Implementing metropolitan planning strategies: taking into account local housing demand
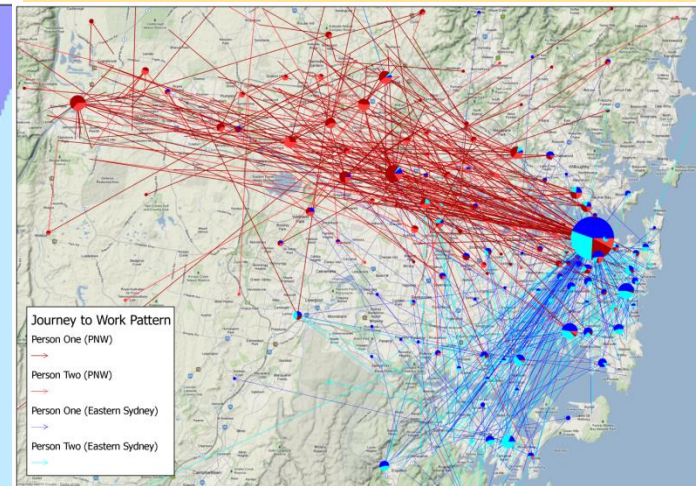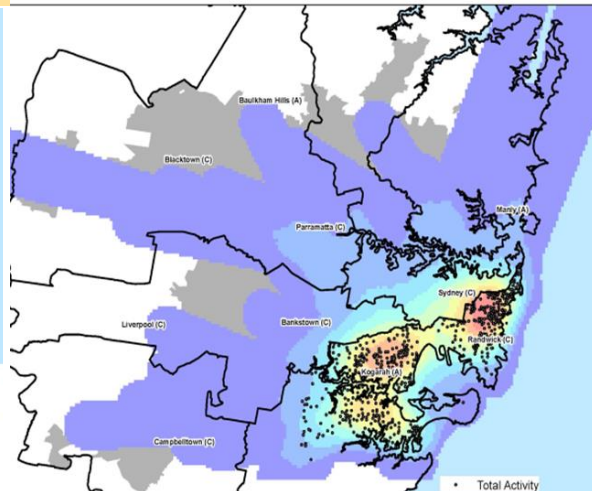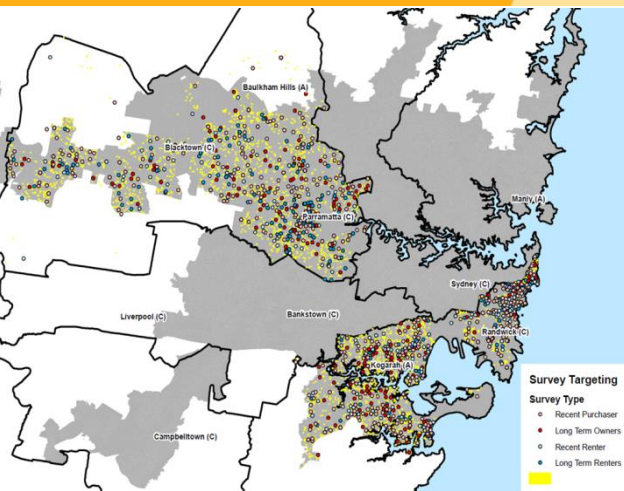
SURVEY REPORT

City Futures Research Centre, June 2013

Never Stand Still

1

INTRODUCTION
Survey Report

This report (and underlying datasets) provides one of the two principal final outputs from the ARC Linkage Project *Implementing metropolitan planning strategies: taking into account local housing demand (LP0990075)*. Through this research, an evidence-based 'toolkit' has been developed that can inform the strategic planning process.

The toolkit does not intend to provide a further iteration of the 'predict and provide' techniques which have predominated in metropolitan planning frameworks in recent decades. Rather the objective of this research has been to offer a more nuanced understanding of how household and population forecasts actually translate into outcomes within the housing system, and how this translation process is shaped by the contextual factors in different parts of the city. It does not provide an alternative 'black box' model from which to derive targets. It does, however, underpin an understanding of how the city 'works' and how those drivers shift the city's spatial formation over time. It offers a framework upon which the concept of 'city shapers' can be articulated.

We report here on the development of a series of housing demand surveys and findings and analysis from piloting those surveys. The surveys represent one of the core elements of the toolkit – the other being the development of a methodology for determining – and then using as an analytical tool – Housing Market Demand Areas making up the metropolitan geography of Sydney. As shall be discussed, these component parts are inevitably highly linked – the HMDA component provides the spatial frame for our surveys and resulting insight. Full discussion of the HMDA component is provided in the companion Technical Report (Tice et al., 2013).

City Futures

SYDNEY HOUSING SURVEYS
Implementing Metropolitan Planning Strategies: taking into account local housing demand

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1. Research Overview

RESEARCH OVERVIEW

> **In this section, we provide a brief overview of the wider ARC research project within which the development and piloting of the local demand surveys sit. The other core strand of the toolkit developed through this project – the determination of Housing Market Demand Areas and analysis undertaken using the HMDA as a spatial framework – are presented in the companion Technical Review. The methodology behind the HMDA development and the resulting geographies are integral to this survey component as the subregions identified provide the spatial remit of the surveys piloted.**

Background to research

The aims, objectives and delivery of metropolitan plans have been largely shaped and informed by traditional forecasting and 'predict and provide' techniques, where future housing supply is determined in line with envisaged economic growth assumptions and projected migration and demographic characteristics. Typically, time horizons are broad, and the geographies at which the drivers of housing need and demand are equally so. Such projections portray a sense of certainty, which unfortunately rarely transpires in reality.

We also know that the real world dynamics of housing market operation, pivotal to facilitating the delivery of metropolitan strategies, complicate the assumed interplay between housing supply and demand.

The implications of housing market segmentation and the differential impact of drivers of housing demand across Sydney in recent years act to highlight the fact that policymakers and practitioners require a more effective understanding of demand issues at the local submarket level. Different parts of the city work in different ways. While their relative roles, and 'structured coherences', demonstrate substantive path dependencies, over time these housing submarkets might either benefit or be disadvantaged by broader macroeconomic changes, changing labour market and employment profiles, etc. These more historical, contextual considerations confound household forecasts and urban capacity models, and they do so with geography and space playing a key role.

The need to better understand housing demand as well as supply drivers at a variety of spatial scales has emerged as a major issue impacting on the effective delivery of recent metropolitan planning and infrastructure strategies in Australia's cities.

ARC Linkage Research

The research provides a systematic, evidence-based framework for housing demand assessment that can assist government planners, community stakeholders and developers in the strategic planning process. The Linkage Project, commencing in 2010, grew out of initial work conducted by City Futures with one of our partners, Landcom (now UrbanGrowth NSW), looking at demand dynamics in different areas on the urban fringe. The project's other partner – the Department of Planning's (now Department of Planning and Infrastructure) Metropolitan Development Program has had an interest in strengthening their understanding of demand dynamics to complement supply side data and analytical capabilities.

RESEARCH OVERVIEW

Rationale for partner interest:

- Good understanding of supply side issues with less handle on housing demand

- Recognition that supply/demand dynamics need to be understood at a variety of spatial scales

- Ongoing interest in Greenfield/fringe dynamics, but increased recognition of existing areas as central to understanding supply/demand trends

- Recognition of the limitations of forecasting/modelling/ urban capacity approaches alone – there is a need for more nuanced, iterative understanding of demand

Core questions directing the research

- **How can housing demand at a local or submarket scale be conceptualised to help inform, shape and review metropolitan strategic planning and delivery frameworks?**

- **How can these approaches help inform current strategic planning frameworks, such as the MDP (Metropolitan Development Program)?**

Key principles shaping our research approach

Modelling the changing demand for housing is difficult. Changes to housing and urban policy, together with the complex and often irrational behavioural dynamics that shape our relationship with housing and what we are prepared to pay for it, together with a wide range of impacting economic and social processes, mean that predicting housing demand is at best partial and speculative.

As the National Housing Supply Council rightly point out, '…there can often be a divergence between the short and the long term in the housing market' (2011, p. 3). Much of it comes down to the difference between *underlying* demand and *effective* demand. At any given point in time, demand may not feed directly into effective (actual) demand. Short term trends can move in a different direction to underlying drivers.

The use of household projections assumes that underlying demand would equal effective demand if the market could provide housing products to meet the needs, aspirations and capacity to pay of all households. But there are substantial trends in household formation propensities (change in overall structure, lifestyle preferences, cultural factors, wider social and economic influences) that fail to be accounted for in such projections.

Such techniques need to be complemented, and informed by, a more nuanced understanding as to how demand actually translates within the housing system and housing market.

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Principles framing our approach

We have developed a framework or 'toolkit' which seeks to capture structural, **mid- and long-term shifts** in the nature and composition of housing demand across metropolitan geographies. Rather than use stated intentions, we consider how demand has been 'expressed ' by looking at actual recent moves – both in terms of the characteristics of the movers and the type/location of housing stock involved in that move. We argue that this:

- Offers a more robust understanding and basis upon which population/household demographic trends translate into actual housing pathways and outcomes

- Provides a nuanced counterweight to models that rely on assumptions regarding formation rates and further assumptions regarding the type of housing demanded by those households

- Crucially, the methodology is framed by **an evidence base of how different households actually express their housing demand**

The toolkit is primarily structured around two components:

Determination of Housing Market Demand Areas (HMDA) and their use as the basis for an analytical framework (**see the companion Technical Report, Tice et al., 2013**)

A parallel series of household surveys targeted at recent movers (both purchasers and renters) and stayers (again both owners and renters), administered at the HMDA level

Determination of Housing Market Demand Areas (HMDA)

Full explanation of the development of the Housing Market Demand Areas (HMDA) and the demand analysis based upon these subregional frames is presented in the compendium Technical Report (Tice et al, 2013). Here we present a brief overview in order to position the role of the HMDA framework established in conducting and analysing the surveys.

We utilise detailed census data to analyse household mobility to better understand the implications of mobility (and stasis) for the evolving structure and form of the metropolitan city.

Picking up that the majority of moves are local, and mapping those household flows in detail, helps identify a series of subregions defining the city which are identified as Housing Market Demand Areas (HMDA). In our initial analysis based on moves between the 2001 and 2006 census, the metropolitan area breaks down into eight HMDA (see figures 1 and 2 overleaf). The geographies of each HMDA are determined by, and reflect that over two-thirds of all household moves taking place over a period of time start and finish within those boundaries. They capture the subregional nature of lifestyles within the city, and suggest a housing and labour market context within which the majority of households enact their housing pathways. Figures 3 and 4 remind us of the subregional geographies identified in *City of Cities* (NSW Government, 2005) (figure 3) and in the current draft metropolitan strategy (NSW Government, 2013) (figure 4)

While the HMDA capture 'bounded' subregions within the metropolitan area, the methodology developed also tracks gradual change over time: the boundaries of the demand areas will shift to reflect the different patterns of mobility over the 5-year timeframe of the census.

RESEARCH OVERVIEW

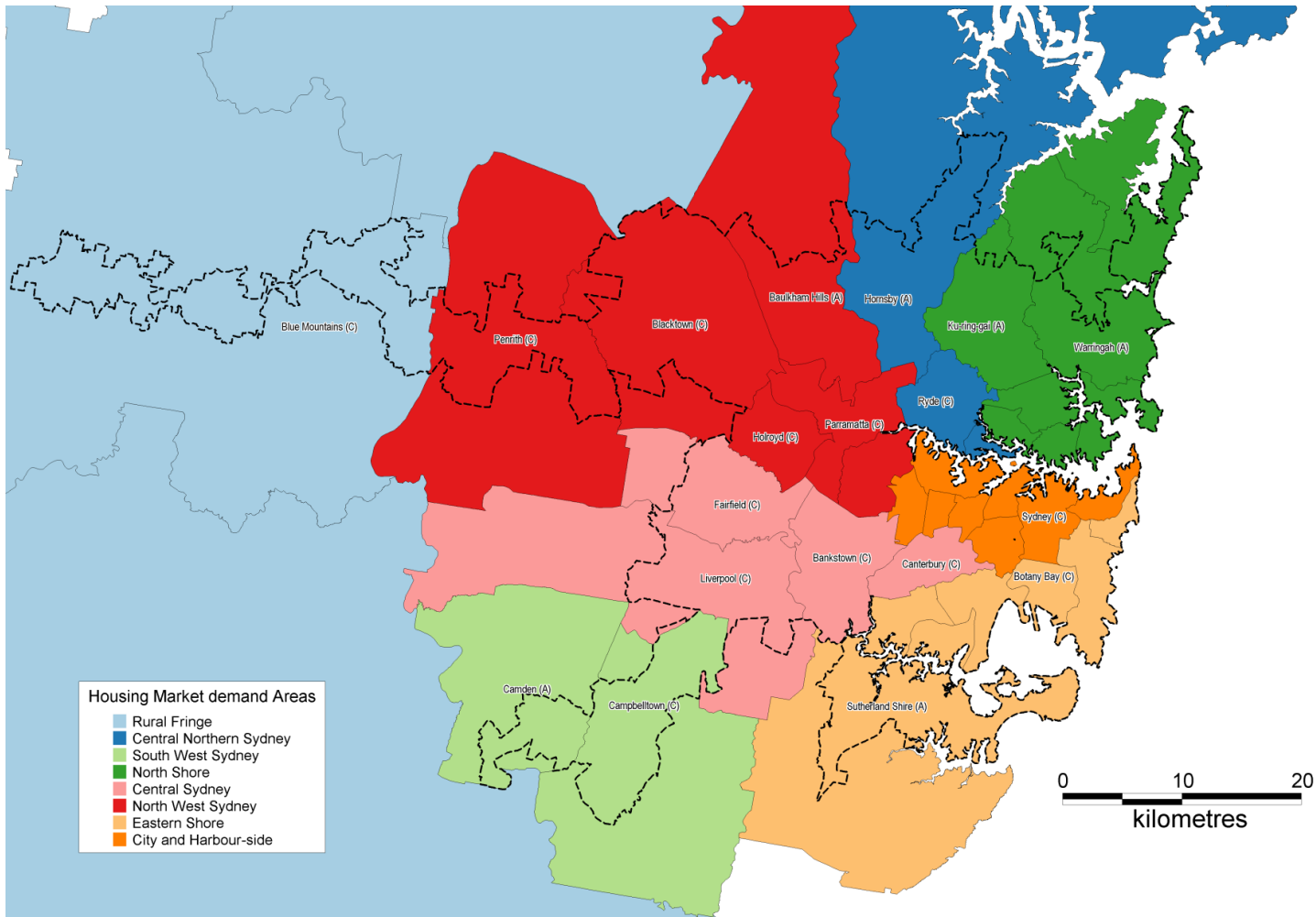Mobility flows across the city (2001-2006)

Figure 1
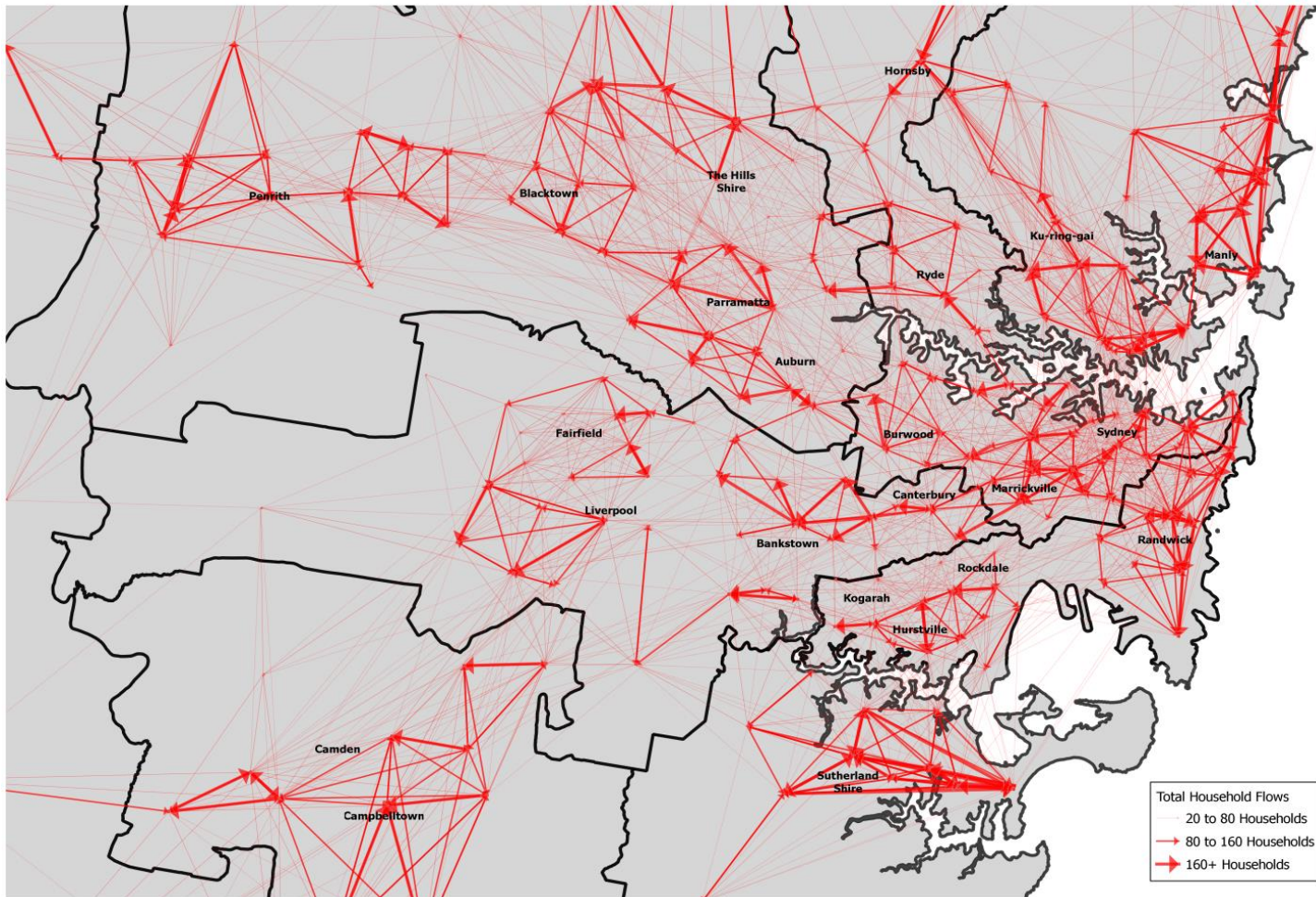
RESEARCH OVERVIEW

The eight Housing Market Demand Areas (HMDA) in metropolitan Sydney

Figure 2

RESEARCH OVERVIEW
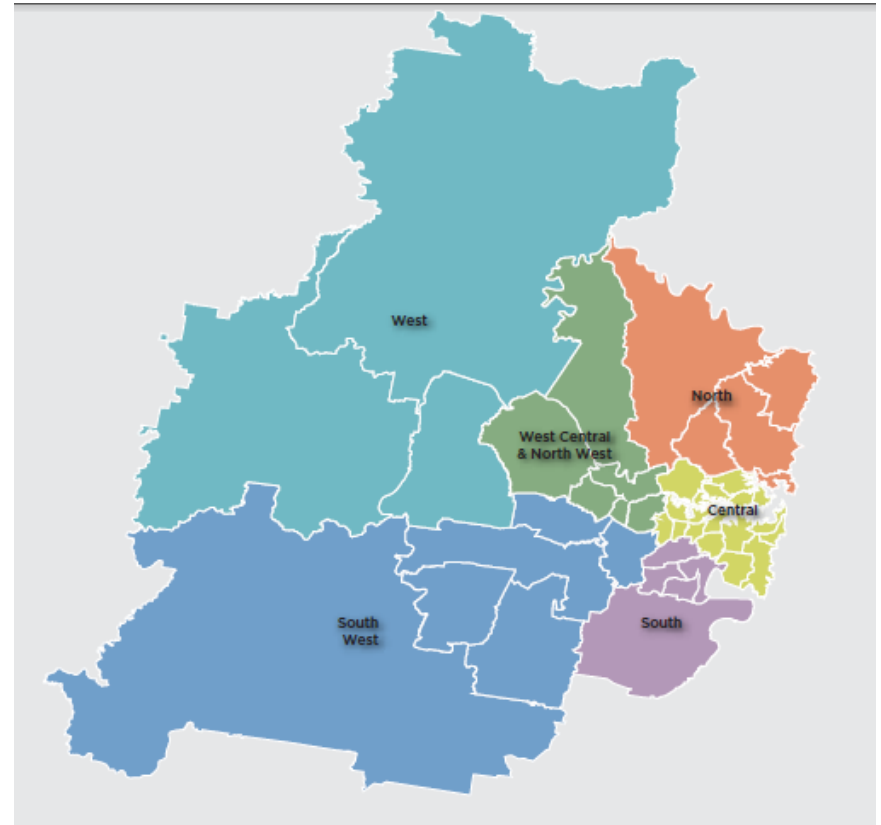
Subregional geographies in City of Cities (2005) and new draft metropolitan strategy (2013)

Figure 3: 10 subregional identified in City of Cities

Figure 4: 6 subregions identified in draft metropolitan strategy

RESEARCH OVERVIEW

Demand Assessment at the HMDA level

Figure 5: Dominant movers by age cohort

HMDA	Location 5 Years Previously	15-19	20-29	30-39	40-49	50-59	60-69s	70-74s
Parramatta and North West	Mover within same HMDA							
	Mover from different HMDA							
	Mover from elsewhere in Australia							
	Mover from Overseas							
North Sydney (and Shore)	Mover within same HMDA							
	Mover from different HMDA							
	Mover from elsewhere in Australia							
	Mover from Overseas							
City and Harbourside	Mover within same HMDA							
	Mover from different HMDA							
	Mover from elsewhere in Australia							
	Mover from Overseas							

Demand Assessment at the HMDA level

- We can drill down to understand patterns of flow and stasis by age group (a valid de facto indicator of life stage), income group and housing type. The 'thermal' mapping to the left (figure 5) explores the dominant (or average, or less significant) groups driving demand in three of the eight HMDA identified for metropolitan Sydney (a full analysis is provided in the Technical Report).

- Much of the 'heat' (activity) hones in on the 30-39 age group in most HMDA – a peak time of family formation and household moves, but it is the patterns which tell the story here. The local 'trade up' market – in the 40/49 and 50/59 brackets – in the Parramatta/NW HMDA stands out, as do the younger 20-29s (students?) moving in from outside the HMDA into the City and Harbourside HMDA.

- The patterning provides a shorthand insight into the different groups that drive demand within each of the HMDA, and captures the differences in those drivers across them: Demand gets expressed in different ways, and the relative significance of relative 'groups' differs across the city.

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2. A Metropolitan Housing Demand Survey

A METROPOLITAN HOUSING DEMAND SURVEY

'...the complexity of the task means that housing demand analysis too frequently becomes reduced to processes by which householders are asked to reflect at a very general level about what they want out of their housing and the types of housing and tenure to which they aspire. Alternatively, housing demand analysis becomes reduced to an analysis of house prices and incomes and an estimate of the aggregate level of stock and its location which different households have an ability to pay for. Both of these approaches are limited' (CHRANZ, 2010, p.14)

'Notwithstanding a flurry of activity and many fine achievements, neo-classical economies has struggled to account for house price dynamics. Certainly, this paradigm is incomplete. It deals with that portion of the housing economy in which markets are efficient, buyers are rational, and prices are determined by attributes of objects, mediated by the influence of economic fundamentals. Arguably, that is not enough. (Smith, 2011, p. 240)

A METROPOLITAN DEMAND SURVEY

Introduction

Recent interest in the use of housing and household surveys (e.g. Beacon Pathways, 2010; Grattan Institute, 2011b; Marsh and Gibb, 2011) both reflects and is symptomatic of the strains seen in the metropolitan planning system. In cities facing substantive growth pressures – as are most Australian cities – exploration of pathways, choice and constraints are underscored by the pressures of affordability where the inevitable trade-offs centre upon questions of tenure, density and locality. This is overlain by the realities of strategic policy imperatives (Greenfield versus infill), availability, development viability and broader factors impacting on the housing system.

The gulf between aspirations and expressed demand (between the detached, owner-occupied block and the constraints that close this door to many) has been a longstanding one. Tracking trends highlights the resilience of this aspirational demand, but there have been hopes that the purported benefits of intensification, coupled with a decline in typical household size, would prevail to strengthen the desirability of medium and high density living. In certain contexts – and for certain household groups – this may well be the case. However, in others, the extent to which those shifting preferences reflect constraints experienced is less clear.

Marsh and Gibb (2011) argue that the housing market models which are based on rational choice and optimising behaviour have notably failed to account for *observed* behaviour in the housing market. More sophisticated techniques to deal with these uncertainties are needed. These include the use of social surveys to better determine the subjectiveness of housing demand propensities and support our understanding of the pattern discerned from census analysis of housing demand patterns.

Aim and scope

Previous and ongoing household surveys related to housing and housing market issues have typically focused upon household demand characteristics, customer sentiment regarding the market, trends within the market, and housing needs. However, these surveys have not been able to tie these findings back to more local geographies or planning policy context more generally. Our approach seeks to address that gap.

The *Metropolitan Submarket Demand Survey* has been developed to capture mid- to long- term demand characteristics that shape Sydney's different housing submarkets. Our specific focus was to understand the drivers shaping housing pathways, and household choices and constraints.

In focusing on what we describe as more structural changes and impacts on the dynamics of the city, we can build up a more robust picture of *flows* and *transitions*. This includes household formation and structure; how these relate to their housing choices, needs and decisions; and the capacity/responsiveness of different parts of the city to respond to different demand profiles and characteristics.

In particular, the aim of the survey is to understand the different ways in which households have actually expressed their housing demand in recent years, rather than focus solely upon stated intentions. By examining the actual moves households have taken, it is possible to ascertain the characteristics of the movers and the type/location of housing stock involved in that move. This produces a more robust understanding and basis upon which population and household demographic trends translate into actual housing pathways and outcomes.

A METROPOLITAN HOUSING DEMAND SURVEY

A look at previous housing surveys

To inform the development of our household surveys, we looked at a number of similar questionnaires that have been utilised in Australia and New Zealand in recent years. They vary in their remit and scale of application.

Large surveys with a housing focus/substantive housing component:

- Australian Housing Survey (ABS, last conducted 1999)

- The Survey of Income and Housing (SIH) (ABS, 1998 and biannual cycles)

- HILDA (Housing, Income and Labour Dynamics in Australia) (since 2001)

Surveys with a location/preference component:

- Housing and location choice survey (Burgess and Skeltys, 1992)

- Drivers and influences of the new house market on Sydney's fringe (BIS Shrapnel, 2009)

- The Housing we'd Choose (Grattan Institute, 2011)

- Productivity Commission Community Survey (2011)

- Tenure and Location Choices of 20-40 year old Households in Auckland Region (CHRANZ, 2010)

- Liveable Compact Cities Project: Community Perceptions Research Report (BBS Communications/Council of Mayors SEQ)

Larger scale housing and household surveys have typically been conducted with samples draw across all States, cities and representation from regional areas. While this can provide a 'representative' population at the national scale, the difficulty with this approach is when these responses are broken down into their smaller geographies , the sample sizes when drilling down below the metropolitan scale are relatively limited. Each city (including the larger capital cities) are likely to have no more than 300 to 400 responses. This greatly reduces the opportunity to disaggregate data to the scale at which demand drivers and outcomes interface with the city and planning systems.

A primary interest for our intended surveys has been whether they can be designed, targeted and analysed in a way which moves beyond the typically 'aspatial' nature of questions typically asked in relation to locational factors. The aim is not to simply explore further the relative importance placed by households on the neighbourhood over specific housing factors in general ways. It may be assumed that most people, if they could chose to do so, would prefer to live near open spaces, parks, the beach, in close proximity to work, and judgements and value will be placed on location in valued neighbourhoods over others.

Moving beyond this, we wanted to explore how surveys could be used to better understand how housing and location choice reflect and impact on how households live, work and move round the city and how different contextual factors in different parts of the city filter through into housing choice and constraints.

A METROPOLITAN HOUSING DEMAND SURVEY
A look at previous housing surveys

Housing and Location Choice Survey

The Housing and Location Choice Survey (HALCS) was undertaken between 1991 and 1992. The Department of Prime Minister and Cabinet collected the Sydney and Melbourne surveys as part of a National Housing Strategy. The findings, outlined in one of a series of background papers for the Strategy (Burgess and Skeltys 1992), were intended to 'disseminate information, promote debate and encourage further research'. ABS and the South Australian Government collected similar surveys in Adelaide and Canberra. The Sydney survey comprised 4281 face-to-face interviews, carried out between February and April 1991 and taking about 40 minutes each. Data are available on the Social Science Data Archives (SSDA).

Of particular interest in the context of our research is the geography applied by HALCS. The survey divided Sydney local government areas into five zones (core, inner, middle, outer and fringe), with the split essentially based on distance from the CBD, population density and population growth rate. Demographic characteristics, trends in housing preference and compromise, and perceptions of the adequacy of services and tenure satisfaction were considered and reported upon for each of these zones.

The surveys found that:

* there was a diversity of households (ages, life stages, etc.) in all zones (e.g. outer zones were not, despite stereotyping, simply dominated by young families)

* This diversity was not matched by diversity in housing type (e.g. despite half of middle zone households having no children, three quarters of dwellings were separate houses).

* There was more renting in the inner and core zones, and more 'changeover' homeowners (i.e. not first time buyers) in the fringe zone.

* The net direction of household movement was outwards, but the majority of migration (56%) was within the same zone.

* Tenure – and achieving home ownership - was a greater priority for first time buyers, amenity (of dwelling and environment) was a greater priority for changeover buyers, and employment-related priorities were greater among private renters.

* There was greater correlation between life stage and any difficulty in accessing services, rather than between zone and any access difficulties. There was also an identified limitation in the methods in calibrating expectations of services between respondents.

There are a number limitations to the survey (mostly acknowledged in the Burgess and Skeltys report), notably that the geographic split does not drill down very far. However, the findings themselves point to factors echoed in Grattan's research twenty years later, perhaps most significantly the imbalance between household diversity and housing diversity.

A METROPOLITAN HOUSING DEMAND SURVEY

'Location, location, location' – but we struggle with the question of geography

Grattan Institute: the Housing We'd Choose

Recent research by the Grattan Institute (Kelly et al. 2011a, 2011b) testing the hypothesis that the housing being built in Australian cities does not match the 'choices and trade-offs that people would make if they could' has received considerable attention. It has been particularly well received by policymakers, arguably because it 'speaks', and points towards a solution to, the challenges faced in increasing housing supply whilst acknowledging affordability constraints in our highly priced cities.

On many levels, the research is conceptually well-grounded and the approach developed is sophisticated. Crucially, the methodology seeks to capture realistic demand based upon trade-offs potential buyers would make given their financial constraints. A two-stage survey was conducted involving approximately 700 respondents across Sydney and Melbourne (representative sample of 350 in each city).

In stage 1, the respondents were asked to identify what mattered most to them in shaping their choices and constraints across a list of housing (e.g. number of bedrooms, outdoor space) and location (e.g. proximity to shops, parks) attributes.

In stage 2, respondents were then asked to make trade-offs between permutations of four housing options visually presented (possible location, floor plan, price, indicative picture) based upon demand-side constraints (i.e. affordability) faced by the respondent.

The resulting 'choice/constraint' profile of respondents were then compared to both existing housing stock, and the characteristics of recent (<10 years old) provision.

Four housing market zones ('affordability quartiles') are identified, primarily based upon land values, and thus essentially replicating a typology of inner, middle and outer rings. In the case of Sydney (see figure 6), they are graded from the high value inner and eastern core to the lower value fringe, skewed by the influence of ocean and harbour. In terms of reflecting and grouping land values across the city, these zones are arguably valid.

As a means of capturing how different housing markets might operate across the city, and how housing demand is enacted and constrained in the context of those different markets, however, they fall short. Participants in the on-line survey were expected to trade off preferences for different house types (with visualisations presented on screen) with indicative localities represented by one of the four zones.

The properties offered to respondents were only identified (geographically) by these zones, and their selections, and therefore the findings, would likely have depended on their assumptions on where in a zone the option was. It also would have skewed choice to those options that at least met dwelling requirements, since there was no guarantee location requirements would be met.

In effect, location factors are reduced to abstract qualities ('near a park', 'near public transport', near the beach'), and a matter of distance from the CBD with land values determining how they are taken into account within the models constructed.
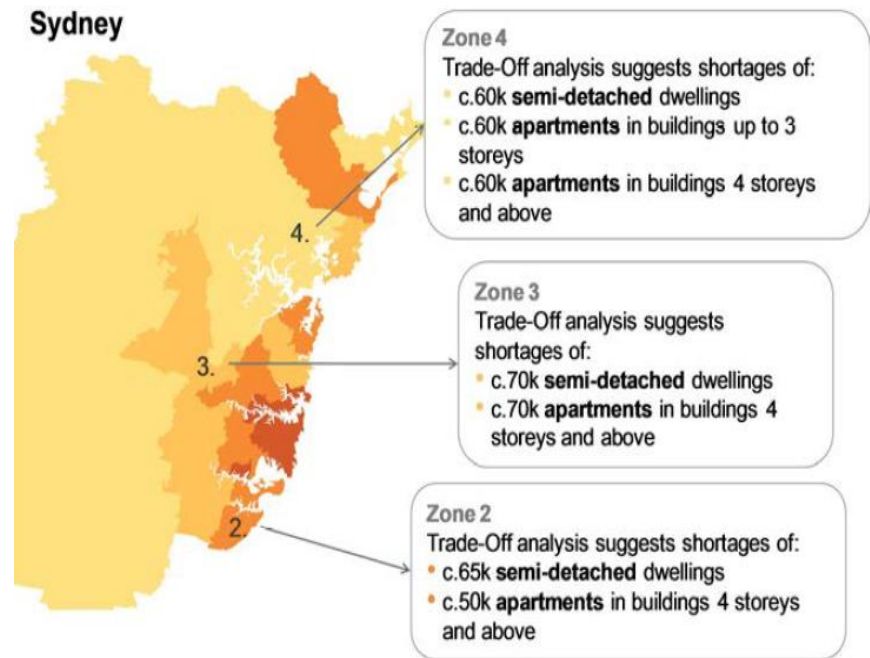
A METROPOLITAN HOUSING DEMAND SURVEY

'Location, location, location' – but we struggle with the question of geography

Figure 6: The spaces of Grattan's analysis

Source: Kelly et al. 2011a, p.4

A METROPOLITAN HOUSING DEMAND SURVEY

'Location, location, location' – but we struggle with the question of geography

For all the technical sophistication enabling random presentation of housing typologies, to respondents Grattan's approach failed to address the very fact the participant's choices will also be directed by their attachment to, and perspectives on, different locations and geographies across the city.

In the context of Sydney, respondents were confronted with making spatial judgements and decisions on geographies which clumped together Warringah on the Northern Beaches with Liverpool in the Central West (both in Grattan's zone 3) or Gosford on the Central Coast with Camden in the southwest (both in zone 4). Whilst in terms of 'purchasing power' these markets may demonstrate equivalences, they share little in common in terms of the subregional housing market areas within which Sydneysiders actually move, or how patterns of housing need and demand translate across different parts of the city.

The conclusions drawn are instructive, and perform a useful role in confirming our intuitive understanding of where the gaps lie: that the middle and outer suburbs could support a greater mix of housing types (more medium density in particular). However, it is difficult to agree that the research helps better understand housing demand for a diversity of housing types across city geographies. In practice, given the high levels of affordability constraint dictating the housing supply and demand dynamics seen in Sydney in recent years, the methodology used is simply capturing a lack of choice due to those constraints, rather than identifying a substantive shift in preferences away from lower density forms. The reason a large shortfall in medium and higher density stock is identified is because other options fall in the trade-off process given affordability constraints: **it is that, or nothing**.

If land values and development cost modelling suggests that multi-unit development can be brought to market at lower price points than single dwelling development in those locations, then its potential demand is a reflection of demand at that price point, not necessarily for the type of dwelling which can be delivered to the market at that price.

If respondents have a choice between medium or high density living in the outer suburbs and little/nothing else, then it is perhaps unsurprising that this type emerges as the 'preferred' type from the methodology employed.

SEQ Mayor's Forum

Other recent studies seeking to capture the interplay between new housing provision and metropolitan planning frameworks have also struggled to incorporate a sense of city geographies and the spatiality of housing market behaviours. For example, the research undertaken for the SEQ Mayor's Forum (2010) is explicitly interested in city structure (and hence spatial dynamics). However, as with much of strategic planning at the metropolitan level, research interest remains essentially tied to teasing out resident and stakeholder views and trade-offs in moving towards more compact, higher density forms focused on activity centres.

In so doing, it is often tied to abstract principles of city form, rather than differential drivers and levels of potential between such centres across actual parts of the city in question. Although location is seen as one of the core anchors around which trade-offs are defined, understanding enabled through such studies tend to be devoid of the geographies that reflect and shape households 'use' and how they live within their cities.

A METROPOLITAN HOUSING DEMAND SURVEY

Tenure and Location Choices of Households in the Auckland Region

Auckland's Housing Market Assessment (HMA)

We need to look across the Tasman for a more compelling engagement with housing demand issues at the metropolitan scale, and a series of research projects commissioned through CHRANZ (the Centre for Housing Research Aotearoa New Zealand) focused on the city of Auckland.

This wider package of research presents a series of reports which together offer detailed insight into demographic and housing market trends in New Zealand's most populous city. Underpinning these elements is a comprehensive Housing Market Assessment (HMA) conducted by Darroch Limited (2010), providing an analysis of housing need and demand trends to 2026. Central to the approach taken was the identification of 14 housing market areas across the wider Auckland metropolitan area, determining subregional areas based upon self-containment and journey-to-work patterns. These geographies provide the spatial framework for subsequent components of the HMA and demonstrate that different parts of the city experience different levels and composite outcomes of demand drivers, which in turn points towards the need for more spatially nuanced strategic planning considerations.

Accompanying Darroch's HMA is a survey involving around 500 20-40 year-olds across the metropolitan region (CHRANZ, 2010). A number of strengths in their survey approach can be highlighted. The first is that although the overall sample size is small, a degree of spatial disaggregation was ensured through setting respondent targets for each part of the city.

Secondly, the survey talks to both purchasers (40%) and renters (60%), acknowledging that the decisions of frequently mobile renters represent a key driver of metropolitan housing markets. Thirdly, the survey provides insight from those that have recently moved – i.e. those who have expressed *and exercised* demand – rather than simply seeking preference statements and expected behaviour from those that *might* move in future.

The questions explored in the survey focused on determinants of housing demand, and then go on to assess the implications and costs of those choices for the householders themselves and the wider city. Essentially, the survey sought to capture and help better understand the role of housing in shaping how respondents lived in Auckland**: what are they looking for in their housing and cities to enable their households to function effectively?**

At the metropolitan level, the survey results highlighted that in the case of both owners and renters, housing choices are a complex balancing act between multiple aspirations – not only about need, but about longer term household futures. Typically households are looking to stay in the same neighbourhood, and thus move only short distances, citing place attachment, quality of life and closeness to family/social connections as key reasons. Despite the clear association between labour markets and housing markets, closeness to work was not so prominent, and employment change is not strongly associated with housing change. A desire to get out of multi-unit buildings and into detached homes was also a key driver of mobility across the city.

A METROPOLITAN HOUSING DEMAND SURVEY
'Location, location, location' … but we struggle with the question of geography

A real strength of the Auckland research rests, however, in their attempt to disaggregate survey responses according to different parts of the city: i.e. align survey findings to the subregional housing market geographies identified through the HMA process. The aim was to highlight the different drivers and composition of demand, and through this, demonstrate the need for more spatially nuanced strategic planning responses.

The level of spatial disaggregation feasible was mediated by the practicalities and pragmatics of overall survey numbers, and in fact the 14 subregional geographies determined through the HMA process were not used in the geographical breakdown of survey responses. Instead disaggregation follows the boundaries of the six territorial authorities which collectively constitute Auckland Super City and within which these subregional geographies can be nested. The result is an approach that seeks to determine how residents' understand and exercise their housing choices in relation to how they live in the city, and how that city *works.* It reflects that households' housing pathways are shaped and reflect options available within a series of differentiated geographies rather than across an abstract metropolitan plain.

At first cut, the enhanced emphasis on geography provided by the Auckland study seems to add useful rather than ground-breaking insight. In large part, it points to findings similar to those that can be garnered from less spatially attentive frameworks. However, it represents an important step in utilising surveys to explore spatial differences across metropolitan space and to determine whether the nature of drivers shaping housing demand and its outcomes 'look different' and are expressed differently across that space.

While this observation appears somewhat obvious, it sits uncomfortably with the forecasting and top-down allocation models that continue to inform Australian metropolitan planning strategies. In the context of Auckland, it helps understand that the housing challenges – and the strategic planning role in meeting those housing challenges – will differ from Waitakere to Manukau.

A METROPOLITAN HOUSING DEMAND SURVEY

Surveys as part of our toolkit for understanding subregional demand drivers in Sydney

Capturing the 'spatiality' of households' housing decisions and its impact on demand

Despite the continued pervasiveness of simplistic supply-demand arguments advocated in certain quarters (notably anti-planning lobby groups such as Demographia who have been successful in pushing their agenda in Australia) there is increased recognition of the need for a more nuanced understanding of how our housing markets work and how strategic planning frameworks both shape, and are shaped by, those housing market dynamics. Despite its limitations, the Grattan Institute work played an important role in positioning the need to develop a better understanding of demand if challenges regarding perceive supply side constraints are to be addressed.

Whilst Australian cities are experiencing problems couched and defined in terms of a shortfall in housing supply (NHSC, 2010; 2011), explanations for low levels of production have as much to do with how the demand required in order for supply to be brought on stream materialises as much as questions of land release or infrastructure provision. Affordability constraints have acted as a key driver of demand and therefore supply. In other words, there is significant demand within the system, but with constraints restricting the opportunity to express those demands, potential supply does not materialise. Purchasers are not going to buy if they cannot afford to do so; developers are not going to build if they are unlikely to achieve the price points required to provide expected profit margins.

This has a city-wide expression, but it also points towards factors as to why certain areas, parts or submarkets in the city can accommodate or respond to demand drivers better or worse than others.

Households' housing decisions do not simply comply with the spatial and temporal expectations that underpin assumptions charted out across the 25-year, metropolitan-wide horizons of strategic plans. Rather, a complex, mediated and 'sticky' interplay between housing supply and demand drivers across more localised geographies, reflect how most households live and work within our cities is seen.

Through this ARC project, our aim has been to develop approaches that enable us to understand how (and from this, why) different parts of the city work in different ways, how this relates to those long-term strategies and how a more iterative strategic planning process may pick-up on, and work with, those dynamics. As stated at the outset, the goal is neither to replicate or replace long-term forecasting models, but to provide a more iterative process whereby the strategic planning process has a basis for engagement at the geographic scale(s) at which change is negotiated and experienced.

So how do we keep hold of, and incorporate, actual geographies in a more nuanced understanding of how housing demand is expressed across different parts of cities, and how might surveys be used to add to this insight? While location is commonly identified as the core counterweight against dwelling type in determining housing choice across space, most studies – bar the Auckland research – that provide questions of geography and how localities relate to housing market dynamics and sit within the context of broader metropolitan space – are in effect muted. The Grattan Institute's work, like HALCS 20 years before it, resorts to using 'zones' which differentiate by economic land value rather than relating to the spaces in which demand decisions actually get made.

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Developing surveys as part of our toolkit for understanding subregional demand drivers in Sydney

Exposing these limitations implies that our survey approach has been able to transcend them. As outlined below – and shown in our resulting findings – it is hoped that we have made some innovative in-roads in this regard. However, it is important to acknowledge, despite very explicit goals to ensure geography remained front and centre within our approach, that translating this into actual survey design and content was a long, iterative struggle. The difficulties experienced in developing, framing and testing questions to tease out those spatial considerations highlights that much of the limited spatiality seen in surveys of this kind may well indicate the type and nature of data that can be meaningfully pursued through this method, rather than a question of developing a good or bad survey per se.

Capturing demand characteristics through surveys

The use of surveys within our wider research framework has a number of objectives. Importantly, it is not our intention to purport that surveys – however well designed and extensively administered – address all weaknesses and limitations inherent in demographic and household forecasting techniques. Rather, the approach taken, and questions asked, attempt to capture a better understanding of:

- how housing decisions and outcomes relate to the structure of the city

- how those expressed housing choices and constraints reflect path dependencies within and across different parts of the city over time, and

- whether the changing dynamics within the metropolitan area can be captured in some way.

A number of key principles have grounded our approach:

➤ Geography First

➤ Expressed demand

➤ Including the stayers

➤ Owners and renters

Geography First

The key defining factor shaping our sampling strategy is the determined geographies of our HMDAs.

One of the key limitations of survey approaches to date has been limitations in how they actually relate to the geographies of interest. Sampling has tended to achieve statistical relevance at the city or regional level. Where analysis drill downs into that sample, then it tends to disaggregate by tenure, by age group, by income levels. The actual geographies within our cities that relate to households' living and working patterns, and in turn the spatial dynamics and interrelations that define housing market characteristics, become obviated. While we may be able to present a view about housing preferences for example by the under 35s, or homeowners, or moderate income groups, we struggle to drill down to a spatial scale that actually corresponds and better reflects the geographies within which housing choice and constraint decisions by households are acted out.

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Developing Surveys as part of our toolkit for understanding subregional demand drivers in Sydney

As discussed above, where there has been an effort to disaggregate Metropolitan space, this has typically translated into delineation and zoning based upon the economic theories of Alonso and Muth, where the importance of distance on land values as one moves from the centre to the edge of our cities holds prominence. While in the context of HALCS back in the early 1990s, this proxy simplification might have adequately captured mobility flows shaping housing pathways across metropolitan Sydney at that time, it is rather less effective in appropriately capturing contemporary market dynamics as demonstrated by the weaknesses in the Grattan work. At this time, the 'conveyor', carrying out households towards the urban fringe remained fairly strong, and inner neighbourhoods were starting to reassert themselves in demand terms through gentrification and shifting employment patterns. By contrast, 20 years later, the shape and structure of housing market operation across the city has increasingly demonstrated that different parts of the city work in different ways.

While these centrifugal conveyor flows can still be observed, it would appear that housing market choices and constraints are increasingly lived and negotiated at the subregional level. Demand for housing tends to arise from households already living in these more local geographies. The city's supply-demand 'imbalance' and affordability concerns are not simply addressed with significant numbers moving from, say, Coogee to Camden to seek out larger, cheaper housing: they look to their more immediate area to satisfy their housing needs and demands, and seek to exercise their options and make trade-offs within the context of these geographies.

The defining feature of the demand-side analysis developed through this research is the determination of subregional geographies for metropolitan Sydney which capture how households actually move through housing markets. **These geographies provide the basis and foundation for our sampling frame.**

Our conceptual framework identifies eight Housing Market Demand Areas (HMDAs) across Sydney. Sample sizes have been set to ensure statistical validity is offered at this subregional level: a crucial factor in terms of being able to pick up spatial variation and different drivers across metropolitan space with a degree of confidence. Rather than sampling by proportional breakdown in movers by tenure (in any given period, far more renter than purchaser/owner households typically move) and between movers and stayers, we have sought sufficiently robust coverage from each group.

Expressed demand

Households generate demand when they move: at that time, they are making active choices, and those choices capture the exercise of those aspirations, the realities of affordability and trade-offs and constraints seen.

In this research we argue an accurate and informed understanding of future demand patterns and the profiles of those engaging in that housing consumption can be determined from those that have made those decisions, in those market contexts, in the recent past**. i.e. those that having actually expressed demand.** Preference surveys – even when wrapped up in the technical sophistication of the Grattan Institute work – that ask those who *might* move tend to capture considerations detached from the individual, complex and often irrational characteristics that shape decision-making factors accompanying the actual act of moving.

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Surveys as part of our toolkit for understanding subregional demand drivers in Sydney

There is a disjuncture between stated preferences (what people say they are going to do) and expressed activity (what people actually do). Conclusions drawn from observed imbalances between available stock and stated preferences (even those where affordability constraints are overlain) can only be, at best, broad starting points. For a start, they assume an efficient use of housing (no over/under occupancy) and rationale decision-making. These do not translate particularly well in reality.

Contra to this approach, it may be argued that these households are unlikely to be those shaping demand profiles in the future short-term given their recent move. However, at particular life-stages we know that one of the best indicators of future mobility is recent mobility: those that move tend to keep moving, whilst once settled and entering into the family household stage, a move might be 10-15 years away, if at all.

As well as providing insight into the motivations, trade-offs and decision making processes of actual movers, the survey draws upon this behavioural insight to understand how housing pathways are negotiated amongst particular cohorts central to driving the market (for example, first time buyers). Factors such as prices paid and trade-offs tied to those price points, work/employment geographies, and other spatial concerns are explored. We can also gain an understanding of the relative importance of staying within their part of the city within this trade off process, helping identify mid- to longer-term structural shifts that set up path dependencies for particular parts of the city and determine whether (and how) demand dynamics across the city may be shifting over time.

Including the stayers

Movers express demand, but non-movers shape the housing system and market too.

Although the profiles and patterns of recent movers structures how housing demand is expressed in the housing market at any given time, their experiences and actions only reflect the active drivers within the system. They tell us less about the **'stickiness'** that acts to define housing choice, constraints, affordability and availability. The majority of households do not move in the intercensal period, and the majority of properties in each of the HMDAs do not change hands. If we are aiming to build up a comprehensive picture of how the whole housing system 'performs' in each of our demand areas, then there is also interest in understanding the housing pathways of 'stayers': those that have not moved for a period of time. Insight from this group is hard to tease out – there is not the recent event of the move itself to frame questions around - but an aim here has been to identify whether this residential stability reflects choice ('I love my home, neighbourhood and I am staying put'), or whether it reflects a sense of entrapment and constraint.

In practice, there are many reasons why people stay put:

a) **There's absolutely no need, or desire, to move**. They are often older households and they own their property outright. This group is of some interest in that we gain insight into the type of stock that is **not** becoming available/or becoming available less frequently than other types. We can determine this from Census and mobility data. It also includes those households who may have considered moving but have chosen not to (e.g. choosing to carry out alterations) instead.

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b) **They have wanted to move, but are unable to do so**. This may be due to affordability, availability, lack of equity required in order to step-up, and will reflect different levels of trade-offs made by individuals. The result might be that they remain in a smaller property than required, in rental when they want to purchase, or stuck in what they perceive to be a less popular neighbourhood. Insight into this group would most closely resemble the imbalances between stated preferences/expressed demand seen in 'housing needs' surveys.

c) **They have not moved recently, but are actively planning to do so**: they would self-identify that it is likely that they would be moving in the next 12-18 months. They would have a clear understanding of their budget, what they were looking for, their search geographies, and gone some way down the track in terms of identifying priorities and trade-offs in how they will go about making a decision. Traditionally this sub-group has provided the focus for preference surveys.

Whilst the stayers' survey aims to capture the constraints/decision-factors related to subgroups (b) and (c) above and how this flows on to how demand might or might not be expressed, it was anticipated that those identifying with (a) would predominate. Here, the insight provided in terms of longer term intentions – towards retirement – amongst these households is valuable. In terms of more immediate impacts, building up a picture of the stickiness of particular types of property, in particular localities is useful. For example, if a significant proportion of family housing is tied up long term with households choosing to move less or the Baby Boom generation remaining in that family home long into retirement, then the housing market dynamics in a locality and levels of availability of stock alter over time.

OWNERS AND RENTERS

As well as ensuring we pick up and reflect upon both movers and stayers within our HMDA geographies, it is also important that both purchasers/owners and renters are represented within the sampling approach. As with all major Australian metropolitan areas, the private rented sector is a key driver within the Sydney housing market. In 2006, almost a third (31.6%) of all dwellings were rented – over 4 in 5 of these privately. Renters also tend to move more frequently, particular types of stock (with an over representation in medium and high density provision) in particular parts of the city are associated with the tenure. Given the particular spatial outcomes arising from the supply, allocation and tenancy characteristics of the public rented sector, our interest focuses on private renters (and in particular those who rent 'through the market', evidenced by the lodging of a Bond).

Data availability and sampling strategy

The availability of data at the address point level has provided a crucial underpinning for the principles above. Structuring our sample in such a way is only possible through access to data at the cadastre level, whereby target groups could be spatially located and from this invited to participate in the survey. Whilst this has relied upon NSW specific datasets, we have been mindful that the methodology should (using equivalent datasets held by other States/Territories) be replicable across the country. We have been able to identify:

• all recent owner/purchaser transfers of title (and assumed a 'move') through land registry data

• all changes in occupation of rental properties through records of Bond lodgement from the NSW Rental Bonds Board

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Having access to these datasets does not – of course – guarantee that surveys sent to those addresses reach a household conforming to expectations, but it offers a valuable starting point (and as shall be discussed later in this report, the targeting was largely successful).

Identifying the 'stayers' is more problematic, and our sampling approach follows the logic of identifying – through the same datasets – address points were there has **not** been a transaction indicative of change of household (and thus movement) for a period of time. In order to capture those address points with greater stability, properties where there had not been a transaction over the previous 3-year period were identified. We then randomly sampled these address points based upon an algorithm picking up properties that fell into these categories which were in a 200m buffer of those flagged as 'Mover Renters and Mover Purchasers'

Although we have wanted to ensure coverage across all parts of each functional demand area, we have, for the movers' survey, over slightly sampled in those locations where there has been a high level of stock made available during the intercensal period, whether through new provision or considerable turnover in existing stock. These areas can be seen as providing 'hot spots' that influence the dynamics and housing pathways seen across the wider functional demand area. We were also faced with a decision as to whether to split our overall sample between renters and owners based upon either the relative proportion of households in each tenure group by HMDA, or by the proportion of moves accounted for by each tenure. The former would have seen sampling in favour of owners/ purchasers; the latter a favour of renters. A more pragmatic solution was taken (as discussed in the next section) to ensure sufficient numbers across all survey types by HMDA.

Four surveys

In order to accommodate our survey objectives, the principles behind those objectives and the sampling strategy adopted, the developed housing demand survey has four variant forms.

- **Recent Mover Purchaser**: targeting those address points where a move can be identified from Land Registry data. The universal sample from which our postal sample was derived considered all transactions between June and December 2011.

- **Recent Mover Renter**: targeting those address points where a new bond was lodged with the NSW Rental Bond Board, again for the period June to December 2011.

- **Long term owner**: targeting address points randomly selected in a 200m buffer from a 'recent mover purchaser' sample point where there is no record of a transaction on the property in the 3 years to the end of 2011

- **Long term renter**: targeting address points randomly selected in a 200m buffer from a 'recent renter mover' sample point where there is no record of a change in Bond details in the 3 years to end 2011.

The surveys share a large majority of content as would be expected, and certainly across all questions pertinent to household decisions and experiences which will be shared regardless of tenure and whether they have recently moved or not. However, the variants allow more detailed questioning as appropriate. For example, the surveys targeted towards households recently moving explore in greater depth considerations tied to that move, and the trade offs and compromises made. Similarly in the surveys directed to purchasers and owners, questions explore issues regarding equity, mortgage repayments, and so forth.

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Administering the survey: why a postal survey?

Given that we are able to determine tenure at the address point level and identify whether there has been a transaction/bond lodgement on that property, we have inevitably used a postal survey to reach our intended recipients. This method has its advantages and disadvantages. Let's start with the disadvantages. Perhaps the most limiting is the likely response rate, which is typically 10% (15% if you are lucky). This meant that we needed to sample 10 times the number of desired returns.

The likelihood of surveys being completed will be assisted if it appears of relevance, is not too long (no more than 15 minutes to complete), and the instructions for the respondent to follow are clear and logical. There are also inevitable restrictions on the level and complexity of questions that can be asked, not least because these data need to be manually entered by the research team on their return. The trade off is overall cost, which – despite the large number of surveys distributed in order to achieve the desired sample size and the cost of data entry – remains more manageable than telephone or face-to-face costs.

Whilst all sample addresses were sent a hard-copy of the survey, on the front page introduction, respondents were given the option to complete the survey on-line rather than fill and return the postal version. A short entry code to initiate the on-line survey enabled the research team to keep tabs on responses and ensure that a single address point did not complete the questionnaire more than once. Setting up the surveys for on-line completion required extensive reformatting, but the benefit of on-line inputting is that it can be used to reduce errors, and also direct the respondent to the relevant next question/section based upon the answers given improving flow and completion rates.

The online survey was developed using Key Survey and had its portal through the City Futures pages on the UNSW Faculty of Built Environment website. Although the click-through visual (see below) could be seen to all visitors to the site, the survey was not open to anyone without the entry code specified on the hard copy they would have received in the post.

Survey coverage

The survey was rolled out in two of the eight HMDA identified for the Sydney metropolitan area, but as previously noted the design and approach has been developed to enable effective roll-out across all HMDA and for replication (access to address-level data willing) across all Australian capital cities. With all four surveys being used in each of the two selected HMDAs, we aimed to:

- Ensure at least 1000 responses in each of the HMDAs

- Ensure a minimum of 200 responses per survey type (recent mover purchaser, recent mover renter, long term owner, long term renter) in each HMDA.

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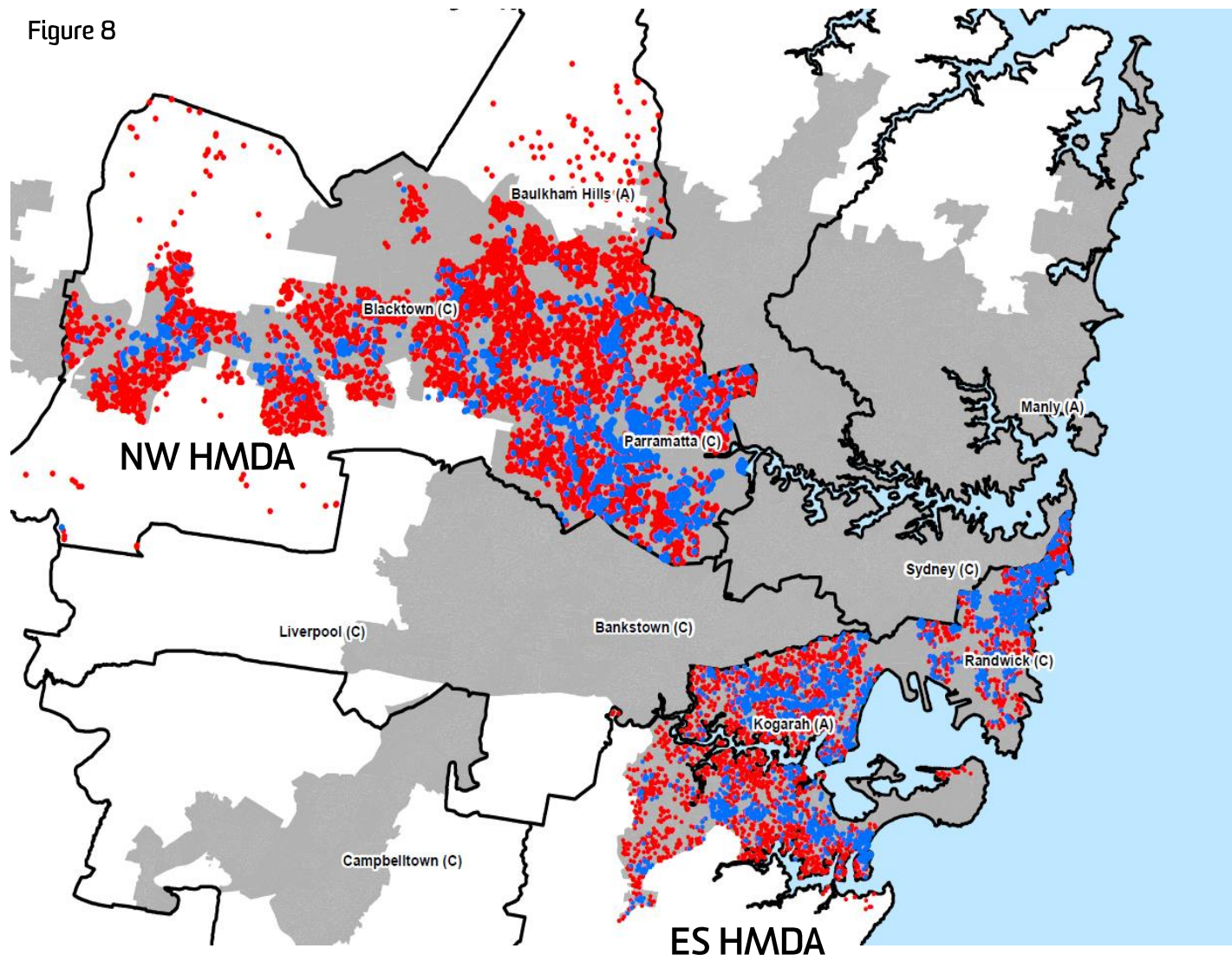Sydney's Housing Market Demand Areas (HMDA)

Figure 7
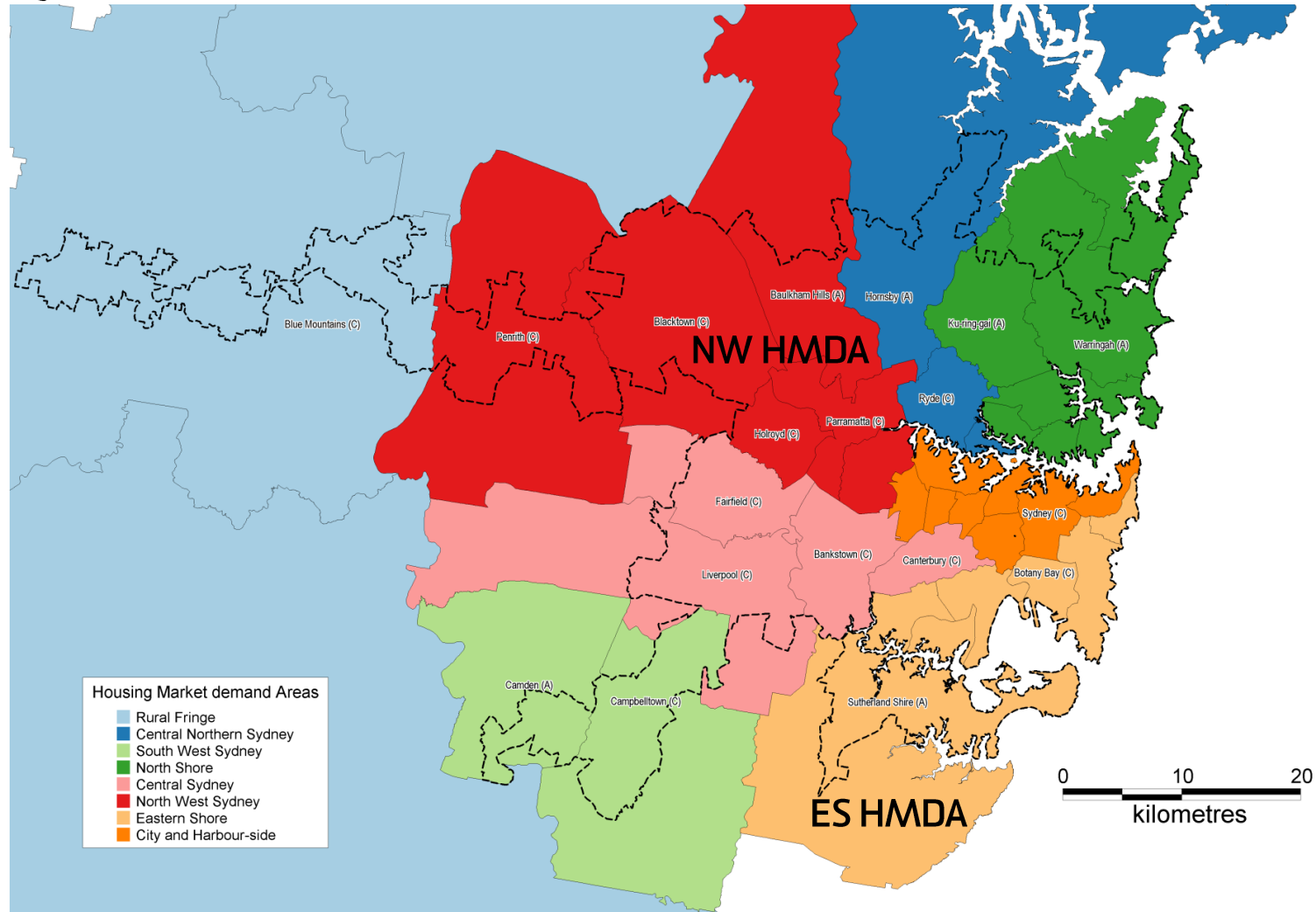
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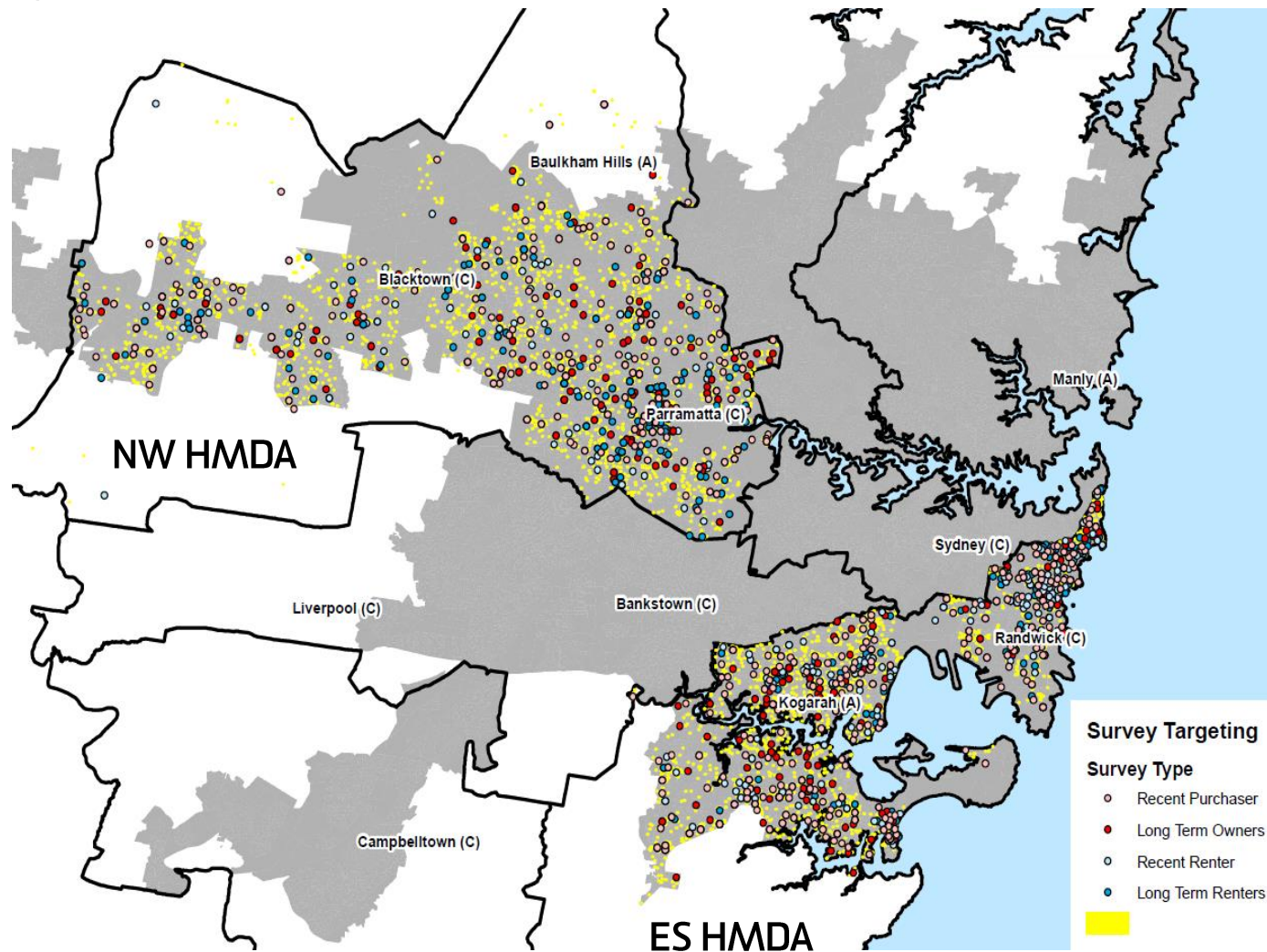Our sampling frame in the two pilot HMDAs

Figure 8

- In each HMDA, Torrens (red dots) and strata (blue dots) sales, and address points where a Rental Bond was lodged (in both cases over July-December 2011) were identified (see figure 8).

- From this base, a random sample was selected, determined by the expected rate of return and required sample for each of the survey types. With a target of 250 surveys per survey, 2500-3000 address points were identified where recent sales or rent transfer could be identified.

- In order to target our 'stayers' – the long term renters and owners for the other two survey variants, address points within a **200 metre buffer** from those address points identified above was selected, and checked to see when the last transaction/transfer on that property was recorded. If over 3 years ago, this qualified as a 'long term' household.

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Geography of our survey returns

Figure 9

- Figure 9 highlights the spatial distribution of our returned questionnaires and those completed on-line across each of the two HMDAs

- As can be seen, the spread across different parts of each of the HMDAs for all of the surveys was successful. Concentrations/clusters of returns generally reflect areas of greater dwelling density (e.g. around Parramatta and Penrith centres in the NW HMDA and Randwick and Rockdale in the ES HMDA)

- The yellow dots identify those address points where surveys were sent out but not completed and returned.

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Total number of survey returns, by type and by HMDA

Figure 10: Combined (NW and ES HMDA)
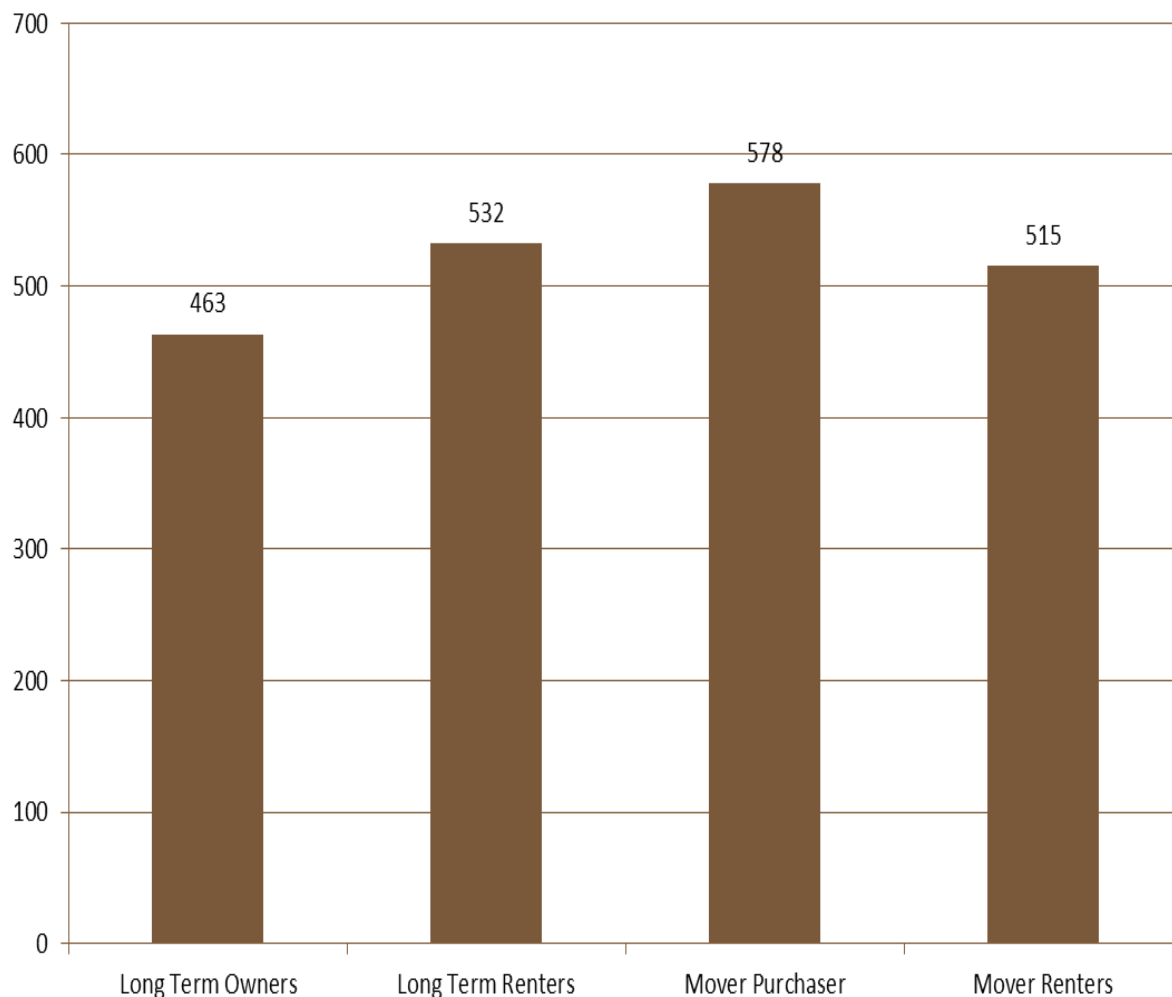
Breakdown of survey returns by type and HMDA	
Eastern suburbs	
Mover purchaser	312
Mover renter	291
Long term owner	252
Long term renter	299
TOTAL RETURNS	1154
Parramatta and Northwest	
Mover purchaser	266
Mover renter	223
Long term owner	210
Long term renter	233
TOTAL RETURNS	932

A METROPOLITAN HOUSING DEMAND SURVEY

Total number of survey returns, by type and by HMDA

Returns, response rates and effectiveness of targeting

As can be seen from the returns breakdown on the previous page (figure 10), 2086 returns in total were collated and used in our findings. It is often the case that returns continue to be received some time after the date of survey close, and whilst these additional responses are not included in this first wave analysis, it is interesting to note that almost 2200 responses were achieved in total. Approximately 25000 surveys were sent out in order to attain this target.

Nearly 400 of these returns were submitted on-line, and thus the additional effort required in reframing and reformatting the surveys for this medium proved worthwhile. It has real advantages in terms of minimising misunderstanding when filling out the survey (the respondent can be filtered through the appropriate questions dependent on responses). It also minimises data entry errors. It also saves researcher time and money – entry is done by the respondent, and initial first-cut analysis assisted through the on-line survey packages. We had a few glitches – with one permutation of a particular question, and it was clear that a few of the question formats – despite rigorous checking and piloting – did not work particularly in on-line format. Nevertheless, the on-line survey tool lets you track who started and gave up (minimal) and of course completion rates for each question (very high).

Providing an accurate response rate is made a little difficult given a high number of surveys that were returned to us marked 'return to sender'. In an initial mail out, a large number of returns highlighted a processing error in terms of mail merge and the address appearing in the envelope window – it would appear that a significant number had gone out which simply could not be delivered as a result of the extent to which a full postal address was visible.

Of those that were returned to the University, the print and mailing company resent to those address points. However, it might be expected that other inadequately addressed mail outs simply got lost in the system.

Following this initial printing error, we encountered a high level of 'return to sender' activity more generally – up to 6-7% of the mail-out numbers. It might be hypothesised that this was a more likely occurrence where we were targeting recent, higher density build where address points in strata blocks can often struggle to get to the intended recipients – certainly in the case of renter households. Although a high number for this group were seen, there were also significant numbers of failed deliveries across our other survey categories. This will reflect that datasets used will contain some inaccuracies in how addresses are recorded in those databases.

Despite a significant number of failed address points in our mail outs, the approach was highly successful in doing what we set out to do: targeting homes/households by survey type according to their circumstances. Although we do not know the extent to which the wrong survey might have been received (I've rented here for the last 4 years and this survey is suggesting I have just moved') and thrown out/dismissed by the recipient, we only had a very small number write to us to say 'sorry, that's not right'. Again this would indicate that the sampling and targeting strategy was in large part successful.

Taken these challenges into account, it is estimated that we achieved a response rate of approximately 9-10%: as expected.

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Survey responses indicate containment levels, triangulating HMDA methodology

While we sought to balance a desire on the one hand to ensure that our sample was *broadly* reflective of the general socio-demographic, income and housing characteristics of each HMDA, this was countered on the other by quite explicit target breakdowns in terms of tenure and mobility. For example, by specifically targeting those that had recently moved in two of our four surveys, half of our respondents had moved in the previous year – quite different to the 10-11% recorded in the 2011 Census for the HMDA as a whole. Similarly, in the case of both HMDAs, half of the surveys were targeted towards renters, and in both HMDAs, while private renting makes up a significant proportion in terms of tenure breakdown, it is not the tenure of 50% of households in either case. Further descriptive analysis of our respondent samples is reported upon in the following sections.

Affirming our methodology and the HMDA geographies produced

Although the principal role of the survey is to gather information from households regarding their housing circumstances and the choices and constraints faced in shaping decisions regarding type and location, it was also intended to use mobility data from the sample returns to sense-check our methodology in developing and defining the HMDA geographies for metropolitan Sydney.

All respondents were asked to identify both their current suburb or postcode and the suburb/postcode of their last property. We can determine how many moves took place within the HMDA itself, moves from other HMDAs, and moves from outside the metropolitan area (or indeed Australia) altogether. We were then able to reconcile these moves to the geographies determined for our HMDAs.

Based upon the levels of 'containment' (i.e. within HMDA moves) utilised in the detailed Census analysis inputting into HMDA determination, figures of **65-70%** would be expected (i.e. around every 7 in 10 moves is essentially local and within subregion).

Figure 11 on the next page provides a breakdown of overall 'containment levels' for our HMDA geographies.

776/1151 respondents (67.4%) had moved from within the ES HMDA at the time of their last move.

In the NW HMDA, 619 out of 932 previous moves (66.4%) originated from within the HMDA.

As such, these figures indicate that the HMDA geographies derived from Census mobility data for the city as a whole hold up very well:

a) our sample demonstrates mobility characteristics consistent with the wider population; and

b) the geographies do indeed capture the housing pathways of the large majority of respondents.

Figures 12 to **13** break these containment levels down by survey type:

- There is little distinction between long-term owners, recent purchasers and indeed renters across both HMDA in terms of these mobility characteristics, although the NW HMDA is slightly less 'contained' for purchasers/occupiers (62% for recent purchasers), suggesting that there is a slightly greater propensity to move into the HMDA in order to purchase a home.

- Similarly, the ES HMDA demonstrates greater 'openness' amongst renters (particularly recent renters at 61% versus 67.4% of total respondents), indicating the role of these eastern and south eastern suburbs as 'receiving' suburbs for renters moving in from other parts of the city.

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Survey responses indicate containment levels, triangulating HMDA methodology

Figure 11: Overall containment levels

		Eastern Sydney	Parramatta and North West	Total	
Origin	Outside Sydney	125	93	218	
	Central Northern Sydney	10	50	60	
	City and Harbour Side	144	64	208	
	Eastern Sydney (ES HMDA)	**776**	**28**	**804**	**67.4%**
	North Sydney (and Shore)	22	18	40	
	Parramatta and North West (NW HMDA)	**21**	**619**	**640**	**66.4%**
	Rural Fringe	4	20	24	
	South West Sydney	6	5	11	
	Western Sydney	48	36	84	
	Elsewhere in Australia	88	76		
Total		1151	932	2083	

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Survey responses indicate containment levels, triangulating HMDA methodology

Figure 12: By survey type (long term owner, recent purchaser)

Long Term Owners					Recent Purchaser				
Origin	Eastern Sydney	Parramatta and North West	Total		Origin	Eastern Sydney	Parramatta and North West	Total	
Outside Sydney	22	14	36		Outside Sydney	20	16	36	
Central Northern Sydney	2	18	20		Central Northern Sydney	1	23	24	
City and Harbour Side	24	14	38		City and Harbour Side	44	27	71	
Eastern Sydney	**181**	**8**	**189**	**73.0%**	**Eastern Sydney**	**230**	**11**	**241**	**73.7%**
North Sydney (and Shore)	4	2	6		North Sydney (and Shore)	6	6	12	
Parramatta and North West	**5**	**138**	**143**	**65.7%**	**Parramatta and North West**	**0**	**165**	**165**	**62.0%**
Rural Fringe	0	6	6		Rural Fringe	0	7	7	
South West Sydney	2	0	2		South West Sydney	1	1	2	
Western Sydney	13	11	24		Western Sydney	10	10	20	
Total	248	210	464		**Total**	312	266	578	
Elsewhere in Australia	11	11			Elsewhere in Australia	16	15		
Overseas	11	3			Overseas	4	1		

A METROPOLITAN HOUSING DEMAND SURVEY

Containment levels, long term renters and recent renters

Figure 13: By survey type (long term renter, recent renter movers)

Long Term Renters					Recent Renter movers				
Origin	Eastern Sydney	Parramatta and North West	Total			Eastern Sydney	Parramatta and North West	Total	
Outside Sydney	40	34	74		Outside Sydney	43	29	72	
Central Northern Sydney	5	7	12		Central Northern Sydney	2	2	4	
City and Harbour Side	44	8	52		City and Harbour Side	32	15	47	
Eastern Sydney	**187**	**4**	**191**	**62.5%**	**Eastern Sydney**	**178**	**5**	**183**	**61.0%**
North Sydney (and Shore)	7	5	12		North Sydney (and Shore)	5	5	10	
Parramatta and North West	**2**	**159**	**161**	**68.2%**	**Parramatta and North West**	**14**	**157**	**171**	**70.4%**
Rural Fringe	2	6	8		Rural Fringe	2	1	3	
South West Sydney	0	2	2		South West Sydney	3	2	5	
Western Sydney	12	8	20		Western Sydney	13	7	20	
Total	299	233	532		**Total**	292	223	515	
Elsewhere in Australia	30	26			Elsewhere in Australia	31	24		
Overseas	10	8			Overseas	12	5		

3. Overview of survey responses

OVERVIEW OF SURVEY RESPONSES

Presentation of survey findings

Introduction

Over the following four sections, we present findings from the four surveys. By no means all the insight derived can be presented here: in many regards, this is an indicative overview of the kind of data made available through the questionnaires and the type of analysis that can be conducted on that data. These sections also capture the range of options regarding the presentation of data in various formats.

The challenges in this regard have been firstly a desire to capture the richness and detail of data without overwhelming with its complexity. The guiding aim here has been to present information in ways which encourage a focus on the patterns and profiles seen, rather than specific figures and percentages. We acknowledge that in some cases (particularly where we present results capturing a fair degree of disaggregation) this has not been entirely successful. For example, in wanting to focus on the patterns of the proportion of household types moving to/living in house type X or from income group Y, readers of those graphs need also to take into account the actual sample sizes of each of those disaggregated groupings – for most we think this works well, but others might mislead.

The second challenge – and an important component of the innovative aspects of this research was to not only capture but effectively present spatial/mobility data in an accessible way. Here we feel that the graphics presented are a real step forward in providing a powerful tool – particularly in how we have captured the 'shape' of activity through the mapping of intensity flows in **section 5**.

In this section (**section 3**) we present an overview of responses across the four surveys, providing a general social, economic and demographic overview of our respondents. As noted, we expect only broad comparability with the general population in the HMDA given the heavy skew of our surveys towards movers.

We would, however, expect a slightly closer alignment amongst our mover profiles – in terms of household type, income and property – with those captured by the 5-yearly census: comparability can only be approximate (given the different time frames involved). Whilst our samples held up well, there were some areas of over and under representation (e.g. over-presentation of couple families with no children and under for family households in both of the HMDA).

OVERVIEW OF SURVEY RESPONSES

Respondents born overseas

Figure 14

Group	Born overseas	Born in Australia
Recent mover renters (494)	49.8%	50.2%
Recent mover purchasers (567)	37.7%	62.3%
Long term renters (515)	49.7%	50.3%
Long term owners (456)	34.0%	66.0%

Figure 14 above shows the breakdown between Australian and overseas born respondents across both NW and ES HMDA.

Overseas born respondents were more dominant among recent mover renters (50%) and long tern renters (50%) compared to recent movers who purchased (38%) and long term owners (34%). The role of the rental market both an as entry point for immigrants as well as a longer term housing option for these households is clear form these data. Longer term owners are overwhelmingly Australian born. Even among recent purchasers the proportion of immigrant respondents remains relatively low.

The tables overleaf break the sample to provide more detail at the HMDA level, looking first at those who have recently moved (in both tenures) and also take into consideration the length of residence in Australia for those born overseas.

Figure 15 looks at patterns for recent purchasers and renter movers. A number of important characteristics can be identified:

- The importance of the private rental sector for recent migrants is clearly illustrated in both HMDAs, although diverges in terms of the decline as the length of residency increases: remaining high in the NW HMDA for longer.

- Non-Australian born residents demonstrate greater access to home ownership in NW HMDA in the first decade post arrival compared to the ES HMDA. This reflects characteristics and market function of these different parts of the city.

Figure 16 considers similar breakdowns for the 'stayers' (long term owners and renters):

- The key insight here is the faster access into ownership for recent migrants in the NW HMDA and thus greater levels of stability seen in the first decade post arrival.

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OVERVIEW OF SURVEY RESPONSES

Length of residence in Australia: Mover purchasers and mover renters

Figure 15

Mover Purchasers					Mover Renters			
HMDA		Frequency	Percentage in demand area		HMDA		Frequency	Percentage in demand area
Eastern Sydney	3 years or less	4	1.28%		**Eastern Sydney**	3 years or less	39	13.40%
	4-9 years	28	8.97%			4-9 years	32	11.00%
	10-19 years	27	8.65%			10-19 years	27	9.28%
	20-29 years	22	7.05%			20-29 years	18	6.19%
	30 years or more	22	7.05%			30 years or more	21	7.22%
	Always	209	66.99%			Always	154	52.92%
	Total	312				Total	291	
Parramatta and North West	3 years or less	12	4.51%		**Parramatta and North West**	3 years or less	29	13.00%
	4-9 years	36	13.53%			4-9 years	37	16.59%
	10-19 years	23	8.65%			10-19 years	12	5.38%
	20-29 years	18	6.77%			20-29 years	15	6.73%
	30 years or more	26	9.77%			30 years or more	13	5.83%
	Always	151	56.77%			Always	117	52.47%
	Total	266				Total	223	

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OVERVIEW OF SURVEY RESPONSES

Length of residence in Australia: Long term owners and long term renters

Figure 16

Long Term Owners					Long Term Renters			
HMDA		Frequency	Percentage in demand area		HMDA		Frequency	Percentage in demand area
Eastern Sydney	4-9 years	2	0.79%		**Eastern Sydney**	4-9 years	55	18.39%
	10-19 years	15	5.95%			10-19 years	37	12.37%
	20-29 years	21	8.33%			20-29 years	20	6.69%
	30 years or more	35	13.89%			30 years or more	30	10.03%
	Always	179	71.03%			Always	157	52.51%
	Total	252				Total	299	
Parramatta and North West	4-9 years	9	4.29%		**Parramatta and North West**	4-9 years	37	15.88%
	10-19 years	16	7.62%			10-19 years	45	19.31%
	20-29 years	23	10.95%			20-29 years	19	8.15%
	30 years or more	29	13.81%			30 years or more	24	10.30%
	Always	133	63.33%			Always	108	46.35%
	Total	210				Total	233	

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OVERVIEW OR SURVEY RESPONSES

First Home Owner Grant Eligibility amongst recent purchasers

Figure 17

First purchase?	FHOG ELIGIBLE?				
	Yes	No	Don't know	Skipped	Grand Total
No, this is my second		17		160	177
No, this is my third or more		22		155	177
Yes	**178**	**31**	**1**	**6**	**216**
(blank)			1	7	8
Grand Total	178	70	2	328	578

How important was the First Home Owners Grant (FHOG) in driving the housing markets of our two HMDAs? In all, 30.7% (178) of our recent purchasers were eligible for the grant (see **figure 17**).

In the ES HMDA 25.6% (80) purchasers were eligible and in the Parramatta-North West HMDA the level was 37.2% (98).

The 'no' responses for second and third time movers can be ignored (respondents should have skipped this question). Those first home purchasers not eligible for the FHOG would include those re-purchasing, perhaps with a partner who had previously received a grant, or purchasing properties above the (then) $835,000 threshold.

It should be noted that the surveys were conducted just prior to the change in FHOG eligibility in mid 2012. Our respondents would have purchased at a time when existing dwellings were still eligible and additional support was being provided to new home purchasers.

The greater significance of first home buyers in the NW HMDA is likely to reflect higher levels of affordability. While it might be presumed that this strong activity is also reflecting that this part of the city is experiencing strong new supply (e.g. up towards the NW Growth Area), much of this activity also related to existing dwellings in established parts of the HMDA.

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OVERVIEW OF SURVEY RESPONSES

First or subsequent purchase by income group (Mover Purchasers)

Figure 18: Recent mover purchasers., across both HMDA
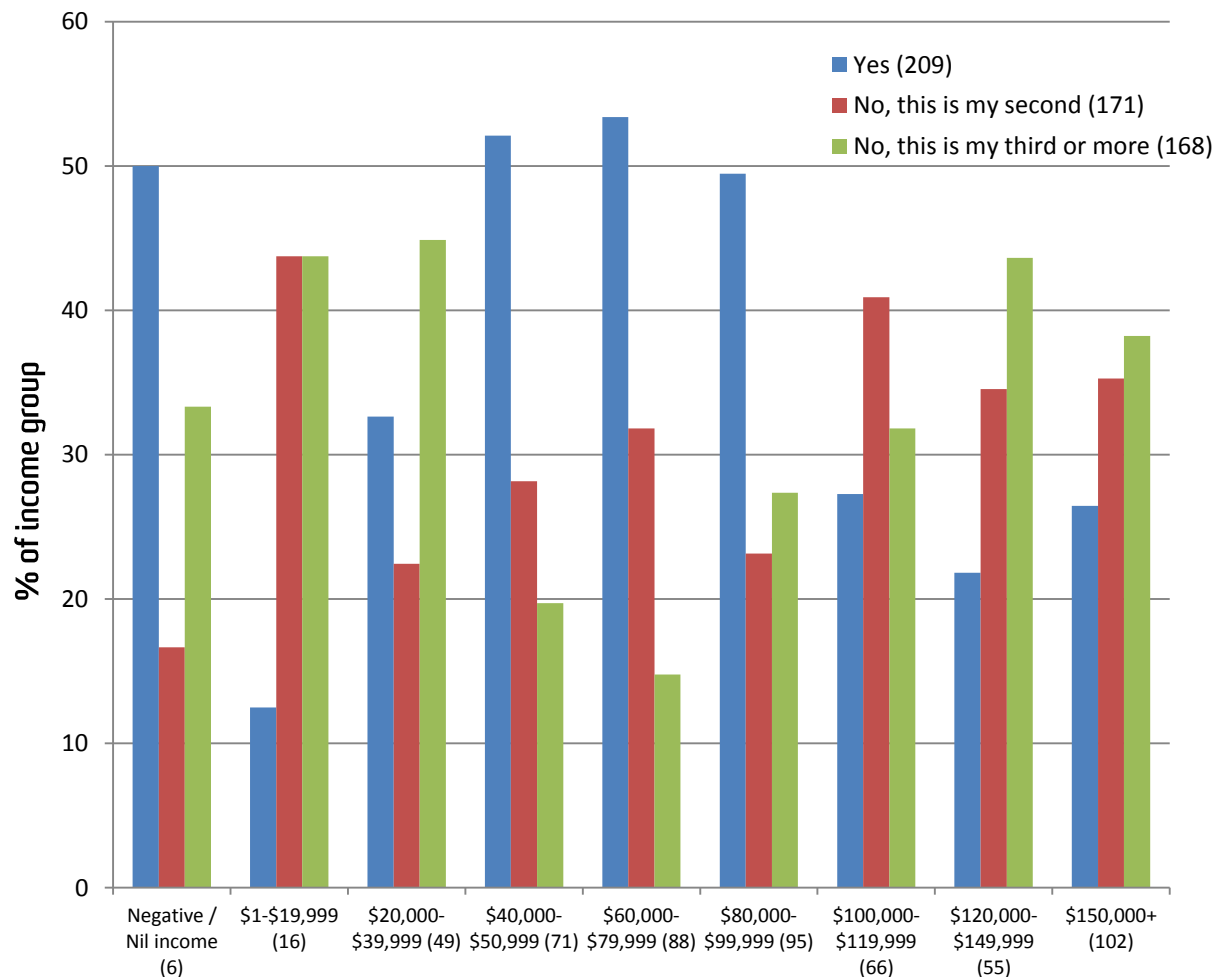
As illustrated by **figure 18**, there was a clear income differentiation between first and subsequent home buyers, as might be expected. But the relationship was not straightforward.

First time buyers were predominantly concentrated in the lower income cohorts, up to $100,000, with a clear peak in moderate income bands (those spanning $40,000-$99,999). Those with no income were also well represented – perhaps signifying purchase outright with significant assistance, or purchasing on return from overseas.

Second home buyers were spread across the age ranges, likely to reflect different levels of equity held in property based upon longevity as an owner.

However, third or more home buyers showed a clear bi-polar income profile, indicating a significant group on lower incomes, most likely older owners downsizing, and higher income owners trading up.

OVERVIEW OF SURVEY RESPONSES

Dwelling Type by Household Type and Household Incomes

Who is moving into what type of dwelling?

The following charts (figures 19 to 22) show the relationship between the household type of our respondents and the dwellings they have either moved into (in the case of the recent movers) or stayed in (our long term owners and renters). The height of the bars represents the proportion of that household type who are living in each of the dwelling types. The sample size for some of the categories – e.g. multigenerational households - is very small and this should be taken into consideration in interpretation.

The first four charts encompass our entire sample (i.e. both the ES and NW HMDA). Looking at the sample as a whole, the following key characteristics are clearly identified:

Figure 19: Recent Purchasers

- The single detached house was the predominant type moved into by this group. This was particularly so for younger and older family households; less so for single person and older households.

- Lower density flats and apartments were moved into by 115 of our recent purchasers. This market appears more bifurcated, with a stronger representation of younger (and childless couples) and older households. This purchaser profile is also broadly mirrored by those moving into semi-detached (30) and attached/terraced homes (63) with probable downsizers particularly well represented in the latter.

- High density dwellings also demonstrate a bifurcated market to a certain extent, with older, single-person households being the standout category here.

Figure 20: Long term owners

- The dwelling characteristics of our long term owners closely reflect those of recent purchasers – although an interesting difference can be seen with older single-person households far more likely to be in lower density apartments rather than high-rise.

Figure 21: Recent mover renters

- Lower density flats and apartments are the predominant housing type moved into by our recent mover renters, and this holds when the group is broken down by household type.

- Younger family households and older couple households comprise the large majority of renters recently moving into detached housing, but the former is also strongly represented in apartments.

- Amongst the household groups with larger sample sizes, older couples (without children) and younger families with children have moved into detached dwellings.

Figure 22: Long term renters

- Again, the profile of housing type resided in amongst our longer term renters shares strong synergies with those renters who have recently moved. However, the number of family households and single parent households (over 40% of these types in each case) living in medium density flats is instructive.

Dwelling type moved to by household type: recent Mover Purchaser

Figure 19: Recent mover purchaser, across both HMDA
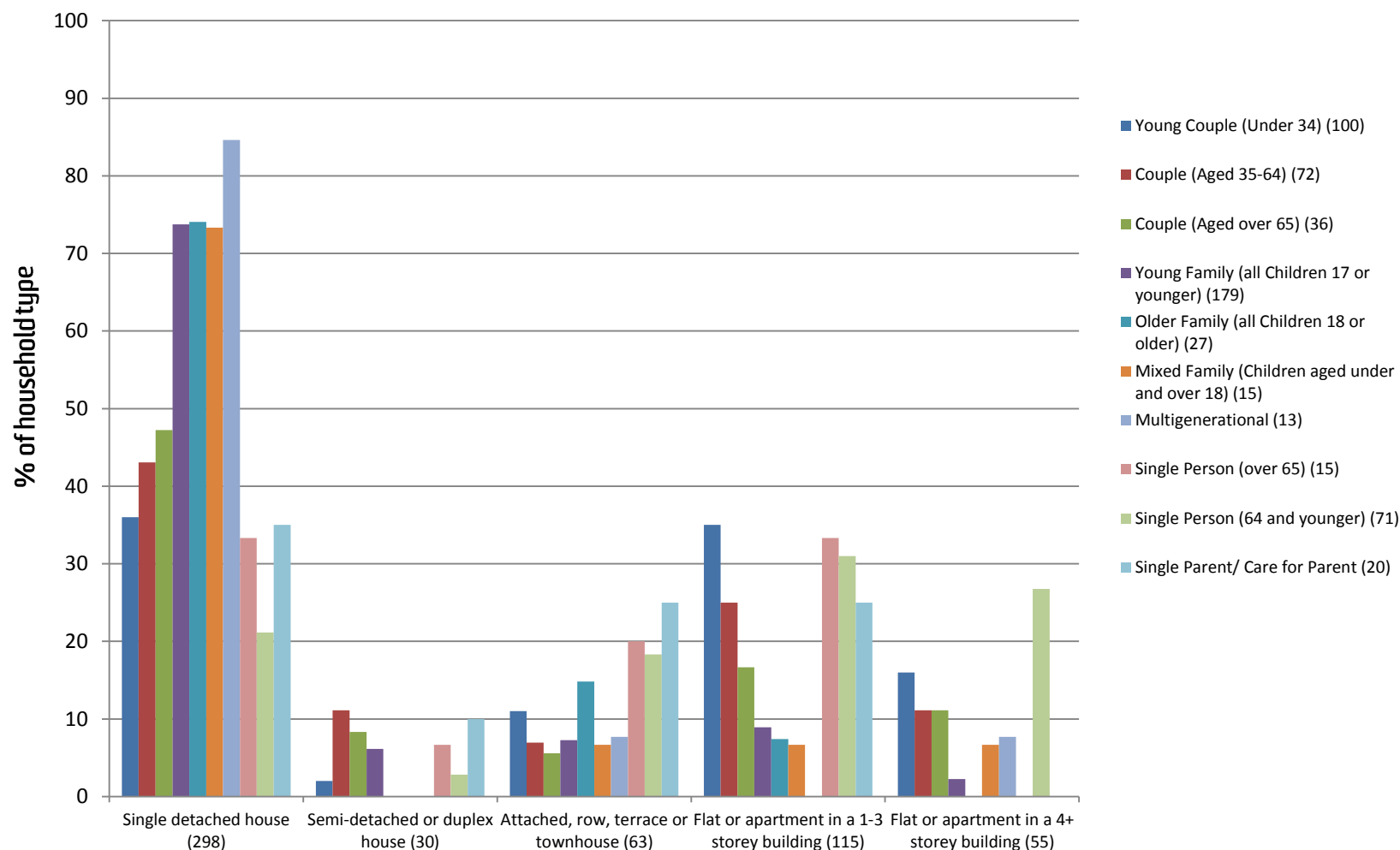
OVERVIEW OF SURVEY RESPONSES

Dwelling type moved to by household type: long term owners

Figure 20: Long term owners, across both HMDA
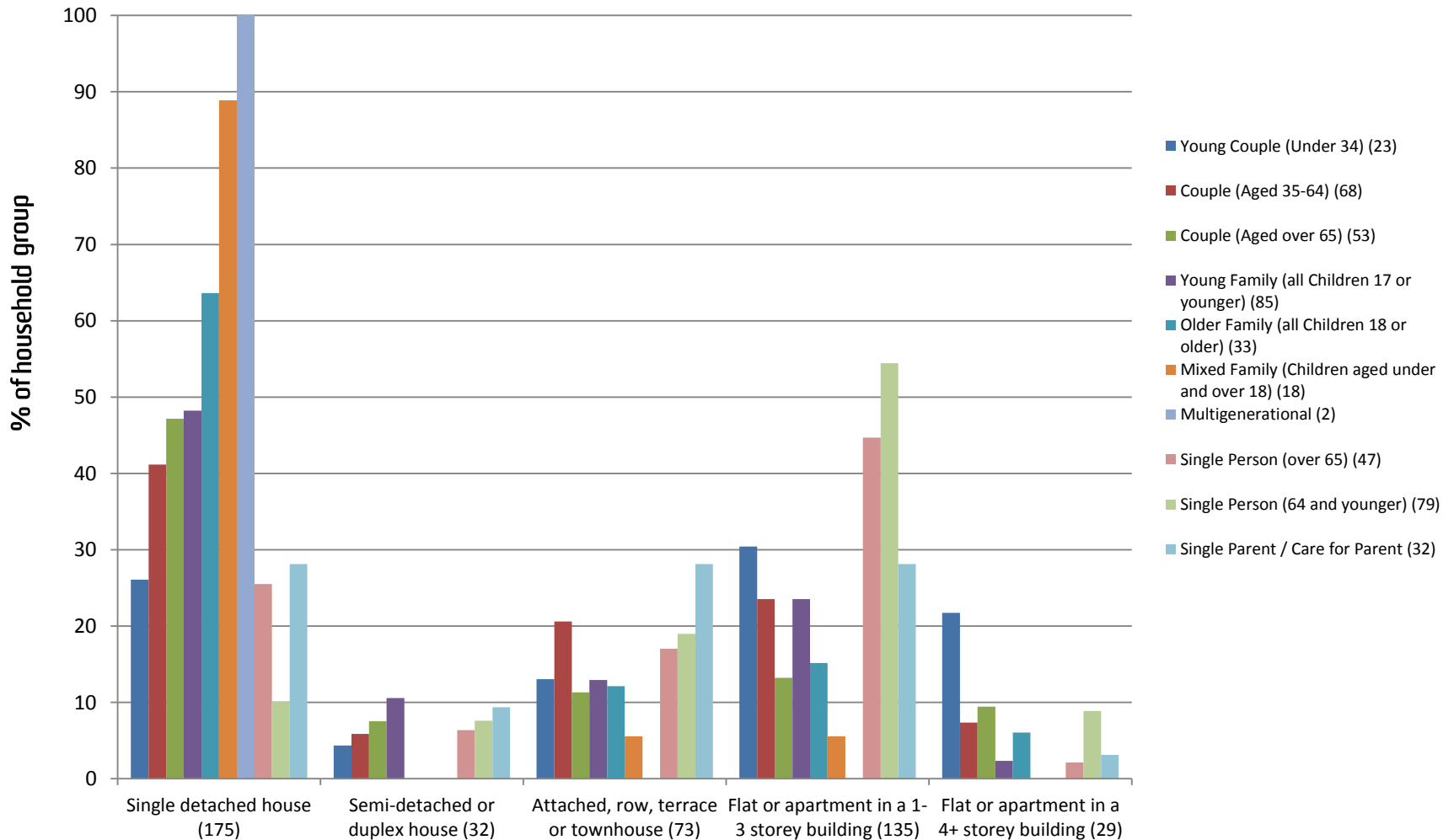
OVERVIEW OF SURVEY RESPONSES

Dwelling type moved to by household type: recent mover renters

Figure 21: Recent mover renters, across both HMDA:

Legend:
- Young Couple (Under 34) (121)
- Couple (Aged 35-64) (55)
- Couple (Aged over 65) (6)
- Young Family (all Children 17 or younger) (110)
- Older Family (all Children 18 or older) (7)
- Mixed Family (Children aged under and over 18) (27)
- Multigenerational (6)
- Single Person (over 65) (3)
- Single Person (64 and younger) (81)
- Single Parent / Care for Parent (48)
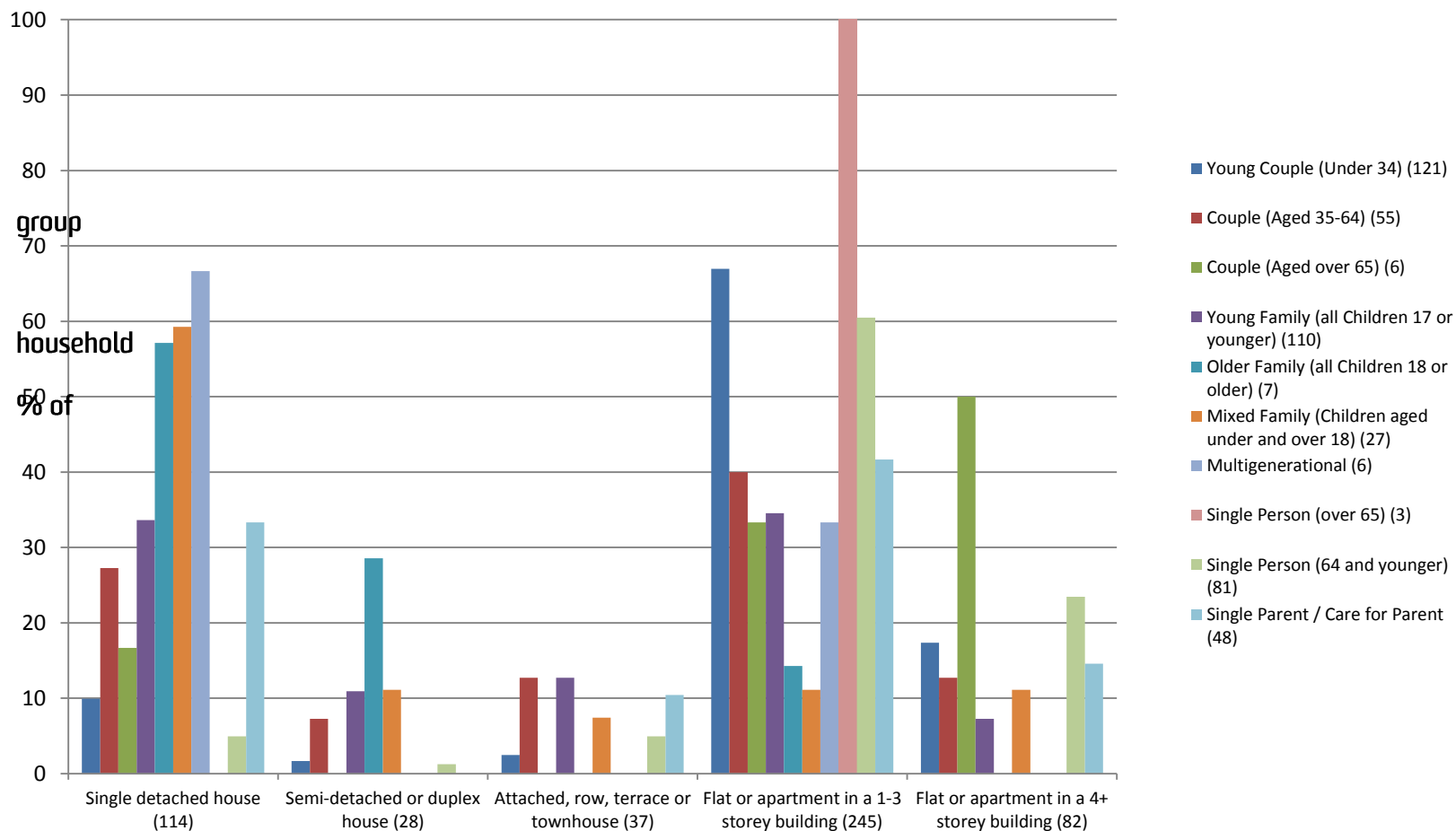
OVERVIEW OF SURVEY RESPONSES

Dwelling type moved to by household type: long term renters

Figure 22: Long term renters, across both HMDA
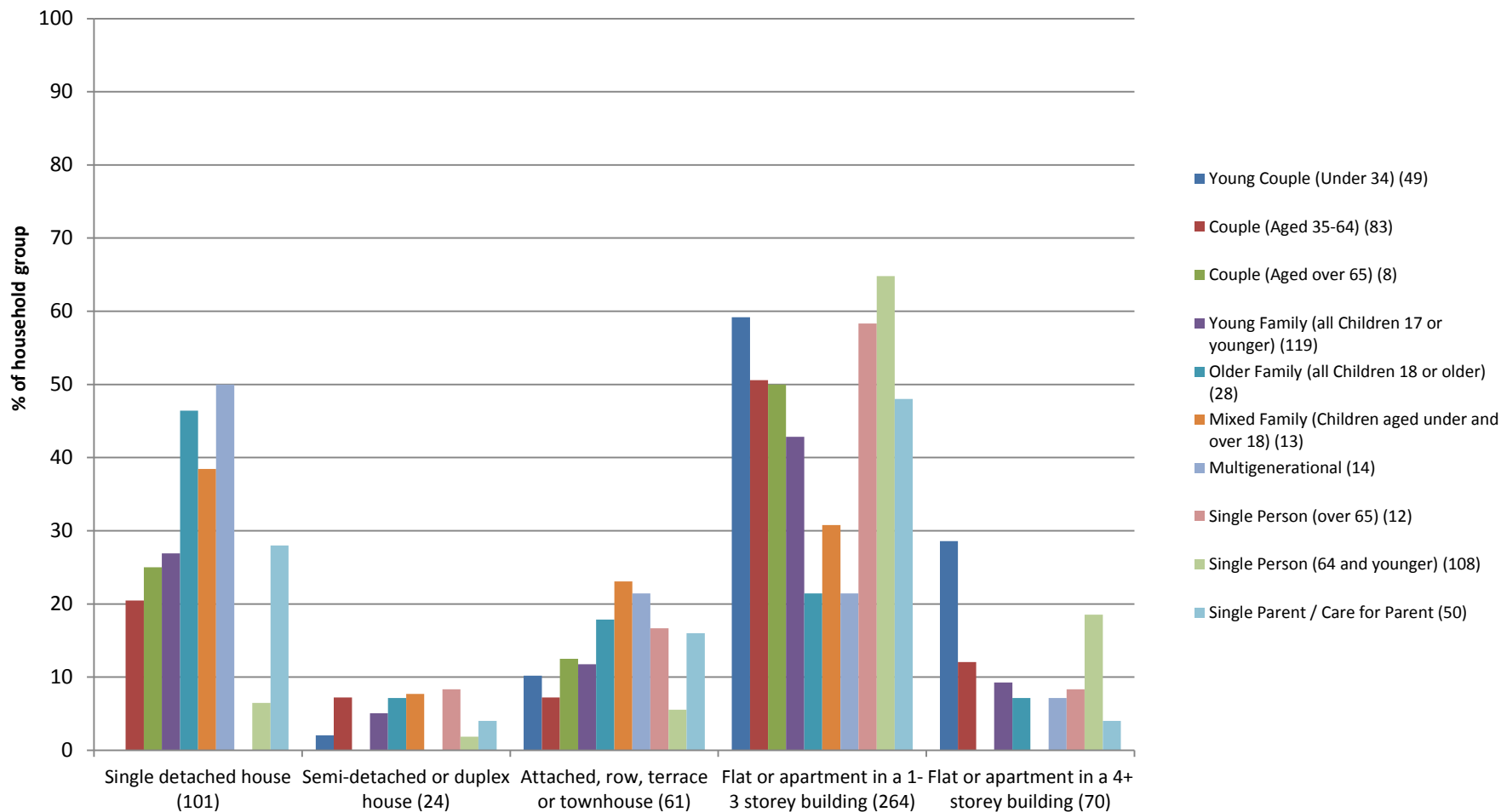
OVERVIEW OF SURVEY RESPONSES

Dwelling type by household type at the HMDA level

Disaggregating the data by HMDA

Over the next set of graphs (figures 23-30), we disaggregate the breakdown of dwelling type by household type at the HMDA level. Identifying similarities and differences between different parts of the city is a clear objective of the approach taken, and here we test out the ability of the surveys to effectively and meaningfully draw out those patterns.

As noted previously, in large part, differences seen between our two HMDA will reflect underlying stock and demographic characteristics – people can only move into the type of housing available, and the type of household moving will reflect the composition of population in those subregions. In this regard, we are not really comparing 'apples with apples'. However, this is not a concern given that our interest is in better understanding – at the subregional level – who is moving (and who is not), the type of housing they are moving into (or staying put in), and the trade-offs and choice/constraint factors shaping those decisions. This provides insight into how housing pathways are working in each of those areas, and for whom.

The following graphs offer some interesting insight in this regard, although the trade-off for this level of disaggregating is quite a complex picture. Presenting this detail produces rather 'busy' graphs that take a little unpicking – the key here is to identify and focus on the patterns rather than specific values.

Figure 29 and 30 Recent Mover purchasers

Amongst our recent mover purchasers across both the NW and ES HMDA, strong correlations (as would be expected) between larger families and detached dwellings was strong, with this dwelling type being predominant. Single person, and single parent households make up the more notable groups moving into medium and higher density stock. Interestingly the distinctions are more pronounced in the ES HDMA, with families moving into large homes and smaller households into flats and apartments. A key difference – reflecting affordability constraint as much as stock profile, is seen in terms of the type of property purchased by young couples – in the NW HMDA this is a detached property market; in the ES HMDA, an apartment market.

Figures 23 and 24 Long term owners

The patterns of property type by household type amongst our long term owners are similar to those seen with recent purchasers, although couple households are less concentrated in the detached (and in the case of the NW, we might speculate new build) market.

Figures 25 and 26 Recent mover renters

In both HMDA, medium and higher density stock figures more prominently for our recent mover renters across most household types. In the NW, larger families are moving into detached homes, but in the ES, access to this type appears limited: there is quite a significant proportion of family households living in flats.

Figures 27 and 28 Long term renters

A similar pattern is seen amongst our long term renters, and indeed the dominance of medium density apartments is even greater. In the ES HMDA, over two-thirds of our younger family households are living in either low-rise or high-rise apartments.

OVERVIEW OF SURVEY RESPONSES

Dwelling type by household type for mover purchasers

Figure 23: Recent mover purchasers, NW HMDA
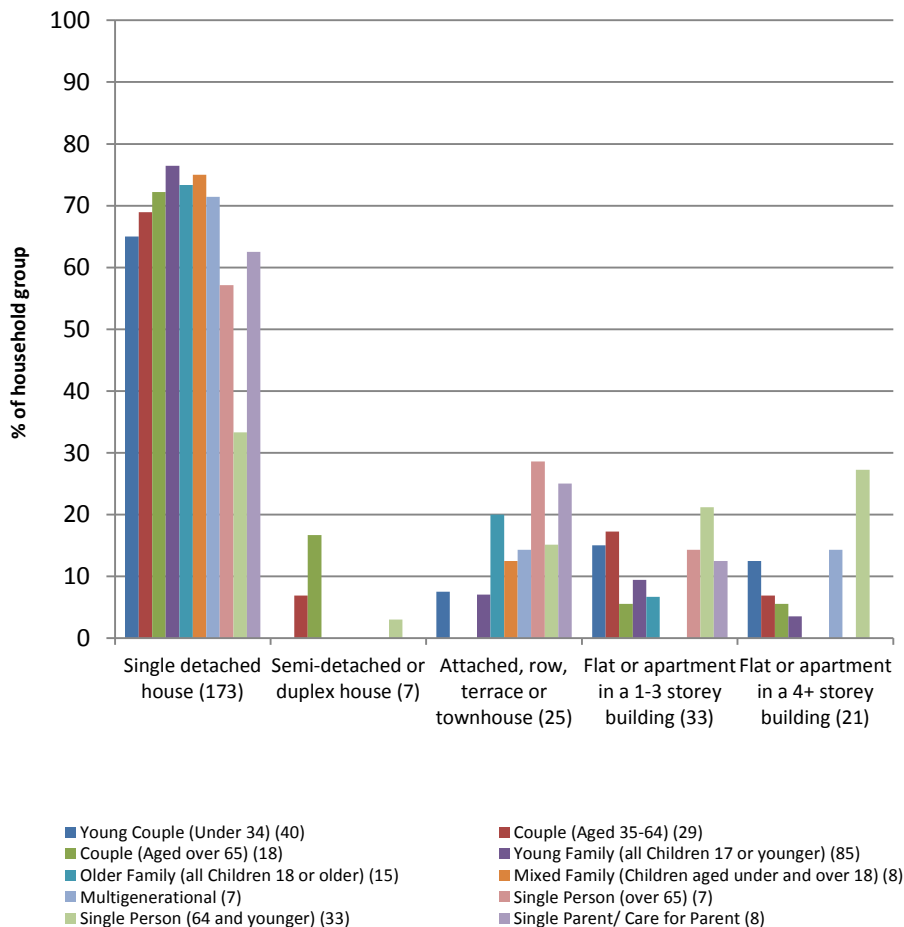
Figure 24: Recent mover purchasers, ES HMDA
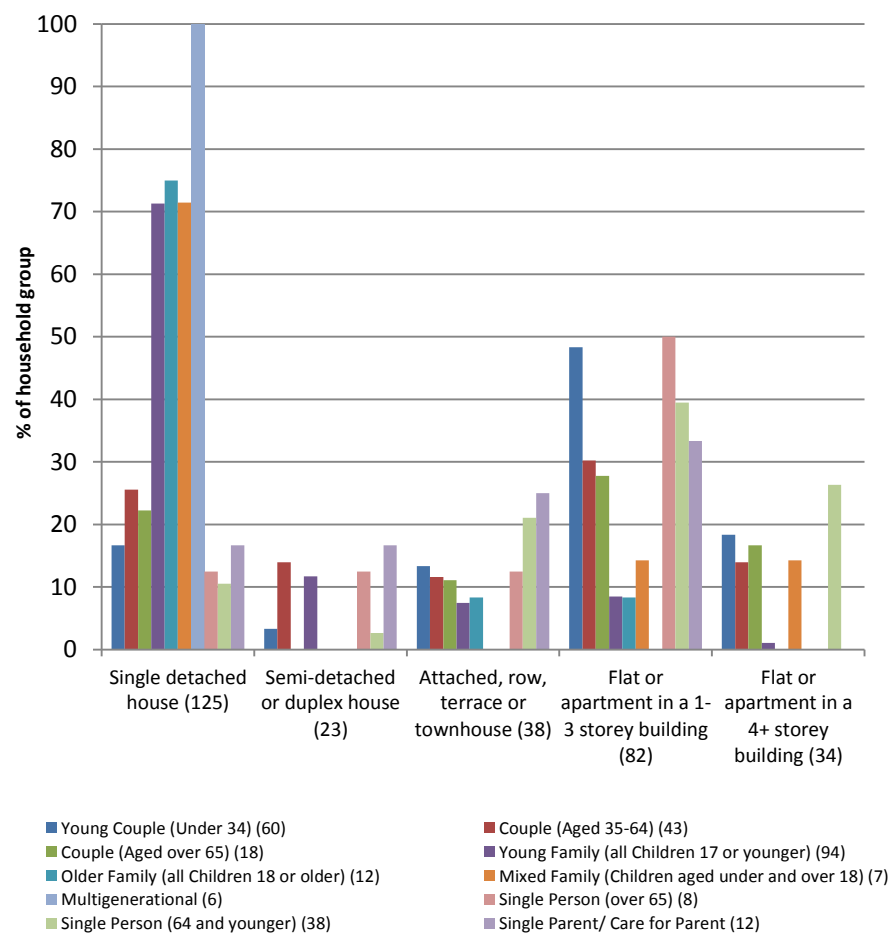
OVERVIEW OF SURVEY RESPONSES

Dwelling type by household type for long term owners

Figure 25: Long term owners, NW HMDA
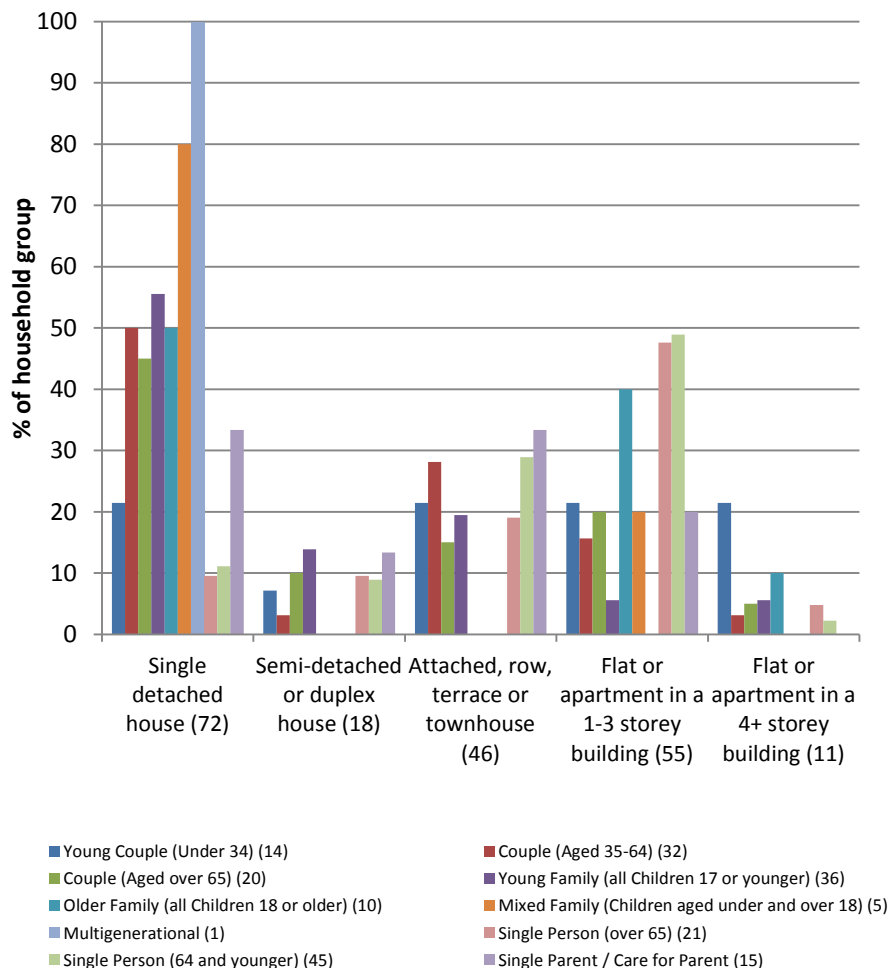
Figure 26: Long term owners, ES HMDA
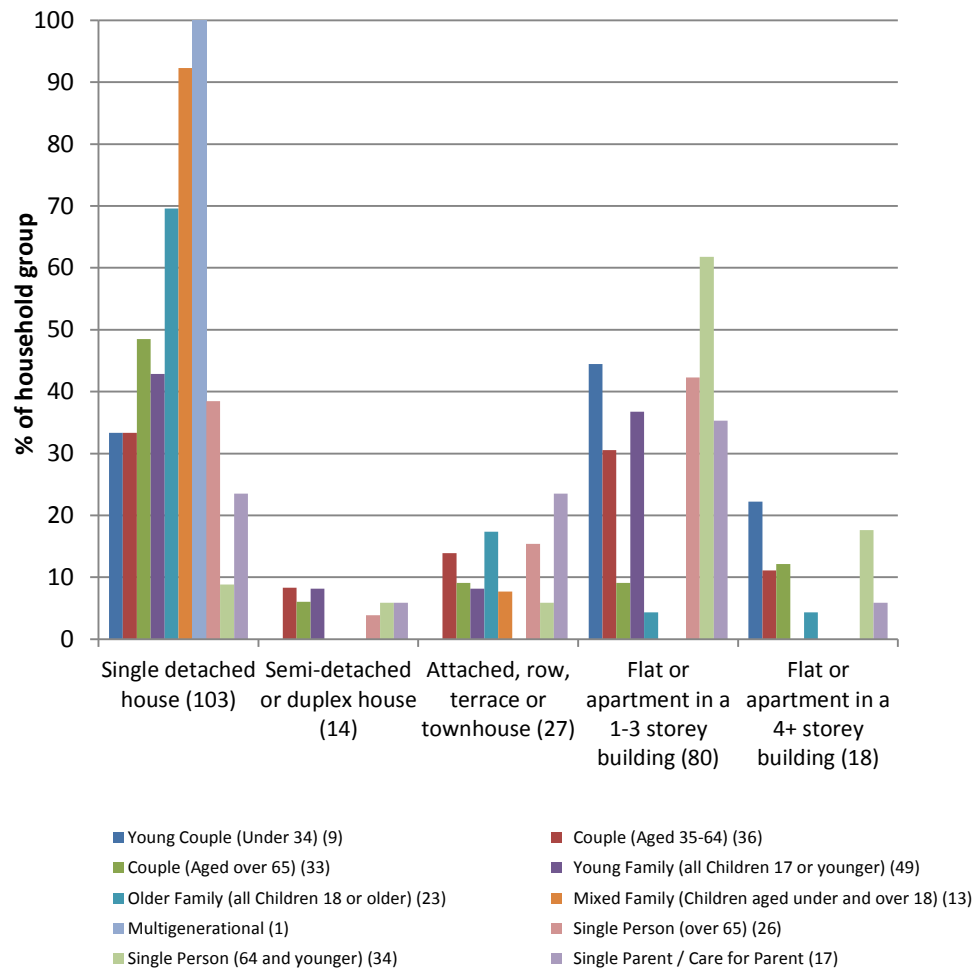
OVERVIEW OF SURVEY RESPONSES

Dwelling type by household type for recent mover renters

Figure 27 Recent Mover Renters, NW HMDA
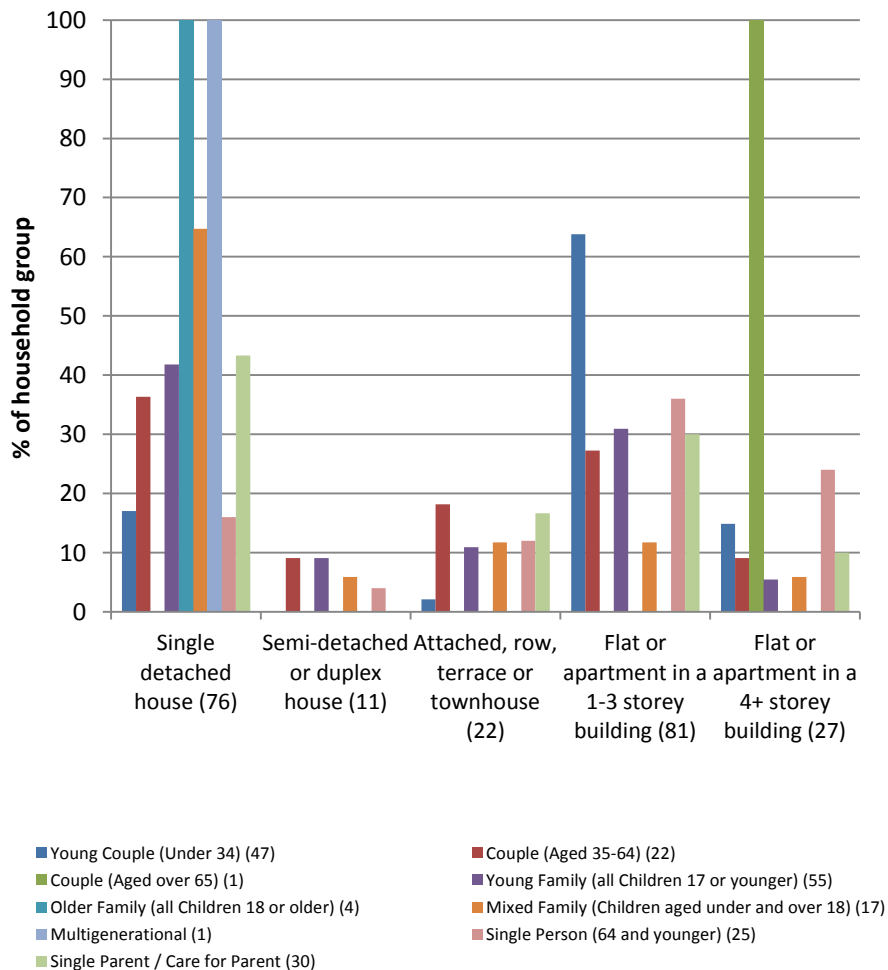
Figure 28: Recent Mover Renters, ES HMDA
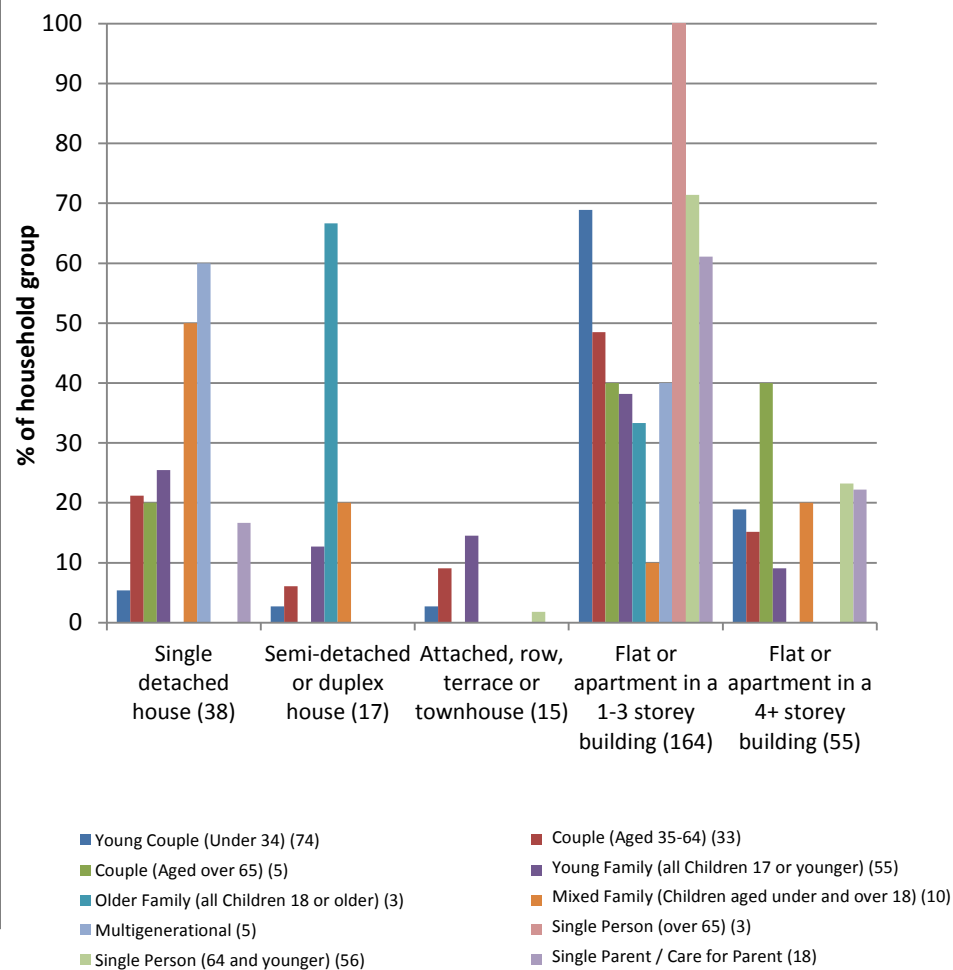
OVERVIEW OF SURVEY RESPONSES

Dwelling type by household type for long term renters

Figure 29: Long term renters, NW HMDA

Legend:
- Young Couple (Under 34) (10)
- Couple (Aged 35-64) (30)
- Couple (Aged over 65) (5)
- Young Family (all Children 17 or younger) (60)
- Older Family (all Children 18 or older) (18)
- Mixed Family (Children aged under and over 18) (6)
- Multigenerational (10)
- Single Person (over 65) (5)
- Single Person (64 and younger) (42)
- Single Parent / Care for Parent (28)
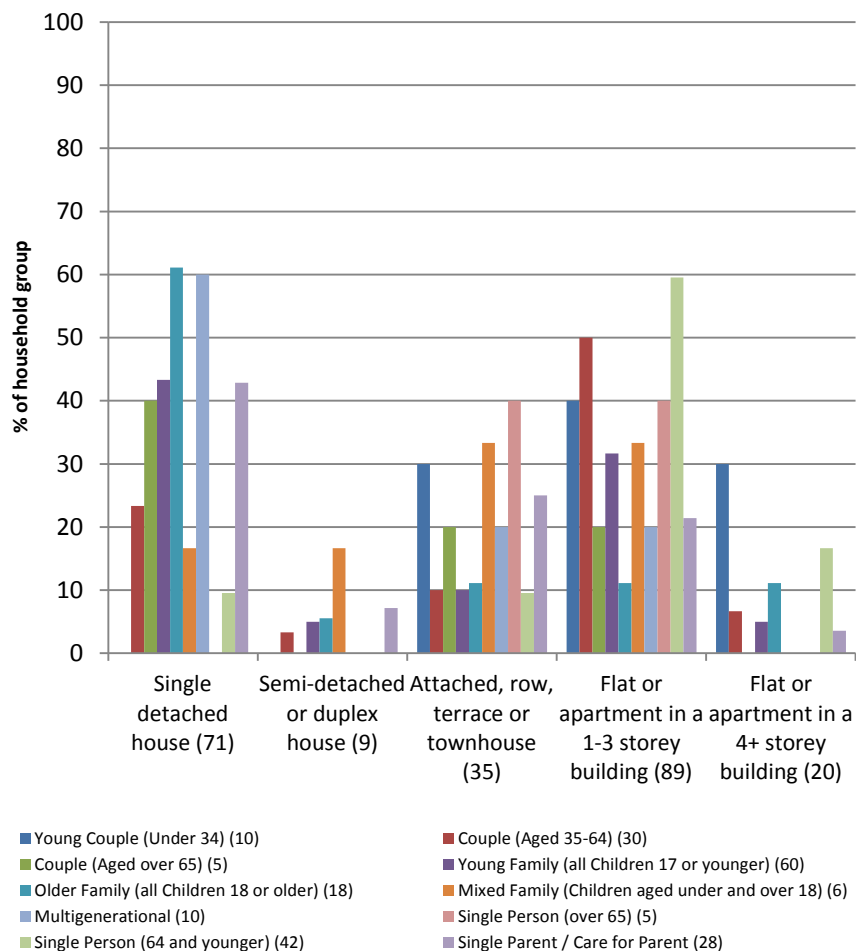
Figure 30: Long term renters, ES HMDA

Legend:
- Young Couple (Under 34) (39)
- Couple (Aged 35-64) (53)
- Couple (Aged over 65) 93
- Young Family (all Children 17 or younger) (59)
- Older Family (all Children 18 or older) (10)
- Mixed Family (Children aged under and over 18) (7)
- Multigenerational (4)
- Single Person (over 65) (7)
- Single Person (64 and younger) (66)
- Single Parent / Care for Parent (22)
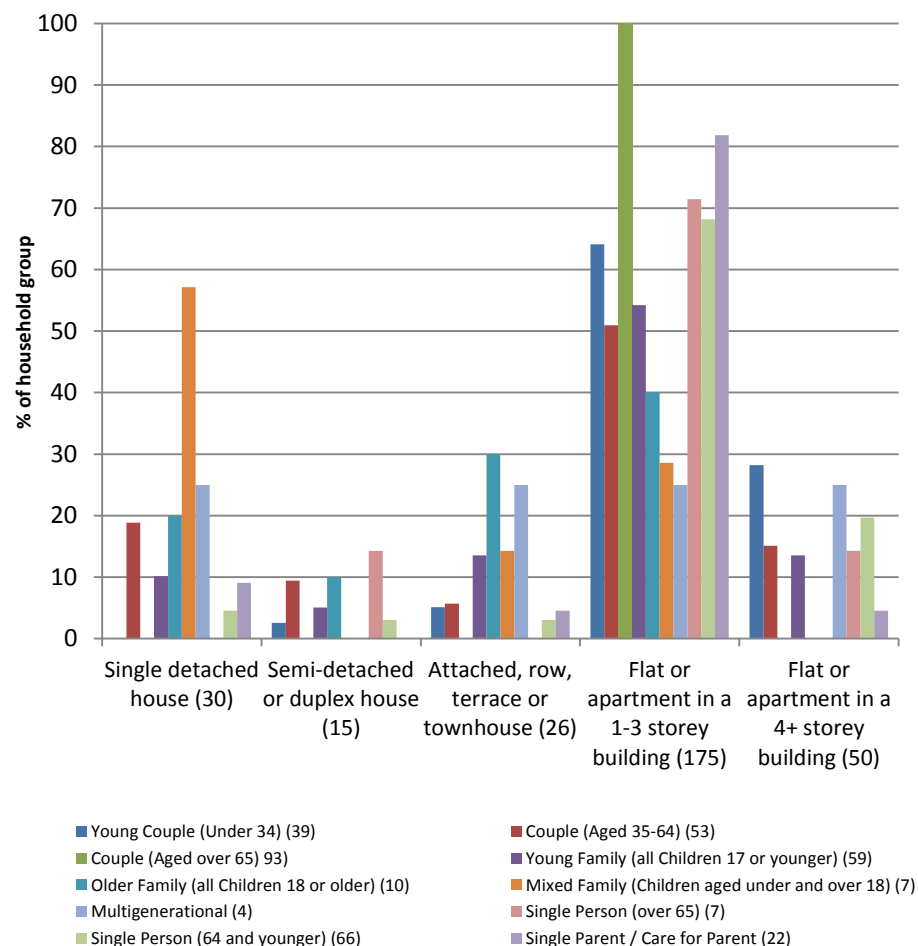
OVERVIEW OF SURVEY RESPONSES

Income profiles

The following charts (**figures 31** to **34**) highlight the distinctive profiles of the respondents to each of the four surveys in terms of income. Both absolute numbers (blue) and percentages (red) are illustrated. Although we cannot ascertain precise values, the patterns of distribution across the income bands identified in the survey provide a fairly powerful narrative.

Figure 31 presents the profile for recent mover purchasers across both HMDA. Analysis undertaken on those with the greatest propensity to express demand (and reported upon in the companion Technical Report – Tice et al., 2013) indicates that higher incomes provide the means to move within Sydney's housing market. Our recent mover purchaser respondents reflect that characteristic, with a skew towards the higher income groups. Two peaks can be seen: firstly between $60,000 and $100,000, representing a moderate income entry market; and secondly above $150,000 – the latter accounting for almost 20% of our recent purchasers.

A more normal profile is seen with our recent mover renters (**figure 32**) with a lower peak in the $60-$80,000 band and over 50% of all respondents in this group registering lower to moderate incomes of between $20,000 and $80,000.

Figure 31: Recent mover purchasers
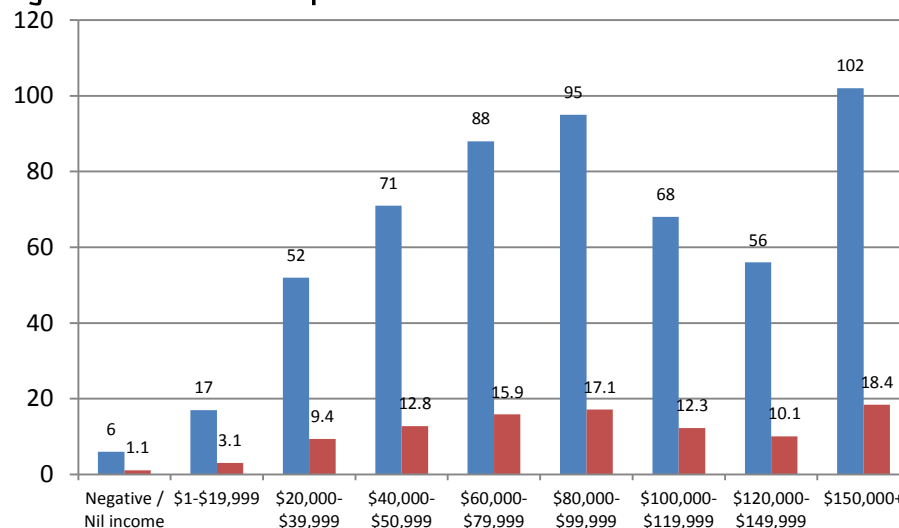
Figure 32: Recent mover renters
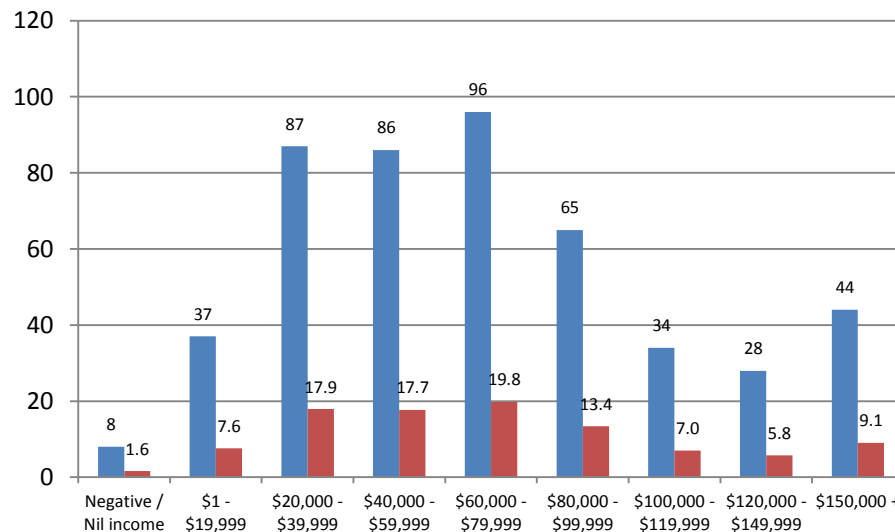
OVERVIEW OF SURVEY RESPONSES

Income profiles

Figure 33 captures the income profile for our long term owner respondents across both HMDA. Although those in the higher income bands are well represented (although not as much as seen amongst our recent purchasers), the profile peaks in the $40,000-$60,000 bracket and almost 50% of all household incomes fall between $40,000-$100,000.

The income profile for long term renters (**figure 34)** is interesting: it might be expected that incomes across this group would be generally lower and be reflective of a group whose housing options would perhaps indicate higher levels of constraint than seen amongst our other groups. However, the profile is not greatly dissimilar to either long term owners or recent mover renters, with a peak in the $40,000-$60,000 bracket. What is distinct is the lowest proportion of households across the four groups in the highest income bracket.

Figure 33: Long term owners
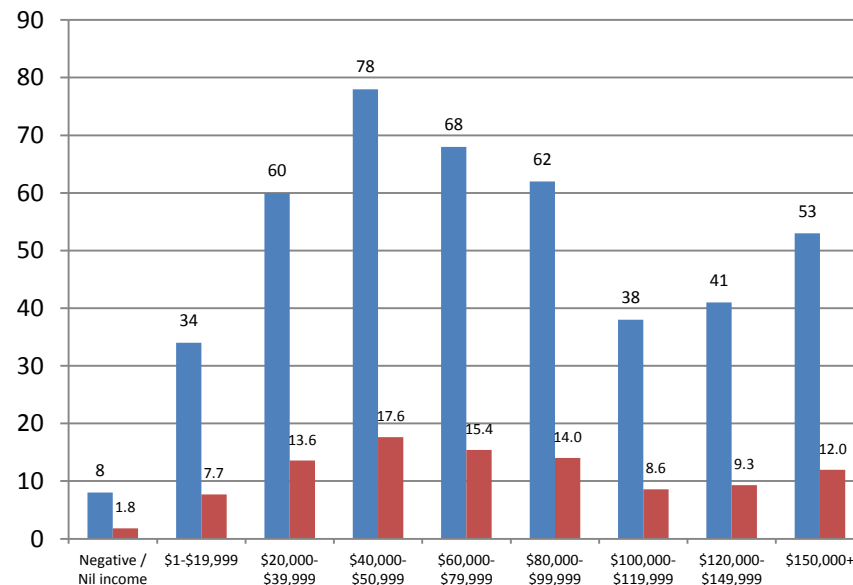
Figure 34: Long term renters
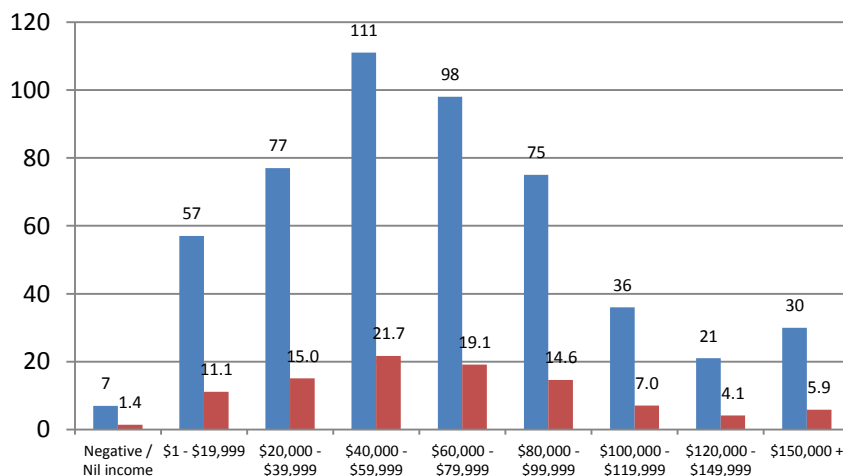
OVERVIEW OF SURVEY RESPONSES
Dwelling type by income, recent mover purchasers

We can drill down to the HMDA level and look at the type of dwelling by income band. The aim here is to tease out similarities and differences across/between the two HMDA. It was hypothesised that quite different patterns might be identified, not least given the different stock profiles in the area, but also quite different house prices.

While the stock profiles in each of the two HMDA lead to moves to detached homes in the NW HMDA being more prevalent than in the ES HMDA (and likewise moves to medium and higher density stock being more significant in the ES HMDA compared to the NW HMDA), the patterns amongst recent mover purchasers are strikingly similar.

In both HMDA (**figures 35** and **36**), moves into detached dwellings predominate, and a bifurcated pattern across income bands can be seen. A secondary peak is seen amongst the lower income groups (likely to be picking up purchasers with high levels of equity and now retired or working part time), and the stronger peak amongst higher income respondents.

Again in both HMDA, similar correlations between type and income band with those moving into either medium and high density stock can be seen. With the former, peaks are seen in households with moderate incomes, particularly so in the ES HMDA where affordability constraints are higher. With higher density dwellings, a strong negative correlation with income is seen. Interestingly, the semi-detached/townhouse market in the ES HMDA seems to track the detached market in terms of income group profile, whereas in the NW HMDA, our respondents moving

into this type follow the income characteristics of those moving into higher density stock.

If we look at our recent mover renters, more significant differences can be identified between the two HMDA. In the NW HMDA (**figure 37**), detached housing is – as is the case in the purchase market – the dominant type, particularly amongst moderate and higher income groups. Medium and higher density housing is more prevalent in our renter group compared to our purchasers, but as with our purchasers, strong negative correlation is seen with income. As with the purchasers, the income profile of those moving into semi-detached and town houses accord with those moving into medium and higher density stock.

However in the ES HMDA (**figure 38**), the significance of medium (and to a certain extent, higher) density options comes through. The availability and affordability of detached housing, particularly to households with incomes less than $100,000, appears limited, and medium density provision plays a predominant role across all income groups – particularly amongst recent movers with lower to moderate incomes. As seen with recent mover purchasers, the income profiles of those moving into semi-detached/townhouses and terraces are more akin to those moving into detached homes.

OVERVIEW OF SURVEY RESPONSES

Dwelling type by income, recent mover purchasers

Figure 35: Recent mover purchasers, NW HMDA
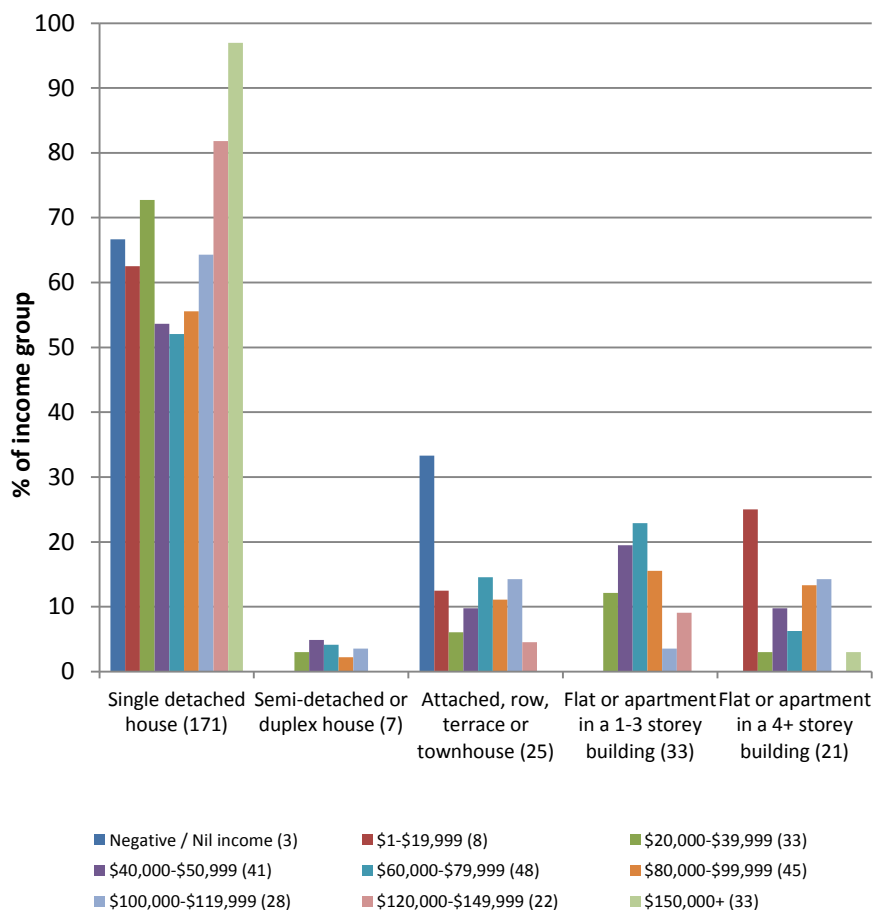
Figure 36: Recent mover purchasers, ES HMDA
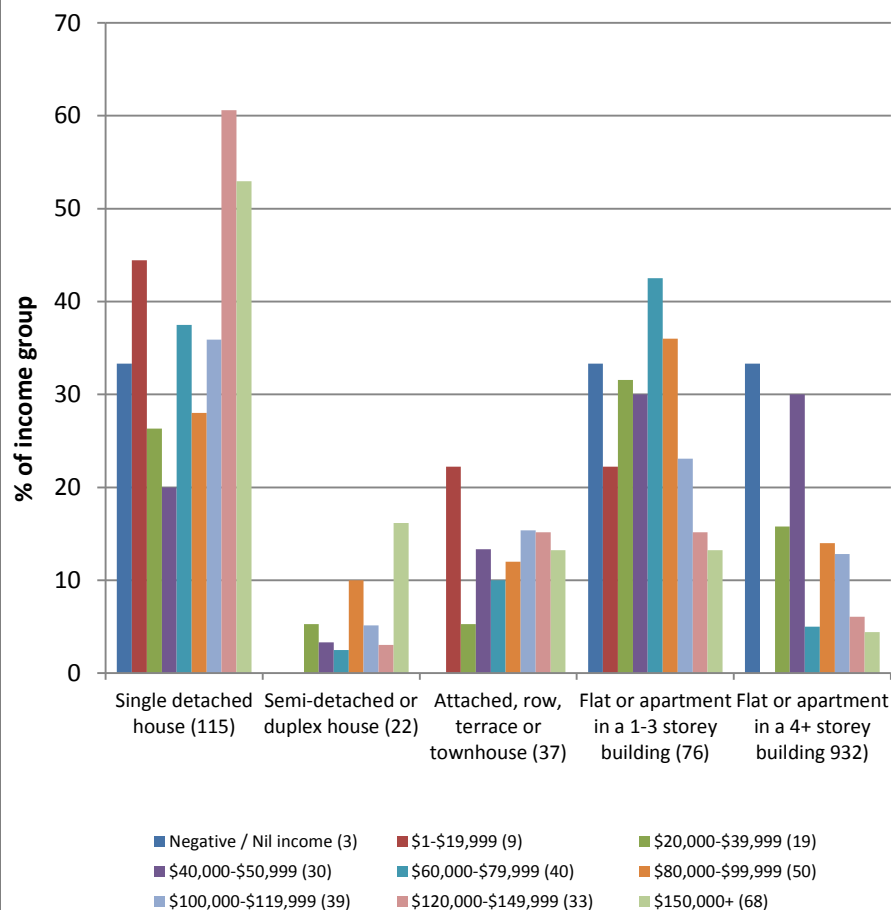
OVERVIEW OF SURVEY RESPONSES

Dwelling type by income for recent mover renters

Figure 37: Recent mover renters, NW HMDA
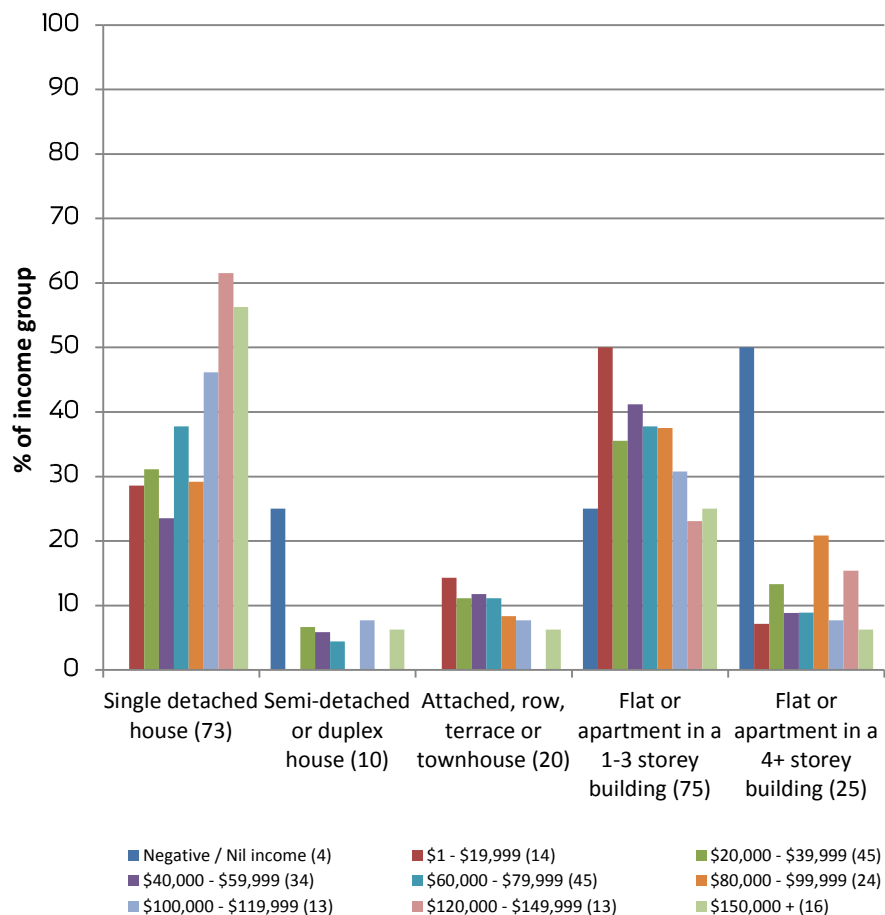
Figure 38: Recent mover renters, ES HMDA
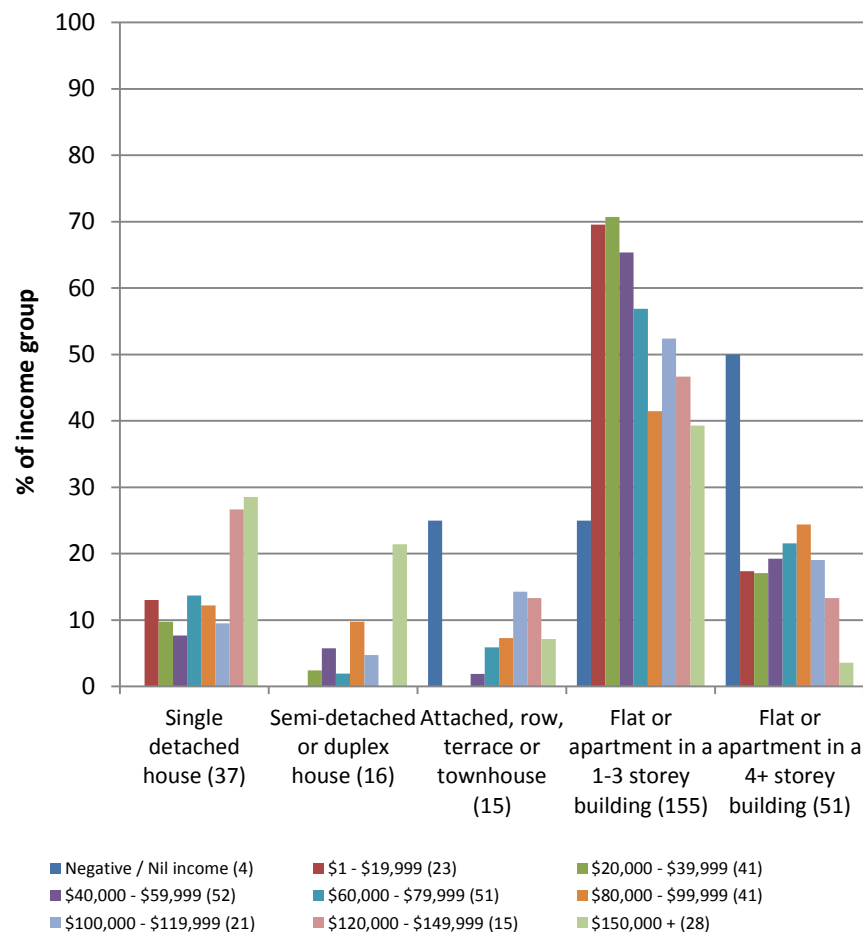
4. City flows and mobilities
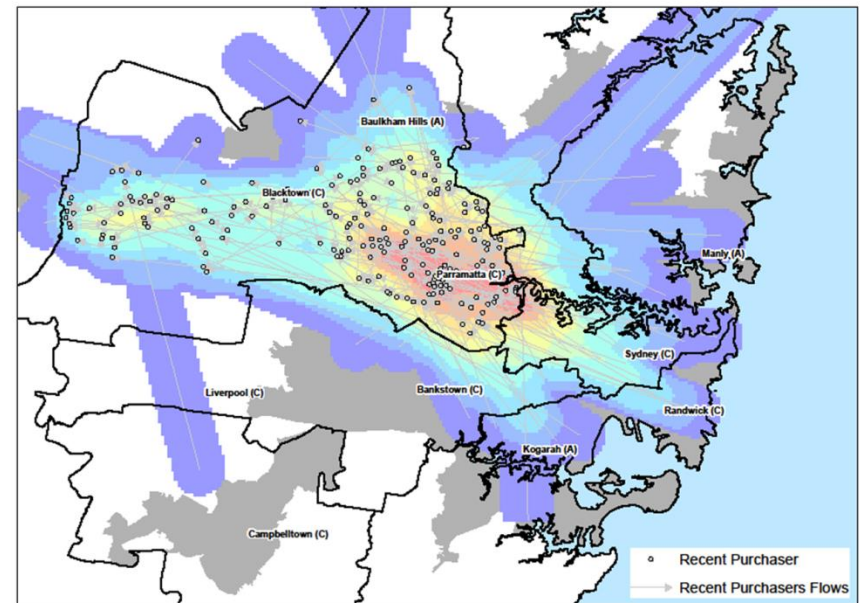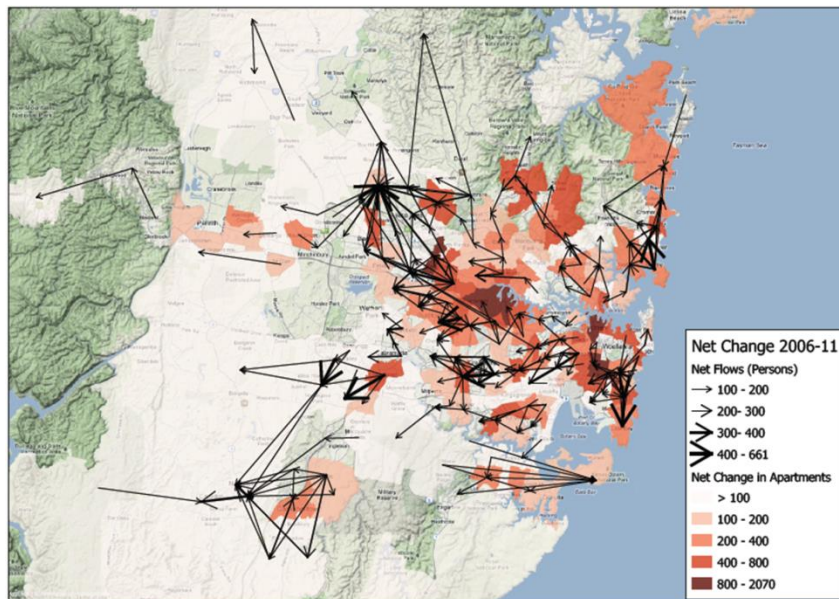
CITY FLOWS AND MOBILITIES

Introduction

In this section we illustrate the geographies of household mobility by mapping flows between origin and destination locations of our moving respondents. This is a key point of innovation in this research. Capturing movement, and presenting it in an easy to digest format is a challenge, particularly so where the key-take out of those spatial pathways is not necessarily told by the longest distances, but the coagulation of shorter distances travelled within the bounds of the determined HMDA.

We start by providing a brief overview of the visual techniques explored to best represent and articulate the spatial data made available through the survey, culminating in the development of the 'intensity map' which subsumes but still implicitly suggests distance and movement while focusing on directing the reader to those parts of the HMDA where moves are at their most intense.

Intensity maps are then used to provide visual representation of mobility data within our two pilot HMDA, disaggregated by household type, ancestry, and so on. The maps provide unique insight into the internal dynamics within the HMDA itself – which, by definition – is the commencement and finish of the majority of moves – but also the pathways culminating in the HMDA that start elsewhere.

These disaggregated maps start to illustrate how different parts of the HMDA play a particular functional role. For example, first time purchaser/younger household moves in the NW HMDA relate closely to Parramatta, whereas older family household moves relate to the larger properties out towards the Hills District.

This internal differentiation by no means contradicts the logic of the HMDA – they are not intended to be homogenous, but rather capture a subregional frame within which a range of housing pathways can be enacted.

CITY FLOWS AND MOBILITIES

Piloting different flow representations (NW HMDA)

Figure 39: Test mapping
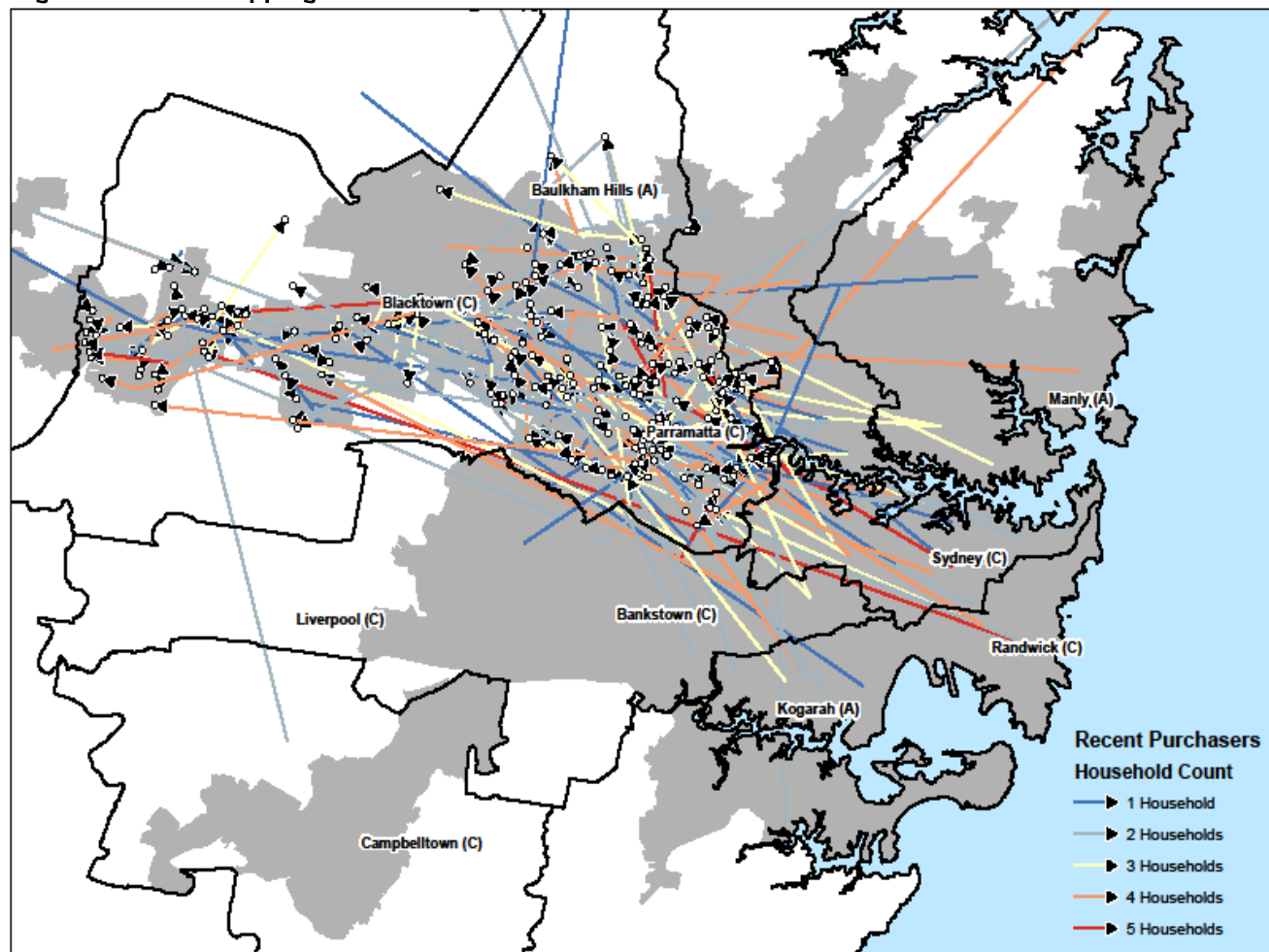
Figure 39 seeks to visualise the spatial extent and depth of flows of recent purchaser movers from both within the NW HMDA but also moves from locations across the city.

We sought to capture movement using a standard approach: a directional arrow offers a well-recognised means of conveying a sense of flow. The arrows were then coloured according to the relative weight of that particular flow – in this case, from blue for a single household move from a particular postcode to red for five or more households.

However, the visualisation is only partly successful, and indeed detracts from the actual message in the data. Your eye is encouraged to focus on the length of arrows, negating the fact that most activity/intensity occurs through much shorter moves within the HMDA.

CITY FLOWS AND MOBILITIES

Piloting different flow representations (NW HMDA)

Figure 40: Test mapping
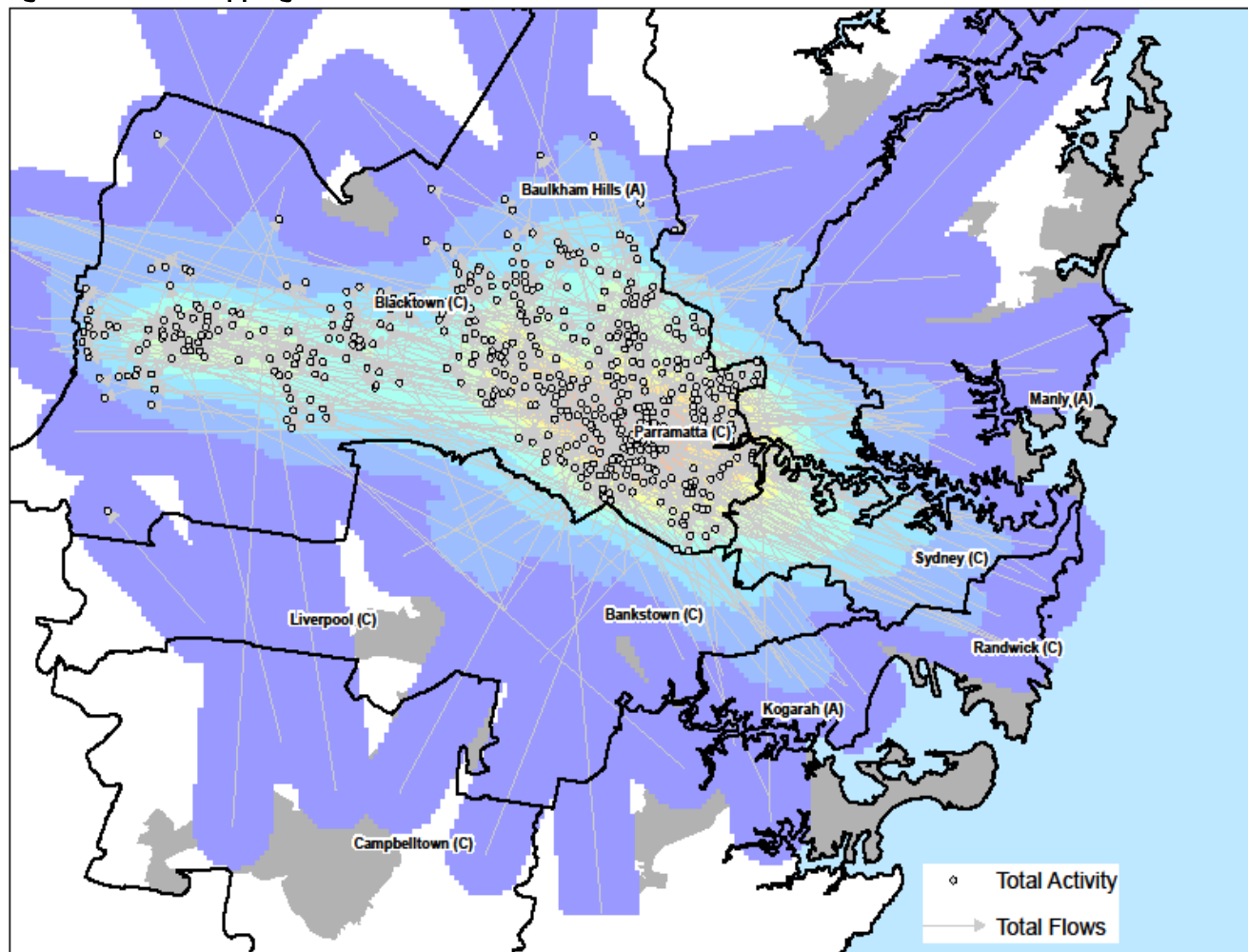
In this visualisation (**figure 40**), the different flows making up all activity within and to the NW HMDA amongst our respondents are captured through a gradated scale of intensity of relative activity, from relatively cold (blue) to relatively hot (red). Less prominent yet nevertheless still visible flow lines are indicated.

This format has a number of strengths. Most importantly, it captures intensity in terms of both the original and destination of the moving household. As a result, the greater the number of within HMDA short distance hops, the greater intensity of activity recorded. Connectivity across HMDAs is thus still presented, however it does not overwhelm the bigger story: the self-containment of, and nature and direction of moves within, the HMDA itself.

One weakness with all flows still shown in composite is that the lines cover up areas of more intense activity: underneath Parramatta is a red hot spot.

CITY FLOWS AND MOBILITIES

Piloting different flow representations (NW HMDA)

Figure 41: Test mapping
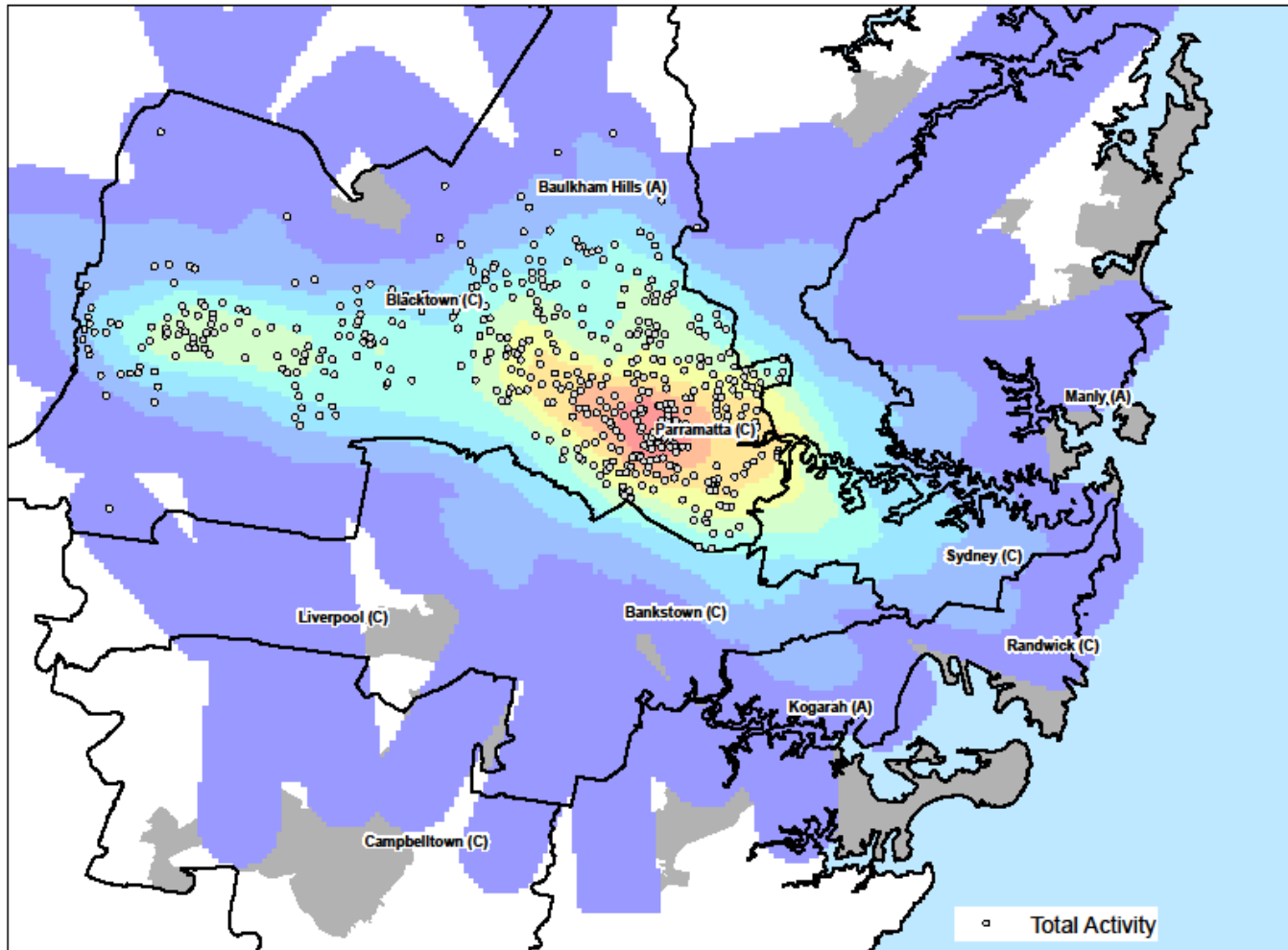
A simple but effective solution to this 'blocking out' is to remove the directional arrows. This enables the different levels of activity intensity to be clearly identified.

Although there is some loss in the sense of 'flows', relation and connectivity across different parts of the HMDA and from outside the HMDA continue to be captured through the gradated colour scheme of intensity levels.

Following concept development and piloting, the maps used in this section use these 'intensity' maps. Directional arrows are retained where the flows in question can be indicated without obscuring the colouring of the activity intensity below (i.e. where there are fewer data points to be mapped).

CITY FLOWS AND MOBILITIES

Recent Mover Purchasers, NW HMDA

Figure 42: Recent Mover Purchaser flows, NW HMDA
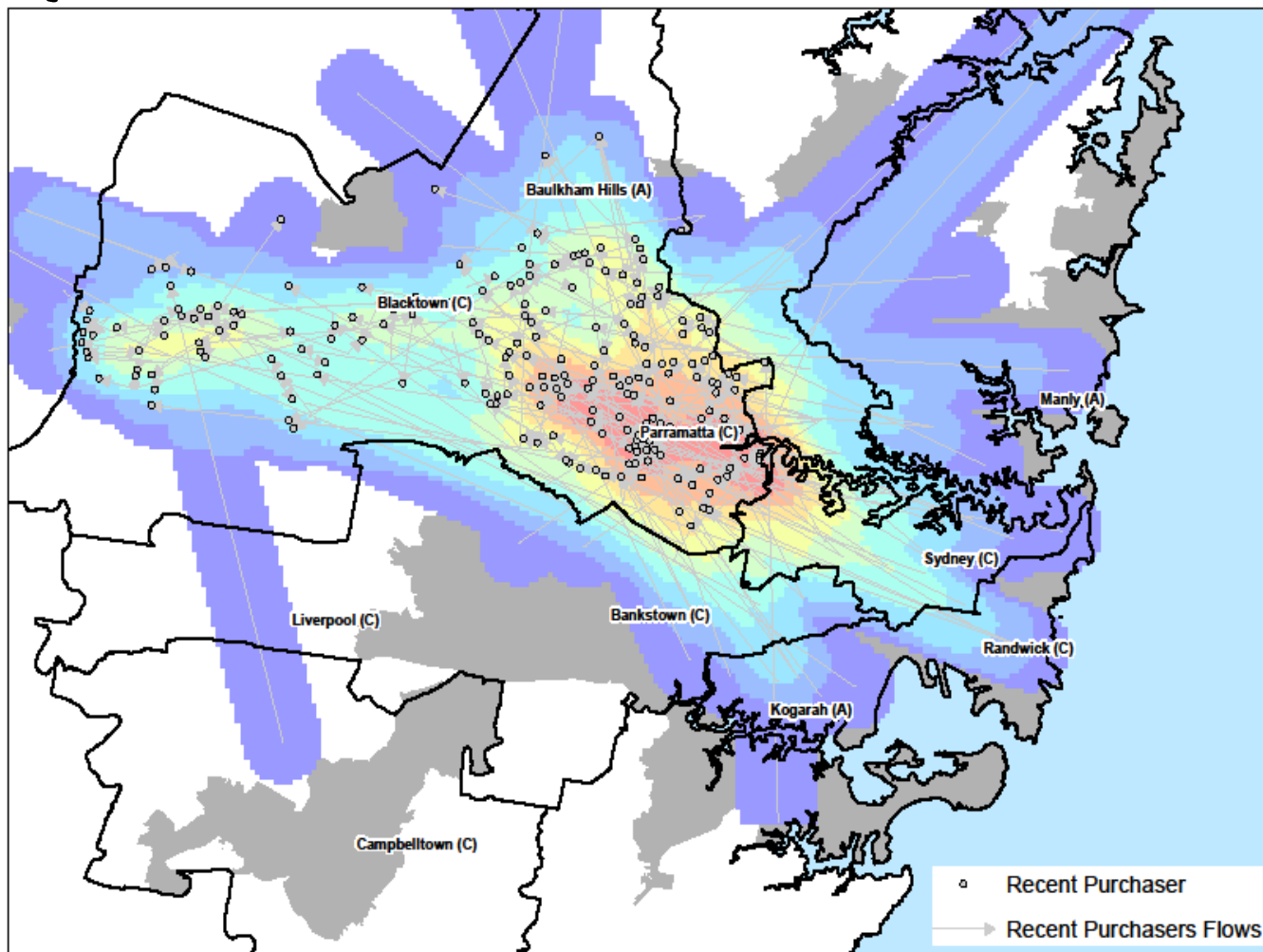
Figure 42 focuses on the flows of recent purchaser movers in the NW HMDA.

- Activity is – as would be expected – focused in the more built-up areas of the HMDA and where a relatively large number of survey returns were received from.

- However the value of mapping intensity capturing both origin and destination is that the local dynamics shaping the HMDA can be observed.

- In this regard, a line of more intense activity stretches from the new residential development in Sydney Olympic park in the east of the HMDA through Parramatta CBD and then out towards Westmead.

- From outside the HMDA there is also a fair amount of flow from the City/Harbourside HMDA and some flow from the ES EMDA.

CITY FLOWS AND MOBILITIES

Recent Mover Renters, NW HMDA

Figure 43: Recent Mover renter flows, NW HMDA
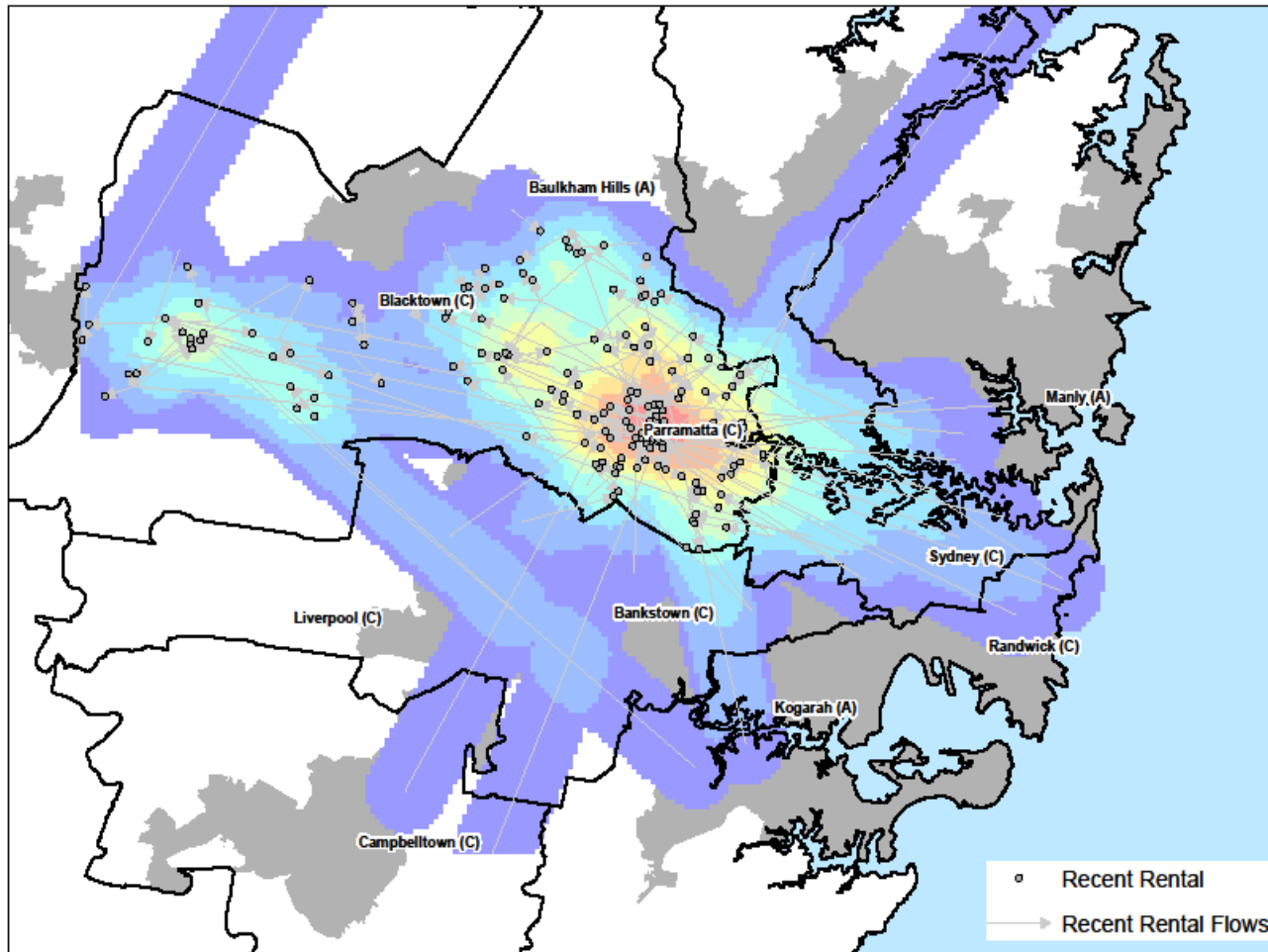
This map (**figure 43**) focuses on the flows of recent renter movers in the NW HMDA.

- Activity is – again – focused around Parramatta and to a lesser extent Penrith where a relatively high proportion of the HMDA's private rented stock is located.

- However it is the spatial patterning of flow intensity when compared to recent purchasers which is of interest. It is more localised, with a large number of the moves made by our respondents being short distance in relatively close proximity to Parramatta CBD.

- Recent moves from outside the HMDA can be seen – again drawing in households from the City/Harbourside and ES HMDAs, but this connectivity is not as strong as seen with the recent mover purchasers.

CITY FLOWS AND MOBILITIES

Recent Mover Renters to owners, NW HMDA

Figure 43: First time purchasers, NW HMDA

This map (**figure 43**) focuses on the flows of recent mover purchasers in the NW HMDA who were previously renting. Essentially, this therefore represents a first time buyer cohort although there will be some re-forming and 'returning' households who had previously owned a home – the survey asks whether those purchasers were eligible for the FHOG.

The concentration of mover flows around Parramatta is as would be expected, given its dominance in both previous mover purchaser and mover renter flow maps. It is the 'shape' of the geographies with significant activity, however, where the particular value of this analysis is highlighted.

In this regard, the strong flow from inner west, Canada Bay and Sydney Olympic Park renters can be seen, as well as the flow west of Parramatta towards Westmead and through to Toongabbie.

CITY FLOWS AND MOBILITIES

Movers by family type, NW HMDA

Comparing the contrasting 'shapes' of the intensity maps amongst different household/family types also casts an important spotlight on housing pathways into and within the HMDA.

Figure 44 (upper right), indicates young family flows amongst our movers in the NW HMDA. Intuitively, this will pick up first time purchasers as well as continuing renters, and although they will be looking for a property with more space, affordability constraints may limit their choices somewhat. Significant movement into medium and higher density stock can be seen (and as the map highlights, this is indicated by the intensity of activity seen around Parramatta CBD). However those areas of greater mover activity do spread outward – west towards Blacktown and north towards the Hills district.

A similar flow map for older families (**figure 45**) – those with older children still living at home – illustrates how different parts of the HMDA operate in quite different ways. Inevitably these different patterns reflect the different stock profiles across the HMDA, however the spatial narrative provided here is powerful:

- It highlights those parts of the HMDA where 'step up' moves are concentrated, and – crucially – that housing pathways and needs in different life stages can be negotiated for many households within the same HMDA.

- The draw of the 3, 4 and 5 bedroom detached houses in the Hills District is very apparent, as are the family neighbourhoods such as Wentworthville and Pendle Hill to the west and Ermington to the east.

- An interesting inward flow can be seen from the Strathfield and Sydney Olympic Park area to the NW HMDA amongst this older family group.

Figure 44: Young family flows, NW HMDA
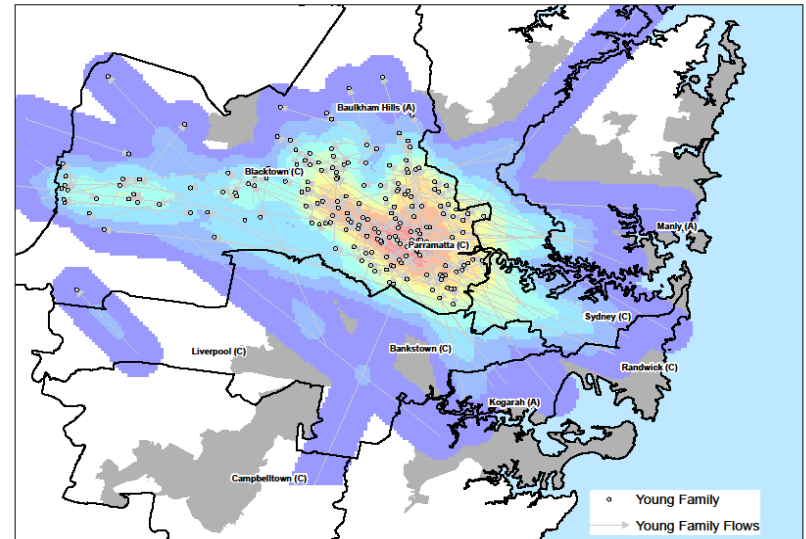
Figure 45: Older family flows, NW HMDA
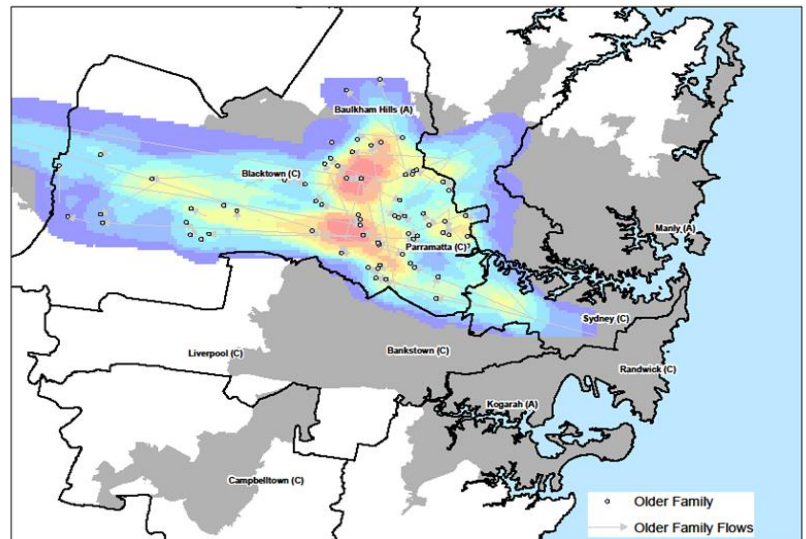
CITY FLOWS AND MOBILITIES
Born in Australia/overseas, NW HMDA

A similar 'shape' analysis can be used to highlight different flow patterns seen between respondents born in Australia and those born overseas. Our born overseas sample may have been in Australia for just a year to 30-40 years of their life, and as might be expected, there is a fair degree of convergence in housing careers/pathways and choices between the two groups over time. Distinctions do remain – most notably the greater propensity for non-born Australians to remain in the private rented sector long-term.

Here we focus on recent movers by place of birth. The flow map for those born in Australia (**figure 46**) highlights significant intensity from Parramatta north towards Castle Hill, Pennant Hills and Baulkham Hills. Strong intensity of flows can also be seen to the west of Parramatta and interesting - for the first time in our NW HMDA flow maps – the attraction of Penrith and the western areas of the HMDA come to the fore.

The flow map for those born overseas (**figure 47**) indicates a much greater intensity focused upon Parramatta CBD and its surrounding neighbourhoods particularly to the east (Harris Park, Granville, Auburn) and just to the west in Westmead.

Whilst these geographies demonstrate some overlap (capturing both the importance of, and density of stock around, Parramatta) they also highlight significant differences. Given that our non-born respondents make up a similar proportion of the total sample in both our renter mover and purchaser mover cohorts, these spatial differences are not simply reflecting a tenure/housing type story.

Figure 46: Australian born flows, NW HMDA
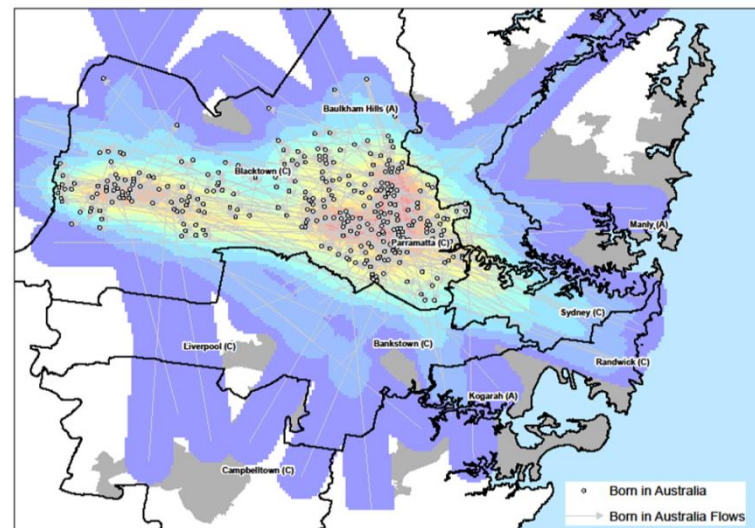
Figure 47: Overseas born flows, NW HMDA
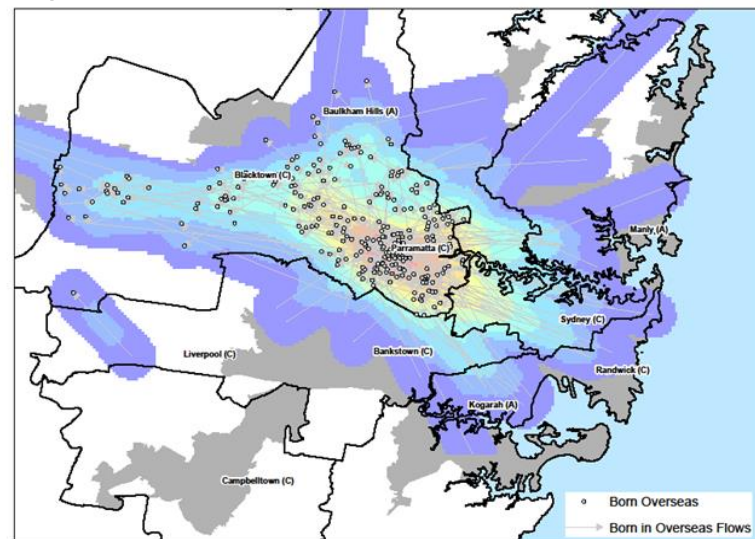
CITY FLOWS AND MOBILITIES

Total flows activity, ES HMDA

Figure 48: Composite intensity map, ES HMDA
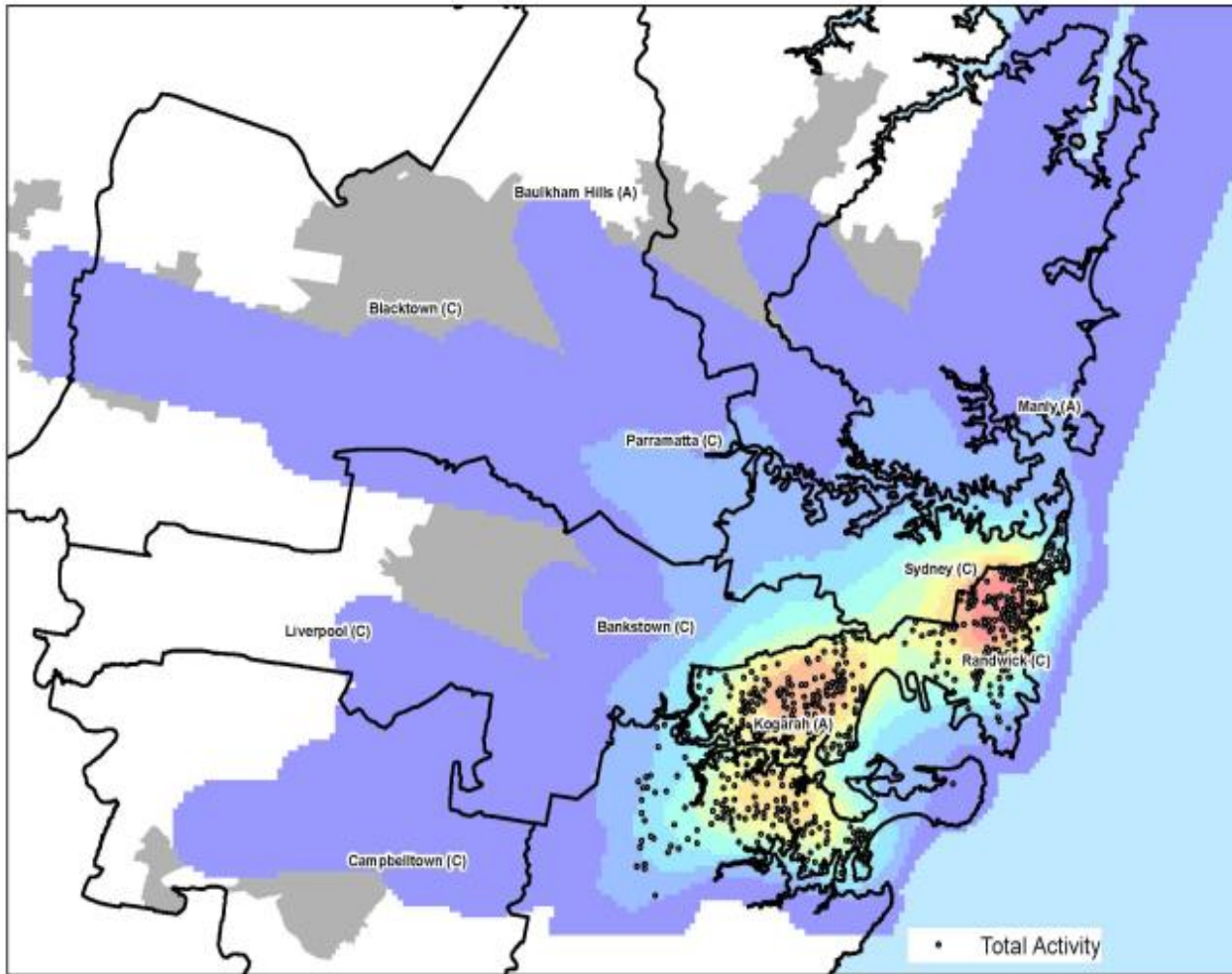
We now present a similar set of flow maps for the Eastern Shore (ES) HMDA (**figure 48**)

Total activity is well represented across the HMDA area, with an inevitable focus on the most densely populated residential areas in the Eastern suburbs (and in particular focused on Randwick) and in the Kogarah-Hurstville area to the south.

The very strong presence of the airport at Mascot acts to divide the HMDA into what would appear to be two distinct sub-geographies. The land use of the airport itself and associated activities is reflected in only a few responses being returned between the west of Rosebery to Banksia.

However, the links and flows across the HMDA are there, and whilst there are areas outside the demand area from which in-movement is seen (particularly the adjoining neighbourhoods of the City/Harbourside HMDA), levels of 'containment' within the HMDA are strong.

CITY FLOWS AND MOBILITIES

Recent Mover Purchasers , ES HMDA

Figure 49: Recent Mover Purchaser flows, ES HMDA
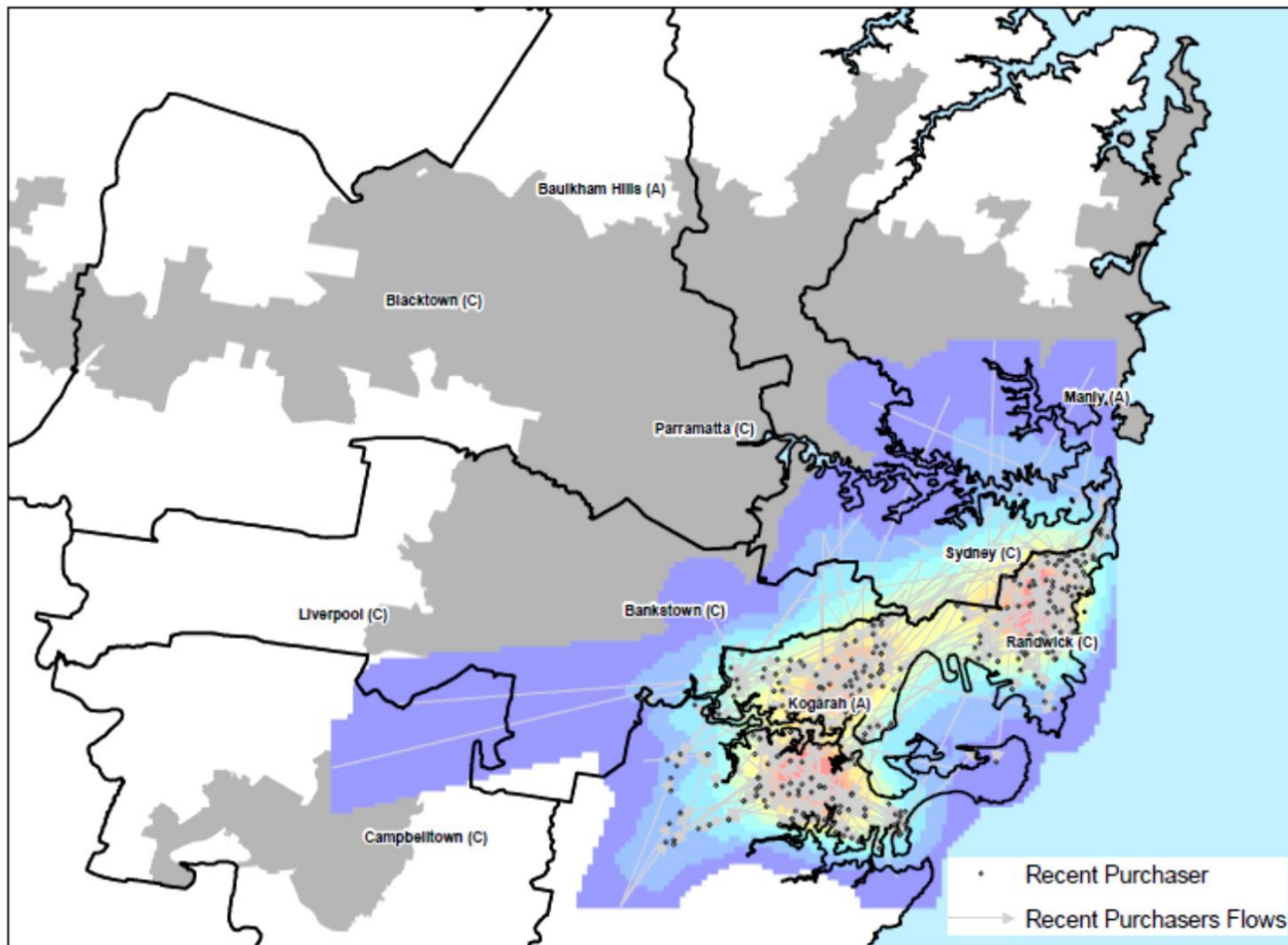
This map (**figure 49**) focuses on the flows of recent mover purchasers in the ES HMDA.

- The spatial pattern of flow intensity of recent purchaser activity largely echoes the geography of total activity seen in the previous map, with concentrations focusing on Randwick and Maroubra in the eastern suburbs and Hurstville and Rockdale along the Illawarra rail line.

- However, we can also see a strong focus of activity across the St Georges river in Sutherland Shire and particularly from Kirrawee east through to Caringbah. Whilst most of the moves are short distance within the sub-geographies of the ES HMDA, significant flows from areas closer to the CBD to the rest of the HMDA can be seen.

CITY FLOWS AND MOBILITIES

Recent Mover Renters , ES HMDA

Figure 50: Recent Mover Renter flows, ES HMDA
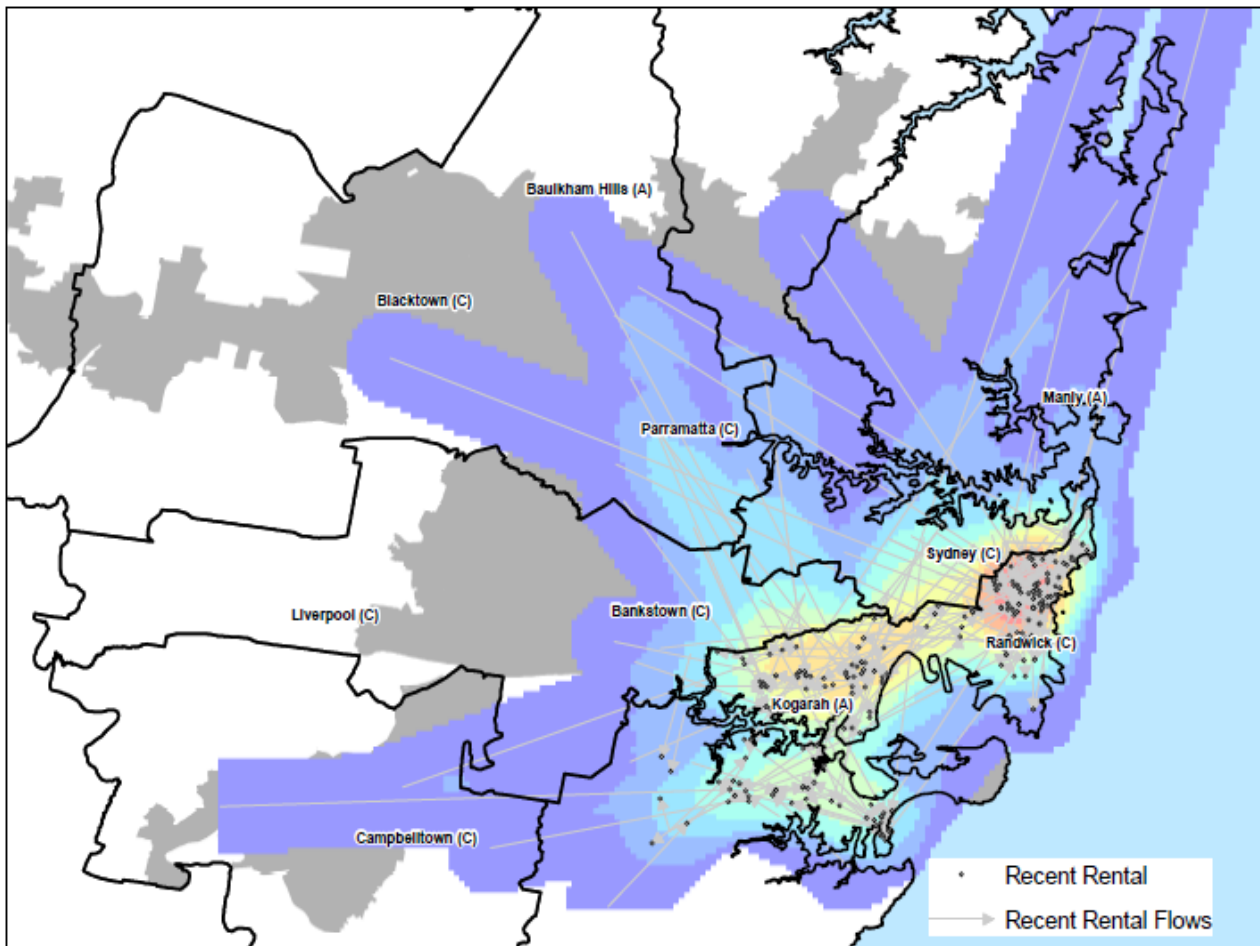
This map (**figure 50**) focuses on the flows of recent renter movers in the ES HMDA.

- Again, the key foci of activity are seen around Randwick and along the Hurstville-Rockdale belt. The intensity around Bondi, through Randwick and down towards Maroubra comprise a large number of short distance moves.

- Recent moves from outside the HMDA can be seen drawing in households from the proximate City/Harbourside HMDA in particular.

- The role of the ES HMDA as an entry point for renters moving closer into the city from other parts of Sydney can also be observed.

CITY FLOWS AND MOBILITIES
Recent Movers, renters to purchasers , ES HMDA

Figure 51: first home purchasers , ES HMDA
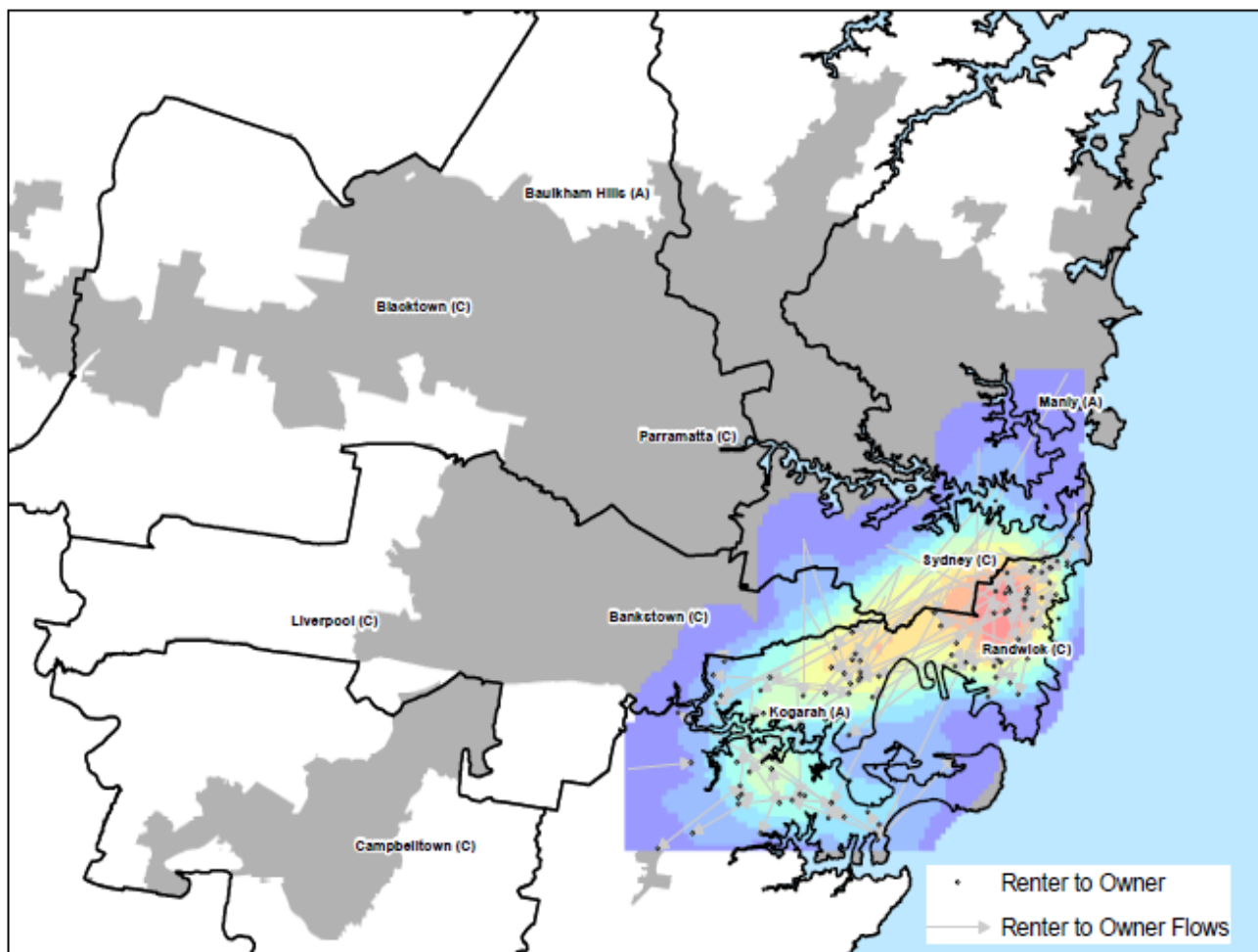
This map (**figure 51**) focuses on the flows of recent mover purchasers in the ES HMDA who were previously renting.

- Although two 'hubs' within the ES HMDA can still be identified (Randwick, Hurstville), the eastern suburbs stands out as the focus for purchasers having recently made the shift from renting. The flows from renter to purchaser in the southern parts of the HMDA are less strong.

- This does not necessarily represent a dwelling 'type' shift, capturing a significant number of recent purchasers moving into medium and high density stock.

- A fairly high level of in-flow of purchasers in the ES HMDA who previously rented in the City-Harbourside HMDA can also be seen.

CITY FLOWS AND MOBILITIES
Movers by family type, ES HMDA

As with the NW HMDA, we can break down the spatial patterns highlighting the relative intensity of mover flows by household type. Here we consider the areas of most activity for younger families and older families. The former typically comprises a younger couple with one or two young children; the latter is a more established household where the children are in their teenage years (or indeed older).

In terms of the younger family flows seen (**figure 52**), the areas of most activity closely correspond to the recent mover purchaser map with Randwick, the Hurstville-Rockdale belt and the central areas of the Sutherland Shire following the Cronulla rail line. There is relatively little movement indicated by this household group into the ES HMDA.

The emphasis within the patterning of mover flows is different where older families are concerned (**figure 53**). While the three hubs of Randwick, St George and central Sutherland Shire can be identified, it is those parts of the HMDA away from the eastern suburbs – and particularly around Hurstville, Carlton and Bexley – which stand out. This is perhaps as might be expected: larger lots and bigger houses, whilst accessibility to the CBD remains good.

Figure 52: Young family flows, ES HMDA
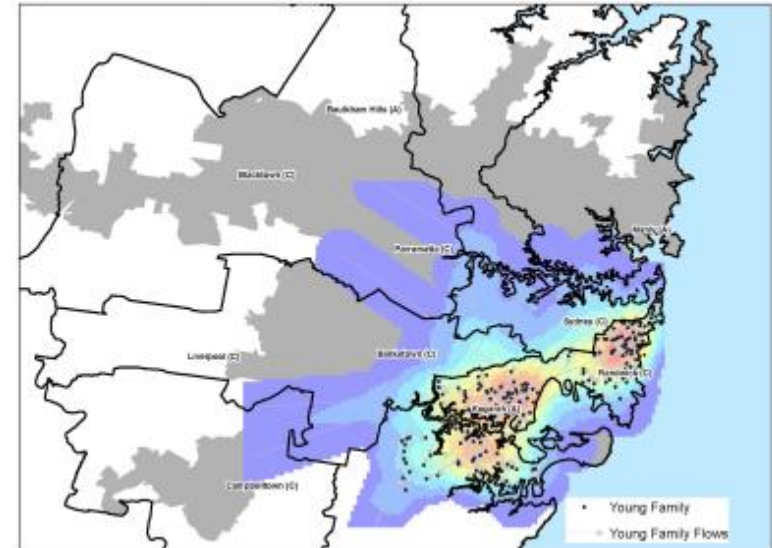
Figure 53: Older family flows, ES HMDA
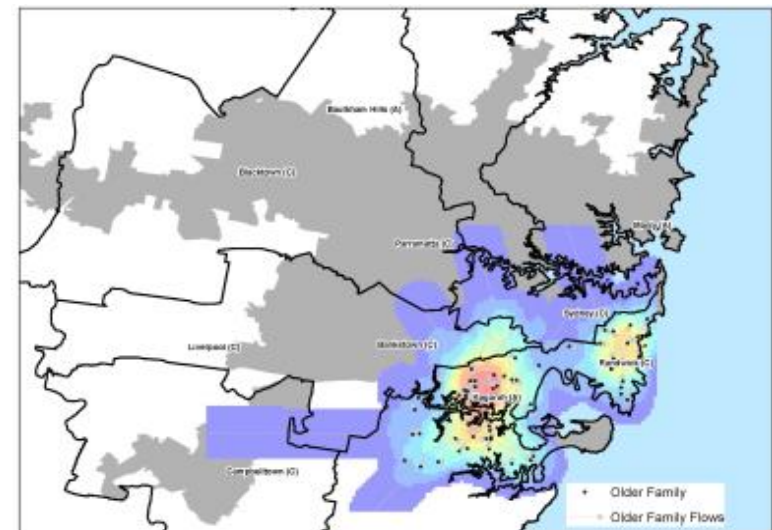
CITY FLOWS AND MOBILITIES

Born in Australia/overseas, ES HMDA

Here we focus on recent movers by place of birth. The flow map for those born in Australia (**figure 54**) highlights a strong presence across all parts of the HMDA from Bondi/Randwick in the northeast down to Kirrawee and Sutherland in the southwest of the demand area. When those born overseas are considered (figure 55), Sutherland Shire falls quite distinctly out of the equation.

Figure 54: Australian born flows, ES HMDA
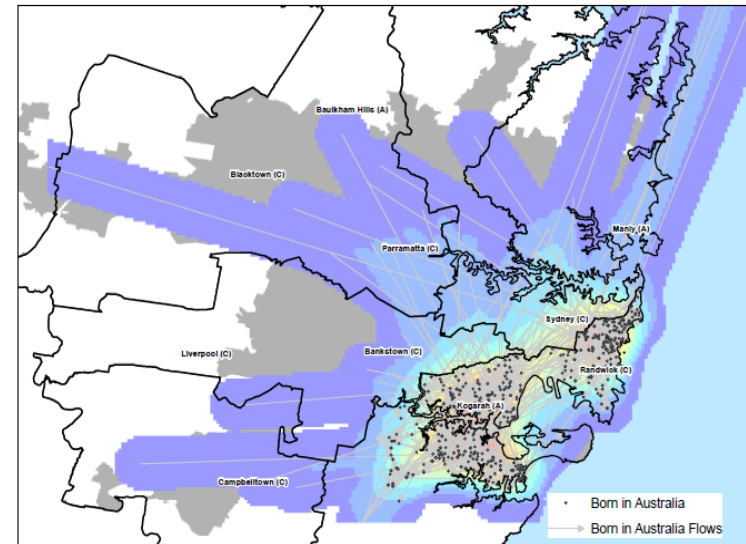
Figure 55: Overseas born flows, ES HMDA
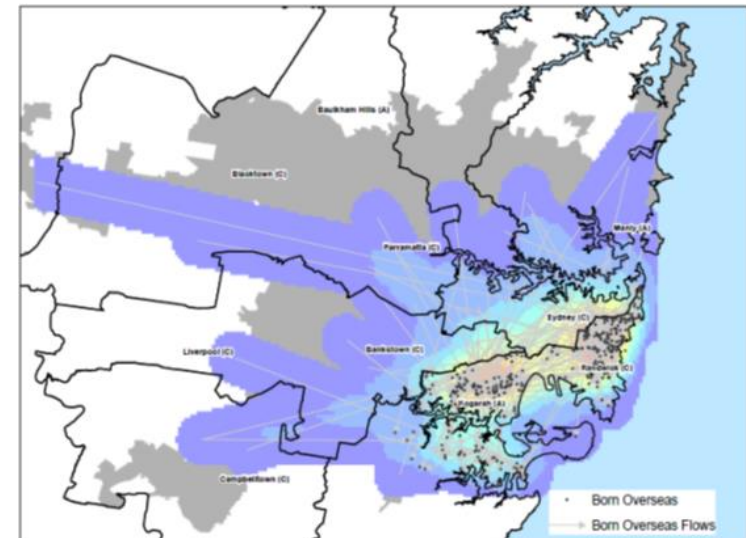
5: Shaping household decisions: push, pull, constraints

SHAPING HOUSEHOLD DECISIONS

Push, pull, constraints

Introduction

In this section, we consider the factors shaping the push and pull of decisions tied to moving, and indeed the decision to stay put. We report on the insight provided by those questions in the survey which explored the reasons identified by respondents surrounding their move, the considerations involved in that move, and the affordability outcomes resulting from that move.

By talking to both movers as well as those who have not (the 'stayers') we were aiming to build up a picture of how choice and constraint are manifest in the Sydney housing market, and how the trade-offs negotiated by different groups are reflected spatially. In practice, the 'stayers' capture a diversity of experiences. As might be expected, the large majority do not move simply because they do not need to. There are some that are trapped due to affordability constraints. Whether the surveys developed have been able to sufficiently tease these differences out is questionable.

The first question we consider here is, however, effective in showing differences in stability and security between the tenures. By and large, moves made by recent purchasers are through the exercise of choice (although those forced to move due to family breakdown are a notable reminder of the constraints that can impact as that stability is removed). In contrast, many of our recent mover renters had not wanted to move.

We asked our recently moving renters whether they considered purchasing at the time of their last move. Quite a few had – but then come up against the hurdle of insufficient deposit or lack of sufficient purchasing capacity to buy what they needed, where they wanted.

We asked all respondents across the four surveys how they were managing with their housing costs – again to try and identify where, and with whom, constraints and stresses lay within Sydney's housing system. Again, whether the surveys facilitated gathering of innovative insight, rather than further consolidate existing evidence on the importance of tenure on housing stress, is questionable.

SHAPING HOUSEHOLD DECISIONS

Did you want to move? Mover Purchasers in ES HMDA

Figure 56: Recent mover purchasers, ES HMDA
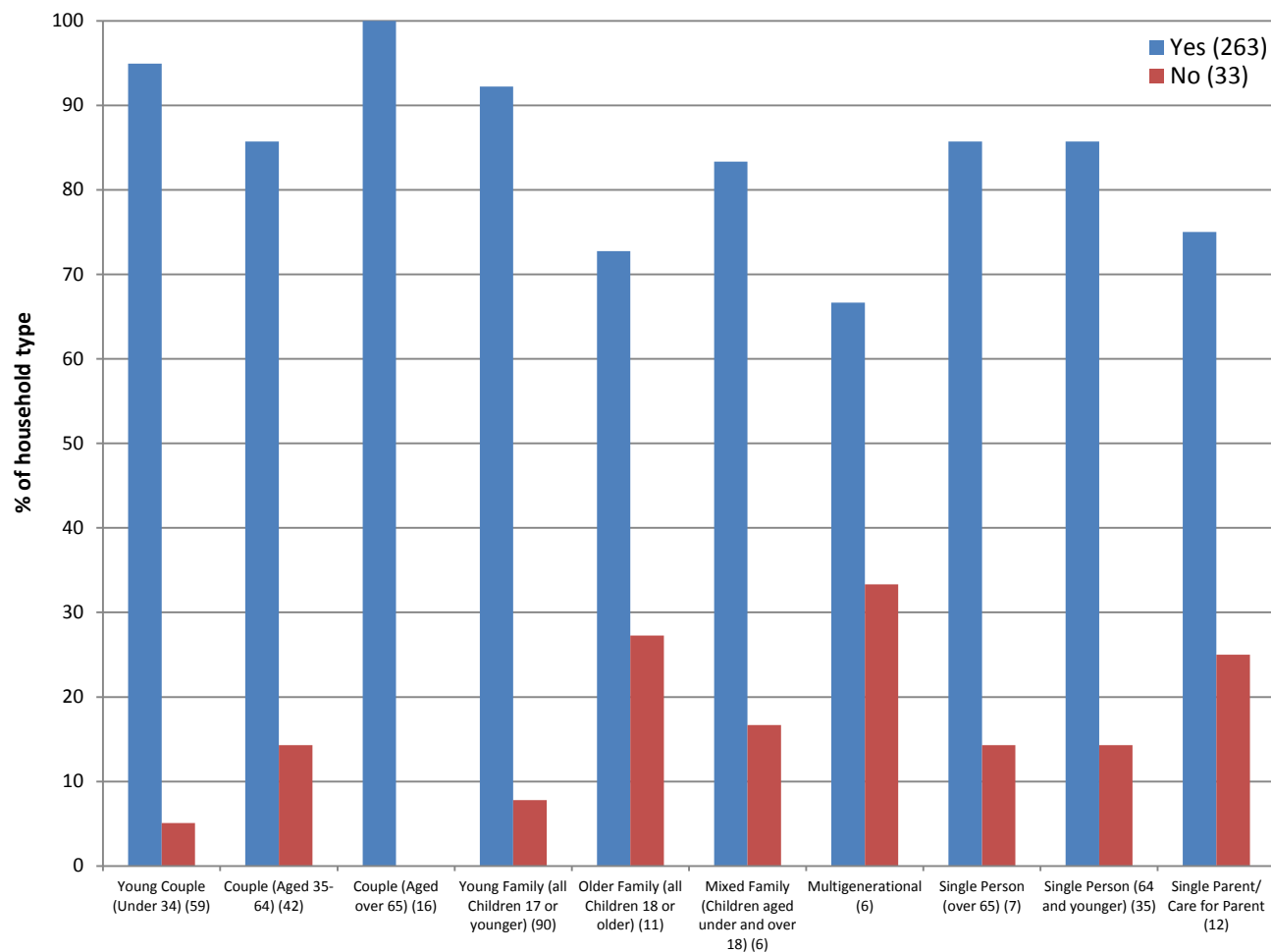
While we are interested in the reasons respondents had for moving, it is important to ask whether they actually wanted to move. We asked this question of our mover groups (recent mover purchasers and recent mover renters), and the results disaggregated by HMDA are presented across the next four graphs (**figures 56** to **59**)

The results are perhaps as might be expected, but nonetheless insightful. How as expected? As can be seen here in the context of recent mover purchasers in the ES HMDA, there is a very strong affirmation of their decision, particularly amongst younger groups (those moving out of home, younger couples and families) and elderly couples.

Higher levels of negative responses came through from certain groups – in particular single/single parent households. These may reflect family breakdown and forced moves.

SHAPING HOUSEHOLD DECISIONS

Did you want to move? Mover Purchaser NW HMDA

Figure 57: Recent mover purchasers, NW HMDA
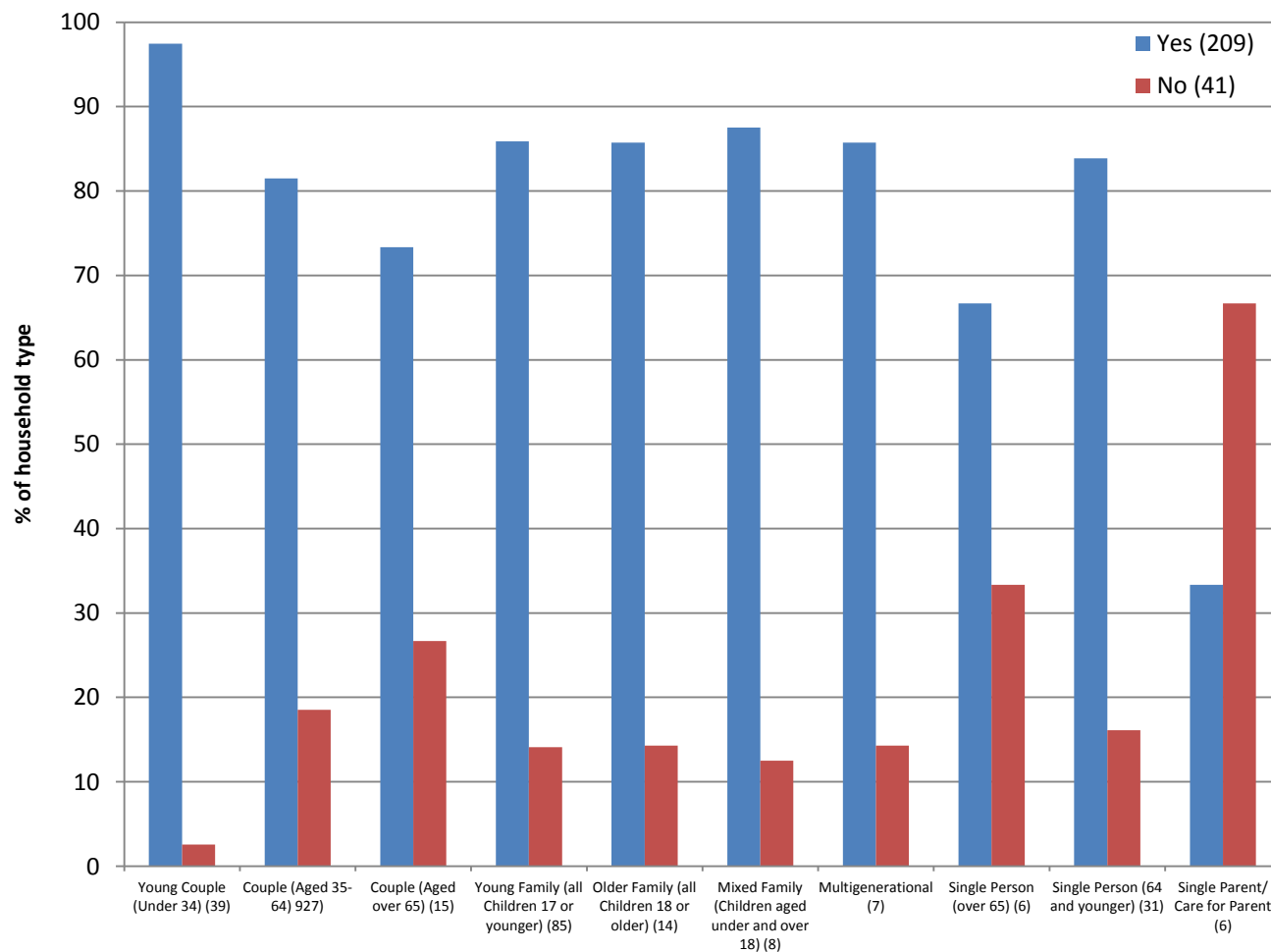
The patterns seen in the ES HMDA are very much reflected amongst recent mover purchasers in the NW HMDA (**figure 57**).

Again, younger couples and young families reinforce and reaffirm their choice in moving, whilst the decision was rather more mixed amongst single person and single parent households (although not the small numbers in these groups).

Across both HMDA, response to this question suggest moving into ownership, or moving home, reflects choice being exercised in the housing market. This is a particularly important dynamic in the younger, family forming stages of housing pathways.

SHAPING HOUSEHOLD DECISIONS

Did you want to move? Recent Mover Renters in ES HMDA

Figure 58: Recent mover renters, ES HMDA
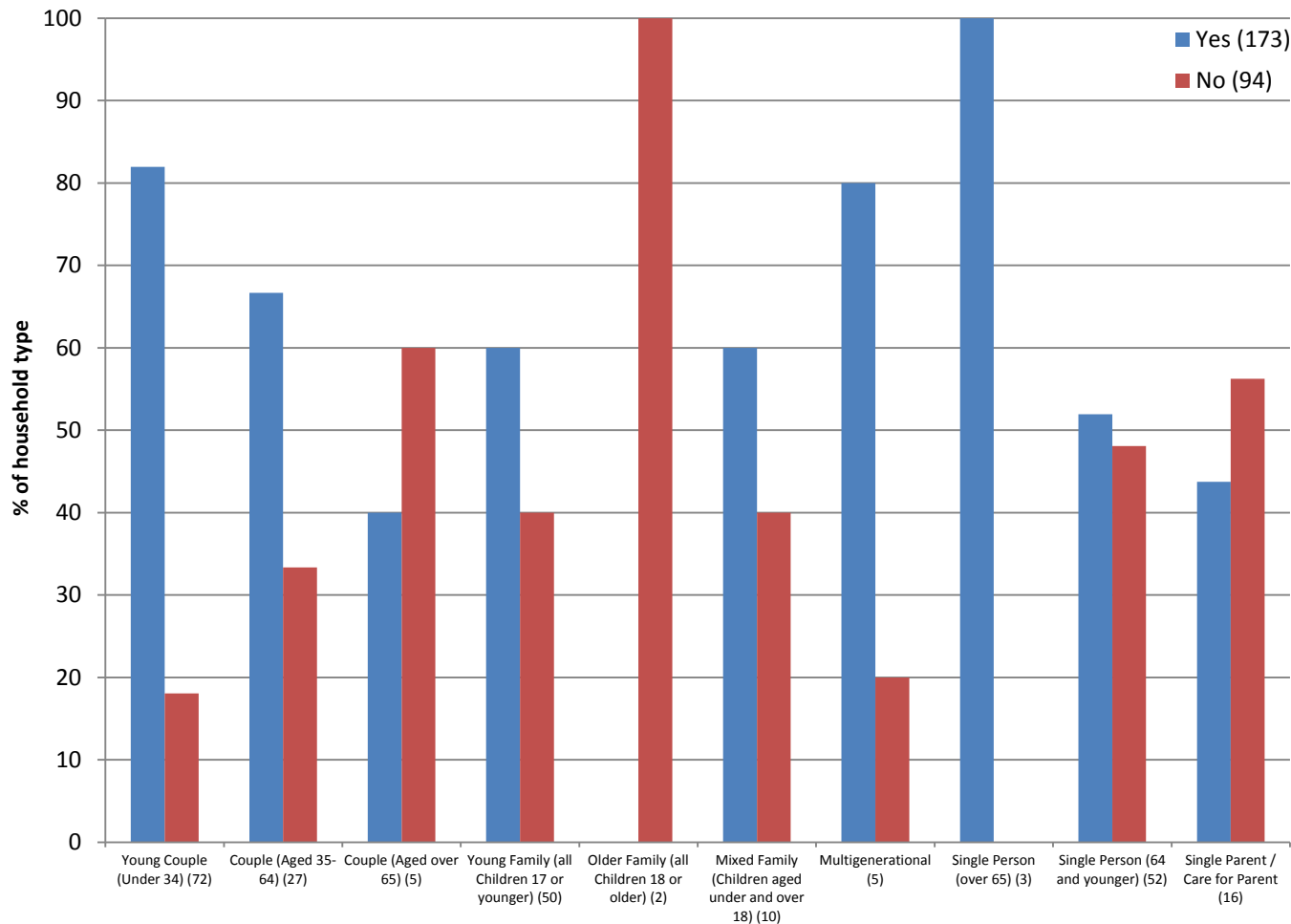
When asked the same question, the responses from our recent mover renters tell a rather different story. This graph (**figure 58**) captures a more varied picture of choice and constraint shaping the recent moves of our renter respondents in the ES HMDA.

Generally, there is a much higher proportion of moves taking place which were not out of choice – around a third compared to around a tenth of recent purchasers.

Couple households without dependents tended to be exercising choice in their move, however amongst young families, single person and single parent households, a significant proportion of moves recently undertaken had not been through choice.

SHAPING HOUSEHOLD DECISIONS

Did you want to move? Recent Mover Renters in NW HMDA

Figure 59: Recent mover renters, NW HMDA
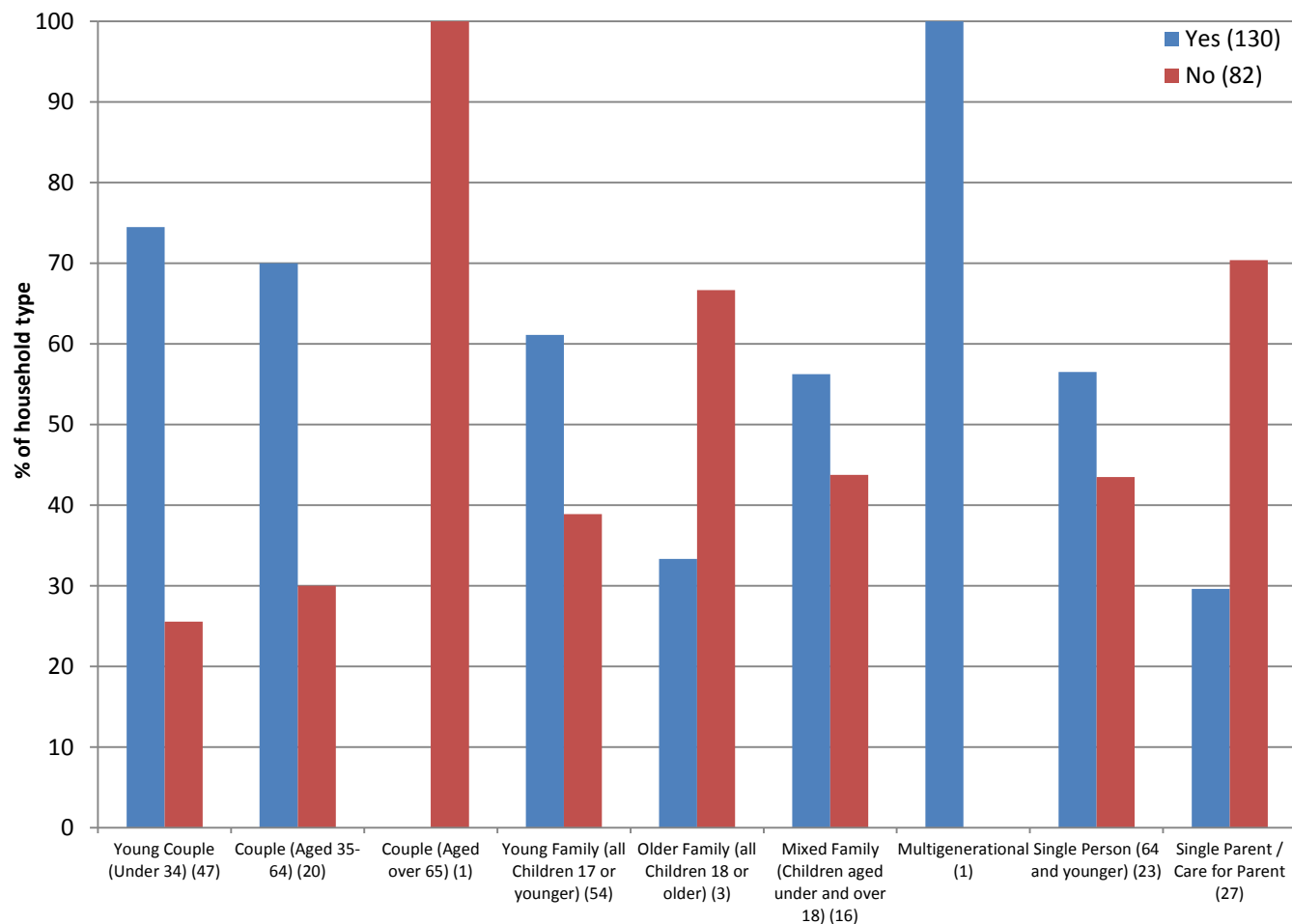
A similar picture is seen when we consider responses to this question from our recent mover renters in the NW HMDA (**figure 59**). Couple households retain a degree of control regarding their housing options, whereas family households and single person and single parent households see their housing pathways dictated by moves made not out of choice.

Further analysis can drill down to identify what the key push factors for these households were, including needing to move to more affordable accommodation, or due to their tenancy coming to an end – however this overall pattern captures fairly high levels of uncertainty and lack of (desired) stability for many households dependent upon the private rented sector.

SHAPING HOUSEHOLD DECISIONS

Recent mover renters, did you consider purchasing a home at that time?

Figure 60: Recent mover renters, across both HMDA
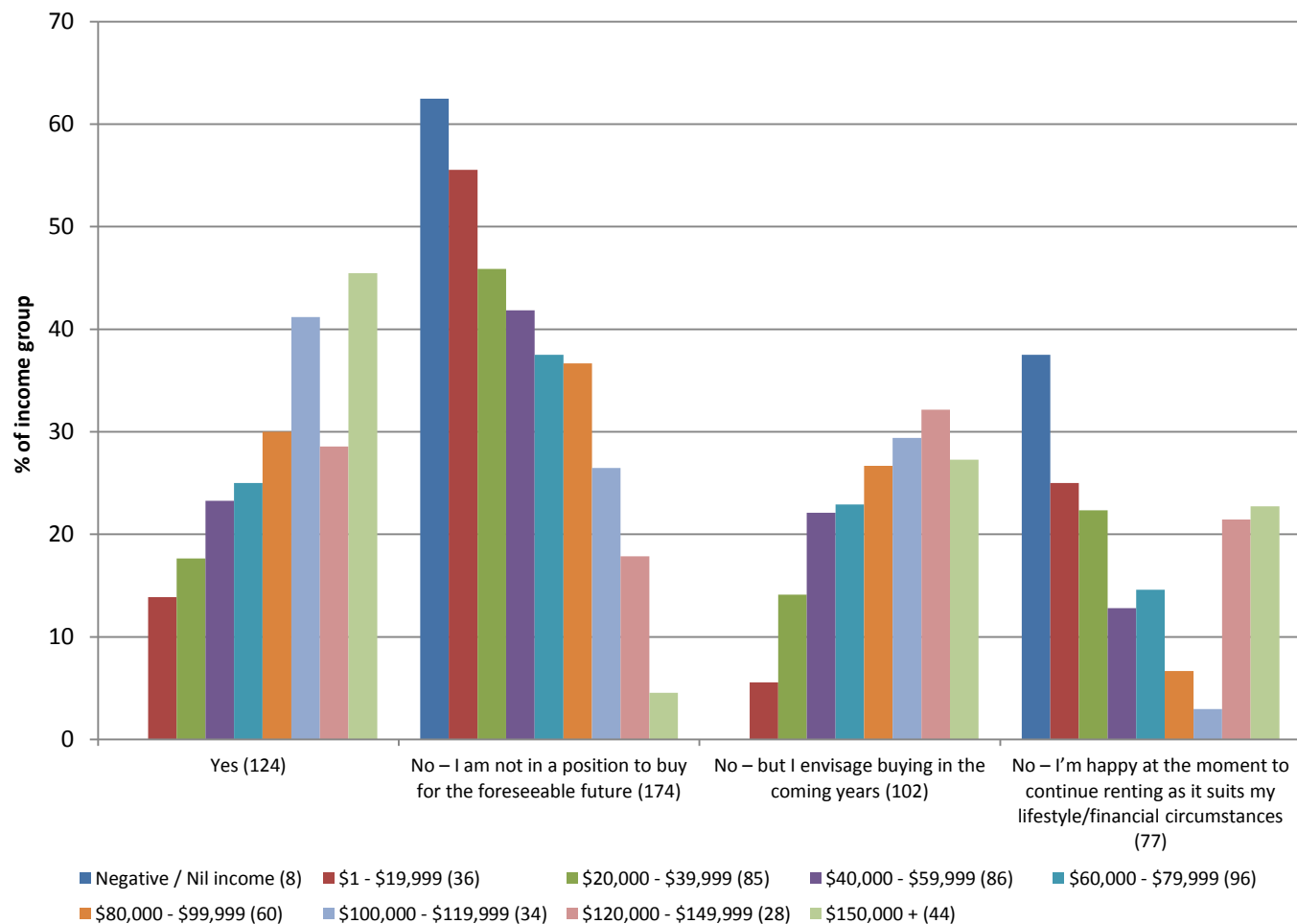
We asked our recent mover renters whether they had considered purchasing a property rather than moving into a rental property for the first time or continuing to rent (**figure 60**).

This question captures both a sense of those constrained from doing so by a variety of (primarily financial) factors, but also the distinct multiple roles played by the private rented sector.

The proportion of respondents who had considered buying was higher – as would be expected – amongst higher income groups (as was also the case with those that had considered buying at that time but envisage doing so in the coming years).

Our findings also highlight the limited pathways from renting into ownership envisaged by lower income respondents.

SHAPING HOUSEHOLD DECISIONS

Recent mover renters, if you didn't purchase, what were the factors behind this?

Figure 61: Recent mover renters, across both HMDA
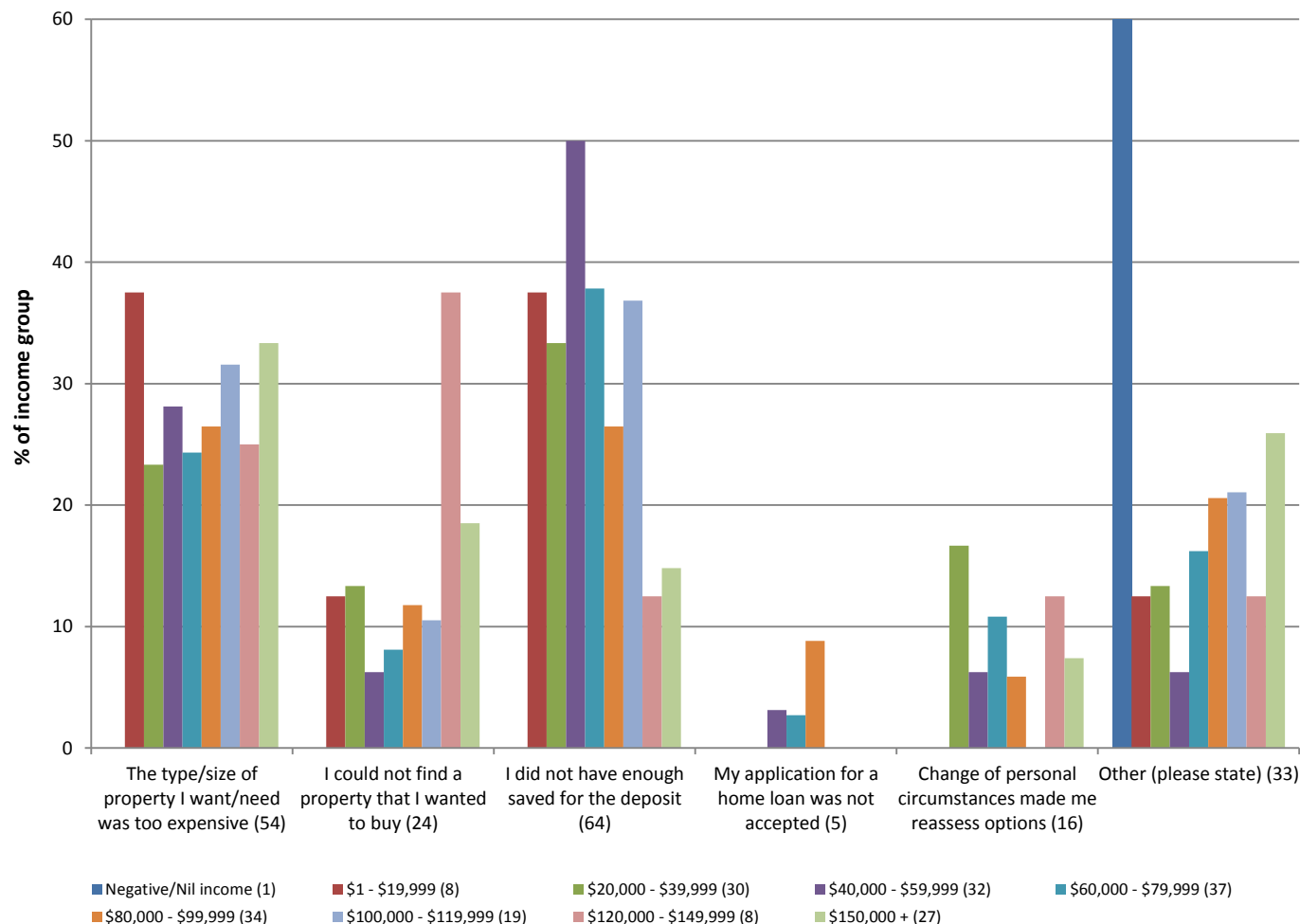
For those recent mover renters indicating that they had considered purchasing a property, we asked why they had not followed this through.

A number of interesting observations can be seen in their responses (see **figure 61**). The two most prevalent answers related to affordability, with either respondents finding a mismatch between what they wanted/needed in terms of type and size of property and what they could afford, or that they had not saved enough for a deposit.

In terms of the mismatch or gap between house needs and preferences and cost, there is little variation seen across different income groups. In terms of having a sufficient deposit, a negative correlation with income is seen with a higher proportion of respondents in lower income brackets citing this.

SHAPING HOUSEHOLD DECISIONS

Mover purchasers

Figure 62: Main factors shaping mover purchaser decisions, across both HMDA

Main Reasons for Household Mover (Mover Purchaser) N = 578	Ranking
Wanted to 'upsize' - e.g. move to a property with more bedrooms	
Had been renting and wanted to buy a home	
Needed more space for a growing family	
Wanted a property with some outdoor space / a garden	
Housing market conditions appeared favourable	
Increase/decrease in household income	
Wanted to buy / build a new home	
Needed a more manageable home in older age	
Recently moved in with my partner	
Wanted to 'downsize' - e.g. move to a property with fewer bedrooms	
Needed / wanted to reduce housing costs	
Recently experienced a relationship breakdown/death of partner	
Moved to a larger home / high value area in order to maximise asset / taxation benefits	
Needed to move due to new job in different part of city	
Needed / wanted to release equity	
Changes to household circumstances	
Financial reasons	
Property related factors	

This table (**figure 62**) captures a composite of factors identified by recent purchasers for their recent move. Inevitably, multiple considerations shape those decisions, although the need to 'upsize' – primarily in response to a growing family and facilitated by a change in income – is a dominant driver. For those buying their first home, moving out of the rented sector was also an important pull and push factor. The housing market context was important, if not the primary consideration, in the decision-making process, with a significant number of respondents identifying that prevailing housing market conditions at the time were favourable (in part, this may have reflected the availability of FHOG; it also reflects purchasers' inevitable affirmation of the investment decision recently taken). Some also mentioned that a desire to maximise asset/tax benefits was also important.

SHAPING HOUSEHOLD DECISIONS

Managing mortgage costs: recent mover purchasers

Across all surveys, we asked respondents about meeting their housing costs, whether in terms of paying off the mortgage or paying their rent. We are particularly interested in the ability of recent movers in meeting those costs in understanding whether that move has stretched affordability concerns (whether through choice or constraint). However, we are also interested in capturing patterns of affordability stress amongst those that have not moved recently: does this relative stability primarily reflect the outcomes of choice or constraint.

Amongst our recent mover purchasers, many in both HMDA were comfortably meeting their housing costs (some having no loan to pay off or able to make overpayments). As would be expected, those who had paid off their loans were typically elder couples or older families. The most common response was that those costs were manageable,

In the NW younger families (**figure 63**), single person, and single parent households were more likely to flag trouble in meeting their mortgage costs. Whilst these groups face higher housing stresses, this may also reflect (given the timing of the survey) lower income households encouraged into home ownership or who brought their purchase decision forward tied to the First Home Owners Grant.

Figure 63: Recent mover purchasers, NW HMDA
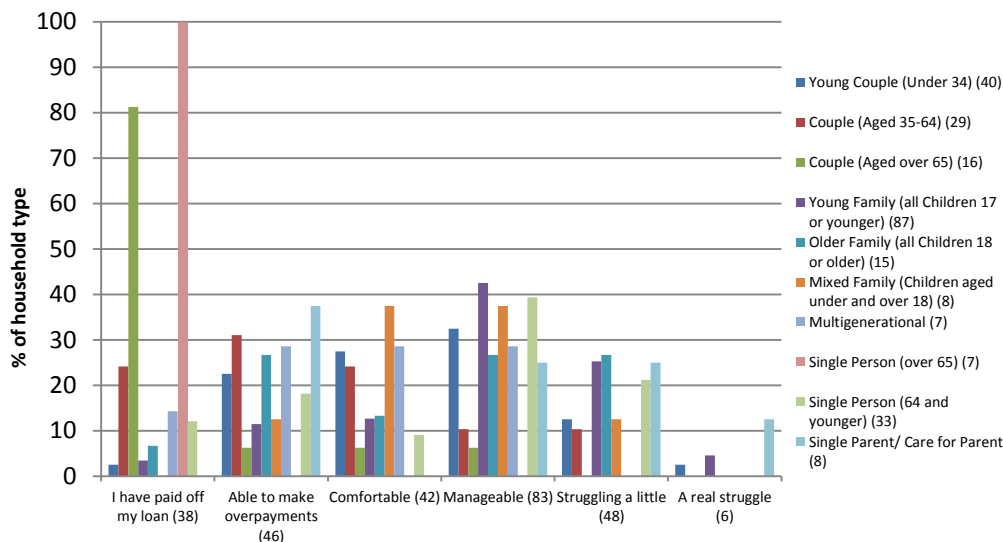
Figure 64: Recent mover purchasers, ES HMDA
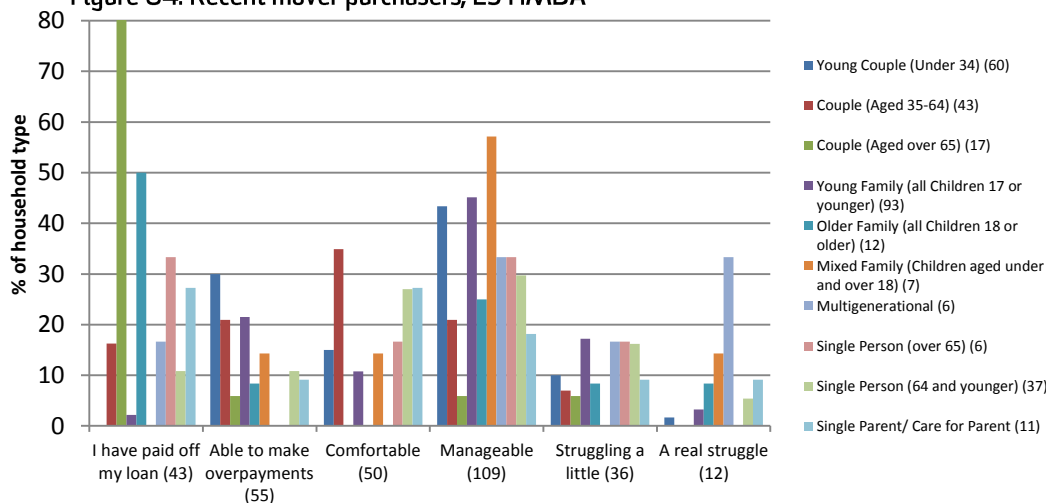
SHAPING HOUSEHOLD DECISIONS

Managing mortgage costs: long term owners

Housing cost considerations amongst long term owners highlight quite a different picture. Across both the HMDA, survey responses capture a picture where our respondents have either paid off their loans in full (particularly in the case of ES HMDA) or are comfortable and in a position to be making overpayments to pay their loans off faster (see **figures 65** and **66**)

Where struggle is identified, this is seen amongst family households.

Figure 65: Long term owners, NW HMDA
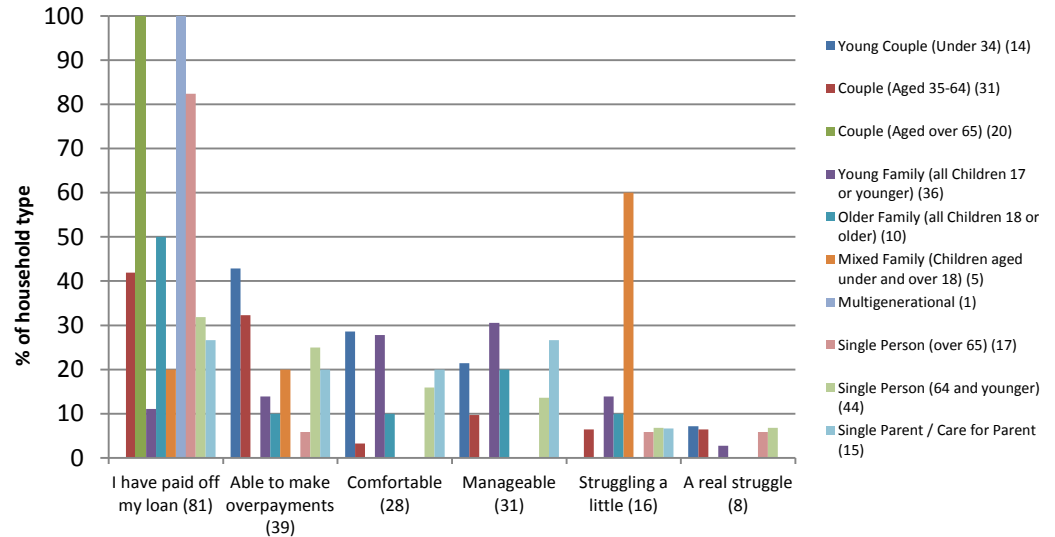
Figure 66: Long term owners, ES HMDA
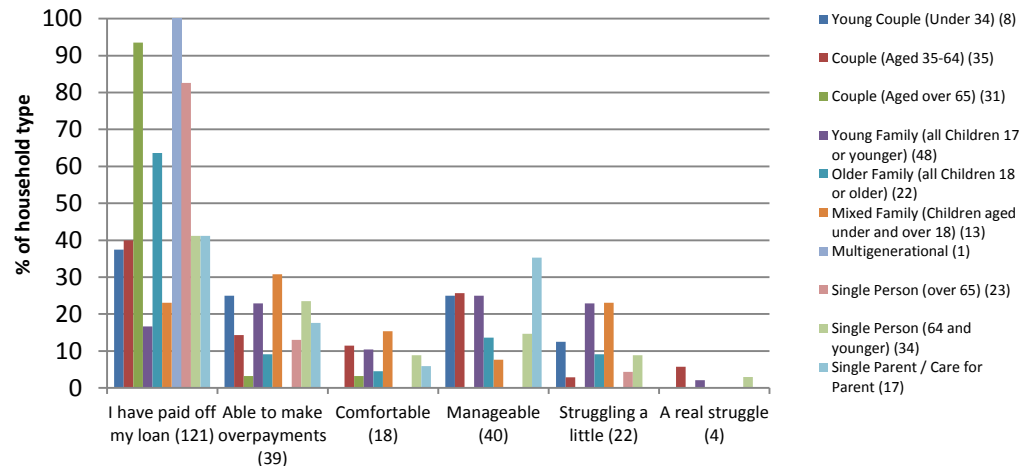
SHAPING HOUSEHOLD DECISIONS

Managing rental costs: recent mover renters

When we look at housing costs amongst our renters, a larger proportion of our respondents indicated that they were finding meeting those costs more of a struggle. In part this is as expected – one might assume that those who can comfortably meet their rental costs would chose to purchase their home.

Many households – particularly those who have made a recent move – will have made trade offs in terms of their selected property in terms of paying a rent which was 'manageable'.

Amongst those who are struggling, this might reflect those that chose to extend themselves in order to live where they wanted to, but is also likely to reflect the cost of renting more generally impacting particularly hard on certain household groups. This is seen in both the NW and ES HMDA (**figure 67** and **68**), with single person and single parent households indicating that they are struggling.

Drilling down into the survey responses further indicates that amongst our rental movers, most moves were accompanied by higher rents paid (there were some step downs), although this is difficult to unpick in terms of relating those increases to the market, the household moving into a larger property, or to a better neighbourhood etc.

Figure 67: Recent mover renters, NW HMDA
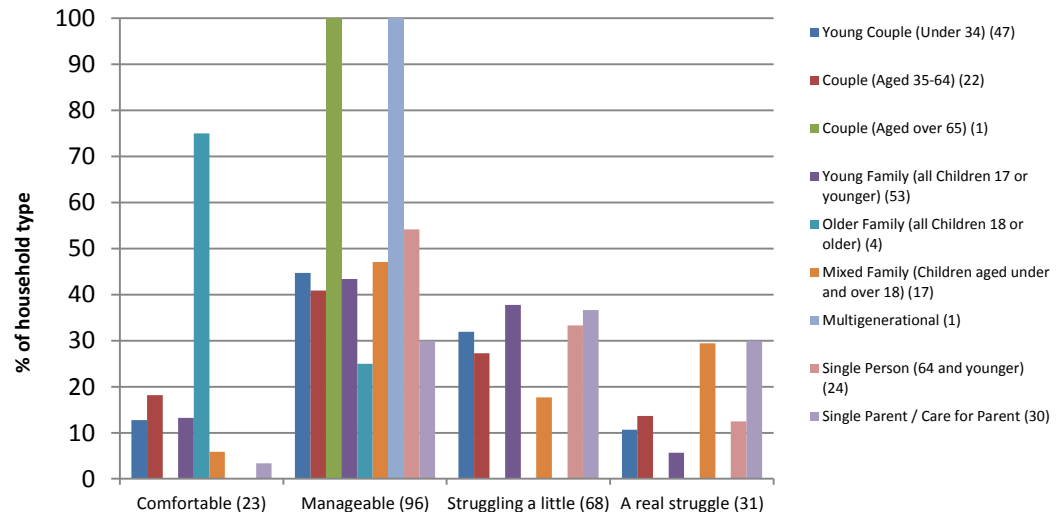
Figure 68: Recent mover renters, ES HMDA
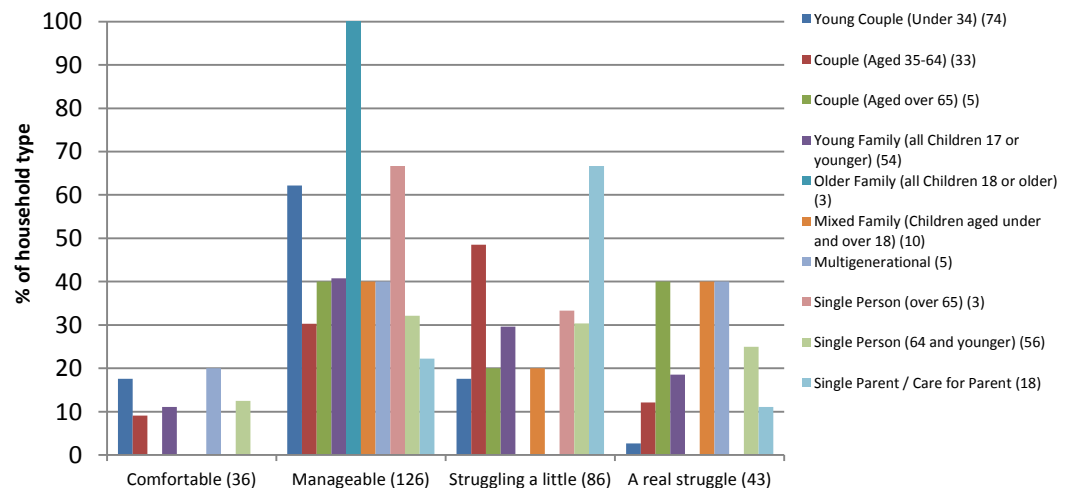
SHAPING HOUSEHOLD DECISIONS

Managing rental costs: long term renters

Amongst our long term renters, a different pattern appears, with a higher proportion of respondents indicating that they are struggling a little or finding their housing costs a real struggle. This is particularly pronounced in the NW HMDA (**figure 69**).

Although housing cost pressures are identified across all household types, older households, single person and single parent households are those under more strain.

Figure 69: Long term renters, NW HMDA
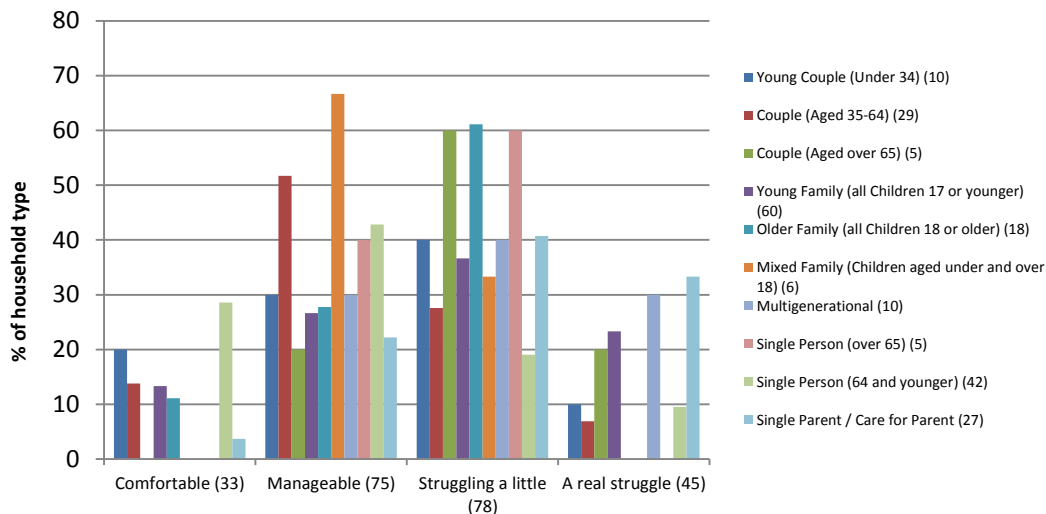
Figure 70: Long term renters, ES HMDA
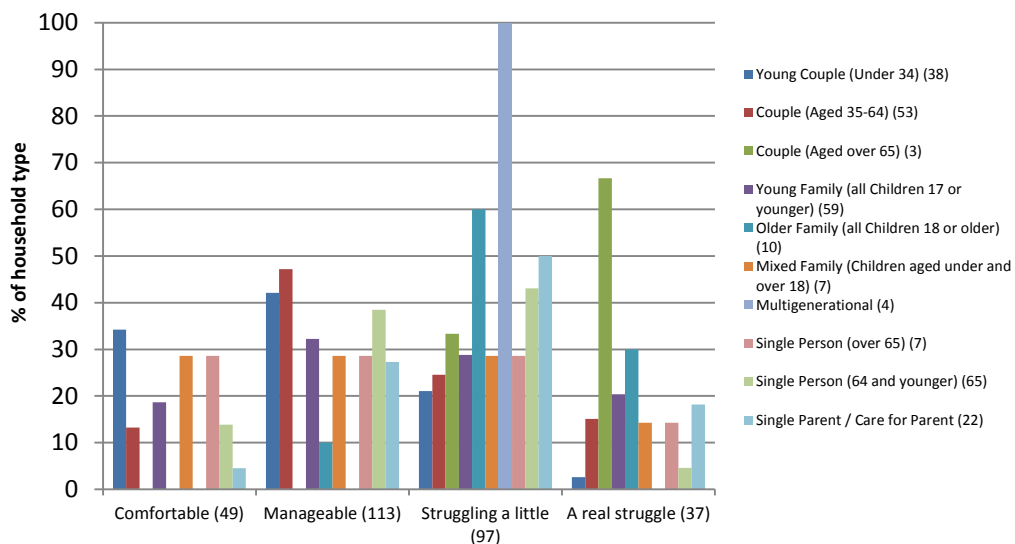
6: Connections & Connectivity
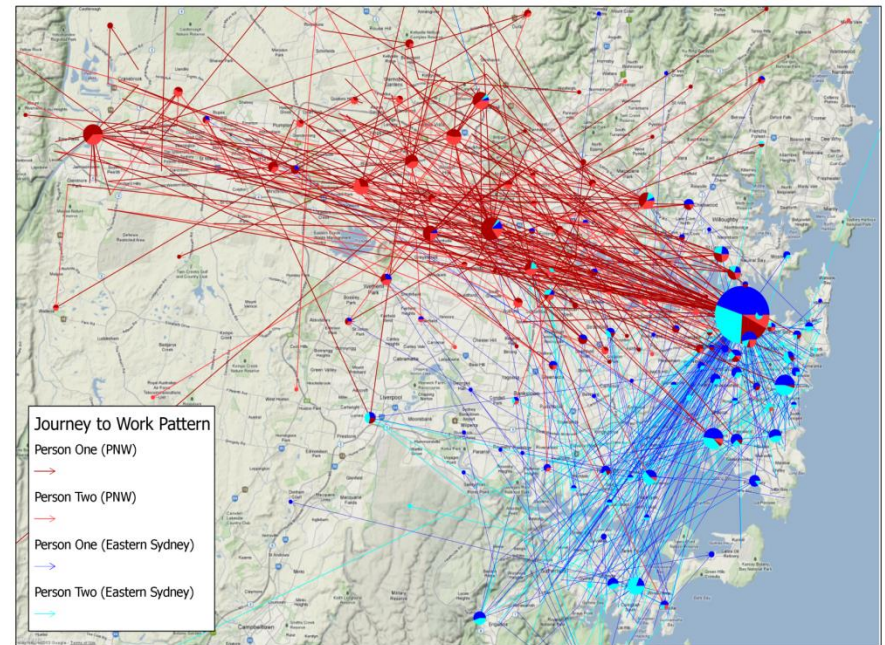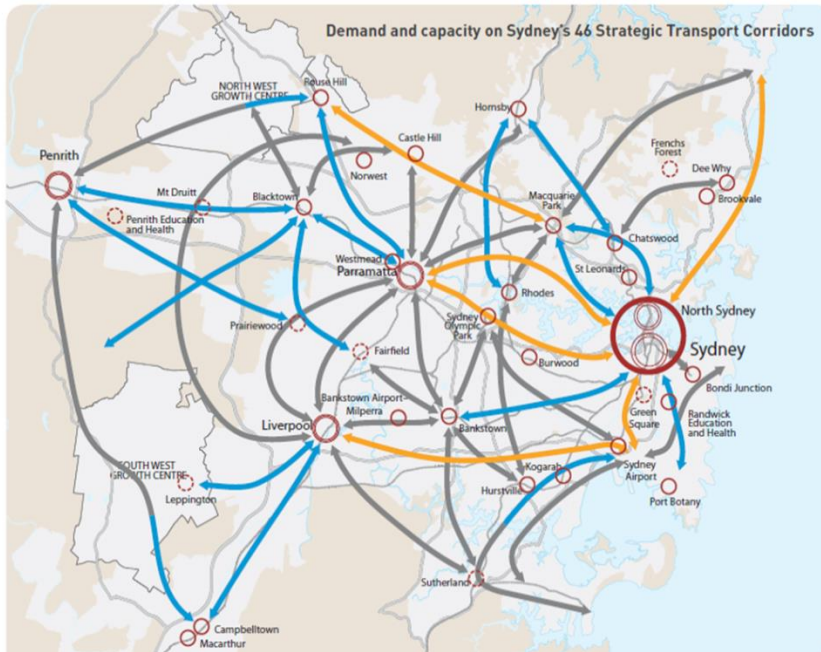
CONNECTIONS & CONNECTIVITY

Introduction

In this section, we consider findings from across the four surveys that help build a better understanding of the spatiality of expressed demand, adding a further component of the mobility analysis enabled through the mapping of origin and destination data in the **City flows and mobilities** section above.

Expectation of the insight from these questions was framed in the recognition that previous surveys seeking to understand locational attributes had been limited. Here, we present initial analysis of a set of questions that:

- Seek to determine the importance of local and subregional attachment in shaping housing pathways and confirming the relative 'stickiness' of the HMDA developed.

- Understand the relative connectivity of households in each of the HMDA to different parts of the city, and particularly how they use and move through the city in terms of work, education and service requirements.

A more implicit aim was to pull out and demonstrate distinct characteristics and dynamics of the different HMDA in order to illustrate **how** different parts of the city work differently, rather than the nevertheless important observation and confirmation that they are different and thus need to be strategically understood as such.

Arguably, the questions were successful in drawing out and helping map local connections, while the broader geographies of wider city connectivity fell short of the aspiration to really draw out the distinctiveness of different parts of the city.

In part this hoped-for added richness will emerge from drilling down further into the data obtained through the surveys, however therein lies the challenge – teasing out those characteristics in a way that can be presented in a useful format is challenging.

It is also worth noting that observing the need to understand the city as a series of HMDA does not necessarily translate into the drivers shaping each of those HMDA operating in very different ways. Indeed, where we have disaggregated at the HMDA level in our analysis thus far, the similarities have told an equally powerful story.

This section starts with a look at ties to their current locality with a look at their search geographies at the time of moving and how they feel in terms of attachment. The narrative that emerges is a generally high level of attachment – certainly amongst long term owners and renters and recent purchasers – and strong, positive associations with where they live. Intentions regarding moving down the track also pick up expectations of remaining in the locality or that part of the city.

We then look at wider city connectivity for both of our pilot HMDA. These 'travel maps' again highlight the subregional dynamics of the city, but also point towards the parts of the metropolitan area where those connections cross-over. The 'separateness' of NW and ES everyday travel geographies, with the exception of the CBD, offers a powerful visualisation of compartmentalisation – rather than desired integration in the 'City of Cities'.
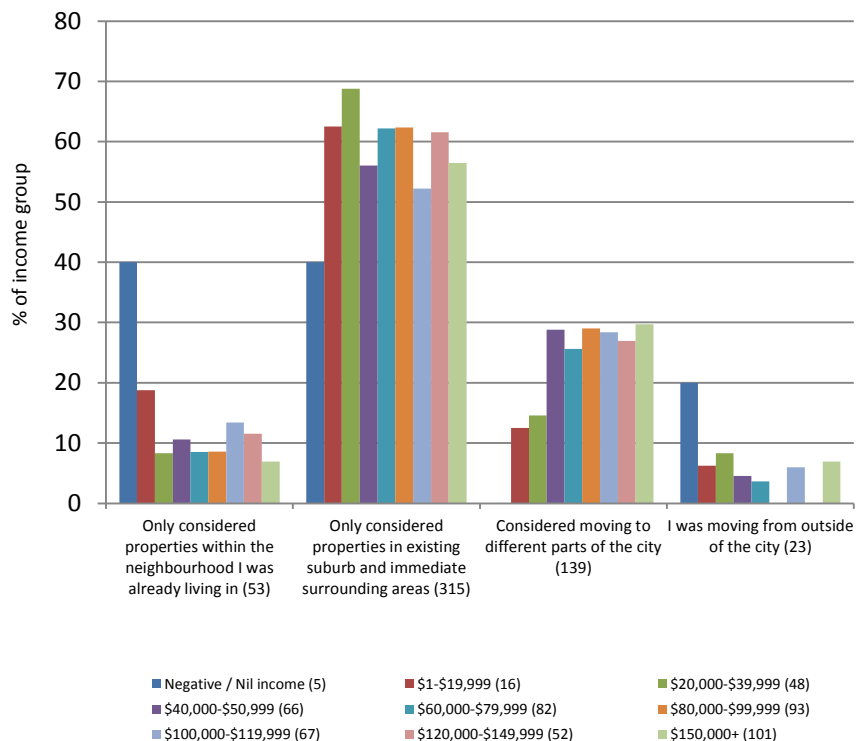
CONNECTIONS & CONNECTIVITY

Recent mover purchasers, which parts of the city did you consider?

We asked recent mover purchasers where they had looked when buying their property – their 'search pattern'. Development of the HMDA is underpinned by the local nature of a majority of household moves, and our findings here further reinforce the subregional nature of housing pathways. Only a small number restricted their search to their existing neighbourhood only – this limits choice – but most did not stray too far, and search patterns conformed to the principle that

60-70% of moves are locally contained. Disaggregating the sample by income band (**figure 71)** or household type (**figure 72)** did not display distinct variation across different groups, although those on lower incomes were more restricted in their search geography. Couple and single person households without dependents were more likely to have considered moving to another part of the city.

Figure 71: Recent mover purchasers across HMDA, by income

Figure 72: Recent mover purchasers across HMDA, by household type
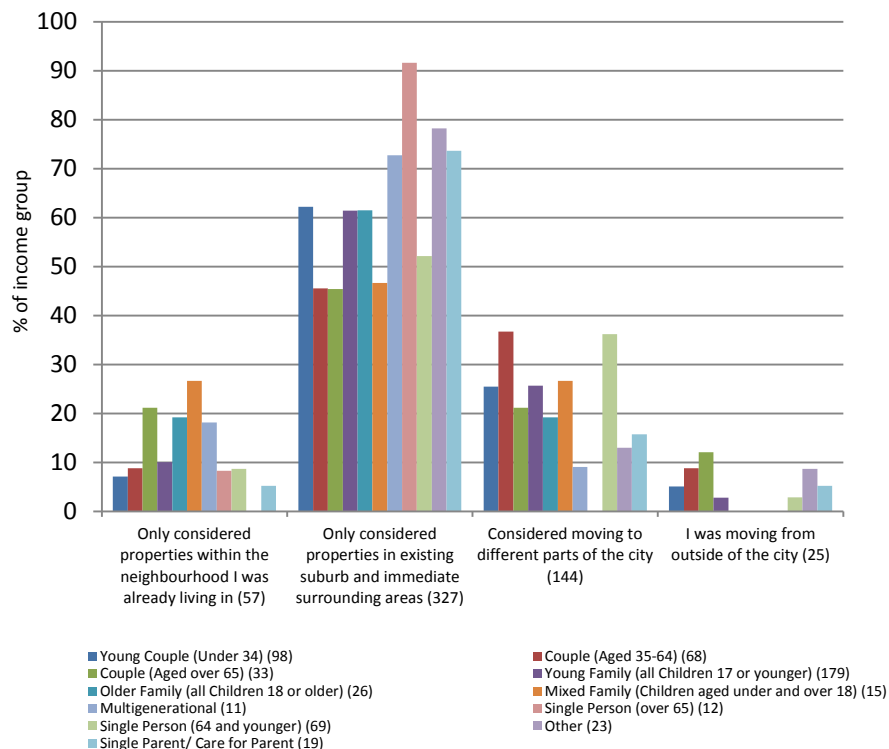
CONNECTIONS & CONNECTIVITY

Local connections: attachment to neighbourhood

All four surveys (recent mover purchaser, recent mover renter, long term owner and long term renter) asked respondents about their connection and attachment to their neighbourhood/part of the city. Perhaps unsurprisingly, the large majority of long term owners felt either very or fairly attached to their locality, and there was little variation across the different income bands in this regard (**figure 73**).

Whilst more respondents felt 'fairly' rather than 'very' connected, a similar pattern was seen with our long term renters (**figure 74**). Again, levels of attachment do not vary a great deal across income bands, although modest correlation can perhaps be seen between greater attachment the higher the income.

Figure 73: Long term owners, across HMDA

Figure 74: Long term renters, across HMDA
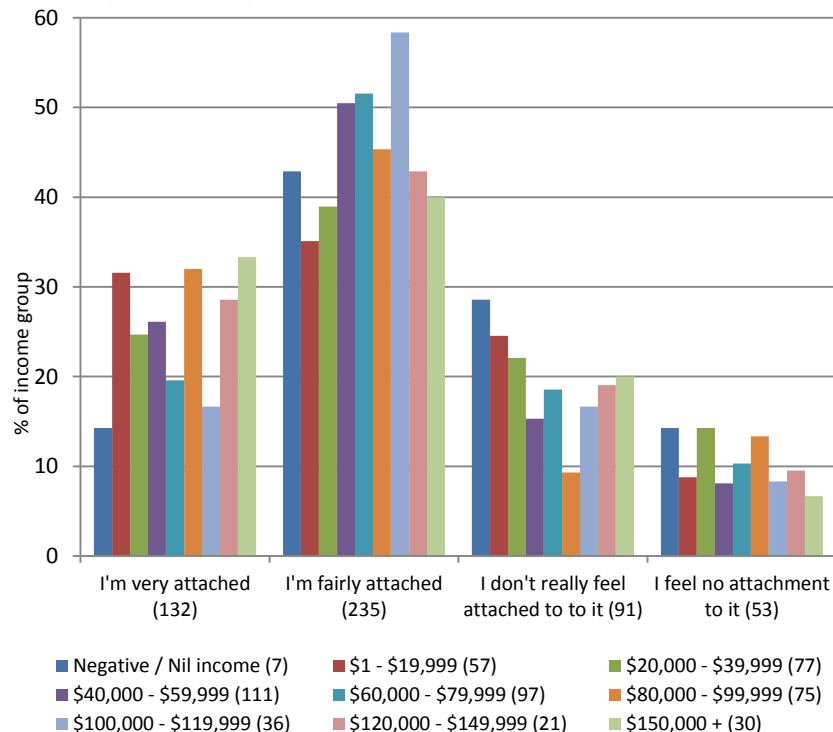
CONNECTIONS & CONNECTIVITY

Local connections: attachment to neighbourhood

As might be expected, attachment to the locality amongst our recent movers is less strong than long term owners. Nevertheless, our recent mover purchasers are not far behind their longer term counterparts (**figure 75**). This is likely to both reflect that this most recent move is likely not to have been far – reaffirming pre-existing attachments - but also self-endorsement of the locational decision made with their purchase. Modest correlation between attachment to the locality and household income can be identified.

Our recent mover renters (**figure 76**) demonstrate the least local attachment of all four groups, with over 40 per cent feeling little or no attachment. This is likely to reflect a range of factors, including a higher proportion of households moving from other parts of the city or from outside the city, but also the outcome of trade-offs made. Again there would appear to be a fair degree of correlation between attachment and income, suggesting greater choice in location for those groups.

Figure 75: Recent mover purchasers, across HMDA

Figure 76: Recent mover renters, across HMDA
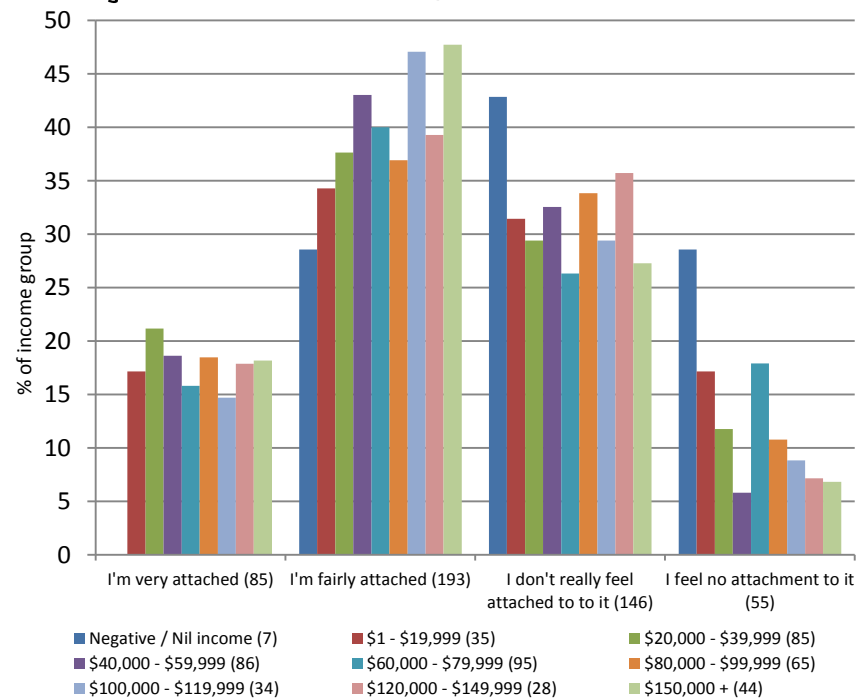
CONNECTIONS & CONNECTIVITY
Local connections: Long term owners attachment to HMDA

Long term owners, across HMDA

How do you think your local area will change over the next 5-10 years?	Ranking
It will stay about the same	
It will get better	
It will get worse	

Why do you think the area will get better? (N = 123)	Ranking
Infrastructure and transport improvements	
Good house price appreciation	
Good range of existing housing supporting a diverse range of households	
Good economic growth and employment prospects in this part of the city	
New housing development providing further choice	

Recent mover purchasers, across HMDA

How do you think your local area will change over the next 5-10 years?	Ranking
It will stay pretty much the same	
It will get better	
It will get worse	

Why do you think the area will get better? (N = 241)	Ranking
Good house price appreciation	
Infrastructure and transport improvements	
Good economic growth and employment prospects in this part of the city	
New housing development providing further choice	
Good range of existing housing supporting a diverse range of households	

In order to understand attachment further respondents were asked to provide their perceptions regarding the likely trajectory of their part of the city (is it going to get better? worse?), and further to this, the key drivers that will underpin this (positive or negative) change.

Here, we look at the responses provided by our long term owners and recent purchasers (this questions were asked across all surveys, and can also be disaggregated down to the HMDA level).

Both long-term owners and recent movers were overwhelmingly positive about the forward prospects of their area. Long term owners felt that it would stay pretty much the same, benefiting from infrastructure improvements and price appreciation. Recent purchasers were highly optimistic about the neighbourhood they had recently invested in – with a strong view that It will change for the better in the coming years – driving first and foremost by house asset appreciation.

CONNECTIONS & CONNECTIVITY

Future housing pathways: what are your long-term locational intentions?

Our 'stayers' demonstrated a strong connection to their current home when asked about longer term intentions regarding moving. The majority (222) of long term owners (**figure 79)** stated a preference to stay in their home for as long as they could manage. Of those suggesting that they would move, the location options were broadly equally split between 'downsizing' in order to stay in the neighbourhood, moving to another part of the city (52) or moving out of the city altogether (67).

Preference for these different pathways between different income groups are difficult to discern, although lower income groups appear to be more attached to their current home/neighbourhood. Our long term renters (**figure 80**) shared a strong commitment to staying where they were for as long as they could (a more definite relationship with income can be identified here), although significant numbers (correlated to higher incomes) indicate that they will look to move out of the city altogether.

Figure 79: Long term owners, across HMDA

Figure 80: Long term renters, across HMDA

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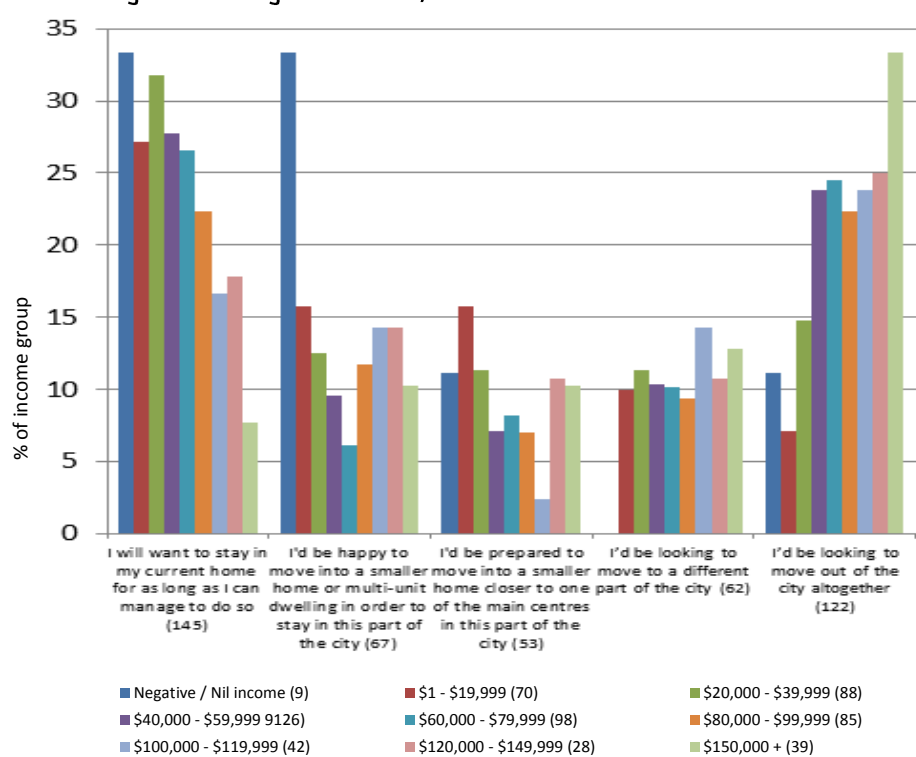
CONNECTIONS & CONNECTIVITY

Future housing pathways: what are your long-term intentions?

Our two recent mover groups demonstrated quite different outlooks when asked about their longer term intentions. Recent purchasers (**figure 81**) very much echoed the long term owners (and to a lesser degree long term renters) with just under half of our respondents suggesting it will be their intention to stay in their new home for as long as possible. A fairly significant number indicated that they would consider extensive renovation or knockdown and rebuild instead of moving elsewhere.

Amongst our recent mover renters (**figure 82**) however, a rather more mobile set of long-term intentions are indicated, with far less attachment either to their recently moved into home or the neighbourhood. The proportion of respondents stating that they would be looking to move outside the city altogether is particularly instructive. We can break down further by HMDA, and it is likely that this reflects in large part the importance of international temporary – for example students – living in the private rented sector in the ES HMDA.

Figure 81: Recent purchasers, across HMDA

Figure 82: Recent mover renters, across HMDA
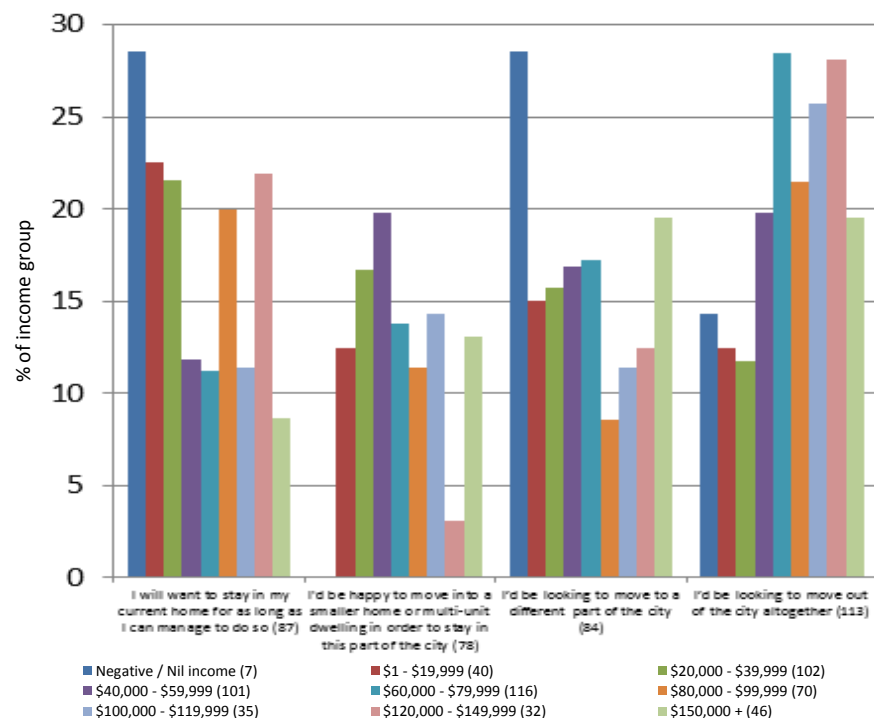
CONNECTIONS & CONNECTIVITY

City connectivity: Place of employment/education flow maps

Place of employment and education flow maps

The surveys also enable us to explore wider connections beyond respondents' HMDA. The following maps highlight the location of workplace and/or site of education attended by the first two identified members of respondent households living in the ES and NW HMDAs. Given that we can identify each households' local suburb, an indicative flow map between home and principal weekday destination is presented. The lines between origin and destination indicate the distance and direction of flow. This information offers insight into residents' use of the city, and the connectivity between their homes and destinations that they have to travel to on work days.

Figure 83: Work/education destinations, members of ES HMDA households

- Strong connections can be seen from home locations throughout the HMDA with the CBD, particularly for the identified 'head' of household. This is not only the case from the relatively proximate parts of the HMDA (such as Randwick), but also areas towards the Sutherland Shire.

- Other predominant hubs essentially fall within the Eastern Suburbs HMDA, including the Randwick Health and Education Precinct and the airport.

- More local/within same HMDA hubs provide destinations for a relatively higher proportion of 'second' household members (for example Brighton-le-Sands and Caringbah.

- There is very little travel outside the HMDA other than towards the CBD. Small hubs can be identified in Parramatta, North Ryde, Liverpool and Sydney Olympic Park.

Figure 84: Work/education destinations, members of NW HMDA

- Again strong connections can be seen between origin locations in the NW HMDA and the CBD. The draw of the city centre is not as strong as seen from the eastern suburbs, and relative distance (with much of the ES HMDA almost adjoining the CBD) will play an important factor here.

- Outside the CBD, other principal destination hubs are more local and found within the NW HMDA geography. The relative importance of Parramatta stands out, but also centres including Baulkham Hills and Norwest are highlighted.

- Whilst local levels of 'containment' are high, as is seen in the ES HMDA, connectivity with key employment and university locations on the North Shore and up to Chatswood and Macquarie Park can be seen.

- Very few household members living in the NW HMDA households have principal destinations in the ES HMDA.

Figure 85: Combined NW and ES HMDA flow map

- Combining the two maps together perhaps tells the most powerful narrative:

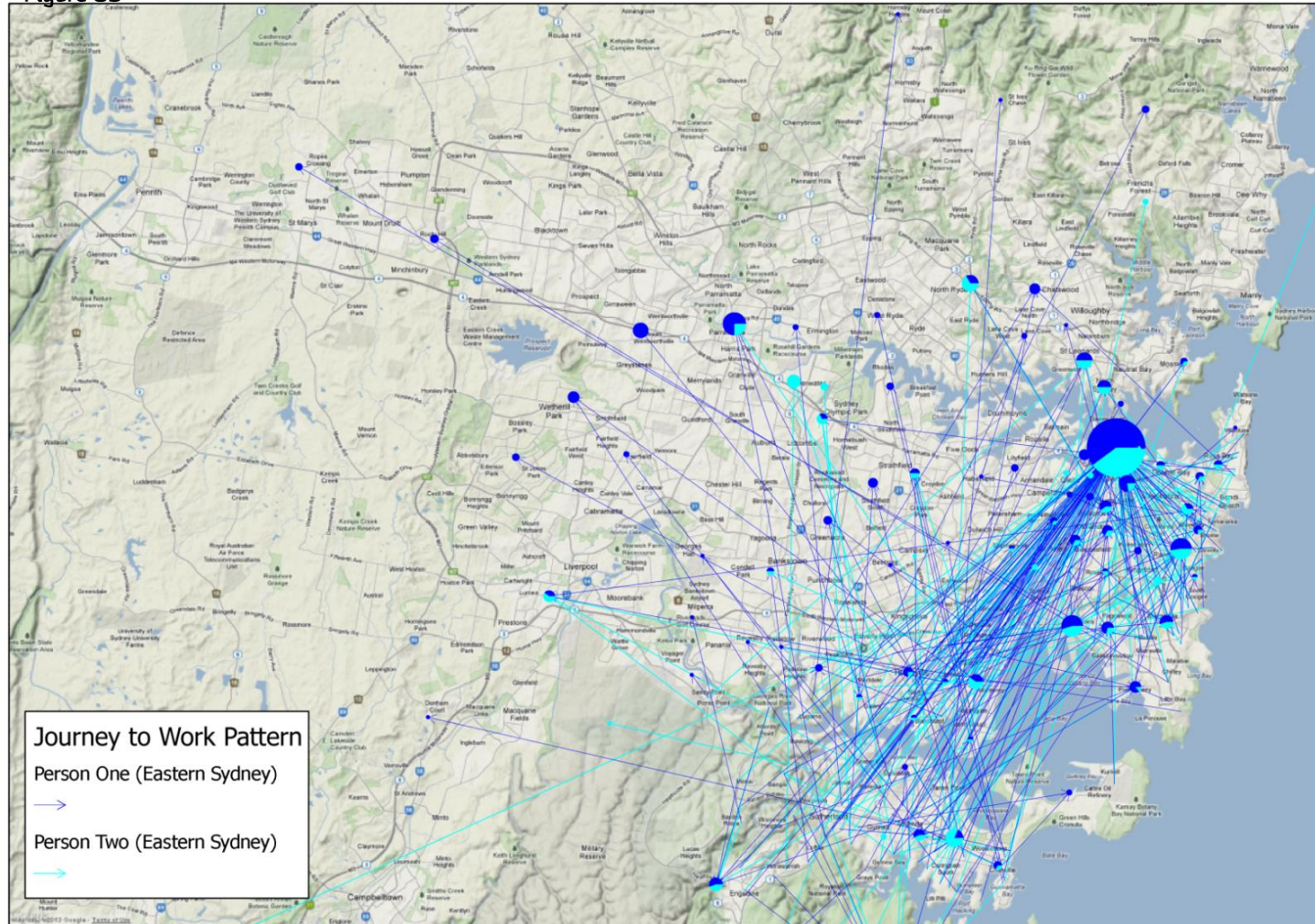➡ **the importance of the CBD, despite the objectives of 'City of Cities', and**

➡ **the otherwise generally localised nature of journey to work and education patterns.**

CONNECTIONS & CONNECTIVITY

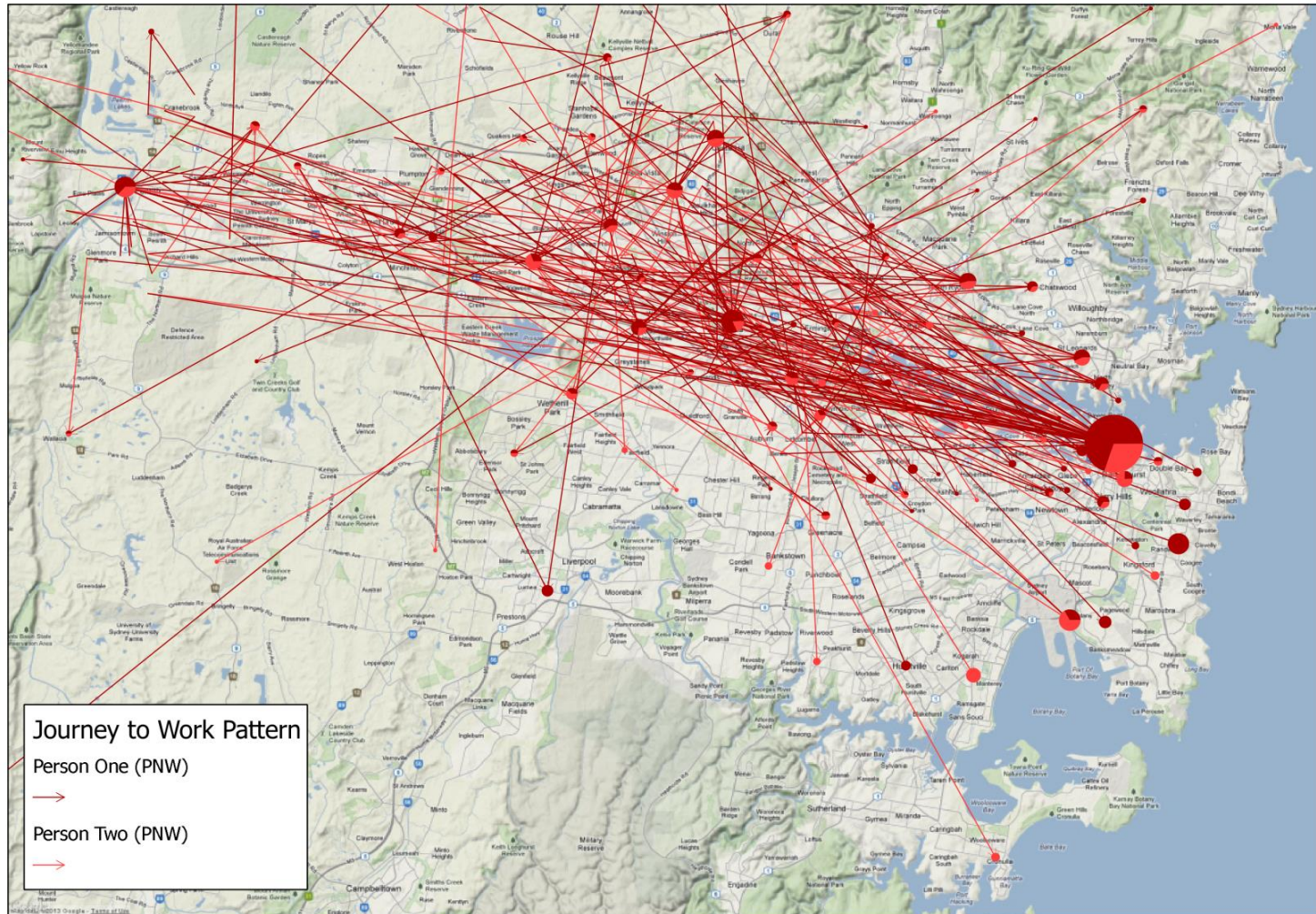Work/education destinations, members of ES HMDA households

Figure 83

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CONNECTIONS & CONNECTIVITY
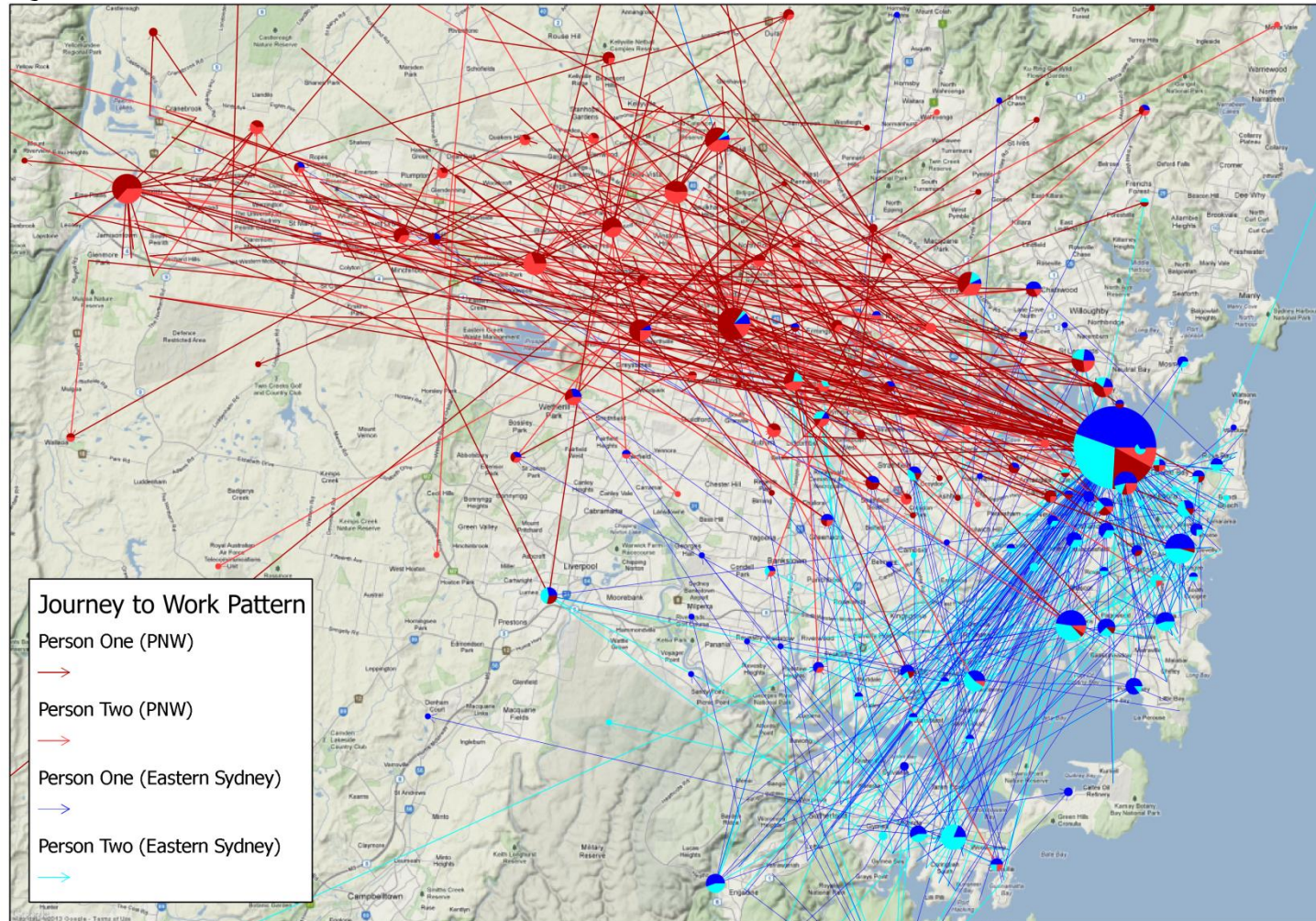
Work/education destinations, members of NW HMDA households

Figure 84

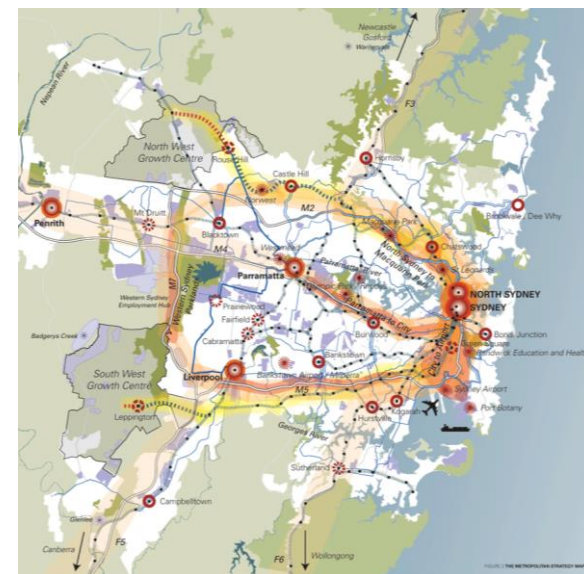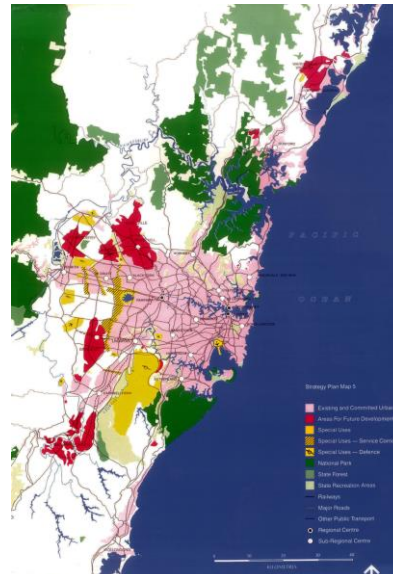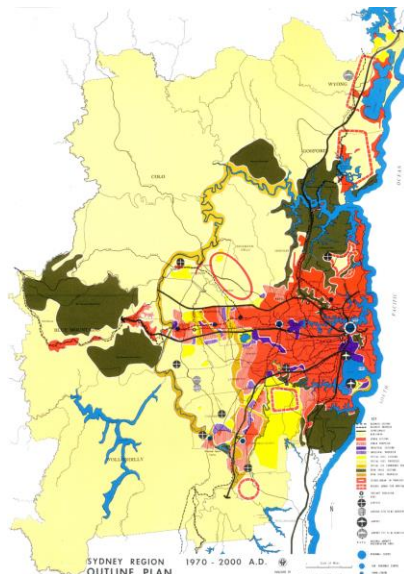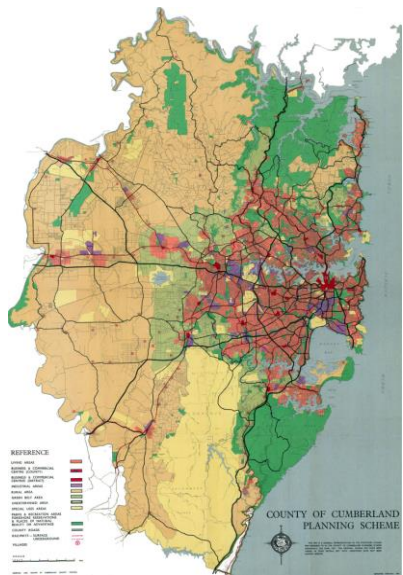Journey to Work Pattern

Person One (PNW)

Person Two (PNW)

CONNECTIONS AND CONNECTIVITY

City connectivity: work/education destinations, members of both ES and NW HMDA households

Figure 85

7: Implementing metropolitan strategies

IMPLEMENTING METROPOLITAN STRATEGIES
Linking the survey to strategic planning

Introduction

In this final section, we address the following questions:

1) Did the survey work?

2) How would the survey be rolled out across the metropolitan area, and how much would it cost?

3) What benefits would the survey, as part of a wider demand toolkit, provide in the strategic planning process

1. Did the surveys work?

The aim of this research was to develop surveys that would capture how factors shaping and driving patterns of demand 'played out' in reality over time, and from this, inform the evidence base about how housing demand actually translates in terms of housing choices and constraints, and how people are positioned in, and use, the localities, subregions and broader metropolitan areas in which they live.

The approach taken, including how the surveys were developed and administered remained true to the original intention of the research. This research was never intended to provide more accurate household forecasts, or to build a better demographic projection model at the local level. Such a pursuit would remain tied to the inferences and assumptions that need to be defined in order to be able to then run the resulting models. Such techniques may track household trends at the metropolitan-wide scale with relative success, but arguably fail to engage with and understand the structure of the city much below this broader scale to much effect.

Demographic trends may well accord with the projections made, and indeed this might flow through in terms of household formation. However, the evidence is more limited in confirming that said models are effective in understanding how households use housing, make choices and negotiate constraints in the housing system. In order to better understand sub-regional local level demand we need to move beyond simply pursuing ever-more nuanced forecasts based upon tracing household cohorts within finer grain geographies.

Rather, our toolkit – of which these surveys form an integral part – aims to sit within a more iterative and interpretive space. The detailed insight from looking at actually expressed demand provides the link between household formation forecasting and how those numbers interface with the housing system. The insight provided helps understand the triggers behind the moves – and the reasons for not moving – within different housing market contexts across the city; an approach that we argue will better serve policy makers and those tasked with implementing the resulting policy as part of strategic planning processes.

The approach developed through this research helps illustrate the spatial patterns of the housing pathways taken at different stages of the lifecycle – and helps determine how abstract forecasts and urban capacity models might translate in practice. It therefore helps refine what those assumptions might be, and how their sensitivities are shaped at the sub-regional level. The surveys do not capture every move and the reasons behind those moves. However, they help us understand who is moving (and who is able to move) through the housing system at that time and assesses this movement according to the type of household, their incomes, their employment, and so on.

IMPLEMENTING METROPOLITAN STRATEGIES
Linking the survey to strategic planning

While our surveys imparted interesting insights regarding household dynamics at the subregional scale, we now ask, did we actually achieve what we set out to achieve? That is, did we capture the spatial/locational attributes – how the city 'works', and people 'use' their city – in an innovative and useful way?

Here it is important to tease out the strengths but also limitations of our approach. We look at their key defining features which are:

- The use of the HMDA geographies defined as part of the toolkit as our survey frame

- The complexity of our sampling approach and survey administration, and whether we managed to reach the intended households

HMDA geographies as a spatial framework for the surveys

The recent draft Metropolitan Strategy places emphasis on the subregion as the principal scale for both strategic direction and implementation. Furthermore, there is a recognition that where, and how, new housing numbers might be supplied is shaped by the realities of different housing market contexts and ultimately enabled (or not) as a result of significant variation in economic viability across different parts of the city. The strategy also heralds the importance of providing a greater diversity and mix of dwelling types. Six subregions are identified (reflecting an outcome of consultation with LGAs and other stakeholders), and 'better reflect the economic geography of Sydney than the previous subregions' (NSW Government, 2013, p. 9) in that they 'allow the full scope of critical economic areas to be planned for more cohesively and 'connect intended hinterlands around respective regional cities' (p. 9).

All these elements point towards a more nuanced understanding of the city, and a need to consider how different parts of the city are shaped, and continue to be shaped, in particular ways. The new subregions identified by the DP&I demonstrate a fairly logical disaggregation of different parts of the city, and bear a degree of crossover and synergy with the geographies of the seven metropolitan HMDAs identified in this research.

Where our HMDA geographies are grounded in the housing system and housing markets which overlay them, they identify sub-regional areas within the city where the majority of household moves are contained – that is, they reflect geographies sufficiently extensive and incorporating a range of housing options so that housing pathways should be accommodated in large part within them.

It therefore made sense that we utilise these HMDAs as the underpinning geography of our surveys. If we are suggesting that strategic planning needs to better understand housing demand (as one of a number of drivers of city change) at the subregional level, then the surveys should reflect this through providing more spatially nuanced insight provided. We believe the results demonstrate this in two main ways:

- *Firstly*, the surveys acted to triangulate the conceptual framework behind the approach developed by the research team (see Technical Report). Defined through an analysis of Census mobility data, the HMDA reflect levels of containment of 60-70%. Our survey returns confirmed that this: i.e. the geographies determined from Census data defined subregions whereby the majority of moves have occurred within the boundaries indicated.

IMPLEMENTING METROPOLITAN STRATEGIES

Linking the survey to strategic planning

- *Secondly*, further analysis of housing pathways (moves prior to the most recent move) would also show the essentially localised nature of household moves and the importance of locality. Households do not tend to jump around and criss-cross different parts of the city: they remain largely local, and thus express demand and interact and shape the housing market at that scale.

Although local moves within the HMDAs reiterate an important observation – demand is expressed locally – the third or so involved in a move across HMDA boundaries is a key part of the narrative of the evolving city. These cross-boundary moves in part reflect the limitations of having to draw a 'boundary' line somewhere: for example, it is perhaps not surprising that quite a lot of 'border traffic' is seen between the more westerly neighbourhoods in the City and Harbourside HMDA (Rhodes, Strathfield) and the Parramatta and NW HMDA. However, they also point to key city shapers that are helping drive the structural evolution of the metropolitan area. Some of the HMDA are relatively more open or closed to other parts of the wider city, or nationally or internationally, than others. If we continue with the example of the Rhodes, Strathfield, Sydney Olympic Park area, this has been an area of significant new housing (or at least apartment) supply in recent years, and thus the flow from NW to Parramatta and further out to the Hills District is informative.

Conveyors reflecting cumulative household mobility between those different geographies can still be identified. **However a vital story here is the narrative that the HMDAs signify a spatially organised social, economic, cultural 'bundle of opportunities' which capture how households make decisions and negotiate constraints in terms of their housing options.**

Complexity of our sampling approach

The sampling approach used in administering the surveys was complex, but nevertheless designed to enable replication across metropolitan geographies and across all capital cities subject to access to relevant datasets. Rather than sending out a generic survey to a random sample of all households in the HMDA, the appropriate questionnaire within a family of 4 surveys – sharing core characteristics but with distinct additional sections – was targeted at the address point level to mover renters, mover purchasers, long-term renters and long-term owners. This requires the use of Valuer General's data, in order to identify address points where a transaction had recently occurred and Rental Bond Board (with the assumption made that a household move – a change in tenancy or ownership - would be involved). Stayers were sampled from an algorithm selecting address points proximate to movers where no transaction can be identified in the preceding three years.

While complex, the approach provided the desired outcome. It would appear that the four different surveys went to their appropriate respective targets. If the sampling strategy did not work we would have expected those households that were sent the wrong survey - a survey saying that they had moved when they have not – to return the survey to the sender complaining of incorrect targeting. We did receive a small handful of such returns, however given the scale of returns – and the minimal complaints regarding misidentification, we would argue that the methodology achieved what it was set out to do.

IMPLEMENTING METROPOLITAN STRATEGIES

Linking the survey to strategic planning

Response rates

Over 24,000 surveys were distributed in total (a first round mail out of nearly 20,000 followed by a smaller 'top-up' where survey numbers had not reached the desire response rate). At the point of cut-off for incorporating responses into our analysis (mid-November 2012), 2088 surveys had been received. (Surveys continued to gradually come in some weeks and sometimes months after close, and final return numbers added another couple of hundred). We also managed to nearly secure our desired number of responses across all four surveys in both of the two pilot HMDAs (falling just short of the 250 target in some of the NW surveys) indicating that the surveys were reaching the appropriate respondents.

With around 1000 responses in each of the HMDA, our sample was robust. While it broadly accorded to the broad characteristics of each of our pilot sub-regions – more detached houses in NW HMDA, more apartments in ES HMDA; higher price points and median incomes in ES HMDA – there were some accounted-for skews. Around a quarter of our sample were recent purchasers, for example, while numbers in the overall population moving in this tenure annually is much lower – hence our sample was over-represented in this regard. However, this helped pick up the characteristics of those able to purchase and move in the market – typically in the upper income brackets, capable of paying the prevalent high house prices in order to do so. We nevertheless achieved a response rate of around 9-10%; a success given the nature of the survey.

Also positive was the very limited number of complaints regarding survey administration: of the thousands returned, less than a handful noted concern that they had been 'identified' as either a recent mover or renter (or indeed stayer) and that we as researchers had got hold of such information. While such data are available in either the public domain or held by organisations, the process of the research inevitably draws households to this fact. Nevertheless, the minimal concerns encountered here should provide confidence to government agencies holding these data sets that they can be used effectively and responsibly to further research understanding without either compromising confidentiality or fuelling concern amongst the general public.

However, there was a downside to the targeted approach we adopted, namely that the approach was dependent upon address point data derived from the VG and RBB databases being correct. A high proportion of incorrect addresses and 'not known' were returned to sender – perhaps around 1000 and representing 5% of our total mail-out. While we had anticipated this as a downside risk, and likely to be a problem in large, new build strata developments, this relatively high level of failed returns was seen across all survey types.

IMPLEMENTING METROPOLITAN STRATEGIES

Linking the survey to strategic planning

Capturing how households 'use' the city

Our survey design placed considerable emphasis on gaining a better understanding of respondents' use of their city and how this related to their exercised housing choices and constraints. Previous surveys have sought to capture locational attributes; however, those attributes have tended to be understood in a contextually desensitised and aspatial way (I like to be near good services, schools, transport, parks etc.), rather than providing a means of understanding the actual geographies of Parramatta, or the eastern suburbs. In order to further tease out factors shaping localised housing pathways, questions were asked about previous homes and reasons for moving. To find out more about respondents relationship with the HMDAs and the city more widely, we asked questions about locations of work, education and leisure.

Did we succeed where others have struggled to capture spatial/locational drivers of housing demand? This was the most experimental component of the methodology, and the answer is a qualified 'in part'. Some question areas were not as successful as hoped. While providing information not usually available, the detailed level provided is difficult to use in aggregate form: it therefore offers an incredible database for more in-depth household level analysis, but is harder to utilise at a more general reporting level.

That said, innovation can be seen in terms of how aspects of that spatial information can be represented to capture the flows, connectivity but also the localised nature of household moves in the city.

Collectively, the spatially oriented-questions help build an effective narrative about local housing choice and constraint relative to their respective HMDAs geographies. They consolidate understanding of the sub-regional housing dynamics shaping our city, and animate the connectivity between new sites of supply that flows through into housing demand within proximate geographies over time. We can see where first time buyers purchase, where they move on to, and demographic and income characteristics associated with moves (or staying put). We can build a profile of those households able to participate within the housing system as currently configured, and by inference, those excluded.

So what does it all add up to? In sum, our sampling approach was a key point of innovation. We achieved (or almost achieved) not only our total sample size but also the desired numbers when each of the HMDA responses are broken down into each of the four different surveys. As such the rewards arising from the complexity are considered worthwhile:

- We have a more spatially nuanced understanding of how demand is expressed across the city.

- We can see the demographic/income profiles of who buys/rents what: the 'demanders' look different in different parts of the city.

- We have a better understanding of the push and pull factors that determine those housing choices/constraints and trade-offs made.

Understanding flows is of key importance, but what the flows demonstrate is that demand is a local, 'sticky' affair: different parts of the city 'perform' in distinct ways. This is compounded when we look at the 'stayers', and the type/price points of stock that get tied up.

IMPLEMENTING METROPOLITAN STRATEGIES

Linking the survey to strategic planning

2. Implementing the surveys

The success of the surveys has demonstrated the value they can play in informing strategic planning frameworks. The surveys do so by establishing a more evidenced-based understanding of how housing demand actually translates in practice through housing market dynamics and choice/constraints defining housing options in different parts of our metropolitan cities. They help capture information that helps build an understanding of how people live in, move through, and engage with different parts of the city.

The spatial analysis afforded by the approach points to the sub-regional/localised nature behind the drivers of demand, and consolidates our interpretation of how city structure and form evolves and shifts. The tracking of mid-term patterns of demand illustrates the drivers shaping our cities over time, and in term, how the shape of the city is changing. Insights from the survey reinforce the patterns seen within secondary data although providing further detail where mobility and responses within the housing system are relatively stronger or weaker.

As noted, the surveys were not developed to capture 'stated intentions' or simply reflect changing market sentiment as a result of interest rate changes or house price trends. Rather, their aim was to extend, and deepen, insight into the mid- to longer-term drivers – as actually expressed through recent transactions and mobility through the housing system.

These strengths and stated intentions highlight a number of parameters appropriate to a rollout of the surveys:

- The surveys need to respect and reflect the housing market geographies within which actual housing moves/pathways are expressed. Utilisation of the HMDA frameworks, and ensuring appropriate and sufficiently robust sampling at the HMDA level, provides an effective means of enabling this.

- In capturing those structural shifts, the frequency of the surveys can reflect a primary interest in capturing mid- to long-term change in terms of trends within HMDA and relative changes across the city. You do not have to roll-out the surveys every year. Indeed, the underlying conceptual framework – grounded in mobility data afforded by the Census points to a 5-yearly cycle.

Options for Implementation

Two options can be presented for roll-out of the survey.

The first (A), would be to conduct the survey every 5 years, applying the methodology used in the pilot here across all HMDA in Sydney;

The second (B) would be to collect data on a continuous basis by administering the survey to a sample of all movers (and a parallel number of stayers)

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IMPLEMENTING METROPOLITAN STRATEGIES

Linking the survey to strategic planning

OPTION A: 5-YEARLY SNAPSHOT

Census data is crucial to the demand toolkit developed, and being able to align survey findings with broader community profile, mobility, and employment data is useful. It is also important to reiterate that our fundamental interest is in the structural, longer term drivers shaping housing demand and how it then translates within housing market activity across different parts of the city. As such, a comprehensive 'snapshot' every 5-years offers an appropriate and effective evidence-base feeding into mid- to long-term city 'shaping' activity and decision making.

Conducting the survey in the year following the Census (2012, 2017 etc.) – as was the case in this research - is useful. It does not become conflated with the census in the minds of respondents (and which may affect the rate of response), but the findings from each cover a relatively comparable period. Since Census data is typically released a year after Census night, this also ensures it is available (and new) at the time of reporting the HMDA surveys.

If rolled out in this 'snap shot' form, metropolitan-wide coverage with robust sampling at the HMDA level would reflect the following considerations:

- Utilising the HMDA framework based upon 2006 Census data, 8 HMDAs (7 Metropolitan, plus 1 fringe/rural) are identified. All 'Metropolitan' HMDAs should be included, and if numbers permit, the fringe/rural HMDA should also be included.

- Each HMDA requires a minimum of 1000 completions, and at least 250 returns for each of the four different surveys. This suggests a total number of completed responses across the 7 (+1) HMDAs of around 8-10,000.

- Based upon a 9-10% response rate, this will require identification of 40-50,000 recent sales and rent transactions, and a similar number of 'non-active' households ('stayers, long term renters') over a preceding 6 month period (or, if necessary, to get sufficient numbers, a12 month period). This equates to 80,000-100,000 survey mail outs in total.

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OPTION B: ROLLING, SYSTEMATIC COLLECTION OF DATA

Rather than a once every 5 year approach (which would draw upon movers in the previous 6-12 month period, depending on the desired sample size), a second option would be to put in place a more systematic approach by sending out a questionnaire at the point in time of each transaction (when the sale is recorded by Lands; when the Rental Bond is lodged). The survey would, as a matter of course be sent to the new occupants at all addresses recording a change, requesting completion of 'recent movers' surveys.

Advantages can be identified in taking this more systematic approach:

- Coverage (in terms of the option to participate in the survey) would be 'universal' for movers.

- The method could be 'normalised' – much like the Bond lodgement forms or (previously) the First Home Owner Grant, with government or an arms-length agency incorporating data tracking housing demand into other ongoing data collection processes. Explicit links with government requirements may help boost the response rate.

- Ongoing collation would also complement the broader potential regarding housing data to be opened up through AURIN (Australian Urban Research Infrastructure Network) activity.

- Continuous collection would open up opportunities for regular reporting and alignment of demand assessment to the associated timeframes of analysis feeding into strategic planning processes.

There are also disadvantages to note:

- Sending out a survey to every moving household has a cost attached both in terms of posting it out and also in inputting the paper-copy returns received. While on-line completion can be promoted as much as possible, the need to offer a hard-copy option will remain for some time to come. While the data received are invaluable, there is a point at which the wealth and amount of information obtained becomes overwhelming.

- Continual data collection also requires ongoing management of that process, not only in terms of inputting of data and oversight of the data framework created but also in terms of 'managing' the information in terms of responding to queries (and concerns, complaints) from the public and establishing protocols when requests for use/application of data are received from a potentially wide range of stakeholders. Again, these costs (and requirements) may outweigh the additional benefits afforded by building up a continuous dataset.

- If surveys are continuously administered for 'movers', then the question arises as to how to incorporate the equivalent tracking of 'stayers'. It might be possible to send out a 'stayer' survey each time a mover survey goes out, however this adds significant complexity. Furthermore, while a recent mover may understand the logic of receiving a survey for completion, this is likely to be less apparent to a stayer.

We do not attempt to price this option: its benefits would be maximised where largely managed in-house and integrated with other data collection mechanisms such as FHOG and Rental Bond Board lodgement forms, and as such associated costs would therefore be best accommodated within those mechanisms.

IMPLEMENTING METROPOLITAN STRATEGIES

Linking the survey to strategic planning

Beyond Metropolitan Sydney: A tool for all capital cities

The surveys and the underlying methodology have been developed so that they could be rolled-out across all metropolitan cities in Australia. The methodology determining the HMDA geographies primarily uses census mobility data (supported by price/value data in terms of mapping supply side geographies). This can therefore be replicated for each of the major metropolitan cities. Accessing the equivalent address data from the equivalent VG and rental bond agencies will be a state-by-state matter. The toolkit developed through this research aligns well with the objectives of AURIN.

3. Utilising the toolkit in the strategic planning process

The new planning system will create a major shift towards evidence based strategic planning in the preparation of plans, community and stakeholder engagement and decision making. The transformation to upfront strategic planning is the key tool for better facilitating the delivery of housing and jobs in the right locations, while protecting and managing the environment and people's way of life (NSW Government, 2013, p.60). Furthermore, strategic plans will be prepared using up-to-date evidence and research, grounded in a real understanding of the key issues and challenges' (NSW Government, 2013, p. 4)

Metropolitan strategic planning places significant emphasis on being able to articulate the challenges that cities face and identifying strategies and actions to manage or even address these challenges in the short, medium and long term. To effectively manage the changing city, strategic planning is equally about knowing how a city works, how it is changing, and how strategic planning can respond.

The surveys outlined and reported upon in this report are an integral component of the demand-side toolkit which has been developed in order to improve the transparency of the evidence base shaping the planning decisions for our city, and to effectively share that evidence, and debate the implications of that evidence, more widely with communities and all stakeholders.

Bridging the gap between actual supply and targets

'Each plan will establish how housing supply targets derived in Regional Growth Plans are to be distributed across the subregion. This distribution will be informed by evidence on the market availability and demand for housing, the economic feasibility of its development in particular locations, analysis of demand for different housing options, availability and suitability of supporting infrastructure, proximity of jobs as well as community, local council and agency participation' (NSW Government, 2013, p.85).

Developing spatial housing and dwelling targets (DP&I, 2013, p. 79)

Housing targets will be based on the following considerations:

1. Demographic and household projections
2. Market demand and consumer preferences, including an understanding of housing and land prices and the feasibility of different housing options
3. Existing and prospective major infrastructure
4. An assessment of different scenarios for low, medium, high growth
5. An understanding of infrastructure dependencies involved in any targets

IMPLEMENTING METROPOLITAN STRATEGIES

More effective, evidenced-based strategic planning

The 'market' supplies new stock where demand exists. Demand exists where the price point required by developers to make that new supply stack up is acceptable to, and/or affordable by, purchasers. However in practice, the profile of those purchasers is likely to look different to those suggested in forecasting models. Smaller households do not necessarily live in smaller properties. Those needing to work in the CBD do not necessarily live within the desired transit catchment for their employment centre. There are large numbers of Sydneysiders where the need for housing is significant, but the market-dependent nature of housing provision and the price-points commanded means that we have a housing system that fails to facilitate sustainable demand from significant sections of our population. Much of the 'realised' demand – certainly in areas of new medium- and high-density supply is bought (and thus has been 'demanded') by an investment sector that does not necessarily accord with those demographic projection models.

By contrast, the surveys present insight into those who have moved (and those 'staying') within the housing system, and through this, we can start to piece together how demand is accommodated and the impact of that demand on local patterns of choice and constraint. Our toolkit allows planners to assess the gap between what could be provided, in accordance with the specific demand cohorts within each HMDA. Crucially, the visual presentations of how people use the city integral to our analysis can provide an accessible basis for engagement in city growth management issues:

- Within our sub-regional HMDAs, we can identify the geographies of first home purchase and have associated insight regarding the circumstances of those households.

- We can compare this with the spatiality of moves made by older family households, or between different income groups.

- We start to understand how the Parramatta and NW HMDA for example, 'works' and how pathways are shaped or constraint. Crucially, seeking insight across renters, owners, recent movers, and long term stayers ensures that the narrative does not simply understand the supply/demand dynamics shaping Sydney only in narrow terms.

- We can see the type of stock, and locality of stock, taken up by moving households. Similarly we can build up a picture of the type and locality of housing that gets 'tied up' and unavailable where there are low levels of household mobility, whether in terms of owner occupation or long term renting.

- We can, through tracing households' housing pathways, build up a better understanding of the connectivity between new and existing housing stock: how do existing areas 'feed' new provision in the subregion?

The translation of household forecasting models into anticipated housing requirements – and in turn housing targets – can be better calibrated utilising the evidence base emerging from both HMDA analysis and the surveys.

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We can see how subregions reflect their local characteristics and how those characteristics differ over metropolitan space. In both of our pilot HMDAs, for example, those moving – and certainly those purchasing – had income profiles skewed towards the higher end of the income profiles of all households in those subregions.

At one level, this is not surprising. Nevertheless, it puts in sharp focus the extent to which housing provision, affordability and availability is only functioning for certain sections of the population. The most obvious reflection of this is that expected newly-forming households stay at home or in flat share arrangements longer; similarly, the anticipated demand from first time buyers will not materialise if they cannot meet the price points desired/required by developers in the context of new build.

The surveys **do not** provide revised housing targets by subregion. They do, however, help better understand why those targets consistently fail to really be meaningful. Insight from the surveys can therefore lend itself to more pragmatic assessments as to how forward household trajectories will flow into housing decisions and housing market dynamics across different parts of the city.

In simple terms, it helps consolidate the evidence-base that underpins our understanding of how housing demand translate across different parts of the city, and starts to indicate the constraints within the system and levels of need that cannot be accommodated by the market.

But the question then becomes, how might such insight inform metropolitan plans and frameworks? With some political difficulty is the answer. Actual numbers of new supply provided and associated spatial outcomes, versus the hypothetical game of housing targets, highlight substantive holes in the ability of the planning system to deliver. Targets suggest that we know how much housing is required. When those levels are not achieved, then the complexity of the development process can be blamed: non-conducive market conditions, lack of development finance, local authority red-tape holding up planning decisions, and so forth. Evaluation of the performance of metropolitan plans and their targets rarely reflect upon the extent to which those 'demanding' housing are likely to be able to exercise that demand – given market conditions and housing system constraints – over the given time period of interest.

The draft new Metropolitan Strategy continues the tradition of forecast household growth into housing requirements. It also recognises the centrality of economic feasibility of development in a market-led planning system in determining new supply through development of the Urban Feasibility Model (UFM). While this is a useful tool in determining site feasibility given underlying market conditions, without the use of parallel housing needs models, the UFM acts to reinforce a planning system which has become defined in terms of development feasibility alone rather than a broader, strategic consideration of getting housing 'right' in order to build a more efficient, productive and equitable city. Without this broader understanding of why we plan, targets will continue to relate to only part of the narrative, and therefore only be partially meaningful.

IMPLEMENTING METROPOLITAN STRATEGIES
More effective, evidenced-based strategic planning

Tracking the structural changes that gradually reshape the city

As discussed above, two options are identified for survey administration: either as a 5-yearly snapshot, or as an ongoing exercise integrated into data collection activities undertaken at the time of household mobility (purchasing a new home; lodging a new rental bond). Although in the case of the latter data would be 'accruing' continually, its potential integration into the monthly and yearly reports of the MDP need to be carefully assessed. The surveys have not been designed to capture short term movements in the housing market, and utilising data over short time periods arguably obviates the core value of the insight provided.

At the strategic planning level, the characteristics of recently expressed demand best contribute to building a more accurate basis for understanding the underlying strengths, constraints and drivers within each of the subregions. These patterns of recently expressed demand should provide planners with a more realistic benchmark informing the likely forward trajectories of particular parts of the city. They help understand where there is an intensity of activity, and how that has translated into mobility and constraint through the housing system.

Insight from the surveys offer, therefore, a robust evidence base regarding drivers of change and – in the language of the recent draft Metropolitan Strategy for Sydney – key geographies, household types, and markets which are gradually 'reshaping' the city. The strategy identifies **city shapers** on the basis of 'their size and scale and the opportunities they present for the change and investment that are critical for the growth of Sydney. They will shape how our city functions' (NSW Government, 2013, p. 18).

The importance of geography – how people live in the city, use the city, and how the city 'works' – presented through the surveys act as a complementary (rather than counter) element to the evidence base alongside considerations of urban capacity, and the economic feasibility of development in terms of planning the future direction for Metropolitan Sydney.

The spatial patterns of household mobility, identified through the surveys, consolidate our understanding as to how housing dynamics shift over time. For example, intensity patterns within the Parramatta and NW HMDAs (see section 4 above) confirm (but also adds several layers of detail to) what Census data alone indicates: that the housing supply/demand dynamics focused around Parramatta and out to the Olympic Park to the east and Westmead to the west are central to understanding the shifting pathways favoured by, or constraining, households across the wider subregion, as well as helping understand how this HMDA sits within, and is connected, to the broader metropolitan space.

Evidence and engagement within the new planning system

Planning at the regional and subregional level can be complex but it is where major planning decisions are made and it remains the best level to achieve multiple objectives. Based on **good evidence** and knowledge and ideas generated through community engagement, decisions can be made to accommodate population growth, manage change and balance competing land uses (NSW Government, 2013, p.50).

IMPLEMENTING METROPOLITAN STRATEGIES

More effective, evidenced-based strategic planning

Crucial to the NSW Planning Reform will be a transformed basis upon which decisions regarding urban growth management are made. This is not simply a matter of improving community engagement and enabling greater transparency between all stakeholders involved; although this is important. It also depends upon a step change in the way the issues and challenges facing metropolitan Sydney are presented to stakeholders in the first instance and then how evidence and information inform discussions between government, developers and residents alike. The culture change identified as so important to the proposed Planning Reforms also needs to encapsulate governments' understanding and approach to building an evidence base, sharing that evidence base, discussing the trade-offs arising from the evidence, and acting upon the choices made.

As part of Vancouver's CityPlan process, extensive preparatory work was undertaken in order to provide all stakeholders with access to an evidence toolkit. This provided the framework on which choices could then be discussed. For example, if the evidence is available to highlight housing challenges faced by parts of the community, then the community has a shared platform from which to understand the trade-offs associated with the choices made.

Under the new Planning System, residents and communities are to be involved upfront – in visioning, in the plan-making process and in the preparation of subregional delivery plans. Having access to the same data, evidence and insight is central to this. Once that evidence is shared, explained and debated, the real challenges facing the planning process can then become the focus.

Final remarks

Together with the HMDA framework, the household surveys developed provide an invaluable toolkit helping incorporate a better understanding of the drivers shaping local level housing demand across the city. They inform the strategic planning process through developing an evidence base which offers:

- A more nuanced understanding of how household and population forecasts actually translate into outcomes within the housing system, and how this translation process is shaped by the contextual factors in different parts of the city. It does not replace those forecasting models, nor provide an alternative 'black box' model from which to derive targets. It does, however, underpin an understanding of how the city 'works' and how those drivers shift the city's spatial formation over time. It offers a framework upon which the concept of 'city shapers' can be articulated.

- An effective communication tool, that shares the evidence base necessary for an informed debate about the strategic planning of the city with all stakeholders. Having a debate about the need to increase medium density housing provision in existing residential areas, or supporting inclusion of more affordable housing is easier where communities can see how those choices relate to the wider pressures and challenges facing the city.

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Appendix A
Surveys

Mover Purchaser Survey

Section 1: Background information about your current home

1. What suburb is your home located in? Suburb _____

2. What year did you move into this home? Year _____

3. Which dwelling type best describes your current home?
- ☐ Single detached house
- ☐ Semi-detached or duplex house
- ☐ Attached, row, terrace or townhouse
- ☐ Flat or apartment in a 1-3 storey building
- ☐ Flat or apartment in a 4+ storey building
- ☐ Other (please state) _____

4. How many bedrooms does your current home have?
- ☐ One
- ☐ Two
- ☐ Three
- ☐ Four or more

5. Do you know the approximate size of the house or unit in square metres?
- ☐ Less than 60 sqm
- ☐ 60-99 sqm
- ☐ 100-149 sqm
- ☐ 150-199 sqm
- ☐ 200+ sqm
- ☐ Don't know

6. And what about the size of the lot on title in square metres?
- ☐ It's a strata unit
- ☐ Less than 200 sqm
- ☐ 200-349 sqm
- ☐ 350-499 sqm
- ☐ 500+ sqm
- ☐ Not sure

7. When was your home built? (you might not know the exact date, but an approximate indication would be useful)
- ☐ Newly Built
- ☐ Between 1991 and 2010
- ☐ Between 1971 and 1990
- ☐ Between 1946 and 1970
- ☐ Pre 1945
- ☐ Not sure

8. Is this the first home you purchased in Australia?
- ☐ Yes (go to question 9)
- ☐ No, this is my second (go to question 11)
- ☐ No, this is my third or more (go to question 11)

9. At the time of purchase, were you eligible for the First Home Owner's Grant (FHOG)?
- ☐ Yes
- ☐ No
- ☐ Don't know

10. How long did you save before you could make a deposit on the home?
- ☐ I used a minimal deposit loan
- ☐ 0 months – 18 months
- ☐ 19months – 3 years
- ☐ 3 years to 5 years
- ☐ More than 5 years

11. What proportion of your home loan remains to be paid off?
- ☐ No mortgage/all paid off
- ☐ Less than 30%
- ☐ Between 30 and 69%
- ☐ Between 70 and 89%
- ☐ 90% or greater

12. What was its approximate value at the *time of purchase*?
- ☐ Less than $300,000
- ☐ $300,000-$399,000
- ☐ $400,000-$499,000
- ☐ $500,000-$599,000
- ☐ $600,000-$699,000
- ☐ $700,000+

13. What is its approximate market value at the *current time*?
- ☐ Less than $300,000
- ☐ $300,000-$399,000
- ☐ $400,000-$499,000
- ☐ $500,000-$599,000
- ☐ $600,000-$699,000
- ☐ $700,000+

14. What is your experience in managing your home loan costs at the current time?
- ☐ I have paid off my loan
- ☐ Able to make overpayments
- ☐ Comfortable
- ☐ Manageable
- ☐ Struggling a little
- ☐ A real struggle

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Section 2: Your previous home and locality

In this section, we are interested in your housing circumstances before your recent move to this address.

15. For your **last** address (if applicable) before moving to your current home, could you tell us:

The suburb where this home was located	
Year moved to this last address	

16. Did you own, rent, or were you living with parents/relatives at this previous address?
- ☐ Owned
- ☐ Rented privately (e.g. through an agent)
- ☐ Rented from NSW Department of Housing, Aboriginal Housing Office or Community Housing Provider
- ☐ Living with parents/relatives
- ☐ Other (please state) _____

17. What was the composition of your household at this previous address?
- ☐ Living at home
- ☐ Just me
- ☐ Me and my partner
- ☐ Flat or house share
- ☐ Family with 1 child
- ☐ Family with 2+ children
- ☐ Other (please state) _____

18. And what type of property was your previous home?
- ☐ Single detached house
- ☐ Semi-detached or duplex house
- ☐ Attached, row, terrace or townhouse
- ☐ Flat or apartment in a 1-3 storey building
- ☐ Flat or apartment in a 4+ storey building
- ☐ Other (please state) _____

19. How many bedrooms did your previous home have?
- ☐ One
- ☐ Two
- ☐ Three
- ☐ Four or more

20. If you were working and/or studying whilst living at this address, where was your place of work/study located? (postcode or suburb name)

Suburb of work	
Suburb of place of study	

21. And for this previous home, how would you rate the following (1 = poor, 3 = average, 5 = excellent)

Size of property was good in relation to needs	1	2	3	4	5
In a preferred neighbourhood	1	2	3	4	5
Good for getting to work/education	1	2	3	4	5
Good for shops/leisure/lifestyle	1	2	3	4	5
Close to where I grew up	1	2	3	4	5
Close to family / friends	1	2	3	4	5
Affordability of housing costs (rent or mortgage)	1	2	3	4	5

22. Apart from your current and this previous address, where have you lived in Sydney over the past ten years?
- ☐ I've only lived in the addresses mentioned above
- ☐ I've also lived elsewhere (Please state which postcode(s), or state/country if outside Sydney): _____

Section 3: Exploring the factors shaping your recent move

There are many reasons why people move home. In this section, we are particularly interested in the key factors and issues that led to your decision to move into your current home and neighbourhood and in any trade-offs you might have made between the actual property, neighbourhood and part of the city

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23. Did you **want** to move from your last home?
☐ Yes ☐ No

24. Please indicate which of the following factors were relevant in influencing your decision or need to move. *In the first column, tick all boxes which were relevant to your decision. In the second column identify the top three (1-3; 1 being the most influential) factors shaping your decision to move to your current home.*

Changes to household circumstances	Relevant?	Main reasons
Increase/decrease in household income		
Needed to move due to new job in different part of city		
Recently moved in with my partner		
Needed more space for a growing family		
Recently experienced a relationship breakdown/death of partner		
Needed a more manageable home in older age		
Property related factors		
Wanted to 'upsize' – e.g. move to a property with more bedrooms		
Wanted to 'downsize' - e.g. move to a property with fewer bedrooms		
Wanted a property with some outdoor space/a garden		
Had been renting and wanted to buy a home		
Wanted to buy/build a new home		
Financial reasons		
Moved to a larger home/high value area in order to maximise asset/taxation benefits on the primary residence		
Needed/wanted to release equity		
Needed/wanted to reduce housing costs		
Housing market conditions appeared favourable		

25. Which of the following **location factors** were important to you in selecting the neighbourhood/part of the city you decided to purchase this property?

Location factors	Relevant?	Main reasons
'I belong to this community': Wanted to stay in the neighbourhood		
Wanted to move to a more desirable/popular area		
Wanted to stay/move to a more affordable area		
Wanted to move closer to work/education		
Wanted to remain near children's schools/move to a good catchment area		
Wanted to move closer to/stay near to family, friends and my community		
Wanted to move to/stay in an area less likely to be affected by change such as urban renewal and redevelopment		
Wanted to move to a newly developing area/master planned community		
Location is not that important – it's more about getting the right house		
Wanted to move closer/stay where I grew up		
Wanted to move to a safer neighbourhood		
Other (please state) _____		

26. In your search, which of the following best describes the location factors shaping your decision?
☐ Only considered properties within the neighbourhood I was already living in
☐ Only considered properties in existing suburb and immediate surrounding areas
☐ Considered moving to different parts of the city. **If so**, please indicate where _____
☐ I was moving from outside of the city

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27. What trade-offs in terms of **location** do you feel you made? (tick all those that apply)
☐ I do not feel I had to make any compromises on the suburb
☐ Had to move some distance from my previous suburb
☐ Had to move to a less popular area/part of the city
☐ Travel time to work increased
☐ Children had to change school
☐ Access to public transport/services decreased
☐ I could not be as close to family/friends as I liked
☐ Other (please state) _____

28. What trade-offs in terms of **property** do you feel you made? (tick all those that apply)
☐ I do not feel I had to make any compromises on the property
☐ Had to buy a flat/apartment/townhouse rather than a separate house
☐ Fewer bedrooms or living space than I needed/wanted
☐ Would have preferred a smaller property, but limited choice where I wanted to live
☐ No garden/less outdoor space than I had wanted
☐ No off-street parking
☐ Other (please state) _____

29. To what extent were expected capital gains important in influencing the dwelling type, size or locality you decided to purchase? (please tick only one box)
☐ Not at all – this is a place to live in rather than an investment
☐ The right home was more important than expected gains, although I expect it to rise in value
☐ Expectations of potential capital growth were highly important in my decision

Section 4: How you use the city

In this section, we want to understand a little more about where members of your household travel for work, education and leisure within the city.

30. Please record the ages of each resident in the household – for the rest of this section, please keep Person 1, Person 2 etc consistent in answering questions 31 and 32.

Age Person 1	Age Person 2	Age Person 3	Age Person 4	Age Person 5	Age Person 6

31. Write the occupation and the name of the suburb where each member of the household works or attends school If a member works from home please write 'home'. If the job is mobile (e.g. trades) please write 'mobile'

Person	Occupation	Postcode/Suburb where job/school is located
1		
2		
3		
4		
5		
6		

32. Please indicate the usual mode of transport for each person in the household. Place a tick in the appropriate row

	Person 1	Person 2	Person 3	Person 4	Person 5	Person 6
Car (driver)						
Car (passenger)						
Public transport						
Walk						
Cycle						
Multi-modal (e.g. part cycle, part train)						
Other _____						

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33. Where do you go to do your weekly food shop? Postcode/suburb _____
34. Where do you go shopping for a wider range of goods? Postcode/suburb _____

Section 5: The changing city and your future moving intentions

In this section we want to know if future intentions to move will be shaped by the changing nature of your immediate neighbourhood.

35. How would you describe your attachment to the **neighbourhood** you currently live in?
☐ I'm very attached ☐ I don't really feel attached to it
☐ I'm fairly attached ☐ I feel no attachment to it

36. How would you describe your attachment to this **part of the city** (e.g. SW, Central West, eastern suburbs)?
☐ I'm very attached ☐ I don't really feel attached to it
☐ I'm fairly attached ☐ I feel no attachment to it

37. How do you think your local area will change over the *next* 5-10 years?
☐ It will get better; If yes, go to question 38
☐ It will stay pretty much the same, go to question 40
☐ It will get worse; If yes, go to question 39

38. Why do you think it will get better? (tick all that apply)
☐ Good economic growth and employment prospects in this part of the city
☐ Good range of existing housing supporting a diverse range of households
☐ New housing development providing further choice
☐ Good house price appreciation
☐ Infrastructure and transport improvements
☐ Other (please state) _____

39. Why do you think it will get worse? (tick all that apply)
☐ I don't think it will get worse
☐ Weaker economic growth and employment prospects compared to other parts of the city
☐ Increased housing development at higher densities
☐ Changing character of the suburb
☐ Poor housing market performance
☐ Insufficient investment in infrastructure and transport provision
☐ Other (please state) _____

40. What do you expect will trigger your next move? (tick all those that apply)
☐ Likely Increase/decrease in household income
☐ Hope to be getting married/starting a family
☐ Will need a different property/more space due to change in household size
☐ Change of job
☐ Want to build or buy a new home
☐ Will be retiring and need a home/location appropriate for my needs at this stage of life
☐ I'll need to release equity in our current home to help finance our retirement
☐ Favourable housing market conditions
☐ Don't know
☐ Other (please state) _____

41. What may alter or affect your decision to move? (tick all those that apply)
☐ Affordability constraints
☐ A desire to stay in this neighbourhood but lack of suitable housing meeting my future expected requirements
(Continue on page 8)

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☐ A lack of suitable housing in the locations that I would like to move to
☐ Costs associated with moving (e.g. agents fees, stamp duty)
☐ Downsizing and reducing equity in my home will have unfavourable tax/pension implications
☐ Don't know
☐ Other (please state) _____

42. Thinking long-term towards retirement (15-20 years/retirement), which of the following sums up your likely position? (tick any that apply)
☐ I will want to stay in my current home for as long as I can manage to do so
☐ I'd consider renovation/knockdown rebuild of this property before considering moving
☐ I'd be happy to move into a smaller home or multi-unit dwelling in this part of the city
☐ I'd be looking to move to a different part of the city. **If so**, please indicate where _____
☐ I'd be looking to move out of the city altogether. **If so**, please indicate where _____
☐ Don't know
☐ Other (please state) _____

43. Do you own a second property, for example an investment property or holiday home?
☐ Yes – investment property(ies) **If so**, please indicate where (postcode/s) _____
☐ Yes – holiday home **If so**, please indicate where (postcode/s) _____
☐ No, go to question 45

44. If yes, do you plan to move into your investment property or holiday home as your primary residence in the future?
☐ Yes ☐ No

Section 6: Additional information about yourself
45. What is the total of all wages/salaries, government benefits, pensions, allowances and other income you usually receive in a year? (Please tick one box)
☐ Negative/Nil income ☐ $40,000 - $59,999 ☐ $100,000 – $119,999
☐ $1 - $19,999 ☐ $60,000 - $79,999 ☐ $120,000 - $149,999
☐ $20,000 - $39,999 ☐ $80,000 - $99,999 ☐ $150,000+

46. Were you born overseas? (Please tick one box)
☐ Yes ☐ No, go to question 49

47. What is your country of birth? (Please write the name of the country) _____

48. How many years have you lived in Australia? (Please tick one box)
☐ 3 years or less ☐ 4-9 years ☐ 20–29 years ☐ 30 years or more
 ☐ 10–19 years

49. What is your ancestry? (Please indicate up to two ancestries only)
☐ Australian ☐ Irish ☐ German ☐ Lebanese
☐ English ☐ Italian ☐ Chinese ☐ Other (please
☐ Indian ☐ Vietnamese ☐ Polish state)
☐ Scottish ☐ Greek ☐ Dutch _____

THANK YOU – Invitation to participate in prize draw and further research

Would you be willing to participate in future research related to this topic? Yes No

Would you like to participate in our prize draw to win one of five Coles Myer $100 gift cards? Yes No

If, yes please provide your full name and contact details. This information will be filed separately from the questionnaire to ensure your privacy.

Name: _____
Address:

Telephone no.: _____ Email address: _____

Recent Renters Survey

Security Code XXXXX

Recent movers: renters

==Address to fit transparent==
==space in envelope==

BUILT ENVIRONMENT

Dear resident,

I would like to invite you to participate in an Australian Research Council-funded project that is currently being undertaken by the City Futures Research Centre at the University of New South Wales. The research aims to better understand the choices and constraints households face across Sydney in terms of their housing options.

Rental Bond Board records obtained from NSW Fair Trading show that you have recently moved to this address. This project canvasses your insight and experiences as a recent mover. The information you provide by completing this questionnaire will help in the understanding of key housing and planning policy issues currently facing Sydney.

Your individual response and personal details will be kept completely confidential. Continuing with the survey indicates that, having read and understood the information provided in the information statement, you have decided to participate voluntarily. The provided copy of the *Project Information Statement* overleaf provides further information about the research.

By completing the questionnaire you will also have the chance to enter into a draw to win one of five $100 gift cards at Coles-Myers. The questionnaire should take no longer than 15 minutes. You can complete and return the attached form by using the prepaid envelope enclosed. We only wish people who are 18 years or older to respond.

If you prefer, the questionnaire can be completed online at: www.cityfutures.net.au where you will find a link to the questionnaire. If you choose to complete the questionnaire online you will be asked to enter a Security Code which you will find on the top right of this page.

If you have any questions, please contact Dr Crystal Legacy, at c.legacy@unsw.edu.au or 9385 4975.

I look forward to receiving your response, and would like to thank you for your time.

Yours Sincerely,

A/Prof. Simon Pinnegar
City Futures Research Centre
Faculty of the Built Environment
University of New South Wales
Sydney NSW 2052 Australia

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Security Code XXXXX

PROJECT INFORMATION STATEMENT

Project Title: **Implementing Metropolitan Planning Strategies: taking into account local housing demand**

BUILT ENVIRONMENT

Approval No.: 115106

Participant selection and purpose of study

You are invited to participate in a study that will capture how housing markets are changing across Sydney. In particular the research will examine how people's housing choices (type and location of dwelling) shape housing markets. You were selected to take part in this survey because you have been identified as someone who has recently moved home.

Description of study

This research is part of a three-year research project being undertaken by the City Futures Research Centre at the University of NSW, funded by the Australian Research Council. It is being conducted in collaboration with government and industry partners. The aim of this study is to understand the drivers influencing household choices and the role these play in shaping housing demand in Sydney. The questions will focus on the factors that shape your household choices and how these decisions shape neighbourhoods and suburbs in Sydney. We expect that the survey will take 15 minutes to complete. You can either complete the survey on line by following the link at www.cityfutures.net.au or you may complete the paper version that is attached to this letter and mail it back using the prepaid envelope supplied. Only persons who are 18 years or older should respond.

We expect that the findings of this research will provide a strong evidence base to inform metropolitan strategic planning decisions in Sydney, including the alignment of housing supply in light of demand profiles. However, we do not guarantee or promise that you will receive any benefits from this study.

Confidentiality and disclosure of information

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission, or as required by law. By continuing with the survey, you are indicating that, having read the information provided in this information statement, you have decided to participate in this research.

We plan to discuss our findings with our partner organisations, media and other interested stakeholders. A final research report will also be published by City Futures with a key findings summary allowing wider dissemination. This report will be available online. The research will also be published in national and international journals to disseminate the findings to a wider policy and academic audience.

Recompense to participants

There will be no specific remuneration for your participation in this project. However, if you complete the survey you will have the option to enter into a draw to win one of five $100 Coles-Myers gift card prizes.

Your consent

Your decision whether or not to participate will not prejudice your future relations with The University of New South Wales or other participating organisations. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice by completing the revocation of consent statement below and returning this entire form to Dr Crystal Legacy, City Futures Research Centre, Faculty of the Built Environment, University of NSW, NSW, 2052; Ph: (02) 9385 4975 Email: c.legacy@unsw.edu.au

REVOCATION OF CONSENT. Project Title: Implementing Metropolitan Planning Strategies: taking into account local housing demand (Please send this entire form to the above address.)

I hereby wish to withdraw my consent to participate in this research project. I understand that such withdrawal will not jeopardise my relationship with The University of New South Wales, other participating organisations or other professionals.

....
Signature   Please PRINT name   Date

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Section 1: Background information about your current home

1. What suburb is your home located in? Suburb _____

2. What year did you move into this home? Year _____

3. Which dwelling type best describes your current home?

   ☐ Single detached house
   ☐ Semi-detached or duplex house
   ☐ Attached, row, terrace or townhouse
   ☐ Flat or apartment in a 1-3 storey building
   ☐ Flat or apartment in a 4+ storey building
   ☐ Other (please state) _____

4. How many bedrooms does your current home have?

   ☐ One ☐ Two ☐ Three ☐ Four or more

5. Do you know the approximate size of the house or unit in square metres?

   ☐ Less than 60 sqm ☐ 100-149 sqm ☐ 200+ sqm
   ☐ 60-99 sqm ☐ 150-199 sqm ☐ Not sure

6. And what about the size of the lot on title in square metres?

   ☐ It's a strata unit ☐ 200-349 sqm ☐ 500+ sqm
   ☐ Less than 200 sqm ☐ 350-499 sqm ☐ Not sure

7. What is the weekly rent on this property?

   ☐ Less than $200/week ☐ $300-$399/week ☐ $500-$599/week
   ☐ $200-$299/week ☐ $400-$499/week ☐ $600 or more/week

8. What is your experience in managing your rental costs at the current time? (please tick only one box)

   ☐ Comfortable ☐ Struggling a little
   ☐ Manageable ☐ A real struggle

Section 2: Your previous home and locality

In this section, we are interested in your housing circumstances before you moved to this address.

9. For your **last** address (if applicable) before moving to your current home, could you tell us:

The suburb where this home was located	
Year moved to this last address	

10. Did you own, rent, or were you living with parents/relatives at this previous address?

   ☐ Owned
   ☐ Rented privately (e.g. through an agent)
   ☐ Rented from NSW Department of Housing, Aboriginal Housing Office or Community Housing Provider
   ☐ Living with parents/relatives
   ☐ Other (please state) _____

11. If renting, what was the weekly rent on this property? If not renting, please go to question 12.

   ☐ Less than $200/week ☐ $300-$399/week ☐ $500-$599/week
   ☐ $200-$299/week ☐ $400-$499/week ☐ $600 or more/week

12. What was the composition of your household at this previous address?

   ☐ Living at home ☐ Flat or house share ☐ Other (please state)
   ☐ Just me ☐ Family with 1 child _____
   ☐ Me and my partner ☐ Family with 2+ children

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13. And what type of property was your previous home?

   ☐ Single detached house
   ☐ Semi-detached or duplex house
   ☐ Attached, row, terrace or townhouse
   ☐ Flat or apartment in a 1-3 storey building
   ☐ Flat or apartment in a 4+ storey building
   ☐ Other (please state) _____

14. How many bedrooms did your previous home have?

   ☐ One ☐ Two ☐ Three ☐ Four or more

15. If you were working and/or studying whilst living at this address, where was your place of work/study located? (postcode or suburb name)

Suburb of work	
Suburb of place of study	

16. And for this previous home, how would you rate the following (1 = poor, 3 = average, 5 = excellent)

Size of property was good in relation to needs	1	2	3	4	5
In a preferred neighbourhood	1	2	3	4	5
Good for getting to work/education	1	2	3	4	5
Good for shops/leisure/lifestyle	1	2	3	4	5
Close to where I grew up	1	2	3	4	5
Close to family / friends	1	2	3	4	5
Affordability of housing costs (rent or mortgage)	1	2	3	4	5

17. Apart from your current and this previous address, where have you lived in Sydney over the past ten years?

   ☐ I've only lived in the addresses mentioned above
   ☐ I've also lived elsewhere (Please state which postcode(s), or state/country if outside Sydney): _____

Section 3: Exploring the factors shaping your recent move

There are many reasons why people move home. In this section, we are particularly interested in the key factors and issues that led to your decision to move into your current home and neighbourhood and in any trade-offs you might have made between the actual property, neighbourhood and part of the city.

18. Did you **want** to move from your last home?

   ☐ Yes ☐ No

19. Please indicate which of the following factors were relevant in influencing your decision or need to move. *In the first column, tick all boxes which were relevant to your decision. In the second column identify the top three factors (1-3; 1 being the most influential).*

Changes to household circumstances	Relevant?	Main reasons
Increase/decrease in household income		
Needed to move due to new job in different part of city		
Recently moved in with my partner		
Flatmate moved out		
Needed more space for a growing family		
Recently experienced a relationship breakdown/death of partner		
Needed a more manageable home in older age		
Property related factors		
Wanted to 'upsize' – e.g. move to a property with more bedrooms		
Wanted to 'downsize' - e.g. move to a property with fewer bedrooms		
Wanted a property with some outdoor space/a garden		
Landlord wanted/needed the property back and lease not renewed		
Financial reasons		
Rent increased at last property and became unaffordable		
Wanted to reduce housing costs		

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20. At the time of this last move, had you considered purchasing rather than renting?

☐ Yes (please go to question 21)
☐ No – I am not in a position to buy for the foreseeable future (please go to question 22)
☐ No – but I envisage buying in the coming years (please go to question 22)
☐ No – I'm happy at the moment to continue renting as it suits my lifestyle/financial circumstances (please go to question 22)

21. If you had considered buying a property, what were the reasons you ended up renting?

☐ The type/size of property I want/need was too expensive
☐ I could not find a property that I wanted to buy
☐ I did not have enough saved for the deposit
☐ My application for a home loan was not accepted
☐ Change of personal circumstances made me reassess options
☐ Other (please state) _____

22. Thinking about the search process for your current rental property, which of the following best describes the location factors shaping your decision?

☐ Only considered properties within the neighbourhood I was already living in
☐ Only considered properties in existing suburb and immediately surrounding areas
☐ Considered moving to different parts of the city. If so, please state where: _____
☐ I was moving from outside of the city

23. Which of the following **location factors** were important to you in selecting the neighbourhood/part of the city you decided to move to? *In the first column, tick all boxes which were relevant to your decision. In the second column identify the top three factors (1-3; 1 being the most influential).*

Location factors	Relevant?	Main reasons
'I belong to this community': Wanted to stay in the neighbourhood		
Wanted to move to a more desirable/popular area		
Wanted to stay/move to a more affordable area		
Wanted to move closer to work/education		
Wanted to remain near children's schools/move to a good catchment area		
Wanted to move closer to/stay near to family, friends and my community		
Wanted to move to/stay in an area less likely to be affected by change such as urban renewal and redevelopment		
Wanted to move to a newly developing area/master planned community		
Location is not that important – it's more about getting the right house		
Wanted to move closer/stay where I grew up		
Wanted to move to a safer neighbourhood		
Other (please state) _____		

24. What trade-offs in terms of **location** do you feel you made? (tick all that apply)

☐ I do not feel I had to make any compromises on the suburb
☐ Had to move some distance from my previous suburb
☐ Had to move to a less popular area/part of the city
☐ Travel time to work increased
☐ Children had to change school
☐ Access to public transport/services decreased
☐ I could not be as close to family/friends as I liked
☐ Other (please state) _____

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25. What trade-offs in terms of **property** do you feel you made? (tick all that apply)

☐ I do not feel I had to make any compromises on the property
☐ Had to rent a flat/apartment/townhouse rather than separate house
☐ Would have preferred a smaller property, but limited choice where I wanted to live
☐ No garden/less outdoor space than I had wanted
☐ Fewer bedrooms or living space than needed/wanted
☐ No off-street parking
☐ Other (please state) _____

Section 4: How you use the city

In this section, we want to understand a little more about where members of your household travel for work, education and leisure within the city.

26. Please record the ages of each resident in the household – for the rest of this section, please keep Person 1, Person 2 etc consistent in answering questions 27 and 28.

Age Person 1	Age Person 2	Age Person 3	Age Person 4	Age Person 5	Age Person 6

27. Write the occupation and name of the suburb where each member of the household works or attends school. If a member works from home, write 'home'. If the job is mobile (e.g. trades) please write 'mobile'

Person	Occupation	Suburb where job/school is located
1		
2		
3		
4		
5		
6		

28. Please indicate the usual mode of transport for each person in the household. Place a tick mark in the appropriate row

	Person 1	Person 2	Person 3	Person 4	Person 5	Person 6
Car (driver)						
Car (passenger)						
Public transport						
Walk						
Cycle						
Multi-modal (e.g. part cycle, part train)						
Other _____						

29. Where do you go to do your weekly food shop?   Name of centre/suburb _____

30. Where do you go shopping for a wider range of goods?   Name of centre/suburb _____

Section 5: The changing city and your future moving intentions

In this section we want to know if future intentions to move will be shaped by the changing nature of your immediate neighbourhood.

31. How would you describe your attachment to the **neighbourhood** you currently live in?

☐ I'm very attached   ☐ I don't really feel attached to it
☐ I'm fairly attached   ☐ I feel no attachment to it

6

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32. How would you describe your attachment to this part of the city (e.g. SW, Central West, eastern suburbs)?

☐ I'm very attached   ☐ I don't really feel attached to it
☐ I'm fairly attached   ☐ I feel no attachment to it

33. How do you think your local area will change over the *next* 5-10 years?

☐ It will get better; If yes, go to question 34
☐ It will stay pretty much the same, go to question 36
☐ It will get worse; If yes, go to question 35

34. Why do you think it will get better? (tick all that apply)

☐ Good economic growth and employment prospects in this part of the city
☐ Good range of existing housing supporting a diverse range of households
☐ New housing development providing further choice
☐ Increased provision of affordable housing
☐ Infrastructure and transport improvements
☐ Other (please state) _____

35. Why do you think it will get worse? (tick all that apply)

☐ I don't think it will get worse
☐ Weaker economic growth and employment prospects compared to other parts of the city
☐ Increased housing development at higher densities
☐ Changing character of the suburb
☐ Lack of affordable housing
☐ Insufficient investment in infrastructure and transport provision
☐ Other (please state) _____

36. What do you expect will trigger your next house move? (tick all that apply)

☐ Likely Increase/decrease in household income
☐ Hope to be getting married/starting a family
☐ Will need a different property/more space due to change in household size
☐ Change of job
☐ Will be retiring and need a home/location appropriate for my needs at this stage of life
☐ Will have saved up enough deposit and want to buy a property
☐ Favourable housing market conditions
☐ Don't know
☐ Other (please state) _____

37. What may affect or delay your decision to move in the short term? *In the first column, tick all boxes relevant. In the second column identify the top three factors (1-3; 1 being the most influential factor)*

	Relevant?	Main reason
Affordability constraints		
Concerns about employment prospects		
A lack of suitable housing in this neighbourhood		
A lack of suitable housing in the locations I would like to move to		
Don't know		
Other (please state) _____		

38. Thinking long-term (15-20 years/retirement), which of the following sums up your likely position? (tick all that apply)

☐ I will want to stay in my current home for as long as I can manage to do so
☐ I'd be happy to move into a smaller home or multi-unit dwelling in order to stay in this part of the city
☐ I'd be looking to move to a different part of the city. **If so**, please indicate where _____
☐ I'd be looking to move out of the city altogether. **If so**, please indicate where _____
☐ Don't know
☐ Other (please state) _____

Section 6: Additional information about yourself

39. What is the total of all wages/salaries, government benefits, pensions, allowances and other income you usually receive in a year? (Please tick one box)

☐ Negative/Nil income   ☐ $40,000 - $59,999   ☐ $100,000 – $119,999
☐ $1 - $19,999   ☐ $60,000 - $79,999   ☐ $120,000 - $149,999
☐ $20,000 - $39,999   ☐ $80,000 - $99,999   ☐ $150,000+

40. Do you receive Commonwealth Rent Assistance?

☐ Yes   ☐ No

41. Are you eligible for the First Home Owner's Grant (FHOG)?

☐ Yes   ☐ No   ☐ Don't know

42. Were you born overseas? (Please circle one)

☐ Yes   ☐ No, go to question 45

43. What is your country of birth? (Please write the name of the country) _____

44. How many years have you lived in Australia? (Please tick one box)

☐ 3 years or less   ☐ 10 – 19 years   ☐ 30 years or more
☐ 4-9 years   ☐ 20 – 29 years

45. What is your ancestry? (Please indicate up to two ancestries only)

☐ Australian   ☐ Irish   ☐ German   ☐ Lebanese
☐ English   ☐ Italian   ☐ Chinese   ☐ Other (please
☐ Indian   ☐ Vietnamese   ☐ Polish   state)
☐ Scottish   ☐ Greek   ☐ Dutch   _____

THANK YOU – Invitation to participate in prize draw and further research

Would you be willing to participate in future research related to this topic?   Yes   No

Would you like to participate in our prize draw to win one of five Coles Myer $100 gift cards?   Yes   No

If, yes please provide your full name and contact details. This information will be filed separately from the questionnaire to ensure your privacy.

Name: _____
Address:

Telephone no.: _____ Email address: _____

Long Term Owners Survey

Security Code XXXX

Longer term owners

Address to fit transparent

space in envelope

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BUILT ENVIRONMENT

Dear resident,

I would like to invite you to participate in an Australian Research Council-funded project that is currently being undertaken by the City Futures Research Centre at the University of New South Wales. The research aims to better understand the choices and constraints households face across Sydney in terms of their housing options.

Sales information obtained from NSW Land and Property Information show that this property was last purchased 4 or more years ago. This project canvasses your insight and experiences as a 'long term' owner. The information you provide by completing this questionnaire will help in the understanding of key housing and planning policy issues currently facing Sydney.

Your individual response and personal details will be kept completely confidential. Continuing with the survey indicates that, having read and understood the information provided in the information statement, you have decided to participate voluntarily. The provided copy of the *Project Information Statement* overleaf provides further information about the research.

By completing the questionnaire you will also have the chance to enter into a draw to win one of five $100 gift cards at Coles-Myers. The questionnaire should take no longer than 15 minutes. You can complete and return the attached form by using the prepaid envelope enclosed. We only wish people who are 18 years or older to respond.

If you prefer, the questionnaire can be completed online at: www.cityfutures.net.au where you will find a link to the questionnaire. If you choose to complete the questionnaire online you will be asked to enter a Security Code which you will find on the top right of this page.

If you have any questions, please contact Dr Crystal Legacy, at c.legacy@unsw.edu.au or 9385 4975.

I look forward to receiving your response, and would like to thank you for your time.

Yours Sincerely,

A/Prof. Simon Pinnegar
City Futures Research Centre
Faculty of the Built Environment
University of New South Wales
Sydney NSW 2052 Australia

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PROJECT INFORMATION STATEMENT

Security Code XXXX

UNSW
THE UNIVERSITY OF NEW SOUTH WALES

Project Title: **Implementing Metropolitan Planning Strategies: taking into account local housing demand**

BUILT ENVIRONMENT

Approval No.: 115106

Participant selection and purpose of study

You are invited to participate in a study that will capture how housing markets are changing across Sydney. In particular the research will examine how people's housing choices (type and location of dwelling) shape housing markets. You were selected to take part in this survey because you have been identified as someone who has not moved in the last four years.

Description of study

This research is part of a three-year research project being undertaken by the City Futures Research Centre at the University of NSW, funded by the Australian Research Council. It is being conducted in collaboration with government and industry partners. The aim of this study is to understand the drivers influencing household choices and the role these play in shaping housing demand in Sydney. The questions will focus on the factors that shape your household choices and how these decisions shape neighbourhoods and suburbs in Sydney. We expect that the survey will take 15 minutes to complete. You can either complete the survey on line by following the link at www.cityfutures.net.au or you may complete the paper version that is attached to this letter and mail it back using the prepaid envelope supplied. Only persons who are 18 years or older should respond.

We expect that the findings of this research will provide a strong evidence base to inform metropolitan strategic planning decisions in Sydney, including the alignment of housing supply in light of demand profiles. However, we do not guarantee or promise that you will receive any benefits from this study.

Confidentiality and disclosure of information

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We plan to discuss our findings with our partner organisations, media and other interested stakeholders. A final research report will also be published by City Futures with a key findings summary allowing wider dissemination. This report will be available online. The research will also be published in national and international journals to disseminate the findings to a wider policy and academic audience.

Recompense to participants

There will be no specific remuneration for your participation in this project. However, if you complete the survey you will have the option to enter into a draw to win one of five $100 Coles-Myers gift card prizes.

Your consent

Your decision whether or not to participate will not prejudice your future relations with The University of New South Wales or other participating organisations. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice by completing the revocation of consent statement below and returning this entire form to Dr Crystal Legacy, City Futures Research Centre, Faculty of the Built Environment, University of NSW, NSW, 2052; Ph: (02) 9385 4975, Email: c.legacy@unsw.edu.au

REVOCATION OF CONSENT. Project Title: Implementing Metropolitan Planning Strategies: taking into account local housing demand (Please send this entire form to the above address.)

I hereby wish to withdraw my consent to participate in this research project. I understand that such withdrawal will not jeopardise my relationship with The University of New South Wales, other participating organisations or other professionals.

Signature

Please PRINT name

Date

2

Section 1: Background information about your current home

1. What suburb is your home located in?   Suburb _____

2. What year did you move into this home?   Year   _____

3. Which dwelling type best describes your current home?

   ☐ Single detached house   ☐ Flat or apartment in a 1-3 storey building
   ☐ Semi-detached or duplex house   ☐ Flat or apartment in a 4+ storey building
   ☐ Attached, row, terrace or townhouse   ☐ Other (please state) _____

4. How many bedrooms does your current home have?

   ☐ One   ☐ Two   ☐ Three   ☐ Four or more

5. Do you know the approximate size of the house or unit in square metres?

   ☐ Less than 60 sqm   ☐ 100-149 sqm   ☐ 200+ sqm
   ☐ 60-99 sqm   ☐ 150-199 sqm   ☐ Not sure

6. And what about the size of the lot on title in square metres?

   ☐ It's a strata unit   ☐ 200-349 sqm   ☐ 500+ sqm
   ☐ Less than 200 sqm   ☐ 350-499 sqm   ☐ Not sure

7. When was it built? (you may not know the exact date, but an approximate indication would be useful)

   ☐ Newly Built   ☐ 1971- 1990   ☐ Pre 1945
   ☐ 1991-2010   ☐ 1946-1970   ☐ Not sure

8. Is this the first home you purchased in Australia?

   ☐ Yes (go to question 9)
   ☐ No, this is my second (go to question 11)
   ☐ No, this is my third or more (go to question 11)

9. At the time of purchase, were you eligible for the First Home Owner's Grant (FHOG)?

   ☐ Yes   ☐ No   ☐ Don't know

10. Do you remember how long you saved before you could make a deposit on the home?

    ☐ I used a minimal deposit loan   ☐ 3 years to 5 years
    ☐ 0 months – 18 months   ☐ More than 5 years
    ☐ 19 months – 3 years

11. What proportion of home loan remains to be paid off?

    ☐ No mortgage/all paid off   ☐ Between 30 and 69%   ☐ 90% or greater
    ☐ Less than 30%   ☐ Between 70 and 89%

12. What was its approximate value at the *time of purchase*?

    ☐ Less than $200,000   ☐ $300,000-$399,000   ☐ $500,000-$599,000
    ☐ $200,000-$299,000   ☐ $400,000-$499,000   ☐ $600,000+

13. What is its approximate market value at the *current time*?

    ☐ Less than $300,000   ☐ $400,000-$499,000   ☐ $600,000-$699,000
    ☐ $300,000-$399,000   ☐ $500,000-$599,000   ☐ $700,000+

14. What is your experience in managing your home loan costs at the current time?

    ☐ I have paid off my loan   ☐ Comfortable   ☐ Struggling a little
    ☐ Able to make overpayments   ☐ Manageable   ☐ A real struggle

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Section 2: Your previous home and locality

In this section, we are interested in your housing circumstances before you moved to this address.

15. For your **last** address (if applicable) before moving to your current home, could you tell us:

In which suburb was your home located	
Year moved to this last address?	

16. Did you own, rent, or were you living with parents/relatives at this previous address?

    ☐ Owned   ☐ Living with parents/relatives
    ☐ Rented privately (e.g. through an agent) ☐ Other (please state) _____
    ☐ Rented from NSW Department of Housing,
      Aboriginal Housing Office or Community
      Housing Provider

17. What was the composition of your household at this previous address?

    ☐ Living at home   ☐ Flat or house share   ☐ Other (please state)
    ☐ Just me   ☐ Family with 1 child   _____
    ☐ Me and my partner ☐ Family with 2+ children

18. And what type of property was your previous home?

    ☐ Single detached house   ☐ Flat or apartment in a 1-3 storey building
    ☐ Semi-detached or duplex house   ☐ Flat or apartment in a 4+ storey building
    ☐ Attached, row, terrace or townhouse   ☐ Other (please state)_____

19. How many bedrooms did your previous home have?

    ☐ One   ☐ Two   ☐ Three   ☐ Four or more

20. If you were working and/or studying whilst living at this address, where was your place of work/study located? (postcode or suburb name)

Suburb of work	
Suburb of place of study	

21. And for this previous home, how would you rate the following (1 = poor, 3 = average, 5 = excellent)

Size of property was good relative to needs	1	2	3	4	5
In a preferred neighbourhood	1	2	3	4	5
Good for getting to work/education	1	2	3	4	5
Good for shops/leisure/lifestyle	1	2	3	4	5
Close to where I grew up	1	2	3	4	5
Close to family / friends	1	2	3	4	5
Affordability of housing costs (rent or mortgage)	1	2	3	4	5

22. Apart from your current and this previous address, where have you lived in Sydney over the past ten years?

    ☐ I've only lived in the addresses mentioned above
    ☐ I've also lived elsewhere (Please state which postcode(s), or state/country if outside Sydney)_____

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Section 3: How you use the city

In this section, we want to understand a little more about where members of your household travel for work, education and leisure within the city.

23. Please record the ages of each resident in the household – for the rest of this section, please keep Person 1, Person 2 etc consistent in answering questions 24 and 25.

Age Person 1	Age Person 2	Age Person 3	Age Person 4	Age Person 5	Age Person 6
☐	☐	☐	☐	☐	☐

24. Write the occupation and name of the suburb where each member of the household works or attends school. If a member works from home write 'home.' If the job is mobile (e.g. trades) please write 'mobile'

Person	Occupation	Postcode/Suburb where job/school is located
1		
2		
3		
4		
5		
6		

25. Please indicate the usual mode of transport for each person in the household. Place a tick in the appropriate row

	Person 1	Person 2	Person 3	Person 4	Person 5	Person 6
Car (driver)						
Car (passenger)						
Public transport						
Walk						
Cycle						
Multi-modal (e.g. part cycle, part train)						
Other _____						

26. Where do you go to do your weekly food shop?   Postcode/suburb   _____

27. Where do you go shopping for a wider range of goods?   Postcode/suburb   _____

Section 4: Housing choices and intentions

There are many factors that shape our housing choices, including whether or not to move house. At different stages of our lives, our household needs are different; we have different financial capacities or constraints, etc. The questions in this section seek to understand more about your current housing choices and the reasons for not having moved for a while.

28. Which of the following best describes your current view on your housing circumstances?

☐ This home suits my/my family's needs and I have no intention of moving for the foreseeable future
☐ This home suits my/my family's needs, but I expect I'll need/want to move in the next few years due to changing circumstances
☐ I would like to move to a different property and have started looking
☐ I would like to move to a better property or neighbourhood but unable to due to affordability constraints
☐ I would like to move but there are no suitable properties in the locations I would like to live
☐ Other (please state) _____

29. If you have been considering moving home, or expect that you'll need to move, in the next couple of years, what do you think will be the main factors driving this decision? *In the first column, tick all boxes relevant. In the second column identify the top three factors (1-3; 1 being the most influential factor)*
    If you are not expecting to move in the next few years, please go to q32.

	Relevant?	Main reasons
Likely Increase/decrease in household income		
Hope to be getting married/starting a family		
Will need a different property/more space due to change in household size		
Will want/need to move for employment-related reasons		
Will want to move to different suburb/different part of the city/out of the city		
Want to build or buy a new home		
Will be retiring and need a home/location appropriate to this stage of life		
Will need to release equity in my current home to help finance retirement		
Favourable housing market conditions		
Do not like the changing nature of our current neighbourhood (e.g. increase in higher density development)		
Don't know		
Other (please state) _____		

30. What do you think will affect or delay your decision to move in the short term?

	Relevant?	Main reasons
Affordability constraints		
Concerns about employment prospects		
A lack of suitable housing in this neighbourhood		
A lack of suitable housing in the locations I would like to move to		
Costs associated with moving (e.g. agents fees, stamp duty)		
Reducing equity in my primary residence will have tax/pension implications		
Don't know		
Other (please state) _____		

31. In terms of location factors tied to this possible move in the next few years, which of the following statements reflect your likely position?

	Relevant?	Main reasons
Location is not that important – it's more about getting the right house		
'I belong to this community': I'll want to stay in the neighbourhood/area		
Will want to move to a different part of the city/away from the city		
Will want to stay/move to a more affordable area		
Will want to move closer to work/education		
Will want to move to an area with better schools/services		
Will want to move closer to/stay near to family and friends		
Will want to move to a safer neighbourhood		
Will want to move closer to/stay where I grew up		
Will want to move to/stay in an area less likely to be affected by change such as urban renewal and redevelopment		
Will want to move to a new or master-planned community		
Other (please state) _____		

32. Have you carried out any major renovations, or made any significant additions, to your current home in the last 5 years?

☐ Yes (go to question 33)
☐ No – there is no need (go to question 35)
☐ No – I cannot afford to get the necessary work done (go to question 35)

33. Please indicate the type of renovation/additions work done on your home

- ☐ Extensive internal repairs e.g. rewiring, new plumbing, kitchen/bathroom modernisation
- ☐ Extensive landscaping or external repairs e.g. replacement of roof, windows
- ☐ Addition of 1-2 new rooms (e.g. additional <40 sqm)
- ☐ Addition of 3-4 new rooms (e.g. additional 40-80 sqm)
- ☐ Knock Down Rebuild – demolishing existing home and replacement with new
- ☐ Other (please state) _____

34. Why did you choose to undertake this work on your existing property/land, rather than move?

- ☐ It was possible to achieve the changes I want through renovation
- ☐ It was more cost effective than moving
- ☐ I wanted to stay living in my existing home, street, neighbourhood
- ☐ I am tied to this neighbourhood through schools/work etc.

Section 5: Longer term intentions and the changing city

In this section we want to know if future intentions to move will be shaped by the changing nature of your immediate neighbourhood.

35. How would you describe your attachment to the **neighbourhood** you currently live in?

- ☐ I'm very attached
- ☐ I'm fairly attached
- ☐ I don't really feel attached to it
- ☐ I feel no attachment to it

36. How do you think your neighbourhood and this **part of the city** will change over the next 5-10 years?

- ☐ It will get better (If yes, go to question 37)
- ☐ It will stay about the same (go to question 39)
- ☐ It will get worse (If yes, go to question 38)

37. Why do you think it will get better? (tick all that apply)

- ☐ Good economic growth and employment prospects in this part of the city
- ☐ Good range of existing housing supporting a diverse range of households
- ☐ New housing development providing further choice
- ☐ Good house price appreciation
- ☐ Infrastructure and transport improvements
- ☐ Other (please state) _____

38. Why do you think it will get worse? (tick all that apply)

- ☐ I don't think it would get worse
- ☐ Weaker economic growth and employment prospects compared to other parts of the city
- ☐ Increased housing development at higher densities
- ☐ Changing character of the suburb
- ☐ Poor housing market performance
- ☐ Insufficient investment in infrastructure and transport provision
- ☐ Other (please state) _____

39. Thinking long-term (15-20 years/retirement), which of the following sums up your likely position? (tick all that apply)

- ☐ I will want to stay in my current home for as long as I can manage to do so
- ☐ I'd consider renovation/knockdown rebuild of this property before considering moving
- ☐ I'd be happy to move into a smaller home or multi-unit dwelling in order to stay in this part of the city
- ☐ I'd be looking to move to a different part of the city. **If so**, please indicate where _____
- ☐ I'd be looking to move out of the city altogether. **If so**, please indicate where _____
- ☐ Don't know
- ☐ Other (please state) _____

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40. Do you own a second property, for example an investment property or holiday home?

- ☐ Yes – investment property(ies) **If so**, please indicate where (postcode/s) _____
- ☐ Yes – holiday home   **If so**, please indicate where (postcode/s) _____
- ☐ No (please go to question 42)

41. If yes, do you plan to make your investment property or holiday home your primary residence in the future?

- ☐ Yes   ☐ No

Section 6: Additional information about yourself

42. What is the total of all wages/salaries, government benefits, pensions, allowances and other income you usually receive in a year? (Please tick one box)

☐ Negative/Nil income	☐ $40,000 - $59,999	☐ $100,000 – $119,999
☐ $1 - $19,999	☐ $60,000 - $79,999	☐ $120,000 - $149,999
☐ $20,000 - $39,999	☐ $80,000 - $99,999	☐ $150,000+

43. Were you born overseas? (Please tick one box)

- ☐ Yes   ☐ No, go to question 46

44. What is your country of birth? (Please write the name of the country) _____

45. How many years have you lived in Australia? (Please tick one box)

☐ 3 years or less	☐ 10 – 19 years	☐ 30 years or more
☐ 4-9 years	☐ 20 – 29 years	

46. What is your ancestry? (Please indicate up to two ancestries only)

☐ Australian	☐ Irish	☐ German	☐ Lebanese
☐ English	☐ Italian	☐ Chinese	☐ Other
☐ Indian	☐ Vietnamese	☐ Polish	_____
☐ Scottish	☐ Greek	☐ Dutch	

THANK YOU – Invitation to participate in prize draw and further research

Would you be willing to participate in future research related to this topic?   Yes   No

Would you like to participate in our prize draw to win one of five Coles Myer $100 gift cards? Yes   No

If, yes please provide your full name and contact details. This information will be filed separately from the questionnaire to ensure your privacy.

Name: _____

Address: _____

Telephone no.: _____   Email address: _____

Longer Term Renters Survey

Section 1: Background information about your current home

1. What suburb is your home located in? Suburb _____

2. What year did you move into this home? Year _____

3. Which dwelling type best describes your current home?

☐ Single detached house
☐ Semi-detached or duplex house
☐ Attached, row, terrace or townhouse

☐ Flat or apartment in a 1-3 storey building
☐ Flat or apartment in a 4 + storey building
☐ Other (please state) _____

4. How many bedrooms does your current home have?

☐ One   ☐ Two   ☐ Three   ☐ Four or more

5. Do you know the approximate size of the house or unit in square metres?

☐ Less than 60 sqm   ☐ 100-149 sqm   ☐ 200+ sqm
☐ 60-99 sqm   ☐ 150-199 sqm   ☐ Not sure

6. And what about the size of the lot on title in square metres?

☐ It's a strata unit   ☐ 200-349 sqm   ☐ 500+ sqm
☐ Less than 200 sqm   ☐ 350-499 sqm   ☐ Not sure

7. What is the weekly rent on this property?

☐ Less than $200/week   ☐ $300-$399/week   ☐ $500-$599/week
☐ $200-$299/week   ☐ $400-$499/week   ☐ $600 or more/week

8. In the past two years, approximately how much has your weekly rent changed for this property?

☐ No change/it's decreased   ☐ $21-40/week   ☐ $60+/week
☐ $1- $20/week   ☐ $41-$60/week

9. What is your experience in managing your rental costs at the current time? (please tick only one box)

☐ Comfortable   ☐ Struggling a little
☐ Manageable   ☐ A real struggle

Section 2: Your previous home and locality

In this section, we are interested in your housing circumstances before you moved to this address.

10. For your **last** address (if applicable) before moving to your current home, could you tell us:

The suburb where this home was located	
Year moved to this last address	

11. Did you own, rent, or were you living with parents/relatives at this previous address?

☐ Owned
☐ Rented privately (e.g. through an agent)
☐ Rented from NSW Department of Housing, Aboriginal Housing Office or Community Housing Provider

☐ Living with parents/relatives
☐ Other (please state) _____

12. What was the composition of your household at this previous address

☐ Living at home   ☐ Flat or house share   ☐ Other (please state)
☐ Just me   ☐ Family with 1 child   _____
☐ Me and my partner   ☐ Family with 2+ children

3

13. And what type of property was your previous home?

☐ Single detached house
☐ Semi-detached or duplex house
☐ Attached, row, terrace or townhouse

☐ Flat or apartment in a 1-3 storey building
☐ Flat or apartment in a 4 + storey building
☐ Other (please state) _____

14. How many bedrooms did your previous home have?

☐ One   ☐ Two   ☐ Three   ☐ Four or more

15. If you were working and/or studying whilst living at this address, where was your place of work/study located? (postcode or suburb name)

Suburb of work	
Suburb of place of study	

16. And for this previous home, how would you rate the following (1 = poor, 3 = average, 5 = excellent)

Size of property was good in relation to needs	1	2	3	4	5
In a preferred neighbourhood	1	2	3	4	5
Good for getting to work/education	1	2	3	4	5
Good for shops/leisure/lifestyle	1	2	3	4	5
Close to where I grew up	1	2	3	4	5
Close to family / friends	1	2	3	4	5
Affordability of housing costs (rent or mortgage)	1	2	3	4	5

17. Apart from your current and this previous address, where have you lived in Sydney over the past ten years?

☐ I've only lived in the addresses mentioned above
☐ I've also lived elsewhere (Please state which postcode(s), or state/country if outside Sydney):_____

Section 3: How you use the city

In this section, we want to understand a little more about where members of your household travel for work, education and leisure within the city.

18. Please record the ages of each resident in the household – for the rest of this section, please keep Person 1, Person 2 etc consistent in answering questions 19 and 20.

Age Person 1   Age Person 2   Age Person 3   Age Person 4   Age Person 5   Age Person 6

19. Write the occupation and the name of the suburb where each member of the household works or attends school. If a member works from home write 'home.' If the job is mobile (e.g. trades) please write 'mobile'

Person	Occupation	Suburb where job/school is located
1		
2		
3		
4		
5		
6		

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20. Please indicate the usual mode of transport for each person in the household. Place a tick mark in the appropriate row

	Person 1	Person 2	Person 3	Person 4	Person 5	Person 6
Car (driver)						
Car (passenger)						
Public transport						
Walk						
Cycle						
Multi-modal (e.g. part cycle, part train)						
Other _____						

21. Where do you go to do your weekly food shop?   Name of centre/suburb _____

22. Where do you go shopping for a wider range of goods?   Name of centre/suburb _____

Section 4: Housing choices and intentions

There are many factors that shape our housing choices, including whether or not to move house. At different stages of our lives, our household needs are different; we have different financial capacities or constraints, etc. The questions in this section seek to understand more about your current housing choices and the reasons for not having moved for a while.

23. Which of the following best describes your current housing circumstances?

☐ This home suits my/my family's needs and I have no intention of moving for the foreseeable future
☐ This home suits my/my family's needs, but I expect I'll need/want to move in the next few years due to changing circumstances
☐ I would like to move to a different rental property and have started looking
☐ I would like to buy a home and have started looking
☐ I would like to move to a better property or neighbourhood but unable to due to affordability constraints
☐ I would like to move but there are no suitable properties in the locations I would like to live
☐ I am on the housing waiting list with the Department of Housing or a Community Housing Provider
☐ Other (please state) _____

24. If you have been considering moving home, or expect that you'll need to move in the next couple of years, what do you think will be the main factors driving this decision? In the first column, tick all boxes relevant. In the second column identify the top three factors (1-3; 1 being the most influential factor)

If you are not expecting to move in the next few years, please go to question 27

	Relevant?	Main reasons
Likely Increase/decrease in household income		
Hope to be getting married/starting a family		
Will need a different property/more space due to change in household size		
Will want/need to move for employment-related reasons		
Will want to move to different suburb/different part of the city/out of the city		
Do not like the changing nature of our current neighbourhood (e.g. increase in higher density development)		
Will not be able to afford an increase in rent		
Hope to be allocated a home by Department of Housing or a Community Housing Provider		
Hope to buy a home		
Will be retiring and need a home/location appropriate to this stage of life		
Don't know		
Other (please state) _____		

25. What do you think may affect or delay your decision to move in the short term?

	Relevant?	Main reasons
Affordability constraints		
Concerns about employment prospects		
A lack of suitable housing in this neighbourhood		
A lack of suitable housing in the locations I would like to move to		
Don't know		
Other (please state) _____		

26. In terms of location factors tied to this possible move in the next few years, which of the following statements reflect your likely position?

	Relevant?	Main reasons
Location is not that important – it's more about getting the right house		
'I belong to this community': I'll want to stay in the neighbourhood/area		
Will want to move to a different part of the city/away from the city		
Will want to stay/move to a more affordable area		
Will want to move closer to work/education		
Will want to move to an area with better schools/services		
Will want to move closer to/stay near to family and friends		
Will want to move to a safer neighbourhood		
Will want to move closer to/stay where I grew up		
Will want to move to/stay in an area less likely to be affected by change such as urban renewal and redevelopment		
Other (please state) _____		

27. How would you describe your attachment to the **neighbourhood** you currently live in?

☐ I'm very attached   ☐ I don't really feel attached to it
☐ I'm fairly attached   ☐ I feel no attachment to it

28. How would you describe your attachment to this **part of the city** (e.g. SW, Central West, eastern suburbs)?

☐ I'm very attached   ☐ I don't really feel attached to it
☐ I'm fairly attached   ☐ I feel no attachment to it

Section 5: Longer term intentions and the changing city

In this section we want to know if future intentions to move will be shaped by the changing nature of your immediate neighbourhood.

29. How do you think your neighbourhood and this part of the city will change over the next 5-10 years?

☐ It will get better; If yes, go to question 30
☐ It will stay pretty much the same, go to question 32
☐ It will get worse; If yes, go to question 31

30. Why do you think it will get better? (tick all that apply)

☐ Good economic growth and employment prospects in this part of the city
☐ Good range of existing housing supporting a diverse range of households
☐ New housing development providing further choice
☐ Increased provision of affordable housing
☐ Infrastructure and transport improvements
☐ Other (please state) _____

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31. Why do you think it will get worse? (tick all that apply)

- ☐ I don't think it will get worse
- ☐ Weaker economic growth and employment prospects compared to other parts of the city
- ☐ Increased housing development at higher densities
- ☐ Changing character of the suburb
- ☐ Lack of affordable housing
- ☐ Insufficient investment in infrastructure and transport provision
- ☐ Other (please state) _____

32. Thinking long-term (15-20 years/retirement), which of the following sums up your likely position? (tick any that apply)

- ☐ I will want to stay in my current home for as long as I can manage to do so
- ☐ I'd be happy to move into a smaller home or multi-unit dwelling in order to stay in this part of the city
- ☐ I'd be prepared to move to a smaller home closer to one of the main centres in this part of the city
- ☐ I'd be looking to move to a different part of the city. If so, please indicate where _____
- ☐ I'd be looking to move out of the city altogether. If so, please indicate where _____
- ☐ Don't know
- ☐ Other (please state) _____

Section 6: Additional information about yourself

33. What is the total of all wages/salaries, government benefits, pensions, allowances and other income you usually receive in a year? (Please tick one box)

☐ Negative/Nil income	☐ $40,000 - $59,999	☐ $100,000 – $119,999
☐ $1 - $19,999	☐ $60,000 - $79,999	☐ $120,000 - $149,999
☐ $20,000 - $39,999	☐ $80,000 - $99,999	☐ $150,000+

34. Do you receive Commonwealth Rent Assistance?

☐ Yes   ☐ No

35. Are you eligible for the First Home Owner's Grant (FHOG)?

☐ Yes   ☐ No   ☐ Don't know

36. Were you born overseas? (Please tick one box)

☐ Yes   ☐ No, go to question 39

37. What is your country of birth? (Please write the name of the country) _____

38. How many years have you lived in Australia? (Please tick one box)

☐ 3 years or less	☐ 10 – 19 years	☐ 30 years or more
☐ 4-9 years	☐ 20 – 29 years	

39. What is your ancestry? (Please indicate up to two ancestries only)

☐ Australian	☐ Irish	☐ German	☐ Lebanese
☐ English	☐ Italian	☐ Chinese	☐ Other
☐ Indian	☐ Vietnamese	☐ Polish	_____
☐ Scottish	☐ Greek	☐ Dutch	

THANK YOU – Invitation to participate in prize draw and further research

Would you be willing to participate in future research related to this topic?   Yes   No

Would you like to participate in our prize draw to win one of five Coles Myer $100 gift cards?   Yes   No

If, yes please provide your full name and contact details. This information will be filed separately from the questionnaire to ensure your privacy.

Name: _____
Address:

Telephone no.: _____   Email address: _____