

Analysis of Commuter Patterns in Derbyshire 2011

Key points

- Derbyshire is predominantly covered by three Travel to Work areas in 2011, one less than in 2001.
- In 2011 more Derbyshire residents left the county for work than commute in from neighbouring areas, meaning that the county is a net exporter of labour. However, encouragingly there has been a reduction in the level of outflow since 2001.
- Only the districts of Chesterfield and Derbyshire Dales have a net gain of commuters.
- Nearly two thirds (65.7%) of employees resident in the county also work in Derbyshire.
- More than three-quarters (77.1%) of jobs based in Derbyshire are taken by county residents.
- Derby is the destination for the greatest number of workers commuting out of the county. It is also the source of most in-commuters.
- 10.5% of the county's residents work from home, an increase on the 9.1% in 2001.
- However, there has been an increase of 4.0% points in the use of a car/van to get to work between 2001 and 2011.

Travel to Work

The most widely accepted method for identifying functional economic market areas is analysis of travel to work areas (TTWAs). A TTWA is a collection of areas for which 'at least 75% of the resident employed population work in the area, and also, that of everyone working in the area, at least 75% live in the area'. TTWAs show the patterns of people travelling from their place of residence to their place of work, and provide an indication of how local labour markets operate. This briefing uses data from the 2011 Census to provide an up to date picture of the pattern of commuting in and out of the county, how far people travel and by what means. Information is also compared with the picture from the 2001 Census.

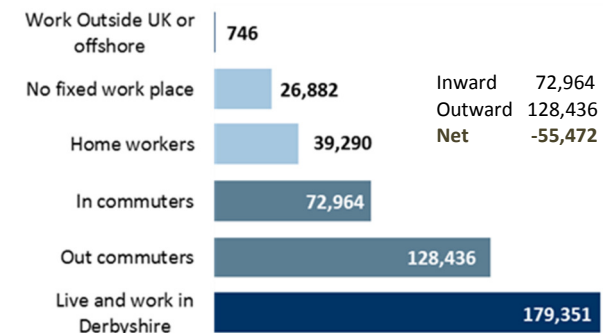
The following map shows the breakdown of Travel to Work Areas used for the 2011 Census in the county and beyond. The bulk of Derby and Derbyshire is covered by the three TTWAs of Buxton, Chesterfield and Derby. In addition to these key employment centres locally, Matlock, Swadlincote, Alfreton and Ilkeston are also important centres within Derbyshire. The number of TTWAs covering Derbyshire has reduced from the four in 2001, reflecting the greater influence of the Derby and Chesterfield economies on the county. Both of the Derby and Chesterfield TTWAs have increased in size taking in the previous Matlock TTWA. Additionally, the northern boundary of the Chesterfield TTWA has extended closer to the Derbyshire county boundary, impinging on part of what was previously the Sheffield and Rotherham TTWA.



Source: Travel to Work Areas were defined by the Office for National Statistics in 2015 based on commuting to work patterns from the 2011 Census to approximate a self-contained labour market. Contains Ordnance Survey data © Crown copyright

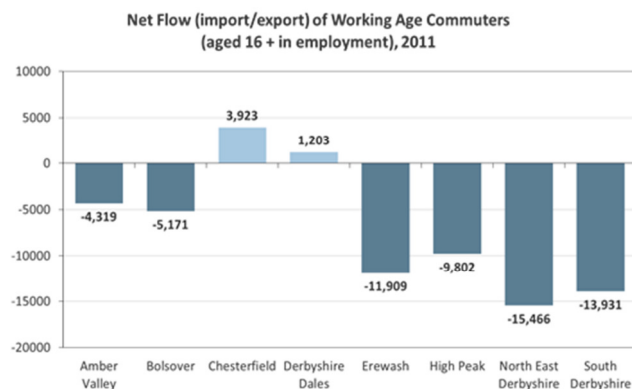
In 2011, there were 373,959 working residents age 16 or over in Derbyshire¹⁹, comprising 179,351 (48.0%) living and working in the county, 39,290 (10.5%) working from home and 26,882 (7.2%) having no fixed commute. The other 128,436 (34.3%) travel beyond the county's borders to work, including 746 who work offshore/outside the UK.

72,964 people commute into Derbyshire. This means that the county has net out-commuting, with 55,472 more people travelling out of Derbyshire to work than travelling in, suggesting that Derbyshire has relatively fewer jobs for the size of the workforce or jobs that some people don't want.



Source: 2011 Census – Table WU01 UK UK Travel Flows (Local Authority), ONS © Crown Copyright

Locally, only the districts of Chesterfield and Derbyshire Dales have a net gain of commuters (3,923 and 1,203 respectively), this is possibly down to not only town centre retail, employment and tourism but also the number of public sector jobs in these areas. Chesterfield has the headquarters of Chesterfield Borough Council and North East Derbyshire District Council and Derbyshire Dales has the headquarters of Derbyshire County Council and Derbyshire Dales District council in Matlock. North East Derbyshire shows the greatest net loss of workers (-15,466).

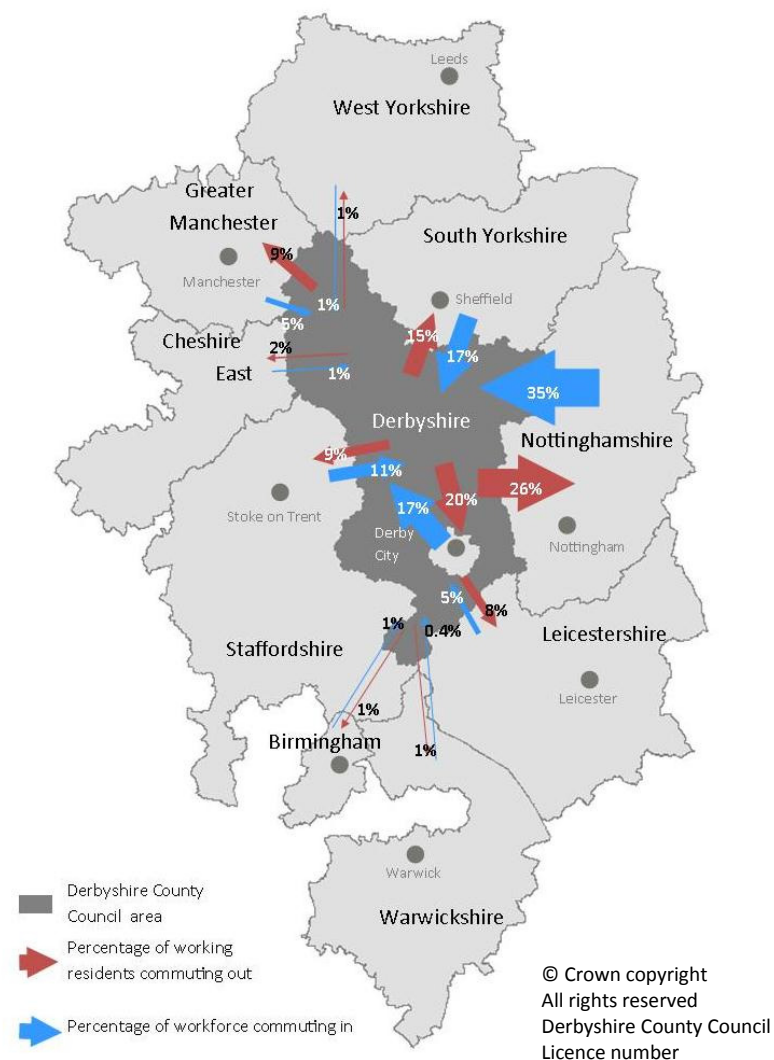


Source: 2011 Census - UK Travel Flows (Local Authority), ONS © Crown Copyright

Whilst towns such as Chesterfield, Matlock, Buxton and Swadlincote are important centres of employment locally, the towns and cities neighbouring the county exert significant influence. Perhaps not surprisingly, the greatest number 25,985 (20.2%) of commuters from the county travel to Derby, followed by Sheffield (12.4%), Nottingham (8.6%), East Staffordshire (6.7%), North West Leicestershire (5.2%), Ashfield and Broxtowe districts in Nottinghamshire (both 4.7%) and Manchester (2.9%).

With almost a quarter of jobs filled by people travelling from outside Derbyshire, this also reflects the importance of neighbouring areas as a source of labour for the county's firms. Derby is the greatest source of labour (17.3% of inbound commuters), followed by Sheffield (12.8%) and Ashfield (8.8%).

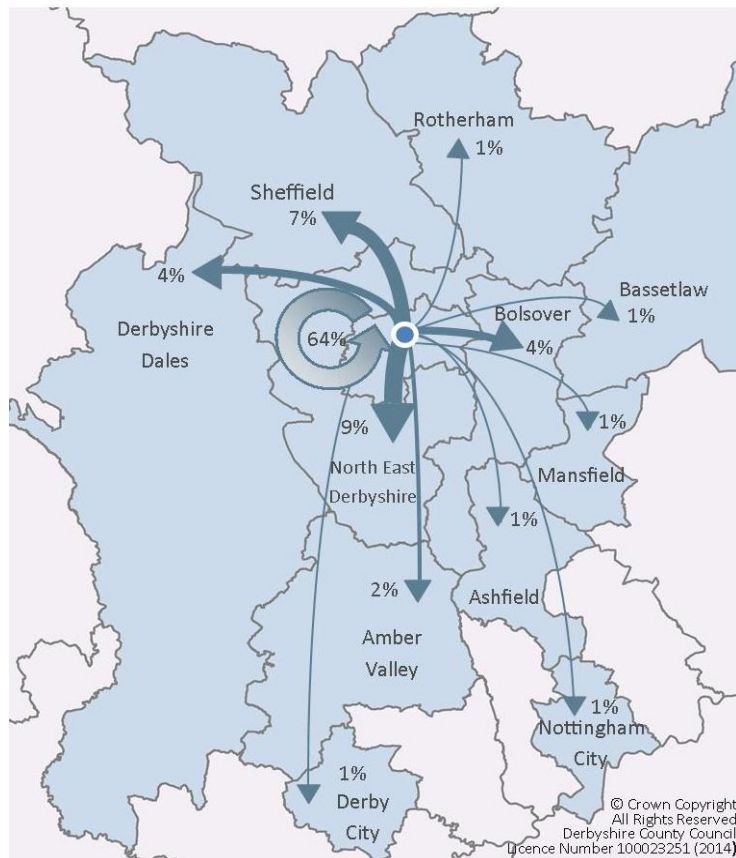
Derbyshire Inward & Outward Commuting Percentages, 2011



Source: 2011 Census – Table WU01 UK UK Travel Flows (Local Authority), ONS © Crown Copyright

The following maps show that in terms of ‘holding on’ to their workers, Derbyshire Dales and Chesterfield are the most self-contained of the Derbyshire districts. 63.7% of Chesterfield’s resident employees live and work within the borough. The remainder of working residents travel relatively short distances to neighbouring authorities such as North East Derbyshire (9.2%), Sheffield (6.5%), Derbyshire Dales (4.1%) and Bolsover (3.5%).

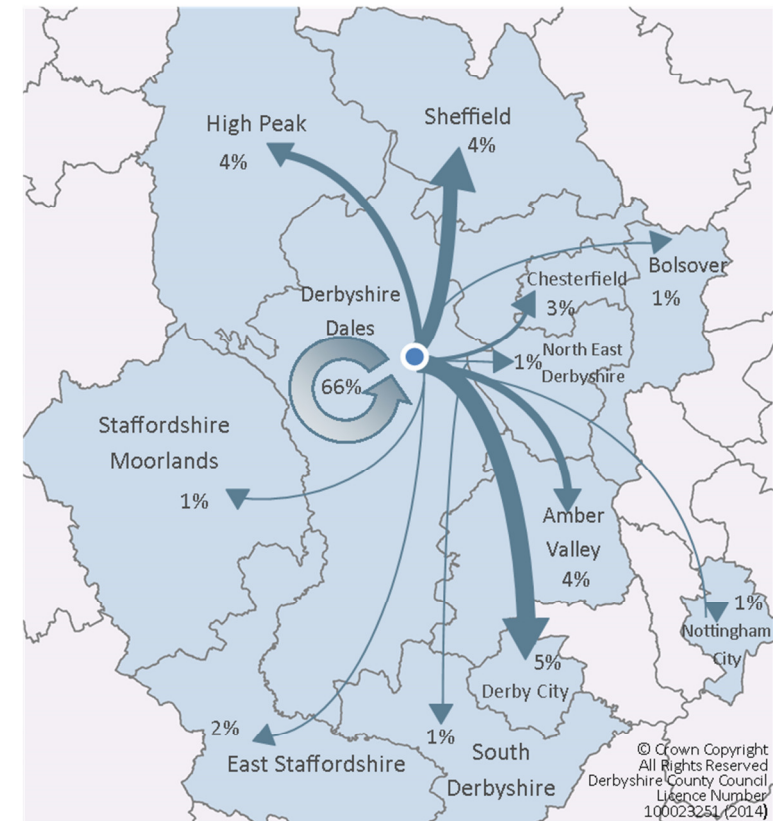
Travel To Work Patterns, Chesterfield Commuter Outflow, 2011



Source: 2011 Census - Table WU01UK UK Travel Flows (Local Authority), ONS © Crown Copyright
Note: Any outflows less than 1.0% have not been displayed on this map.

In Derbyshire Dales, 66.1% of its working residents both live and work within the district. Again the remainder of the working population travel fairly short distances to work in the neighbouring authorities of Derby City (5.2%), Sheffield (4.1%), High Peak (3.7%) and Amber Valley (3.5%).

Travel To Work Patterns, Derbyshire Dales Commuter Outflow, 2011



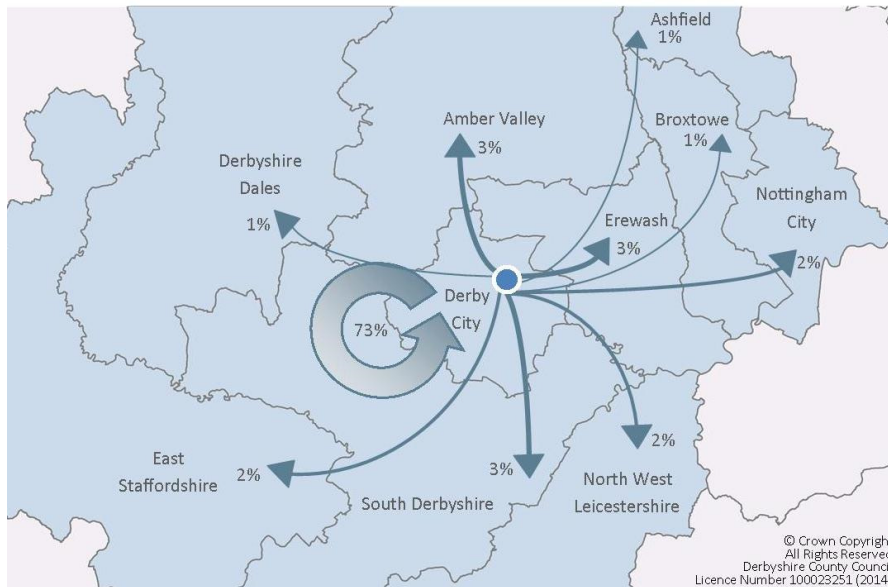
Source: 2011 Census - Table WU01UK UK Travel Flows (Local Authority), ONS © Crown Copyright
Note: Any outflows less than 1.0% have not been displayed on this map.

The proportions of employed residents that work in the area where they live for the remaining Derbyshire districts are as follows:

High Peak (61.8%), Amber Valley (56.1%), Erewash (48.1%), South Derbyshire (41.1%), Bolsover (40.8%), and North East Derbyshire (38.5%),

As might be expected for a major settlement, Derby has a relatively high proportion of its employed residents with jobs based in the city (73.3%). Commuting outside of Derby is greatest in the direction of the neighbouring Derbyshire districts of Amber Valley (3.3%), South Derbyshire (3.1%) and Erewash (2.8%).

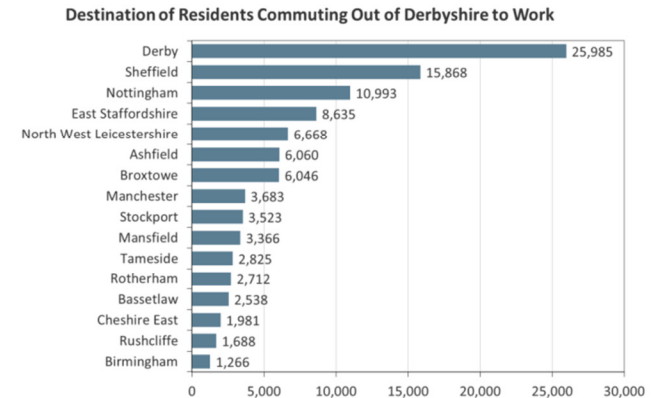
Travel To Work Patterns, Derby Commuter Outflow, 2011



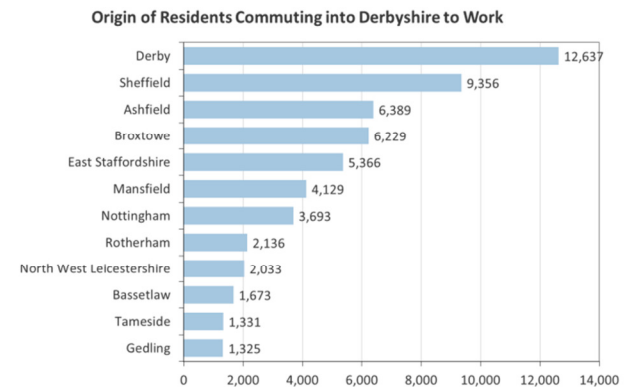
Source: 2011 Census - Table WU01UK UK Travel Flows (Local Authority), ONS © Crown Copyright

Note: Any outflows less than 1.0% have not been displayed on this map.

Analysis by local authority area reveals Derby City is by far the most significant in terms of the supply of labour and supply of jobs, followed by Sheffield and Nottingham.



Source: 2011 Census - Table WU01UK UK Travel Flows (Local Authority), ONS © Crown Copyright



Source: 2011 Census - Table WU01UK UK Travel Flows (Local Authority), ONS © Crown Copyright

The following table details the top three destinations for people commuting out of Derbyshire from each of the local authority areas.

Percentage of resident based commuters travelling out of Derbyshire Districts (Highest 3 Destinations)			
District			
Amber Valley	Derby (32.0%)	Other Derbyshire Districts (29.7%)	Nottingham and Nottinghamshire (24.3%)
Bolsover	Other Derbyshire Districts (40.1%)	Nottingham and Nottinghamshire (37.7%)	South Yorkshire (11.1%)
Chesterfield	Other Derbyshire Districts (53.3%)	South Yorkshire (22.0%)	Nottingham Nottinghamshire (10.2%)
Derbyshire Dales	Other Derbyshire Districts (40.3%)	Derby City (15.3%)	South Yorkshire (13.8%)
Erewash	Nottingham Nottinghamshire (45.7%)	Derby City (22.2%)	Other Derbyshire Districts (12.1%)
High Peak	Manchester and Greater Manchester (63.3%)	Cheshire East (9.8%)	Other Derbyshire Districts (9.6%)
North East Derbyshire	Other Derbyshire Districts (47.3%)	South Yorkshire (36.3%)	Nottingham and Nottinghamshire (6.6%)
South Derbyshire	Stafford and Staffordshire (30.1%)	Derby City (28.0%)	Leicester and Leicestershire (18.6%)
Derbyshire	Nottingham and Nottinghamshire (25.6%)	Derby City (20.2%)	South Yorkshire (15.4%)

Source: 2011 Census - Table WU01UK UK Travel Flows (Local Authority), ONS © Crown Copyright

The majority of people who commute out of Derbyshire travel to Nottingham and Nottinghamshire combined (25.6%), followed by Derby (20.2%) and South Yorkshire authorities combined (15.4%). Localised analysis shows that 63.3% of all outgoing commuters in High Peak travel to Manchester and Greater Manchester, with only

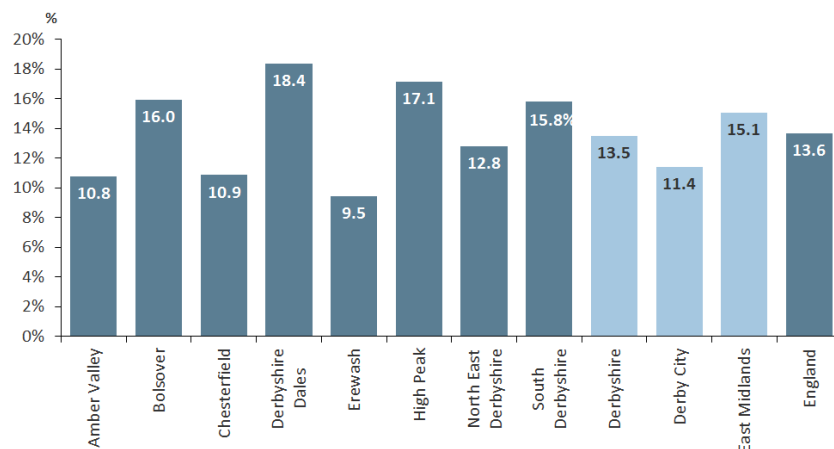
9.6% travelling to other Derbyshire districts. Similarly 45.7% of Erewash's and 37.7% of Bolsover's outgoing commuters travel to Nottingham and Nottinghamshire, and 32.0% of Amber Valley's commuters travel to Derby.

Homeworking is an important feature of labour markets today, reflecting improvements in technology and the ability this has given to firms and workers to adopt more flexible working practices. In 2011 across England, 10.4% of employed people worked from home, similar to the 10.5% for Derbyshire. However, within the county the figure varies from around 8.0% in Chesterfield and Bolsover to 18.6% in Derbyshire Dales, one of the highest levels nationally.

Homeworking in the UK is more prevalent among older workers and this will be a factor in the relatively high value in Derbyshire Dales which has an older age structure. It may also reflect the more rural nature of the district and greater number of people working in higher level jobs, e.g. consultancy, where homeworking may be more common. Long distance commuting in Derbyshire is very similar to the national figure with 13.5% of the working age population travelling 20 kilometres or more to work, compared with England (13.6%).

Derbyshire Dales, High Peak, Bolsover and South Derbyshire have higher levels of long distance commuting compared to the national average, possibly due to the influence of major nearby urban centres. Erewash, Amber Valley and Chesterfield fewer numbers travelling long distances to get to work.

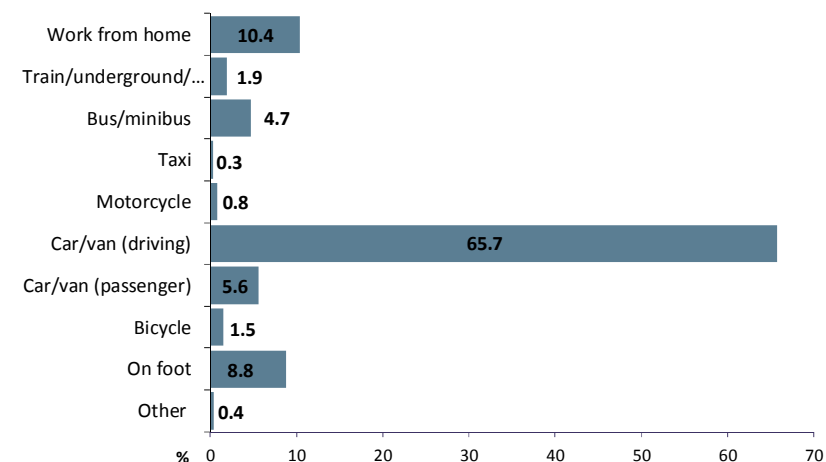
**Working population (age 16+) in employment travelling
20km or more to work (%) (2011)**



Source: 2011 Census – Table DC702EW Distance Travelled to Work, ONS © Crown Copyright

In 2011, the majority of people (65.7%) travelled to work in Derbyshire by car/van, with a further 5.6% being a passenger in a car or van. 8.8% walked to work, with 4.7% travelling by bus/minibus and 1.9% by train/underground/tram. Additionally 3.0% travel by other methods and 10.4% worked from home. Nationally there is a lower proportion of people commuting by car (54.0%), and higher levels of travel by train/underground/tram (9.1%), and bus/minibus (7.3%). These differences are likely to reflect the more rural nature of the county and the greater need for people to use a car to access employment opportunities. The distance travelled by those in work is similar between Derbyshire and England, with 13.5% and 13.7% respectively travelling more than 20km.

Method of Travel to Work (2011)



Source: 2011 Census – Table DC701EW Method of Travel, ONS © Crown Copyright

Change Over Time – 2001 to 2011

Please note that the following analysis is based on the resident working population aged 16-74 years for 2011 Census so that comparisons can be made with the 2001 Census.

There are some key differences in travel to work patterns between 2001 and 2011 linked to changes in the labour market²⁰. Although Derbyshire continues to experience high levels of net out-commuting, there has been a significant fall (11.5%) from the figure of 62,598 in 2001. A number of factors are behind this. There has been a significant increase (27.4%) in the level of inbound commuting, whilst the level of outbound commuting has only increased by 7.1%. A shift towards more flexible working arrangements has contributed to this, with the proportion of local employed residents homeworking or having no fixed work base increasing from 13.1% to 17.6% (the share of home workers

increased from 9.1% to 10.5%). Despite national levels of commuting by car/van having dipped by 0.4% points between 2001 and 2011, there has been an increase of 4.0% points in Derbyshire which is significant in the context of efforts to lower levels of CO₂ emissions. There has also been a slight increase of 1.9% points in the proportion of workers travelling more than 20km over the period, similar to the 1.1% point increase for England.

The rate of increase in in-commuting was greater than the increase of out-commuting (7.3%) for most districts across the county between 2001 and 2011, although there were varying rates of growth. Chesterfield was the only exception, which experienced a faster rate of out-commuting than in-commuting.

Whilst Chesterfield was the only authority in the county to experience a faster rate of out-commuting, it continues to be one of only two authorities, the other being Derbyshire Dales, to experience net in-commuting although for Chesterfield this dropped significantly from 2001 to 2011. Derbyshire Dales experienced the most dramatic change in commuting patterns going from net out-commuting in 2001 to net in-commuting in 2011.

The percentage of people working from home in Derbyshire has increased from 9.1% in 2001 to 10.4% in 2011. This is broadly comparable with the national figures of 9.2% in 2001 to 10.3% in 2011. The figures between districts again vary considerably with 18.3% of people in Derbyshire Dales working from home compared to 7.8% in Chesterfield. Whilst all districts showed an increase in the number of home workers the rural areas of Derbyshire Dales and High Peak showed the largest increase in home working. Chesterfield with its better transport links and access to services has the lowest percentage of home workers per work-day resident population.

Percentage of home workers as a percentage of work-day resident population (2011)		
District	Census 2001	Census 2011
Amber Valley	8.7%	9.6%
Bolsover	7.9%	8.3%
Chesterfield	7.4%	7.8%
Derbyshire Dales	14.0%	18.3%
Erewash	7.5%	8.4%
High Peak	10.2%	12.0%
North East Derbyshire	9.2%	10.0%
South Derbyshire	9.2%	10.6%
Derbyshire	9.1%	10.4%
England	9.2%	10.3%

Source: 2011 Census – Table WU02UK, Location of Usual Residence and Place of Work by Age, and 2001 Census - Table T101, UK Travel Flows, ONS © Crown Copyright

Understanding the travel to work patterns and developing appropriate policies which integrate transport infrastructure to development sites, but which also recognise the importance of creating more sustainable communities will be critical to ensuring economic prosperity across the county.