit price in a particular LGA is unaffordable to households at the relevant income level.

The 2001 position

In 2001, households with an income equivalent to the *40th percentile* for Sydney ($778 per week) could not affordably purchase the median priced house in any LGA in Sydney, although they could afford to buy a median priced unit in just three LGAs – Fairfield, Campbelltown and Penrith. LGAs to the east and north of the city were much less affordable to this group of households. The implication is that, without equity, these households can only afford to rent in Sydney.

Households with the Sydney wide *median* household income ($988 per week) in 2001 could only affordably purchase the median priced house in two LGAs – Campbelltown and Wyong. The situation was less restricted for units, with households on median incomes able to afford a median priced unit in ten LGAs. However, these ten LGAs were all located in the middle and outer suburbs of Sydney, and in Wyong. Therefore, middle income households can only effectively **purchase** houses at the extreme fringe or purchase units in middle and outer suburbs.

Households with incomes equivalent to the *60th percentile* household income in Sydney in 2001 ($1,197) could affordably purchase the median priced house in seven LGAs in Sydney. These LGAs were located in the middle and outer suburbs of Sydney and Wyong on the Central Coast. These households also could affordably purchase the median priced unit in 16 LGAs in Sydney. Again all these LGAs were located in the middle and outer suburbs of Sydney and the Central Coast, with the exception of Marrickville, which proved affordable to these households. In other words, even at the top of the middle income range, households could only effectively purchase a house in a minority of LGAs, or a unit in a wider area, but not in any inner city LGAs.

The 2003 position

By 2003 the position had changed significantly. Households on the 40th percentile income ($818 per week) in Sydney could not affordably purchase the median priced house or unit in any LGA.

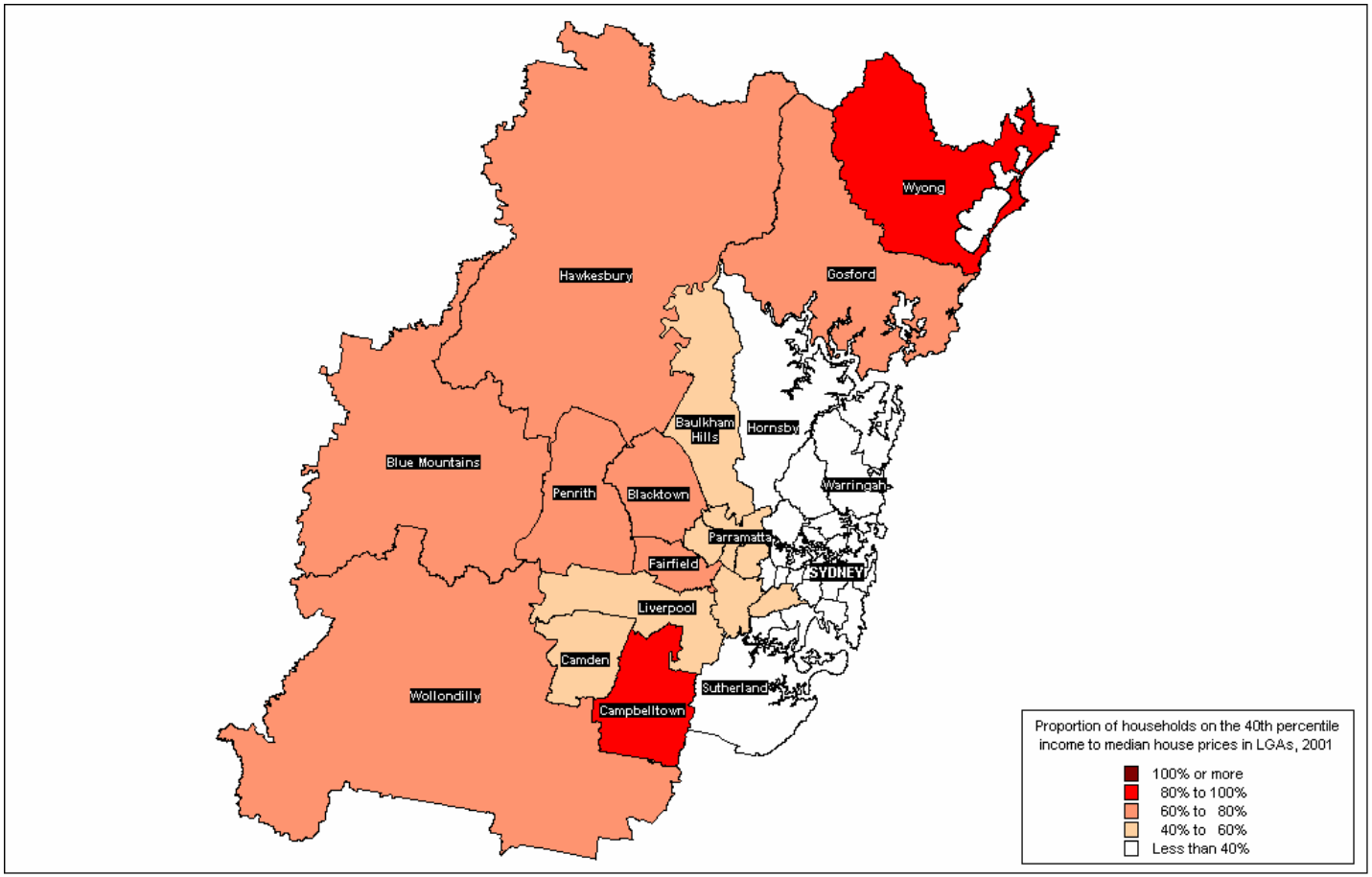
Similarly, there has been a decline in the purchasing power of households on median income in Sydney between 2001 and 2003. By 2003 a median income household ($1,039 per week) could not affordably purchase a median priced house in any LGA and they could only afford a median priced unit in just two LGAs – Fairfield and Campbelltown.[5]

A similar reduction of opportunities emerges for households on the 60th percentile household income ($1,259 per week). By 2003, a household at the higher end of the moderate income range could not affordably purchase the median priced house in any LGA without substantial equity, while the number of LGAs where they could buy a median priced unit had halved, falling to just eight. Seven of these eight LGAs were located in the middle and outer suburbs of Sydney, with the other LGA being Wyong on the Central Coast.

This analysis clearly shows both the geographical distribution of housing opportunities that are affordable to moderate income households, and the declining opportunities for affordable purchase for this group in the two years between 2001 and 2003. While the situation was considerably worse for households at the 40th income percentile compared to those on median or the 60th percentile, and for houses compared to units, declining opportunities affected the whole range of the moderate income household group. The only affordable housing opportunities in both years were restricted largely to Western Sydney or the central coast.

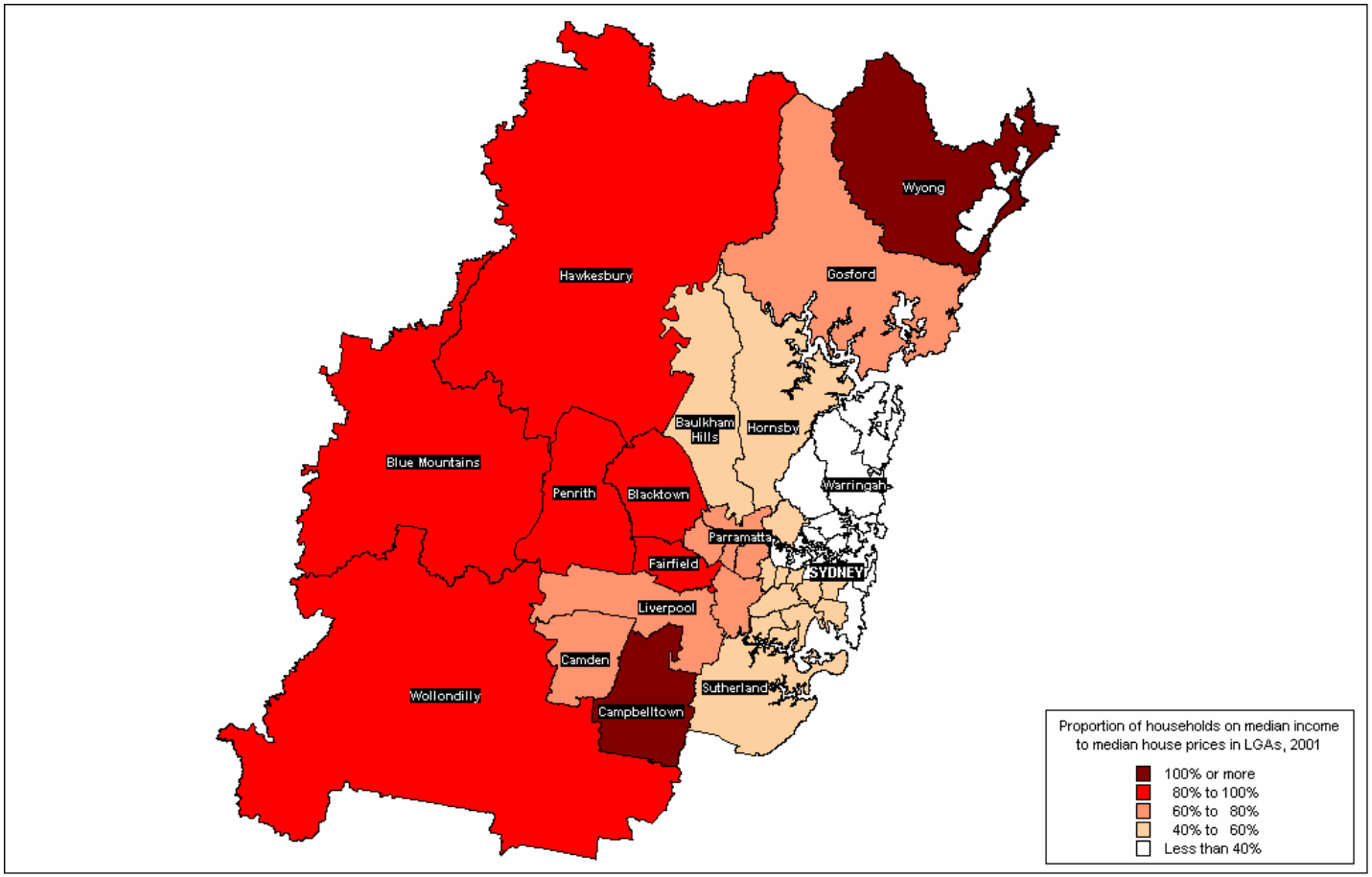
[5] Also confirmed in the Point-in-Time Survey (Chapter 7)

Figure 4.3: The ratio between the house price a household at the 40th income percentile for Sydney as a whole could afford and the median house prices for each LGA, 2001



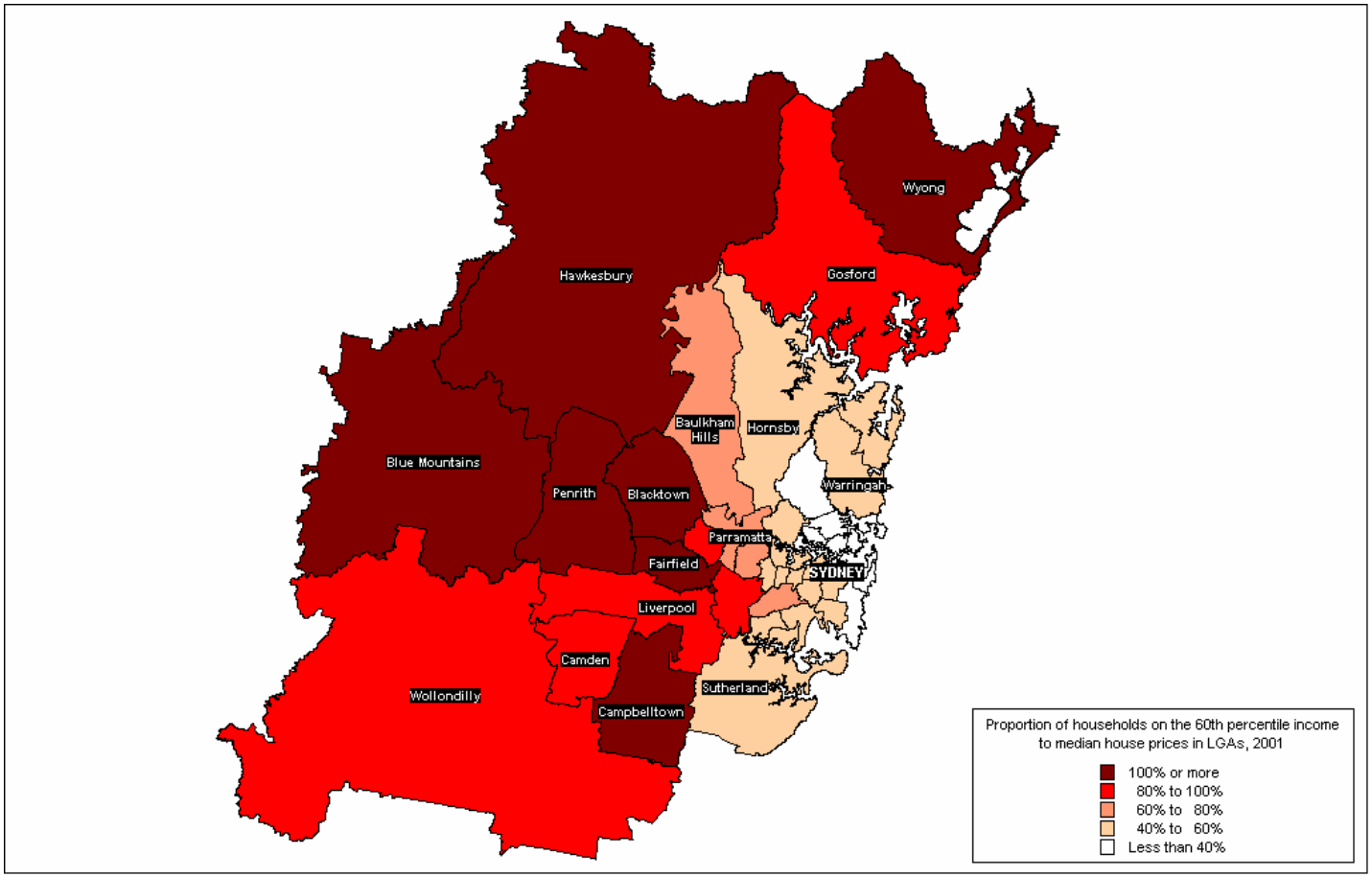
(Note: 100% or more is affordable)

Figure 4.4: The ratio between the house price a household at the median income for Sydney as a whole could afford and the median house prices for each LGA, 2001



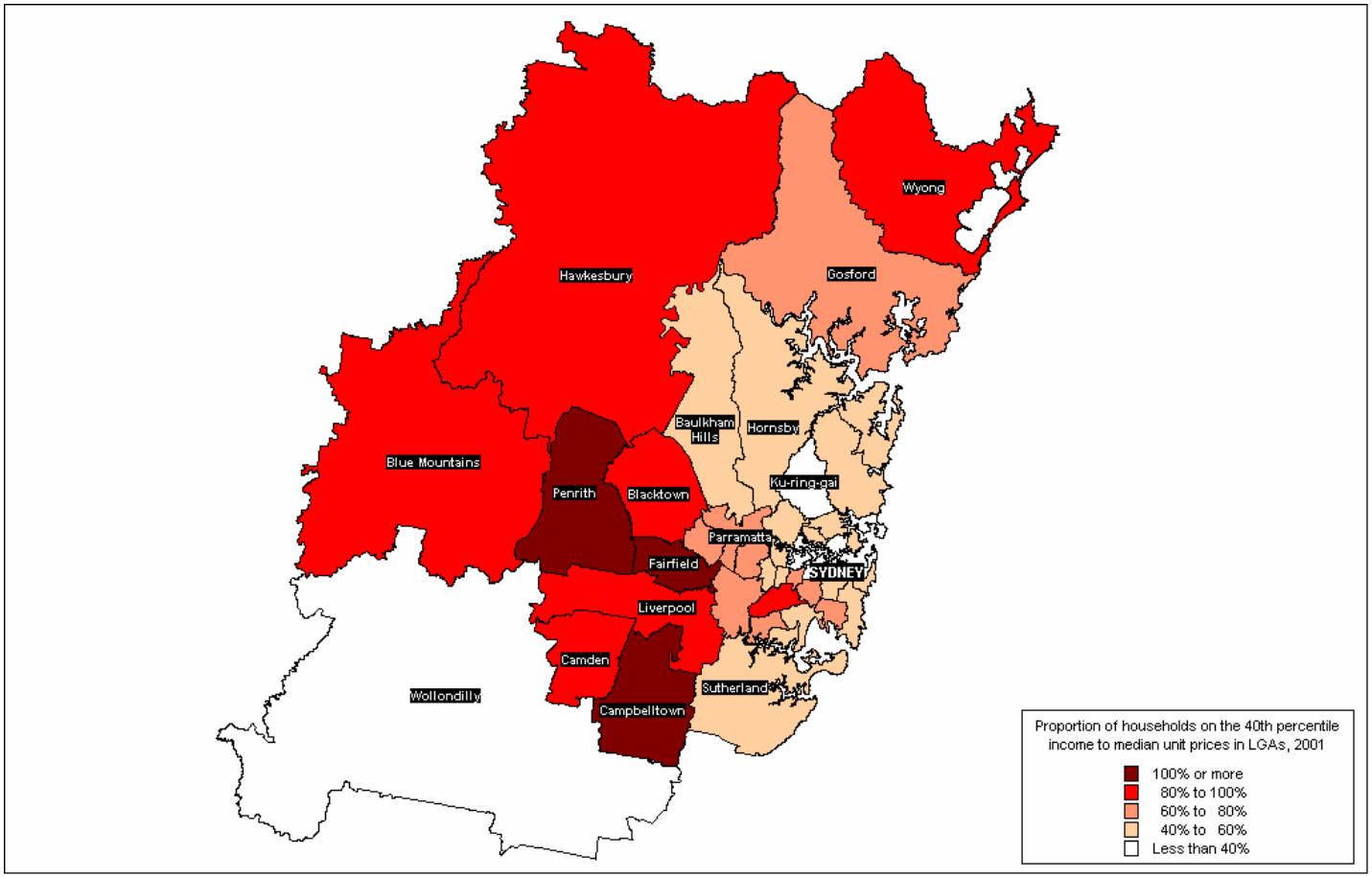
(Note: 100% or more is affordable)

Figure 4.5: The ratio between the house price a household at the 60th percentile income for Sydney as a whole could afford and the median house prices for each LGA, 2001



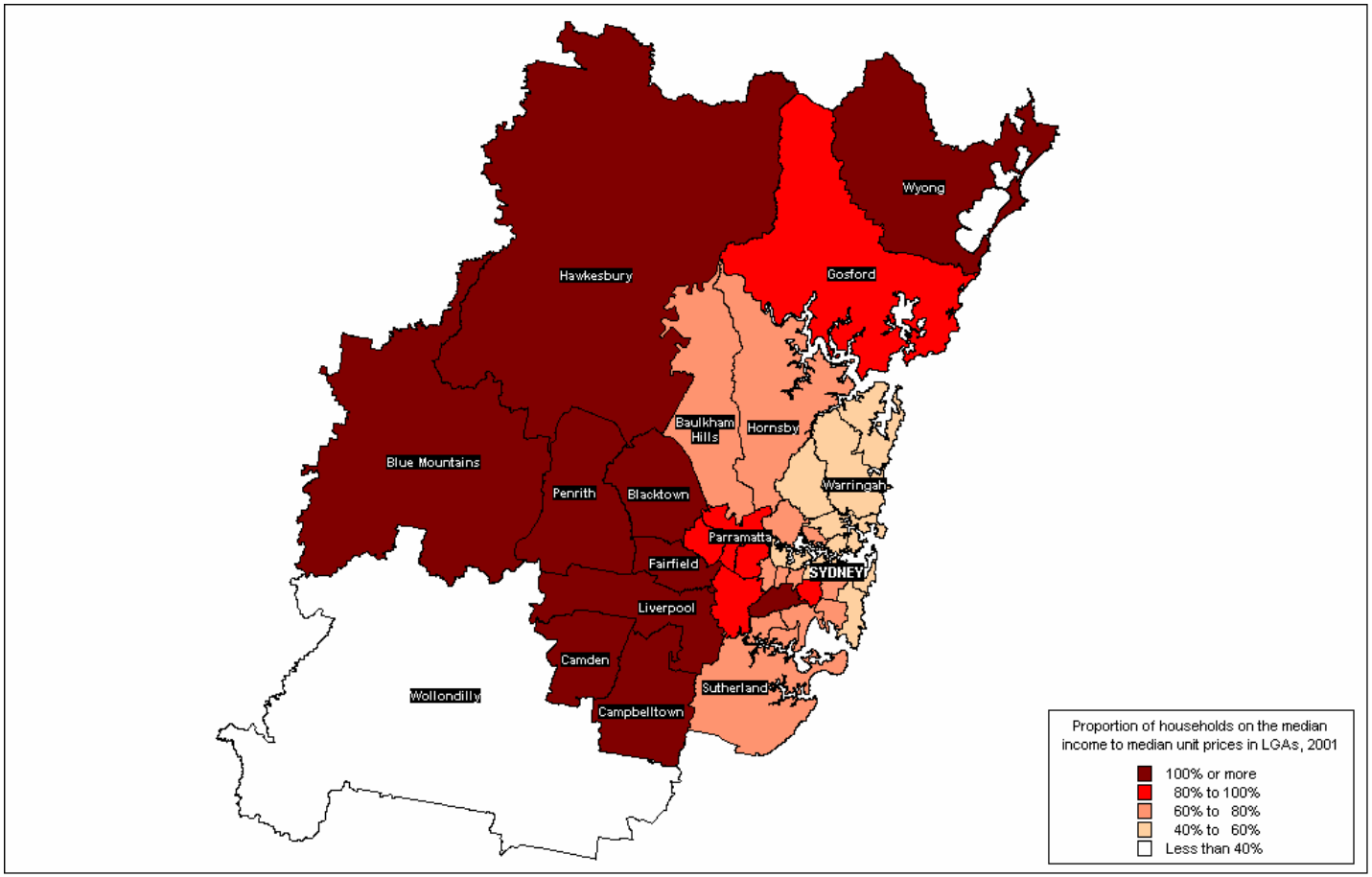
(Note: 100% or more is affordable)

Figure 4.6: The ratio between the unit price a household at the 40th income percentile for Sydney as a whole could afford and the median unit prices for each LGA, 2001



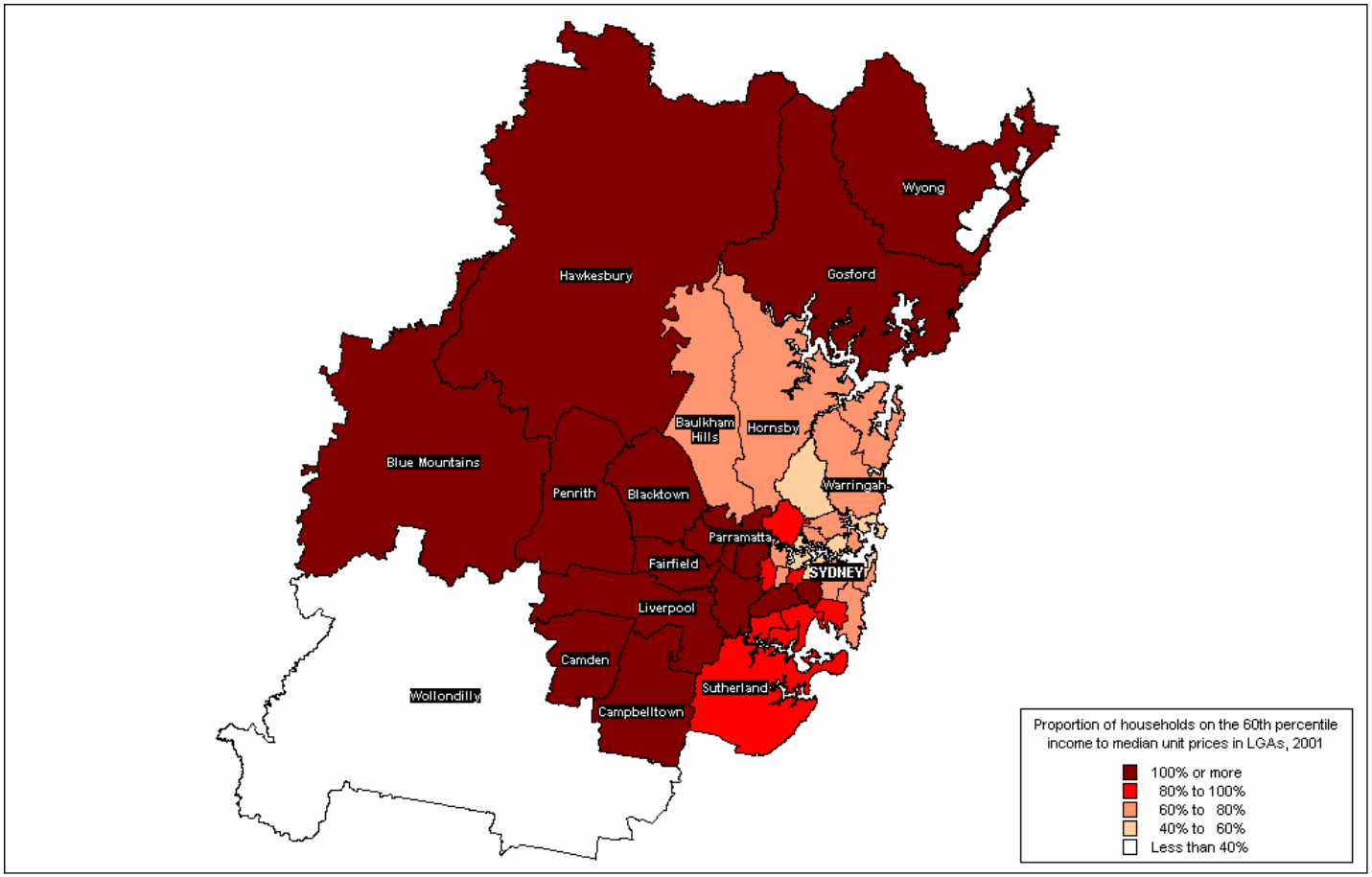
(Note: 100% or more is affordable)

Figure 4.7: The ratio between the unit price a household at the median income for Sydney as a whole could afford and the median unit prices for each LGA, 2001



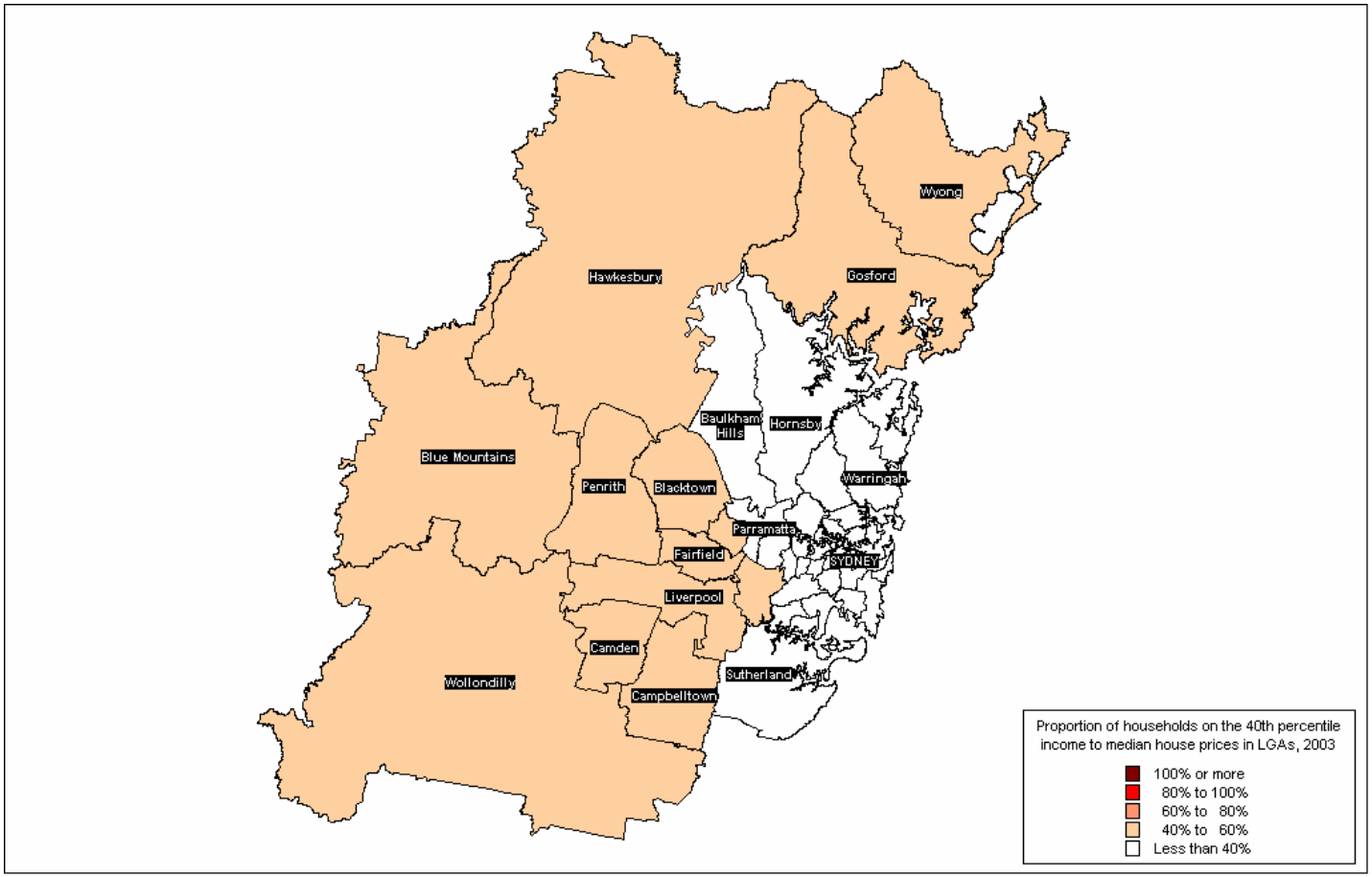
(Note: 100% or more is affordable)

Figure 4.8: The ratio between the unit price a household at the 60th income percentile for Sydney as a whole could afford and the median unit prices for each LGA, 2001



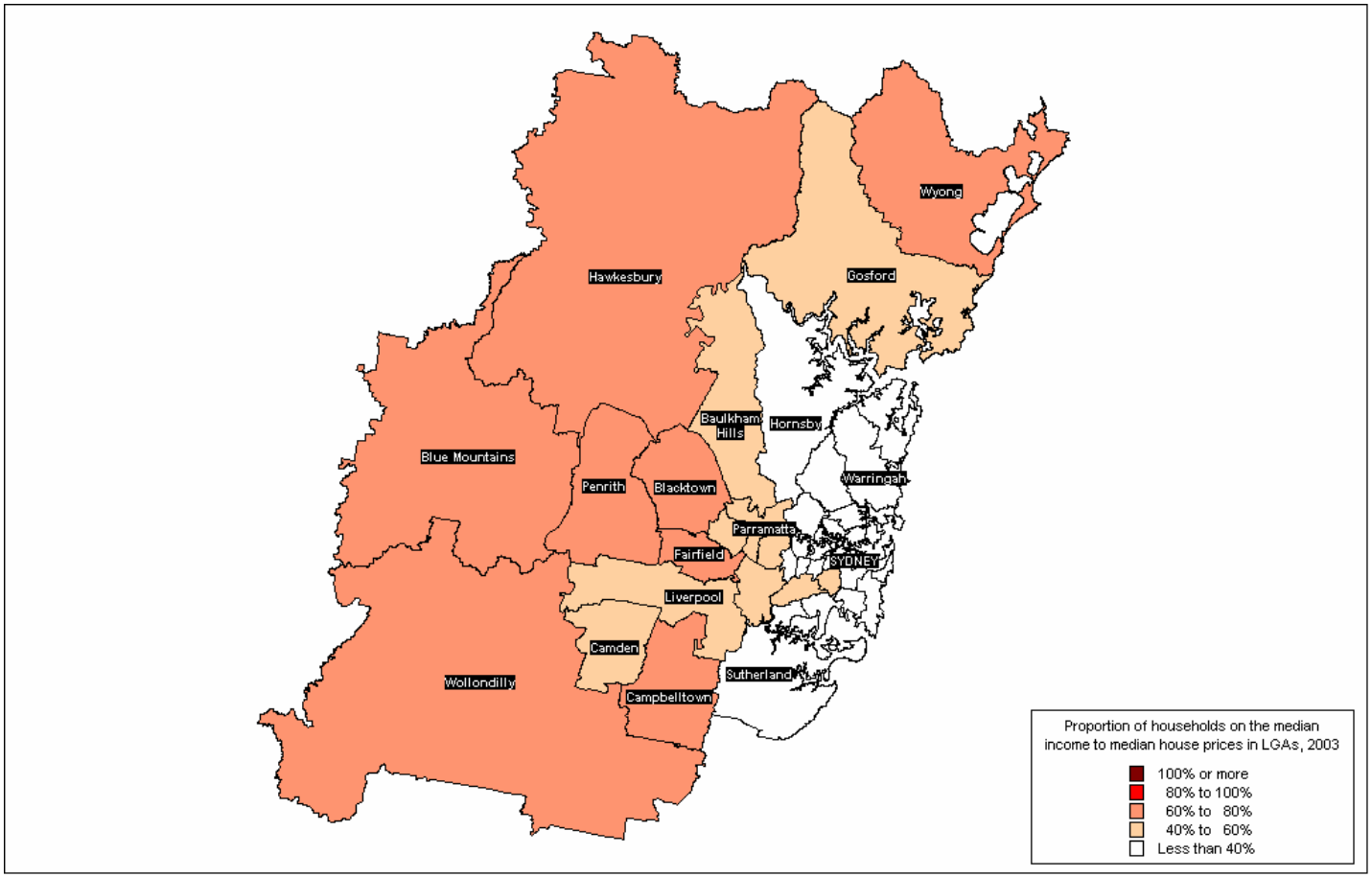
(Note: 100% or more is affordable)

Figure 4.9: The ratio between the house price a household at the 40th income percentile for Sydney as a whole could afford and the median house prices for each LGA, 2003



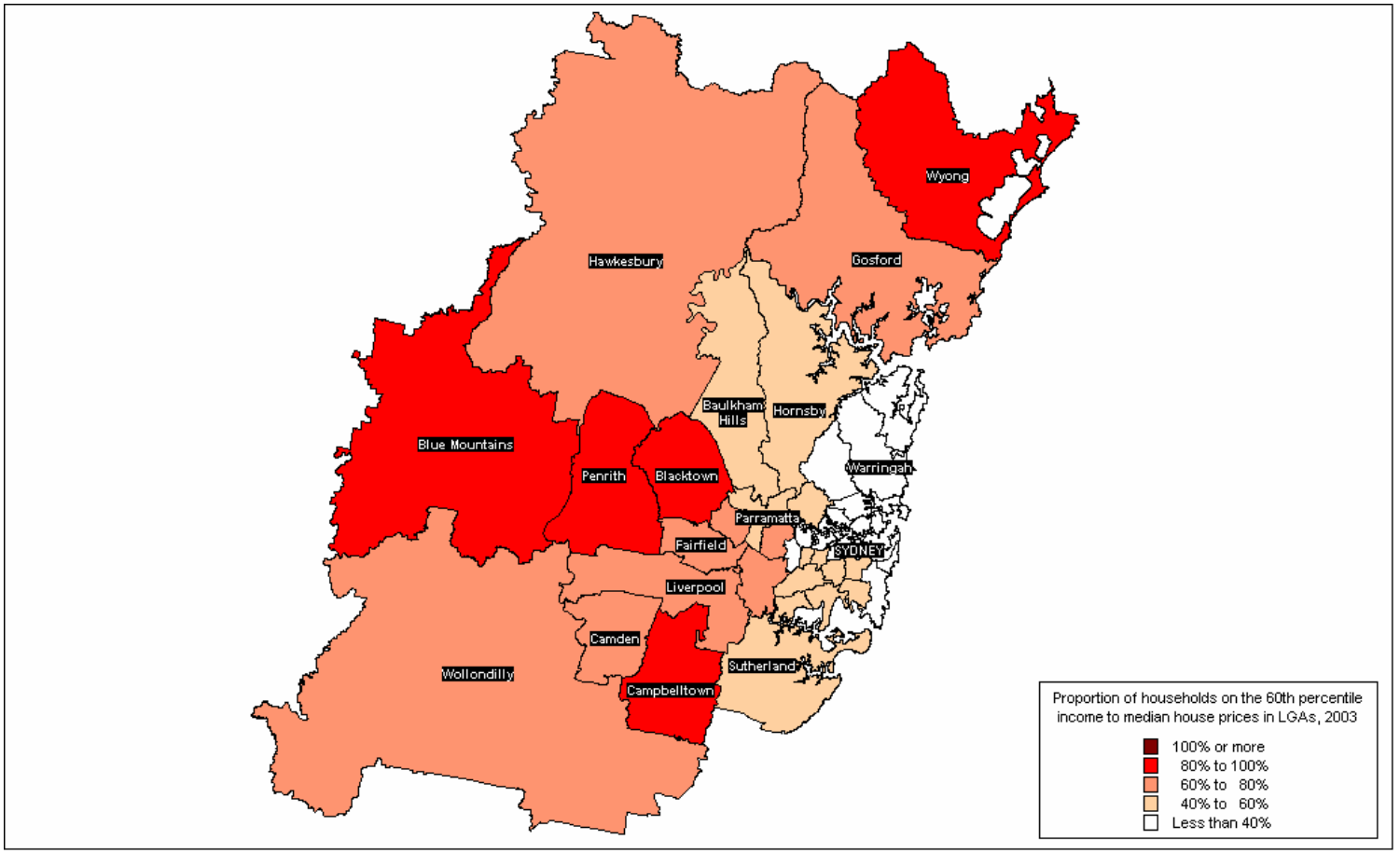
(Note: 100% or more is affordable)

Figure 4.10: The ratio between the house price a household at the median income for Sydney as a whole could afford and the median house prices for each LGA, 2003



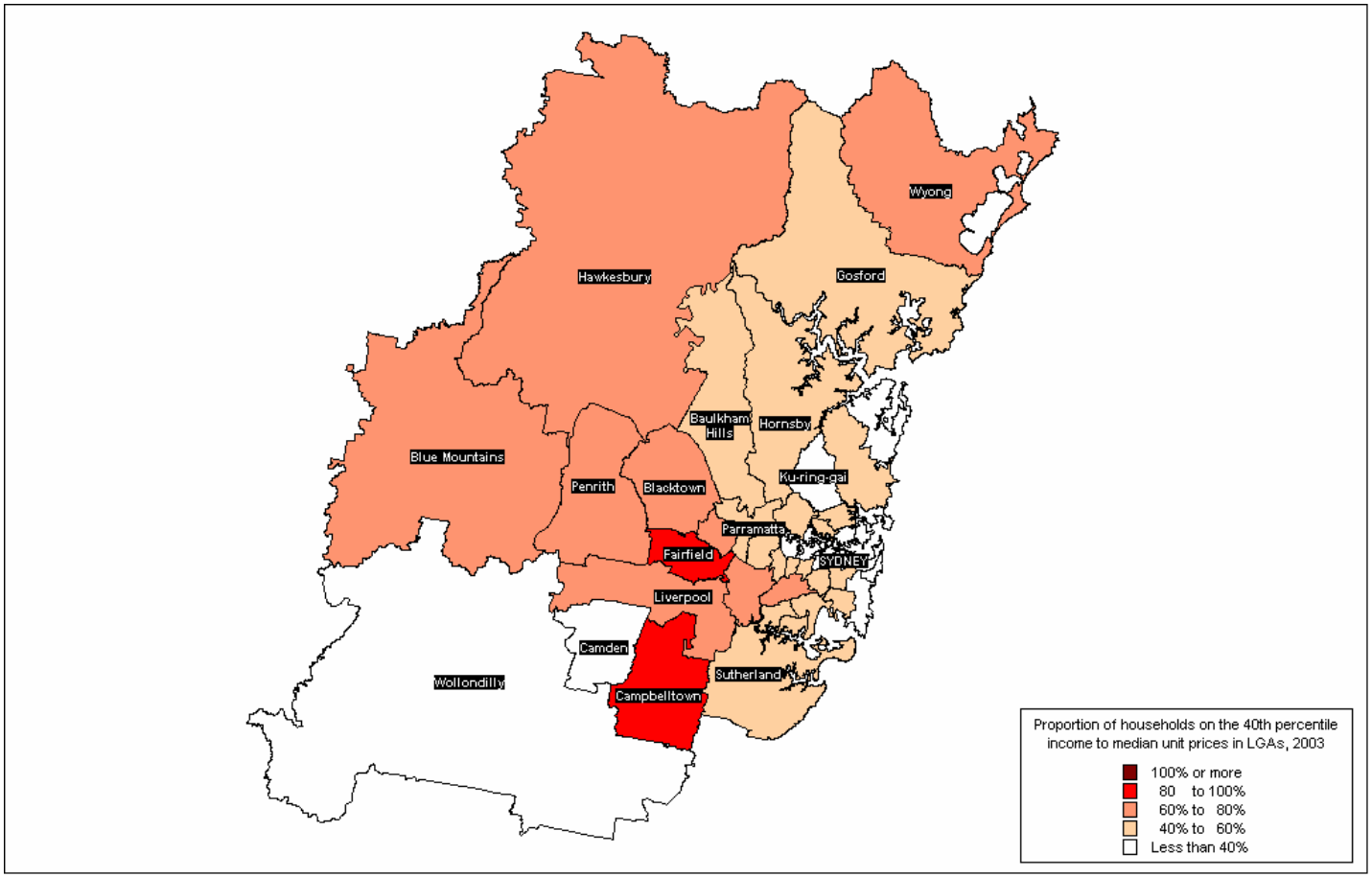
(Note: 100% or more is affordable)

Figure 4.11: The ratio between the house price a household at the 60th income percentile for Sydney as a whole could afford and the median house prices for each LGA, 2003



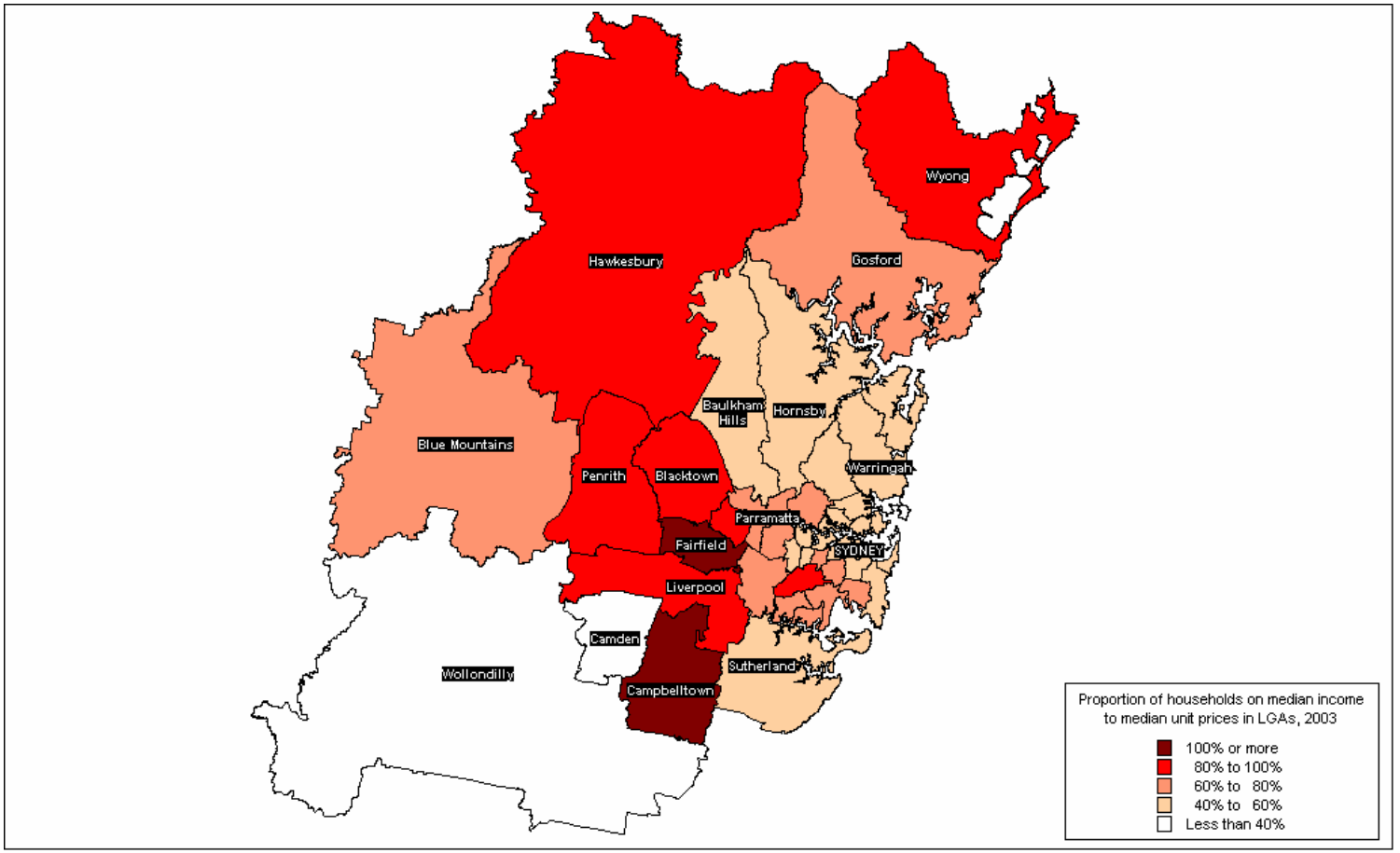
(Note: 100% or more is affordable)

Figure 4.12: The ratio between the unit price a household at the 40th income percentile for Sydney as a whole could afford and the median unit prices for each LGA, 2003



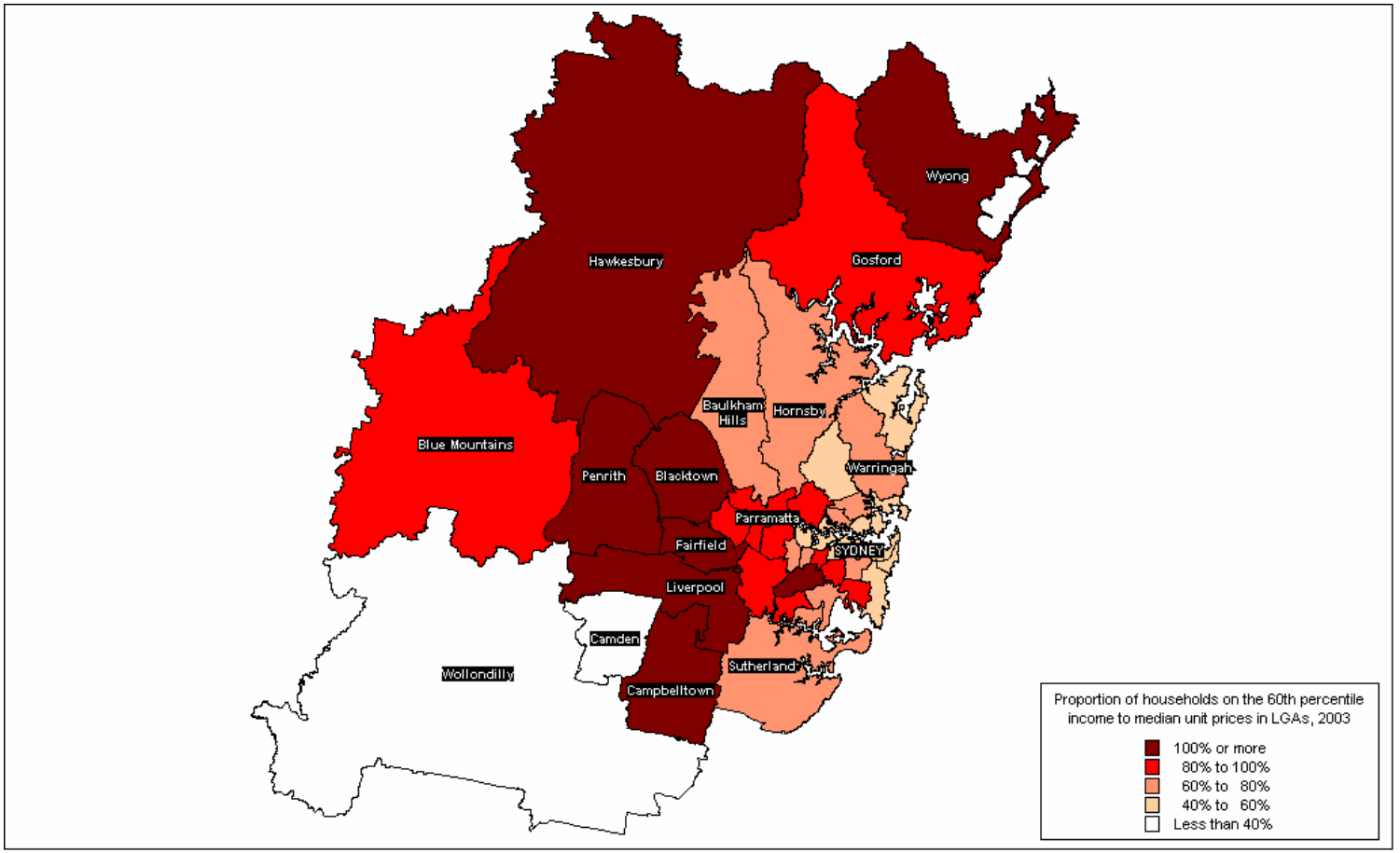
(Note: 100% or more is affordable)

Figure 4.13: The ratio between the unit price a household at the median income for Sydney as a whole could afford and the median unit prices for each LGA, 2003



(Note: 100% or more is affordable)

Figure 4.14: The ratio between the unit price a household at the 60th income percentile for Sydney as a whole could afford and the median unit prices for each LGA, 2003



(Note: 100% or more is affordable)

4.2.3 A longer term perspective on the changing geography of affordability

We saw in above that the ratio of house and unit prices to household incomes had deteriorated significantly between 1981 and 2003. The previous section showed clear geographical variation in affordability and a deterioration between 2001 and 2003. A further way of looking at the changing nature of affordability is to compare average prices to average incomes over time. This section analyses the change in the median price to income relationship across Sydney between 1981 and 2003 to establish the longer term trends.

The LGA level analysis of the changing relationship between median prices and incomes is set out in Tables 4.5 and 4.6 and summarised in Figures 4.15 and 4.16. Taking houses first, there is a clear pattern in 1981 where the higher ratios are located in LGAs in the highest income areas: Mosman, North Sydney, Waverly and Woollahra, for example. Ashfield and Willoughby also feature high house price to income ratios at this time. Lowest ratios were recorded in outer and fringe LGAs: Blacktown, Blue Mountains, Penrith and Wollondilly, for example.

This pattern was broadly maintained in 2003, by which time an average house in Mosman cost 19 times the average household income in this LGA. House prices reached or exceeded income by a factor of 15 in six other LGAs, all in the inner areas and north shore. It seems that ratios in high income areas are affected either by an ability of home owners in these areas to have access to additional equity to assist home purchase, or that there are significant proportions of relatively low income households living in these areas, perhaps, older residents who bought several decades previously or flat dwellers. Prices in outer areas are much more likely to reflect the income base of the population.

The changes between 1981 and 2003 suggest that house prices have moved decisively up against median incomes in the eastern and north shore LGAs of Warringah, Pittwater, Manly, Mosman, Botany Bay and Randwick. But the change in ratios between 1981 and 2003 is also higher in a swathe of middle ring suburbs from Ryde and Hunters Hill round to Hurstville and Kogarah. Noticeably, the change in ratios is modest in the highest income areas of inner and north Sydney, and generally much lower elsewhere across the western and outer Sydney.

For houses, then, the impact of house price inflation in eastern and coastal areas and the middle suburban ring has been most pronounced in driving house prices up against average household incomes.

Turing to units, the ratios are much lower across the board (reflecting the analysis for Sydney as a whole presented above). Higher price to income ratios characterise the inner and seaboard LGAs in both 1981 and 2003. However, changes in ratios between 1981 and 2003 indicate that some areas have moved up the rankings, including Auburn (Olympic Park), Concord and Strathfield in the inner middle ring area and Pittwater on the northern beaches. In general here appears to be more spatial variation in changes compared to houses, perhaps reflecting more localised market conditions for this sector. Only in the exceptional case of the City of Sydney was there a decline in ratio levels, most likely a reflection of both boom in units

developed in recent years in this area, and a substantial upward movement in average incomes with new higher income residents moving into the area over this time.

4.3 Summary

In summary, the ratio of median house and unit prices to median household incomes has consistently worsened over the 1981 to 2003 period across all LGAs in Sydney. But the relationship has deteriorated most significantly in the inner and eastern suburbs, especially those on the coast. Most interestingly, there is a band of inner middle ring suburbs where price pressures have moved consistently against average household incomes, indicating both gentrification and, possibly, changes in income structures with a higher proportion of older residents on lower incomes remaining in-situ, helping to keep average income levels down relative to property prices. Price pressures in these areas seem to be related both to rising incomes of buyers but also to access to additional equity among buyers.

Table 4.5: The Ratio of LGA Median House Prices to LGA Median Household Income, 1981 and 2003

LGA	Median House Prices 1981	Median Household Income 1981	Ratio of House Prices to Household Income 1981	Median House Prices 2003	Median Household Income 2003	Ratio of House Prices to Household Income 2003	Change 1981 to 2003
Ashfield	100,000	14,643	6.83	644,000	50,860	12.66	5.83
Auburn	60,000	14,414	4.16	437,000	40,087	10.90	6.74
Bankstown	65,000	17,511	3.71	428,000	43,915	9.75	6.03
Baulkham Hills	85,000	23,069	3.68	543,000	81,650	6.65	2.97
Blacktown	50,000	17,455	2.86	329,000	50,587	6.50	3.64
Blue Mountains	22,500	15,068	1.49	330,000	48,563	6.80	5.30
Botany Bay	68,650	15,147	4.53	660,000	44,571	14.81	10.28
Burwood	86,875	15,076	5.76	660,000	48,563	13.59	7.83
Camden	55,500	19,018	2.92	385,000	62,509	6.16	3.24
Campbelltown	56,000	17,375	3.22	287,000	49,438	5.81	2.58
Canterbury	72,000	14,419	4.99	505,000	39,430	12.81	7.81
Concord	86,500	16,572	5.22	755,000	63,274	11.93	6.71
Drummoyne	83,000	17,215	4.82	755,000	64,149	11.77	6.95
Fairfield	52,000	16,574	3.14	348,000	41,454	8.39	5.26
Gosford	NA	NA	NA	380,000	40,852	9.30	NA
Hawkesbury	53,900	16,360	3.29	350,000	52,720	6.64	3.34
Holroyd	61,000	16,995	3.59	410,000	46,704	8.78	5.19
Hornsby	86,500	21,171	4.09	579,000	69,235	8.36	4.28
Hunter's Hill	105,500	19,699	5.36	939,000	80,337	11.69	6.33
Hurstville	82,125	17,718	4.64	565,000	49,384	11.44	6.81
Kogarah	83,750	18,080	4.63	715,000	55,782	12.82	8.19
Ku-ring-gai	145,000	26,000	5.58	875,000	89,033	9.83	4.25
Lane Cove	131,000	20,191	6.49	946,000	75,962	12.45	5.97
Leichhardt	73,500	14,678	5.01	671,000	63,985	10.49	5.48
Liverpool	57,875	17,114	3.38	387,000	50,915	7.60	4.22
Manly	100,500	16,997	5.91	1,200,000	70,548	17.01	11.10
Marrickville	65,000	13,279	4.89	544,000	52,610	10.34	5.45
Mosman	170,000	19,792	8.59	1,645,000	84,822	19.39	10.80
North Sydney	135,000	17,614	7.66	1,003,000	80,556	12.45	4.79
Parramatta	63,000	17,101	3.68	443,000	48,180	9.19	5.51
Penrith	52,815	17,473	3.02	310,000	53,923	5.75	2.73
Pittwater	110,000	19,622	5.61	804,000	65,735	12.23	6.62
Randwick	95,000	16,440	5.78	930,000	55,837	16.66	10.88
Rockdale	80,625	15,134	5.33	580,000	46,430	12.49	7.16
Ryde	83,250	18,731	4.44	630,000	55,891	11.27	6.83
South Sydney	60,000	11,320	5.30	602,000	53,376	11.28	5.98
Strathfield	94,000	17,574	5.35	873,000	52,610	16.59	11.24
Sutherland Shire	83,000	20,426	4.06	590,000	62,946	9.37	5.31
Sydney	63,250	11,854	5.34	516,000	59,610	8.66	3.32
Warringah	105,000	19,622	5.35	710,000	61,853	11.48	6.13
Waverley	112,500	15,388	7.31	1,021,000	60,157	16.97	9.66
Willoughby	135,000	19,881	6.79	955,000	75,196	12.70	5.91
Wollondilly	37,500	16,519	2.27	348,000	53,759	6.47	4.20
Woollahra	200,000	19,044	10.50	1,458,000	82,743	17.62	7.12
Wyong	48,500	10,626	4.56	300,000	33,852	8.86	4.30

Table 4.6: The Ratio of LGA Median Unit Prices to LGA Median Household Income, 1981 and 2003

LGA	**Median Unit Prices 1981**	**Median Household Income 1981**	**Ratio of Unit Prices to Household Income 1981**	**Median Unit Prices 2003**	**Median Household Income 2003**	**Ratio of Unit Prices to Household Income 2003**	**Change 1981 to 2003**
Ashfield	NA	NA	NA	313,000	50,860	6.15	NA
Auburn	51,125	14,414	3.55	287,000	40,087	7.16	3.61
Bankstown	63,550	17,511	3.63	281,000	43,915	6.40	2.77
Baulkham Hills	58,000	23,069	2.51	414,000	81,650	5.07	2.56
Blacktown	NA	NA	NA	255,000	50,587	5.04	NA
Blue Mountains	NA	NA	NA	277,000	48,563	5.70	NA
Botany Bay	55,000	15,147	3.63	300,000	44,571	6.73	3.10
Burwood	70,500	15,076	4.68	397,000	48,563	8.17	3.50
Camden	NA	NA	NA	NA	NA	NA	NA
Campbelltown	49,950	17,375	2.87	215,000	49,438	4.35	1.47
Canterbury	53,500	14,419	3.71	230,000	39,430	5.83	2.12
Concord	65,250	16,572	3.94	466,000	63,274	7.36	3.43
Drummoyne	74,950	17,215	4.35	466,000	64,149	7.26	2.91
Fairfield	NA	NA	NA	210,000	41,454	5.07	NA
Gosford	NA	NA	NA	287,000	40,852	7.03	NA
Hawkesbury	50,000	16,360	3.06	255,000	52,720	4.84	1.78
Holroyd	55,500	16,995	3.27	270,000	46,704	5.78	2.52
Hornsby	78,500	21,171	3.71	367,000	69,235	5.30	1.59
Hunter's Hill	80,750	19,699	4.10	535,000	80,337	6.66	2.56
Hurstville	62,000	17,718	3.50	307,000	49,384	6.22	2.72
Kogarah	68,000	18,080	3.76	360,000	55,782	6.45	2.69
Ku-ring-gai	129,000	26,000	4.96	512,000	89,033	5.75	0.79
Lane Cove	85,000	20,191	4.21	368,000	75,962	4.84	0.63
Leichhardt	63,750	14,678	4.34	492,000	63,985	7.69	3.35
Liverpool	44,000	17,114	2.57	236,000	50,915	4.64	2.06
Manly	75,500	16,997	4.44	589,000	70,548	8.35	3.91
Marrickville	53,250	13,279	4.01	312,000	52,610	5.93	1.92
Mosman	91,500	19,792	4.62	489,000	84,822	5.77	1.14
North Sydney	87,750	17,614	4.98	509,000	80,556	6.32	1.34
Parramatta	60,000	17,101	3.51	310,000	48,180	6.43	2.93
Penrith	43,500	17,473	2.49	230,000	53,923	4.27	1.78
Pittwater	67,250	19,622	3.43	471,000	65,735	7.17	3.74
Randwick	68,750	16,440	4.18	445,000	55,837	7.97	3.79
Rockdale	68,000	15,134	4.49	340,000	46,430	7.32	2.83
Ryde	61,000	18,731	3.26	323,000	55,891	5.78	2.52
South Sydney	50,975	11,320	4.50	380,000	53,376	7.12	2.62
Strathfield	63,000	17,574	3.58	376,000	52,610	7.15	3.56
Sutherland	65,500	20,426	3.21	376,000	62,946	5.97	2.77
Sydney	140,000	11,854	11.81	465,000	59,610	7.80	-4.01
Warringah	68,000	19,622	3.47	396,000	61,853	6.40	2.94
Waverley	65,000	15,388	4.22	495,000	60,157	8.23	4.00
Willoughby	92,500	19,881	4.65	421,000	75,196	5.60	0.95
Wollondilly	NA	NA	NA	NA	NA	NA	NA
Woollahra	81,500	19,044	4.28	623,000	82,743	7.53	3.25
Wyong	NA	NA	NA	255,000	33,852	7.53	NA

FIGURE 4.15: The Change in the Ratio of LGA Median House Prices to LGA Median Household Income, 1981-2003

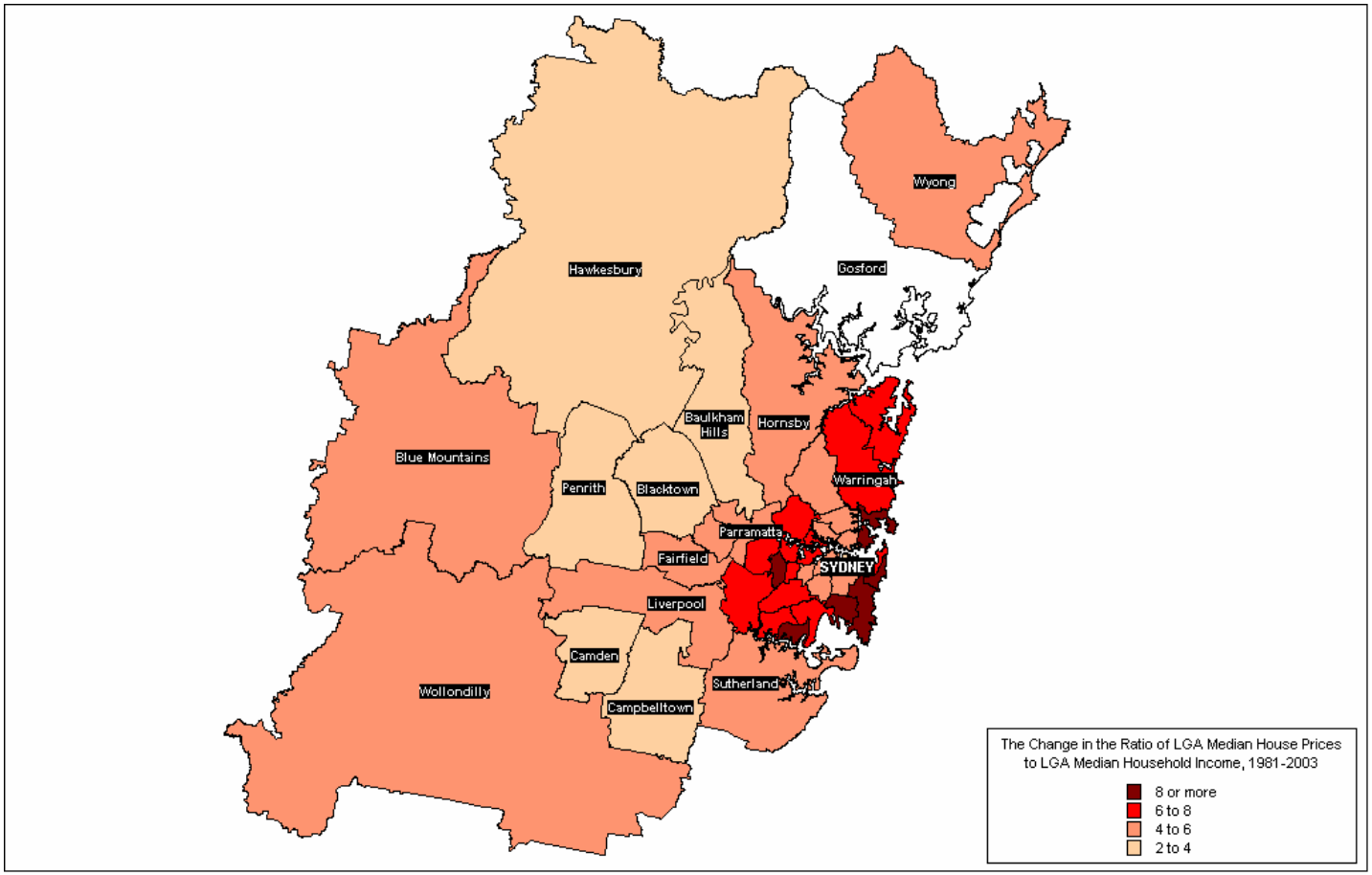
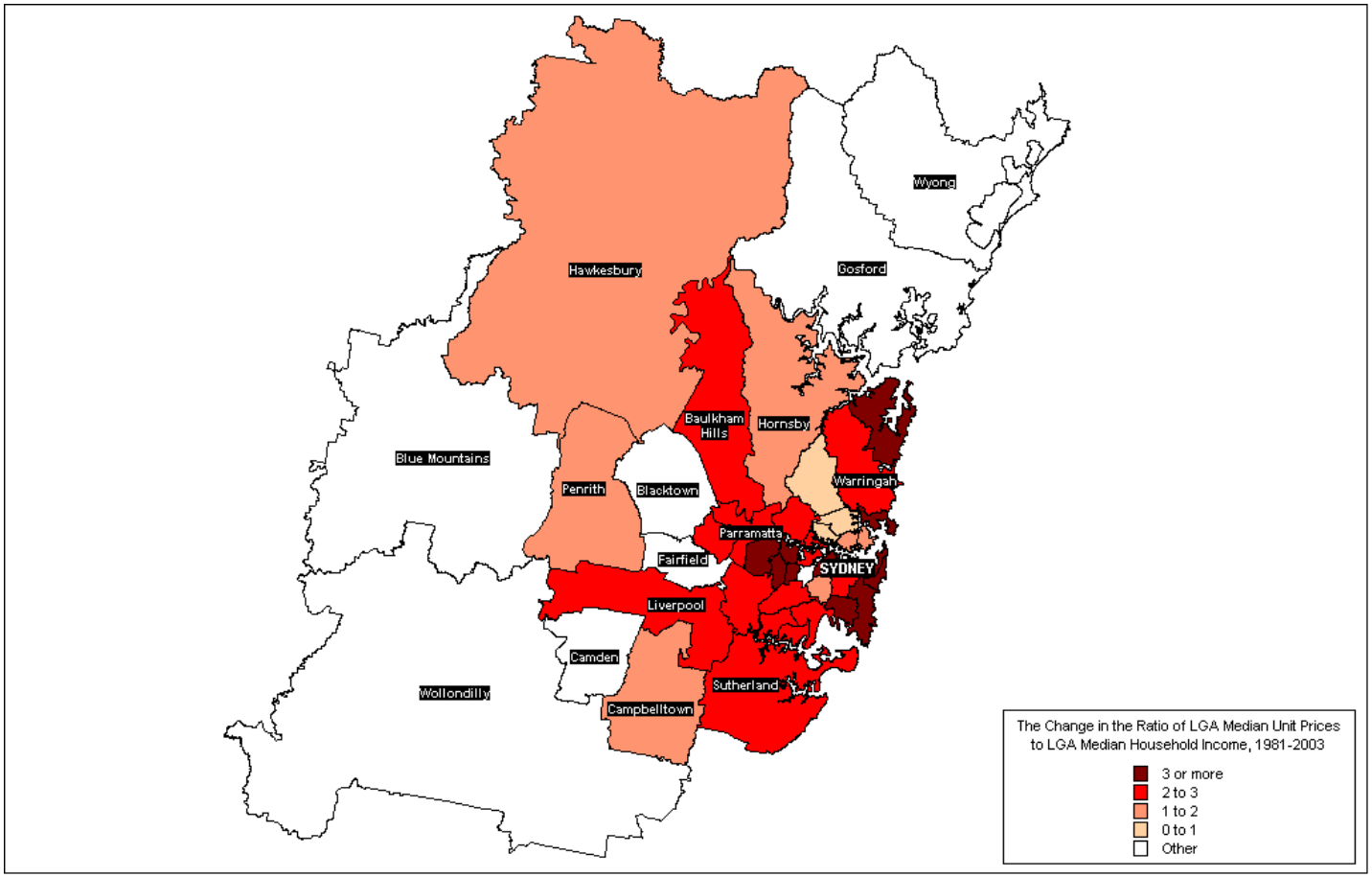


FIGURE 4.16: The Change in the Ratio of LGA Median Unit Prices to LGA Median Household Income, 1981-2003



Note: LGAs where data is not available are classified as other

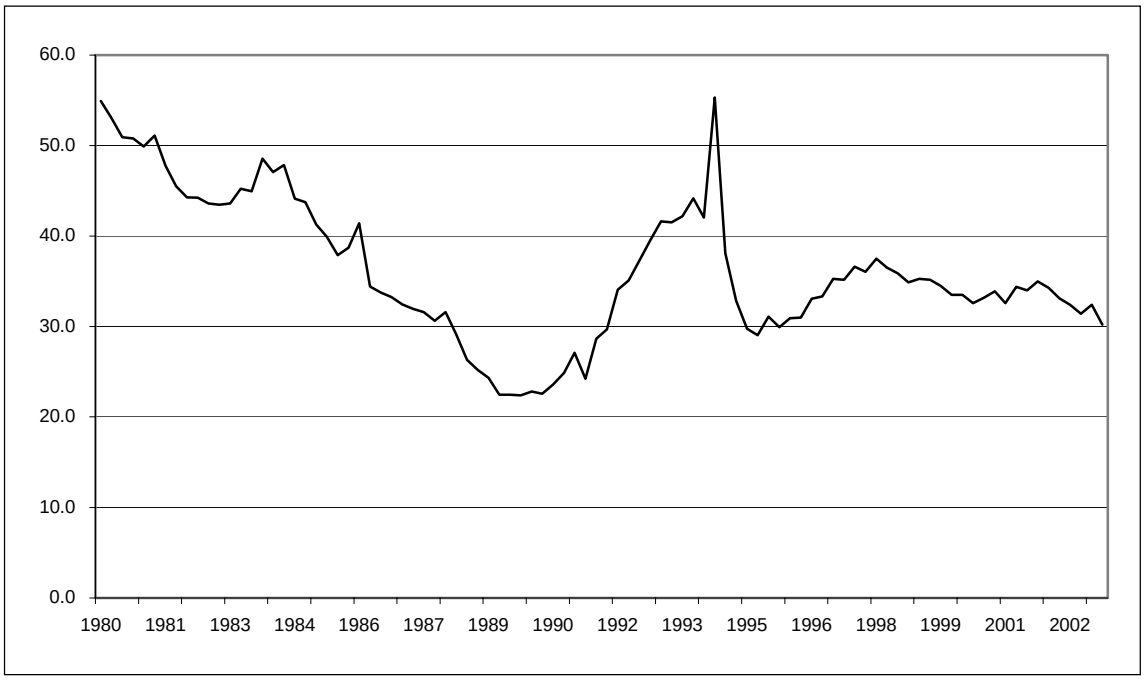
4.3 Other measures of affordability

In this section we review the trends in housing affordability as measured by two of the more well-known time series published on behalf of the property sector. These are the REIA/AMP Banking Home Loan Affordability Index and the HIA/ Commonwealth Bank Home Loan Affordability Index. Both these indices chart specific aspects of housing affordability that together offer concise insights into recent affordability trends. The following outlines each measure and briefly summarises the trends they have shown over the last two decades.

4.3.1 Real Estate Institute of Australia/AMP Banking Home Loan Affordability Indicator

Figure 4.17 shows the home loan affordability indicator for NSW, which is produced by the Real Estate Institute of Australia (REIA) in conjunction with AMP Banking. This affordability indictor presents a ratio of family income to average loan repayments. The higher the value the more affordable housing is. Loan repayment figures are calculated from figures provided by the ABS, Cannex Pollfax, and financial institutions across Australia. Weekly family[6] income figures are sourced from the ABS and updated on the basis of movements in average weekly earnings.

FIGURE 4.17: REIA/AMP Home Loan Affordability Indictor NSW (March 1980-June 2003)



The REIA affordability indictor has had a number of peaks and troughs since 1980. The indicator declined from a peak of 54.9 in 1980 to a low point in 1989-1990. The index then increased to another high of 55.3 in 1994 before declining rapidly during

[6] Family is defined as a married couple with or without children

1994-1995. The index steadily increased until 1998 when its present downward trend began. At June 2003 the index was 30.2, approaching the same levels that it was in 1994-1995. That is, housing has become less affordable for families in NSW over the previous five years, despite slight movements in the index. The long term trend is clearly downwards since the early 1980s.

4.3.2 Housing Industry Association (HIA)/Commonwealth Bank Home Loan Affordability Index

The HIA/Commonwealth Bank home loan affordability index measures accessibility to home ownership for an average first home buyer. It is measured by the ratio of average household income to the income necessary to be able to meet repayments on an average established dwelling purchased by first home buyers. Thus an increase in the ratio represents an improvement in affordability while a decline represents a deterioration in affordability for this group.

The median price of established dwellings is obtained from home loans financed by the Commonwealth Bank of Australia. An adjustment is made to approximate "first home buyer" prices. From the March quarter 1988 the median price has been moved forward by a linked index of prices paid by all home buyers. National capital city and rest of state median price levels are obtained by weighting respective median price levels for each region by the number of housing loans made by all lenders in each state adjusted to reflect the allocation of Commonwealth Bank loan approvals in each state between capital city and rest of state regions.

The house price for all Australia is obtained by a similar weighting procedure. Postcodes are used to allocate data on house prices between capital city and rest of state regions.

Housing loan rates are those quoted for loans to owner-occupiers. The series used is taken from the Indicator lending rates published in the Reserve Bank Bulletin. The standard variable rate of all banks is used as the applicable interest rate. Rates for Banks are the predominate rates of those banks which are large home lenders. Consultation with the CBA is also undertaken in determining the appropriate interest rate to quote.

Constant monitoring of the ratio of the number of variable home loans to non-variable home loans also needs to take place to assess any shifts in their relative market shares. Recent increased competition makes this process more difficult due to the range of different home loan packages now available.

Aggregate household income and household disposable income is taken from the ABS Quarterly Estimates of National Income and Expenditure. The seasonally adjusted series is used, on a one quarter lag reflecting the timing of the release of the data. The National Accounts estimates are subject to frequent revision, reflecting the availability of more up-to-date information and re-estimation of seasonal factors.

An estimate of the number of households is used to convert household income to a per household basis. Estimates of the number of households have been derived by applying estimates of headship ratios by five year age groups to ABS estimated

resident population at June each year, with quarterly estimates obtained by interpolation. Headship ratios have been taken from the Indicative Planning Council's 1989 Long-term Projections Report and held at the 1986 estimate. The assumption of constant headship rates appears to fit the 1980's quite well, as rising housing costs and slow real income growth have restrained household formation.

FIGURE 4.18: HIA/Commonwealth Bank Home Loan Affordability Index, Sydney, 1985 to June 2003

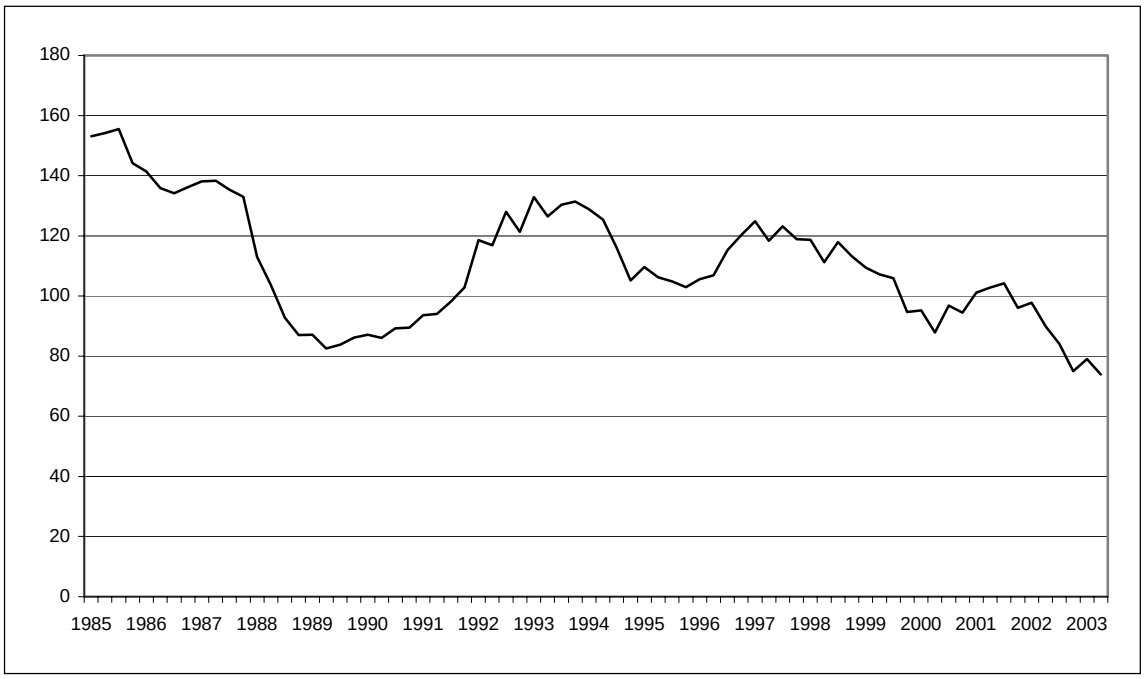


Figure 4.18 shows some similar patterns to the REIA/AMP home loan indicator, with a long term decline in affordability in Sydney for first home buyers. The HIA/Commonwealth Bank home loan affordability index was at a peak in 1985 and declined until 1989 where it reached a low of 82.5. The index then recovered steadily to 1994 from where it fell again until 1995-1996. Following a short rise to 1997/8, the index has continued to decline to 2003, despite some fluctuations over this time. Significantly, given its relevance to first home buyers, the HIA/ Commonwealth Bank index reached it's lowest level by 2003 (lower than during the 1989-90 period), such that by June 2003 the index had reached 73.9 in Sydney.

4.3.3 Summary

In summary, both indexes reviewed here point to a longer term 'structural' decline in affordability in Sydney over the last two decades or so, especially for first home owners. While there are clearly cyclical influences at work, most notably the property crash of the early 1990s, leading to fluctuations in affordability levels, the overall trend is one of declining levels of affordability. It does not appear from this published data, therefore, that the current affordability problem is simply a cyclical one that will correct itself once prices have stabilised.

5 MODELLING HOUSING AFFORDABILITY

5.1 Trends in the estimated income required to buy a median priced home in Sydney

This section estimates the weekly income necessary to purchase a dwelling affordably in Sydney between 1981 and 2003. The assumptions on which the estimates are based are noted at the foot of Table 5.1, but they include a variable interest rate appropriate for the year the estimate refers to.

Table 5.1 shows that to purchase a median priced house at an affordable rate in 1981 required a weekly income of $580. This was 1.8 times the actual median household income at this time. By 2003 the weekly household income necessary to purchase a median priced house was $2,233, some 2.2 times the actual median weekly income. Overall, the ratio of median weekly income needed to purchase a median priced house affordably in Sydney has increased between 1981 and 2001. However, the ratio reached its peak in 1991and fell up till 2001. In the last two years the ratio has increased substantially again to approximately its 1991 level for houses.

In 1981 the weekly income needed to affordably purchase a flat/unit in Sydney was $482. This represented 1.5 times the actual median weekly income. By 2003 the weekly income required to affordably purchase a median priced flat/unit in Sydney was $1,711. This represents 1.7 times actual median household income in 2003. So while the ratio between the weekly household income necessary to purchase the median priced flat/unit in Sydney and actual median weekly income increased between 1981 and 2003, the degree of increase was lower than for houses. The general trends were similar, however, increasing between 1981 and 1991, falling back between 1991 and 1996 and then rising again since 1996. While the 2003 ratio for houses was around the same level as that for 1991, however, for flats/units the ratio was at its highest level in the last 20 years.

The results for the top and bottom of the MIH income range generally reflect the findings for median household income. At the 40th percentile household income level, the index stood at 2.7 in for houses in 2003 (the same as in 1991), compared to 2.2 in 1981 (Table 5.2). The higher index for the 40th income group reflects this groups worse purchasing position.

At the 60th percentile household income level, the increase in the ratio between 1981 and 2003 for both houses and flats/units has not been as large as that for the 40th percentile and median income households, rising form 1.5 to 1.8 for houses and 1.2 to 1.4 for flats/units.

These data are represented graphically in Figures 5.1 to 5.2. The data illustrates the worsening position of households at the bottom of the MIH range and the worse position for MIHs buying houses compared to flats over this time.

TABLE 5.1: Amount of Income necessary to purchase the median priced house and unit in Sydney, 1981-2003

	Interest Rate	Median Dwelling Price ($'000s)	Weekly Income Necessary to Purchase Dwelling Affordably	Median Weekly Income	Ratio of Affordable Weekly Repayments to Median Weekly Income
Houses					
1981	12.00	78.8	$579.63	$329.83	1.76
1986	15.50	100.9	$927.56	$487.98	1.90
1991	13.00	186.0	$1,463.96	$675.04	2.17
1996	9.25	215.0	$1,288.46	$760.00	1.70
2001	6.55	315.0	$1,496.75	$988.00	1.51
2003	6.55	470.0	$2,233.25	$1,039.08	2.15
Units					
1981	12.00	65.5	$481.80	$329.83	1.46
1986	15.50	73.5	$675.52	$487.98	1.38
1991	13.00	135.0	$1,062.55	$675.04	1.57
1996	9.25	177.3	$1,062.73	$760.00	1.40
2001	6.55	300.0	$1,425.48	$988.00	1.44
2003	6.55	360.0	$1,710.58	$1,039.08	1.65

Notes:

- Term of Loan is 25 years, Amount borrowed is 90% of the purchase price.
- Interest rates were collated from the RBA and are based on the standard variable housing loan from a bank in the September quarter of each year.
- The affordability benchmark has been set at 30%.
- Median weekly incomes were sourced from the ABS for the relevant census years. The 2003 median household income has been inflated from the 2001 figure.
- Median house and unit prices courtesy of REIA.

TABLE 5.2: Ratio of Affordable Weekly Repayments to Weekly Income for Moderate Income Households, 1981-2003

	Weekly Income Necessary to Purchase Dwelling Affordably	40th Percentile Weekly Income	Ratio of Affordable Weekly Repayments to 40th Percentile Weekly Income	60th Percentile Weekly Income	Ratio of Affordable Weekly Repayments to 60th Percentile Weekly Income
Houses					
1981	$579.63	269	2.16	395	1.47
1986	$927.56	393	2.36	586	1.58
1991	$1,463.96	536	2.73	821	1.78
1996	$1,288.46	607	2.12	934	1.38
2001	$1,496.75	778	1.92	1197	1.25
2003	$2,233.25	818	2.73	1259	1.77
Units					
1981	$481.80	269	1.79	395	1.22
1986	$675.52	393	1.72	586	1.15
1991	$1,062.55	536	1.98	821	1.29
1996	$1,062.73	607	1.75	934	1.14
2001	$1,425.48	778	1.83	1197	1.19
2003	$1,710.58	818	2.09	1259	1.36

Notes:

- Term of Loan is 25 years, Amount borrowed is 90% of the purchase price.
- Interest rates were collated from the RBA and are based on the standard variable housing loan from a bank in the September quarter of each year.
- The affordability benchmark has been set at 30%.
- Median weekly incomes were sourced from the ABS for the relevant census years. The 2003 median household income has been inflated from the 2001 figure.
- Median house and unit prices courtesy of REIA.

Figure 5.1: The ratio of weekly income necessary to affordably purchase a house to household income, for various income groups between 1981 and 2003

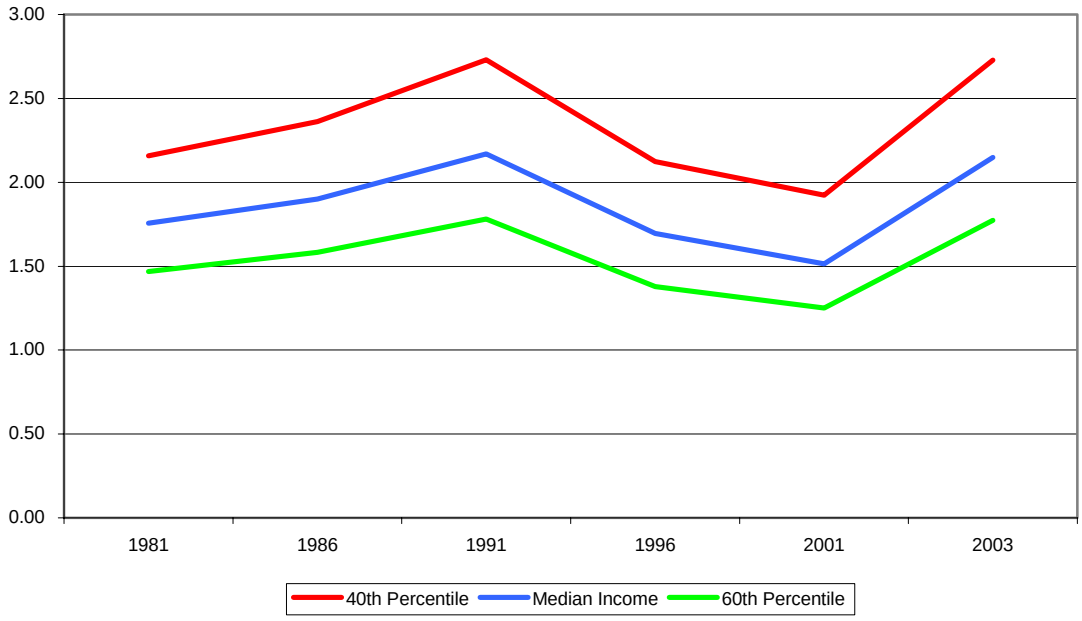
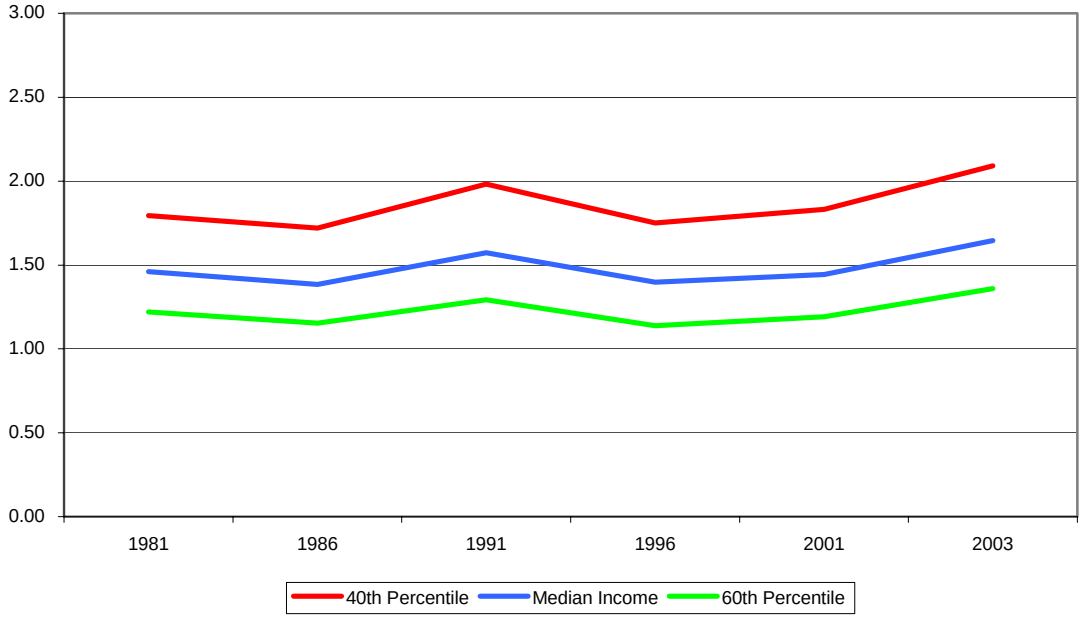


Figure 5.2: The ratio of weekly income necessary to affordably purchase a flat/unit to household income, for various income groups between 1981 and 2003



5.2 Trends in the estimated income required to buy a median priced home in Sydney using a standardised interest rate

While using a variable interest rate provides a closer approximation to reality of the actual position potential MIH purchasers were in over the two decades of this analysis, using a standardised rate for the period allows the effects of interest rate variations on changing the affordability of housing to be controlled for, thereby exposing the effects of changing income levels more clearly. This approach also more clearly differentiates the structural aspect of housing affordability from the shorter term (and more volatile) cyclical aspect of affordability.

This section presents an analysis of housing affordability for MIHs in Sydney using standardised interest rate calculated at 11.3 per cent for the 1981 to 2003 period. Between these two dates the resulting ratio of income necessary to affordably purchase the median priced house in Sydney to median weekly income increased from 1.7 in 1981 to 3.2 in 2003 (Table 5.3). Despite a drop between 1981 and 1986 the ratio has increased consistently since then, but most significantly between 2001 and 2003. A similar story emerges for flats, where the ratio increased from 1.4 in 1981 to 2.4 in 2003, again with a fall between 1981 and 1986.

TABLE 5.3: Amount of Income necessary to purchase the median priced house and unit in Sydney (using standardised interest rate), 1981-2003

	Interest Rate	Median Dwelling Price ($'000s)	Weekly Income Needed to Buy a Dwelling Affordably	Median Weekly Income	Ratio of Affordable Weekly Repayments to Median Weekly Income
Houses					
1981	11.30	78.8	$551.67	$329.83	1.67
1986	11.30	100.9	$706.39	$487.98	1.45
1991	11.30	186.0	$1,302.17	$675.04	1.93
1996	11.30	215.0	$1,505.20	$760.00	1.98
2001	11.30	315.0	$2,205.29	$988.00	2.23
2003	11.30	470.0	$3,290.44	$1,039.08	3.17
Units					
1981	11.30	65.5	$458.56	$329.83	1.39
1986	11.30	73.5	$514.45	$487.98	1.05
1991	11.30	135.0	$945.13	$675.04	1.40
1996	11.30	177.3	$1,241.50	$760.00	1.63
2001	11.30	300.0	$2,100.28	$988.00	2.13
2003	11.30	360.0	$2,520.34	$1,039.08	2.43

Notes:

- Term of Loan is 25 years, Amount borrowed is 90% of the purchase price.
- Standardised interest rate was collated from the RBA and are based on the standard variable housing loan from a bank in the September quarter of each year.[7]
- The affordability benchmark has been set at 30%.
- Median weekly incomes were sourced from the ABS for the relevant census years. The 2003 median household income has been inflated from the 2001 figure.
- Median house and unit prices courtesy of REIA.

[7] The standardised interest rate refers to the average of the quarterly standard variable housing loan interest rate between 1981 and 2003.

Similarly, the ratios of income necessary to affordably purchase the median priced house at the 40th and 60th percentile incomes all increased between 1981 and 2003 (Table 5.4). In particular, the large increase in the ratio for households on the 40th percentile household income, without any equity, between 2001 and 2003 is particularly noteworthy (from 2.1 to 4.0). There were also large increases in recent years of the ratio for households on the 60th percentile income.

TABLE 5.4: Ratio of Affordable Weekly Repayments to Weekly Income for Moderate Income Households (using standardised interest rate), 1981-2003

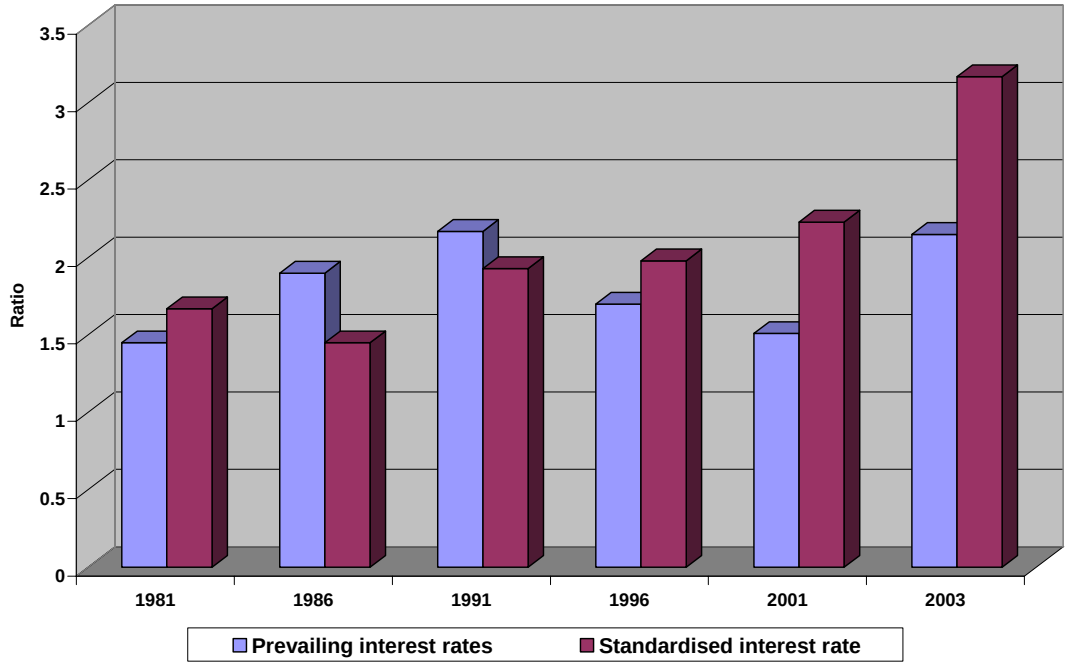
	Weekly Income Necessary to Purchase Dwelling Affordably	40th Percentile Weekly Income	Ratio of Affordable Weekly Repayments to 40th Percentile Weekly Income	60th Percentile Weekly Income	Ratio of Affordable Weekly Repayments to 60th Percentile Weekly Income
Houses					
1981	$551.67	269	2.05	395	1.40
1986	$706.39	393	1.80	586	1.21
1991	$1,302.17	536	2.43	821	1.59
1996	$1,505.20	607	2.48	934	1.61
2001	$2,205.29	778	2.83	1197	1.84
2003	$3,290.44	818	4.02	1259	2.61
Units					
1981	$458.56	269	1.71	395	1.16
1986	$514.45	393	1.31	586	0.88
1991	$945.13	536	1.76	821	1.15
1996	$1,241.50	607	2.05	934	1.33
2001	$2,100.28	778	2.70	1197	1.75
2003	$2,520.34	818	3.08	1259	2.00

Notes:

- Term of Loan is 25 years, Amount borrowed is 90% of the purchase price.
- Standardised interest rate were collated from the RBA and are based on the standard variable housing loan from a bank in the September quarter of each year.
- The affordability benchmark has been set at 30%.
- Median weekly incomes were sourced from the ABS for the relevant census years. The 2003 median household income has been inflated from the 2001 figure.
- Median house and unit prices courtesy of REIA.

This analysis indicates that when interest rates are controlled for, the impact of house price inflation in relation to incomes for MIHs in Sydney is much more stark. While the general lowering of interest rates over the last decade has undoubtedly helped to fuel house price increases, the analysis here indicates just how important the costs of borrowing have been in ameliorating the impacts of overall price rises for MIHs. Figure 5.3 illustrates the increasing impact of low interest rates on affordability by comparing the ratio of median incomes and the income needed to affordably buy a median priced house in Sydney between 1981 and 2003 at the actual and standardised interest rates analysed in Tables 5.1 and 5.3. The implication is that MIHs are likely to be highly vulnerable to interest rate rises, especially if they trend upwards towards the historic longer term rates.

Figure 5.3: Ratio of weekly household income needed to affordably buy a median priced house to actual weekly household incomes, Sydney 1981 to 2003



5.3 Scenario testing: Rising rates and falling prices

At the time of completing this report, property prices in Sydney appear to have levelled off and may well be falling, following both the changes in investment property taxation and a likely oversupply of properties in the investment market in central Sydney. At the same time, interest rates, already at historically low levels, are likely to response to general economic trends and interest rate increases in key market overseas.

The impact of these changes on housing affordability in Sydney is likely to be complex and will not be clear for some time. However, in order to make some assessment of the likely impact of foreseeable market changes on the affordability situation, the following section presents some illustrative scenarios using the model presented above for a range of interst rate and house price situations.

Table 5.5 sets out a range of outcomes from four different scenarios assuming changes in interest rates and house prices. These are:

Scenario 1 Interest rate of 8% p.a. and median house price fall of 5%.
Scenario 2 Interest rate of 8% p.a. and median house price fall of 15%
Scenario 3 Interest rate of 10% p.a. and median house price fall of 5%
Scenario4 Interest rate of 10% p.a. and median house price fall of 15%

These four scenarios are set against a base case derived from Table 5.1 with interest rates and prices as at mid-2003. The median weekly income level is set at $1,039.

What do the different scenarios show? A modest increase in interest rates to 8 per cent coupled with a modest 5 per cent fall in house prices results in a worsening of the

affordability position (Scenario 1). Under this scenario, the weekly income required to purchase a median priced house without exceeding the 30 per cent cost:income ratio increases by 8 per cent from $2,233 to $2,413. For units the comparable increase is from $1,710 to $1,848. However, if prices fell by 15 per cent (Scenario 2), then there is an overall improvement in affordability with the income needed to buy at the median price dropping to $2,159 for houses and $1,654 for units (or by 3 per cent).

Increasing interest rates to 10 per cent has a more significant impact (Scenario 3). With a 5 per cent fall in prices, the income required to buy at an affordable level increases by 27 per cent for both houses and units. Even if house prices fell by 15 per cent, the income needed to buy still increases by 14 per cent (Scenario 4).

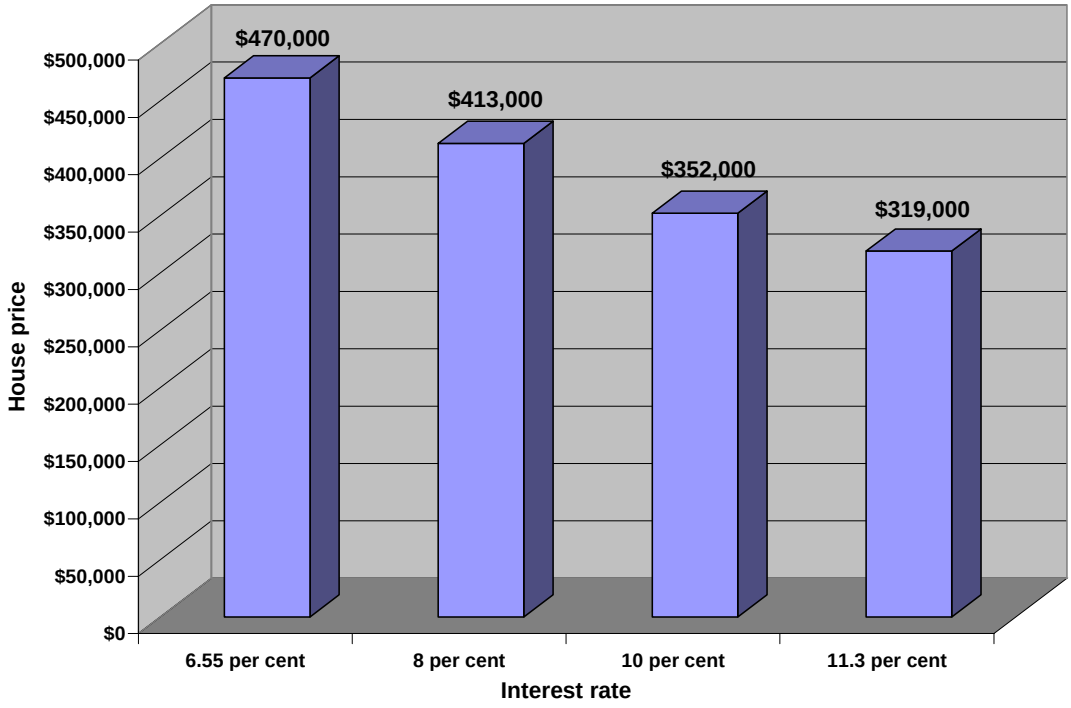
Without interest rates rising, a reduction in average property prices will result in an improved affordability situation, and is to be welcomed. However, rising interest rates threaten to negate the benefits of falling prices. These results suggest that interest rates are likely to have a more critical impact on housing affordability and will themselves have an impact on property prices, in which case predicting likely outcomes becomes even more hazardous (in rapidly falling property markets a whole new set of problems emerge, including negative equity). Given that a 10 per cent interest rate is below the average rate experienced over the last 20 years, then the implications of these findings are clear.

TABLE 5.5: The Impact of Changes in Interest Rates and House Prices on Affordability Outcomes for Households on Median Incomes.

	Interest Rate	**House Price Change**	**Median Dwelling Price**	**Weekly Income Necessary to Purchase Dwelling Affordably**	**Percentage change in required income**	**Ratio of Affordable Weekly Payments to Median Weekly Income**
Houses						
Base Case	6.55%		$470,000	$2,233.25		2.15
Scenario 1	8%	-5%	$446,500	$2,413.13	+8%	2.32
Scenario 2	8%	-15%	$399,500	$2,159.12	-3%	2.08
Scenario 3	10%	-5%	$446,500	$2,837.89	+27%	2.73
Scenario 4	10%	-15%	$399,500	$2,539.16	+14%	2.44
Units						
Base Case	6.55%		$360,000	$1,710.58		1.65
Scenario 1	8%	-5%	$342,000	$1,848.35	+8%	1.78
Scenario 2	8%	-15%	$306,000	$1,653.79	-3%	1.59
Scenario 3	10%	-5%	$342,000	$2,173.70	+27%	2.09
Scenario 4	10%	-15%	$306,000	$1,944.89	+14%	1.87

If interest rates are a key determining factor on affordability, and assuming that household incomes are inelastic in the short run, how far would house prices need to fall if interest rates rose in order to maintain even the current high ratios of payments to median incomes? As Figure 5.4 shows, assuming fixed weekly incomes of $2,233 (the current income needed to buy a median house affordably) and a steady payment to income ratio of 1:2.15 (from Table 1), then if interest rates increased to 8 per cent, house prices would need to fall to $413,000, or by 12 per cent ($57,000), to maintain the current position. At rates of 10 per cent, house prices would need to fall by 24 per cent ($118,000) to $352,000, and if interest rates hit the longer term average of 11.3 per cent, house price falls of 32 per cent ($151,000) to $319,000 would be required. The impact of this level of property devaluation would be substantial.

Figure 5.4: House prices required to maintain the current repayment to income ratios with increasing interest rates



5.4 Summary

Overall, the ratio of median weekly income needed to buy a median priced house affordably to the *actual* median incomes in Sydney increased from 1.8 to 2.2 between 1981 and 2003. The relevant ratios for units were 1.5 and 1.7. However, using a standardized interest rate averaged across the whole period, which controls for interest rate fluctuations and compensates for the historically low interest rates of the past few years, a much starker picture emerges. Between 1981 and 2003 the resulting ratio of income necessary to affordably purchase the median priced house in Sydney to median weekly income increased from 1.7 in 1981 to 3.2 in 2003. Despite falling between 1981 and 1986, this ratio has increased consistently since then, but most significantly between 2001 and 2003. A similar story emerges for flats, where the

price:income ratio increased from 1.4 in 1981 to 2.4 in 2003, again with a fall between 1981 and 1986.

This analysis highlights how vulnerable moderate income households are to potential fluctuations in interest rates, especially if rates were to begin to move upwards towards longer term levels. Substantial negative house price adjustments would be needed to maintain even the current levels of affordability.

6 A PROFILE OF MODERATE INCOME HOUSEHOLDS AND THE EXTENT OF HOUSING STRESS

6.1 Characteristics of moderate income households in Sydney

While income is a defining factor in housing demand and affordability, it is not the only factor that affects housing consumption outcomes. Other household characteristics also shape housing demand propensities. If these characteristics are different for MIHs compared to other household income groups, then we might expect that the MIH group will display somewhat different housing market behaviours to these other groups. So what are the broader characteristics of the MIH market? What is the social and demographic profile of the sector and what kinds of housing do they live in? This section unpacks the sector and describes its basic characteristics. Table 6.1 shows a selected range of characteristics of 232,000 MIHs in Sydney from the 2001 Census. Table 6.2 disaggregates the dwelling type and size characteristics of this group for those households in 2 and 3 bedroom dwellings to explore the occupancy levels.

6.1.1 Socio-demographic characteristics

Compared to Sydney as a whole, MIHs were more likely to comprise of couples with dependents (33 per cent) or lone persons (24 per cent). On the other hand, only 19 per cent of MIHs in Sydney in 2001 were couple only households, significantly lower than the Sydney wide average of 23 per cent. Proportions of group households and single parents with dependents were comparable to those for all Sydney households.

The age profile of MIHs was disproportionately concentrated in the middle age cohorts, especially the 35 to 44 year old group. The youngest (15 to 24) age group was significantly under-represented, and proportions of over 65s were also well below the Sydney figure.

Turning to household size, MIHs in Sydney are more likely to comprise of just one person or three or four people compared with the Sydney-wide figure. This characteristic reflects the household type profile noted above and confirms that our target MIH group are more likely to be singles or smaller families than Sydney's population as a whole. This would also tie in with the age profiles, with larger proportions of households headed by persons in the "Generation X" and younger middle-aged groups of the population.

6.1.2 Housing characteristics

At the time of the 2001 Census, 63 per cent of MIHs resided in separate houses, 11 per cent in semi-detached dwellings, 16 per cent in flats in a block of less than 4 storeys, and 9 per cent in a flat in a block of 4 or more storeys. These proportions were similar to that for all households across Sydney, although a slightly higher percentage of MIHs lived in flats than did households in Sydney as a whole. Conversely, a slightly lower proportion of MIHs lived in semi-detached dwellings compared with all households in Sydney.

A larger proportion of MIHs were either purchasing or renting their dwelling in 2001 compared with other households across Sydney. In 2001, 29 per cent of MIHs were purchasing their dwelling compared with 24 per cent across Sydney. Similarly, 28 per cent of MIHs were renting from a private landlord compared with 22 per cent in Sydney as a whole. Nevertheless, the largest group owned their homes outright (36 per cent), as was the case for all Sydney households. The proportion of MIHs in social housing was less than half of the Sydney average in 2001.

The dwelling size of MIHs in Sydney in 2001 was similar to that for all households across Sydney. The majority of MIHs, like all households, had 3 or more bedroom dwellings. It is difficult to compare across bedroom categories due to the high non-response rate across all households in Sydney.

Table 6.1: Characteristics of Moderate Income Households in Sydney SD, 2001

	Moderate Income Households	%	All Households
Dwelling Structure			
Separate Houses	146,541	63.1%	63.1%
Semi Detached	24,629	10.6%	11.3%
Flats in a block of less than 4 storeys	36,382	15.7%	15.1%
Flats in a block of 4 or more storeys	20,482	8.8%	8.4%
Other Dwellings	2,592	1.1%	1.2%
Not Stated	1,750	0.8%	0.9%
Total	232,376	100.0%	100.0%
Tenure			
Owned	84,008	36.2%	39.0%
Being Purchased	66,887	28.8%	23.7%
Rented: Private Landlord	65,161	28.0%	22.2%
Rented: Social Housing[1]	5,028	2.2%	5.4%
Rented: Other	2,889	1.2%	1.3%
Rented: Total	73,078	31.4%	29.0%
Other Tenure and Not Stated	8,403	3.6%	8.4%
Total	232,376	100.0%	100.0%
Household Type			
Couple with Dependents	75,514	32.5%	28.8%
Couple only	43,374	18.7%	23.1%
One Parent with Dependents	14,084	6.1%	6.8%
Lone Person Households	55,873	24.0%	21.3%
Group Households	9,974	4.3%	4.1%
Other/Not Stated	33,557	14.4%	15.9%
Total	232,376	100.0%	100.0%
Bedrooms			
0 or 1 bedroom	16,564	7.1%	7.0%
2 bedrooms	62,696	27.0%	24.6%
3 or more bedrooms	151,557	65.2%	63.2%
Not Stated	1,559	0.7%	5.2%
Total	232,376	100.0%	100.0%
Age of Reference Person			
Aged 15-24 years	10,676	4.6%	17.5%
Aged 25-34 years	52,146	22.4%	20.1%
Aged 35-44 years	63,327	27.3%	19.7%
Aged 45-54 years	47,817	20.6%	16.8%
Aged 55-64 years	31,434	13.5%	11.0%
Aged 65 years or more	26,977	11.6%	14.9%
Total	232,376	100.0%	100.0%
Number of Residents			
1 resident	55,873	24.0%	22.4%
2 residents	66,704	28.7%	30.7%
3 residents	43,705	18.8%	17.2%
4 residents	40,093	17.3%	17.4%
5 residents	17,436	7.5%	8.1%
6 or more residents	8,566	3.7%	4.2%
Total	232,376	100.0%	100.0%

1. Social housing includes dwelling rented from a State Housing Authority or Community Housing Provider.

6.1.3 Occupancy levels

This section analyses the occupancy level of two and three bedroom dwellings. Due to difficulties in accurately obtaining the number of bedrooms for dwellings classified as 0-1 and 4+ bedroom dwellings, these dwellings have been excluded from the analysis.

The majority of MIHs living in homes with two or three bedrooms had an adequate number of rooms to meet the space requirements of the household (Table 6.2). For two bedroom accommodation, 89 per cent of MIHs had more rooms than were strictly required to meet basic needs. Similarly, 92 per cent of MIHs in three bedroom accommodation lived in dwellings where there were more bedrooms than was required. Nevertheless, there were still 5,994 MIHs in two bedroom dwellings (10 per cent) and 6,951 in three bedroom dwellings (7 per cent) where the number of bedrooms did not adequately meet the basic space requirements of that household.

For a small proportion of MIHs, therefore, overcrowding does seem to be a problem. It would be interesting to explore this issue further, for example, to see if these latter households were disproportionately made up of families with children, or group households sharing accommodation. However, we were not able to do so with these data.

Table 6.2: The size of dwelling by the number of bedrooms required for MIH, Sydney SD, 2001

	2 Bedroom Dwelling				**3 bedroom Dwelling**			
	More Bedrooms in Dwelling Than Required	Less Bedrooms in Dwelling Than Required	Unable to Determine	Total	More Bedrooms in Dwelling Than Required	Less Bedrooms in Dwelling Than Required	Unable to Determine	Total
Separate Houses	13,394	1,666	105	15,165	74,554	5,669	449	80,672
Semi Detached Dwellings	8,323	633	93	9,049	11,741	788	81	12,610
Flats in a block of less than 4 storeys	22,312	2,556	250	25,118	3,350	290	45	3,685
Flats in block of 4 or more storeys	10,573	991	197	11,761	2,031	132	27	2,190
Other Dwellings	838	102	36	976	420	42	6	468
Not Stated	560	46	21	627	536	30	9	575
Total	**56,000**	**5,994**	**702**	**62,696**	**92,632**	**6,951**	**617**	**100,200**
	89%	10%	1%	100%	92%	7%	1%	100%

6.2 The geography of MIH characteristics (Tables 6.3 to 6.15, Figures 6.1 to 6.15)

6.2.1 Dwelling type

At the LGA level in 2001, MIHs predominantly occupied separate houses on the fringe and flats and units in the inner city (Table 6.3). For example, in Baulkham Hills, Blacktown, Blue Mountains, Camden, Hawkesbury, Penrith, Wollondilly and Wyong, over 85 per cent of MIHs in theses LGAs lived in a separate house. On the other hand, in North Sydney, Mosman, Sydney, Randwick, Waverley and Woollahra and South Sydney[8] over 60 per cent of MIHs lived in a flat. Half of MIHs living in Ashfield lived in flats in blocks under four storeys, while as many as 88 per cent of MIHs living in Syndey were in flats in blocks over 4 storeys. The inner city LGAs of Marrickville, South Sydney and Woollahra also had a high proportion of MIHs who resided in semi-detached dwellings.

In absolute terms, MIH households living in separate houses were highly concentrated in the outer city areas of Blacktown, Campbelltown, Gosford, Wyong, Liverpool, Fairfield, Bankstown, Penrith and Sutherland. In these nine LGAs alone there were 74,406 MIHs living in separate houses. This represents 51 per cent of all MIHs in separate houses at this time.

High numbers of MIHs in semi-detached dwellings were found in the inner city LGAs of South Sydney, Marrickville and Leichhardt, while in outer Sydney, Sutherland, Campbelltown, and Blacktown all contained higher numbers of MIHs in semi-detached homes (the latter two associated with public housing).

LGAs with higher numbers of MIHs living in flats included Canterbury, North Sydney, Parramatta, Randwick, South Sydney, Sutherland, Warringah and Waverley. Some 25,050 MIHs lived in flats in these eight LGAs, accounting for 44 per cent of all MIHs in flats at this time.

6.2.2 Tenure

In 2001, only a small percentage of MIHs lived in public housing (2 per cent). The majority of MIHs either owned, were purchasing or rented privately. At the LGA level, MIHs who owned their homes outright were concentrated in Bankstown, Blacktown, Fairfield, Gosford, Hornsby, Penrith, Sutherland and Warringah. MIH home purchasers were largely concentrated on the urban fringe, for example, in Blacktown, Campbelltown, Gosford, Fairfield, Liverpool, Penrith, Sutherland and Wyong.

In contrast, larger numbers of MIH private renters were generally found in the inner city and inner west (for example, South Sydney, Randwick and Canterbury), although there were large numbers of MIHs renting privately in the outer LGAs of Blacktown, Parramatta and Penrith.

[8] South Sydney LGA was recently incorporated into the Sydney LGA

Proportional data reveal the inner : outer division between renting and purchasing more clearly. Over 40 per cent of MIHs in Ashfield, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney, Waverley and Woollahra rented privately. Similarly, over 40 per cent of MIHs in Blue Mountains, Camden, Campbelltown, Hawkesbury, Penrith and Wollondilly were purchasing their dwelling. In between, high proportions of MIH outright owners were found in Ku-ring-gai, Hunters Hill, Pittwater, Baulkham Hills, Hornsby, and Concord[9], probably related to a higher proportion of older MIHs here (see below).

6.2.3 Household type

At the LGA level, the type of MIH varies significantly across Sydney. While MIH lone person households were located widely across Sydney. for example, in Blacktown, Gosford, Leichhardt, Marrickville, North Sydney, Randwick, Ryde, South Sydney and Sutherland, proportionally they were particularly concentrated in the inner city. Over 40 per cent of MIHs in Drummoyne[6], Lane Cove, Manly, and Waverley comprised lone person households, rising to 50 per cent in Leichhardt, Mosman, South Sydney, Sydney and Woollahra, while in North Sydney, two thirds (67 per cent) of MIH were lone persons.

MIH couples with children, on the other hand, were concentrated in the middle and outer suburbs of Sydney. There were larger concentrations of couples with children on moderate incomes in Blacktown, Fairfield, Liverpool, Sutherland, Wyong and Penrith. In 10 LGAs in western Sydney and Wyong on the Central Coast, over 40 per cent of MIHs were couples with children. This compares with inner city areas like North Sydney, Mosman, South Sydney, Sydney and Woollahra where fewer than one in ten of MIHs were couples with children.

Lone parent MIH families were most numerous in Blacktown, Sutherland and Penrith, although overall, this group represented a relatively low proportion of all MIHs in Sydney, accounting for between 3 and 8 per cent of all MIHs depending on the LGA. But surprisingly, the highest proportions of lone parent MIHs were found in the relatively higher income suburbs of Baulkham Hills, Concord, Hornsby, Ku-ring-gai, Lane Cove.

The largest absolute numbers of couple only households on moderate incomes were located in Blacktown, Gosford, Penrith, Sutherland, Warringah and Wyong. Proportionally, however, this type of household were more associated with higher value areas. Over 25 per cent of couple only households on moderate incomes were located in Ku-ring-gai and Pittwater. The lowest proportion of couple only households were found in the middle suburbs of Fairfield and Auburn as well as LGAs in the inner west (Ashfield, Marrickville, Strathfield), and Leichhardt. Generally speaking, it would seem that higher proportions of couple only households were found in areas dominated by separate houses and semi detached dwellings. The distribution of this group may well reflect the greater market capacity of couple households where two persons are working.

[9] Concord LGA merged with Drummoyne LGA to form what is know Canada Bay LGA

Not surprisingly, a large proportion of group households[10] were concentrated in eastern and inner city locations, with over one in ten MIHs in Sydney and South Sydney comprising groups of unrelated adults. Other related individuals[11] were highly concentrated in Botany Bay, Fairfield, Bankstown and Canterbury, a possible reflection of multi-generational households among recent immigrant population in these areas.

6.2.4 Age of reference person

As we noted above, MIH reference persons were disproportionately represented among the 25 and 45 age cohorts. However, there were significant variations between LGAs. In absolute terms, there were large numbers of younger MIHs age 25-34 in Blacktown, Campbelltown, Liverpool, Penrith, South Sydney and Sutherland. These areas also accounted for large numbers of persons aged 35-44 years, together with with Fairfield and Gosford. Similarly, Blacktown, Campbelltown, Fairfield, Gosford, Penrith, South Sydney and Sutherland had large numbers of persons aged 45-54. Larger numbers of MIH reference persons aged 55-64 were located in Blacktown and Sutherland. Interestingly, the largest numbers of MIHs aged over 65 years were found in a much more dispersed range of LGAs than younger age cohorts, including Ku-ring-gai, Warringah, Bankstown, Gosford, Hornsby and Sutherland,

In proportional terms, however, a more distinctive pattern is revealed. The highest proportions of persons aged 65 years and more were found in inner north and northern Sydney LGAs. For example, over 20 per cent of reference persons in Hunters Hill, Ku-ring-gai, Manly, Mosman, Willoughby and Woollahra were aged over 65 years, compared with the Sydney wide average of 12 per cent, a reflection of the numbers of retired higher income households in these areas. Low proportions of over 65 year olds were recorded in the central LGAs of Sydney and South Sydney LGAs, as well as the outer western Sydney LGAs.

Proportionally, MIH reference persons aged 25-44 years were concentrated in the outer fringe LGAs as well as inner city LGAs. Over 55 per cent of persons in Blacktown, Camden, Campbelltown, Hawkesbury, Liverpool, Penrith, Sutherland and Wollondilly were aged 25-44 years, but similar proportions were recorded in Marrickville, North Sydney, South Sydney, and Sydney. This clearly reflects a split between concentrations of younger households purchasing their dwelling in outer fringe LGAs and those renting in the inner city.

The highest proportions of MIH reference persons aged 45-64 years were recorded in Baulkham Hills and Blue Mountains LGAs, where over 42 and 41 per cent of MIHs were aged in this cohort.

Summary

The analysis of the profiles of MIHs in Sydney and their geography indicates that the MIH market is far from homogenous and is clearly spatially differentiated. While they all share comparable income levels, there are a number of fairly well defined

[10] Group households refer to households consisting of two or more unrelated individuals.
[11] Other related individuals are individuals who are related to members of the household but do not form couple or parent-child relationships. Relatives beyond first cousin are excluded.

sub-markets within the MIH group. Primary among these is the difference between those who rent and those who are buying their homes. The former predominate in the inner and eastern Sydney suburbs, while the latter are predominantly an outer suburban characteristic. Having said that, large numbers of MIH rent in the middle and outer suburbs also and the largest absolute group among the MIH were those who owned their homes outright, implying a substantial middle and older aged population. The preponderance of flat dwellers in the inner and eastern suburbs was also apparent, reflecting the distribution of this kind of dwelling. Overlaying these housing market characteristics are differences in household type, with lone persons and group households over represented in the inner and eastern suburbs, while those with children are predominantly outer suburban in location. MIH headed by persons aged 25 to 44 are found in both the inner suburban areas and in the outer and fringe suburbs – a possible reflection of the split between those where life-style and renting predominates and those engaged in child rearing and home buying. MIH in the middle age groups are over-represented in a middle band of suburbs and in the northern suburbs. Older MIH households are predominantly a feature of the northern suburbs, reflecting the location of higher income retirees.

The segmented nature of the MIH market suggests that new forms of provision for this group should include a range of housing and tenure opportunities.

Table 6.3: The number of MIHs in each LGA by dwelling type, 2001

LGA	Separate Houses	Semi Detached Dwellings	Flats in a block of less than 4 storeys	Flats in a block of 4 or more storeys	Other Dwellings	Not Stated	Total
Ashfield	812	354	1,357	114	46	60	2,743
Auburn	1,729	268	613	131	24	27	2,792
Bankstown	6,813	954	615	175	61	24	8,642
Baulkham Hills	5,303	598	102	31	57	43	6,134
Blacktown	13,231	1,170	285	65	86	72	14,909
Blue Mountains	4,620	138	68	3	28	30	4,887
Botany Bay	898	277	707	171	24	12	2,089
Burwood	807	163	375	169	50	15	1,579
Camden	2,501	121	25	0	18	3	2,668
Campbelltown	7,193	1,153	123	6	30	49	8,554
Canterbury	4,125	567	2,344	148	67	61	7,312
Concord	929	152	294	60	27	9	1,471
Drummoyne	844	226	539	313	34	27	1,983
Fairfield	7,381	815	574	155	79	48	9,052
Gosford	8,296	893	416	89	146	54	9,894
Hawkesbury	3,438	372	82	3	36	32	3,963
Holroyd	3,524	477	961	350	40	49	5,401
Hornsby	5,464	491	875	246	82	42	7,200
Hunter's Hill	270	63	107	40	15	6	501
Hurstville	2,549	350	787	494	42	27	4,249
Kogarah	1,638	226	818	253	36	15	2,986
Ku-ring-gai	3,193	130	498	80	31	27	3,959
Lane Cove	629	138	526	475	16	18	1,802
Leichhardt	1,174	1,436	863	578	104	42	4,197
Liverpool	6,944	690	536	315	27	51	8,563
Manly	646	221	840	423	28	18	2,176
Marrickville	1,574	1,441	1,830	286	193	45	5,369
Mosman	349	179	616	504	32	12	1,692
North Sydney	372	525	1,512	2,145	51	39	4,644
Parramatta	5,009	900	1,599	795	65	72	8,440
Penrith	9,698	682	423	35	42	63	10,943
Pittwater	2,206	179	397	24	127	54	2,987
Randwick	1,883	1,154	2,669	1,422	150	69	7,347
Rockdale	2,782	650	1,250	718	65	22	5,487
Ryde	2,908	867	1,545	752	48	77	6,197
South Sydney	191	1,851	1,162	3,073	52	108	6,437
Strathfield	746	53	415	106	18	9	1,347
Sutherland Shire	7,491	1,183	2,093	824	128	34	11,753
Sydney	0	86	86	1,595	6	33	1,806
Warringah	4,404	390	2,121	465	143	52	7,575
Waverley	513	652	1,684	994	53	56	3,952
Willoughby	1,484	285	602	748	27	34	3,180
Wollondilly	2,194	30	9	0	27	24	2,284
Woollahra	427	652	927	1,091	34	59	3,190
Wyong	7,359	427	112	18	97	27	8,040
SYDNEY SD	**146,541**	**24,629**	**36,382**	**20,482**	**2,592**	**1,750**	**232,376**

Table6.4: The proportion of MIHs in each LGA by dwelling type, 2001

LGA	Separate Houses	Semi Detached Dwellings	Flats in a block of less than 4 storeys	Flats in a block of 4 or more storeys	Other Dwellings	Not Stated	Total
Ashfield	29.6%	12.9%	49.5%	4.2%	1.7%	2.2%	100.0%
Auburn	61.9%	9.6%	22.0%	4.7%	0.9%	1.0%	100.0%
Bankstown	78.8%	11.0%	7.1%	2.0%	0.7%	0.3%	100.0%
Baulkham Hills	86.5%	9.7%	1.7%	0.5%	0.9%	0.7%	100.0%
Blacktown	88.7%	7.8%	1.9%	0.4%	0.6%	0.5%	100.0%
Blue Mountains	94.5%	2.8%	1.4%	0.1%	0.6%	0.6%	100.0%
Botany Bay	43.0%	13.3%	33.8%	8.2%	1.1%	0.6%	100.0%
Burwood	51.1%	10.3%	23.7%	10.7%	3.2%	0.9%	100.0%
Camden	93.7%	4.5%	0.9%	0.0%	0.7%	0.1%	100.0%
Campbelltown	84.1%	13.5%	1.4%	0.1%	0.4%	0.6%	100.0%
Canterbury	56.4%	7.8%	32.1%	2.0%	0.9%	0.8%	100.0%
Concord	63.2%	10.3%	20.0%	4.1%	1.8%	0.6%	100.0%
Drummoyne	42.6%	11.4%	27.2%	15.8%	1.7%	1.4%	100.0%
Fairfield	81.5%	9.0%	6.3%	1.7%	0.9%	0.5%	100.0%
Gosford	83.8%	9.0%	4.2%	0.9%	1.5%	0.5%	100.0%
Hawkesbury	86.8%	9.4%	2.1%	0.1%	0.9%	0.8%	100.0%
Holroyd	65.2%	8.8%	17.8%	6.5%	0.7%	0.9%	100.0%
Hornsby	75.9%	6.8%	12.2%	3.4%	1.1%	0.6%	100.0%
Hunter's Hill	53.9%	12.6%	21.4%	8.0%	3.0%	1.2%	100.0%
Hurstville	60.0%	8.2%	18.5%	11.6%	1.0%	0.6%	100.0%
Kogarah	54.9%	7.6%	27.4%	8.5%	1.2%	0.5%	100.0%
Ku-ring-gai	80.7%	3.3%	12.6%	2.0%	0.8%	0.7%	100.0%
Lane Cove	34.9%	7.7%	29.2%	26.4%	0.9%	1.0%	100.0%
Leichhardt	28.0%	34.2%	20.6%	13.8%	2.5%	1.0%	100.0%
Liverpool	81.1%	8.1%	6.3%	3.7%	0.3%	0.6%	100.0%
Manly	29.7%	10.2%	38.6%	19.4%	1.3%	0.8%	100.0%
Marrickville	29.3%	26.8%	34.1%	5.3%	3.6%	0.8%	100.0%
Mosman	20.6%	10.6%	36.4%	29.8%	1.9%	0.7%	100.0%
North Sydney	8.0%	11.3%	32.6%	46.2%	1.1%	0.8%	100.0%
Parramatta	59.3%	10.7%	18.9%	9.4%	0.8%	0.9%	100.0%
Penrith	88.6%	6.2%	3.9%	0.3%	0.4%	0.6%	100.0%
Pittwater	73.9%	6.0%	13.3%	0.8%	4.3%	1.8%	100.0%
Randwick	25.6%	15.7%	36.3%	19.4%	2.0%	0.9%	100.0%
Rockdale	50.7%	11.8%	22.8%	13.1%	1.2%	0.4%	100.0%
Ryde	46.9%	14.0%	24.9%	12.1%	0.8%	1.2%	100.0%
South Sydney	3.0%	28.8%	18.1%	47.7%	0.8%	1.7%	100.0%
Strathfield	55.4%	3.9%	30.8%	7.9%	1.3%	0.7%	100.0%
Sutherland Shire	63.7%	10.1%	17.8%	7.0%	1.1%	0.3%	100.0%
Sydney	0.0%	4.8%	4.8%	88.3%	0.3%	1.8%	100.0%
Warringah	58.1%	5.1%	28.0%	6.1%	1.9%	0.7%	100.0%
Waverley	13.0%	16.5%	42.6%	25.2%	1.3%	1.4%	100.0%
Willoughby	46.7%	9.0%	18.9%	23.5%	0.8%	1.1%	100.0%
Wollondilly	96.1%	1.3%	0.4%	0.0%	1.2%	1.1%	100.0%
Woollahra	13.4%	20.4%	29.1%	34.2%	1.1%	1.8%	100.0%
Wyong	91.5%	5.3%	1.4%	0.2%	1.2%	0.3%	100.0%
SYDNEY SD	**63.1%**	**10.6%**	**15.7%**	**8.8%**	**1.1%**	**0.8%**	**100.0%**

Table 6.5: The number of MIHs in each LGA by tenure type, 2001

LGA	Owned	Being Purchased	Rented: Private Landlord	Rented: State Housing Authority	Rented: Other	Other Tenure and Not Stated	Total
Ashfield	828	554	1,212	18	27	104	2,743
Auburn	1,086	604	922	59	21	100	2,792
Bankstown	3,926	2,269	1,672	392	68	315	8,642
Baulkham Hills	2,917	1,978	923	18	72	226	6,134
Blacktown	4,324	6,182	2,974	802	162	465	14,909
Blue Mountains	1,741	2,083	850	25	38	150	4,887
Botany Bay	796	443	673	86	18	73	2,089
Burwood	659	242	558	18	33	69	1,579
Camden	674	1,336	481	26	24	127	2,668
Campbelltown	2,209	3,920	1,558	595	50	222	8,554
Canterbury	2,990	1,574	2,226	146	64	312	7,312
Concord	656	316	405	12	18	64	1,471
Drummoyne	845	378	625	41	6	88	1,983
Fairfield	3,971	2,432	1,799	336	117	397	9,052
Gosford	3,322	3,751	2,220	109	72	420	9,894
Hawkesbury	1,149	1,701	754	64	153	142	3,963
Holroyd	1,946	1,309	1,809	106	30	201	5,401
Hornsby	3,461	1,862	1,511	48	82	236	7,200
Hunter's Hill	277	84	77	18	12	33	501
Hurstville	1,771	1,015	1,193	62	48	160	4,249
Kogarah	1,296	663	886	12	24	105	2,986
Ku-ring-gai	2,754	546	460	3	30	166	3,959
Lane Cove	723	351	628	15	33	52	1,802
Leichhardt	1,133	893	1,868	148	39	116	4,197
Liverpool	2,537	3,189	1,830	341	296	370	8,563
Manly	876	305	836	9	63	87	2,176
Marrickville	1,431	1,377	2,264	49	54	194	5,369
Mosman	659	218	748	0	9	58	1,692
North Sydney	1,365	546	2,476	18	77	162	4,644
Parramatta	2,837	2,233	2,716	292	100	262	8,440
Penrith	3,032	4,980	2,260	197	147	327	10,943
Pittwater	1,409	740	680	3	27	128	2,987
Randwick	2,432	1,119	3,223	194	141	238	7,347
Rockdale	2,261	1,190	1,758	30	54	194	5,487
Ryde	2,293	1,398	2,078	76	104	248	6,197
South Sydney	1,202	1,353	3,353	223	81	225	6,437
Strathfield	547	244	446	39	12	59	1,347
Sutherland Shire	4,890	3,511	2,733	125	141	353	11,753
Sydney	266	256	1,081	70	55	78	1,806
Warringah	3,188	1,834	2,130	45	84	294	7,575
Waverley	1,285	555	1,866	18	51	177	3,952
Willoughby	1,468	425	1,116	18	24	129	3,180
Wollondilly	770	1,088	286	15	32	93	2,284
Woollahra	1,322	396	1,292	6	45	129	3,190
Wyong	2,484	3,444	1,705	101	51	255	8,040
SYDNEY SD	**84,008**	**66,887**	**65,161**	**5,028**	**2,889**	**8,403**	**232,376**

Table 6.6: The proportion of MIHs in each LGA by tenure type, 2001

LGA	Owned	Being Purchased	Rented: Private Landlord	Rented: State Housing Authority	Rented: Other	Other Tenure and Not Stated	Total
Ashfield	30.2%	20.2%	44.2%	0.7%	1.0%	3.8%	100.0%
Auburn	38.9%	21.6%	33.0%	2.1%	0.8%	3.6%	100.0%
Bankstown	45.4%	26.3%	19.3%	4.5%	0.8%	3.6%	100.0%
Baulkham Hills	47.6%	32.2%	15.0%	0.3%	1.2%	3.7%	100.0%
Blacktown	29.0%	41.5%	19.9%	5.4%	1.1%	3.1%	100.0%
Blue Mountains	35.6%	42.6%	17.4%	0.5%	0.8%	3.1%	100.0%
Botany Bay	38.1%	21.2%	32.2%	4.1%	0.9%	3.5%	100.0%
Burwood	41.7%	15.3%	35.3%	1.1%	2.1%	4.4%	100.0%
Camden	25.3%	50.1%	18.0%	1.0%	0.9%	4.8%	100.0%
Campbelltown	25.8%	45.8%	18.2%	7.0%	0.6%	2.6%	100.0%
Canterbury	40.9%	21.5%	30.4%	2.0%	0.9%	4.3%	100.0%
Concord	44.6%	21.5%	27.5%	0.8%	1.2%	4.4%	100.0%
Drummoyne	42.6%	19.1%	31.5%	2.1%	0.3%	4.4%	100.0%
Fairfield	43.9%	26.9%	19.9%	3.7%	1.3%	4.4%	100.0%
Gosford	33.6%	37.9%	22.4%	1.1%	0.7%	4.2%	100.0%
Hawkesbury	29.0%	42.9%	19.0%	1.6%	3.9%	3.6%	100.0%
Holroyd	36.0%	24.2%	33.5%	2.0%	0.6%	3.7%	100.0%
Hornsby	48.1%	25.9%	21.0%	0.7%	1.1%	3.3%	100.0%
Hunter's Hill	55.3%	16.8%	15.4%	3.6%	2.4%	6.6%	100.0%
Hurstville	41.7%	23.9%	28.1%	1.5%	1.1%	3.8%	100.0%
Kogarah	43.4%	22.2%	29.7%	0.4%	0.8%	3.5%	100.0%
Ku-ring-gai	69.6%	13.8%	11.6%	0.1%	0.8%	4.2%	100.0%
Lane Cove	40.1%	19.5%	34.9%	0.8%	1.8%	2.9%	100.0%
Leichhardt	27.0%	21.3%	44.5%	3.5%	0.9%	2.8%	100.0%
Liverpool	29.6%	37.2%	21.4%	4.0%	3.5%	4.3%	100.0%
Manly	40.3%	14.0%	38.4%	0.4%	2.9%	4.0%	100.0%
Marrickville	26.7%	25.6%	42.2%	0.9%	1.0%	3.6%	100.0%
Mosman	38.9%	12.9%	44.2%	0.0%	0.5%	3.4%	100.0%
North Sydney	29.4%	11.8%	53.3%	0.4%	1.7%	3.5%	100.0%
Parramatta	33.6%	26.5%	32.2%	3.5%	1.2%	3.1%	100.0%
Penrith	27.7%	45.5%	20.7%	1.8%	1.3%	3.0%	100.0%
Pittwater	47.2%	24.8%	22.8%	0.1%	0.9%	4.3%	100.0%
Randwick	33.1%	15.2%	43.9%	2.6%	1.9%	3.2%	100.0%
Rockdale	41.2%	21.7%	32.0%	0.5%	1.0%	3.5%	100.0%
Ryde	37.0%	22.6%	33.5%	1.2%	1.7%	4.0%	100.0%
South Sydney	18.7%	21.0%	52.1%	3.5%	1.3%	3.5%	100.0%
Strathfield	40.6%	18.1%	33.1%	2.9%	0.9%	4.4%	100.0%
Sutherland Shire	41.6%	29.9%	23.3%	1.1%	1.2%	3.0%	100.0%
Sydney	14.7%	14.2%	59.9%	3.9%	3.0%	4.3%	100.0%
Warringah	42.1%	24.2%	28.1%	0.6%	1.1%	3.9%	100.0%
Waverley	32.5%	14.0%	47.2%	0.5%	1.3%	4.5%	100.0%
Willoughby	46.2%	13.4%	35.1%	0.6%	0.8%	4.1%	100.0%
Wollondilly	33.7%	47.6%	12.5%	0.7%	1.4%	4.1%	100.0%
Woollahra	41.4%	12.4%	40.5%	0.2%	1.4%	4.0%	100.0%
Wyong	30.9%	42.8%	21.2%	1.3%	0.6%	3.2%	100.0%
SYDNEY SD	**36.2%**	**28.8%**	**28.0%**	**2.2%**	**1.2%**	**3.6%**	**100.0%**

Table 6.7: The number of MIHs in each LGA by household type, 2001

LGA	Lone Person Household	Couples with Children	One Parent Families	Other Related Individuals	Couples without Children	Group Household	Other Household	Total
Ashfield	976	580	154	372	411	214	36	2,743
Auburn	350	1,212	129	486	372	146	97	2,792
Bankstown	1,031	3,560	478	1,708	1,402	241	222	8,642
Baulkham Hills	998	2,299	435	731	1,491	102	78	6,134
Blacktown	1,810	6,894	944	2,205	2,429	389	239	14,909
Blue Mountains	1,046	1,674	380	416	1,157	192	21	4,887
Botany Bay	316	723	124	443	349	110	24	2,089
Burwood	370	521	69	247	249	93	31	1,579
Camden	314	1,286	168	253	545	83	18	2,668
Campbelltown	1,166	3,933	596	1,111	1,418	210	120	8,554
Canterbury	1,167	2,705	422	1,456	1,101	293	167	7,312
Concord	334	461	105	261	235	57	18	1,471
Drummoyne	817	389	99	257	335	68	18	1,983
Fairfield	648	4,220	543	1,921	1,126	230	364	9,052
Gosford	1,658	3,730	627	1,108	2,354	328	89	9,894
Hawkesbury	546	1,772	259	403	839	111	33	3,963
Holroyd	1,040	1,891	316	912	927	212	103	5,401
Hornsby	1,472	2,322	570	828	1,692	230	85	7,200
Hunter's Hill	189	108	32	62	100	10	0	501
Hurstville	945	1,370	246	643	809	177	59	4,249
Kogarah	718	916	165	416	595	126	49	2,986
Ku-ring-gai	1,128	745	289	443	1,262	74	18	3,959
Lane Cove	765	279	142	160	334	116	6	1,802
Leichhardt	2,158	488	247	385	583	321	15	4,197
Liverpool	913	4,133	501	1,254	1,361	225	177	8,563
Manly	890	318	129	206	525	104	3	2,176
Marrickville	2,115	976	287	634	804	481	72	5,369
Mosman	976	135	98	94	321	64	3	1,692
North Sydney	3,092	247	180	220	683	222	0	4,644
Parramatta	1,971	2,829	533	1,186	1,401	389	132	8,440
Penrith	1,467	4,887	758	1,372	2,033	331	95	10,943
Pittwater	702	830	195	308	817	124	12	2,987
Randwick	2,482	1,392	466	1,016	1,283	657	51	7,347
Rockdale	1,328	1,581	325	912	1,018	224	100	5,487
Ryde	2,129	1,512	343	773	1,076	299	66	6,197
South Sydney	3,822	417	185	423	904	665	21	6,437
Strathfield	271	517	88	221	181	53	16	1,347
Sutherland Shire	2,834	3,757	757	1,416	2,542	358	90	11,753
Sydney	971	106	35	160	281	249	3	1,806
Warringah	1,997	1,983	436	936	1,801	348	74	7,575
Waverley	1,731	496	246	359	761	343	15	3,952
Willoughby	1,220	589	214	371	594	172	21	3,180
Wollondilly	255	1,075	137	254	490	52	21	2,284
Woollahra	1,813	236	180	205	563	190	3	3,190
Wyong	931	3,422	449	1,016	1,821	293	107	8,040
SYDNEY SD	**55,873**	**75,514**	**14,084**	**30,562**	**43,374**	**9,974**	**2,995**	**232,376**

Table 6.8: The proportion of MIHs in each LGA by household type, 2001

LGA	Lone Person Household	Couples with Children	One Parent Families	Other Related Individuals	Couples without Children	Group Household	Other Household	Total
Ashfield	35.6%	21.1%	5.6%	13.6%	15.0%	7.8%	1.3%	100.0%
Auburn	12.5%	43.4%	4.6%	17.4%	13.3%	5.2%	3.5%	100.0%
Bankstown	11.9%	41.2%	5.5%	19.8%	16.2%	2.8%	2.6%	100.0%
Baulkham Hills	16.3%	37.5%	7.1%	11.9%	24.3%	1.7%	1.3%	100.0%
Blacktown	12.1%	46.2%	6.3%	14.8%	16.3%	2.6%	1.6%	100.0%
Blue Mountains	21.4%	34.3%	7.8%	8.5%	23.7%	3.9%	0.4%	100.0%
Botany Bay	15.1%	34.6%	5.9%	21.2%	16.7%	5.3%	1.1%	100.0%
Burwood	23.4%	33.0%	4.4%	15.6%	15.8%	5.9%	2.0%	100.0%
Camden	11.8%	48.2%	6.3%	9.5%	20.4%	3.1%	0.7%	100.0%
Campbelltown	13.6%	46.0%	7.0%	13.0%	16.6%	2.5%	1.4%	100.0%
Canterbury	16.0%	37.0%	5.8%	19.9%	15.1%	4.0%	2.3%	100.0%
Concord	22.7%	31.3%	7.1%	17.7%	16.0%	3.9%	1.2%	100.0%
Drummoyne	41.2%	19.6%	5.0%	13.0%	16.9%	3.4%	0.9%	100.0%
Fairfield	7.2%	46.6%	6.0%	21.2%	12.4%	2.5%	4.0%	100.0%
Gosford	16.8%	37.7%	6.3%	11.2%	23.8%	3.3%	0.9%	100.0%
Hawkesbury	13.8%	44.7%	6.5%	10.2%	21.2%	2.8%	0.8%	100.0%
Holroyd	19.3%	35.0%	5.9%	16.9%	17.2%	3.9%	1.9%	100.0%
Hornsby	20.4%	32.3%	7.9%	11.5%	23.5%	3.2%	1.2%	100.0%
Hunter's Hill	37.7%	21.6%	6.4%	12.4%	20.0%	2.0%	0.0%	100.0%
Hurstville	22.2%	32.2%	5.8%	15.1%	19.0%	4.2%	1.4%	100.0%
Kogarah	24.0%	30.7%	5.5%	13.9%	19.9%	4.2%	1.6%	100.0%
Ku-ring-gai	28.5%	18.8%	7.3%	11.2%	31.9%	1.9%	0.5%	100.0%
Lane Cove	42.5%	15.5%	7.9%	8.9%	18.5%	6.4%	0.3%	100.0%
Leichhardt	51.4%	11.6%	5.9%	9.2%	13.9%	7.6%	0.4%	100.0%
Liverpool	10.7%	48.3%	5.9%	14.6%	15.9%	2.6%	2.1%	100.0%
Manly	40.9%	14.6%	5.9%	9.5%	24.1%	4.8%	0.1%	100.0%
Marrickville	39.4%	18.2%	5.3%	11.8%	15.0%	9.0%	1.3%	100.0%
Mosman	57.7%	8.0%	5.8%	5.6%	19.0%	3.8%	0.2%	100.0%
North Sydney	66.6%	5.3%	3.9%	4.7%	14.7%	4.8%	0.0%	100.0%
Parramatta	23.4%	33.5%	6.3%	14.1%	16.6%	4.6%	1.6%	100.0%
Penrith	13.4%	44.7%	6.9%	12.5%	18.6%	3.0%	0.9%	100.0%
Pittwater	23.5%	27.8%	6.5%	10.3%	27.4%	4.2%	0.4%	100.0%
Randwick	33.8%	18.9%	6.3%	13.8%	17.5%	8.9%	0.7%	100.0%
Rockdale	24.2%	28.8%	5.9%	16.6%	18.6%	4.1%	1.8%	100.0%
Ryde	34.4%	24.4%	5.5%	12.5%	17.4%	4.8%	1.1%	100.0%
South Sydney	59.4%	6.5%	2.9%	6.6%	14.0%	10.3%	0.3%	100.0%
Strathfield	20.1%	38.4%	6.5%	16.4%	13.4%	3.9%	1.2%	100.0%
Sutherland Shire	24.1%	32.0%	6.4%	12.0%	21.6%	3.0%	0.8%	100.0%
Sydney	53.8%	5.9%	1.9%	8.9%	15.6%	13.8%	0.2%	100.0%
Warringah	26.4%	26.2%	5.8%	12.4%	23.8%	4.6%	1.0%	100.0%
Waverley	43.8%	12.6%	6.2%	9.1%	19.3%	8.7%	0.4%	100.0%
Willoughby	38.4%	18.5%	6.7%	11.7%	18.7%	5.4%	0.7%	100.0%
Wollondilly	11.2%	47.1%	6.0%	11.1%	21.5%	2.3%	0.9%	100.0%
Woollahra	56.8%	7.4%	5.6%	6.4%	17.6%	6.0%	0.1%	100.0%
Wyong	11.6%	42.6%	5.6%	12.6%	22.6%	3.6%	1.3%	100.0%
SYDNEY SD	**24.0%**	**32.5%**	**6.1%**	**13.2%**	**18.7%**	**4.3%**	**1.3%**	**100.0%**

Table 6.9: The number of MIHs in each LGA by age of reference person, 2001

LGA	Aged 15-24	Aged 25-34	Aged 35-44	Aged 45-54	Aged 55-64	Aged 65 or more	Total
Ashfield	146	640	798	582	284	292	2,743
Auburn	102	504	881	660	369	275	2,792
Bankstown	250	1,591	2,455	1,862	1,309	1,176	8,642
Baulkham Hills	135	1,034	1,600	1,320	1,266	779	6,134
Blacktown	668	3,773	4,525	3,172	1,832	939	14,909
Blue Mountains	171	892	1,408	1,244	756	416	4,887
Botany Bay	71	383	594	441	331	269	2,089
Burwood	82	342	346	351	229	228	1,579
Camden	118	863	735	511	293	147	2,668
Campbelltown	394	2,000	2,684	2,026	1,036	416	8,554
Canterbury	203	1,364	2,187	1,642	971	944	7,312
Concord	45	270	385	319	219	233	1,471
Drummoyne	66	387	497	407	315	312	1,983
Fairfield	199	1,685	2,642	2,245	1,297	984	9,052
Gosford	398	1,991	2,822	2,129	1,349	1,204	9,894
Hawkesbury	188	1,074	1,200	783	488	230	3,963
Holroyd	272	1,316	1,509	1,038	782	484	5,401
Hornsby	227	1,127	1,883	1,512	1,233	1,219	7,200
Hunter's Hill	13	67	118	99	96	108	501
Hurstville	176	810	1,185	844	605	629	4,249
Kogarah	96	591	791	640	422	446	2,986
Ku-ring-gai	97	281	529	685	706	1,660	3,959
Lane Cove	118	369	390	386	229	310	1,802
Leichhardt	271	1,115	1,081	938	488	304	4,197
Liverpool	372	2,294	2,759	1,579	1,020	539	8,563
Manly	80	440	513	400	288	454	2,176
Marrickville	315	1,399	1,550	1,142	583	380	5,369
Mosman	75	351	330	294	249	393	1,692
North Sydney	283	1,446	909	808	602	596	4,644
Parramatta	382	1,986	2,388	1,734	1,069	881	8,440
Penrith	681	2,985	3,211	2,262	1,270	533	10,943
Pittwater	81	450	731	645	515	565	2,987
Randwick	598	1,758	1,787	1,392	852	961	7,347
Rockdale	228	1,127	1,478	1,147	807	700	5,487
Ryde	313	1,380	1,736	1,179	779	812	6,197
South Sydney	579	2,204	1,666	1,135	526	327	6,437
Strathfield	60	209	377	302	183	216	1,347
Sutherland Shire	461	2,574	3,151	2,249	1,824	1,493	11,753
Sydney	320	702	331	233	147	73	1,806
Warringah	295	1,543	1,906	1,359	1,200	1,271	7,575
Waverley	230	1,088	928	733	436	537	3,952
Willoughby	185	602	676	647	419	651	3,180
Wollondilly	99	577	675	467	326	141	2,284
Woollahra	133	728	629	598	402	701	3,190
Wyong	402	1,835	2,349	1,674	1,030	750	8,040
SYDNEY SD	**10,676**	**52,146**	**63,327**	**47,817**	**31,434**	**26,977**	**232,376**

Table 6.10: The proportion of MIHs in each LGA by age of reference person, 2001

LGA	Aged 15-24	Aged 25-34	Aged 35-44	Aged 45-54	Aged 55-64	Aged 65 or more	Total
Ashfield	5.3%	23.3%	29.1%	21.2%	10.4%	10.6%	100.0%
Auburn	3.7%	18.1%	31.6%	23.6%	13.2%	9.8%	100.0%
Bankstown	2.9%	18.4%	28.4%	21.5%	15.1%	13.6%	100.0%
Baulkham Hills	2.2%	16.9%	26.1%	21.5%	20.6%	12.7%	100.0%
Blacktown	4.5%	25.3%	30.4%	21.3%	12.3%	6.3%	100.0%
Blue Mountains	3.5%	18.3%	28.8%	25.5%	15.5%	8.5%	100.0%
Botany Bay	3.4%	18.3%	28.4%	21.1%	15.8%	12.9%	100.0%
Burwood	5.2%	21.7%	21.9%	22.2%	14.5%	14.4%	100.0%
Camden	4.4%	32.3%	27.5%	19.2%	11.0%	5.5%	100.0%
Campbelltown	4.6%	23.4%	31.4%	23.7%	12.1%	4.9%	100.0%
Canterbury	2.8%	18.7%	29.9%	22.5%	13.3%	12.9%	100.0%
Concord	3.1%	18.4%	26.2%	21.7%	14.9%	15.8%	100.0%
Drummoyne	3.3%	19.5%	25.1%	20.5%	15.9%	15.7%	100.0%
Fairfield	2.2%	18.6%	29.2%	24.8%	14.3%	10.9%	100.0%
Gosford	4.0%	20.1%	28.5%	21.5%	13.6%	12.2%	100.0%
Hawkesbury	4.7%	27.1%	30.3%	19.8%	12.3%	5.8%	100.0%
Holroyd	5.0%	24.4%	27.9%	19.2%	14.5%	9.0%	100.0%
Hornsby	3.2%	15.7%	26.2%	21.0%	17.1%	16.9%	100.0%
Hunter's Hill	2.6%	13.4%	23.6%	19.8%	19.2%	21.6%	100.0%
Hurstville	4.1%	19.1%	27.9%	19.9%	14.2%	14.8%	100.0%
Kogarah	3.2%	19.8%	26.5%	21.4%	14.1%	14.9%	100.0%
Ku-ring-gai	2.5%	7.1%	13.4%	17.3%	17.8%	41.9%	100.0%
Lane Cove	6.5%	20.5%	21.6%	21.4%	12.7%	17.2%	100.0%
Leichhardt	6.5%	26.6%	25.8%	22.3%	11.6%	7.2%	100.0%
Liverpool	4.3%	26.8%	32.2%	18.4%	11.9%	6.3%	100.0%
Manly	3.7%	20.2%	23.6%	18.4%	13.2%	20.9%	100.0%
Marrickville	5.9%	26.1%	28.9%	21.3%	10.9%	7.1%	100.0%
Mosman	4.4%	20.7%	19.5%	17.4%	14.7%	23.2%	100.0%
North Sydney	6.1%	31.1%	19.6%	17.4%	13.0%	12.8%	100.0%
Parramatta	4.5%	23.5%	28.3%	20.5%	12.7%	10.4%	100.0%
Penrith	6.2%	27.3%	29.3%	20.7%	11.6%	4.9%	100.0%
Pittwater	2.7%	15.1%	24.5%	21.6%	17.2%	18.9%	100.0%
Randwick	8.1%	23.9%	24.3%	18.9%	11.6%	13.1%	100.0%
Rockdale	4.2%	20.5%	26.9%	20.9%	14.7%	12.8%	100.0%
Ryde	5.1%	22.3%	28.0%	19.0%	12.6%	13.1%	100.0%
South Sydney	9.0%	34.2%	25.9%	17.6%	8.2%	5.1%	100.0%
Strathfield	4.5%	15.5%	28.0%	22.4%	13.6%	16.0%	100.0%
Sutherland Shire	3.9%	21.9%	26.8%	19.1%	15.5%	12.7%	100.0%
Sydney	17.7%	38.9%	18.3%	12.9%	8.1%	4.0%	100.0%
Warringah	3.9%	20.4%	25.2%	17.9%	15.8%	16.8%	100.0%
Waverley	5.8%	27.5%	23.5%	18.5%	11.0%	13.6%	100.0%
Willoughby	5.8%	18.9%	21.3%	20.3%	13.2%	20.5%	100.0%
Wollondilly	4.3%	25.3%	29.6%	20.4%	14.3%	6.2%	100.0%
Woollahra	4.2%	22.8%	19.7%	18.7%	12.6%	22.0%	100.0%
Wyong	5.0%	22.8%	29.2%	20.8%	12.8%	9.3%	100.0%
SYDNEY SD	**4.6%**	**22.4%**	**27.3%**	**20.6%**	**13.5%**	**11.6%**	**100.0%**

Figure 6.1: The proportion of moderate income households who reside in separate houses, 2001

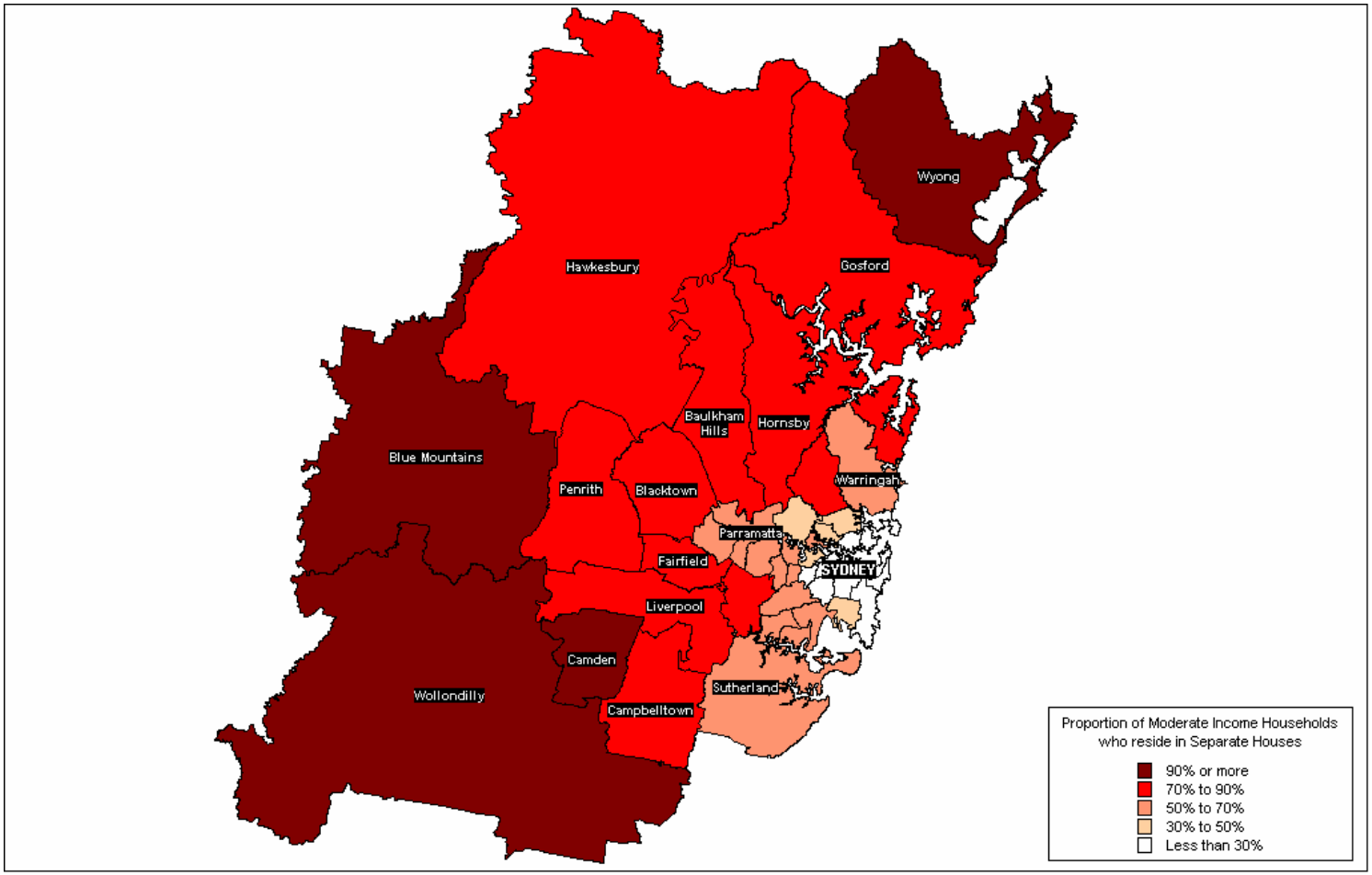


Figure 6.2: The proportion of moderate income households who reside in semi-detached dwellings, 2001

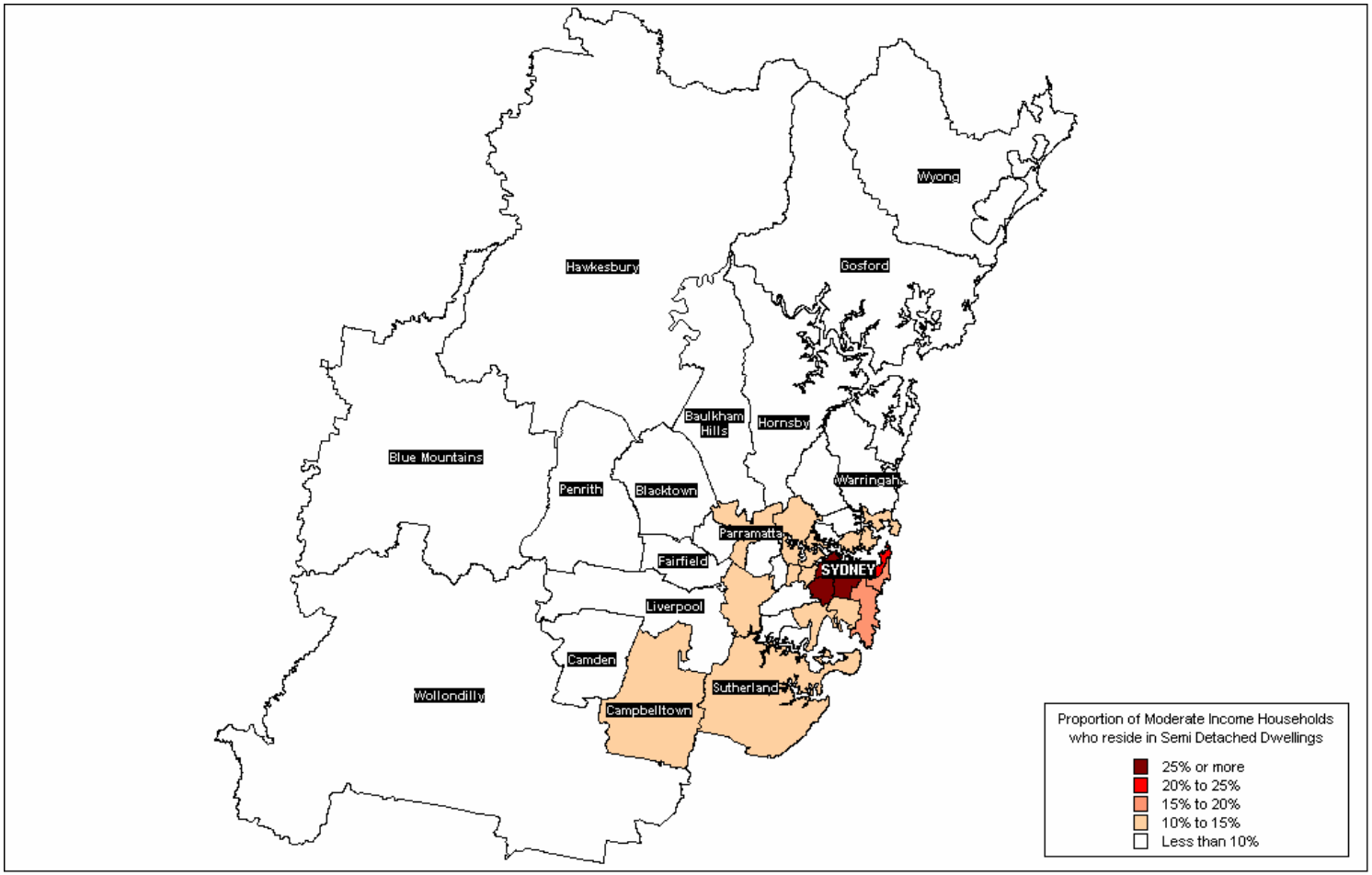


Figure 6.3: The proportion of moderate income households who reside in a flats, 2001

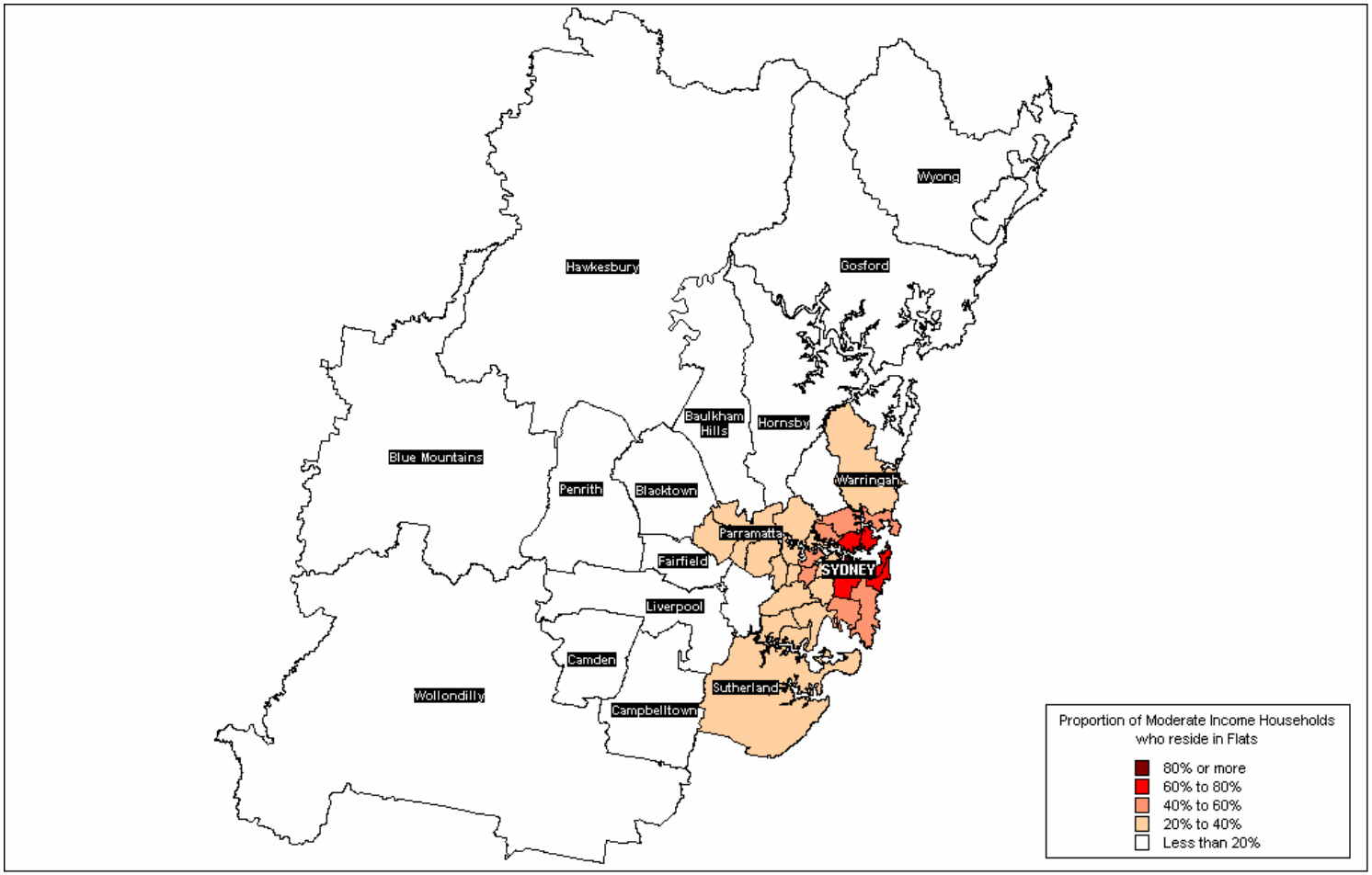


Figure 6.4: The proportion of moderate income households who are owner-occupiers, 2001

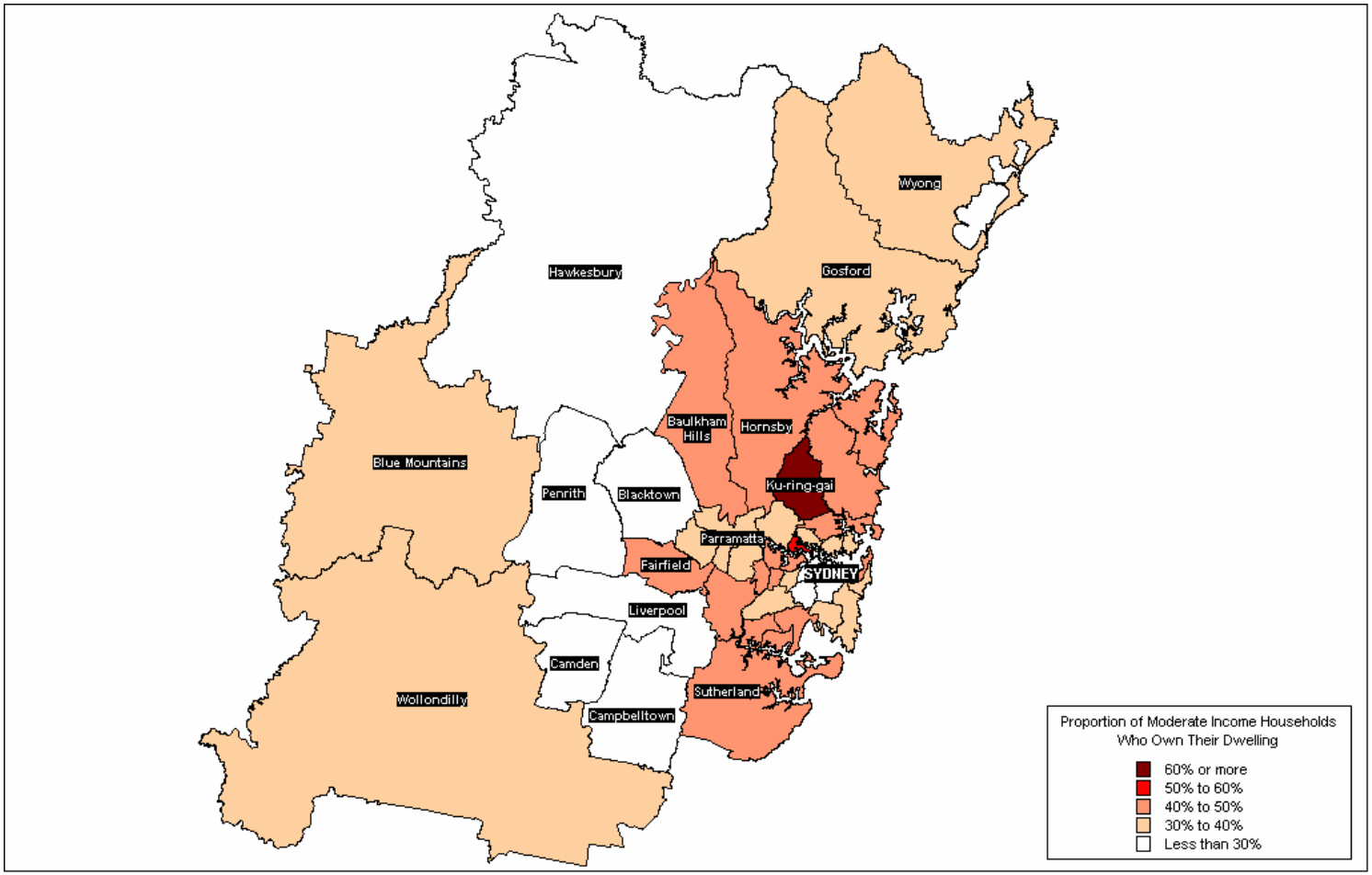


Figure 6.5: The proportion of moderate income households who are purchasing their dwelling, 2001

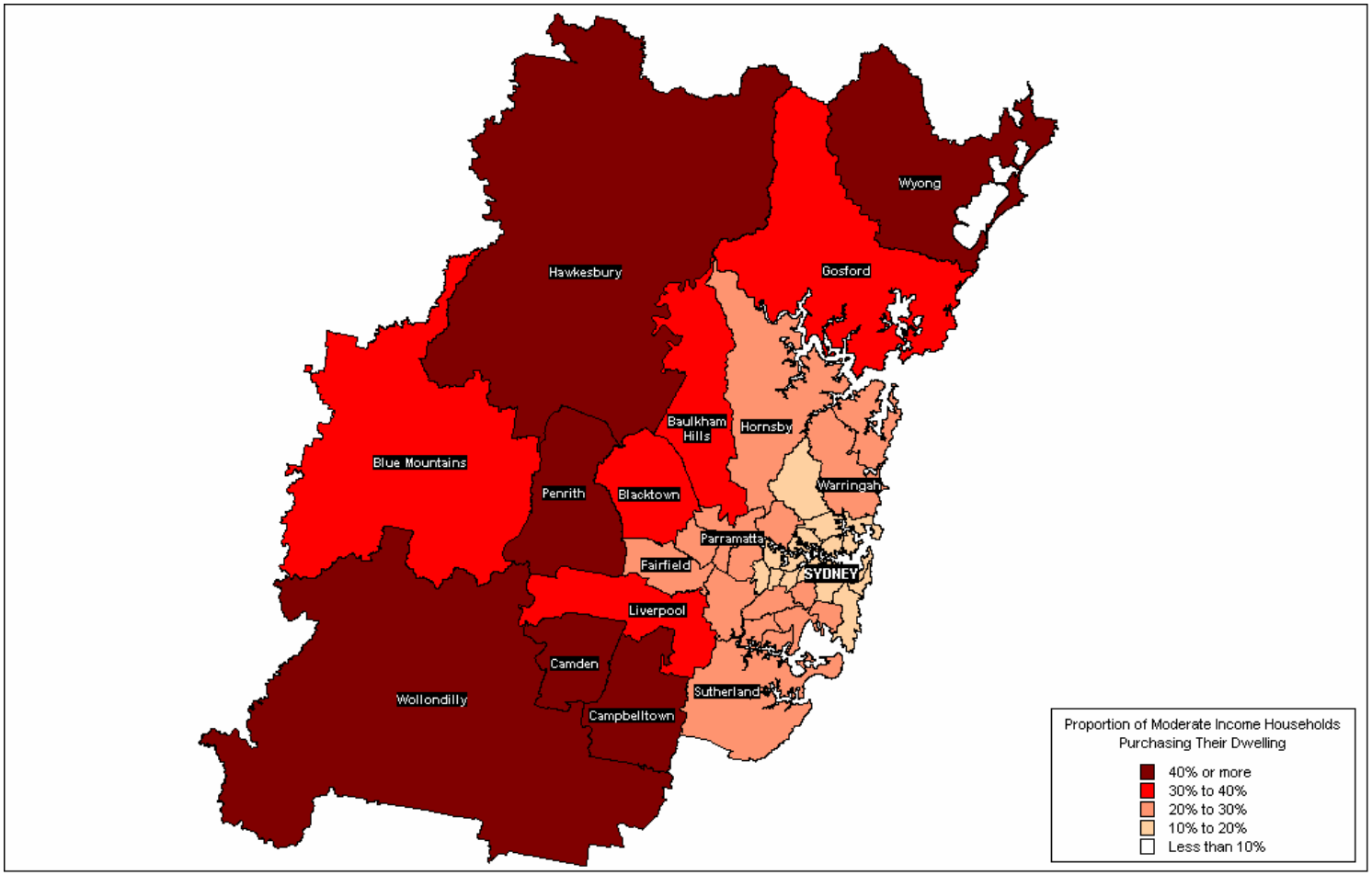


Figure 6.6: The proportion of moderate income households who rent from a private landlord, 2001

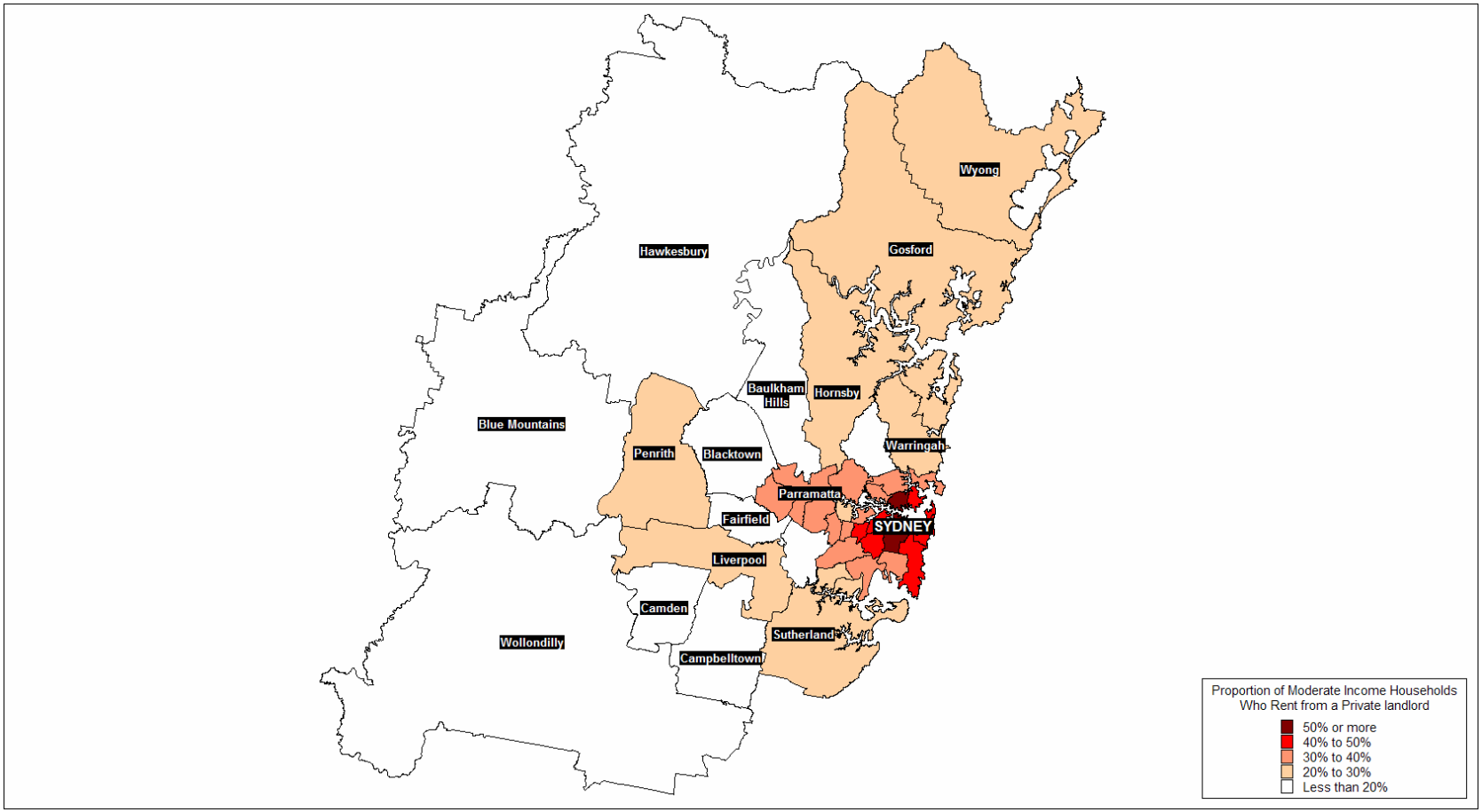


Figure 6.7: The proportion of moderate income households who are lone person households, 2001

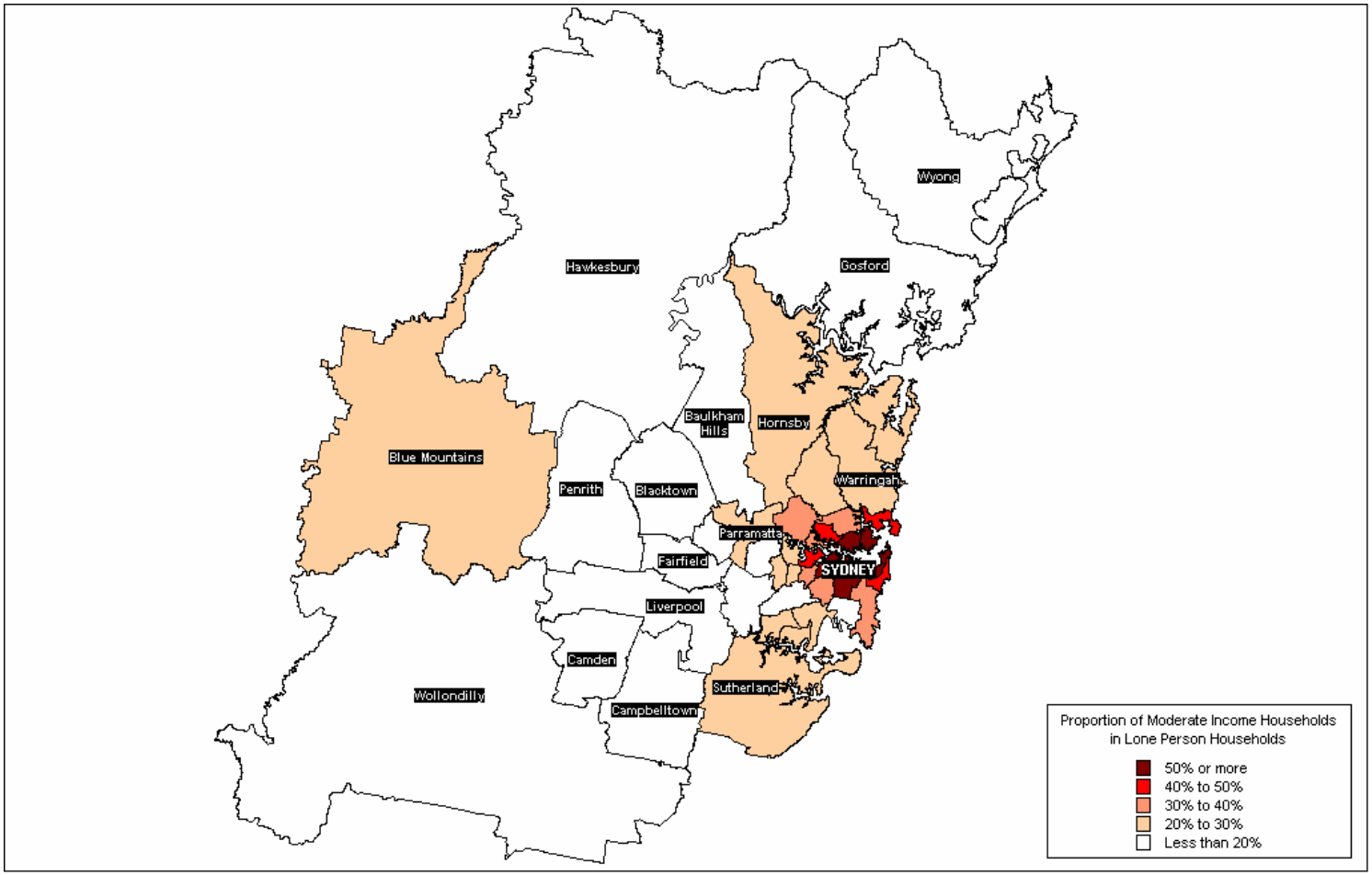


Figure 6.8: The proportion of moderate income households who are couples with children, 2001

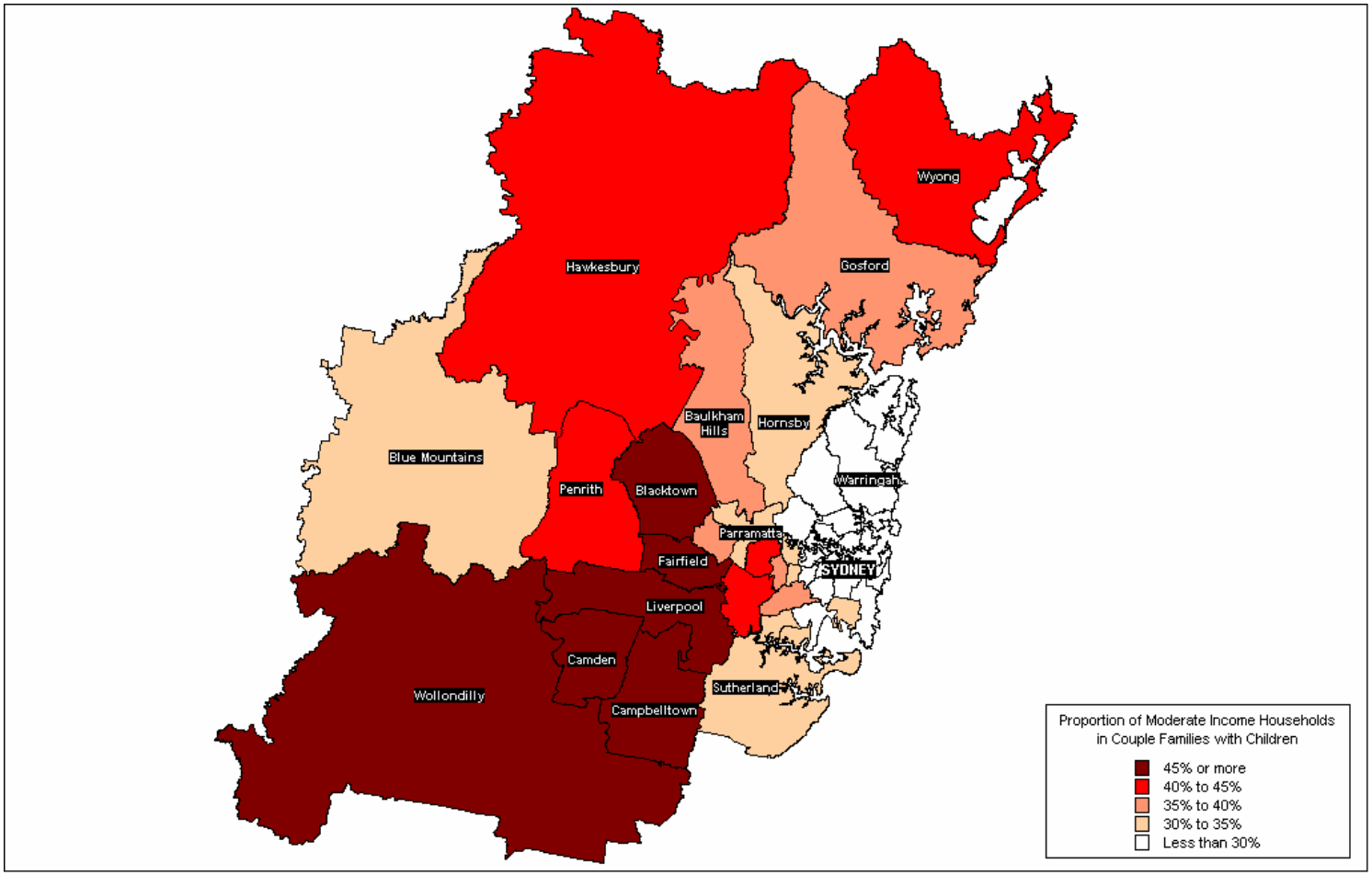


Figure 6.9: The proportion of moderate income households who are one parent families, 2001

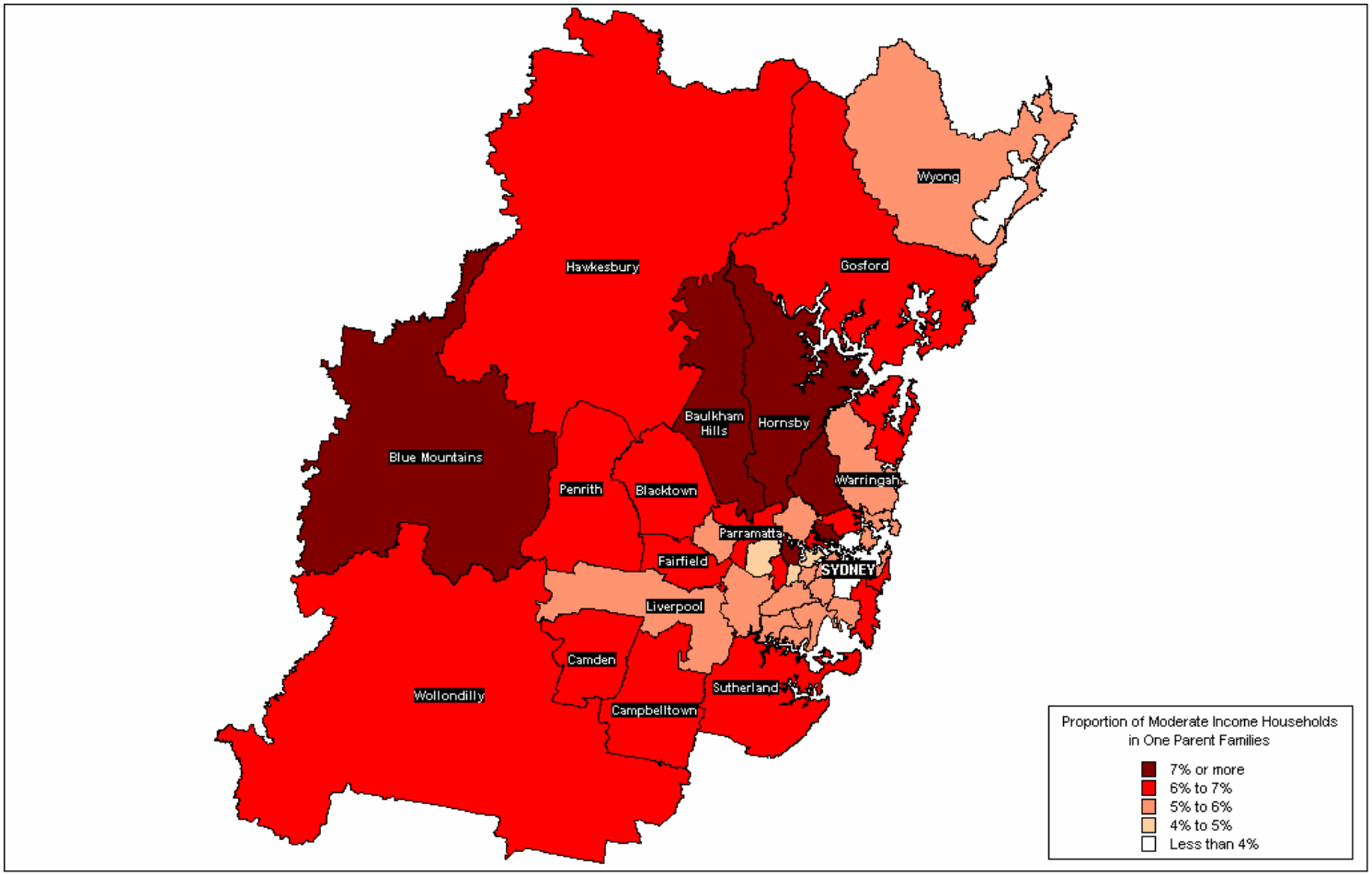


Figure 6.10: The proportion of moderate income households who are couple only households, 2001

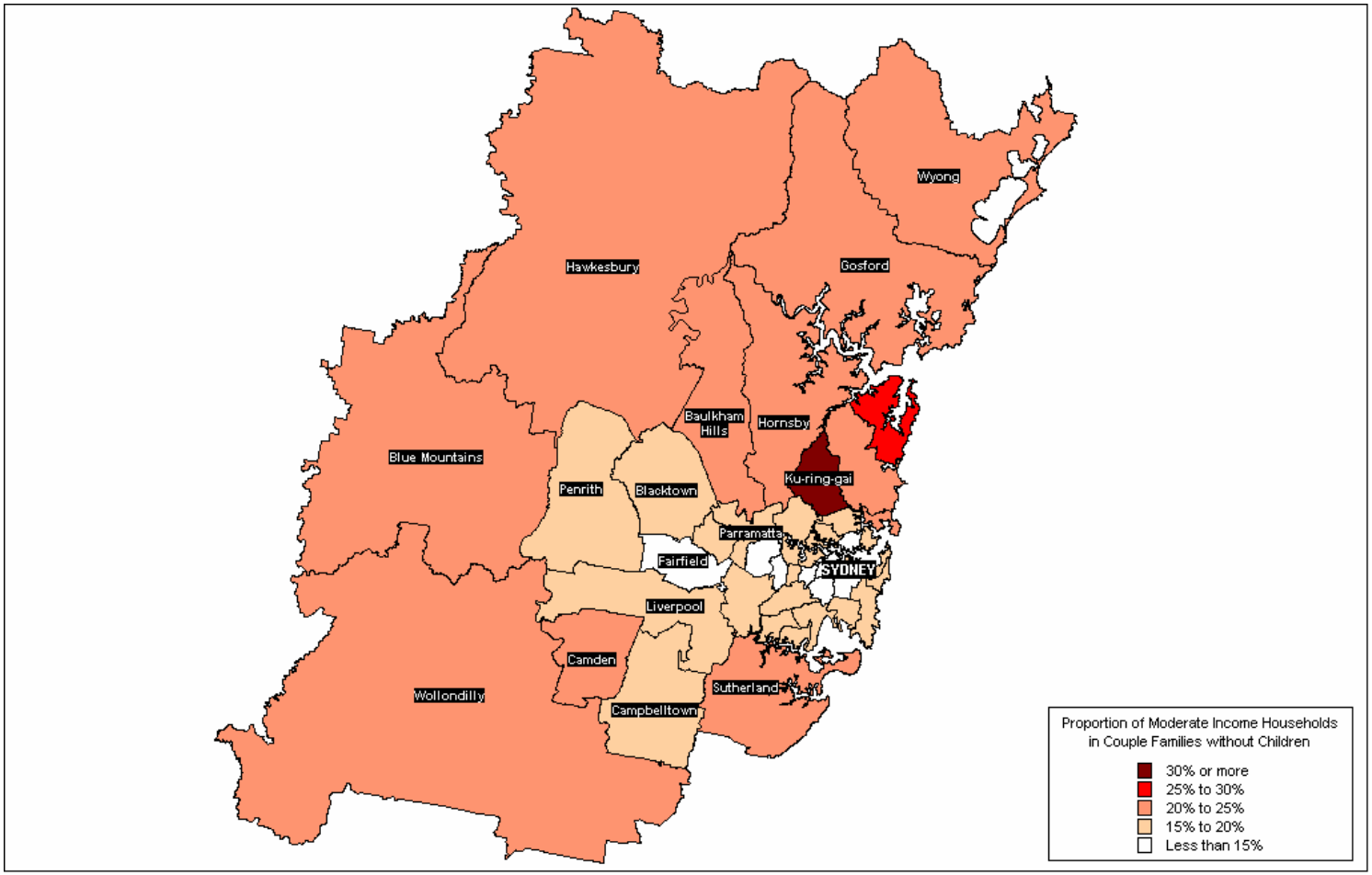


Figure 6.11: The proportion of moderate income households who are group households, 2001

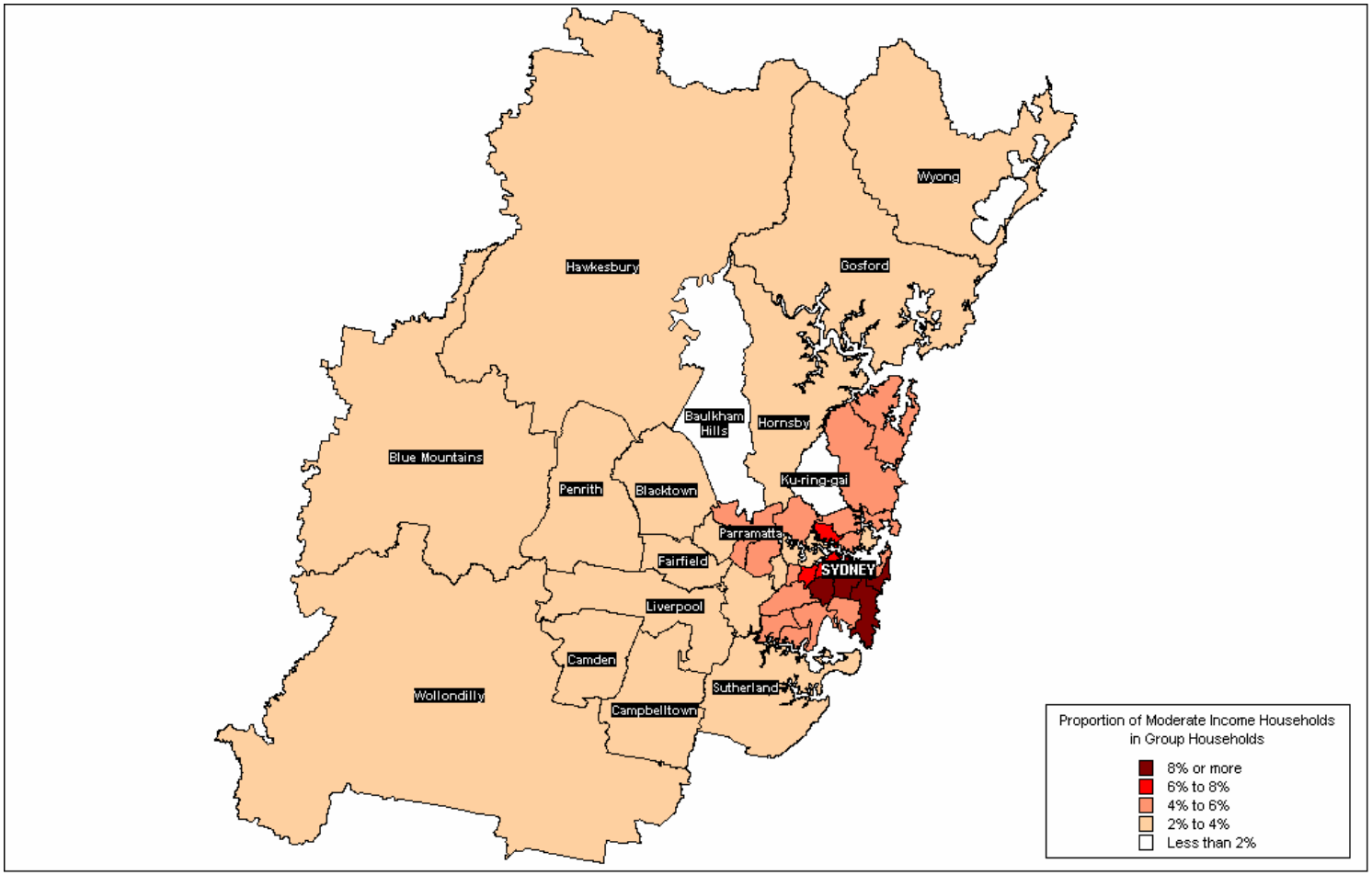


Figure 6.12: The proportion of moderate income households who are other related individuals, 2001

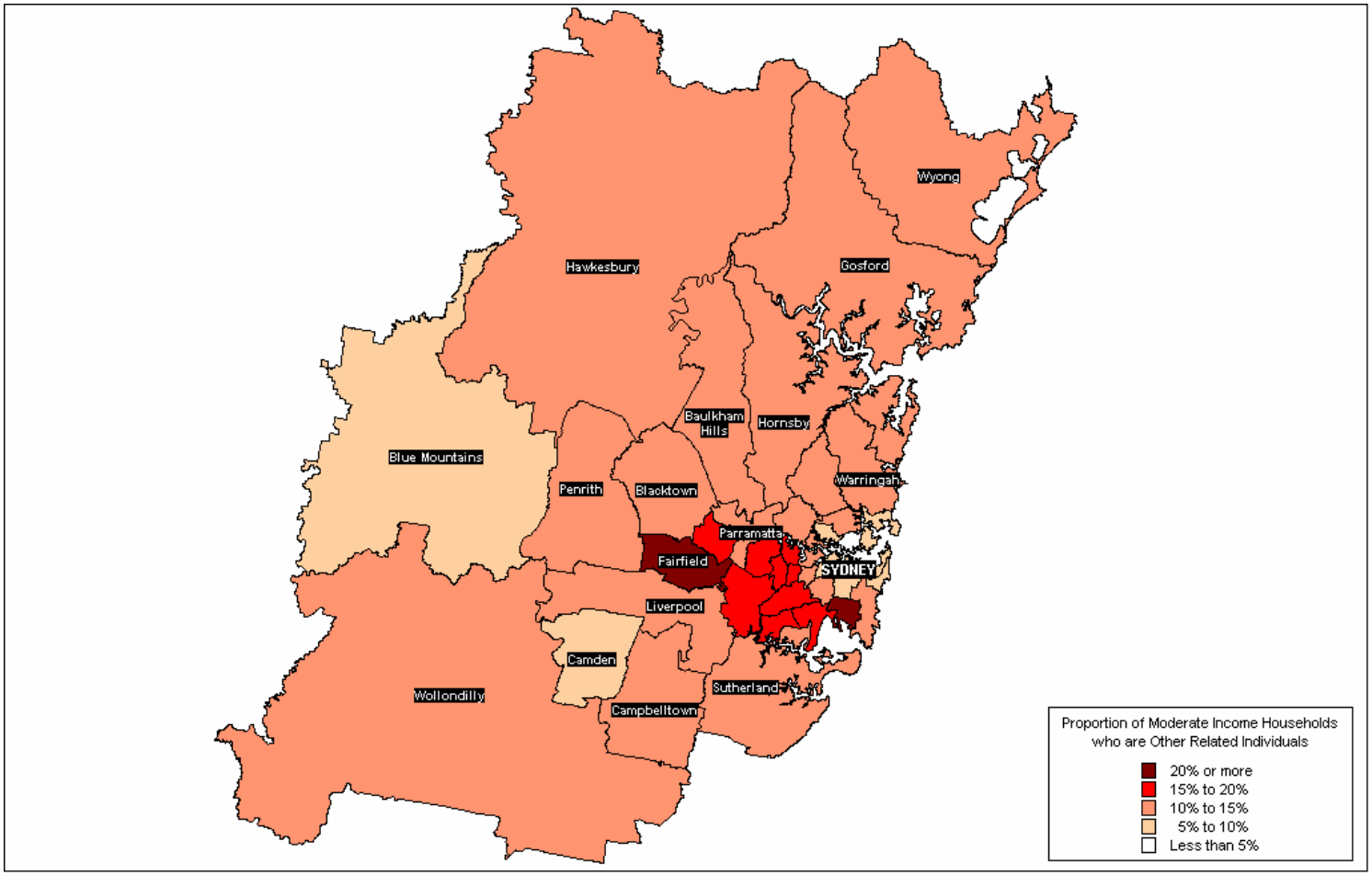


Figure 6.13: The proportion of moderate income households whose reference person is aged 25-44 years, 2001

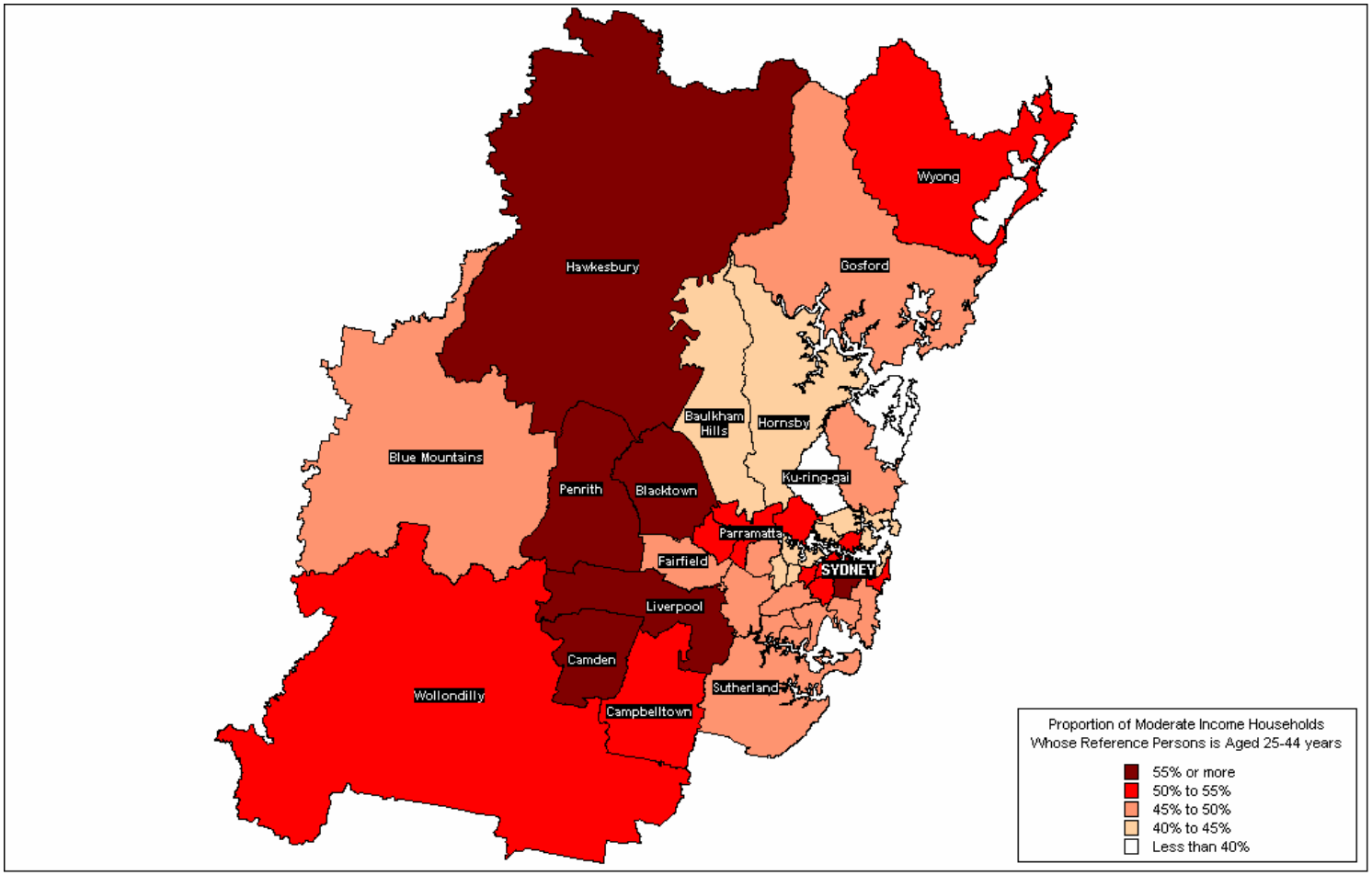


Figure 6.14: The proportion of moderate income households whose reference person is aged 45-64 years, 2001

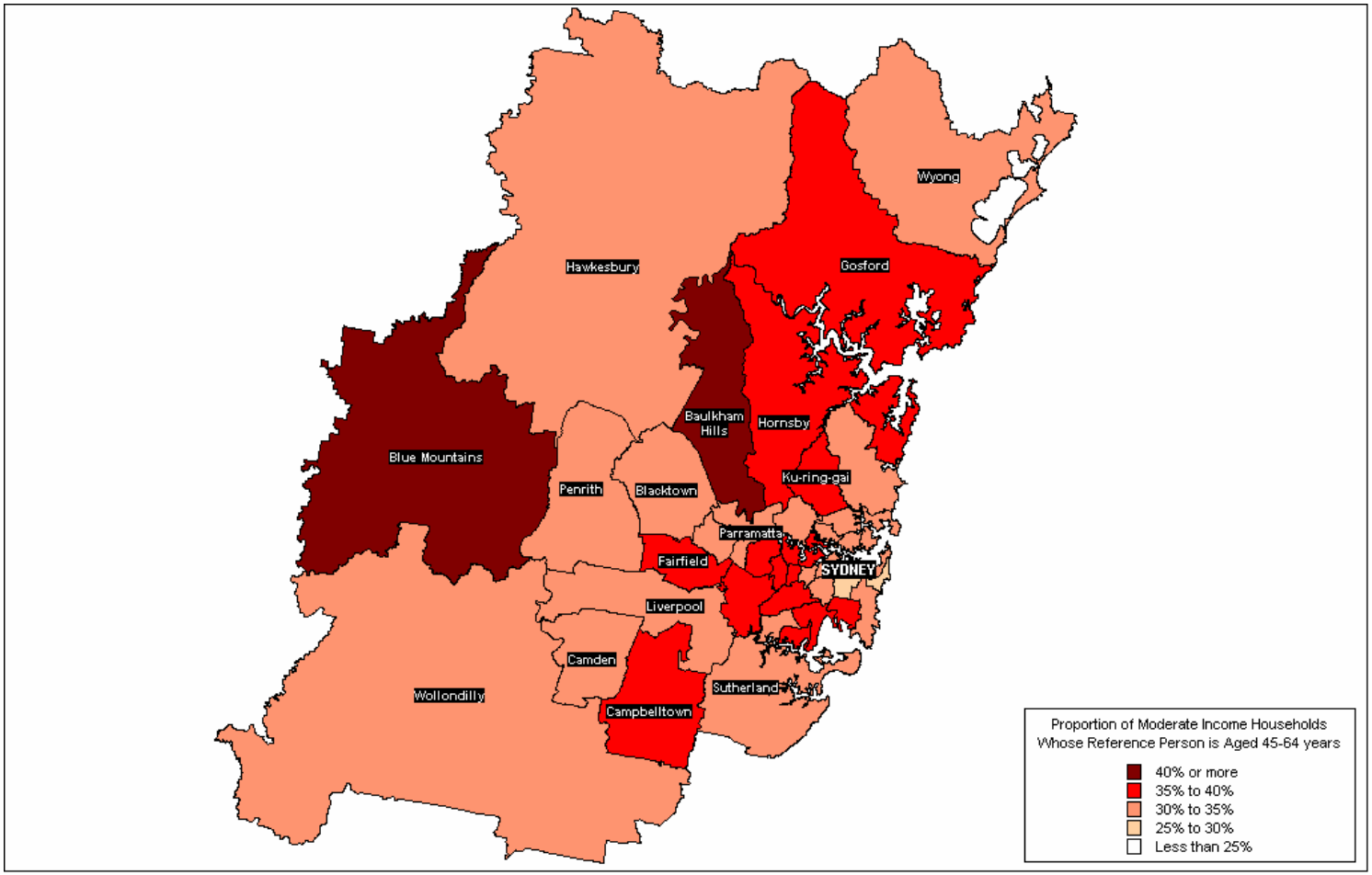
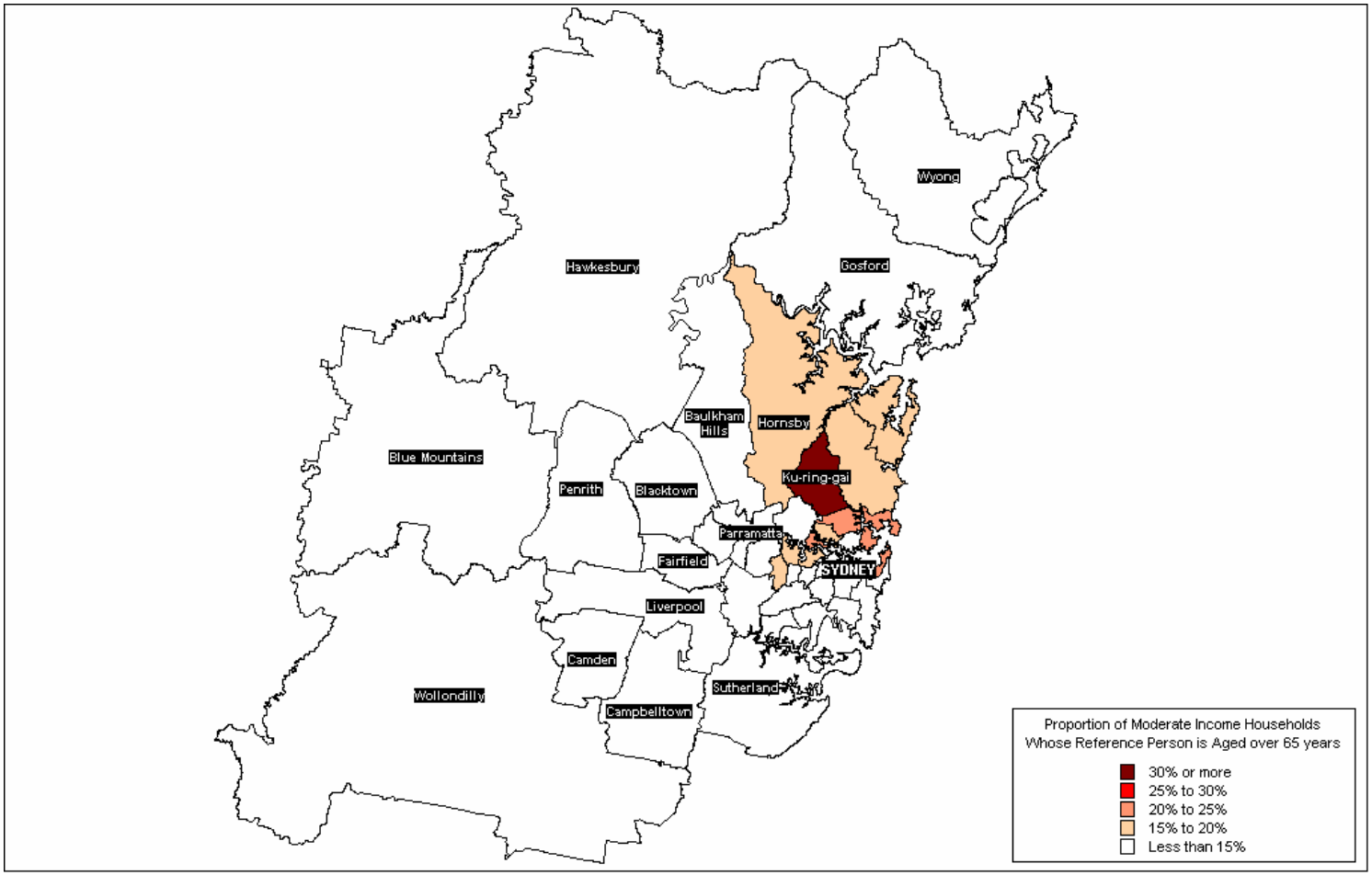


Figure 6.15: The proportion of moderate income households whose reference person is aged over 65 years, 2001



6.3 Moderate income households and housing stress

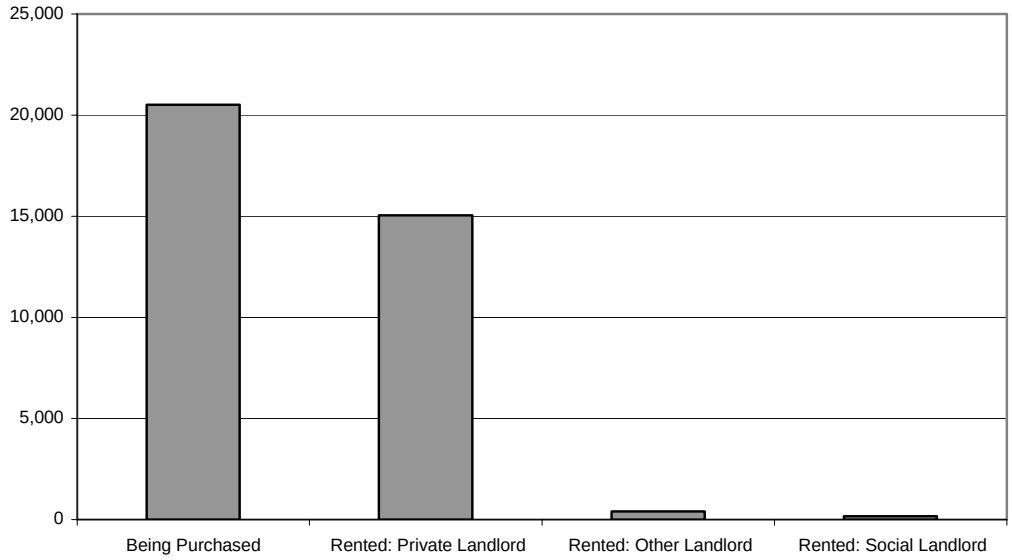
A key issue in determining the needs of the MIH market are the numbers of households who are facing housing affordability problems. If this sector is already adequately housed in affordable accommodation, then there will be little logic in pursuing a strategy to provide affordable accommodation for them. But if they are facing an affordability problem, then is it important to estimate how many are facing problems and where the demand for more affordable accommodation might be needed. This section analyses the numbers of MIH in Sydney in 'housing stress', defined as where 30 per cent or more of household income is devoted to rent or mortgage repayments, and attempts to describe their current housing situation.

In 2001, 36,136 MIHs were estimated to be in housing stress in Sydney, or 16 per cent of all MIHs (Table 6.11). More significantly, these households accounted for 27 per cent of all MIH buying or renting privately in Sydney at this time. Of these, 57 per cent were purchasing their dwelling and 42 per cent were renting from a private landlord. A very small proportion of MIHs in stress were renting from a social landlord or other landlord.

Table 6.11: Estimated Housing Costs of Moderate Income Households in Sydney SD, 2001

Housing Costs	Number of MIHs	%
30% or more	*36,136*	*15.6%*
30% to 35%	14,657	6.3%
35% to 50%	14,784	6.4%
50% or more	6,695	2.9%
Other	*196,240*	*84.4%*
Total	232,376	100.0%

Figure 6.16: Tenure of Households where housing costs exceed 30% of household income, Sydney, 2001 (Absolute numbers)



Of the 36,136 MIHs in stress in Sydney 19,577 (54 per cent) were living in separate houses, 11,022 (31 per cent) lived in flats/units and a further 4,885 (14 per cent) were in semi detached dwellings. Of the MIHs in stress in separate houses 76 per cent were purchasers while a further 23 per cent are private renters. Significantly, of all the MIHs renting privately and in housing stress, half (51 per cent) lived in flats/units. In fact, of the 11,022 MIHs in stress in flats/units, 69 per cent were private renters. Similarly, of the 20,510 purchasers in stress, 73 per cent lived in separate houses.

Table 6.12: Moderate Income Households whose housing costs exceed 30% of their income by dwelling structure and tenure, Sydney SD, 2001

	Purchasers	Private Renters	Other	Total
Separate House	14,880	4,493	204	19,577
Semi Detached	2,244	2,542	99	4,885
Flats/Units	3,179	7,613	230	11,022
Other	99	243	36	378
Not Stated	108	157	9	274
Total	20,510	15,048	578	36,136

6.4 The geography of housing stress among MIHs

The distribution of MIH in housing stress in shown in Table 6.13 and Figure 6.16. It is clear that areas in the inner city and northern suburbs were home to many MIH in housing stress: South Sydney, Randwick, and Warringah stand out. But there were also several outer LGAs where numbers were very high, Sutherland and Blacktown, for example. The middle suburbs did not have high concentrations of MIHs in housing stress,

However, LGAs with the highest *proportions* of MIH in stress were generally found in the inner city, the inner west, eastern suburbs, north shore and northern beaches, although Baulkham Hills and Camden also stood out in the outer suburbs (Figure 6.17). In the Cityof Sydney half (51 per cent) of MIH residents were experiencing housing stress.

In absolute terms, MIH purchasers in stress were predominantly located in outer LGAS, such as Sutherland, Liverpool, Penrith, and Blacktown (Table 6.14). There were also significant concentrations of MIHs purchasing their dwelling and in stress in Baulkham Hills, Bankstown, Warringah and Gosford. In contrast, there were relatively low numbers of MIHs purchasing their dwelling and in stress in the inner west, eastern suburbs, and lower northern suburbs. But in proportional terms, LGAs in higher cost areas recored the highest percentages of MIH purchasers in housing stress (Figure 6.18). More than half of all MIH purchasers in Mossman and the City of Sydney paid over 30% of their income in mortages, compared to just 18 per cent in both Campbelltown and Wyong.

Unlike home buyers, moderate income households renting privately and in housing stress were concentrated in the inner LGAs, particularly Warringah, North Sydney, South Sydney and Randwick (Table 6.15). Figure 6.19). There were also significant concentrations in Sydney, Waverley and Sutherland. Relatively few MIH renting

privately and in housing stress were recorded in western and south western Sydney, and the Central Coast.

But unlike home buyers, the locations of highest numbers of MIH renters in housing stress were also where the highest proportions of this group were concentrated. Over 50 per cent of MIH renters in Ku-ring-gai, Willoughby and Woollahra were estimated to be in housing stress, rising to as many as 69 per cent in the City of Sydney.

6.5 Housing stress amongst purchasers and private renters

If we consider just purchasers and private renters the proportions in stress within these tenure groups increases significantly than for the whole MIH population. Some 30% of MIH purchasers are in stress across Sydney. This ranges from 18% in Campbelltown and Wyong to 50% in Mosman. Generally, speaking the largest proportion of purchasers in stress are concentrated in the inner city, eastern suburbs and north shore (Table 6.14 and Figure 6.18).

Similarly, 23% of MIH private renters are in stress across Sydney. However, the range of private renters in stress in this income group differs significantly across the metropolitan area. In Wollondilly and Campbelltown only 3% of MIH private renters are stress, whereas, 70% of MIH private renters are in stress in Sydney LGA (Table 6.15 and Figure 6.19). Like MIH purchasers the proportion of private renters in stress is greatest in the inner city, north shore and eastern suburbs with much lower proportions in stress in fringe areas of Sydney.

Summary

In numerical terms, therefore, housing stress is a feature of the outer suburbs for home purchasers, clearly reflecting the large numbers of home buyers at the earlier stage of the home purchase cycle where incomes have been stretched to the maximum to buy as first time buyers, or where existing owners have traded up to a new home on the urban fringe. In both instances, the mortgage repayment to income ratio is likely to be high for many households. But in proportional terms, buyers in the higher value inner city and northern suburbs are much more likely to be experiencing housing stress compared to their suburban compatriots. This finding may be an outcome of higher proportions of early housing career purchasers in these areas compared to the middle and outer suburbs, where home ownership is more ubiquitous across a wider age range.

For renters, housing stress is undoubtedly an inner city experience for our MIH group in Sydney. In both absolute numbers, and proportionally, the incidence of housing stress among MIH renters was greatest in the higher value inner city, eastern and northern suburbs,

TABLE 6.13: All MIHs in housing stress by LGA, Sydney 2001

LGA	Number of MIHs in Stress	Total MIHs	Proportion of MIHs in Stress
Ashfield	363	2,743	13.2%
Auburn	306	2,792	11.0%
Bankstown	883	8,642	10.2%
Baulkham Hills	1,242	6,134	20.2%
Blacktown	1,609	14,909	10.8%
Blue Mountains	451	4,887	9.2%
Botany Bay	304	2,089	14.6%
Burwood	227	1,579	14.4%
Camden	508	2,668	19.0%
Campbelltown	749	8,554	8.8%
Canterbury	749	7,312	10.2%
Concord	304	1,471	20.7%
Drummoyne	412	1,983	20.8%
Fairfield	723	9,052	8.0%
Gosford	977	9,894	9.9%
Hawkesbury	486	3,963	12.3%
Holroyd	499	5,401	9.2%
Hornsby	1,232	7,200	17.1%
Hunter's Hill	76	501	15.2%
Hurstville	554	4,249	13.0%
Kogarah	435	2,986	14.6%
Ku-ring-gai	519	3,959	13.1%
Lane Cove	316	1,802	17.5%
Leichhardt	1,030	4,197	24.5%
Liverpool	1,238	8,563	14.5%
Manly	508	2,176	23.3%
Marrickville	905	5,369	16.9%
Mosman	389	1,692	23.0%
North Sydney	1,246	4,644	26.8%
Parramatta	1,052	8,440	12.5%
Penrith	1,186	10,943	10.8%
Pittwater	689	2,987	23.1%
Randwick	1,813	7,347	24.7%
Rockdale	818	5,487	14.9%
Ryde	965	6,197	15.6%
South Sydney	1,866	6,437	29.0%
Strathfield	242	1,347	18.0%
Sutherland	1,966	11,753	16.7%
Sydney	916	1,806	50.7%
Warringah	1,663	7,575	22.0%
Waverley	1,059	3,952	26.8%
Willoughby	794	3,180	25.0%
Wollondilly	280	2,284	12.3%
Woollahra	897	3,190	28.1%
Wyong	690	8,040	8.6%
Sydney SD	**36,136**	**232,376**	**15.6%**

TABLE 6.14: MIH purchasers in housing stress by LGA, Sydney 2001

LGA	Number of MIH Purchasers in Stress	Total MIH Purchasers	Proportion of MIH Purchasers in Stress
Ashfield	192	554	34.7%
Auburn	215	604	35.6%
Bankstown	735	2,269	32.4%
Baulkham Hills	847	1,978	42.8%
Blacktown	1,474	6,182	23.8%
Blue Mountains	417	2,083	20.0%
Botany Bay	185	443	41.8%
Burwood	98	242	40.5%
Camden	462	1,336	34.6%
Campbelltown	701	3,920	17.9%
Canterbury	519	1,574	33.0%
Concord	141	316	44.6%
Drummoyne	136	378	36.0%
Fairfield	639	2,432	26.3%
Gosford	835	3,751	22.3%
Hawkesbury	438	1,701	25.7%
Holroyd	377	1,309	28.8%
Hornsby	706	1,862	37.9%
Hunter's Hill	40	84	47.6%
Hurstville	387	1,015	38.1%
Kogarah	272	663	41.0%
Ku-ring-gai	246	546	45.1%
Lane Cove	124	351	35.3%
Leichhardt	335	893	37.5%
Liverpool	1,117	3,189	35.0%
Manly	112	305	36.7%
Marrickville	440	1,377	32.0%
Mosman	109	218	50.0%
North Sydney	235	546	43.0%
Parramatta	672	2,233	30.1%
Penrith	1,073	4,980	21.5%
Pittwater	348	740	47.0%
Randwick	468	1,119	41.8%
Rockdale	485	1,190	40.8%
Ryde	523	1,398	37.4%
South Sydney	543	1,353	40.1%
Strathfield	97	244	39.8%
Sutherland	1,361	3,511	38.8%
Sydney	135	256	52.7%
Warringah	809	1,834	44.1%
Waverley	206	555	37.1%
Willoughby	188	425	44.2%
Wollondilly	268	1,088	24.6%
Woollahra	187	396	47.2%
Wyong	613	3,444	17.8%
Sydney SD	**20,510**	**66,887**	**30.7%**

TABLE 6.15: MIH renting privately in housing stress by LGA, Sydney 2001

LGA	Number of MIH Private Renters in Stress	Total MIH Private Renters	Proportion of MIH Private Renters in Stress
Ashfield	159	1,212	13.1%
Auburn	91	922	9.9%
Bankstown	136	1,672	8.1%
Baulkham Hills	383	923	41.5%
Blacktown	120	2,974	4.0%
Blue Mountains	34	850	4.0%
Botany Bay	116	673	17.2%
Burwood	129	558	23.1%
Camden	43	481	8.9%
Campbelltown	39	1,558	2.5%
Canterbury	224	2,226	10.1%
Concord	154	405	38.0%
Drummoyne	276	625	44.2%
Fairfield	69	1,799	3.8%
Gosford	133	2,220	6.0%
Hawkesbury	48	754	6.4%
Holroyd	122	1,809	6.7%
Hornsby	511	1,511	33.8%
Hunter's Hill	27	77	35.1%
Hurstville	158	1,193	13.2%
Kogarah	160	886	18.1%
Ku-ring-gai	270	460	58.7%
Lane Cove	180	628	28.7%
Leichhardt	686	1,868	36.7%
Liverpool	109	1,830	6.0%
Manly	384	836	45.9%
Marrickville	450	2,264	19.9%
Mosman	277	748	37.0%
North Sydney	978	2,476	39.5%
Parramatta	353	2,716	13.0%
Penrith	95	2,260	4.2%
Pittwater	329	680	48.4%
Randwick	1,300	3,223	40.3%
Rockdale	321	1,758	18.3%
Ryde	409	2,078	19.7%
South Sydney	1,290	3,353	38.5%
Strathfield	133	446	29.8%
Sutherland	584	2,733	21.4%
Sydney	749	1,081	69.3%
Warringah	824	2,130	38.7%
Waverley	829	1,866	44.4%
Willoughby	597	1,116	53.5%
Wollondilly	9	286	3.1%
Woollahra	689	1,292	53.3%
Wyong	71	1,705	4.2%
Sydney SD	**15,048**	**65,161**	**23.1%**

Figure 6.16: The number of moderate income households in housing stress by LGA, 2001

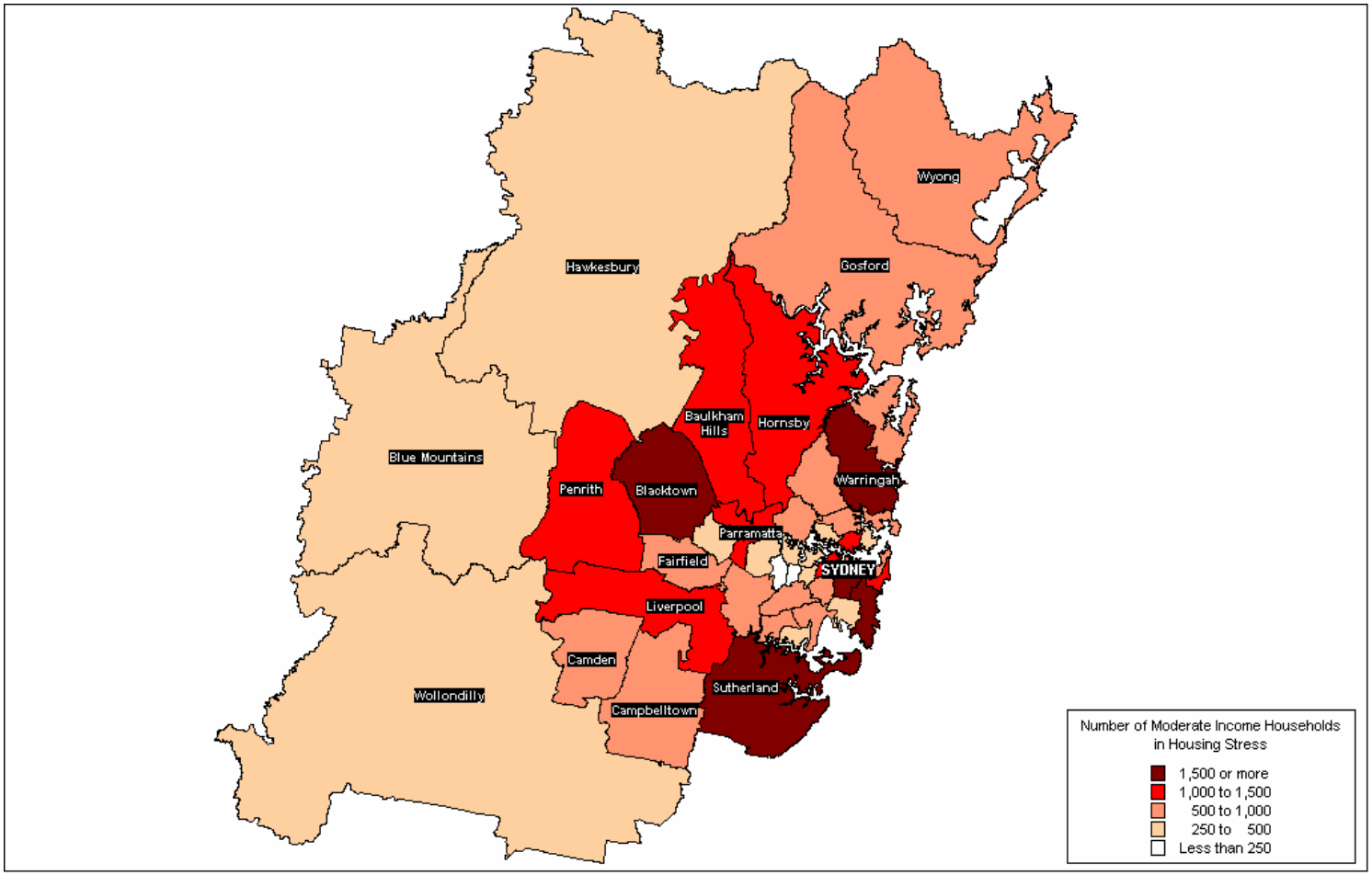


Figure 6.17: The proportion of moderate income households in housing stress by LGA, 2001

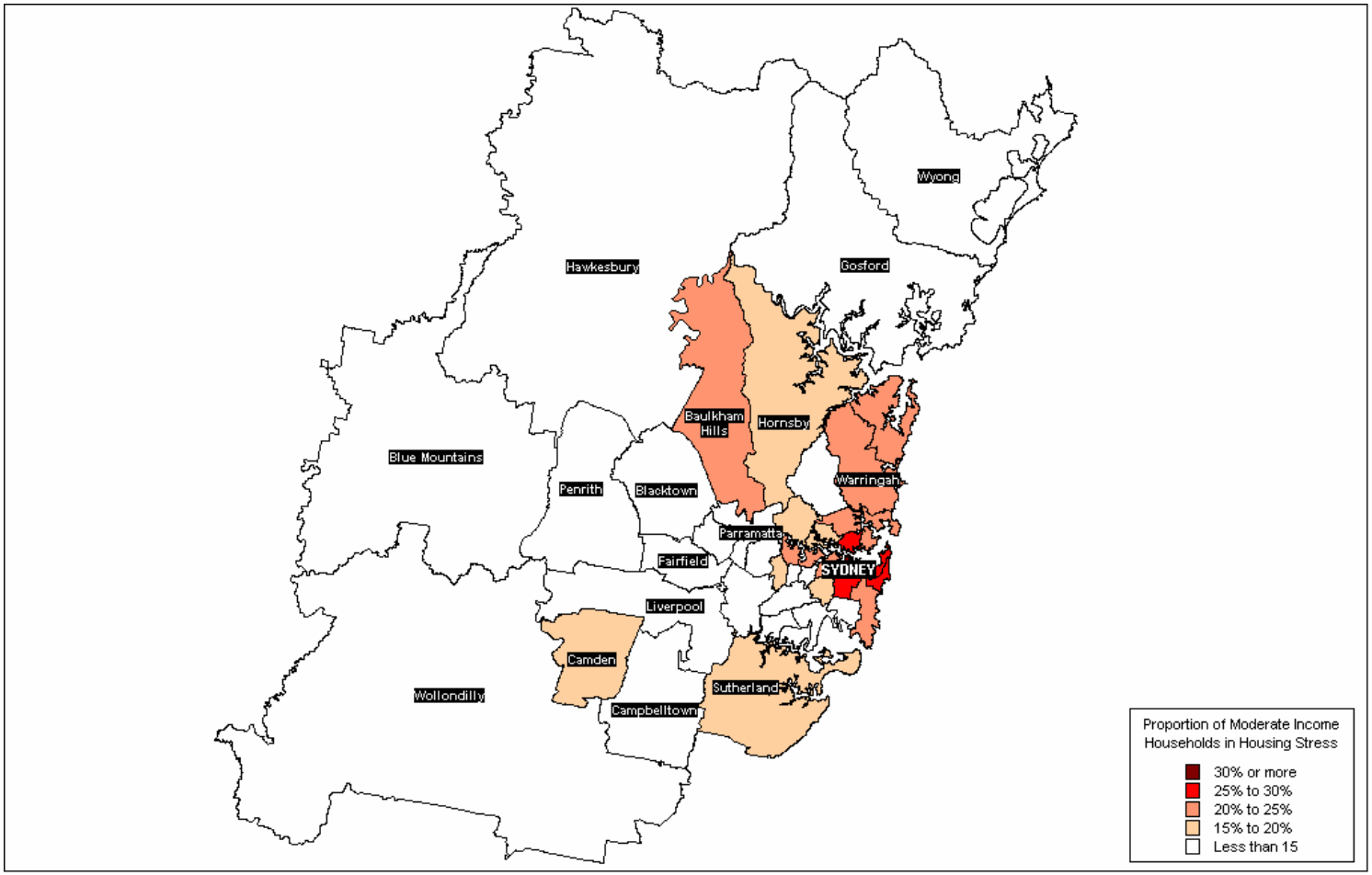


FIGURE 6.18: The proportion of MIH purchasers in housing stress, Sydney 2001

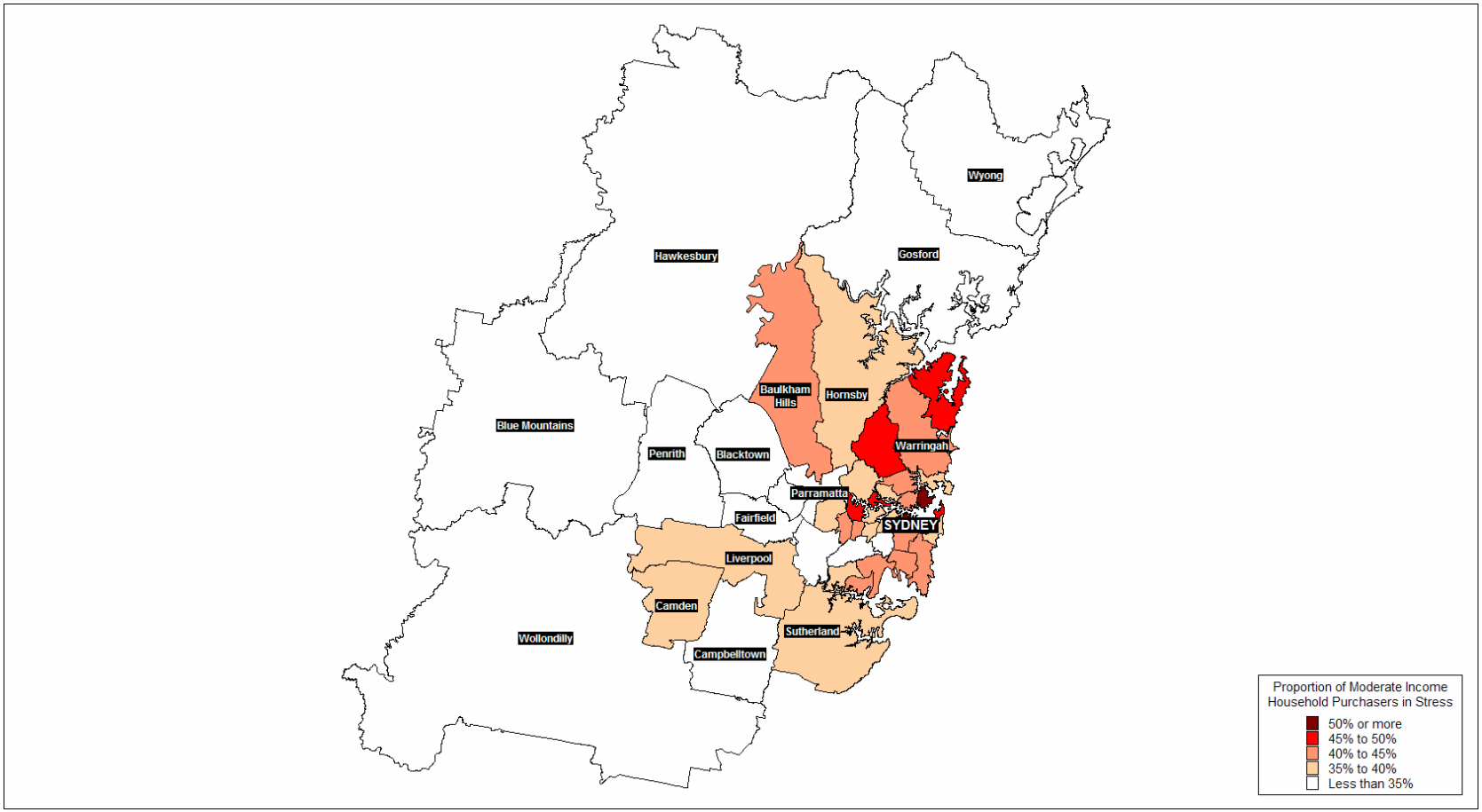
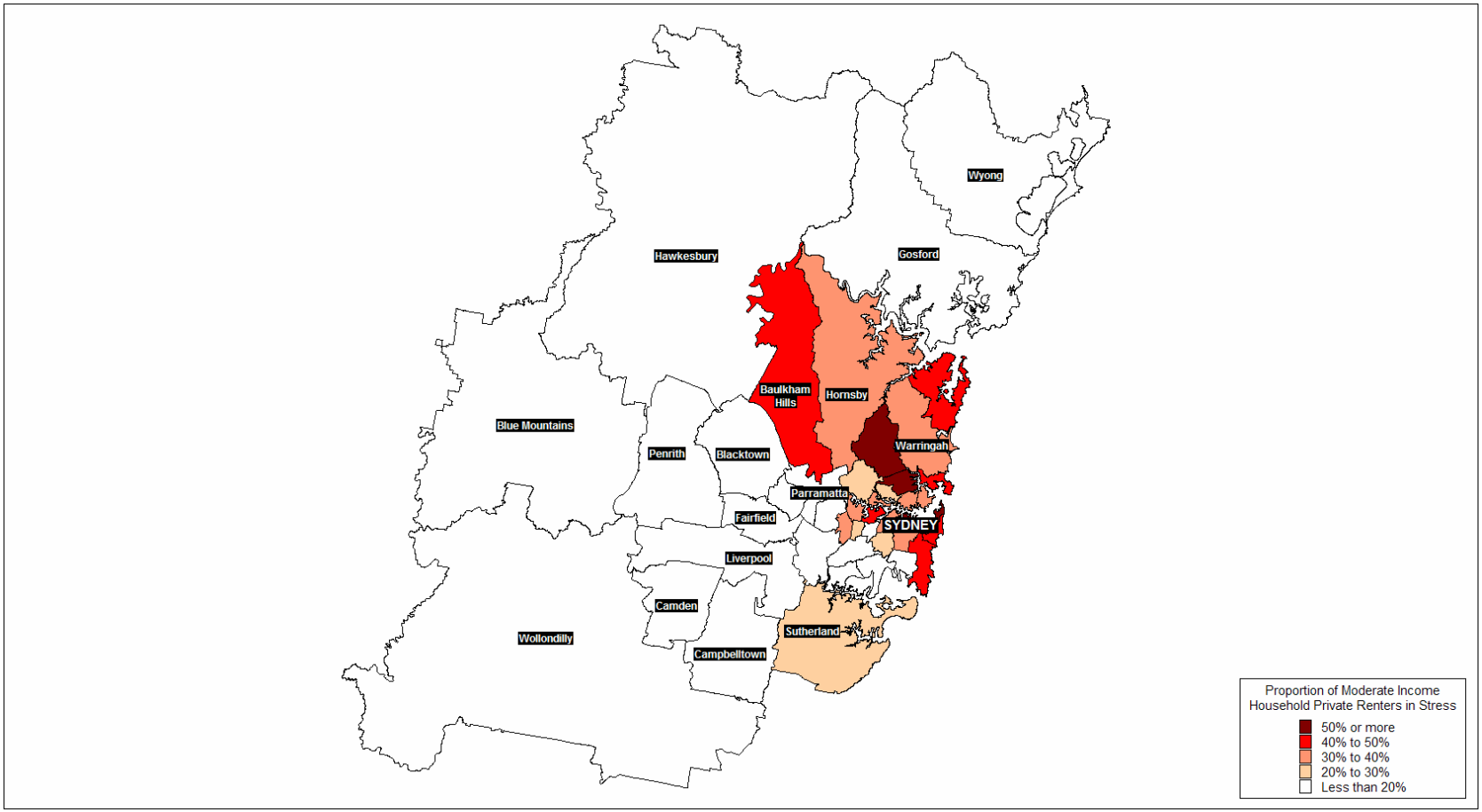


FIGURE 6.19: The proportion of MIH private renters in housing stress, Sydney 2001



6.6 The changing characteristics of MIHs – Evidence from ABS household surveys

This section analyses the changing composition of the MIH group in Sydney using two surveys produced by the Australian Bureau of Statistics (ABS). The first is the Australian Housing Survey conducted in 1994 and the second is the Survey of Income and Housing Costs conducted in 2000-01. It should be noted that the sample numbers for these surveys are relatively low at the Sydney metropolitan level for the MIH subgroup. Consequently, the data are not statistically robust at the disaggregated level. However, the samples are randomly drawn and therefore can be taken as reasonably indicative of the changes in the MIH sector over this time. Tables 6.16 and 6.17 present the data.

6.6.1 The 1994 ABS Australian Housing Survey

There were 391 households involved in the 1994 Australian Housing Survey that fell into the moderate income quintile (80 per cent to 120 per cent of median household income) in Sydney. In terms of their housing tenure, one third (34 per cent) were owner-occupiers, another third (34 per cent) were purchasers, whilst the remaining third were renters (31 per cent), with a small proportion being classified as "other tenure" (1 per cent). Only 4 per cent were public renters. Compared to the figures for all of Sydney, the MIH group were compiled of fewer owner-occupiers and more purchasers. There were also higher proportions of renters. Some 7 per cent were considered to be first time home owner.

Three quarters of MIH (75 per cent) lived in separate houses at this time, approximately 5 per cent higher than the figure for all Sydney households. The remaining quarter of moderate income households were living in semi-detached houses (10.5 per cent) and flats/units (14.2 per cent).

Turning to household type, 48 per cent of households were composed of couples with children, while 15 per cent were couples without children and 8 per cent were one parent families. A further 14 per cent were classified as lone person households and 15 per cent as "other household types".

MIHs are predominantly economically active. Some 85 per cent of household reference persons were employed compared to 66 per cent for all households in the Sydney. The number of unemployed reference persons was very low, representing only 2 per cent of the moderate income households surveyed, a similar figure to that of all households (4 per cent). Households in which the reference person was not in the labour force made up 13 per cent of all moderate income households surveyed, which is less than half of the figure for all households (30 per cent).

The reference person for approximately two thirds of moderate income households were Australian born (66 per cent), whilst the remaining third were born overseas (34 per cent), comparable to the Sydney population as whole.

6.6.2 Comparison with the 2000-01 ABS Survey of Income and Housing Costs

There were 187 households involved in the 2001-02 Survey of Income and Housing Costs that fell into the moderate income bracket The numbers involved were smaller that for the 1994 Survey as the overall sample was substantially lower. Of those 187 households, 36 per cent were owner-occupiers, 26 per cent were purchasers and 35 per cent were renting (of which only 2 per cent were public renters).

Tenure
The most significant changes in these figures when compared to the 1994 data is the decrease in MIH classified as purchasers (5.5 percentage point decrease) and the significant increase in private renters of 8 percentage points. These shifts are much greater than those recorded in Sydney as a whole. Perhaps surprisingly, there was no change in the proportions of MIH who were first time buyers between the two surveys, which remained stable at around 6 per cent.

Dwelling type
Some significant changes can also be noted with regards to the dwelling type of moderate income households. The 2001-02 survey indicated a 5 percentage point decrease in proportion of MIH residing in separate houses (75 per cent in 1994 to 70 per cent in 2001-02). The number of households residing in semi-detached houses decreased slightly (8.5 per cent in 2001-02 compared to 10.5 per cent in 1994). But there was a significant increase (6.7 percentage points) in the number of households residing in flats and units (21 per cent in 2000-2001 compared to 14 per cent in 1994). Again, these shift are much greater than in Sydney as a whole.

Household type
Between the 1994 and 2001-02 surveys, there was a relative drop in the number of MIH couples with children, amounting to a 12.4 percentage point decrease. The 2001-02 survey showed that 35 per cent of MIH were couples with children compared to 48 per cent in 1994, while the proportion of one parent families fell marginally. In contrast the proportion of couples without children increased from 15 to 20 per cent. The proportions of lone person households also increased substantially from 13 to 23 per cent. The "other household type" category remained stable at 15 per cent. Again, these changes are substantially more pronounced than the changes recorded in the composition of Sydney's households as a whole.

Employment status
With regards to the employment status of moderate income household in the 2001-02 ABS survey, the figures seemed to show that employed persons had moved into the "not in the labour force" category, with a 6.3 per cent drop in employed reference persons and an 8.4 per cent increase in those who stated that they were not in the labour force. In contrast, trends in the Sydney-wide data show no significant change in the employment status figures between 1994 and 2001-02.

County of origin
In 2000-01, 57 per cent of the MIH sample had an Australian born reference person, a significant fall from the figure of 66 per cent in 1994. There was a reciprocal increase in households where the reference person was born overseas (from 34 per cent to 43

per cent). Once again, changes recorded in the MIH sector are substantially greater than the trend in the Sydney sample as a whole.

Summary

In summary, and recognising the limitations of the data presented here, the trends in the social profile of the MIH sector in Sydney between 1994 to 2000-01 underwent a proportionally greater shift towards private renting, living in a flat or unit, comprising lone person and childless couple households, and in the proportion of the household reference person not in the labour force and not Australian born compared to trends in the Sydney population as a whole. These trends imply both a greater ageing of the MIH population and a shift away from families with children than has happened in the population as a whole.

However, the sample numbers of MIH were low in both surveys and further research (for example, with the next 2006 Census) will be needed to confirm these trends.

Table 6.16: Characteristics of MIHs, 1994 and 2001-02

	1994			2001-02		
	Number	**Weighted Percentage (of MIHs)**	**All Households Weighted Percentage**	**Number**	**Weighted Percentage (of MIHs)**	**All Households Weighted Percentage**
Number of MIHs	391	20%		187	20%	
Owner-Occupiers	141	34.2%	41.1%	68	35.9%	39.9%
Purchasers	129	33.8%	27.7%	52	28.3%	30.6%
Rent – Public	17	4.2%	6.8%	4	1.9%	5.0%
Rent – Private	88	23.5%	20.1%	58	31.6%	21.9%
Rent – Other	12	3.1%	2.7%	3	1.6%	1.1%
Other Tenure	4	1.1%	1.4%	2	0.6%	1.5%
Separate Houses	299	75.0%	70.2%	129	70.0%	66.9%
Semi Detached	39	10.5%	10.1%	17	8.5%	12.4%
Flats/Units	52	14.2%	19.2%	40	20.9%	20.0%
Other Dwellings	1	0.3%	0.4%	1	0.5%	0.7%
Couple with Children	193	47.7%	36.8%	64	35.3%	38.3%
Couples without Children	57	14.7%	21.7%	39	20.3%	22.6%
One Parent Family	35	8.3%	8.1%	12	6.3%	6.4%
Lone Person Household	49	13.8%	20.8%	46	23.0%	21.8%
Other Household Type	57	15.4%	12.6%	26	15.1%	10.8%
Employed	328	84.6%	66.0%	146	78.3%	66.4%
Unemployed	9	2.2%	3.7%	0	0.0%	2.1%
Not in the Labour Force	54	13.3%	30.3%	41	21.7%	31.4%
First time home owner	24	6.8%	4.6%	13	6.9%	5.9%
Purchased new dwelling	8	2.1%	1.3%	6	3.0%	2.3%
Purchased established dwelling	44	12.1%	9.6%	20	10.3%	12.4%
Australian Born	256	66.2%	66.0%	110	56.7%	59.6%
Overseas Born	135	33.8%	34.0%	77	43.3%	40.3%

(Source: Australian Housing Survey 1994, Survey of Income and Housing Costs 2000-01)
Notes: Private renter – rents from real estate agent or other person not in the Same household

Table 6.17: Summary of percentage point changes in the profile of MIHs, 1994 and 2001-02

	Percentage Point Changes 1994-2001/02	
	MIHs	All Households
Owner-Occupiers	1.7%	-1.2%
Purchasers	-5.5%	2.9%
Rent – Public	-2.3%	-1.8%
Rent – Private	8.1%	1.8%
Rent – Other	-1.5%	-1.6%
Other Tenure	-0.5%	0.1%
Separate Houses	-5.0%	-3.3%
Semi Detached	-2.0%	2.3%
Flats/Units	6.7%	0.8%
Other Dwellings	0.2%	0.3%
Couple with Children	-12.4%	1.5%
Couples without Children	5.6%	0.9%
One Parent Family	-2.0%	-1.7%
Lone Person Household	9.2%	1.0%
Other Household Type	-0.3%	-1.8%
Employed	-6.3%	0.4%
Unemployed	-2.2%	-1.6%
Not in the Labour Force	8.4%	1.1%
First time home owner	0.1%	1.3%
Purchased new dwelling	0.9%	1.0%
Purchased established dwelling	-1.8%	2.8%
Australian Born	-9.5%	-6.4%
Overseas Born	9.5%	6.3%

(Source: Australian Housing Survey 1994, Survey of Income and Housing Costs 2000-01)
Notes: Private renter – rents from real estate agent or other person not in the Same household

7 THE REALITY OF AFFORDABILITY: MODERATE INCOME HOUSEHOLDS AND HOUSING COSTS IN OUTER SYDNEY

7.1 Introduction

While analysing aggregate house price and Census data provides an overall picture of both the structure of unaffordability among the MIH sector and changes over time, it does not allow anything to be deduced about the actual market situation of MIHs who are looking for a new home in the housing market *at any one time*. In particular, modelling buying capacity and house prices tells us nothing about the actual choices facing home buyers, particularly in the numbers of appropriately priced homes that are available at any one time, where these are and what kinds of housing is available.

This chapter attempts to address these issues by presenting an analysis of a point-in-time survey of all the properties on the market for purchase and rental in a specific week in three areas where moderate income households form a major component of the demand in Sydney and where it might be expected that their needs would be most readily met: Blacktown, Liverpool and Campbelltown. These are all outer suburban areas where the previous analyses have indicated property prices are under less pressure and where it might be supposed a household on a moderate income could find suitably priced accommodation.

The analysis was conducted as follows. On the 8th December 2003 a point-in-time survey was conducted of properties for sale and rent in Blacktown, Liverpool and Campbelltown. Data from the survey was analysed to establish an estimate of the size of the MIH market in these LGAs at this time and it's broad characteristics. The typical incomes that would be needed to buy a dwelling (with limited equity) in the three LGAs was then estimated, along with the income needed to affordably rent dwellings in these three LGAs.

7.2 Methodology

The basis of the survey was a census of all estate agents and property databases in the three case study LGAs to collect information on all properties on the market for purchase or rental on 8th December 2003. A number of sources were used. Firstly, the website for the Real Estate Institute of Australia (REIA) was visited to gain a list of agents details, including the name and contact details of real estate agents in Blacktown, Campbelltown and Liverpool LGAs. The REIA represents 75 per cent of real estate firms and agents, and provided an excellent starting point in the data collection process.

The details of 17 Campbelltown LGA agents, 25 Blacktown LGA agents and 19 Liverpool LGA agents (61 in total) were gathered from the REIA website. These agents were first contacted with a letter 2 weeks prior to the survey, which highlighted the key aspects of the project and the groups involved, along with details regarding what was required from them. More specifically, the letter asked them to fax through or email details of their sales and rent listings on 8th December 2003. This was then followed up with a phone call in the week prior to the survey to ensure that they received the letter and to also gauge their response.

The overall response rate of agents was 56 per cent. Some 47 per cent of Campbelltown and Liverpool agents responded, whilst 68 per cent of Blacktown real estate agents responded. Agents that had agreed to help were given a reminder call during the course of the census day. From 25 agents in Blacktown, 10 sales listings and 15 rent listings were faxed or emailed, whilst 2 agents refused to take part in the survey. In Liverpool, 7 sales listings and 8 rent listings were obtained through fax or email from the various agents, while 2 agencies refused and a further one agency said they had no available properties for sale or rent on the census day. From the Campbelltown agents, 3 sales listings and 7 rent listings were obtained.

For all other real estate agencies initial contacted prior to the 8th December, the listings were retrieved from the Internet. Other agencies in the case study LGAs that were not listed by the REIA were also added, with listings for the Liverpool and Blacktown LGAs being retrieved off their website. A website for private listings was also studied to ensure that this section of the market had not been ignored, however, only 3 additional properties were found, all being within the Campbelltown LGA.

7.3 The house purchase market in the case study areas

From the point-in-time survey, 1,624 properties were found to be on the market in Liverpool, Campbelltown and Blacktown LGAs on the survey date. The properties ranged in price from $159,950 to $1,550,000, with the average price being $410,378. The median price was slightly lower at $379,950. Separate houses constituted 78 per cent of the property market, whilst 12 per cent were townhouses and the remaining 10 per cent were units, apartments or flats. Three bedroom homes were the most common (44 per cent), however, there was also a substantial number of 4 bedroom homes, which made up one third (32 per cent) of the market. Two bedroom properties were in the minority (15 per cent).

Campbelltown
There were 533 properties available for sale in the Campbelltown LGA, with the average price being $382,924, and the median price being $349,000. The majority of available properties for sale were separate houses (82 per cent), with townhouses being the other major housing type (16 per cent). This is also reflected in the number of bedrooms within these available Campbelltown properties. Almost half the properties had 3 bedrooms (46 per cent) and just under one third (31 per cent) were 4 bedroom properties. The Campbelltown LGA had the least number of one or two bedroom properties (13 per cent), and the most number of properties with five or more bedrooms (10 per cent).

Blacktown
In the Blacktown LGA there were 503 properties on the marke at an average price of $392,938, with a median price of $381,750. Blacktown was the most likely LGA to have separate houses on the market (84 per cent), with 9 per cent of the market being made up of townhouses and 7 per cent of flats/units. Over half the available properties in Blacktown had 3 bedrooms (54 per cent), with the rest of the market mainly comprising of 2 bedroom (13 per cent) and 4 bedroom (26 per cent) properties. Blacktown did, however, have the least number of properties with four or more bedrooms. Properties with four or more bedrooms constituted 32 per cent of the

Blacktown market, compared to 41 per cent of Campbelltown properties and 44 per cent of Liverpool properties.

Liverpool
There were 571 properties for sale in the Liverpool LGA, with the average property price being $450,438 and the median price being $419,950. These figures were much higher than both Campbelltown and Blacktown. Liverpool appeared the have the widest range of housing in terms of price and size. Whilst the majority of properties were separate houses, there were still a relatively large proportion of townhouses (12 per cent). The proportion of units, at18 per cent, was the highest of the three case study areas. Two bedroom properties accounted for 20 per cent of the market, whilst 35 per cent and 37 per cent of properties comprised 3 and 4 bedrooms respectively. Five or more bedrooms were seen in 8 per cent of Liverpool properties.

7.3.1 Housing affordability for moderate income buyers in the three LGAs

For the purposes of this analysis, a moderate income household was considered to have an income of between $42,578 and $65,462 per annum. Working under the assumption that these households are first home buyers, an affordable price range has been calculated at on a loan at 6.55% over 25 years, with 90 per cent of the purchase price being borrowed. The calculations show that moderate income households could afford to buy a property worth between $172,300 and $264,900. At prevailing price levels, none of these households could have afforded the median priced property at $379,950.

Of the 1,624 properties on the market in the three LGAs, only 177 (11 per cent) properties were on offer for less than $265,000. With property prices starting at $159,950 for the cheapest property, a household earning at the 40th percentile would have been able to afford just 5 properties in any of these areas (Table 7.1).

Of the 177 properties affordable across the MIH income range, 112 (63 per cent) were units, while 25 per cent were townhouses and only 12 per cent were separate houses. Two bedroom properties made up 76 per cent of the total, whilst 23 per cent had 1 or 3 bedrooms and only 1 property had 4 bedrooms. The Liverpool LGA had the highest proportion of affordable moderate income housing on the market (14 per cent), with only 9 per cent and 8 per cent of Campbelltown and Blacktown properties proving to be affordable. Individual suburbs with the most properties affordable to moderate income housing at the 60th percentile were Liverpool itself (40 per cent), Mount Druitt (16 per cent), Warwick Farm (6 per cent) and Macquarie Fields (6 per cent).

TABLE 7.1: Affordability of housing in the case study LGAs at the 60th income percentile

Affordability of Housing	**LOCAL GOVERNMENT AREA**			**TOTAL**
	Campbelltown	**Blacktown**	**Liverpool**	
Affordable (<$264,900)	51 (10%)	40 (8%)	86 (15%)	177 (11%)
Not affordable (>$264,900)	482 (90%)	463 (92%)	502 (85%)	1,447 (89%)
Total	533 (100%)	503 (100%)	588 (100%)	1,624 (100%)

Campbelltown
Looking at the split between each LGA (Table 7.2), only 51 (10 per cent) of the available properties in the Campbelltown LGA were affordable to moderate income households at the 60th income percentile. Campbelltown provided 29 per cent of the affordable housing market within the three LGAs. Of these 51 properties, 69 per cent were townhouses, 12 per cent were units and 20 per cent were detached houses. Over half (51 per cent) of the properties had 2 bedrooms, whilst 41 per cent were 3 bedroom properties (Table 7.3). The remaining properties were 1 bedroom residences (8 per cent).

Blacktown
Only 8 per cent (40) of properties on the market in Blacktown were affordable to a moderate income household at the top end of the MIH income range (60th percentile). These 40 properties made up 23 per cent of the affordable housing market in the three LGAs. Some 60 per cent (24 properties) were units, while the other 40 per cent comprised separate houses (18 per cent) and townhouses (23 per cent). The affordable housing in Blacktown comprised only 2 bedroom (73 per cent) and 3 bedroom (23 per cent) dwellings.

Liverpool
Only one in seven Liverpool properties (15 per cent) on the market were affordable to moderate income households at the 60th income percentile. These 86 properties accounted for half (49 per cent) of the affordable housing market between these the case study LGAs. Almost all (95 per cent) of the affordable properties in Liverpool were units, with an insignificant proportion of 5 per cent being detached houses. Like Blacktown, Liverpool also had a large proportion of 2 bedroom properties (90 per cent) that fell in to the affordable housing price bracket. Some 7 per cent of affordable properties in Liverpool were one bedroom properties, whilst the other 3 per cent were 3 and 4 bedroom properties.

TABLE 7.2: Type of housing of affordable properties in each LGA at the 60th percentile

LGA	**TYPE OF HOUSING**			**TOTAL**
	Separate House	**Townhouse**	**Flats/Units**	
Campbelltown	10 (20%)	35 (69%)	6 (12%)	51 (100%)
Blacktown	7 (18%)	9 (23%)	24 (60%)	40 (100%)
Liverpool	4 (5%)	NA	82 (95%)	86 (100%)
Total	21 (12%)	44 (25%)	112 (63%)	177 (100%)

TABLE 7.3: Number of bedrooms in affordable properties for each LGA at the 60th percentile

	NUMBER OF BEDROOMS					TOTAL
	1	**2**	**3**	**4**	**Not Stated**	
Campbelltown	4 (8%)	26 (51%)	21 (41%)	NA	NA	51 (100%)
Blacktown	NA	29 (73%)	9 (23%)	NA	2 (5%)	40 (100%)
Liverpool	6 (7%)	77 (90%)	2 (2%)	1 (1%)	NA	86 (100%)
Total	10 (6%)	132 (75%)	32 (18%)	1 (0%)	2 (0%)	177 (100%)

7.3.2 Summary

For moderate income households, choice in the housing market in the three case study LGAs in late 2003 was limited. Of the 1,624 homes for sale on the survey date (8th December 2003), the cheapest was priced at $160,000 and the median was $379,950.

For first time buyers with limited equity, we found that only 11 per cent of the available market – 177 properties – were affordable to a MIH at the top of the MIH band ($65,462 p.a.). Two thirds of these (63 per cent) were flats and two bedroom property made up 76 per cent of the total. At the bottom of the MIH range ($42,578 p.a.) just 5 properties were affordable. None of these households could have afforded the median priced property on offer across the three LGAs.

The cheapest suburbs included Mt Druitt, Warwick Farm, Maquarie Fields, and Blacktown and Liverpool town centres.

While we do not have specific data on the profile of MIHs in Liverpool, it is apparent from the analysis in Chapter 6 that given that around two in five MIHs in Sydney comprised households with children, and given the largely family orientated character of the outer suburban housing market in Sydney, then the lack of affordable housing for this group in what are three of the more affordable areas of Sydney is clearly worrying. Moreover, given that the great majority of properties for sale at an affordable price were flats or had two bedrooms only, then the limited choice available for family households on moderate incomes in the case study areas is again of concern.

7.4 The rental market in the case study LGAs

The point-in-time survey also revealed that 1,175 properties were available for rent in the Campbelltown, Blacktown and Liverpool LGAs. The average rent across these LGAs was $223 per week, with the median being slightly lower at $220. Separate houses comprised 55 per cent of the rental market, while units made up 26 per cent and townhouses 19 per cent. Three bedroom properties were the most common (55 per cent), however, 2 bedroom properties did make up 31 per cent of the rental market.

Campbelltown
There were 252 rental properties available in the Campbelltown LGA. The average weekly rental price for the Campbelltown LGA was $217, whilst the median price was $210. Almost two thirds (64 per cent) of the 252 properties were classified as separate houses. The remaining properties were classified as townhouses (27 per cent) and units (9 per cent). Nearly 60 per cent of the available rental properties in the area were 3 bedroom properties while 24 per cent had 2 bedrooms and 13 per cent had 4 bedrooms. One and 5 or more bedroom properties made up the remaining 3 per cent of properties.

Blacktown
Within the Blacktown LGA, there were 495 properties available for rent. The average price of these properties per week was $216, whilst the median price was slightly higher at $220. Just over half (56 per cent) the available properties had 3 bedrooms and approximately one third (32 per cent) had 2 bedrooms. There were also a significant proportion of 4 bedroom properties (8 per cent), whilst the remaining 4 per cent was comprised of 1 and 5 bedroom properties. Separate houses made up 60 per cent of the available rental properties, whilst townhouses made up 14 per cent of Blacktown's rental market and units 26 per cent.

Liverpool
There were 427 properties available for rent in the Liverpool LGA. The average weekly rental price was $233 and the median price was $230. Liverpool had the most diverse range of housing types for rent, with 45 per cent of rental properties being separate houses, 19 per cent being townhouses and 36 per cent being units. Approximately half (51 per cent) of the Liverpool rental market was comprised of 3 bedroom properties, with just over one third (34 per cent) of Liverpool properties having 2 bedrooms. There were also 12 per cent of properties that had 4 bedrooms and the remaining 3 per cent of Liverpool rental properties had 1, 5 or 7 bedrooms.

7.4.1 Rental affordability for moderate income households

An affordable rent for the top and bottom of the moderate household income range ($42,548 to $65,462) was calculated assuming that a 30 per cent income threshold. The outcome was a rent affordability bracket of $245 – $378 per week for the MIH market. Households with incomes at the 40th percentile could afford to rent 73 per cent of properties (858) in the rental market of the three LGAs (Table 7.3). Households at the top end of the moderate income bracket (60th percentile) would have been able to afford 98 per cent (1,156) of the rental market in the three areas. Rental housing in the three LGAs is therefore affordable to the majority of moderate income households.

Three suburbs had a significant amount of affordable rental properties for the 40th percentile: Blacktown (17 per cent of the affordable rental market), Liverpool (15 per cent) and Mount Druitt (6 per cent). At the 60th percentile the suburbs with most affordable rental stock are: Blacktown (15 per cent of the affordable rental market) and Liverpool (14 per cent).

TABLE 7.3: Affordable rental properties for each LGA for the 40th and 60th percentiles for all moderate income households

Affordable Rental Properties	LOCAL GOVERNMENT AREA			TOTAL
	Blacktown	Campbelltown	Liverpool	
40th percentile	401 (81%)	196 (78%)	261 (61%)	858 (73%)
60th percentile	495 (100%)	242 (96%)	419 (98%)	1,156 (98%)

Campbelltown

Some 78 per cent of the rental market in Campbelltown was affordable to households rental at the 40th percentile and 96 per cent was affordable at the 60th percentile. The Campbelltown LGA accounted for 23 per cent of the total affordable rental market in all three LGAs for those at the 40th percentile and slightly less for those at the 60th percentile (21 per cent). Campbelltown had the greatest proportion of larger rental properties on the market affordable to moderate income households. More specifically, 68 per cent of Campbelltown rental properties affordable to the 40th percentile had 3 or more bedrooms, compared to 58 per cent of Blacktown's affordable market and 45 per cent of Liverpool's (Table 7.4). Similar differences were seen for the 60th percentile, with 74 per cent of affordable rental properties in Campbelltown having 3 or more bedrooms, compared to 64 per cent in Blacktown and 63 per cent in Liverpool. Table 7.5 shows that Campbelltown's affordable rental market for the 40th and 60th percentiles were comprised of significantly less units (approximately 10 per cent) than in Blacktown (approximately 27 per cent) and Liverpool's (approximately 42 per cent). Just over half (57 per cent) the rental properties affordable to the 40th percentile were separate houses, whilst approximately one third (32 per cent) were townhouses. Separate houses made up slightly more of the rental market (64 per cent) for those households in the 60th percentile, with townhouses making up slightly less of the market (27 per cent).

Blacktown

Blacktown had the most affordable rental market for moderate income households, with 81 per cent of available properties being affordable for the 40th percentile and 100 per cent for the 60th percentile. Blacktown rental properties make up 47 per cent of the 40th percentile's rental market (within the three studied LGAs) and 43 per cent of the 60th percentile's rental market. The Blacktown affordable rental market consisted mainly of 3 bedroom properties for both the 40th percentile (54 per cent) and the 60th percentile (56 per cent). Those households in the 40th percentile were only slightly more limited in their access to separate houses for rent than were those in the 60th percentile. Over half (57 per cent) of the rental market in Blacktown that was affordable to the 40th percentile constituted separate houses with just under one third (29 per cent) being units and the remaining 14 per cent being townhouses. For the 60th percentile, 60 per cent of affordable rental properties in Blacktown were separate houses whilst 26 per cent were units and the remaining affordable properties were townhouses (14 per cent).

TABLE 7.4: Number of bedrooms in affordable rental properties for each LGA at the 40th and 60th percentile for working moderate income households

LGA	NUMBER OF BEDROOMS						TOTAL
	1	2	3	4	5	7	
Campbelltown							
40th percentile	3 (2%)	59 (30%)	124 (63%)	10 (5%)	NA	NA	196 (100%)
60th percentile	3 (1%)	59 (25%)	145 (61%)	28 (12%)	4 (2%)	NA	239 (100%)
Blacktown							
40th percentile	18 (5%)	150 (38%)	217 (54%)	14 (4%)	NA	NA	399 (100%)
60th percentile	18 (4%)	158 (32%)	273 (56%)	40 (8%)	3 (1%)	NA	492 (100%)
Liverpool							
40th percentile	9 (4%)	133 (52%)	110 (43%)	4 (2%)	NA	NA	256 (100%)
60th percentile	9 (2%)	145 (35%)	215 (52%)	42 (10%)	2 (1%)	1 (0%)	414 (100%)

TABLE 7.5: Type of housing of affordable rental properties in each LGA at the 40th and 60th percentile for all moderate income households

LGA	TYPE OF HOUSING			TOTAL
	Separate House	Townhouse	Unit, etc	
Campbelltown				
40th percentile	111 (57%)	63 (32%)	22 (11%)	196 (100%)
60th percentile	154 (64%)	66 (27%)	22 (9%)	242 (100%)
Blacktown				
40th percentile	229 (57%)	54 (14%)	118 (29%)	401 (100%)
60th percentile	298 (60%)	71 (14%)	126 (26%)	495 (100%)
Liverpool				
40th percentile	98 (38%)	39 (15%)	124 (48%)	261 (100%)
60th percentile	183 (44%)	80 (19%)	156 (37%)	419 (100%)

Liverpool
Only 61 per cent of Liverpool's rental market was affordable to those in the 40th percentile, however, 98 per cent was affordable to those in the 60th percentile. Liverpool rental properties made up 30 per cent of the affordable market for those in the 40th percentile and 36 per cent of the affordable market for the 60th percentile households. Approximately half (52 per cent) the properties affordable to the 40th percentile were 2 bedroom, whilst for the 60th percentile it was the 3 bedroom properties that were more common (52 per cent). The majority of the rental properties in Liverpool that were affordable to the 40th percentile were units (48 per cent). There was also a large proportion of separate houses (38 per cent), with the remaining 15 per cent comprising townhouses. The majority of rental properties available to those in the 60th percentile were separate houses (44 per cent), however, there was also a large proportion of units (37 per cent). Also, approximately a fifth of affordable rental properties were townhouses (19 per cent).

7.4.2 Summary

The median rent for the 1,175 rental properties on the market in December 2003 was $220 per week, which would have been affordable to a household earning $38,100 p.a. or more. Just over a half of these properties were separate houses while a quarter were units.

The rental market in the three case study LGAs is highly affordable to household with moderate incomes. Overall, some 73% of these properties were affordable to a household with an income at the 40th percentile level, while almost all (98 per cent) were affordable to a household with a 60th percentile income.

Blacktown's rental market was both the largest and the most affordable of the three LGAs, but only 61 per cent of Liverpool's available rental market was affordable at the 40th percentile income level. The rental market in Campbelltown was dominated by separate houses, while units were much more common in Liverpool.

8. AFFORDABILITY AND KEY WORKERS

8.1 What's important about "key workers"?

This chapter moves the analysis away from a focus on moderate income households *per* se and towards a broader understanding of the way housing affordability and opportunity affects the wider functioning of the city economy. The chapter presents an analysis of moderate income households by their labour market characteristics. The focus here is on a representative number of jobs that could be argued to be important for the working of the city, from both public and private sectors – so called "key workers". Many of these key worker jobs are in the income ranges that typify the moderate income category, broadly between $45,000 and $65,000 a year. Most importantly, these jobs are widely distributed across the city, meaning that work places are found in areas of both high and low housing costs. In Sydney, the problem for moderate income workers in finding appropriate affordable housing within reasonable distance of their workplace is most acute for those working in the highest costs areas in the inner, east and northern suburbs.

Although no satisfactory general definition has been proposed, at its simplest, a "key worker", also known as an "essential worker", is an employed individual who is deemed 'essential' for the social or economic wellbeing of a city, but who earns only a low or moderate income. There are now concerns, expressed most forcefully in other countries, but also surfacing in Australia, that the affordability of housing in the largest cites is now affecting both the recruitment and retention of key workers in certain areas of the city (National Housing Federation, 2001; Wilcox, 2003; Delargy and Hawkey, 2003). The fear is that certain essential workers are now finding it increasingly difficult to afford reasonable quality housing in areas that are proximate to job opportunities. The issue also refers both to the supply of rental and lower cost home ownership. The flow-on impacts in terms of journey to work, housing stress, and other consequences have also come to the fore in public debates. This is the basis of the key worker debate. To date, little objective analysis has been directed at showing whether, in fact, there is any basis for this concern in Sydney.

However, the debates are widening. In the UK, the debate has re-focused on an emerging "intermediate housing market". This refers more broadly to the housing needs of low to moderate income households whose main income earners are in those jobs that are essential for the effective functioning of the city, but who find it difficult to afford decent quality housing on the open market and are ineligible for social housing (UK Office of the Deputy Prime Minister, 2003). These are people from varying skill levels and employment sectors. What occupations make up the key worker sector are, however, still a matter of debate.

8.2 What is a key worker?

While there is a growing body of evidence to suggest that providing affordable housing for key workers is essential to the continued successful growth of the city, there is a general lack of consensus as to what defines a key worker (Armstrong 2003). A number of commentators have noted that public sector employees, such as police officers, fire fighters, teachers and nurses are often considered to be key workers (The Daily Telegraph, 1999; The Evening Standard, 2003). As a

consequence, interventions in other countries have been targeted on public sector employees whose incomes are now insufficient to compete in urban housing markets, but whose housing might be provided on a subsidised basis to assist them locate closer to their workplaces. In the past, such accommodation was often provided, but twenty years of vigorous privatisation has removed much of this kind of accommodation. On the other hand, others have suggested that some unskilled and semi-skilled private sector workers, such as retail workers, hotel and restaurant workers and tradesmen, should also be considered key workers (London Housing Federation, 2001, Delargy and Hawkey, 2003; American Immigration Lawyers Association, 2003). The definition of what key workers are is therefore unclear and might be best determined in the light of specific labour market difficulties in each city.

In NSW, some awareness of housing issues for certain workers as already been acknowledged. But here, the focus has primarily been driven by concerns of attracting essential workers to more remote locations, not into the cities, where this has yet to be seen as a serious policy issue. So, for example, in 2003, the NSW State government granted tax relief concessions to public servants if they were transferred to work in another location that required them to move house (Sydney Morning Herald, 2003).

One of the key issues for providing affordable housing for key workers has been the continuing struggle to retain as well as recruit moderate income workers essential to the servicing of cities. For example, the Greater London Authority (GLA) investigated the impact shortfalls in affordable housing were having on the key services of health, schools, transport and policing. While the GLA acknowledged that this was a select group of occupations that could be considered key workers, they chose these groups as they were clearly having recruitment and retention problems (GLA, 2001).

As part of the new funding initiative to support key worker housing, the UK Office of the Deputy Prime Minister (ODPM) made an attempt to draft a list of key worker groups in 2003 (Table 8.1). This list collated 21 groups of occupations that they considered to be key workers. It is noticeable that the majority of occupations on the list were public sector positions. The argument behind this list is that, at least in the short term, resources for key worker housing initiatives are needed to ensure staffing levels in essential public services are maintained. Staff in public services are more often on nationally agreed pay scales which provide only limited cost weightings for high cost metropolitan locations (OPDM, 2003). As noted above, much of the accommodation for these groups has been sold off in recent decades. A series of publicly funded initiatives are now being implemented in London and other high cost locations to increase the supply of rental and home ownership options of the intermediate housing market, such as the Starter Homes Initiative and the Keep London Working Partnership, both of which were launched in 2001. Initial funding for three years has now been replaced by further key worker schemes, specifically targeted on the recruitment and retention of front-line public sector workers in high cost areas. Low cost home ownership initiatives have played an important part in this intervention, providing equity loans, interest free loans and shared ownership for key worker purchasers. Rents are being set for some rental schemes some where between social housing rents and open market rents (Renewal.net, 2003). Other initiatives have focused on how the planning system can better deliver intermediate housing in

these areas through planning obligations on developers (a target of 50% of all new residential development in the form of affordable homes is the current policy of the Greater London Authority).

8.3 Key workers in Sydney

For this project, we have selected five occupational groups for detailed analysis to explore their position in the moderate income housing market in Sydney. We have chosen a mix of both public and private sector employment to establish whether different conditions apply to very different kinds of workers. The choice of which worker groups to choose was based on an analysis of the kinds of jobs people in moderate income households in Sydney are actually employed.

Initially, a full list of the number of reference persons[12] in all occupations[13] from MIHs where the reference person was in work (176,664 households in all, or 75 per cent of the total MIH in Sydney) with incomes in the MIH band of $800-$1,199 per week (the census income bands most closely equivalent to the 2003 moderate income range of $42,000 to $62,000 per year) in 2001 was requested from the ABS. The reference person was chosen to best approximate a household's labour market position from the 2001 Census in the absence of a definition of household head.

A list of the top 30 occupations in the MIH band can be seen in Table 8.2. The top 30 listing is dominated by private sector workers. It should be stressed that these persons are drawn exclusively from the moderate household income band and reflect occupations of reference persons from that band. Occupational characteristics of groups in higher or lower income bands are likely to be somewhat different.

Based on this matrix, five occupations were selected for further analysis. The five selected for further analysis include:

- Sales Assistants
- Computer Professionals
- Truck Drivers
- Teachers (both secondary and primary school teachers)
- Registered Nurses

Choice of these categories was determined by the need to include a mix of public and private sector employment types (although in practice the groups will include workers in both sectors) as well as the need to ensure a large enough sample for each group to provide sufficient cases at LGA level for sensible sub-group analysis (especially when broken down by demographic and tenure characteristics). While the analysis tries to show whether there is a spatial mismatch between the residence of workers and their place of employment, it is beyond the scope of this section to examine whether people are forced to reside in an area or they choose to do so of their own volition, or a combination of both (this would require extensive interview survey-based research).

[12] The reference person or person who completed 'Person 1' on the Census form was selected for this analysis

[13] The four digit level in the Australian Standard Classification of Occupations (ASCO) was used for this analysis.

The analysis looks at the characteristics of these workers and then focuses on their tenure and age characteristics to explore the spatial structure of housing demand for this group.

The analysis simply sets out to see if any discernable patterns can be seen in the spatial location of the homes and jobs of these workers, and whether their demographic and tenure characteristics have any notable variation across the city related to housing costs.

Table 8.1: Draft list of Key Workers from the OPDM UK, 2003

CODE	OCCUPATION
	Education
1	Teachers: nursery, primary, secondary (incl special needs)
2	Teachers: higher and further education
3	Classroom Assistants
4	Education Welfare Assistants
	Other Public Services
5	Police Officers
6	Police Civilian Staff
7	Firefighters
8	Prison Service Officers
9	Prison Service Operational Support
10	Care Workers (Private Sector)
11	Care Workers (Public Sector)
12	Child Protection Officers
13	Social Workers
14	Probation Officers
15	Probation Service Admin Support
16	Town Planners
	Health Care
17	NHS Nurses (incl midwives)
18	NHS Other Medical (e.g. nursing auxiliaries, radiographers, physiotherapists, ambulance staff)
19	NHS Admin Support
	Transport Services
20	Bus/Tram/Train/Metro/Tube Drivers
21	Transport Police

Source: National Housing Federation, London, personal communication.

Table 8.2: The 30 largest occupational groups of reference persons in households with weekly incomes between $800-$1,199, Sydney SD, 2001

Occupation	Number of Households	Median Weekly Household Income
Sales Assistants	**4,563**	**983**
Computing Professionals	**4,347**	**1,058**
Secretaries and Personal Assistants	3,678	972
Sales Representatives	3,500	1,006
Shop Managers	3,268	991
Truck Drivers	**3,246**	**993**
Storepersons	3,236	980
Accountants	3,103	1,030
Cleaners	2,844	981
Secondary School Teachers	**2,778**	**1,059**
Registered Nurses	**2,709**	**991**
Sales and Marketing Managers	2,623	1,048
General Clerks	2,536	983
Carpentry and Joinery Tradespersons	2,414	1,001
Electricians	2,405	1,008
Project and Program Administrators	2,279	1,030
Primary School Teachers	**2,088**	**1,050**
Motor Mechanics	1,951	980
Accounting Clerks	1,892	983
Office Managers	1,841	989
Metal Fitters and Machinists	1,733	993
General Managers	1,710	1,048
Stock and Purchasing Clerks	1,608	988
Delivery Drivers	1,559	983
Inquiry and Admissions Clerks	1,440	976
Plumbers	1,414	1,005
Human Resource Professionals	1,387	1,028
Building and Construction Managers	1,351	1,008
Receptionists	1,336	979
Marketing and Advertising Professionals	1,276	1,035

(source: ABS Customised Matrix)

8.4 An analysis of key workers in Sydney

This section analyses the overall distribution of the five MIH key worker groups whose household income was between $800 to $1,199 per week in terms of both place of residence and place of work of the reference person. Data are presented in Tables 8.3 and 8.4 and Figures 8.1 to 8.18.

All key worker groups

The distribution of all 19,802 households in the five key workers MIH groups by residence and workplace in Sydney LGAs in 2001 is shown in Figures 8.1 and 8.2. The difference between these two distributions, i.e. the net balance between the number of workers living in each LGA and the numbers working in that LGA, is shown in Figure 8.3. The widespread distribution of MIH households has already been alluded to. Figure 8.1 illustrates this for the five key worker groups, but also shows significant numerical concentrations of these groups in Penrith, Blacktown, Sutherland, Gosford and Parramatta. Relatively few lived in the inner west, eastern and north shore locations. The workplace locations were also widely spread, with both suburban and inner city concentrations. However, when the net balance between workplace and residential locations is taken there were two clear areas where the number of jobs outstrips the number of resident workers. One centres on the middle suburbs of Fairfield, Auburn, Parramatta, Bankstown Strathfield, Burwood and Concord, and a second area was broadly associated with the 'Global Arc' stretching from Ku-ring-gai in the north through the City to Botany in the south. All other areas effectively 'exported' key workers to these areas. These areas represent very different concentrations of jobs, however, with the middle suburbs centred on manufacturing and distributive employment and the Global Arc closely associated with IT, finance and higher order business services. Sydney/South Sydney was by far the largest net imported of key workers, with a net 'deficit' of 1,572 workers in these five categories,, followed by North Sydney with a net deficit of 499.

But when the work:home profiles of the individual key worker groups are analysed, it is clear that each group has its own rather different pattern.

Sales Assistants

There were 4,580 MIH reference persons[14] employed as sales assistants across Sydney in 2001. In absolute terms, there were concentrations of these workers in some in western Sydney LGAs, particularly the larger ones such as Blacktown, Penrith, Sutherland, and Gosford and Wyong on the Central Coast. The workplaces of these workers were widespread, reflecting the dispersed characteristics of the retail trade. Overall, across the Sydney SD, 38 per cent of sales assistants worked in their LGA of residence, which was the highest proportion of the five occupations analysed in this study. However, there was a large concentration of MIH sales workers working the Sydney LGA, with other significant concentrations in Blacktown and Gosford. Some 14 of the Sydney SD LGAs were net importers of sales assistants. By far the largest was the City of Sydney, with South Sydney, Willoughby and Botany

[14] The occupation of 'persons' in this section refers to the occupation of the household reference person.

Bay also recording significant net inflows of sales workers, all areas of relatively limited housing opportunities for moderate income households.

Computer Professionals

Among the 4,317 MIH reference persons employed as computer professionals there were clear concentrations of workers living in Blacktown, Hornsby, Parramatta, Ryde, North Sydney, Sydney and South Sydney, the latter also closely associated with concentrations of jobs for these workers. There were relatively low numbers of computer professionals in south western Sydney and the inner west. More strikingly, no less than 41 per cent of these workers commuted to the City of Sydney and North Sydney LGAs to work (30 per cent into Sydney alone). In fact, there are only nine LGAs in the Sydney SD where the number of jobs for computer professionals out-numbered the number of resident computer professionals: in addition to the two already mentioned, these included Willoughby, South Sydney, Lane Cove and Botany. Overall, just 17 per cent of computer professionals live and work in the same LGA, the lowest proportion of all occupations examined in this study. This group, therefore, has the most extensive cross-LGA journey to work pattern of all the case study groups, reflecting the high concentration of employment in this sector in a few key LGAs associated with the higher costs Sydney "Global Arc".

Truck Drivers

The majority of the 3,260 MIH truck drivers in the Sydney SD were living in the outer west and south western parts of the city, Wyong to the north, and Sutherland in the south. Few truck drivers lived in the inner city, eastern suburbs, inner west and northern parts of the city. This, in part, reflects the limitations on owner drivers to park their vehicles over night in residential areas. Overall, 31 per cent of truck drivers lived and work in the same LGA. There were clear concentrations of workplaces for truckers, particularly in western Sydney, but low concentrations in most inner and northern parts of the city. In all, there were 19 LGAs where the number of resident truck drivers was less than the number of drivers who work in that particular LGA. The most significant net importers of truckers included Auburn, South Sydney, Bankstown, Botany, Parramatta and Strathfield, all areas associated with manufacturing and wholesaling industries or were key transport centres (such as Sydney Airport). The pattern of living and working for truck drivers suggests that while they largely live in outer city locations, many of which may be close to suburban industrial areas, other inner and middle suburban industrial areas are likely to be more difficult to get to, and are net importers of truck drivers from the outer suburbs.

Teachers

In 2001 there were 2,778 secondary teachers and 2,088 primary school teachers in Sydney who were the reference person in households with incomes between $800 and $1,199 per week. Overall, across Sydney 31 per cent of teachers live and work in the same LGA. Unlike most of the occupations already analysed, the residential locations of teachers were quite widespread across the city. Nevertheless, there were higher concentrations living in the Blue Mountains, Penrith, Blacktown, Sutherland, Parramatta and Gosford, as well as other significant concentrations in the inner city

and to the north of the CBD. In terms of workplace location, in general these were concentrated in LGAs in which children are also concentrated. These LGAs include Gosford, Penrith, Blacktown, Bankstown and Liverpool. In all, there were 28 LGAs (62 per cent) in which the number of teachers who resided in the LGA out-numbered the teachers who worked in that LGA. LGAs that are major net importers of teachers include Bankstown, Blacktown, Fairfield, Liverpool, Ku-ring-gai, Strathfield and the City of Sydney. While some of these are in high cost locations, most of them are not. Interpreting these findings suggests that while teachers are able to make choices about where they live if they work in the outer suburbs, they may be more constrained in housing locations if they work in some higher cost areas.

Registered Nurses

The residential pattern of the 2,712 registered nurses living in MIHs in Sydney show concentrations in Blacktown, Hornsby, Parramatta, Penrith, Randwick, Ryde, South Sydney, Sutherland and Gosford. Some 32 per cent of registered nurses in Sydney lived and worked in the same LGA. Not surprisingly, the workplace concentrations of registered nurses reflects the presence of the larger hospitals in Sydney. Among the larger net exporters of nurses were Blacktown, Blue Mountains, Hornsby, Marrickville and Sutherland. The largest net importers of nurses were the health "hubs" in South Sydney and Parramatta, but with Concord, Kogarah, Lane Cove and Liverpool also recording a significant inflow of nurses associated with large hospital in these locations.

Summary

The more dispersed employment patterns of, for example, nurses, teachers and sale assistants, means that the bulk of these workers will have a lower degree of separation between job and home, or at least less pressure over their choice of residential location. The more highly constrained workplace locations of computer professional and to a lesser extent, truckers, showed much greater degree of work-home separation. For some groups, therefore, the spatial concentrations of employment (for shop workers in the Sydey CBD and computer professionals in central and North Sydney, for example) mean that there is a greater dislocation between home and jobs for those working in these job rich locations.

A significant number of suburban LGAs were clearly net exporters of workers from moderate income households – Campbeltown, Camden, Sutherland, Blue Mountains, Gosford and Wyong, for example. But some inner LGAs also showed consistent surplus of residents over workers: Drummoyne, Leichhardt, Hurstville and Rockdale. Others LGAs, usually in higher income or job-rich locations, were net importers across most groups – Auburn, Botany, Ku-ring-gai, and Willoughby, for example, although South Sydney and Sydney City are stand-out net importers of MIH workers across the board.

Among the individual key worker groupings analysed here, the concentration of MIH computing professional jobs in LGAs associated with Sydney's Global Arc clearly led to significant home-work dislocations for many. The more dispersed job market for sales assistants meant lower numbers of LGAs with net deficits, but there were clear concentrations of jobs in excess of residents in the CBD area. Truck drivers had a

predominately outer suburban pattern of residence, but there were clear indications that LGAs associated with middle ring and inner industrial concentrations imported substantial numbers of this group. Teachers showed some indication of a range of locational choice, as relatively lower cost areas where schools were concentrated nevertheless were net importers of this group: Bankstown, Blacktown, Fairfield and Liverpool, for example. On the other hand several higher cost locations also had net deficits of teachers: for example, Strathfield and City of Sydney. Finally, turning to registered nurses, several LGAs with concentrations of jobs also had concentrations of nurses: Gosford, Parramatta, Penrith, Randwick and South Sydney, for example. This may reflect the location of nursing accommodation in some cases. However, LGAs with hospital concentrations generally were also considerable net importers of nurses, particularly Parramatta and South Sydney.

Table 8.3: The number of reference persons from moderate income households who live and work in LGAs for selected occupations, 2001

	Sales Assistants			Computing Professionals		
	Total Who Live in the LGA	Total who Live and Work in the LGA	Total Who Work in the LGA	Total Who Live in the LGA	Total who Live and Work in the LGA	Total Who Work in the LGA
Ashfield	66	11	26	110	9	21
Auburn	54	9	90	49	3	80
Bankstown	151	55	144	105	9	49
Baulkham Hills	125	51	148	126	35	112
Blacktown	277	117	209	201	31	70
Blue Mountains	82	44	44	52	8	8
Botany Bay	30	8	93	40	4	121
Burwood	37	5	43	47	6	82
Camden	53	16	38	21	0	0
Campbelltown	186	83	111	81	10	13
Canterbury	142	28	92	117	4	16
Concord	31	7	13	27	3	20
Drummoyne	43	9	40	34	0	3
Fairfield	142	50	109	50	4	30
Gosford	231	158	203	105	34	34
Hawkesbury	74	39	56	40	15	27
Holroyd	100	18	51	127	5	26
Hornsby	115	41	91	243	22	56
Hunter's Hill	3	0	6	6	0	3
Hurstville	83	17	70	89	7	24
Kogarah	62	11	35	68	8	35
Ku-ring-gai	61	17	60	59	9	83
Lane Cove	29	0	18	72	15	135
Leichhardt	86	25	75	98	11	29
Liverpool	157	57	127	88	6	31
Manly	35	14	45	48	12	24
Marrickville	99	17	63	151	14	20
Mosman	23	5	30	33	0	6
North Sydney	68	22	95	239	81	449
Parramatta	160	39	185	274	46	179
Penrith	220	107	154	91	15	30
Pittwater	62	23	35	30	7	17
Randwick	171	42	75	152	24	61
Rockdale	99	19	51	112	4	10
Ryde	109	38	125	243	53	240
South Sydney	119	32	206	209	41	290
Strathfield	36	3	33	26	3	15
Sutherland Shire	259	132	158	137	20	40
Sydney	46	25	435	100	55	1,282
Warringah	167	94	140	116	39	83
Waverley	86	33	120	79	10	24
Willoughby	67	30	133	130	43	270
Wollondilly	36	14	20	9	3	3
Woollahra	69	18	62	49	10	27
Wyong	229	141	157	34	7	11
Sydney SD	4,580	1,724	4,314	4,317	745	4,189

(Note: Excludes LGA residents who travel to work beyond the Sydney metropolitan area or their place of work was unidentifiable)

Table 8.3: The number of persons who live and work in LGAs for selected occupations, 2001 (Cont.)

	Truck Drivers			Teachers		
	Total Who Live in the LGA	Total who Live and Work in the LGA	Total Who Work in the LGA	Total Who Live in the LGA	Total who Live and Work in the LGA	Total Who Work in the LGA
Ashfield	6	0	9	103	11	70
Auburn	33	6	130	32	6	69
Bankstown	127	46	208	109	27	215
Baulkham Hills	53	15	38	126	38	139
Blacktown	393	123	312	204	92	284
Blue Mountains	65	24	27	234	96	113
Botany Bay	32	9	85	33	3	31
Burwood	12	3	9	42	6	74
Camden	108	25	58	88	26	51
Campbelltown	252	77	108	141	81	180
Canterbury	64	14	35	138	25	150
Concord	15	3	12	48	0	16
Drummoyne	15	3	3	74	0	24
Fairfield	184	47	231	70	24	197
Gosford	135	66	106	241	177	217
Hawkesbury	127	48	70	89	43	63
Holroyd	102	21	136	87	14	77
Hornsby	41	19	52	193	56	180
Hunter's Hill	3	0	0	3	3	45
Hurstville	51	8	26	99	20	90
Kogarah	19	4	7	64	7	61
Ku-ring-gai	0	0	9	82	35	154
Lane Cove	6	0	7	53	17	39
Leichhardt	18	3	15	109	16	56
Liverpool	215	51	141	119	45	206
Manly	6	3	6	40	8	29
Marrickville	26	5	43	177	24	99
Mosman	0	0	0	20	4	39
North Sydney	0	0	6	116	22	104
Parramatta	98	26	162	205	31	137
Penrith	360	111	165	216	111	259
Pittwater	14	7	14	55	18	42
Randwick	37	13	40	176	41	147
Rockdale	78	13	16	117	15	90
Ryde	45	10	28	175	23	79
South Sydney	6	0	102	154	21	117
Strathfield	9	3	93	26	7	88
Sutherland Shire	153	46	55	294	134	173
Sydney	6	3	24	10	4	68
Warringah	49	27	50	161	61	141
Waverley	11	3	6	79	14	72
Willoughby	6	3	17	63	10	66
Wollondilly	85	29	38	56	14	17
Woollahra	3	3	6	72	18	98
Wyong	192	82	92	140	91	123
Sydney SD	3,260	1,002	2,797	4,933	1,539	4,789

(Note: Excludes LGA residents who travel to work beyond the Sydney metropolitan area or their place of work was unidentifiable)

Table 8.3: The number of persons who live and work in LGAs for selected occupations, 2001 (Cont.)

	Registered Nurses		
	Total Who Live in the LGA	Total who Live and Work in the LGA	Total Who Work in the LGA
Ashfield	45	8	21
Auburn	19	7	29
Bankstown	50	19	50
Baulkham Hills	81	10	34
Blacktown	151	31	57
Blue Mountains	98	36	36
Botany Bay	24	3	9
Burwood	16	3	21
Camden	33	3	8
Campbelltown	78	25	44
Canterbury	68	12	39
Concord	23	11	86
Drummoyne	23	0	6
Fairfield	41	10	37
Gosford	172	126	158
Hawkesbury	42	10	13
Holroyd	61	3	27
Hornsby	108	21	51
Hunter's Hill	3	0	15
Hurstville	40	7	12
Kogarah	26	13	87
Ku-ring-gai	43	12	61
Lane Cove	37	16	101
Leichhardt	59	6	39
Liverpool	53	33	110
Manly	28	10	38
Marrickville	92	11	20
Mosman	19	3	9
North Sydney	61	12	41
Parramatta	143	62	291
Penrith	114	46	102
Pittwater	37	18	30
Randwick	134	72	177
Rockdale	55	7	21
Ryde	114	30	84
South Sydney	102	50	309
Strathfield	9	0	12
Sutherland Shire	113	36	48
Sydney	6	3	45
Warringah	68	13	25
Waverley	39	3	17
Willoughby	35	7	70
Wollondilly	27	4	4
Woollahra	40	7	13
Wyong	82	44	49
Sydney SD	2,712	863	2,556

(Note: Excludes LGA residents who travel to work beyond the Sydney metropolitan area or their place of work was unidentifiable)

Table 8.4: The net job-home balance deficit of persons for selected occupations in LGAs in Sydney SD, 2001

	Number of Persons who reside in an LGA minus the number who work in that LGA					
	Sales Assistants	**Computing Professionals**	**Truck Drivers**	**Teachers**	**Registered Nurses**	**Total net balance**
Ashfield	40	89	-3	33	24	183
Auburn	-36	-31	-97	-37	-10	-211
Bankstown	7	56	-81	-106	0	-124
Baulkham Hills	-23	14	15	-13	47	40
Blacktown	68	131	81	-80	94	294
Blue Mountains	38	44	38	121	62	303
Botany Bay	-63	-81	-53	2	15	-180
Burwood	-6	-35	3	-32	-5	-75
Camden	15	21	50	37	25	148
Campbelltown	75	68	144	-39	34	282
Canterbury	50	101	29	-12	29	197
Concord	18	7	3	32	-63	-3
Drummoyne	3	31	12	50	17	113
Fairfield	33	20	-47	-127	4	-117
Gosford	28	71	29	24	14	166
Hawkesbury	18	13	57	26	29	143
Holroyd	49	101	-34	10	34	160
Hornsby	24	187	-11	13	57	270
Hunter's Hill	-3	3	3	-42	-12	-51
Hurstville	13	65	25	9	28	140
Kogarah	27	33	12	3	-61	14
Ku-ring-gai	1	-24	-9	-72	-18	-122
Lane Cove	11	-63	-1	14	-64	-103
Leichhardt	11	69	3	53	20	156
Liverpool	30	57	74	-87	-57	17
Manly	-10	24	0	11	-10	15
Marrickville	36	131	-17	78	72	300
Mosman	-7	27	0	-19	10	11
North Sydney	-27	-210	-6	12	20	-211
Parramatta	-25	95	-64	68	-148	-74
Penrith	66	61	195	-43	12	291
Pittwater	27	13	0	13	7	60
Randwick	96	91	-3	29	-43	170
Rockdale	48	102	62	27	34	273
Ryde	-16	3	17	96	30	130
South Sydney	-87	-81	-96	37	-207	-434
Strathfield	3	11	-84	-62	-3	-135
Sutherland Shire	101	97	98	121	65	482
Sydney	-389	-1,182	-18	-58	-39	-1,686
Warringah	27	33	-1	20	43	122
Waverley	-34	55	5	7	22	55
Willoughby	-66	-140	-11	-3	-35	-255
Wollondilly	16	6	47	39	23	131
Woollahra	7	22	-3	-26	27	27
Wyong	72	23	100	17	33	245

Figure 8.1: The residential location of MIHs in all key worker groups

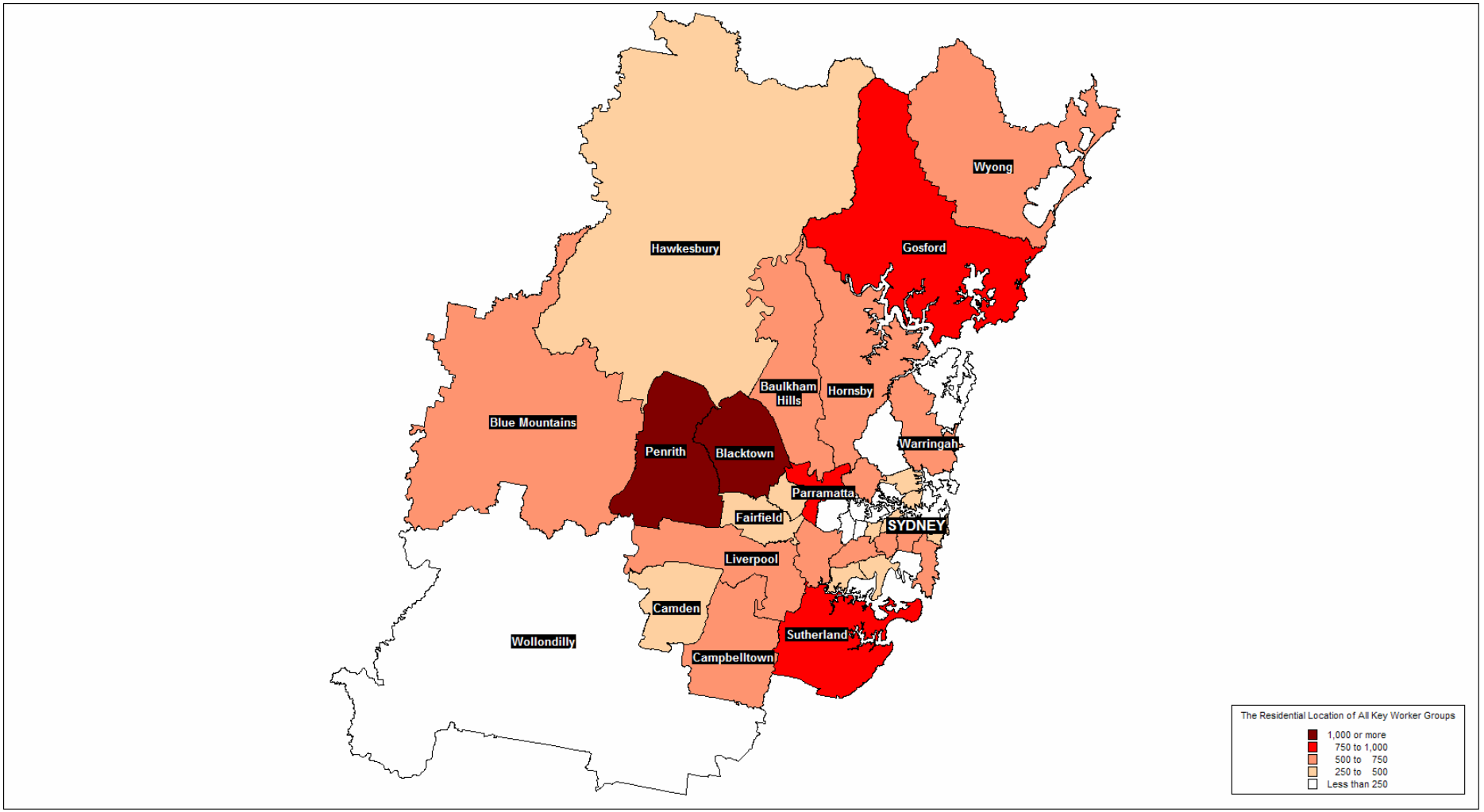


Figure 8.2: The workplace location of MIHs in all key worker groups

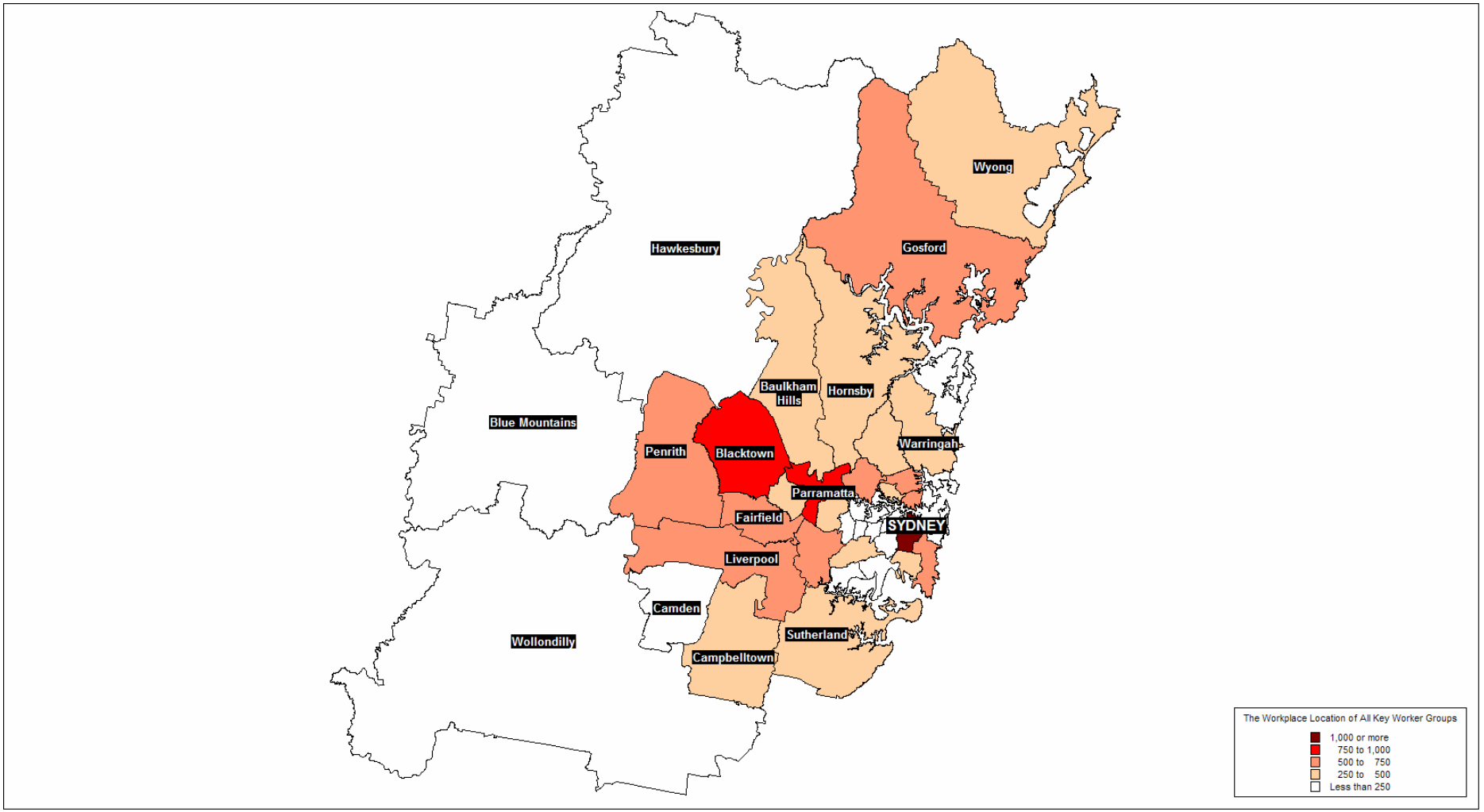


Figure 8.3: The net jobs balance of all key worker groups

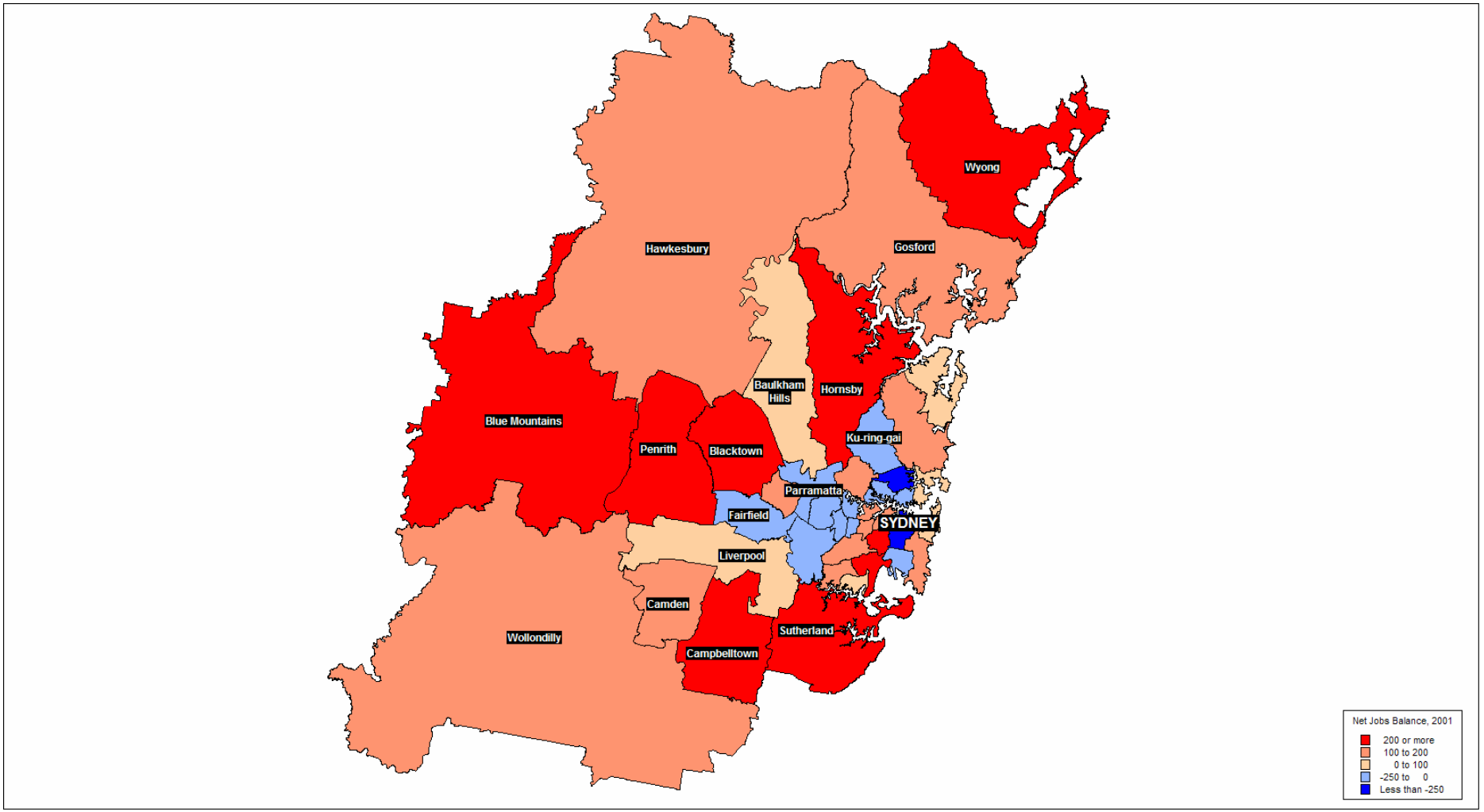


Figure 8.4: The residential location of persons in MIHs employed as sales assistants, 2001

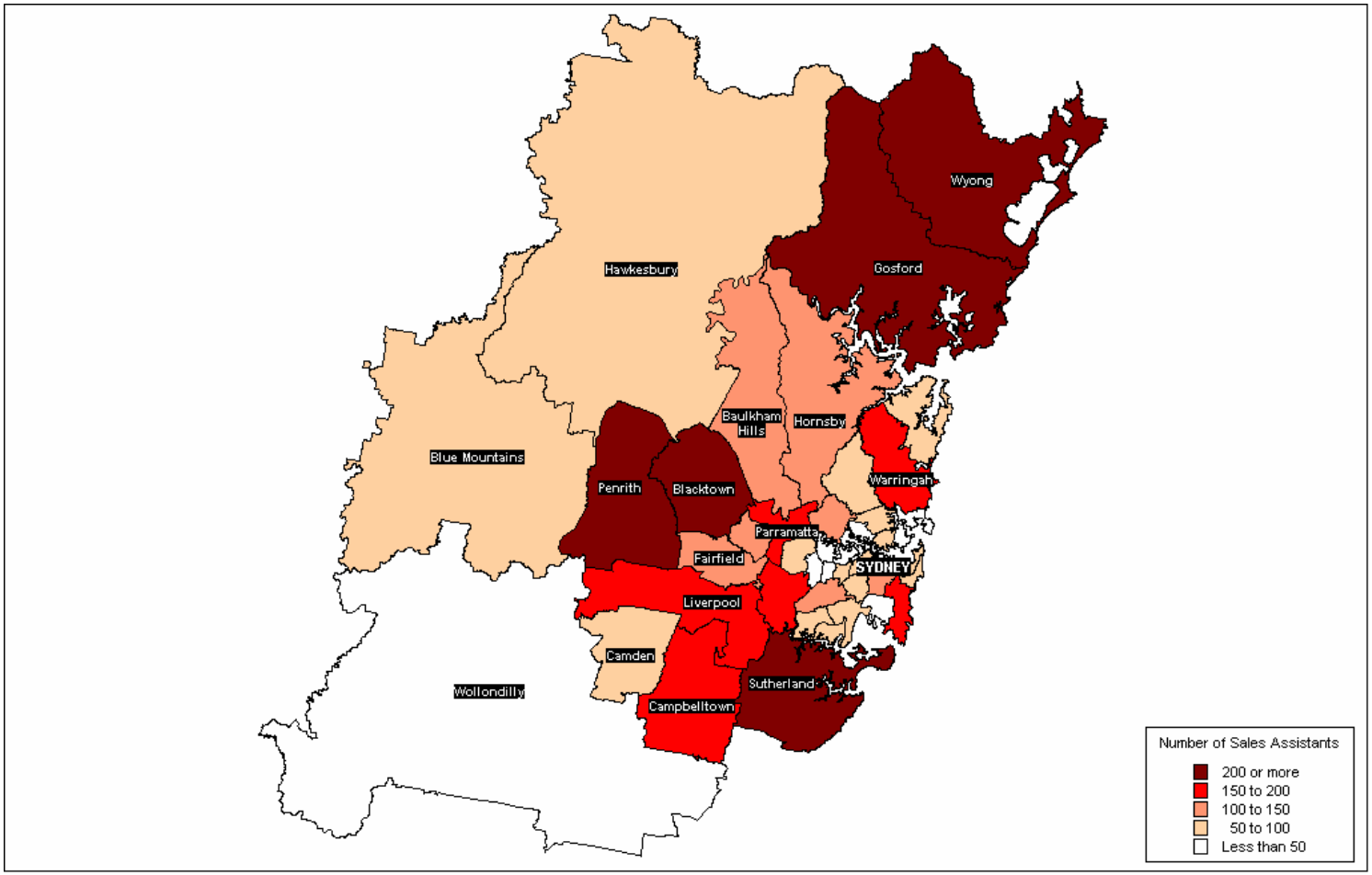


Figure 8.5: The workplace location of persons in MIHs employed as sales assistants, 2001

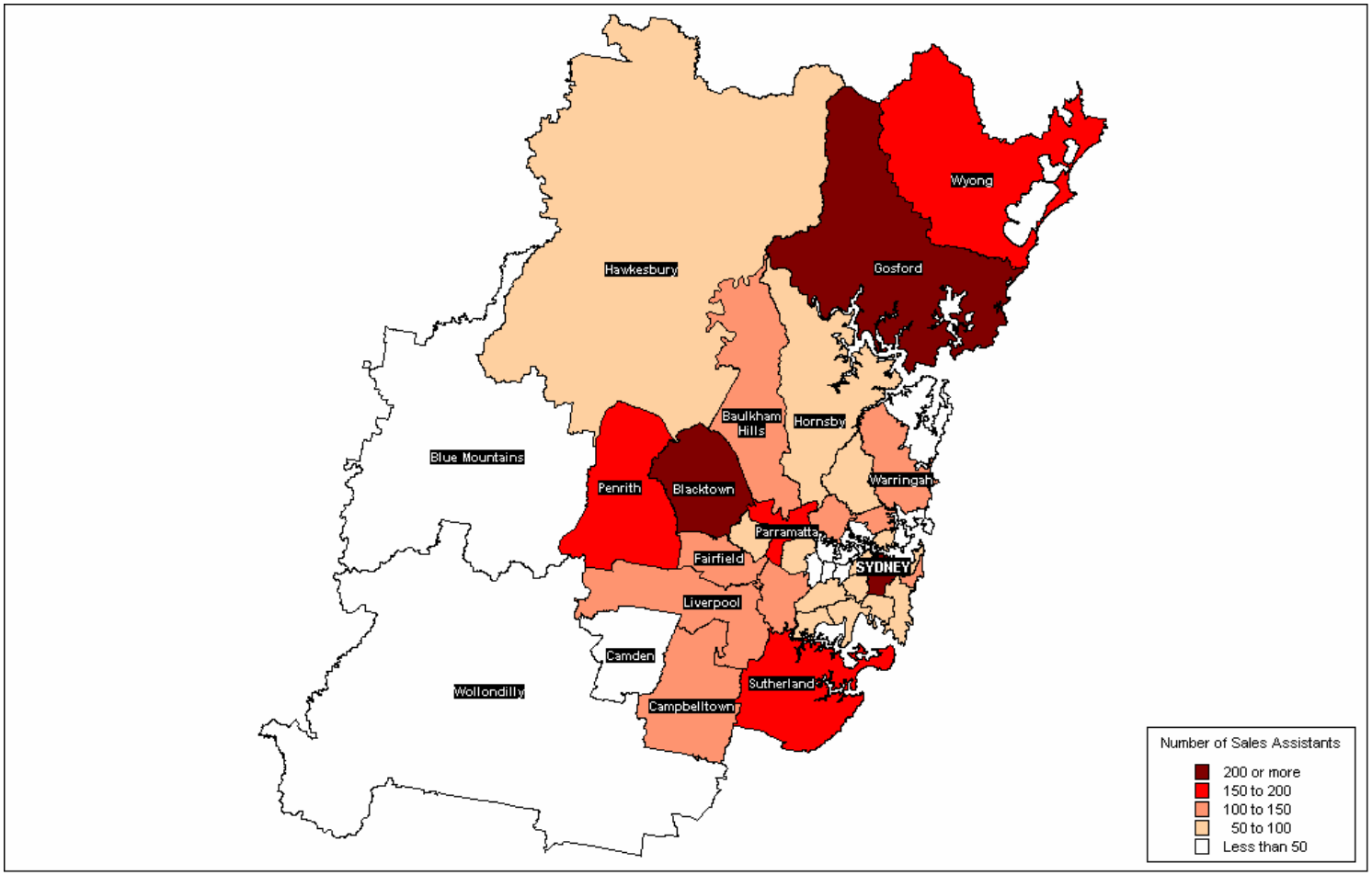


Figure 8.6: The net jobs balance of sales assistants

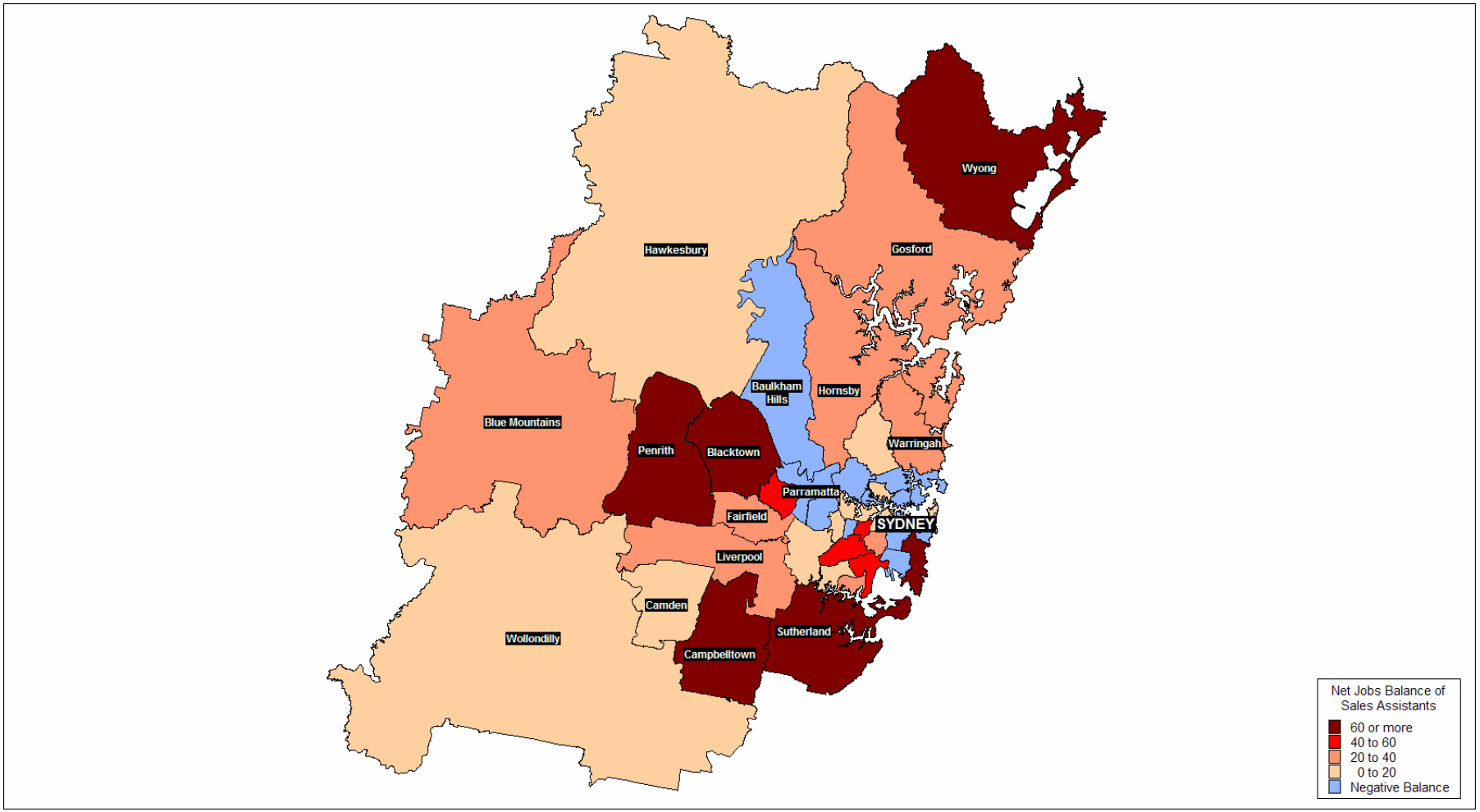


Figure 8.7: The residential location of persons in MIHs employed as computer professionals, 2001

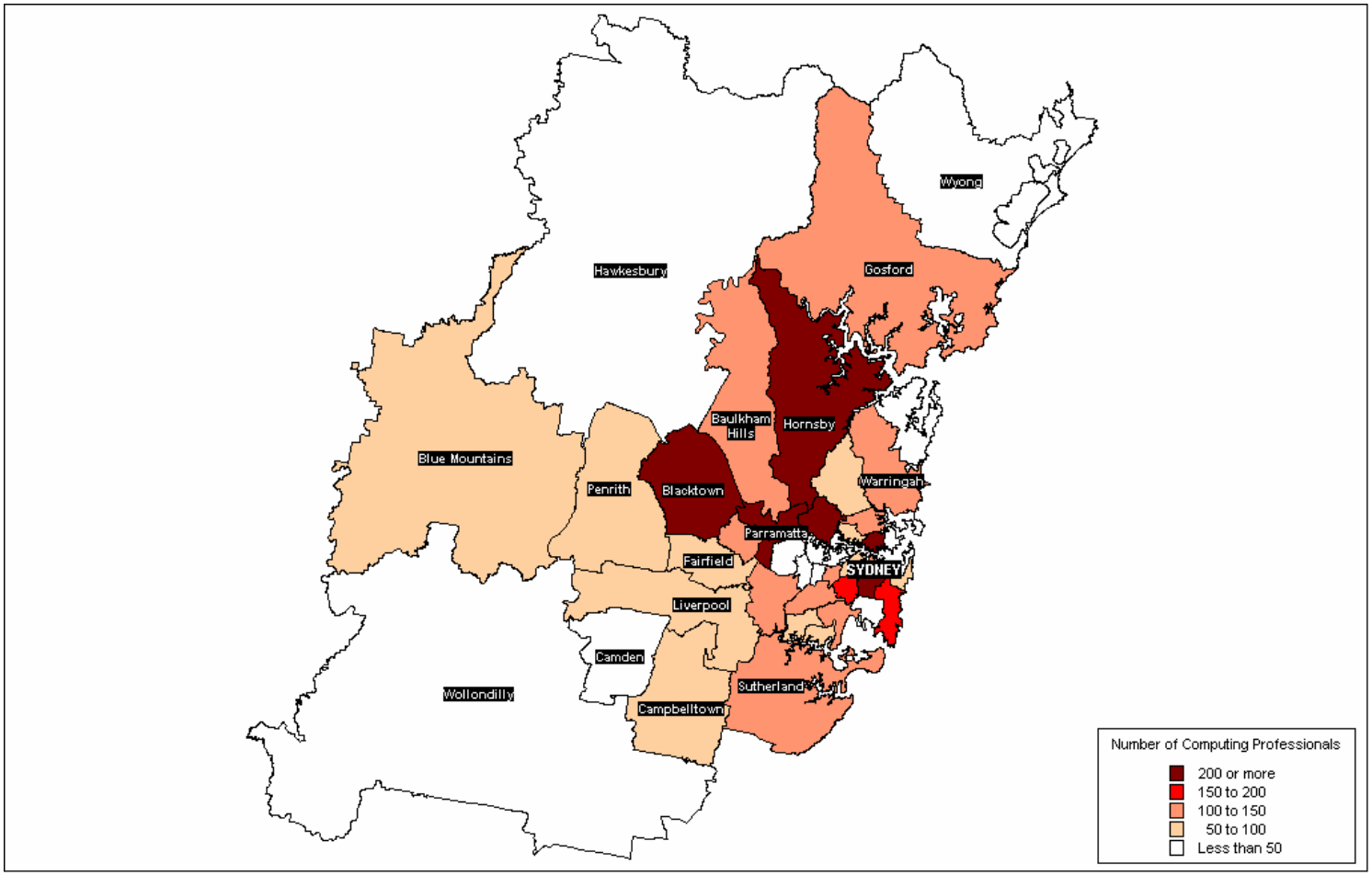


Figure 8.8: The workplace location of persons in MIHs employed as computer professionals, 2001

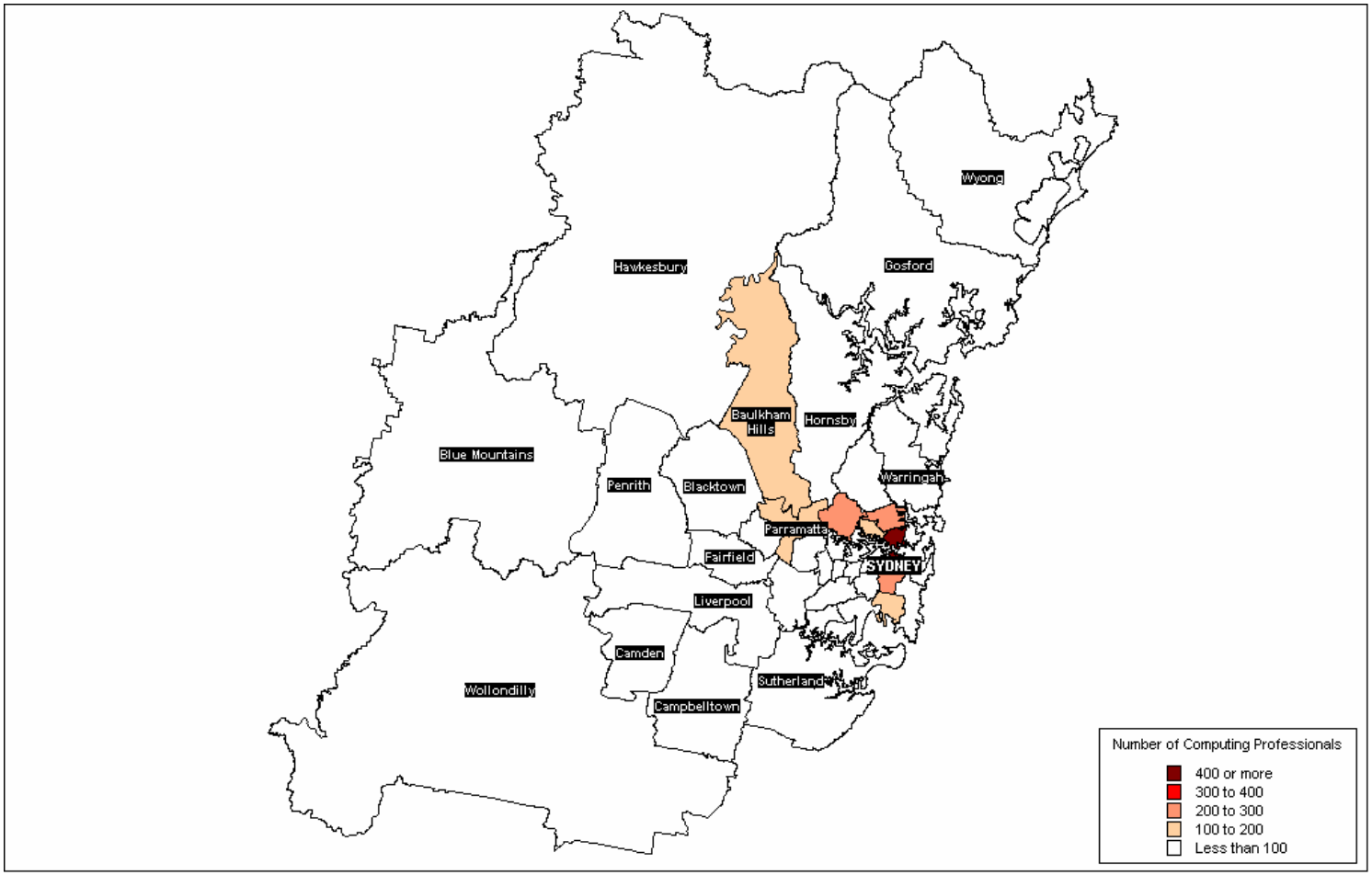


Figure 8.9 : The net jobs balance of computing professionals

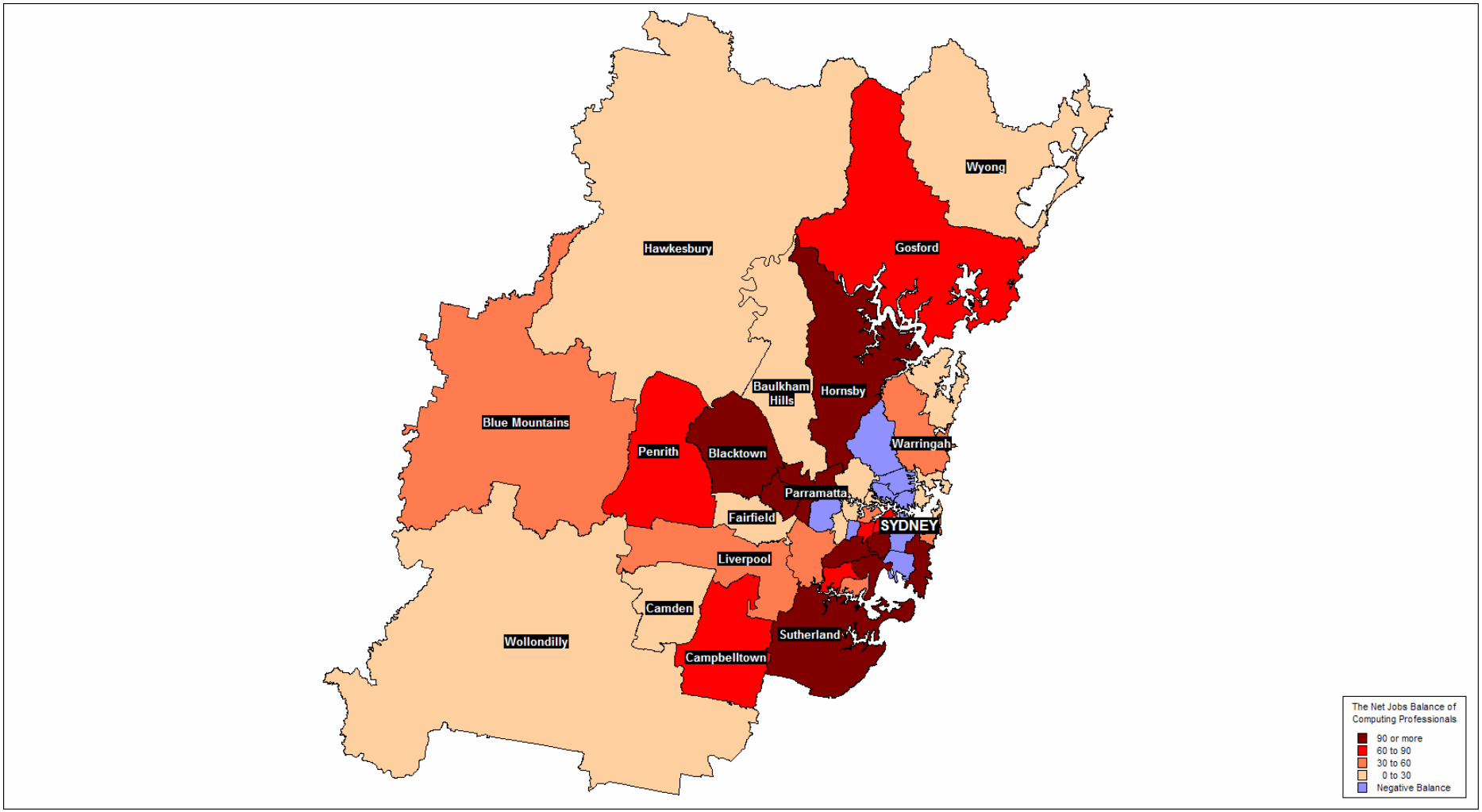


Figure 8.10: The residential location of persons in MIHs employed as truck drivers, 2001

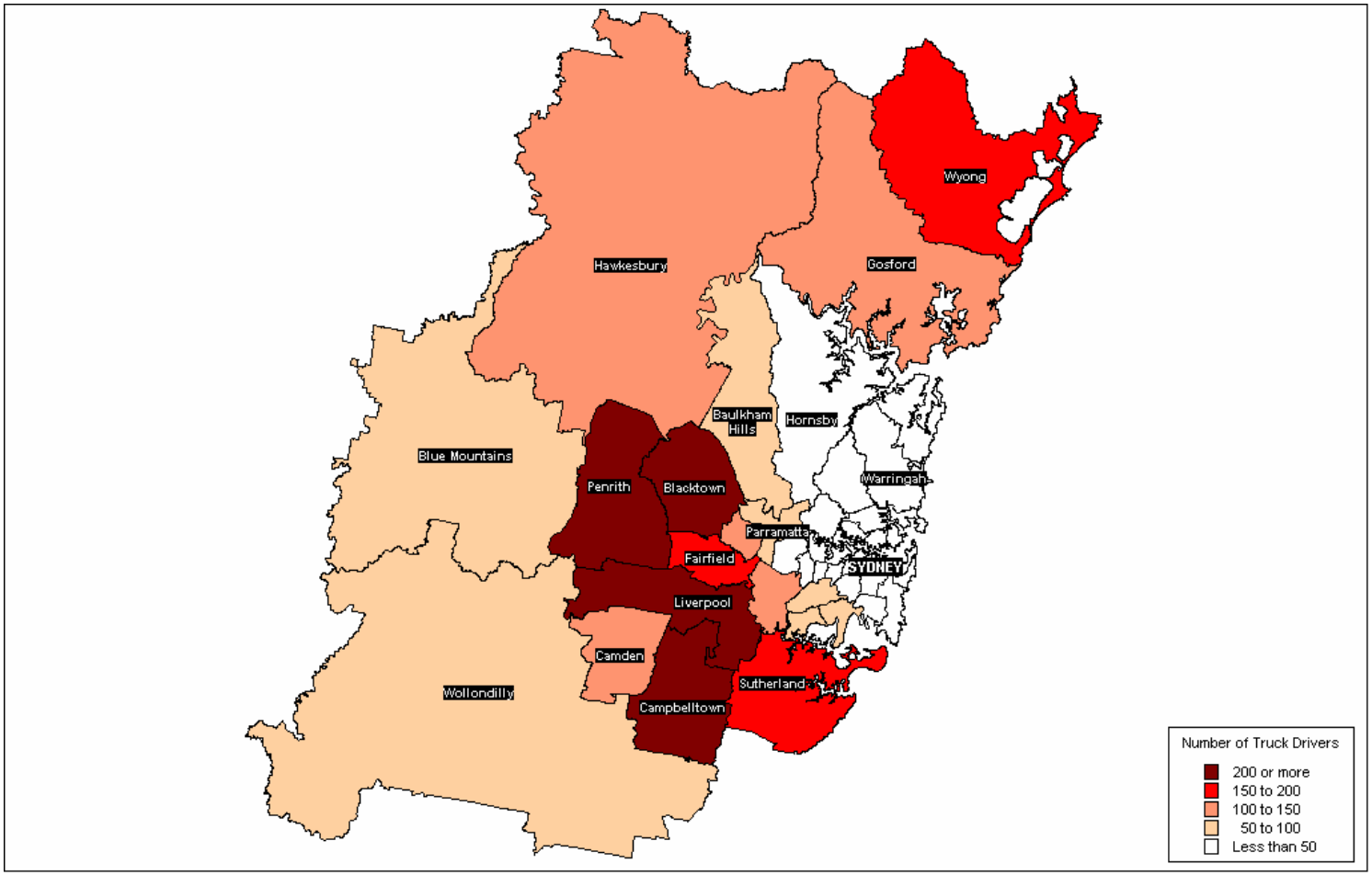


Figure 8.11: The workplace location of persons in MIHs employed as truck drivers, 2001

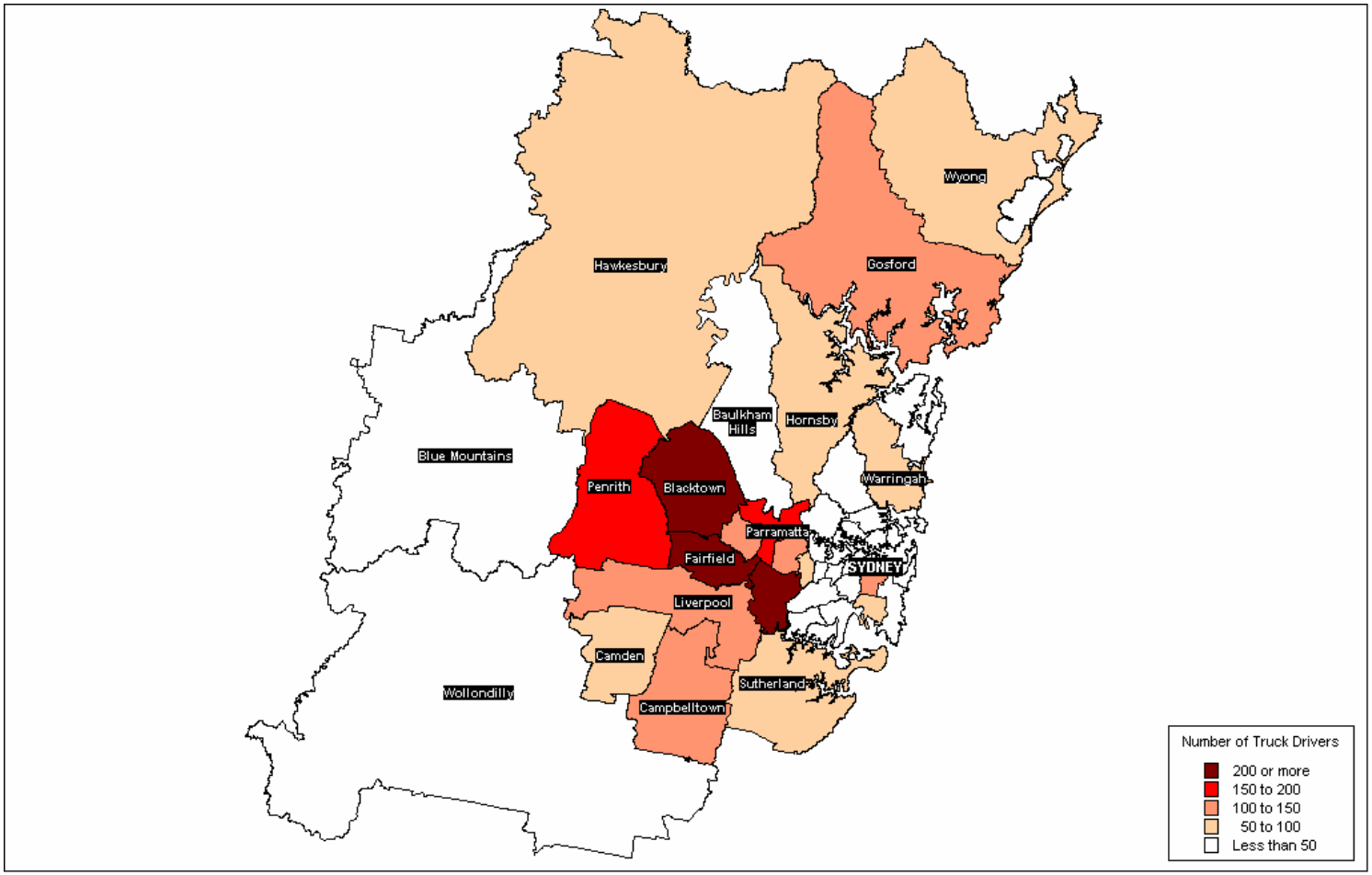


Figure 8.12: The net jobs balance of truck drivers

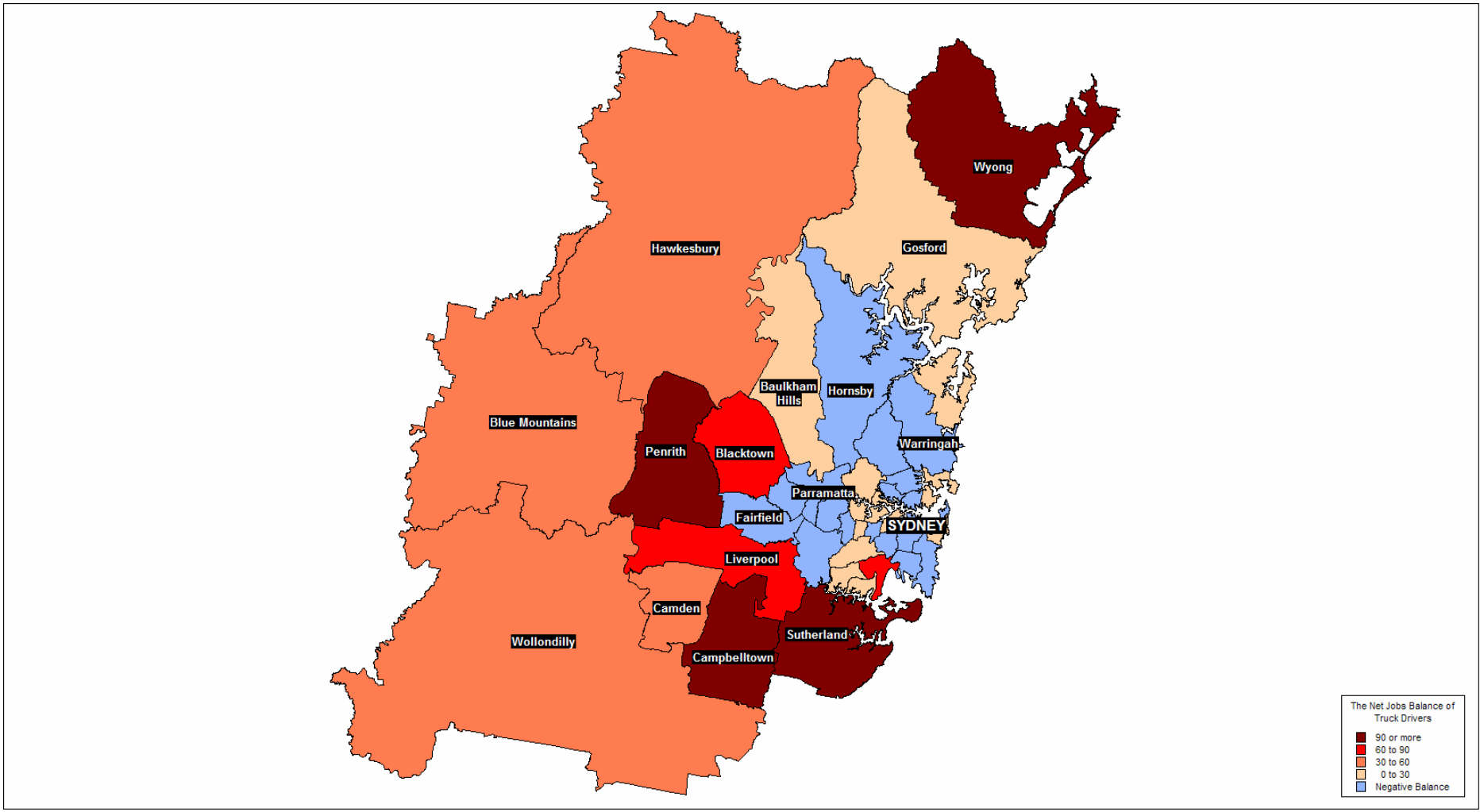


Figure 8.13: The residential location of persons in MIHs employed as teachers, 2001

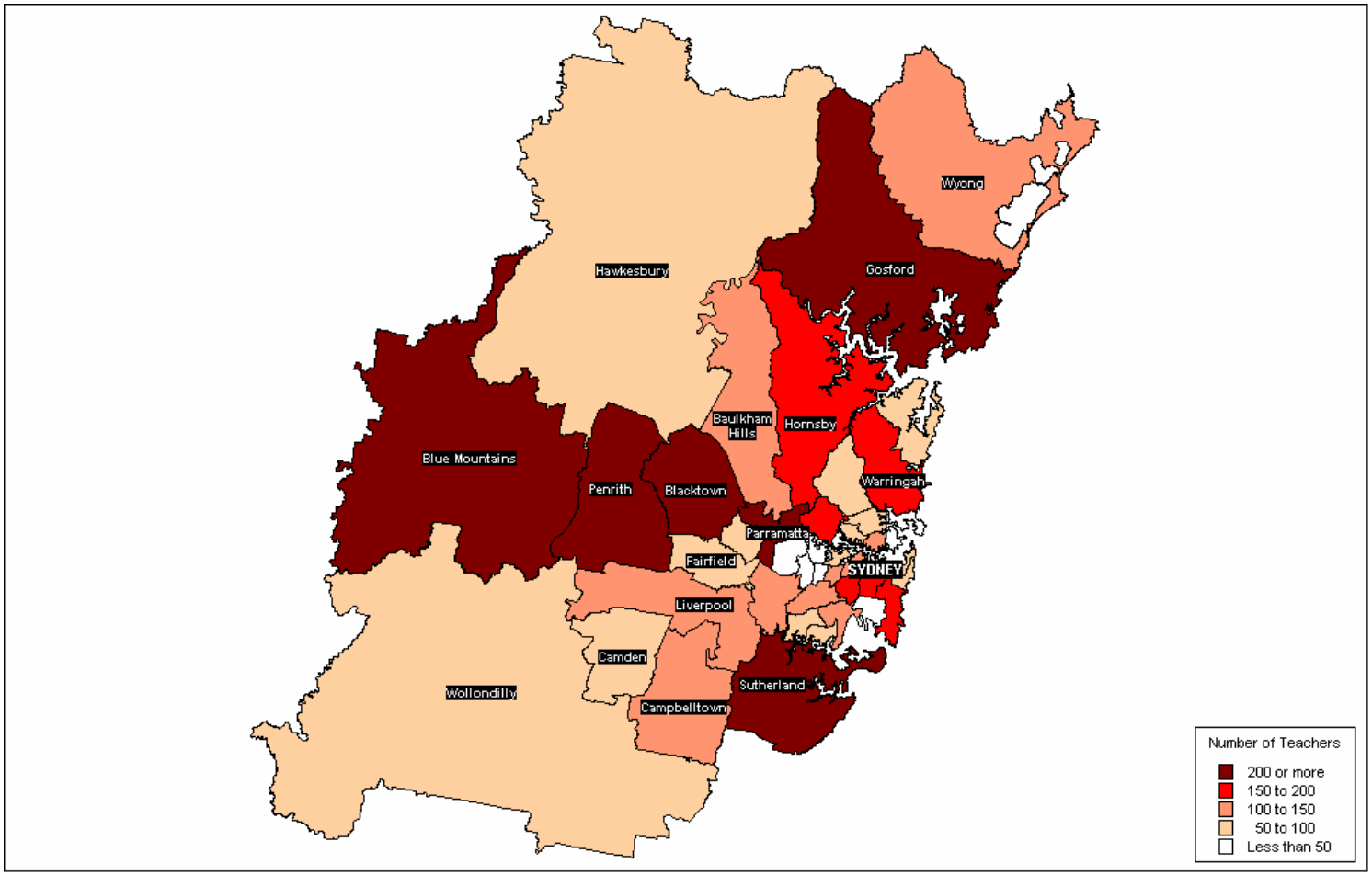


Figure 8.14: The workplace location of persons in MIHs employed as teachers, 2001

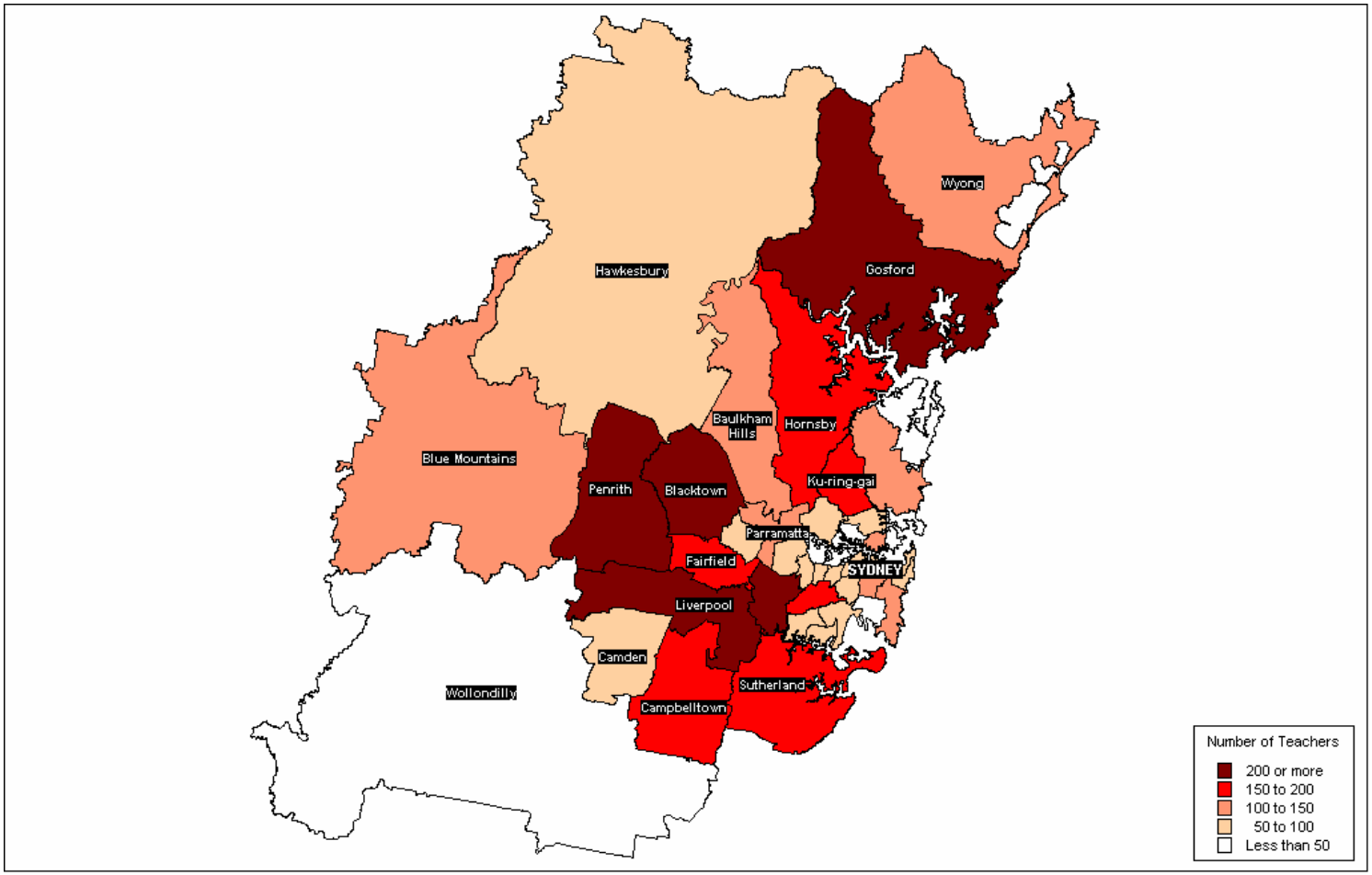


Figure 8.15: The net jobs balance of teachers

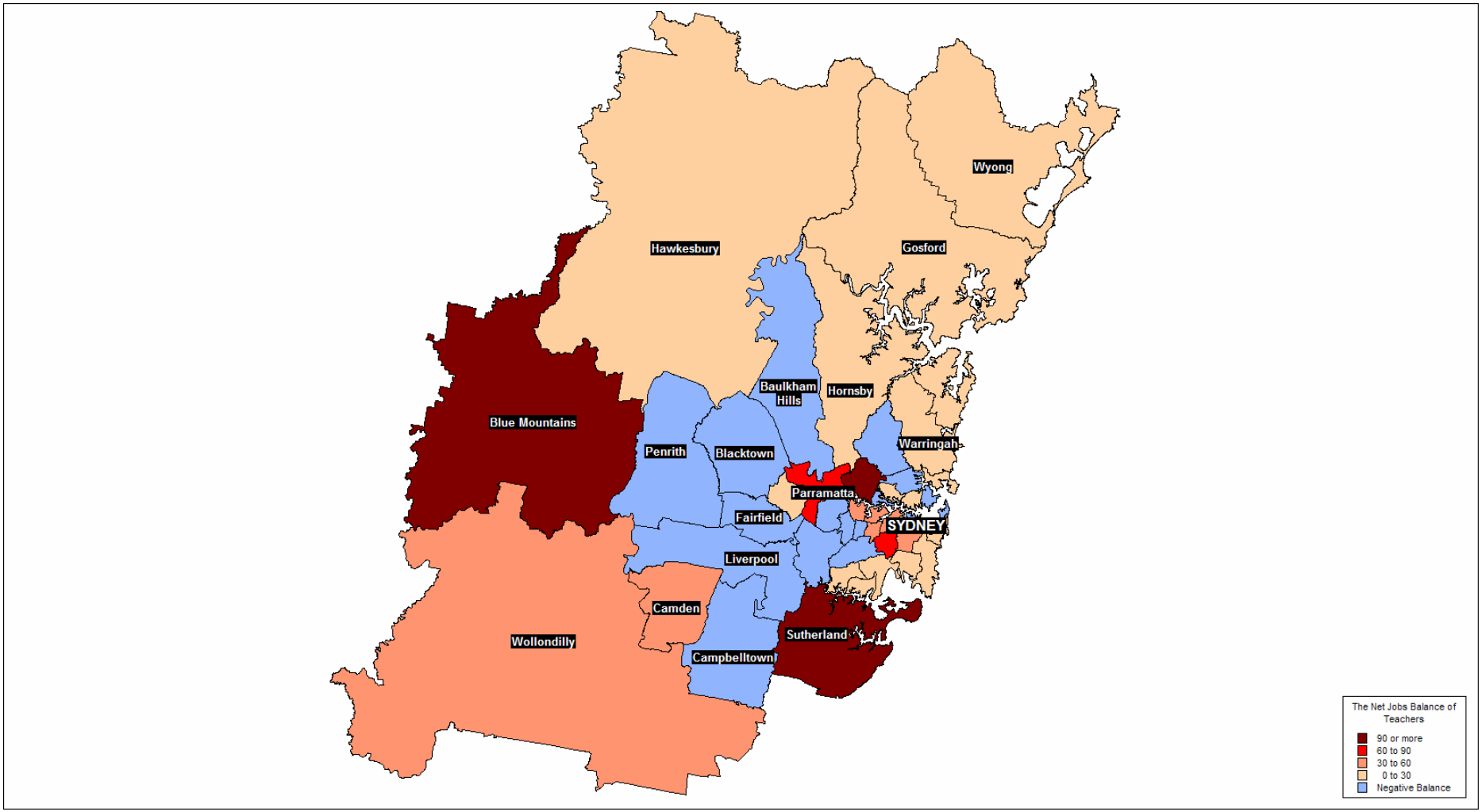


Figure 8.16: The residential location of persons in MIHs employed as registered nurses, 2001

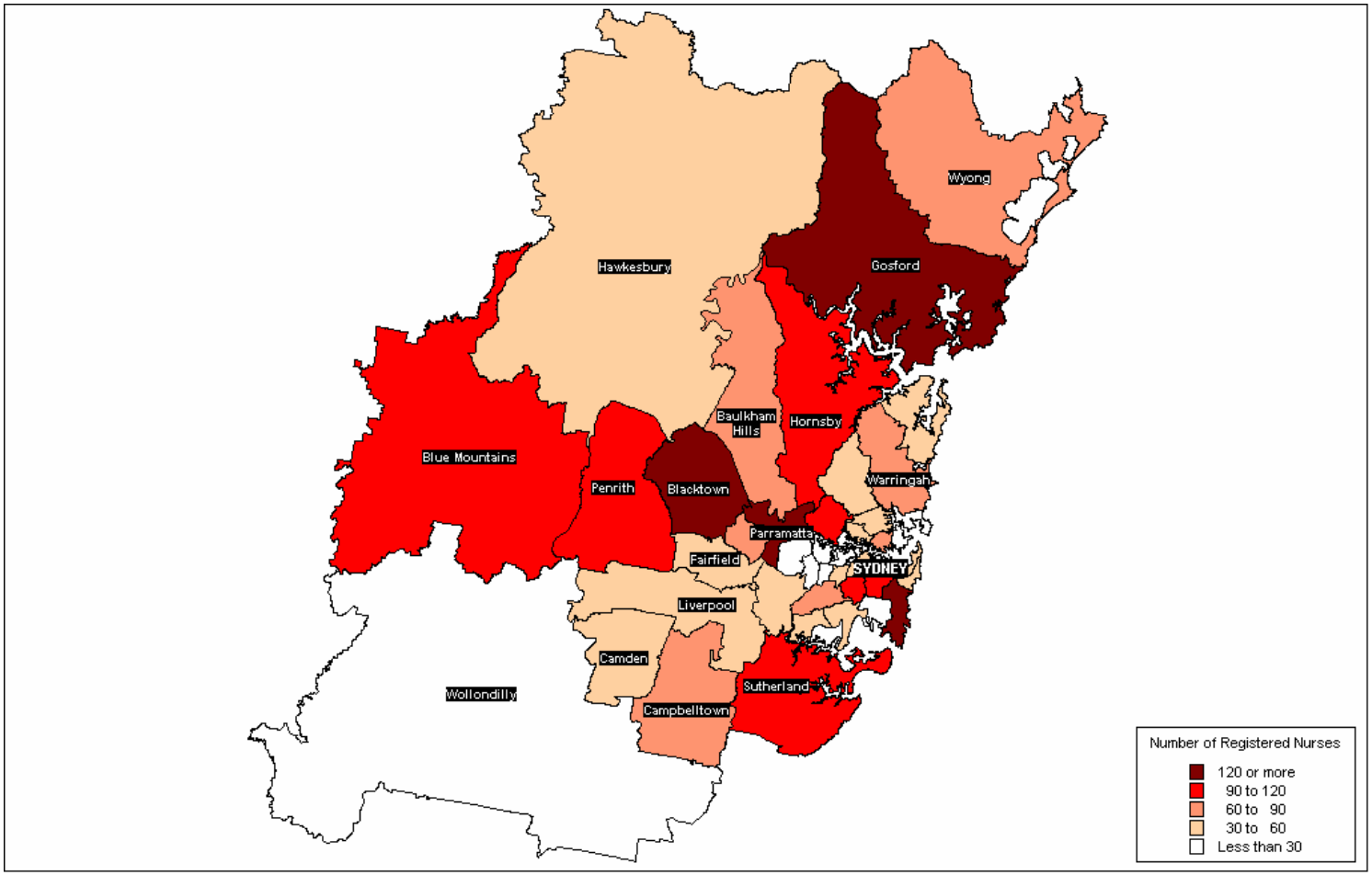


Figure 8.17: The workplace location of persons in MIHs employed as registered nurses, 2001

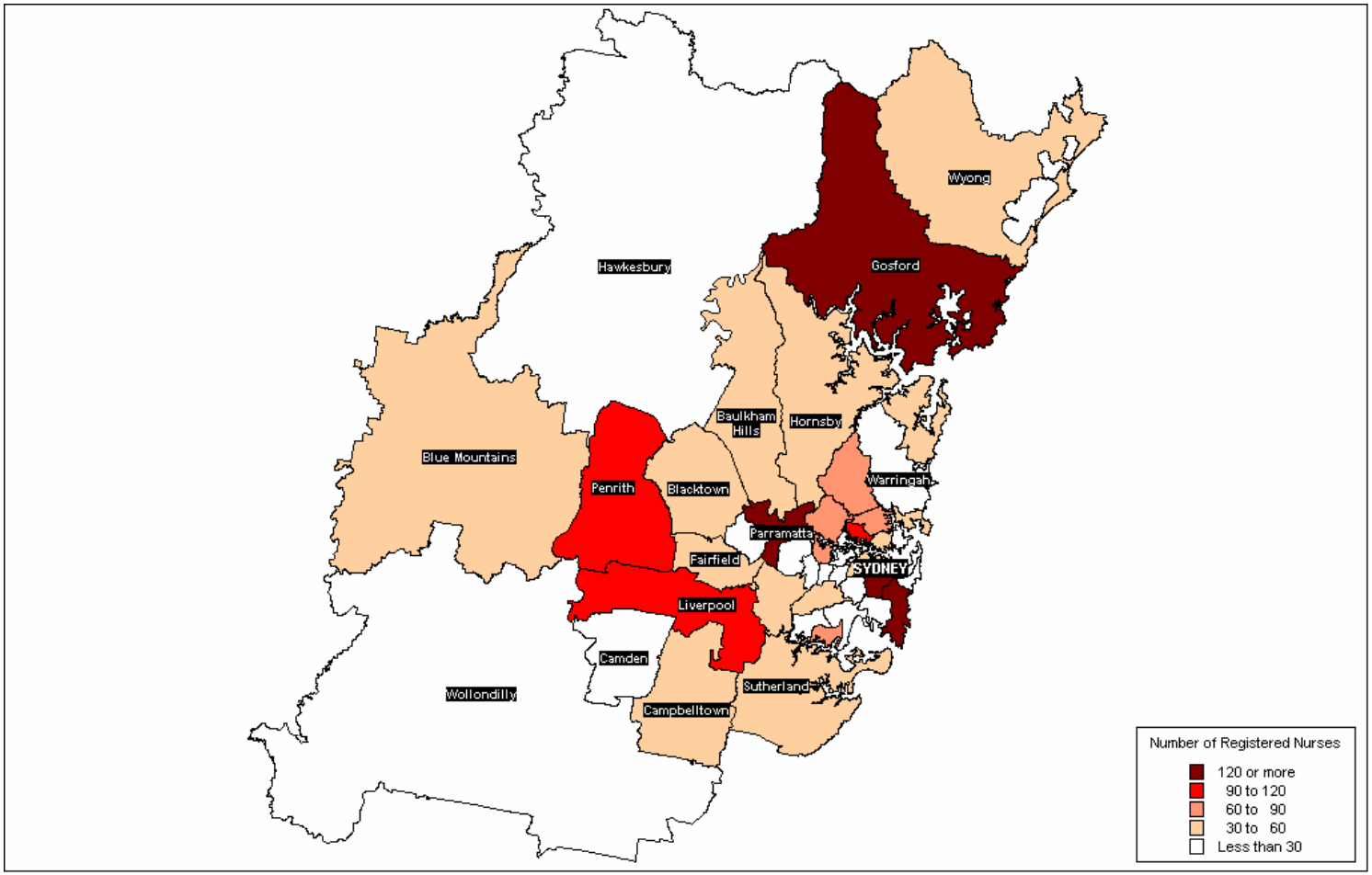
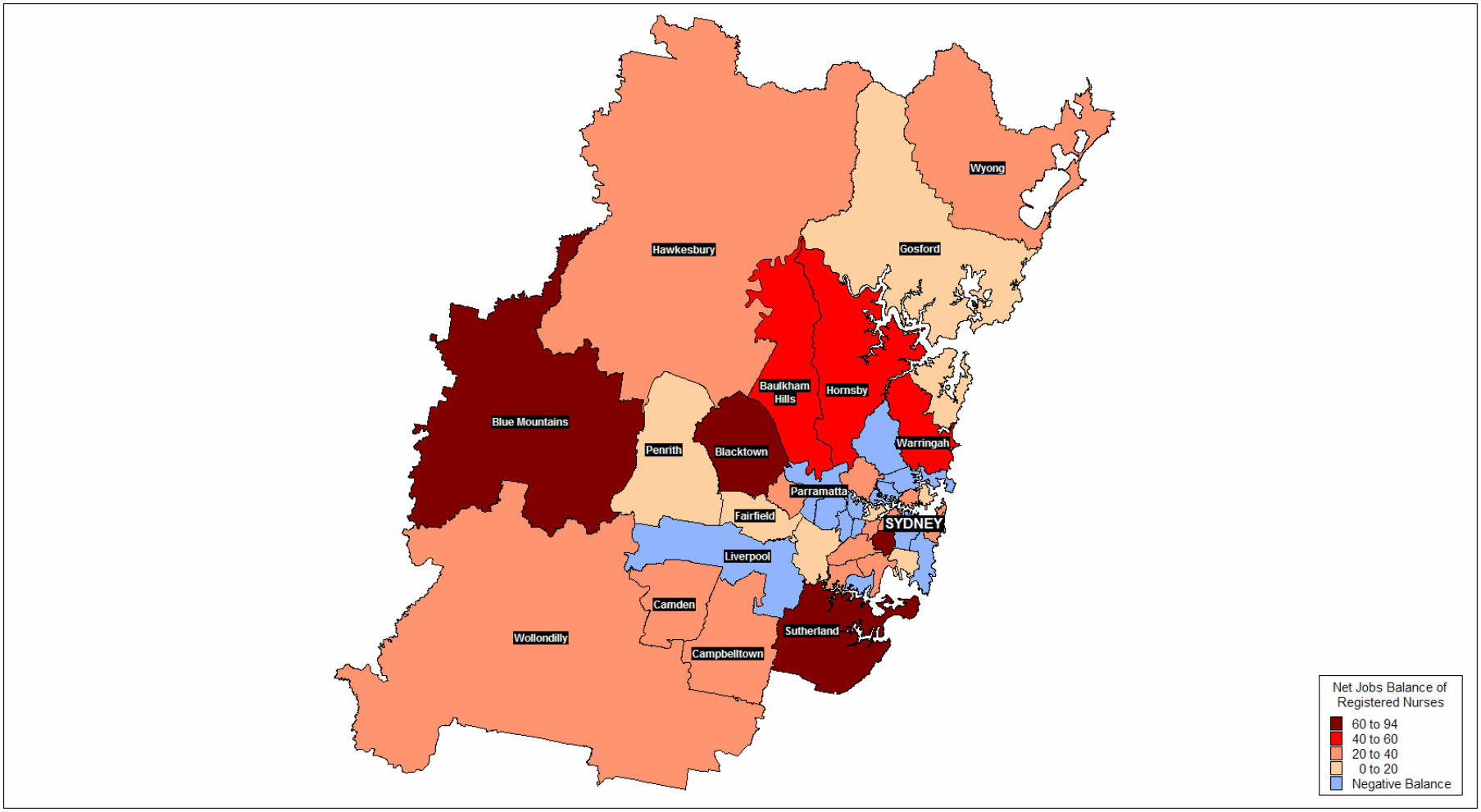


Figure 8.18: The net jobs balance of registered nurses



8.5 Key workers and affordability

While the job-home mismatch is one indicator of how MIH workers in key occupations manage the relationship between the realities of their labour market position and where they can afford to live, it does not tell us where they could afford to live. This section explores this issue by assessing the extent to which the key workers groups can afford to purchase, without any significant equity, the median priced house or unit in LGAs across Sydney. The median household income of our five key worker groups used in this analysis is presented in Table 8.2. In this section we have separately analysed primary and secondary school teachers so that six groups are analysed. A simple ratio was calculated between the key worker group median household income and the household income needed to buy a median priced house and unit in each LGA, whereby any LGA with a ratio of 1.0 or greater is affordable for that occupation at the given income level. The results are illustrated in Figures 8.19 to 8.30.

Houses

In 2001, a household on the median household income for the six key worker groups could only affordably purchase the median priced house in two LGAs in Sydney SD – Campbelltown and Wyong. Not surprisingly, areas on the fringe of Sydney were more affordable than areas in the eastern suburbs, north shore and inner city.

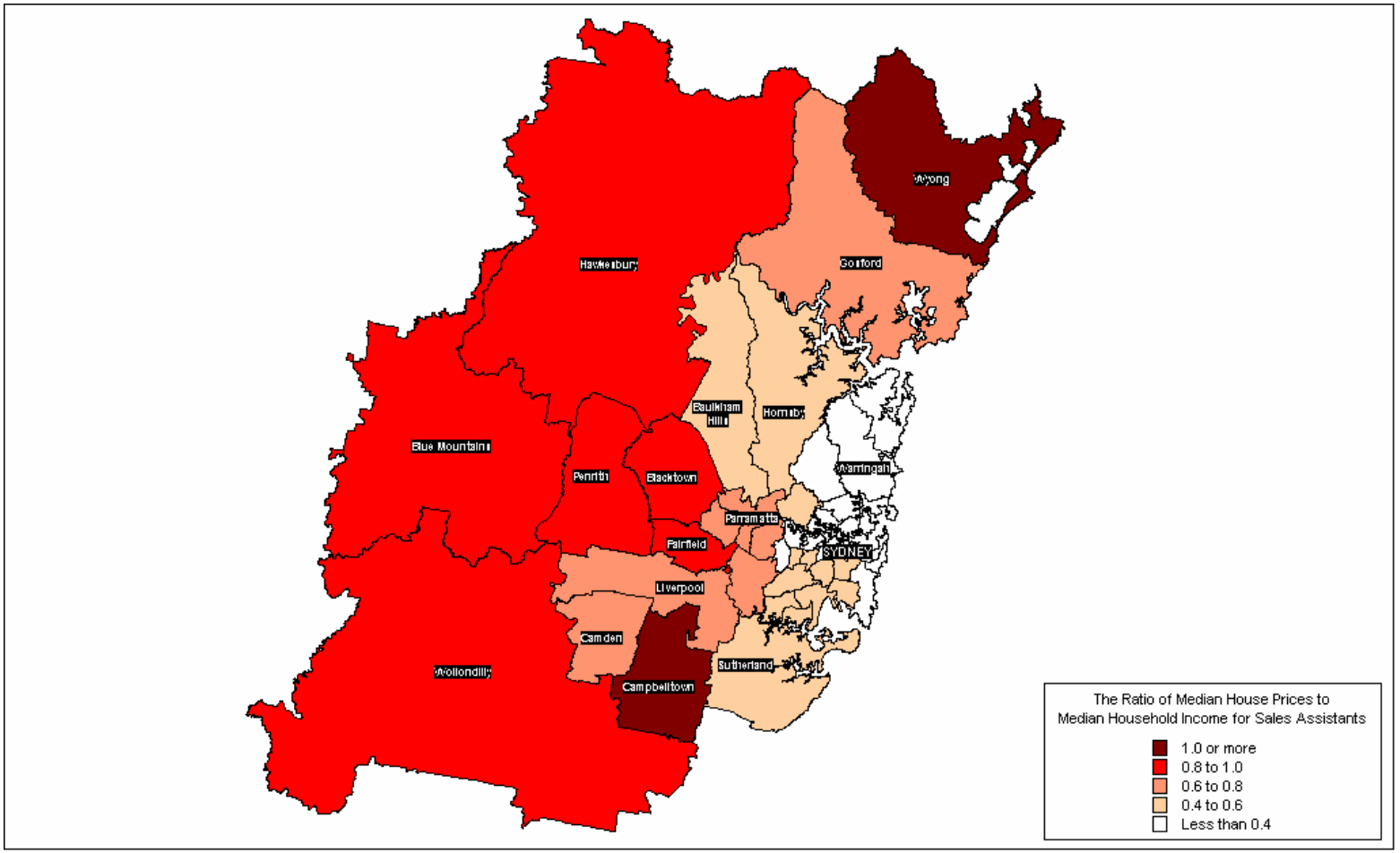
Units

Sales assistants, truck drivers and registered nurses in a household on the median household income could afford purchase the median priced unit in 10 LGAs across Sydney without any equity. These included Hawkesbury, Blue Mountains, Penrith, Blacktown, Fairfield, Liverpool, Camden and Campbelltown in western Sydney, Wyong, and Canterbury. The other three key worker groups – computing professionals, primary and secondary school teachers –could afford purchase the median priced unit in 12 LGAs in Sydney. These 12 LGAs included the 10 listed above, plus Auburn and Holroyd in western Sydney.

Summary

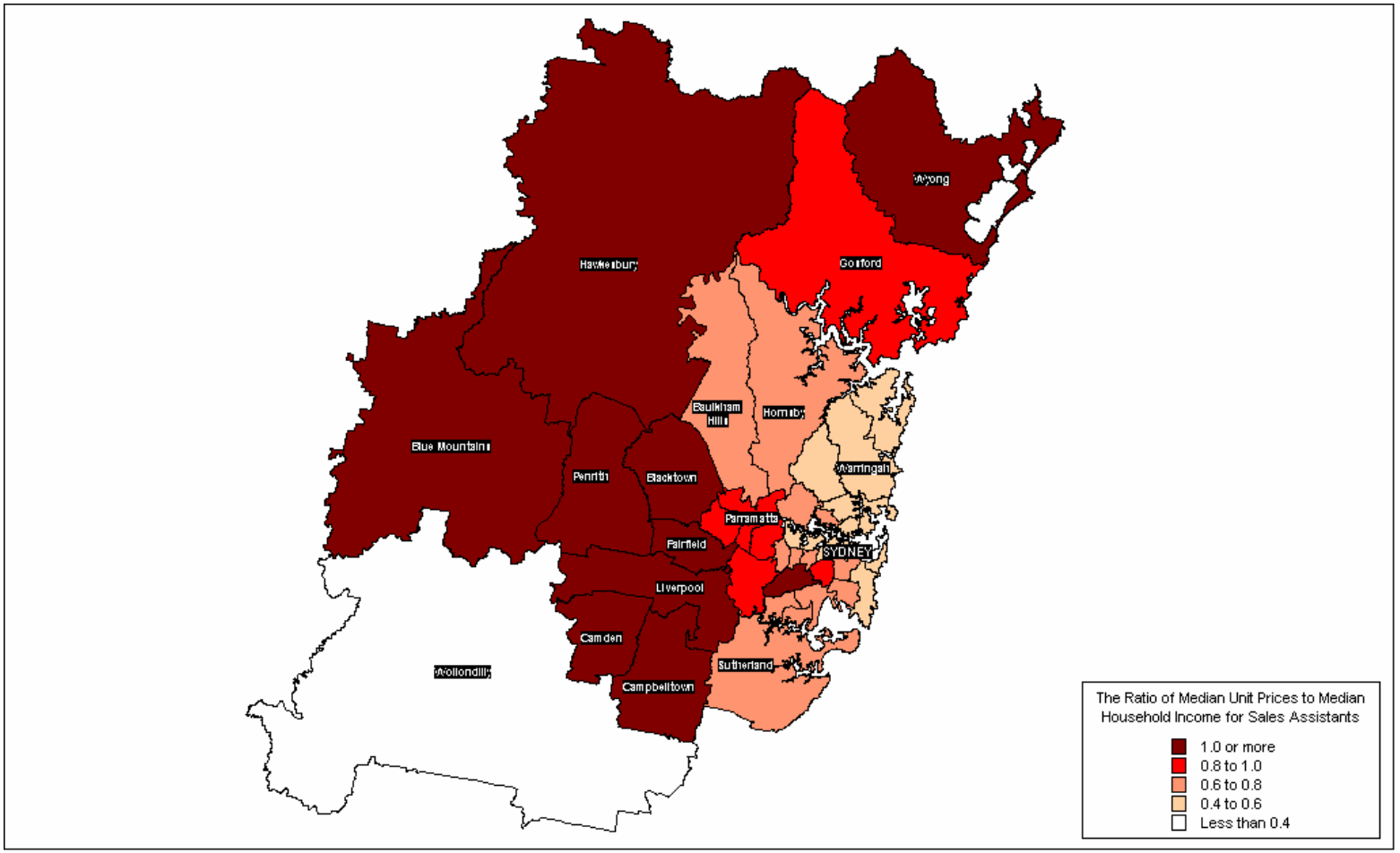
The relative negative imbalance between the homes of our MIH key workers groups and their workplaces in the inner and eastern suburbs can be clearly related to the difficulties in affording home purchase in these locations. However, as the preceding analysis showed, there are numbers of these households living in higher cost locations. Home buying is not the only option, and the following section unpacks the tenure characteristics of these different locational patterns in more detail.

Figure 8.19: The ratio of LGA median house prices to the median household income for MIH sales assistants, 2001



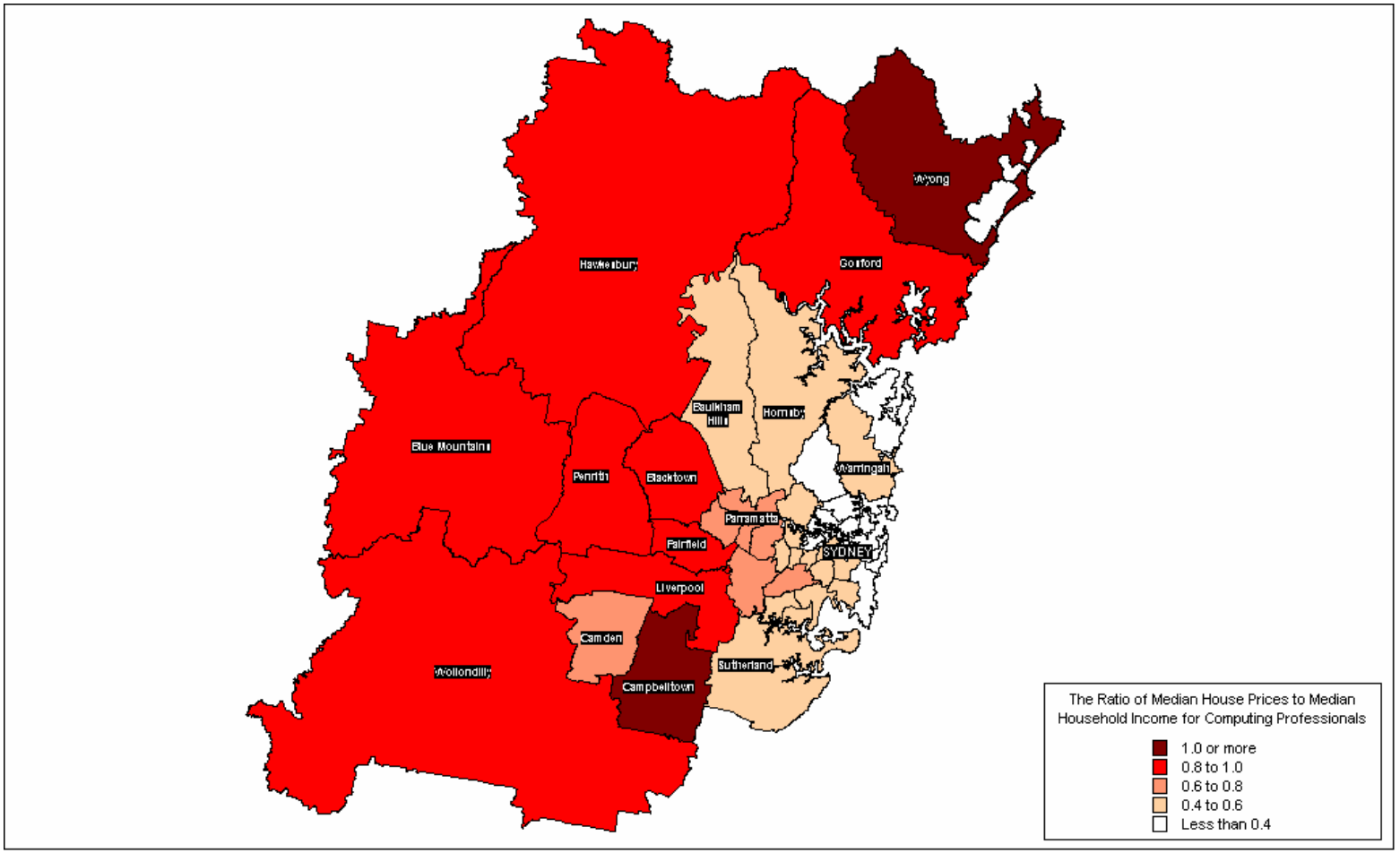
(Note: A ratio of 1.0 or more is affordable)

Figure 8.20: The ratio of LGA median unit prices to the median household income for MIH sales assistants, 2001



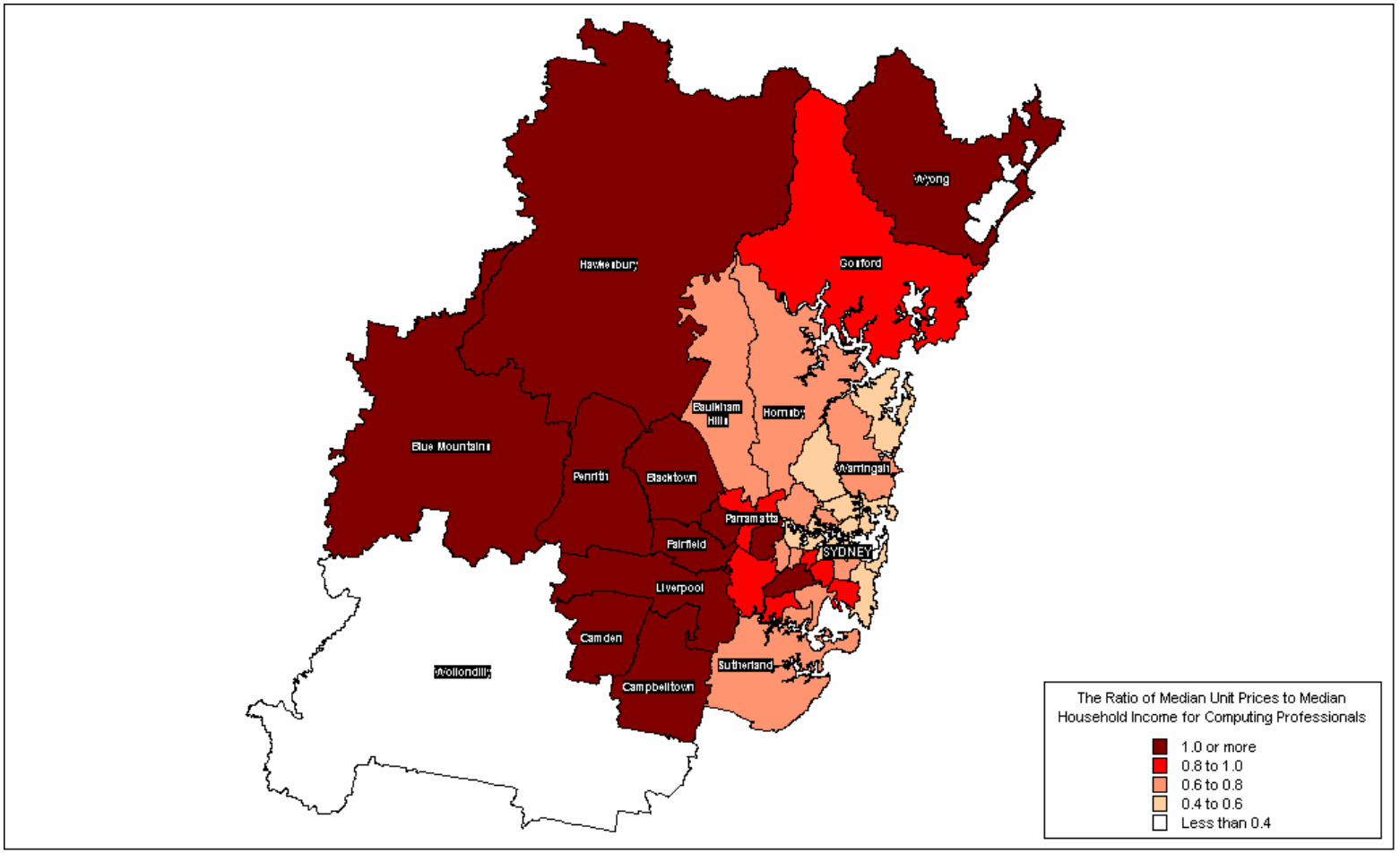
(Note: A ratio of 1.0 or more is affordable)

Figure 8.21: The ratio of LGA median house prices to the median household income for MIH computing professionals, 2001



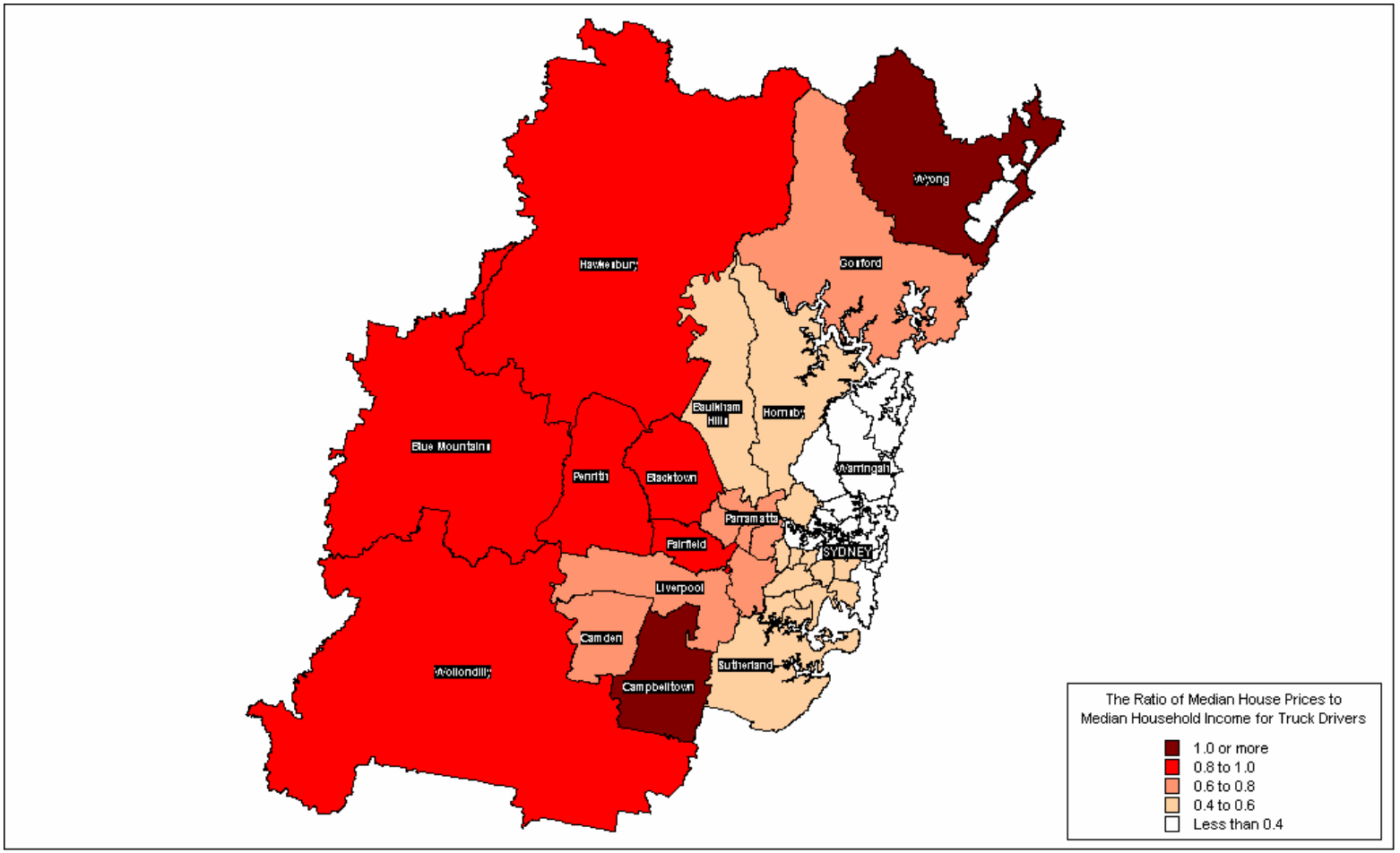
(Note: A ratio of 1.0 or more is affordable)

Figure 8.22: The ratio of LGA median unit prices to the median household income for MIH computing professionals, 2001



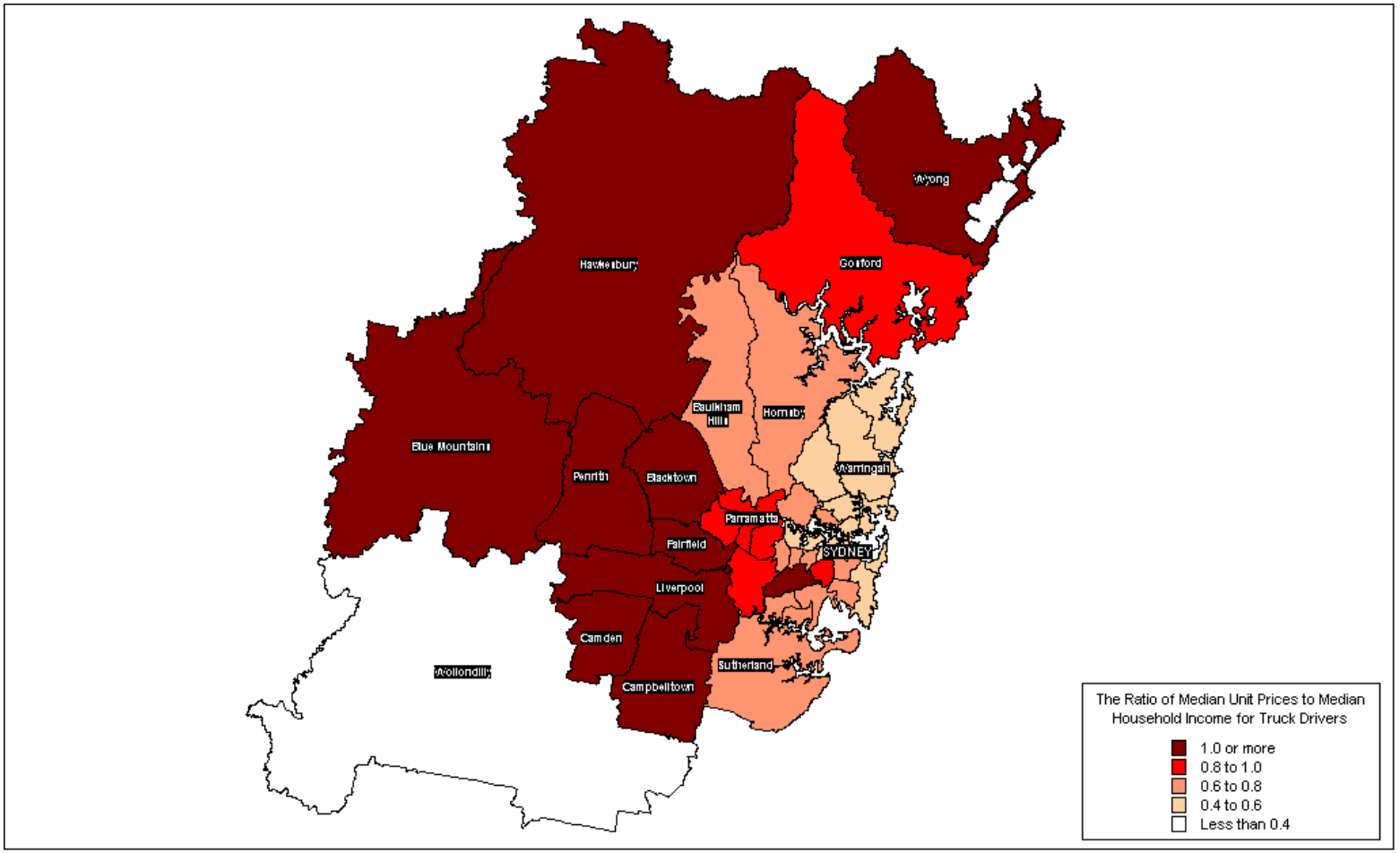
(Note: A ratio of 1.0 or more is affordable)

Figure 8.23: The ratio of LGA median house prices to the median household income for MIH truck drivers, 2001



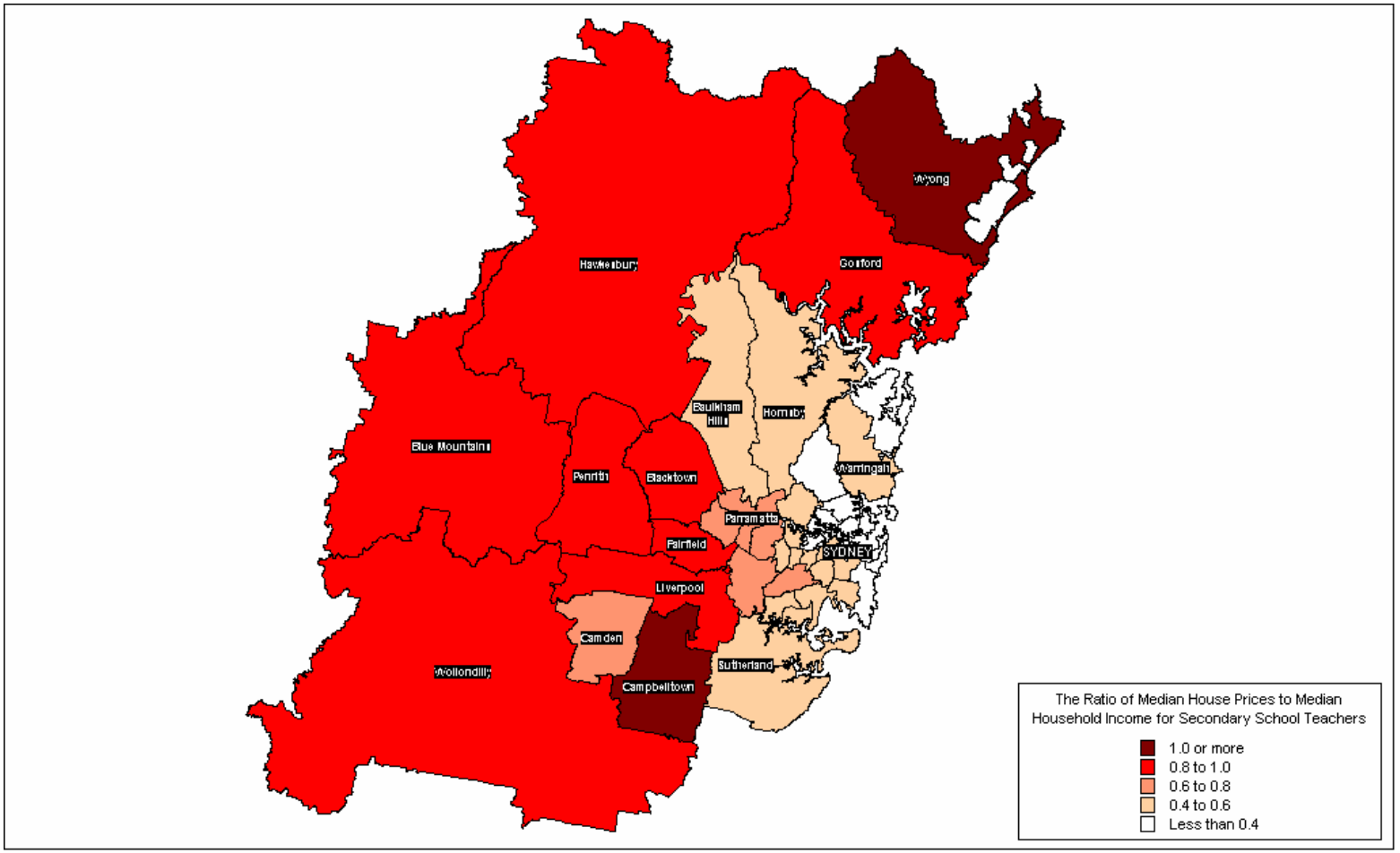
(Note: A ratio of 1.0 or more is affordable)

Figure 8.24: The ratio of LGA median unit prices to the median household income for MIH truck drivers, 2001



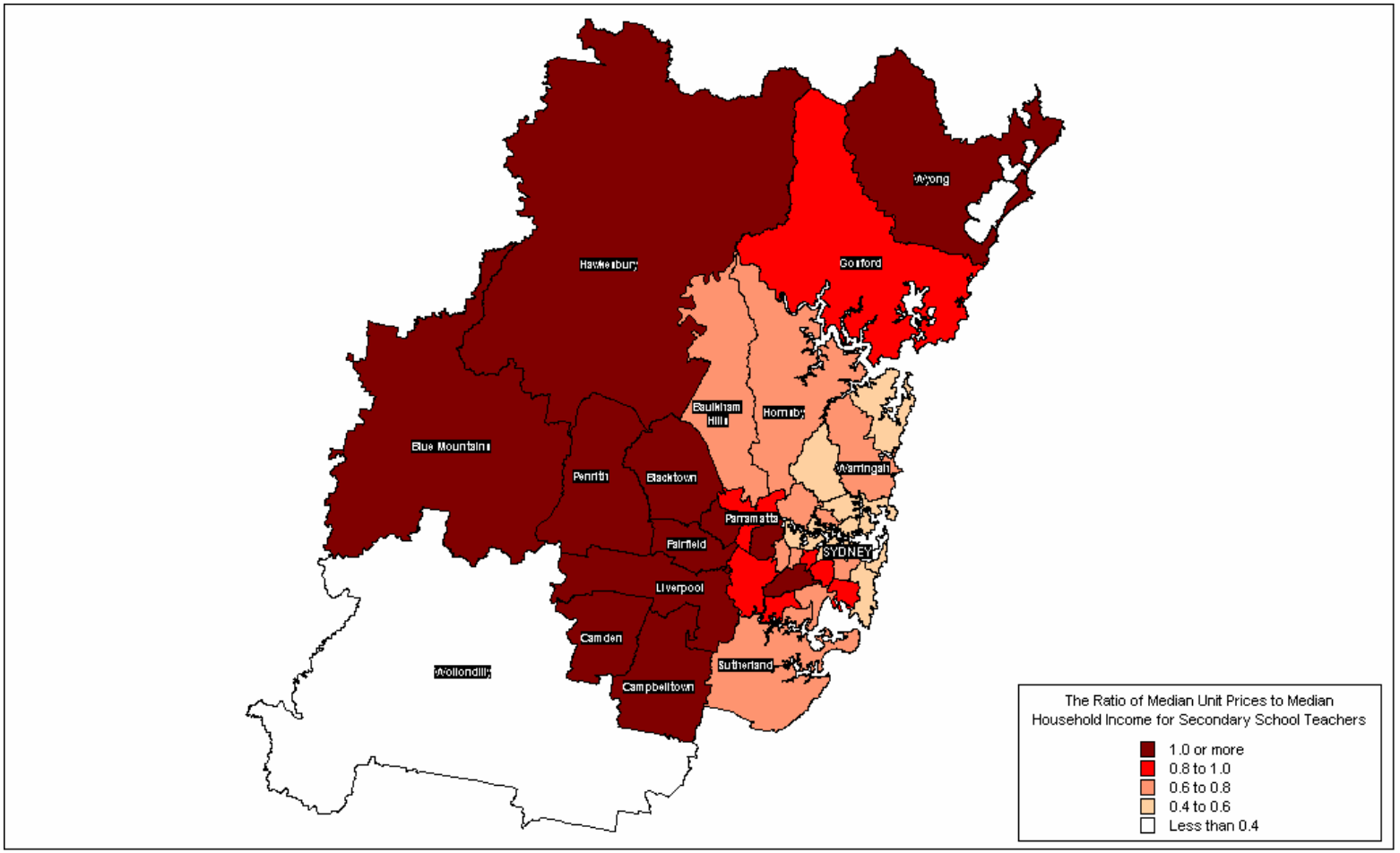
(Note: A ratio of 1.0 or more is affordable)

Figure 8.25: The ratio of LGA median house prices to the median household income for MIH secondary school teachers, 2001



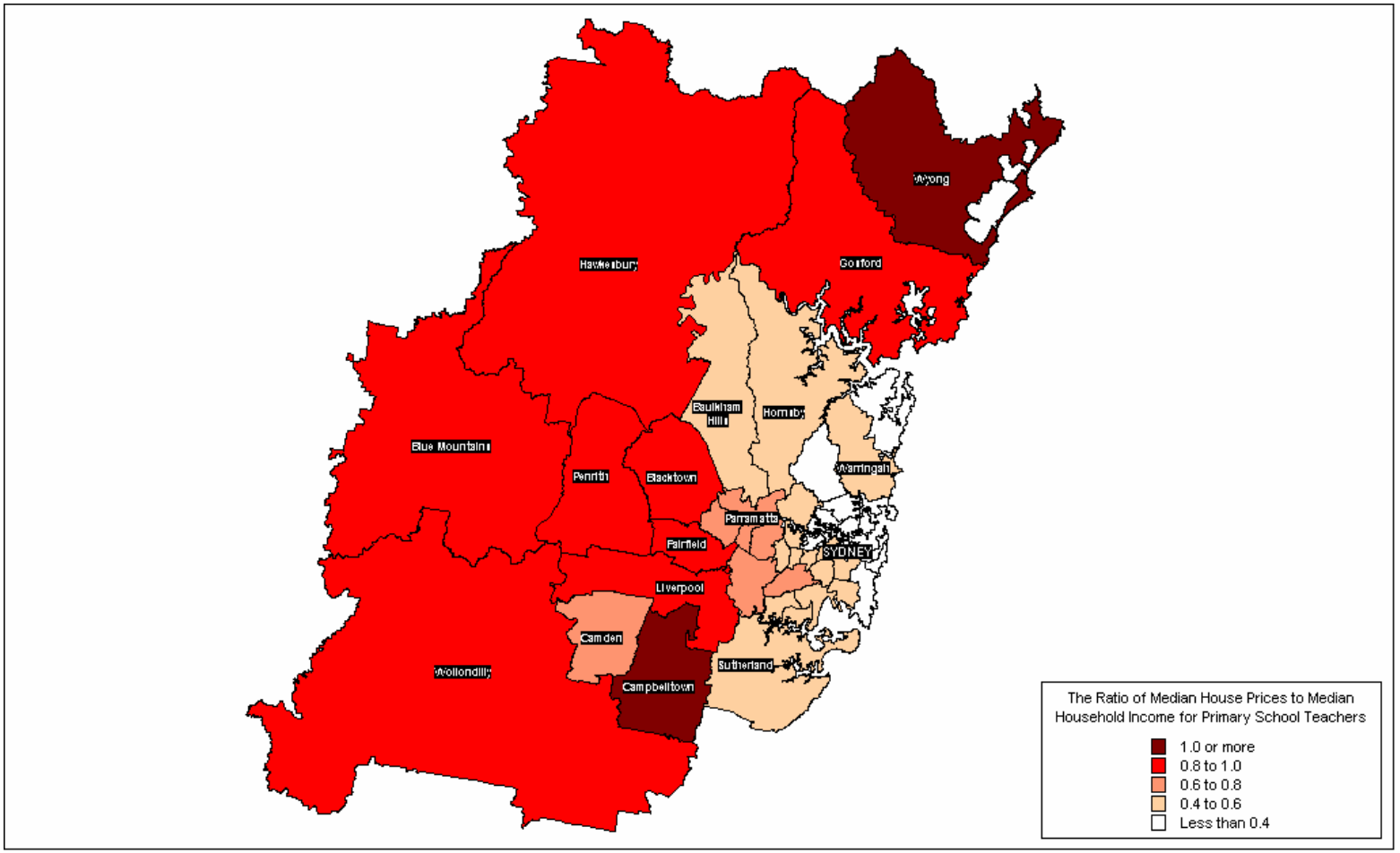
(Note: A ratio of 1.0 or more is affordable)

Figure 8.26: The ratio of LGA median unit prices to the median household income for MIH secondary school teachers, 2001



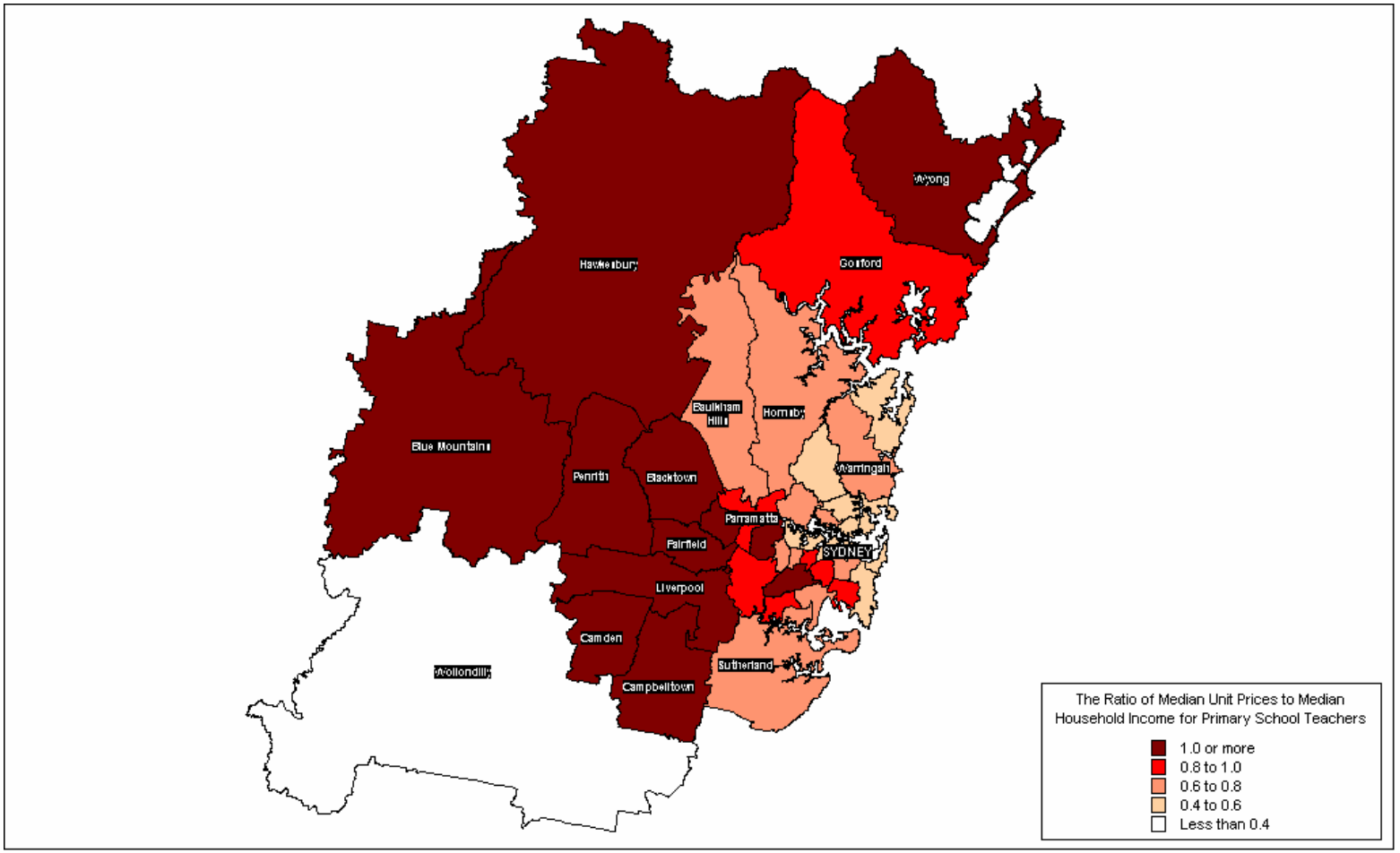
(Note: A ratio of 1.0 or more is affordable)

Figure 8.27: The ratio of LGA median house prices to the median household income for MIH primary school teachers, 2001



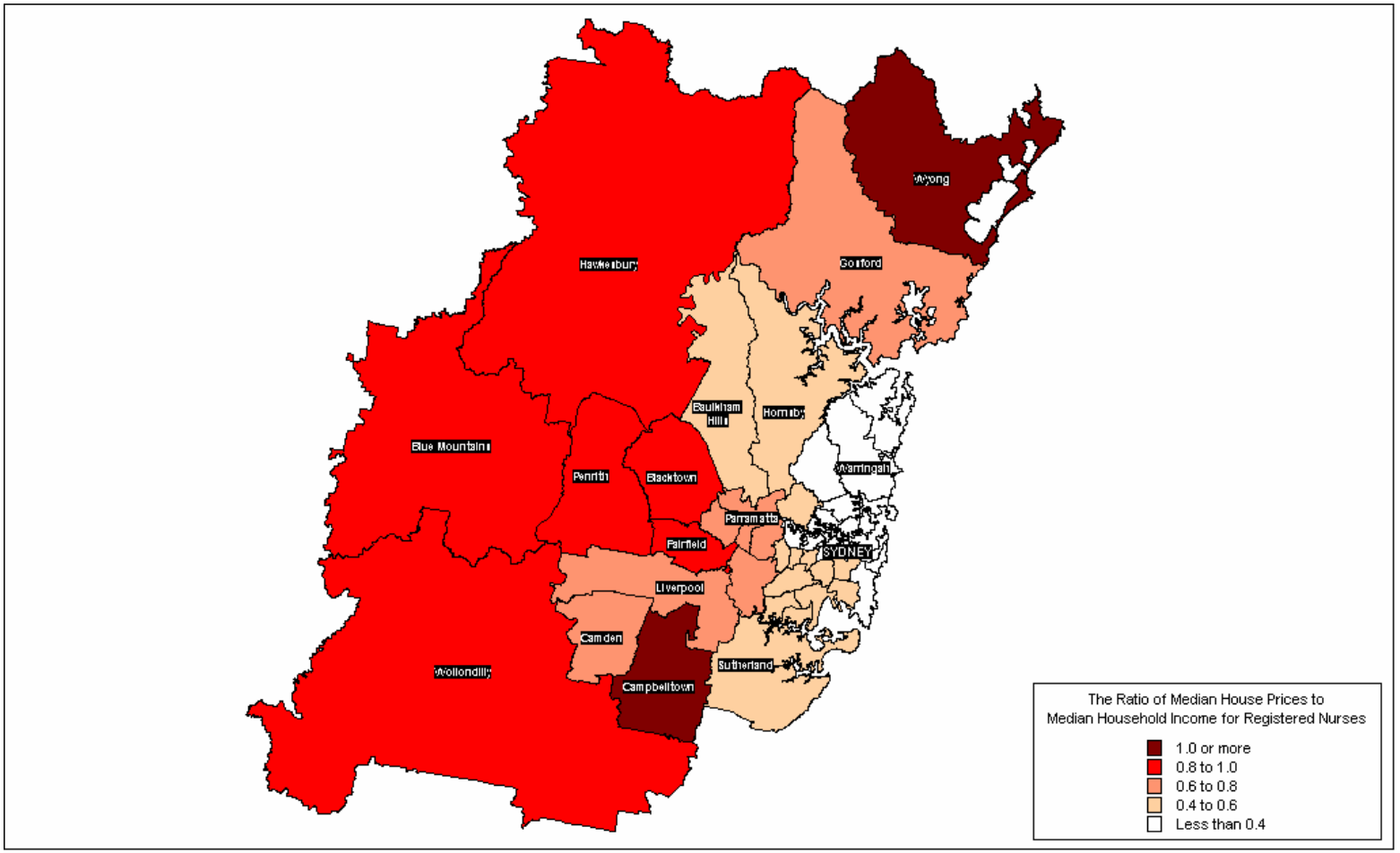
(Note: A ratio of 1.0 or more is affordable)

Figure 8.28: The ratio of LGA median unit prices to the median household income for MIH primary school teachers, 2001



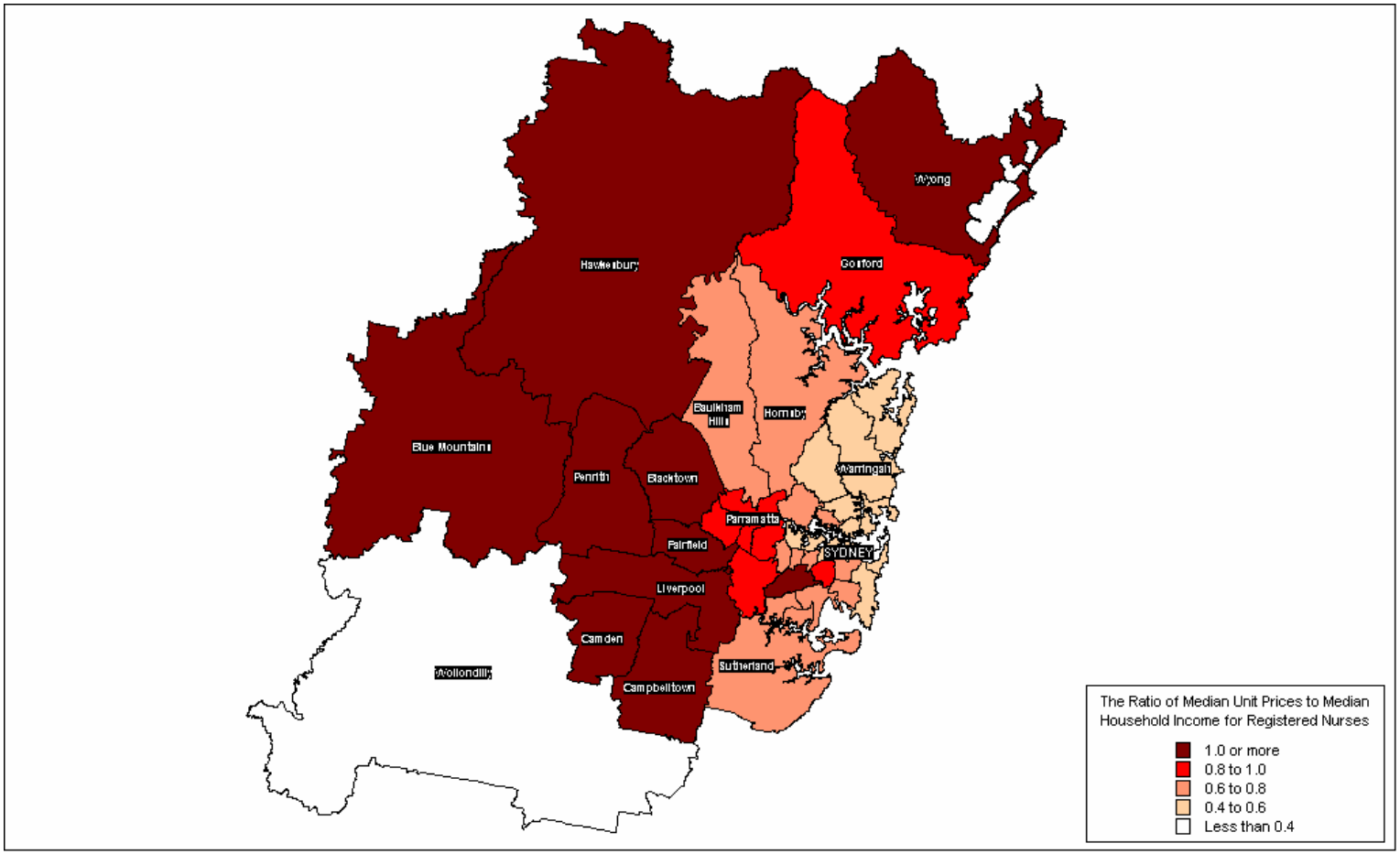
(Note: A ratio of 1.0 or more is affordable)

Figure 8.29: The ratio of LGA median house prices to the median household income for MIH registered nurses, 2001



(Note: A ratio of 1.0 or more is affordable)

Figure 8.30: The ratio of LGA median unit prices to the median household income for MIH registered nurses, 2001



(Note: A ratio of 1.0 or more is affordable)

8.6 Key workers – Home purchasers and private renters

Moderate income key workers who are currently purchasing are clearly more likely to do so in the western suburbs and fringes of Sydney, in line with the overall analysis of MIHs in Chapter 7 above. Figure 8.31 shows that the concentration of MIH key worker home buyers increase as distance from the eastern suburbs and the City increases. Those LGAs in which 45% or more of key workers were currently purchasing included Hawkesbury, Blue Mountains, Penrith, Blacktown, Wollondilly, Campbelltown and Camden. Hunters Hill is indicated as having a high percentage of purchasers, however, this is more likely due to the small percentage of key workers residing in the area. The only inner city area that seems to be attracting a moderate proportion of key worker purchasers is Marrickville.

Moderate income key workers renting are clearly concentrated in central Sydney LGAs, with lower proportions of renters as distance from the city increases. As Figure 8.32 shows, LGAs that have the highest concentration of key workers privately renting include Willoughby, North Sydney and Mosman to the north of the CBD, Woollahra and Waverley in the eastern suburbs and Leichhardt, Ashfield, Burwood and Marrickville in the inner west. Sydney LGA and South Sydney were also areas that had high rates of key workers renting. The percentage of renters in fringe areas was much lower corresponding to larger proportions of home buyers.

A key generalisation is that MIH key workers in Sydney tend to rent in the inner city and buy out west. The purchaser maps for each of the individual key worker groups were remarkably similar, with high concentrations of purchasers in the western parts of Sydney, although there were also higher proportions of nurses and sales assistants who were purchasing a dwelling in Botany Bay (Figures 8.33 to 8.42). For teachers, the inner west was also characterised by a higher proportion of buyers, especially in Burwood and Marrickville.

With regards to renting, the maps show strong concentrations in the inner city and inner west and inner north suburbs for computing professionals, truck drivers and sales assistants. There were also moderate concentrations of truck drivers and sales assistants renting in the Manly, Warringah and Pittwater (North Shore) areas, possibly due to the factories, warehouses and commercial strips in those areas. The eastern suburbs, the inner west and Warringah and Mosman in the north were all areas that had 47% or more of residing moderate income nurses renting. There was also a relatively high proportion of moderate income nurses renting in Liverpool. Moderate income school teachers had the most diverse renting patterns, with concentrations in the inner city suburbs (eg. South Sydney and Woollahra) and the inner west, along with outer western areas such as Liverpool and Penrith. This is most probably due to the fact that school teachers have one of the most diverse locations for work.

Figure 8.31: The proportion of MIH key workers (all groups) who were purchasing their dwelling, 2001

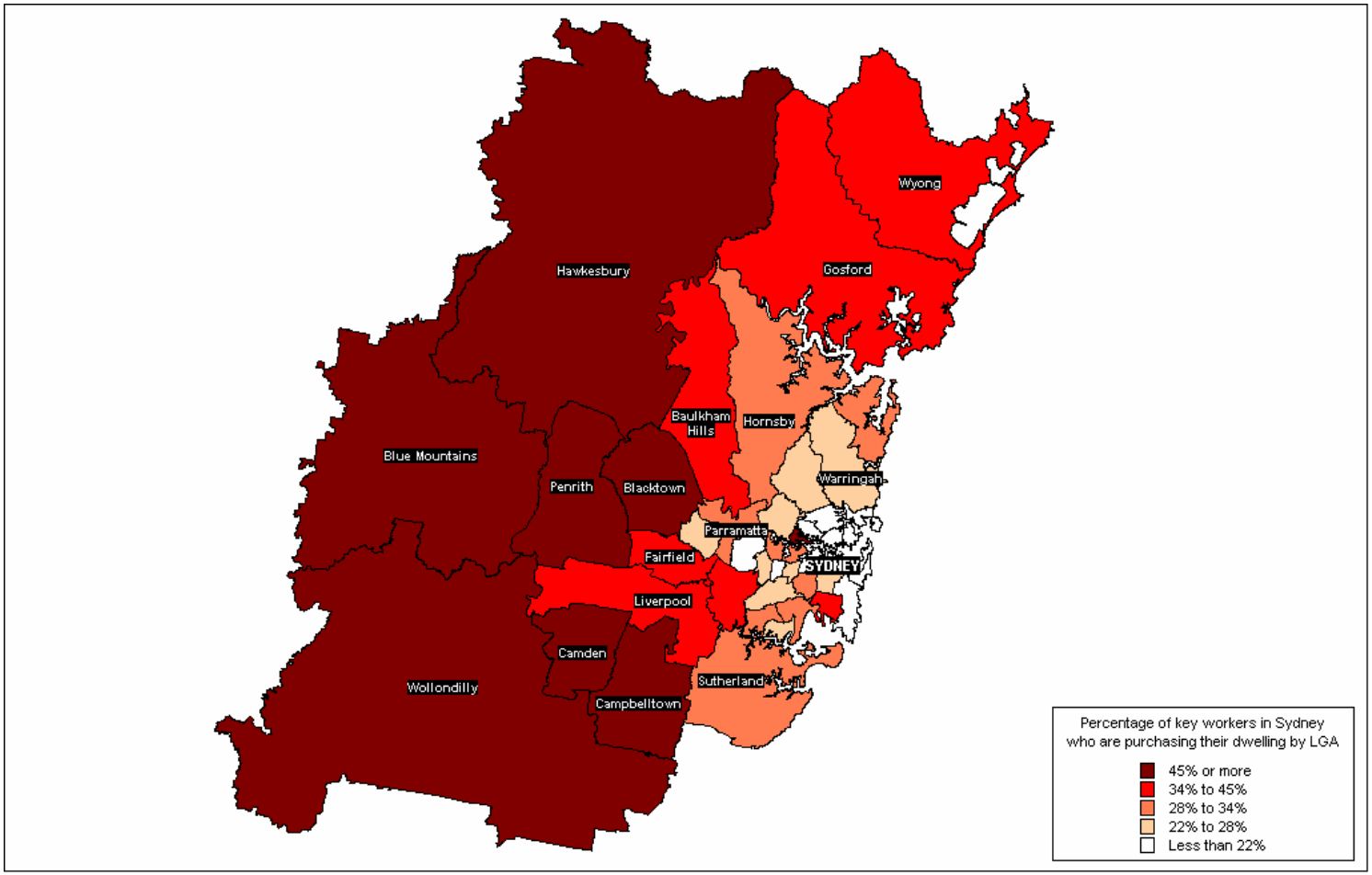


Figure 8.32: The proportion of MIH key workers (all groups) who were privately renting their dwelling, 2001

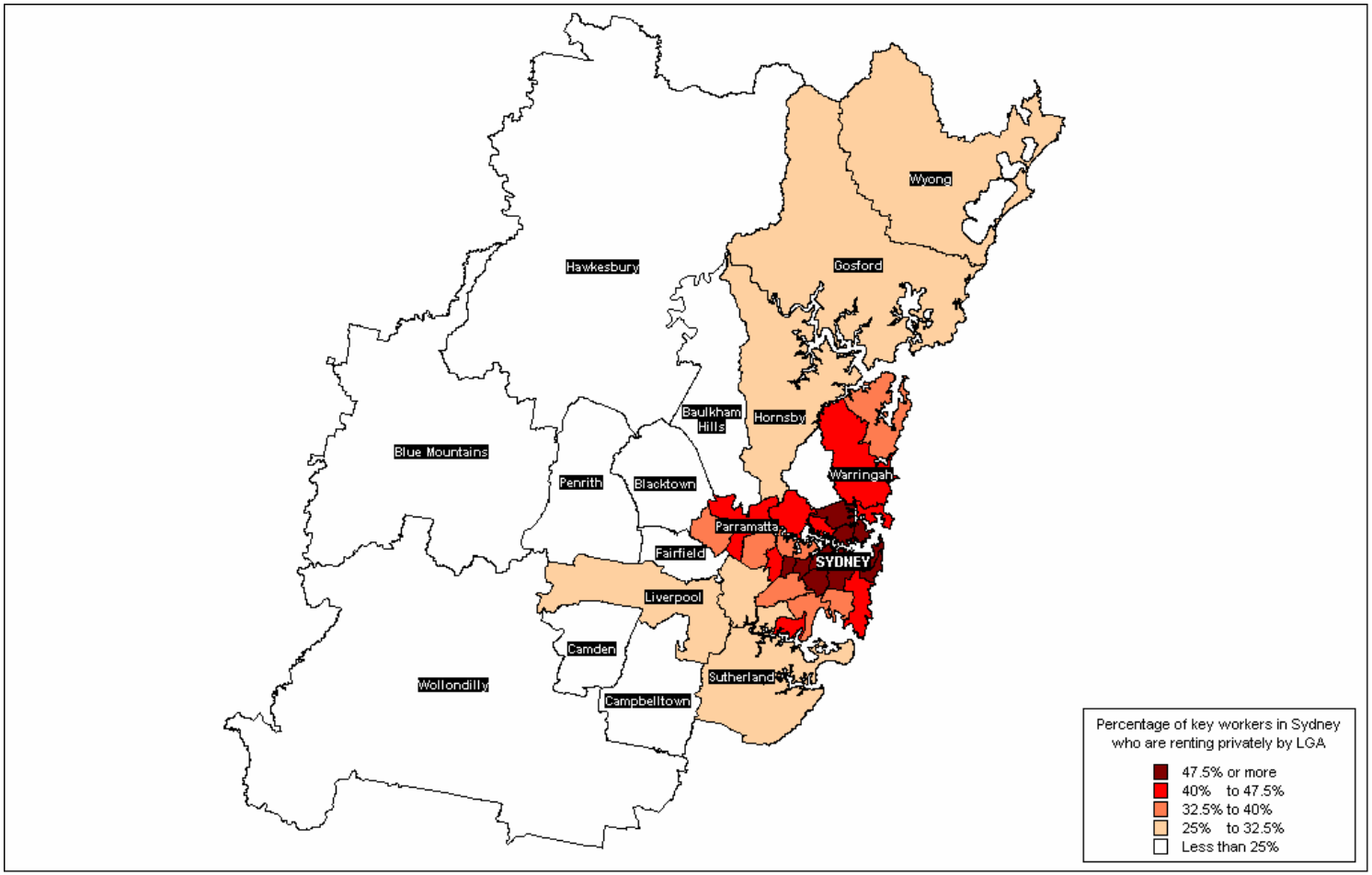


Figure 8.33: The proportion of MIH computing professionals who are purchasing their dwelling, 2001

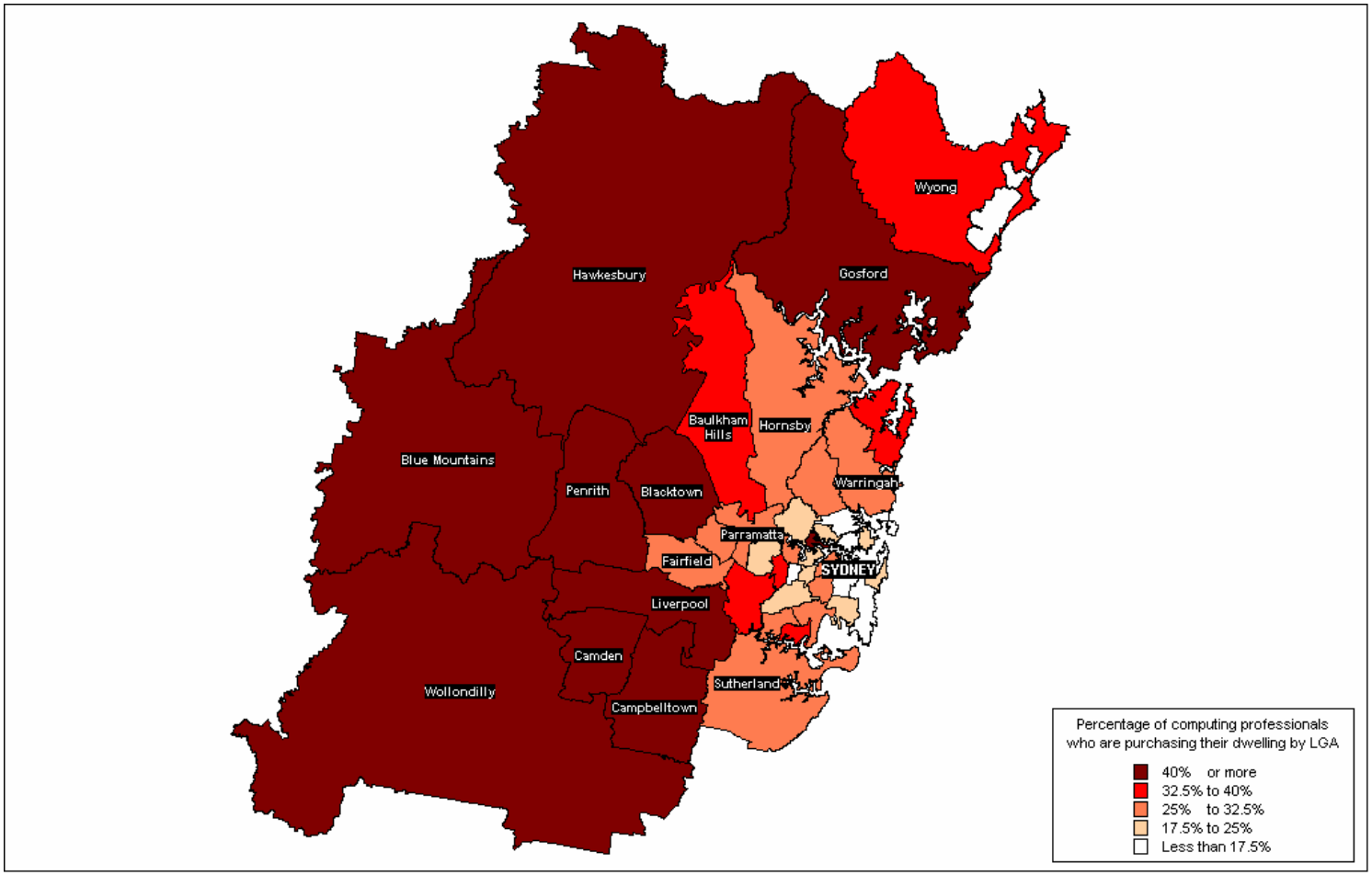


Figure 8.34: The proportion of MIH computing professionals who were privately renting their dwelling, 2001

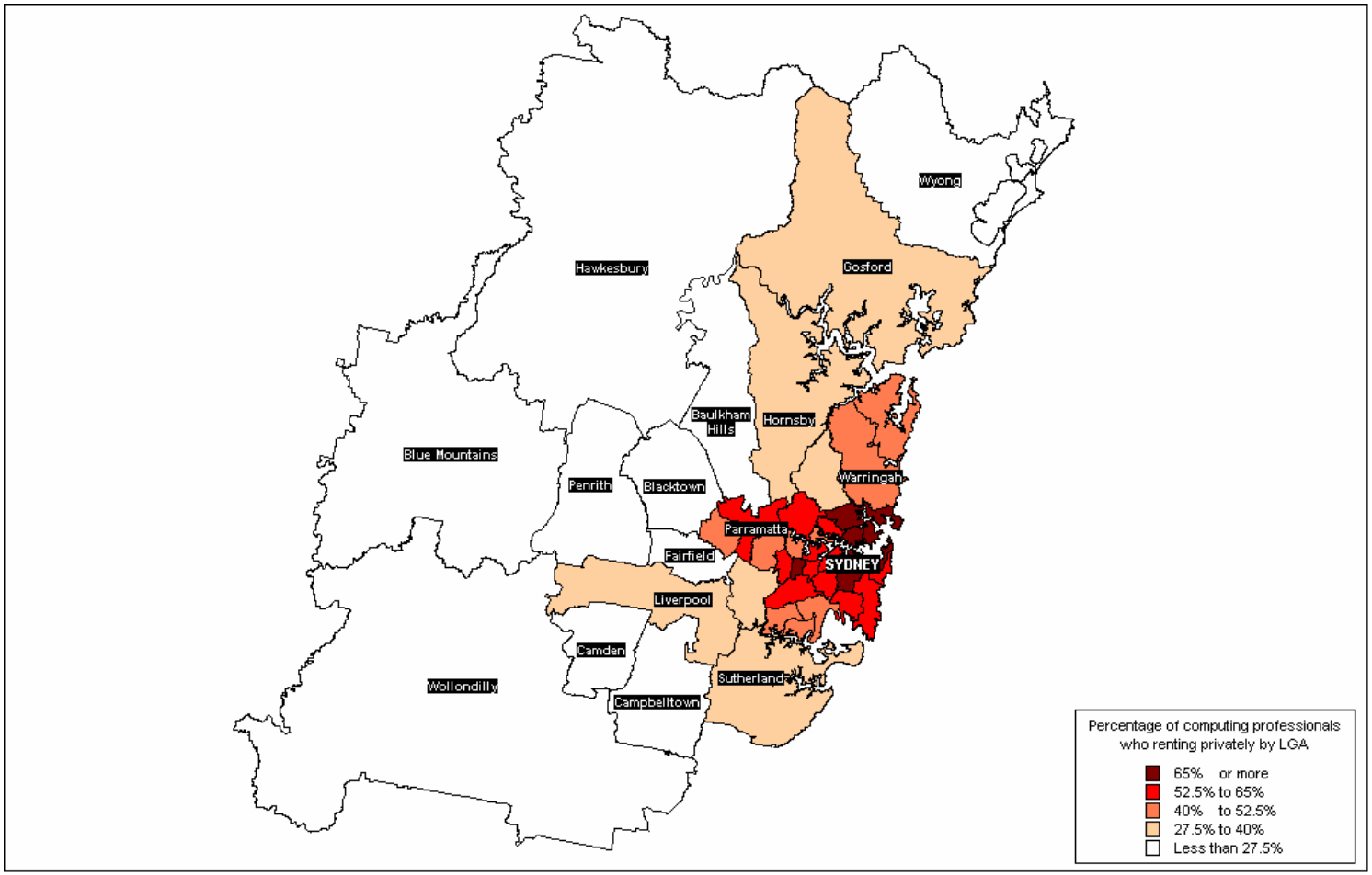


Figure 8.35: The proportion of MIH registered nurses who were purchasing their dwelling, 2001

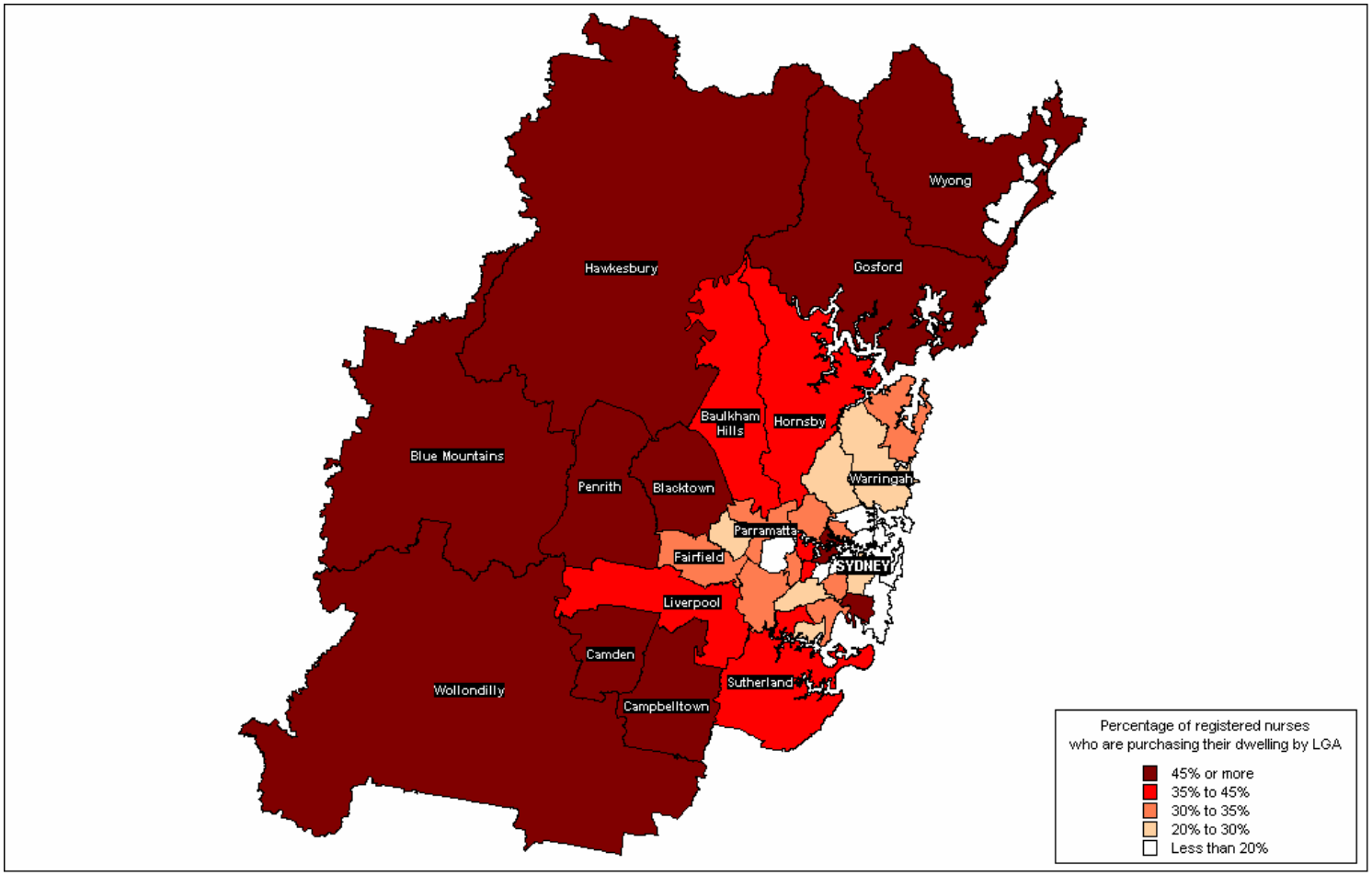


Figure 8.36: The proportion of MIH registered nurses who were privately renting their dwelling, 2001

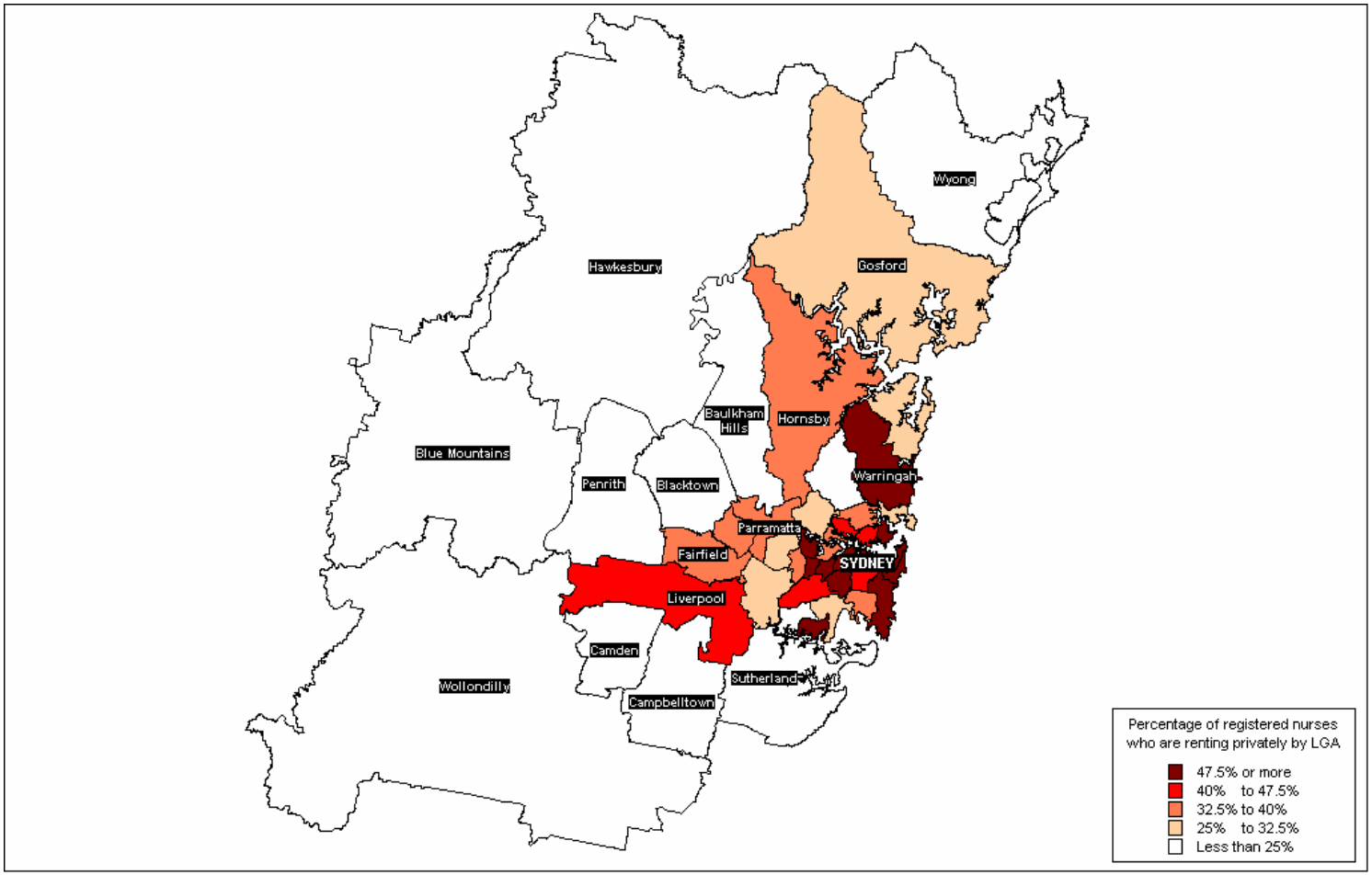


Figure 8.37: The proportion of MIH sales assistants who were purchasing their dwelling, 2001

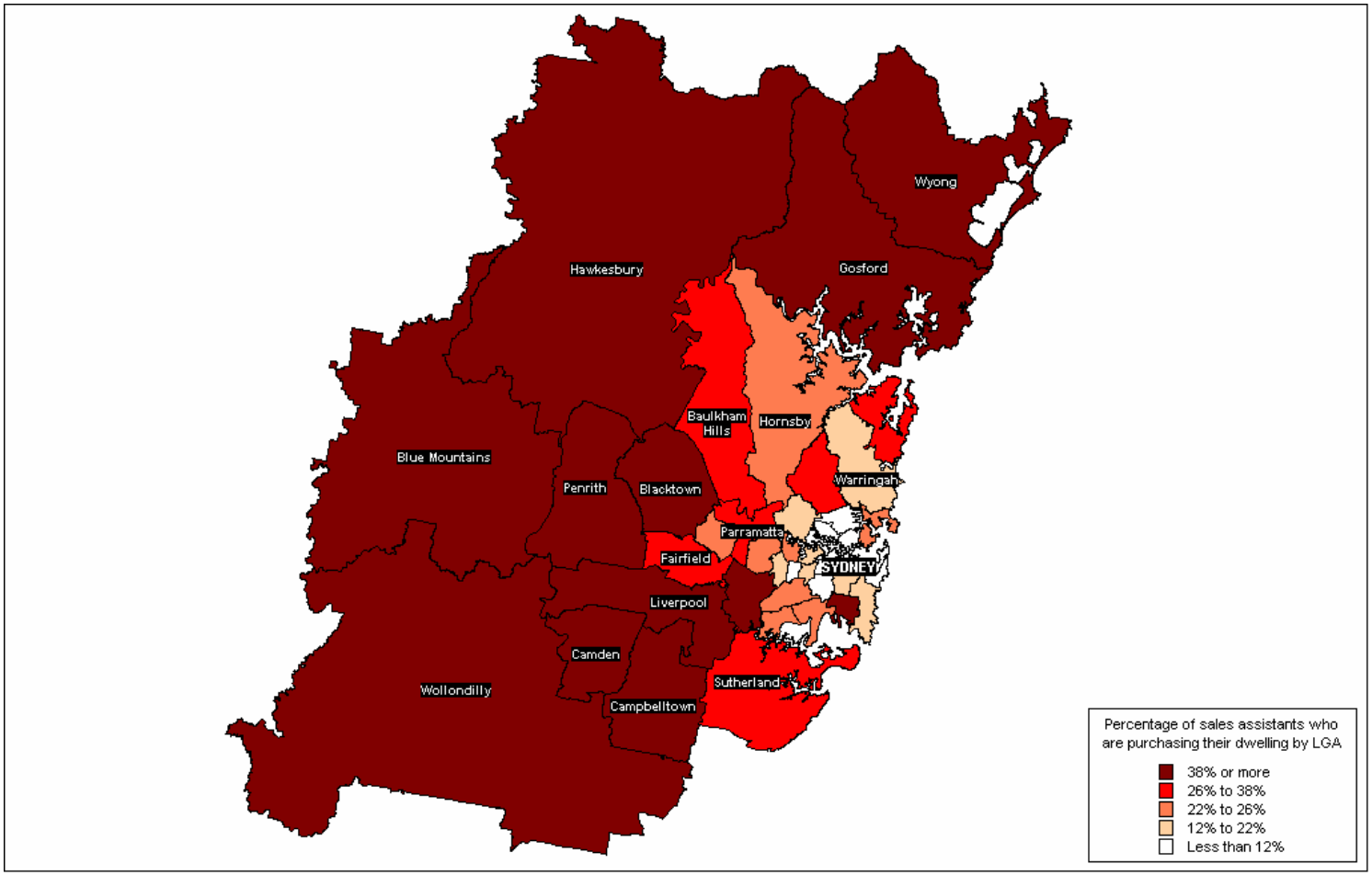


Figure 2.38: The proportion of MIH sales assistants who were privately renting their dwelling, 2001

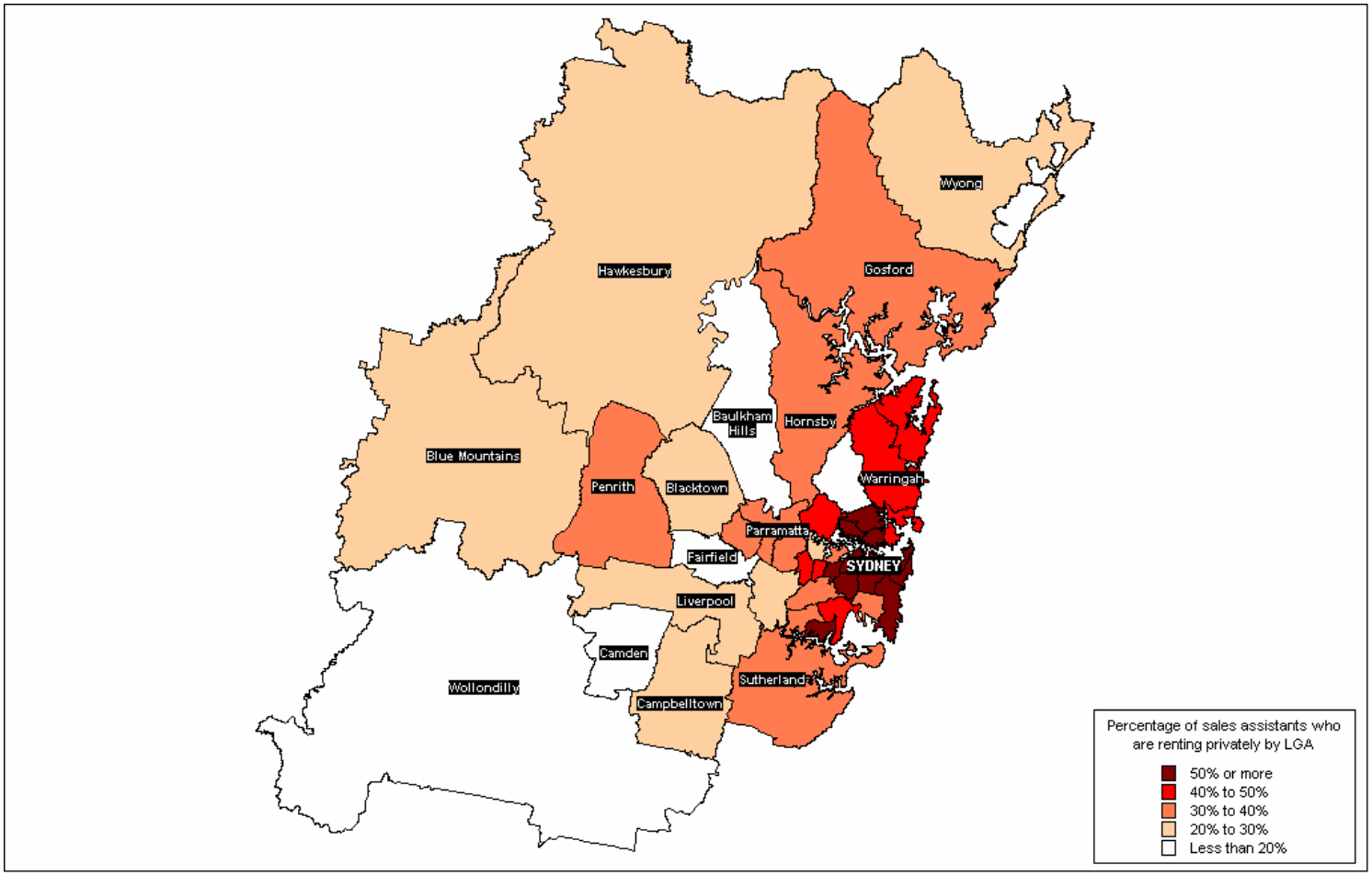


Figure 8.39: The proportion of MIH teachers who were purchasing their dwelling, 2001

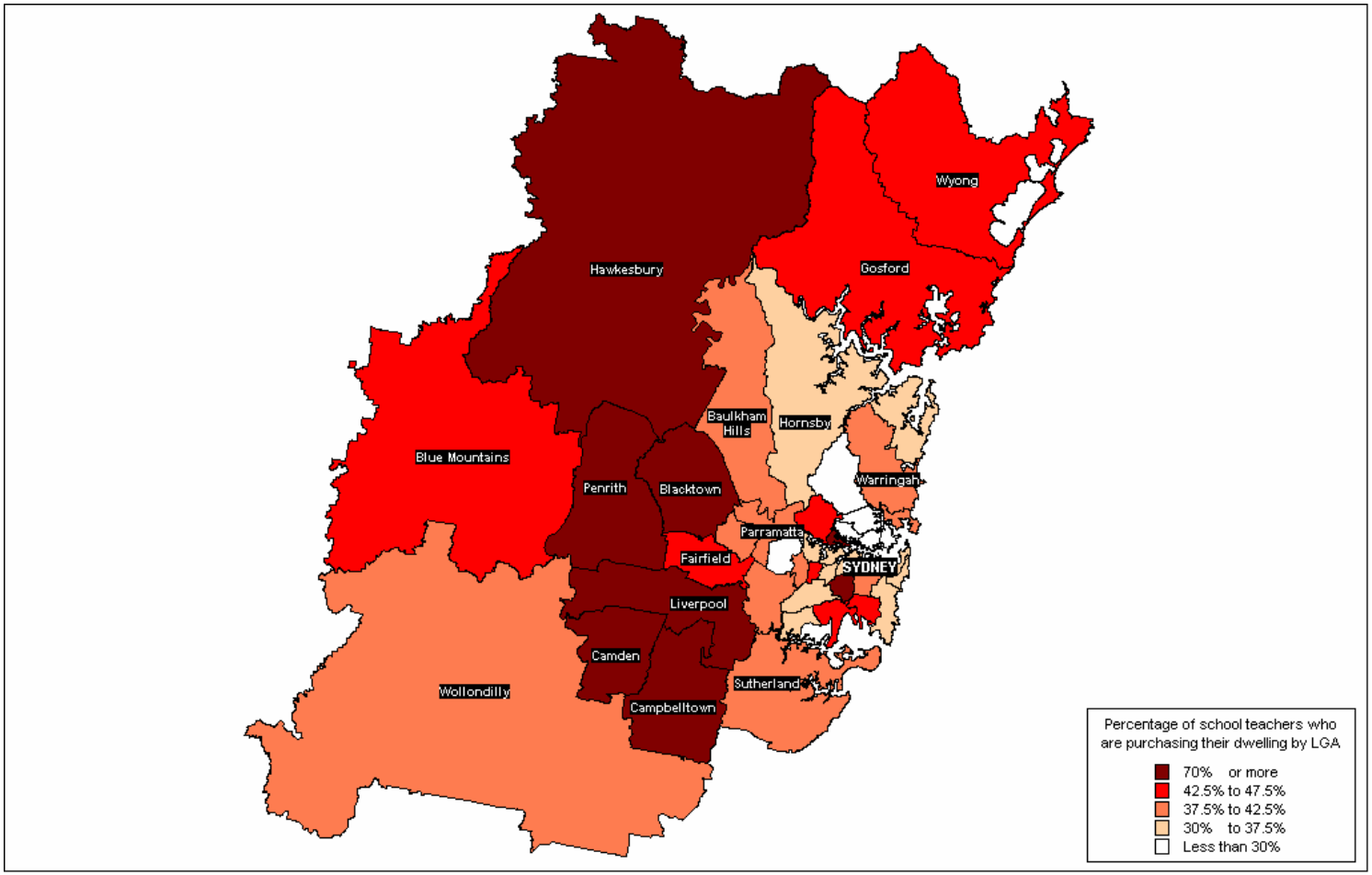


Figure 8.40: The proportion of MIH teachers who were privately renting their dwelling, 2001

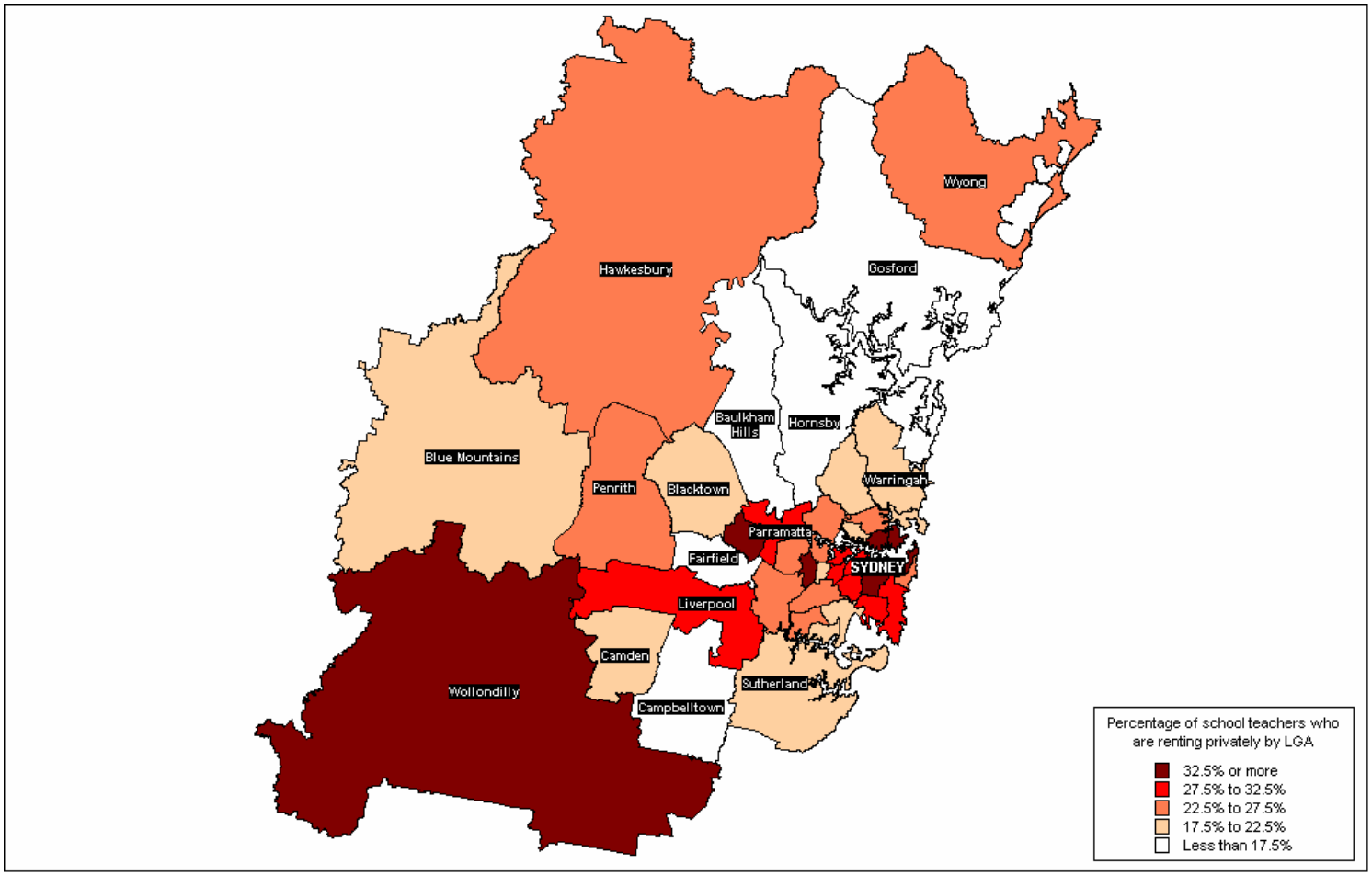


Figure 8.41: The proportion of MIH truck drivers who were purchasing their dwelling, 2001

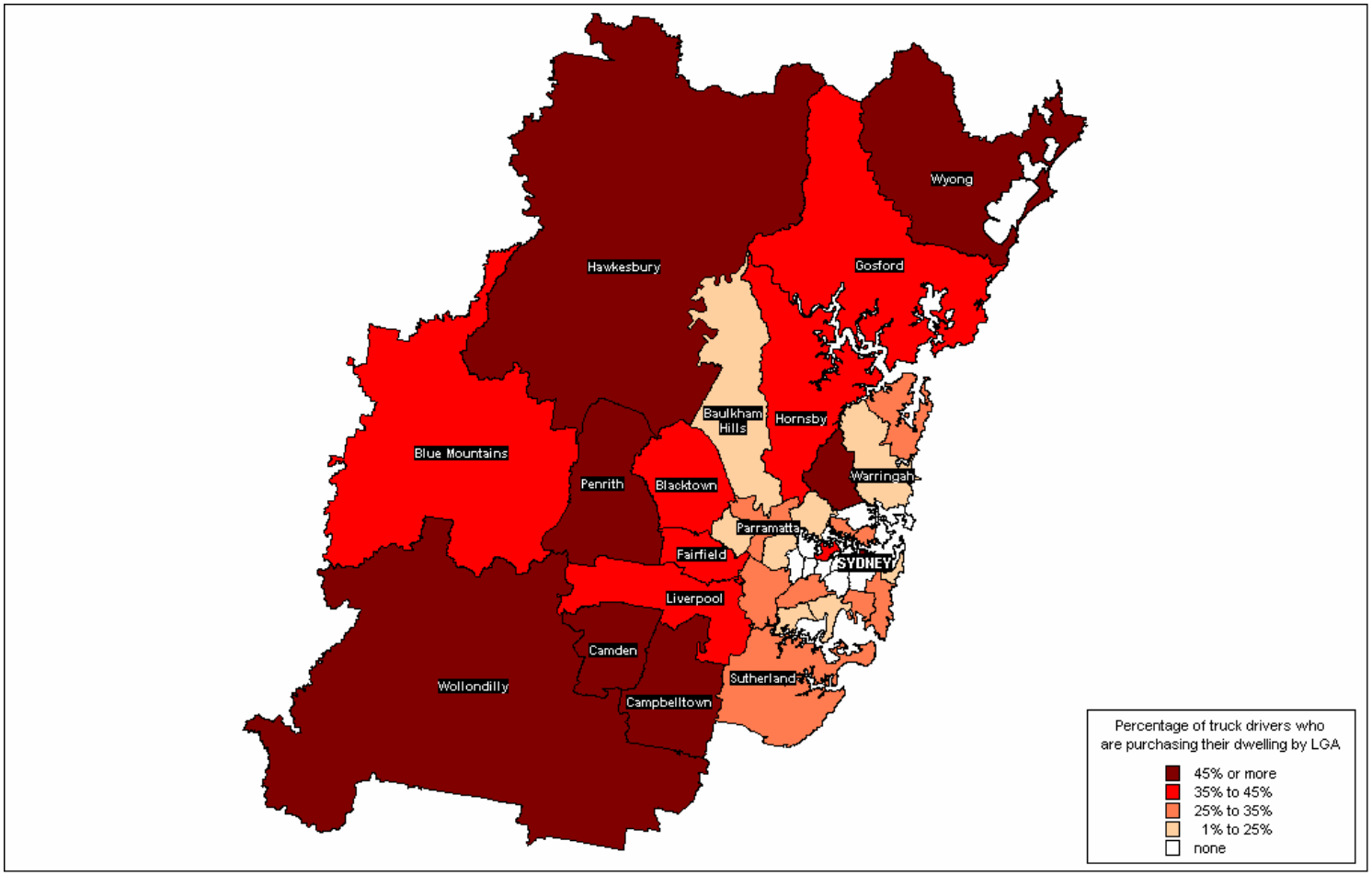
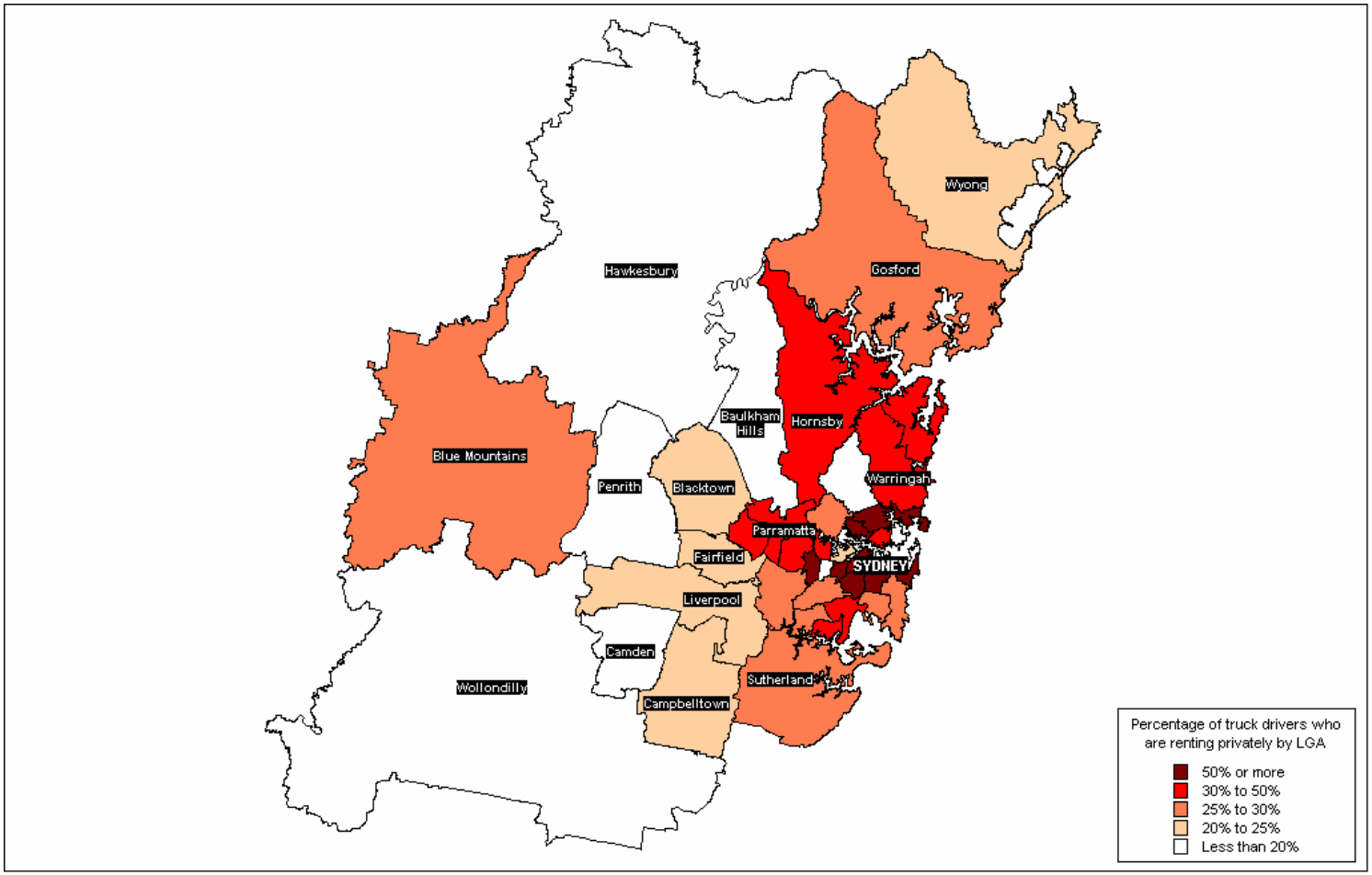


Figure 8.42: The proportion of MIH truck drivers who were privately renting their dwelling, 2001



8.7 Key workers: Age and tenure interrelationships

The discussion of the tenure outcomes for MIH key workers in the preceding section raises issues concerning the compositional effect noted in Chapter 6 above. If MIH key workers who live in the higher cost eastern suburbs have a higher predilection for rental compared to their compatriots who live in the western half of the city, is this related to any specific difference in the profile of the MIH population in these two area? It is clearly not an income generated outcome, as the incomes for this group are relatively constant within the MIH income band. To explore this issue, we commissioned further ABS tabulations to disaggregate the key worker groups by age and tenure. This section analyses these data. First, we review the age structure of the key workers by local government area to establish any age related patterns in their distribution. The results are portrayed in Figures 8.43 to 8.45. The following section then looks at the age-tenure relationship in more detail.

8.7.1 Age cohort analysis

MIH key workers aged 15-34 years
The analysis of the place of residence of key workers and their age showed some strong patterns through the cohorts. For those moderate income key workers aged between 15 and 34, the most popular LGAs to reside in were in the inner city areas such as Sydney City, South Sydney, Marrickville, Burwood, North Sydney and Willoughby. In these areas 40 per cent or more of the moderate income key workers residing within them were aged between 15 and 34 years. There appeared to be relatively large concentrations (between 35 per cent and 40 per cent) of key workers aged between 15 and 34 in a limited number of suburbs, such as Randwick and Waverley in the east, and Leichhardt and Ashfield in the inner west. Other strong concentrations of 15-34 year olds appeared further out in the west around Parramatta, and also in Penrith and Camden.

MIH key workers aged 35-49 years
The prominent locations that moderate income key workers aged between 35 and 49 years included those in middle suburban areas, namely Strathfield, Auburn, Bankstown, Canterbury and Hurstville. In these LGAs 50 per cent or more of MIH key worker residents were aged between 35 and 49. Slightly lower proportions (between 47 per cent and 50 per cent) were recorded in Liverpool, Fairfield and Campbelltown and well as far west in the Blue Mountains. Similar proportions were also recorded in areas to the far north of the Sydney region (Hornsby, Gosford and Wyong).

MIH key workers aged 50 years and over
The higher proportional concentrations of moderate income key workers aged 50 years and over were on the north shore and northern suburbs. Willoughby, Pittwater, Ku-ring-gai, Manly, Mosman, Hunters Hill and Baulkham Hills each recorded 26 per cent or more of MIH key worker residents aged 50 years of age or older. Areas along the waterways of the Parramatta River and Lane Cove River, such as Leichhardt, Concord, Drummoyne, Woollahra and Lane Cove were also relatively popular with this group, with between 24 per cent to 26 per cent of MIH key workers aged 50 years old or over.

8.7.2 Age by tenure analysis

In the following analysis, data for 'Rented not stated', 'Rented other', 'Other tenure' and 'Tenure not stated' are included in the Tables, but not commented on in the text. Together, these residual groups accounted for just 3.6 per cent of the total households

All Key Worker Groups

There was a strong overall relationship between age and tenure when all five MIH key worker groups are analysed together, reflecting housing career pathways from rental to ownership (Table 8.5). The 15 – 34 ages were strongly associated with private rental, which accounted for half (53 per cent) of this cohort, with a lower proportion purchasing their home (29 per cent). This age group accounted for half of all MIH key worker renting privately. The 35 – 49 cohort were strongly associated with home purchase (41 per cent), although private rental (28 per cent) and outright ownership (25 per cent) were also prominent. Half the 50 – 64 year cohort were outright owners, while only 17 per cent were private renters. The small number of key workers aged 65 or older were overwhelmingly outright home owners (77 per cent).

Table 8.5: Tenure and age of key workers (all groups)

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	721	2,165	2,120	202	5,208
Being purchased	1,914	3,636	1,113	27	6,690
Private rental	3,468	2,503	690	30	6,691
Rental-other	130	176	86	0	392
Rented-landlord not stated	17	9	3	0	29
Other tenure	188	179	54	3	424
Tenure not stated	69	115	66	0	250
Total	6,507	8,783	4,132	262	19,684
Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	13.8%	41.6%	40.7%	3.9%	100%
Being purchased	28.6%	54.3%	16.6%	0.4%	100%
Private rental	51.8%	37.4%	10.3%	0.4%	100%
Rental-other	33.2%	44.9%	21.9%	0.0%	100%
Rented-landlord not stated	58.6%	31.0%	10.3%	0.0%	100%
Other tenure	44.3%	42.2%	12.7%	0.7%	100%
Tenure not stated	27.6%	46.0%	26.4%	0.0%	100%
Total	33.1%	44.6%	21.0%	1.3%	100%
Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	11.1%	24.6%	51.3%	77.1%	26.5%
Being purchased	29.4%	41.4%	26.9%	10.3%	34.0%
Private rental	53.3%	28.5%	16.7%	11.5%	34.0%
Rental-other	2.0%	2.0%	2.1%	0.0%	2.0%
Rented-landlord not stated	0.3%	0.1%	0.1%	0.0%	0.1%
Other tenure	2.9%	2.0%	1.3%	1.1%	2.2%
Tenure not stated	1.1%	1.3%	1.6%	0.0%	1.3%
Total	100%	100%	100%	100%	100%

Figure 8.43: The Proportion of MIH Key Workers (all groups) Aged 15-34 years by LGA, 2001

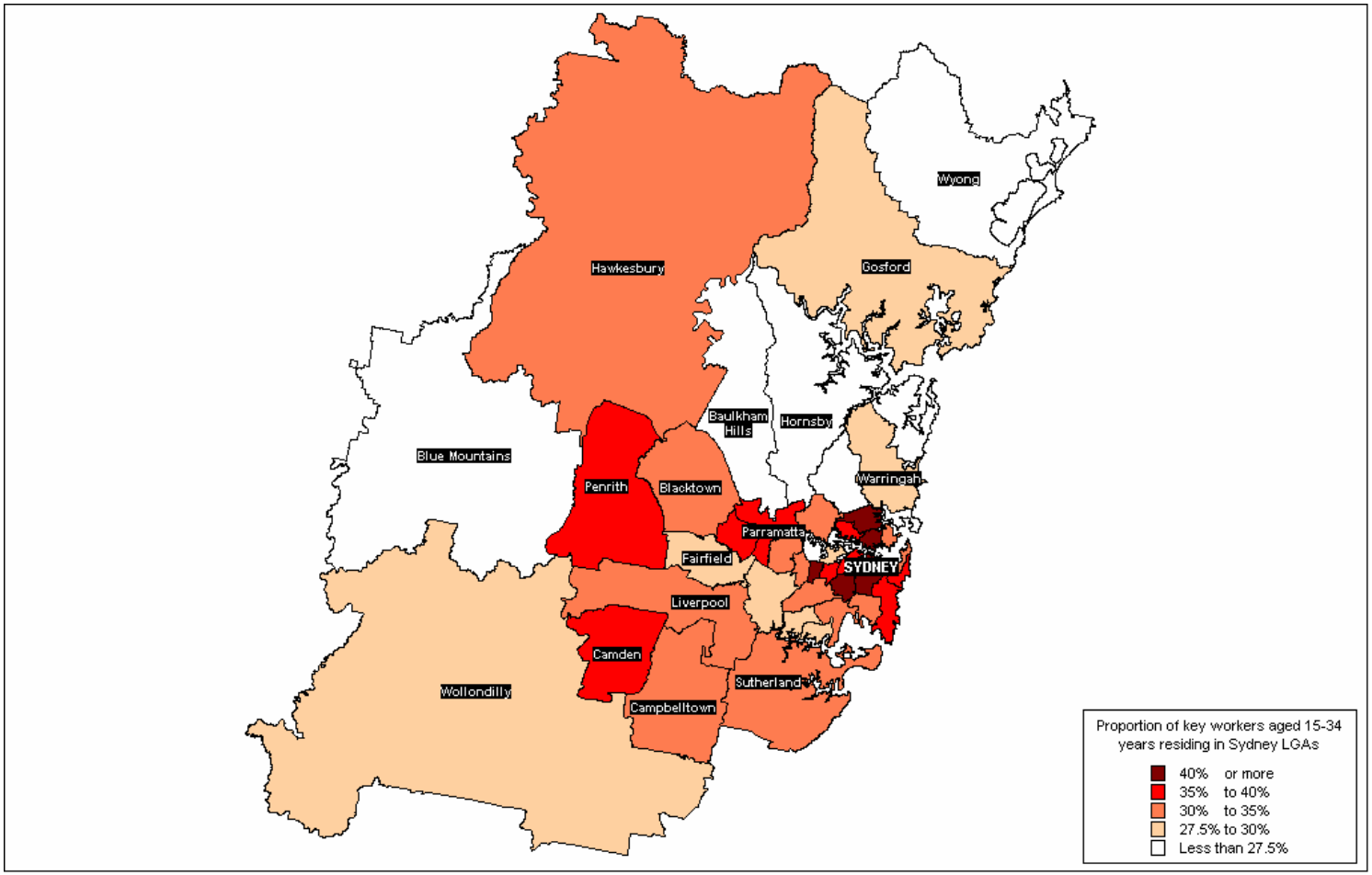


Figure 8.44: The Proportion of MIH Key Workers (all groups) Aged 35-49 years by LGA, 2001

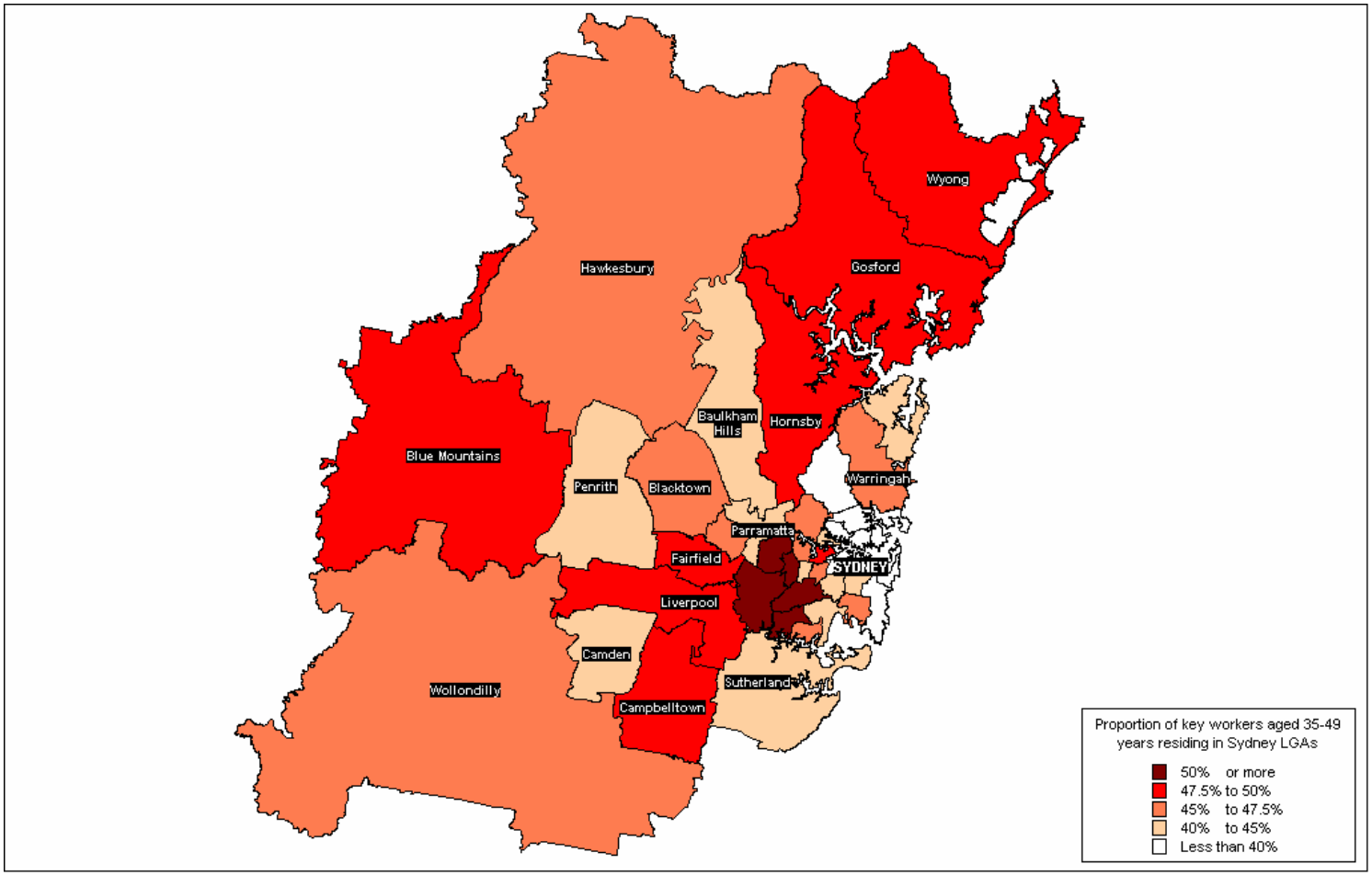
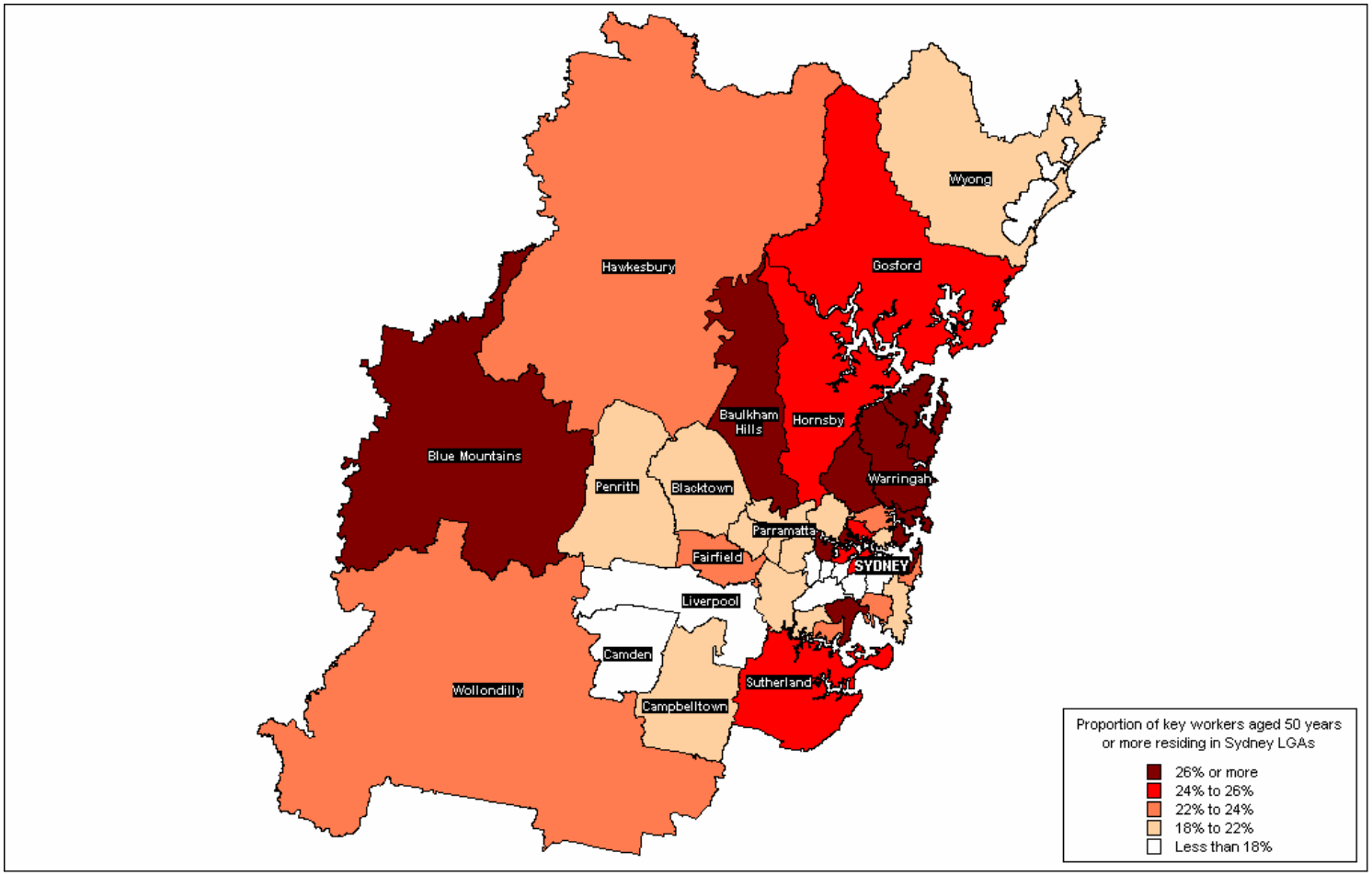


Figure 8.45: The Proportion of MIH Key Workers (all groups) Aged 50 years or more by LGA, 2001



Computing Professionals

Home owners
Middle income computing professionals who were home owners made up 19 per cent (842) of the computing professionals sample. Of those who fully owned their home, the majority were aged between 35 and 49 (52 per cent), whilst 26 per cent were aged between 15 and 34 and a similar 20 per cent were aged between 50 and 64 years old. The remaining 2 per cent were 65 years of age or older. As would be expected, home ownership within the age brackets increased as age increased. Only 11 per cent of this gourp aged 15 to 34 years were home owners, compared to almost half (45 per cent) of the 50 to 64 year olds.

Home purchasers
Home purchasers accounted for 28 per cent (1,219) of the middle income computer professionals. Of those home purchasers, approximately one third were aged between 15 and 34 years (35 per cent) and just over half were aged between 35 and 49 years (56 per cent). There were few computing professionals aged over 65 years, and overall. The 35 to 49 age bracket had the largest proportion of their age group purchasing a home (36 per cent), while approximately one quarter of 15 to 34 year olds (21 per cent) and 50 to 64 year olds (27 per cent) were home purchasers.

Private renters
Almost half (48 per cent) of middle income computing professionals were private renters, with approximately two thirds (62 per cent) being in the youngest age group category (15 to 34 years). Approximately two thirds (34 per cent) of private renters fell in to the 35 to 49 age bracket, whilst an insignificant number (4 per cent) were aged 50 or over. As expected, the opposite trend with regards to home ownership and age is found here with private rentals and age. As many as 63 per cent of 15 to 34 year old computing professionals rented privately, falling to 27 per cent of 50 to 64 year olds.

Summary
Few computer professionals were aged over 50 (9 per cent), while almost half were aged under 35 (47 per cent). This skewed aged distribution is reflected in the groups tenure characteristics. Almost half of this group were private renters (48 per cent), by far the largest proportion among the five gourps, with 30 per cent being private renters aged 15 – 43 years. The predominance of younger renters helps explain their residence in some of the inner city and eastern suburbs where house costs are high, but where rental supply is also high. As we saw in the earlier analysis, computing workplace locations were the most concentrated in areas with higher property values.

Table 8.6: Tenure and Age of Middle Income Computing Professionals

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	221	438	168	15	842
Being purchased	432	685	99	3	1,219
Private rental	1,286	709	85	3	2,083
Rental-other	28	12	6	-	46
Rented-landlord not stated	8	-	-	-	8
Other tenure	53	34	9	-	96
Tenure not stated	30	15	3	-	48
Total	2,058	1,893	370	21	4,342

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	26.2%	52%	20%	1.8%	100%
Being purchased	35.4%	56.2%	8.1%	0.2%	100%
Private rental	61.7%	34%	4.1%	0.1%	100%
Rental-other	60.9%	26.1%	13%	-	100%
Rented-landlord not stated	100%	-	-	-	100%
Other tenure	55.2%	35.4%	9.4%	-	100%
Tenure not stated	62.5%	31.3%	6.3%	-	100%
Total	47.4%	43.6%	8.5%	0.5%	100%

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	10.7%	23.1%	45.4%	71.4%	19.4%
Being purchased	21%	36.2%	26.8%	14.3%	28.1%
Private rental	62.5%	37.5%	23%	14.3%	48%
Rental-other	1.4%	0.6%	1.6%	-	1.1%
Rented-landlord not stated	0.4%	-	-	-	0.2%
Other tenure	2.6%	1.8%	2.4%	-	22%
Tenure not stated	1.5%	0.8%	0.8%	-	1.1%
Total	100%	100%	100%	100%	100%

Registered Nurses

Home owners

Just over one quarter (26 per cent) of middle income registered nurses owned their homes outright. Like computing professionals, older nurses were most likely to be home owners. More specifically, 10, 21 and 48 per cent of registered nurses aged between 15 and 34, 35 and 49 and 50 and 64 respectively were home owners. Only 9 per cent of registered nurses who owned a home were aged between 15 and 34.

Home purchasers

A third of middle income registered nurses were home purchasers (35 per cent). Over half (57 per cent) of these were aged between 35 and 49, with around a fifth aged both between 15 and 34 and between 50 and 64. Less than 1 per cent of registered nurses purchasing a home were 65 years old or more. Distributions amongst the age groups showed that approximately one third (30 per cent) of middle income registered nurses were home purchasers, whilst in the 35-49 age bracket, almost half (41 per cent) the registered nurses were home purchasers. Approximately one quarter (28 per cent) of registered nurses aged between 50 to 64 year olds and 17 per cent aged 65 or older were home purchasers.

Private renters
Approximately one third (34 per cent) of middle income registered nurses were private renters. Of these, 38 per cent were aged between 15 and 34, Just under half (47 per cent) were aged between 35 and 49, and 15 per cent were aged between 50 and 64. Private renters made up over half (55 per cent) the selected registered nurses in the 15 to 34 year age bracket. As expected, the percentage of MIH nurses renting privately decreased in each succeeding age bracket: 41 per cent of the 35 to 49 year old group and falling to 28 per cent of 50 to 64 year old group.

Summary
A quarter of registered nurses were aged over 50 (27 per cent), while half were aged 35 to 49 (49 per cent). Home buyer and ownership rates were therefore higher. A third were buying and a third were renting. Again, younger workers in this groups were predominantly renting (55 per cent) with home ownership increasing with age.

Table 8.7: Tenure and Age of Middle Income Registered Nurses

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	62	274	343	27	706
Being purchased	190	541	205	6	942
Private rental	346	427	141	3	917
Rental-other	12	34	12	-	58
Rented-landlord not stated	-	-	-		-
Other tenure	9	27	9	-	45
Tenure not stated	9	21	12	-	42
Total	628	1,324	722	36	2,710

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	8.8%	38.8%	48.6%	3.8%	100%
Being purchased	20.2%	57.4%	21.8%	0.6%	100%
Private rental	37.7%	46.6%	15.4%	0.3%	100%
Rental-other	20.7%	58.6%	20.7%	-	100%
Rented-landlord not stated	-	-	-	-	100%
Other tenure	20%	60%	20%	-	100%
Tenure not stated	21.4%	50%	28.6%	-	100%
Total	23.2%	48.9%	26.6%	1.3%	100%

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	9.9%	20.7%	47.5%	75%	26.1%
Being purchased	30.3%	40.9%	28.4%	16.7%	34.8%
Private rental	55.1%	32.3%	19.5%	8.3%	33.8%
Rental-other	1.9%	2.6%	1.7%	-	2.1%
Rented-landlord not stated	-	-	-	-	-
Other tenure	1.4%	2%	1.2%	-	1.7%
Tenure not stated	1.4%	1.6%	1.7%	-	1.5%
Total	100%	100%	100%	100%	100%

Primary and Secondary School Teachers

Home owners
Some 30 per cent of the 4,797 middle income school teachers were home owners. Home ownership was highest in 35 to 49 age bracket (46 per cent), with a similar figure seen in the 50 to 64 age bracket (42 per cent). Only 10 per cent of home owners were aged between 15 and 34. Again home ownership increased with age. Approximately half (51 per cent) of those aged between 50 and 64 owned their home.

Home purchasers
The largest tenure type for middle income school teachers was home purchasing (41 per cent), the highest proportion among all five key worker groups. As expected, the majority of the home purchasers came from the two youngest age brackets (81.3 per cent). Almost three in five MIH tacher purchasers (57 per cent) were aged between 35 and 49, whilst almost one quarter (24 per cent) were aged between 15 and 34.

Private renters
Just under a quarter (24 per cent) of middle income school teachers were private renters. Of those, almost half (47 per cent) were aged between 35 and 49, with a large proportion (40 per cent) also being aged between 15 and 34. As age increased, the portion of private renters in each category decreased, from 40 per cent among those under 34 years to 13 per cent of 50 to 64 year olds.

Summary
School teachers had a similar age profile to nurses, with a quarter aged over 50, a quarter aged under 35, and a half aged between 35 and 39. However, teachers were more likely to be buying a home than renting, compared to nurses, and home buying was much more prevalent among younger teachers than was the case with younger computer professionals (42 per cent of under 34 year old teachers were buying and 40 per cent were renting). Home purchase was also more prevalent in the middle age groups, and outright ownership particularly high among the older group.

Table 8.8: Tenure and Age of Middle Income School Teachers

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	145	662	609	36	1,452
Being purchased	474	1,138	363	9	1,984
Private rental	458	519	156	6	1,139
Rental-other	20	24	18	-	62
Rented-landlord not stated	3	-	-	-	3
Other tenure	40	51	15	-	106
Tenure not stated	-	27	24	-	51
Total	1,140	2,421	1,185	51	4,797

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	10%	45.6%	41.9%	2.5%	100%
Being purchased	23.9%	57.4%	18.3%	0.5%	100%
Private rental	40.2%	45.6%	13.7%	0.5%	100%
Rental-other	32.3%	38.7%	29%	-	100%
Rented-landlord not stated	100%	-	-	-	100%
Other tenure	37.7%	48.1%	14.2%	-	100%
Tenure not stated	-	52.9%	47.1%	-	100%
Total	23.8%	50.5%	24.7%	1.1%	100%

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	12.7%	27.3%	51.4%	70.6%	30.3%
Being purchased	41.6%	47%	30.6%	17.6%	41.4%
Private rental	40.2%	21.4%	13.2%	11.8%	23.7%
Rental-other	1.8%	1%	1.5%	-	1.3%
Rented-landlord not stated	0.3%	-	-	-	-
Other tenure	3.5%	2.1%	1.3%	-	2.2%
Tenure not stated	-	1.1%	2%	-	1.1%
Total	100%	100%	100%	100%	100%

Truck Drivers

Home owners

Home owners accounted for 29 per cent of the 3,261 MIH truck drivers, on a par with school teachers. Of these, half (51 per cent) were aged between 50 and 64, whilst approximately one third (36 per cent) were aged between 35 and 49. Over half (54 per cent) of truckers aged between 50 and 64 were home owners. At the younger end of the scale, only 11 per cent of 15 to 34 year olds owned a home and 23 per cent of 35 to 49 year olds.

Home purchasers

Home purchasing was the largest goup among truck drivers (38 per cent). Just over half (53 per cent) of home purchasers were aged between 35 and 49, while there were also a relatively large proportion of 15 to 34 year olds purchasing homes (29 per cent). Just over two in five 15 to 34 year old and 35 to 49 year old truckers were purchasing a home (44 and 43 per cent respectively). .

Private renters

Just over one quarter (27 per cent) of middle income truck drivers were private renters, with just under half of these (48 per cent) being aged between 35 and 49. Private renters made up just over one third (37 per cent) of truck drivers aged between 15 and 34 and 27 per cent of truck drivers aged between 35 and 49.

Summary

Truck drivers had high overall home purchase levels and lower rental levels. Home buying among the youngest truckers was the highest of all five groups at 44 per cent, and rental levels were the lowest (37 per cent). The proportion of truckers in the older age group 50 to 64 years was high (27 per cent) and outright home ownership among this cohort was the highest of all the groups (54 per cent).

Table 8.9: Tenure and Age of Middle Income Truck Drivers

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	94	346	479	28	947
Being purchased	360	649	223	3	1,235
Private rental	306	414	145	3	868
Rental-other	12	49	25	-	86
Rented-landlord not stated	-	6	-	-	6
Other tenure	37	27	6	-	70
Tenure not stated	12	25	12	-	49
Total	821	1,516	890	34	3,261

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	9.9%	36.5%	50.6%	3%	100%
Being purchased	29.1%	52.6%	18.1%	0.2%	100%
Private rental	35.3%	47.7%	16.7%	0.3%	100%
Rental-other	14%	57%	29.1%	-	100%
Rented-landlord not stated	-	100%	-	-	100%
Other tenure	52.9%	38.6%	8.6%	-	100%
Tenure not stated	24.5%	51%	24.5%	-	100%
Total	25.2%	46.5%	27.3%	1%	100%

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	11.4%	22.8%	53.8%	82.4%	29%
Being purchased	43.8%	42.8%	25.1%	8.8%	37.9%
Private rental	37.3%	27.3%	16.3%	8.8%	26.6%
Rental-other	1.5%	3.2%	2.8%	-	2.6%
Rented-landlord not stated	-	0.4%	-	-	0.2%
Other tenure	4.5%	1.8%	0.7%	-	2.1%
Tenure not stated	1.5%	1.6%	1.3%	-	1.5%
Total	100%	100%	100%	100%	100%

Sales Assistants

Home owners

Home ownership at 28 per cent, was around the middle of the five gruops. Of these, 41 per cent were aged 50 to 64 and 35 per cent were aged 35 to 49. In fact, home ownership rates among the 50 to 65 year old cohort (54 per cent) was the highest of all five groups.

Home purchasers

Home purchase levels were among the lowest of the five groups, however, at 29 per cent. Of these, almost half (48 per cent) were aged between 35 and 49. Having said that, among those who were buying, over a third were aged under 35 years (35 per cent), suggesting a sizele proportion wo do buy do so at a relatively younger age.

Private renters

Private rental was the most predominant tenure type for middle income sales assistants, with over one third (37 per cent) being private renters. Of those

approximately two thirds (64 per cent) were in the youngest age category (15 to 34 years), whilst a quarter (26 per cent) were in the next age category (35 to 49 years) There was a very strong tendency for the percentage of private renters in each age group to decrease as age increases. Over half the sales assistants aged between 15 and 34 were private renters along with approximately one in four in the 34 to 49 year age bracket.

Summary
Like computer professionals, sales assistants were biased towards the younger age cohorts, with two in five (41 per cent) aged under 35 years and only a fifth (21 per cent) aged between 50 and 64. This more youthful age profile is reflected in the relatively high proportion renting privately (37 per cent). Indeed, a quarter (23 per cent) of this group were renters under 35 years and 58 per cent of this age cohort were renters. However, home ownership was predominant among older sales assistants and as many as 54 per cent of 50 to 64 year olds were outright owners, on a par with older truckers.

Table 8.10: Tenure and Age of Middle Income Sales Assistants

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	199	445	521	96	1,261
Being purchased	458	623	223	6	1,310
Private rental	1,072	434	163	15	1,684
Rental-other	58	57	25	-	140
Rented-landlord not stated	6	3	3	-	12
Other tenure	49	40	15	3	107
Tenure not stated	18	27	15	-	60
Total	1,860	1,629	965	120	4,574

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	15.8%	35.3%	41.3%	7.6%	100%
Being purchased	35%	47.6%	17%	0.5%	100%
Private rental	63.7%	25.8%	9.7%	0.9%	100%
Rental-other	41.4%	40.7%	17.9%	-	100%
Rented-landlord not stated	50%	25%	25%	-	100%
Other tenure	45.8%	37.4%	14%	2.8%	100%
Tenure not stated	30%	45%	25%	-	100%
Total	40.7%	35.6%	21.1%	2.6%	100%

Tenure Type	Age group				Total
	15-34yrs	35-49yrs	50-64yrs	65yrs or more	
Fully Owned	10.7%	27.3%	54%	80%	27.6%
Being purchased	24.6%	38.2%	23.1%	5%	28.6%
Private rental	57.6%	26.6%	16.9%	12.5%	36.8%
Rental-other	3.1%	3.5%	2.6%	-	3.1%
Rented-landlord not stated	0.3%	0.2%	0.3%	-	0.3%
Other tenure	2.6%	2.5%	1.6%	2.5%	2.3%
Tenure not stated	1%	1.7%	1.6%	-	1.3%
Total	100%	100%	100%	100%	100%

8.5.3 Summary

The age by tenure analysis confirms that the geography of the tenure distribution of the five MIH key worker groups is related to their age profile. Younger workers are much more likely to rent, while the middle age group were predominantly buyers, and outright home ownership predominated among the older groups. This relationship for all five key worker groups is summarised in Table 8.11. This in part explains the tenure distributions we saw in Section 8.4 above, with rental predominating in the inner and eastern high cost suburbs and home purchase in the middle and outer areas. Home purchase was a dominant tenure in the northern suburbs, with a substantial older population.

Table 8.12 summarises the overall tenure position for the five groups. The prevalence for renting among computer professionals is highlighted, as is the preference for home purchase among teachers and truckers.

Table 8.11: Summary of the Age and Housing Tenure Profile of Five Key Worker Groups, Sydney 2001.

	Age group				**Total**	
Tenure	**15-34yrs**	**35-49yrs**	**50-64yrs**	**65yrs or more**	**Key workers**	**Sydney**
Fully owned	11.1	24.6	51.3	77.1	**26.5**	**39.0**
Being purchased	29.4	41.4	26.9	10.3	**34.0**	**23.7**
Private rental	53.3	28.5	16.7	11.5	**34.0**	**22.2**
Other	6.3	5.4	5.1	1.1	**5.5**	**15.1**
Total(100%)	**6,507**	**8,783**	**4,132**	**262**	**19,684**	**-**

Table 8.12: Summary of Tenure Profile of the Five Key Worker Groups, Sydney, 2001

Tenure	**Computer professionals**	**Registered nurses**	**School teachers**	**Truck drivers**	**Sales assistants**	**Key Workers**
Fully owned	19.4%	26.1%	30.3%	29.0%	27.6%	**26.5**
Being purchased	28.1%	34.8%	41.4%	37.9%	28.6%	**34.0**
Private rental	48.0%	33.8%	23.7%	26.6%	36.8%	**34.0**
Other	4.5%	5.3%	4.6%	6.4%	7.0%	**5.5**
Total (100%)	**4,342**	**2,710**	**4,797**	**3,261**	**4,574**	**19,684**

The analysis also highlights the significant dependency on private rental and home purchse among these MIH key workers compared to the wider Sydney population. From Landcom's position, the prevalence of rental among this group, in particular,

suggests a substantial market for affordable home purchase options if these can be brought forward in appropriate locations.

8.8 Key workers and future housing demand

While the current housing market position of the key worker categories analysed here indicates a latent demand for affordable home ownership options in higher cost areas of Sydney, as evidenced by the tenure mismatch between the eastern and western suburbs, it says little about whether this pattern of demand may continue. Table 8.13 sets out a comparison between the top 30 MIH occupational groups from Table 8.2 and the assessment of future national job growth in these occupations taken from the Commonwealth Department of Employment and Workplace Relations' "Job Prospects and Future Jobs Growth (2011)" report (DEWR, 2004). While not claiming to be representative of the MIH group as a whole, the table does highlight the positive employment prospects for many of the occupations listed in these top 30 MIH jobs.

Overall, six of the 30 in the list have been rated as having 'very good' job prospects to 2011, and 14 are rated 'good'. Of the "key worker" groups analysed in this chapter (teachers are split into two in the table), two are rated as having 'very good' prospects (secondary school teachers and registered nurses) and four as having 'good' prospects. If the four ratings categories are assigned a score from 1 to 4 with 4 = very good, the average score for the top 30 of 2.8 compares to an average score across all the job categories in the DEWR report of 2.5. Job prospects for our five groups average 3.3, well above the average.

Turning to future job growth, the DEWR report assesses each occupation on a scale from 1 to 10 with 10 having the highest prospects for growth to 2011. In our table, twelve categories are assessed as having growth ratings of eight or more, and a further 10 rate between 6 or 7. The average for the top 30 MIH occupations is 6.9 compared to the average for all occupations in the DEWR report of 6.2. The average across our MIH key worker groups is 8.0, again well above the average.

From this short analysis, it appears that for our key worker occupations, job prospects and future job growth will be above average for the next two decades. The implication is that there is likely to be continuing demand for housing from this group. Strongest job growth is expected from sales assistants, computing professionals and registered nurses, all of whom have significant workplace concentrations in the inner, east and northern areas of Sydney. It therefore seems likely that demand for affordable housing in these areas from these occupational groups will remain strong.

Table 8.13: Comparison with top 30 MIH occupational groups in Sydney and assessed national job prospects

Occupation	Number of MIH Sydney	Job Prospects	Future Job Growth*
Sales Assistants	**4,563**	Good	9
Computing Professionals	**4,347**	Good	10
Secretaries and Personal Assistants	3,678	Average	1
Sales Representatives	3,500	Average	6
Shop Managers	3,268	Average	5
Truck Drivers	**3,246**	Good	6
Storepersons	3,236	Average	6
Accountants	3,103	Very Good	10
Cleaners	2,844	Average	4
Secondary School Teachers	**2,778**	Very Good	7
Registered Nurses	**2,709**	Very Good	9
Sales and Marketing Managers	2,623	Good	9
General Clerks	2,536	Good	9
Carpentry and Joinery Tradespersons	2,414	Average	5
Electricians	2,405	Good	7
Project and Program Administrators	2,279	Very Good	10
Primary School Teachers	**2,088**	Good	7
Motor Mechanics	1,951	Good	3
Accounting Clerks	1,892	Average	3
Office Managers	1,841	Good	9
Metal Fitters and Machinists	1,733	Average	3
General Managers	1,710	Good	8
Stock and Purchasing Clerks	1,608	Average	7
Delivery Drivers	1,559	Below average	5
Inquiry and Admissions Clerks	1,440	Good	10
Plumbers	1,414	Good	7
Human Resource Professionals	1,387	Very Good	10
Building and Construction Managers	1,351	Average	6
Receptionists	1,336	Good	7
Marketing and Advertising Professionals	1,276	Very Good	9
Receptionists	1,336	Good	7
Marketing and Advertising Professionals	1,276	Very Good	9

* Future Job Growth scaled from 1 to 10 in order of increasing growth.

Source: Department of Employment and Workplace Relations (2004)

9 CONCLUSIONS

This report has ranged broadly over the housing situation of a particular group of Sydney's population, namely those households who have incomes 10 percentage points either side of the median household income. In mid-2003 this was equivalent to an annual household income of approximately $42,000 to $65,000. In 2001 an estimated 230,000 households fell into this category in Sydney as a whole. The findings do not, therefore, reflect the situation of Sydney as a whole. Neither are these households particularly disadvantaged in financial terms. They are simply in the middle of income spectrum. This group is significant as it the target for Landcom's Moderate Income Housing strategy which is attempting to establish new models of providing housing that are more affordable to households in this income range. As we have seen, around a quarter of a million of these households currently live in Sydney, spread widely across the city, but with clear geographical differences in terms of their housing market position. This represents a substantial target market for such a housing product.

As the key empirical findings are summarised in the Executive Summary, the conclusions will concentrate on making some brief points about the implications of the findings for both the housing market in Sydney, the housing prospects for moderate income households and for Landcom's Moderate Income Housing policy.

The affordability problem for Sydney is structural

The first point to stress is that the results of the analysis of affordability trends presented in Chapter 4 point to a structural trend in declining affordability across Sydney over the twenty or so years to 2003, particularly in the latter half of this period. While there is indication of a property price "bubble" in the period between 2001 and 2003 (the dates are determined by available data), it is clear that property prices have moved against household on median incomes during this time. There are certainly cyclical peaks and troughs, but the underlying affordability situation appears to have deteriorated.

While households on moderate incomes have never found housing cheap during this period, it is clear that they have become more disadvantaged, unless they have access to substantial equity from previous home ownership or other sources. Households at the bottom of the moderate income category (at the 40th percentile) have been most severely disadvantaged compared to those at the top of the band (the 60th percentile). The problem first home owners face in this kind of increasingly unaffordable market should be quite evident from these findings.

While most MIH in Sydney do not face immediate affordability problems, in that the costs of their accommodation does not account for excessive proportions of their incomes, around 16 per cent, or 36,000 households, were assessed as paying over 30 per cent of t heir incomes in wither mortgage repayments or rent in 2001. Some 57 per cent of these were home buyers and 42 per cent renting privately. More significantly, this total represents just under one in three of those MIH actively buying or renting privately in Sydney. This represents a significant potential market for a MIH affordable housing product.

The geography of unaffordability has become more pronounced

It is also clear that house prices in the inner, eastern and northern suburbs have outstripped other areas of the city, often by a significant amount. The housing market has become more polarised as a result. This has meant that it has become even harder for a household with a moderate income to compete in the homeownership markets of inner and eastern Sydney. Opportunities are increasingly limited to middle and outer city LGAs. But even here, as the point-in-tine survey showed, only a limited amount of housing for sale is affordable to MIHs without either substantial equity or a substantial commitment of income to meet repayment costs.

The impact of interest rates

While it might be argued that low interest rates make mortgages, and hence housing, more affordable, in practice all that happens is the increased lending capacity is capitalised into higher prices. As a consequence, despite low interest rates, moderate income households are still being pushed out of the inner city housing market. Moreover, the analysis presented in Chapter 5 showed just how vulnerable these households would be if interest rates started to trend upwards towards the longer term average.

The segmented nature of the moderate income housing market

While moderate income households characterise all sections of the population, the analysis in Chapter 6 showed that MIHs are more likely to be couples with children or single people, compared to Sydney's population. This is important, because the former are less likely to find suitable accommodation in the more affordable flat market, although this kind of accommodation may be suitable for single person households.

There were also differences between MIHs who rent and those who own or are buying their home. The former group account for a much higher proportion of the MIH market in the inner and eastern LGAs, a reflection of higher property prices there. Put simply, MIHs have little option than to rent if they wish to locate in these areas. Suburban MIHs are more likely to be buying their home or to own in outright. Age is also implicated, with younger MIHs much more likely to be renting their home and older MIHs more likely to be buying their home.

The implication is that MIH have little choice but to move to more suburban locations if they want to buy. Affordability problems are also most common for both renters and home buyers in the higher value inner and eastern LGAs.

These findings show that far from being homogenous, a range of MIH sub-markets exists, suggesting a moderate income housing product for this group needs to offer a diversity of housing options in a range of locations. Current planning policy settings that offer only an affordable option in the form of higher density flats in central locations are unlikely to be appropriate for many MIHs with affordability problems.

The limited opportunities for MIHs without equity

The analysis presented in Chapter 7 based on a survey of the available housing in Blacktown, Liverpool and Campbelltown, indicated just how limited the options are for MIH who want to buy, even in these three LGAs where property prices are among the most affordable in Sydney. Only one in ten properties for sale were affordable without. Moreover, families were considerably disadvantaged, with most affordable accommodation being smaller flats. Households at the bottom of the MIH range were virtually priced out of the market in these three areas altogether, even for the cheapest flats.

However, opportunities to rent were much more plentiful, confirming just how important the rental market is for this group. Whether this represents a suitable long term option for MIHs in these areas would need further research. These findings highlight a potential area of vulnerability for the MIH group. If the rental market either begins to falter due to disinvestment by investors or rents start to rise significantly, perhaps in response to falling capital returns on rental investment, then even in these locations, this group could find its housing options severely being squeezed.

The demand for affordable housing opportunities for Key Workers?

The findings also raise a central issue of relevance to the so-called "key worker" debate**.** What this analysis has shown is that middle income households in significant labour market groups face a choice in Sydney. The younger workers in the key worker groups analysed in Chapter 8 are likely to find jobs and homes in the inner areas, but they will need to rent rather then buy their homes. As these workers mature and look for home ownership options, then they appear to be shifting their homes to other locations in the middle and outer suburbs. Of course, younger workers in the outer areas also may have higher home purchase rates (although the data analysed here was not able to show that), but it seems appropriate to conclude that the price structure of the Sydney housing market means that key workers who work and live in the eastern half of the city have less opportunity to buy their homes and therefore are constrained to rent. A key question, therefore, is that if the private rental sector suffers a decline in these areas to any great degree, the housing options for these groups could be severely constrained. These populations are also much less likely to find stable accommodation in the inner areas and will not be able to stay there if they wish to buy a home. Employment retention rates in inner areas in these jobs are therefore likely to be low.

This is not just a function of life cycle. If it were, the case that these workers rent while young and buy as they mature, then there would not be such a distinctive differentiation between the location of buyers and renters from the same group. Moreover, it is unlikely that this differentiation is simply a life-style choice – once you buy you move to the suburbs. Rather, the trends illustrated in this report are the outcome of constrained housing choices for our MIH group. They simply cannot afford to buy as first home owners in inner areas and therefore move to more affordable locations when they do buy.

This may, in part, explain the documented decline over recent years in home ownership rates among younger age cohorts in Australia. It may be that some of this decline in home purchase, or at least deferral of purchase, is related to the spatial differentiation of affordable housing opportunities: namely the difficulty of home purchase in inner city locations where many younger people spend the first decade or two of their working life and where jobs in growth sectors are concentrated. Those who remain over the long term in inner locations may never get the chance to purchase, and may remain trapped in rental accommodation if they remain there. If so, this may have repercussions in later life when access to equity in the form of housing wealth will play an increasingly important component in differentiating living standards. Exclusion from this wealth will have significant impacts on households left out of home ownership or who enter it later in life, especially those reliant on only one income.

The reliance on renting for large numbers of the MIH key worker groups, especially younger workers who currently live in job-rich inner city locations, is potentially significant for Landcom's Moderate Income Housing Policy. The prevalence of rental among this group, particularly among the younger workers, suggests a substantial market for affordable home purchase options if these can be brought forward in appropriate locations.

Future demand

Finally, it is highly likely that demand for affordable housing from this moderate income group is likely to persist or grow. As the analysis of future job growth among the largest MIH occupational groups showed, the majority are assessed as having good job growth prospects in the next two decades across Australia. Moreover, the 'key worker' groups analysed in Chapter 8 had significantly higher than average likelihood of growth.

Implications for the demand for moderate income housing

These findings suggest that there is certainly a potential demand for housing marketed to the moderate income group in Sydney, especially those without substantial equity. Given that almost half the MIHs estimated to have been in housing stress in 2001 were renting, then first home owners would form a major source of this market. In absolute terms, even this market represents around minimum of around 15,000 dwellings alone.

Moreover, the distribution of the MIH sector indicates that housing opportunities could be widely provided across Sydney, with particular focus on bringing forward opportunities in the higher cost areas.

The potential market is not a single market. The profile of the MIH group indicates a wide range of housing product will be needed to meet a diverse demand from a diverse group.

The likely future growth of jobs in moderate income key worker groups also indicates that the demand for such housing will continue into the foreseeable future as Sydney continues to grow.

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