

FINAL REPORT

The South East Wales Regional Housing Market Study

**The Regeneration Institute
Cardiff University**

and

Bob Line, Simon Inkson and Tamsin Stirling

for the

**South East Wales Regional Housing Forum
(SEWRHF)**

December 2005

Contents

Executive Summary

1. Introduction

2. Research in Context

- 2.1 Analysing Housing Markets – A Review of the Literature
- 2.2 Strategic Housing Provision and the Planning System in Wales

3. Housing Markets in South East Wales

4. Pressures on Housing Markets – Migration and Investment Effects

5. Affordability and Housing Needs

6. Conclusions and Recommendations

- 6.1 Conclusions
- 6.2 Policy Implications

References

Executive Summary

Introduction

1. This report represents a comprehensive analysis of the South East Wales regional housing market (an area comprising ten unitary local authorities, stretching from Bridgend in the west to Monmouthshire in the East). The analysis has been set within the wider socio-economic and spatial context in which the market operates.

Aims of the Research

2. The central aim of the research has been to provide an analysis and understanding of the South East Wales Regional Housing Market. This has been underpinned by a number of key objectives. These include:-
 - to examine the nature of the relationship between local, regional, sub-regional and national housing markets;
 - to provide a detailed assessment of the operation of the regional and sub-regional housing markets ;
 - to identify the nature and extent of housing needs and demand for the region, sub-region and (where appropriate) localities within the region;
 - to explore the need for additional affordable housing within the region, and to suggest ways that these needs might be met in the future;
 - to examine the interaction of different policies and strategies at local, regional and sub-regional levels within South-East Wales;
 - to identify key issues to be included in local strategies and plans, and to consider how these might be addressed at regional and sub-regional levels;
 - to develop, as far as is possible, a consistent approach across South East Wales to the assessment of housing needs and demand, considering any gaps in data, how information might be shared more effectively, and the linkages between housing policy and other key areas of decision making.

Research Methods

3. The study was undertaken using four separate yet related methods:-
 - an overview of the existing literature;
 - consideration and evaluation of existing secondary data and current relevant strategies.
 - interviews with key organisations and individuals at local, regional and national levels in Wales;
 - consideration of how the research might contribute to and underpin the future development of a regional housing market model.
4. Given the project has set out to research, map and understand how housing markets operate (and the factors which drive them) across South East Wales, part of the research has been to analyse existing secondary data (e.g. 2001 Census information, Land Registry sales data, CACI Paycheck data for 2004). In addition, the study has considered:-
 - Key strategic documents within the 10 local authority areas covered by the research;
 - Information on housing need, homelessness, numbers on housing registers etc;
 - Wider housing management information;
 - Evidence of new housing provision;
 - Qualitative information from a range of interviews with key informants.
5. The methodology employed for estimating affordability and housing needs is essentially a gross flows residual need method. It is based on entry level house price data for any selected geographical area (derived from Land Registry data) which has then been analysed in a spreadsheet model in relation to the number of households in that area deemed not to be able to afford entry to the owner-occupied market. This assessment has been based on an income: mortgage multiplier of 3.5. The proportion unable to afford to buy has then been applied to the number of non-owner moving households, based on ward level migration figures, to give gross needs. This has been compared to the supply of affordable housing for each area (derived from LA and RSL lettings data) and then converted to an estimated net need for each area. The approach is based on the components of housing need set out in recent UK good practice guidance, although the nature of the datasets and sources of information has meant

that the method has had to be adapted and does not reflect all aspects of housing need.

The Research in Context

6. Chapter 2 of the report sets the research in context. Part one presents a review of the literature, including a definition and discussion of the concept of a housing market. It raises the question of what is meant by “local”, how different parts of the housing system interact at regional and sub-regional levels and how broader social, economic and demographic trends impact upon local and regional housing markets.
7. The chapter also examines different conceptual approaches to housing market analysis, which are considered under the following headings:-
 - Policy applied
 - Classical economic
 - Social economic, and
 - Institutional
8. In addition, the literature review summarises four more practical approaches used to define housing markets:-
 - Using existing pre-defined boundaries;
 - Using Travel to Work Areas (TTWAs);
 - Using migration – based data to test for “self-containment” (where most household movement occurs within, rather than across, chosen boundaries);
 - Using more qualitative local knowledge
9. The literature review also examines examples of housing market analysis in practice and argues that such analyses can inform land use planning, the development of housing strategies, policies for the provision of additional affordable housing, how wider regeneration policies and strategies may impact upon housing markets and how local housing market decisions have implications for household mobility and the future sustainability of localities.
10. The second part of chapter two sets strategic housing provision in the context of the land use planning system and also in a specifically Welsh context. It examines the regional context for South-East Wales and also considers some of the recent relevant policy developments and proposals in relation to the local assessment of housing requirements, the provision

of affordable housing and moves towards plan rationalisation in local government in Wales.

Housing Markets in South East Wales

11. Chapter 3 builds upon the literature review and analysis of different conceptual and practical approaches to housing market analysis by examining housing markets in the South East Wales region.
12. Four different approaches to housing market analysis are considered (migration patterns, travel to work patterns, rental market areas and newspaper distribution patterns). These are then compared and triangulated to derive a “best match” to define and map housing market areas within South East Wales.
13. The analysis is used to develop a classification of different types of housing market. Five types are identified:-

- Heads of the Valleys
- Mid Valleys
- North of the M4 corridor
- Three Urban Based Areas, South of the M4 (Newport, Cardiff and Bridgend/Porthcawl)
- Rural Monmouthshire

In the case of the first three, these types of housing market run East-West, cutting across the traditional local authority boundaries which tend to run broadly North-South.

14. Each housing market within this classification is analysed to show its key characteristics (in terms of age structure of population, households and their mobility and average house prices). Similarities and differences between the individual housing market areas are also highlighted.
15. Chapter 3 concludes with an examination of how housing market areas can be considered to consist of different sub-markets (areas in which properties will compete directly with each other for the attention of households). In relation to the large urban housing market areas within South East Wales (Cardiff, Greater Newport – including Cwmbran and Bridgend/Porthcawl) the research identifies a suggested sub market structure, which could be used as a framework for the future aggregation and analysis of housing market data.

Pressures on Housing Markets

16. Chapter 4 of the report examines specific pressures on housing markets, and looks in particular at the effects of migration and investment.
17. In-migration may create demand pressures leading to price rises. Conversely, nett 'out' migration from a housing market may be reflected in population decline, falls in demand, oversupply, a fall in house prices and overall market decline. Both may be symptoms of housing markets which are either "overheated" or "in low demand".
18. Using migration data for 2002-03 the research shows the pattern of household moves between local authorities within South East Wales. It shows how Cardiff (unsurprisingly) is the major driver of housing market migration within the region. Health service records are used to show migration to and from both Cardiff and Newport (and not just within the region). Census data is also used to show some of the complexities of movement within and between urban areas within the South East Wales region.
19. The report also examines the characteristics of mover households. In particular, it highlights the higher proportion of professional/managerial movers coming to Cardiff, as well as the large numbers of students moving to both Cardiff and Pontypridd (or more specifically Treforest). A socio-economic classification of movers in 2000-2001 is shown for 28 separate urban areas within the region. A similar analysis is also provided for each of the 5 housing market types previously identified. (see 13 above)
20. The research also considers how the different circumstances of housing purchasers (those with extensive savings, relatively wealthy households, those trading down, landlord investors, cash purchasers etc) can shape housing markets. Using Land Registry data it shows the evidence of relatively high proportions of cash purchases in the Mid Valleys and Head of the Valleys areas, and conversely the much lower proportions in Cardiff and Newport. It also highlights evidence of low value sales (under £40,000) by housing market type, using data from October 2004 – March 2005, and the concentration of very low value sales in the Heads of the Valleys housing market area.

Affordability and Housing Needs

21. Chapter 5 sets out in detail the methodology which we have used to calculate affordability levels and the extent of unmet housing need within different housing market areas within South East Wales.
22. The research has estimated the gross housing requirement for affordable housing (residual backlog plus annual emerging need, without allowing for supply), both by housing market type and within existing local authorities. All local authorities are shown to have a gross affordable housing need, through this is heavily concentrated in Cardiff (40%), Rhondda Cynon Taff (12%) and Newport (9%), - and lowest in Blaenau Gwent and Merthyr Tydfil.
23. A second set of calculations (again by type of housing market area and local authority) are presented, showing net need annually over a five year period. This suggests an annual affordable housing need within the South East Wales region of just over 3,500 homes per annum, over a five year period (with almost half of this need being in Cardiff). Whilst these figures are higher than Holmans' work for the Council of Mortgage Lenders (which was not broken down below an all-Wales level), we believe they are broadly commensurate, given increase in entry level prices for home ownership in South East Wales, since his work was undertaken.
24. As well as presenting evidence of gross and net affordable housing need, both by local authority and type of housing market area, this chapter also examines some of the other key indicators which may drive the regional and local housing markets. In particular it examines the nature of the housing stock, household and housing circumstances (using a composite of 4 indicators), household incomes, and the proportions of households in higher socio-economic categories.
25. In relation to the rented sectors the research uses information from data provided by the ten local authorities and appropriate RSLs to look at issues such as the relative demand for council housing, the scale of sales under the Right to Buy, evidence of vacancy in the council housing sector, empty property in other tenures and the pattern of private renting and housing association provision.

Conclusion and Policy Implications

26. The final chapter (6) summaries the main findings from the research and highlights the key conclusions. It makes the point that, whilst housing markets in South East Wales are diverse and complex, it is possible to identify of both geographical housing market areas and types of housing market areas within the region.

27. In relation to the suggested housing market areas the point is made that these are subject to on-going processes of change, adjustment and transition. They are not static. This highlights the potential which the development of an interactive housing market model might offer for the further progression of housing market area analysis in the Region.
28. The research also concludes that policy solutions to some of the key issues evident in different housing market areas (and sub markets) will not always be the same. However, in many instances effective solutions will need to be developed at a regional and sub-regional levels, rather than locally.
29. Finally, the study findings suggest a number of policy implications. These can be summarised as follows:-
- At a LA level Local Housing Strategies need to develop closer connections with other local plans and strategies. The moves in Wales towards plan rationalisation may assist in this respect.
 - There is a need for a greater emphasis to be placed upon regional (and sub-regional) partnerships in relation to strategy and policy development in South East Wales.
 - There are implications from the research for the ways in which housing investment might be targeted in the future.
 - In areas of relatively high value housing there are issues of land supply, housing need and affordability, as well as concerns about the levels of investment required to provide additional social and non-market housing. Closer partnership approaches may be required to identify appropriate solutions to unmet housing needs.
 - In other types of housing market there may also be a need for more integrated approaches to housing market renewal, incorporating not only a physical remodelling of parts of the stock but a consideration of tenure balance. Wider regeneration policies will need to be considered in terms of the impacts they may have upon housing markets.

Introduction

1.1 Background to the Study

The need to understand the “housing market” has become something of a received wisdom for good practice in developing housing strategies. The term “housing market” is now often used as if it is clear and unproblematic. Bramley, in his work for the then Department of the Environment, Transport and the regions – DETR (2000) on local housing needs assessment, attempted to define a “housing market area” and others (e.g. Watkins, 1998) have reviewed the academic literature on sub-markets as constituents of housing market areas.

Government has encouraged the development of local housing needs assessments, usually based on postal or interview surveys (or a contribution of the two). There have been useful exercises in gathering data and contextual information about local housing markets, but they tend to represent a moment-in-time assessment, they are based on a sample of the population, they tend to be relatively expensive (particularly where interview based) and often subjective, reflecting intentions and aspirations as much as, if not more than, behaviour. The development of cross-boundary market analysis builds upon studies of housing requirements.

Whilst the scale of housing market assessments has not been predetermined, recent guidance in England has suggested that an assessment should cross local authority boundaries and should look at housing as a system in which there are connections between the stock of property and the mobility of households. It has been argued that housing market assessments should:-

- identify and define housing market areas;
- examine how the housing market operates;
- establish the strategic and policy context;
- understand recent, current and future trends in supply and demand;
- consider the factors which drive needs and demand from different groups in the population and for different types of housing in specific localities;
- assess the overall position with regard to excesses or shortfalls of housing, relative to needs and demand;
- consider the options to address any imbalances.

(Derived from ODPM, Housing Market Assessment Manual, 2004)

The concept of “housing markets” is now widely used, but as we have indicated it is by no means unproblematic. Individuals and households can move wherever they choose and are able to afford or access, although their effective demand and choices are usually constrained by various lifestyle requirements and trade-offs such as employment, schools and access to services. In effect, the wider socio-economic and land-use context. Degrees of self-containment, based on travel-to-work and migration patterns to urban and commercial centres are the basis for common concepts of housing market areas, but increasingly these patterns are found to be intertwined, overlaid and blurred. Identification of the pattern of housing markets (and sub-markets) in South-East Wales, and how these relate to broader patterns of socio-

economic changes, will be a key aspect of developing a better understanding of the South East Wales Regional Housing Market.

The concept of the housing market is an important one in the development and implementation of policies (housing, planning, economic development, regeneration, transport etc.) at local, regional and national levels. It is therefore important that the research should help to develop a better understanding of the South East Wales Regional Housing Market (and its sub-markets). However, it is the nature of research in practical policy terms which is the key to the success of the study. Housing market analysis should have a valuable contribution to make across a number of key policy areas. These are summarised below.

1.2 The Role and Potential of Housing Market Analysis

Developing Local Housing Strategies

Local authorities have a strategic housing rôle, and in this respect are required to consider the evidence of housing demand, supply and need within their boundaries, and to develop policies to ensure housing requirements are met effectively. However, a local housing system or market is unlikely to be constrained by artificial, administrative boundaries and demand (and need) in one local area may spill over in to another locality, creating areas of either housing pressure or relatively low demand (and perhaps, in more extreme circumstances, market collapse).

Land-Use Planning

The current land-use planning system in Wales is also based on the geographical area of the unitary local authority. Development plans need to ensure that sufficient housing land is brought forward within the plan period to ensure that housing needs and demand are met. However, as well as the link between local plan policies and those contained in the local housing strategy, the requirement for land for housing development needs to be informed by local, regional and sub-regional housing market analysis. Since, as already noted, housing markets are unlikely to coincide with local authority boundaries, it will be important to consider how current and future housing requirements (and particularly a requirement for additional housing) might be addressed either within or across local authority boundaries.

Provision of Additional Affordable Housing

The issue of housing affordability is a complex one, and the South East Wales region is a diverse one, containing two of Wales' major cities (Cardiff and Newport), the rural areas of the Western Vale of Glamorgan and Monmouthshire and the valley communities to the north of the M4 motorway. Local authorities are expected to justify their policies for the provision of affordable housing on the basis of evidence of unmet needs, and in assessing these needs then it is appropriate to consider the dynamics of local and sub-regional housing markets in order to develop policies for affordable housing which are both justifiable and sustainable.

Regeneration

Within the region the development of policies in relation to the social and economic regeneration of particular areas and communities will have an impact upon the housing market areas within which regeneration may be taking place. In developing an understanding of housing markets, it is therefore of vital importance that research should have an understanding of local regeneration strategies and the extent to which local regeneration is impacting upon housing markets.

Transport

There are important relationships between policies in relation to housing and investment in transport, with decisions made in relation to the transport infrastructure having potentially significant implications not only for the development of housing markets but also travel to work areas.

Sustainable Communities

The interactions between housing and other key areas of local policy (e.g. health, crime and disorder, local economic development, provision of education and social services etc.) are also key to the development of housing markets. How individuals and households perceive particular localities and the quality of services delivered in these areas will have an impact upon the future development of local and sub-regional housing markets within South East Wales.

In seeking to put the research in context, it should be clear that we consider developing the concept of housing market areas to offer considerable benefits to individual authorities within the South East Wales region, not only in enhancing their understanding of how local housing systems operate (and promoting better joint working) but also in developing a range of key strategies which (if effectively integrated) should lead to the development of more sustainable communities across the region. However, a true understanding of housing markets, and how they change, will depend upon an understanding of how a wide range of policies are being developed and implemented locally.

1.3 The Aims and Objectives of the Research

In October 2004 the Regeneration Institute at Cardiff University, in collaboration with Bob Line, Simon Inkson and Tamsin Stirling were commissioned by the South East Wales Regional Housing Forum to undertake a study of housing markets in South East Wales. The Forum includes the following 10 Unitary local authorities:

Blaenau Gwent CBC
Bridgend CBC
Caerphilly CBC
Cardiff CC
Merthyr Tydfil CBC
Monmouthshire CC

Newport CC
Rhondda Cynon Taf CBC
Torfaen CBC
Vale of Glamorgan CBC

1.3 The Aims and Objectives of the Study

These are:-

- to undertake a comprehensive examination of the defined regional housing market; and
- to situate this analysis within a wider socio-economic and spatial context.

These aims are underpinned by a number of specific key requirements, namely:-

- to examine the nature of the relationship between local, regional, sub-regional and national housing markets;
- to provide a detailed assessment of the operation of the regional and sub-regional housing markets, focusing on assessing and interpreting activity in these markets;
- to identify the nature and extent of housing needs and demand for the region, sub-region and (when appropriate) localities within the region;
- to explore the need for additional affordable housing within the region, and to suggest ways that these needs might best be met in the future;
- to examine the interaction of different policies and strategies at local, regional and sub-regional levels within South East Wales;
- to identify key issues to be included in local strategies and plans, and to consider how these might be addressed at regional and sub-regional levels;
- to develop, as far as possible, a consistent approach across the South East Wales region towards the assessment of housing needs and demand, including the consideration of any gaps in information, how information might be shared more effectively and the linkages between housing policy and other key areas of decision-making at a local level.

1.4 Research Methods

The study has been conducted using four separate, yet related methods:-

- overview of the existing literature;
- consideration and evaluation of existing secondary data and current relevant strategies;
- interviews with key organisations/individuals at national, regional and local levels;
- consideration of how the research might contribute to and underpin the development of a regional housing market model.

Each of these is considered in further detail below.

The first part of Chapter 2 provides an overview of the existing literature on housing market analysis. It begins by asking a series of fundamental questions as to what we mean by local housing markets, how they might operate and impact upon one another and how broader economic, social and demographic trends impact upon local and regional housing markets. It then outlines four different approaches to housing market studies, looks at a number of recent examples of housing market analysis and suggests how a clearer understanding of housing markets will enable not only the development of appropriate housing strategies, policies and interventions but also inform the development of broader strategies and policies around land-use planning and economic and community regeneration. The second part of Chapter 2 sets the strategic context for policy development within the South East Wales Region.

Since the project has set out to research, map and understand how housing markets operate (and the factors which drive them) across the 10 local authority areas who make up the South East Wales Regional Housing Forum, part of the study has been to identify, collect and analyse existing secondary data. In addition to more generally available data such as Census information, Land Registry sales data, and CACI Paycheck data for 2004, we have examined:-

- key strategic documents within the 10 member local authorities;
- information on housing need, homelessness, numbers on housing registers etc;
- housing management information (social housing stock, turnover, lettings, vacancies, etc.);
- evidence of new housing provision.

In the addition to the quantitative data analysis, research has also been conducted at a local, regional and national level with a range of organisations. This has included interviews with:-

- each of the 10 local authorities (housing strategy, landlord services, planning, estates, etc.);
- a selection of local and regional housing associations;
- selected housing developers;
- estate/letting agencies and lending institutions;
- university accommodation officers;
- Rent Officer Service
- Welsh Assembly Government
- Welsh Development Agency

Separate locality studies are being prepared for each of the 10 member authorities.

2 The Research in Context

2.1 Analysing Housing Markets – A review of the literature

2.1.1 Introduction

The purpose of this review is to consider the concept of a housing market and in doing so to provide insights into our understanding of the regional and sub-regional structures of the housing system within South East Wales. In the next section we present a definition and discussion of the concept of housing market analysis. Section 3 (2.1.3) then provides a brief outline and evaluation of the various approaches to housing market analysis which have been developed and applied. The chapter then turns to focus more closely on the South East Wales region and explores in greater detail the approaches to analysis which are particularly applicable to this study (2.1.4). Some practical examples of good practice in housing market analysis are then provided (2.1.5). The chapter concludes with a consideration of the importance of housing market analysis and the contribution which it might make to policy development.

2.1.2 Local Housing Market Analysis

Local and regional housing market analysis represents an attempt to understand how housing systems operate at the local, regional and sub-regional levels, and how they change over time. This raises a number of fundamental questions, including:-

- What do we mean by “local”?
- How do different parts of a “local” housing system interact – and how does any one “local” housing system interact with others at the regional and sub-regional levels?
- How do broader social, economic and demographic trends impact upon the operation of local and regional housing markets?

Local housing markets (social as well as private) have their own spatial structures, and it is the task of housing market analysis to examine the nature and shape of these markets. The concept of a local housing market is based upon a number of key underlying principles:-

1. Firstly, housing is diverse. Housing markets are highly differentiated, not only in terms of the type, price, size, condition, tenure and location of the stock but also in terms of the households who live in particular neighbourhoods (or are seeking to do so). Households vary in terms of their structure, resources (income, wealth etc), lifestyles, mobility, preferences and housing choices.
2. Housing is part of a broader economic, social and political environment. Its production and consumption will be shaped by economic, social and demographic forces, as well as policy action.

3. There are dynamic processes operating within housing markets. New dwellings are built, some existing ones may be demolished (or change use), others are improved. Some households move (voluntarily or otherwise); others do not. Housing markets change over time.
4. Housing markets are made more complex by the activities of the many institutions and organisations which operate within them: central government, local authorities, developers, financial institutions, landlords (social and private), estate agents, voluntary agencies and regulatory bodies. These different actors help shape housing supply and demand, transactions and outcomes.
5. Patterns of household mobility (as well as the intentions of those planning or seeking to move) define the spatial boundaries of functional housing markets. This raises a series of questions. For example:-
 - why and under what circumstances do households move (bearing in mind that not all moves take place for housing reasons)?
 - which types of household tend to move most often – and which ones less frequently?
 - is there a tendency for particular households to move from one sub-market to another?
 - what factors might encourage household mobility, and which ones discourage or constrain it?
 - how might different opportunities and constraints affect different households, both established and newly forming or potential?

These are some of the questions with which we will be concerned in seeking to define local and sub-regional housing markets within the South East Wales Region.

Thus, a local housing market might be seen as a largely self-contained geographical area whose shape and structure is determined by the linkages between available dwellings (each with its own unique characteristics) and different households, where mobility depends not only on consumer choice but also the actions of a variety of actors and a number of complex forces operating in the wider environment, which may impact upon household choice. The dynamics are such that local housing markets will experience almost constant change, as individual decisions and actions have repercussions elsewhere in the local housing market, and perhaps beyond.

In order to intervene effectively in local housing markets (for example, to rectify imbalances in housing supply and demand), it is important to understand the processes which are at work, the linkages and interconnections which operate (including the inevitable tensions and conflicts which exist in interconnected systems) and how these have changed (and might continue to do so) over space and time.

Whilst the principal objectives of housing market analysis are to identify the boundaries of different types of housing market (and within them particular local markets), and to show where housing markets are not operating as effectively as they might (and therefore where intervention might be appropriate), housing market analysis should not be confused with local housing strategy development. Housing market analysis may identify particular issues or problems (housing affordability, localised low demand etc) which will need to be addressed through strategic and policy development. It should inform strategic and policy frameworks and decisions, but not replace them.

Defining Local Housing Markets

In order to analyse a housing market one must first define it. Housing does not exist in isolation; it has a spatial context. Homes are usually fixed in location, with specific attributes in terms of access to services and the quality of the neighbourhood in which they are set – and these attributes will have significant influence in terms of demand for such homes.

No one would deny that the housing system is made up of different components (as we have argued above), or that many of these components are linked to each other. Divisions might be based upon tenure, price, size (number of bedrooms) – or location. However, a three-bedroom owner-occupied house in Wrexham is unlikely to be a direct substitute for an identical type of house in Cardiff. Nor is the owner-occupied property likely to be a substitute for a similar social rented dwelling – whether in Wrexham, Cardiff or elsewhere.

In housing market analysis terms, defining “local” is problematic. In the past there has been a tendency to use local authority boundaries, which are unambiguous, as the basis for assessing local housing requirements. This has had the advantage that much existing secondary data (published and unpublished) is available at this spatial scale. However, housing consumers often pay little attention to local administrative boundaries when making housing decisions, and many housing providers (including social landlords) work across local authority boundaries, or in tandem with those who offer accommodation beyond a local authority’s traditional area of operation.

2.1.3 Approaches to Housing Market Analysis

Housing markets can therefore be quite complex, and activity both within and between markets is influenced by a range of factors that need to be identified when engaging in market analysis. In a comprehensive review of the literature on housing markets Wallace (2004) identifies four distinct approaches to developing housing market analysis. The four approaches are identified as:-

- Policy applied;
- Classical economic;
- Social economic; and
- Institutional.

Traditional approaches to housing market analysis have been from a classical economic perspective. This approach, however, is fairly theoretical, utilising quantitative data sets to develop economic modelling such as hedonic pricing models and filtering models. Hedonic modelling, a method of measuring prices and quantities through using hedonic equations to predict and compare housing costs, has been widely used nationally and internationally (Follain and Jimenez, 1985; Sheppard, 1999; Malpezzi, 2001). Economic modelling approaches have made significant contributions to developing an understanding of land-use planning and markets and have been widely used within this context (O'Sullivan and Gibb, 2003).

There exists a significant body of literature which has developed around classical economic approaches, but there is a tendency for these to be based upon assumptions which fail to take account of wider social and economic factors. As housing is not solely an economic commodity, but can be viewed as multi-functional in terms of its contributions to providing shelter, privacy, security, social status, and access to services, in addition to a return on investment (Scottish Executive, 2004), the complexity of these relationships means that mainstream economic models are of limited value.

It is important to acknowledge that there are disadvantages to adopting a totally quantitative approach. These classical approaches, whilst facilitating some quite sophisticated economic modelling, cannot take into account the complex nature and relationship of interactions between actors (Wallace, 2004). If a significant understanding of local housing markets is to be developed, it is necessary to take a broader approach to data collection and analysis to include social and economic information.

Housing market analysis from the social economic perspective tends to focus upon the rôle of actors at the local level combining this with economic explorations of market activity. Data collected using this methodology can include more substantive social, economic and demographic data and will take into account all housing tenures. Issues such as social exclusion, polarisation and segregation may be highlighted through this type of methodology. The more detailed analysis that this approach provides can be used to develop an evidence base for policy recommendations.

More recently, however, there has been an increasing focus upon impacts that key actors may have upon housing markets. These institutional approaches to housing market analysis, as defined by Wallace (2004), share “a common research focus on key actors, organisations or institutions” (Wallace, 2004, p12). Institutional approaches have been developed in the fields of urban studies, social geography and planning. Residential property markets, individuals and neighbourhoods have been analysed using this approach to market analysis which emphasises qualitative analysis of the actions and perceptions of key actors. However, these approaches have tended to marginalise the rôle of economic factors, and critics have claimed that there is a tendency within this to over-emphasise the rôle of the social rather than balancing the relationship between the two.

Policy-applied approaches at the local and regional level have, in the past, been relatively narrowly focused and have tended to concentrate upon issues of housing need and the need for affordable housing rather than adopting a more holistic

analytical approach. This is evidenced in Blackaby's (2000) study on understanding local housing markets and their rôle in local authority housing strategies. The research found that although the 36 housing market assessments examined explored issues of affordability, many of them failed to make the comprehensive approach outlined in the guidance (Blackaby, 2000). In failing to take into account the views of a wider range of stakeholders, particularly in the private sector, many of the local authorities studied were unable to develop a thorough analysis of housing market activity within the local housing market area.

Although the four approaches identified by Wallace (2004) provide us with an insight into the development of housing market analysis, it is clear that elements of all of these are necessary if a thorough understanding of local housing markets is to be developed. These elements are discussed in more detail in the following section.

2.1.4 Key Approaches to Housing Market Analysis

As a starting point, a housing market might be defined as a geographical space within which households living or seeking to move are willing to search for alternative accommodation. The housing market area should incorporate both private and social sector housing. Whilst such a definition reflects the key conceptual underpinnings set out in the previous section (2.1.3), we need to look beyond this to considering how, in practice, earlier research has attempted to identify local housing markets in a number of ways. These can be summarised as follows:-

- Using existing pre-defined boundaries.
- Using Travel To Work Areas (TTWAs) as the basis for housing market areas.
- Using migration-based data to test for “self containment” (where most movement occurs within chosen boundaries, rather than across boundaries), and to use this analysis to define housing market areas.
- Using more qualitative local knowledge to define housing markets.

Each of these is considered separately (and briefly) below.

The Use of Pre-Defined Boundaries

In one sense, this study is starting with pre-defined boundaries – those which encompass the 10 South Wales unitary authorities which make up the South East Wales Regional Housing Forum (SEWRHF). However, this area is not one in which there are already pre-defined housing market areas.

In strategic planning terms the requirement upon local authorities in the UK to define housing market areas has been extremely limited. Only in Scotland have structure plan authorities been required to allocate land within a housing market area framework – and where this has been done it has generated significant debate around the different approaches taken. In the Scottish context housing market areas have been broadly defined as areas in which the majority of people move home without a

change of employment. As such, and notwithstanding variations in method and differing assumptions made by individual strategic planning authorities, the general approach has been to define these housing market areas using measures of household migration and self-containment (see below).

Using Travel-to-Work Areas (TTWAs)

A range of studies has used local travel-to-work areas (TTWAs) as the basis for determining housing market areas. TTWAs are based upon labour market commuting flows, and implicit in this approach is that the housing market (and residential location) is determined by travel-to-work patterns (and households trade-off journey-to-work costs, time and financial, against housing expenditure).

Whilst this approach benefits from access to already defined TTWAs, these can be out of date. At the same time, there is a very real danger that using this approach fails to reflect what is actually happening in local housing markets.

Using Migration-Based Data to Model Housing Markets

Whilst the two approaches outlined above rely upon pre-defined geographical areas, the main alternative is to seek to define housing markets through an analysis of household migration. Within this broad approach, the usual method adopted has been to use what has been termed as “containment” analysis.

The aim of this approach is to define, within a broader geographical locality, areas with minimum levels of migration (or commuting) within defined boundaries. Whilst there is no generally accepted scientific base for determining what is the appropriate level of “self-containment”, convention suggests that this is around 70-75%. In a number of cases, containment analysis has been developed based upon individually identified settlements within a region or sub-region, and has been used to show how differing sizes of existing settlements can have different effects on the degree of self-containment. Such analysis can also be used to show where external moves occur beyond areas of “self-containment”.

As an alternative to the “containment” analysis approach, an alternative “household flows” approach has been developed in Scotland. This method has started by identifying a single settlement which might be considered to be at the heart of a local housing market area, then these surrounding areas are included within that settlement’s housing market areas. Where sales are below 10%, but this is significant, then further tests are applied to determine whether these localities should be included in the local housing market area.

Using Local Knowledge to Define Housing Market Areas

The final approach considered here is the use of local knowledge (professional, or community-based – or both) to define the boundaries of local housing market areas. This has the benefit of engaging stakeholders in the process of defining housing markets and may help to explain or clarify ambiguities arising from more technical

and quantitative analysis. It can also be used to test local housing market areas defined using techniques such as self-containment analysis against the opinions of local policy makers and practitioners.

Current Guidance

Current government guidance on housing market analysis issued by the Office of the Deputy Prime Minister (2004), the Scottish Executive (2004) and the Welsh Assembly Government (2002) adapt and adopt a range of these methods to market analysis. All of the guidance manuals emphasise the importance of cross-tenure and cross-departmental approaches to housing market analysis. Each of these documents provides advice and guidance on the undertaking of an analysis of local housing markets/systems. Key to this are:-

- the identification and definition of housing market areas;
- examination of the operation of the local housing market;
- the development of an understanding of current and future trends in supply and demand;
- consideration of the factors which drive needs and demand for different groups/types of housing in particular areas;
- an assessment of the overall position with regard to excesses or shortfalls of housing relative to needs and demand;
- the consideration of options for intervention.

The revised Scottish Executive (2004) guidance on Understanding Local Housing Systems provides an extensive analytic framework that is extremely robust, involving all relevant stakeholders, facilitating both an understanding of current markets and methods of anticipating future market directions. The importance of the use of qualitative data in the generation of hypotheses and the validation of results, which was under-utilised in previous Scottish guidance, is emphasised in this guide which is the most highly developed of the three.

Whilst we have highlighted some of the different approaches used to determine the boundaries of local housing markets, in many cases it may be appropriate to combine several of these different and often complementary techniques.

2.1.5 Examples of Housing Market Analysis in Practice

Housing market/system analysis can make a significant contribution to sub-regional planning, the promotion of best practice and joint working both within and between authorities, resource allocation and housing needs assessments. Further evidence suggests that housing market systems analysis can also underpin the development of an understanding of, and intervention in, problematic issues such as low demand.

This section outlines the benefits of housing market analysis using good practice examples.

DTZ Pida (2004a) use a range of descriptive data (e.g. Census data, TTWA data and central and local government data) to identify potential sub-regional housing markets with the South West region of England. The findings were then tested through discussions with stakeholders missing vital local and regional knowledge, to aid interpretation of the data. Through adopting this approach which utilises both quantitative and qualitative data, the researchers were able to identify what was known about the operation of sub-markets in the South West of England, across a housing market which extends into Monmouthshire, Newport and Cardiff in South East Wales. In doing so, 12 sub-markets were identified enabling the appropriate authorities to work together to develop cross-boundary market analysis and strategy development. The findings can also be used to inform both resource allocation and sub-regional planning.

Similar methodology was employed by DTZ Pida (2004b) to develop a better understanding of the strategic pattern of housing markets in South East England. Extensive analysis and informed consultation with regional stakeholders resulted in the identification of 21 sub-regional housing markets in the south-east. The report recommends that the sub-markets should be reflected in the development of the Regional Housing Strategy and also be used to inform the Regional Spatial Strategy. In this region, where there are significant pressures upon the housing system, this level of information can prove invaluable in terms of informing future resource allocation.

Housing market analysis has also been utilised in attempts to develop an understanding of, and therefore intervention in, particular phenomena. Models for the identification of areas of risk of low or changing demand in the Midlands and the North of England have been developed by the Centre for Urban and Regional Studies (CURS) at Birmingham University and the Centre for Regional, Economic and Social Research (CRESR) at Sheffield Hallam University.

CURS has developed a model which aims to identify areas at risk of low demand (Nevin et al, 2001). The model does not highlight existing areas of low demand but uses an index developed from these to identify areas which may be at risk because they share similar attributes as dwellings and households in existing areas of low demand. Although this model requires some updating, as indicators are based upon 1991 Census data and the geographic areas (based on Census enumeration districts) do not necessarily correspond with housing market areas and sub-market areas, the methodology which underpins the model provides a starting point for establishing a data base which will allow the tracking of changes in the housing system.

The methodology developed by CRESR (Cole et al, 2004) for the interpretation of housing market change in Leeds can be viewed as complementary to the approaches developed by CURS. Cole et al (2004) have also developed an approach which allows changing demand to be monitored and for intervention in the market if necessary. This model is based upon the development of a matrix that enables the identification of trends in housing market demand (see Figure 1).

Figure 1

Trend in Demand			
Rate of Turnover	Increase	Steady/Mixed	Decrease
High	“Transitional”	“Unstable”	“Falling”
Medium	“Rising”	“Stable”	“Fragile”
Low	“Self-sustaining”	“Stagnant”	“Eroding”

Source: Cole et al (2004)

Highlighting the importance of the local balance of tenure in shaping any intervention in the housing market, Cole et al (2004) identify four aspects of intervention available to policy-makers:-

- strategy-focused interventions that consider issues of land supply, the planning system and linkages between development strategies;
- property-focused interventions, centring around housing management and regulation issues;
- Service focused interventions (e.g. new forms of service delivery, changing policies on lettings or licensing of private landlords etc)
- neighbourhood-focused interventions, which may focus on inter-agency working, area-based participation in planning and other activities.

The nature of any intervention is therefore dependent upon the characteristics of the market in operation. However, it is important to note that the form of intervention within high value local markets may be confined to strategic issues. Whereas, in contrast, potentially comprehensive programmes of transformation may be required within housing market areas at the other end of the spectrum and this can be evidenced in the activities of the English Housing Market Renewal Pathfinders.

Once again, the complex nature of housing markets is emphasised by this research. Cole et al (2004) emphasise that consideration needs to be paid to the complexity of housing markets, particularly the need to understand the drivers of residential mobility in urban areas. Descriptive or analytical use of quantitative data alone does not facilitate this level of understanding, highlighting the need for housing market analysis to be informed by both qualitative and quantitative data. Of central importance to this is the identification of drivers of residential mobility in urban areas, an approach which has been adopted elsewhere, for example, to identify the rôle of local authority schools catchment areas as a driver for residential mobility (Line et al, 2002).

The development of indicators which identify the sustainability of neighbourhoods can also assist in developing an understanding of housing market activity. This type of assessment has also proved successful in community regeneration in the USA, particularly in Baltimore. Here in the UK, Leeds City Council have developed a Neighbourhood Oriented Model of Area Demand (NOMAD), which combines analysis of a range of housing and social indicators to develop a score for each of 180 neighbourhoods. Through this scoring system neighbourhoods are rated and then classified into one of four groupings: areas in significant decline, areas on the edge, popular areas with specific problems and popular areas. This type of assessment

allows the identification of neighbourhoods requiring intervention and can also be used to inform both housing and regeneration strategies.

In their study of the dynamics of neighbourhood sustainability, Green et al (2005) used neighbourhood assets as an identifier of neighbourhood sustainability. They identified four assets, or “capitals” – social, human, environmental and fixed – which were then used to profile eight former mining communities. The study argued that there is a strong relationship between neighbourhood assets and neighbourhood sustainability. Typically, unsustainable neighbourhoods and individuals within these localities will display low levels of each of the “four capitals”. Green et al (2005) argue that by investing in each of these assets it is possible to reverse decline in some areas. They argue that, whilst this form of neighbourhood investment strategy is the most cost effective, an investment programme of this type will only succeed where there is a sub-regional policy to prevent excess housing supply, and in some neighbourhoods this will include demolition.

2.1.6 Contribution and Importance of Housing Market Analysis

Previous research has argued that markets for housing are essentially spatial. We have highlighted how the concept of a housing market might be considered and some of the different approaches and techniques which have been used to develop housing market analysis.

However, in this final section of this chapter, it is worth reiterating some of the points we made in our original submission to the Forum, as to the value of housing market analysis in practical planning, strategy and policy terms.

Research on housing market areas is important for a number of reasons. These can be summarised as follows:-

- A better understanding of housing markets will help to inform the development of land-use planning and the allocation of land. Understanding how local housing markets operate, and the factors which drive change, should inform the revision of land-use planning strategies.
- Local authorities have a responsibility for housing strategy, and these will be affected by the nature and evolution of local housing markets. Housing market analysis will help to inform local housing assessments of need and demand and the development of appropriate policy responses.
- The changing dynamics of local housing markets should inform the development of policies for the provision of additional affordable housing.
- There is a need to understand how wider strategies and policies, around issues of area-based regeneration may impact upon local housing markets.

- Decisions made which shape the development of local housing markets will have implications for travel patterns of households and thus are important in considering the future sustainability of localities.

Whilst housing market analysis is itself still evolving, and can never be any more than an imperfect presentation of the complex interactions taking place in housing systems across space and time, nevertheless it does offer a way forward in understanding how housing systems operate geographically. Potentially, it offers considerable benefits for informing the development of strategic plans and policies for the future of housing and land-use planning at regional, sub-regional and local levels. In the next part of this chapter we set out the broad strategic framework in which the development and implementation of housing, planning and related policy is currently taking place.

2.2. Strategic Housing Provision and the Planning System

2.2.1 Introduction

Over the last fifteen years there has been a shift in housing policy aimed at moving the rôle of local authorities towards the strategic enabling and facilitating rôle and a concern with the operation of housing markets. Part of this has been a growing concern with the interaction of housing (and in particular the provision of additional housing) with the land-use planning system, and how changing the planning and policy context might address housing market problems and stimulate housing supply.

At the same time, since its election in 1997, the Labour Government has pursued a comprehensive programme of modernisation of government, which has included a devolution of powers to a new Scottish Parliament and a National Assembly for Wales, a degree of regional devolution in England (though with no directly elected Regional Assemblies as yet) and a raft of policies and programmes to modernise the operation of both central and local government in order to improve the delivery of public services.

Historically, housing policy within the UK has been increasingly centralised over the last 30 years. As housing policies and the land-use planning system have both evolved, it has been acknowledged that there has been a failure (at all levels) to work together, resulting in a severe mismatch between housing and planning policy. The failure to synergise policies, the centralised nature of policy-making and a lack of understanding of the way housing markets operate have all contributed to a “top down” approach to housing policy. More recently, however, in terms of planning, the legislative and policy framework has facilitated a shift from a “predict and provide” approach to focus upon a system which emphasises the need to “plan, monitor and manage”. Consequently, the development of this approach to housing provision requires a more strategic emphasis by both planners and housing enablers and providers.

A more strategic approach to public sector provision is characteristic of the modernisation of government rhetoric, which has featured highly on the political agenda since Labour was elected in 1997, and has involved a devolution of powers (to varying degrees) across the UK. The emphasis upon strategic planning in public

service provision has impacted upon both the rôle of housing providers and the land-use planning system. This “enabling” rôle of local authorities requires greater attention to strategy at both regional and local levels, thus demanding higher levels of collaboration and co-operation than previously experienced. As these changes have emerged, the regional diversity and subsequent differences in terms of housing market activities and housing policy requirements has come to influence the development of a regional approach to the provision of housing.

Following the devolution of powers to Scotland and Wales, the notion of regional governance within the English context was heralded in the White Paper “Your Region, Your Choice” (DETR, 2002), which set out proposals for a system of regional government in England. Prior to this, however, some regional structures, in terms of planning and housing, have emerged in England, although these have developed in an incremental and ad hoc manner. Although Regional Planning Guidance (RPG) has existed in England since the late 1980s, this has been criticised as being too centrally influenced and lacking any regional focus. In comparison, the subsequent establishment of the Regional Development Agencies (RDAs), responsible for the promotion of both economic growth and regeneration, has in some cases led to conflict between the two. Although there is a requirement for RDAs to consult with Regional Chambers (which are representative of local stakeholders), it has been argued that this structure demonstrates little more than a local arm of centralised decision-making, lacking in accountability at the local level.

Regional governance structures in England have been further strengthened through the introduction of the Government Offices for the Regions (GORs). Within this structure GORs, in conjunction with the Regional Offices of the Housing Corporation, control housing investment funding. Housing policy in England now features a stronger regional dimension. The regional focus has facilitated the production of Regional Housing Statements and, more recently, Regional Housing Strategies. These documents are designed to reflect regional concerns and priorities, and as such influence Housing Investment Programme (HIP) allocations. Additionally, there is a requirement for Regional Housing Strategies to reflect and influence wider strategic considerations. In the context of the emerging regional framework in England there is a potential opportunity for stakeholder influence on housing policy through the establishment of Regional Housing Forums. These Forums, which vary in their size and membership, feed in to the Regional Housing Strategy, and as such are well placed to influence policy. The regional influence discussed here has, until recently, been lacking in Wales. However, the establishment of the South East Wales Regional Housing Forum (SEWRHF), as an informal grouping of ten unitary local authorities, has significant potential to influence the development of housing policy in Wales, and in particular the development of a more strategic approach to planning for housing.

2.2 The Welsh Context

Since devolution the Welsh Assembly has initiated a wide-ranging review of housing policy in Wales and published its own National Housing Strategy, “Better Homes for People in Wales” in 2001 (NAW, 2001). This document also set the national framework for the development of local housing strategies. A subsequent review of the then existing Housing Strategy and Operational Plan (HSOP) process in Wales took account of the need to assess local housing markets and to facilitate effectively

the contribution that the private sector might make to meeting housing requirements (WAG, 2002a; 2002b; 2003). It had been a criticism of earlier approaches to housing needs assessments in both England and Wales that they had often failed in both of these respects (Evans et al, 1999; Blackaby, 2000).

The National Housing Strategy for Wales (NAW, 2001) has made it clear that developing a comprehensive and accurate understanding of the nature and extent of housing need and demand is a key issue for the Assembly. It has also provided assistance for local authorities to assess housing requirements at a local (district) level, both in terms of guidance and through financial support to encourage local studies. All but one of the ten local authorities in South East Wales have commissioned a local housing requirements study, and some have commissioned more than one since devolution. Alongside the development of planning policy, which the Assembly as seen as having a key rôle in providing homes, investment and jobs in ways which are consistent with sustainable development (for which the Assembly has a statutory duty), it has also argued the need for local authorities to work in partnership, to set priorities, maximise investment, develop strategies and address needs.

The planning of strategic housing provision in Wales is largely the responsibility of local authorities, and is operationalised via the discharge of their housing and planning functions. In carrying out these functions, recent policy changes have given greater emphasis to the preparation of local housing strategies, with local authorities being advised by the Welsh Assembly Government (WAG) to adopt a corporate approach to ensure that planning and housing policies are compatible in terms of their strategic objectives (Planning Policy Wales, 2002, para. 9.1.3; Preparing Local Housing Strategies, 2002, para. 7.4), within the context of the Community Strategy.

In discharging their planning function, local planning authorities must take full account of local housing requirement assessments (needs and demands) and, in estimating these requirements, are strongly encouraged to integrate the provisions of their local housing strategies with the relevant provisions of their statutory development plans (Planning Policy Wales, 2002, para. 9.2.4). Guidance on the preparation of local housing strategies (WAG, 2002, para. 7.4) advises that “in particular, assessments of local housing need and demand should, as a matter of good practice, be undertaken jointly by housing and planning departments to ensure that consistent data and assumptions underpin both planning processes”.

The preparation of local housing strategies has therefore assumed an enhanced significance in policy making within the boundaries of a local authority area. This significance is further buttressed in strategic terms by WAG planning and housing advice to local authorities to work collaboratively with neighbouring authorities when tackling cross-boundary strategic housing issues (Planning Policy Wales, 2002, para. 3.2; Preparing Local Housing Strategies, 2002, para. 8.13). However, in Wales the framework for the voluntary groupings of local authorities established for strategic planning purposes is not yet congruent with that initiated for housing purposes (including the South East Wales Regional Housing Forum). This the co-ordination involved in the preparation of local housing strategies involved not only the corporate dimension of the local authority but inter-corporate liaison with other local authorities and partnerships with non-government stakeholders and other organisations.

It can readily be seen that this widening of the scope of local housing strategies involves the consideration of the appropriate scale at which analysis is to be conducted, as local housing issues are widened to encompass sub-regional and regional dimensions. The institutional context in which this dimension might be addressed is underdeveloped in Wales in comparison with the situation elsewhere in the UK, and sub-regional housing issues in Wales are poorly articulated. Nor has the recent policy framework provided by “People, Places, Futures: the Wales Spatial Plan” (WAG, 2004) adequately addressed the strategic housing dimension, in particular failing to provide a holistic housing perspective (Stewart, 2005).

In terms of the land-use planning system, the Welsh Assembly Government set out its initial proposals in a Green Paper published in January 2002. This document made it clear that the land-use planning system should become better integrated with other plans, policies and actions at a local level, and take full account of the activities of private and voluntary organisations as well as public sector agencies. In this respect its messages were consistent with those emanating from the Assembly with regard to housing strategy development. In March 2002 the Welsh Assembly published its revised planning guidance for Wales, “Planning Policy Wales” (WAG, 2002c). In relation to housing, “Planning Policy Wales” advised local authorities that, in making provision for additional housing, they should take account of (amongst other things) household population projections, local assessments of housing requirements, the capacity of local areas to provide additional homes and the local housing strategy (WAG, 2002c).

Thus, whilst planning policy in Wales (as with housing policy) is still subject to primary legislation enacted at Westminster, the Welsh planning system is developing independently from that of England. In particular, the Welsh Assembly is now encouraging a new system of slimmed-down local development plans, rather than the existing framework of unitary development plans (only one of which has been successfully adopted in Wales since the system was introduced in 1996).

However, whereas in England planning policy has had a strong regional framework, supported through the Government Offices for the Regions, the development of voluntary Regional Chambers (in many ways styled on the model of the Welsh Assembly) and the Regional Development Agencies (RDAs), this has not been the case in Wales. In England, Regional Planning Guidance (RPG), whatever its limitations, has had a valuable rôle to play in taking a strategic regional view, where appropriate, resolving local conflicts, encouraging a regional and sub-regional overview of local issues and giving a stronger regional focus on key strategic issues.

Towards the end of this study (July 2005) the Welsh Assembly Government issued for consultation a package of guidance documents on planning and affordable housing. These included a Local Housing Assessment Guide (WAG, 2005a) and an Affordable Housing Toolkit (WAG, 2005b). At the Planning and the Countryside issued an interim planning policy statement to revise the housing chapter of Planning Policy Wales and revised Technical Advice Notes (TANs) 1 and 2, in relation to Joint Housing Land Availability Studies and Planning for Affordable Housing respectively.

Together, these are designed to provide a set of measures to assist Welsh Local authorities in both addressing overall housing requirements and in meeting the need for affordable homes. The period of consultation was to late October 2005. Our understanding is that revised TAN guidance and final versions of the Local Housing Assessment guidance and the Affordable Housing Toolkit will be published by October 2006.

2.2.3 The Regional Perspective in South East Wales

The South East Wales Regional Housing Forum (SEWRHF) was established in September 2003 and, as we noted in chapter one, is comprised of ten neighbouring local authorities, stretching from Bridgend in the west to Monmouthshire on the English borders. In contrast with the English Regional Housing Forums which underpin the regional governance framework, the SEWRHF aims to provide the main focus for the discussion of regional housing issues, lobbying to raise the profile of housing with the Welsh Assembly Government, local authorities themselves and other stakeholders through the promotion of an awareness of the strategic housing rôle and the development of links with other policy and service areas.

The ten member authorities of the Forum are: Blaenau Gwent, Bridgend, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Rhondda-Cynon Taf, Torfaen, and the Vale of Glamorgan. Together they reflect a diverse and contrasting range of demographic, social, political and economic situations, both within and between local authority boundaries. Industrial decline in the South Wales valleys has adversely affected many communities. In particular, Merthyr Tydfil, Rhondda-Cynon-Taf, Blaeneu Gwent, Caerphilly and Torfaen carry the legacy of the decline of the iron and coal industries in South Wales. The levels of decline are clear in the evidence provided by the Welsh Index of Multiple Deprivation (NAW, 2000), which combines data to provide summary measures of deprivation at the electoral division level across Wales. The one hundred most deprived divisions (out of 865) in Wales, by this measure, receive funding under the Assembly's "Communities First" programme – similar in a number of respects to the New Deal for Communities (NDC) programme in England. The unitary authorities of Merthyr Tydfil, Rhondda-Cynon-Taf and Caerphilly feature highly within this index. For example, 17 of Rhondda-Cynon-Taf's electoral divisions qualify for Communities First funding, as do 13 out of 36 divisions in Caerphilly. In contrast to the levels of deprivation experienced within many parts of the South Wales Valleys, semi-rural authorities such as Monmouthshire and the western parts of the Vale of Glamorgan experience relatively low levels of deprivation and do not feature in the one hundred most disadvantaged electoral divisions at all.

The diversity which exists within authorities is also reflected between authorities and is closely related to geographic location. The more urban and often relatively affluent authorities around and to the south of the M4 – Monmouthshire, Newport, Cardiff, the Vale of Glamorgan and the southern part of Bridgend – experience more effective infrastructures and contrast significantly with their immediate counterparts to the north. However, it should be noted that due to demographic variations, some authorities within South East Wales may experience greater differences in disadvantage than others, with highly concentrated pockets of deprivation rather than an even spread. In Cardiff, for example, there is a clear demarcation between socially

disadvantaged and better-off communities in what is often terms locally a north (comparatively well-off)–south (comparatively disadvantaged) divide. Similarly, whilst the Vale of Glamorgan is relatively affluent, the town of Barry (its largest urban settlement) displays evidence of high unemployment, long-term illness and relatively low incomes. In comparison in Cowbridge (to the west) the average weekly wage is 40% higher than in the lowest ranked ward in Barry. The contrasting nature of Forum member authorities also highlights the fact that whilst many authorities may share concerns in relation to strategic housing issues, the socio-economic profiles and spatial contexts suggest significant differences in sub-regional and local housing markets.

Whilst as we have shown the regional agenda is becoming firmly established in England and Scotland, in Wales it has been slow to develop in strategic terms. Whilst there is evidence of corporate working within authorities (for example, in relation to the provision of affordable housing), there has generally been a lack of collaboration between authorities. In developing the recent Local Housing Strategies, individual authorities have identified gaps in policy development and delivery between local and national levels in Wales. Amongst the ten members of the SEWRHF there has been a growing concern about the region's lack of influence upon national policy – a key factor in the establishment of the Forum. Furthermore, the emphasis within the local housing strategy process on addressing cross-tenure housing requirements needs co-operation and co-ordination of both housing and planning policies. In addition to these primary concerns, Forum members also consider that benefit will arise for individual authorities within the region in a number of different ways: opportunities for enhanced housing provision, more consistent interpretation of policy guidance, the sharing of innovation and best practice and the strengthening of the profile of strategic housing authorities (Beirne, 2004).

The desire for co-ordinated and integrated housing and land-use planning policies is highlighted by both the National Housing Strategy for Wales (NAW, 2001) and the Wales Spatial Plan (WAG, 2004). The need to harmonise housing and planning policies, thereby situating housing within the wider spatial planning and economic regeneration context is seen as critical to the work of the SEWRHF. It is also worth noting that earlier this year the Welsh Assembly published a Strategic Framework for the Heads of the Valleys (an area which falls within the study area). Set within the wider framework of the Wales Spatial Plan, this is a 15 year programme designed to co-ordinate and integrate work at a strategic level and across geographical and sectorial boundaries (WAG, 2005). It is also proposed that it will provide a framework for the joint delivery of frontline services.

2.4. The Strategic Plan Rationalisation Proposals for Local Government in Wales

In concluding this chapter, it is appropriate for us to outline (in brief) the prospects for change in relation to strategic planning for housing in Wales. The Welsh Assembly Government has recently announced plans to rationalise the strategic planning framework in Wales, and has issued a consultation paper setting out its proposals (WAG, 2005). The argument put forward is that current arrangements (which require local authorities to prepare and submit over 40 different plans and strategies) not only

impose significant burdens and costs, but that the system is piecemeal and inflexible and may not lead to the delivery of better outcomes.

The Assembly's proposals, which have been developed in collaboration with local authorities, the Wales Audit Office and others, set out a much more limited requirement for a number of high-level strategies. These include the Community Strategy, designed to complement the Wales Spatial Plan, and three other long-term non-service-specific strategies. These are:-

- The Health, Social Care and Wellbeing Strategy
- The Children and Young People's Plan
- The Local Development Plan.

In relation to service-specific plans, the intention is that current plans should be allowed to expire and the requirements to produce them not renewed. In relation to the Local Housing Strategy, the intention appears to be that beyond 2008-09 this should be subsumed within the individual Community Strategies of Welsh authorities and linked to the Health, Social Care and Wellbeing Strategy and the proposed Local Development Plan. A number of the sub-strategies (Black and Minority Ethnic Housing Strategy, Local Homelessness Strategy) are to be included in enhanced Local Housing Strategies from 2007 and within Community Strategies beyond this date. At the time of writing, our understanding is that in 2007-08 Welsh local authorities will be required to submit and publish an enhanced Local Housing Strategy (to include key elements of a BME housing strategy and Local Homelessness Strategy). Revised Assembly Guidance in relation to the Local Housing Strategy is due in March 2006. However, by 2013 the requirement to submit and publish a Local Housing Strategy will be subsumed within each Local Community Plan.

At this stage the consultation paper (WAG, 2005) suggests that within this revised framework local authorities would be free to plan their services. It makes the case that they could (if they so chose) plan services jointly with other local authorities (and indeed other stakeholders) – and in the case of transport (but not housing) they suggest planning should be on a regional rather than a local basis.

3. Housing Markets in South East Wales

3.1 Understanding housing markets

In many ways housing market analysis is simply approaching familiar subjects and evidence patterns using a different set of concepts and ideas, and so may sometimes appear patently obvious. But a new approach can also bring new insights, leading to a better understanding not only of housing, but also of the way in which other factors and variables are distributed and presented.

This often reflects *multi-collinearity*, where variables and indicators such as income, occupation, household type, educational attainments and housing circumstances vary together – or as the dictionary definition puts it, - “ *a case of multiple regression in which the predictor variables are themselves highly correlated* ”. Nor does this necessarily mean that improving one variable by policies, interventions and actions will also improve the others . UK housing history in particular is littered with instances where extensive investment and improvement has brought about very little long term improvement in the circumstances and fortunes of people in an area. However, what is certain is that if none change there will be no improvement at all. But by understanding the links and interactions between factors in a more holistic and interactive way there is more chance that there will be overall progress.

In thinking about housing using market analysis it also becomes clear that while improved data and methods of handling it can give us a better idea of ‘how’ they function, the question of ‘why’ is more difficult, and is dependent on a myriad of different household and personal circumstances and choices. This in part is why some housing economists have argued that housing search behaviour must be understood to fully appreciate how housing markets operate. The ‘why’ questions are generally more sophisticated and harder to answer. Even more difficult are questions on ‘what can we do to improve it’, which are inevitably fraught with complexity and unintended consequences, especially in housing policy.

3.2 Housing markets in South East Wales

A key initial aim of the project was to identify ‘Housing Market Areas’ in South East Wales. The term ‘Housing Market’ is often used as if it is clear, but it has been pointed out “*the term housing market is used loosely in a number ways and there is no agreed definition.*”

Most comment about ‘the housing market’ is either on the national, - or at best regional -, level and the commercial, economic or financial implications and effects of overall house prices and mortgage borrowing; or at the other end of the scale there are commercial and practitioner guides and TV programmes about how to present, market, value, sell and survey specific houses.

However, the lessons of limited housing need surveys and a narrow focus on social renting as affordable housing does strongly indicate that developing a theory and research methodology for understanding local housing markets is a key pre-requisite for developing housing strategies which have more chance of success. Jones (2001) argues that the establishment of a geography of functional housing market areas represents the first step in the development of systematic planning research.

There is much less research and information on the details of on the ground patterns and drivers of local market behaviour. Jones comments that *“there is a dearth of understanding of the structure and functioning of housing markets and no systematic research has been undertaken into the definition of local housing market areas”*. This is changing and more research and analysis is now being carried out, with apparently better progress in Scotland, Australia, Singapore and the USA.

There are several levels at which housing markets are commonly conceptualised and analysed . This commonly includes :-

- the national UK housing market
- wider **housing market areas** (HMAs) - mainly around larger population centres
- housing **submarkets** - areas within which properties compete with each other
- neighbourhoods – spatially based attributes associated with cluster of residences
- individual properties

It is becoming clear that making logical distinctions of this kind is important to properly understand processes at work. National and housing market areas have been considered above and are more widely recognised and understood. Within the wider housing market areas reference is also sometimes made to submarkets , but these are often or conflated with *neighbourhoods*, which could create some conceptual confusion.

There are, however, no firm distinctions between the different levels in what is in practice a widely variable continuum. The different levels are often not ‘real’ in the sense that boundaries between them can be found, - although sometimes housing markets may be divided by clear physical boundaries.. The concepts that are developed are inevitably therefore arbitrary to some extent, but are nevertheless essential tools to help understand patterns and trends in what is otherwise a complete confusion of data.

In these circumstances the concepts that works best will be those that give the best results – that is lead to better policy. This also is not easy to assess and measure, as many other variables can change, and it can be many years before the outcomes of housing policy become clear.

However, data for any area itself holds clues to the patterns underlying it. Wider housing market areas are often considered to be areas of self containment , within which households move when not changing jobs. They are also often considered to

be similar to Travel to Work areas. For example, the advice note on Local Housing Market analysis to Welsh Local Authorities from the Welsh Assembly Government, (WAG, 2002), drawn up by the University of Glasgow, says:-

Functional areas

Both travel-to-work-areas (TTWAs) and housing market areas (HMAs) are defined on the basis of relative self-containment. TTWAs are areas in which the majority of people both live and work and are defined using data on commuting patterns. HMAs are areas within which the majority of households remain after moving house, defined using information on migration, usually in the owner occupied sector. Because in the private market, people's housing choices are not constrained by local authority or other administrative boundaries, HMA boundaries are unlikely to coincide exactly with those of the local authority,

Page 15

The degree of self containment is usually set at around 70% to 'define' a Housing Market Area, based on previous work on Travel to Work areas, but the guidance also acknowledges that .

There is no hard and fast rule on what constitutes a majority, but typically an area in which 70-75% remain after moving is regarded as reasonably self-contained.

Page 16

For this study, a variety of methods were used which were then compared and 'triangulated' to derive the best match from which to define and map Housing Market Areas. These were:-

- Migration patterns
- Travel to Work patterns
- Rent Service – rental market areas
- Newspaper distribution patterns.

These are explained in more detail as they are exemplified below.

3.2.1 Migration patterns

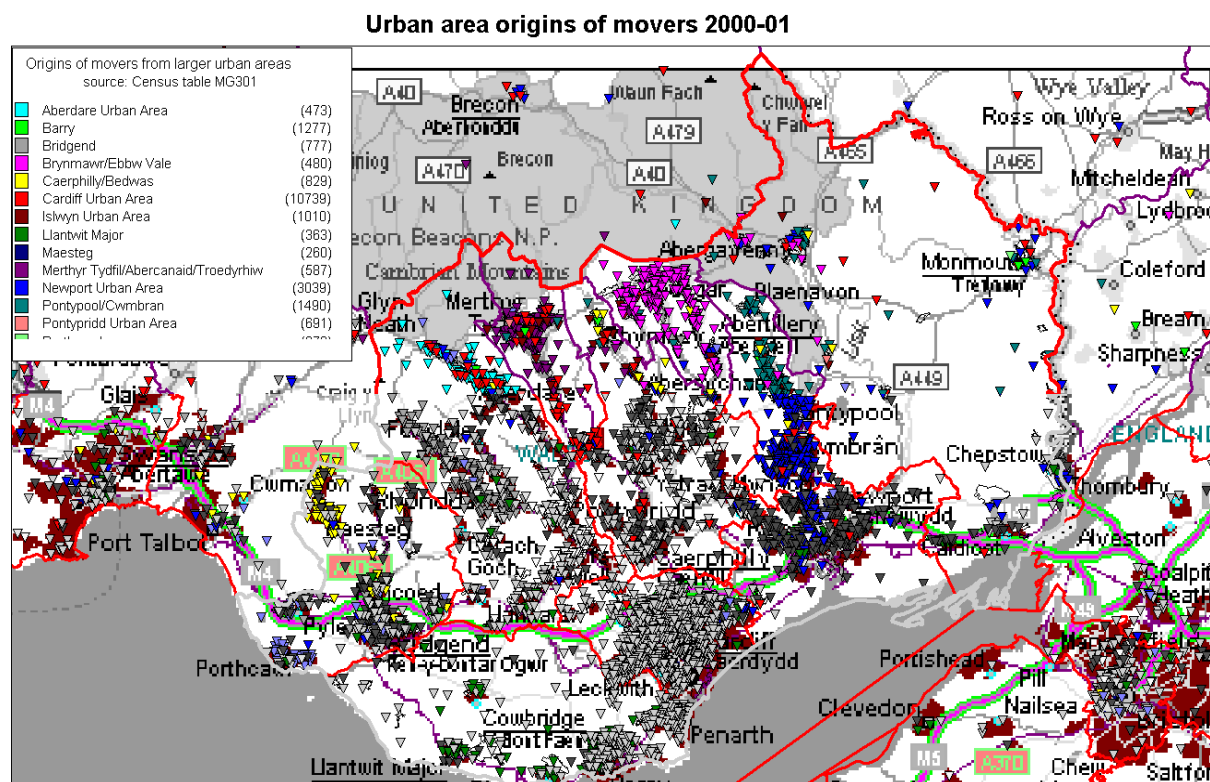
These were analysed using two sources of data.

1. Census migrations data – mainly tables MG301 and MG201
2. National Health Service Central Register Patient re-registrations.

The Census migrations data is the most detailed source available, giving a count of movers between Output Areas in the year prior to the Census on April 29 2001. However, cells with small counts –for this dataset most of them - are rounded to 3 to ensure confidentiality, when the actual number could be between 1 and 4. The overall effect is smoothed to avoid grossed up counts becoming vastly different to the actual totals for larger areas¹.

This allows migration patterns to be identified quite accurately, showing the anonymised origins and destinations of movers, and allowing the distance, proportion and extent of moves to be derived.

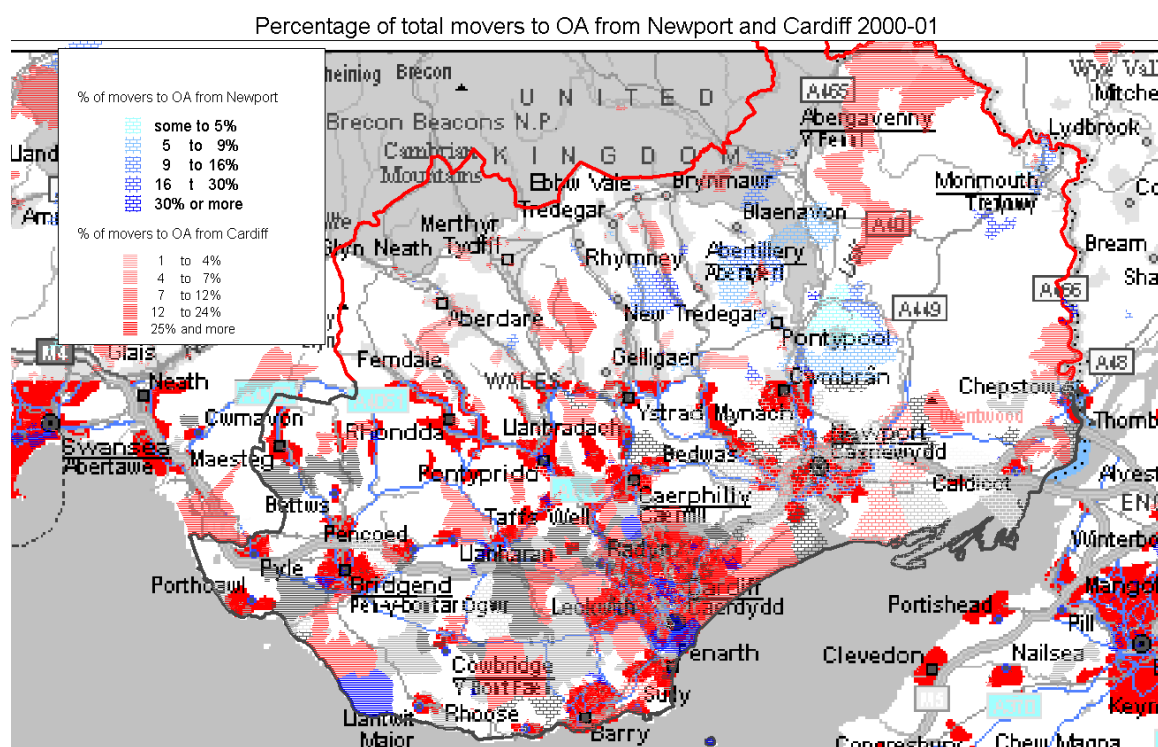
The data was geocoded to both origin and destination within GIS. The outcomes are inevitably very complex and confused, as people can and do move wherever they wish and can afford or arrange. To disentangle and make sense of this, specific origins and destinations can be selected, and analysed separately. An example showing the point destinations colour coded by the larger urban areas of origin is shown below.



¹ A description of the methods applied is at http://www.statistics.gov.uk/census2001/pdfs/tabular_counts.pdf

This also results in vast numbers of combinations and variations of origin and destination which are far too many to analyse in full in a written report. The method is best applied as a tool to look at a particular area or issues as the need arises.

However, patterns do emerge strongly from the data. Most moves are quite local – proximity is usually always paramount for migration. The graphic below shows moves from Cardiff and Newport only. The extent of moves from Cardiff is noticeably greater, partly, no doubt, because it is a larger city; - but also probably because its residents generally have higher incomes and greater equity in their homes.

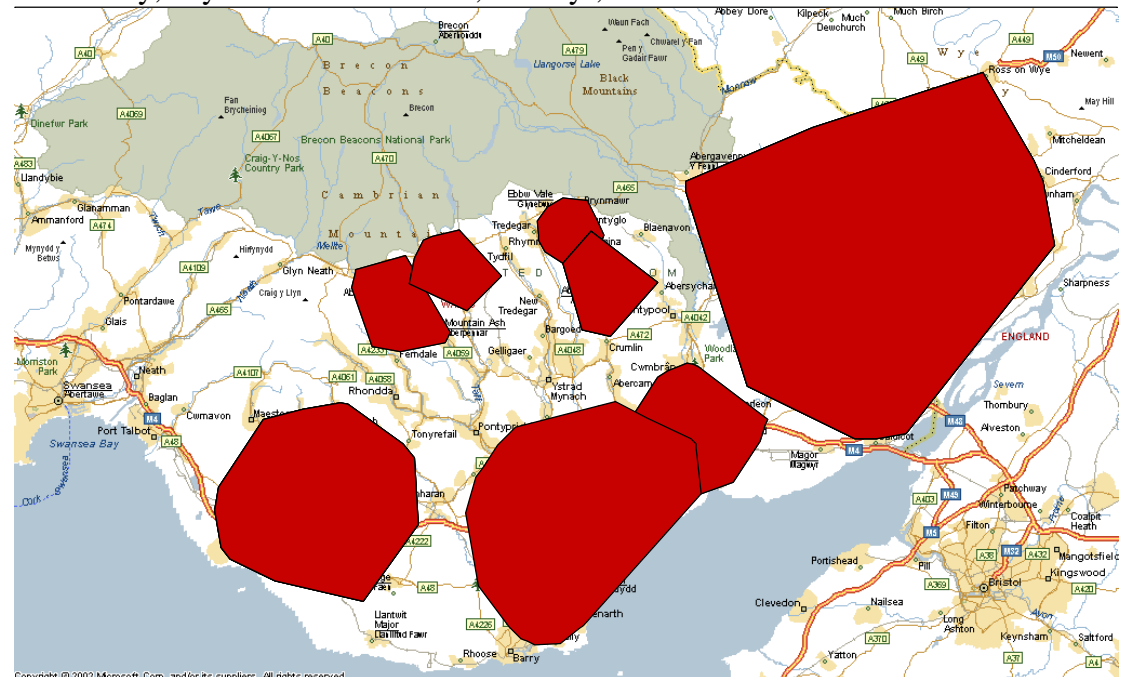


To identify Housing Market Areas the degree of self containment of movers is required, and this can be derived by selecting the required proportion of movers from specific origins. This was done by a batch process using an add on² to the GIS software, which produces a polygon of a pre-set level of self containment of destinations where the origins were within a selected area.

So all the movers with origins within the Cardiff urban area, for example, can be selected, and this data re-geocoded to the destinations. The area within which a specified proportion, say 70%, of these destinations fall is then determined by the software.

² A MapBasic programme originally designed for tracking animal ranges from sightings, Range Manager, was adapted for the purpose. It will produce some slight inaccuracy compared to manual selection as it counts each point as one, but as most Origin-Migration cells are rounded to 3 anyway, proportionately the result will be more or less the same. This was also tested and confirmed by comparison.

70% self containment of movers from Bridgend, Cardiff, Newport, Monmouth, Abertillery, Brymawr & Ebbw Vale, Merthyr, Aberdare

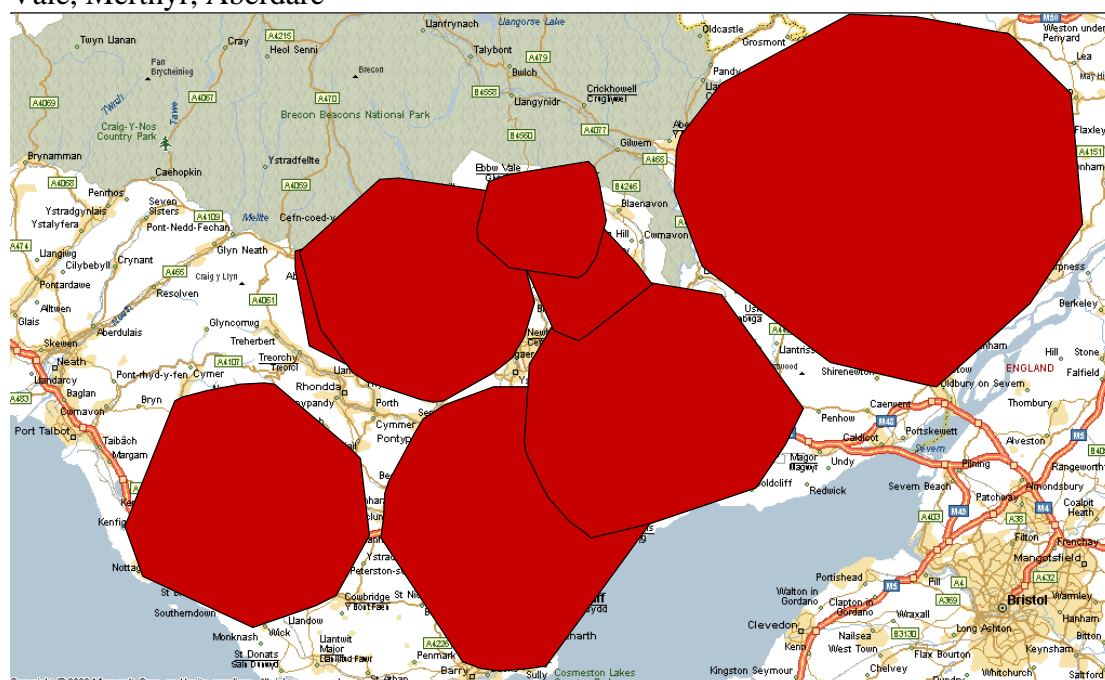


3.2.2 Travel to work areas (TTWAs)

The second method used to identify possible Housing Market Areas was travel to work patterns. Again, detailed data for this was obtained by the 2001 Census, showing the place of residence and workplace by Output Area for each Census respondent, but with rounding of small cell counts. This can then be selected and analysed in the same way as for migrations data.

TTWAs of 70% self containment, (70% of workers within the urban area live within the selected TTWA) , come out as similar in some respects and cases to migration patterns, but there are also noticeable differences, which also appear to be indicators of the different general characteristics of each HMA.

TTWAs of Bridgend, Cardiff, Newport, Monmouth, Abertillery, Brymawr & Ebbw Vale, Merthyr, Aberdare

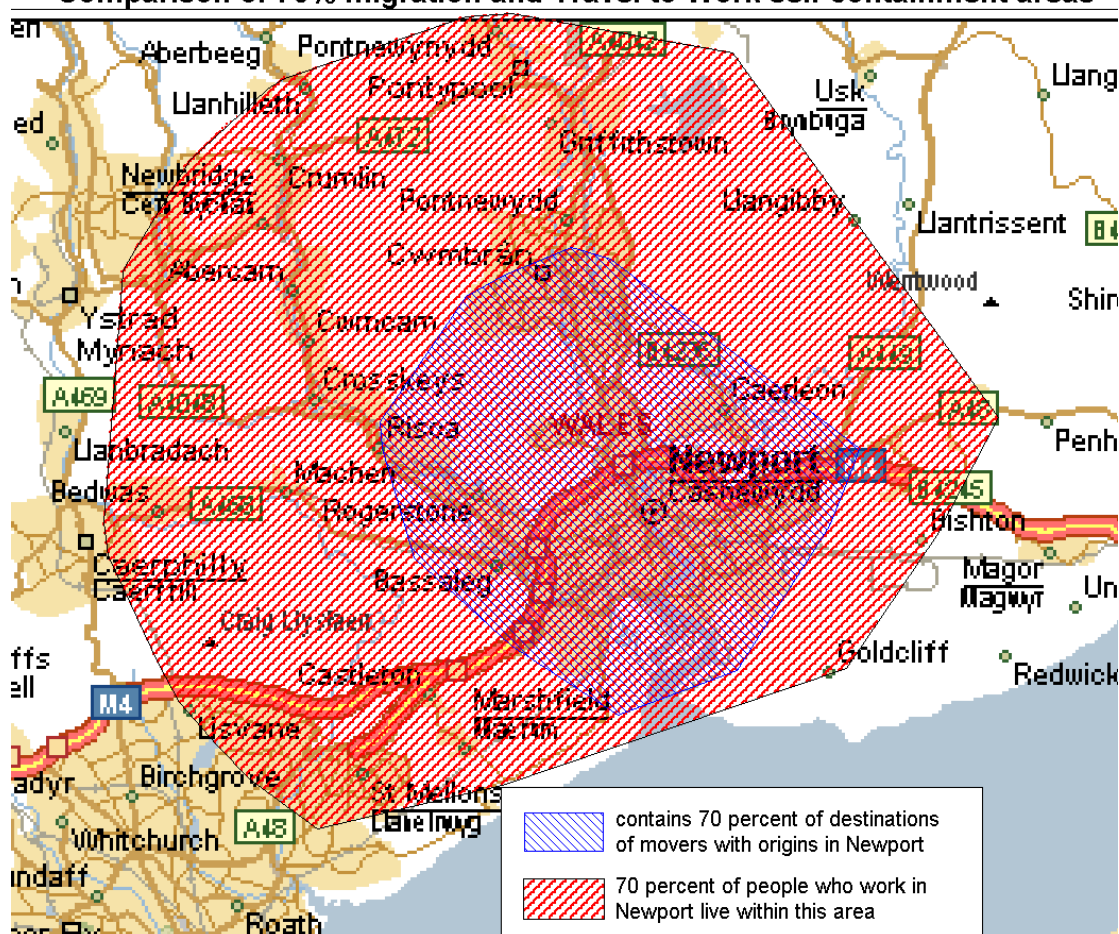


This pattern shows that while the 70% migrations areas for Newport is quite constrained, - an area of some 114 square kilometres stretching just less than 9km from the centre of Newport, the TTWA is much larger – 420 square kilometres stretching up to 16km from Newport centre. This is shown in the map below. The reasons for this need to be further explored through qualitative research and local knowledge, but may lie in the differences in incomes and house prices between the two cities.

It may be partly due simply to the Cardiff being a larger city, so that more people who work in it also live within it. A comparison of journey to work times might well also show that these are similar for Cardiff and Newport even though journeys into Newport are longer; – that is Cardiff has more traffic congestion. But households living in Newport are less able to move towards Cardiff, where house prices are higher.

Comparison of migrations and travel to work 70% self containment areas for Newport

Comparison of 70% migration and Travel to Work self containment areas



A possible hypothesis resulting from this is that the patterns of moves reflect the *relative economic resources of movers*, both in terms of income levels and the equity they are likely to have from the value of their property compared to the surrounding areas. So residents of Newport are less able to move into the relatively more expensive housing areas towards Cardiff or in the rural areas, but the residents of Cardiff generally have more purchasing power and equity, and hence more choice. However, this is merely a hypothesis that needs further testing.

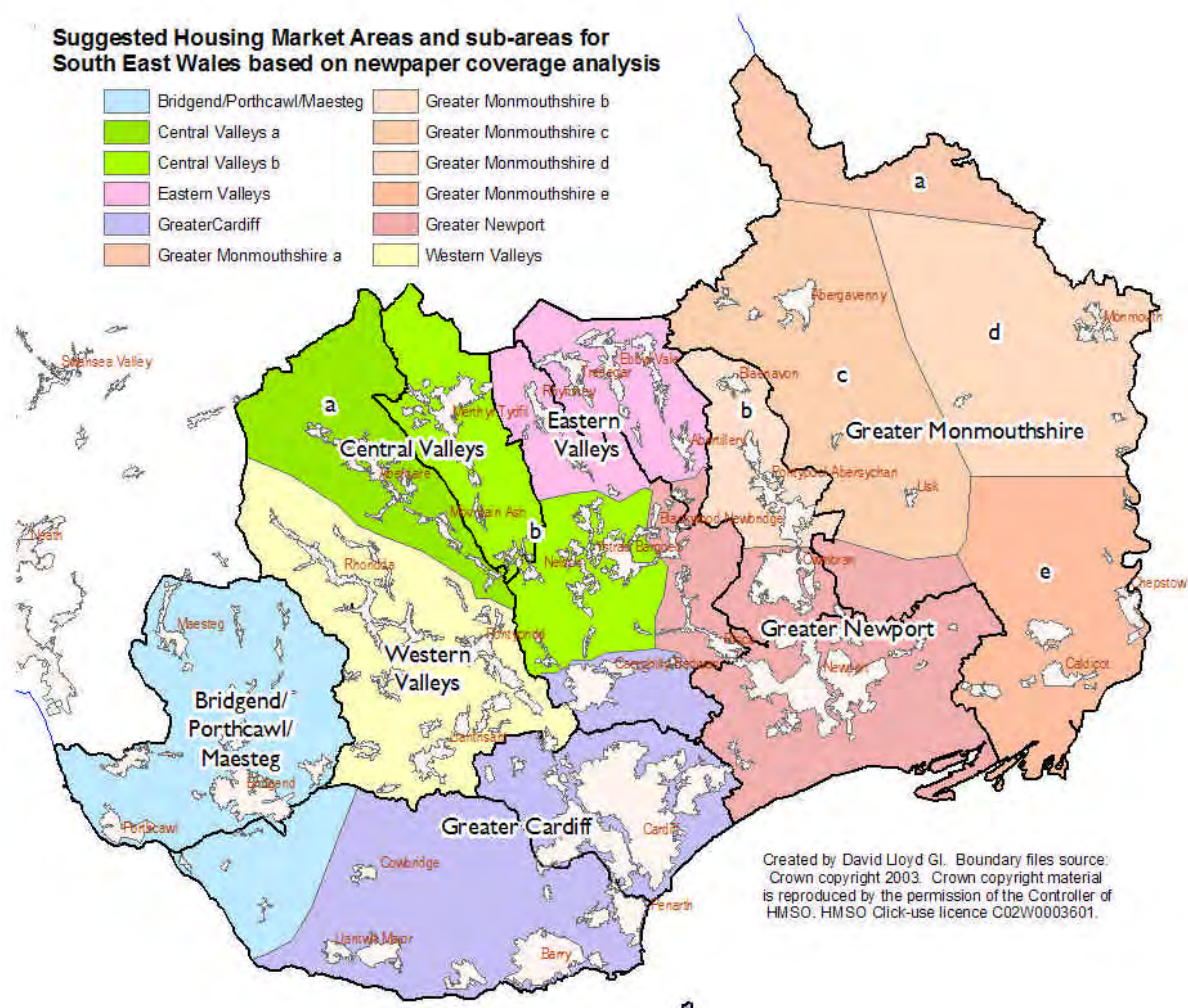
Another possible interpretation is that 70% self containment for movers is not a high enough figure to properly represent the functional housing market areas, but that a higher figure, perhaps 80% or more, might do so. This would appear to make sense in terms of behaviour, as households may be less likely and able to move as far from urban centres as they are able and willing to travel to work.

There is, however, no real check as to the validity of the outcomes except for the perceptions of those who know local housing markets well, and triangulation with other methods. This is considered further below.

3.2.3 Newspaper distributions

The third method used was to look at newspaper distribution patterns. This captures some of the information transmission and community affinity aspects of areas, as well as reflecting the geographic spread of advertisement for houses for sale. Availability of comprehensive data is a key reason for using this method. The Newspaper Society (www.newspapersoc.org.uk) is the “voice of Britain’s regional press” and it, along with the Joint Industry Committee on Regional Press research (JICREG) (www.jicreg.org.uk) proves a wealth of publicly available data aimed at helping advertisers target their expenditure.

The results are shown in the coloured areas in the map below, with local authority areas boundaries shown as black lines.



Unsurprisingly, this too is similar to migration and travel to work areas in some respects and for some of the major urban settlements, but also different in some cases. Again this may partly simply reflect the different data and method, but may

also provide useful evidence on the different characteristics of each area, and the nature of the housing markets within them.

3.2.4 Rental market areas

The fourth method was kindly provided by the Rent Service Quality and Redetermination Unit in Caernarfon. It is based on their identification of 'broad rental market areas' or 'localities' to assist in the statutory responsibility of the Rent Service to provide Local Reference Rent and Housing Allowance levels. These are the areas used to set the level of Local Housing Allowances that Housing Benefit claimants can get. It is summarized in several Rent Service publications - examples of which are given below.

We will tell the Housing Benefit Office what the Broad Rental Market Areas are called and which postcodes and neighbourhoods they include. There may be more than one Broad Rental Market Area for a council. Some of those Areas may overlap the council's boundaries. This is because the market for rented properties may not follow the council's area. We will say which postcodes are inside the boundary, and which are outside.

Welsh Assembly : Government Rent Officer and Housing Benefit in Conwy Pathfinder

The local reference rent is the midpoint of the range of rents for all types of property with the right number of rooms in the same 'locality' as your home. The 'locality' is a broad area with a number of neighbourhoods. Within this broad area there will be a mix of property types and alternative places to live within a reasonable travelling distance of similar public amenities.

The Rent Service and Housing Benefit

The means of defining localities and Broad Rental Market Areas is guided to some extent by legislation and regulatory orders. An identical description covers both.

"Broad rental market area"

4. *In this Schedule "broad rental market area" means an area.....–*

and

*(6) For the purposes of this paragraph and paragraph 5 "**locality**" means an area–*

(a) comprising two or more neighbourhoods, including the neighbourhood where the dwelling is situated, each neighbourhood adjoining at least one other in the area;

(b) within which a tenant of the dwelling could reasonably be expected to live having regard to facilities and services for the purposes of health, education, recreation, personal banking and shopping which are in or accessible from the neighbourhood of the dwelling, taking account of the distance of travel, by public and private transport, to and from facilities and services of the same type and similar standard; and

(c) containing residential premises of a variety of types, and including such premises held on a variety of tenancies.

The Rent Officers (Housing Benefit Functions) Order 1997

This 'definition' therefore mainly considers proximity of facilities and services. In practice it is strongly influenced by the local knowledge of Rent Officers working on the ground, who develop a good working knowledge of the local rental housing market areas. It is also influenced by the data they collect for their rental market evidence database.

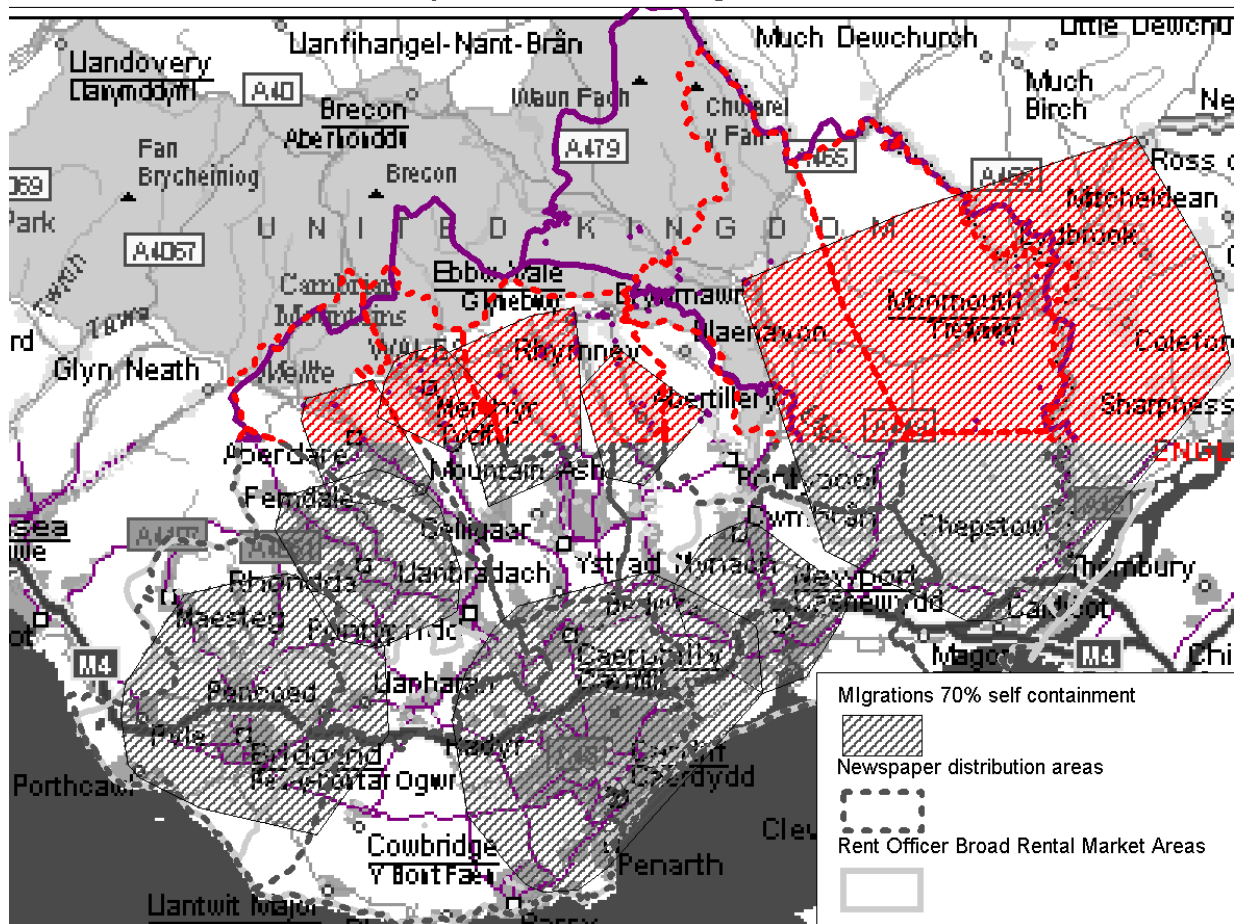
The Rent Service boundaries in the South East Wales area are currently as shown.



Again these are quite close to the HMA boundaries derived by the other methods, but again more so in some cases than in others.

The next step is to overlay these different HMA derivations to see how they compare. This can result in a very confused picture, especially when shown in a limited fixed size/paper medium, and is really best considered 'on screen' using GIS. However, it can be seen that there is a considerable similarity between the areas reached by the different methods.

South East Wales - comparison of 3 Housing Market Area derivation methods



The different methods used here for identifying housing market areas can be viewed interactively and separately as different layers in an on line SVG map³ at http://homepage.ntlworld.com/b.line/SEWRHF/SVG/HMAtypes/HMA_identification_methods.htm.

³ The map requires a free Adobe plug-in, similar to Acrobat Reader, to view it, available for free download at <http://download.adobe.com/pub/adobe/magic/svgviewer/win/3.x/3.03/en/SVGView.exe>. If your system firewall and security settings prevent downloading and installing, please ask the system administrator to install it. It is the same plug in as used by the Office for National Statistics for mapping – www.statistics.gov.uk.

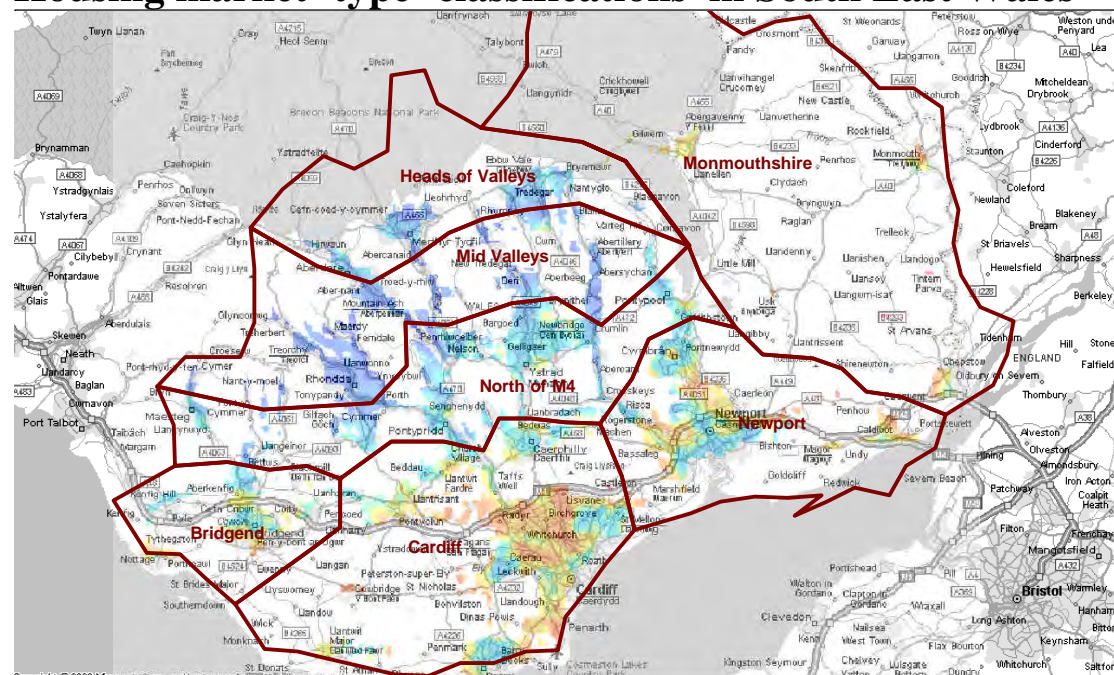
3.3 Types of Housing Market

As well as the *geographical* dimensions of Housing Market Areas in South East Wales, it is also be useful to categorise them by their general buoyancy or otherwise, resulting from the balance of supply and demand within them. Experience of housing market patterns over recent years has shown that areas may be in high demand, - with rising prices, increasing homelessness and overcrowding; or in low demand, - with static or falling prices, rapid turnover, and empty properties. These can also sometimes be quite close to each other, demonstrating that a generalised analysis based on boundaries such as local authorities which do not relate to real housing choices can be very misleading.

This relates very clearly to the economic infrastructure of the area, with Cardiff in the role of the powerhouse of growth and development, and the M4 corridor as the link between this and other key commercial centres to the east. It is based on the house price and sales patterns across the region.

This partly follows the geographical HMAs pattern for the major cities of Newport, Cardiff, and Bridgend and related settlements to the west; and for the more rural area of Monmouthshire. However the interpolated price patterns show similarities in pricing patterns to the north of the M4 corridor, the Mid Valleys, and Heads of the Valleys.

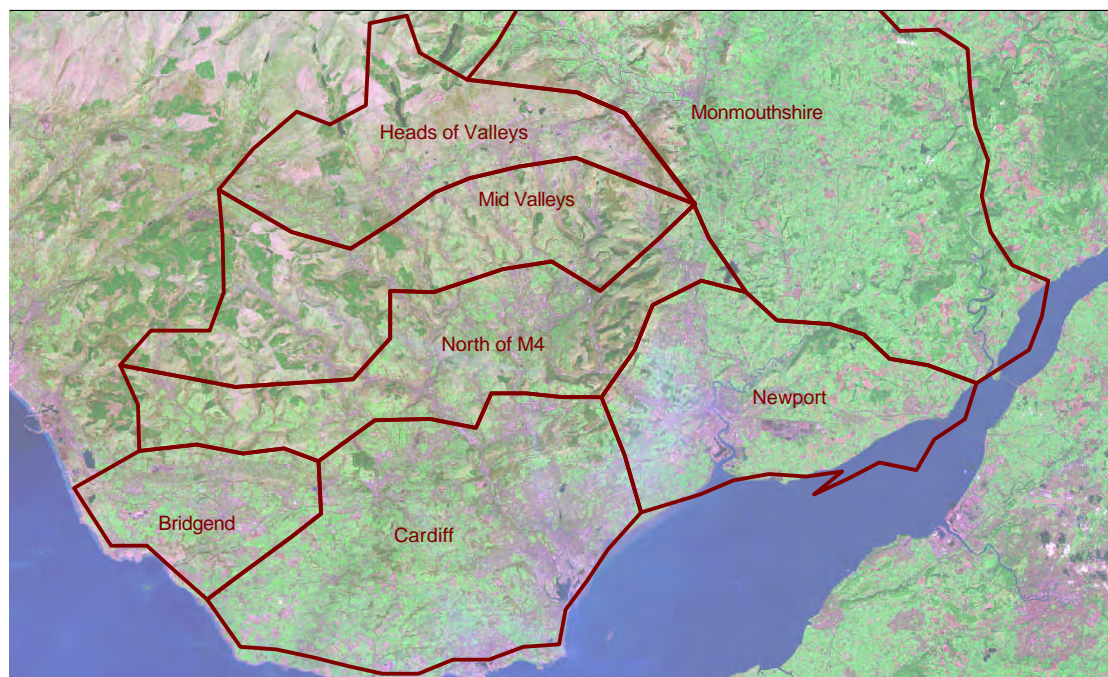
Housing market 'type' classifications in South East Wales



based on price patterns, physical geography, local knowledge, rent service localities

Those with local knowledge interpret these patterns as reflecting many factors within the different HMAs; including house prices, the supply/demand balance, economic activity, employment opportunities, ease of access, and prevailing types of housing stock.

Physical geography is also an important factor in this, as can be seen from the satellite picture (below) of the area compared to the housing market types pattern, showing how the hills and valleys help to create the market structure.



Satellite photograph from NASA Earth Science Applications Directorate

<https://zulu.ssc.nasa.gov/mrsid/>

The housing market type areas of Bridgend, Cardiff, Newport and Monmouthshire are essentially quite similar to their geographical HMAs, and are urban centred geographical housing market areas. The 'north of M4', 'mid valleys' and 'heads of valleys' areas can be conceptualised in different ways, by either:-

- dividing up the Broad Rental Market Area into different 'layers', changing as they progress up the valleys; or
- grouping them into geographical HMAs based on the major housing market indicators

These are merely different ways of conceptualising the same patterns, but the policy implications of it are that :-

- similar actions and interventions may work in these similar market types, **but**
- a particular action in one geographical HMA may not have any substantial effect on other HMAs, even adjacent ones, which are within the same market type, and
- interventions and changes in housing markets of different types, that is to the north or south, may be more likely to have an effect.

Even though the mid valley markets are of similar types, the separation between them is such that even action in an adjacent valley would probably not have much effect on the one next to it.

To interpret this on another level, it is essentially just showing that the ties within many mid valley areas are strong, so that communities and settlements are distinct and separate, even though they may be very similar and face very identical problems. Partly this may well be due to ties of community and local loyalties, but in housing market terms it also appears to be due to lower incomes and less equity in property restricting the ability to move out. Recent reporting adds social and human context to the patterns seen in the data :-

<http://society.guardian.co.uk/regeneration/story/0,7940,1477976,00.html> .

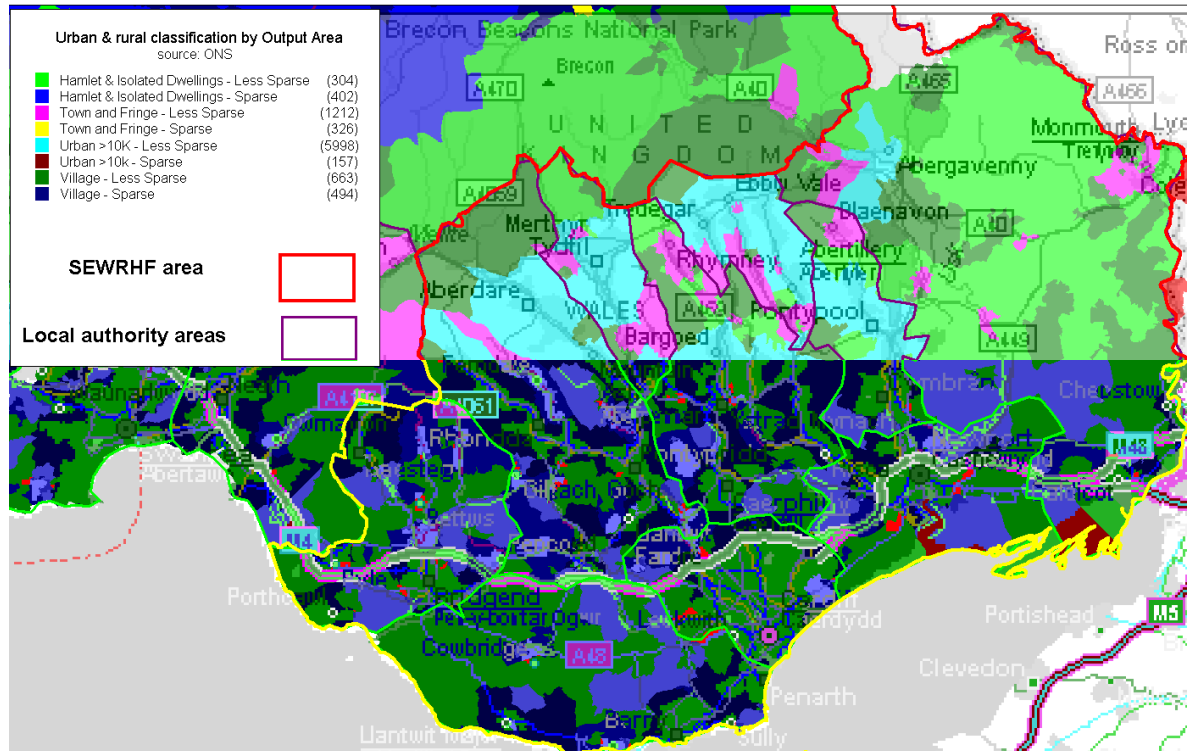
This suggests that the mid valleys need to be seen as geographically quite separate from each other to help assess the likely effects of policies and interventions.

So this also suggests that action in the north of the M4 or Heads of the Valleys markets may have an effect on the mid valleys markets, or action in the north of the M4 markets may affect the cities markets. However, this could be both positive and negative - for example providing more affordable housing in the Heads of the Valley might pull some population out of the Mid Valleys, causing possible decline. Providing lower cost housing for sale in the north of M4, provided transport links to it are good, could ease pressure on the cities markets.

Urban and rural dimensions

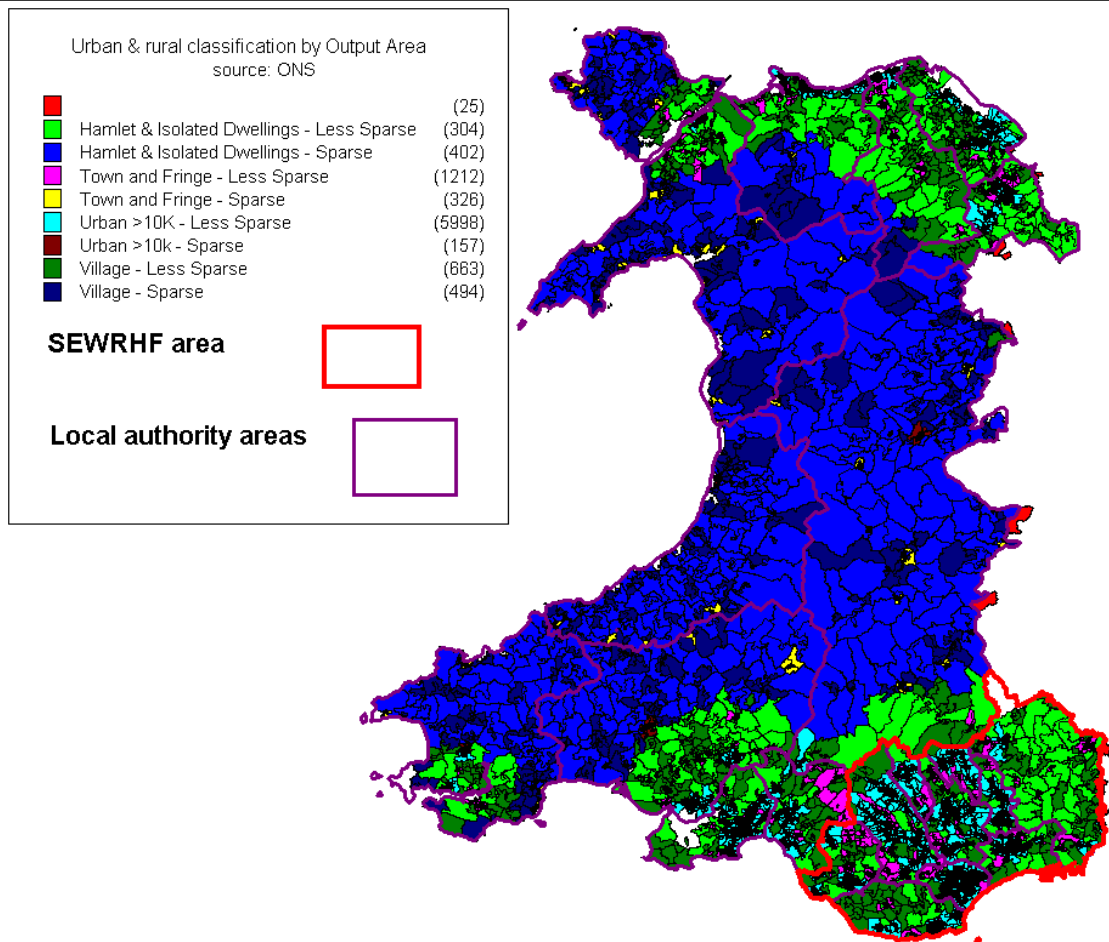
A further dimension of housing markets in the sub region is their urban/rural classification. The method of classification was recently reviewed and revised by a project jointly sponsored by Department of the Environment, Food and Rural Affairs, Office of the Deputy Prime Minister, Office of National Statistics and the Welsh Assembly Government. The resulting classifications of the study area are shown in the map below.

South East Wales - urban/rural classification by Output Area



Much of South East Wales is urban or less sparse villages. This contrasts with much of the rest of Wales, which is classified as very rural until reaching the north. This again reflects how widely differing housing market areas are compressed into a relatively small area, but the physical geography and transport systems do not necessarily mean that imbalances are easier to overcome than where distances between different types of market are much greater, as in the commonly alleged English 'north/south' split.

Wales - urban/rural classification by Output Area



The new urban/rural classification also suggests that the best area within which to study and analyse the wider housing market would be somewhat larger than the South East Wales Regional Housing Forum area of 10 local authorities, and would cover the urban and related semi rural areas shown hedged in green in the map above. This would also include the local authorities of Neath & Port Talbot, Swansea and at least part of Carmarthenshire.

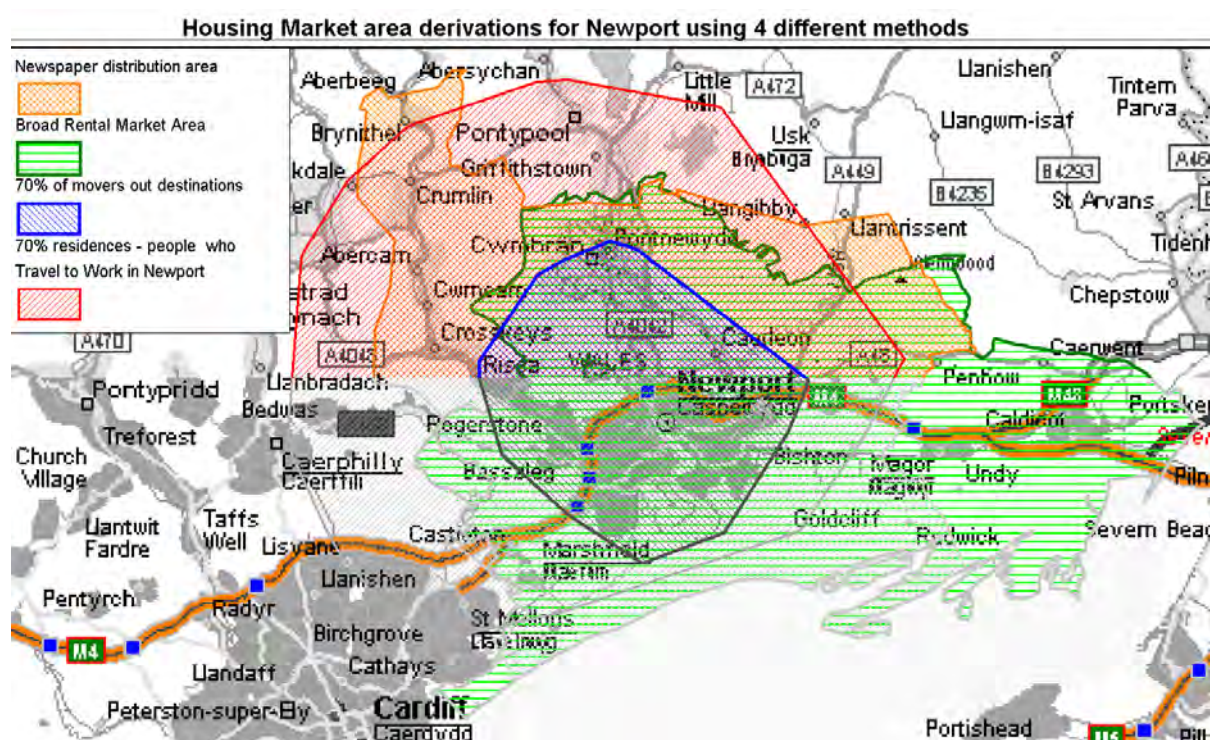
This area is quite unusual in housing market terms in being clearly bounded by more rural areas to the west in Carmarthenshire, and to the east in Monmouthshire. The impact of Bristol and the M4 corridor clearly needs to be taken into account, but this is relatively straightforward compared to complex, multiple influences in other regions.

3.4 Identifying the best housing market areas to help make better policy

The analysis above demonstrates how the data evidence from different sources, and use of different methods, produces reasonably similar results for the extent of housing market areas in the South East Wales region; - but also results in differences in some notable respects.

These variations also appear to reflect real differences in the underlying factors, characteristics and drivers applying in these different housing market areas. These are likely to be helpful in helping to understand how housing links with other variables, such as employment, incomes, transport, socio-economic profiles, and so on. This means that fixed defined housing market areas may not be the best way of making better policy. HMAs are ultimately simply conceptual devices to help understand the mass of widely variable data, and making them too fixed and rigid may actually prevent progress in understanding and making effective policy.

However, this also raises questions of why these differences occur, how the various factors interact, and what they mean for policy and interventions. An example is the Newport 70% migrations and travel to work areas considered above. All four methods are shown for comparison in the map below.



The 70% Travel to Work area and Newspaper distributions and Broad Rental Market areas concur reasonably well. The Broad Rental Market Area penetrates eastwards much more, but is restricted to the west because it cannot by definition encroach on what is clearly the Cardiff Broad Rental Market. The Newport 70% TTWA is not constrained in this way, and can and does overlap extensively with the Cardiff 70%

TTWA. However, these overlaps could be important for some aspects of housing policy.

The smaller 70% self containment of migrants probably reflects the purchasing power of Newport movers compared to others around them from the higher priced Cardiff and rural areas. This suggests that to achieve a better balance of housing market areas the Newport market should move closer in relative overall price to Cardiff and the surrounding areas. This does not of course mean that Newport prices should necessarily increase, but rather that others need to stabilise or even fall until it catches up. This in turn may also relate to differential business and commercial growth, resulting in increased polarisation, and have implications for policy on promoting economic growth. It could also mean, for example, that Newport should seek to expand its proportion of more up market housing and concentrate on renewal, while Cardiff needs to increase its overall supply, especially of affordable housing.

This finding also suggests that migration self containment patterns are not always the best way of identifying housing market areas which will help make better policy. Since this depends on the ability of movers to afford or obtain the housing they want, the resultant 70% area is constrained by the characteristics of the HMA, which do not reflect the optimum or actual area for Travel to Work, or the natural connections and affinities of the area. Providing housing in the larger TTWA or Newspaper distribution areas around Newport would therefore appear from the evidence to be more likely to meet the needs and aspirations of households who live or work in the city. On balance, therefore, for most purposes the Travel to Work areas or economic and community activities areas based around major cities and towns would appear to be the best means of identifying geographical housing market areas.

However, it may be that these differences also mean that the optimum housing market area to use will depend on *what it is for*. This could well mean that policy making may need to become more localised and sophisticated, but the costs of getting housing provision or interventions wrong, or not using the resources available to best effect, far outweigh those of a more aware, subtle, rational and evidence based approach.

Housing market types and local authority policy making

As understanding and analysis of housing markets improves, a mismatch increasingly becomes apparent between the patterns and interactions identified by this and the policy making units of local authorities. This usually results in attempts at better co-ordination of policy by improved liaison and communication between local authorities through regional forums, meetings and exchange of information. This is clearly valid and necessary, but often also very time and resource consuming.

A way of making this liaison more efficient and effective is to use the same data and information base, and to present and aggregate this data through the same analytical framework. A number of options have been presented and discussed above.

In the context of the South East Wales sub region, at this stage in the process of improving understanding and developing cross local authority working and policy development, the classification based on types of housing market, rather than categorised just by geographical area, may be a more useful way of making progress.

The distinctions drawn between the different *types* of housing market were classified as:-

- Heads of the Valleys,
- Mid Valleys,
- North of M4 corridor,
- Three urban based areas, - Bridgend/Porthcawl, Cardiff and Newport,
- Rural Monmouthshire .

These can then be applied to each local authority, most of which run north-south along the valleys and so often include several of the different types of market. This results in a series of subdivisions which can be used to analyse and present data, which gives a more consistent basis for comparison.

The way these divisions cut across the local authority areas can be seen in the following map. The subdivisions provide a framework that is more consistent with the pattern of housing markets, for analysing data, which brings out the differences between variables in different housing market types within the same local authority

Housing market types subdivisions of local authority areas

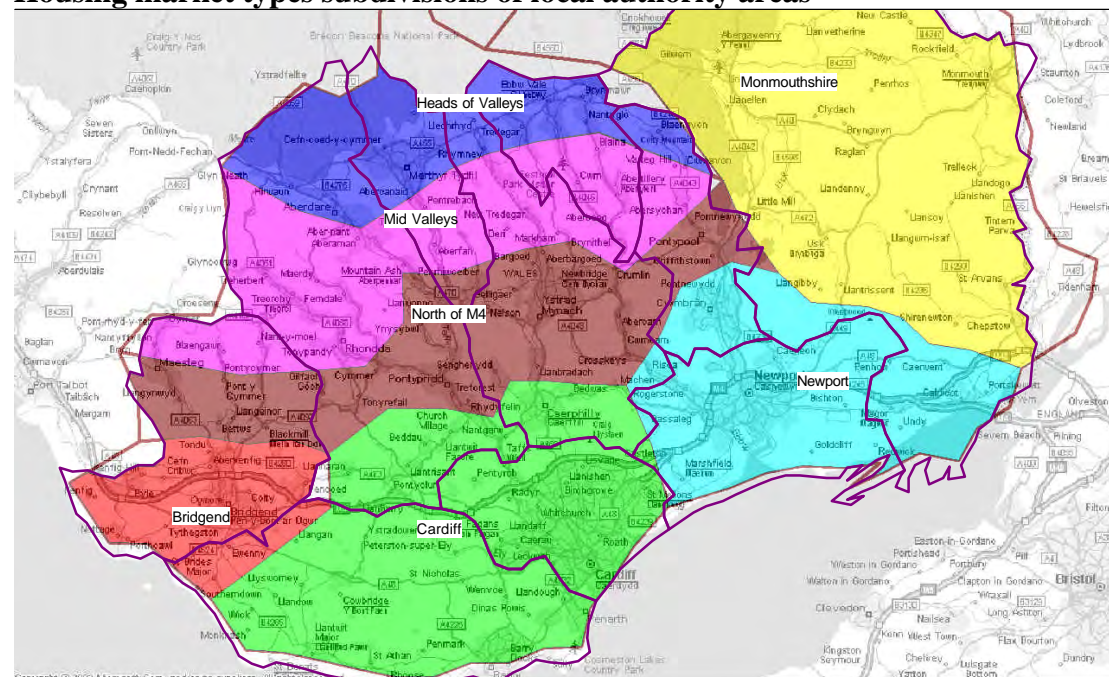


Table – house prices by housing market type within local authority areas

Type of housing market and LA area	detached	flat	semi	terraced	overall
Bridgend HMA in Bridgend	£ 170,742	£ 63,991	£ 109,552	£ 88,527	£ 119,718
Bridgend HMA in Vale of Glamorgan	£ 263,367		£ 210,917	£ 186,148	£ 238,424
Cardiff HMA in Caerphilly	£ 177,637	£ 85,359	£ 108,473	£ 92,832	£ 120,374
Cardiff HMA in Cardiff	£ 235,006	£ 117,712	£ 158,928	£ 136,126	£ 154,430
Cardiff HMA in RCT	£ 178,216	£ 79,770	£ 102,639	£ 92,327	£ 125,290
Cardiff HMA in Vale of Glamorgan	£ 245,297	£ 116,008	£ 149,302	£ 115,834	£ 153,914
Heads of Valleys type in Blaenau Gwent	£ 131,252	£ 27,781	£ 67,099	£ 54,700	£ 67,354
Heads of Valleys type in Caerphilly	£ 149,000		£ 62,750	£ 50,224	£ 58,764
Heads of Valleys type in Merthyr	£ 135,525	£ 32,313	£ 71,500	£ 51,108	£ 65,217
Heads of Valleys type in RCT	£ 144,275	£ 19,217	£ 74,966	£ 52,218	£ 77,615
Heads of Valleys type in Torfaen	£ 101,878	£ 37,750	£ 68,050	£ 61,721	£ 65,909
Mid Valleys HMA type in Blaenau Gwent	£ 128,038	£ 20,375	£ 62,894	£ 48,838	£ 55,938
Mid Valleys HMA type in Bridgend	£ 105,063	£ 18,333	£ 49,606	£ 47,377	£ 49,044
Mid Valleys HMA type in Caerphilly	£ 117,992		£ 61,589	£ 47,541	£ 54,109
Mid Valleys HMA type in Merthyr	£ 92,286		£ 62,535	£ 39,093	£ 43,068
Mid Valleys HMA type in RCT	£ 101,340	£ 28,413	£ 63,675	£ 44,158	£ 48,073
Mid Valleys HMA type in Torfaen	£ 144,553	£ 40,750	£ 93,600	£ 78,041	£ 93,156
Monmouthshire HMA type in Monmouthshire	£ 252,459	£ 110,103	£ 147,565	£ 132,280	£ 181,266
Newport HMA in Caerphilly	£ 141,421	£ 49,000	£ 84,574	£ 78,528	£ 83,258
Newport HMA in Monmouthshire	£ 214,833	£ 85,740	£ 128,731	£ 119,449	£ 165,321
Newport HMA in Newport	£ 201,799	£ 78,129	£ 125,881	£ 93,805	£ 126,377
Newport HMA in Torfaen	£ 207,410	£ 60,365	£ 96,626	£ 84,526	£ 117,464
North of M4 HMA type in Bridgend	£ 143,995	£ 25,250	£ 76,103	£ 66,847	£ 78,967
North of M4 HMA type in Caerphilly	£ 150,940	£ 52,462	£ 88,069	£ 72,009	£ 88,300
North of M4 HMA type in Merthyr	£ 154,667		£ 79,781	£ 55,819	£ 76,703
North of M4 HMA type in RCT	£ 141,676	£ 56,803	£ 85,939	£ 62,688	£ 73,783
North of M4 HMA type in Torfaen	£ 150,442	£ 51,996	£ 107,416	£ 79,992	£ 97,666
overall	£ 202,073	£ 106,585	£ 120,919	£ 87,224	£ 118,710

So, for example, house prices in Rhonda, Cynon, Taff are most markedly different in the Cardiff HMA area to those in the mid Valleys area.

Table – price differences within RCT in different housing market types

Type of housing market and LA	detached	flat	semi	terraced	overall
Cardiff HMA in RCT	£ 178,216	£ 79,770	£ 102,639	£ 92,327	£ 125,290
Mid Valleys HMA type in RCT	£ 101,340	£ 28,413	£ 63,675	£ 44,158	£ 48,073

These subdivisions have been used in presenting the data for profiles of each local authority area. Using them may help enable the differences within and similarities between local authorities to be seen in the different variables. In essence, this basically reflects that the housing market type structure runs east-west, while the policy unit structure runs north-south. It is a partial and interim subdivision to some extent, as it does not fully differentiate the housing market types; but it does apply it to the existing policy units of local authorities

Interpreted through local knowledge, this could lead to a better focus on key factors, which will not be just housing related, but should include employment, transport, age profiles, socio-economic classifications, and so on. Addressing the issues may not

become any easier, but it may assist in setting objectives for moving towards a better balance within communities and housing markets.

3.5 Characteristics of Different Housing Market Types

The following section draws attention to the characteristics of the seven housing markets identified by the study. Observations about the characteristics of each of the housing markets are made using data found at:-

<http://homepage.ntlworld.com/b.line/SEWRHF/localitydata>

This analysis uses data from the 2001 Census, CACI Paycheck and the Land Registry.

Each housing market is described in turn prior to the grouping of these markets into similar types.

3.5.1 Cardiff Housing Market

The area of the Cardiff housing market crosses four local authority areas and has a population of 495,864 people contained in 207,085 households, with an average household size of 2.39 persons. It is the largest of the housing markets in South East Wales. In terms of the age structure of the population, this market can be described as relatively young. It contained a high proportion of people under 20 (26.7%), a relatively high proportion of those aged 20-30 (14.5%) and a relatively small population of people aged over 65 (12.0%). In terms of household types the area had a high proportion of single person households (28.4%) and a high proportion of lone parent households (11.3%). The area's working age population includes a high proportion of households in occupation groups 1 and 2 (8.9%) and the lowest proportion of people with a long-term limiting illness in the region (19.5%). The mean average income was the highest in the region (£34,172) – substantially above the regionally average. The population demonstrates a high rate of mobility with only 79.1% of movers in the housing market area remaining within the area (defined as remaining in the housing market area of the local authority in which they were resident prior to moving).

The Cardiff Housing Market Area has the largest private rented sector in the region (8.1%), a high proportion of semi-detached homes (34.4%) and the largest proportion of flats in South East Wales (15.8%). At the end of the first quarter of 2005 the area had the third highest average house price in the region (£144,528), considerably higher than the regional average. House price increases in the area were strongest between 2001 and 2004, with annual increases of 19.9%, 16.3% and 17.6% respectively. However, between 2004 and 2005 the rate of increase fell to just 4.4%.

The market can be characterised as affluent with a generally younger population, a good mix of house types and tenures and relatively high house prices.

3.5.2 The Bridgend Area Housing Market

This crosses three local authority areas and contained a population of 89,149 in 37,699 households, with an average household size of 2.36 persons (the average for South East Wales as a whole). In terms of age structure, the population contained a

high proportion of people aged 30-65 (47.6%). In 2001 the area had a relatively high proportion of pensioner households (10.2%) and the highest proportion of households containing a couple and dependent children (23.1%). The area's working age population contained a high proportion of households in occupation groups 1 and 2 (6.5%). At £34,370, the area has the highest crude mean income of all the areas in the Region. The population demonstrates a high rate of mobility, with only 80.2% of movers in the housing market area of their origin.

The Bridgend area has the highest level of owner-occupation (78.3%) and the lowest rate of social rented housing (14.2%) in the region. In terms of housing type, the area has the highest proportion of semi-detached properties in the region (44.9%) and a relatively low proportion of terraced homes (18.5%). At the end of the first quarter of 2005 the area had an average house price of £165,367, which was the second highest in the region (after Monmouthshire), and considerably higher than the mean for South East Wales as a whole (£123,525). House price increases in the Bridgend Housing Market Area were strongest between 2001 and 2004, with annual increases of 23.1%, 14.4% and 21.6% respectively. Between 2004 and 2005 the rate of increase fell to 5.5%, although behind this headline figure the price of terraced and semi-detached homes in the area fell by 6.2% and 14.8% respectively.

The Bridgend area can be characterised as affluent, with a good mix of house types and high house prices.

3.5.3 Newport Housing Market

The Newport Housing Market Area stretches across four local authority areas and contained 220,170 people living in 93,225 households, with an average household size of 2.36 persons. In terms of its age structure, the Newport Housing Market Area's population is relatively youthful, with the highest proportion of the population of any of the market areas under 20 (27.2%) and a relatively low proportion of people aged 65 and over (16%). In terms of household type the area contains a high proportion of couples with dependent children (22.7%) and single parent households (11.5%), and a low proportion of pensioner households (8.6%). The area's working age population contained a high proportion of those employed in routine and semi-routine occupations (34.7%) and low proportions of people who had never worked (2.9%) and the long-term unemployed. However, over a fifth (21.6%) had a long-term limiting illness. The area's mean household income of £29,006 was slightly higher than the regional average. The population of the Newport Housing Market Area demonstrates a degree of mobility broadly in line with the regional average (82.5%), with a slightly higher proportion of workers (84.7%) remaining within the area.

This area has the second highest proportion of social rented housing (22.3%) and the lowest proportion of privately rented accommodation (4.1%) in the region. The area has a good mix of different house types, though with a relatively high proportion of flats (13.5%). At the end of the first quarter of 2005 the area had an average house price of £130,744, which was the closest of all of the housing market areas to the regional average. The price of homes increased most in 2002-03 (23.1%) and 2003-04 (21.2%), though it has been much more modest since then (6.2% in 2004-05).

The Newport Housing Market Area can be characterised as one with a relatively youthful population, balanced in terms of house type and tenure, and where house prices are closest to the regional average.

3.5.4 North of the M4

The North of the M4 Housing Market Area takes in parts of five local authority areas and contained 232,812 people resident in 98,447 households, with an average household size of 2.36 persons. The area had a relatively youthful population, with high proportions of those aged under 20 (26.2%) and between 20 and 30 (12.3%), with 15.8% of its population aged 65 and over. In terms of household type the area has relatively high proportions of couples with dependent children (22.6%) and lone parent families (11.5%) and a low proportion of pensioner households (8.6%). The area's working age population contained a low proportion of those in occupation groups 1 and 2 (4.2%) and the highest proportion of those in routine or semi-routine occupations (26.5%). A high proportion of people were affected by long-term limiting illness (26.7%). The area's crude average household income (£27,934) was slightly lower than for the region as a whole. The population of this area demonstrates a lower rate of mobility than the regional average, with 87% of movers remaining in the area.

The North of the M4 Housing Market Area contains a high proportion of owner-occupier households (73.1%). It also has a relatively high proportion of terraced houses (43.6%) and a low proportion of detached properties (13.4%). At the end of the first quarter of 2005 the area had an average residential property price of £94,144 – significantly lower than the average for the region as a whole. As with the other valley housing market areas, house price increases have been a relatively recent phenomenon, with prices increasing on average by 27.9% in 2004-04 and by 13.8% in 2004-05.

This housing market area can be characterised as one with a relatively youthful population, a high rate of owner-occupation, but with average house prices below the regional mean.

3.5.5 Mid Valleys Housing Market

This housing market area stretches across five local authority areas and contained 159,506 people in 70,956 households, with an average household size of 2.24 persons (the smallest in the region). In terms of the age structure of the population this area had a high proportion of people aged 65 and over (17.2%) and a low proportion of these in their 20s (11.2%). The area also had a high proportion of single person households (29.2%), single pensioner households (16.6%) and lone parent families (12.7%) and a relatively low proportion of couples with dependent children (20.9%). In comparison with other housing market areas, the Mid Valleys area contains the lowest proportion of households in occupation groups 1 and 2 (3.0%), relatively high proportions of people in routine and semi-routine occupations (24.8%), those who have never worked (4.0%) and the long-term unemployed (1.2%). The area also contains the highest proportion of people in the region with a long-term limiting illness (30.5%). Given this profile, it is unsurprising that the area's average

household income is the lowest in the region. The population demonstrates a low rate of mobility, with 91% of movers remaining within the area.

The area is characterised by an exceptionally high proportion of terraced housing (68.8%) and very low proportions of both detached (6.6%) and semi-detached (16.2%) properties. At the end of the first quarter of 2005 this area had the lowest average house price in the region (£61,957) – less than half the regional average. Annual price increases have been experienced throughout the period 2001-2005, but in the last two years increases have accelerated, prices growing by 33.9% in 2004-04 and 22.9% in 2004-05.

The Mid Valleys Housing Market Area can be characterised as one with a relatively older and economically disadvantaged population, where house prices are significantly lower than for South East Wales as a whole, although they have increased over the last two years.

3.5.6 Heads of the Valleys Housing Market Area

This area covers parts of six different local authority areas in South East Wales and contained 111,548 people in 49,527 households, with an average household size of 2.25 persons (significantly lower than across the region as a whole, and similar to that for the Mid Valleys area). In terms of age structure, the area has a high proportion of those aged 65 and over (17.1%) and a low proportion of people in their 20s (10.7%). The area has the highest proportions of single person households (29.8%) and lone parent families (13.1%) in the region, a high proportion of single pensioner households (16.2%) and the lowest proportion of couples with dependent children (20.6%) in the region. The area's working population contained the highest proportions of those who had never worked (4.3%) and the long-term unemployed (1.5%) in the region, and a high proportion of those in routine/semi-routine occupations. The area also has a high proportion of people with a long-term limiting illness (29.1%). The area's average household income (£23,703) is substantially below the regional mean and its population demonstrates a relatively low rate of mobility (though not as low as in the Mid Valleys area), with 87.4% of movers remaining within the area.

This housing market area has the highest proportion of social rented housing (27.8%) and the lowest level of owner-occupation (63.5%). The area has a relatively high proportion of terraced homes (46.2%) and relatively low proportions of other types of housing. At the end of the first quarter of 2005 this area had the second lowest average house price in the region (£86,417), although significantly above the average in the Mid Valleys area. House prices experienced a rapid increase between 2003 and 2004 (34.8%), although this has slowed considerably in 2004-05 to just 11.3%.

The Heads of the Valleys Housing Market Area, like the Mid Valleys Area, can be characterised as one with a relatively older and economically disadvantaged population. There are imbalances in the housing market in terms of house type and tenure, and whilst average house prices increase rapidly in 2003-04, the evidence suggests this has been much less apparent since.

3.5.7 Monmouthshire Housing Market Area

This final housing market area is the smallest in the region in terms of population (61,135 people in 27,035 households, with an average household size of 2.26 persons) and the largest in terms of geographical area, covering the rural areas of Monmouthshire. In terms of its age structure, the population of the area is relatively elderly, with almost 20% aged 65 or over and only 23.6% of the population under 20 (and 8.1% aged in their 20s). The area has the highest proportions of pensioner households (11.5%) and couples without dependents (19.5%) and the smallest proportion of lone parent household (7.9%) in the region. Unsurprisingly, it has the highest proportion of people in occupation groups 1 and 2 (9.9%) and the lowest proportion of those in routine and semi-routine occupations (17.9%).

Compared with the other housing market areas in the region it also has the lowest proportions of those who have either never worked (1.8%) or are long-term unemployed (0.8%). The area also has a relatively low proportion of people with a long-term limiting illness. The area's average household income (£32,976) was the second highest in the region (after the Bridgend area) and the population demonstrates a high degree of household mobility, with only 67.7% of movers remaining in the area.

The Monmouthshire Housing Market Area has a high proportion of owner-occupied housing (74.7%) and a correspondingly low level of social rented accommodation (14.9%). There is a high percentage of detached homes (43.8%) and a low proportion of terraced housing (18.5%), and at the end of the first quarter of 2005 the average house price in the area was £190,292 – significantly higher than the regional mean. Residential prices increased by 18.9% in 2001-02 and 17.6% in 2002-03, but the rate of increase has since slowed, being just 4.9% in 2004-05.

The area can be characterised as one with an affluent older population, with an owner-occupied market which is relatively expensive.

3.5.8 Comparing Housing Market Areas

In some cases there are similarities between the different housing markets that allow them to be paired with one another.

The Cardiff and Bridgend Housing Market Areas show significant similarities in terms of their population profiles, household incomes and average house prices. A further similarity between the two housing market areas is the pattern of house price movement, in that between 2001 and 2005 house prices increased at similar levels and at similar times, before reducing between 2004 and 2005.

The Monmouthshire Housing Market Area shares many of the characteristics of the Cardiff and Bridgend areas in terms of the scale and timing of house price change, although the downturn in price increases occurred a year earlier than in the Cardiff and Bridgend housing markets. However, in terms of the profile of its population and housing stock, the area is unique within South Wales. Its mean house price is considerably higher than the averages in both the Cardiff and Bridgend Housing Market Areas.

The Housing Market Areas of Newport and North of the M4 can also be compared. Both have similar profiles in terms of their population (relatively youthful), low proportions of their working age population in occupation groups 1 and 2 (and relatively high proportions in routine and semi-routine occupations). Average household incomes for the two areas are not dissimilar (and close to the regional mean) and housing stock profiles are also quite similar. The only significant difference between the two is in house price movement, with Newport showing an earlier growth in prices between 2001 and 2004, before declining to just 6.2% increase in 2004-05. In this respect the Newport Housing Market Area more closely resembles Cardiff and Bridgend, whereas the North of the M4 Housing Market Area shows patterns similar to the two other Valley Housing Market Areas considered below.

The Heads of the Valleys and Mid Valleys Housing Market Areas have similar profiles in terms of population, with both exhibiting significant economic disadvantage reflected in low average household incomes. In terms of housing stock, the Heads of the Valleys area has a greater proportion of social rented housing, but both areas are dominated by terraced housing. The growth in house prices has come later in both these housing market areas than elsewhere in the South East Wales region, but given the relatively low base of housing prices the rate of growth has been greater than in other areas. Evidence from the more qualitative aspects of the research suggests that the relatively recent growth in house prices in both these areas may have been fuelled, at least in part, by “buy-to-let” and speculative investment in some of the cheapest properties in the region. The rate of house price growth in both areas has appeared to slow in 2004-05, reflecting recent trends elsewhere in the region.

3.6 Submarket structures

Housing market areas in any settlement of moderate size are usually not homogeneous, but can be seen as consisting of *housing submarkets*. This concept is not commonly used as yet, but is derived from economic principles of supply and demand, with a quite extensive literature (e.g. Adair 1996, Bourassa et al 1999 & 2002, Pryce 2004). Submarkets are essentially areas within which properties are *substitutable*:- that is properties within the same submarkets will compete directly with each other, whereas properties in different submarkets will not be seen by a home hunter household with particular characteristics as equivalent, and will not directly compete with each other.

Submarkets may also be non contiguous, so that areas on opposite sides of a city may effectively be in the same submarket. In its economic analysis context the term has a more precise technical meaning, but the concept may also be useful more generally in understanding housing patterns and trends, and in making policy.

The submarkets concept may also capture *housing search behaviour* by households seeking a move or new housing, and in general use may often reflect areas that are recognised by local residents, or as areas used by Estate Agents in advertising properties. That is households will search in particular areas – the submarkets - , which are commensurate with their circumstances such as lifestyle, lifestage, and what they can afford or obtain, but will not search in other submarket areas which they consider unattainable or do not want for whatever reasons.

Submarkets are considered to be of importance for housing policy because an action or intervention in one submarket could have an effect in what is effectively another part of that same submarket, but perhaps some distance away in a non contiguous or even different local authority area. So providing, changing or demolishing housing in one location may have an effect on demand in another location, perhaps some distance away. The effect could, over perhaps a surprisingly short period, markedly reduce demand elsewhere.

This is shown by the outcomes of additional social housing provision in some areas of the north of England, which arguably added to low demand patterns and led to the need for Pathfinder interventions. It can also be seen in supply and demand patterns for specific types, such as accommodation for older people, which created its own submarket, and where lack of awareness of the wider supply and demand effects has led to difficult to let stock in this category in many areas.

Submarkets may also be relevant in moving towards more balanced communities and housing markets, in that any wider housing market area may require a mix of submarkets which will meet the needs *and* reasonable aspirations of the different socio-economic groups necessary for a properly functioning local economy.

For example, as well as affordable, entry level housing being necessary, if higher quality housing of the right size, type, tenure and attainable price is not available for households with higher incomes, such as those in the professional and managerial socio-economic group, they will eventually move to areas where such housing is available, or alternatively will commute long distances to their place of work. A

range and balance of housing types within the submarkets that they create will be needed to avoid this. Housing markets in settlements of any size are unlikely ever to become a homogeneous mix, as they start from the current position of segmentation and polarisation. In any event, such a situation, even if it were achievable, could well have unintended consequences which cannot yet be imagined.

Analysis using the submarket concept can also be useful as a diagnostic aid for key drivers in local housing markets. For example, when prices vary mainly according to factors more intrinsic to the properties themselves, such as type or size, this often appears to reflect a better balance than if they vary mainly due to concentrations of tenure, or lifestyles, or household types. Submarkets can sometimes be defined mainly by tenure concentrations - such as large council estates, or by lifestyle and lifecycle - such as mainly student areas. These areas are now often seen as representing a lack of balance in local housing markets, and the evidence of the data can suggest policy interventions, for example as tenure diversification or limiting conversion into houses in multiple occupation.

The Barker Review of housing supply has also prompted new approaches and research along these lines, with the first of a proposed series of projects published for the ODPM in August 2004 - Pryce, G, (2004) *The Micro and Macro Effects of the Location of New Housing Supply* -

http://www.odpm.gov.uk/stellent/groups/odpm_science/documents/page/odpm_science_031063.pdf.

This is based on some basic economic principles of markets:-

- substitutability: dwellings in the same submarket are considered as substitutes.
- law of one price: any single market has a single price, therefore price differences (e.g. of dwelling attributes) indicate separate or "sub" markets.
- information flows: one definition of a market is that borrowers & sellers have a reasonably coherent information set. Marked breaks in search behaviour or in responses to market signals or external shocks are indicative of separate markets.

Based on these it therefore sets out to identify submarkets by finding structural breaks in house sales data, while correcting for other variables such as type, size and quality, so that what is left is the variation due to location.

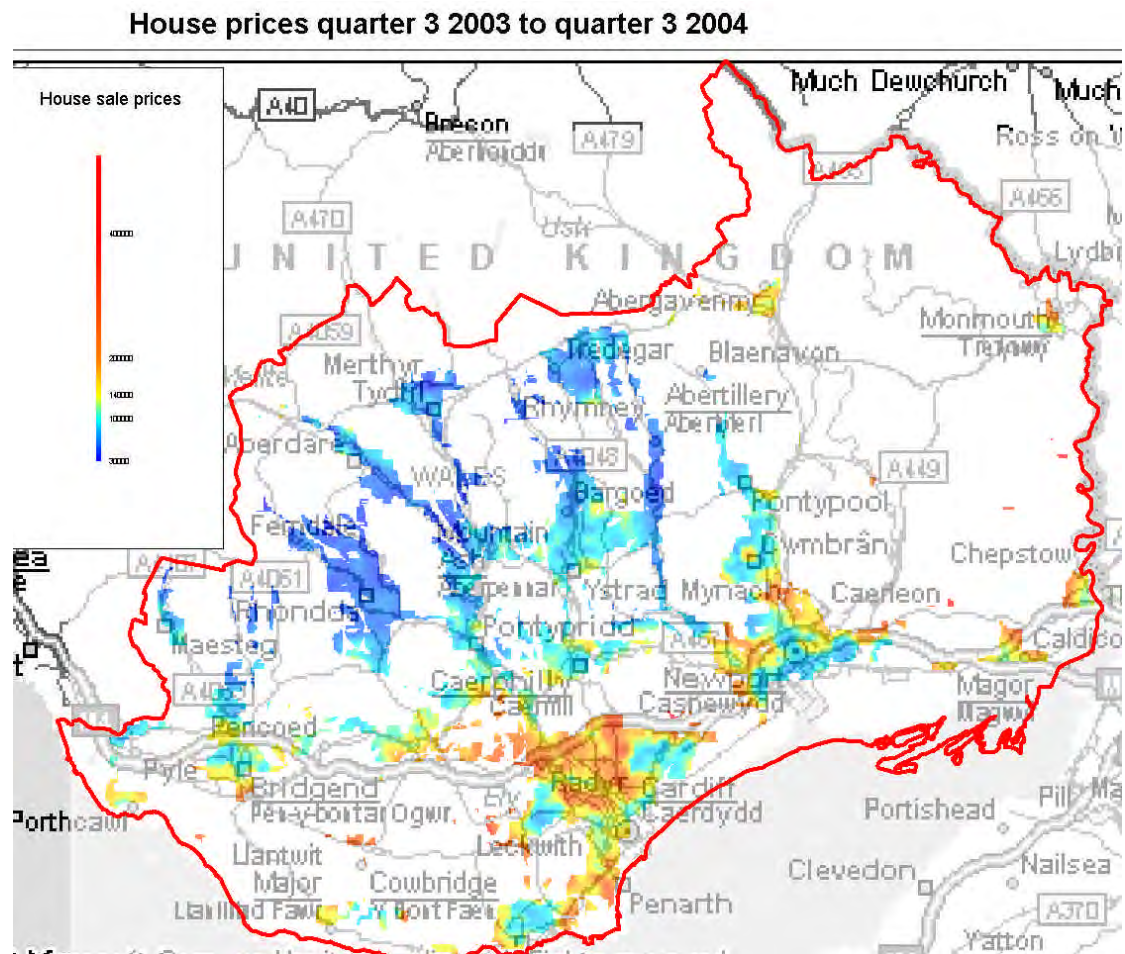
The techniques are still being developed, and need to utilise large sales datasets containing as much information as possible on property characteristics, and some sophisticated multiple regression modelling techniques.

These are not yet available for use, so instead more pedestrian methods were used. To identify housing submarkets that could be useful for strategy and policy development a combination of factors and techniques were applied. These include:-

1. data analysis and clustering in GIS, especially of house price data
2. knowledge and perceptions of people who know the areas
3. relevant physical and geographical features - *urban morphology*

House prices are a reflection of market preferences and actions, and provide a basis on which to make a primary consideration of housing submarkets, although it always needs to be born in mind that size, type and quality, in addition to location, all have a substantial effect on price.

The pattern of prices generated by interpolation across the region (a GIS technique of filling in gaps in data) clearly shows the higher prices in Cardiff and some rural areas, and lower prices in the mid valleys.

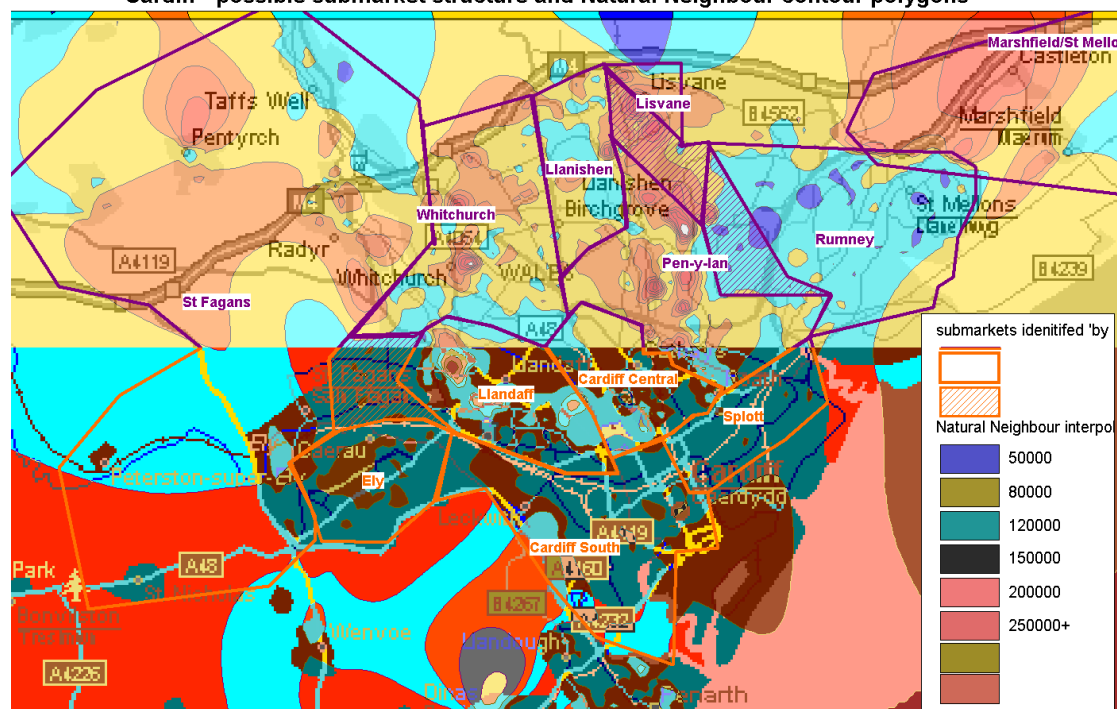


Newport - house price interpolation = sub markets ?

The initial interpolation can be refined by creating contours of the price pattern, although it is important to note that this is still quite ‘fuzzy’ at the boundaries. These

price patterns, in conjunction with local knowledge and the urban morphology structure, can then be used to draft an initial crude submarket structure.

Cardiff - possible submarket structure and Natural Neighbour contour polygons



3.6.1 Identification of submarkets

This process was carried out for the larger urban housing market areas of Cardiff, Newport, Cwmbran and Bridgend, to produce an initial classification into geographical submarkets. These do not yet as identify any links and structural breaks in the data which may show that different geographical areas or neighbourhoods are essentially parts of the same submarket but not geographically contiguous. However, these conjunctions may well already be quite apparent to those with local knowledge of property markets.

This exercise, or a more sophisticated version of it, could be useful for Planning and developing housing policy in all the other sizeable settlements within the SEWRHF area; but it is essential that it has an input based on good local knowledge and experience, as the data evidence alone is as yet not detailed or consistent enough to be reliable.

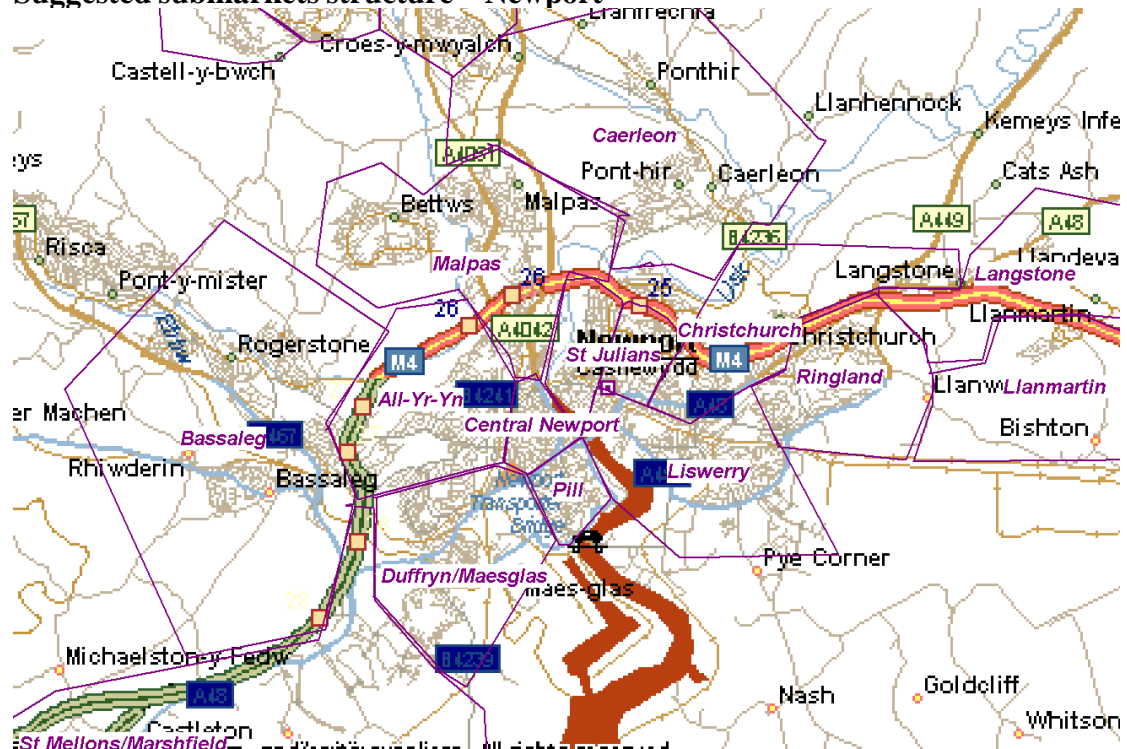
The submarkets identified are shown for the main settlements in the maps below, and on line in an interactive map at

http://homepage.ntlworld.com/b.line/SEWRHF/SVG/submarkets/submarkets_HMtypes.htm

Suggested submarkets structure - Cardiff



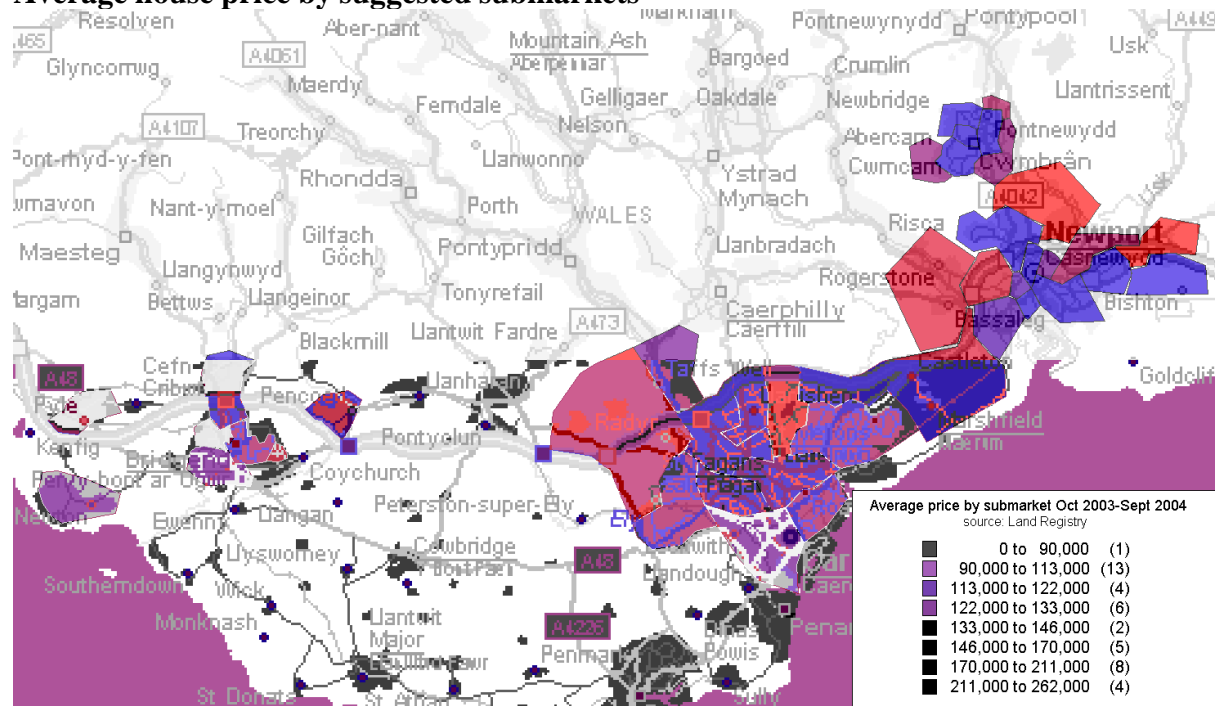
Suggested submarkets structure – Newport



The map shows the Cwmbran area with various locations and roads. Key locations include Pontnewydd, Croesyceiliog North, Croesyceiliog, Woodlands Park, Llanfrynach, Llanfrechfa, Ponthir, Malthouse Road, and Caerleon. Roads shown include Tre-herbert Road, A4051, A4042, B4235, and Pontnewydd Road. Other features include Fairwater & Green Meadows, Henllys, and Castell-y-bwch.

66

Average house price by suggested submarkets



This is not to say, of course, that indicators within these areas do not also vary substantially; but the variation should generally be less than for other ways of aggregating the data. This then allows variables to be compared and correlated with less un-attributable ‘noise’ in the data, and thus greater cogency.

So for example, comparing average house prices with the proportion of local authority rented housing within the same submarket gives a negative correlation – that is price decreases as the proportion of council housing increases – of minus 67% , a quite significant figure, but not at a level where the proportion of council housing could be identified as the main driver of all price differentials. The results are shown in the table below.

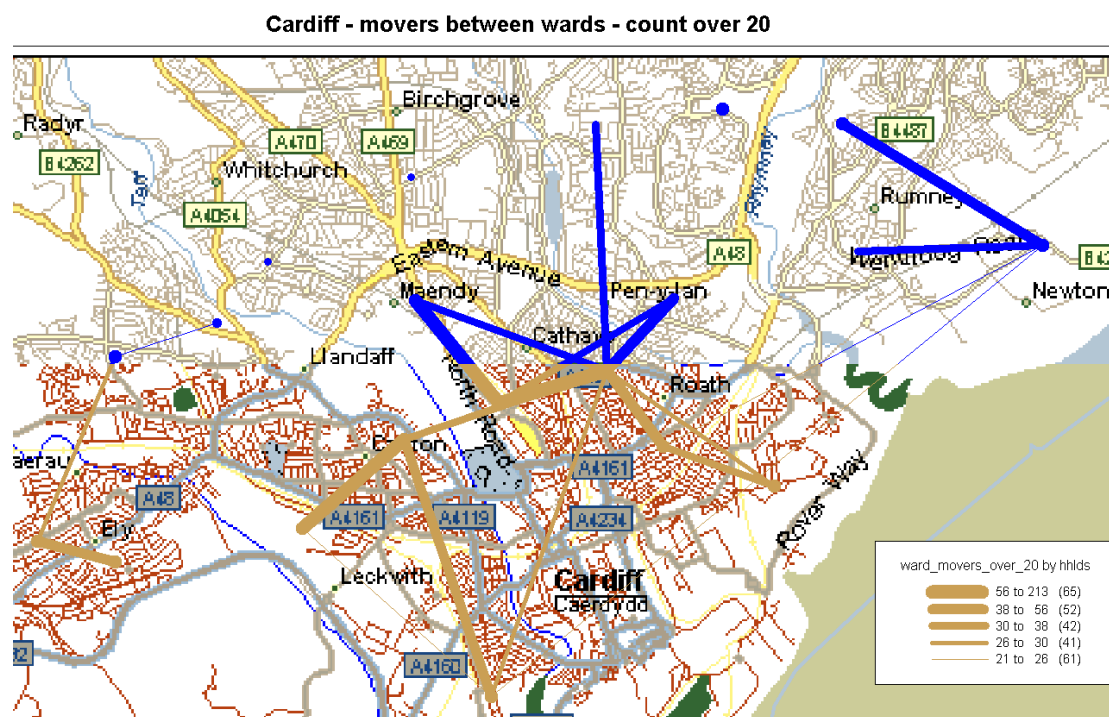
Table Average house prices and percentage of council housing by submarket

	Ave price	LA stock	total stock	% LA stock
Llanmartin	£ 90,333	196	880	22%
Pill	£ 94,859	549	1789	31%
Llanyravon/Northville/Southville	£ 94,903	779	3044	26%
Old Cwmbran	£ 95,475	56	248	23%
Brynitriion	£ 95,614	579	2773	21%
Liswerry	£ 96,330	1140	6962	16%
Sarn	£ 98,170	691	3751	18%
Ringland	£ 99,744	1449	3868	37%
Pyle	£102,200	1118	4810	23%
Pontnewydd & Cwmbran North	£102,303	1299	3794	34%
Fairwater & Green Meadow	£103,002	1932	5703	34%
Malpas	£103,403	2229	9961	22%
Riverside	£106,553	43	3106	1%
Pencoed	£116,960	332	3016	11%
Duffryn/Maesglas	£117,592	1638	4526	36%
Central Newport	£118,636	77	1378	6%
Ely	£122,974	4845	17865	27%
Rumney	£124,527	4204	20070	21%
St Julians	£125,971	232	2954	8%
Splott	£127,408	854	8594	10%
Bridgend Town	£127,577	401	5363	7%
Tongwynlais	£129,735	96	1704	6%
LLantarnum/Croesyceiliog	£133,298	490	2600	19%
Henllys	£134,548	52	1885	3%
Cardiff South	£146,222	1451	11190	13%
Croesyceiliog North	£148,445	59	682	9%
Christchurch	£148,495	235	3215	7%
Bridgend South	£152,340	493	4070	12%
Porthcawl	£162,057	325	6606	5%
Alt-Yr-Yn	£170,475	205	5496	4%
Pen-y-fai	£176,175	135	1755	8%
St Mellons/Marshfield	£179,024	72	3726	2%
Bassaleg	£181,274	547	5989	9%
Llanishen	£181,418	672	8243	8%
Roath	£181,607	385	18470	2%
Llandaff	£184,344	195	10870	2%
Whitchurch	£188,656	1132	16386	7%
Langstone	£211,895	9	766	1%
Cardiff West	£217,606	148	5036	3%
Caerleon	£225,621	387	3512	11%
Lisvane	£261,663	40	6511	1%

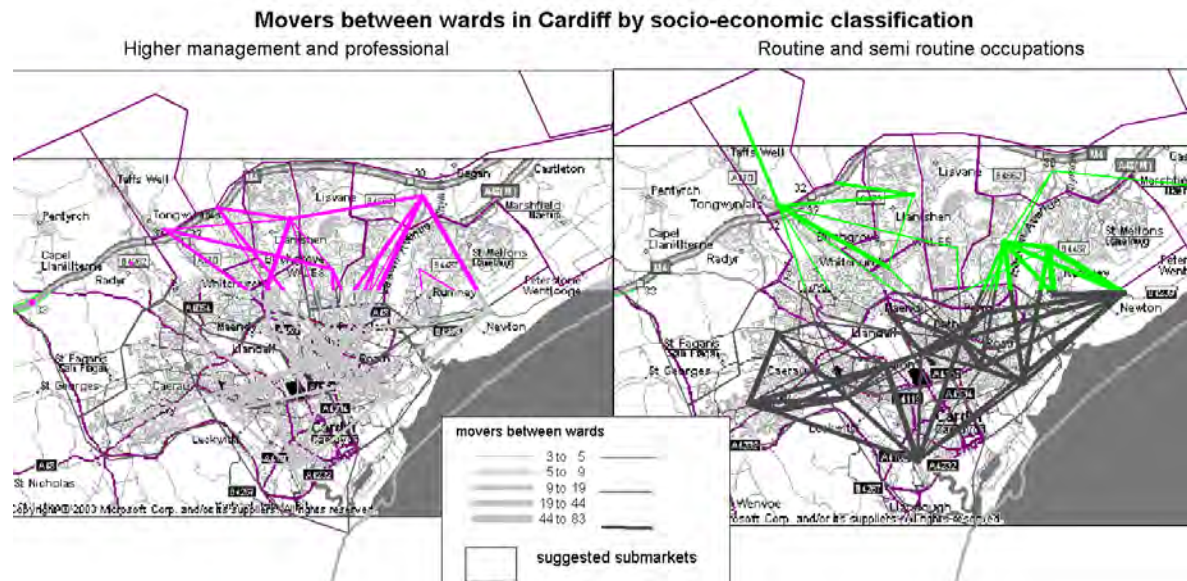
Interpreting the interactions and key drivers behind these patterns again also requires good local knowledge. For example, although the Land Registry data does not contain initial Right to Buy sales to tenants, but only subsequent resales, the initial lower prices could mean simply that prices have not increased as much and so will not be as high as in other submarkets. If so, areas with a lower proportion of council housing and low average house price may indicate a more depressed or imbalanced local

housing market than a high proportion of council housing and low prices. Nor are lower prices necessarily an indication of a problem; – with a lowest average price of over £90,000 affordability is clearly a much greater issue.

The submarket structure may also help shed some light on how households of different types and classifications tend to move within and even between larger settlements. Moves between Output Areas are usually too small to find meaningful differences, and the data has to be aggregated to higher levels to make any sense. The pattern of all movers between wards where the totals were over 20 households is shown in the map below.



When disentangled to show higher management/professional socio economic households compared to routine/semi routine occupations, a different emphasis in the patterns emerges, although there is still considerable overlap at ward level.



The potential benefit of the submarket concept is as a working and interactive tool, which could be used by Planners, Developers and housing policy makers to begin thinking in these terms to develop policy that goes with the grain of market interactions as far as possible to give it a greater chance of success, rather than against it, when it is more likely to try to ‘buck the market’ and fail.

However the first outcomes often tend to be negative in that they can initially show where interventions will probably not be successful as they will be overwhelmed by current conditions; but it could also help move towards a better balance within and between submarkets, and so help put the right type of housing in the right places.

4. Pressures on Housing Markets - Migration and Investment Effects

4.1 Migrations

Migrations are also considered to be important in analysing housing markets because they create demand pressures leading to price rises; or conversely may reflect population decline with consequent falls in demand, leading to oversupply, price falls and market decline. Both are seen as symptoms of housing markets which are out of balance – either ‘overheated’ or ‘in low demand’.

Migrations patterns were also considered as part of the section on conceptualising and analysing housing markets, with one conclusion that 70-75% migration self containment is not the best indicator of wider housing market areas, due to variations in the relative house prices in different markets.

The extent and type of migrations into and out of an area can reveal more about these pressures and trends. Data sources and the means of handling them have also improved over recent years;

- the most comprehensive and reliable source is the Census, which gives data on movers down to Output Area level by age group, and at ward level by tenure, socio-economic group and ethnic origin.
- the National Health Service Central Register (NHSCR) records moves between local authority areas when people re-register with a new doctor. It is produced every year, so is more recent than the Census; but it is generally accepted that it does not capture many moves of young people, especially males, who often fail to re-register with a doctor.
- another possible source, but not always accessible, is forwarding addresses from Council Tax database systems, from accounts ending when households move. This could, in theory, be updated regularly by data extraction, or even be a live link - but that is perhaps still sometime in the future.

Households can move to housing anywhere they want provided they can afford or obtain it, but there are in reality usually many conditions, judgments and trade-offs that they must and will make. Most moves are local, and the mass of moves within a housing market area can disguise other effects.

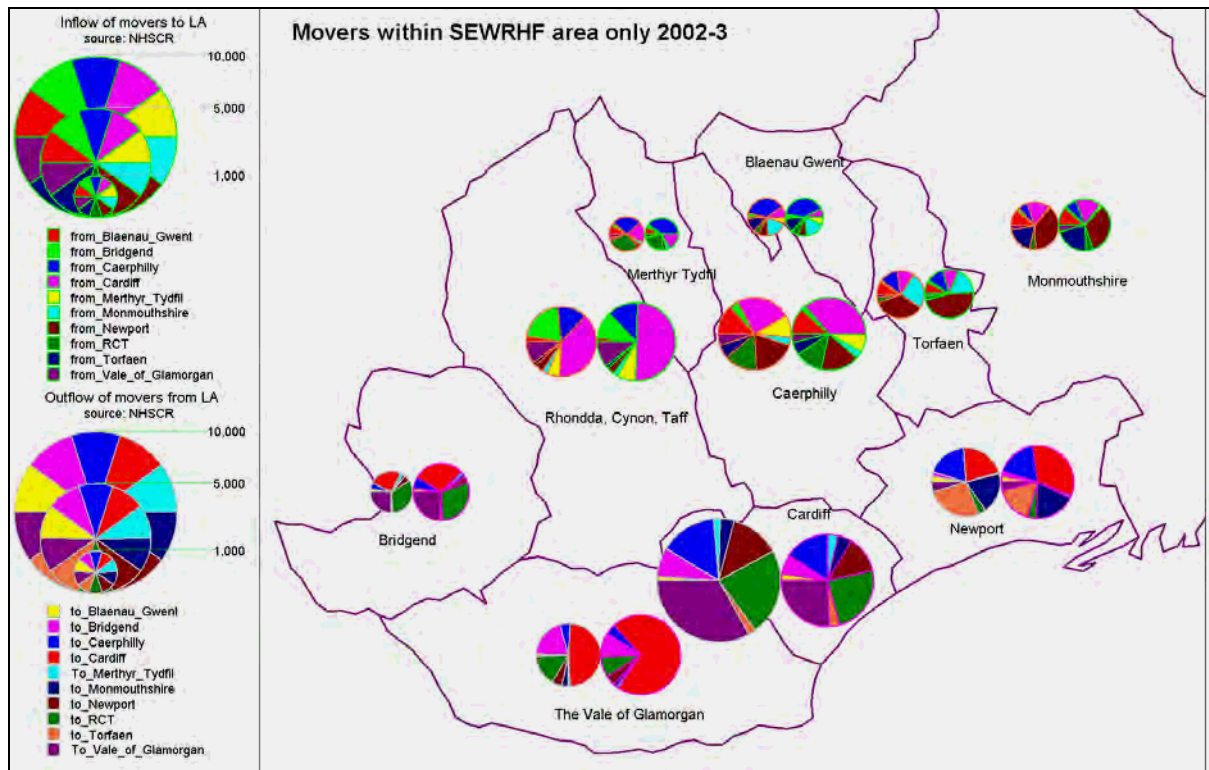
To make sense of the confusion of data that always results from the many different moves that take place requires some sort of framework for analysis. Moves between local authority areas is one useful method of considering migration effects.

The number of moves given by the NHSCR records for 2002-3 between local authority areas within the SEWRHF area is shown in the table below. This is inevitably complex even at this limited scale, but it can be interpreted better interactively by filtering in the full spreadsheet, available at

http://homepage.ntlworld.com/b.line/SEWRHF/migrations/inter_LA_NHSCR_moves02-3.xls . It is also shown graphically in the map below.

Table – inter SEWRHF moves between local authorities

origin/destination	Blaenau Gwent	Bridgend	Caerphilly	Cardiff	Merthyr Tydfil	Monmouthshire	Newport	Torfaen	Vale Glamorgan
to Blaenau Gwent	#N/A	20	320	60	50	130	60	100	10
from Blaenau Gwent	#N/A	30	300	80	40	150	60	100	10
to Bridgend	30	#N/A	110	480	30	30	50	20	400
from Bridgend	20	#N/A	50	260	20	20	50	20	250
to Caerphilly	300	50	#N/A	940	200	80	430	150	100
from Caerphilly	320	110	#N/A	590	240	90	450	150	130
to Cardiff	80	260	590	#N/A	130	180	480	130	950
from Cardiff	60	480	940	#N/A	110	220	810	130	2060
To Merthyr Tydfil	40	20	240	110	#N/A	20	20	10	20
from Merthyr Tydfil	50	30	200	130	#N/A	20	20	10	30
to Monmouthshire	150	20	90	220	20	#N/A	430	290	60
from Monmouthshire	130	30	80	180	20	#N/A	450	220	40
to Newport	60	50	450	810	20	450	#N/A	410	100
from Newport	60	50	430	480	20	430	#N/A	590	110
to RCT	40	320	360	1400	220	50	80	40	310
from RCT	50	490	310	890	130	60	90	40	240
to Torfaen	100	20	150	130	10	220	590	#N/A	20
from Torfaen	100	20	150	130	10	290	410	#N/A	30
To Vale of Glamorgan	10	250	130	2060	30	40	110	30	#N/A
from Vale of Glamorgan	10	400	100	950	20	60	100	20	#N/A



In the SEWRHF study area, Cardiff is clearly very strongly the major centre and driver of housing market migration patterns, and NHSCR data shows a pattern of moves into the city from farther afield, especially from rural Wales but also from many English local authority areas. There is then an out migration from Cardiff to its surrounding local authorities.

Table – migrations to and from Cardiff by local authority area – year to June 2003

Movers to/from Cardiff origin/destination	Out from Cardiff to LA	Into Cardiff from LA	net gain/loss
Vale Glamorgan	2060	950	-1110 (gain from Cardiff)
Rhondda, Cynon, Taff	1400	890	-510
Caerphilly	940	590	-350
Newport	810	480	-330
Bridgend	480	260	-220
Bristol, City of UA	440	330	-110
Wandsworth	140	60	-80
Monmouthshire	220	180	-40
Birmingham	280	250	-30
Ceredigion	140	280	140 (loss to Cardiff)
Pembrokeshire	220	350	130
Swansea	380	510	130
Plymouth UA	80	160	80
Gwynedd	110	180	70
Cheltenham	70	130	60
Powys	120	180	60
Bath and North East Somerset UA	80	130	50
Carmarthenshire	310	360	50
Herefordshire, County of UA	80	120	40

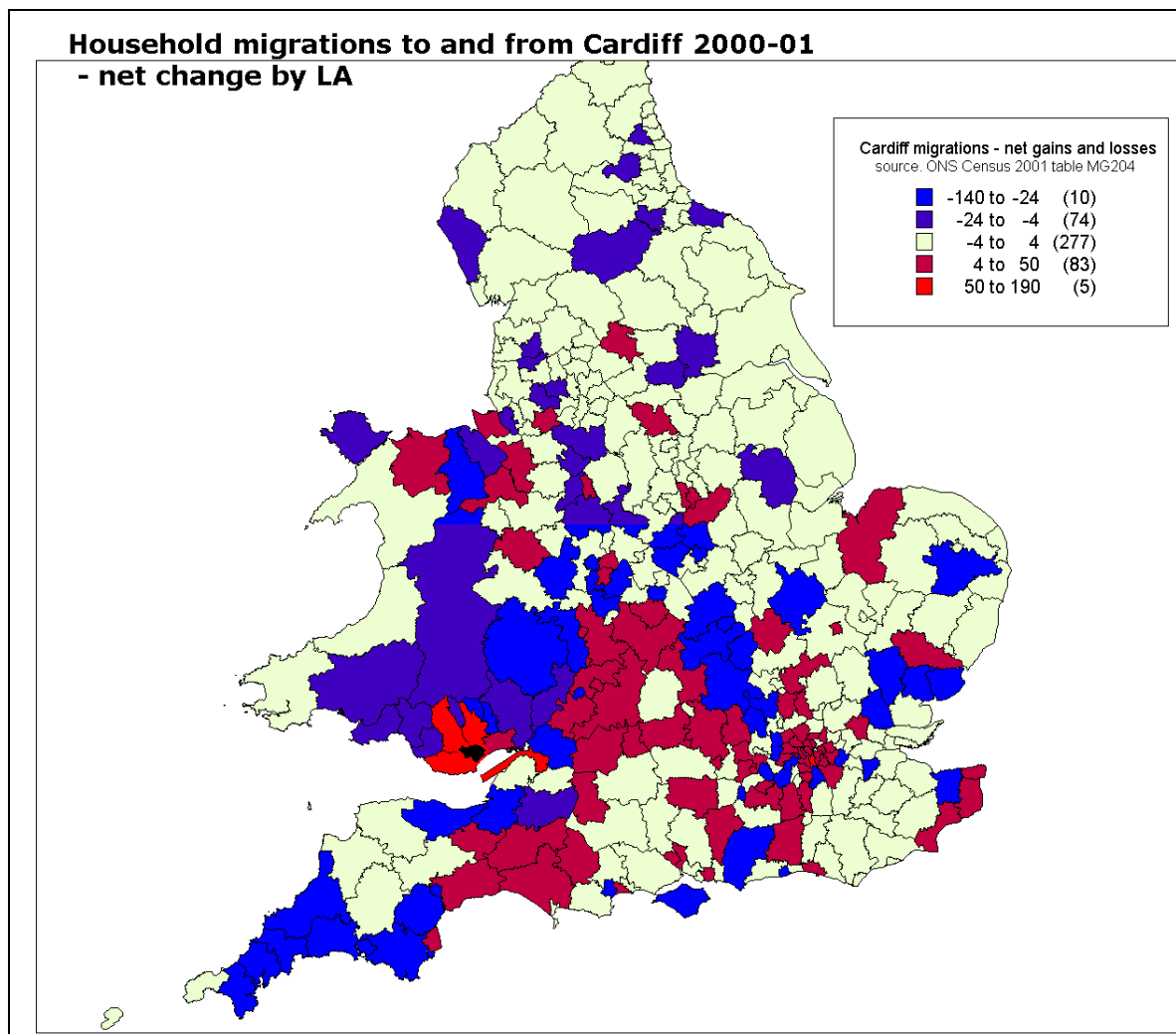
Lewisham	20	60	40
Newham	40	80	40
Wychavon	40	80	40
Brighton and Hove UA	50	80	30
Carrick	30	60	30
Exeter	50	80	30
Fareham	10	40	30
Isle of Anglesey	30	60	30
Leicester UA	40	70	30
Mid Devon	10	40	30
South Hams	20	50	30
South Somerset	40	70	30
Taunton Deane	30	60	30
Teignbridge	30	60	30
Tewkesbury	20	50	30
Torbay UA	40	70	30

Source: NHSCR NB NHSCR data for small areas is rounded to 10 to protect confidentiality

The Census data gives a similar but more detailed picture. This is shown below and interactively on line in SVG map format at

http://homepage.ntlworld.com/b.line/SEWRHF/SVG/migrations/Cardiff_Census_migration_gain_loss.htm

(NB Census data for small areas is rounded to 3 to protect confidentiality)



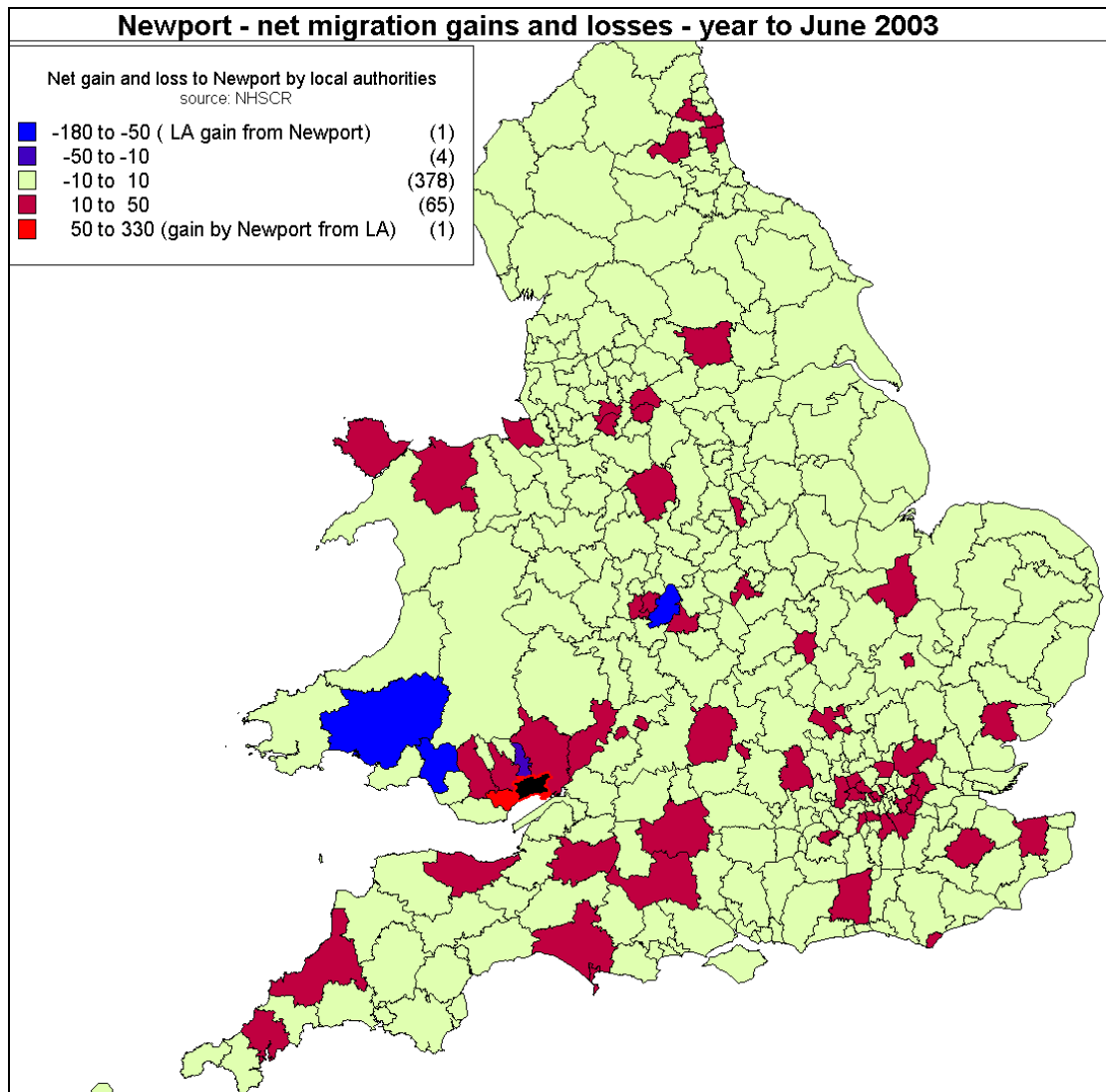
This is a typical pattern for major cities, as younger and people taking up employment move into the city, followed by a later move out to the suburbs or country, creating an age and socio-economic related flow through.

Newport has a generally similar flow through pattern, but subtly different in the origins and destinations of households.

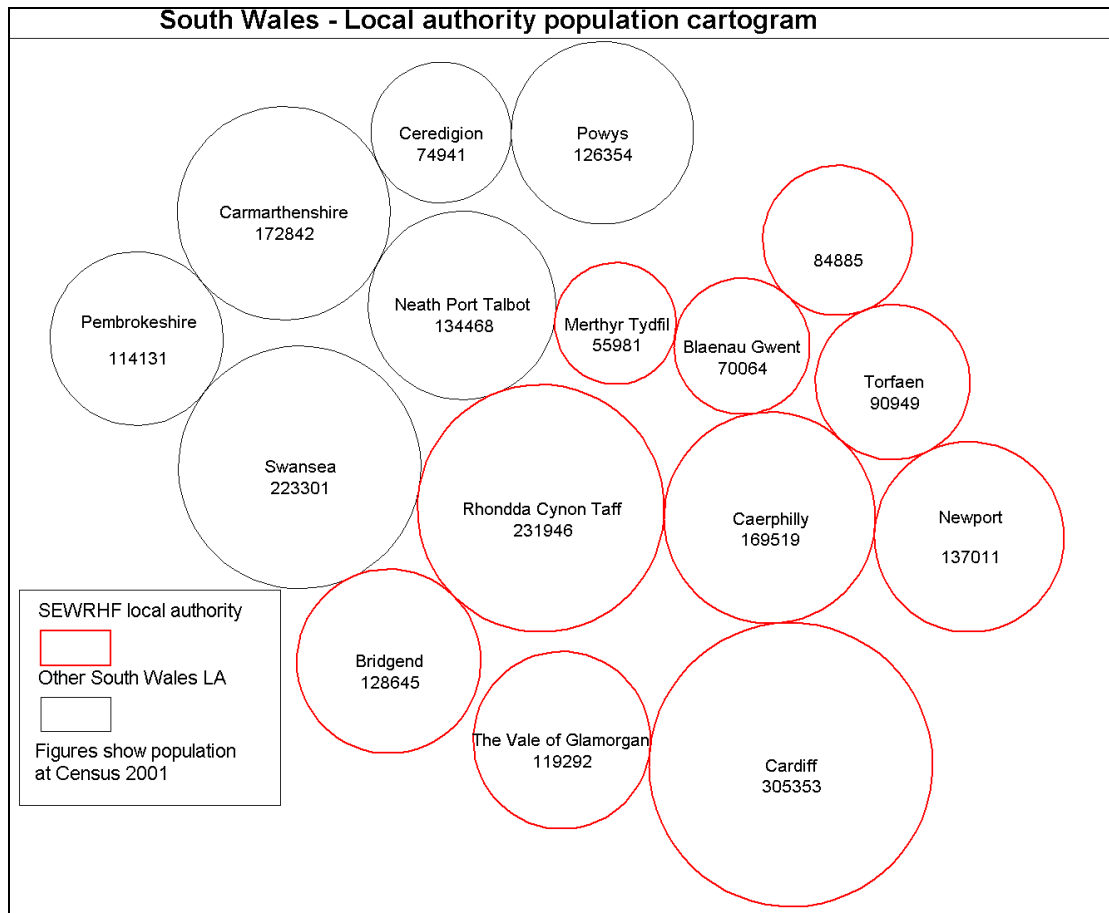
Table 1. Newport migration - net gains and losses (only major flows and net changes shown)

Newport from	inout		net gain/loss to LA from Newport	
Cardiff	810	480	330	gain by Newport
Bristol, City of UA	160	90	70	
South Gloucestershire UA	80	50	30	
North Somerset UA	50	20	30	
Caerphilly	450	430	20	
Monmouthshire	450	430	20	
Bath and North East Somerset UA	40	20	20	
Hillingdon	30	10	20	
Enfield	20	0	20	
West Berkshire UA	20	0	20	
Rhondda, Cynon, Taff	90	80	10	
Forest of Dean	60	50	10	
Plymouth UA	40	30	10	
Blaenau Gwent	60	60	0	gain from Newport
Bridgend	50	50	0	
Manchester	20	20	0	
Liverpool	20	20	0	
Coventry	20	20	0	
Southampton UA	20	20	0	
Bournemouth UA	20	20	0	
Exeter	20	20	0	
Merthyr Tydfil	20	20	0	
Powys	20	20	0	
Swansea	100	110	-10	
Vale Glamorgan	100	110	-10	
Pembrokeshire	30	40	-10	
Wrexham	0	10	-10	
Carmarthenshire	30	50	-20	
Neath Port Talbot	30	50	-20	
Herefordshire, County of UA	20	40	-20	
Ceredigion	10	40	-30	
Birmingham	50	90	-40	
Torfaen	410	590	-180	

Source: NHSCR

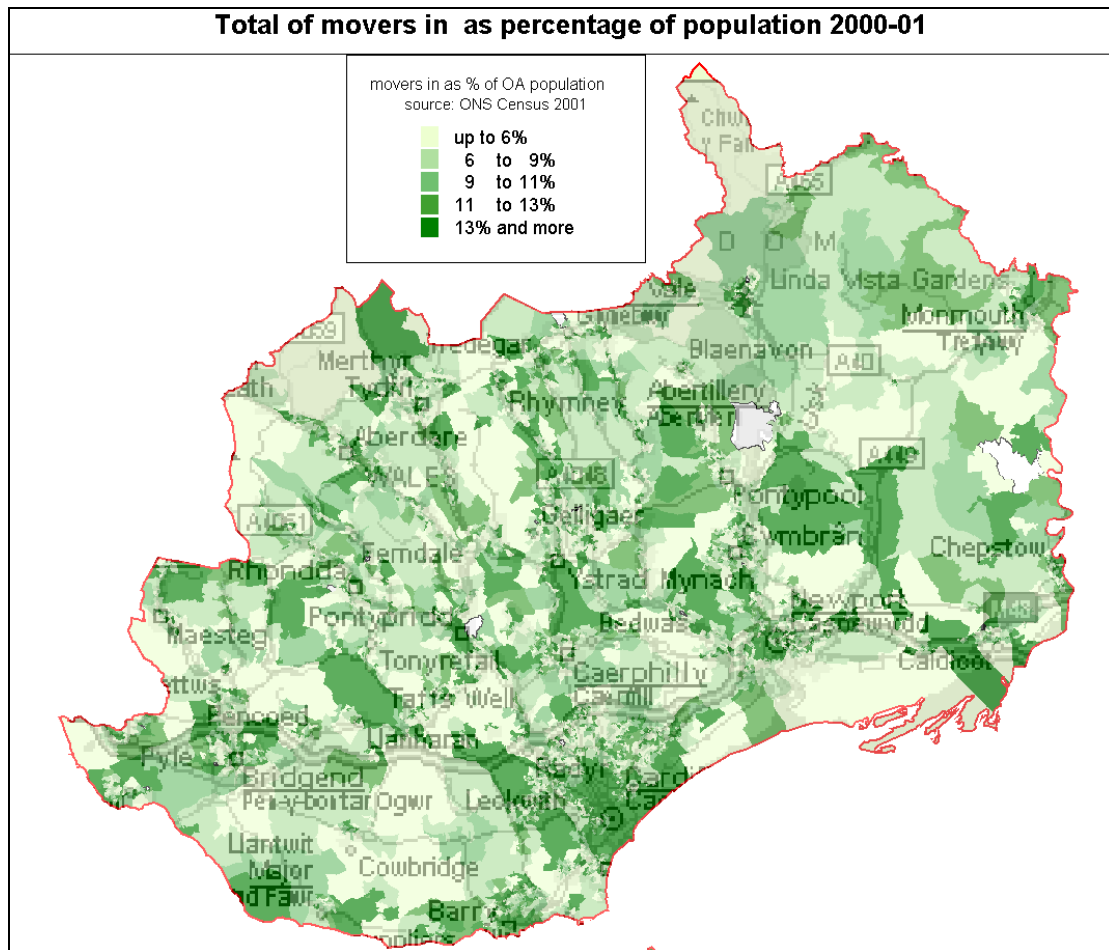


These distributions of populations can be misleading for these figures, and the patterns also need to be interpreted in the light of the different sizes of the local authorities. This can be seen in the cartogram below.

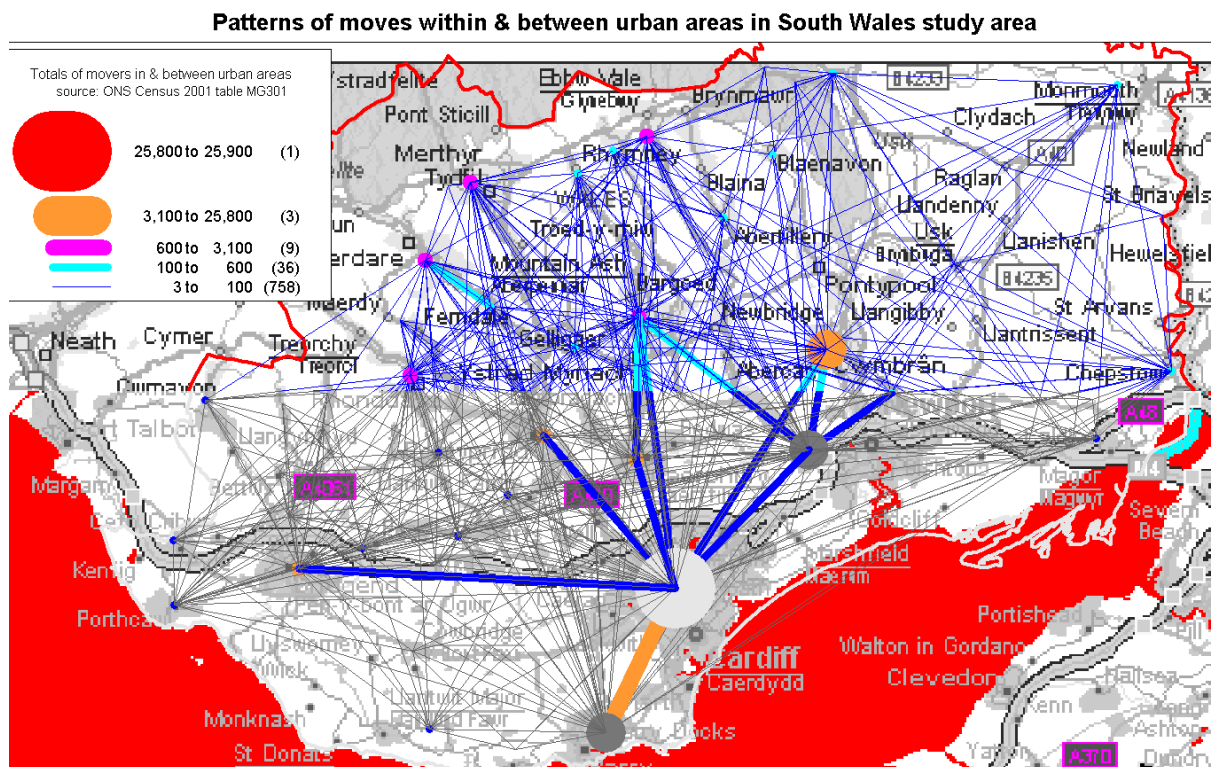


Neither are local authority areas particularly relevant for migration patterns, as they are generally unimportant for the housing choices of moving households, - except for social sector tenants who are commonly more constrained by housing allocations criteria which require a local connection.

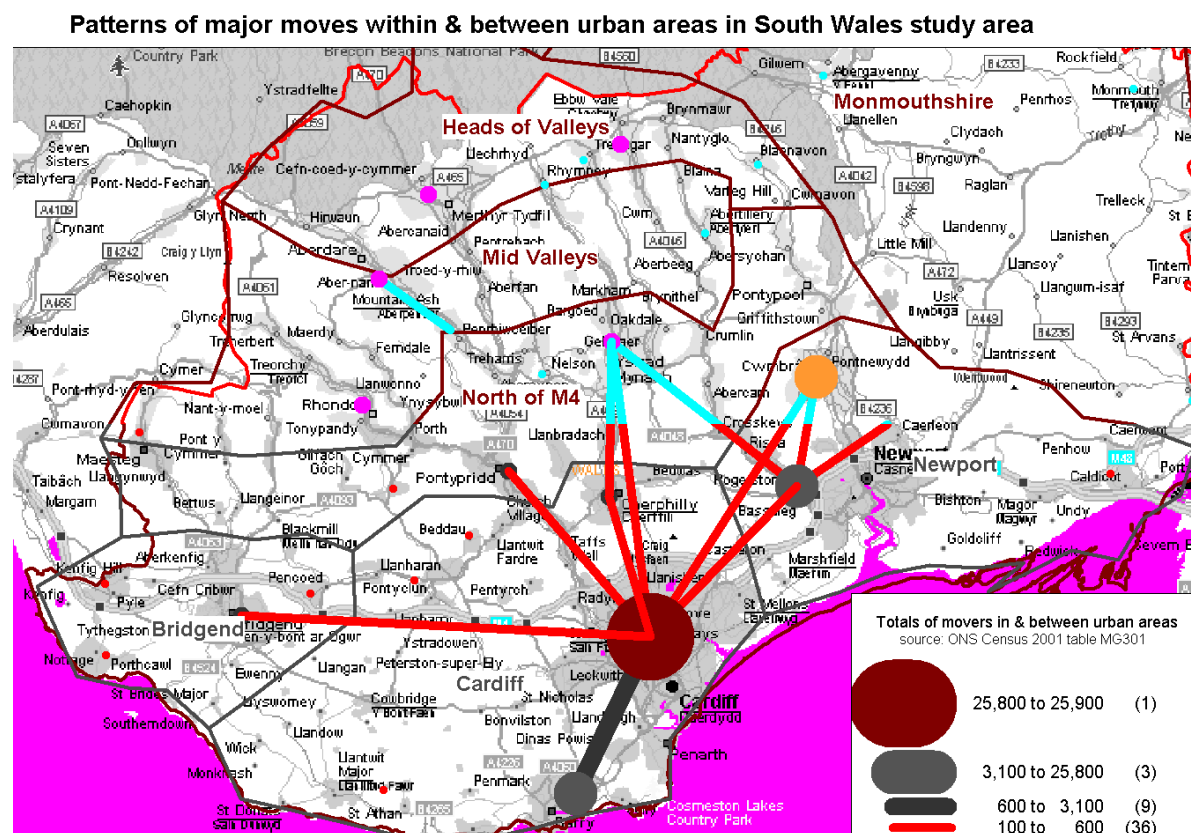
The proportion of movers shows some variation on a more detailed Output Area level, but this mainly reflects the pattern of urban settlements.



The pattern of migrations between settlements is of course very complex when all moves are taken into account.



However, when larger numbers of moves only are considered the picture is much clearer, and shows that the north of the M4 and Bridgend, Cardiff and Newport area housing markets are relatively separate from those in the mid valleys northwards.



This is still simplistic and misleading to some extent, because the total of moves between smaller areas is quite substantial in total, comprising around a quarter of all moves within the ten local authorities. However, 37% of movers in this area are within Cardiff, and 10% within Newport.

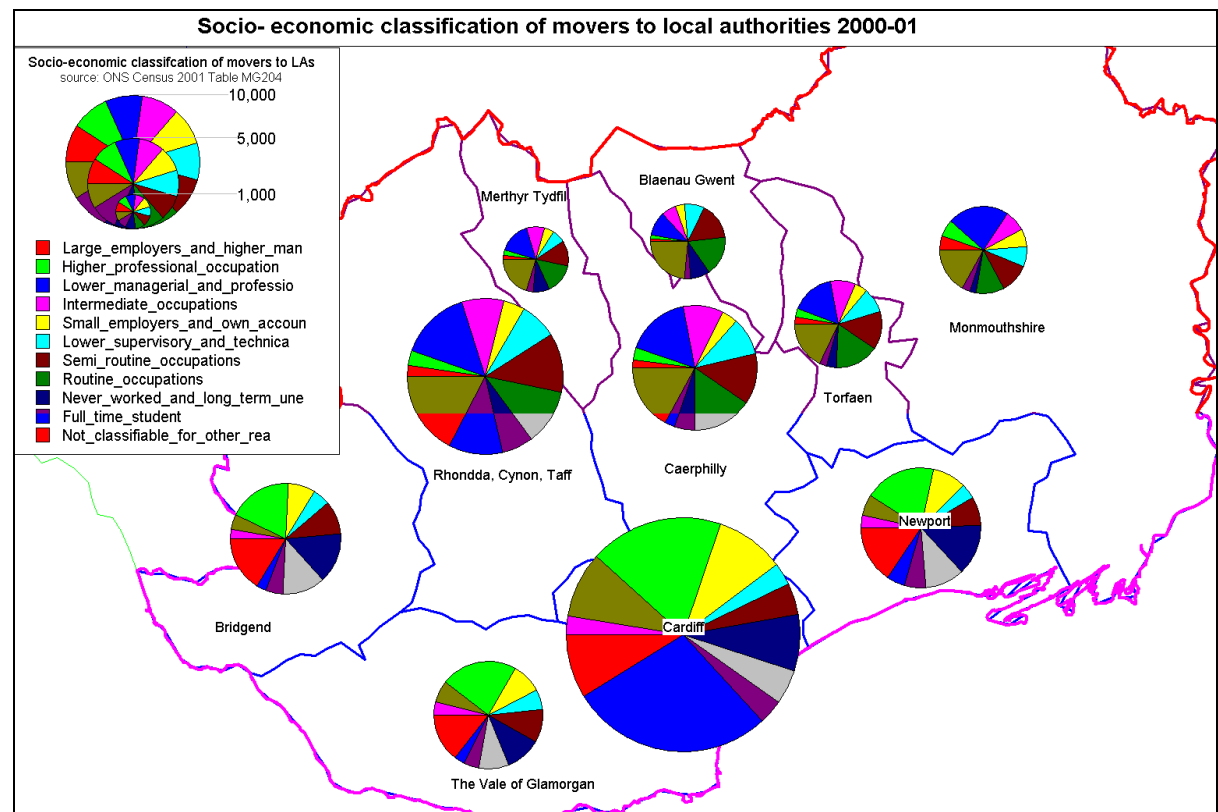
The main outflows of moves from the two main cities appear to be from Cardiff to Penarth, Pontypridd, Caerphilly, Newport, and the Gelligaer/Ystrad Mynach/Pengam area; and from Newport to Cwmbran, Caerleon and the Gelligaer/Ystrad Mynach/Pengam area. Some of these may well be due to new developments in these areas at that time boosting numbers, but a proportion will be moves into older housing.

4.2 Characteristics of Mover Households

Census migrations data at ward level is also categorised by age, household type, tenure and socio-economic classification, which can be used for more detailed analysis and profiling of migration patterns. This can show differences in the type of in and out migration for different areas, although these are seldom markedly different, and it is only by carefully comparing them that different trends can be determined.

The pie charts below show the socio-economic classifications of groups and households moving in to each of the ten local authorities. The most noticeable aspect

is the number of students moving into Cardiff, and higher managerial and professional movers can also be seen to be more significant for Cardiff.



The geographical aggregations used to analyse the evidence are also very important here, as showing the data for whole local authorities can seriously distort the more detailed picture, especially in a situation where housing market conditions are very different from north to south within some of the valley authorities.

Shown by urban area, the data shows the differences in the extent and characteristics of movers households more clearly. Cardiff can be seen as even more dominant, and specific local effects such as the large number of students moving to Pontypridd, or more specifically to Treforest, become apparent.

The numbers and percentages of movers by socio economic classification to the urban areas are also show in the tables below, and an interactive SVG version of the map above is at

http://homepage.ntlworld.com/b.line/SEWRHF/SVG/migrations/SeC_movers_to_urb_areas.htm .

SEWRHF area

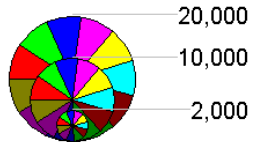


Urban areas (ONS classification)



Pie Chart of SeC_of movers to urban areas

source: ONS Census 2001 Table MG204



- Large_employers_and_higher_man
- Higher_professional_occupation
- Lower_managerial_and_professio
- Intermediate_occupations
- Small_employers_and_own_accoun
- Lower_supervisory_and_technica
- Semi_routine_occupations
- Routine_occupations
- Never_worked_and_long_term_une
- Full_time_student
- Not_classifiable_for_other_rea

Socio- economic classifaction of movers to urban areas 2000-01

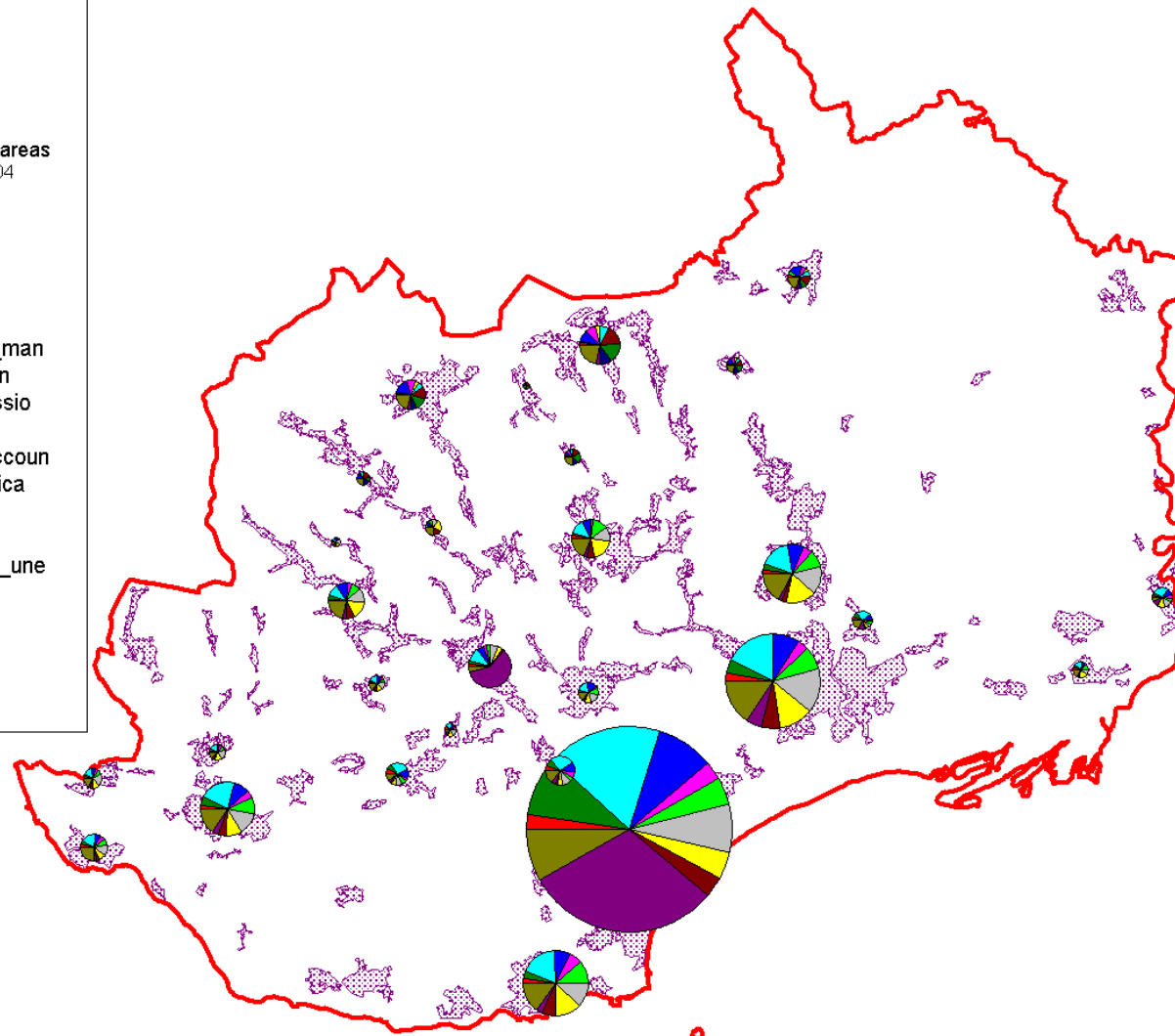


Table movers to urban areas by socio- economic classification 2000-01

movers to	Higher professional	Lower managerial professional	Intermediate occupations	Small employers workers	Lower supervisory technical	Semi-routine	Routine	Never worked < unemployed	Full-time student	Not classifiable
Aberdare Urban Area	0	22	7	6	20	39	19	31	3	50
Abergavenny	24	95	36	18	36	60	36	21	12	103
Aberkenfig/Bryncoch	18	53	12	21	24	52	43	6	12	41
Barry	131	618	275	211	362	406	428	219	102	506
Beddau	6	38	18	9	12	29	29	9	6	22
Blaenavon	3	43	35	13	22	35	52	30	12	72
Bridgend	112	490	218	96	227	276	214	108	80	356
Brynmawr/Ebbw Vale	12	135	102	59	86	210	200	122	28	285
Caerleon	39	103	37	21	16	19	18	9	42	79
Caerphilly/Bedwas	12	74	55	19	37	55	40	9	6	55
Caldicot	18	58	27	6	36	36	51	9	9	61
Cardiff Urban Area	2252	4342	2157	702	1010	1815	1009	760	7270	1990
Chepstow Urban Area	18	101	43	24	18	47	43	9	30	33
Ferndale	0	27	20	6	6	32	14	18	3	23
Islwyn Urban Area	21	173	91	37	161	157	233	85	30	251
Llantrisant/Pontyclun	45	139	63	12	33	49	24	18	15	55
Merthyr Tydfil/Abercanaid/Troedyrhiw	12	160	86	33	58	112	120	61	21	191
Mountain Ash/Abercynon	0	11	22	10	17	49	62	42	6	75
New Tredegar	0	21	15	9	16	39	52	25	3	64
Newport Urban Area	303	1126	571	216	499	941	705	418	328	993
Pontypool/Cwmbran	105	474	265	144	256	417	454	74	54	491
Pontypridd Urban Area	39	157	87	42	46	87	62	24	895	78
Porthcawl	28	127	42	34	48	77	47	28	23	155
Pyle	12	65	29	17	31	72	49	15	15	67
Rhondda	36	135	135	48	88	161	178	78	48	262
Rhymney	0	9	9	0	6	17	19	3	0	16
Tongwynlais	66	215	78	44	39	63	42	19	37	120
Tonyrefail	12	66	42	16	21	47	36	21	15	52

movers to	Large employers and higher managerial	Higher professional	Lower managerial and professional	Intermediate	Small employers and own account workers	Lower supervisory and technical	Semi-routine	Routine occupations	Never worked and long-term unemployed	Full-time student	Not classifiable for other reasons
Aberdare Urban Area	0%	0%	11%	4%	3%	10%	20%	10%	16%	2%	25%
Abergavenny	3%	5%	21%	8%	4%	8%	13%	8%	5%	3%	23%
Aberkenfig/Bryncoch	1%	6%	19%	4%	7%	8%	18%	15%	2%	4%	14%
Barry	2%	4%	19%	8%	6%	11%	12%	13%	7%	3%	15%
Beddau	8%	3%	20%	9%	5%	6%	15%	15%	5%	3%	11%
Blaenavon	3%	1%	13%	11%	4%	7%	11%	16%	9%	4%	22%
Bridgend	2%	5%	22%	10%	4%	10%	12%	10%	5%	4%	16%
Brynmawr/Ebbw Vale	1%	1%	11%	8%	5%	7%	17%	16%	10%	2%	23%
Caerleon	5%	10%	26%	9%	5%	4%	5%	4%	2%	10%	20%
Caerphilly/Bedwas	0%	3%	20%	15%	5%	10%	15%	11%	2%	2%	15%
Caldicot	5%	5%	18%	8%	2%	11%	11%	16%	3%	3%	19%
Cardiff Urban Area	2%	9%	18%	9%	3%	4%	8%	4%	3%	30%	8%
Chepstow Urban Area	4%	5%	27%	11%	6%	5%	12%	11%	2%	8%	9%
Ferndale	2%	0%	18%	13%	4%	4%	21%	9%	12%	2%	15%
Islwyn Urban Area	3%	2%	14%	7%	3%	13%	12%	18%	7%	2%	20%
Llantrisant/Pontyclun	7%	9%	29%	13%	2%	7%	10%	5%	4%	3%	11%
Merthyr Tydfil/Abercanaid/Troedyrhiw	1%	1%	19%	10%	4%	7%	13%	14%	7%	2%	22%
Mountain Ash/Abercynon	0%	0%	4%	7%	3%	6%	17%	21%	14%	2%	26%
New Tredegar	1%	0%	9%	6%	4%	6%	16%	21%	10%	1%	26%
Newport Urban Area	3%	5%	18%	9%	3%	8%	15%	11%	7%	5%	16%
Pontypool/Cwmbran	2%	4%	17%	10%	5%	9%	15%	16%	3%	2%	18%
Pontypridd Urban Area	2%	3%	10%	6%	3%	3%	6%	4%	2%	58%	5%
Porthcawl	3%	4%	20%	7%	5%	8%	12%	7%	4%	4%	25%
Pyle	4%	3%	17%	7%	4%	8%	19%	13%	4%	4%	17%
Rhondda	1%	3%	11%	11%	4%	7%	14%	15%	7%	4%	22%
Rhymney	0%	0%	11%	11%	0%	8%	22%	24%	4%	0%	20%
Tongwynlais	4%	9%	28%	10%	6%	5%	8%	6%	3%	5%	16%
Tonyrefail	2%	4%	20%	13%	5%	6%	14%	11%	6%	4%	16%

Although migration patterns from farther away are complex, fragmented and often largely random, key influences can sometimes be identified from the data. For example, movers to Cardiff from Birmingham and Gloucester have a higher proportion of higher professional occupations, at between 5 and 10%, than movers from Swansea, Bristol or Neath & Port Talbot, at under 5%; but there are more movers to Cardiff from the closer cities, so the numbers in each category are higher

Table 2

Movers to Cardiff by SeC group \ LA origin>	Birmingham	Bristol, City of	Swansea	Gloucester	Neath Port Talbot
Total: Wholly moving households	24	39	69	6	21
Total: Other moving groups	60	121	270	9	99
Large employers and higher managerial occupations: Wholly moving households			6		
Large employers and higher managerial occupations: Other moving groups	3	3			3
Higher professional occupations: Wholly moving households	6	6	33	3	3
Higher professional occupations: Other moving groups	15	12	24	3	12
Lower managerial and professional occupations: Wholly moving households	9	6	18	3	9
Lower managerial and professional occupations: Other moving groups	6	24	67	3	12
Intermediate occupations: Wholly moving households	3	6	3		
Intermediate occupations: Other moving groups	9	15	30	3	12
Small employers and own account workers: Wholly moving households	3	3			
Small employers and own account workers: Other moving groups	3		9		
Lower supervisory and technical occupations: Wholly moving households		3	3		
Lower supervisory and technical occupations: Other moving groups	3		6		
Semi-routine occupations: Wholly moving households		3			
Semi-routine occupations: Other moving groups	3	9	12		
Routine occupations: Wholly moving households		6			3
Routine occupations: Other moving groups		3			
Never worked and long-term unemployed: Wholly moving households		3			
Never worked and long-term unemployed: Other moving groups	6		3		
Full-time student: Wholly moving households		3	6		3
Full-time student: Other moving groups	12	49	119		54
Not classifiable for other reasons: Wholly moving households	3				3
Not classifiable for other reasons: Other moving groups		6			6
Total mover households	168	320	678	30	240

However, while the totals of migrants from individual local authorities may be small, the sum total of migrations are more substantial, and highlights the differences in the nature of migrations to the different local authority areas and urban settlements more clearly.

Examples of the numbers and percentages of socio-economic classifications of movers to Cardiff, Newport, and Merthyr Tydfil are shown in the tables below for comparison, and all the ten local authorities are shown in a spreadsheet at http://homepage.ntlworld.com/b.line/SEWRHF/migrations/SeC_Movers_to_LAs_by_region.xls.

These show slight but noticeable differences in the proportions of households from different socio-economic groups moving to different areas. For example, 7% of higher managerial and 9% of higher professional movers to Cardiff are from London and the South East; the proportions for Caerphilly for the same groups are 5% and 5%.

Again data aggregated by local authority level can distort, and by urban settlement differences are more marked. For Cardiff urban area 10% of higher professionals are from the South East, and 77% from Wales; for the Rhondda & Aberdare area, the proportions are none from South East UK, and 93% from Wales. Some more examples are given at http://homepage.ntlworld.com/b.line/SEWRHF/migrations/movers_to_urban_settlements_by_SeC.xls , but the total of 93 areas classified as urban in the study area means it is not sensible to give all of them, although they can be quickly derived as required.

This is, of course, quite obvious from experience, and merely demonstrates the kind of pressures and influences on the different housing markets. Applying the ‘types of housing market’ area framework to this data gives perhaps the most useful and understandable view. This is shown for the percentage of movers from Wales and from South East UK as examples in the table below. All categories are in the spreadsheet at http://homepage.ntlworld.com/b.line/SEWRHF/migrations/SeC_movers_by_HMtype1.xls

Table – movers to Cardiff wards by Socio-economic classification 2000-01

Number of movers to Cardiff	All mover households & groups	Large employers and higher managerial occupations	Higher professional occupations	Lower managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	Routine occupations	Never worked and long-term unemployed	Full-time student	Not classifiable for other reasons
South East UK	1427	39	192	324	99	39	30	60	33	18	527	66
North West	264	9	45	36	18	3	9	12	6	6	105	15
Yorkshire and Humberside	165	6	36	27	15	3	3		3		57	15
North	69	3	12	21	6	3					15	9
West Midlands	451	15	45	51	36	15	15	36	15	9	195	19
South West UK	971	21	96	150	102	24	12	51	30	3	446	36
Wales	18849	473	1623	3751	1930	617	891	1564	931	599	5062	1408
East Midlands	180	6	18	33	30	3		12	6		69	3
East Anglia	99	3	12	6	18	3	3	3		6	36	9
Total	22475	575	2079	4399	2254	710	963	1738	1024	641	6512	1580
<i>Percentage of SeC class.</i>												
South East UK	6.3%	6.8%	9.2%	7.4%	4.4%	5.5%	3.1%	3.5%	3.2%	2.8%	8.1%	4%
North West	1.2%	1.6%	2.2%	0.8%	0.8%	0.4%	0.9%	0.7%	0.6%	0.9%	1.6%	1%
Yorkshire and Humberside	0.7%	1.0%	1.7%	0.6%	0.7%	0.4%	0.3%		0.3%		0.9%	1%
North	0.3%	0.5%	0.6%	0.5%	0.3%	0.4%					0.2%	1%
West Midlands	2.0%	2.6%	2.2%	1.2%	1.6%	2.1%	1.6%	2.1%	1.5%	1.4%	3.0%	1%
South West UK	4.3%	3.7%	4.6%	3.4%	4.5%	3.4%	1.2%	2.9%	2.9%	0.5%	6.8%	2%
Wales	83.9%	82.3%	78.1%	85.3%	85.6%	86.9%	92.5%	90.0%	90.9%	93.4%	77.7%	89%
East Midlands	0.8%	1.0%	0.9%	0.8%	1.3%	0.4%		0.7%	0.6%		1.1%	0%
East Anglia	0%	1%	1%	0%	1%	0%	0%	0%		1%	1%	1%

Table socio-economic classification of movers to Newport

Number of movers to Newport	All mover households & groups	Large employers and higher managerial occupations	Higher professional occupations	Lower managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	Routine occupations	Never worked and long-term unemployed	Full-time student	Not classifiable for other reasons
South East UK	327	12	51	75	24	18	21	33	12	15	27	39
Yorkshire and Humberside	63	3	12	33	3	-	-	3	3	-	3	3
North	31	-	9	13	-	-	-	-	-	-	6	3
North West	57	-	3	15	6	-	3	9	12	-	3	6
East Midlands	57	3	6	12	3	6	3	9	-	-	6	9
South West UK	243	9	30	54	24	12	12	33	21	15	21	12
Wales	6,097	205	301	1,190	617	258	506	900	663	348	267	842
West Midlands	112	15	12	27	3	9	9	9	9	-	10	9
East Anglia	27	-	6	9	6	-	3	-	-	-	-	3
	7,014	247	430	1,428	686	303	557	996	720	378	343	926
<i>Percentage of SeC class.</i>												
South East UK	4.7%	4.9%	11.9%	5.3%	3.5%	5.9%	3.8%	3.3%	1.7%	4.0%	7.9%	4.2%
Yorkshire and Humberside	0.9%	1.2%	2.8%	2.3%	0.4%			0.3%	0.4%		0.9%	0.3%
North	0.4%		2.1%	0.9%							1.7%	0.3%
North West	0.8%		0.7%	1.1%	0.9%		0.5%	0.9%	1.7%		0.9%	0.6%
East Midlands	0.8%	1.2%	1.4%	0.8%	0.4%	2.0%	0.5%	0.9%			1.7%	1.0%
South West UK	3.5%	3.6%	7.0%	3.8%	3.5%	4.0%	2.2%	3.3%	2.9%	4.0%	6.1%	1.3%
Wales	86.9%	83.0%	70.0%	83.3%	89.9%	85.1%	90.8%	90.4%	92.1%	92.1%	77.8%	90.9%
West Midlands	1.6%	6.1%	2.8%	1.9%	0.4%	3.0%	1.6%	0.9%	1.3%		2.9%	1.0%
East Anglia	0.4%		1.4%	0.6%	0.9%		0.5%					0.3%

Table socio economic classification of movers to Merthyr Tydfil

	All mover households & groups	Large employers and higher managerial occupations	Higher professional occupations	Lower managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	Routine occupations	Never worked and long-term unemployed	Full-time student	Not classifiable for other reasons
South East UK	72	0	3	27	15	3	3	3	6	3	3	6
North West	9	0	0	3	0	0	0	0	0	3	0	3
West Midlands	39	0	0	6	0	9	0	6	3	3	3	9
South West UK	66	3	3	12	15	6	6	12	3	0	0	6
Wales	2248	36	69	346	213	105	164	285	355	198	71	406
East Anglia	6	0	0	0	0	3	0	0	0	3	0	0
East Midlands	6	0	0	3	0	0	0	0	0	0	0	3
Yorkshire and Humberside	12	0	0	6	0	0	0	0	0	0	3	3
North	9	0	0	6	0	0	0	0	0	0	0	3
	2467	39	75	409	243	126	173	306	367	210	80	439
South East UK	3%	0%	4%	7%	6%	2%	2%	1%	2%	1%	4%	1%
North West	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%
West Midlands	2%	0%	0%	1%	0%	7%	0%	2%	1%	1%	4%	2%
South West UK	3%	8%	4%	3%	6%	5%	3%	4%	1%	0%	0%	1%
Wales	91%	92%	92%	85%	88%	83%	95%	93%	97%	94%	89%	92%
East Anglia	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%
East Midlands	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%
Yorkshire and Humberside	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	4%	1%
North	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%

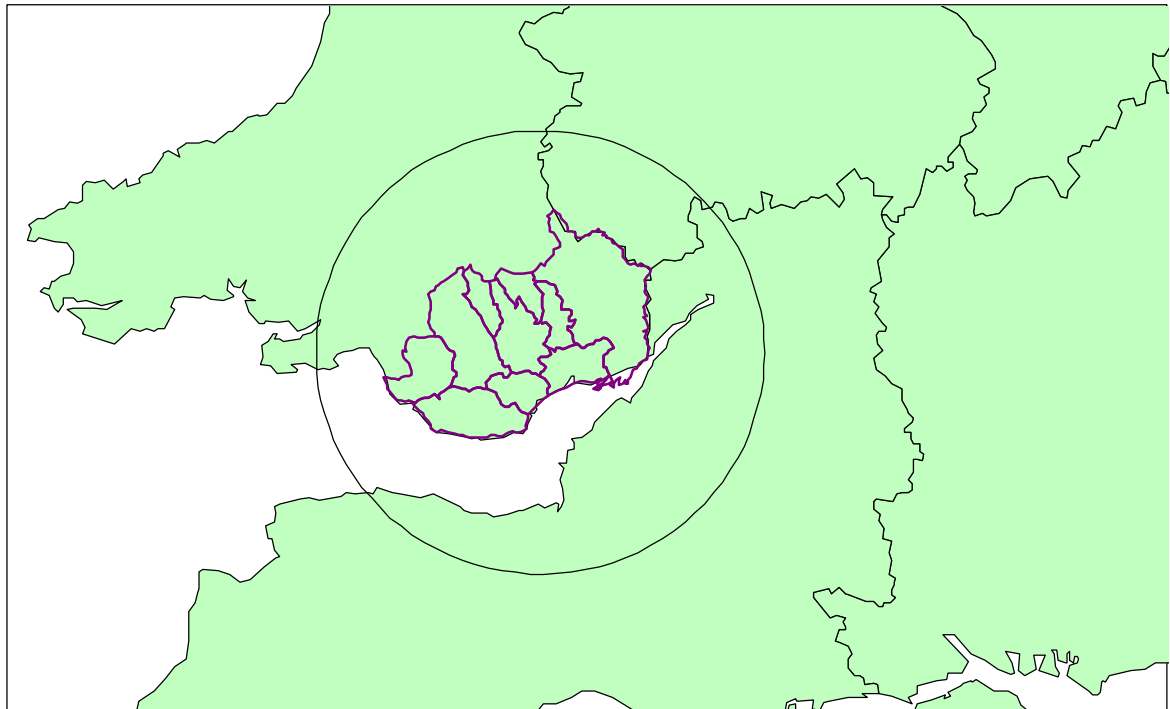
Table 3 socio economic classification of movers to housing market types

% of movers from Wales by Socio economic classification	All mover households & groups	Large employers and higher managerial occupations	Higher professional occupations	Lower managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	Routine occupations	Never worked and long-term unemployed	Full-time student	Not classifiable for other reasons
Newport, Cardiff, Bridgend	86%	80%	77%	85%	86%	89%	92%	91%	92%	93%	78%	89%
North of M4	91%	87%	83%	88%	92%	93%	94%	95%	96%	93%	81%	93%
Mid Valleys	94%	84%	88%	90%	86%	94%	95%	95%	96%	96%	91%	96%
Heads of Valleys	92%	96%	89%	89%	92%	82%	96%	94%	93%	94%	91%	91%
Monmouthshire rural	64%	45%	53%	60%	52%	71%	80%	72%	73%	57%	55%	69%
% of movers from South East by Socio economic classification	All mover households & groups	Large employers and higher managerial occupations	Higher professional occupations	Lower managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	Routine occupations	Never worked and long-term unemployed	Full-time student	Not classifiable for other reasons
Newport, Cardiff, Bridgend	5.5%	7.4%	10.0%	6.2%	4.7%	4.8%	3.2%	3.0%	2.5%	2.8%	8.0%	4.5%
North of M4	3.4%	5.3%	7.0%	5.8%	2.4%	1.7%	2.6%	1.5%	2.4%	2.1%	6.8%	2.4%
Mid Valleys	2.7%	9.6%	4.0%	5.4%	7.4%	2.0%	2.0%	1.4%	1.6%	0.5%	5.2%	2.0%
Heads of Valleys	3.4%	3.7%	2.8%	4.0%	4.7%	8.1%	3.5%	2.4%	4.3%	1.6%	2.3%	2.3%
Monmouthshire rural	11.3%	15.0%	13.0%	12.9%	15.1%	10.2%	6.1%	11.4%	5.2%	10.0%	4.9%	12.7%

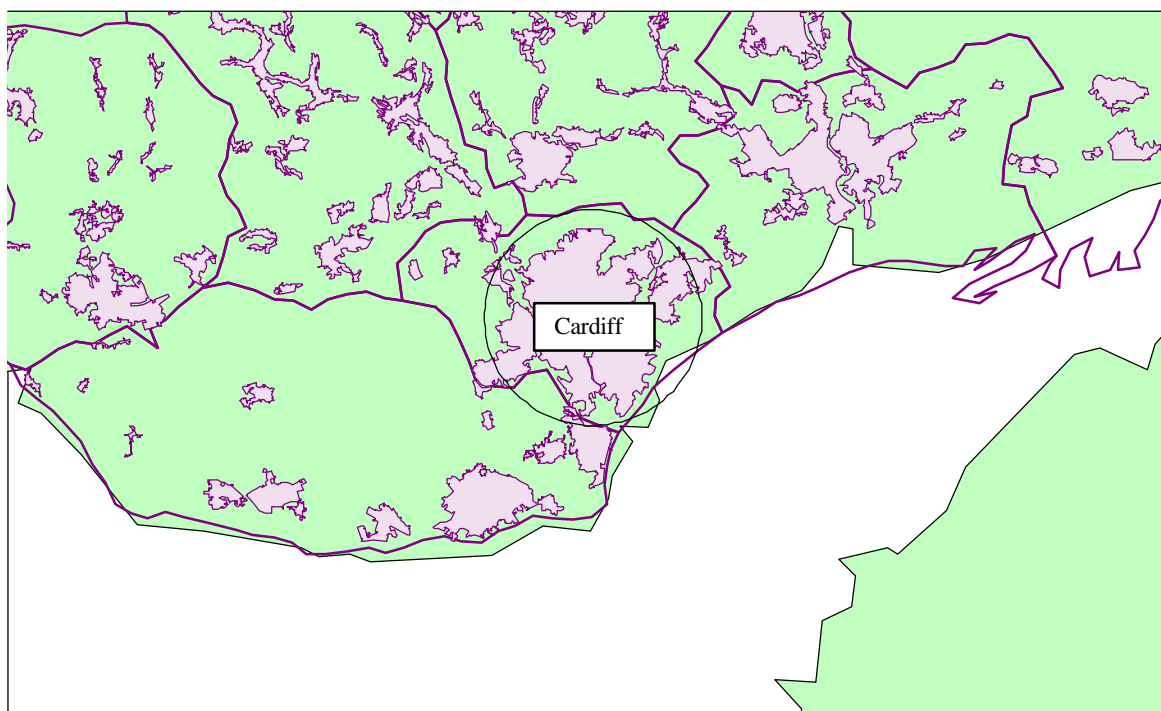
Monmouthshire rural can be seen as most strongly linked to the South East, as would be expected, while the mid valleys areas have the strongest internal links .

This also raises the possibility of deriving housing market areas for different socio-economic groups, which could enable policy to be tailored for the type and tenure of housing within a more balanced market.

For higher management and professional movers, the 70% self containment area is as shown in the map below, covering the whole of the SEWRHF area and beyond to Bristol and Swansea.



For routine and semi routine households moving, the equivalent 70% self containment area is virtually the Cardiff urban area only.



Even the overall Cardiff local authority area, including surrounding villages and small settlements, receives 73% of movers in these SeC groups.

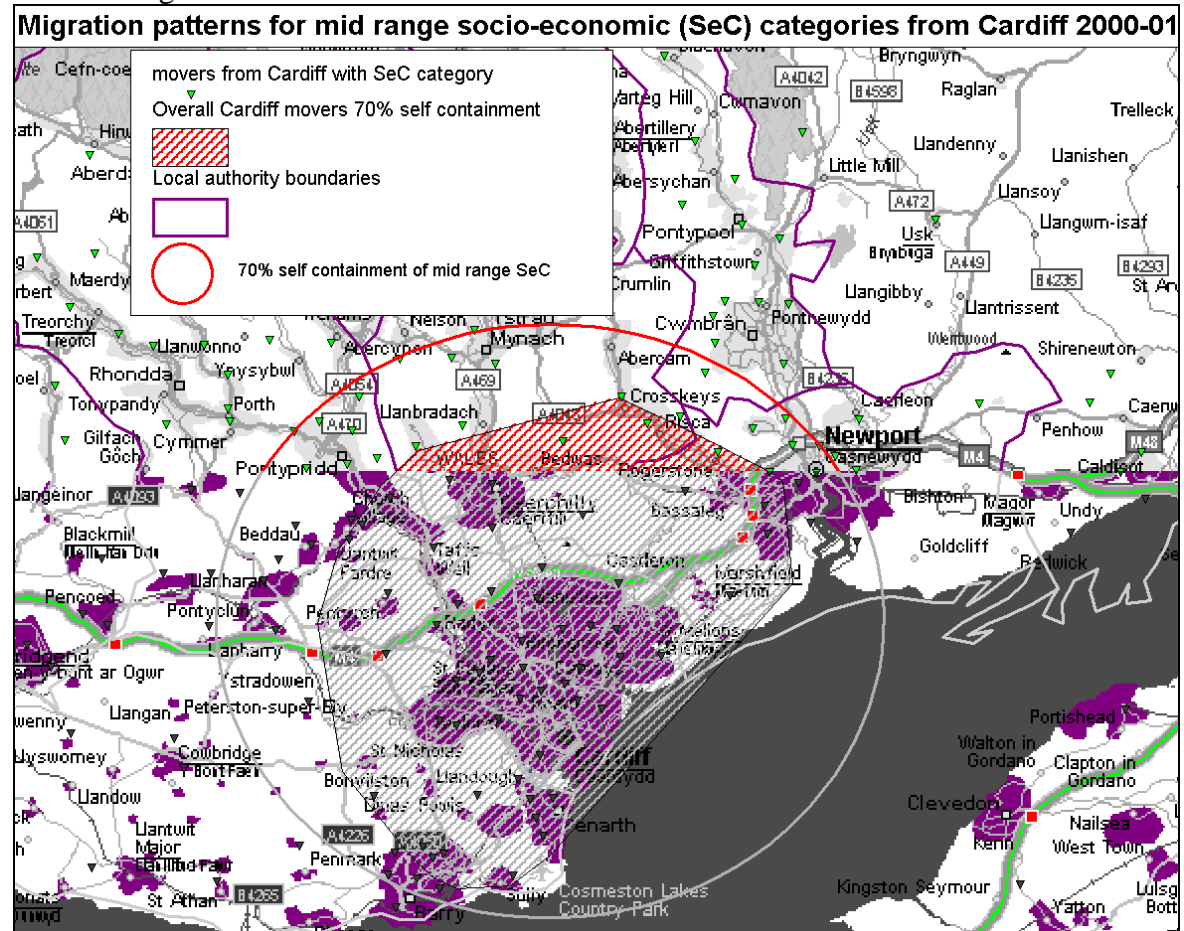
These are opposite ends of the socio-economic classification, and the middle ranges also have different housing market self containment patterns. In the study area just under 40% of households are in the middle range occupations.

National Statistics Socio-economic classification in South East Wales study area

		% of total in SEWRHF area
All people	994173	
Large employers and higher managerial occupations	24691	2%
Higher professional occupations	40208	4%
<i>Lower managerial and professional occupations</i>	<i>164156</i>	<i>17%</i>
<i>Intermediate occupations</i>	<i>84621</i>	<i>9%</i>
<i>Small employers and own account workers</i>	<i>51594</i>	<i>5%</i>
<i>Lower supervisory and technical occupations</i>	<i>76290</i>	<i>8%</i>
Semi-routine occupations	120056	12%
Routine occupations	102654	10%
Never worked	30677	3%
Long-term unemployed	10236	1%
Full-time students**	75300	8%
Not classifiable for other reasons	213690	21%

These would seem to be the types of occupations which not only constitute the majority of economically active households, but will also be more active in the housing market and move as their lifestyles change and they progress through their 'housing careers'. The equivalent 70% self containment area for movers with origins in Cardiff for this group is slightly bigger than the overall 70% self containment, as would be expected if the routine and semi routine categories have a smaller self containment area.

While 70-75% self containment of migrations was not found to be the most useful or consistent indicator of housing markets areas compared to other methods, it does give a consistent means of comparison for a single area, and for which the socio-economic classifications are available in the data. Cardiff is also used as the example because of the strong influence it has within the SEWRHF area.



Although this basically just confirms what is obvious from experience, it also provides a more quantifiable basis for understanding the likely mover and housing demand patterns, and the interactions of different income, lifestyle and life stage groups, which may in turn also link with tenure expectations. The data alone does not and cannot give complete answers, but when interpreted thought local knowledge could contribute to and underpin better local policy, intervention and planning decisions.

4.3 Investment pressures

Cash purchases constitute about 23% of all residential property sales in England and Wales overall. They can result from several different sets of circumstances of buyer, or combinations of them. They could include, in general terms,:-

- Households trading down
 - Due to moving from a larger home
 - Due to moving from a more expensive housing market area
 - A combination of both of these
- Landlords buying with accrued resources to rent
- Investment in housing instead of other forms, such as stocks and shares
- Mortgage of other property
- Legacies
- Parental or other financial help
- Cheap property
- Extensive savings
- Wealthy households

No doubt all of these things happen, but the main reasons and circumstances in any specific sub market or location could reveal more about the likely future trends, and thus the best strategic and policy options. For example, if the main cause is first time buyers with parental help an area may be more likely to be regenerated than if it is landlords with spare cash.

Recent research shed some more light onto the reasons for cash purchases:-

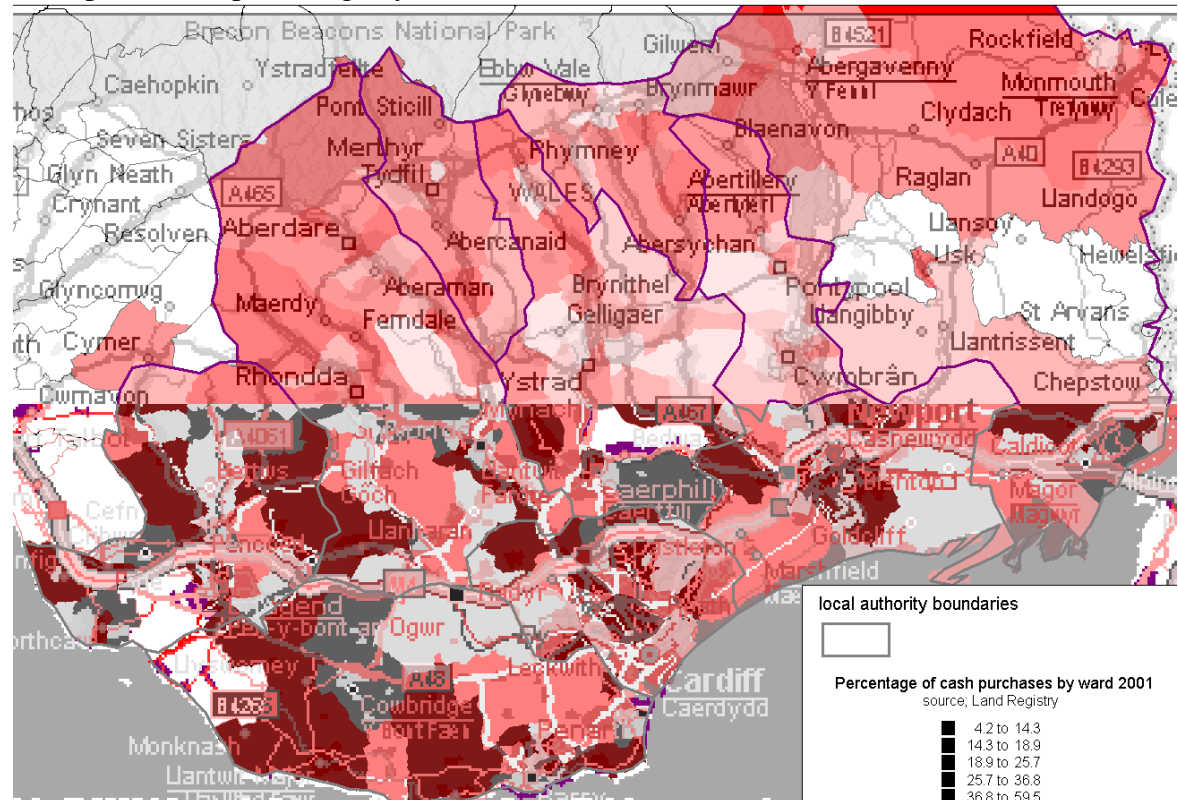
- over 50% of all cash buyers have an annual income of less than £15,000, which given the age profile is likely to be pension income.
- only 3% of cash buyers have an income over £50,000 compared with 13% of borrowers.
- two-thirds used equity from the sale of a previous property as the main source of funding for their cash purchase.
- a quarter contributed savings towards the purchase, but only 16% used savings as the primary source of finance.

- 6% of those surveyed own property other than their main residential home. A second property is more than twice as likely to be bought with cash than a first residence

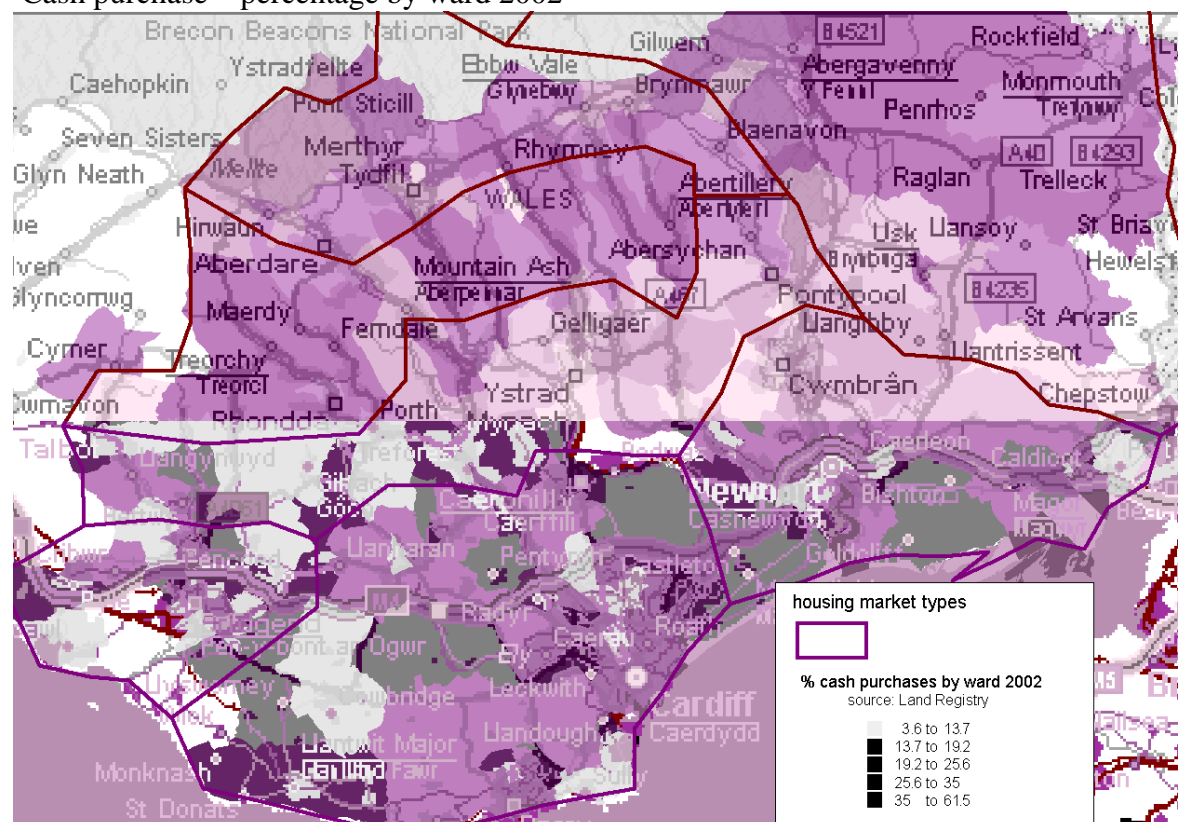
Source. Council of Mortgage Lenders (CML) 'Rich or retired ; a profile of cash purchasers in the UK. 2004

The pattern of cash purchases in the SEWRHF study area for 2001 and 2002, the most recent data available, is shown in the maps below. The first maps for 2001 shows the local authorities, while the second shows the divisions by housing market type identified for the study.

Cash purchase – percentage by ward 2001



Cash purchase – percentage by ward 2002



The housing market type boundaries bring out the clearest divisions within the data, showing that the mid valleys and heads of valleys have the highest proportions of cash purchases, while Newport and Cardiff are lowest.

Table 4 cash and mortgage residential property sales 2001 & 2 by housing market type -numbers

Housing market type	cash 01	mortgage 01	total 01	cash02	mortgage 02	total 02
Bridgend	445	1545	1990	479	1709	2188
Cardiff	1876	8294	10170	2088	10478	12566
Heads of Valleys	358	892	1250	460	1198	1658
Mid Valleys	754	1501	2255	1087	1844	2931
Monmouthshire	283	735	1018	384	976	1360
Newport	665	3161	3826	823	3852	4675
North of M4	784	2858	3642	968	3439	4407
Total	5165	18986	24151	6289	23496	29785

Table 5 cash and mortgage residential property sales 2001 & 2 by housing market type -percentages

Housing market type	cash 01	mortgage 01	cash02	mortgage 02
Bridgend	22%	78%	22%	78%
Cardiff	18%	82%	17%	83%
Heads of Valleys	29%	71%	28%	72%
Mid Valleys	33%	67%	37%	63%
Monmouthshire	28%	72%	28%	72%
Newport	17%	83%	18%	82%
North of M4	22%	78%	22%	78%
Total	21%	79%	21%	79%

Source: Land Registry

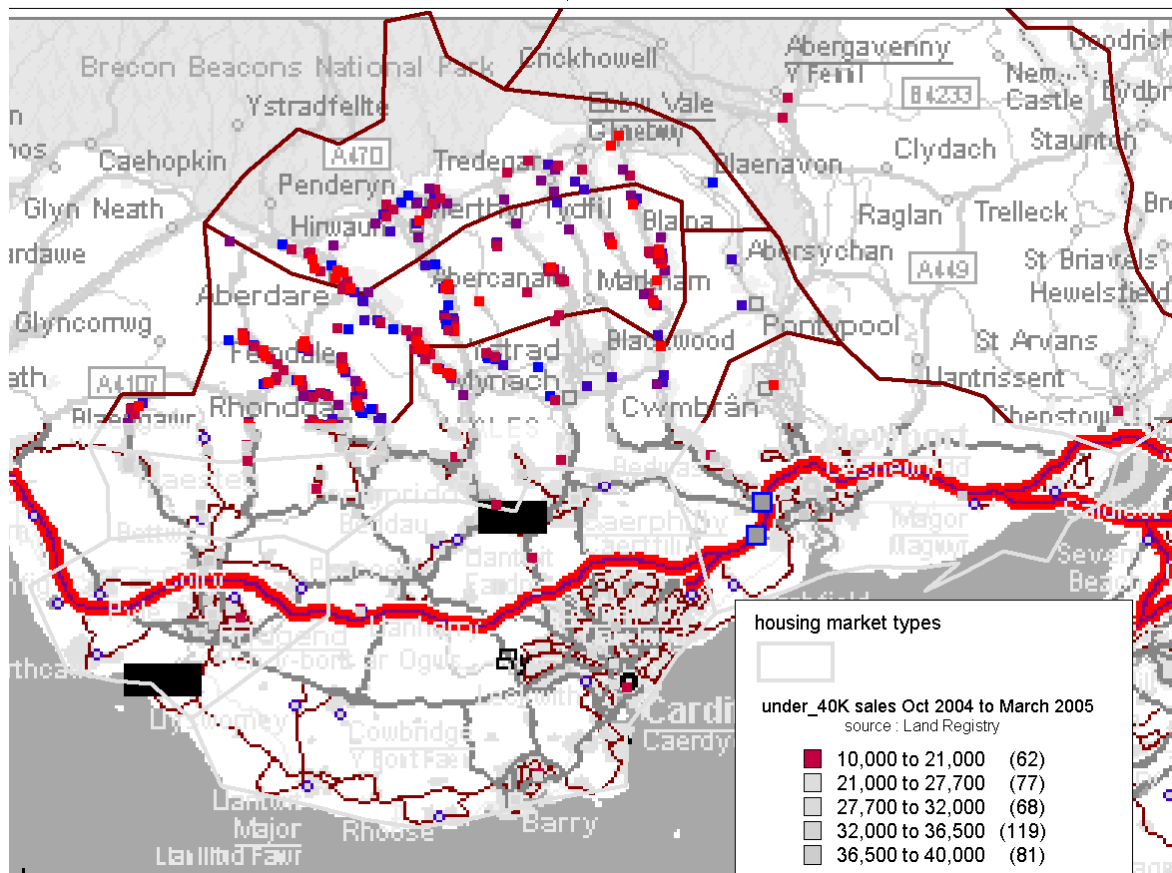
No doubt all reasons apply in various proportions, but evidence from interviews with estate agents suggest that buy to let is an important influence in some areas, especially where house prices are lower.

Cash purchases may be a sign of market adjustment and investment, but they may also be an indicator of absentee landlords looking for bargain buy to let properties, which are then not maintained or improved to a reasonable standard. While it may be a sign of recovery while the market is buoyant and house price inflation and capital gains expected, it could also be a fragile recovery if market circumstances change.

As house prices have generally levelled off in many areas towards the end of 2004, signs of increasing numbers of empty private rented houses, or rapidly changing Housing Benefit claims in the private rented sector in some locations may be an indication of possible market reversal.

The latest Land Registry sales data for the period from October 2004 to March 2005 shows some 400, under £40,000 out of 9500 sales - around 4%, and 1250 or 13% under £60,000. The under £40,000 sales are concentrated in the mid valleys housing market type, with some in the heads of valleys area.

Sales under £40,000 October 2004 to March 2005



There are always a few low value sales everywhere for various reasons, - usually oddities and outliers - , which will account for the 1-2% in Cardiff, Newport and Bridgend. The picture does however perhaps suggest that there are more very low value sales in the heads of the valleys, which are perhaps more likely to be outliers; while in the mid valleys, where the overall average price is still lower, more properties are changing hands as general market forces operate. For comparison, the numbers of sales under £40K by housing market type were:

Table – sales under £40K by housing market type – October 2004 to March 2005

Housing market type	sales under £40K	total sales	% under £40K
Bridgend	8	499	2%
Cardiff	21	3194	1%
Monmouthshire	3	340	1%
Newport	11	1182	1%
Heads of Valleys	64	625	10%
Mid Valleys	218	1168	19%
North of M4	79	1332	6%

Source: Land Registry

Whether any market led recovery is being sustained in these housing markets areas, or is petering out as the general market levels off , could be monitored by:-

- extracting and analysing Housing Benefit data for that specific area,

- charting changes in house prices locally,
- checking trends in whether buyers are mainly owner occupiers or buying to let, and
- reviewing information arising from the proposed licensing scheme for privately rented accommodation.

This could allow timely policies and interventions to prevent possible decline.

5. Affordability and Housing Needs

5.1 Methodology using the available datasets

Various datasets compiled and acquired for the study can be used as the basis for estimates of the affordability of housing at a quite detailed level of geography, and from an estimate of the need for affordable housing within both smaller areas and the overall study area can be derived. As ever, this poses some difficult problems of methodology;- the interactions between housing, its costs and households and their resources are exceedingly complex, further obscured by movement and migration patterns, and our understanding of them is still at a fairly rudimentary stage.

The method used here is essentially a residual need gross flows approach, which derives the number of households interacting with the market who cannot afford to buy a home at an entry level price, based on their resources, by using standard factors for their mortgage borrowing capability and the loan required. The ones who cannot access entry level owner occupation are deemed to be households who ‘need’ affordable housing, and the existing supply of this is also taken into account.

This essentially reflects the basic components of need method used in the guidance on housing needs assessments in Wales and England, both in their current form and in the proposed new combined version due to be published by ODPM later in 2005. It does not, however, at this level set out to follow the detail of the guidance for all aspects of need.

There is a key difference between the ‘stock’ of households which meet the unable to afford criteria, as most of them will already be in housing; and the ‘flow’ of households moving or emerging which will interact with the market, and so consume a new or different dwelling (but quite possibly also releasing one).

It is at base a mechanistic, arithmetical process using bulk datasets, and will not capture all aspects of housing need. Nevertheless it does use consistent data and the same approach across the whole study area; and because the data is available at small area levels, comparisons between different parts of the sub region can be drawn. While the datasets used do not include the level of detail that can be obtained in a survey, it is however not just for a sample but usually for well over 90% of cases, - that is all cases covered by administrative recording systems or the Census.

Key factors that can be used in the estimates are:

- house prices and sales . Using full postcode Land Registry data allows the realistic entry level price to be determined, at the same time taking into account the number of sales, for quite small areas.
- CACI Paycheck incomes profiles for each postcode allow estimates of the number of households who can afford these entry level prices to be derived.
- the number of households moving, emerging and ending

- current supply of affordable housing ; and
- the extent of equity in owner occupation which may give household resources to meet their own housing needs

A key issue is the spatial scale at which these calculations are made, and many options are possible. Traditional housing needs assessments tend to be for a specific local authority, but these are frequently not of themselves housing market areas within which households make choices about their housing; - this is discussed further in the section on *Conceptualising and analysing housing markets*. The wider housing market areas identified in the study are one option for deriving affordability and needs estimates.

This has limitations, however, especially for the larger urban areas, where different submarkets within the wider housing market area have quite different entry level house prices and incomes profiles. Using submarkets within these areas is another option,

Smaller levels of geography such as Super Output Areas or postcode sectors can also be used, and these have the advantage of showing a more detailed pattern of needs. These also do not represent any ‘real’ patterns in the market, but are the building blocks by which data can be built into more meaningful patterns. However, households are also more likely to move out of these small areas when seeking housing, so confining estimates to within these areas will not capture the real flows and patterns.

The method used was:-

- the lowest level data, postcode or Output Area, was aggregated to the chosen boundary structure :- housing market areas, submarkets, or Super Output Areas.
- The entry level house price by type was determined for each geographical unit. This was done by taking either :-
 - the lowest property type average price,
 - or the upper level of the lower quartile of the number of sales within each area.

It is sometimes argued that very low priced outliers should be removed, but as these are genuine transactions which could provide housing they have all been included.

- Using an income mortgage multiplier of 3.5, and a loan to value ratio of 95% (so always assuming a 5% deposit), the number of households with incomes below the level needed to buy an entry level property can be calculated for each area unit. The multiplier and loan to value ratio can also be altered in the model to allow scenario analysis.

This gives the total of households who could not afford to buy on income alone, - itself a useful indicator of housing market conditions -; but of course many of these

are already housed in either owner occupation, (and so would have equity if they needed to move); or in rented housing. It is the *flow* of households moving which cannot afford market housing which is relevant for housing needs estimates.

This flow, represented by the number of household moving, is derived from Census migration matrices, specifically for each different level of geography. The ward level data (Table MG205) includes a breakdown by tenure, which also enables the number of owner occupiers to be estimated and removed from the total who may need affordable housing. The residual figure, for each geographical unit, is a number for the annual flow of non owner households who cannot afford to buy, and therefore deemed to need affordable housing of some form. So the result of this first part of the process is an estimate of the residual backlog need, expressed as a number of units required per year, within each geographical unit.

Another component of housing need must also be taken into account - emerging and concealed households. The 2001 Census table CAS11 includes figures for:-

- concealed families, broken down by the age of the household reference person (HRP), and
- households with non dependant children living in them, again split by age of HRP.

The age breakdowns of 29 and under, 30 to 44, 45 to 64, and 65 + enable differentiation between concealed families in different lifestages. So over 65 HRP concealed families, who could be, for example, older parents living with their adult children, can be excluded from the total who may need separate housing. These elements were derived for the different geographical units, and, with adjustments to reflect 'pairing and sharing' and headship rates, added to the needs totals.

Only concealed families aged under 65 were included as in need, and this total, as possible delayed residual need, was also deducted from the annual cohort of potential emerging households aged 20 to 24, to avoid potential double counting.

5.2 Supply of affordable housing

Against this 'debit' side of the needs equation must be set the 'credit' supply side of affordable homes coming available for occupation. This is derived from voids and lettings figures for local authorities and housing associations from the detailed data extracted from their systems, and from the WHO4 statistical returns.

Since the total residual backlog need is based on all households who cannot afford who interact with the market by moving, - including for example transfers and exchanges within social housing - , the supply side must also include the total affordable supply, and not just new lets. This adds a dimension by including *all* available supply, including stock which turns over more rapidly or is difficult to let.

This will therefore also reflect any 'churning' or low demand stock within areas which can often increase apparent supply without actually solving any longer term housing need – indeed often actually adding to it. The resulting net need in the area

will be therefore be reduced, but this may represent unpopularity or inadequacy of the stock available in the area rather than lack of need.

The proportions of voids and lets were aggregated for each geographical from the detailed data, thus giving a more detailed distribution of lets and capturing areas of higher and lower turnover. This was then weighted to give the overall WHO4 total of all lets, transfers and exchanges within the study area. This is a fairly crude process, but will go some way towards capturing variation in the detail of demand and supply, rather than just using local authority level lets totals, which can often distort the true detailed picture. It could be refined considerably by using more frequent, consistent and cleaner data feeds from local authority and RSL lettings systems.

There are clearly many complications, qualifications and caveats to the method, as indeed to all methods of estimating a nebulous concept like 'need' in a complex system such as housing.

- The method in effect applies the *overall* incomes profile for each geographical unit to the *all households* in that unit, whereas it is likely that in reality movers who are not owners will have a lower incomes profile. This will therefore tend to overstate their ability to buy, and thus produce a lower proportion unable to afford.
- Conversely, the method also assumes that private lets at rents similar to mortgage levels are also not affordable, whereas in reality private renting is clearly an alternative for many households who cannot afford to buy; - indeed in many ways it has become the default 'intermediate' housing market between social renting and buying. This may compensate for the overstatement of incomes, although the numbers of households involved in both cases is not currently adequately quantifiable.
- A further sophistication to the method could be to include an element of the private rented sector that is affordable; - such as lets supported by Housing Benefit. Some figures for this can be derived from the 121 and 122 statistical returns to the Department of Work and Pensions by local authority housing benefit departments, and also from HB data provided by local authorities for the project, although this was patchy in coverage.
- The method also does not allow for resources from other sources which can often help households to 'get a foot on the housing ladder'. This could include, for example, higher income-mortgage multipliers, larger deposits, parental help, legacies and gifts, and so on. However, as these will have an inflationary effect on house prices and are not available to all households, including them in estimates of need can be argued to be not justifiable for the policy evidence base, even though they may, of necessity, be increasingly common.

5.3 Results of affordability and needs estimates

The results are best shown in the interactive spreadsheet models and maps, and web links to these are given at the relevant points in the following text.

In summary, the gross need for the different housing market types within the local authority areas (see section) is given in the table below. Cardiff has the highest need, at 40% of the total gross need in the South East Wales Regional Housing Forum area, followed by Rhondda Cynon Taff at 12%, and Newport at 9%. All local authority areas show some gross need by this method, with Blaenau Gwent and Merthyr Tydfil the lowest at around 3% of the total each.

Table – gross need (before supply) for affordable housing – residual backlog plus annual emerging need

Housing Market type in LA	LA	Total gross need	Gross need in LA	Proportion of need in LA	Proportion of need in SEWRHF area
Heads of Valleys HMType in Blaenau Gwent	Blaenau Gwent	573	1094	52%	1.8%
Mid Valleys HMType in Blaenau Gwent	Blaenau Gwent	521	3.5%	48%	1.7%
Bridgend HM in Bridgend	Bridgend	1458	1934	75%	4.7%
Mid Valleys HMType in Bridgend	Bridgend	198	6.2%	10%	0.6%
north of M4 HMtype in Bridgend	Bridgend	278		14%	0.9%
Cardiff HM in Caerphilly	Caerphilly	570	2704	21%	1.8%
Heads of Valleys HMType in Caerphilly	Caerphilly	53	8.7%	2%	0.2%
Mid Valleys HMType in Caerphilly	Caerphilly	373		14%	1.2%
Newport HMA in Caerphilly	Caerphilly	193		7%	0.6%
north of M4 HMtype in Caerphilly	Caerphilly	1515		56%	4.9%
Cardiff HM in Cardiff	Cardiff	12496	12496	100%	40.3%
Heads of Valleys HMType in Merthyr	Merthyr	635	865	73%	2.0%
Mid Valleys HMType in Merthyr	Merthyr	141	2.8%	16%	0.5%
north of M4 HMtype in Merthyr	Merthyr	89		10%	0.3%
Heads of Valleys HMType in Monmouthshire	Monmouthshire	5	1647	0%	0.0%
Monmouthshire HMA type in Monmouthshire	Monmouthshire	1304	5.3%	79%	4.2%
Newport HMA in Monmouthshire	Monmouthshire	338		21%	1.1%
Newport HMA in Newport	Newport	2671	2671	100%	8.6%
Bridgend HM in RCT	Rhondda Cynon Taff	7	3824	0.2%	0.0%
Cardiff HM in RCT	Rhondda Cynon Taff	631	12.3%	17%	2.0%
Heads of Valleys HMType in RCT	Rhondda Cynon Taff	349		9%	1.1%
Mid Valleys HMType in RCT	Rhondda Cynon Taff	1096		29%	3.5%
north of M4 HMtype in RCT	Rhondda Cynon Taff	1741		46%	5.6%
Heads of Valleys HMType in Torfaen	Torfaen	125	1733	7%	0.4%
Newport HMA in Torfaen	Torfaen	946	5.6%	55%	3.0%
north of M4 HMtype in Torfaen	Torfaen	662		38%	2.1%
Bridgend HM in Vale of Glamorgan	Vale of Glamorgan	26	2067	1.3%	0.1%
Cardiff HM in Vale of Glamorgan	Vale of Glamorgan	2041	6.7%	99%	6.6%

However, this is just the **gross** need, before the supply of affordable housing is taken into account. In itself this may be a useful measure, indicative of key characteristics of local housing markets, and showing the relative proportions of need in each area,

and perhaps representing some measure of an overall shortage of supply compared to demand within these markets.

Taking into account the supply of affordable homes through social lets changes the outcomes. Although 'need' exists everywhere in the SEWRHF area, - based on entry level house prices, incomes, tenure, lifestyle and engagement with the market -, this can be met to varying degrees by the flow of social housing lets of all kinds. The pattern of need remains fairly similar, as might be expected, but there are differences. The table below summarises the results

Table – net need by housing market type within local authority area

HMTinLA	LA	residual and delayed backlog new need	need/year	Total gross need per area	Total social lets	Net need	over 5 years - affordable units/year needed	Net annual need in LA
Heads of Valleys HMType in Blaenau Gwent	Blaenau Gwent	481	93	573	274	300	60	129
Mid Valleys HMType in Blaenau Gwent	Blaenau Gwent	449	72	521	175	346	69	
Bridgend HM in Bridgend	Bridgend	1345	113	1458	463	995	199	205
Mid Valleys HMType in Bridgend	Bridgend	159	39	198	353	-155	-31	
north of M4 HMtype in Bridgend	Bridgend	250	28	278	95	183	37	
Cardiff HM in Caerphilly	Caerphilly	467	103	570	244	326	65	252
Heads of Valleys HMType in Caerphilly	Caerphilly	39	14	53	151	-98	-20	
Mid Valleys HMType in Caerphilly	Caerphilly	334	39	141	107	34	7	
Newport HMA in Caerphilly	Caerphilly	175	18	193	123	70	14	
north of M4 HMtype in Caerphilly	Caerphilly	1326	188	1515	584	931	186	
Cardiff HM in Cardiff	Cardiff	10898	1598	12496	4276	8220	1644	1644
Heads of Valleys HMType in Merthyr	Merthyr	623	13	635	826	-191	-38	83
Mid Valleys HMType in Merthyr	Merthyr	125	16	1095	582	514	103	
north of M4 HMtype in Merthyr	Merthyr	69	20	88	0	88	18	
Heads of Valleys HMType in Monmouthshire	Monmouthshire	0	5	5	0	5	1	244
Monmouthshire HMA type in Monmouthshire	Monmouthshire	1275	29	1304	303	1001	200	
Newport HMA in Monmouthshire	Monmouthshire	291	47	338	124	214	43	
Newport HMA in Newport	Newport	2396	276	2671	1306	1366	273	273
Bridgend HM in RCT	RCT	3	4	7	0	7	1	324
Cardiff HM in RCT	RCT	504	127	631	219	412	82	
Heads of Valleys HMType in RCT	RCT	309	40	349	107	242	48	
Mid Valleys HMType in RCT	RCT	942	153	373	275	98	20	
north of M4 HMtype in RCT	RCT	1446	295	1741	878	863	173	
Heads of Valleys HMType in Torfaen	Torfaen	113	12	125	53	72	14	180
Newport HMA in Torfaen	Torfaen	825	121	946	390	557	111	
north of M4 HMtype in Torfaen	Torfaen	578	84	662	389	274	55	
Bridgend HM in Vale of Glamorgan	Vale of Glamorgan	43	6	49	0	49	10	257
Cardiff HM in Vale of Glamorgan	Vale of Glamorgan	1932	109	2041	805	1236	247	
Totals		27397	3662	31033	13102	17936	3586	

The overall net need is also converted into a net annual need over a five year policy period, as suggested in current guidance. However, as housing market conditions such as entry level prices can change rapidly, as they have over recent years, the idea

of being able to address a stable backlog over a defined period may seem to miss the realities of how housing markets actually operate.

The patterns and results derived by this method do not mean that there is no requirement for interventions in the housing markets in the areas where the need is shown as less; but, when interpreted with the benefit of local knowledge and experience, may help inform and guide the type of actions and policies needed. In some local authorities the results suggest that replacement and remodelling of stock, or even improved access, environmental improvements, or other measures, may be needed to address imbalances between markets in different areas within the same local authority.

Overall, within the study area, the net need is estimated, using this method, as a total of just under 18,000 additional affordable homes required. This translates to an annual need for around an additional 3,500 affordable homes each year for the next 5 years. It compares, for example, with Holman's work for CML published in 2003, looking at housing demand between 1998 and 2016, which identified a need for 2,500 new social rented homes per year plus a backlog of unmet need of 33,000 homes as at 1998 across the whole of Wales. Given the increases in entry level house prices since then and the different geographical scale, the different estimates appear broadly commensurate.

The total need is also likely to be more than the total annual new housing supply within the area, which may appear illogical at first sight, but in fact is not, as affordability depends primarily on resale entry level house prices, and has no direct logical relationship with new supply levels (Although may have a more complex link through supply and demand, as set out in the Barker review). Relative needs between areas were:-

Table 6

LA	Net annual need in LA	% of total need in SEWRHF area
Blaenau Gwent	129	3.6%
Bridgend	205	5.8%
Caerphilly	202	5.7%
Cardiff	1644	46.5%
Merthyr	83	2.3%
Monmouthshire	244	6.9%
Newport	273	7.7%
RCT	324	9.2%
Torfaen	180	5.1%
Vale of Glamorgan	252	7.1%
Total annual need in SEWRHF area	3536	

The patterns of need by housing market types within the local authority areas are shown in the maps below, and in on line SVG maps at :-

http://homepage.ntlworld.com/b.line/SEWRHF/SVG/HMAtypes/gross_need_by_HMtype_in_LA.htm

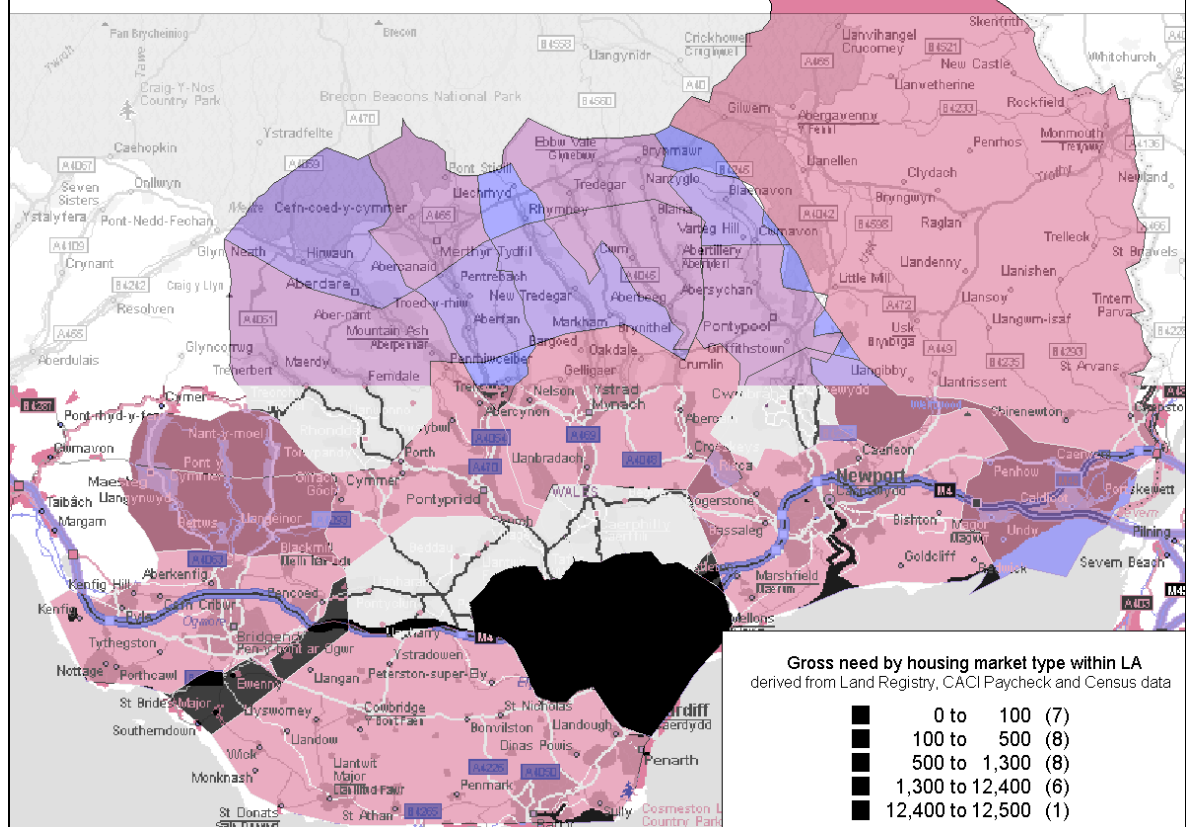
and

http://homepage.ntlworld.com/b.line/SEWRHF/SVG/affordability/Net_need_by_HMtype_in_LA.htm.

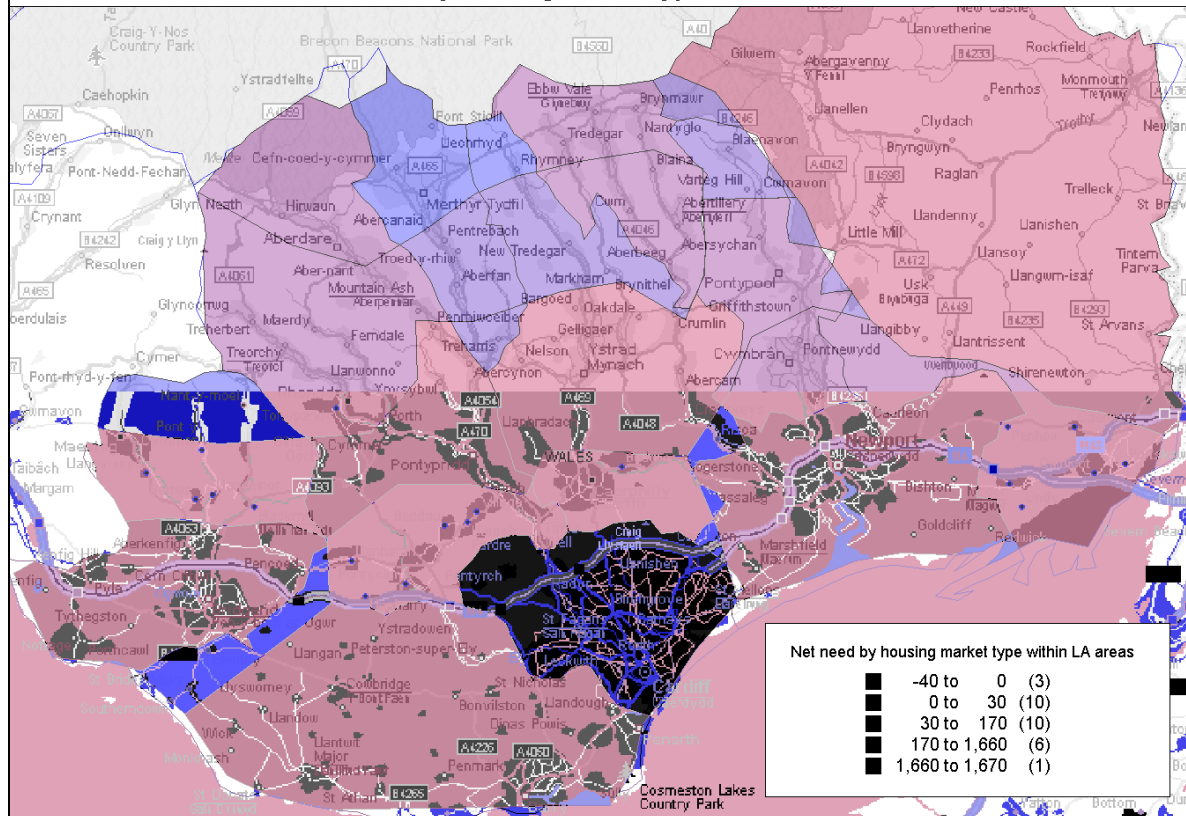
The full spreadsheet model is also available at :-

http://homepage.ntlworld.com/b.line/SEWRHF/Affordability&needs/affordability_by_HMtype_in_LA.xls

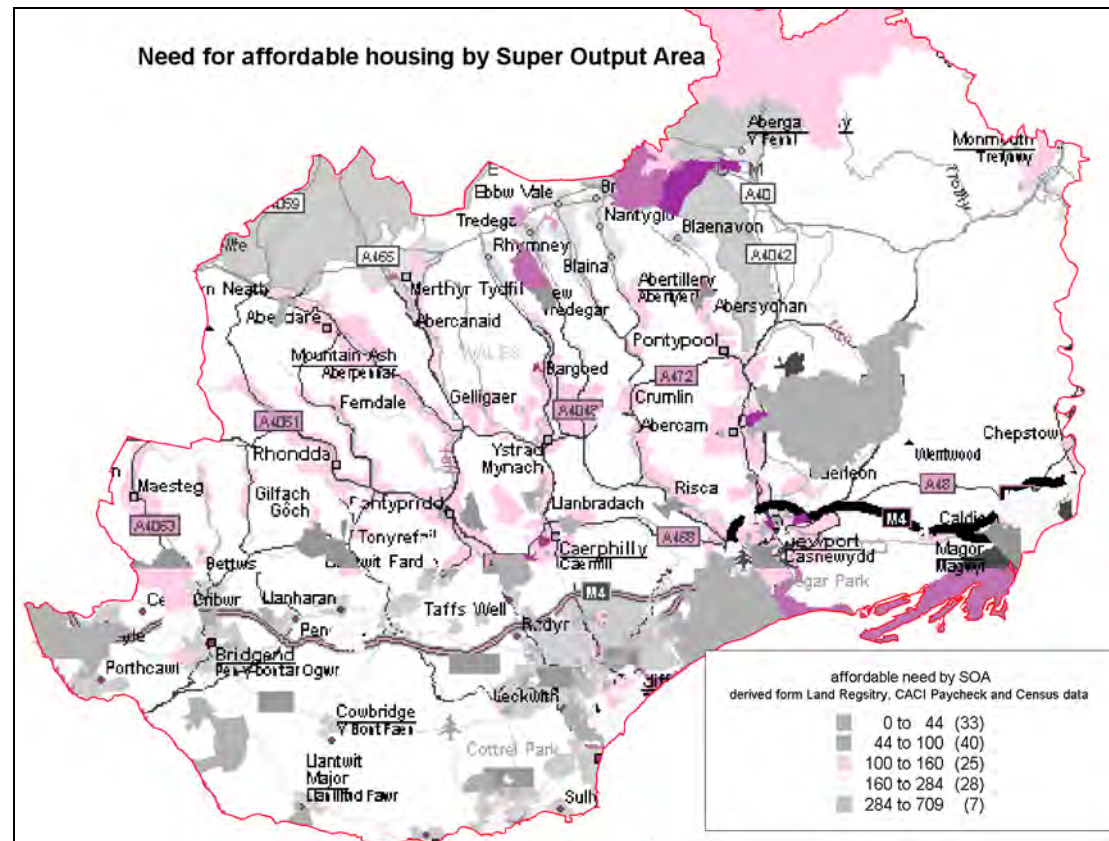
Gross need by housing market type within LA



Net need by housing market type within LA areas



Housing need can also be analysed at a more detailed level of geography. This is more difficult due to the more fragmented and erratic nature of the data at this level, and so will completely agree with the analysis at a larger scale, and also in any case mainly reflects the larger urban areas. It may however, have some indicative value as a comparison between and to some extent within settlements.



An on line SVG version of this map is available at :-

http://homepage.ntlworld.com/b.line/SEWRHF/SVG/affordability/Need_by_SOA.htm

5.4 Patterns in key housing indicators and variables

Housing markets are inevitably complex, dynamic and interlinked, and in attempting to improve understanding of how they work it is essential to have a framework for understanding what can otherwise be a confusion of data. Key elements are set out in LOCAL HOUSING MARKET ANALYSIS, An Advice note to Welsh Local Authorities from the Welsh Assembly Government :-

- housing stock
- housing costs/affordability
- housing quality
- land/construction
- households

In addition, key external drivers are identified :-

- demography
- macro/regional economy
- local labour market
- earnings and employment

In other sections these have been expanded and considered in more detail, covering factors such as:-

Stability/turnover	- number of movers in & out compared to population
Self containment	- how far households generally move when they do
Penetration/interactions	- what other places export to and import from the area
Influence	- what other places or areas have an influence
Travel to Work areas	- how far and where people travel to work
Economic activity, jobs	- what type of people, skills and households does employment bring to or keep in the area
Accommodation types	- what types of housing are available and do they provide what people want
Affordability/housing need	- what are the costs of housing compared to resources

From this emerges a picture of shortages and surpluses, pressing and evolving problems, external drivers, and links with/across tenure/sector/areas. This is seldom clear cut, however, as all areas contain a range of every variable even though in aggregate the differences can be substantial. Nor do policy measures to address it readily emerge from data and evidence alone, and this still requires political vision, resources and commitment.

An important part of the project to provide the evidence for this analysis was to gather raw data from the participant local authorities, housing associations and other organisations, and to use this and other data from the Census, Land Registry, CACI Paycheck, etc, to analyse the spatial patterns and interactions in the South East Wales area.

Data requested included:-

- social housing stock at full address level, enabling GIS mapping of virtually every social rented property for organisations which provided the data
- Right to Buy sales
- Voids and relets
- Start of tenancy dates to allow derivation of tenancy periods
- Tenants dates of birth to allow age of tenants to be derived
- Preferences for area and property type for applicants for housing from waiting list systems.

As always with exercises of this kind, data was not provided by every participant, and where it was it varied in terms of its content, the fields available and the categories used, depending on the individual housing management database systems. In addition, as the project also involved ten local authorities and numerous housing associations this multiplied the variations and difficulties, and it was always made very clear that there would inevitably be gaps in the data coverage, and not all of it would be usable immediately.

Nevertheless, this aspect of the project was quite successful for some datasets, with records acquired on nearly 80,000 local authority and 20,000 housing association properties.

It was also found that this parallels an ODPM project to set up a National Register of Social Housing (NROSH) , which was initially planned to also include social housing stock in Wales, although the Welsh Assembly Government had not yet committed to join the project as at June 2005. Project details can be found at http://www.odpm.gov.uk/stellent/groups/odpm_control/documents/contentservertemp/late/odpm_index.hcst?n=5505&l=2 . The ODPM project will be a much more rigorous and comprehensive exercise, which will be accessible by central, regional and local government and other interested parties, and reduce the burden of reporting on housing providers.

As organisations get used to providing raw data its coverage, quality and validity will improve. For the moment, however, there remain considerable problems of ‘dirty data’, gaps and discrepancies, and it should be seen as indicative of possible patterns only. Initially data also merely usually reflects what people know from experience,

and only by reflecting on it carefully and analysing it detail can new insights sometimes emerge.

Data was also requested from other local authority departments, including Housing Benefits sections to see the concentrations and amounts of claims; and Council Tax systems to see locations of empty properties of all tenures. However, as is often the case, this yielded few results and little data at this stage.

Correlation of variables and data patterns

Not surprisingly, many variables and indicators related to housing, social and economic circumstances tend to be quite closely correlated, and vary together reflecting the underlying circumstances of the subjects. So households with lower incomes tend to live in cheaper housing; those with lower incomes tend to have less well paid jobs; and less well paid jobs are more likely to be unskilled or routine occupations. This can mean that data patterns simply repeat themselves for different indicators, and do not really reveal any new insights into the reasons for them, or even less on possible policies to change the position.

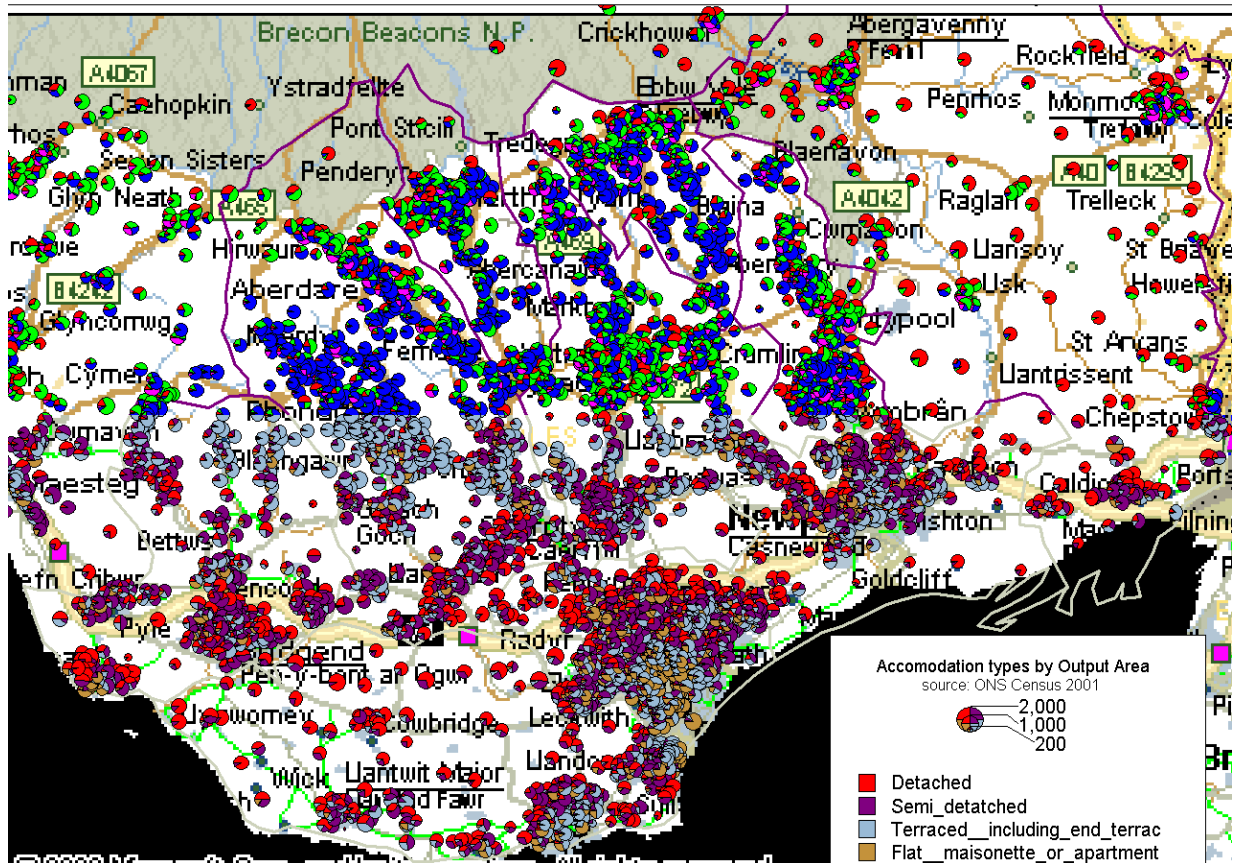
Many of these concentrations are often linked to location, and knowing the most important and influential variables within a specific area can allow policies and interventions to be targeted more appropriately. For example, if the main problem is one of low retirement incomes but with substantial property assets the policies could be quite different to where there are higher working incomes but low capital resources.

This kind of data is really best considered and analysed interactively at a detailed level. Presenting it at more general levels only gives an overall picture, which often simply confirm known patterns which coincide with other indicators. The higher level perspectives do however provide a starting point for more localised analysis, allowing patterns to be visualised and detected for closer investigation.

Comparison of indicators and variables

‘Housing stock’ is a factor identified by the Advice note as an important element in housing market analysis. However, even areas as small as Census Output Areas – each approximately 125 addresses- often contain a mixture of property types. The map below shows the pattern of accommodation types on the fairly crude classification of detached, semi detached, terraced and flats.

South East Wales - accommodation types by Output Area



A lookup model of accommodation types is available at http://homepage.ntlworld.com/b.line/SEWRHF/locality_data/locality%20profile%20info%20-%20age%20&%20hhld%20type.xls.

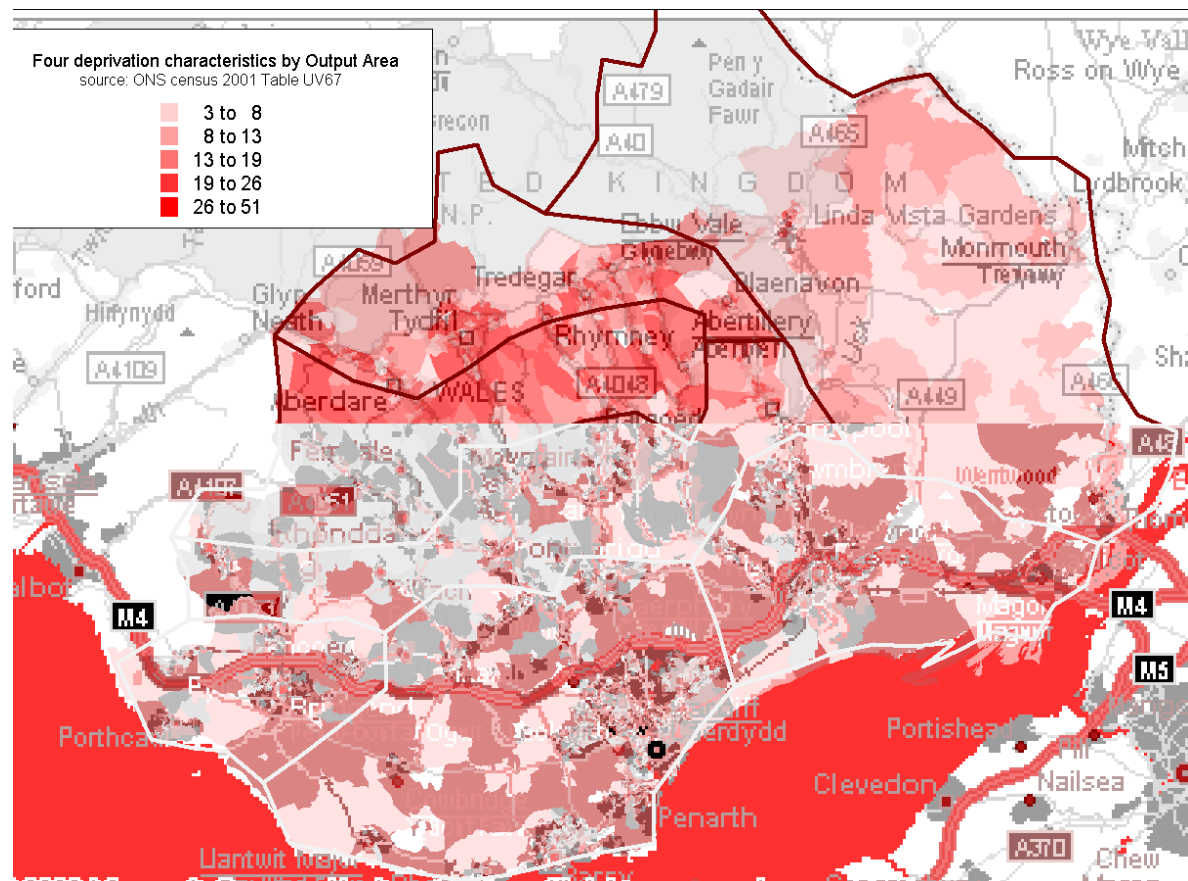
The concentration of terraced houses in the mid valleys is apparent, but there are also concentrations in Cardiff and Newport. The type of stock in the mid valleys is clearly very important for shaping its housing markets, but the interpolated price patterns shown in map below show that by itself terraced housing is not always lower priced in south Wales; location is all important, as some terraced housing in Cardiff is higher priced than some of the semi detached properties, which are mainly in areas where there are higher proportions of council housing.

The map displays house sale prices across South Wales. The color scale ranges from blue (low prices) to red (high prices). High prices are concentrated in the Cardiff and Newport areas, while lower prices are found in more rural areas like Merthyr Tydfil and Swansea. The map also shows major roads and the English border to the north.

At the bulk data level, one useful but not ideal source is Census table UV67, which gives a composite summary of household circumstances and property condition indicators, which are :-

- The incidence of all four characteristics by Output Area is shown in the map below.

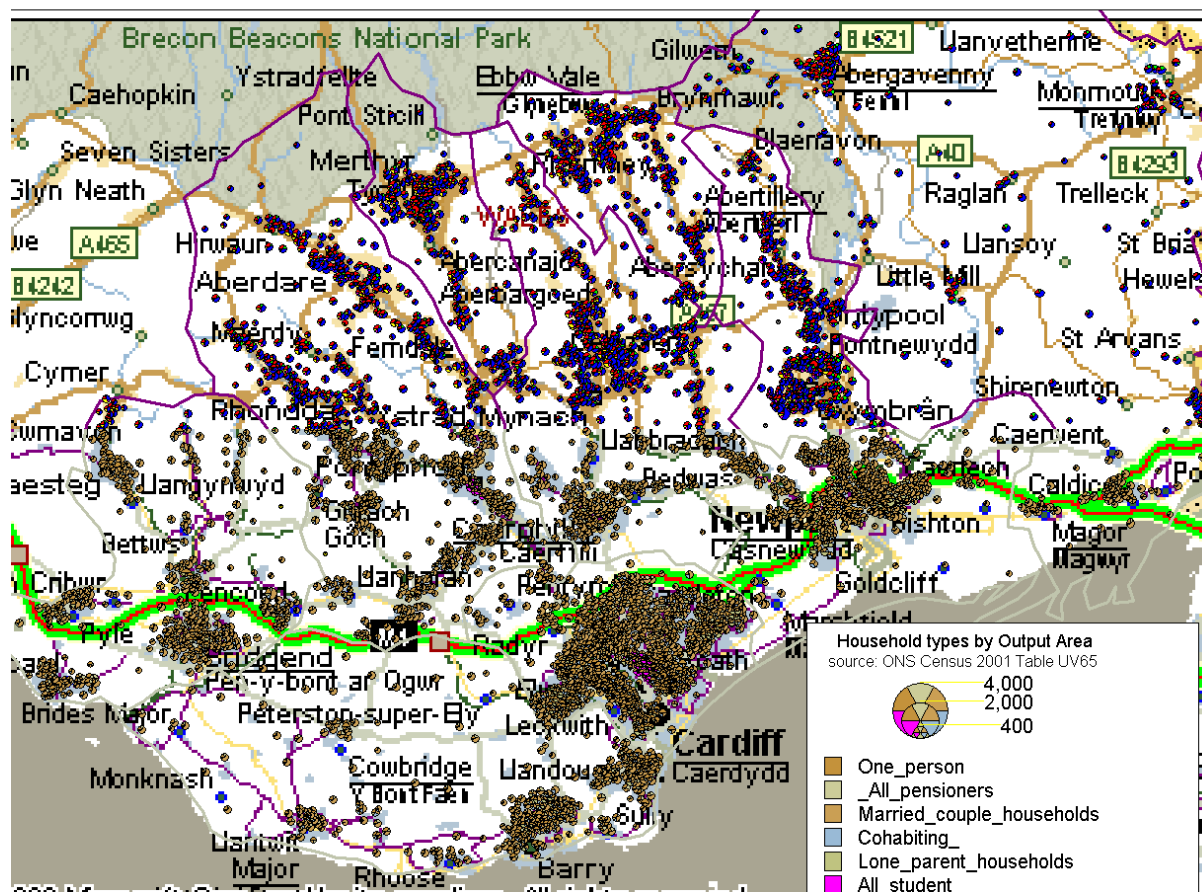
Four deprivation characteristics by Output Area



In areas where poorer quality housing stock coincides with lower prices and incomes replacement and regeneration of housing stock, together with measures to improve incomes, are more likely to be successful than adding new stock, which will simply add to the pace of decline of less popular housing.

Household types are also identified by the Advice note as an important factor, but here the pattern is even more mixed, as many different household types occur in most areas, and only a higher proportion of one type compared to another must be used to guide policy. Indeed a predominance of one household type over others is often now seen as symptom of a dysfunctional and polarised housing market – for example in student areas. The map below gives some general indication of the pattern.

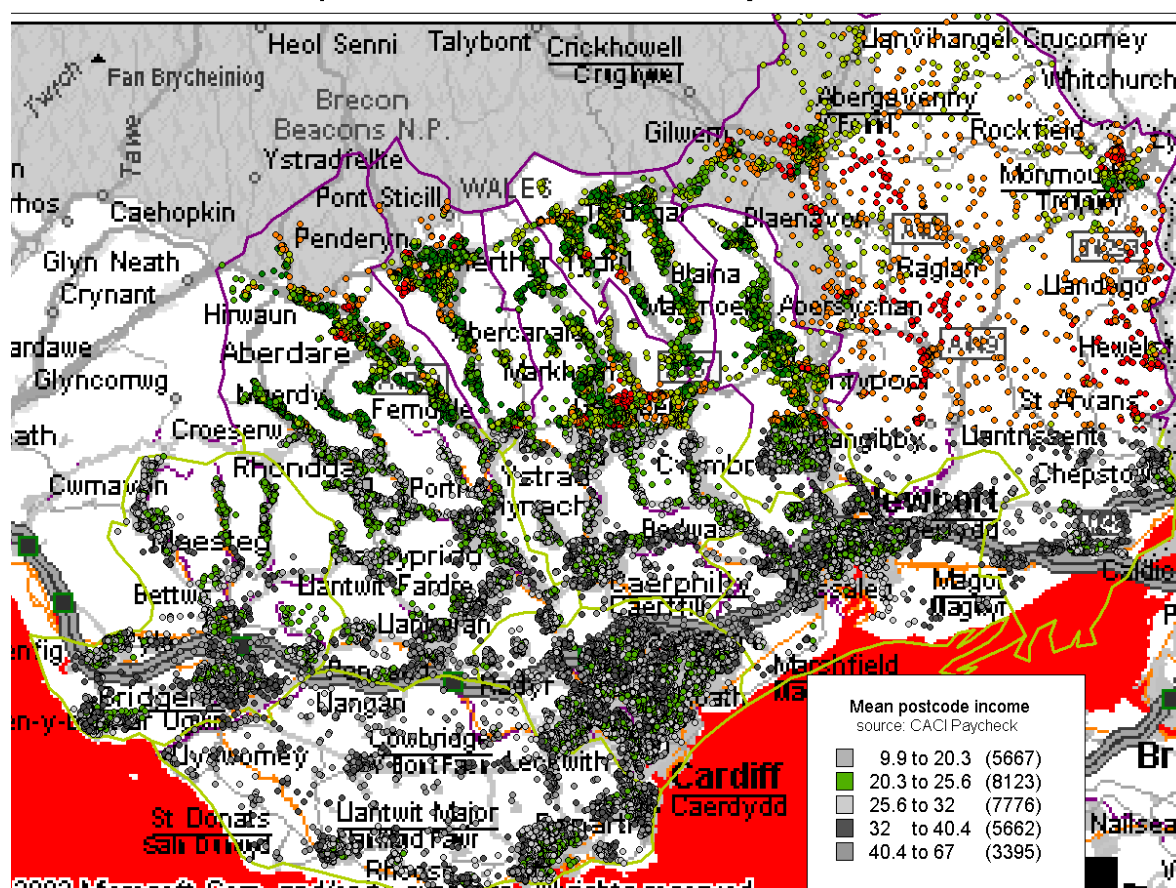
South East Wales - main household types by Output Area



Earnings and employment are another key factor identified in the Advice note.

The average incomes patterns are set out in the map below showing consistently lower average incomes in the mid valleys, but pockets of higher incomes in the suburbs especially around larger settlements, in rural Monmouthshire, and some parts of the heads of the valleys.

Mean postcode income 2003 - CACI Paycheck



Aggregating incomes to a higher level such as ward gives a different perspective, which gains some clarity but loses detail. The map below is for the whole of South Wales, showing incomes by ward and identifying the SEWRHF area. The lower average income level in the valleys are clear.

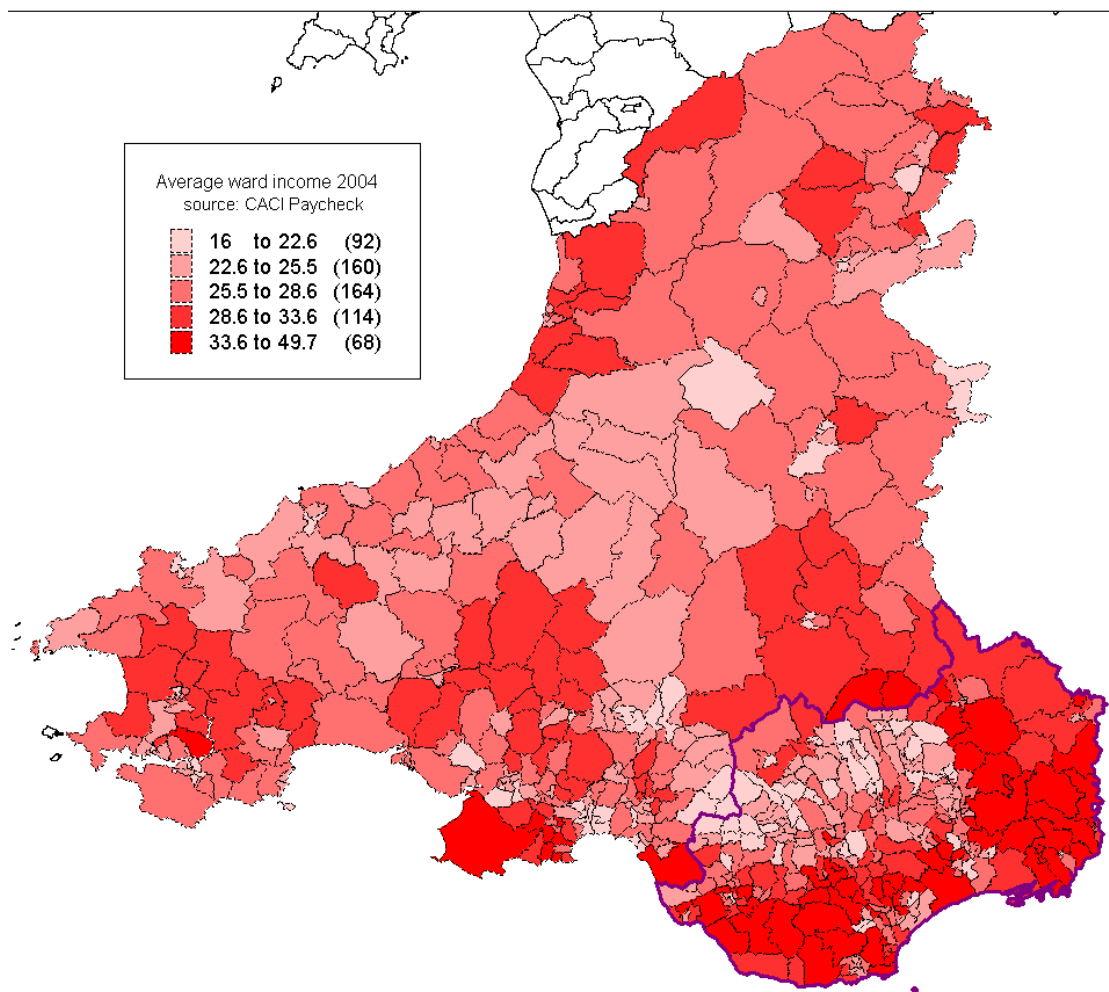
Mean incomes can however disguise and distort the true picture, which is always of a range or profile of incomes in each area, as every household is different although there may be more similarities within small areas. To help address this a number of lookup spreadsheet models derived from the incomes data were produced to enable profiles to be produced quickly. These are available at

http://homepage.ntlworld.com/b.line/SEWRHF/q-paycheck_by_urban_area_subdivisions.xls

and

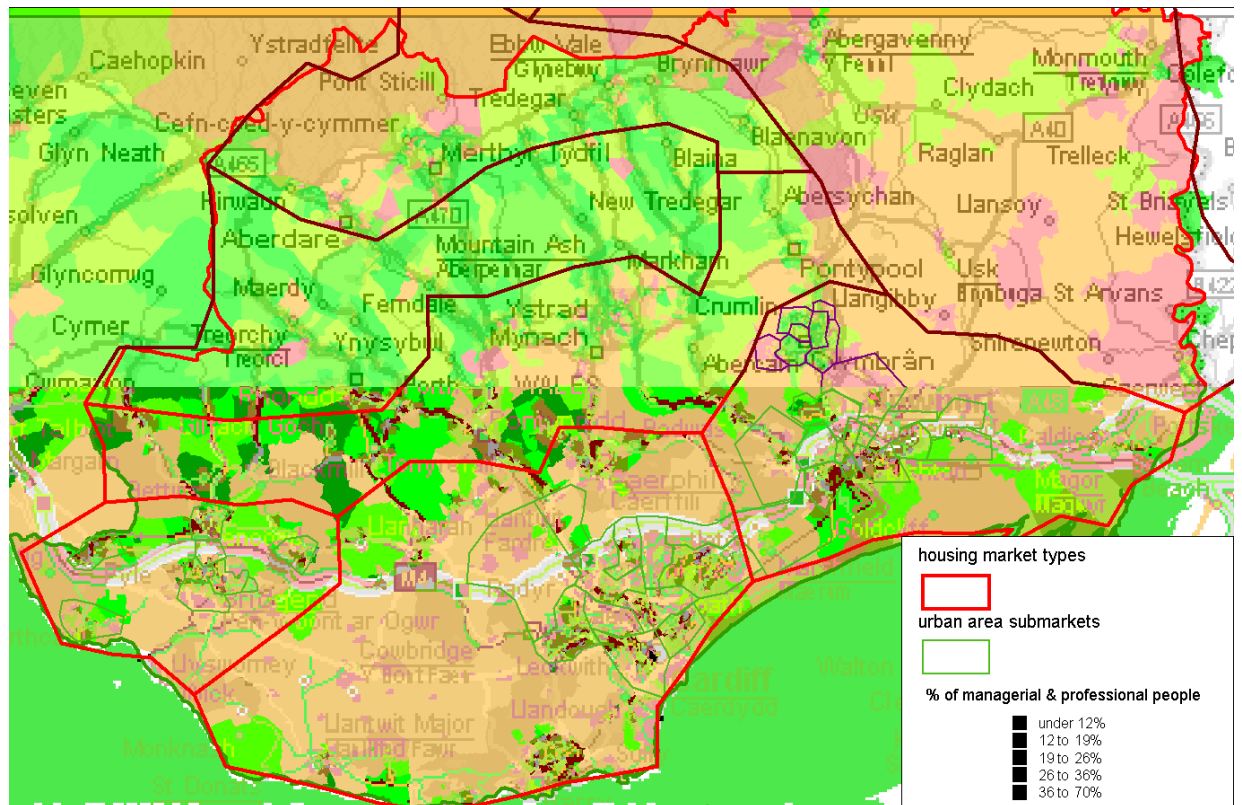
http://homepage.ntlworld.com/b.line/SEWRHF/q-ward_income_profiles.xls

South Wales - average ward income 2004



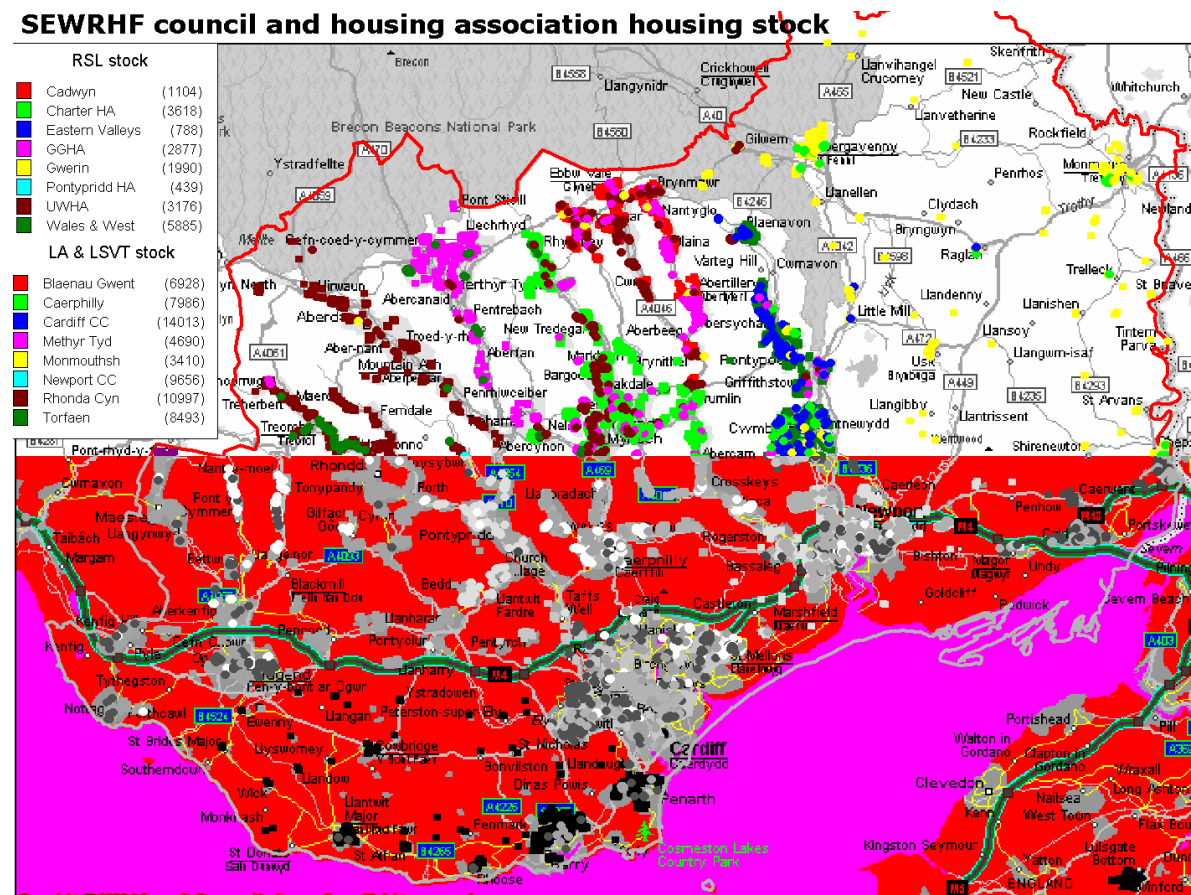
Employment and occupation are very much parallel to these patterns, as for most households income is dependent on the type of employment. An indication of the pattern is given, in the map below, for the percentage of higher managerial and professional occupations. For socio-economic categories the pattern of housing submarkets in and around larger settlements is also important.

SEWRHF - socio-economic category - % management & professional



5.5 Council housing - area popularity

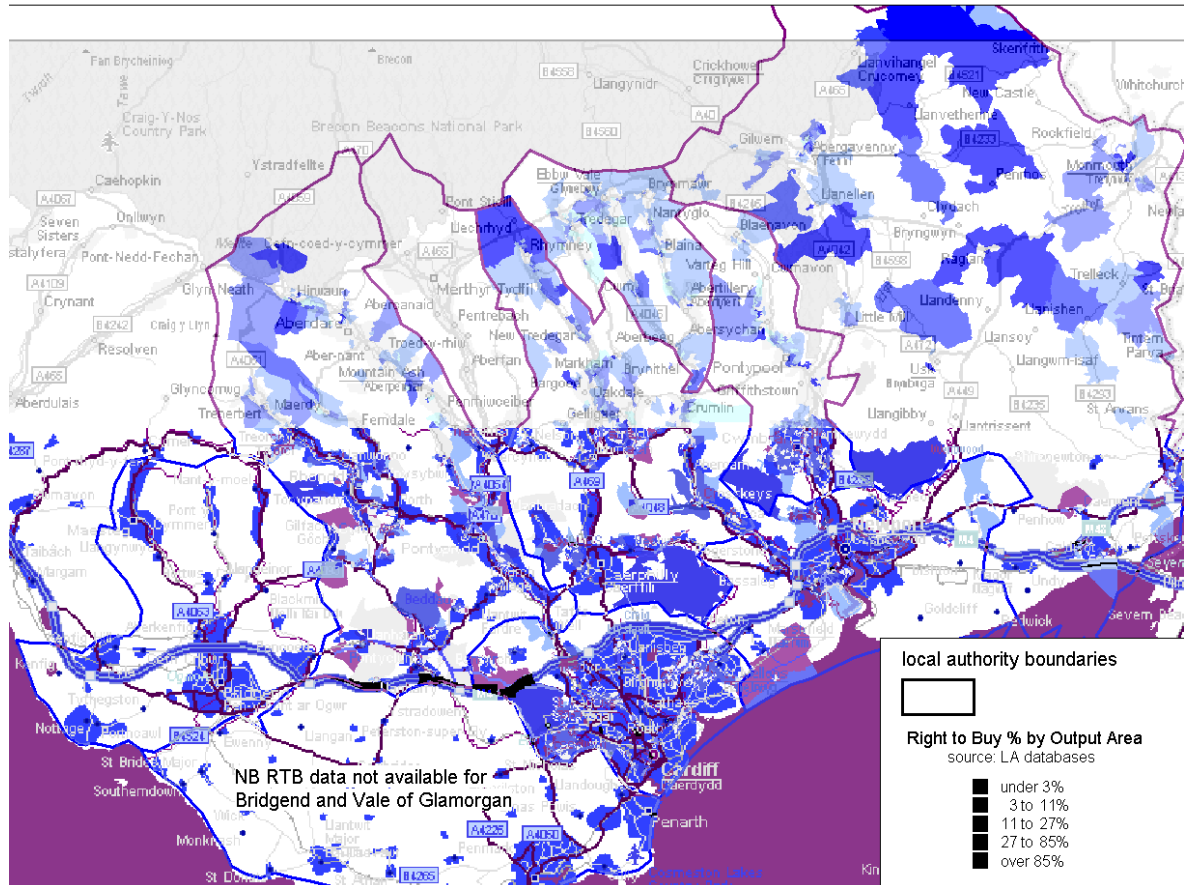
The data provided by participant local authorities and housing associations, together with other indicators, allows a closer look at the relative popularity of the social housing stock, and how this relates to wider housing market patterns. A general overview of the local authority and housing association stock data obtained is shown in the map below.



The proportion of Right to Buy sales for the last two or three years by Output Areas is shown below. This gives an indication of the popularity of different locations for sales, and conversely of losses of council stock in these areas.

The map shows fewer RTB sales in the higher priced areas of Cardiff and Newport, and also fewer in the mid valleys; and the highest proportions in the heads of the valleys and north of M4 areas. This would appear to reflect the ripple effect of higher prices, but when prices become very high RTB sales also slow.

Percentage of Right to Buys by Output Area, where there is LA stock



This can be used to derive a list of streets near the apparent current top locations for RTB sales in the study area, although this may be affected by discrepancies in the data, distortions by the aggregation to Output Area, or just random variation; and is essentially testing whether the data can predict demand patterns correctly. A spreadsheet showing the results is at

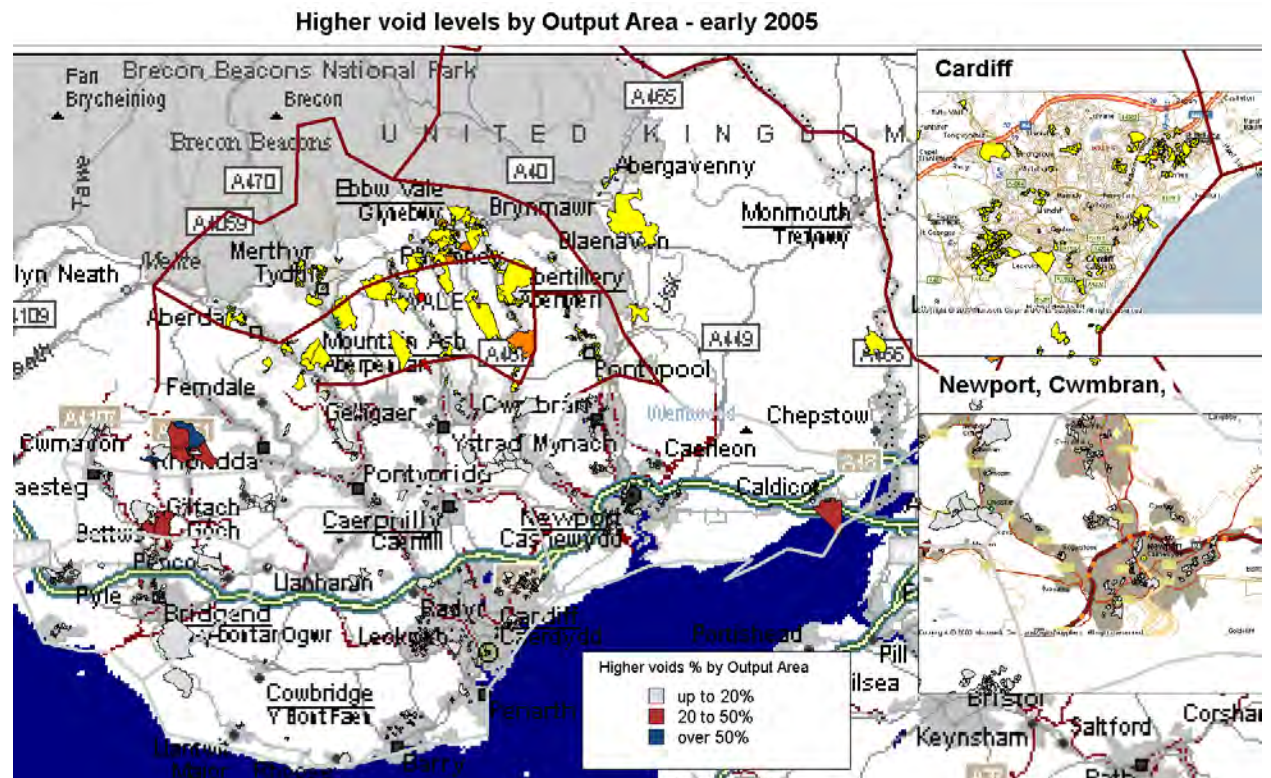
http://homepage.ntlworld.com/b.line/SEWRHF/LA&RSLs/over_50%_RTB_streets.xls

When tested against overall house prices by spatial correlation, there is a small correlation factor of minus 0.23 between RTB sales with overall prices, which suggests that the presence of ex-Council housing reduces prices by a small amount. However, this compares to a correlation factor between local authority housing stock and prices of minus 0.67.

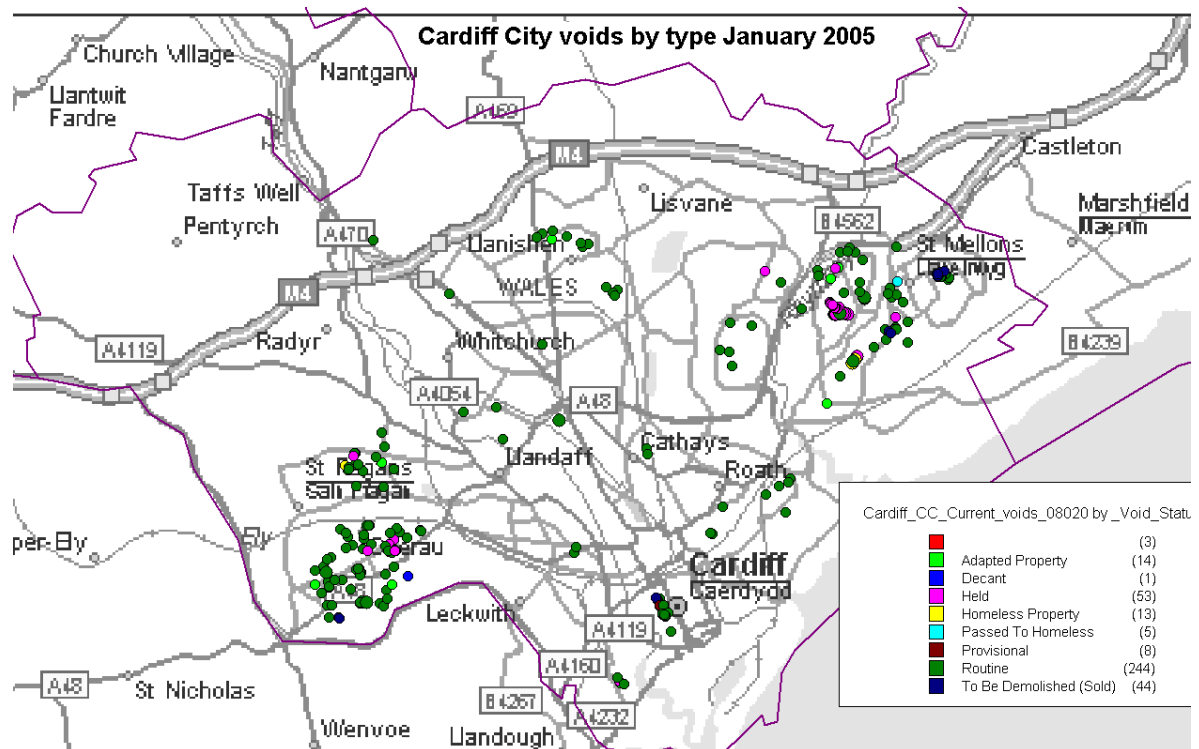
The extent to which ex-RTB properties become fully integrated into the wider housing market is one possible indication of whether a housing market area contains imbalances, and although better integration may see an increase in prices, the improved supply should in the longer term, according to the Barker hypothesis, result in greater stabilisation of house prices.

In similar fashion, the voids data from local authority systems can be used to look at areas where turnover may be higher, possibly pointing towards the less popular areas. This appears to indicate higher void rates in the mid valleys and heads of valleys, but also to a lesser extent in patches in the cities.

It should be noted that Output Areas are also usually larger in area in non urban locations. A spreadsheet showing examples of streets within these Output Areas, ranked in order of voids percentage, is at http://homepage.ntlworld.com/b.line/SEWRHF/LA&RSLs/LA_void_streets_%_rank.xls, but again, this is are speculative testing of the data and may be distorted in various ways.



The voids data can also be used for closer analysis of patterns and trends. The map below shows Cardiff City Council's empty properties in January 2005 by their administrative categories. Animation techniques applied to the data over time could also be used to show trends and changes in patterns and concentrations, but the datasets will need to be built up further for this.

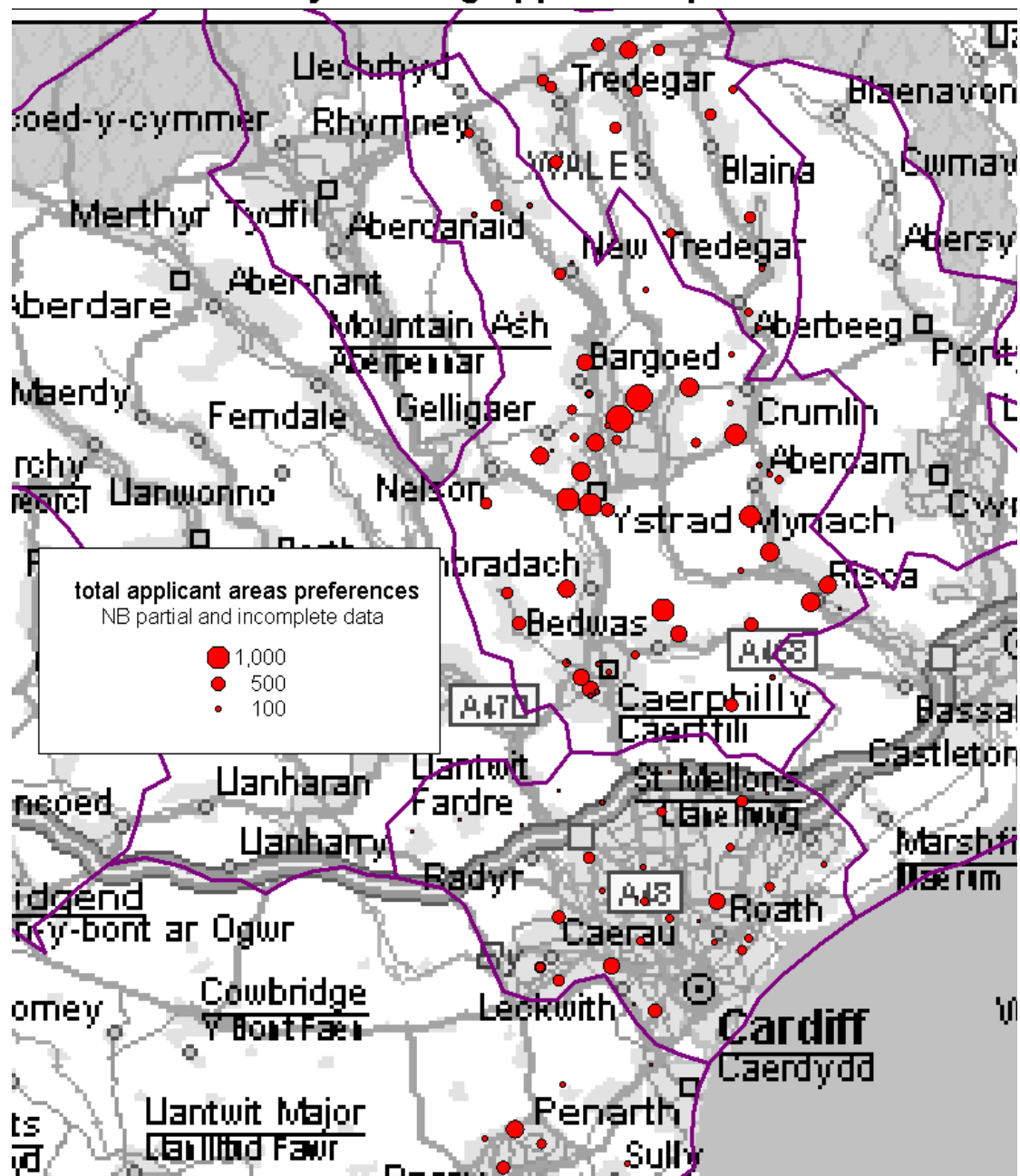


Area popularity

Four of the participant local authorities provided data on the preferred locations of applicants for their housing. This is a difficult and variable item of data to extract, and the results should be viewed with caution. The systems of preferences used vary, so some local authorities have more options and choices allowed than others. The geographical areas used to define choices are typically locally tailored, usually based on lettings areas, estates or communities, and do not always coincide with any more widely known or formal geography such as postcodes or street names which could be used to geocode and locate the data.

Nevertheless, some of the data was able to be located, giving a total number of choices for these spatially located areas only shown in the map below.

Local authority housing applicants preferences for are



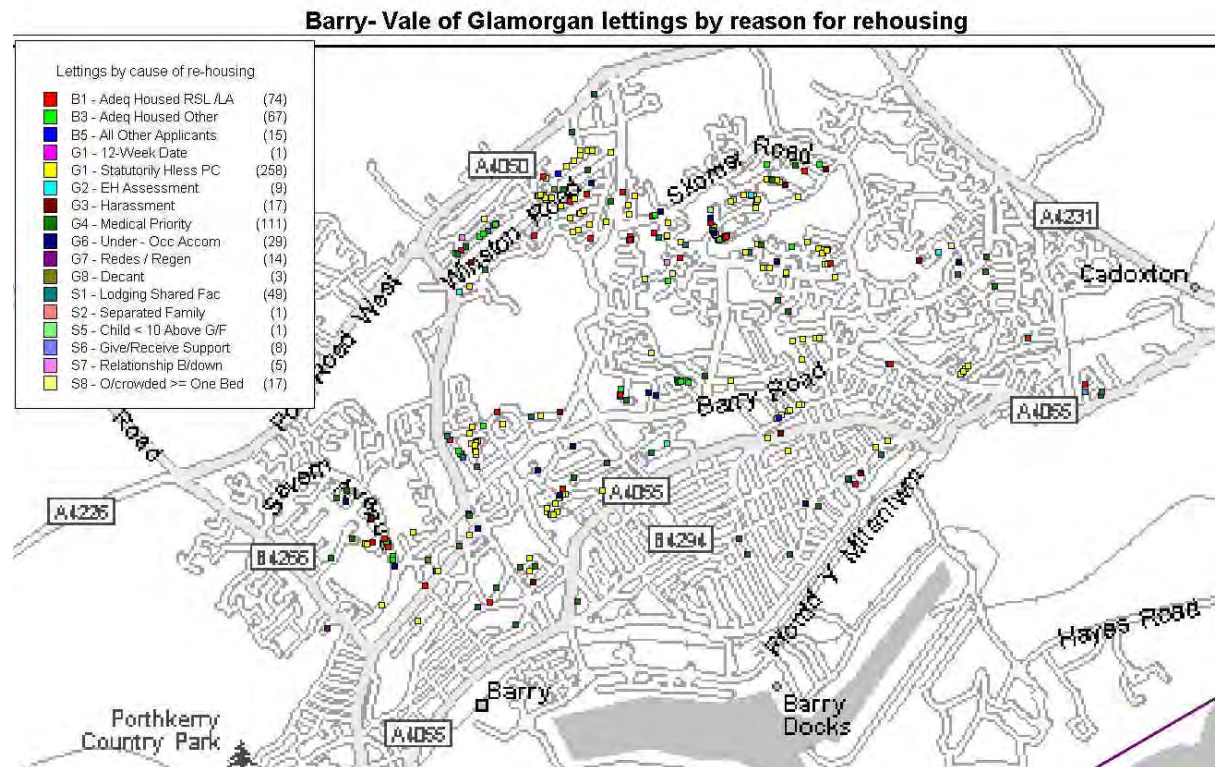
Tables were also produced from the data, showing the greatest demand for areas. On this basis, the most sought after council housing areas in each of the four local authorities were:-

Table 7

Caerphilly	Cefn Fforest
The Vale of Glamorgan	Gibbonsdown
Blaenau Gwent	Beaufort Estate
Cardiff	Roath

Again, at this stage this is really just testing the validity and robustness of the data, and it maybe that it is too variable and distorted by the operational processes which it is primarily used for to yield any useful information in this respect.

Lettings data was also supplied by some local authorities. The data for the Vale of Glamorgan is shown in the map below, giving the reason for re-housing. Homelessness is a substantial primary cause, and the concentrations of how this works out in practice can be seen more clearly, for example in the Winston Road, St Brides Way, West Walk and Walker Road areas.

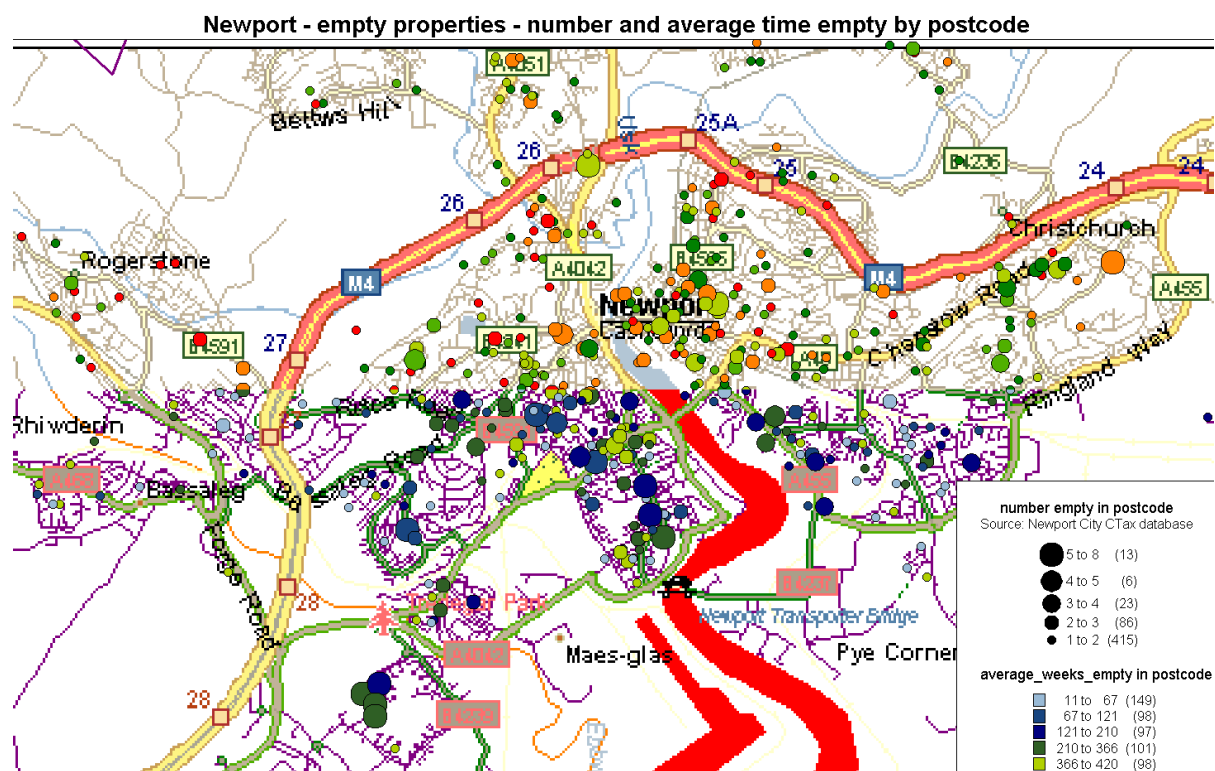


This may be an example of how polarisation tends to happen, often despite policies and intentions, because of the interaction of household circumstances and what is available, through a form of modified supply and demand within the social sector.

5.6 Empty property

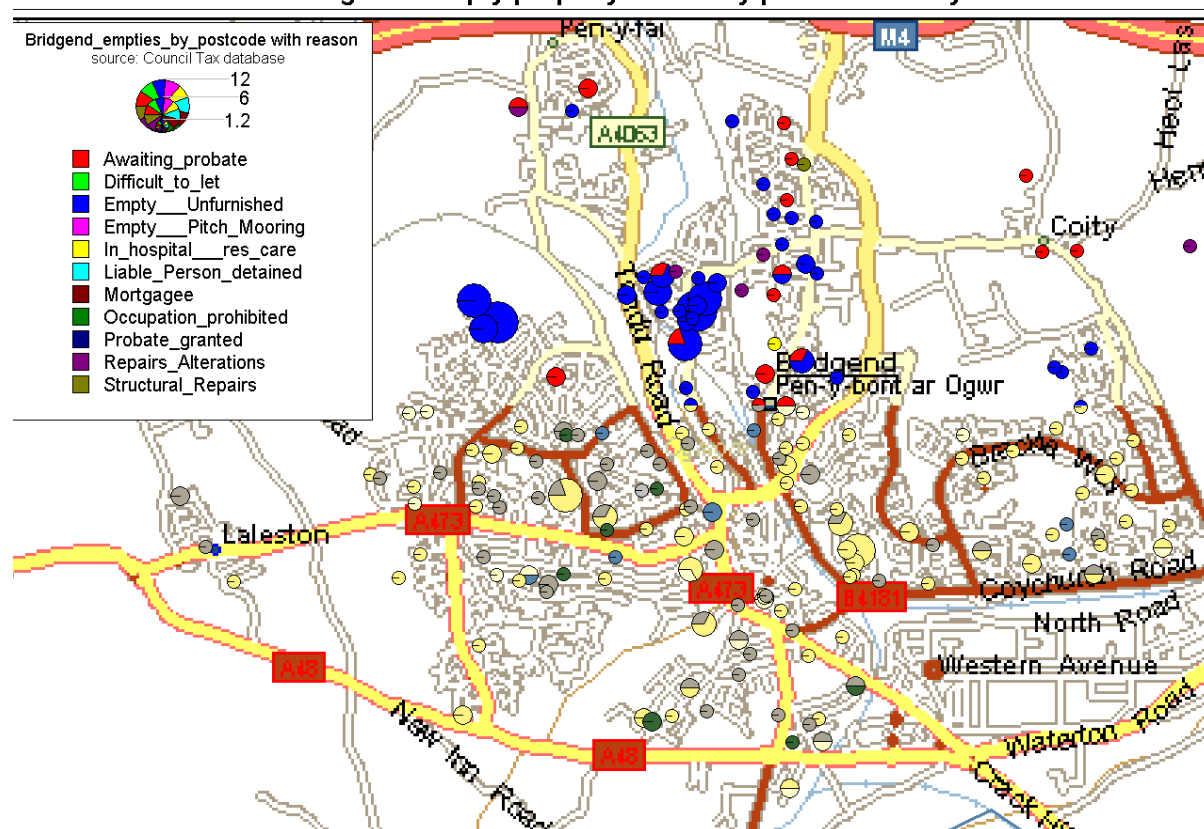
Empty property in other tenures is also a source of intelligence about the housing market, and a cause of concern as it may represent wasted housing resources. Council Tax operational databases routinely hold records on empty properties, although it must be remembered that this is primarily for assessing charges Council Tax charges, and is not therefore a neutral recording system.

Council Tax data on empty property was provided by Newport and Bridgend, and the maps below show the spatial pattern totals of empty properties by postcode.



For Bridgend (see map below) the reasons are also shown, which identifies awaiting probate as a key reason for scattered empty properties, and some larger concentrations of empty –unfurnished, which experience suggest might be new unsold properties. This might suggest some more unusual policies for improving housing supply overall, such as promoting keeping Wills up to date for older owners, or Council Tax penalties or other incentives on developers with unsold properties

Bridgend - empty property - totals by postcode - early 2005

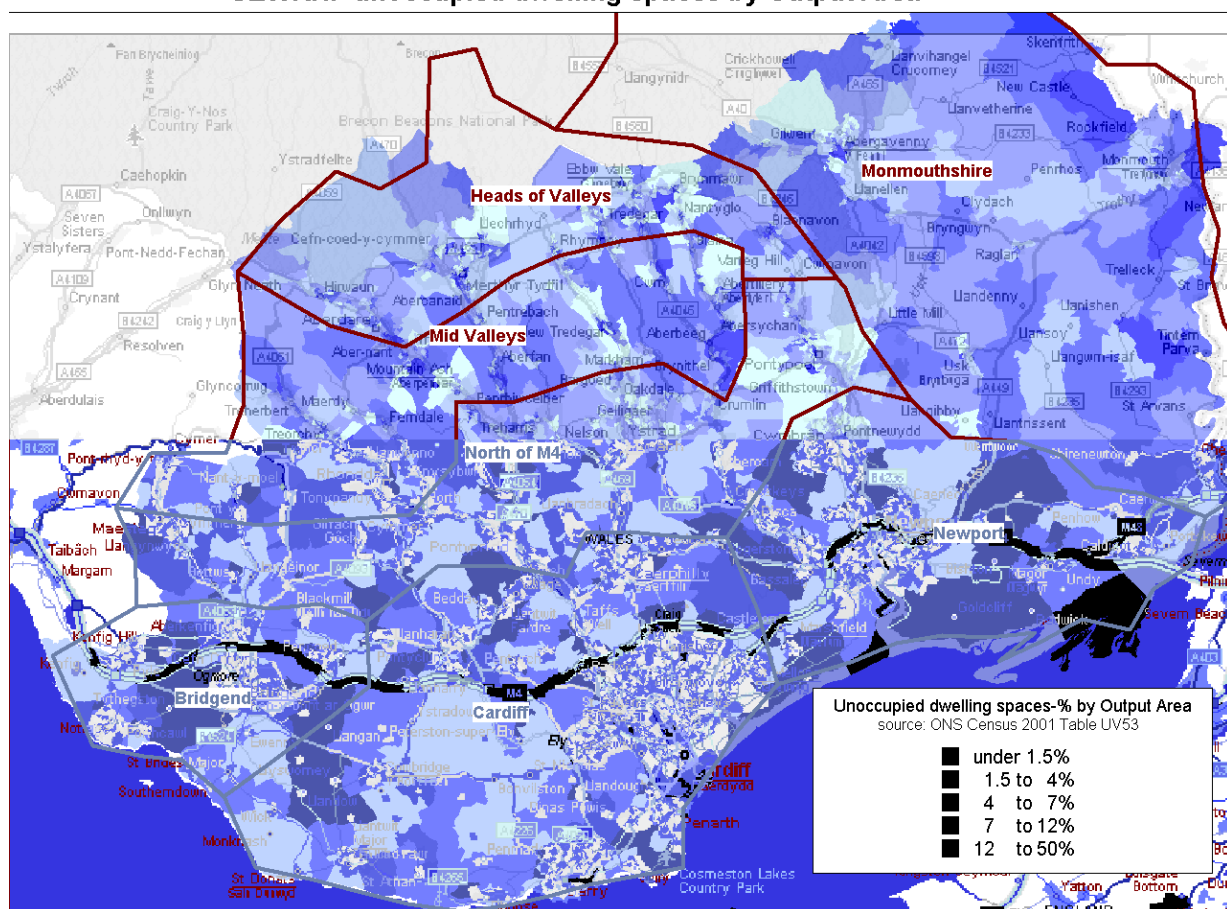


Since only two local authority Council Tax extracts were received it has not been possible so far to produce a more thorough analysis of empty property across the SEWRHF study area.

Census data gives a baseline from 2001, although this data is now over four years old and empty properties are likely to have changed considerably over this period due to changes in the overall housing market.

It should also be noted that Output Areas in non urban locations are considerably larger in area, which will distort the picture.

SEWRHF unoccupied dwelling spaces by Output Area

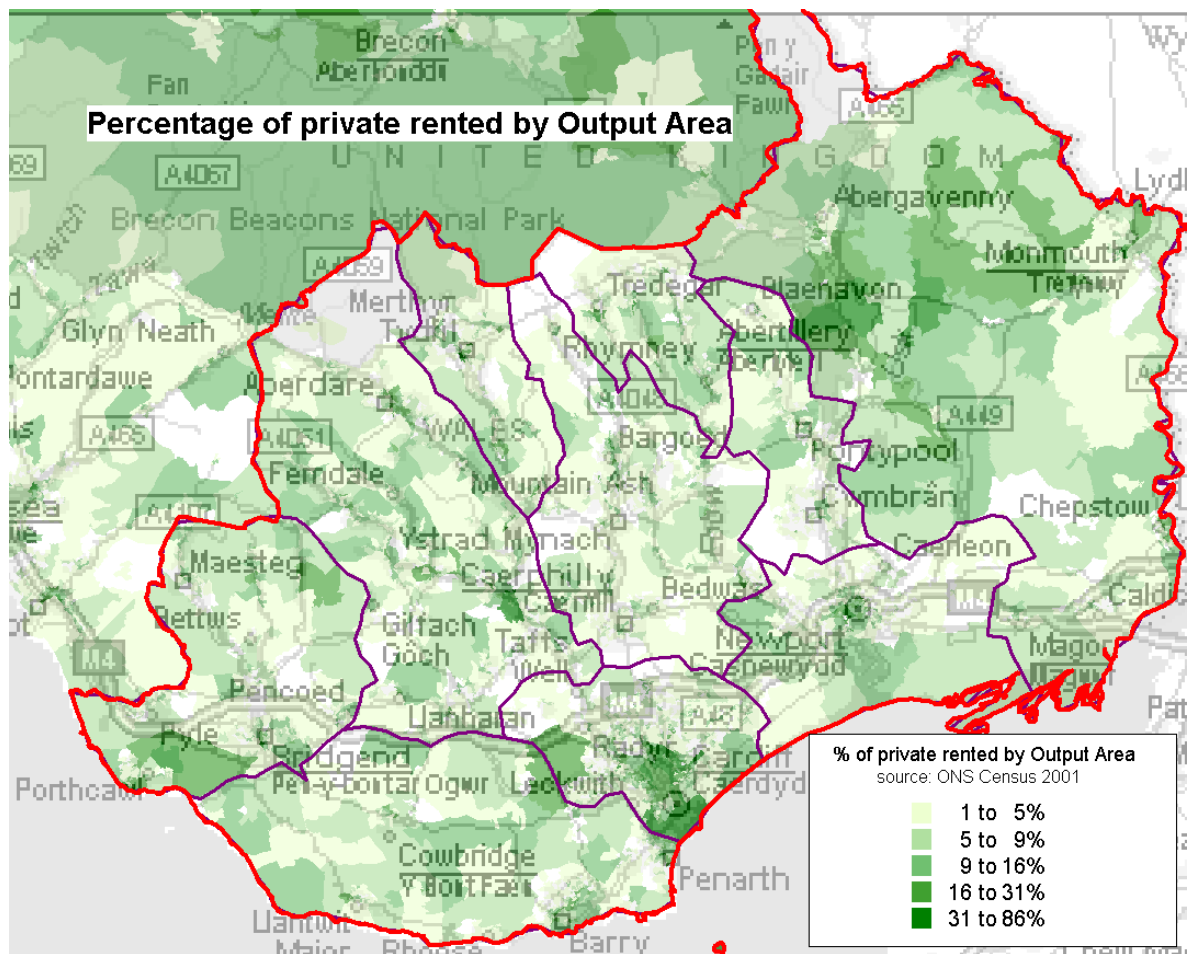


5.7 Private rented property

The effects of empty housing, as well as many other influences on and symptoms of housing markets, can be indicated by the extent and quality of the private rented sector. It is, however, one of the more difficult variables on which to obtain data and evidence.

The Rent Service in Wales were very helpful in providing their broad rental market areas, and intended to assist with anonymised data on private renting from their market evidence database, but problems with the IT system emerged which absorbed all their resources over the latter period of the project. However this is a data source that could be used the future.

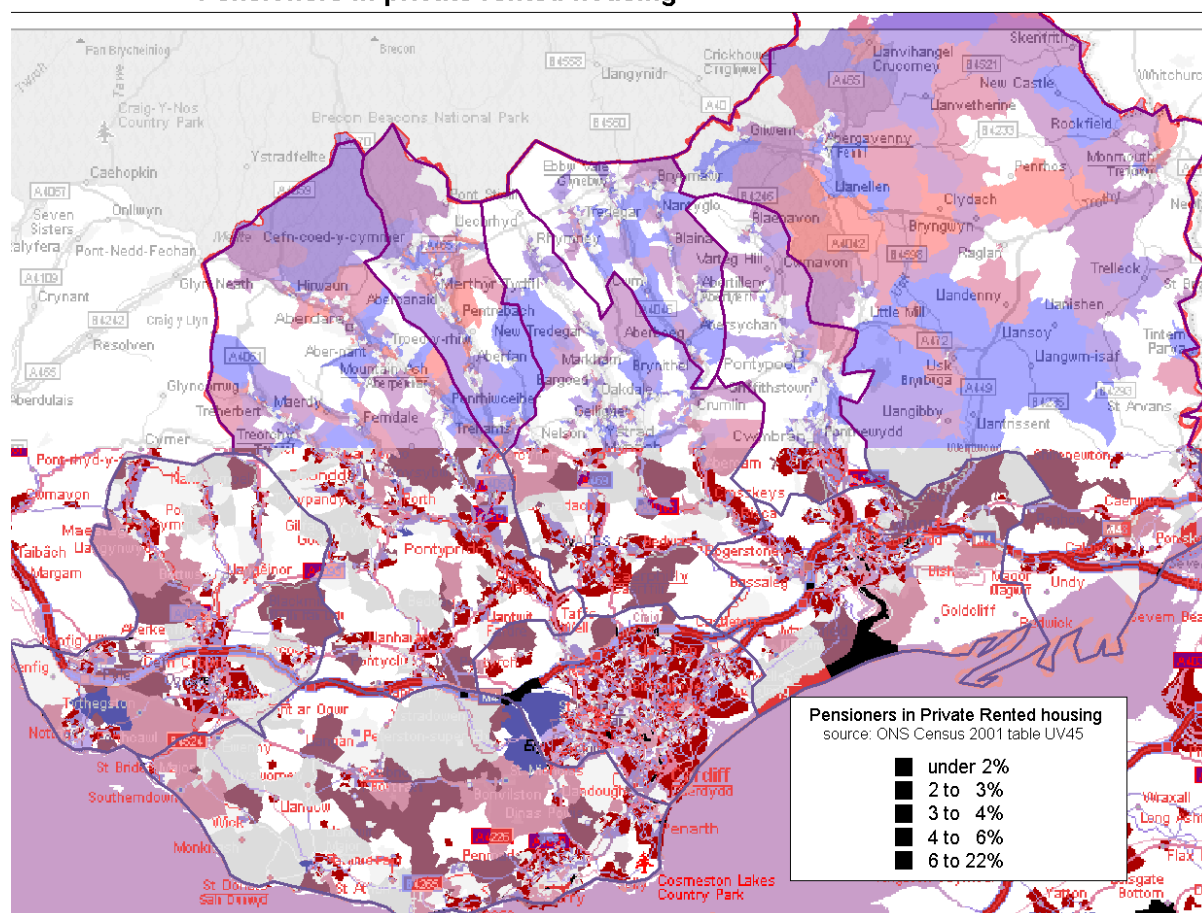
The pattern of private renting from the 2001 Census shown in the map below gives a baseline picture, showing higher proportions of private renting mainly in parts of Cardiff, and Monmouthshire.



Another possible source for information on the private rented sector is from anonymised local authority Housing Benefit database records. These were requested, but there were very few responses.

Census data does give further breakdown by factors likely to be of interest to housing policy makers. The map below shows the proportion of pensioners in private rented accommodation by Output Area in 2001. This kind of data can be selected for specific detailed areas using the Census on line SVG mapping at <http://neighbourhood.statistics.gov.uk/dissemination/areasubject.do> .

Pensioners in private rented housing



5.8 Housing association stock

Housing associations stock data was requested from all associations operating in the SEWRHF local authorities, and a total of around 20,000 stock records from eight associations was provided. This is around 55% of all association stock within the study area, which totalled some 36,000 in the stock estimates for March 2004. This means there will be some substantial gaps in the coverage.

The associations who provided data were:-

Table 8 RSL stock data collected

RSL name	stock records
Cadwyn	1104
Charter	3618
EVHA	788
GGHA	2877
Pontypridd	439
UWHA	3176
Wales & West	5885
Gwerin HA	1990
Total	19877

Some 223 properties in the records were actually outside the SEWRHF area, in Powys, Swansea and Neath & Port Talbot, and a further 379 had an address which could not be found by automatic matching to put the property on the GIS map. For the 97% of records which did geocode, the distribution was:-

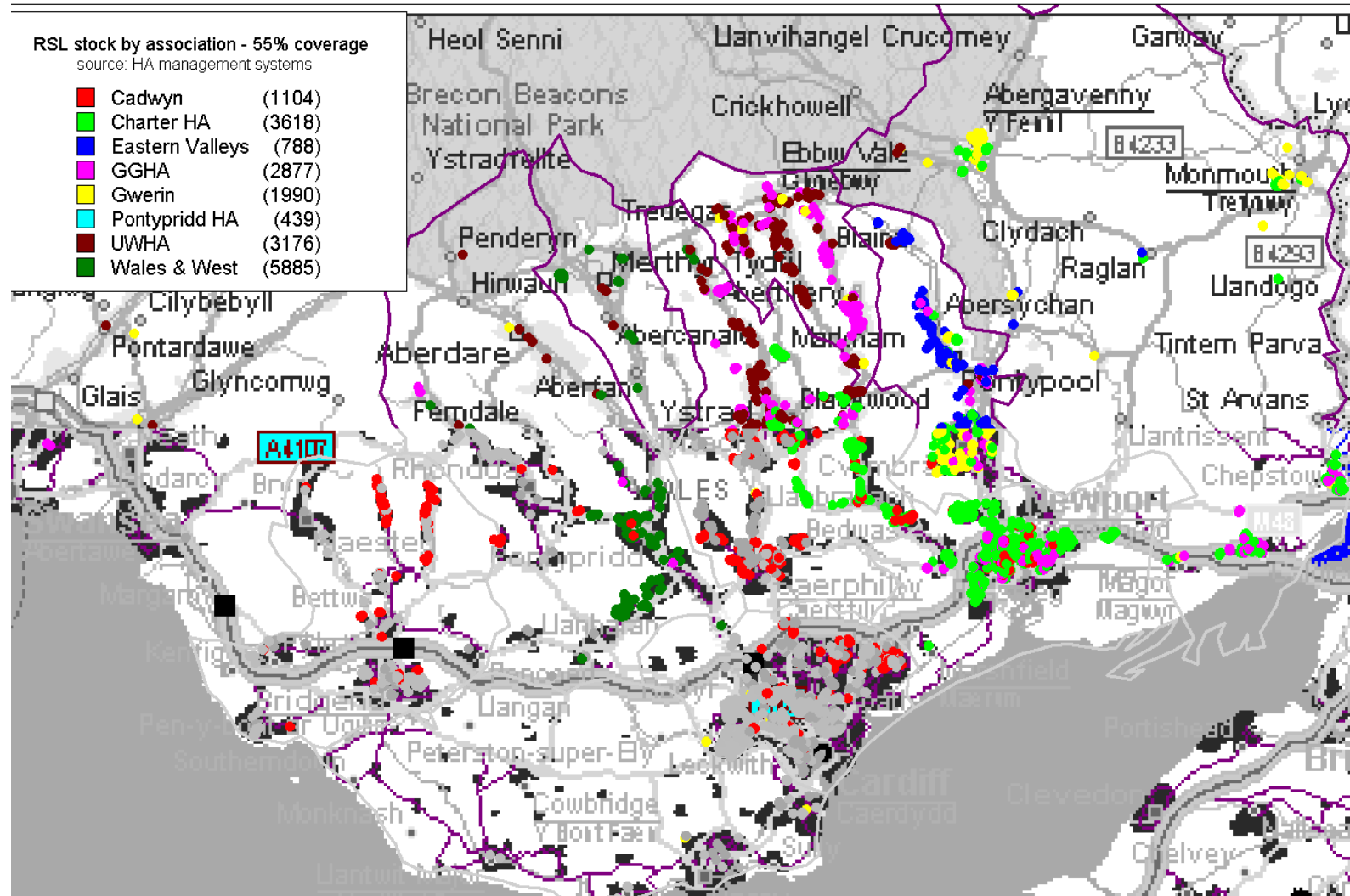
Table 9

local authority	Cadwyn	Charter HA	Easter n Valleys	GGHA	Gweri n	Pontyp ridd HA	UWH A	Wales & West	Totals
Blaenau Gwent				565	226		633		1424
Bridgend				359			20	1186	1565
Caerphilly	18	764	3	712			1368	206	3071
Cardiff	1051		7	789			775	3194	5816
Merthyr Tydfil							4	420	424
Monmouthshire		718	10		591		55		1374
Newport		1846		176	666		2		2690
Rhondda, Cynon, Taff				22	66	439	21	302	850
Vale of Glamorgan	1		2				140	448	591
Torfaen		287	735	158	223		67		1470
Totals	1070	3615	757	2781	1772	439	3085	5756	19275

The pattern allows the distribution and significant concentrations to be visualised.

Without further data on lettings, voids, turnover, etc; - and at this scale - , this data is of limited use. However the 'live' GIS system allows rapid zooming, panning and selection of records so that any overlaps or significant duplication can be identified for further consideration for any rationalisation or shared services programme. This can be useful for strategic reviews of provision, for example when there is a surplus of older people's housing, or difficult to let properties.

RSL stock by association 2004- 55% coverage



6. Conclusions and Policy Implications

6.1 Conclusions

Housing markets in South-East Wales are very diverse. This study has used a variety of methods (patterns of migration, travel-to-work movement, newspaper distribution patterns and the Rent Officer Service Rental Market Areas) to derive housing market areas (HMAs) within the region. Whilst different methods have identified different possible HMAs, they also show considerable overlaps.

The data we have analysed is also highly variable, and by itself sometimes confused (and confusing), making it difficult to disentangle complex causes, influences and relationships. However we have attempted to develop a framework for analysis based on grounded hypotheses of how housing markets operate. This seems to take account of the judgements, trade-offs, choices and decisions which households make in relation to the housing stock and related factors such as services and location.

Housing market patterns are often very detailed and localised, and any generalisations run the risk of distorting reality and giving rise to misinterpretation and mistaken policy responses and interventions. It is impossible to find and illustrate all the different components of the housing market (and their interactions) in a fixed report. A higher level, top-down approach will inevitably have limitations, and local interpretation and judgements must be applied through an interactive and consultative process. In this respect this regional report must be seen alongside the individual locality studies. Nevertheless, our research has provided a picture of key housing market areas within South East Wales.

In geographical terms then, the region is perhaps best thought of in terms of the following housing market areas:

- Bridgend/Porthcawl/Maesteg
- Greater Cardiff
- Greater Newport
- Western Valleys
- Central Valleys
- Eastern Valleys
- Greater Monmouthshire

However, the research suggests that as well as the geographical dimensions of the sub-regional housing markets, it may also be useful to categorise HMAs by type, according to their relative market buoyancy (or otherwise), where the mapping of housing markets suggests similarities in the structures of housing markets, even

though there may be spatial discontinuities. In this respect we have identified five different types of HMA, as follows:-

- The urban-based housing markets around and to the south of the M4 corridor
- A rural Monmouthshire housing market area
- The urban area to the immediate north of the M4 corridor
- A Mid Valleys housing market area
- A Heads of the Valleys housing market area.

For the purposes of analysis and reporting we have identified three geographical sub-market areas within the first of these (M4 Corridor Housing Market) – Cardiff, Newport and Bridgend, which are akin to the first three geographical HMAs identified above (Greater Cardiff, Greater Newport and Bridgend/Porthcawl/Maesteg). However, the last three of our types of HMA (North of M4, Mid Valleys, Heads of Valleys) cut across the geographically defined HMAs of the Eastern, Central and Western Valleys. In considering HMAs within the South-East Wales region a further dimension is the urban-rural interface, recognising the differences between the housing market areas of the major cities and urban areas and the more sparsely populated rural areas. Perhaps two key points need to be made at this juncture. Firstly, each of the suggested HMAs will be subject to processes of ongoing change, adjustment and transition, and whilst this research has used a variety of data and techniques to identify sub-regional and local HMAs within the South-East Wales region, these are unlikely to remain static. The second, and perhaps more critical point, is that the policy solutions appropriate to tackling some of the key issues evident within particular HMAs will not necessarily be the same, and that in many instances effective solutions may need to be developed at a regional or sub-regional level, rather than locally. The sub-regional HMAs we have identified do not confirm to local authority boundaries.

In the case of the three urban-based HMAs of the M4 corridor then, for each of these we have produced an initial suggested sub-market structure.

In seeking to understand the differential pressures of demand in different HMAs the research is also looking at migration and investment effects. Within the South-East Wales Region, Cardiff is both the major urban settlement and the driver of migration. Whilst the city has continued to grow as a result of in-migration, there is also evidence of outward migration, particularly to neighbouring authorities and others in the region (Vale of Glamorgan, Rhondda Cynon Taf, Caerphilly, Newport, Bridgend and Monmouthshire). Newport shows similar patterns of recent migration, with differences in the detail of origins and destination, with net gains of migrants from Cardiff and Bristol, but a net loss to Torfaen. In terms of the characteristics of in-migrants, Cardiff also has (unsurprisingly) significant proportions of students and professional/higher managerial in-migrants, which suggests the particular pressures being placed upon the Cardiff HMA.

We were asked as part of this study to estimate the need for additional affordable housing within South-East Wales. Using available household data, land registry sales information, household income profiles (and assumptions about loan multiples and loan to value ratios) we have attempted to estimate the number of non-owner households unable to access the owner-occupied market. Against this need we have set likely supply of vacancies within the social rented sector. On the assumption that any current backlog of need for affordable housing is met over a five-year period, then this suggests a net need for additional affordable homes of about 18,000 dwellings over the next five years – an average annual rate of provision of just over 3,500 units of affordable housing per annum within the South-East Wales region. This desk-based exercise suggests that there remains a need for additional affordable housing provision in each of the ten unitary authority areas which make up the region, though the bulk of this (over 46%) is to be found in Cardiff, followed by Rhondda Cynon Taf (a little over 9%) and Newport (just under 8%). Taking our housing market types then, the vast bulk of additional need is in the M4 corridor HMA (and within this the vast majority in the Greater Cardiff sub-market area). However, there is also evidence of unmet need for affordable housing in each of the other types of HMA, although it is of least significance in the Heads of the Valleys HMA, where in some locations (Merthyr Tydfil, Northern part of Caerphilly) there is some evidence of a small over-supply of affordable homes. Whilst these figures can only be approximations, and we have set out a number of qualifications and caveats to the methodology employed, given recent increases in entry level house prices, and the significance of the South-East Region in the overall Welsh housing market, the figures do not seem out of line with other earlier estimates.

Despite what we hope this research has achieved, a better understanding of the key drivers of housing markets is needed, as current awareness remains relatively primitive. This will need improvements in data capture (and quality), handling and analysis, and probably the development of interactive computer based housing market models. The idea that a fixed moment in time study can predict how housing markets will develop and change in the future with any degree of reliability is nonsense, and potentially very damaging. An ongoing process of data collection, analysis interpretation and projection is needed, using information to “plan” monitor and manage” housing rather than “predict and provide”.

Where evidence is clearly useful in helping to shape and develop strategies and policies, it is also clear that alone evidence will not drive better policy. Judgements and vision (political as well as professional) are also essential. However, as a recent ODPM study concluded (ODPM, 2005):

“ Policies are most successful when they follow the grain of economic and social change, and least successful when they do not”. The evidence and analysis from this research suggests this is a sound guiding principle.

6.2 Policy Implications

The research has sought to provide a better understanding of the South-East Wales housing market and the different types of housing market and sub-market we have identified within the region. However, the South-East Wales Regional Housing Forum, its individual members, and others concerned with policy formulation and

implementation within housing markets will be concerned with how they might intervene in different types of housing market (and sub-markets and neighbourhoods) within the region.

Policy makers have a range of instruments at their disposal for promoting sustainable housing markets. In terms of categorising these different interventions we have been taken with the work of Cole et al (2004) on interpreting housing market change. They have suggested a four-fold differentiation of policy interventions.

- Strategy-focused interventions – e.g. those concerned with linkages between sectors (housing, planning, transport, economic development etc.) and with issues around land supply and the operation of the planning system.
- Property-focused interventions – e.g. stock improvement, housing renewal, development, meeting the Welsh Housing Quality Standard (WHQS) etc.
- Service-focused interventions – e.g. changing policies within particular service areas (e.g. new policies on letting, social housing, regulating private landlords, policies on controlling crime and anti-social behaviour etc.).

The conclusions from this report have policy implications for housing, planning and regeneration, for both local government and the Assembly, and for the ways in which both local and devolved central government interact with a range of different stakeholders at local and regional levels.

At a local authority level there is a clear need for Local Housing Strategies to develop closer connections with other local plans and strategies (particularly in relation to land-use planning, social well-being and economic and community regeneration). There is a need at the unitary authority level to develop a better understanding of the relationships between households and housing and the flows of households, not only within and between different tenures but to understand housing market change at a local (neighbourhood) level.

As this research has shown, housing markets do not easily fit within the administrative boundaries of local government, and there is therefore a need for a greater emphasis to be placed upon regional (and sub-regional) partnerships within South-East Wales in relation to strategic and policy development. The SEWRHF has shown a way forward in this respect, but effective strategic development will require much closer cross-discipline/professional working and perhaps more formal arrangements to be put in place. It might be appropriate for such developments to take place in collaboration with the Welsh Assembly Government.

The current proposals for plan rationalisation in Wales may provide an opportunity for a closer integration of housing, planning and regeneration strategies in particular at local, regional (and sub-regional) and national levels. In our view it would be a retrograde step if the progress which has been made in relation to the development of Local Housing Strategies in Wales were to be undermined by a failure to recognise the importance of a strategic approach to housing at the local and regional levels. At the same time, developing a stronger understanding of how housing markets operate (and how they might change) should be integral to the development of wider

strategies, and the ways in which policies are operationalised at the local and neighbourhood levels.

The research also has implications for the ways in which housing investment might be targeted in the future at particular neighbourhoods, estates and tenures. Housing investment strategies need to reflect an understanding of local and regional housing markets and how these might be changing. It should be obvious, but investment in one locality may have spillover effects elsewhere in the same or adjacent housing markets, and these may be either positive or negative. Our research has recognised the diversity of housing markets within South-East Wales, and there is a clear requirement for balancing the needs of some of the more affluent parts of the region (much of the area to the south of the M4 corridor and rural Monmouthshire) with these areas where the housing market is much less buoyant (and potentially at risk).

In those areas of relatively high-value housing (essentially around and to the south of the M4 corridor, and in parts of rural Monmouthshire) there are issues of housing need, affordability and land supply, as well as concerns as to the necessary levels of public investment to provide additional social and non-market housing. There is an argument that the local authorities in this part of the region should develop closer joint working not only amongst themselves but also with the Welsh Assembly, and developing Registered Social Landlords both to identify locations for new residential development which might meet sub-regional and local requirements, as well as those which might cater for more local demand. Once again, this pinpoints the need not only for local strategic housing fora which engage with land-use planning and development bodies but also the desirability of encouraging such groupings at regional and sub-regional levels within South-East Wales.

Similar joint working and partnership arrangements may need to be developed in relation to the other types of housing market we have identified within the region, where the nature of the markets (and the stock) may be very different. However, our research has not identified significant areas within South-East Wales where there is evidence of housing market failure at the present time (falling house prices, high rates of turnover or vacancy), although there are localities within the Mid and Heads of the Valleys Housing Market Areas where investment is needed in housing renewal and wider economic and community regeneration. This is also true in relation to significant parts of the council housing stock within the region, in order to achieve the Welsh Housing Quality Standard (WHQS). Once again, in these areas there is a need for a more integrated approach to regeneration, and one which considers what impacts investment might have not only locally but elsewhere in the region. In some cases programmes of renewal and regeneration may need to incorporate not only a physical remodelling of the housing stock but also a change in the balance of housing within different tenures. Designing policies to encourage the regeneration of local housing markets will also need to consider employment levels and the potential which policy interventions to encourage economic growth or improvements in transportation might have on these areas.

The development of closer strategic partnerships which link across service areas within local government (as well as to the private, voluntary and non-statutory sectors) at a regional and sub-regional level within South-East Wales might not only allow for considering how local interventions in one housing market may impact

elsewhere. In the longer term they might also lead to closer operational (as well as strategic) planning, with consideration of how in the future partnerships might be developed across traditional organisational and administrative boundaries to deliver services to local consumers.

References

- Blackaby, R (2000) *Understanding Local Housing Markets: Their rôle in local housing strategies*, Coventry, Chartered Institute of Housing, and London, Council of Mortgage Lenders.
- Cole, I, Hickman, P and Reeve, K (2004) *Interpreting Housing Market Change: the case of Leeds*, Sheffield Centre for Regional Economic and Social Research.
- Council of Mortgage Lenders (2003) *Who's Counting? Demand for homes in Wales 1998-2016*, London, CML.
- DETR (2000) *Local Housing Needs Assessment – A Guide to Good Practice*, London, DETR
- DTZ Pida (2004a) *South West England Sub-Regional Housing Markets Study*, London, DTZ Pida Consulting.
- DTZ Pida (2004b) *South East England Sub-Regional Housing Markets Study*, London, DTZ Pida Consulting.
- Green, R K and Malpezzi (2001) *A Primer on US Housing Markets and Policies*, Washington DC, Urban Institute for the American Real Estate and Urban Economic Association.
- Line, B, Golland, A and Davey, A (2002) *Housing Market Study and Housing Needs Study – 2002*, Nottingham, Nottingham City Council.
- MacLennan, D, More, A, O'Sullivan, A and Young, G (1998) *Local Housing Systems Analysis: Best Practice Guide*, Edinburgh, Scottish Homes
- National Assembly for Wales (2001) *Better Homes for People in Wales*, Cardiff. NAW
- Nevin, B, Lee, P, Goodson, L, Murie, A and Phillimore, J (2001) *The West Midlands Housing Market: Changing Demand, Decentralisation and Urban Regeneration*, Birmingham, Centre for Urban and Regional Studies.
- ODPM (2004) *Housing Market Assessment Manual*, London, ODPM.
- O'Sullivan, A and Gibb, K (2003) *Housing Economics and Public Policy*, Oxford, Blackwell.
- Scottish Executive (2004) *Local Housing System Analysis: Good practice guide*, Edinburgh, Scottish Executive.
- Sheppard, S (1999) Hedonic analysis of housing markets, in Cheshire, P C and Mills, E S (eds), *A Handbook of Regional and Urban Economics Volume 3*, New York, Elsevier.

Wallace, A (2004) *Understanding Local Housing Markets? Examining Approaches to Housing Market Analysis*, London, ODPM.

Welsh Assembly Government 2002) *Local Housing Market Analysis – an advice note to Welsh Local Authorities*, Cardiff, WAG.

Welsh Assembly Government (2005a) *Local Housing Assessment Guide: Consultation Draft*, Cardiff, WAG.

Welsh Assembly Government (2005b) *The Affordable Housing Toolkit: Consultation Draft*, Cardiff, WAG.

Welsh Assembly Government (2005c) *Heads We Win: A Strategic Framework for the Heads of the Valleys*, Cardiff, WAG.

Welsh Assembly Government (2005d) *Local Government Plan Rationalisation*, Cardiff, WAG.