Annex 6.3 Centre to periphery methodology for defining housing market areas

This annex explains how the Communities Scotland/DTZ Pieda alternative methodology to defining housing market areas was developed and applied, as a way of illustrating what that method entails.

In March 2001 a joint Communities Scotland and DTZ Pieda working group was set up to review alternative options for the area boundaries for Communities Scotland. One of the principal criteria for assessing the alternative geographical structures was the "fit" with wider functioning housing market areas. It was therefore agreed that there was a need to ensure that housing market area boundaries were up to date.

An internal research project was conducted to refine the existing boundaries and look at the inter-linkages between housing market areas. A number of principles were established at the start of this project:

• Wider housing markets require a degree of population density and tend to be concentrated in the main population centres. It was therefore accepted from the outset that HMA's would not cover the whole of Scotland.

• The focus should be on the "sphere of influence" of major urban housing markets only. As a result, local housing markets operating within a single local authority area boundary were not reviewed.

• As the focus was to update or refine existing wider housing market boundaries rather than start from first principles, the main task was to see if the physical boundaries of housing market areas had expanded or contracted since they had first been established. It was therefore felt that relying on traditional self-containment analysis would be inappropriate, as sales in and around Cities such as Edinburgh or Glasgow would point to self-containment regardless of where the boundary was drawn.

Method

The key elements of the revised method developed by Communities Scotland and DTZ Pieda are detailed in the table below.

Step	Description
Define Settlement Backbone	Identify the major settlements upon which the market area structure is to be built
Determine Movement Patterns	Use Sasines/Land Registry data to establish market area for largest settlements. Use statistical approach developed by Communities Scotland/DTZ Pieda Consulting to define outer boundaries
Identify Degree of Match with Other HMA boundaries	Identify any existing boundaries and assess degree of fit.
Inter-Connections between HMA's	Measure migration flows between defined HMAs
Obtain/Review Other Evidence	Review any other evidence on movement patterns (e.g. needs/demand surveys) Consider need for primary research on movement patterns (e.g. buyers survey) and collect and analyse data

Taking these steps in turn:

Defining settlement backbone

As indicated above, Communities Scotland focused on Scotland's 5 largest cities and a few other identified settlements.

Determining movement patterns

The approach adopted was to examine the pattern of purchaser moves from each city to a specified or named location. Each named location would be included within the wider housing market area if a minimum of 10% of purchasers originated from the Core City.

Supplementary tests were undertaken where the origin based migration flow data proved inconclusive. Once the wider housing market for each city had been agreed, the above process was repeated for a small number of large towns that lay outside these five housing market areas.

The specific steps used to plot the **furthest points of each housing market area** are summarised in bullet points (a) to (e) below. It should be noted that not all steps were carried out for each location tested. Each step was only undertaken if the previous step proved inconclusive. For example, if the proportion of buyers accounted for by moves from the main centre was say between 7 and 12%, then step (b) would be carried out.

a)   Establish how many households moved from a Core settlement (e.g. Core Settlement A) to a named town or village (e.g. Location X) – for example how many households purchasing in Dunbar moved from or originated in Edinburgh?

b)   Establish what proportion of all households selling their home in Location X moved to Core Settlement A, if (a) proved inclusive. For example what number and percentage of households selling property in Dunbar relocated to Edinburgh or chose Edinburgh as their destination?

c)   Establish the Core Settlement A to Location X origin based migration flow for **new build properties** where (a) above and (b) above prove inconclusive. In other words, how many purchasers of newly constructed housing in Dunbar moved or originated from Edinburgh?

d)   Establish how many moved from the Core Settlement A and adjacent locations (e.g. Edinburgh and the rest of Lothians) to Location X (e.g. Dunbar) where the results from the migration patterns established at steps (a) to (c) above proved inclusive. In other words how many households relocating or purchasing a house in Dunbar came from Edinburgh, Musselburgh, and Dalkeith etc?

e)   Establish how many households selling a house in Location X move to the Core Settlement A and locations adjacent to A where (a) to (d) proved inclusive. In other words, how many households that sold their property in Dunbar moved or purchased a property in Edinburgh, Musselburgh, Dalkeith etc?

The analysis was undertaken using Sasines data for 1996 to 2000 for **all sales excluding right to buy** on the basis that RTB sales reflect a change in tenure rather than a house move. Sales below £10,000 and above £1 million were discounted. The exception was for Fife, where analysis was restricted to 1998 and 1999 due to concerns about the quality of Sasines data available at the time.

The locations identified as part of the market area by this process were plotted on a map and a continuous border or boundary was then drawn joining the outer-most settlements identified as part of the market. An initial boundary line was drawn to join up each location, following main roads, railway lines or physical features when and if possible.

Some degree of judgment was involved in this interpolation between data points– for example account was taken of obvious physical features (there is no point in drawing a line through a hill). Although Sasines data was used, in principle migration data from the 2001 Census could have been used, as it is likely to remain valid (at least for the major HMAs) until 2005 or 2006 at least.

Identifying and assessing "fit" with other HMA functional boundaries

Once initial boundaries had been plotted, these were then compared with the HMA boundaries for the wider functioning housing market areas prepared by LA Structure Planning Teams.

Inter-connections between HMAs

Further work was undertaken to explore the degree to which neighbouring HMAs influenced each HMA. For instance, is the Stirling HMA more strongly affected by the Glasgow HMA or by the Edinburgh HMA? Much of the data required to examine this issue was obtained as part of the process of refining the housing market boundaries. However, both the origin and destination migration flows for Edinburgh City and Glasgow City and for some of the smaller housing market areas as a whole (1998 to 99) were also examined.

Obtaining/reviewing other evidence

Although no additional work was felt to be essential at the time when the above analysis was undertaken, it was accepted that this work might have been considerably enhanced through further research – such as the housing search patterns of economically active households.

It was recommended as good practice to keep these boundaries under review and subject to a process of stakeholder consultation and feedback every three to five years.

Results: Housing Markets Areas for the main Scottish Cities

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The boundaries of the HMAs do not coincide exactly with Council boundaries but in broad terms the HMAs comprise:

- Glasgow City, East Dunbartonshire, West Dunbartonshire, Renfrewshire, East Renfrewshire, and parts of North Lanarkshire, South Lanarkshire, and East Ayrshire.
- Edinburgh City, East Lothian, Midlothian and West Lothian and parts of the Fife, Perth and Kinross and Scottish Borders.
- Dundee City, part of Angus and small parts of Fife and Perth and Kinross.
- Aberdeen City, and part of Aberdeenshire.

Sources:

Young and Watkins (2000) New Executive Agency Area Boundaries - Technical Annex, Scottish Homes

DTZ Pieda Consulting,(2003), Housing Market Areas in Scotland: definition and review, Volume 3: Guidance on Market Area Definition, Communities Scotland, Edinburgh

Derek Haldane Consultancy, (2002), City Region Boundaries Study, Edinburgh, Scottish Executive Central Research Unit