



South Derbyshire

Housing market analysis
and
needs estimates

2007

13 August 2007

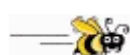
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This report is an initial analysis produced for the South Derbyshire Conjoint Planning Appeal 2007.

It will become part of a larger assessment of the South Derbyshire housing market, and it is intended that this in turn will contribute to the Derby Strategic Housing Market Area Assessment.

13 August 2007

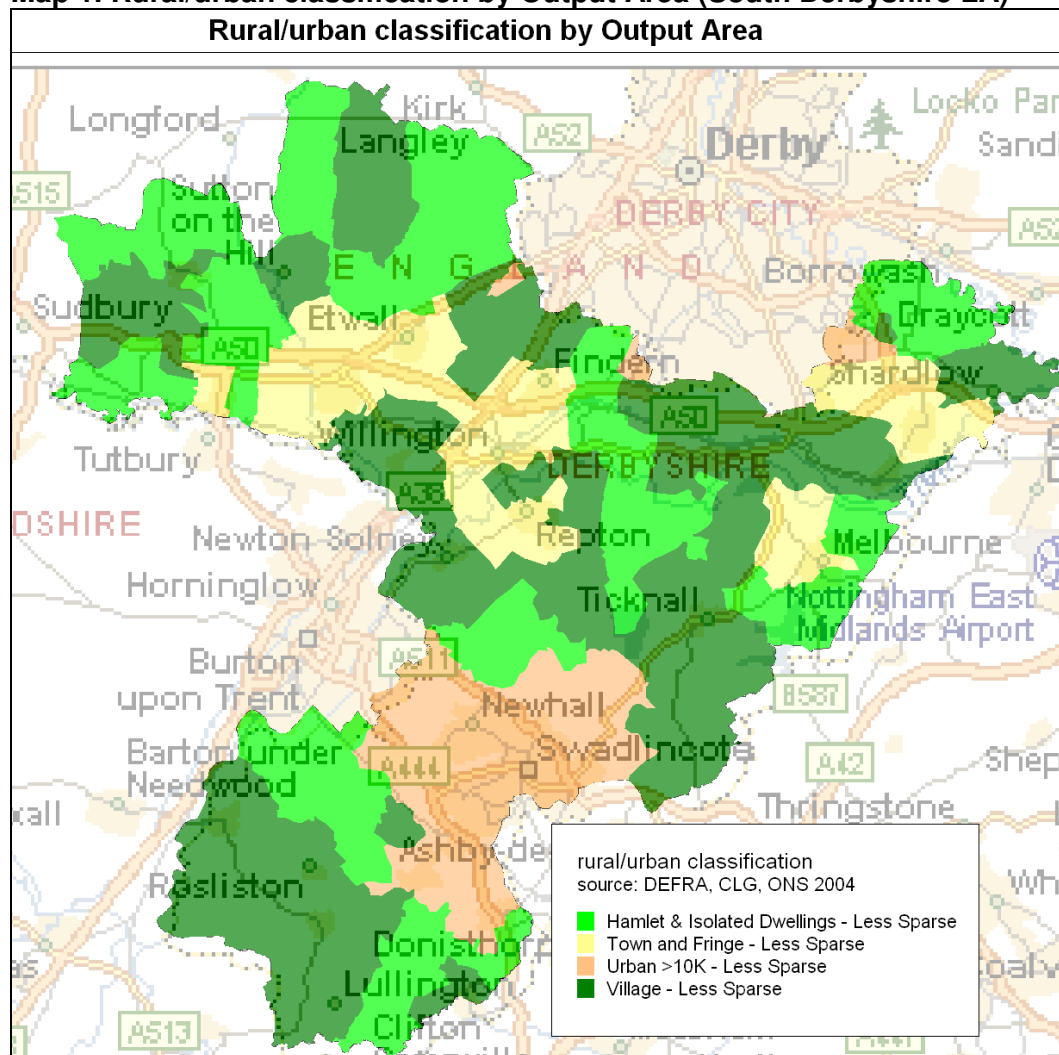
South Derbyshire

Housing market analysis and needs estimates

1. Background

South Derbyshire is mainly rural in character, but with strong links to adjacent urban areas. Burton upon Trent to the west, in Staffordshire in the West Midlands region, is most strongly linked to the South Derbyshire urban core of Swadlincote; while the northern part of the district links more strongly to Derby City.

Map 1. Rural/urban classification by Output Area (South Derbyshire LA)



The northern part of the district is also strongly affected by and linked with the Derby City housing market, such that the two ideally need to be considered together to understand market processes properly. This is analysed further in the first section below, to set the context for further analysis and needs estimates, and identify a 'Derby fringe' sub area of South Derbyshire.

2. Housing Market areas in South Derbyshire

Self containment patterns

Travel to work and migration patterns taken from the 2001 Census can help to provide a useful indication of the search patterns and housing behaviour of local residents. The Census data is initially mapped against Output Area¹, which is then aggregated to allow analysis based on 3 different geographical levels of data:

- Local authority boundary
- Sub areas (as defined by South Derbyshire District Council)
- Urban areas/settlements (as defined by ONS)

Although local authority boundaries are useful in providing a broad indication of flows, they should be treated with caution as they most likely form part of a larger housing market area. The CLG Advice note "Identifying sub-regional housing market areas" (April 2007, p.4) emphasises this point:

"The extent of sub-regional functional housing market areas identified will vary and many will in practice cut across local authority administrative boundaries. For these reasons, regions and local authorities will want to consider, for the purposes of developing evidence bases and policy, using a pragmatic approach that groups local authority administrative areas together as an approximation for functional sub-regional housing market areas."

This comment is supported by the migration and travel to work patterns surrounding the South Derbyshire local authority area. An initial breakdown of migratory movements in and out of the local authority area indicates a relatively low gravity in terms of self containment.

"Gravity" is used here as a concept to describe the extent to which an area retains its population in terms of both migrations and travel to work patterns. An area with high gravity will show the majority of people moving within a relatively short distance, whereas a low gravity area will show movements that are more widely dispersed geographically. An area with high gravity (for example Derby) will also tend to pull people in to live and work from the surrounding areas. It is in effect partly a measure of the population density of an area, but also incorporates other 'pull' or 'holding' factors like employment or community ties. It is also affected by relative house prices, because the higher the house prices in relation to other areas, the more households are able to move away to wherever they choose.

¹ See http://www.statistics.gov.uk/census2001/cn_40.asp for an explanation of how output areas are defined.

The table below indicates:

- 3,364 people moved within the SDDC local authority boundary in 2001 (43.22% of inflow, or 47.82% of outflow)
- Derby is the most significant influence on migrations in and out of the local authority area.
- East Staffordshire is more significant in terms of pulling households away from South Derbyshire than it is in generating movers into the area.
- More people move in to South Derbyshire from North West Leicestershire than vice versa.

Table 2. Main migration origins and destinations to/from South Derbyshire Local Authority

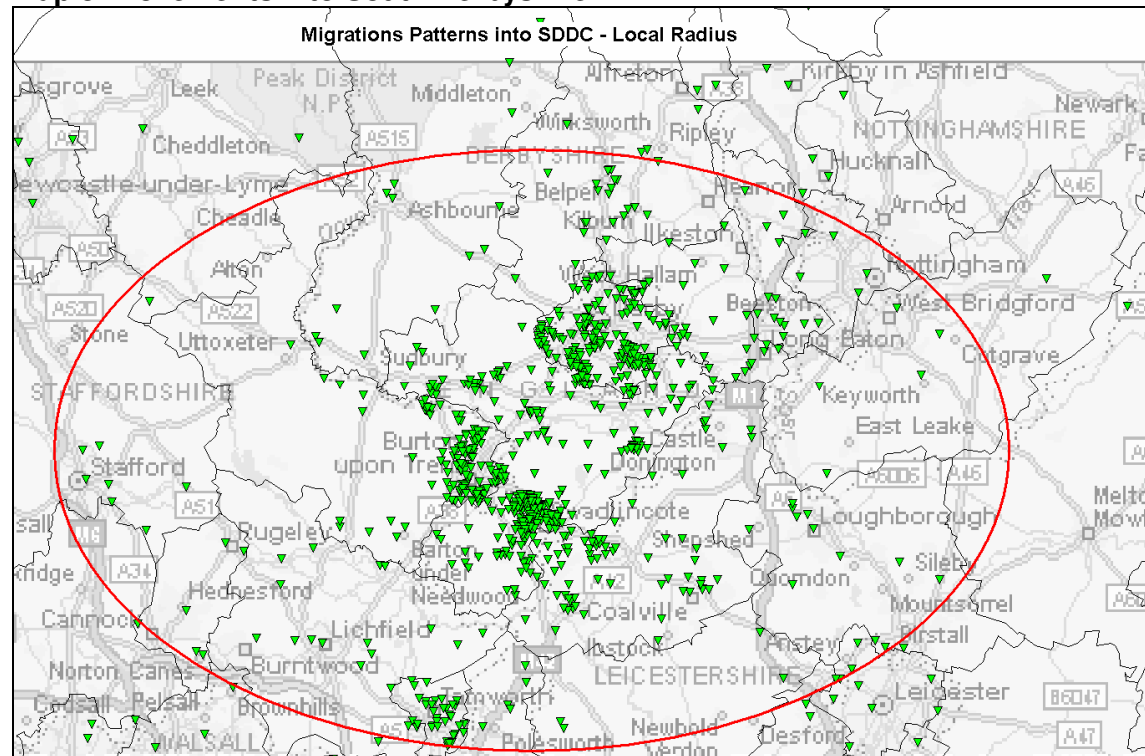
LA	In	% all movers	Out	% all movers
South Derbyshire	3364	43.22%	3364	47.82%
Derby	822	10.56%	832	11.83%
East Staffordshire	570	7.32%	721	10.25%
North West Leicestershire	398	5.11%	291	4.14%
Tamworth	168	2.16%	21	0.30%
Erewash	105	1.35%	70	1.00%
Birmingham	99	1.27%	91	1.29%
Amber Valley	96	1.23%	75	1.07%
TOTAL (UK)	7784		7035	

Source: ONS Census 2001 (Table MG301 Migration)

CLG Guidance identifies the typical threshold for self containment as 70% of movers in a given time period. The maps below show a rough radius around the South Derbyshire local authority area which encompasses around 70% of movers (both in and out respectively). The scope of the area involved is clearly broad, and the scattered pattern of movers outside specific urban areas (such as Derby, Swadlincote and Burton Upon Trent), suggests a trend of movements between rural areas, which tend to require a different focus and demonstrate different behaviour in terms of housing².

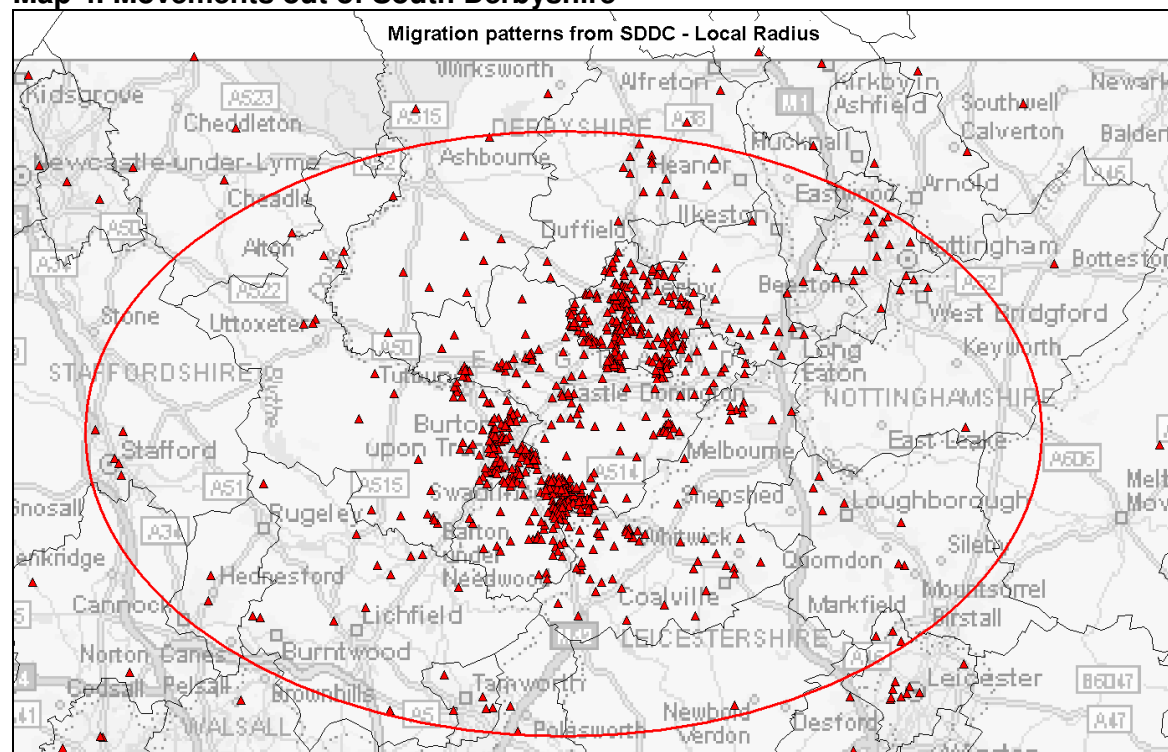
² See East Midlands Rural Affairs Forum, "Rural Strategic Housing: Building a Rural Dimension into Strategic Housing Market Assessments" (April 2007), Rural Housing Solutions & B.Line Housing Information

Map 3. Movements into South Derbyshire



Source: ONS Census 2001 (Table MG301 Migration)

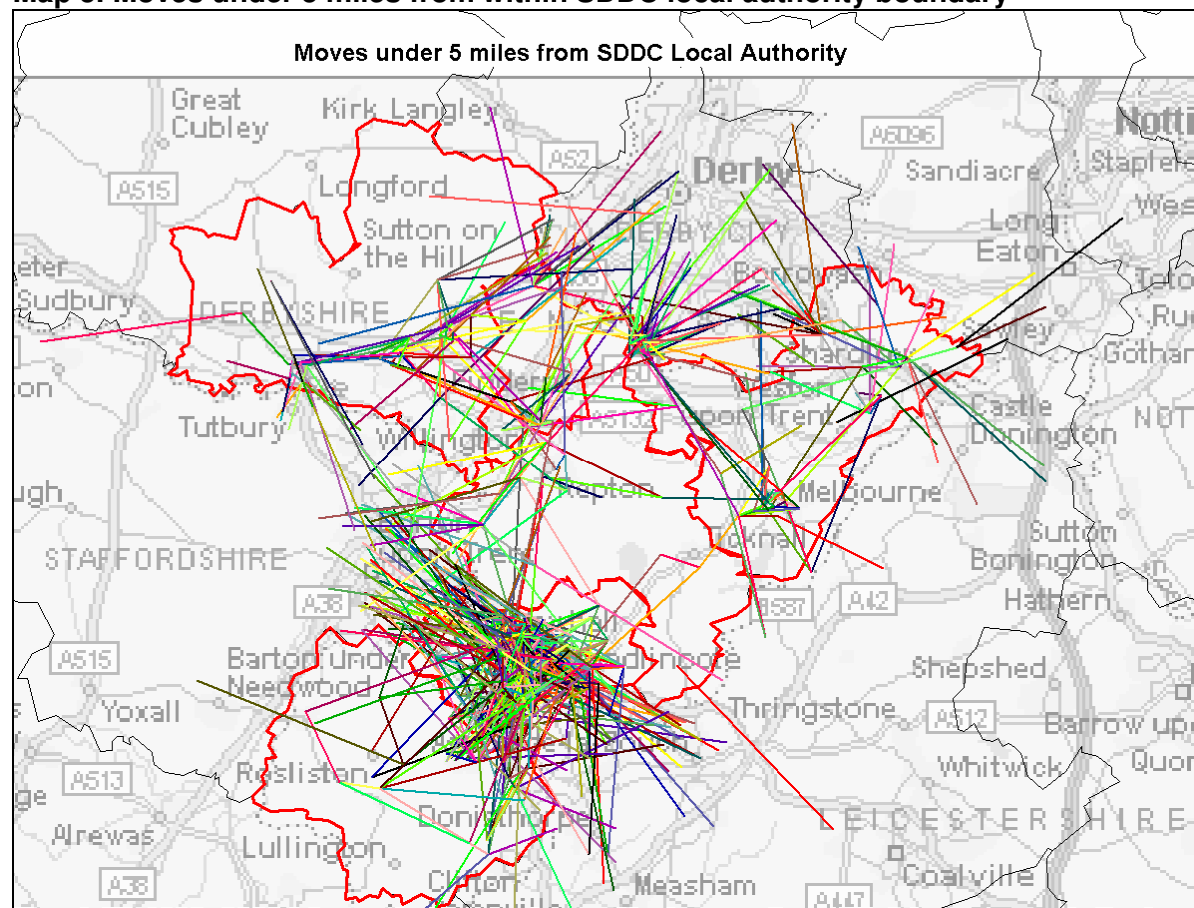
Map 4. Movements out of South Derbyshire



Source: ONS Census 2001 (Table MG301 Migration)

The general pattern of movers suggests that to use a 70% threshold to measure self containment within the SDDC area is unrealistic. The map below shows details of all movers from the SDDC local authority area who moved a distance of under 5 miles. There is a clear concentration of activity around Swadlincote, Burton Upon Trent, and the Derby and Derby Fringe areas suggesting that the gravity of these more urban settlements is much stronger than the more rural parts of South Derbyshire.

Map 5. Moves under 5 miles from within SDDC local authority boundary



Source: ONS Census 2001 (Table MG301 Migration)

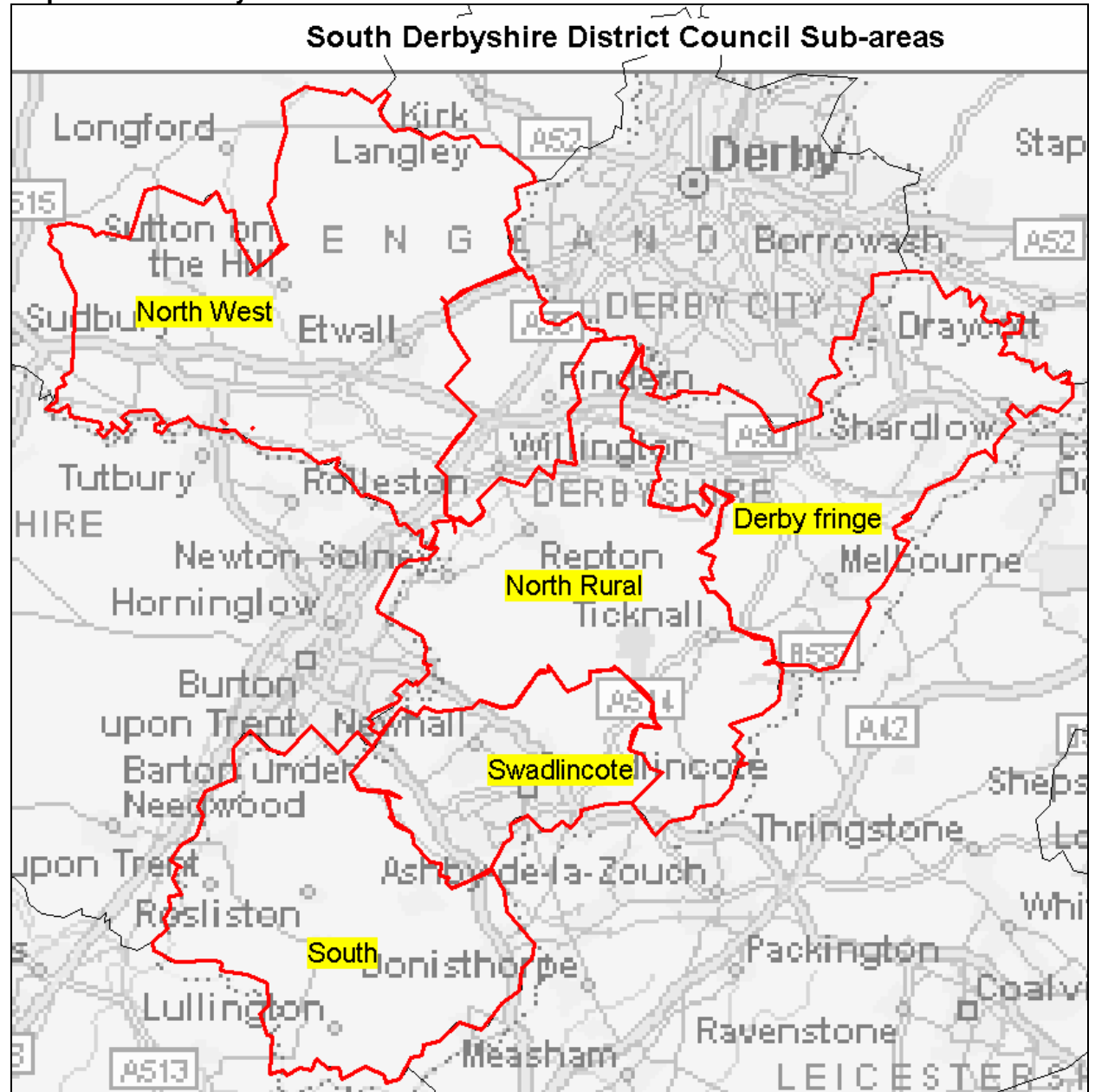
When data relating to the distance moved is consolidated, the results are as below. The data indicates 62% of people moved less than 5 miles in 2001, and the above map suggests that the majority of the 62% moved from within the Swadlincote sub area.

Table 6. Movers from SDDC by distance moved

Distance Moved	No. movers	% total movers
+ 30 miles	1405	16%
20-30 miles	336	4%
10-20 miles	735	9%
5-10 miles	756	9%
< 5 miles	5340	62%
TOTAL	8572	

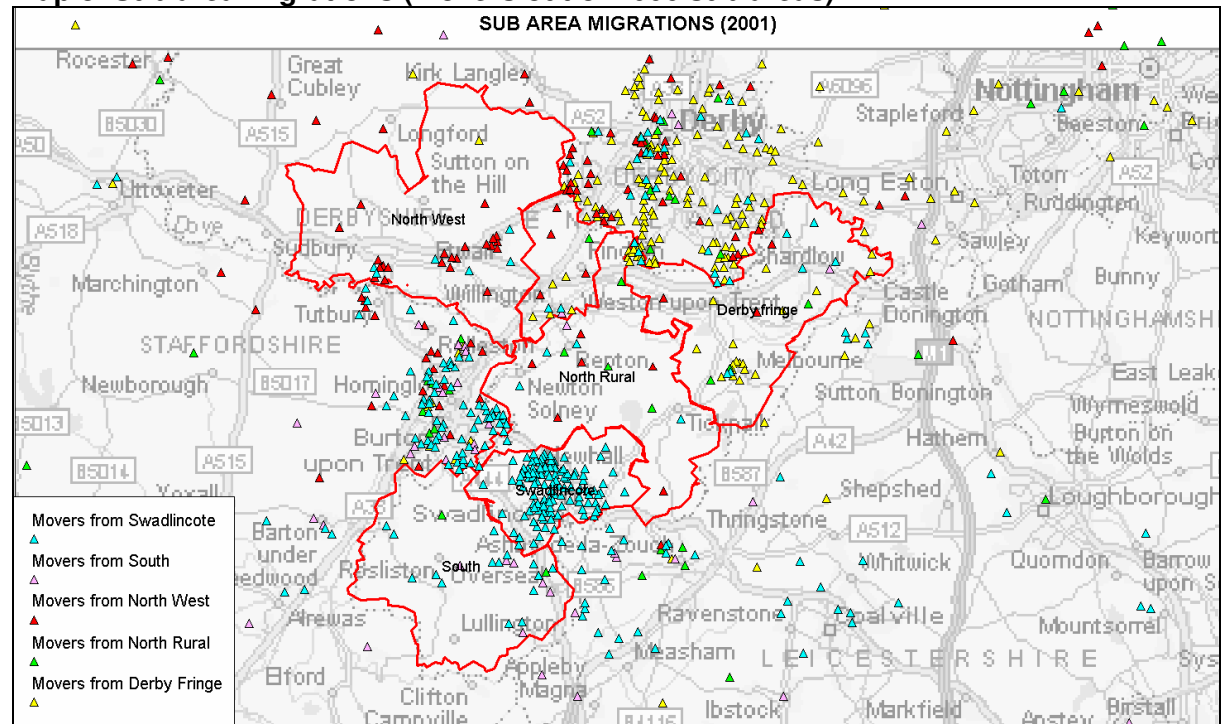
The South Derbyshire District Council local authority boundary was divided into sub areas in 2006 to enable further analysis of housing patterns (shown below). Note that the Derby Fringe sub area is split by the parish of Twyford and Stenson (which forms part of the North Rural sub area) so borders both the North Rural and North West sub areas.

Map 7. South Derbyshire District Council Sub areas



The relative gravity of each area can be inferred from the map and table below. These indicators support the suggestion that the gravity of the South Derbyshire Area is principally accounted for by the Swadlincote sub area, which retains 62% of movers. The other 4 sub areas retain on average only 21% of movers, suggesting a very different pattern of housing behaviour.

Map 8. Sub area migrations (movers out of 2006 sub areas)



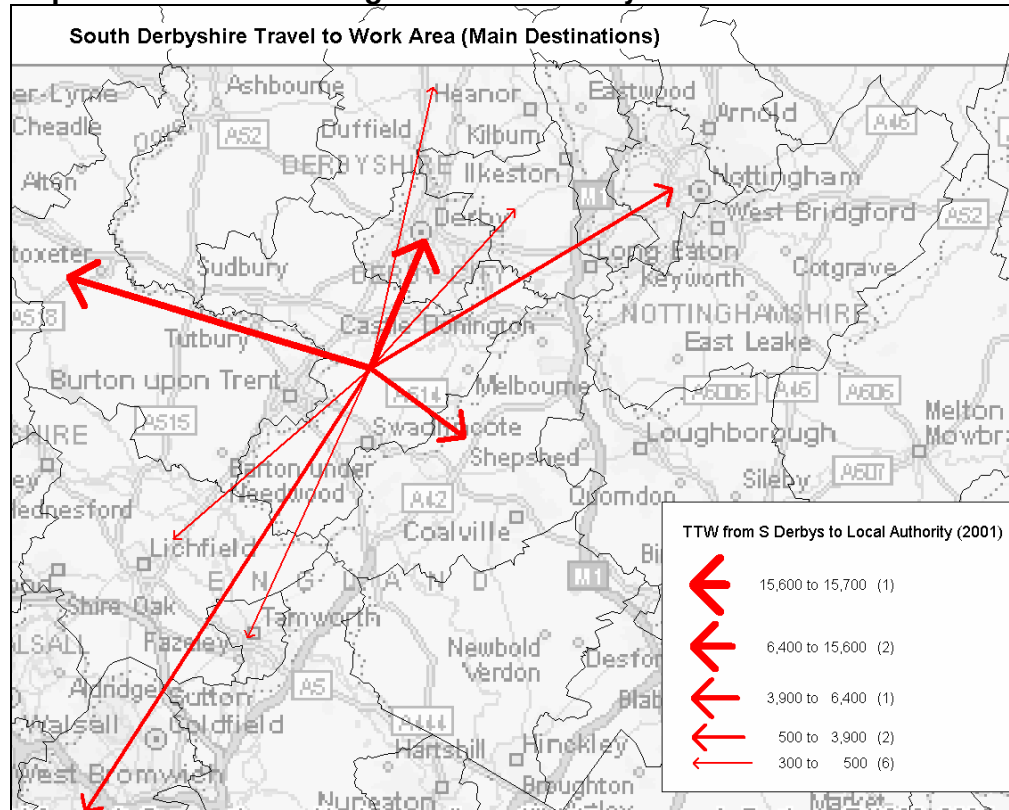
Source: ONS Census 2001, (Table MG301 Migration)

Table 9. Self containment levels of sub areas (migration)

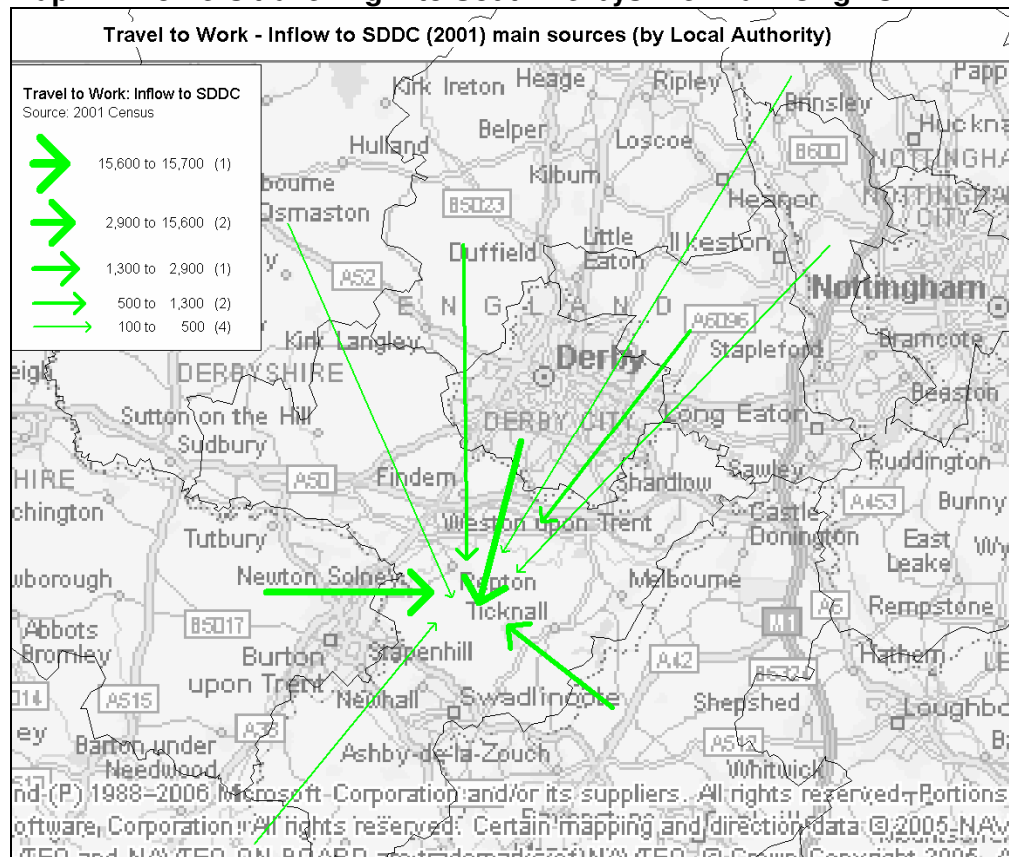
Sub area	Self containment
North West	23.27%
Swadlincote	62.00%
Derby Fringe	24.26%
South	20.85%
North Rural	17.00%

Travel to work patterns from the South Derbyshire area also show a relatively wide radius. The most significant flows both in and out are between Derby and Burton Upon Trent. North West Leicestershire is also responsible for substantial flows. The M1 and M42 Motorways seem to have an influence on commuters between Nottingham and the West Midlands urban area (particularly Birmingham), though there is a strong network of A roads which seems to be more important in terms of the most significant commuter routes.

Map 10. Workers travelling from South Derbyshire: Main Destinations



Map 11. Workers travelling into South Derbyshire: Main Origins



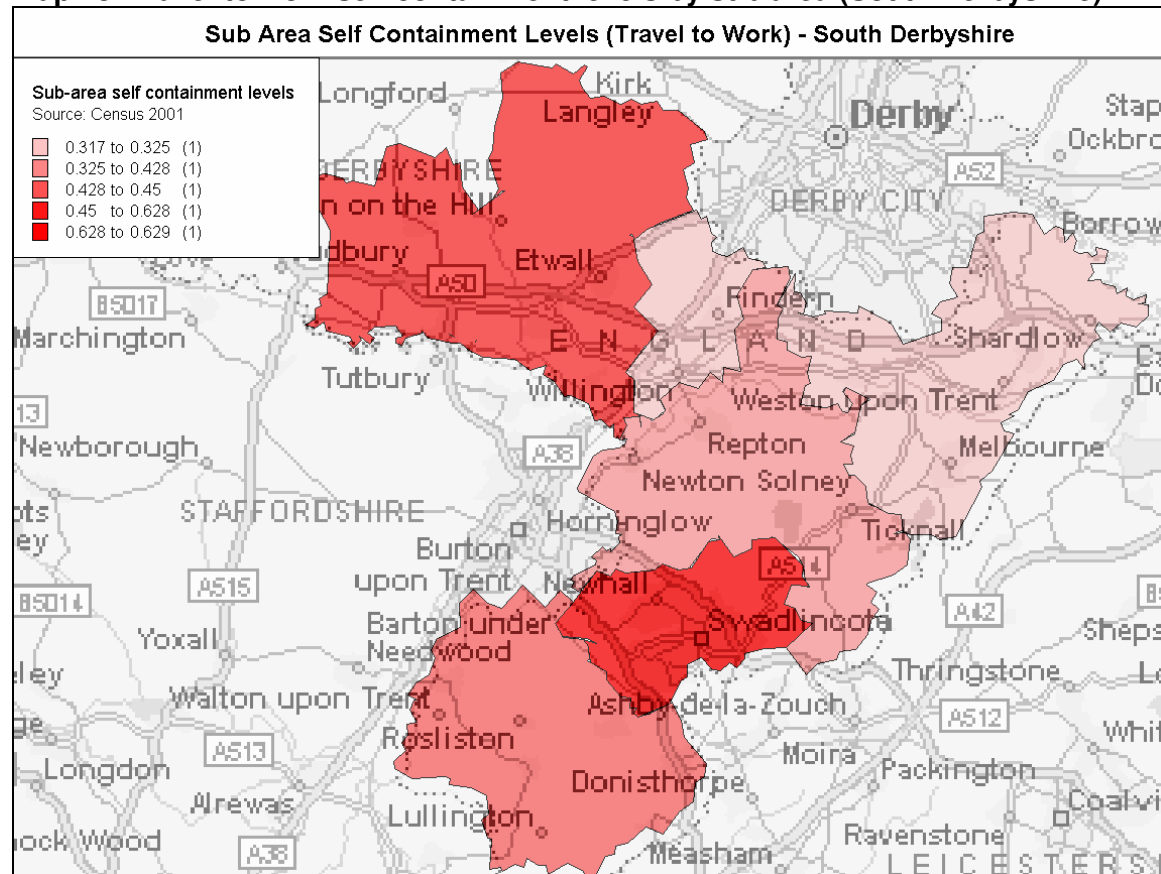
In terms of sub areas, the level of self containment relating to work is relatively higher than that of migration. Swadlincote retains around 63% of it's working population (similar to the migration statistic), but the other sub areas retain a comparatively higher average of 38% (although this is still a relatively low proportion compared to more urban areas).

Table 12. Self containment levels of sub areas (travel to work)

Sub area	Self containment
North West	45.02%
Swadlincote	62.86%
Derby Fringe	31.72%
South	42.84%
North Rural	32.52%

The relative 'strength' of each sub area in terms of retaining workers is shown on the map below. Swadlincote and the North West sub area are the most successful at attracting workers from the local area. The Derby Fringe area clearly shows the lowest retention level.

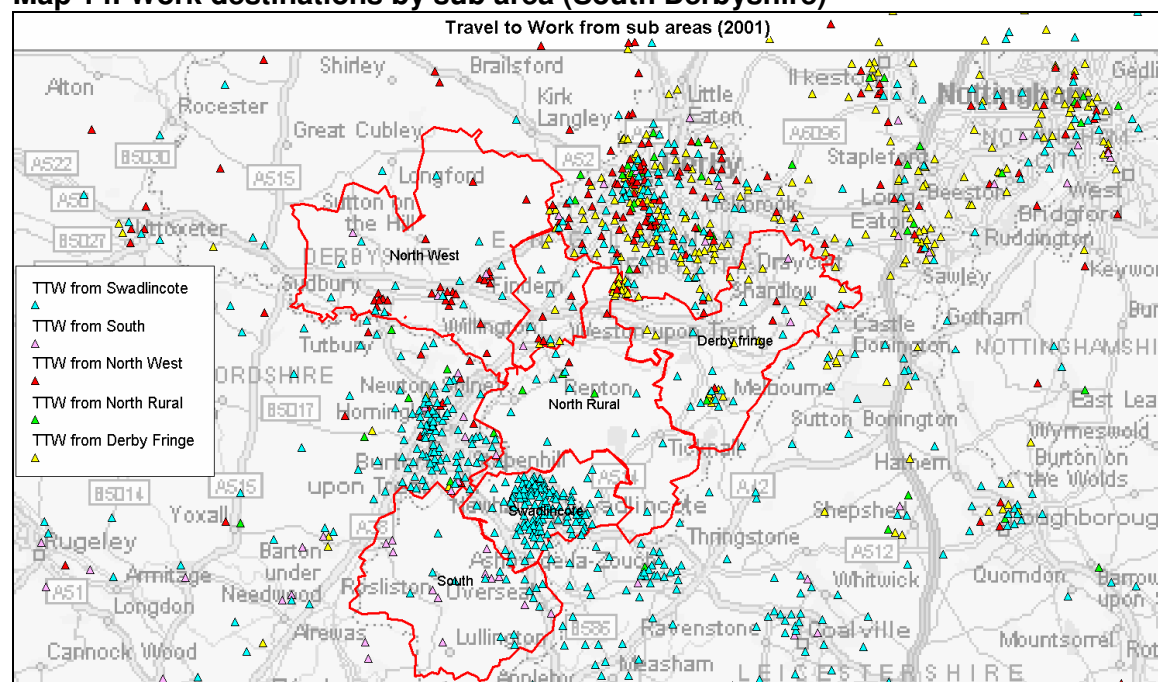
Map 13. Travel to work self containment levels by sub area (South Derbyshire)



Source: ONS Census 2001, DVD-04, August 2003

The destinations of workers from each sub area are mapped below. The map provides a limited scope – the table below it shows that over 90% of people travelling to work from South Derbyshire commute less than 30 miles to their destination, mainly to the adjacent urban areas. The significance of Swadlincote and Burton Upon Trent to the Swadlincote area is clearly visible, as is the pull of Derby and Nottingham to the Derby Fringe area. Derby also attracts moderate numbers of workers from the North West sub area.

Map 14. Work destinations by sub area (South Derbyshire)



Source: ONS Census 2001, DVD-04, August 2003

Table 15. Work destinations from South Derbyshire local authority area (first 90%)

LA	No. people	%	Cumulative
South Derbyshire	15693	38.58%	38.58%
Derby	7551	18.56%	57.15%
East Staffordshire	6403	15.74%	72.89%
North West Leicestershire	3901	9.59%	82.48%
Nottingham	580	1.43%	83.90%
Birmingham	570	1.40%	85.31%
Amber Valley	432	1.06%	86.37%
Erewash	432	1.06%	87.43%
Lichfield	408	1.00%	88.43%
Tamworth	376	0.92%	89.36%
Charnwood	348	0.86%	90.21%

The most significant urban areas in terms of workers within each sub area have been extracted and compared below. The table shows the relative pull of each sub area on the urban areas selected. Despite losing substantial numbers to Derby, the Derby Fringe and North West sub areas also exert a moderate pull on the nearby city, attracting 26% and 11% of their workers from the area respectively. The Swadlincote/Donisthorpe urban area is the most significant contributor in terms of workers in the South and North Rural sub areas, though the low gravity of these more rural locations remains evident. The higher self containment of the Swadlincote sub area can also be seen. In a more general sense, even after extracting the most significant urban areas responsible for providing workers to South Derbyshire, these still account for a maximum of 65% (in Swadlincote) of the total working population. This again reinforces the indication of high mobility.

Table 16. Sub area pull on workers from urban areas (South Derbyshire)

Urban Area	North West	Swadlincote	Derby Fringe	South	North Rural
Derby Urban Area	11.04%	2.97%	26.22%	2.70%	7.32%
Coalville	0.37%	0.47%	0.33%	0.14%	0.54%
Leicester Urban Area	0.30%	0.32%	0.30%	0.14%	0.43%
Swadlincote/Donisthorpe	2.23%	50.02%	2.81%	20.72%	13.53%
Burton Upon Trent	6.48%	3.33%	2.33%	4.46%	5.38%
Nottingham Urban Area	2.08%	0.76%	6.61%	0.81%	1.83%
West Midlands Urban Area	0.07%	0.47%	0.71%	1.35%	0.43%
Ashby-de-la-Zouch	0.15%	1.11%	0.11%	0.54%	0.97%
Tamworth Urban Area	0.22%	0.29%	0.67%	0.81%	0.32%
Stapenhill/Winshill	2.38%	3.80%	1.09%	5.45%	5.42%
Greater London Urban Area	0.22%	0.09%	0.04%	0.00%	0.00%
Greater Manchester Urban Area	0.07%	0.09%	0.07%	0.14%	0.00%
Melbourne	0.30%	0.32%	6.53%	0.27%	0.32%
Loughborough	0.07%	0.23%	0.22%	0.00%	0.32%
Mansfield Urban Area	0.07%	0.12%	1.83%	0.00%	0.32%
Willington (South Derbyshire)	0.89%	0.09%	1.34%	0.41%	1.40%
Tutbury/Hatton	8.17%	0.23%	0.33%	0.68%	0.22%
Etwall	5.58%	0.26%	0.42%	0.27%	0.75%
Uttoxeter	1.54%	0.10%	0.22%	0.00%	0.32%
Hilton (South Derbyshire)	5.39%	0.17%	0.56%	0.14%	0.43%
Repton	0.15%	0.15%	0.19%	0.14%	3.48%
TOTAL	47.80%	65.39%	52.92%	39.14%	43.75%

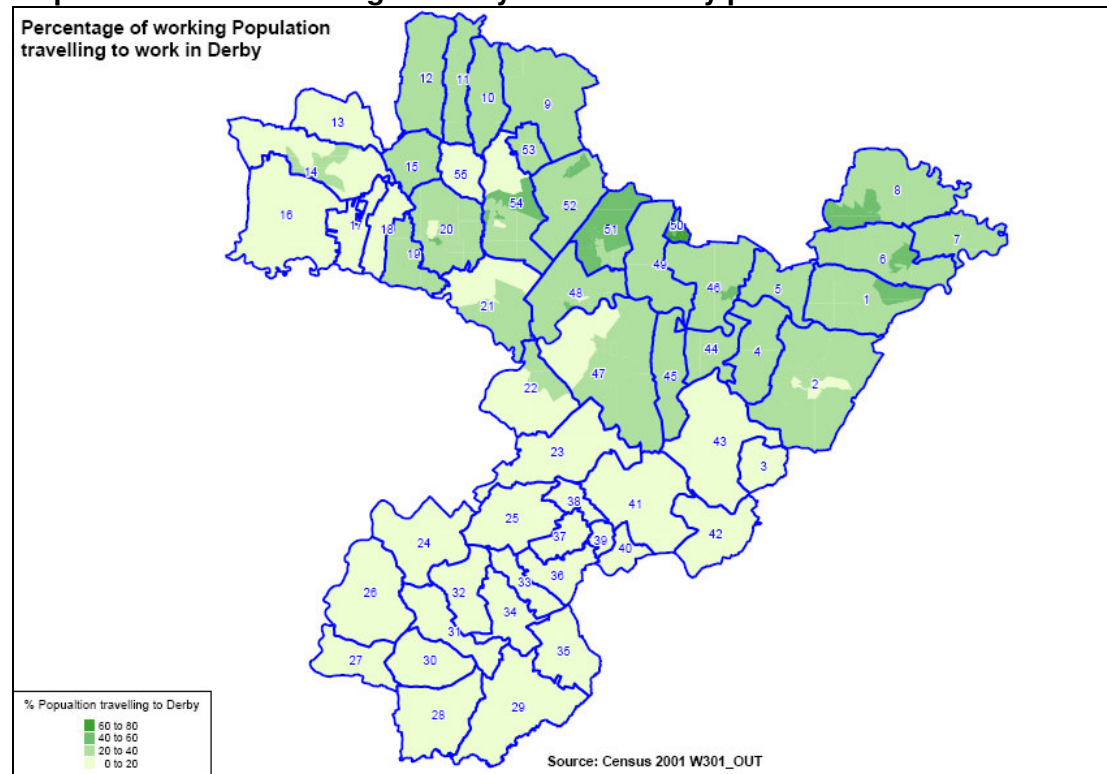
In relation to workers travelling out of each sub area similar relationships to those described above can be found. Derby, Swadlincote and Burton Upon Trent are the most significant in terms of workplace destinations from each sub area, but all are relatively low in gravity and show a wide dispersal of commuters across the region and beyond.

Table 17. Urban area pull on workers from sub areas (South Derbyshire)

Urban Area	North West	Swadlincote	Derby Fringe	South	North Rural
Derby Urban Area	19.95%	3.64%	34.18%	1.78%	14.61%
Coalville	0.05%	1.05%	0.32%	1.00%	0.36%
Leicester Urban Area	0.51%	0.84%	1.24%	0.70%	0.60%
Swadlincote/ Donisthorpe	1.54%	30.55%	1.32%	12.90%	3.94%
Burton Upon Trent	10.86%	16.50%	3.07%	14.24%	9.71%
Nottingham Urban Area	2.36%	0.80%	5.61%	0.93%	2.39%
West Midlands Urban Area	1.64%	1.92%	1.69%	6.87%	2.27%
Ashby-de-la-Zouch	0.36%	4.53%	0.44%	2.99%	1.51%
Tamworth Urban Area	0.20%	1.15%	0.34%	2.96%	0.12%
Stapenhill/ Winshall	0.20%	0.72%	0.11%	1.08%	1.19%
Greater London Urban Area	0.51%	0.52%	0.61%	0.23%	0.48%
Greater Manchester Urban Area	0.46%	0.05%	0.16%	0.23%	0.12%
Melbourne	0.15%	0.07%	4.25%	0.08%	0.36%
Loughborough	0.20%	0.28%	0.69%	0.23%	0.24%
Mansfield Urban Area	0.10%	0.05%	0.40%	0.00%	0.12%
Willington (South Derbyshire)	0.10%	0.02%	0.77%	0.00%	0.12%
Tutbury/Hatton	5.28%	0.14%	0.26%	0.15%	0.24%
Etwall	3.52%	0.00%	0.16%	0.08%	0.00%
Uttoxeter	0.92%	0.12%	0.16%	0.00%	0.00%
Hilton (South Derbyshire)	2.68%	0.02%	0.05%	0.08%	0.00%
Repton	0.00%	0.07%	0.05%	0.00%	2.47%
TOTAL	51.61%	63.06%	55.87%	46.52%	40.84%

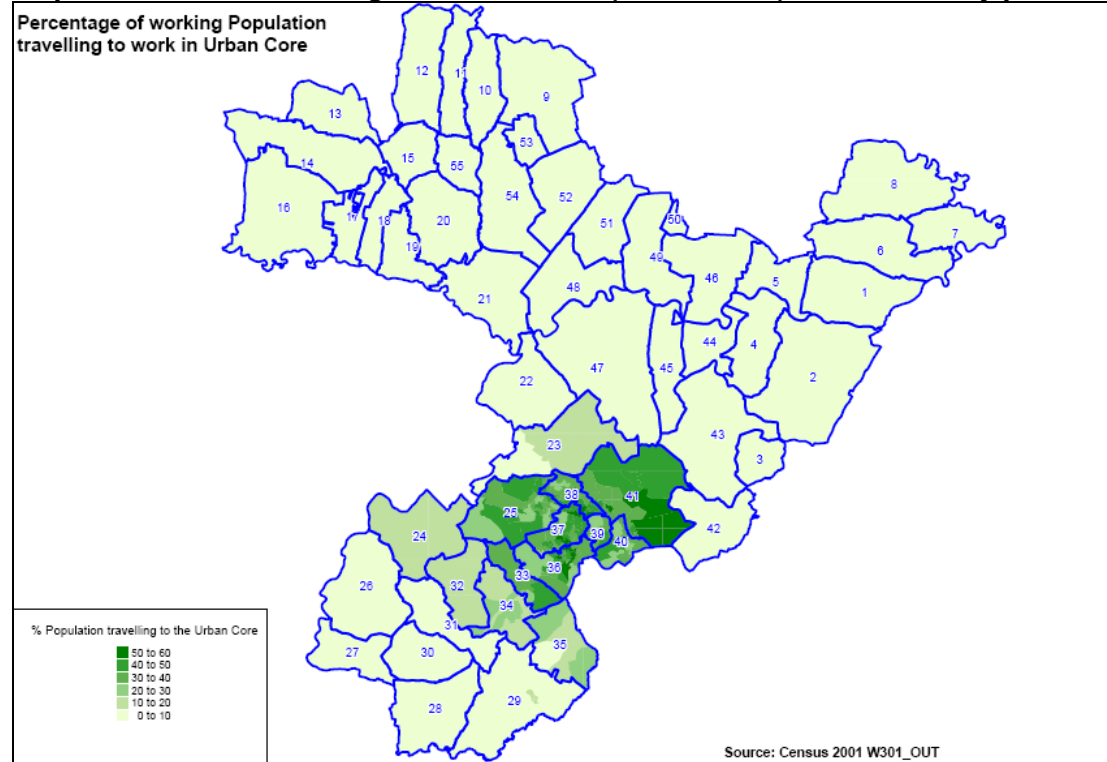
The relative pull of Derby, Swadlincote and Burton Upon Trent can be examined further in the maps below, which show the percentage of working population travelling to each area, according to parish boundaries.

Map 18. Workers travelling to Derby from SDDC by parish



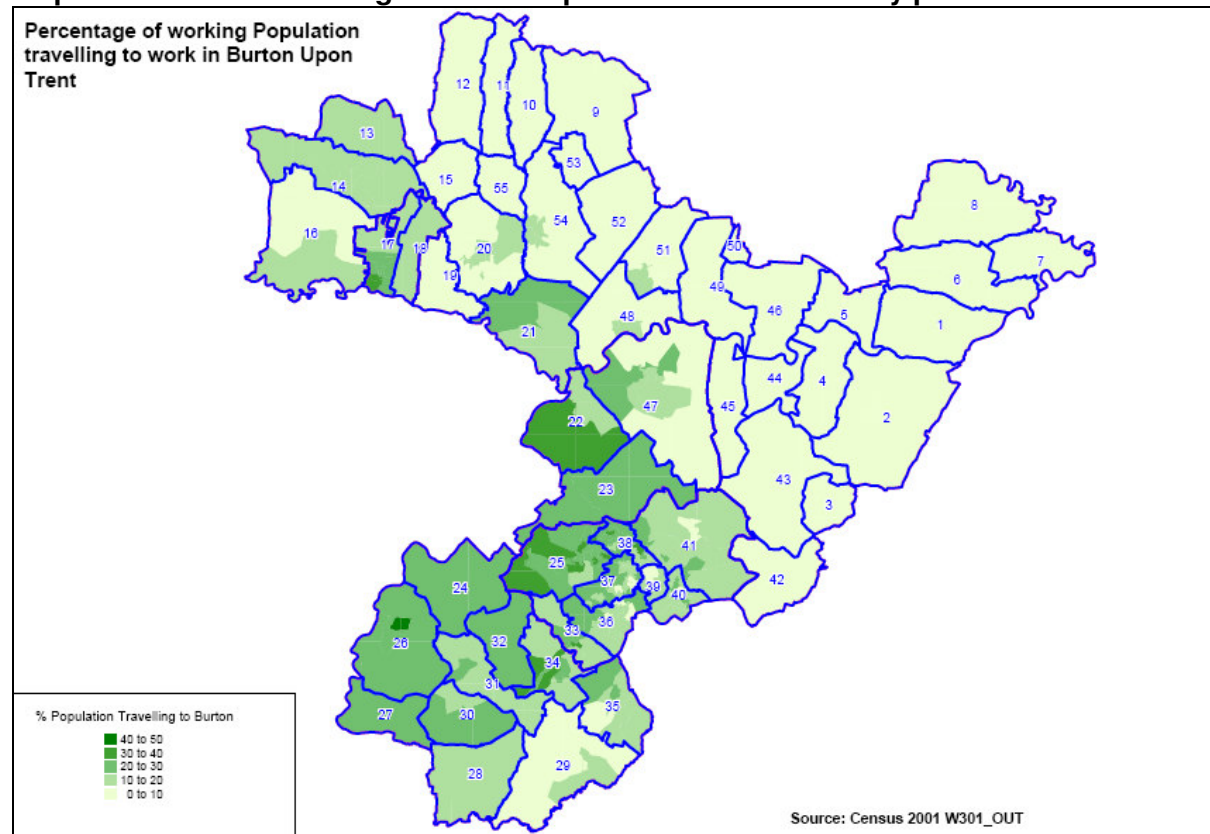
Source: South Derbyshire District Council, "Recalculation of the Housing Market Areas for South Derbyshire District Council" (January 2006)

Map 19. Workers travelling to Swadlincote (Urban Core) from SDDC by parish



Source: South Derbyshire District Council, "Recalculation of the Housing Market Areas for South Derbyshire District Council" (January 2006)

Map 20. Workers travelling to Burton Upon Trent from SDDC by parish



Source: South Derbyshire District Council, "Recalculation of the Housing Market Areas for South Derbyshire District Council" (January 2006)

The general indication of the data is that there are two significant pulls on the area. The first is towards Derby and the North, the second towards Burton/Swadlincote and the West. The idea of Swadlincote and Burton as a single housing market area has been suggested previously and is supported by the data assessed so far³.

Re-analysing the travel to work and migrations data as above has led to an indication that it would be prudent to redefine the sub-market boundaries for a more up-to-date housing market analysis. The data indicates households are likely to fall into one of three main categories within the South Derbyshire area:

1. Households which are influenced in terms of migration and work by the Derby Urban Area.
2. Households which are influenced in terms of migration and work by the Swadlincote/Burton Urban Area.
3. Households which are in rural areas and have much weaker or negligible ties to nearby urban centres.

To allow new sub area boundaries to be defined the influence of the two main urban areas on each settlement within the local authority boundary has been measured as shown in the map below.

³ See West Midlands Regional Assembly: "Study into the Identification and Use of Local Housing Market Areas for the Development of the Regional Spatial Strategy" (Final Revised Technical Report) p. 27-28.
<http://www.wmra.gov.uk/download.asp?id=1515>

SDDC Influence of key urban areas on main settlements

Main Urban Areas

- Burton Upon Trent (1)
- Derby Urban Area (1)
- Swadlincote/Donisthorpe (1)

Key TTW locations

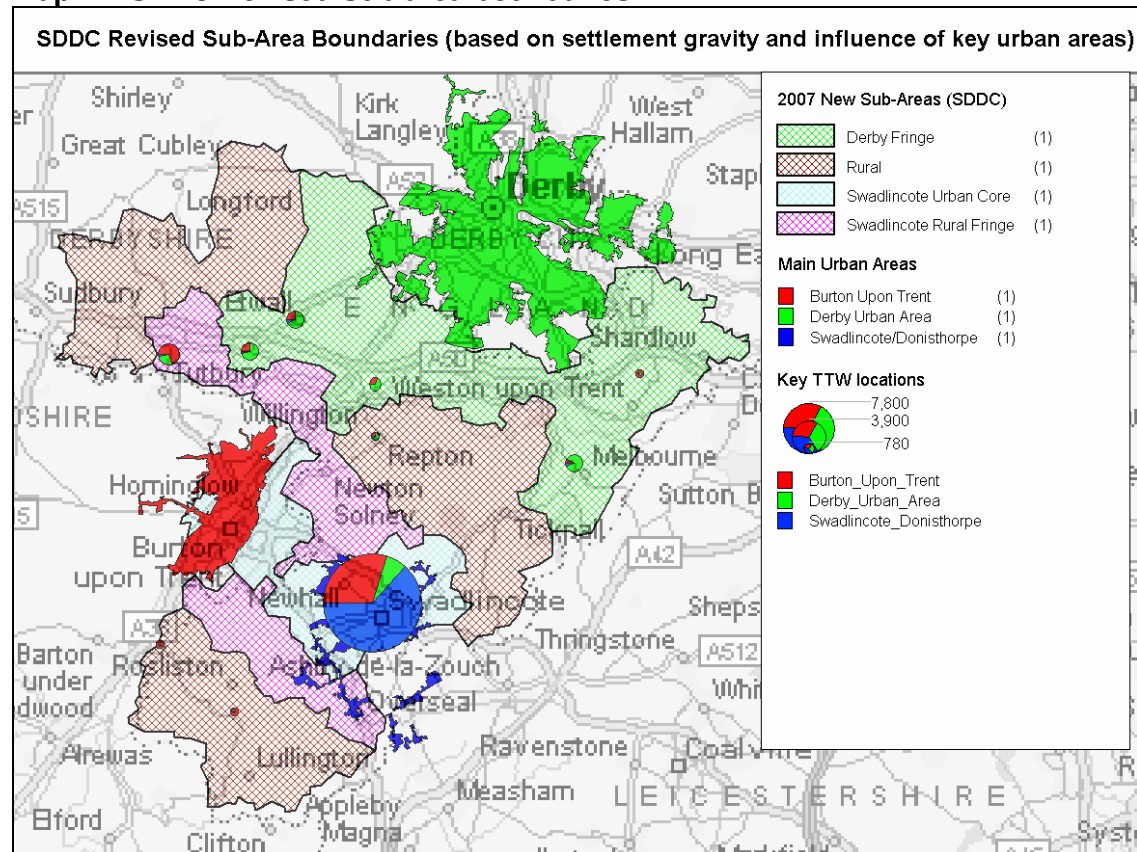
- 7,800
- 3,900
- 780

Legend:

- Burton_Upon_Trent
- Derby_Urban_Area
- Swadlincote_Donisthorpe

Following consultation with South Derbyshire District Council about the significance of these findings, revised sub area boundaries are outlined below.

Map 22. SDDC Revised Sub area boundaries



These revised sub areas are based on parish boundaries, and are defined as follows:

- **Derby Fringe:** Encompasses those settlements which generally pull towards Derby in terms of travel to work and migration patterns.
- **Rural:** Households living within rural areas generally demonstrate different migration and travel patterns and have different issues of housing need.
- **Swadlincote Urban Core:** The urban centre of the area, encompassing both the Burton upon Trent and the Swadlincote/Donisthorpe urban areas. These urban settlements clearly exert a significant influence on the households within and around them in terms of work and migration patterns.
- **Swadlincote Rural Fringe:** Encompasses settlements which are outside the urban core but still show a tendency to pull towards it in terms of migration and work patterns (i.e. their movements are less diverse and more predictable than those households living within the more rural areas.)

The parishes contained within each sub area are shown in the table below.

Table 23. Revised sub areas - parishes

Swadlincote Urban Core	Swadlincote Rural Fringe	Derby Fringe	Rural
Swadlincote	Hatton	Radbourne	Osleston and Thurvaston
Hartshorne	Hoon	Bearwardcote	Trusley
Woodville	Marston On Dove	Etwall	Dalbury Lees
Castle Gresley	Egginton	Elvaston	Barton Blount
Stanton and Newhall	Newton Solney	Burnaston	Church Broughton
Midway	Bretby	Hilton	Sutton On The Hill
Church Gresley	Drakelow	Findern	Ash
	Cauldwell	Twyford And Stenson	Foston and Scropton
	Linton	Stenson Fields	Repton
	Overseal	Shardlow and Great Wilne	Stanton By Bridge
		Aston Upon Trent	Foremark
		Barrow Upon Trent	Ingleby
		Willington	Ticknall
		Swarkestone	Calke
		Weston Upon Trent	Smisby
		Melbourne	Walton Upon Trent
			Rosliston
			Catton
			Coton In The Elms
			Netherseal
			Lullington

This assessment and estimate of need focuses particularly on the conjoined Planning appeal sites in South Derbyshire, but is also part of a wider Housing Needs and Market Assessment for 2007.

This element of the study has been carried out earlier in the larger project to help meet the timetables for the appeal. It will continue into a wider analysis, which will join with Derby City and Amber Valley into a wider Strategic Housing Market Assessment, and can also be timetabled to take account of relevant views and findings at the appeal.

3. Housing markets and needs

Geographical factors – housing submarkets

CLG Strategic Housing Market Assessments: Practice Guidance 2007 says:-

“Housing market areas are geographical areas defined by household demand and preferences for housing. They reflect the key functional linkages between places where people live and work”.

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The Derby housing market area (HMA) was identified and defined by research accepted by the East Midlands Regional Assembly as covering Derby City, Amber Valley, and South Derbyshire. The borough of Erewash, although adjacent to Derby City, was placed into the Nottingham ‘core’ HMA⁴ because of the proximity of its main urban areas to Nottingham city.

However, the Regional Assembly recognises that this is an administrative and political compromise to some extent, and a report to the East Midlands Regional Assembly Housing, Planning & Transport joint board in May 2006 noted that :-

“It has always been acknowledged by Government (and the Assembly) that these Local Authority groupings do not represent actual housing market areas (which are market led and dynamic as opposed to administrative and fixed). However, they have the potential to provide a better starting point for analysis and policy development than traditional strategic planning boundaries.”

Sub areas in South Derbyshire

Housing market areas are quite large. They are not homogeneous, but contain many different submarkets, spatially and by type and tenure, and are subject to different influences⁵.

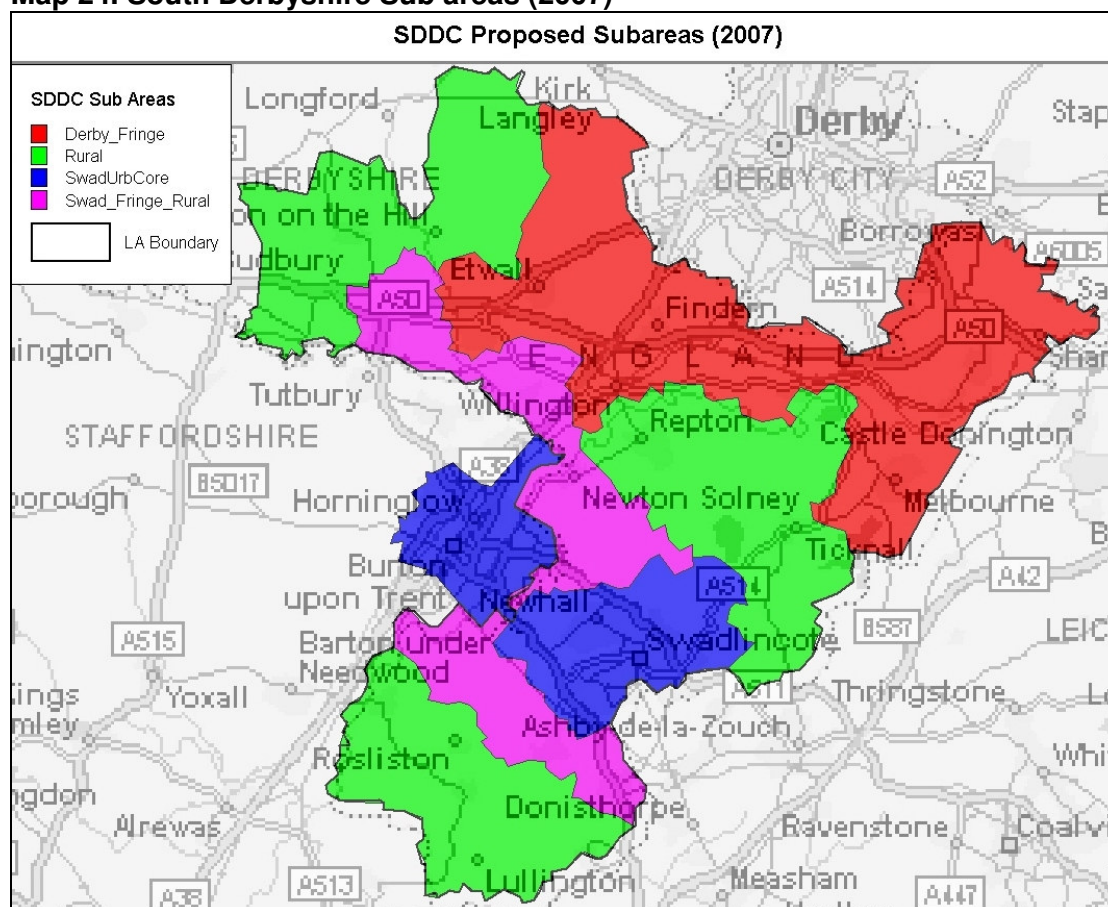
Analysis of migration and travel to work data in the section above identifies that the parishes of Radbourne, Bearwardcote, Etwall, Elvaston, Burnaston, Hilton, Findern, Twyford And Stenson, Stenson Fields, Shardlow and Great Wilne, Aston Upon Trent, Barrow Upon Trent, Willington, Swarkestone Weston Upon Trent and Melbourne all relate more strongly to Derby, and should therefore be considered as part of a Derby fringe sub area for housing planning.

⁴ The Nottingham core SHMA is available from http://www.blnehousing.info/Nottingham_core-SHMA.htm

⁵ See <http://www.communities.gov.uk/index.asp?id=1510297>

Other parts of South Derbyshire relate more strongly to the Swadlincote and/or Burton on Trent urban core, or are essentially rural in character with no strong affinity. This is shown in the map below.

Map 24. South Derbyshire Sub areas (2007)



The Burton upon Trent urban core is shown as joined to the Swadlincote urban core, because this is what analysis indicates⁶. Detailed data for Burton has not been used in this analysis, but its influence should be recognised, especially for the Swadlincote urban core.

Methodology for estimating housing needs

Estimating housing needs is a complex, often controversial, and inevitably imprecise exercise, for which methodologies are still developing, not just in the UK but in much of the developed world, where housing faces similar problems of supply and affordability.

New Government Guidance was published in March 2007, which moves away from a narrow and simplistic approach, and now explicitly recognises this complexity much more:-

⁶ See also WMRA *Study into the Identification and Use of Local Housing Market Areas* <http://www.wmra.gov.uk/download.asp?id=1515> - page 27

“Housing markets are dynamic and complex. Because of this, strategic housing market assessments will not provide definitive estimates of housing need, demand and market conditions. However, they can provide valuable insights into how housing markets operate both now and in the future. They should provide a fit for purpose basis upon which to develop planning and housing policies by considering the characteristics of the housing market, how key factors work together and the probable scale of change in future housing need and demand.”

Strategic Housing Market Assessments Practice Guidance, page 9

The new guidance also progresses on from a reliance on ‘housing needs surveys’, and recognises the range and variety of large and detailed secondary datasets that have become available over recent years, along with the means to handle and analyse them.

Pertinent extracts from the new Guidance include :-

- *neither secondary nor primary data are of themselves more or less robust.*
- *a key technique for addressing data limitations is ‘triangulation’. This involves bringing together and contrasting available evidence from different data sources for aspects of the assessment where there is no one definitive source.*

There has been a tendency for some to believe that collecting sufficient data would lead to clear answers as to how much affordable housing is required, derived by some precise arithmetical process from this quantified data. It has become clear that this is not so, but that many key factors and variables require choices, assumptions and judgments, albeit evidence based.

Among the Strategic Housing Market Assessment required process checklist items are that it :-

- *Contains a full technical explanation of the methods employed, with any limitations noted*
- *Assumptions, judgements and findings are fully justified and presented in an open and transparent manner*

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While this part of the study is not yet a fully fledged Strategic Housing Market Assessment, and sources are clearly important, the new Guidance also deliberately moves the focus away from a narrow, survey reliant, arithmetical approach:-

- *Whether a strategic housing market assessment is based upon secondary or survey data should not be a factor in determining whether an assessment is robust and credible. No one methodological approach or use of a particular dataset(s) will result in a definitive assessment of housing need and demand.*

- *a strategic housing market assessment should be considered robust and credible if, as a minimum, it provides all of the core outputs and meets the requirements of all of the process criteria in figures 1.1 and 1.2. In such circumstances, there is no need for the approach used to be considered at the independent examination. Any discussion at independent examination should focus upon the assessment's findings and its relationship with the proposed spatial policies for housing set out in the draft submission development plan document.*

The National Housing and Planning Unit⁷ was also launched in June 2007, and has published an initial report – ‘Affordability matters’ - setting out some of the issues⁸, and describing how complex and inter-related these have become in current housing market circumstances .

In practice improved data, and especially more detailed coverage from administrative and secondary sources, can determine some factors more accurately. For example the Land Registry makes available its data on every sale to full address level. Data on all local authority and housing association lettings can be extracted from their administrative or monitoring systems.

Other variables and inputs are more elusive. Incomes data does come from surveys but often these appear suspect and variable in quality and accuracy. It can be provided by commercial modeled estimates, or derived from Government sources such as the Annual Survey of Hours and Earnings (ASHE) – although these too have their deficiencies.

Any housing need assessment is therefore essentially an evidence based estimate, which can at best give a range of needs, and which will also change as the market moves – for example for the past few years the need for affordable housing has generally risen dramatically as house prices have increased.

Data and information sources

The appeal sites are located in the Derby fringe sub area, close to, or as actual urban extensions of, Derby City. All the evidence suggests that they will be strongly influenced by, and to a substantial extent will serve, the Derby housing market. Data selected for the Derby fringe sub area has therefore been used as the evidence base for analysing and estimating needs.

Analysis is based on a variety of sources, which have been compared or ‘triangulated’ where relevant. All sources have their advantages and disadvantages.

⁷ <http://www.communities.gov.uk/index.asp?id=1510755>

⁸ <http://www.communities.gov.uk/index.asp?id=1510913>

Principal data and evidence sources used were:-

- A household survey by personal interview, carried out jointly with Derby City Council (whose survey is still being completed at the time of writing). This covered eighty six questions giving three hundred and thirty two data fields. It resulted in a total of 1,800 responses in South Derbyshire District, which gives an overall confidence interval of 2.25 at a 95% confidence level. This means that there is 95% confidence that any result from the overall survey is correct to within plus or minus 2.25%⁹. However, this level falls with smaller subdivisions or sections of the survey.

The survey responses were postcoded so that the majority of them (98%) could be located accurately using GIS, and allocated to the defined sub areas. The results by sub area were:-

Table 25. – Sub area survey samples and confidence levels

subarea	Frequency	Valid Percent	households	confidence interval
not mapped	22	1.2		
Derby_Fringe	635	35.3	11997	3.8
Rural	180	10.0	3850	7.1
Swadlincote_Rural Fringe_	202	11.2	4002	6.7
Swadlincote Urban Core	761	42.3	15875	3.5
Total	1800	100.0		

As with all surveys, more responses were obtained from household types who are at home more – such as outright owners and council tenants. Household types were therefore partially weighted towards the Census tenure profile to correct for these factors. The weightings applied were:-

Table 26. Survey weightings

Survey weightings to compensate for sampling bias	weight (tenure correction x gross to household total)
Owner occupied (with no loan or mortgage)	17.3
Owner occupied (with a mortgage)	23.9
Low Cost Home Ownership	no weighting
Rented from the Council	16.5
Rented from a Housing Association	no weighting
Rented from a landlord (furnished)	no weighting
Rented from a landlord (unfurnished)	no weighting
Tied or linked to a job	no weighting
Other	no weighting

Survey data is usually more up to date, and can ask questions about perceptions and intentions, but by the same token this makes it more subjective. It is also limited in geographical coverage, and although it can be grossed up to the total population this can be a suspect exercise. The biggest problem is that answers need to be interpreted in the light of the specific circumstances of the respondents, and these are so variable and changeable that the effective sample size can become quite precarious.

⁹ For a fuller explanation see <http://www.surveysystem.com/sscalc.htm>

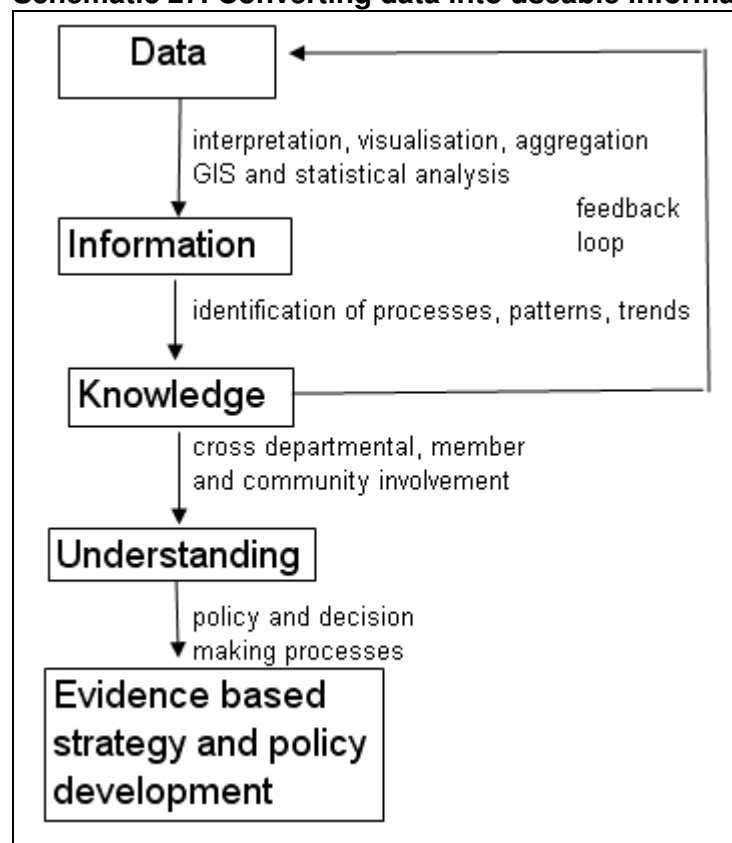
Secondary data sources have also been used extensively. These include:-

- Land Registry residential sales data at full address level
- Mortgage valuations from 'Hometrack'
- CACI 'Paycheck' incomes profiles at full postcode level
- Chelmer household and population projections.
- Stock and lettings data extracted from SDDC systems
- CORE lettings and intermediate sales data for housing associations

Secondary data is by definition historical, although some, such as Hometrack valuations data, is updated constantly. Land Registry data is now produced monthly, and is comprehensive in that in theory it covers every registered sale. Similarly administrative data, for example on lettings and stock, covers *all* the cases occurring in an area, not just a sample or averages.

This can result in an initially bewildering richness of data, and the challenge with these large datasets is then to visualise, aggregate and analyse them effectively to turn the raw data into useable information. The process can be set out schematically as:-

Schematic 27. Converting data into useable information



Methodology for estimating housing needs

Some aspects of the methodology used are explained as they are developed in the need sections. This section summarises the overall approach, and makes links with guidance and other studies.

Guidance sets out the key components of need, which remain similar to previous guidance.

Table 28. Extract from Guidance – stages in assessing need

Stage 1	Current housing need (gross backlog)
Stage 2	Future housing need (gross annual estimate)
Stage 3	Affordable housing supply
Stage 4	Housing requirements of households in need
Stage 5	Bringing the evidence together

These can be estimated using combinations of the survey and/or secondary data. It is possible to measure need in different ways, so alternative methods can be used to derive needs estimates, which can then be compared. However in practice this can often lead to different results - it is more usual for different assessments to produce needs estimates within broadly similar, though not identical, ranges.

Stocks and flows

As well as consisting of different components, housing need is dynamic and changing. Simple 'snapshot', arithmetical methods scarcely do justice to the complex flows and interactions that actually occur in housing markets.

For example, 'backlog' need is not static, but is made up of households which have moved into the market in some way, often into private renting or student housing, and then become part of this backlog need as existing households when their circumstances change. When they eventually do find a long term solution to their housing needs they cease to be part of the backlog, but are replaced by others moving through similar lifestages and circumstances.

Guidance summarises this as:-

the net figure derived should be converted into an annual flow using assumptions about the number of years that will be taken to address the backlog. Levels of unmet need are unlikely to ever fall to nil given that peoples' housing circumstances change and there will always be households falling in and out of housing need.

Any amount of raw data will never of itself lead simply to clear information, but careful examination of it can help disentangle what it means, interpreting the evidence through a conceptual framework of how the housing market operates.

Survey data can be used to derive some of the components of need, by selecting cases with particular responses, and cross tabulating key variables.

The optimum approach is to use both primary and secondary data as appropriate, which this assessment has done.

4. Housing needs estimates

Current housing need backlog

The survey asked a number of questions that are relevant to whether a household is in circumstances that may lead to it being in housing need, but these are often not clear cut as to whether they want or expect to move to another home.

Circumstances which might be expected to prompt a desire to move often actually do not do so, although some are more likely to than others, while many households want to move without being in any of these circumstances. A desire or need to move can usually be explained by individual lifestages and preferences, but these become very complex to disentangle in order to derive numerical estimates of need. Many patterns and trends in modern housing markets are driven to a considerable degree by affluence and choice, but with greater polarisation occurring so that a substantial proportion of households have very few choices.

Unsatisfactory housing

Various reasons for the current home being unsuitable or unsatisfactory are covered in the survey. These range from circumstances of clear housing need to what might be considered less important, such as parking difficulties, and all had an option between 'a problem' or 'a serious problem'.

Selecting only the more serious types of problem responses, the extrapolated number of households responding that they had 'serious problems' on these factors was just under 2,400, or around 6% of households. The most common serious problem is that the current home is too small at a third of cases, followed by "Nuisance/harassment in neighbourhood" at 29%, and then "Housing costs too expensive" at 12%.

Table 29. Reasons for current housing being unsuitable.

Q10A. Thinking about your current housing situation, are any of these a problem for you?

	Frequency	Valid Percent
Home too small	805	33.8
Home too big	35	1.5
Need to be closer to relatives	40	1.7
Need to be closer to carer/someone you care for	17	0.7
Needs of disabled member of household not met	217	9.1
Health suffering because of house condition	34	1.4
Housing costs too expensive	293	12.3
Nuisance/harassment in neighbourhood	695	29.2
Home in need of major repairs	193	8.1
Difficulties maintaining home	53	2.2
Total	2382	100

Source: SDDC Questionnaire 2007 (Sky High Market Research)

Having what they themselves consider a serious problem does not, however, mean that respondents necessarily want to move. The current home being too small is the factor most likely to lead to a need to move within three years.

However, even this is only for just over half of cases; and indeed in 20% of these cases the home is considered adequate even where 'too small' is considered a serious problem, and in 28% of 'too small – serious problem' cases respondents did not wish to move at all.

Table 30. Reasons for current home unsuitability by desire to move - counts

Q10A. Thinking about your current housing situation, are any of these a problem for you?	Your current housing is adequate but you would like to move in the next three years	current housing does not meet needs so you will need to move within three years	You do not want or need to move in the next three years	Total
Home too small	163	416	227	806
Home too big	0	17	17	34
Need to be closer to relatives	0	20	20	40
Need to be closer to carer/someone you care for	17	0	0	17
Needs of disabled member of household not met	17	40	159	216
Health suffering because of house condition	17	0	17	34
Housing costs too expensive	95	41	157	293
Nuisance/harassment in neighbourhood	184	48	463	695
Home in need of major repairs	44	20	129	193
Difficulties maintaining home	0	17	37	54
Total	537	619	1226	2382

Source: SDDC Questionnaire 2007 (Sky High Market Research)

Table 31. Reasons for current home unsuitability by desire to move (%)

Q10A. Thinking about your current housing situation, are any of these a problem for you?	Your current housing is adequate but you would like to move in the next three years	Your current housing does not meet your needs so you need to move within the next three years	You do not want or need to move in the next three years
Home too small	20%	52%	28%
Home too big	0%	50%	50%
Need to be closer to relatives	0%	50%	50%
Need to be closer to carer/someone you care for	100%	0%	0%
Needs of disabled member of household not met	8%	19%	74%
Health suffering because of house condition	50%	0%	50%
Housing costs too expensive	32%	14%	54%
Nuisance/harassment in neighbourhood	26%	7%	67%
Home in need of major repairs	23%	10%	67%
Difficulties maintaining home	0%	31%	69%
Total	23%	26%	51%

Source: SDDC housing survey 2007 (Sky High Market Research)

These responses are usually interpretable within a framework of households' circumstances and lifestages. For example the time when a home is likely to be too small is with teenage or adult children still at home, but parents will not simply want or expect to move to a larger house, but will cope until their offspring can leave to set up their own homes. The survey data contains many similar indications of preferences and expectations linked to current circumstances.

However, in view of these complications and inconsistencies, which are typical of variable and subjective survey responses, a more useful guide to market pressures and demand is household's views about whether they *expect* to move. The survey asks this question for a 3 year time frame, although this can often miss the reality, which is that people and households tend to move at particular *life events*, for example when they form a relationship, when they finish school or college, when their children have left home, etc. These are often not predictable within certain planned time frames – although they may coincide on occasion¹⁰.

The survey indicates that around 15% of households want and expect to move, and that some 11% - that is about 3,900 households in South Derbyshire - expect to move within 3 years. The national average for households moving is around 11% a year, according to the Survey of English Housing.

¹⁰ See for example Rowlingson, K (2000), 'Fate, hope and insecurity - Future orientation and forward planning', York: Joseph Rowntree Foundation
<http://www.jrf.org.uk/knowledge/findings/socialpolicy/570.asp>

The survey results indicate that around 6% of households need to move fairly urgently, within a year, and that a slightly lower total of some 5% expect to move within 1 to 3 years.

Cases can then be selected where households expect to move *and* cannot afford the entry lower quartile level prices within their sub areas, *and* which are not in tenure which will help them to move (that is social renters who can in theory obtain transfers, or owner occupiers with equity). This enables a conservative estimate of cases who expect to move and cannot afford to buy each year.

Table 32. Households who say they need to move and cannot afford to buy

Q23. Is your current accommodation...	Derby_ Fringe	Rural	Swadlincote_ Fringe	Swadlincote Urban core
Owner occupied (with no loan or mortgage)	433	87	156	277
Owner occupied (with a mortgage)	860	96	143	1004
Rented from the Council	33	50	17	330
Rented from a Housing Association	20	0	0	260
Rented from a landlord (furnished)	60	0	20	80
Rented from a landlord (unfurnished)	260	60	80	500
Tied or linked to a job	0	0	0	60
Other	20	0	0	0
Source: SDDC housing survey 2007 (Sky High Market Research)	1686	293	416	2511

Selecting only those cases in tenures that will not assist them to move, mainly private renting, gives 1140 households who need to move quite urgently.

Table 33.. Expect to move within a year – non owners or social tenants

	Derby_Fr inge	Rural	Swadlinc ote_ Fringe_ Rural	Swadlinc ote Urban Core	Total
Expect to move within a year And not owners or social tenants	340	60	100	640	1140

Source: SDDC housing survey 2007 (Sky High Market Research)

As a form of triangulation of this result, the Council's housing register is currently around 1,000 cases.

However, if more affordable housing is provided, this figure should in theory gradually reduce. In reality if house prices increase further this could easily increase housing needs much faster than they can be reduced, as has happened over recent years.

This 'backlog' need quota must then be addressed over a 'policy period'. This is a judgment to be made by the local authority, but guidance says:-

The quota should be based upon meeting need over a period of five years, although longer timescales can be used.

Table 34. Backlog need over five years

Meeting backlog need over 5 years	Derby_ Fringe	Rural	Swadlincote_ Fringe_ Rural	Swadlincote Urban Core	Total
Derived estimated total	68	12	20	128	228

Source: SDDC housing survey 2007 (Sky High Market Research)

This gives the first part of the needs estimates, but other components must be added to this.

Future housing need – emerging households

The survey asked - *Will any of the other people in your household need their own separate accommodation within the next three years?* An extrapolated total of 1,573 households, or 4.4 %, replied yes. Of these over 90% are sons or daughters of the head of household, with parents or grandparents at only 3%.

Table 35. Emerging Households – relationship to head of household

Q65. Will any of the other people in your household

need their own separate accommodation within the next three years?

Q67A. What is their relationship to the head of household? - Person 1	Yes	%
Son/daughter	1430	91%
Parent/grandparent	41	3%
Other	17	1%
No Answer	85	5%
Not Applicable	0	0%
Total	1573	100%

Source: SDDC housing survey 2007 (Sky High Market Research)

Most of them, 76%, are single adults without children, but an appreciable 12% are single adults with children – which could be either due to relationship breakup or younger members of the household with their own children.

Table 36. Emerging Households – Household types

Q65. Will any of the other people in your household need their own separate accommodation within the next three years?

Q68A. Are they... - Person 1	Yes	% of total
Single adult(s) without children	1195	76%
Single adult(s) with children	191	12%
Couple without children	44	3%
Couple with children	17	1%
Other	17	1%
No Answer	109	7%
Not Applicable	0	0%
Total	1573	100%

Source: SDDC housing survey 2007 (Sky High Market Research)

This is a typical pattern for emerging households, which are normally young people reaching a lifestage where they will move into their own accommodation through various means such as going to university, moving in with a partner, into a shared house, and so on.

There is however substantial evidence, and widespread experience for many families, that this is becoming more difficult, and is delayed longer, partly due to changes in behaviour patterns, and partly due to problems relating to the affordability of housing, or probably often a combination and interaction of both.

The survey responses do not contain data about the incomes of these households because it is virtually impossible to find out with any confidence. Young people at this lifestage often change circumstances and jobs quite rapidly and frequently, they may live with others to increase their ability to afford, and they may move quite often as they adjust their circumstances.

However this is a group that are universally recognised as experiencing problems in affording housing, particularly to access owner occupation as has been the pattern and expectation in the past. If they do not require permanent housing immediately it is usually likely within a few years of leaving their parental home.

The survey finds an extrapolated total of 1,573 respondents expecting to have one or more members of their household need their own accommodation within three years.

Table 37. Q65. Will any of the other people in your household need their own separate accommodation within the next three years?

	no area given	Derby_ Fringe	Rural	Swadlincote_ Fringe	Swadlincote Urban Core	Total
Yes	48	623	225	157	520	1573
No	365	11674	3236	3808	14308	33391
Don t know	24	378	41	64	420	927
Not applicable	24	123	0	17	17	181
no response	0	37	0	20	88	145
	461	12835	3502	4066	15353	36217

Source: SDDC housing survey 2007 (Sky High Market Research)

Some households expect more than one person to leave to set up a new household, and this can also be factored in.

Table 38. Number of new households emerging

Q66. How many separate homes will be needed? * subarea Crosstabulation

number of homes needed	no area given	Derby_ Fringe	Rural	Swadlincote_ Fringe_ Rural	Swadlincote Urban Core	Total
1	48	517	205	134	472	1376
2	0	106	20	0	48	174
3	0	0	0	24	0	24
	48	623	225	158	520	1574

Source: SDDC housing survey 2007 (Sky High Market Research), (N.B. figures may not fully agree due to grossing and rounding)

Multiplying the number of people by number of homes needed gives the total expected.

Table 39. Total emerging households by sub area

Q66. How many separate homes will be needed? * subarea Crosstabulation

number of homes needed	no area given	Derby_ Fringe	Rural	Swadlincote_ Fringe_ Rural	Swadlincote Urban Core	Total
1	48	517	205	134	472	1376
2	0	212	40	0	96	348
3	0	0	0	72	0	72
	48	729	245	206	568	1796

Source: SDDC housing survey 2007 (Sky High Market Research)

This total of just under 1,800 (1,796) must then be divided into three to give an annual figure, although again this assumes that those responding are effectively planning within this three year time scale, which is not necessarily true. It is more likely that a larger proportion of this total will be earlier, and the figure will increase for subsequent years to a similar level, as people who are not yet thinking in terms of moving approach different lifestages. In essence, research shows that people do not plan that far ahead.

Nevertheless, the survey responses do not give a better way of deriving the number of emerging households, so dividing by three gives a projected total of 598 emerging households a year.

This must also then be converted to *households*, which means applying a persons per household multiplier. The survey allows this to be estimated using the question regarding the expected circumstances of the person(s) likely to move out.

Table 40. Expected type of emerging household

	subarea	households				
Q68A. Are they... - Person 1	not known	Derby_ Fringe	Rural	Swad'cote_ Fringe	Swad' cote Urban core	Total
Single adult(s) without children	24	521	140	76	435	1196
Single adult(s) with children	24	17	24	65	61	191
Couple without children	0	0	44	0	0	44
Couple with children	0	0	0	17	0	17
Other	0	0	17	0	0	17
Totals	48	538	225	158	496	1465

Source: SDDC housing survey 2007 (Sky High Market Research)

(N.B. cross tabulations only find cases which fall into both categories. If a response is missing in either it will not be included, so the total number will be smaller.)

Multiplying the number of emergers by the imputed household size gives the total number of people, and then dividing this by the number of households gives a crude expected household size.

Table 41. Imputed household sizes from survey results

Q68A. Are they... - Person 1	Total household	imputed hhlds size	Total persons
Single adult(s) without children	1196	1	1196
Single adult(s) with children	191	2	382
Couple without children	44	2	88
Couple with children	17	3	51
Other	17	4	68
Totals	1465		1785

The total persons expected to emerge as new households (Table 40 above) was 1,465. So the average household size projected by the survey would be $1785/1465 = 1.2$ persons per household.

Table 42. Average household size by sub area implied by survey responses

Average household size	Derby_Fringe	Rural	Swadlincote_Fringe_Rural	Swadlincote Urban Core	Overall average
people/hhlds	1.03	1.53	1.63	1.12	1.22

Source: SDDC housing survey 2007 (Sky High Market Research)

Applying the overall average persons per household derived by this method gives $598 / 1.22 = 490$ emerging households a year

The expected household size differs between sub area, and is lowest in the Derby fringe. However, these are low household size figures even given falling average sizes, and is probably due to respondents not knowing how their children will form new households, so that they are recorded as *Single adult(s) without children*. This answer is true at that time, but may not be the case when they leave home to form new households. A higher figure may therefore be appropriate, which requires an evidence based judgment. A range of scenarios is shown in the table below.

Table 43. Estimated numbers of emerging households

Number of emergers per year	598	598	598	598	598
average household size	1.22	1.5	1.8	2	2.2
Expected households	490	399	332	299	272

Source: SDDC housing survey 2007 (Sky High Market Research)

It is worth at this point comparing this total to the Chelmer household projection figures for South Derbyshire, which give an average number of new *households* (while the survey is of *people*) expected to form over five year periods. It shows some 6,400 households aged under 35 forming in South Derbyshire over the period 2006 to 2016, which averages 640 a year. It also indicates an increase of some 900 in the number of under 35 households, with a shift from married to cohabiting couples and single people, as is common across all UK demographic trends.

This figure for new households is somewhat higher than that derived from the survey, but this is most likely largely due to the process by which households emerge and change, and their consequent housing circumstances and needs.

This is because in the survey, those households that have recently left their parental home will become included in the backlog need, whereas for the projections they will still be future households. So although these figures are different, the triangulation and interpretation suggests a broadly similar picture. As guidance affirms, expecting detailed accuracy and agreement between sources and methods in estimating housing need is in any case somewhat simplistic and wishful.

The two components of backlog and future needs can then be added together to give an overall total.

Table 44. Summary of main needs components in sub areas

Annualised need	no area given	Derby_ Fringe	Rural	Swadlin cote_ Fringe_ Rural	Swadlin cote Urban Core	Total
backlog need over 5 years	0	68	12	20	128	228
emerging & future need	13	199	67	56	155	490
Total need	13	267	79	76	283	718

Source: derived from Housing survey (N.B. Grossing and rounding may mean that total figures do not sum accurately)

This 'debit' needs estimate must then be compared to the 'credit' supply side of affordable housing supply. Supply is analysed in more detail in the next chapter, but is included for convenience in the composite table below to show the net need resulting.

Table 45. Summary of components of need and supply

Annualised need	no area given	Derby_ Fringe	Rural	Swad' cote_ Fringe_ Rural	Swad' cote Urban Core	Total
backlog need over 5 years	0	68	12	20	128	228
emerging & future need	13	199	67	56	155	490
Total need	13	267	79	76	283	718
Net affordable supply	0	53	23	25	221	323
<i>Total need - supply = net need</i>	<i>13</i>	<i>214</i>	<i>56</i>	<i>51</i>	<i>62</i>	<i>396</i>

Source: Derived from Housing survey (N.B. Grossing and rounding may mean that total figures do not sum accurately)

The net need estimated principally from survey data therefore suggests a requirement for more than a doubling of affordable supply. The largest shortfall is in the Derby fringe, at 54% of the total need in the District, and implying that more than a four fold increase is needed in the affordable supply in this sub area. However, this does not capture the extent of interaction with the adjacent housing submarkets of Derby City.

The shortfall is lower in the Swadlincote Urban core, due to greater supply, although closer analysis of the nature of this supply shows other complications and policy implications. The rural areas show substantial need

at around 50 each for both the Swadlincote/Burton fringe and the free standing rural areas.

However, this estimated figure will change if the input parameters are changed; for example if the anticipated household size is reduced, on the basis that survey responses may distort what is actually likely to happen for emerging households.

As suggested above, it maybe more appropriate for estimates of need to use a more realistic, higher number of persons per emerging household, to try to avoid distortion from survey responses based on subjective expectation and unknown futures. This requires a move away from the unmediated evidence of the survey, and therefore means that alternative figures used must be based on other evidence and plausible assumptions.

The average household size for South Derbyshire for 2006 based on Chelmer projections was 2.36 persons per household, which of course includes larger families and sharing households, as well as the increasingly common single person households.

Household sizes will also tend to change with different 'lifestages'. For example young people leaving their parental home for the first time often share with others, or may move into accommodation such as student halls, giving large household sizes. The next lifestage, moving into more permanent, unshared accommodation is often in a couple, when the average household size would be two. Or it may increasingly be as a single person household, which may also happen after living as a couple as well as after being in shared housing.

For couple households that then have children, the additional persons added to that household will not have been part of the expected emergers detected by the survey. This implies that for households reaching a stage where they require permanent accommodation affordable to them the average household size should be between one and two.

On this basis, using a household size of 1.8 persons per household, based on evidence and judgment, gives a net need for the whole district of around 240 additional affordable lets per year; and for the Derby fringe area only gives need for around 115 additional affordable lets or sales per year.

It should also be noted that assuming bigger household sizes in turn implies that more larger and family units would be required, in both the private and social sectors. Capturing the more dynamic and lifestage shift aspects of housing markets and needs is currently beyond most housing needs modeling and estimates, although progress is being made.

5. Implications of needs estimates for the proportion of affordable housing required.

How this estimated level of need translates into a percentage of affordable housing required depends on the level of new supply, which becomes the denominator in the proportion of needs 'equation'. This is however again not a clear cut figure, but varies with Planning policy and economic circumstances.

Actual delivery rates have been :-

Table 46.

South Derbyshire dwellings completion rate 1991 to 2006

Year	Total
1991/92	508
92/93	342
93/94	323
94/95	707
95/96	486
96/97	425
97/98	657
98/99	1082
99/00	624
00/01	584
2001/2	746
2002/3	628
2003/4	622
2004/5	776
2005/6	506
Total completions	9016
average	601

Source: Appendix 3, SDD Annual Monitoring Report 2005/6

If this rate were to continue, the justifiable affordable housing requirement based on the survey needs estimates would be some 60% of total provision. For the parishes in the Derby fringe area only , completions over 15 years from 1991 to 2006 have been:-

Table 47. Derby fringe parish completions

Derby fringe parishes	completions 1991-2006
Aston Upon Trent	73
Barrow Upon Trent	42
Bearwardcote	8
Burnaston	458
Elvaston	527
Etwall	113
Findern	42
Hilton	1640
Melbourne	329
Radbourne	2
Shardlow and Great Wilne	30
Stenson Fields	331
Swarkestone	15
Twyford And Stenson	22
Weston Upon Trent	181
Willington	262
Total	4075
average	272

Source: Appendix 3, SDD Annual Monitoring Report 2005/6

At this rate of completions the justifiable proportion of affordable housing based on the survey based estimates would be some 78% based on the survey.

The Draft East Midlands Regional Plan proposed targets for South Derbyshire are :-

Figure 48. – extract from draft RSS

South Derbyshire: 605 dwellings per annum, of which 255 dwellings per annum should be sustainable Urban extensions to the Derby Principle Urban Area. Development in the remainder of the District will be focused primarily on Swadlincote, including Urban extensions as necessary.

On the survey based estimates, therefore, the affordable housing requirement that could in theory be justifiable would be in the region of 65% of total new supply in the district as a whole, and some 80% in the Derby fringe area. If the higher average level of 2 persons per household is applied for the sub areas, the requirement is for some $115/255 = 45\%$ of annual supply in the Derby fringe to be affordable.

High levels of estimated need are not unusual given the way house prices have risen since 2001. There is no direct logical link between the level of new development and local housing needs, (although there may well be a wider market supply and demand effect), as most need is driven by resale prices, and need levels of more than 100% of total new supply are not uncommon in high priced, high demand areas. There are also some contributors to housing need, such as homelessness and reposessions, that have not been

included here – although they are often symptoms of need rather than root causes.

However, it must be emphasised that housing needs research is not and should not lead directly to policy, but must be modified by considerations of viability and deliverability. It seems unlikely that very high levels of affordable housing would be either deliverable in terms of the economics of site development, or desirable in terms of mixed communities.

Intermediate housing demand and housing mix

However, it is not just the level of affordable housing that affects the balance within housing markets, but also the mix of housing types, sizes and tenures. This results from comparisons and a complex balance with the type of housing stock in an area, and the wider market of both resale and new properties.

In the Derby fringe needs estimates are greater largely because prices are high compared to lower and middle range incomes, so that inability to afford stretches higher up the incomes scale. Many middle income new households aspire to buy, and can also pay higher housing costs from their incomes, which tends to give rise to a greater need for intermediate housing. Providing all social housing would not meet these aspirations, and would also cost more in public funds.

However, if Intermediate housing costs are the same as open market entry levels, this tenure has no affordability advantage and will not be seen as attractive. Using the CACI Paycheck incomes profile data and Land Registry actual house prices the proportion of households who could afford different percentages of the entry level price can be modeled and estimated.

For example, if the purchase price for Intermediate Housing is set at 70% of the district wide open market entry level price of £112,000, and assuming a 10% deposit and mortgage loan of 3.5 times income, then 27% of households cannot afford, rather than the 45% which cannot afford full entry level.

This means that :- $(45 - 27)/45 = 40\%$ can now in principle afford the lower entry level price, which therefore gives an indication of the proportion of Intermediate Housing required.

A matrix of levels of Intermediate Housing justifiable at different percentages of the full entry level are given in the table below.

Table 49. - proportion of Intermediate housing justifiable at different proportions of the local market entry level price

IH price as % of full entry level	unable to afford	implied IH %
50%	16%	66%
60%	22%	53%
70%	28%	40%
80%	34%	28%
90%	40%	15%
100%	47%	0%

Source: derived from Land Registry data and CACI Paycheck

Lower sale prices will make the funding of these developments more expensive, or will require more Social Housing Grant, which is unlikely to be available. According to local housing associations 70% has been a typical and justifiable figure for the East Midlands, which has in the past proved to be viable and reasonably attractive, *provided* that other costs and factors do not deter buyers. This means that a target figure for entry into shared ownership in South Derbyshire overall at an acceptable equity share level of, which in the East Midlands has typically been around 50% according to CORE¹¹ sales records, should be around 70% x £112,000, or £78,500.

For shared ownership, this purchase price should also be for an equity share of the property the overall price of which is competitive when compared to open market entry levels. There may be some justifiable higher costs due to new build and quality, while the open market entry level is often for older terraced houses or flats, so an equity share of some 60-70% for this price may be attractive for the right products.

The Derby fringe has a higher lower quartile entry level price of some £132,000, so this figure could be higher, - on the same basis at around £90,000, - but may then have to compete with lower prices in Derby city and so may prove too high.

However the type and price of provision of these intermediate products is of crucial importance. There is growing and increasingly clamorous evidence that shared ownership flats and apartments simply do not meet the aspirations of their intended market, and can have adverse effects on the success and attractiveness of newly developed schemes.

Developments in suburban areas such as the Derby fringe which have large proportions of Intermediate housing or shared ownership flats and apartments are extremely unlikely on all current evidence to be attractive to their target prospective buyers, who are at lifestages where they are trying to 'get a foot on the ladder', and will fail to meet either need for social rented or demand for Intermediate housing.

¹¹ CORE is the COntinuous REcording of lettings and sales system operated by housing associations – www.core.ac.uk

The survey gives clear relatively results on expectations for size of property :-

- The majority of respondents require two or three bedroom properties – 45% of those who want to move require three bedrooms.
- Only 2% of respondents would move to a one bedroom property.

The proportion of the market for which one bedroom flats are desirable is decreasing, as those with a larger home and bargaining position in the market will often not see small flats as acceptable; and the lifestage for which one bedroom flat is appropriate is also quite limited – perhaps only a few years while aged 20 to 30 or so. This is being confirmed by recent over-provision of small flats and apartments in many areas, which is failing to meet longer term need or demand, and is increasingly creating distortions and dysfunctionality in housing markets.

6. Interactions with the Derby housing market

As shown in the section on identification of housing market sub areas, the Derby fringe is closely linked to Derby City housing markets, so Derby could be considered as a possible alternative for households who cannot afford to buy in the Derby fringe.

The survey asks about the intended and expected destination of emerging households :-

Table 50. Expected destination of emerger households

Q65. Will any of the other people in your household need their own separate accommodation within the next three years? – yes			
Q71A. Where will/are they most likely to move to?	Yes	% of total	Sub totals
Barrow upon Trent	41	2.6%	
Castle Gresley	44	2.8%	
Church Gresley	41	2.6%	
Etwall	37	2.4%	
Findern	24	1.5%	
Hartshorne	24	1.5%	
Hatton	48	3.1%	
Hilton	17	1.1%	
Melbourne	17	1.1%	
Midway	33	2.1%	
Netherseal	17	1.1%	
Overseal	24	1.5%	
Shardlow	17	1.1%	
Stanton & Newhall	17	1.1%	
Stenson Fields	41	2.6%	
Swadlincote	82	5.2%	
Ticknall	24	1.5%	
Willington	65	4.1%	
Walton upon Trent	17	1.1%	
Woodville	48	3.1%	
Other Derbyshire (exc. Derby)	17	1.1%	Derby fringe total
Other Derby City	20	1.3%	
Other	126	8.0%	
Do not know	485	30.9%	Not known
No Answer	246	15.6%	
Not Applicable	0	0.0%	
Total	1572	100%	46.5%

The most noticeable result is that almost half of respondents do not know, which tends to confirm that people do not plan in this way and often simply do not know the answers to questions of this kind. It is quite possible that a proportion of these will go on to higher education in other cities; although these may be replaced in the wider housing market by students coming to Derby, and some may in time return as they reach different lifestages.

Most respondents who do give a more definite answer tend to say that they will remain close to where they already live, mostly with their parents. Some 15% of movers expect to move to parishes within the Derby fringe area, which is considerably less, at around half, of the 30%+ of households in South Derbyshire which are in the Derby fringe. This simply reflects the split of 'do not know' or 'no answer' responses, and shows that in the main emerging households expect and want to stay fairly close to home.

Affordable housing supply

Affordable supply is the 'credit' side of the needs equation, which must be taken into account to derive robust estimates. As with other variables, it is not always a simple figure to derive or obtain data on. What counts as affordable housing can be controversial, although it has been defined more closely by PPS3, at least for Planning, which says that :-

Whereas, those homes that do not meet the definition, for example, 'low cost market' housing, may not be considered, for planning purposes, as affordable housing.

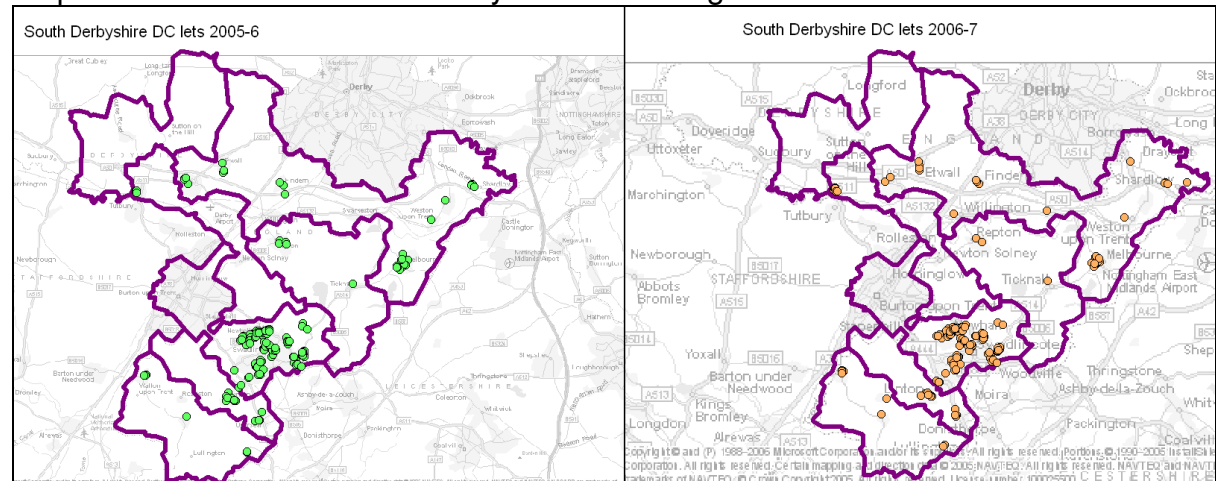
As with needs estimates, it is the 'flows' that are relevant for the supply of properties coming available for letting or sale. These can change year on year, and are often directly affected by the wider housing market – typically the number of properties coming available for letting falls as prices increase and it becomes harder for tenants to move out to buy.

In an area with less social housing such as South Derbyshire the number of lets can also often be quite volatile, changing quite considerably - for example when new scheme comes through -, or when there is an increase in transfer activity.

Supply also varies by location, with some – especially villages - having few or no relets. Some villages have no remaining social housing stock at all. As needs are being estimated by sub area, to reflect the true situation supply also needs to be estimated for these local areas.

The general pattern of lets in 2005/6 and 2006/7 can be seen in the maps below.

Maps 51. Location of South Derbyshire DC lettings 2005-7



The supply is greater in the Swadlincote urban core, both because that is where most stock is and because the level of turnover there is higher. Overall the rate of turnover in South Derbyshire is lower than the national average of around 11%.

Table 52. South Derbyshire lets by sub area

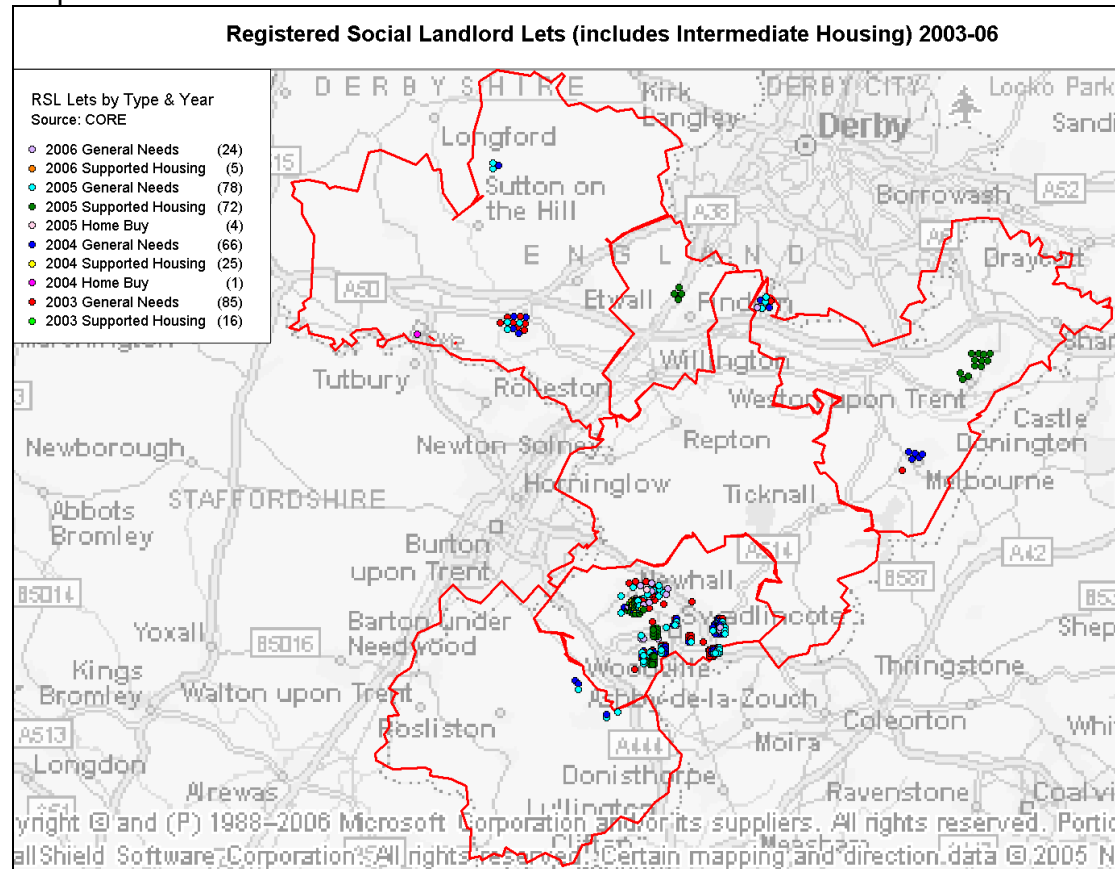
SDDC lets by sub area	2006-7	2005-6	trend	average	SDDC stock	actual turnover
Derby Fringe	43	55	67	49	662	7.4%
Swadlincote Urban Core	195	204	213	200	2343	8.5%
Swadlincote Fringe Rural	25	25	25	25	369	6.8%
Rural	22	20	18	21	320	6.6%
Totals	285	304	323	295	3694	8.0%

Source: SDDC lettings database

The Derby fringe has about 17% of SDDC lettings at around 50 a year, compared to some 33% of households in South Derbyshire living in the Derby fringe sub area. This reflects historical provision of Council stock, and the nature of and hence turnover in the sub area.

Housing association lettings and sales are similarly distributed.

Map 53. RSL lets 2003 to 2006



Following the guidance, a further adjustment needs to be made to remove transfers, so that net lets are used rather than including those which are essentially adjusting the match of households to dwellings within the social housing stock, as social housing tenants were not included in the survey based needs estimates.

Combining these sources of lettings allows an estimate of the annual supply or flow of affordable housing.

Table 54. Total affordable supply by sub area

Lets	Derby_ Fringe	Rural	Swadlincote_ Fringe	Swadlincote Urban Core	Total
LA	55	26	29	187	297
RSL lets per year	11	3	3	77	94
Total affordable lets per year	66	29	32	264	391
net lets (deduct transfers)	53	23	25	221	322

Source: HSSA, SDDC lettings database, CORE

Figures are averaged and rounded over a two year period. Precise numbers are however a spurious accuracy, and all should be considered as approximations and projections.

These figures can then be compared to the estimated needs by sub area to give an annualised shortfall or net need for each.

Private renting

Any role or contribution of the private rented sector in meeting affordable need is also difficult to assess. For many low to middle income young households it has become the default 'intermediate' housing market.

"The private rented sector is increasingly becoming the provider for households which previously would have bought a low value dwelling or rented from a social housing agency."

Affordability matters, NHPAU , page 12

A recent report by Hometrack, the housing intelligence agency, similarly commented :-

.... new analysis by Hometrack shows that the private rental market is already catering for those who are unable to get on the housing ladder, so called 'intermediate' households. Based on incomes data for private tenants' from the Family Resources Survey, we estimate that 70% of renters are unable to afford property priced at the lower quartile level.

However, PPS 3 says :-

Affordable housing should:

– Meet the needs of eligible households including availability at a cost low enough for them to afford, determined with regard to local incomes and local house prices.

The private rented sector is still widely not seen or accepted as a satisfactory long term solution, - for example for families with children - , due to insecurity of tenure, some quality issues, and because it does not allow any capital investment and 'a foot on the ladder'.

For these reasons, in practice it can often create need as well as provide some supply, and indeed in reality much housing need comes via the private rented sector. It has therefore not been included in the supply side in these estimates, following guidance. Nevertheless it clearly plays an important role, and needs to be better understood and appropriate policies developed to work with it.

7. Summary

Housing needs have been estimated as an average for the district overall, and for sub areas of South Derbyshire derived from analysis of Census migrations and travel to work data. The five conjoint Planning appeal sites are all within the 'Derby fringe' sub area, and needs estimates for them are based on data for this specific area.

Based primarily on the housing survey estimates, the affordable housing requirement justifiable would be in the region of 65% of total new supply in the district as a whole, and some 80% in the Derby fringe area. However, using other, - possibly more realistic - , input assumptions on likely emerging household sizes based on secondary data evidence and not solely on the survey suggest needs of around 40% in the South Derbyshire district overall, and levels up to around 50% in the Derby fringe.

Need is potentially greater in the Derby fringe because house prices there are higher, and affordable housing stock and supply of lets is much lower; - although the demographic and socio-economic characteristics of the sub area may also tend to reduce the need for social rented, and increase demand for affordable family housing to buy.

For the district as a whole the proportion of Intermediate housing that would be justifiable is judged on the basis of the evidence to be some 40%, although again this could be higher for the Derby fringe area because of its market characteristics. More detailed analysis in the full study may be able to tease this out.

The mix of provision on new developments is likely to be equally as important as provision of any pre-specified percentage of social or affordable housing. Pricing of housing and intermediate products provided as part of new development in the Derby fringe will be of crucial importance. In particular, the evidence suggests that shared ownership flats and apartments based on full market values are very unlikely to meet either need or demand, and could adversely affect the general balance, success and marketability of new developments.