

2001 Census Travel to Work Data Profile of Business Parks in Leicestershire

April 2006

Report Produced by Research & Information Team
Chief Executive's Department
Leicestershire County Council

Reader Information

Document Purpose	To understand the travel to work patterns in the county's largest business parks following discussions with transport and planning officers identifying gaps in the available evidence.
Title	Generalised Travel to Work Profile of Business Parks in Leicestershire
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Publication Date	April 2006
Related Reports	District Travel to Work Profiles County Travel to Work Profile Workplace Population of Loughborough Workplace Population of Melton Mowbray
Target Audience	Planning Policy Officers Transport Officers Leicester Shire Economic Partnership
Description	This report compares the travel to work patterns of the largest business parks in Leicestershire. Data is presented that shows a profile of the workforce, commuting patterns and wider influence of the major business parks.
Notes	Caution must be taken when attributing the data to the business parks because the data refers to Output Areas rather than the business parks exclusively.
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Introduction

This report compares the travel to work patterns of the largest business parks in Leicestershire. The aim of the report is not to determine the travel to work patterns for each of the individual business park, but to understand the general commuting patterns in these major employment areas.

There is often an assumption that people travel further to business parks because they are usually located close to major trunk roads in remote areas where public transport provision is poor. As a result, most people have to travel by means of car to access the employment opportunities available at these sites.

The sites included in this study are listed in the table below, including, Fosse Park, Meridian Business Park, Bishop Meadow Estate, Magna Park, Dodswell Bridge and Bardon Hill. The table shows the ward and district the business park is located. The table also shows the Output Area(s) the business park is within, which is the geographical level used to present the data for each site. Output Areas (OAs) are a relatively new geography created by ONS from 2001 Census data. They are the lowest level for which detailed census information is released and each contain approximately 120 households. The OAs boundaries are quite arbitrary and in some cases divide industrial parks. This is because they have been created to each contain a

certain population threshold as they are resident based. Therefore, the OAs assigned to the business parks may include other workplaces small and large. This is not a huge problem as the majority of the employment in the OA(s) assigned to each business park will be based within the site because the OAs are so small. There is no other data available to compare travel patterns to business parks. Appendix I provides detailed maps of the OAs that have been assigned to each of the business parks.

The total number of people that work within the OAs assigned to the business parks is given in Table I. The total number of people employed in of the six business parks in the report account for more than 10 percent of the workforce in Leicestershire.

The structure of the report is as follows. The first section will profile the workforce of the business parks in terms of age and socio-economic status. The second section looks at the commuting patterns of the workforce in terms of the mode of transport used and distance travelled to get to work. The final section analyses the sphere of influence of each business park. This shows the areas where people are most likely to travel from that work in each site. The data used is at ward level because the output level data showing origin and destinations is unreliable.

Table I - Number of Employees in the Largest Business Parks in Leicestershire and Number of Employees

Business Park	Output Area(s)	Ward(s)	District	Workplace employment
Fosse Park	31UBGD0004	Enderby and St John's	Blaby	4,495
Meridian Business Park	31UBGR0010 31UBGR0012	Winstanley	Blaby	4,561
Bishop Meadow Estate	31UCGS0004 31UCGS0007	Loughborough Lemyngton	Charnwood	6,461
Magna Park	31UDHE0001 31UDGR0004	Ullesthorne, Lutterworth Orchard	Harborough	4,984
Dodswell Bridge & Harrowbrook Industrial Estate	31UEGE0004 31UEGE0012	Hinckley Clarendon	Hinckley and Bosworth	4,759
Bardon Industrial Estates	31UHGJ0013	Hugglescote	North West Leicestershire	2,814

Profile of Business Park Workforce

Generally, the workforce within the major business parks in Leicestershire is younger than the county, region and country as a whole. Table 2 shows that there is a smaller proportion of people over the age of 50 years old working in the business park areas. However, on the whole, a lower proportion of people are employed in the

business parks that are younger than 20 years old. The only exception is Fosse Park where almost 13 percent of the workforce are under 20 years old. This is a reflection of the retail employment opportunities available which attract young people. The greatest proportion of people employed in the business parks are between the age of 30 and 39 years old.

Table 2 - Age Structure of Employees in the Largest Business Parks in Leicestershire

	Fosse Park	Meridian Park	Bishop Meadow	Magna Park	Dodswell Bridge	Bardon Hill	Total	Leics	East Midlands	England
Employees	4,495	4,561	6,461	4,984	4,759	2,814	28,070	261,807	1,825,197	22,376,121
Less than 20 years old	12.5%	4.4%	4.4%	3.0%	5.1%	3.6%	5.5%	5.3%	5.2%	5.0%
20-29 years old	24.2%	23.4%	22.8%	21.6%	21.7%	22.5%	22.6%	18.1%	18.8%	20.1%
30-39 years old	28.3%	31.6%	29.4%	33.8%	29.9%	32.8%	30.7%	26.0%	26.3%	26.7%
40-49 years old	20.6%	24.1%	22.5%	22.2%	21.3%	22.4%	22.1%	23.9%	23.9%	23.4%
50-59 year old	11.8%	15.5%	17.4%	16.2%	17.3%	15.2%	15.7%	20.9%	20.4%	19.3%
More than 59 years	2.6%	3.2%	3.5%	3.1%	4.7%	3.5%	3.4%	5.8%	5.5%	5.5%

Source: Univariate Table 75
Note: data is not bound to business park

Table 3 shows that, on the whole, the greatest proportion of the employees in the major business parks in Leicestershire are working in routine occupations (24%) compared to only 15% in the county as a whole. (Appendix 2 gives example of the occupations in each NS-SeC group). However, there are marked differences between the sites. The majority of people working in the Bishop Meadow Industrial Estate are working in the highest level occupations (21%). In contrast the vast majority of people employed at Magna Park are working in routine occupations (50%).

There is also a very small proportion of people who are owners of small employers in the major business park in Leicestershire compared to the county, regional and national average.

Table 3 - National Statistic Socio-Economic Classification of Employees in the Largest Business Parks in Leicestershire

	Fosse Park	Meridian Park	Bishop Meadow	Magna Park	Dodswell Bridge	Bardon Hill	Total	Leics	East Midlands	England
All people	4,495	4,560	6,460	4,983	4,758	2,813	28,069	261,806	1,825,196	22,376,120
Higher professional	7.0%	13.4%	21.3%	4.6%	7.2%	9.4%	10.5%	10.3%	9.9%	12.5%
Lower professional	19.5%	24.5%	21.1%	13.1%	16.1%	20.7%	19.2%	22.5%	23.4%	26.3%
Intermediate	20.1%	13.4%	10.3%	7.2%	8.0%	8.0%	11.2%	11.0%	11.6%	12.9%
Small employers	0.4%	1.0%	1.8%	1.6%	3.2%	1.8%	1.6%	11.1%	9.9%	9.8%
Lower supervisory	9.3%	8.7%	14.3%	11.8%	16.0%	14.6%	12.5%	11.2%	11.1%	9.6%
Semi-routine	26.0%	23.3%	11.9%	9.7%	16.1%	15.3%	17.1%	15.5%	16.1%	14.5%
Routine	4.7%	12.3%	17.0%	50.3%	30.8%	29.3%	24.1%	14.8%	14.6%	10.9%
Not classified	13.0%	3.2%	2.3%	1.8%	2.5%	0.9%	4.0%	3.7%	3.4%	3.5%

Source: Univariate Table 76
Note: data is not bound to business park

Commuting Patterns of Business Park Workforce

The people employed in the major business parks in Leicestershire are much more likely to use a private car or van to travel to work (over 85% on average) compared to the county (69%), regional (67%) and national (61%) average. There is a distinct split between the business parks located in largely urban and rural areas. For example,

in Bardon Hill and Magna Park, which are located in rural areas over 90 percent of employees travelling to work use a private car or van. In contrast, in Bishop Meadow and Fosse Park, which are located in largely urban areas the proportion is below 80 percent. In these business parks other forms of transport are more utilised, for example, public transport (9%) in Fosse Park and bicycle in Bishop Meadow Estate (6%).

Table 4 - Mode of Travel to Largest Business Parks in Leicestershire

	Fosse Park	Meridian Park	Bishop Meadow	Magna Park	Dodswell Bridge	Bardon Hill	Total	Leics	East Mids	England
All people	4,495	4,562	6,464	4,978	4,757	2,814	28,070	261,806	1,825,196	22,376,120
Works from home	0.4%	0.5%	0.4%	1.6%	0.7%	0.4%	0.7%	11.3%	9.5%	9.2%
Public transport	9.2%	5.2%	4.6%	1.3%	2.0%	1.2%	3.9%	4.1%	7.8%	14.9%
Car	80.2%	85.8%	79.1%	93.7%	85.5%	92.7%	86.2%	69.1%	66.6%	61.1%
Bicycle	4.4%	4.2%	6.0%	0.7%	6.8%	2.3%	4.1%	3.4%	3.4%	2.8%
On foot	3.8%	2.6%	7.7%	0.5%	2.4%	0.5%	2.9%	10.3%	10.9%	10.0%
Other	1.9%	1.7%	2.2%	2.1%	2.7%	2.9%	2.3%	1.7%	1.8%	2.0%

Source: Univariate Table 37

Note: data is not bound to business park

On average, the people employed in the business parks in Leicestershire travel further distances to work than the county, regional and national averages. However, there is again a split between the business parks located in urban and rural areas. In Magna Park and Bardon Hill the majority of people travel between 10km and 20km to get to work. In the sites within urban areas, for example, Fosse Park, Bishop Meadow Estate and Dodswell Bridge, the greatest proportion of people travel

between 2km and 5km to get to work. The distances travelled to these areas are still higher than the county, regional and national averages with greater proportions of people travelling in the furthest distance categories. This reaffirms the assumption that people travel further to get to work in business parks. This holds even in the business parks in the largest urban areas in Leicestershire.

Table 5 - Distance Travel to Work in the Largest Business Parks in Leicestershire

	Fosse	Meridian	Bishop	Magna	Dodswell	Bardon	Total	Leics	East Mids	England
All People	4,495	4,562	6,460	4,984	4,758	2,813	28,072	261,806	1,825,196	22,376,120
Work mainly from home	0.5%	0.5%	0.5%	1.9%	0.9%	0.5%	0.8%	15.6%	13.5%	13.6%
Less than 2km	8.7%	6.7%	19.2%	1.7%	12.9%	4.4%	8.9%	22.7%	22.4%	20.0%
2-5km	33.5%	25.1%	23.5%	8.9%	31.1%	29.9%	25.4%	16.5%	21.3%	20.2%
5-10km	27.8%	32.5%	19.1%	11.1%	28.2%	13.8%	22.1%	17.8%	18.0%	18.3%
10-20km	16.5%	15.6%	19.9%	49.8%	15.0%	31.7%	24.8%	16.0%	14.0%	15.3%
20-30km	5.5%	5.1%	10.8%	16.3%	5.8%	8.5%	8.7%	5.5%	5.1%	5.4%
30-40km	2.3%	5.1%	2.0%	4.5%	1.7%	4.2%	3.3%	1.9%	2.0%	2.4%
40-60km	2.7%	5.0%	1.9%	2.6%	2.0%	3.8%	3.0%	1.7%	1.6%	2.2%
60km and over	2.4%	4.3%	3.0%	3.1%	2.4%	3.1%	3.1%	2.3%	2.1%	2.7%

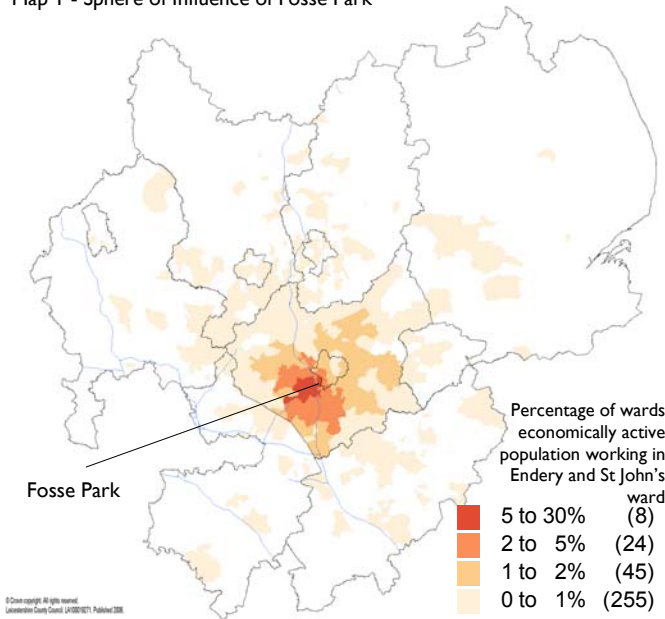
Source: Univariate Table 80

Note: data is not bound to business park

Sphere of Influence of Business Park Workforce

This section looks at the sphere of influence of the business parks on their surrounding areas. The output area data is not fit for this purpose because rounding of the data by ONS has significant impacts at this level of geography. The data used in the following maps is at ward level, which contain many more employment sites than the business parks in this study. Therefore, the following data and analysis must therefore be treated with due caution.

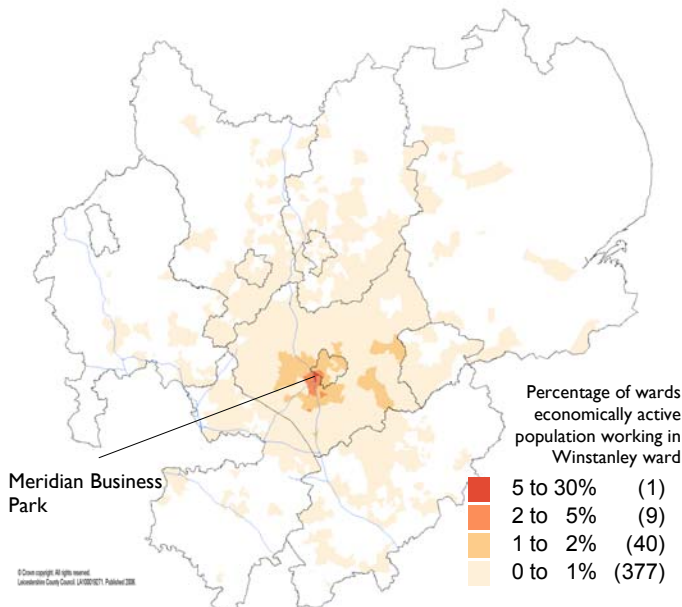
Map 1 - Sphere of Influence of Fosse Park



Notes: Map uses ward data and may not be fully represented of Fosse Park. The blue line represent the motorway running through the region. Bracket in the key indicate number of wards in each

The map on the left shows the influence on the wards in the surrounding area of Enderby and St John's ward which contains Fosse Park. Map 1 shows the proportion of the economically active people in the wards in the surrounding area that work in Enderby and St John's ward, which contains Fosse Park. The map indicates that the site has the biggest influence on the wards immediately surrounding Fosse Park. However, the site has some influence on almost all the wards in the county and a number of wards stretching along the M1 into Derbyshire, Nottingham and Northamptonshire

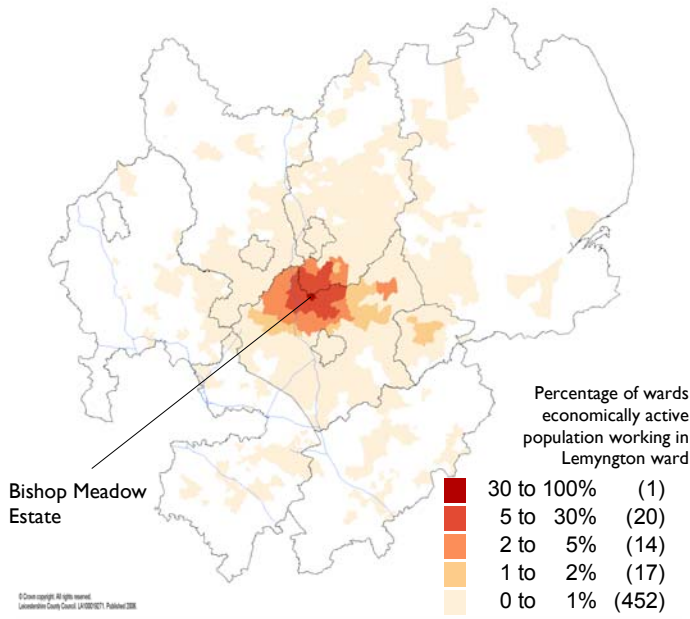
Map 2 - Sphere of Influence of Meridian Business Park



Notes: Map uses ward data and may not be fully represented of Meridian Business Park. The blue line represent the motorway running through the region. Brackets in the key indicate number of wards in each range.

Map 2 shows the influence on the wards in the surrounding area of Winstanley ward, which contains Meridian Business Park. The number of wards with more than 5 percent of their economically active population working in the area is much lower with only one ward compared to the area around Fosse Park where there are eight wards within this range. However, the spread of the influence in the ward which contains Meridian Park is much greater. A large number of wards in Nottinghamshire, Derbyshire, Warwickshire, Northamptonshire and Rutland have people travelling to work into the ward that contains Meridian Business Park.

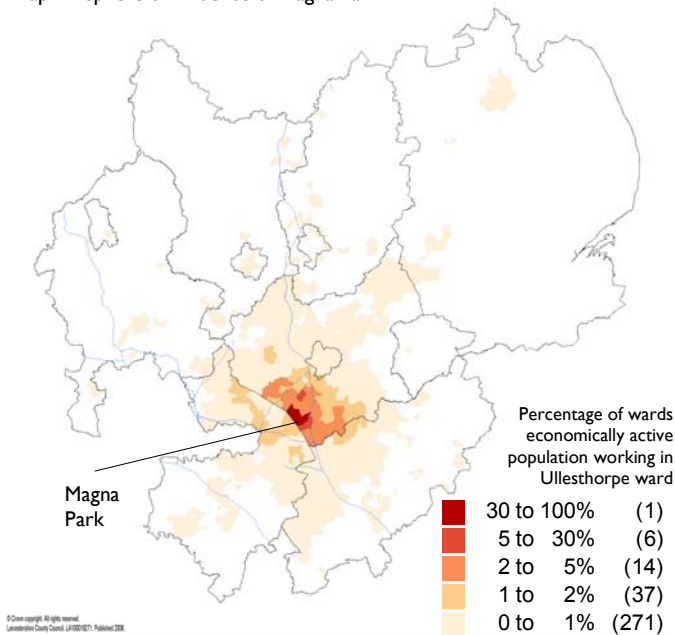
Map 3 - Sphere of Influence of Bishop Meadow Estate



Notes: Map uses ward data and may not be fully represented of Bishop Meadow Estate. The blue line represent the motorway running through the region. Bracket in the key indicate number

Map 3 shows the influence on the wards in the surrounding area of Loughborough Lemington ward, which contains Bishop Meadow Estate. The map shows that the ward including the site draws heavily on the local labour supply. A number of wards in the north of Charnwood district and south of Rushcliffe district provide more than 5 percent of their economic active population to Loughborough Lemington ward, which contains Bishop Meadow Estate. The ward also has a wide influence stretching far into both Nottinghamshire and Derbyshire, particularly along the M1.

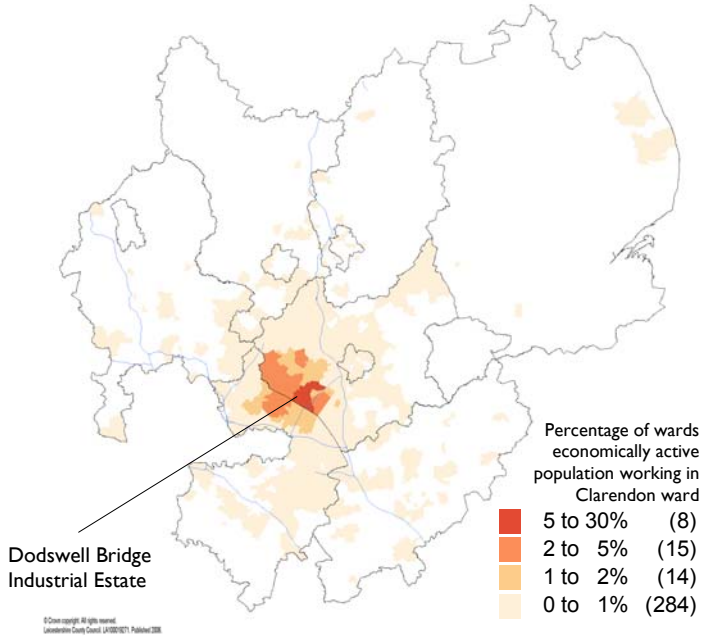
Map 4 - Sphere of Influence of Magna Park



Notes: Map uses ward data and may not be fully represented of Magna Park. The blue line represent the motorway running through the region. Bracket in the key indicate number of wards in

Map 4 shows the influence on the wards in the surrounding area of Ullesthorpe ward, which contains Magna Park. The ward has a strong influence on economic active population in Ullesthorpe ward and the wards in the close proximity. The influence of the area stretches far south into Warwickshire and Northamptonshire along the M69 and M1 respectively.

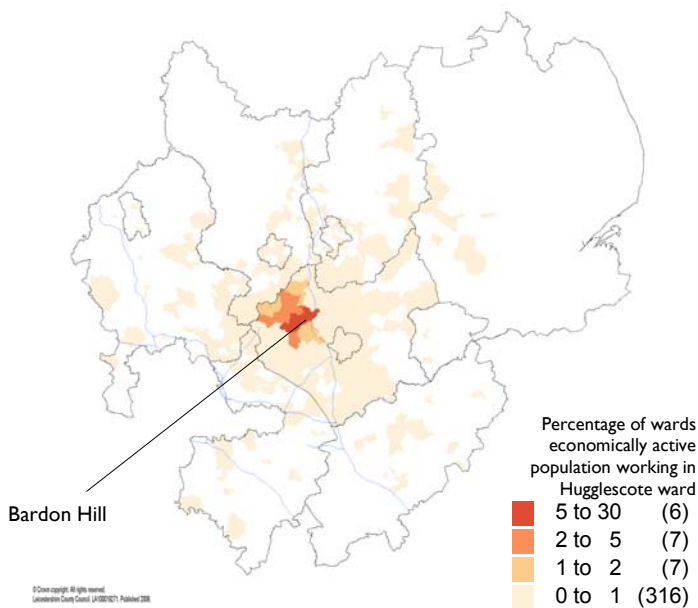
Map 5 - Sphere of Influence of Dodswell Bridge Industrial Estate



Notes: Map uses ward data and may not be fully represented of Dodswell Bridge Industrial Estate. The blue line represent the motorway running through the region. Bracket in the key indicate number of wards in each range.

Map 5 shows the influence on the wards in the surrounding area of Hinckley Clarendon ward, which contains Dodswell Bridge Industrial Estate. The area has a strong influence over the wards within Hinckley town, rural parts of Hinckley and Bosworth Borough and Nuneaton. In these areas at least 2 percent of the economically active population travel to Hinckley Clarendon ward. The spread of the influence of Hinckley Clarendon ward stretches across most of Warwickshire and the west side of Leicestershire.

Map 6 - Sphere of Influence of Bardon Hill



Notes: Map uses ward data and may not be fully represented of Bardon Hill. The blue line represent the motorway running through the region. Bracket in the key indicate number of wards in each range.

Map 6 shows the influence on the wards in the surrounding area of Hugglescote ward, which contains Bardon Hill. The ward draws a higher proportion of the economic active population in the surrounding wards, however, beyond this the area it does not have as strong influence as the other wards in the maps above. The spread of the influence is also quite dispersed for Hugglescote ward with people commuting from a number of different county areas.

Conclusion

The people working within the major business parks in Leicestershire are generally younger than the Leicestershire workforce as a whole. However, a much smaller proportion of people are aged under 20 years that work in the major business parks in Leicestershire. The exception is Fosse Park where over 10 percent of employees are under 20 years old, reflecting the nature of the employment opportunities.

On average, the majority of people working in the business parks are employed in routine occupations. However, in Bishop Meadow Estate and Meridian Business Park a much greater proportion work in professional occupations. In Magna Park, the vast majority of people are employed in routine occupations, which reflects the large number of jobs available that involving packing and general warehouse work.

A private car or van is the mode of choice for the vast majority of people that work in the major business parks in Leicestershire. In the sites within the largely rural areas there is an even higher proportion of people using a private car to get to work. For example, Magna Park (94%) and Bardon Hill (93%).

People that work in the largest business parks in Leicestershire tend to travel further to get to work than the county, regional and country as a whole. However, in the business parks in rural areas the distance travelled is even further with the majority of people travelling over 10km to get to work in Magna Park and Bardon Hill.

The influence of the major business parks is wide in terms of the proportion of the economically population in surrounding areas that travelled to the areas containing the six sites. However, some of the business parks are more reliant on local

labour than others. For example, employees in the wards containing Bishop Meadow Estate, Magna Park and Dodswell Bridge Industrial Estate are drawn quite heavily from the local labour supply. Some of the business parks also have a strong influence over the economically active populations in areas stretching far beyond the immediately surrounding area. For example, Bishop Meadow Estate, Magna Park and Meridian Business Park attract commuters from far beyond the surrounding areas, particularly along the M1.

Policy conclusions:

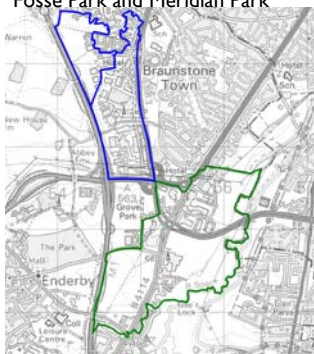
The business parks in Leicestershire are characterised by higher proportions of people travelling by car and long distances to get to work than the county average. Emphasis could be placed on restricting this trend by:

- Providing better provision for more sustainable forms of transport through improved public transport provision and access via bicycle and foot. Encourage car sharing and discourage single person car use.
- Promoting opportunities to local people that reside close to the business parks. Existing research* argues that geography matters most for those with poor skills and, therefore, job opportunities need to be provided close to where they live.

* Owen and Green (2005) Factor associated with commuting behaviour in England and Wales, presented to British Society for Population Studies Annual Conference, 12-14th September 2005.

Appendix I - Business Parks in Leicestershire

Fosse Park and Meridian Park



The maps on the left show the Output Areas* which were assigned to the six largest business parks in Leicestershire for the data in Tables 2-5. They give an idea to the location of the sites and number of Output Areas they cover. Each boundary is green with the exception of Meridian Business Park (blue) which is shown on the same map as Fosse Park.

Below is a description of each business park:

Fosse Park

This is the UK's largest outdoor shopping centre located about half a mile from Junction 21 of the M1. It lies within Blaby district near the Leicester suburbs of Braunstone, Eyres Monsell and Enderby. The retail park is an area of mixed industrial and commercial development containing a Marks and Spencer's, Asda and Next store's.

Meridian Business Park

This is a business park located close to Junction 21 of the M1 adjacent to Fosse Park. The site is within four hours of 88% of the UK population and mainly houses office developments, including Royal Mail and Leicestershire Learning and Skills Council.

Bishop Meadow Industrial Estate



Bishop Meadow Estate

This area is an amalgamation of a number of industrial sites, including part of Belton Park, Meadow Lane Estate and Oaks Industrial Estate to the north of Loughborough. The site is mainly consists of medium sized wholesale, distribution, printing and engineering companies

Magna Park



Magna Park

This is the biggest distribution centre in the UK which lies within a triangle of the M1, M6 and M69. The nearest settlement is Lutterworth and the tenants of the site include, Argos, Asda and Nissan warehouses. The site has seen significant expansion since 2001 (approx. 40 hectares**).

Dodswell Bridge Industrial Estate



Dodswell Bridge Industrial Estate

This industrial area is close to the A5 on the outskirts of Hinckley. It is part of a number of industrial estates developed beside the A5 corridor with Warwickshire. The site is made up of predominately engineering and manufacturing units, including Triumph and Tesco Distribution as the largest employers.

Bardon Hill



Bardon Hill

This a mixed industrial use area including a number of business parks such as Bardon 22 Interlink and Beveridge Lane. The area is in close proximity to the M1 via the A511. The site house a number of distribution, quarrying, engineering and manufacturing enterprises, including Agreggate Industries and Palle-Ex.

*there is consultation with ONS for creating workplace Output Area for the 2011 Census

** Leicestershire Land Monitoring Report 2005

Appendix 2

The table below gives the National Statistics Socio-economic Classifications. This is the official way in which people are grouped by social class in the UK. The occupations have been agreed through a consultation process and used to analyse the results of the 2001 Census.

	NS-SeC	Examples of occupations
1	Higher managerial and professional occupations	Doctors, directors of large organisations, clergy
2	Lower managerial and professional occupations	Journalists, nurses, school teachers
3	Intermediate occupations	Travel agents, police officers (sergeant and below)
4	Small employers and own account workers	Farmers, taxi drivers, hotel managers
5	Lower supervisory and technical occupations	Train drivers, electricians, bakers
6	Semi-routine occupations	Scaffolders, traffic wardens, dental nurses
7	Routine occupations	Building labourers, waiters, cleaners

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