

5. AREA OVERVIEW



The strategic assessment of accessibility has included analysis of the characteristics of the Local Transport Plan area. This chapter discusses car ownership and deprivation levels, together with information on ill health, and information on the public transport network in the area.

This information has provided a helpful baseline for understanding accessibility issues identified by partners, and a context in which to appraise actions to address those problems.

5.1 THE ROLE OF MAPPING

Maps have been produced to assist in the identification of problem areas in the strategic area accessibility assessment. The three categories of maps, which have been produced, are:

- Maps of key national and local datasets such as car ownership, Index of Multiple Deprivation.
- Maps showing the public transport network in Nottinghamshire, particularly service frequencies and the extent of services provided by the commercial bus network.
- Accessibility maps showing the results of the calculations of the core accessibility indicators for Nottinghamshire undertaken by Nottinghamshire County Council in January 2006. These were produced using Accession and mapped using MapInfo software.

Details of the data sources used to inform the mapping process together with a short explanation of how the maps have been produced can be found in Annex C.

Analysis and mapping of key national datasets have revealed the following characteristics of the area.

5.2 CAR OWNERSHIP LEVELS

Figure 5.1 shows the percentage of households with no car across the North Nottinghamshire area based at census output area level and interpolated across the plan area using a grid function. It can be seen that car ownership levels are lowest in the urban parts of North Nottinghamshire, particularly in the Ashfield/Mansfield and Worksop subareas. However, the map also shows small isolated areas of low car ownership in rural areas, and it is these areas which may not be able to support a conventional commercial bus service due to low levels of population. One of the challenges of accessibility planning is how best to serve these 'rural' pockets of deprivation given a limited supply of revenue funding to support a conventional bus service.

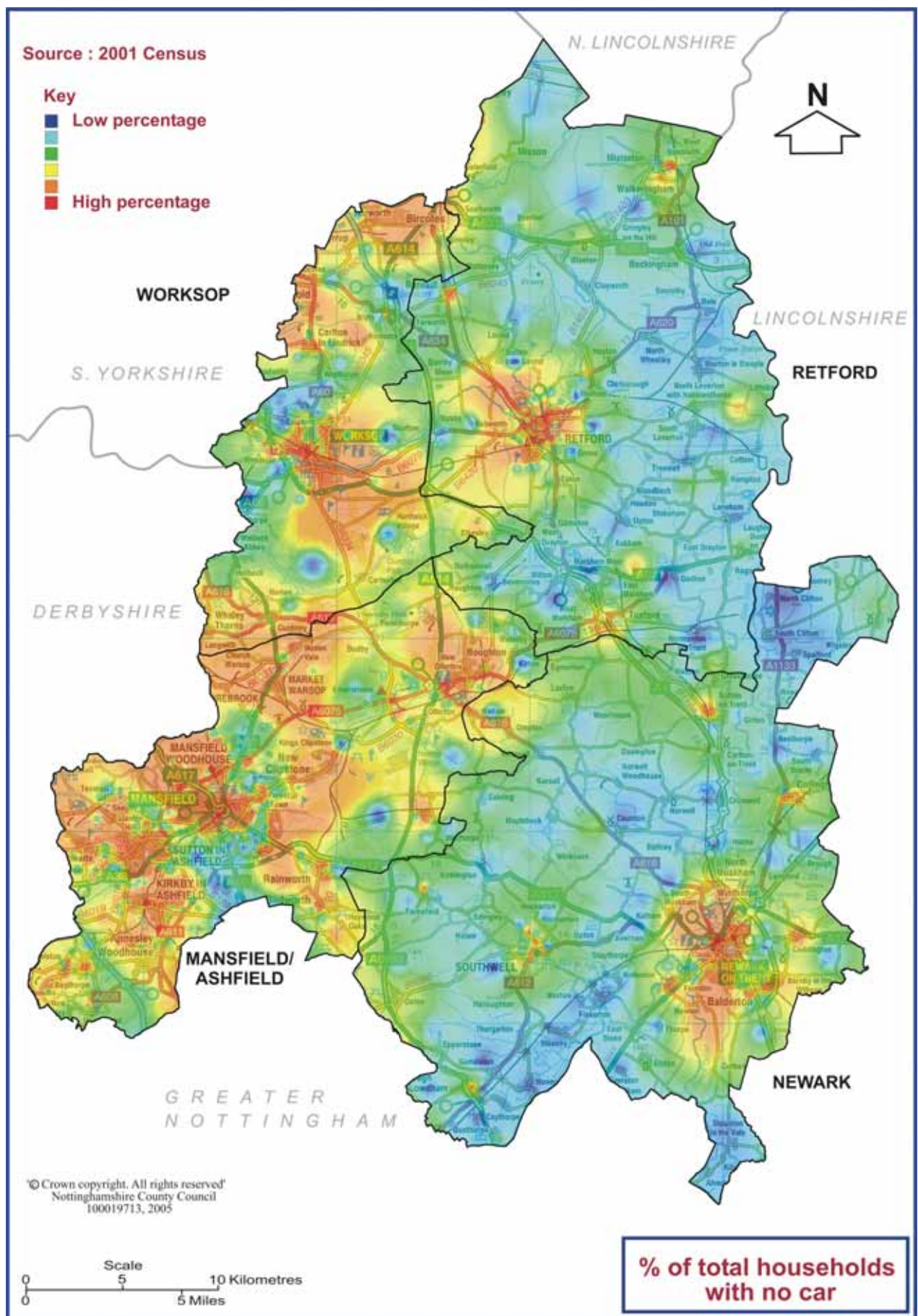


Figure 5.1

Figure 5.2 shows the percentage of households with one car but with two or more people over 17 in the household. This is based on the premise that access to the family car may vary by time of day and by members of the household. The map shows the majority of households falling into this category tend to be located outside of the main inner-urban areas (areas with the lowest level of car ownership), spreading into the suburbs and extending into 'stand-alone' settlements with more than 3000 population.

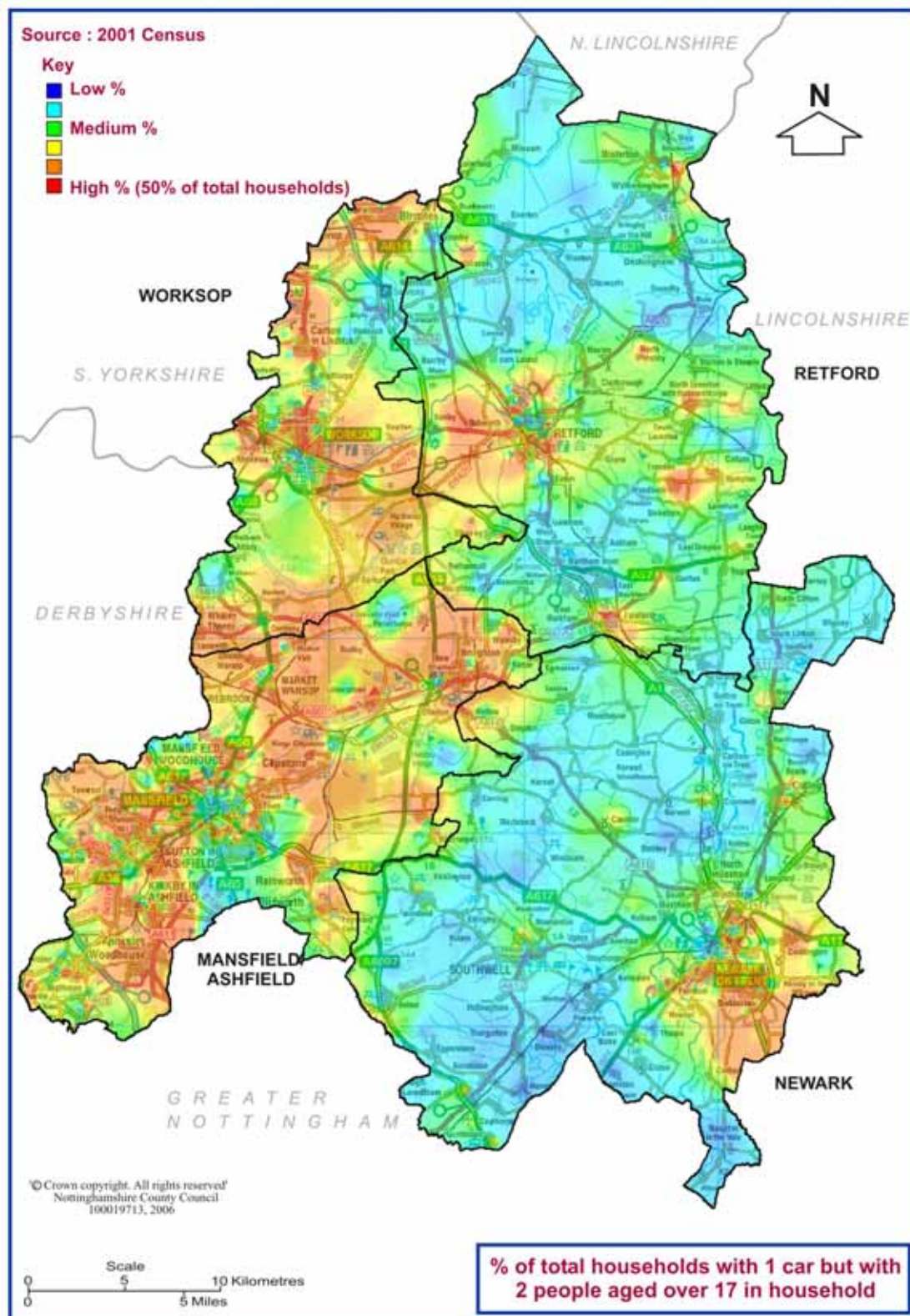


Figure 5.2

5.3 INDEX OF MULTIPLE DEPRIVATION

Figure 5.3 shows the 2004 Index of Multiple Deprivation (IMD) across the North Nottinghamshire area, with the darker areas being areas of high deprivation. Deprivation levels are highest in the urban parts of North Nottinghamshire, particularly in the Ashfield/Mansfield and Worksop sub-areas. However, the map does show small isolated pockets of deprivation in rural areas, particularly in the area to the south east of Retford.

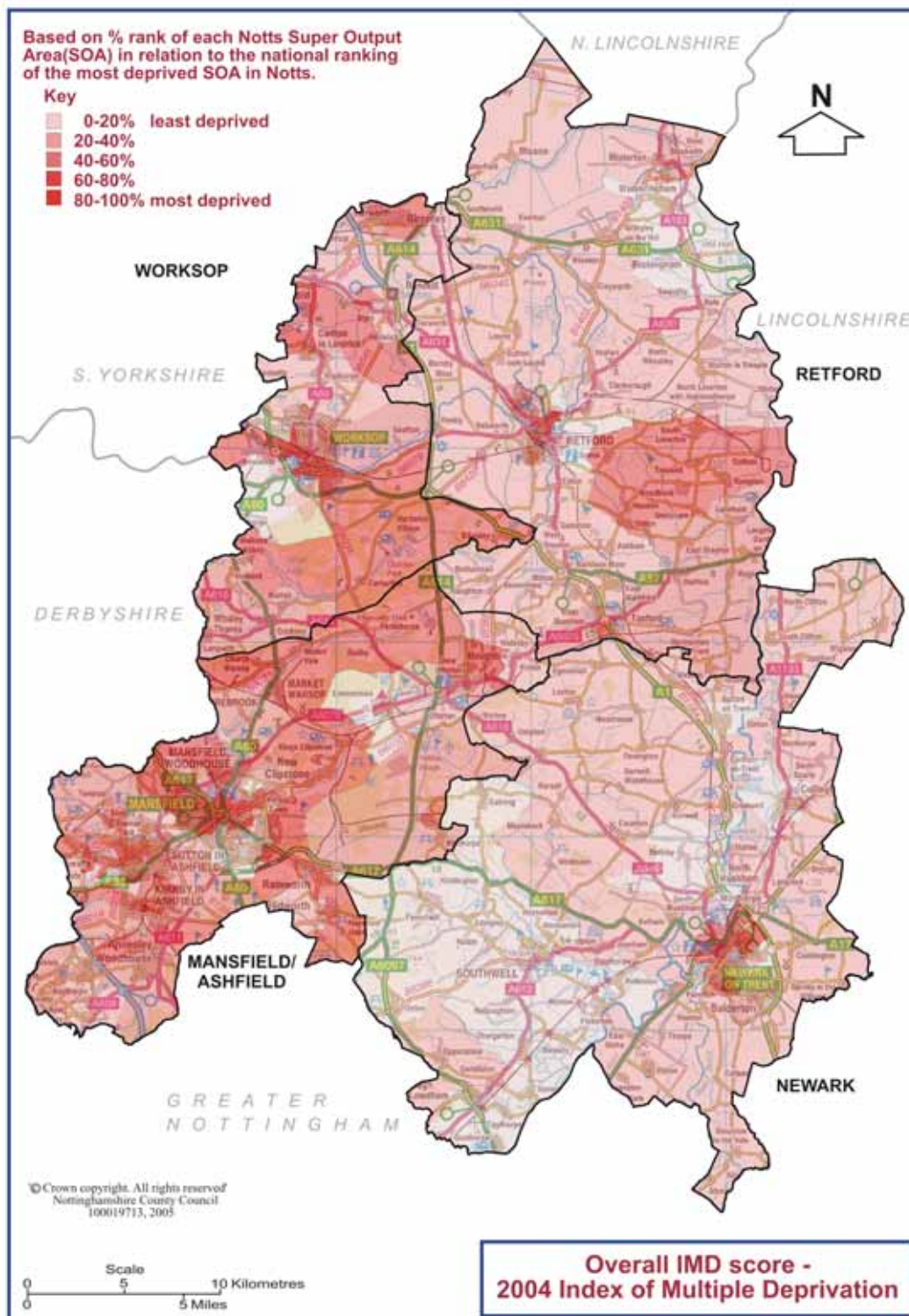


Figure 5.3

Figure 5.4 shows the overall Index of Multiple Deprivation but with the Barriers to Housing and Essential Services domain added as an additional layer on the map. This enables areas suffering high levels of deprivation together with poor levels of access to essential services to be identified. Such areas are dark shaded and show the blue square map symbol. In rural areas, the area to the south east of Retford falls into this category. Further information can be viewed in appendix C.

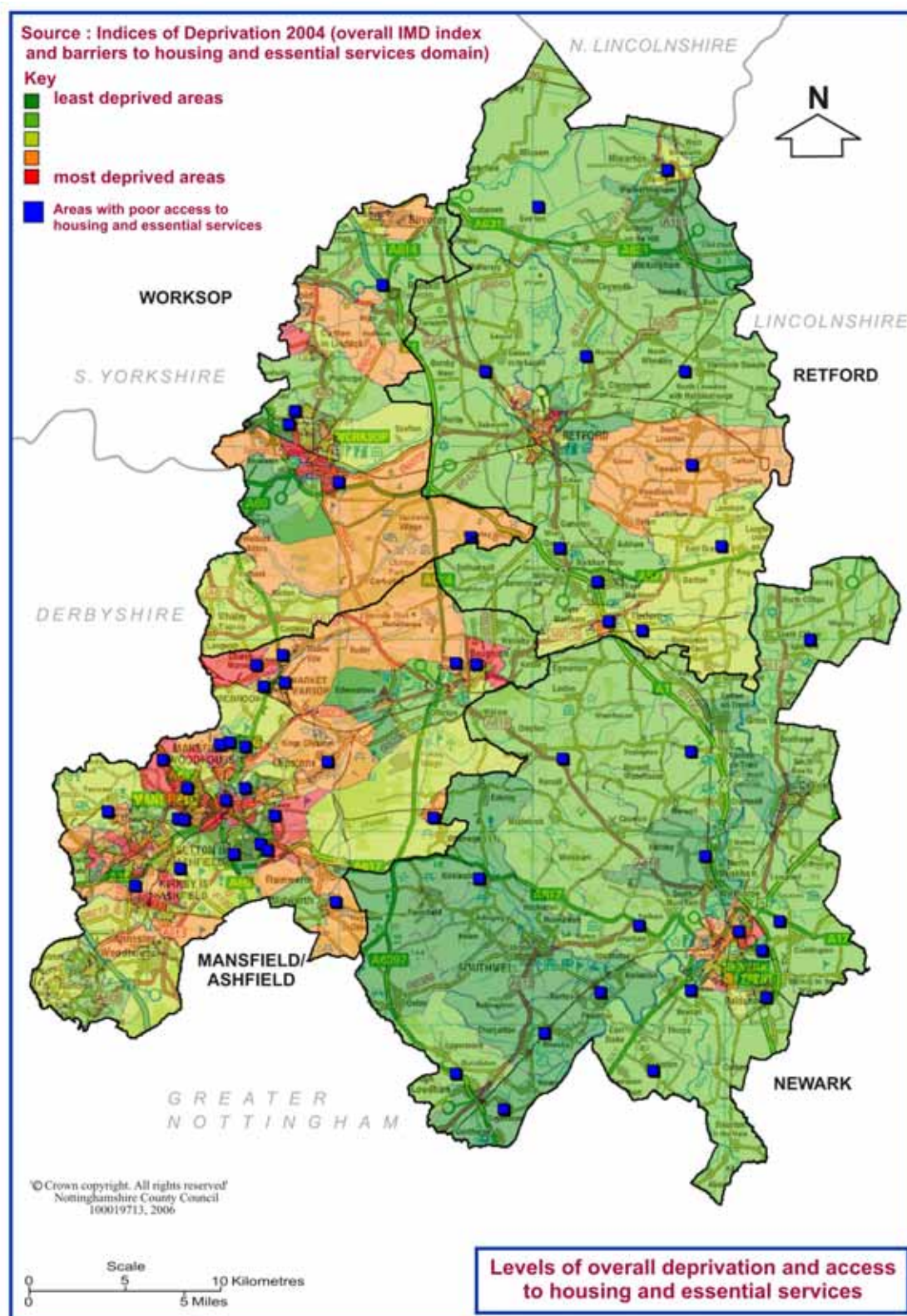


Figure 5.4

5.4 POPULATION WITH A LIMITING LONG TERM ILLNESS (LLTI)

This is a key indicator of deprivation, and figure 5.5 shows the percentage of the population with a limiting long term illness, calculated at census output area level and interpolated across the Plan area using a grid function. 21% of the total population in North Nottinghamshire have a limiting long term illness, the highest levels being observed in Mansfield / Ashfield area (23%). The high incidence of illness in the former mining communities of the former West Nottinghamshire coalfield should be noted.

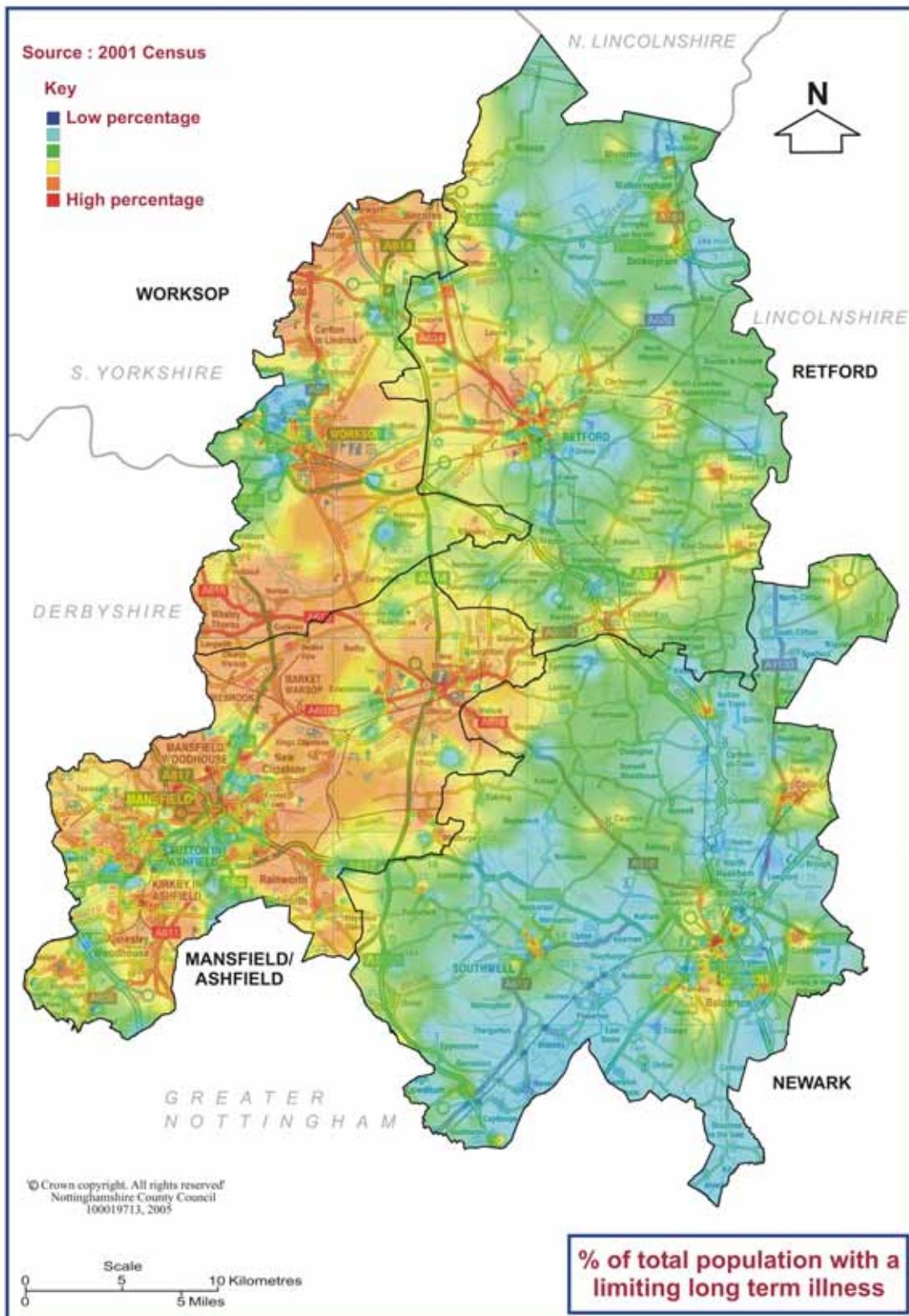


Figure 5.5

5.5 PUBLIC TRANSPORT PROVISION

Demand for Public Transport

In general, demand for public transport is highest in areas where there are a large number of households without access to a car, in areas experiencing high levels of deprivation, areas where there is a high concentration of population on low incomes (student/pensioner households), and areas with a high population density.

Figure 5.6 combines car ownership data from the 2001 census with the Index of Multiple Deprivation and calculates a score for each Lower Super Output area (LSOA). The map shows demand for public transport is highest in urban areas where there are high levels of deprivation and large concentrations of households with no car. Demand for public transport is lowest in rural areas where there are high levels of car ownership, in particular large numbers of households with access to two or more cars. However the map shows significant areas of North Nottinghamshire where demand for public transport may not be as high to justify the provision of commercial services but where there is still a demand for some form of public transport to be provided. The rural areas of Bassetlaw District particularly around Retford fall into this category. Such areas need to be served in a cost-effective manner, as demand for bus services still exists but not at the level required for services to be provided commercially.

Supply of public transport

An indication of the supply of public transport, in particular conventional bus services is given in figure 5.7. Lower Super Output Areas (LSOAs) have been assigned a score relating to access to the public transport network, and LSOAs which meet a defined service standard as agreed in the Rural White Paper 2000 are shown in green on the map. This service standard relates to all households being within 10 mins (800m) walk of their nearest bus stop with an hourly service frequency on weekdays 0600-1800 hrs (minimum 10 calls per bus stop over the 12 hour period specified). The map clearly shows the extent of the County's supported bus network, and in particular the important contribution which it makes to general accessibility levels and reducing social exclusion. Services are provided in areas where clearly the demand is not as great as that in urban areas and where demand is not high enough to justify the provision of commercial bus services (see figure 5.6).

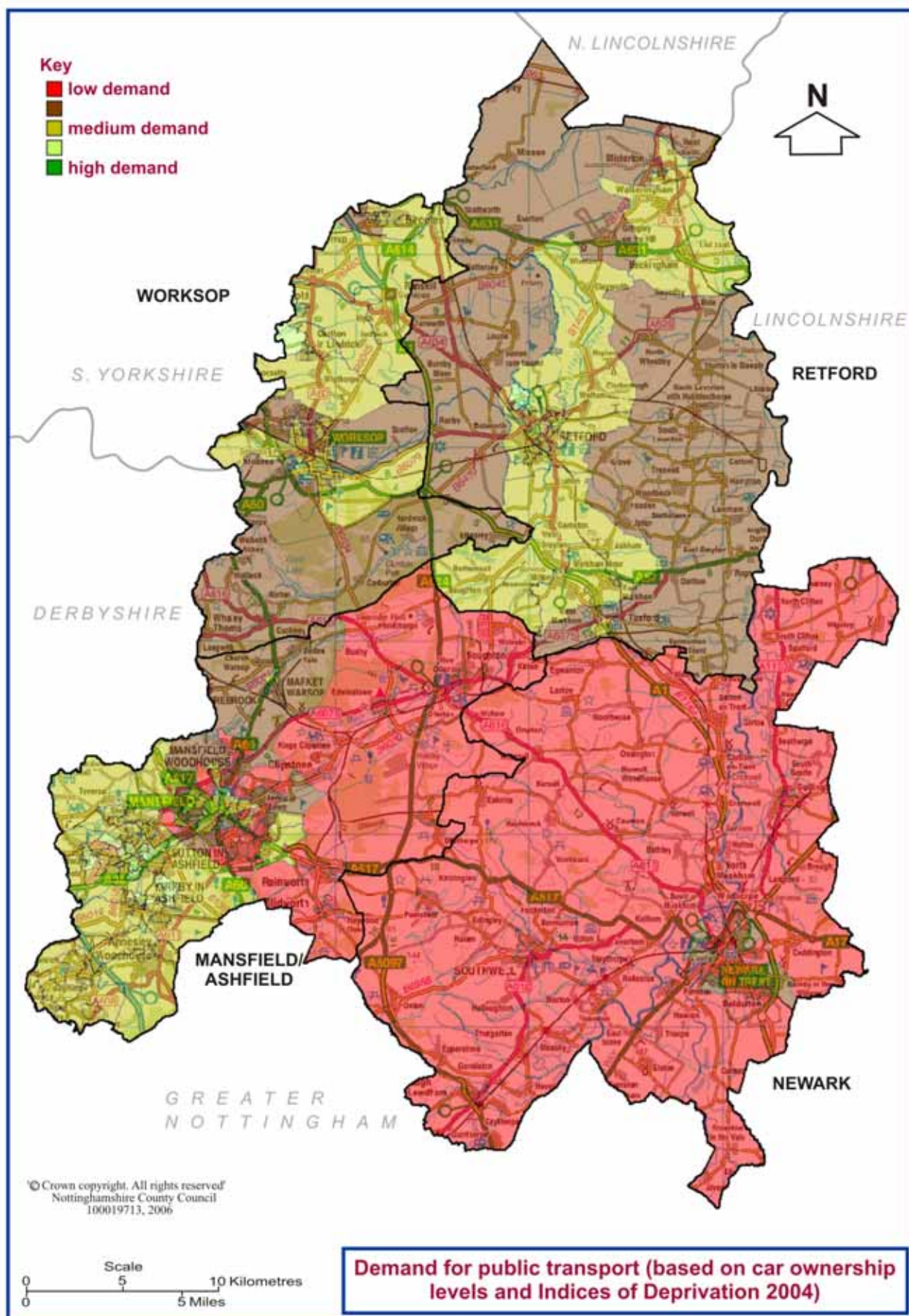


Figure 5.6

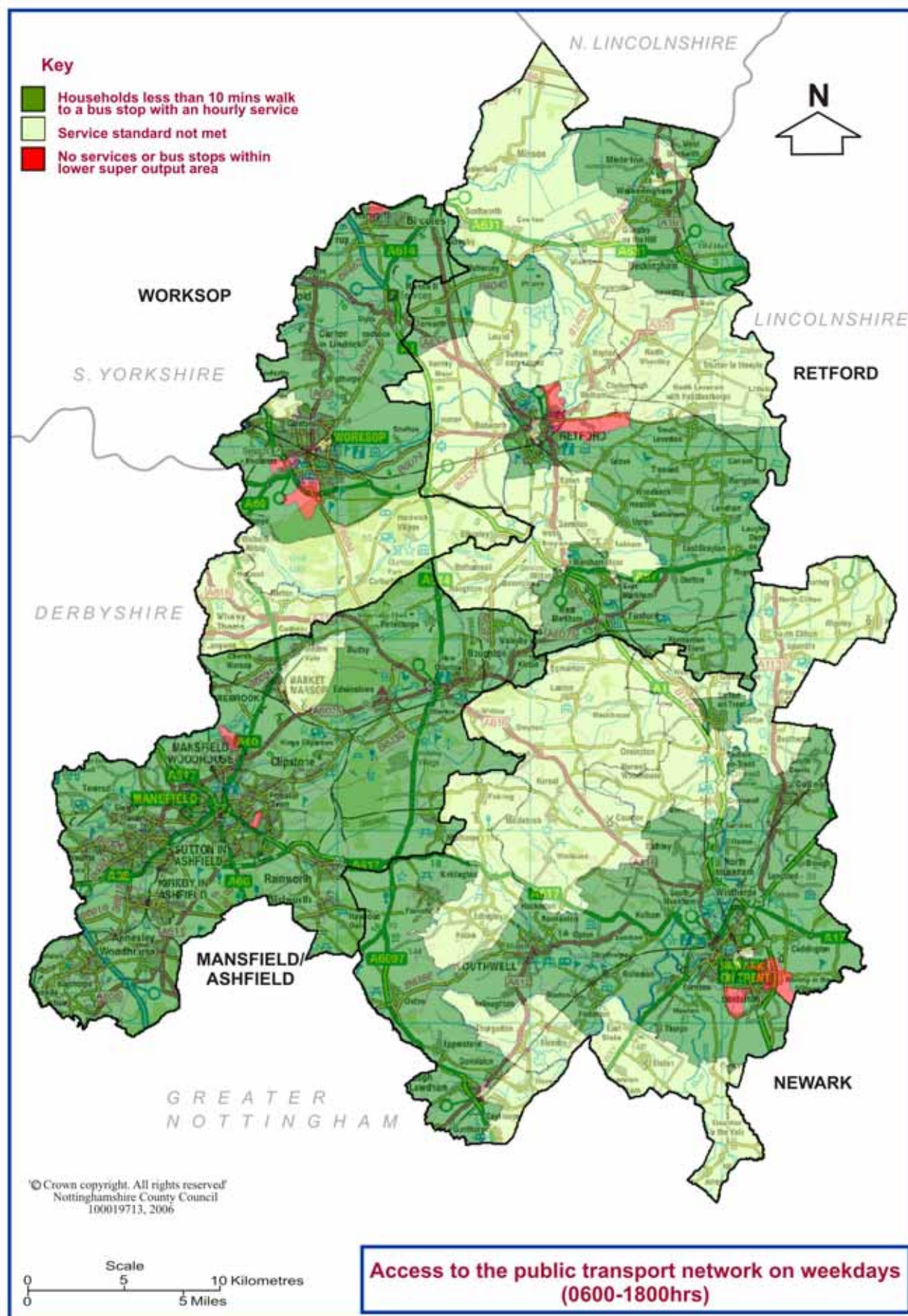


Figure 5.7

The effect of the County Supported Bus Network on accessibility levels in communities can be seen in figure 5.8 which shows what the effects would be if funding support for all county-supported services was withdrawn, including funding to support a diversion or extension of a commercial route to service a particular community (deminimis agreement). This hypothetical scenario shows that many communities would face a reduced level of service and some communities would have no services provided at all. In some areas there may be an increase in the distance walked to the nearest bus stop with a suitable frequency.

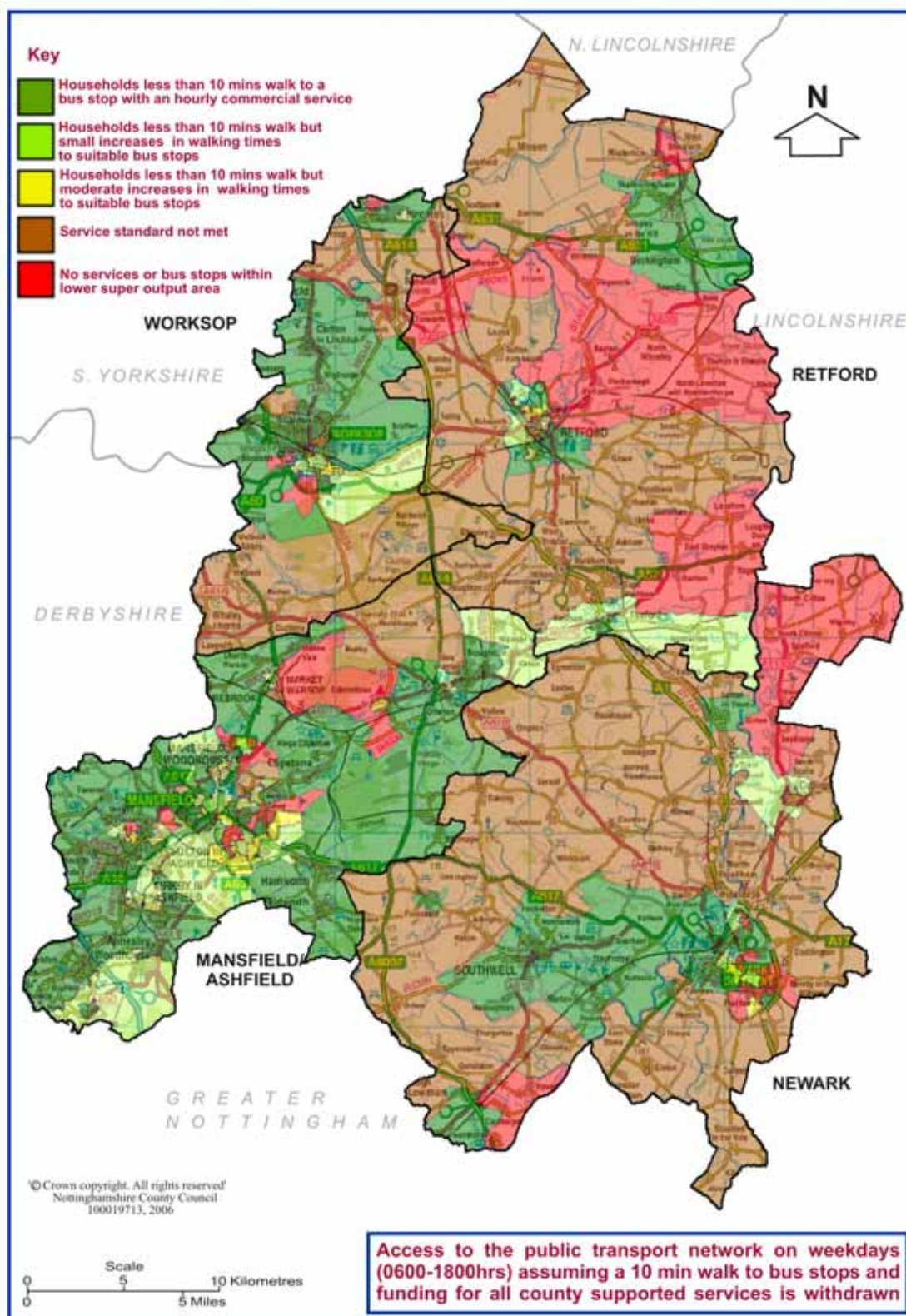


Figure 5.8

The examples given in figs 5.7 and 5.8 assume a 10 min walking time (800m walking distance) from each household to its nearest bus stop with an hourly or better service and averaged for all the households in the Lower Super Output Area. In practice, many people would not be able to walk such distances particularly if they are elderly, sick and infirm and also if they live in

hilly areas. Figure 5.9 assumes a 5-min walk (400m) to the nearest bus stop with an hourly or better service, with this walking distance being used to reflect the ease of walking by these vulnerable population groups to suitable bus stops.

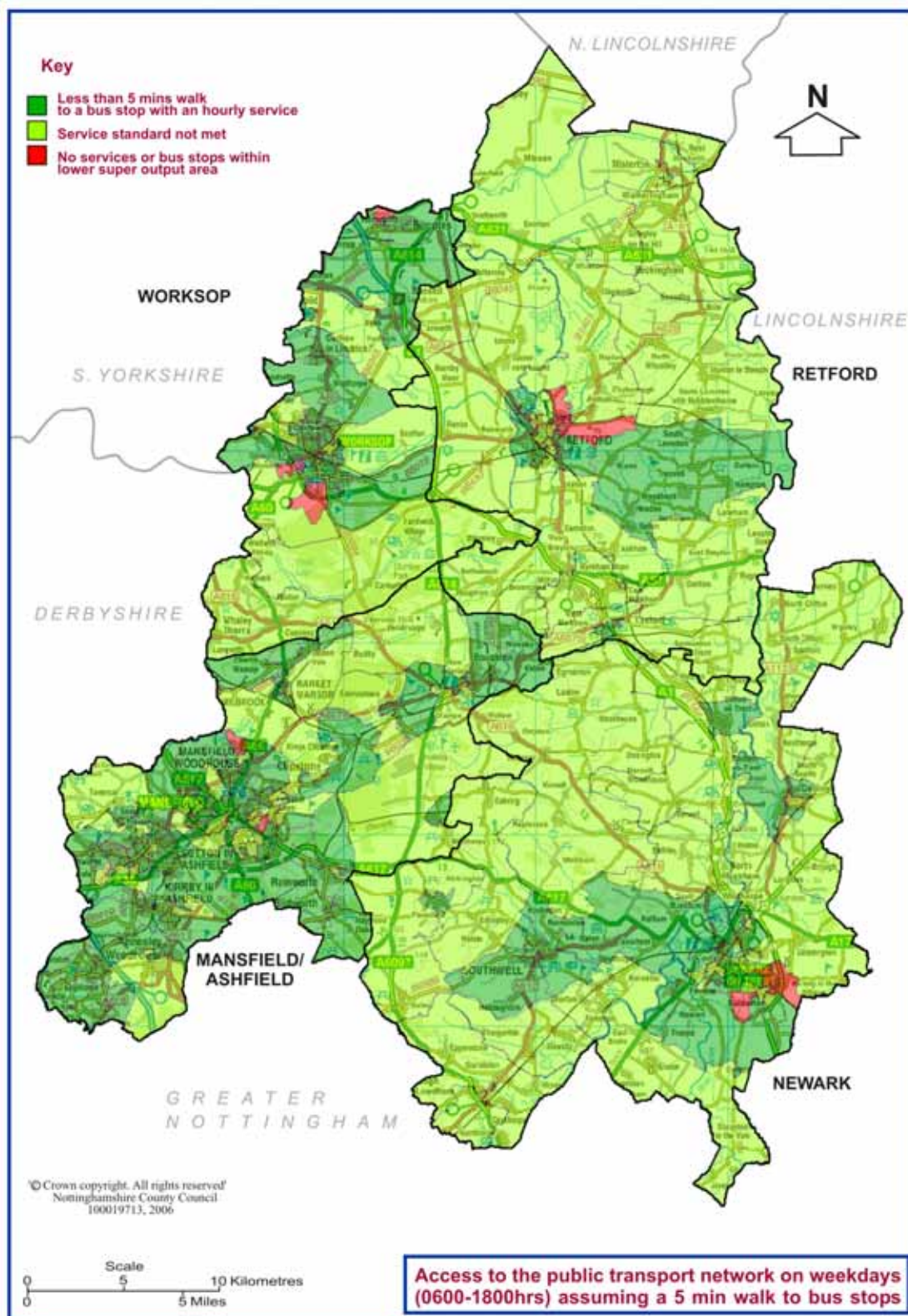


Figure 5.9

Figure 5.10 again assumes the above service standard, but excluding all county-supported services.

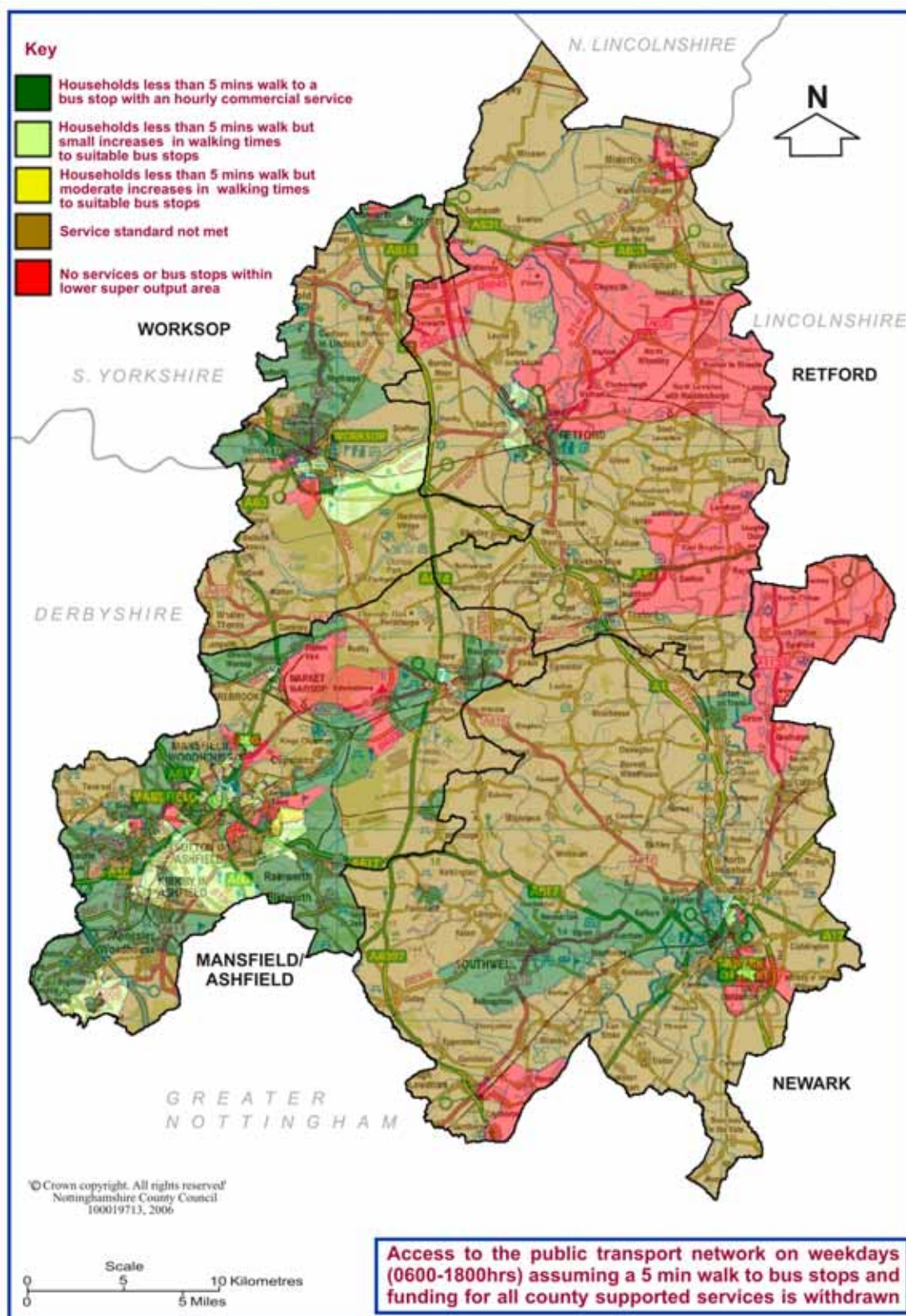


Figure 5.10

Again the figures show the key role which the county-supported bus network plays in meeting social need, particularly in rural areas where walking distances from households to their nearest bus stops are much greater.

Data on the extent of commercial bus service provision on Sundays has been collated. The commercial network is even sparser when compared to weekdays, with County-supported services forming a vast majority of the service provision in rural areas, with a large number of

rural communities having no services at all on Sundays. The complete Sunday bus service networks in Retford and Newark and the majority of the Sunday bus network in Worksop are provided by County-supported services.

The County's budget for securing socially necessary bus services has come under increasing pressure in recent years due to continuing withdrawals of marginal services provided by commercial operators, and rising costs. To try and prioritise this revenue funding for tendered bus services in a fair and consistent manner, a Performance Management Framework has been drawn up to assess competing claims on the budget. The Framework was given full Cabinet approval in October 2005, and from this date it will be used to assess all future claims on the revenue budget for supported services in relation to existing funding commitments, and to provide a reality check for any initiatives arising out of the accessibility planning process to assess the likelihood for funding given the existing funding commitments.

The following variables have been used to prioritise each local bus service contract and non-statutory school transport contract:

- Subsidy per passenger
- Passengers per trip
- Journey purpose
- Car ownership levels in the communities which the service serves
- Availability of alternative public transport provision in the communities which the service serves
- Index of Multiple Deprivation levels in the communities which the service serves.

Concepts of accessibility planning have been incorporated into the final three variables noted above:

- Car ownership levels include households with no car and households with one car but with two or more people within the household, on the premise that access to the family car will vary by time of day and each household member
- Availability of alternatives includes an element of local accessibility, where settlements are ranked according to the extent to which alternative public transport options are provided by the commercial bus network. Thus settlements where services are entirely provided by the supported bus network will score more highly than settlements where there are a number of alternatives provided by the commercial network.
- The Index of Multiple Deprivation has as one of its domains 'Barriers to Housing and Essential Services'.

In addition to supporting conventional public transport, the County also supports the following schemes designed to supplement the local bus network:

- Three Bus Challenge schemes (Village Lynx Rural Bus Challenge, Ashfield Access Lynx Urban Bus Challenge and Boughton Boomerang Rural Bus Challenge). These schemes are a combination of conventional bus routes and fixed route Demand Responsive Transport;
- Thirteen voluntary car schemes, and 10 Community Transport minibus schemes. 5 of the minibus schemes run scheduled timetable services. Figures for the 2004/05 financial year show there were 257 volunteer car scheme drivers and over 2,400 car scheme users making 163,000 trips. There were also 100 volunteer minibus scheme drivers and over 200,000 minibus kms run.
- The Countywide dial-a-ride service supports those whose disabilities prevent them from using mainstream public transport, community transport, or other sorts of transport provision.

Data on the usage of voluntary car schemes serving rural areas in North Nottinghamshire has been collated. The table below shows the typical usage of voluntary car schemes supported by the County over a 12 month period. Further data has been collated for two schemes to show

the take-up of schemes by residents in neighbouring communities. The table clearly shows the vital services that these schemes provide in order for people to access key facilities in the absence of good public transport facilities.

Scheme	Average trips per financial period 2005
Bassetlaw	898
Kirkby	1290
Sutton	291
Thorney	16
Misson	8
Tuxford	107

5.6 OVERALL PUBLIC TRANSPORT DEMAND AND SUPPLY

To conclude, demand for public transport in the Plan area in the context of low income households, households without a car and areas of high population density is largely matched by the supply of conventional public transport in the context of commercial bus services, especially on weekdays. The table below shows commercial bus services being provided in urban areas and settlements with a population of over 3000. The table also shows that if no county-supported services were provided in rural areas with a population of less than 3000, then the provision of commercial services alone in these areas would still ensure that rural accessibility targets as proposed in the 2000 Rural White Paper are met. The 'top-up' effect of the funding provided by the County to support socially necessary bus services in these small communities can clearly be seen, by raising accessibility levels in these communities to a level considerably above the national average.

	% of households within 800m walk of a bus stop with at least an hourly bus service on weekdays		
	England	North Nottinghamshire	North Nottinghamshire with no supported services
Area category			
Other Urban (large-small/medium)	95%	99%	98%
Small urban	86%	100%	98%
Rural	55%	77%	51%

-Notes:

- Weekdays for Nottinghamshire data includes Monday to Saturday 0600-1800 hrs
- Hourly bus service for Notts includes 10 or more calls at each bus stop on weekdays Monday to Saturday 0600-1800 hrs
- Population definitions: Rural = settlements with <3,000 population; Small Urban = settlements >3,000 but less than 10,000 population; Other Urban = settlements >10,000 population
- Walking distances to bus stops in Nottinghamshire are based on a straight line distance in metres from each household to its nearest bus stop with an hourly or better service, calculated using pythagoras' theorem and adjusted to allow for curvature in the road network. An average distance figure for all households to their nearest bus stop is then calculated for each Lower Super Output Area (urban areas) or County parishes (rural areas).

5.7 OTHER SURVEY WORK

North Nottinghamshire Personal Perceptions Survey

A Personal Perceptions Survey for the North Nottinghamshire LTP area was carried out in spring 2005. Respondents were contacted by telephone and asked for their opinions on the core themes and shared priorities to be included in the forthcoming Local Transport Plan for their area. The data in the original survey was reweighted to better reflect the distribution of population between the urban and rural areas of North Nottinghamshire. Results show that respondents' overall views on the ease of access to key destinations was lowest in rural areas (23%), particularly around Retford. Respondents' overall opinion on the provision of public transport services was again lowest in the Retford rural and Newark rural areas (5% and 15% respectively), and it is in these same areas where the overall opinion on the availability of sufficient jobs and services locally was lowest. One in 5 respondents (20%) without access to a car ranked accessibility as a top priority for their area, and the same proportion of respondents (20%) living in the Retford urban and rural areas respectively ranked accessibility as a top priority.

North Nottinghamshire Personal Travel Survey

A Personal Travel Survey for the North Nottinghamshire LTP area similar to the travel surveys carried out on a continuous basis by the DfT was carried out in summer 2005. Residents in the urban areas of Worksop, Mansfield/Ashfield, Retford and Newark were asked a series of questions on their recent trip-making patterns, and in addition a specific question was included on their opinions of access to key local facilities in their area. The main points of the survey of relevance to accessibility are shown in figures 5.11-5.19 and are given by theme area below.

Overall

- 10% of all respondents thought access to health facilities was particularly difficult (respondents choosing response 'difficult/very difficult')

Disabled people

- 20% of people with a disability thought access to health facilities was particularly difficult, and 11% of respondents in this same group thought access to food shops was particularly difficult

Access to household car / households with no car

- 14% of respondents without access to a car thought access to health facilities was particularly difficult, and 10% of respondents in this same group thought access to food shops was particularly difficult
- 9% of respondents living in households with no car thought access to health facilities was particularly difficult

Age

- 54% of respondents aged 60 and over thought access to health facilities was particularly difficult, and 46% of respondents in this same age group thought access to food shops was particularly difficult
- 40% of respondents aged 20 to 40 and 42% of people aged 40 to 60 thought access to work was particularly difficult

Socio-economic grouping of household

- 45% of respondents in the lower socio-economic class groupings (classes D & E) thought access to health facilities was particularly difficult, and 41% of respondents in these same two groupings thought access to leisure facilities was particularly difficult
- 51% of respondents in the higher socio-economic class groupings (classes A, B & C1) thought access to work was particularly difficult

Access to public transport

- 54% of respondents living within 2 minutes (160m) walk of a bus stop with an hourly or better service on weekdays thought access to leisure facilities was particularly difficult, and 48% of respondents in this same group thought access to food shops was particularly difficult

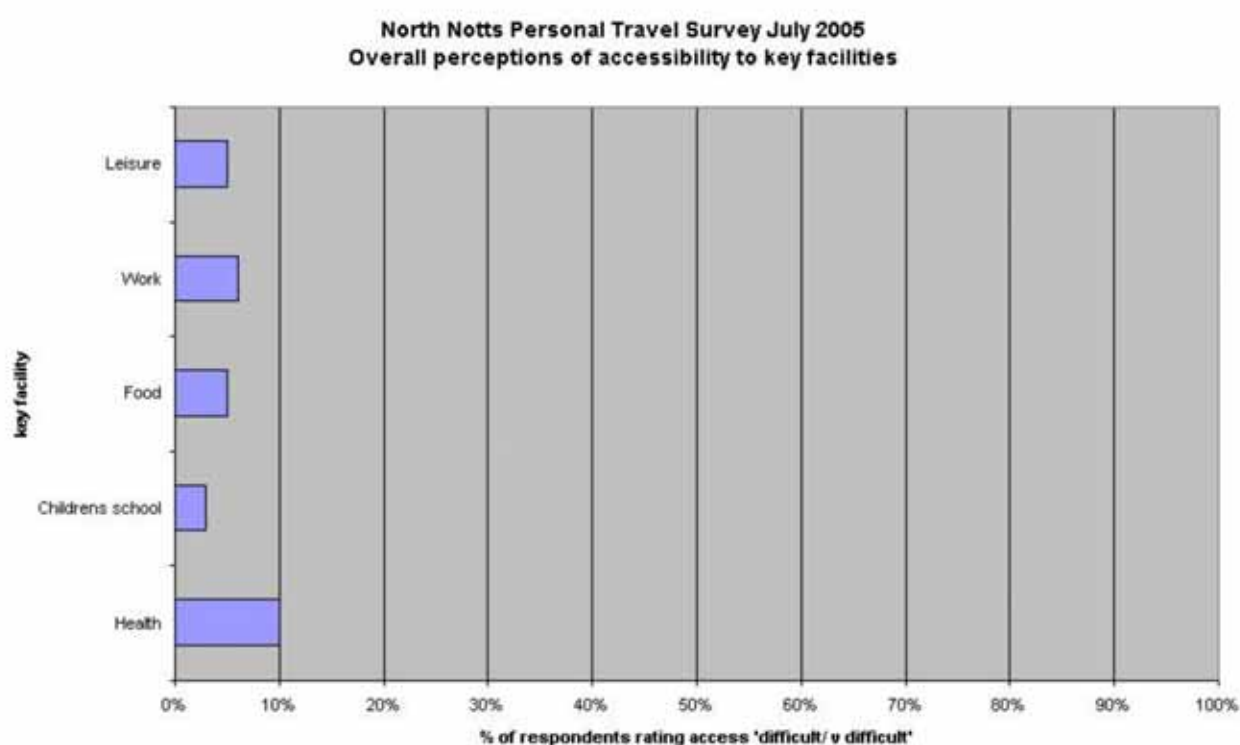


Figure 5.11

North Notts Personal Travel Survey July 2005
Perceptions of accessibility to key facilities by disability

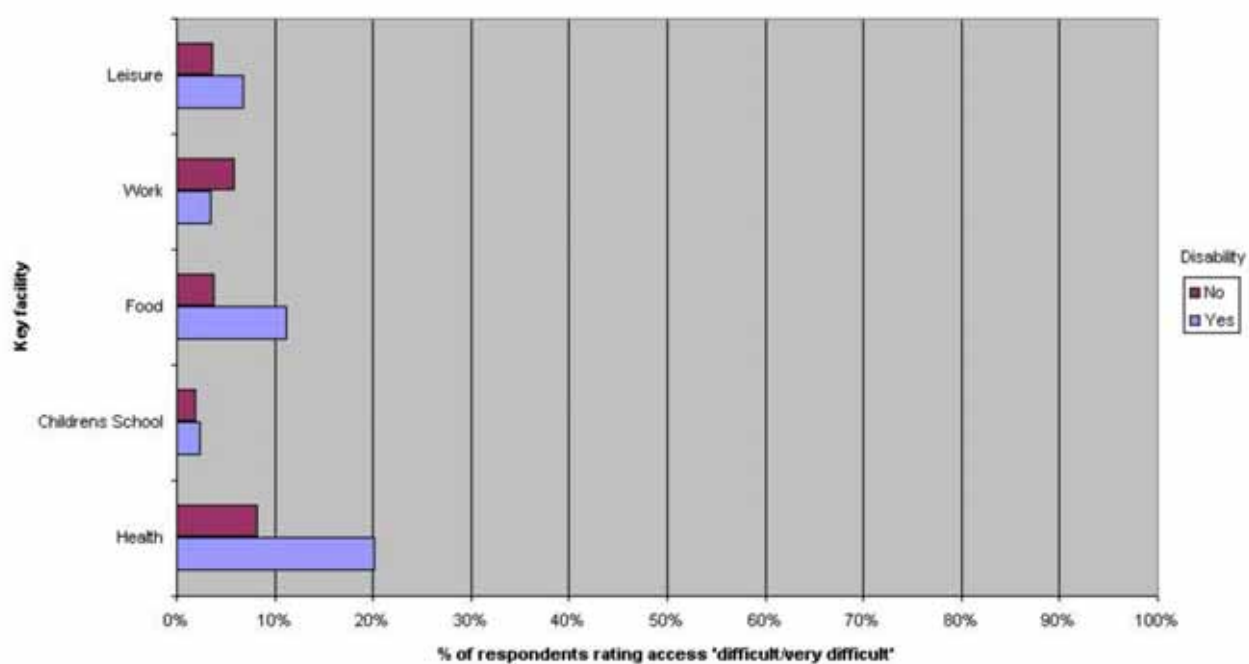


Figure 5.12

North Notts Personal travel Survey July 2005
Perceptions of accessibility to key facilities by access to car

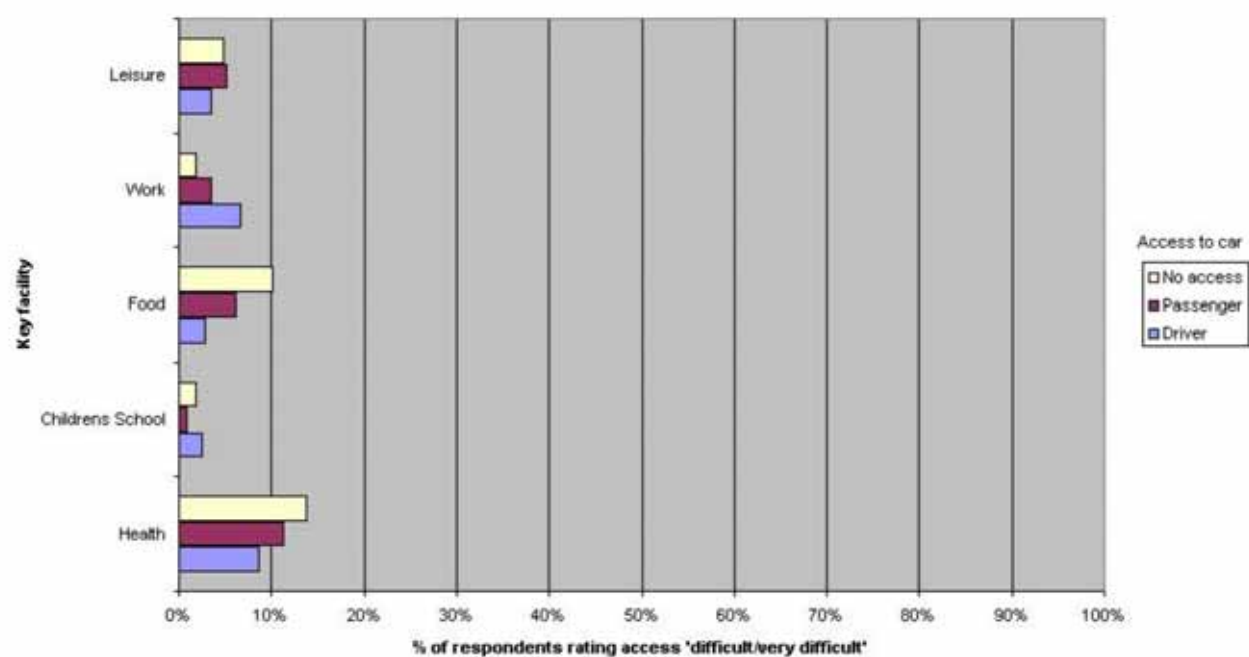


Figure 5.13

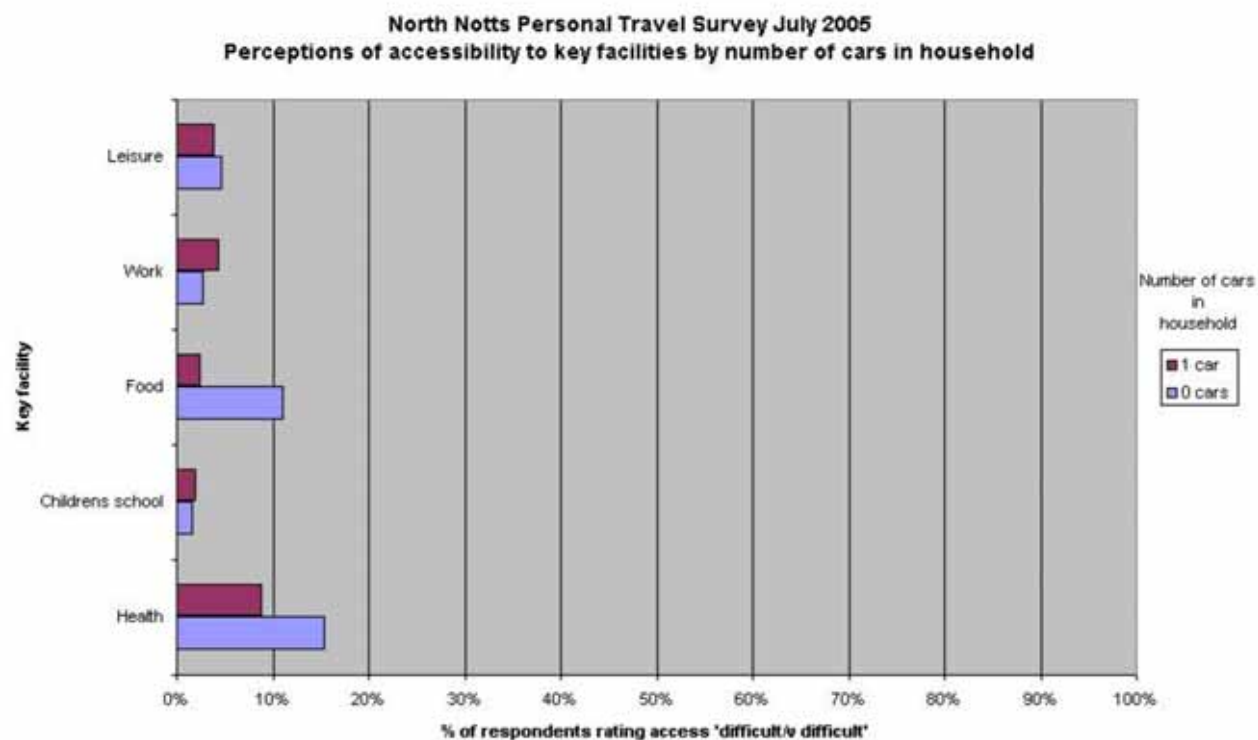


Figure 5.14

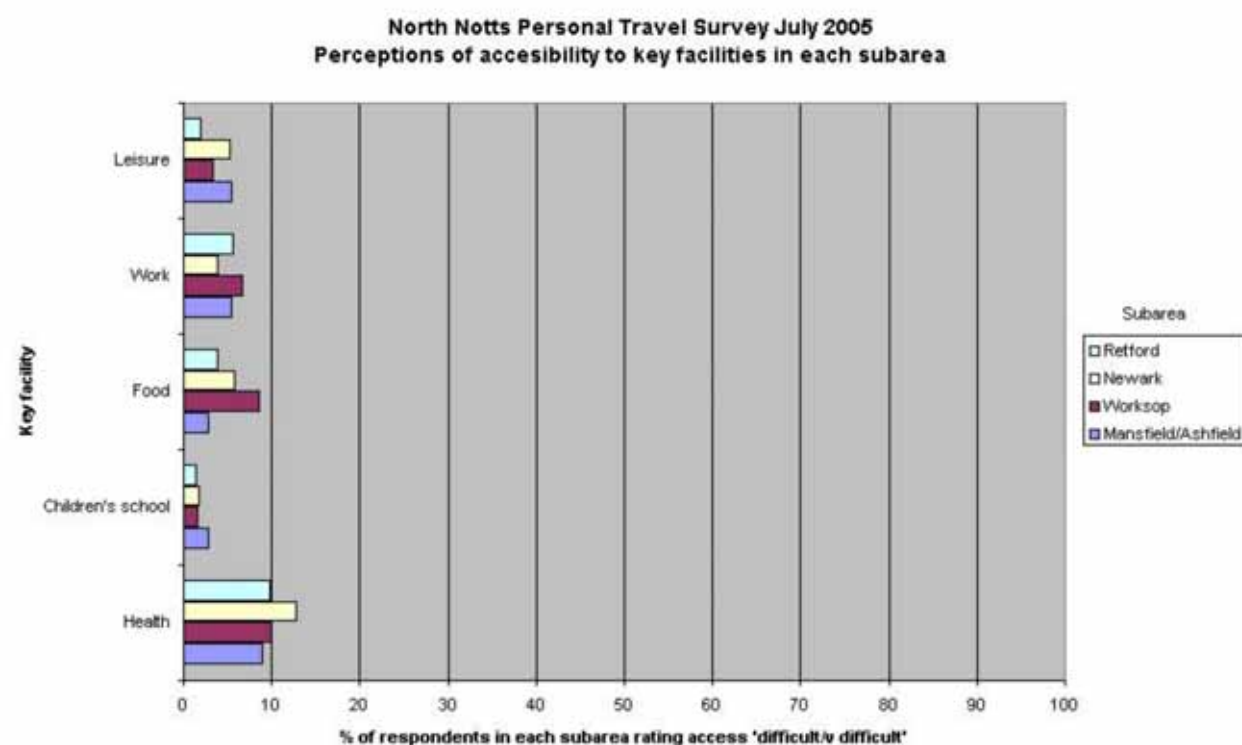


Figure 5.15

North Notts Personal Travel Survey July 2005
Perceptions of accessibility to key facilities based on walking times to nearest bus stop with an hourly service

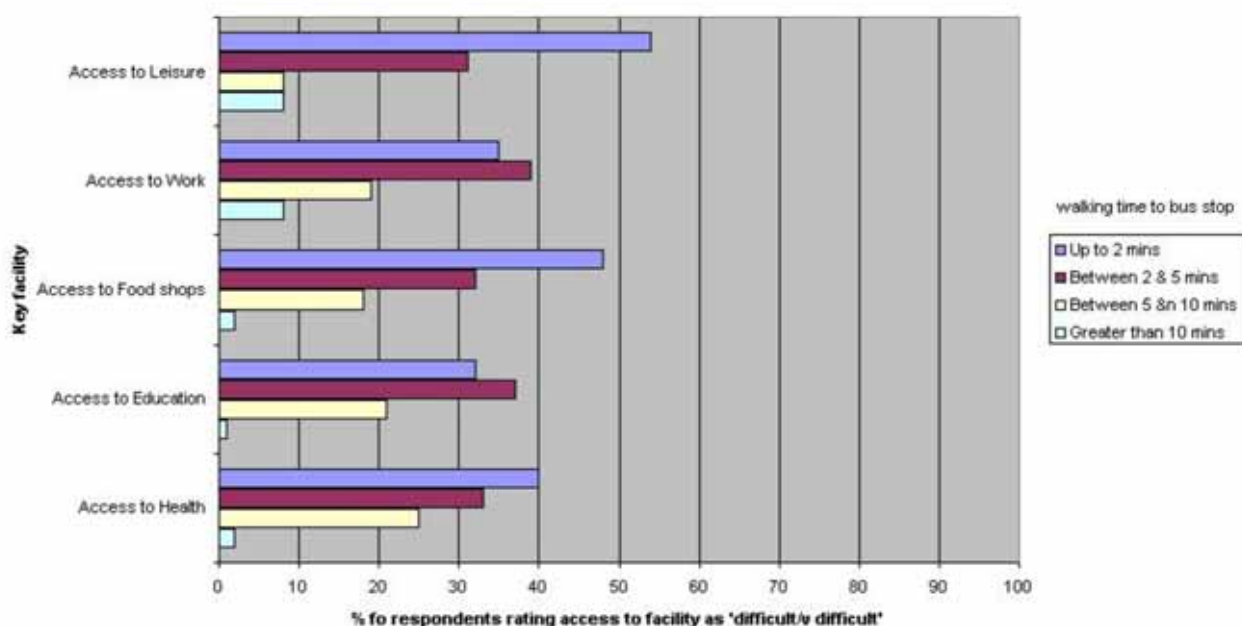


Figure 5.16

This figure shows a number of respondents rating access as 'difficult / very difficult' but living within a suitable walking distance of a bus stop with an hourly or better service on weekdays. This could point to the fact that such respondents may be unaware of the existence of suitable facilities, or that they may be unaware of how to access these facilities by public transport. This points to an action of improving the availability of public transport information or better informing the public about the existence of suitable destinations.

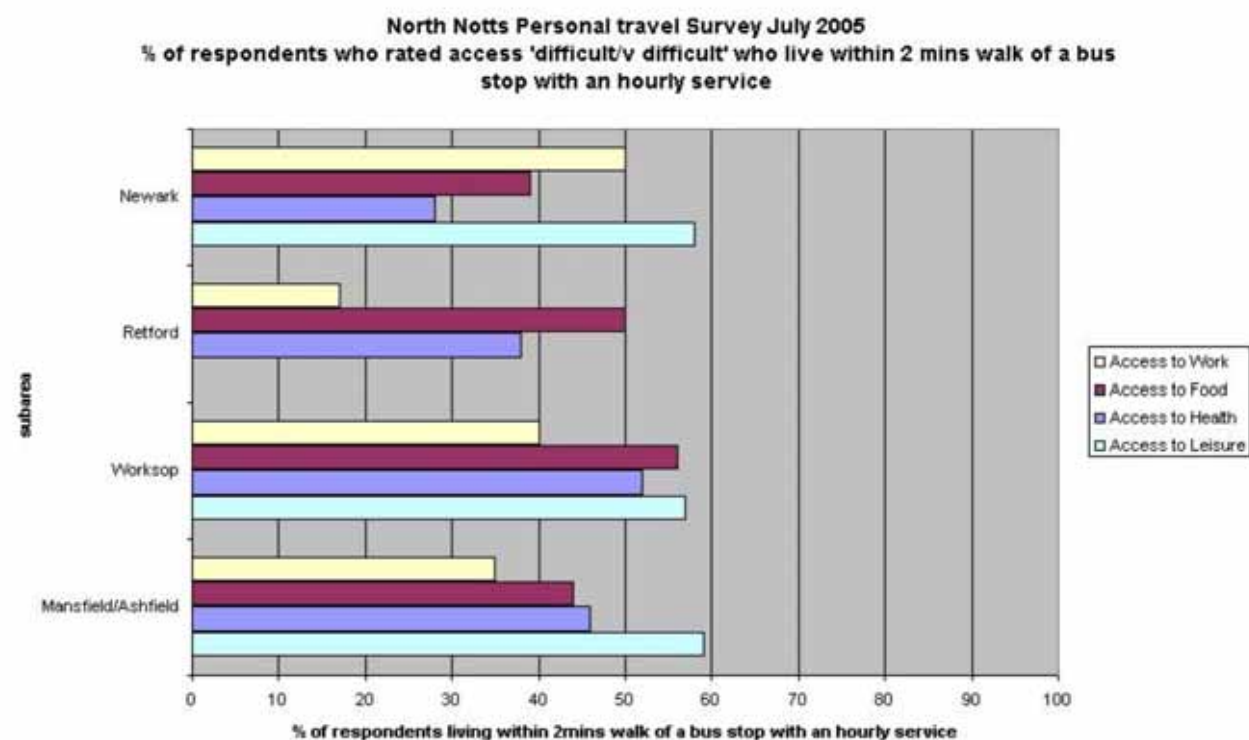


Figure 5.17

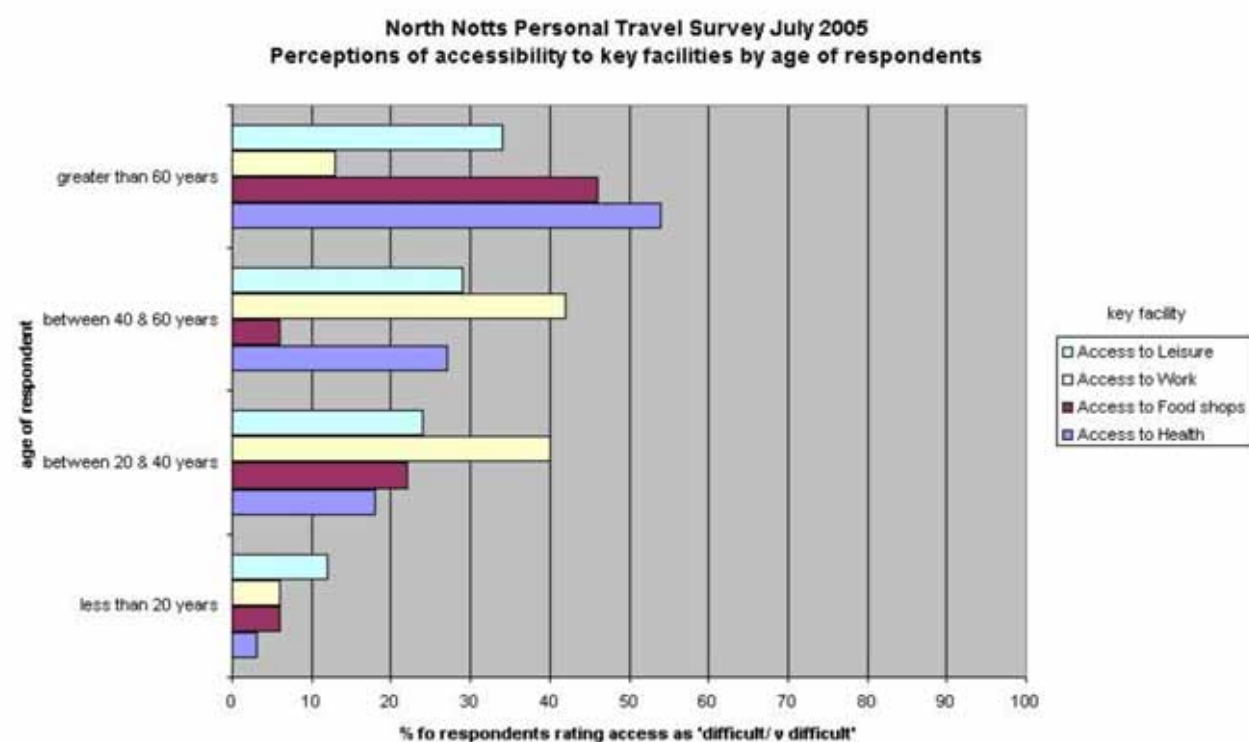


Figure 5.18

North Notts Personal Travel Survey July 2005
Perceptions of accessibility to key facilities by Socio-Economic classification of Head of Household

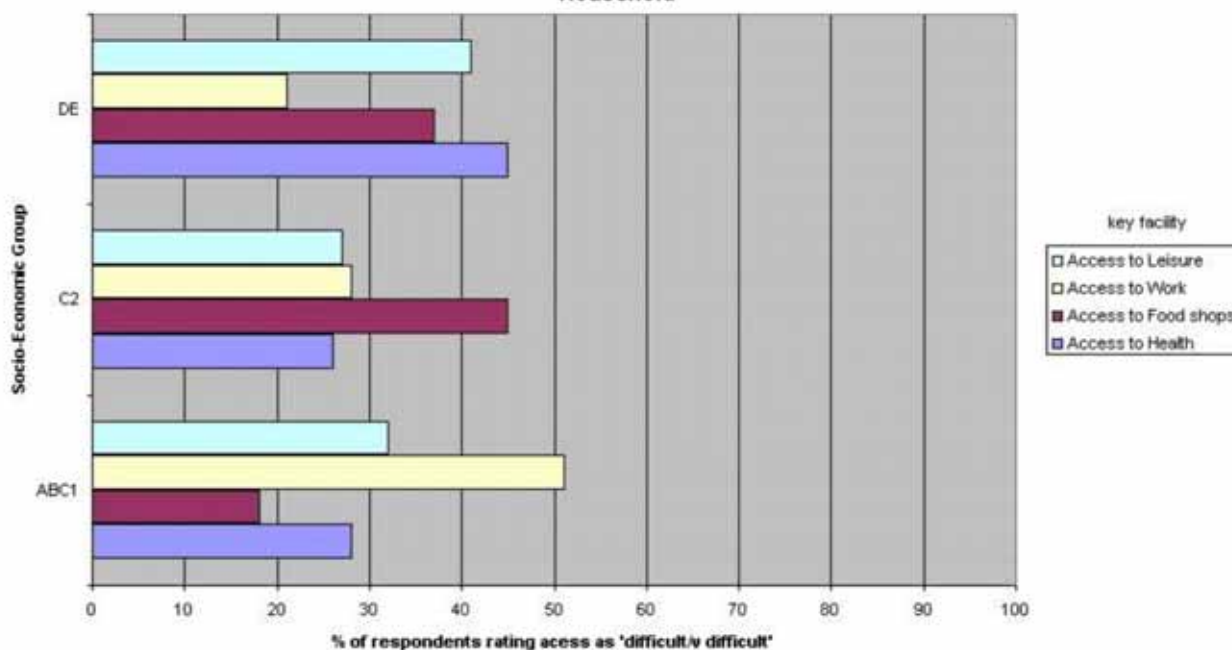


Figure 5.19

Further results of the survey, particularly in relation to each topic area are given in the next chapter.