The Ecology of

Food Deserts

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The candidate confirms that the work submitted is his own and that appropriate credit
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Abstract

The Ecology of Food Deserts

During the second half of the twentieth century there has been a transformation in the way groceries are bought in Britain. Global economic, social, and demographic trends have helped the supermarket, a shopping institution unknown in 1950s Britain, to gain over three quarters of the share of groceries bought in the UK in 2003. Accompanying this has been a major decline in the number of small neighbourhood shops selling groceries, and especially in those selling fresh fruit and vegetables.

Because many of the supermarkets have tended to locate in areas away from the residential districts where the smaller shops have closed, a new term, ‘food deserts’, entered the language in the 1990s. Lack of easy access to certain foods, the fruit and vegetables that the remaining local shops tended not to stock in any great variety or quantity, has combined with developments in technology, society, and the economy to reduce the dietary quality of many people. The poor, elderly, disabled, and other disadvantaged groups are especially affected, but the wealthy are not immune to this either. This lack of access can be seen as a problem of social exclusion for those affected, and there are wider costs imposed on society. A large part of those costs is related to health problems caused by a poor diet. There are also implications for crime, housing, neighbourhood sustainability, and transport. Those affected, and their families, may suffer psychologically too.

This research has investigated a variety of geographical areas and people from different socio-economic backgrounds to discover which groups food deserts may affect, and whether some groups might have been overlooked by earlier research. The multiple factors that may contribute to lack of access to a nutritious diet are examined in order to build a picture of what may cause food deserts, how people cope with their effects now, and what measures are possible, within the current economic climate of globalisation and neo-liberal governance, to alleviate or eliminate such food deserts. A classification of food deserts is proposed, and how this classification may be of use as a policy tool to alleviate food access problems.
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List of abbreviations
BOGOF = ‘Buy One Get One Free’. A common form of discounting at supermarkets
CPRE = Council for the Protection of Rural England
CTN = Confectionery, tobacconist, and newsagent shop. This shop may sell a very few grocery items but not enough to count as a small convenience store. See section 3.2.2.
DDA = Disability Discrimination Act, 1995
DETR = Department of the Environment, Transport, and the Regions
EZ = Enterprise Zone
FTE = Full Time Employee
GIS = Geographical Information Systems
HA = Housing Association
HWRCC = Humber and Wolds Rural Community Council
IT = Information Technology
LIPT = Low Income Project Team
LNL = Lincolnshire and North Lincolnshire
OFT = Office of Fair Trading
PPG = Policy Planning and Guidance. A series of planning guidance notes issued in 1996 by the then Prime Minister, John Major, with the aim of curbing urban sprawl into rural areas
RMI = Retail Monitor International
RPI = Retail Price Index
RPM = Resale Price Maintenance
RSA = Rural Shops Alliance
SRB = Single Regeneration Budget
TCM = Town Centre Management
WYPTA = West Yorkshire Passenger Transport Authority

Notes on the referencing system for interviewee quotes and locations
All quotes are sourced by a letter (A, R, or S) and a number. The letter refers to quotes from agencies (A), retailers (R), or shoppers (S). The number corresponds with that in appendices 4 to 6. For locations, the grid referencing system is used as marked on the edges of maps 1 to 6, Chapter Four. The letters LS refer to the Leeds/Scunthorpe map; the letters LN refer to the rural North Lincolnshire map. The numbers refer to the eastings, and then the northings, along the map boundary. This follows the Ordnance Survey convention for National Grid references.
Chapter One

What are Food Deserts and why are they important?

1.1. Origin of the term ‘Food Desert’

The word ‘desert’ has increasingly been used by human geographers to refer to a region lacking some facility that is considered important for people to have access to. The noun ‘desert’ once referred mainly to barren, generally dry, areas of land. However as a verb, ‘desert’ also meant to abandon someone or something, for example one’s wife, or the army. So ‘desert’ has always had a human, as well as a physical geographical, meaning.

Several urban geographers have used this meaning of the word ‘desert’. Baines (1973, p.3) wrote “the large suburban estates that are a recent feature of the townscape are epitomized by the regular rows of similarly styled houses that have earned for themselves the title of suburban deserts. They often lack the shops, churches, public houses and social centres that allow a community life to develop” (italics added). By 1973 Britain had lost about a fifth of the 500,000 shops it had in 1950. Davies (1988, p.20) wrote “the mobile well-to-do shop out of town; the less well advantaged are left with the declining facilities of the centre”. This urban use of the word ‘desert’ was further extended when on 6/9/99 the BBC1 6 o’clock news spoke of ‘Money Deserts’. These referred to areas of east London where the major banks had closed many branches, leaving local people without easy access to banking facilities. By the mid 1990s, when researchers began to use the term ‘food desert’ to describe the area or situation whereby some people could not easily access nutritious food, Britain had less than half of the shops it had in 1950. The decline in numbers of grocery shops had been even steeper, as many had converted to other retail uses. Meanwhile the supermarkets had made great advances both in numbers and in market share.

The term ‘food desert’ was reputedly first used by ‘a resident of a public sector housing scheme in the west of Scotland in the early 1990s’ (Cummins, 2002a, p.436). Cummins himself doubts the existence of many food deserts as reported by subsequent researchers in the late 1990s, because cheap supermarkets like the discounters often locate in or near poor areas. So Cummins casts doubt on the idea that the poor pay more for their food, or suffer a worse choice than wealthy shoppers driving to out-of-town superstores. However access problems to supermarkets can be considerable for some people even when the supermarket is only a few hundred metres from their
homes. Also, physical distance is not the only barrier to food access. The problems of purchasing food for a healthy diet are the result of a complex interaction between distance, mobility, food prices, cultural preferences, and lack of cooking skills.

In 1996 the Low Income Project Team used the term ‘food desert’ to describe “areas of relative exclusion where people experience physical and economic barriers to accessing healthy food”. The Observer, 13/9/98, p.11, said “many poor housing estates were left as food deserts by the closure of local food shops” and that in the few food shops left, prices were up to 60% higher than the supermarkets”. The Guardian II (17/3/99, pp.2/3) said “on the poorer estates of Coventry, low cost, good quality, food is not available to the poorest” and that these people “either have to shop at expensive local stores or pay for transport and lug small children for miles out of town and back with shopping”. These quotes suggest food deserts are closely linked with poverty, and that they may be a major cause of ill health. But what sort of poverty, and where, is linked to food deserts? Is it lack of money, of transport, of physical ability to access the shops, or lack of something else, that causes problems in accessing good quality food? These questions are discussed further in section 1.3. Section 2.4 looks at how other researchers in the 1990s have defined food deserts, and indeed whether they considered such a definition feasible, given the complex factors involved in this phenomenon. However, this research first looks at the costs imposed on society by the lack of a good quality diet for some.

1.2. The cost of a poor diet

For over 99% of our history, the biggest dietary problem faced by humanity was lack of calories. We have good physiological mechanisms to cope with this problem, still faced by many people in the Third World today. However, more efficient agriculture, better transport systems, and a general rise in wealth have created the opposite problem; too many calories in the diet. The cheap food available in the shops on the 'poor housing estates' referred to by The Observer (13/9/98, p.11) is rich in calories, but often poor in vitamins. Dieticians recommend that people should consume ‘five portions’ of fruit and vegetables a day, in fresh, frozen, or tinned form. These foods are often available locally on poor housing estates, but as processed foods, they may have high levels of

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1 Reported in the Health Education Journal (2000, p.138)
sugar and salt, and contain lower levels of vitamins than fresh food. People may also not consume fruit and vegetables even when locally available. A Mori poll in 2001 found that 6% of a sample of 11 – 16 year olds had eaten no fruit or vegetables in the past 7 days. Many dieticians recommend that ‘ready meals’ should be eaten with a side serving of vegetables, but for the consumer this would defeat the purpose of having something that is quick and almost labour-free to cook.

The primary health effect of a diet high in calories, sugar, and fat, is obesity. The same physiological mechanism that causes us to conserve calories in times of famine causes us to store them as fat in times of plenty. Levels of obesity have trebled in Britain between 1980 and 2002, and by 2002 17% of men, 20% of women, and 10% of children under four years old were obese. Obesity causes 30,000 premature deaths a year in the UK. Diseases caused by obesity include diabetes, heart disease, and cancer, which are long term and expensive illnesses. Coronary heart disease is one of Britain’s commonest diseases, and costs the NHS £10 billion annually. Salt, often found at elevated levels in processed foods, may contribute to high blood pressure, also causing heart disease; a high salt intake may also cause some cancers. Lack of fibre, which comes from fruit and vegetables, may cause colon cancer. Diabetes may cause other complications including blindness, kidney failure, and amputations. Although these ailments have other causes, including smoking, pollution, and stress, the NHS estimates that it spends £500 million annually on obesity-related illness. Adding other costs to the economy from obesity-related diseases, such as lost productivity and care costs, means the UK economy is losing £2.5 billion to obesity annually. For comparison, in 2002 total NHS spending in the UK was £59 billion, similar to the 2001 government income from VAT at £61 billion.

Vitamin supplements are added to foods such as bread and cereals, and pregnant mothers are urged to take Folic Acid supplements to prevent spina bifida in their child, and childhood leukemia, so actual vitamin deficiency diseases are fairly rare in the UK. Not all 'processing', i.e. tinning, freezing, etc. is bad. Modern techniques can preserve many of the vitamins. Paradoxically processed tomatoes can be healthier than raw ones because processing breaks down the cell walls and releases more lycopenes, chemicals that protect against cancer.

Reported in The Daily Express (7/11/01, p.22)

These figures are from the following newspaper reports: The Daily Telegraph (21/2/01, p.2), The Times (16/1/02, p.8), The Guardian (8/8/02, p.3)

This figure was given by a dietician in Leeds, and is in line with other reports in various media sources.

The medical costs of obesity to the UK appear to be rising sharply. In 1995/6 total UK medical costs from obesity were £1.7 billion (dietician, Scunthorpe), compared with the 2001 figure of £2.5 billion from The Times (16/1/02, p.8).
Lack of exercise contributes to obesity, and one cause of this is consumers driving, or taking the bus, to distant supermarkets rather than walking to local grocery stores. For the elderly, lack of exercise contributes to bone disease, and can exacerbate arthritis. Asthma levels have also risen in the UK. Asthma affects 3 million Britons and kills 2,000 a year; it costs the NHS £500 million annually. Air pollution and food additives may cause asthma, as well as a diet poor in fresh fruit and vegetables. Some traffic pollution will be due to increased car journeys to the supermarket, as well as food travelling further, due to the supermarkets’ centralised distribution systems.

Other medical problems caused by a poor diet include high blood pressure, gastric ulcers, kidney failure, and osteoporosis caused by a high salt intake. Poor diet can cause hidden, low-level ill health. In Bradford, West Yorkshire, a survey of 2,000 children under 5 showed that 43% had anaemia, due to lack of iron in their diet, and this was due to poverty rather than ethnic background. Another report said that 40% of the elderly and 15% of children are malnourished on arrival at hospital, which adds £300 million to NHS costs because recovery from illness or an operation is delayed. There may also be mental health problems associated with a ‘junk food’ diet, one that is low in fresh fruit and vegetables, lacking vitamins, but high in additives, fat and sugar. Hyperactivity in children has been associated with a junk food diet, leading to more juvenile delinquency, crime, and exclusions from school. The Daily Telegraph (3/2/03, p.7) reported “chips, pies, and sweets are to be taken off the menu at three British prisons during a study intended to reduce violence”. The size of these costs means that even if only a small part of them is caused by poor diet, bad eating habits are still costing the UK several billion pounds a year. The main obstacle here is political; it would take much longer than the 5-year lifespan of an elected government to see any payback on money spent on improving diet to reduce disease. This research examines if there are ways to improve the nation’s diet whilst allowing for financial and governmental constraints.

(21/2/01, p.2) also noted that treatment of diabetes, and all its complications, from all causes, cost the NHS alone some £5.2 billion in 2001, 9% of the total NHS budget. Lack of exercise has many causes, from the decline of PE at schools to the use of emails in the office, discouraging walking between desks. This sort of ‘micro-exercise’ added up during a day to several miles of walking, as did trips to the shops on foot. The small decline in calories used, without a corresponding decline in calories consumed, adds up over a long period to a considerable weight gain.

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9 Yorkshire Post (11/4/00, p.9)

10 Independent on Sunday (9/4/00, p.8)
1.3. The research questions

This research looks at three main questions concerning food deserts. Firstly, how did they develop? Section 1.1 noted that there has been a decline in UK shop numbers of two thirds between 1950 and 2000, and an even steeper decline in grocery shops. What caused this decline, and can lessons be learned from this for alleviating the effects of food deserts? Secondly, who is affected by food deserts? Definitions of food deserts in section 1.1 heavily implicated poverty, and access problems, but these can affect many different people in different ways. Can we distinguish and classify different types of food deserts? Do those affected live in discrete geographical areas, or do they form a scattering of households within ‘food-fertile’ districts? If there are different types of food desert, this will affect the third research question, what can be done to alleviate the effects of food deserts? Section 1.2 showed the potentially large financial costs of food deserts. There are also psychological costs, such as loss of independence amongst those forced to rely on others to buy their daily food. There are numerous economic and governmental constraints on what ‘can be done’ as opposed to ‘what it is desirable to do’, these constraints being moderated by the phenomenon of globalisation which is examined in Chapter Two. Interviews of governmental and NGO agencies show that affordable and practicable solutions to food deserts often lie in areas beyond the food retailing system. Recognition of cross-links between different policies in different areas is needed, and solutions are often better based on asking local people rather than imposing solutions from the top down.

1.4. Ecological comparisons

The term ‘desert’, in physical geography, can refer to a number of different ecological settings. The Penguin Dictionary of Geography\(^{11}\) says “the isohyet of 10 inches may be taken as a rough guide to the limit of desert climes, though in the far north of Canada and Siberia 10 inches is actually sufficient to promote forest growth. In some desert areas there may be 20 inches of rainfall, but it falls in violent thundery showers and is mostly lost by run-off”. This research examines whether similar variability exists in urban and rural food deserts. For example, could some areas with few food shops present less of a food access problem to the people living there than some areas with many more food stores?

\(^{11}\) 5th edition, 1974, pp.65/6
Different desert organisms have different strategies for coping with lack of water, and an unsuccessful strategy means extinction for that species. Cacti and camels hoard water, some arctic plants make do with very little water use, some rodents adapt their behaviour so as to be out cooler times of the day when water requirements are low; these species find a special niche. This research investigates whether analogous methods, or coping strategies, are used by businesses and households in environments of low cash flow, and also whether food deserts can also be found in cash-rich environments. The mobility and behaviour of an organism also determines its survival in a desert, as does the severity or frequency of attacks by exogenous factors like predators. Likewise the mobility of households and the geographical reach of businesses, and their attitude, as well as exogenous competition, may determine financial survival in a food desert. And like many endangered species, section 4.1.1. shows we have no exact idea of how many grocers or greengrocers shops still exist in Britain. For the third research question mentioned in section 1.3, an ecological parallel can also be drawn. It is vital to understand all the interactions in an ecological system before alterations to it are attempted, and likewise all the economic and other interactions in a food desert need to be studied before attempts can be made to ameliorate it.

In Chapter Seven a classification and mapping of food deserts is attempted. The problems of mapping an entity such as a food desert, or even a physical desert, which has no definite boundaries, only a rather artificial definition of the 10-inch isohyet, is alluded to by Smith and Mark, 2003. Concerning the mapping of another physical feature without a definite boundary, mountains, Smith says these are 'fuzzy' landforms with no real break in slope between a mountain and the plain it borders. Smith's aim was to help GIS users map such landforms, onto a medium (electronic) that demands definitive boundaries. The existence and boundary of 'mountains' or 'deserts' is an ontological one, a question of being or existence. In Chapter Seven a methodology of drawing boundaries for the fuzzy entity of food deserts is discussed.

1.5. The research approach

'Access', and the effects of poverty of various kinds on access, is a key determinant of whether a food desert exists. This research disaggregates the concept of 'access' into three other factors; 'ability', 'assets', and 'attitude'. 'Ability' means the physical capabilities of the consumer, how far can they walk and does this put them in reach of a food store, and what sort of food is available there? Can they physically board a bus, or
carry shopping home? At home, can they cope with opening food packaging and cooking the contents? 'Assets' refers to the money or possessions of the consumer. Do they have a car, or the means to pay for a taxi or bus fare? Do they have the means to store bulk food from a supermarket, such as a freezer? 'Attitude' refers to the cultural and mental processes that affect food access. It includes lack of cooking skills, preference for unhealthy foods, lack of time or inclination to prepare food, and cultural or ethnic barriers to consumption of food available.

1.6. The research structure

For car drivers, the shopping journey may seem like a simple one-stage return journey; out to the shop, and back again. Others however may face problems accessing good quality food. These problems can be appreciated by breaking down the entire shopping process, from leaving home to actually eating the food, into separate stages.

a) From the house to the front gate. Many persons are too disabled to manage this, and must rely on others or on remote ordering of their groceries. The right groceries are not always brought, and there is loss of independence.

b) From the front gate to the shops. This may be too far to walk, there may be no bus, the bus may not be useable by some disabled, the bus fare may be too high for some to afford. Fear of crime deters some from venturing out, and some women lack confidence.

c) Entering the shop. Not all shops are accessible to disabled, especially garage forecourt shops and small shops with steps to the door. Inside the shop, narrow aisles, goods bins in aisles, and other obstructions make getting to grocery shelves difficult for some disabled with wheelchairs or walking frames.

d) Selecting the food from the shelves. Labelling may be hard to read for the partially sighted or for those with poor English. Some ethnic minorities have strict dietary laws and labels may not give sufficient information about the ingredients used. Even deaf persons may have difficulty with some labels, if complex language is used, because sign language is different in syntax from English.

e) Picking the food from the shelves. For some elderly and disabled, certain shop shelves are too high or too low.

f) Taking the food from the shelves to the till. Supermarkets may only sell large packages that are too big for lone pensioners to carry, or to use up before the sell-by date. Smaller shops provide hand-baskets, not trolleys. These are hard to carry for those with arthritic hands. Mentally disabled persons cannot always cope with the shopping process alone.
g) Transporting the shopping home. If there is no car, the shopping may be too heavy to carry on foot, or on and off a bus.

h) Unpacking and storing the food at home. This may be difficult for some elderly or disabled, and many poor retired persons have insufficient space for the large pack sizes from supermarkets. Smaller sizes cost relatively more, so often the poorest and elderly pay more for their groceries.

i) Removing the food from its packaging and cooking it. Arthritis sufferers may find this difficult, and many persons lack the cooking skills to prepare and cook fresh vegetables. Some cash-rich but time-poor households do not have the time to cook.

j) Eating the food. Children, for example, may be prepared healthy food by their parents but have prejudices against eating it, preferring less healthy items such as crisps or sweets.

The comments made by many of the respondents on the access problems faced by some in the shopping process have been discussed under one of these ten stages. Access problems and coping strategies occurring at each of these ten stages provides a basis for a classification of different types of food desert, with different remedies for each.

1.7. Area of the research

Two areas were chosen for this research, Leeds, and North Lincolnshire, including the town of Scunthorpe. This gave a variety of settlement sizes from the major regional city of Leeds (population 727,000)\(^{12}\) and the town of Scunthorpe (population with Bottesford 70,000), down to very small villages. It also included some small market towns such as Brigg and Kirton Lindsey. Both Leeds and Scunthorpe have a mix of wealthy and poor suburbs, and several ethnic-minority communities. Scunthorpe and the surrounding rural area constitutes a fairly self-contained market area. The nearest comparable towns, Doncaster and Grimsby, lie 40 kilometres west and east respectively of Scunthorpe. The River Humber to the north is a significant barrier to travel, and public transport links south from Scunthorpe are poor. The next major town to the south, Lincoln, is also 40 kilometres away. The Meadowhall regional shopping centre, near Sheffield is accessible by bus, car, or train from Scunthorpe, but is over 70 kilometres distant and is used more for comparison goods than food shopping. A more detailed discussion of the economic, social, and retail characteristics of these areas, is found in section 4.7.1.

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\(^{12}\) Figure for 1996, from The Statesman’s Yearbook (2000, p.1585)
1.8 Brief summary of Chapters 2 - 8

Chapter Two reviews the circumstances that led to the phenomenon of food deserts, the shift in UK grocery retailing from local shops to supermarkets. It then reviews the literature and research done so far on food deserts and associated topics. Chapter Three details the methodology of this research. The fieldwork had four components. The food shops were mapped in the two research areas. Then three categories of respondents were interviewed. Households, for their shopping habits, shops of different types, from small convenience stores and specialist food stores to large supermarkets, and various agencies relevant to access to shops. Chapter Four looks at the supply side of grocery retailing. It details the results of the shop interviews and shops mapping, which was done in 1999 and repeated in 2002 to see how retail facilities provision in the research areas has changed. The causes of small shops closing are covered here, as are opinions on the importance of small shops and supermarkets. This chapter then looks at ways in which shops can help themselves to remain open, and at what outside help is now available for maintaining retail provision. A possible classification of food deserts is introduced here. Chapter Five examines the demand side of grocery retailing, as revealed by interviews with shoppers and agencies. This chapter reveals a number of groups who may not be thought of as suffering access problems to grocery shopping do in fact have such problems. These include carers and women with children, one-car households, some racial minorities, and wealthy professionals. There are also seasonal food deserts, where grocery provision is varies at different times of the year. Chapter Six is an analysis of the interview data from Chapters Four and Five, in the light of the changing provision of retail grocery outlets shown by the shops mapping. The different comments from the various respondents are brought together to create an overall picture of the ecology of food deserts. Chapter Seven covers the initial conclusions from this research. The advantages of classifying food deserts into different types are considered, as this allows for different policy solutions to be considered for each type. The likely effects of current initiatives in improving grocery access are considered, and also what new initiatives may be necessary, allowing for any financial and governance restraints imposed by globalisation. The developing grocery retail situation overseas is also considered. Chapter Eight looks at the possible future for food deserts, and how a classification of food deserts could be used in Britain and abroad.
Chapter Two

A review of supermarket development, the effects on local retail access, and previous research on these effects

2.1. Introduction: why (retailing) history matters

Henry Ford, the US car maker, famously said ‘history is bunk’. Those running modern global retail companies such as Wal Mart, keeping up with the latest fashions, anticipating more growth, may be tempted to agree. However in understanding social phenomena such as food deserts that are related to the growth of such companies, an understanding of the relevant history is vital. The term ‘food desert’ may be only around a decade old but its origins go back to retailing developments in early twentieth-century USA. Not only retailing innovations, but a wide range of demographic, economic, technical, social, and governmental developments over the past decades have come together to produce ‘food deserts’ in Britain. Small shops have been in decline since around 1950. As section 2.4 shows, this became of concern to the public, to policymakers, and to academic researchers, in the 1970s; first in rural areas, then in cities too. By 2002, research had been carried out in a wide variety of venues in the UK and in other countries (sections 2.4 and 7.6). To understand the background to this earlier research, why the focus began with rural areas and shifted to cities, why there were links with social exclusion, indeed why certain methodologies were used in the earlier research and in this research, one needs to examine the underlying factor that brought ‘food deserts’ about. That is, the enormous success of the supermarket as a retailing institution, both in Britain and worldwide.

This chapter therefore begins with a review of the circumstances, economic, social, and other, leading up to the introduction of supermarkets to British shoppers. Section 2.3 then examines how supermarkets have expanded their market share, at the expense of corner shops. Section 2.4 then reviews the existing research on this topic; the changing focus of the research, who was researching this and why, and what methodology they used. Chapter Three reviews the methodology of this research, and Chapters Four and Five then use the results obtained by this methodology to work towards a possible classification of food deserts. A comprehensive classification of the different types of food desert found in Britain has not so far been attempted, and this research attempts to produce such a classification, and show how this could then be used as a policy tool for those seeking to alleviate the effects of food deserts.
2.2. The origin of supermarket retailing in Britain

2.2.1. From fairs to the peak of the ‘corner shop’

The word ‘shop’ derives from the German ‘schuppe’; a shed where goods were made. This meaning is preserved in the terms ‘shop floor’ and ‘workshop’, the production areas of a factory. The ‘schuppe’ was where goods were produced for sale in travelling fairs. By around 1700 ‘schuppes’ began selling goods directly from these premises (Pain, 1967, pp.6/7). This formed a peripheral area of retailing to the fair in the market place but shops were later set up in the market place itself. From the late 1700s the Industrial Revolution made many farm workers redundant. They migrated to the cities to find work in the new factories. From having been self-sufficient in food, and perhaps other commodities too, they were now living in cramped terraced housing and for the first time the needs of many workers were completely divorced from what they were making for a living. Shopping habits changed, from a weekly visit to the fair; to a daily trip to the local ‘corner shop’ for their food and other needs (Davis, 1966, p.299).

Apart from grand civic buildings, and new roads driven through inner city slums, there was little urban planning in eighteenth and nineteenth century Britain. Worker’s terraced housing was built cheaply, with few facilities because these took up space where more houses could be built. The same laissez-faire attitude extended to property use; houses were converted to shops on the whim of the owner, no planning permission was needed (Davis, 1966, p.300). Premises where many people passed by, on main streets or on suburban street corners, were most likely to change from residential to retail use. As Ashby, Scunthorpe, grew from a village to a suburb between 1900 and 1960, what were terraced houses shown in a photo dated 1955 have now become shops on Ashby High Street (LS,65,09). House to shop conversions have become very rare since the 1970s, due to the dominance of the supermarkets and rising house prices. The conversion is now almost always the other way, from shop to house.

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13 Photograph in the Scunthorpe Telegraph (20/8/1999, p.8)
2.2.2. Globalisation, and the start of self-service shopping

1950 was about the peak of the small 'corner shop' in Britain. After this date, small single-premises declined, for reasons covered in Chapter Four. But the nemesis of many corner shops had begun in 1916 when the world's first self-service store, the Piggly Wiggly store, opened in Memphis, Tennessee (Falk, 1997, p.65). In 1922 a second out-of-town mall opened at Kansas City, the Country Club Plaza (ibid, p.98); the third such mall was at the Highland Shopping Park, near Dallas, Texas. The Dallas centre was the first centre based on a pedestrian mall rather than large stores arranged around a car park. This was the start of the standardised shopping experience provided by many supermarkets today.

Economic production in the US was also becoming standardised, in contrast to the batch production from individual craft workshops prevailing in Britain. In the mid-nineteenth century the US Army had instituted 'armoury practice' in its small arms factories (Pursell, 1994, p.98). This meant a rifle, or its components, produced in any US factory, was interchangeable with the same item from any other US factory. This production method spread from military to civilian factories and was the origin of Taylorist and Fordist work methods. Companies in the US exploited large economies of scale and could set up a virtuous circle of larger production leading to more economies of scale leading to cheaper prices. Larger companies also acquired buying power. Once a company starts buying a significant proportion of the output of a producer further up the chain, the customer company begins to acquire monopsony power and can force the producer to sell at a lower price. A large retailer could also build a strong brand presence, both physically on the landscape (as with Macdonald's Golden Arches), and more importantly in customers' minds as they repeatedly saw the same shop fascia in every town.

An important innovation in US shops was self-service. Customers liked self-service retailing because they felt less sales pressure in a cleaner and brighter shopping environment. However the store operator gained a major economic advantage because fewer staff were required for a given sales volume. The personal element was stripped out of selling, and the shop became an assembly line for purchasing, with the customer doing the work of bringing standardised goods to the till. Car ownership rose in the US in the opening years of the twentieth century. This made possible the opening of the world's first out-of-town shopping mall, also in 1916, at Lake Forest, near Chicago (Marshall, 1995, pp.65,178). By 1950 mass US car ownership had facilitated a flight to
the suburbs by the wealthy, and US city centres were not only less accessible to the better off, they were also undesirable places to go anyway because only the poor were left near these centres and fear of crime together with run down shops was unattractive to the new mass-consumer rich.

Edward Bernays, nephew of the famous psychologist Sigmund Freud, also helped, in the 1920s, promote today's consumer society. Adapting his uncle's thoughts on the nature of human psychology for commercial (and political) ends, he believed that human nature, human emotions, were essentially animalistic. He realized these emotions could be used to sell consumer goods, to satisfy such emotional needs. His first success was to market cigarettes to women in the 1920s, who then did not customarily smoke. Women of the 1920s did desire the vote, and Bernays suggested marketing cigarettes to women as 'torches of freedom', symbols of equality with men. Bernaysian techniques are applied to many goods today; for example, cars as symbols of freedom, or ice cream as a sexual food. This facilitated the expansion of demand for goods, by converting luxury, goods, 'wants', into must-have 'needs', without which the consumer would feel personally unfulfilled. As disposable income has risen for many through the twentieth century, Bernaysian marketing has channelled this income into many 'luxury' retail outlets, from suntan parlours to hairdressers, from home makeover DIY outlets to travel agents and beauty shops. This change of function of the retail parade, as many staple food stores have closed, is discussed in section 2.2.4.

2.2.3. The arrival of USA retailing innovations in Britain.

The lower rate of car ownership in Britain, and the worse state of the UK economy through till the 1950s, due to two World Wars, delayed the arrival of retail innovations such as self-service and out-of-town malls in Britain. In 1960 the US had over 300 cars per 1,000 people, compared to 110 in the UK (Birkin, et al 2002, p.9). War damage to the UK economy meant rationing persisted until the 1950s, and a lack of disposable income meant the absence of economies of scale that would have attracted major retail investment. The UK also had 'Resale Price Maintenance' (RPM), protecting small shops by forbidding large retailers from selling goods below a certain price. Therefore UK shopping stayed closer to town centres than did contemporary USA retailing. UK out-of-town retailing has made great advances since 1970, but the abandonment of US cities by conventional retailing and services has not occurred to
such a great extent in the UK. Many of the larger UK shopping centres have successfully reinvented themselves as specialist retail and tourist centres (Cannings, 2001, p.304, Williams, 1992, p.285). Leeds city centre is vibrant despite the White Rose Centre 5 kilometres away. British town planners supported city centre shopping, such as Arndale Centres, rather than out-of-town retailing, to maintain access for those without cars (Wrigley, 1988, p.11).

These factors explain why Britain only acquired its first self-service store in around 1950. The first UK store to offer self-service was either Sainsbury in St Albans or Tesco in Croydon; each corporate website claims its store was first. By 1960 self-service operated in 7,100 UK stores, and in 15,690 by 1964 (N Wrigley, 1988, p.15). Self service arrived in the less wealthy areas last of all; the last Sainsbury store to offer counter service was their Peckham branch, south London, which closed in 1982. The first UK out-of-town mall opened at Wilmslow, Cheshire, in the early 1960s, built to attract “mobile two-car households” and “Manchester business people” (Stacey, 1965, pp.192/3). The second mall in the UK was Brent Cross, opened in 1976. Retail analysts in the late 1970s did not think that further UK out-of-town shopping centres would be built, saying “the out-of-town shopping centre has failed completely even to secure a foothold in the United Kingdom” (Wrigley, 1988, p.358). Meanwhile Sir Jack Cohen, founder of Tesco in 1919, was lobbying the UK Parliament for the repeal of RPM, which was in fact eliminated on most goods in 1964. By 1979 the UK economy was beginning to fulfil some of the key conditions that had facilitated the retailing changes in the USA sixty years earlier; rising car ownership, less restrictive retail pricing laws, and greater consumer spending power. The period after 1979 was to be crucial for supermarket penetration into Britain.

2.2.4. Globalisation, Thatcherism, and the increase in inequality in the UK

The UK recession of the later 1970s had several causes; one was the decline of British manufacturing. Especially hard hit were the old ‘heavy’ industries of coal, steel, shipbuilding, metal processing, and chemicals. Industrial sites of tens or even hundreds of hectares a few miles out from the centres of Britain’s old industrial cities were

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14 Information about Bernays is from The Guardian’s website; www.guardian.co.uk/columnists/column/0,5673,676703,00.html.
15 An article in ‘History Today’, 11/02, pp.34/5, claims that the Co-operative introduced self service in a London store as early as 1942 and that by 1947 there were ten self service grocery stores in Britain. But these dates are not confirmed in other literature.
abandoned. The Conservatives, under Mrs. Thatcher declared these tracts of dereliction to be Enterprise Zones (EZs) where economic growth was prioritised. There were few planning restrictions on land use. There were tax breaks and other financial incentives for companies setting up on the EZs such as ten-year rates and rent ‘holidays’ (Guy, 1994, p.300). Initially retailing activities on EZs of the early 1980s were mostly carpets, furnishing, and DIY stores; uses requiring large showrooms that would have been costly in town centres. But towards the end of the 1980s large supermarkets and High Street ‘anchor stores’ such as Marks and Spencer, John Lewis, Laura Ashley, and Habitat, moved to these out-of-town centres (The World in 1987, p.115). These major changes in retailing were portrayed by Nicholas Ridley, Conservative Secretary of State for the Environment in the 1980s, as simply bowing to the irresistible tide of international economic competition. Mr. Ridley said, concerning the growth of out-of-town retailing, “It is a bigger force than I. It is a mistake to say that I can stop it or that it can be stopped. I don’t think it can be stopped with the powers the government has”, (Davies, 1988, p.8). Not that Mr. Ridley would have wanted to stop it anyway. Thus the political development of Britain during the 1980s and 1990s favoured the growth of the supermarket; a form of retailing practically unknown to Britons a generation earlier.

As global communications improved, companies sought out areas of low wages and taxes. Governments had to reduce corporate taxes. This corporate hyper-mobility included what Sklair (2002, p.40) calls the ‘trans-national global elite’; well paid key workers including company directors, research staff, top media and advertising personnel, who could domicile anywhere. This created a tax shortfall for the UK government, faced with both a shrinking corporate tax base and rising government spending on items like Unemployment Benefit. UK unemployment rose from 0.5 million in 1973 to a peak of 3.1 million in 1986. The number of pensioners was also rising, creating an increase in the ‘dependency ratio’, the numbers of pensioners per worker, as UK demography changed with better health care, longer life expectancy, and a falling birth rate.

This tax shortfall was solved by the Conservatives in several ways that directly affect the food desert situation in the UK today. Healthcare and pensions were effectively ‘privatised’, as the tax regime shifted to encourage people to take out private provision, whilst the relative value of the State Pension declined by being fixed to prices, not wages. Pensioners on the State Pension were denied any rise in the national living standard. The basic State Pension in Britain was £27 a week in 1975, 21% of national earnings, but by 2000 the State Pension of £67.50 a week was just 16% of national
earnings (Daily Telegraph, 30/9/00, p.3). Had the former link with earnings been maintained, the 2000 State Pension would have been £97.20 a week. Some pensioners living standards fell behind the rest of society, and these were the already poorer workers whose employer did not provide a pension scheme and were not paid enough to start a private pension themselves. Pensioner poverty was worsened by the reluctance of many pensioners to claim State Benefits. There was a culture of shame associated with claiming from the State, and long, complex forms associated with means-tested Benefits put off many pensioners.

UK tax policy since 1979 has shifted from direct (income) taxes to indirect (purchase) taxes such as VAT. This widened inequality because the poor spend a greater proportion of their income; the rich save a greater fraction of theirs. The Gini Coefficient for the UK, a measure of inequality, rose from 0.25 in 1979 to 0.34 in 1990, and stayed at that level till the New Labour election victory of 1997. Between 1997 and 2000, under New Labour, the Gini Coefficient actually rose further, to 0.35, though it marginally reduced again in 2001/2. Poor neighbourhoods lost spending power because of these tax rises, and many local shops closed. UK taxes rose especially steeply on cigarettes and alcohol. This hit small convenience stores who rely on these goods where their profit margins are higher (section 4.2.3), as sales were lost to cross-Channel smugglers. Local pubs lost out also, as imported beer was drunk at people’s homes. The closure of pubs was further erosion of the institutions that knit together a community, something local shops are an important part of (section 4.6.1). Another policy of the Thatcher Government was the ‘Right to Buy’ council houses by their tenants. This was to generate money for local authorities, so saving money for central government. It was also meant to increase the Tory vote by creating more home owners. The nicest houses went first, generally those in small estates in villages. Rising car ownership raised the mobility of UK society, and many villages became dormitory settlements for car-owning executives whose work and shopping life was still geared to the nearest town. Rural local stores lost trade and closed. This decline in rural facilities is discussed further in sections 4.1.4. and 4.7.1. Section 2.3.2. discusses how the research on declining retail facilities was once focussed on these rural areas.

UK poverty was also exacerbated by a shift from State help to charity-based help, what Wolsch calls the ‘Shadow State’. Charity may replace state help initially but as tax rates for the rich fall, so do charitable tax breaks. Global competition and shareholder pressure for higher returns may curb charity donations by companies. The Guardian (4/12/00, p.11) noted that in the 1990s the medium sized charities, with a local-poverty
focus, suffered the biggest drop in income, as they were squeezed by the marketing of larger national charities, often medically-oriented. A rise in deontological ethics in the governance of the UK meant the poor were increasingly seen as to blame for their own situation, (Dean, 1999, p.1032), rather than expect State help. The State was to be coercive, not supportive, a shift from Keynesian welfare to Schumpeterian workfare. This militated against support of retail facilities that the poor had access to; a different ethos from the planners' support for Arndales in the 1970s. However increasing inequality meant rising disposable income for some. Credit and money flows were deregulated, making it easier and cheaper for investors to shift funds across continents, a process helped by computers and electronic money flows. The already-rich, those doing the most investing, saw investment opportunities grow and their wealth increased (Hutton, 1995, p.72). Haberberg (2001, p.662) stated that overall UK disposable income rose by 30% between 1960 and 1970 and by 72% between 1960 and 1980.

Leisure spending grew in the UK, on things like tanning, sun beds, gyms, and hairdressers. The Yorkshire Post (9/10/01, Business section, p.10) reported “In 1999 the average UK household spending on entertainment exceeded household spending in groceries for the first time in recorded history”. The UK was only the second country to pass this milestone, the USA being (unsurprisingly) the first, in 1994. The same Yorkshire Post article had a map showing the ratio between entertainment and grocery spending per household showing a general correlation between wealth and higher entertainment spending. Rural North Yorkshire, the villages north west of Hull, the rural areas west of Sheffield, and the villages surrounding Grimsby, were areas where entertainment spending exceeded grocery spending by 10% to 40%. Conversely, entertainment spending fell short of grocery spending by between 10% and 30% in the southeastern suburbs of Leeds, northern Scunthorpe, and the former pit villages between Doncaster and Barnsley. Shops follow fashions and trends, hence the rise in frozen food stores as frozen and pre-cooked meals have become popular, see section 4.3.1. If a good or service is ‘in fashion’ the retailer supplying it will be able to bid more rent for a shop unit and will displace other uses. Financial services shops mushroomed in the 1980s, as did computer shops in the 1990s, and mobile phone shops around 2000. As the business climate of the 1980s and 1990s favoured entrepreneurs opening small businesses, and as larger businesses hived out non-core functions, demand for retail space by various business services such as solicitors, accountants, designers, and others rose.
These new retail uses occupy many units that were once grocery shops. However the presence of empty shop units suggests there is still a surplus of available retail space and these uses did not contribute to food deserts by displacing grocery stores. On the contrary, a variety of uses on a shopping parade may help food shops to survive. However the rise of the 'pampering of the self' as pioneered by Bernaysian marketing leads to an atomisation of society, the rise of individualism and individualistic consumption (Bauman, 1998, p.30). Subjic (1992, p.25) wrote “the city is as much about selfishness and fear as it is about community and civil life”. Conspicuous consumption, fuelled by 'relentless advertising' (Bauman, 1998, p.40) aimed at the rich, leaves the poor as ‘flawed consumers’ who, in a deontological world, fail through their own fault to fully support and participate in modern life. As Mrs. Thatcher famously put it “there is no such thing as society”. This has implications for crime and the closure rate of local shops (section 4.3.3).

Another policy of the Conservative administration (1979-1997) relevant here was to considerably curb the autonomy of local authorities. This was done both in financial and operational areas. This continued a process of removal of functions from local to national government, which began in 1945 under the Labour administration of Attlee, with the transfer of hospitals, gas, and electricity to Westminster. Since World War Two, local government has been seen as “agents of central government which should act in accordance with the political will at the centre”, (Cullingworth, 1988, p.33). The Thatcher government also placed spending limits on local authorities, forcing them to sell off surplus land, as well as their council house stock under right-to-buy. Some of this land was now open to use as out-of-town retail parks.

2.2.5. The silencing of local communities

Globalisation, the growth in size and power of the large corporations, has also tended to silence local communities. Atkinson (1999, p.62) wrote "More powerful organisations will set the context within which other organisations function. The power to do this may derive from a combination of political or bureaucratic authority, or in the case of globalisation, economic power". These powerful agencies than have what Bourdieu (1991 p.141) called the 'power of naming'. The word 'regeneration' comes to be seen as economic regeneration, not the alleviation of poverty. Bourdieu gives the example of the 'regeneration' of the Kings Cross area of London where the Thatcher government steered funding away from areas of need towards areas of economic potential. This
change of outlook may lead to a fear of the poor as an 'underclass', something apart from the economy and therefore to be distrusted and avoided. This loss of voice led to what Atkinson (ibid) called 'self-censorship of the poor'. Anticipating failure, the rejection of their argument by well-trained advocates of the economic development side, the community keeps silent. "The mere existence of community representatives is not enough to guarantee the community has a say (Atkinson, 1999, p.67). "Any debate between agencies as to whether to preserve facilities such as allotments for the community or to use them for building land will be circumscribed by higher level discourses such as economic efficiency" (Atkinson, 1999, p.62).

Allotments can be an important source of fresh vegetables for those unable to access them from local shops. However allotments are not a financially effective use of land. Allotments in Dartford, Kent, were let at £25 a year, well below the £2,000 a year the council could have obtained from them in land values and council tax receipts. The Scunthorpe Telegraph (9/9/02, p.5) reported that development land fetched “£250,000 to £300,000 an acre” whereas a 300 square yard allotment was charged at £15 annual rent. £15 a year capitalised at 2002 interest rates (3.5%) would be a lump sum of £429; 300 square yards at £275,000 an acre was worth £17,000. Allotment land in Scunthorpe in 2002 had a value forty times greater if it was developed as housing. In Dartford the difference was a factor of eighty times. Using allotments as building land may avoid the use of greenfield sites, but may result in higher health costs in the future. The role of allotments as a community resource to alleviate food deserts is further considered in section 5.9.

2.2.6. Demographic changes in Britain

Changes in Britain’s age, family, and ethnic structure are linked to the development of food deserts. Work hours have tended to lengthen in Britain since 1980, although we work shorter hours than a century ago. The UK has the 1998 Working Time Regulation Act stating that employees should not normally have to work more than an average of 48 hours a week over any 17 week period. However this is exceeded by an estimated 4 million UK workers, 1 in 6 of the workforce (Leeds Metro, 14/8/02, p.2). Some 95% of

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16 The term 'underclass' was coined by Gunnar Myrdal in 1963 to describe those excluded from work due to deindustrialisation. By the 1990s 'underclass' had come to mean criminality, the feckless who didn't want to work, single mothers, state benefit scroungers, environmental protestors, etc. In other words, not those who lost work through an economic process that wasn't their fault, but those who deliberately 'chose to lose their jobs'.


UK [full-time] workers work longer than the standard 37.5 hour week, and the UK has the longest work hours, at 43.6, in the EU. In many households, both partners work, probably to meet high housing costs, and this means less time for cooking and more consumption of ready meals. The number of pensioners in the UK has risen sharply over the twentieth century. In 1901 the UK had 1.6 million persons aged between 65 and 74, and 0.85 million aged over 85. In 2001 these figures had become 5 million aged between 65 and 74, and 2.1 million aged over 85. By 2060, the UK is projected to have 7 million aged 65 to 74, and 2.9 million aged over 85. This increase in pensioner numbers is shown below in Figure One. All these factors increase the number of people living alone. The 2001 Social Trends showed that 1 in 10 men aged under 65 lived alone, three times the proportion in 1970. Single pensioners are especially vulnerable to isolation from services, especially if they can no longer drive a car. Mothers may be ‘disabled by children’ (section 5.3). Many wives have no car during the day because their partner has taken it to work; and other family members are more likely to live too far away to help with household tasks like shopping as society becomes more mobile. In 1971 in England and Wales, 3% of households consisted of a single man under 65, and 2% were a single man over 65. A further 5% of households were a single woman under 65 and 8% were a single woman over 65. Total single households in 1971 were 18%. By 2021 it is expected that 13% of household will be a single man under 65, 4% a single man over 65, 8% a single woman under 65, and 9% a single woman over 65; total single households 34%. This increase in single-person households is shown below in Figure Two.

Figure One. UK Pensioner numbers of various ages, 1901, 2001, and projections to 2060 (millions)
Another demographic change is the growth of ethnic minority communities in Britain. World War Two labour shortages caused major immigration of African and Asian communities and London Transport in 1948 actively sought Jamaicans to fill posts. This was the start of many of the ethnic-community districts in British cities today. The role these have in the existence of Food Deserts is explored in section 5.10. The next section here now looks at the growth of supermarket retailing in the UK against the background of these socio-economic changes.

2.3 The growth of the supermarkets in Britain.

2.3.1. Current definitions of a supermarket

There is no clear distinction between various shop types (section 3.2.2) but shops of under 200 square metres are generally classified as convenience stores and those of over 400 square metres may be classed as small supermarkets. The following definitions are taken from Guy (1996, p.1568), Jones (1988, p.146-8), Tanburn (1981, p.15), and The Guardian (14/1/99, p.16). All figures refer to the sales area only, and definitions given in square feet are converted into square meters at 10 square feet = 1 square metre. Jones defines a convenience store as being between 50 and 300 square metres. Tanburn recognised an intermediate category of ‘superettes’ of around 400 square meters. Tanburn, Guy, the Unit for Retail Planning Information, and the Institute of Grocery Distribution, all defined a supermarket as having over 2,500 square metres, and a hypermarket as being over 5,000 square metres. The Guardian (ibid) talked of future ‘gigastores’ of over 10,000 square metres, or one hectare, which may be built with their own housing estates. These would be a new sort of company town,
based not on work but on consumption. Or such 'consumption towns' may be created by default as a supermarket in a particular suburb becomes the only shop in town, the smaller convenience stores nearby closing down.

2.3.2. Increase in numbers, size, and geographical coverage of supermarket outlets

Section 2.2.2. detailed the benefits to a company of growing larger; economies of scale, greater buying power, and, for retailers, a dominant brand that would capture public purchasing habits. This can be achieved by building more outlets, and ploughing back the resultant economies of scale into still more outlets, and so on, setting up a virtuous circle of growth. Because definitions of supermarkets vary, different sources from different years do not always tally.

Table One approximate numbers of supermarkets in the UK at five-yearly intervals.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>1960</td>
<td>0</td>
</tr>
<tr>
<td>1965</td>
<td>1</td>
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<tr>
<td>1970</td>
<td>16</td>
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<td>1975</td>
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<td>1980</td>
<td>280</td>
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<td>1985</td>
<td>400</td>
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<td>1990</td>
<td>775</td>
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<tr>
<td>1995</td>
<td>1,000</td>
</tr>
<tr>
<td>2000</td>
<td>1,200 (1,500 – 2,000 including the smaller format Metro and Local stores).</td>
</tr>
</tbody>
</table>
Figure Four illustrates the rapid increase in supermarket numbers in the UK during the late 1980s, followed by slower growth in the 1990s.

Figure Four. Supermarket numbers in the UK 1960-2000

The slower growth in total supermarkets in the 1970s compared to the 1980s reflects a balance between opening of larger stores but closure in the 70s of many inner-urban smaller supermarkets. By 1980 most of these smaller stores had already been closed, whilst new out-of-town store openings continued. In the late 1990s out-of-town openings slowed due to planning restrictions and because many suitable sites were already developed. Langston et al (1997, p.100) wrote that by 1997 the major supermarket chains had established a site in most major UK towns and that by early in the 21st century every UK town of over 50,000 people will have four superstores. Because of this saturation, there has been a return by the supermarket chains to smaller urban sites such as the Locals and Metros (section 2.3.7). The growth of number of outlets of individual supermarket operators is detailed below. Growth was both organic, by individual store openings, and also by takeovers.

Asda, (www.asda.co.uk, accessed 26/3/03) grew from 65 stores in 1982 to over 100 by 1995. In 1991 Asda bought 61 stores from Gateway, but there was some rationalisation and closure of smaller stores. Asda’s 229 stores were taken over by the US company Wal-Mart for £6.72 billion in 1999. By the end of 2002 the Asda name, retained in the UK, was on 259 stores. By 2005 Wal-mart hopes to add a further 110 UK stores (Yorkshire Post, 21/2/01, p.16).

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17 Sources of these figures: Burt, 1997, BBC1 Panorama, 10pm 23/11/98, Daily Express (12/1/00, p.6)
18 Sources of these figures: Burt, 1997, BBC1 Panorama, 10pm 23/11/98, Daily Express (12/1/00, p.6)

Sainsbury, (www.sainsbury.co.uk, accessed 26/3/03) which began as one shop in London in 1869 (Tansey, 1996, p.126), had 48 shops by 1900 in London and the South East. By 1994, the year Sainsbury opened its first French store (Calais), it had 384 supermarkets, including 10 large Savacentres, of area 9-10,000 square metres. The first Savacentre, 7,000 square metres, opened in 1985, and by 1996 the average size of a Savacentre was 8,500 square metres (Burt, 1997, p.7). By 2002 Sainsbury had 479 stores in the UK. Sainsbury’s international growth included the takeover of the 87 Shaw supermarkets in the northeastern USA. However such expansion is vulnerable to political events. In 2001 Sainsbury had to pull out of Egypt because it was seen as too pro-Israeli, in the escalating days of the Intifada, as it faced Arab attacks and a boycott of the store (Guardian 10/4/01, p.21).

Tesco (www.tesco.com, accessed 26/3/03) began as a market stall in east London in 1919. It had 400 UK stores by 1959 and 790 stores in 1972. During the 1970s and 1980s Tesco, like other supermarket operators, closed many smaller stores, mostly in inner city areas. Tesco took over the Victor Value chain in 1986 and Hilliards in 1987, gaining 40 new premises in total, but ended the 1980s with less total outlets than it had in 1980, because of store closures. Between 1974 and 1983 the total number of Tesco stores fell from 771 to 369 (West 1988, pp.39/40). Of the 518 Tesco stores of under 500 square metres in 1972, just 190 remained by 1980. At the opposite end of the size scale, Tesco’s first ‘Extra’ format hypermarket, of around 10,000 square metres, opened in Pitsea, Essex, in 1997. The average size of a Tesco store rose from 600 square metres in 1974 to 1,000 square meters in 1979 and 2,200 square metres in 1988 (West, 1988, p.35, Gardner, 1989, p.177). By the end of 2002, Tesco had 730 UK stores. Tesco has entered eastern Europe, a growth area since the fall of Communism; Poland, with a large population and potential economies of scale, is especially targeted. It has also set up branches in south east Asia, Thailand and Taiwan. By 2001 Tesco had stores in Eire, the Czech Republic, Slovakia, and South Korea. But like Sainsbury some international ventures failed. Tesco took over the Catteau chain of 90 stores in 1992 (Bromley, 1993, p.66) but sold it when it found that “some brands do not easily transfer across frontiers” (The Economist, 14/4/01, p.36).
Spar, (www.spar.co.uk, accessed 26/3/02) a buying group for smaller grocery retailers, has also globalised and members are found in Finland, South Korea, Japan, South Africa, and Zimbabwe (Bromley and Thomas, 1993, p.22).

The ‘discounters’, Aldi, Lidl, and Netto, entered the UK in the early 1990s. Their role in British grocery retailing is discussed further in section 2.3.7.

The average size of a supermarket was therefore increasing. In 1958 only 175 grocery stores in the UK were larger than 200 square metres (Wrigley, 1988, p.16). There were some early very large UK grocery stores, such as the GEM store in Nottingham, opened in 1964 with 8,400 square metres (Davies, 1987, p.78), and the Tesco store in Westbury, Wiltshire, opened in 1967 with 9,000 square meters (Tesco website), but these were exceptional. In 1974 the average size of an outlet owned by one of the large chains was still only 260 square metres. This rose to 700 square metres in 1980 and 1,300 square meters in 1994. Between 1974 and 1983 the average size of a new store being opened nearly doubled, from 1,100 square metres to 1,900 square metres. Over this period the average size of a store being closed also rose from 150 square metres to 450 square metres. By 1983 the average size of a store being closed, probably because it was too small for adequate economies of scale, was greater than the average size of a store operating in 1974.19 The average size of a Tesco outlet rose from 60 square meters in 1974 to 1,000 square meters in 1983, 1,800 square metres in 1983, and 2,200 square meters in 1988 (West, 1988, p.35, Gardner 1989, p.177). The USA was ahead of the UK in having very large stores of 10,000 square metres in 1963, but McClelland (1963, p.34/5) considered this “inconceivable here in the UK”, “given problems of pilfering and store management”. McClelland considered the maximum desirable size of a UK grocery store to be 1,000 square metres. But then he did not foresee the advances in Information Technology, and monitoring systems such as CCTV, enjoyed by the UK supermarkets by 2003, as detailed in section 2.3.6. In Belgium and France the average store size was also a third larger than in the UK in the 1980s (Knee, 1985, p.45).

The future seems likely to bring more takeovers, more concentration in the UK grocery market. Verdict, the retail research group, said in 2000 that “in five years only Wal-Mart/Asda and Tesco may be left as major UK grocers” (Daily Mail, 21/8/00, p.31). This came a step closer when Wal Mart, Morrison, Sainsbury and Tesco made bids to take over Safeway. Marks and Spencer also made a bid, as did Philip Green, owner of British Home Stores, Top Shop, Wallis, Dorothy Perkins, and Burton. In autumn 2003
it is not clear who will take over Safeway. Morrison has the best synergies, because its stores are mostly in the north of England whereas Safeway’s are mainly in the south. Some of the bids are probably ‘spoiling bids’ designed to force up the price of Safeway to the successful buyer, reducing their overall profits. The Office of Fair Trading might prefer Philip Green’s bid, as he a mainly non-food retailer. Tesco’s bid, if made, may be the least likely to be allowed as it already has a 23%-26% share of the UK grocery market. The bid did however reveal the existence of a shadowy and anonymous government committee which meets in secret and advises the OFT on what to decide (The Guardian, 6/2/03, p.27). Supposedly, the last meeting before a decision is at the OFT, in which the bidding companies have a last chance to influence matters. In fact this ‘other committee’ and the OFT meet after this ‘last chance’ meeting, and the bidders have no say at the true ‘last meeting’.

2.3.3. Increase in the market share of supermarkets

Supermarkets in Britain have, by 2003, achieved a grocery market share of nearly 70%, a level attained by supermarkets in the USA by 1948. Actual grocery market shares for the biggest supermarket operators are hard to quantify because stores are moving into non-food sales, which is more profitable. The supermarkets may understate their market share because ‘too high’ shares might create political pressure to curb further expansion. If non-food sales are included in the market share figures, the supermarket’s market share appears to drop because their penetration of markets in white goods, electronic goods, and financial products is, so far, lower than in groceries. Figure Five below gives the market share of the UK groceries market for selected years. Sources are Haberberg (2001, p.669), The Guardian (28/8/01, p.28). In order of market share, at the end of 2002, Tesco was biggest, then Sainsbury. Asda was 3rd, Safeway 4th, Somerfield (including Kwik Save) 5th, Morrison 6th, Waitrose 7th, Aldi 8th, Iceland 9th. Aldi and Iceland had around 2% each of the UK grocery market, compared to the 25% of the market leader, Tesco. The Competition Commission normally acts when a single company reaches a market share of 25% (Birkin et al 2002, p.34). Tesco is just past this figure in the UK, on groceries alone, though if one calculates the total market share of Tesco, including non-food sales, Tesco had around 17% market share at the end of 2002. The latter figure is the one Tesco would prefer to be used by the Competition Commission.

19 Figures in this paragraph are from West (1988, pp.39/40) and the Low Income Project Team (1996, p.6)
20 depending on criteria and method of calculation.
2.3.4. Diversification of supermarkets’ product range

The UK supermarkets of the early 1970s had a rather cheap, down-market image; Tesco’s slogan in the 1970s was ‘pile it high and sell it cheap’ (Falk, 1997, p.100). However as the supermarkets abandoned small inner-city stores for larger edge-of-town sites in the 1970s, 80s, and 90s, they began aiming at a more affluent market (Burt, 1997). One of the first diversifications by the supermarkets was into petrol (Berry, 1978, p.33) to attract car-borne customers, By 1991 Tesco had become the biggest petrol retailer in the UK. The economies of scale of the supermarkets ensured their petrol would be cheaper than many garages. Within groceries, supermarkets have diversified into a wide range of ‘ethnic’ foods, appealing both to the growing ethnic-minority population of the UK and to the popularity of such dishes amongst the white population. Indian and Chinese foods were the first to appear in supermarkets, followed more recently by Thai dishes, Italian, and to a lesser extent Spanish, foods. In 2002, Marketing (7/2/02, p.24) stated that for the whole UK prepared foods market, Chinese meals were the third largest sector, after Italian and Indian. This leaves a number of smaller ‘ethnic food markets’ as yet largely untouched by the large supermarkets; for example Greek, Afro-Caribbean, and Vietnamese. but small shopkeepers fear future supermarket penetration here too.

In February 1997 Sainsbury began marketing bank accounts, savings plans, and insurance; Tesco followed Sainsbury with its ‘Personal Finance’ package later in 1997. In November 2000 Tesco linked with the Norwich Union to sell life insurance in its stores (Sunday Telegraph, 29/10/00, p.3). Asda also began selling jewellery, to add to its successful ‘George’ clothing range. By 2001, Tesco had nearly
50% of its floor space devoted to non-food goods, such as newspapers, books, clothes, white electrical goods, and electronic goods (Economist, 14/4/01, p.36). In May 2001 RPM was removed on pharmaceutical goods, and the supermarkets began selling a large range of non-prescription items such as vitamin pills, dental care products and some non-prescription drugs. For those wanting a quick headache or indigestion remedy, without the hassle of going round an entire supermarket, the large stores often have a small chemist shop in the foyer. This is one of the factors leading to a decline in small local pharmacies, (section 4.1.1).

A large superstore, of 5,000-10,000 square metres, now stocks around 50,000 different product lines, but the diversification of products has not yet ended. In 2000, Asda began screening drive-in movies at some of its car parks (Daily Telegraph, 16/2/00, p.2). Asda considered car sales in 1986 (Scunthorpe Telegraph, 24/6/86, p.3), and has revived this idea in 2002, and Tesco also in 2002 plans to sell motorbikes. By 2002 some supermarkets had diversified into hosting services such as polling booths, Citizen’s Advice Bureaux, MP’s surgeries, as well as having visiting chaplains, and medical advisors. Asda York even became the latest venue for registering the birth of a child (The Guardian, 13/11/02, p.8). This diversification will capture yet more market share. “It’s just really convenient” said the child’s father, “there’s loads of parking and everything about the store is child-friendly, including the chance to stock up quickly with nappies if the need arises”!

2.3.5. Longer opening hours of supermarket

To obtain the most efficient use of their premises, and to gain more economies of scale, the opening hours of supermarkets have steadily lengthened. This harms small ‘corner shops’ of the ‘open all hours’ type which used to gain custom by being open from very early in the morning till late at night. The 1950 Shops Act, repealed in 1994, made it illegal for most shops to open on Sundays or after 8pm except to sell ‘perishable goods’. ‘Perishable goods’ included newspapers and fresh fruit and vegetables; in practice small shops selling non-perishable goods such as tobacco were seldom bothered by enforcement of the Act. Asian-run shops, with several family members to run the shop in shifts, could open very long hours, e.g. 6am. to midnight, but rarely stayed open the full 24 hours because of the crime risk.

By the 1990s UK work conditions had changed considerably from 1950. Commuting times had lengthened, as people lived further from their workplace and work hours
were prolonged. This fuelled a demand for shopping in the late evening and on Sundays. Sunday shopping was permitted for up to 6 hours, from November 1995, loosening hours, which had been ‘tightly regulated from the 19th century’ (Haberberg, 2001, p.167). In 2000 Tesco began 24-hour opening in some stores. The costs of overnight opening were fairly low as the store is manned at night anyway, for shelf-filling and loading Internet orders. A 1998 DETR report stated (p.87) that longer supermarket opening hours encouraged a shift to car usage because public transport becomes less frequent and much less safe, especially for women, after 6pm and at weekends. Longer opening hours also erode the trade of local shops at certain times of the day only (section 4.2.3, Leeds Co-op trading).

2.3.6. Technological innovations, de-skilling

The superstore operators have made wide use of Information Technology to create more profitability. Major falls in the cost of IT mean it GIS-based methods are increasingly available to retailers to replace ‘common-sense’ or intuition-based location methods. A more precise match can be made between the store location and the store type, with the micro-geography and local socio-economic conditions. Even what is stocked in the store can be closely matched to local demand. This individualisation of stores can be done without loss of economies of scale for the whole group, because rapid and efficient stocking is possible through computerisation and ‘just-in-time’ deliveries. However smaller single-store retailers may still not be able to afford the financial investment in IT, or the staff time-investment needed to learn to operate these sophisticated programmes (Bennison, 2000).

‘Just-in-time’, or ‘kanban’, methods of delivery are widely used in industry now. Sophisticated inventory control, and better transport infrastructure (motorways, container ships, ports) enables companies to maintain less warehouse stock; reducing costs of idle capital, spoilage, and insurance. Instead they order in goods just hours before they are needed. Supermarkets, due to their large buying power, can make their suppliers wait up to 40 days for payment (Wrigley, 1988, p.20) but due to ‘kanban’ methods the goods they buy in are re-sold to a customer after only 18 days. Thus the supermarkets enjoy an average 22 days free credit on their sales; at 5% interest rates this gives them 0.3% of sales as free interest, or around £75 million a year for Tesco. The Daily Telegraph, 19/9/99, p.31, showed the huge buying power supermarkets have in the example of Wal-Mart which then bought 20% of the entire output of Pampers nappies. ‘Kanban’ methods are facilitated by bar codes, which are needed for the close
inventory control required here. Bar codes were introduced to the USA in 1949 and
came to Britain in 1978 (Davies, 1987, p.50). In 2002 Safeway began installing
electronically adjustable prices, so customers could be enticed in at quieter times (Daily
Mail, 13/12/02, p.43). The electronic labels can also display special offers such as
BOGOFs, nutritional information, and when sold-out products will be back. This
innovation will enable supermarkets to squeeze both more profit margins from their
trade and more market share from the total grocery market.

Store, or loyalty, cards were another supermarket innovation; but one that has had only
partial success. Tesco introduced the ‘Clubcard’ in 1995 and the other large
supermarkets followed. The customer effectively got 1%, or more if special offers, off
their shopping via accumulated points; the store got far more. A large database of the
customer’s buying habits, with (via credit card information) other data such as where
they lived, lifestyle, and more, was built up and either used by the store for targeted
advertising or sold to other merchandisers. However the cards failed to keep customers
to one store only, because all stores had similar schemes. 30% of shoppers regularly
used 2 major supermarkets and 20% used three or more; only 15% of shoppers stayed
loyal to one supermarket chain only (The Independent 12/10/01, p.15). Huge volumes
of data built up so efforts at meaningful targeting were swamped (Guardian II, 11/5/00,
p.14). The cards were costing the supermarkets 1p per customer per week, a cost to
Sainsbury and Tesco of £7 million a year, which could have been used on price cuts
(Guardian 7/8/99, p.19). Safeway and Asda abandoned their cards, promising lower
prices instead. The ‘loyalty card’ concept may actually be more applicable to groups of
small retailers, for example the ‘Leeds card’.

Changes in work practices have also cut the supermarkets’ costs. The key is staff
‘flexibility’, variable hours to suit the employer’s requirements rather than a body of
staff employed for a fixed number of hours per week regardless of whether they are
actually needed. Aldi had the ‘zero-hours’ contract where the employer did not
 guarantee any work at all but kept staff waiting to see if they were needed or not
(Chesney and Thomas, 1993a, p.64). Most supermarkets do not go this far with
casualisation of the workforce, because very short hours may lead to higher staff
turnover. This raises recruitment costs and results in a lower perception of service by
the customer (Perrons, 2000, p.1725). The UK recently legislated to give part time staff
similar holiday and sick pay rights to full time staff but part time staff tend to be less
unionised, build up less pension rights, and are easier to hire and fire. Supermarkets
have also feminised their workforce. Women may accept lower wages than men
because their job is seen as the 'top-up' income to their partner's, and are more willing to work part time to fit in with childcare needs. The supermarket's out-of-town location gives them access to a large pool of cheap female labour, who may accept lower wages as they do not have to commute to the town centre (J Johnson, 1974, p.160), and between 1957 and 1983 the proportion of supermarket staff who were both females and part-time rose from 18.8% to 38.8% (Wrigley, 1988, p.8). These measures have improved ‘sales per full-time-equivalent’ employee markedly. The ‘full-time-equivalent’, or FTE, is the number of staff a supermarket would have, if all the hours worked there were done by full-time employees. Wrigley, 1988, p.7, calculated that (at constant 1982 prices) annual supermarket sales per FTE rose from £24,100 in 1957 to £40,660 in 1971. The RMI (12/01, p.17) states that Tesco’s sales per employee continued rising from £146,326 in 1997, through £151,138 in 1999, to £161,161 in 2001. This helped Tesco's per-square-foot sales rise from £19.74 in 1997 to £22.01 in 2001 (ibid).

2.3.7. Market segmentation and the return to smaller formats

Tesco, and especially Sainsbury, had moved upmarket by the 1990s. This, and the shift to larger out-of-town stores, created two gaps in the grocery market. Firstly, there was an opening for a cheaper supermarket to serve the less affluent, as well as affluent but money-conscious customers. Secondly, there was an opening for local city centre supermarkets, and locations at suburban hubs such as busy railway stations, used by commuters, office workers during lunch, tourists, and others who might want to buy groceries quickly, without travelling to an out-of-town store. Morrison and Asda remained at the cheaper end of the ‘big four’ but from 1990 faced competition from Netto (Langston et al 1997, p.101). Netto began in Copenhagen in 1981 and entered the UK in December 1990. Netto’s first UK supermarket was at Halton, Leeds. This was followed by Aldi, whose first UK branch opened in Birmingham in April 199121. Lidl, which began in 1973 in Germany, entered the UK in 199422.

The Co-op initially followed the route of the ‘big four’, rationalizing by closing smaller inner city stores and opening larger out-of-town ones (Birchall, preface, p.viii), but has now repositioned itself as a neighbourhood local supermarket. Jackson, Nite and Day, and Alddays adopted a similar strategy. Kwik Save was effectively taken over by

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21 Information from various supermarket managers interviewed about supermarket opening dates in October 2003.
22 Information from http://www.lidl.co.uk, accessed 24/10/2003
Somerfield in 1998 (Marketing Week, 6/4/00, p.24), potentially giving Somerfield greater market share and economies of scale. These chains initially represented a more serious threat to local corner stores than the big four supermarkets. Although these local supermarkets are not out-of-town, consumer access to groceries could still worsen if they replaced the small shops because these neighbourhood local supermarkets need to be about 1,000 metres apart to have a large enough catchment area to be viable, unlike the corner stores which could co-exist 100 metres or less apart. For those who are elderly or disabled and cannot carry shopping as far as 500 metres, access to groceries may become harder. However as discussed later in this section, it appears, in 2003, to be the supermarkets and smaller shops who are squeezing the market share of the discounters. Kwik Save has proved rather indigestible to Somerfield and some of the discounters are under threat, especially from Asda/Wal Mart.

The big supermarkets began entering smaller formats in the 1990s, for two reasons. Firstly, “In an ideal world [the large grocery retailers] would still like to open superstores, but the sites aren’t available; it’s time to return to the High Street” (Financial Mail on Sunday, 25/7/99, p.5). Guy (1994a, p.7) says, regarding small towns in Wales such as Cardigan and Haverfordwest, “certainly it is only in the last year or two that [Tesco and Safeway] have been interested in these areas”. Wal Mart has discovered that, at least in the USA, a town with as few as 4,500 people can support a large supermarket, “so long as most of the competition is eliminated” (Monbiot, 2000, p.200). In other words, the supermarkets want to expand, gain more market share, but the only direction available for expansion is back in the city or into smaller towns. Under the PPG6 guidelines, it is almost impossible now [2003] to get planning permission for a new out-of-town superstore; only those where planning permission was previously gained but not yet used can still be built. Secondly, “late 1990s advances in technology enable these smaller formats to enjoy some of the economies of scale of supermarkets” (Langston et al 1997, p.101). So modern IT has facilitated the return to smaller formats.

These smaller outlets can be classed in three categories; stand-alone supermarket branches, links to petrol retailers, and links to village shops. They are in places like Covent Garden, London, to catch the office and tourist trade, and in small towns like Headcorn, Kent. Here they are seen as a threat to smaller single-store grocers, much as the Alldays and Co-ops could be. The ‘Locals’ will be open from 6am to midnight and prices would match larger supermarket prices on ‘40 popular product lines’ whereas traditional corner stores are ’17-40% more expensive than a large Sainsbury’. Morton
Middleditch, Managing Director of the Spar group, commented “the Local in Headcorn has closed down four or five small shops in the area” (Business Observer, 30/8/98, p.6). Tesco also plans to build pre-fabricated shop units of 200-250 square metres that can be put up in a week, and also can be dismantled quickly (Wrigley, 1998, p.20, Independent, 12/1/02, p.4). So an unprofitable area can be quickly abandoned. The chemist store, Boots, has also entered the city-centre grocery store market, cutting back on the usual toiletries range to stock more convenience foods (Convenience Store, 1/8/03, p.18).

Safeway has linked to BP, and Tesco to Esso, to supply groceries to garage-forecourt-based shops. There is little extra cost to the garage since many open very long hours anyway for petrol. ‘Convenience Store’ (18/7/03, pp.4-5) noted recent advances by the larger retailers into petrol forecourt and other smaller formats. Tesco has opened its first ‘Express’ store in Milton Keynes that was converted from the T&S group which Tesco took over in 2002. Not only small shopkeepers but the Director General of the Federation of Wholesale Distributors, Alan Toft, has called on the Competition Commission to rein back the advance of Tesco. Meanwhile (‘Convenience Store’, ibid), BP is expanding the number of its Connect forecourt stores in Scotland following its takeover of 29 Texaco forecourts north of the border.

During 2000 a combination of economic prosperity in the OECD nations and uncertainty in the Middle East due to the ongoing Palestinian Intifada caused oil prices to soar, and in the UK unleaded petrol reached 80p a litre; the ‘escalator’ tax, which raised UK petrol duty above the inflation rate each year, also contributed. 75% of the 80p a litre UK petrol price was tax. Drivers protested but in fact the oil companies were making very little profit per litre of fuel. Grocery sales were then the main profit source for garages. However by 2002 unleaded was back down to around 73p a litre, and was again profitable to the oil companies. Continued competition on grocery sales in 2002 by the supermarkets has meant many garages that stocked a limited range of groceries in 2000 had by 2002 pulled out of this market. Garage retail space was given to car-related items like motor spares and atlases. However some garages have become sizeable grocery retailers, and increased the range of fruit and vegetables stocked since 2000; the target market is time-pressed motorists who don’t have the time to go round a large supermarket (Guardian, 5/2/00, p.28). In other words, the market that corner shops are aiming at.
Sainsbury plans to link with village shops, who will sell Sainsbury own-brand goods (Guardian, 11/8/98, p.2). This is controversial because it keeps village shops open, but only as de-facto branches of Sainsbury. Somerfield plans to offer free delivery to convenience stores in both urban and rural areas, (Yorkshire Post, 15/3/00, p.6). This is to "breathe life into areas where shops were once a focal point of the community, areas which are 'fresh food deserts'". In October 2002, Tesco took over the T & S company, which operates around 862 retail outlets under the names of 'One Stop' and 'Nite and Day'. 450 of these T & S outlets will become Tesco Metro stores, 200 Dillons newsagents and 130 Supercigs tobacco kiosks will be sold; the remaining outlets will continue to trade under their existing name (The Guardian, 31/10/02, p.26). Tesco will expand its share of the UK grocery market by a further 1%. This is controversial as other convenience stores will now be faced with local shops with the full price-cutting force of Tesco behind them. Customers within a few hundred metres of the new Tesco Metros will gain "the levels of perishable goods and pricing that Tesco can bring" (Guardian, ibid) but other shoppers, may see their local shops close.

Meanwhile the advance of the discounters into the lower end of the UK grocery market has not gone smoothly. In the late 1990s and early 2000s, Aldi, Lidl, Netto, and also Kwik Save, have not done as well as expected. As noted above, "Somerfield's value continues to plummet following the disastrous Kwik Save takeover" (Marketing Week, 6/4/00, p.24). Marketing Week, 6/6/02, p.18, commented on the fortunes of Kwik Save four years on from the takeover, saying "Kwik Save has suffered an identity crisis since 1998 after being merged with Somerfield. It tried to widen its range by introducing Somerfield-branded products. After this failed it reintroduced its own-label range and has since invested £16m in a refurbishment programme". Marketing Week (6/6/02, p.18) therefore attributes Kwik Save's poor performance to 'playing with the formula', that is changing the product mix shoppers at Kwik Save were used to and alienating them, but not attracting new shoppers to compensate either. Somerfield has reacted by trying to sell off some of its larger stores, both Kwik Save and Somerfield fascias, "to concentrate on convenience retailing" (Marketing Week, 6/4/00, p.24). However "the sell off has stalled, with the bigger players cherry-picking the best sites" (marketing week, ibid). Earlier, in 1998, Somerfield, like the bigger supermarket chains, began to diversify into electrical goods such as TVs, stereos, and radios (Marketing Week, 3/12/98, p.6).

Kwik Save and Aldi have both lost market share (between 1998/99 and 2000/01), and Netto has merely remained static on this crucial measure. Only Lidl has gained market
share over this period, from 1.0% to 1.4% (Marketing Week 6/6/02, p.18). The old
dependence by the discounters on the “Pareto principle” – that 80% of sales come from
20% of lines” (Marketing Week, 6/6/02, p.18) appears to be failing despite having
worked well before. Why? Marketing Week, 6/6/02, p.18 and Guy, 2003, give four
reasons. Firstly, the discounter’s limited range, especially in foods like stir fries and
pizza “which have the most growth potential” (Marketing Week, ibid), means shoppers
have to visit another store anyway to complete their shop. Secondly, the discounters
may appeal to the poorer customer but “increasingly people are not so short of cash”
(Marketing Week ibid). Marketing Weeks backs up this statement that the average UK
weekly wage has risen from £352 in 1996 to £445 in 2001, a rise in real terms of
11%24. However this argument may be weakened if, as many media reports say, the
real rise in wages is concentrated amongst the higher UK deciles, and income rises for
the poor, also benefit rises for those not in work, have been much lower in real terms.
The third reason for the discounters’ difficulties is the price cuts of the large
supermarkets themselves, especially Asda since its takeover by Wal Mart. Marketing
Week, 28/11/99, p.11, reported that Lidl was facing growing pressure on prices since
Wal Mart took over Asda. Asda, Morrison, and even Tesco to an extent, are competing
heavily on prices in 2003. Fourthly, the entry by the big four supermarkets into smaller
local formats is putting pressure on the locational advantage of many of the discounters
for the quick shopper or the poor one who has no car; their High Street positions.
Marketing, 2/5/02, p.1, reported on how Asda has now entered the local store format
with Tesco, Sainsbury and Safeway, with a “convenience format ‘Metro’ type store,
1,700 square metres”, opening in Walthamstow, east London. Marketing Week (6/6/02,
p.18) further comments “Sainsbury’s appears to be beating the discounters at their own
game. [Its] new [local-format] stores will be about [4,000 square metres]. The
discounters traditionally run stores between [600 and 900 square metres]. So if
Sainsbury can combine choice with low costs it could be a lethal combination.

Some discounters and other stores may be able to fight back. Netto is owned by the
Dansk Group, itself part of Maersk Shipping, which means Netto can import foods
more cheaply into the UK. The Co-op, whilst having some one-third of its stores in
poor areas, has also repositioned itself more as a local convenience store, as noted
above. In 2002 the Co-op bought GTS supermarkets, a local chain in Yorkshire, giving
it a medium-sized store presence in areas like Meanwood, Leeds (see section 4.7.1).

23 Pareto efficiency generally means that resources (e.g. sales space) is allocated so that
no change in [sales space] can further increase revenue from that space.
24 Inflation data from www.statistics.gov.uk/rpi
Figures released in 2002 by the Institute of Grocery Distribution suggested that small shops\textsuperscript{25} were at least holding their own in terms of market share. This was credited to the more personal service in small shops, and the provision by them of extra services such as video rental, photocopying, and dry cleaning. Research reported in ‘Convenience Store (18/7/03, p.10) carried out for American Express found that most UK consumers prefer ‘High Street’ shopping to the ‘shopping centre’ environment. However free parking and the ‘British weather’ continued to lure shoppers to large out-of-town centres. Guy (2003) noted however that “truly independent grocers, general stores, and newsagents” continued a “steady decline”, although these stores still formed around 60% of all convenience stores. 13% of such stores belonged to a ‘symbol group’ like Spar, but it was, Guy (2003) noted, the “convenience stores owned by retail multiples, petrol companies, and the Co-operative movement” which were growing in number. Guy (ibid) reported that not only did multiple-owned convenience stores have access to the price-cutting power of their parent company, but their average annual turnover, at £800,000, was higher than ‘affiliated’ or ‘symbol’ stores (£630,000) and far higher than independents (£260,000). The independent convenience stores were more concerned “about the growth of multiples in the convenience store sector” than about the large supermarkets, since these supermarkets were not serving the same market, the ‘convenience/top-up’ shopper, as the independents were. The Association of Convenience Stores was unhappy at Tesco being allowed to take over the T&S chain of convenience stores without a government investigation. Tesco saw room for expansion here, saying “we are busier, have less time to spend preparing meals, more customers want to shop conveniently and locally” (Guy, 2003). This could be good or bad news for the independents, suggesting they have a future market niche, but also that Tesco wants some of this niche.

Very recent changes, up to 2003, in the locations of discount supermarkets and others in Leeds related to these developments are described in section 4.7.1.

2.3.8. Supermarket prices

Developments within the UK supermarket sector in the past forty years - increasing size of premises, geographical spread, more market share and greater product range,

\textsuperscript{25} The IGD was here referring to shops of “less than [300 square metres] selling predominantly food and drink, and stocking at least core convenience items such as bread and milk”
longer hours, technological and management innovations, and extension into different formats – are part of a strategy to gain economies of scale, and so to offer lower prices, perpetuating the cycle of expansion. For example “Tesco in the 1970s commenced an aggressive price-slashing campaign and pursued an uncompromising strategy of selling own-brand goods. It squeezed margins but improved market share”, Independent on Sunday (27/8/00, p.14) A Tesco advertisement in The Economist (12/12/99, p.91) stated that their profit margin was ‘only 6p in the £’. A government enquiry asked if the supermarkets were making excessive profits. It found they were not. However supermarkets may cross subsidise prices both over time and between products. Some supermarkets offer cut-price alcohol at Christmas, funded by sales of other goods and from profits earned at other times of the year. The Guardian (2/10/00, p.21) stated that supermarkets used the higher profit margins on their increasing sales of non-food goods to keep grocery prices low. As a result, "grocery prices in the main supermarkets rose by just 1.85% between 1996 and 2001, and food prices dropped in real terms by 9.4% between 1989 and 1999".

The overall picture might be expected to be one of supermarkets offering lower prices than single-store grocers; these lower prices achieved in part by squeezing of the supermarket food suppliers. In practice this is only a broad caricature. Small grocery store prices may be lower than supermarkets, but this does not necessarily mean these small shops gain the trade. Different foodstuffs show different patterns of price change over time, and between different types of retailer. And there is a complicated pattern of competition and interaction between retailers; adjacent food retailers may either compete or enhance each other’s trade, and the picture is further muddied by conflicting claims of enhancement or competition amongst these retailers. There are other elements than price to the competition/enhancement argument, such as the provision of free supermarket parking fairly close to small shops, and the effect of farmers markets. There are also wider effects, such as employment changes upon local spending power, to consider. Other factors affecting small shops include the rural economy, farmers markets, small shop prices, and parking at shops.

This chapter has, so far, reviewed the growth of the supermarket as a new retail institution. The next section looks at research already done on the effects of this change in retailing, on travel and access to shops, social exclusion, neighbourhood renewal, and other effects.
2.4. A review of research already completed on new retail developments, retail changes, changes in food consumption, and their social and economic effects

2.4.1. General direction of this research, 1970-2003

Although local shops have been losing ground, in terms of both numbers and market share, to the multiple chains and supermarkets since the 1950s (section 4.1.1), research on how local shops were declining and what effects this might have on customers became prominent only in the 1970s. The earliest research was on decline in rural shops, although from the 1980s Guy has conducted long-term research on urban shopping change in Cardiff. As out-of-town shopping centres grew in numbers and in turnover during the 1980s, several studies were made on their effect on the retail trade of the nearby town centre. The election of New Labour in Britain in 1997 created a greater interest in urban poverty and exclusion, and this meant more research into social exclusion in the big cities (Wrigley, 2002). One of New Labour’s first acts was to set up a Social Exclusion Unit within the Cabinet Office (Wrigley, 2003). However there has been concern amongst policymakers since the 1970s about the declining socio-economic status of some housing estates on the periphery of some cities, and research papers appeared on this topic in the 1980s too. Between 1998 and the present a number of studies of retail exclusion and related topics such as health, diet, and transport poverty have been carried out in cities including Cardiff, Coventry, Glasgow, Leeds, London, and Newcastle.

There are several reasons why rural shop closures were researched before urban ones. Firstly, a grocery shop closing in a 1950s or 60s urban setting might have had little impact on food accessibility because there would be another one within a few hundred metres, whereas even in a village with ten or so shops, the closure of one would be more noticeable. Secondly the early UK supermarkets were often in inner-urban settings, not so much on the urban fringe as today. Hence as small shops gave way to supermarkets, urban access to groceries would have been preserved, initially at least. Thirdly, the 1960s and 70s were a time of major motorway development in Britain; this exposed villages to colonisation by urban commuters and holiday homes, so beginning the process of erosion of village shop trade seen today (sections 4.1.3, 4.1.4). UK car ownership began to take off from the 1950s (section 4.3.2), and car ownership has tended to be higher in rural areas than inner-city areas, so again rural shops were more at risk from this transport development. Fourthly, research tends to follow the concerns
of the day, not least because funding for these concerns is easier to obtain. Loss of rural facilities was a concern long before 1997 and the shift to urban concerns.

2.4.2. Examples of this research – decline in rural facilities

One of the earliest studies into the decline in rural shops and other village facilities was carried out by the SRCC (Standing Conference of Rural Community Councils). Their study spanned the period 1972-78, and covered seven counties in southwest England. This study was reported in “English Village Services in the Eighties”, a 1990 publication that also detailed (pp.76-77) a large number of similar studies, in 27 of the non-metropolitan counties of England alone, carried out in the 1980s. The University of East Anglia published a national study (Moseley and Packman, 1983) of how village services had declined in the 1970s; much of the research was done by local Women’s Institutes. Another study in Northumberland (English Village Services in the Eighties, p.16) called ‘Village Shops – Taking Stock’ was a collaborative project between the county council and the local community council, as were similar studies in Gloucestershire and Lincolnshire in 1981. These were mainly empirical studies of what facilities, shops, and also schools, libraries, GPs, banks, and Post Offices, had been lost over previous years. The problem of elderly people, women especially, (due to their longer lifespan than men) being stranded in villages that no longer had the facilities they needed for shopping, obtaining their pension, etc. was becoming more prominent. This problem was exacerbated by declining rural bus services and the fact that elderly women in the 1980s were quite likely to have no car, or even to have ever held a driving licence; hence the prominent involvement of Women’s Institutes here. Phillips and Williams (1984) also examined the decline in rural facilities in Britain, and how this was caused by centralisation and the desire for economies of scale. Derounian (1987) reported on a study conducted by the Northumberland Rural Development Programme on how to ensure that village shops there were viable businesses; able to stay open as sound businesses, and bring the social benefits that came with a strong village shop. Phillips and Williams, and Derounian, went beyond empirical studies of what facilities existed and were closing, to a wider business/economic perspective, to what was causing the decline and how to address it. However a wider examination of the effects on the demand side of loss of shops was to come later.
2.4.3 Out of town centres, retail centres, and their effects on city centres

Howard (1986) wrote, “Proposals for very large scale shopping developments have multiplied in the last few months...this year has seen an unprecedented surge of proposals for large scale retail development”. The impact these schemes have on food access is mediated, firstly by the actual effect the out-of-town centre has on town centre shops; sometimes the impact was less than had been feared. Secondly, many town centres were mainly selling comparison, non-food goods. Rent bid by shops such as jewellers and clothes retailers would squeeze out many grocery shops. Town and Country Planning (July/August 1985, pp.226-7) reported on studies of the effects of new developments in two very different shopping centres; The Nags Head in Islington, London, and Eldon Square in Newcastle (Roscoe, 1985, Wood, 1985). The concerns were the loss of small ‘traditional’ shops, increased traffic levels to the new centres, and the loss of housing to make way for new large shops and car parking. Bennison and Davies (1980) also published a study of the central area of Newcastle on Tyne, looking at the effect of developments such as Eldon Square on smaller town centre shops.

Thirty kilometres south and thirty years earlier the new town of Peterlee had been built and Robinson (1975) studied the development of facilities such as shops, pubs, clubs, and medical services here. The take-up of retail premises appeared to lag behind the settlement of the town, causing early Peterlee settlers to suffer a shortage of retail services. A different ‘town centre’ study was conducted by Cordy and Robson (1985). This concerned the emergence of an alternative town centre for Asian shoppers in the Belgrave district of Leicester. The number of Asian shops here had grown rapidly between 1969 and 1984 and Cordy says that some rows of shops, now totally run by south Asians, may become ‘Asian superstores’. Thomas and Bromley (2002) studied the effects of supermarkets in other adjacent towns to the towns of Atherstone and Llanelli. Llanelli also has a closed-down Tesco in its centre, causing some retail blight. However new development and revitalisation of Llanelli centre restored some shopping footfall. Methodology used here included GOAD mapping of changes in retail facilities and questionnaires of shoppers before and after the changes.

2.4.4 Towards a social exclusion perspective

Guy (1991) also researched rural facilities decline in Wales, again in conjunction with local Womens Institutes. Shopping facilities were mapped and their food prices noted in Cardiff, Wrexham, Haverfordwest, and small villages around these towns. A similar study across the border in Cheshire was carried out by the School for the Built
Environment, Liverpool John Moores University, and University College Chester in 1997, and reported in Town and Country Planning (4/2000). Both these studies found some rural exclusion, both in the form of higher rural prices and lack of access to facilities like shops and pubs, for village dwellers without access to private motor transport. Guy (1985) has also carried out long-term longitudinal studies of changing access to shops and shifts in household food consumption in Cardiff since the early 1980s, from when the supermarkets began a major shift to out-of-town premises, often onto old industrial sites left vacant by the deindustrialisation of the 1980s (section 2.2.3). In 1987 Guy also studied the attributes of grocery shopping trips done on foot, that is, trips to local shops. Walking in Cardiff varied with age and income, but shops accessed on foot tended to be smaller and have less choice, exacerbated by a shift from local parades to remoter supermarkets accessed mainly by car.

Potter (1980) carried out another relatively early urban study of the quality of local food shops, and how this might correlate with the affluence of the neighbourhood, in Stockport, near Manchester. Potter's research involved visiting all 1,562 shops in greater Stockport and gave each a ranking of quality according to factors such as the shop's appearance, window display, cleanliness, range and prices of goods, and style of advertising. Quality was then ranked as high, medium, or low, and correlated with the socio-economic status of Stockport's suburbs, using regression analysis. The result was that the analysis showed "a close association exists between the qualitative attributes of retail areas and the socio-economic character of their tributary areas. The quality of shops is highly sensitive to concentrations of particular groups of customers".

Broadbent (1985) also reported on a study for CES Ltd on falling living standards in the overspill estates built in the 1950s and 60s. These estates "were recognised in the early 1970s as severely deprived areas" but "lie almost entirely outside the boundaries designated for special help by central government" (ibid, p.54). Estates in Middlesborough, Hull, Glasgow, and Kirkby (Merseyside) were studied. The focus was on broad social exclusion and poverty and unemployment, although lack of access to shops was noted as part of this.

The studies by Robinson (1975) and Potter (1980) are interesting for this research because they point, in different ways, towards the possibility of a classification of food deserts today. Robinson shows that retail facilities can change over time, that what today would be called 'food deserts' can be hidden and/or transient, and is very relevant to 2003 because of developments east of London. Here, what is effectively a new town, Thames Gateway, is being developed, as the demand for houses in the South
East rises, and as Chapter Five of this research shows, retail development may not always keep pace with house building. Potter’s study covered a whole town, correlating neighbourhood affluence with shop quality, and (had the term been invented then) might have said that food deserts existed north and south of Stockport centre. This research also aims, by covering a range of types of district, to see if food deserts exist in different areas and can be classified.

Research into declining shopping facilities in rural areas continued in the 1990s, with for example the DETR report “Impact of Large Food Stores on Market Towns and District Centres” and a survey by Norfolk Council of village shops in Norfolk, presented at the Norfolk Food Futures Conference on 13/7/01. There have been several studies in rural Scotland linking declining facilities with social exclusion. The Tayside Rural Village Shop Support Scheme, drawn up in 1984 as part of the Tayside Structure Plan was a collaborative effort between the local council and the Institute for Retail Studies, Department of Marketing, University of Stirling, as well as the more recent Joseph Rowntree Foundation study, “Social Exclusion and Young people in Rural Scotland” in 2000, based in Duns (Borders region) and Callander (Stirling Region), noted the need for a complete package of jobs, housing, and services to avert a cycle of depopulation and falling service provision. Smith and Sparks (2000a) looked at small shops in both rural and urban settings across Scotland. They noted the economic and social benefits of such shops in supporting the community and providing employment, as well as problems of commercial viability in many of these shops. Smith and Sparks noted the need for holistic policy solutions based on the wider needs and behaviour of consumers as well as the wider economy small shops operate in. In similar vein, Baron et al (2001) conducted a nationwide survey of UK small retailers; using semantic differentials, shops’ responses were analysed to ascertain the problems and opportunities facing such shops. The attributes of community connections and personal service were seen as major competitive advantages possessed by local shops against the large multiple stores.

However there were also, in the 1990s, a number of large urban studies specifically of food access problems that might be faced by poorer households. The size of urban area studies has varied widely, from an entire city (e.g. Cardiff, Leeds) to a single street in Carlisle. Bromley and Thomas (1993b) conducted a study of Swansea households, looking at shopping habits, travel to shops, and socio-economic indicators such as

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wealth and car ownership. Holbrook and Jackson 1996, surveyed the effect on shopping patterns in north London of the opening of two major suburban shopping centres, Brent Cross and Wood Green Shopping City, in the 1970s, using a large scale social survey of shoppers in those centres and also group discussions. In 2002 the World Health Organisation (Regional Office for Europe) examined the contribution made to social exclusion and barriers to healthy eating caused by inadequate public transport in Liverpool.\ref{footnote1} C Bailey (2000) looked at the street of Botchergate in Carlisle. This is a secondary shopping area a few hundred metres from Carlisle centre, which serves the everyday grocery needs of a poor hinterland residential area behind this main road out of Carlisle. Qualitative, in-depth, interviews and a survey of travel patterns showed that visitors to Carlisle needed to be directed towards, not away from, Botchergate and that sensitive small-scale renovation could make it attractive whilst maintaining its character and shopping use for local people.

Chapter Seven details some of the studies that have been carried out regarding food access and exclusion in other countries. This section now examines some important recent studies in major UK cities.

2.4.5. Supermarkets, regeneration, and social exclusion: studies in Leeds, Bradford, Cardiff, Glasgow, and Coventry

Other studies have looked at the regeneration effects of building a large supermarket in a deprived area, such as east Manchester, Leyton in east London, or the Castle Vale estate in Birmingham, and whether any adverse effects on local shops outweigh this regeneration. A large study of this kind was conducted recently in Leeds, which is now discussed.

The background to the Leeds study was the opening in late 2000 of a large Tesco supermarket in Seacroft, east Leeds. This Tesco replaced a 1960s district centre, which by the 1990s had become "extremely degraded" (Wrigley, 2002b, p.2064). Tesco promised not only better food provision than has been available in the district centre but employment benefits; it promised Leeds Council to give priority to long term unemployed residents of Seacroft. Even though the long term number of jobs a supermarket provides may well be less than those in the smaller shops it ultimately may

\footnote{Accessed 2/8/03 at \url{http://www.who.dk/eprise/main/who/progs/hcp/Urb} \url{iHealthTopics/20020129_3}}
supplant, long term unemployed from a poor area are doubly disadvantaged when it comes to applying for many jobs. Hence Tesco employing these may actually indirectly raise Leeds’ employment levels.\footnote{Avoiding the ‘lump of labour fallacy’; if hard to employ persons are employed, multiplier effects, and the fact that more employable job candidates who missed out on Tesco’s jobs will likely get jobs elsewhere, should expand the economy overall.} Seacroft was a deprived suburb with poor food provision; whilst most of its residents were within 600 metres of a food shop, fresh fruit and vegetable provision on the estate, or what Wrigley terms ‘green retailers’, was almost non-existent. Leeds was therefore a ‘before and after’ study, such as might be prompted by a supermarket opening, closure, or replacement by a limited line freezer shop (Wrigley, 2002a, p.2035). Studies were made of food consumption patterns in the Seacroft area in summer 2000 and again in summer 2001, the same season being chosen to minimise seasonal food consumption variations. There were still some unavoidable biases in the respondents and in those who dropped out between 2000 and 2001; but these were minimal, and are noted by Wrigley (2002b, p.2067).

The Leeds/Bradford/Cardiff project was jointly funded by Sainsbury and the ESRC. Initial stages involved mapping the shops in Leeds/Bradford/Cardiff and then modelling the levels of grocery provision per household (G Clarke et al 2002), also including measures of the socio-economic categories living in these areas because “simply having relatively poor access to grocery provision is unlikely to convince planners that all of these areas are ‘food deserts. An area might only be classified as a ‘food desert’ if the residents of that area have little or no means of travelling significant distances in order to purchase food”(p.2049). Clarke et al (2002, p.2054) points out that whilst the new Tesco has raised the food provision level across Seacroft, it may deteriorate again if the new Tesco causes other local stores such as the Co-op or Netto to close (G Clarke, 2002, p.2059), possibly creating “micro-food deserts” (Clarke et al, 2002, p.2054). Additionally some poor families might not be able to afford the new Tesco prices or might avoid it for fear of being tempted to buy more than they could afford (Wrigley, 2000b, p.2065). In fact respondents whom were less well off and with a poorer diet did tend to switch to the new Tesco and improve their diet (Wrigley, 2002b, p.2078) showing the new Tesco had improved physical access to fruit and vegetables for many. Knowledge of how to cook foods and health motivations would also affect food consumption patterns. So the Leeds study noted physical, economic, and psychological barriers to fruit and vegetable consumption. This research, ‘The ecology of food deserts’, also attempts to classify food deserts according to these three criteria, ‘ability’, ‘assets’, and ‘attitude’. Interestingly Wrigley (2002a) writes that the
definition of a food desert is "rather imprecise" (p.2032), although attempts have been made to clarify it (Donkin, 1999a). The 1999 Donkin study looked at ethnic-minority food consumption in a deprived area of London with a large number of south Asians, eastern Wembley, and concluded that "in urban Pakistani families at the higher income levels, dietary trends appear to move towards a healthier diet whereas in low-income families factors such as lack of financial resources and lack of awareness are checking this positive trend" (Donkin et al, 1999b). There is evidence here of different sorts of food deserts; using data in Chapters Four and Five, 'the ecology of food deserts' research will attempt a ternary-diagram based classification of food deserts in Chapter Seven.

A similar project studied the availability and prices of food in Glasgow (Cummins and Maclntyre 2002b). This found that shop type, rather than shop location or local levels of poverty, best indicated the price and availability of healthy foods. By looking at the whole of Glasgow, Cummins concludes that earlier 'food desert' studies have not fully allowed for the cheapness of foods in poor areas. However Cummins also states that these cheap foods tend to be the less healthy ones. Another Glasgow study by Piacentini et al (2001) analysed the shopping behaviour by customers of various socio-economic types, finding considerable ingenuity in overcoming problems of affordability, access, travel costs etc. However Piacentini did note "where mobility is constrained, individuals are less able to exercise control over their shopping behaviour and feelings of disadvantage are exacerbated, particularly where social networks are weak" (2001, p.153).

Finally in this section, the Coventry study of 2001 is noted (P Williams and Hubbard 2001). The Coventry study used a large-scale quantitative survey followed up by a more in-depth qualitative survey on selected households in poor districts of Coventry to analyse access problems to grocery retailing. Access was found to be mediated not just be geography but by factors as diverse as physical health, gender, ethnicity, income, and even feelings of 'belonging' or not in certain shopping centres as well as fear of crime in some places. It should be noted here that there also exists a study done in 1998 in Newcastle on Tyne by CURDS (Centre for Urban Development and Research) but, as confirmed in an email from CURDS in August 2003, this study has not yet been published anywhere.
2.4.6. Who has done these studies and what was discovered

A variety of bodies have contributed to the food access and social deprivation studies mentioned above, including local, national, and supra-national governmental bodies such as the EU, as well as commercial organisations. Also, NGOs such as charities, from the local to the national in geographical scope, and of course a wide range of academic researchers. In summary, many studies have found a decline in retail food provision but that few poor actually have no access at all to food shops of some kind. The presence of supermarkets can raise food access, but not for all; some smaller shops in the neighbourhood may subsequently close. There are other non-access benefits of a supermarket such as better job opportunities locally, although as retail grocery provision becomes more concentrated, overall employment in this sector may fall. The existence of food deserts is not a matter of simple geographical access alone; on this basis, food deserts may be hard to justify, but these deserts may well have an effect on people’s lives in other ways. Food access may be denied in ways more sociological and cultural; food deserts may be ‘hidden’ but still have tangible consequences for some.

The debate thus continues as to whether food deserts are a widespread problem in UK cities or somewhat an artefact of studies of particular local poor districts. This debate concerns intricate differences of price and healthiness of different foods on different shops, and whether food access is mediated by more than geographical access alone. The research ‘the ecology of food deserts’ attempts to examine a wide variety of food access situations, both from the demand and supply side, to further discover the barriers to the consumption of a healthy diet, in different neighbourhoods and for different groups of people.

2.4.7. Methodologies of research on retail change and food consumption

The various studies have used a range of methodologies that can be broadly grouped under three heads. Firstly, mapping retail facilities, and how these change over time. Existing city/tourist maps and literature may be compared with retail maps, and other facilities such as parking may also be mapped (Bailey, 2000). Retail facilities have been mapped before and after some event such as the opening of a new supermarket. The routes of shoppers in a retailing environment may also be mapped, and even classified by route type (Zacharias, 1997). Secondly, quantitative surveys of factors such as travel patterns (Williams, 1992), food consumption, stores visited, and prices of food (Cummins and MacIntyre, 2002), along with socio-economic indicators such as
income and car ownership (e.g. Potter, 1980, as an early example of this). Shopkeepers might be questioned as well as shoppers (Baron et al, 2001). These have also been used ‘before and after’ some event such as a new store opening (Wrigley et al, 2002).

Thirdly, qualitative, in depth, surveys of various factors involving food consumption (e.g. Williams and Hubbard, 2001, study of Coventry). Tools such as food consumption diaries and diet questionnaires have also been used (Whelan et al, 2002). The method of contact of the respondent has been by post (Medway et al, 1999), in-shopping-centre surveys, or at the home of the consumer, or in focus groups held at various venues (Whelan et al, 2002). Areas selected for study may comprise a certain town or city, (e.g. Guy and Wrigley, studies of Cardiff); or one where a retail change such as a new supermarket has occurred (e.g. the Seacroft, Leeds, study); or an area noted for some characteristic such as high deprivation, or a large ethnic minority population (Donkin et al, 1999b).

Many studies used multiple methodologies to triangulate the data, that is, to obtain similar data and conclusions from different methodologies. The Leeds/Bradford/Cardiff study noted above made extensive use of statistical cartographic analysis; these techniques have developed rapidly and were not available to earlier studies. They may require some time commitment to learn. The Leeds study also used a technique called focus groups. These have the advantage that “participants with poor reading or writing skills are not discriminated against”, but “can be time consuming and difficult to arrange and analyse” (Whelan et al 2002, p.2087). The advantage of using multiple strategies in one study is that data can be ‘triangulated’, that is crosschecked between different sources and methodologies to ensure validity and accuracy.

This research, for ‘The ecology of food deserts’, used primarily qualitative methods, (semi-structured interviews) to discover how food access problems may be perceived by consumers, and other parties to the food chain. More quantitative methodology such as mapping the shops in two different years, to show any changes in that period, was also used. The justification for using such methodology in this research is discussed in Chapter Three. The methodologies used here do not differ substantially in principle from those used in other food access studies such as those described above. As with most research, constraints of time and other resources imposed many of the differences (for example in scale of methodology, the number of persons interviewed and geographical scope of the research) account for many of the methodological differences between different projects. The next chapter therefore details what methodology was used for this research, and why it was used.
Chapter Three
The methodologies used in this research

3.1. Introduction — why a qualitative approach

The literature review has shown that there have been numerous food desert studies (Cummins and MacIntyre, 2002b, p.2116), pointing towards a general lack of access to healthy foods in poor areas, higher prices at the smaller stores often found in poor areas as against the large supermarkets that are often accessible only to car owners. These studies have taken place in both urban and rural settings. This suggests a classification of food deserts may be possible; something that has not been done before. By researching a number of settings where problems with food access may occur, this research attempts to work towards such a classification. Lack of access to food is made up of much more than geographical distance alone; it is a matter of many human phenomena such as culture, food preferences, poverty, and physical ability.

Rudestam and Newton (2001, p.36) state, “qualitative methods are especially useful in the generation of categories for understanding human phenomena and the investigation of the interpretation and meaning that people give to events they experience”. Qualitative research methods “are concerned with how the world is viewed, experienced, and constructed by social actors. [These methods] provide access to the motives, aspirations and power relationships that account for how places, people, and events are made and represented” (Dictionary of Human Geography, 2001, p.660).

Chapter Two of this research showed how power relationships have been crucial in determining access to urban facilities such as retailing centres, in determining influence on the planning and building process as these facilities changed for example in the 1980s. Some agencies whose interview comments are reported in Chapter Five show how these power relationships affect the poor today in Leeds and Scunthorpe.

Chapters Four and Five here also show how food deserts are a matter, not solely of what shops exist ‘on the ground’, but of how these shops are viewed by local people. A world with few grocery shops in it can be ‘constructed’ by, for example a pensioner in Beeston, out of a ‘mapped world’ with many grocery shops — because those shops are not the ones the pensioner wants to use. This creates ‘virtual food deserts’ that can be discovered through the medium of qualitative research, through semi-structured interviews with a variety of people and agencies. This type of research is good at uncovering the feelings, attitudes that create a mental foodscape that may be more
important for people's perceptions and behaviour than the actually existing physical foodscape. This has practical applications. Policy measures aimed at alleviating food exclusion may be aimed at the wrong areas if the need for them is adjudged solely on what shops physically exist, rather than on what people's attitude of these shops is. Policy measures may be ineffective, may be seen as inappropriate, if they target areas or populations suffering food exclusion that are not the same as the areas or populations perceived by themselves as suffering from food exclusion. So for practical, for financial and political reasons, a qualitative-based research understanding of food deserts is important.

Qualitative research is typically conducted through semi- or un-structured interviews, through direct observation and participation in subject's lifestyles (ethnographic research), or through interpretation of texts, pictures, and other media (hermeneutics). For this research, hermeneutics was not appropriate. An ethnographic approach, whilst giving a very rich experience and understanding of, say, how an East Park pensioner or disabled villager from Lincolnshire, coped with the travails of transport and shopping, would not have permitted a full investigation of the possible full range of food desert locales within the resource and time constraints pertaining here. For this reason, the methodology of semi-structured interviews was adopted. Rudestam and Newton (2001, pp.92-93) would classify this approach as being more phenomenological. Qualitative research does not necessarily aim to interview a representative sample of the whole population, but to gain great detail of the experience from those who are affected. By interviewing a wide range of people possibly affected by lack of access to a healthy diet, this research aims to elicit as many of the different types of food desert existing as possible, at least within the research resources available.

Some researchers have used focus groups to elicit experiences of food exclusion (for example the Leeds/Seacroft study described in section 2.4). These can be good at encouraging a range of comments; the group may acquire its own momentum, and the outcome can be a rich source of qualitative, unstructured, information for the researcher. However setting up such a group is crucial, and can be complex. The participants should be of similar background, or else the more vocal, middle-class, people may dominate the discussion. Arranging for all participants to be present together may be hard. If, as in this research, the idea is to examine a range of possible food desert locales, focus groups may take too long to arrange. Here, interviews were usually one-to-one, although for some, there were two or three respondents, because the venue was an office or college where several persons turned up to the interview. Also
for some agencies such as the various support groups for the disabled, pensioners, illness groups, one person described the experiences of several others in grocery shopping. This broadened the range of experiences and perceptions elicited, and strengthened the research by correlating, or triangulating, the experiences of agencies and people from similar socio-economic groups but from different geographical areas.

Theory – in this case, a classification of food deserts – may emerge inductively from the data collected (Rudestam and Newton, 2001, p.93) rather than by the deductive method of some quantitative studies. Naturally, however, a grounded theory – in this case, the socio-economic basis of food deserts – is also necessary to ensure the research and its results are relevant to the ‘real world’. Research methodology is also strengthened if multiple methodologies are used, as then any resulting conclusions have a stronger methodological and theoretical basis. Two principal research methods were used to answer the research questions described in Chapter One. Firstly the geographical distribution of food retailing, and other shops which the research suggested were important to the viability of food shops, was mapped. The map was then used to provide an indication of retail food access for consumers of different abilities to travel. Secondly over 200 interviews, of a semi-structured nature, were carried out with a range of respondents. 120 agencies were interviewed, and some 50 shops and 50 ordinary households were also interviewed, to build a more complete picture of retail food demand and supply, and any problems associated with this. As with the studies described above (section 2.4), results have been ‘triangulated’, that is, data from different sources have been correlated to build a consistent picture of food access problems. These two methodologies are described below.

3.2. Mapping the distribution of food and other retailing

3.2.1. Aims of the mapping

1) To ascertain the accessibility of various types of grocery and other retailing for persons of different travel ability across the study areas of Leeds, Scunthorpe, and North Lincolnshire.

2) To do this in a way that is comparable across all areas, and also over time.

3) To quantify this change over time by repeating the mapping exercise after a time lapse of three years.
3.2.2. Selection and definition of the shops to be mapped

Food shops do not come in discrete categories but form a continuous spectrum. For convenience stores this spectrum begins with CTN (confectionery, tobacconist, and newsagent) stores that effectively sell no ‘groceries’ at all. They sell edible items such as chocolate and ice cream but it is not possible to live off what they sell alone, nor to make what most people might consider a ‘main/hot meal’ from their stock. Some CTNs also stock a few tins of tomatoes or instant food like pot-noodles. Some will also sell tins of soup, and maybe tinned peas too. What they stock depends largely on what the shopkeeper thinks will sell, given local demand and competition (Tanburn, 1981, p. 22). Some shops still stock confectionery, tobacco, and newspapers but also have a wider range of food; perhaps pre-packed sandwiches, tinned fruit, raw potatoes and onions.

Moving further along the food-provision spectrum there are shops selling a wider range of tinned, frozen, chilled, and pre-prepared foods, with perhaps five or ten kinds of fruit and vegetables. These raw fruits and vegetables are usually the ‘hard’ types that do not spoil rapidly, such as lemons, apples, and turnips as well as potatoes and onions.

Looking towards a more comprehensive fruit and vegetable selection, along with other staple foods such as bread, milk, tinned food, and ready-to-cook meals, the spectrum now bifurcates. One branch is the typical inner city ‘south Asian’ store. This store is usually small, around 100 square metres or less, but very densely stocked with many different fruits and vegetables (forty, fifty, or more), and often spills out onto the pavement with an awning for shelter. In areas with a high Muslim population, there may be a small Halal butchers at the rear of the shop. The other branch leads to ever-larger grocery stores, with 800 or 1,000 square metres sales area, and twenty, thirty, or more different types of fruit and vegetables. This could be a typical Jackson or Nite and Day store, or a medium-sized Co-op. Beyond this lie the smaller supermarkets such as Lidl or Aldi, all the way up to a large Tesco Extra 10,000 square metre superstore.

There is a similar ‘spectrum’ rather than a clear delineation of bakers, butchers, and other food shops. Bakers may stock a wide range of loaves, or may just be a Greggs outlet selling mainly pre-packed sandwiches and one or two types of loaf. This is more like a takeaway sandwich bar. Butchers vary from a dedicated outlet selling a wide range of meats down to a convenience store selling some plastic packs of ham or chicken. Other facilities such as Post Offices frequently occupied the same shop as a convenience store. Many people like to do all their shopping in the one local parade or shop. Post Offices and chemists are important especially for the elderly, poor, and disabled, persons also likely to face difficulties accessing grocery facilities. These
groups need more medication than younger able-bodied persons, and the Post Office is needed for payment of pensions and other benefits. It was desirable to distinguish between convenience stores that stocked very few fresh fruit and vegetables, and those offering a wider range, and between these and dedicated greengrocers stocking fresh fruit and vegetables (many of these also had non-food items such as flowers). This is because access to fresh fruit and vegetables is important for health reasons, as outlined in Chapter One. Lack of these in the diet imposes large costs on society.

To reduce this wide range of facilities into a number of categories that could produce comparable maps across different neighbourhoods, facilities rather than shops were mapped. Guy, 1980, in a study in Watford, recognised basic categories of shops. When Guy polled ‘Watford housewives’ as to what shops they considered essential or desirable, the results were as follows (percentage figures are the proportion of ‘housewives’ agreeing the shop was essential/desirable):-

‘Essential’; chemist (98%), Post Office (97%), Convenience store/grocer (96%), baker (95%), butcher (94%), greengrocer (94%), newsagent (94%).

‘Desirable’; fishmonger (66%), bank (65%), hardware store (63%), draper (63%), shoe repairer (57%), hairdresser (52%), dry cleaner (51%).

This research is only considering food stores, chemists, and Post Offices so Guy’s ‘desirable’ shops except fishmongers were not mapped. In practice, by 1999, the date of the first shops mapping, fishmongers had virtually ceased to exist. The only places fresh/wet fish could be bought in Leeds and North Lincolnshire in 1999 were supermarkets, town markets, one or two convenience stores in the more affluent areas of north Leeds, and one free standing fishmonger in Ashby, Scunthorpe. By 2002 fresh/wet fish in these towns could only be obtained in supermarkets and town markets. Therefore fishmongers would have relatively little impact on the food maps, and for practical reasons such as map clarity were discarded. Grocers were divided on the basis of range of fruit and vegetables stocked as follows. If under ten kinds of fruit and vegetable in total were stocked, it was counted as a ‘small’ convenience store.\(^{29}\) If ten or more kinds were stocked it was counted as a ‘large’ store. If the store was part of one of the following chains; Aldi, Asda, Co-op, GT Smith, Lidl, Morrison, Netto,

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\(^{29}\) The categories ‘small’ and ‘large’ did not necessarily refer to the physical size of the shop’s sales area. Although shops of larger area did tend to sell a wider range of fresh fruit and vegetables, Asian shops were an exception. Many were very small, perhaps 100 square metres or less, but were very densely stocked and sold a wider range of fresh fruit and vegetables than ‘White’ stores several times larger.
Proudfoot, Safeway, Sainsbury, Tesco; that is, the main supermarket chains in Leeds and North Lincolnshire, it was marked as a supermarket. The threshold of ten served to distinguish shops essentially without fresh fruit and vegetables but which stocked just a few potatoes and onions. This threshold of below/above ten was independently chosen by the Norfolk Health Authority in a study of grocery provision in Norfolk villages.

The categories mapped were, then, defined as follows:-
Baker: a shop selling a range of loaves, not just sandwiches, but apart from bakery-related items such as cakes, no other food.
Butcher: a shop selling a range of uncooked meats.
Chemist: a shop dedicated to pharmaceutical goods.
Convenience store (small): a shop selling a wide range of foods, and nine or less types of fresh fruit and vegetable.
Convenience store (large): a shop selling a wide range of foods, and ten or more types of fresh fruit and vegetable.
Supermarket: One of the chains mentioned above.
Greengrocer: a shop selling only fruit and vegetables as food, though some sold flowers too.
Post office: a shop with the usual postal facilities.

Farm shops were ignored, unless within the built-up area of a village, because these would only be accessible to those with cars; a similar technique was used in the Norfolk rural village food study. A shop offering more than one of these facilities, e.g. a butcher that also sold fruit and vegetables, or a Post Office inside a convenience store, counted as two separate facilities. If a square contained two shops of the same category this was not double-counted. From the point of view of a customer two adjacent butchers, for example, offered much the same access to facilities as one butcher alone.

3.2.3. Procedures of the mapping

The boundaries of the study areas, Leeds and North Lincolnshire, were first defined so as to approximate to natural market boundaries. That is a sort of "watershed", a line where customers, if travelling to the most easily reachable shopping centre, would either travel into or out of the study area. This was then fitted to an approximate Ordnance Survey gridline so as to produce a rectangular area. This prevented the possibility of including or excluding certain areas due to their local characteristics, so reducing researcher bias. The areas mapped are shown in section 4.7.2. Previous food
desert research has used a number of different spatial frames, such as postcode sectors or enumeration districts. The advantage of these is that if quantitative mapping using census data is intended, as in Clarke et al (2002) computer programs can readily produce maps of retail provision per household and much else. This study, ‘the ecology of food deserts’ is intended to be more qualitative, both to more fully explore ‘uncharted food deserts’ and because time and resource constraints would make it difficult to obtain a large number of interviews, so as to obtain valid quantitative data. Rudestam and Newton (2001, p.36) says the merits of qualitative research are a fuller ‘understanding of human phenomena and the investigation and meaning that people give to events they experience’. As food deserts may not be purely geographical but depend on cultural, social, and psychological factors, qualitative research should be well suited to an examination of the ‘ecology’ of such deserts. Cummins and MacIntyre (2002b, p.2118) says “Postcode sectors might not be the most appropriate spatial scale at which to map food price and availability....we are not aware of any data from the UK demonstrating the appropriate scale for shopping-basket surveys”. To enable comparisons to be readily made between different suburbs and rural areas, where postcodes and enumeration districts would vary widely in size with population density, ‘the ecology of food deserts’ research used a grid square spatial framework based on the Ordnance Survey National Grid.

The use of Ordnance Survey gridlines enabled the study areas to be divided into 250metre x 250 metre squares for Leeds and Scunthorpe, and 500 metre x 500 metre squares for rural North Lincolnshire. The choice of 250 metres was practical because the A-Z street atlases were already divided into 500 x 500 metre squares, and these 250 metre squares approximated to a circle of radius 150 metres, which this research and earlier researchers have shown is the limit many disabled persons can walk. Therefore the facilities within one square can be read as the facilities accessible on foot for an older/more disabled person living in that square. In rural areas practical considerations of mapping scale dictated the use of 500 metre squares. However many small rural settlements are only 500 – 1,000 metres across anyway, so the use of smaller squares would not have added much information to shop accessibility there.

The shops were then visited to ascertain what they stocked and so what category they should be mapped as. A visit was necessary, rather than relying on trade directories, for two reasons. Firstly, the trade directories would be out of date. Shops change use rapidly and any directory over six months old could have many shops incorrect. More problematically, shops classifications in publications such as Yellow Pages may give
little clue as to what sort of shop it actually is. This is true for 'newsagents' or 'off-
llicences', which actually may stock enough food to be counted as convenience stores. However the shopkeeper themselves chooses the classification and may pick one, e.g. off-licence, to gain more outside trade, whilst local customers know the groceries they stock anyway. Finally the position of the shop was plotted on a street map and its category noted. The 250 metre squares were added to the street map so that the categories available in each square could be determined.

3.2.4. Ethical issues

The main ethical issue involved 'informed consent'; informing the shopkeeper of the purpose of the visit, otherwise the researcher may have been mistaken for a shoplifter or a commercial spy. Informing the shopkeeper was beneficial for the research as many shopkeepers, when told of the research, offered informal comments on the state of their trade and of local conditions. No shopkeepers were obstructive or resented the visit. Shopkeepers who were interviewed were given the contact details of the researcher and sent a summary of the results.

3.2.5. Problems of the mapping and how overcome

There were two main problems once the shops were reached, besides that of bad weather. These were, firstly determining if a closed shop premises was to be open later on, and secondly determining if the selection of fruit and vegetables on offer at the time of the visit was typical or if the visit had been made when the stock was depleted, shortly before a fresh delivery. Some danger from street crime was anticipated, and precautions such as not entering crime-prone areas after dark or carrying many valuables were adopted. In fact the shops mapping was carried out during the Spring and Summer and only between 9am and 6pm so these hours were daylight anyway. Personal danger did not materialize apart from one egg thrown by youths.

Discerning if a non-open shop was permanently shut could be solved in three ways. Firstly by asking either local pedestrians or in the next-door shop, if there was one open. The best form of question was "Do you know when [the shop] will be open" because that ensured they had to say if it was permanently closed at present. If there was nobody to ask, looking through the window revealed if the shop was empty or if it had goods that were waiting to be sold. This was not always possible if metal shutters were down, although occasionally the interior of the shop could still be seen. Finally
the street environment around the shop gave clues. If there was an accumulation of rubbish, leaves, or weeds in front of the shop, or a pile of junk mail inside the shop door, this suggested nobody had come to open it for some time. Local knowledge was a useful source of information, especially in rural areas, of past changes in retailing provision. Many older persons in villages had lived there for some years and could give details of what shops had once existed, where, and what they sold. Memories can be false, but the trend of this information across villages was consistent and correlated with other information on rural retail changes.

Because the level of grocery stocks in shops varies over several timescales, it was harder to decide what was the typical level of grocery provision in some shops. If the shop has a large turnover of fruit and vegetables, there may be a daily delivery and afternoon levels are significantly lower than morning ones. Many smaller convenience stores try to avoid spoilage by having vegetables delivered just once weekly; local customers know which day this is, and the rest of the week the greengrocery shelves are fairly bare. Seasonal variations occur because some shops avoid stocking easily perishable vegetables in the hot summer months. In areas with a large student population, like Headingley, some shops stock fruit and vegetables more during term time than in holiday weeks. A similar seasonality occurs in holiday villages where retail provision may be good between April and October but is very sparse in the winter for the few who stay over the winter there. For this research the shop was categorised according to its maximum typical vegetable provision because if, for example, the shop has weekly deliveries, customers may adapt their shopping to this pattern.

Whether the fruit and vegetable levels seen by the researcher represented maximum typical provision or not could be judged by comparing the area of shelving available to the actual stock present. A problem here was that the provision may have been recently run down, on a permanent basis, but the shelving not adjusted yet. Looking for the presence or absence of price tags, usually removed if a product line has been permanently discontinued, gave a clue. It was possible to ask the shopkeeper, but they might be busy, or if there was only an assistant present, they might not know. A useful question, in this case, to the assistant was “do you have a X in?”, answer “No”, “Are you going to have a X in next week?” (X here being a vegetable such as broccoli that is commonly stocked by grocery stores with over ten kinds of fruit and vegetable but not usually stocked by those with under ten kinds).
3.2.6. Constructing up the maps

Each 250 x 250 metre square of the Leeds and Scunthorpe maps (500 x 500 metre square for the rural North Lincolnshire maps) could now be marked as containing one or more of the shops categories outlined in section 3.2.2. or as containing no shops. Only squares containing residential properties were marked; squares that were solely parkland, playing fields, industrial, or otherwise non-residential were left blank, as were rural squares where nobody lived. A square had to have at least 10% of its area as residential not to be left blank, for any of the maps. This was because otherwise areas such as southeast Leeds, where there are large industrial estates and no shops, would show up as food deserts when in fact no one is denied access to food by this absence of shops. The meaning of the changes in retailing provision observed between 1999 and 2002 is further discussed in section 4.7.2.

3.3. Interviewing the respondents

3.3.1. Aims of the interviewing

The aim was to build up a complete picture of the food chain, from supermarkets and wholesalers to small shops and the consumer, in the study areas of Leeds and North Lincolnshire. In practice contacts emerged that gave insights into the food chain in areas beyond this, from Norfolk and Birmingham to London and Northern England, and even overseas. Existing research has been done on many of the aspects of the food chain researched here, for example Guy’s work on how far consumers will walk to shops before they change mode to private or public transport. Other aspects of this research, such as whether there are many different types of food desert, are newer. In this aspect the aim was two-fold; to confirm, or otherwise, existing research, and to test and develop the new concepts further.

3.3.2. Selection of types of respondents to be asked for an interview

Three broad categories of prospective respondent were targeted. Firstly, supply-side agencies, that is, supermarkets, wholesalers, and small shopkeepers. Secondly, customers, that is, a selection of households. Thirdly, other agencies relevant to the ten stages of access to food by the consumer, as outlined in section 1.6. Which other agencies might be relevant was determined by the literature review, and this list was open to change following the results of early interviews with customers and
shopkeepers. A similar strategy was followed to decide what questions to ask for the semi-structured interview. This type of interview was used for all respondents, although the actual question schedule varied according to whether, for example, a bus company or an MP was being interviewed. The categories of agencies interviewed, and the questions they were asked, are listed in Appendix 1.

3.3.3. Selection of actual respondents to be asked for an interview

A different selection strategy was appropriate for each of the three broad categories outlined in section 3.3.2. The supermarkets and small shops were interviewed as the second mapping in 2002 was completed, minimising travel costs. Pilot interviews had been carried out during the first mapping, and this helped determine the question schedule for several categories of agency. Additional information was obtained whilst mapping shops in Bradford (Yorkshire), Birmingham, Sheffield, and London. The aim was to interview a selection of each category of shop as outlined in section 3.2.2, in each of the study areas, Leeds and North Lincolnshire. The respondents were to be chosen so as to achieve a geographical spread across the study area, with different types of neighbourhood represented in the sample. There were 5 categories of food shops to be interviewed, and the researcher also interviewed different types of supermarkets, from smaller Co-ops, Jacksons, and Aldi up to large Tesco and Asda stores. However, data saturation clearly set in after 40-50 shop interviews in total. No new information had been gathered from the last few interviews as shop mapping progressed westwards across the study area. This meant there were more interviews to the east than the west of Leeds. However to guard against any bias due to these two halves being possibly different in socio-economic or demographic terms some interviews were carried out with west-Leeds shops, and informal conversations with shops where no semi-structured interview took place confirmed the same viewpoint by these shopkeepers too. In other words no significant east-west Leeds bias occurred.

The researcher anticipated a problem with busy shopkeepers or supermarket managers being unwilling, perhaps too busy, to give an interview. In fact 90% of small shopkeepers and some 50% of supermarket managers were willing to be interviewed, either at the time of the first visit in 2002 or at a later appointment; 90% of appointments were honoured. The main category of shops presenting problems

30 Data saturation is the point when no important new themes are emerging from interviews.
as regards gaining an interview were bakers. These were frequently busy, with the
demand for sandwiches, and many were controlled by one of the major bakery chains,
Greggs or Ainsley. The shop manager here often had little autonomy over the business
and so could not answer many of the questions. But other shops successfully filled any
data gaps. The procedure for interviewing wholesalers was not as for shops but as for
the 'other agencies'.

Several methods were available to obtain household interviews. These all had biases
but used in conjunction, gave a good range of types of households. A method not used
was interviews in shopping areas. This was because the semi-structured interview
lasted about 30 minutes and those that were of most interest, the old and disabled,
would not have been present or would not have stood for that long. Also the interviews
were tape-recorded and tapes do not distinguish between speech and unwanted
background noise. Any recordings done in an environment with background noise were
barely audible. Postal surveys were also hardly used. They offered low travel costs but
were not suited to a qualitative semi-structured interview schedule. The return rate is
usually low, so travel costs saved are outweighed by postage costs per form returned;
the return rate can be boosted by including a stamped addressed envelope but this
doubles costs. Some householders will retain the stamp and still not return the
questionnaire. With a semi-structured, non-definitive, answer form, the non-return rate
could be expected to rise (Victor, 1987, p.60). The persons least likely to fill them in
are elderly and disabled, with possible eyesight problems. Poor, maybe less literate,
people may also avoid returning questionnaires. Another group who may not reply are
ethnic minorities with poor English; these and the poor, the elderly, and disabled are
key groups the researcher wished to interview. There is no way of knowing from postal
addresses alone which household types have not filled them in, 31 so any bias is
unknown. However some respondents contacted by phone (see below) stated they
would rather have the form posted out. About ten forms were posted out and about half
were returned, with some useful information, though written answers will always be
shorter than spoken ones. The problem here is one cannot ask the respondent to clarify
or expand on answers, or assess non-verbal information such as attitudinal indicators.

Random telephoning was tried, and yielded some useful interviews. Once the relevant
phone codes were established for Leeds, Scunthorpe, and North Lincolnshire, the last

31 There would be a bias towards family heads here; the views of younger persons, as
well as the very old, might not be obtained.
six digits were randomly selected. The advantages and disadvantages of this method are outlined below.

**Advantages.** The selection is random as the researcher does not know which household type is being called. By using random numbers rather than a phone directory, new and unlisted numbers are available (some unlisted householders were puzzled as to how their number had been obtained). Householders who do not go out much such as the elderly and disabled can be contacted. Some numbers were workplaces and not only were multiple interviews obtained here, but some of the respondents lived beyond Leeds, in places like Otley, widening the selection geographically. By calling between 6pm and 8pm and on Saturdays working households could also be contacted (calls were not made before 9am as households may be busy going to work or sending children to school, nor were they made after 8pm in case some were going to bed early). However there was still a risk of awaking night-shift workers. Some householder would give interviews over the phone when they would have been wary of allowing an unknown researcher to visit them in person. Checking the Telephone Preference Scheme rules confirmed that cold calling was legal for academic non-profit making research.

**Disadvantages.** The selection is biased against the poor, those hard of hearing, and elderly, who may not have a telephone, and against persons who may have a mobile number only. Residents of institutions such as bed and breakfasts or care homes may also be missed, although the shopping habits of these were covered in some of the poverty/elderly community based agencies interviewed. Overall about 95% of UK households had a phone in 1998 (Ody, 1998, p.20), and 98% of working households in 2000 (The Guardian, 2/3/00, p.6). However according to The Guardian, in 2000 only 85% of workless households had a phone. Many numbers were out, and leaving an answer-phone message never elicited a reply. Many numbers do not connect to any telephone so although many numbers can be dialled in a short period of time, interviews are actually obtained rather slowly. Usually the respondent still has to be travelled to, and as there has been less personal contact with the researcher when making the appointment, this may account for the higher rate of not-at-homes when the house was visited for an interview.

The most fruitful method used was house-to-house calling. This has the following advantages and disadvantages.
Advantages. This method gave the researcher control over types of house and neighbourhood called upon, although type/area of house is no guarantee of the socio-economic background of the household, and certainly no indicator of age or disability. Researcher bias as to areas visited could be lessened by random selection in the A-Z street index of street name to start calling from; there is unlikely to be any connection between the alphabetical order of the street name and any other relevant variable. It was expected that most householders would require the researcher to return later but over 50% of householders called upon gave an interview there and then; appropriate identification was always shown, and a letter giving contact addresses/phone numbers at the University was left. This method could be used to recover time otherwise wasted if an interview venue had been travelled to only to find the respondent unavailable. Generally no more than twenty houses were called on, including those with no-one at home, before an interview was secured. There was less risk of awakening shift workers than by telephone, as houses with upstairs curtains closed could be avoided.

Disadvantages. Travel costs were not high per interview, but the researcher was exposed to adverse weather, and potential danger, from muggers to dangerous dogs, though in fact this did not materialize. Houses where a dog menace was evident were not visited. Cold calling might alarm some householders, for example the elderly. There was a bias against working people and also those at day centres such as some elderly and disabled, because houses were not called on before 9am or after 5.30pm. There was also a bias against flat-dwellers if there was an intercom system as here refusals were more likely than than face to face at a door.

The last method used was snowballing from other interviews. Householders were asked at the close of the interview if they knew of others who might be willing to be interviewed, and on average one snowball address per four interviews was obtained. Snowballing introduced a bias, towards the more mobile, fitter, persons who are likely to have more contacts. It also biased the research geographically towards those areas where people had already been interviewed, because people often have friends in the same area they live in. Most ‘snowballs’ visited did agree to an interview. ‘Snowball’ respondents may be more willing to give an interview if the researcher can say a friend of theirs recommended their name.

Data saturation began to set in after around 40 household interviews, and 50 household interviews in total were conducted, giving a good range of age, socio-economic category, and neighbourhood type.
The agencies relevant to the ten stages of food access were selected differently. Once the broad categories had been selected (Appendix 2) the task was to find organisations engaged in these categories. Where these addresses and phone numbers were found depended to an extent on the type of agency. Bus company addresses were found at leaflets at Scunthorpe and Leeds bus stations. Leeds, and North Lincolnshire, council offices had leaflets giving many useful addresses, from council housing offices to elderly and poor-support organisations. Leeds City Hall, and North Lincolnshire Council, has lists of local councillors; council websites were also useful here. Yellow pages, available on-line, gave addresses of agencies in wholesaling and estate agency. Local newspapers had sections detailing community support contacts, and both local papers' and the Guardian's job columns were also examined for relevant bodies. Snowballing was useful here, and also 'eyeballing'; en route to an appointment, one might spot a useful organisation, which could be called in on to get a phone number for later contact. Personal contacts also gave some useful addresses, and some contacts were made through visitors to the researcher's website at the University of Leeds. Overall the researcher aimed for 'symmetry' between Leeds and North Lincolnshire. That is, if an organisation of a certain type was interviewed in Leeds, an equivalent organisation was sought in North Lincolnshire. This was broadly achieved, although some Leeds organisations, such as the Vietnamese community, had no North Lincolnshire equivalent. Also, some organisations interviewed had no connection with either region, such as those in Norfolk, but still gave invaluable information on grocery retailing and food deserts. Symmetry also could not be completely achieved because of different local practices in the two study areas. For example the Housing Department of North Lincolnshire preferred an interview to be done centrally with the head of the Housing Department. In Leeds, the council preference was for multiple interviews with local office managers.

Once an agency name, address, and phone number was obtained, the best method of contact was to phone first and get, if possible the personal name, or at least the job title, of a relevant employee, and then write in asking for an interview. Some agencies then replied immediately offering to arrange an interview, but if not, the agency could then be telephoned about 10 days later. By this stage about 70% of original agency contacts resulted in an appointment for interview, over 90% of which were honoured. Data saturation did not set in even after 120 agency interviews but by then a good range of agencies had been interviewed, from different areas, covering different categories.
3.3.4 Ethical issues

The main ethical issues were 'informed consent' and avoiding any form of coercion on the respondent. Calls at unsocial hours, for example after dark, were avoided, and calls on businesses at busy times such as at the end of the financial year were also avoided. Times when many personnel might be on holiday, such as end-December, were also best avoided. At all stages of the interview, from the initial contact on, the respondent was fully informed of the identity of the person interviewing them. All respondents were promised a summary of the research results. It was made clear to the respondent that at any time they could abort the interview. Permission was sought not just for the interview but also for tape recording, the taking of notes, and for the use of anonymised quotes. All respondents who agreed to an interview agreed to note taking, and over 95% of respondents agreed to tape recording and anonymised quotes. The purpose of the tape recording was explained to the respondent; merely to assist with transcription, and that the tape recording would be discarded once this was done. Local customs were respected, for example removing the shoes when entering some south Asian households. The researcher dressed in smart casual clothes; to have worn a suit might have intimidated some persons into giving an interview because the researcher looked official (Bailey, 1978, p. 55). On the other hand, clothes that were not smart could have alienated some house-proud respondents, and business respondents.

3.3.5 Problems of the interviewing and how overcome

There was little problem with respondents not being there for the interview. Travel schedules became contorted as geographically adjacent respondents could not always agree to adjacent interview times, and scheduling could be a problem as the duration of the interview varied between 20 and 70 minutes. A mobile phone was useful when encountering unexpected traffic hold-ups, or delays due to the previous respondent not being on time. Once the researcher had to phone the householder from their own doorstep; the householder was at home, but in the rear garden and could not hear the doorbell. Inaudible tapes were a problem because several respondents chose venues such as cafeterias or offices with much background noise. Sometimes the tape recorder batteries would begin to run down during the interview, or it might be set incorrectly. All this made note taking very useful as a back up, see section 3.3.6. Some rural respondents contacted by phone would give an address that was hard to find because many village roads had no nameplates.
3.3.6. Drawing up and administering the interview schedule

The actual question schedules are reproduced in Appendix 2. The schedule was designed to take 25-30 minutes except for interviews with private companies, which tended to be shorter. However many agents were willing to talk for longer, and some interviews lasted for 60-70 minutes. All interviews, except the small shop interviews were, subject to the respondent’s permission, both tape recorded and had the answers taken down in note form. This had several benefits. There was a back-up if the tape was inaudible (see section 3.3.5). The respondent did not have to wait for the researcher to write down their answer so the interview could be speeded up, or more information obtained in a given time. The notes enabled the researcher, when transcribing the tape, to see where they were in the interview schedule, and made transcription speedier. With notes, a 30-minute tape could be transcribed in 2½ to 3 hours, whereas without notes it might have taken 4-5 hours. Superfluous sections could be fast-forwarded. And the notes could have the interview time and number recorded, so that by similarly annotating the tape (by speaking into it after the researcher had left) multiple interviews could be conducted in a day without losing track of which set of answers belonged to which respondent. Small shop interviews were only taken down in note form. This was because the interview was in the shop sales area and was often noisy, and subject to interruptions if a customer entered. The questions and answers here were quite short and could be completed in 10-15 minutes.

The question schedules followed principles set out in Bailey (1978, p.119), Kitchin (1999, pp.52/3), and Fowler (1990, p.42). Questions should be relevant, or the respondent’s time is being wasted which is unethical, and may be detected by them. Questions should be in plain English, not vague or containing technical jargon, and easily understandable. Double questions, ambiguous questions, and double negatives should be avoided. Otherwise the respondent may answer a different question from the one asked. The interviewer may need to rephrase the question if the respondent has not understood it. The respondent was assured that their own views were sought and there were no ‘right’ or ‘wrong’ answers. If the respondent could not answer a question they were reassured that was OK; the answer might emerge later with other questions. If more information was needed, prompts were used like ‘please tell me more’, or ‘tell me what you mean by that’; without pressuring the respondent. Hypothetical questions should be avoided where possible, although for this research it was desirable to know the maximum distance a respondent would walk to the shops. To answer this, the respondent would often give the actual distance from them to the shops, if this was
walkable for them; the researcher then did not know if, had the shops been further, they would still have walked there. A solution to this was to nominate a local landmark, further than the shops, and ask if they would walk there if that was where the shops were.

The questions should be in a logical order to avoid confusing the respondent, but on the other hand the appearance of a common thread through the questions should be avoided as a 'response set' may be encountered where all the answers support a single theme or idea. Filter questions can be used, such as "does anyone who does not live in your household buy food for you" and only if the answer is 'yes', asking more about this. This saves time in the interview, and avoids making assumptions about the respondent. Emotive words like 'greedy' or 'pollution' should be avoided as these may bias the answers. Also avoided are leading questions like 'don't you think that...?'. Potentially biased questions like 'should the supermarkets be taxed' can be better put on a Likert scale of 'agree strongly/agree/no opinion/disagree/disagree strongly', and this can be analysed in a part-quantitative manner. 'Don't knows' are coded separately. Sensitive questions such as on income or age are put last. Then if the respondent objects, useful information has still been obtained and they are not prejudiced against the interviewer for the other questions.

Overall there was some 'learning by doing' and questions that had been problematic in earlier interviews were adapted slightly in later ones. This did not invalidate any research or make later interviews incompatible because the questions were a framework for the respondent to express their own views anyway. In later interviews, contentious topics could be brought up, without affecting the respondent/interviewer attitude, by attributing them to a third party. For example, 'some people have said X; what do you think to that?'

The main factor was to preserve what Bailey (1987, p.58), calls 'face validity'; is the instrument, the questionnaire, really measuring what the researcher thinks it is? Does it provide an adequate sample of what is being measured? There are a number of non-verbal traps to be avoided, besides the questionnaire wording. The interviewer's own bias may come across in several ways, in the question wording, in non-verbal responses to the answers, or in the interpretation of what is said. It is best to approach each interview with an 'agnostic' viewpoint, with no preconceptions about the respondent's aims or actions at all, if it is possible to 'wipe one's own mind' this way. However it is not just the researcher's own attitude that may cause problems. The respondent will
often try and please the interviewer, and many in this research brought out tea and biscuits, and some even turned up for the interview when feeling unwell. This may give rise to 'interviewer bias', when the respondent tries to give an answer that will please the interviewer, when in fact the real answer may have been, for example, 'I don't know'. Likewise, income or assets may be exaggerated to make the respondent look better. If the interviewer suspects this they may ask the same question a different way but this can be risky. If the respondent spots this, they may become antagonised to the interviewer and the opposite side of this problem emerges. Face-to-face interviews can give non-verbal clues to this that will be missed on postal or phone interviews.

The attitude of the respondent may shift during the interview. In this research, there was a detectable shift by some respondents from a right wing viewpoint towards a more socially oriented viewpoint as successive questions made them think more about social exclusion. This is called 'sensitisation'. A similar problem is 'maturation effects', where a subject being researched is also being reported in the media, and later respondents have a different set of views and knowledge from earlier ones. In this research, the concept of food deserts became better known due to media reporting, and may have altered the views of respondents interviewed later on. That cannot be controlled for, except by attempting to ensure that all respondents of a certain type are interviewed within as short time period as possible. However, time, resource, and financial constraints may work against this. Like 'maturation, 'history' can be a threat to the research. If a major event occurs during the research timetable, answers given before and after may not be comparable, for example research on terrorism conducted over a period including September 11, 2001. Changes in retail provision are relatively frequent, and during the course of this research several large supermarkets opened in Leeds and in Brigg. The Parishes Centre in Scunthorpe was also announced and was well publicized to open just after interviewing concluded, in Autumn 2002. However 'history' can be turned to the advantage of the researcher by asking the respondents their opinion of these changes.

When transcribing the tapes onto paper, there was the problem of many respondents not talking in discrete sentences, or even in correct grammar. Transcription should be exactly as the respondent spoke, but the transcriber still has to add some punctuation. This should be based on the pauses as the respondent spoke, but there is still room for interpretation, and therefore error. Two examples show the huge change of thought that can be made by the presence of absence of even a comma. Firstly, in the 1960s the USA tax authorities put an import tax on 'fruit vegetables'. They meant 'fruit,
vegetables'. The omission of the comma in the legislation resulted in this tax only applying to a narrow category of foods, and meant a huge loss of revenue till new legislation could be passed. Secondly, consider the difference between ‘I tell you today, I shall be in Leeds’ and ‘I tell you, today I shall be in Leeds’. The sense of timing has been completely altered due to the transposition of the comma.

These threats to the research validity can be minimised by careful research tactics but never entirely eliminated; obtaining a wide sample of respondents can lessen their impact further by broadening the range of opinions sampled.

3.3.7. Analysing the interview data

The semi-structured interviews with over 200 respondents produced a wealth of data, around 100-150 hours of tape recorded comments, as well as some shopkeeper interviews not tape recorded but noted down on paper only. Many of the coping strategies employed emerged from this data. However first the data had to be organised in some manner so that trends could be identified, redundancy could be eliminated, and a picture of what food deserts may exist or are perceived by respondents built up. The researcher chose to organise this data by the stages of the shopping process as noted in section 1.6. This was because it is at these stages of the journey, the entire ‘consumption journey’ from the shopper leaving their home to finally consuming the food, where obstacles to such consumption may occur. It is these obstacles that comprise the essence of food deserts; these obstacles are the reasons why healthy food is not consumed and why costs such as medical treatment arise.

The analytical process was an iterative one; interviewee comments do not come in neat categorical ‘boxes’, but, especially with semi structured interviews, tend to mention many topics within one interview, or even one sentence. Once the data had been transferred from tape, or paper, to a Word document on computer, sorting categories meant reading and re-reading the data, sometimes duplicating comments in different categories before sorting out the redundant comments. Initially, the volume of data grew somewhat before sorting and reduction. Sorting the data involved discarding some comments and selection of those to use in the final thesis. This created a dilemma. Should the researcher use the unusual comments, eliciting perhaps unrecognised types of food desert for the classification in Chapter Seven, and yet risk picking atypical cases that would not correlate with other research in this field? Or should the researcher stay with comments that triangulate with existing knowledge
about food deserts, and miss any new situations concerning food access? Does one household, in a unique food access situation, constitute another type of food desert; if not, how many households are required to constitute such a new type?

This ‘minimum size’ question is further dealt with in section 7.2. However the quantitative research needed to estimate such a ‘minimum size’ has not yet been done and would require resources beyond this research. For this research, therefore, opinions, statements, and the like concerning food access and related topics were used if backed up in broad theme by a total of five sources. ‘Sources’ here could be actual respondent’s interviewed but also might include other research or media reports. Other research might include both that published in academic journals and that done by the researcher in other cities such as Birmingham or London. Thus the food desert classification proposed in Chapter Seven includes some previously unmentioned venues for food desert yet these venues, associated food access problems, and attempted coping strategies, were mentioned by at least five, often considerably more, sources.

A decision had to be made on whether to use a program such as NUDIST to analyse the data. This would have incurred time learning the program, to be set off against time possibly saved in analysis. However there could be more flexibility in categorising the data if done manually, so the computer was used only for word-processing the interview data.

This chapter has detailed how the respondents were chosen and interviewed, and how the shops were mapped. Chapter Four, looks at the supply side of grocery shopping. The results of the interviews of shops are given, and the results of the agency interviews where these relate to the supply side of food retailing. Chapter Five investigates the demand side of grocery shopping. Here all the stages of access by the shopper to the shops are examined, along with any problems that may occur at each stage.
Chapter Four
Results of the shop interviews and shops mapping

4.1. The development of the small shop since 1950

4.1.1. General trends in small shops since 1950

Section 2.1, traced the origins of the small store in Britain from its seventeenth century role as work-shops producing goods for sale in travelling fairs to its peak in the 1950s. This section looks at the changes in this type of retailing since then.

Table 2, below, gives the approximate number of single-store shops, of all types, in Britain, 1950-2000.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>450,000</td>
</tr>
<tr>
<td>1960</td>
<td>360,000</td>
</tr>
<tr>
<td>1970</td>
<td>330,000</td>
</tr>
<tr>
<td>1980</td>
<td>225,000</td>
</tr>
<tr>
<td>1990</td>
<td>215,000</td>
</tr>
<tr>
<td>2000</td>
<td>200,000</td>
</tr>
</tbody>
</table>


Table 3, below, shows how the market share (of the total UK grocery market) of small independent grocery shops has changed between 1900 and 2000.

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>80%</td>
</tr>
<tr>
<td>1940</td>
<td>54%</td>
</tr>
<tr>
<td>1950</td>
<td>54%</td>
</tr>
<tr>
<td>1960</td>
<td>51%</td>
</tr>
<tr>
<td>1970</td>
<td>43%</td>
</tr>
<tr>
<td>1980</td>
<td>32%</td>
</tr>
<tr>
<td>1990</td>
<td>25%</td>
</tr>
<tr>
<td>2000</td>
<td>18%</td>
</tr>
</tbody>
</table>

The actual numbers of single-store independent 'grocery' or 'greengrocery' shops is harder to determine because different sources use different definitions, so figures for various years do not tally. Here, the definition of a greengrocer is a shop selling no food other than fresh fruit and vegetables, although flowers or other goods may also be sold. A grocer is treated as a general store selling all kinds of staple foods, tinned, frozen, and fresh. The following figures are from several sources (stated below) and may involve interpolations between different years. Where estimates vary greatly between sources, the range of estimates is given.

Table 4, below, gives the numbers of independent grocery (convenience) stores in the UK, various years.

1950 = 250,000
1960 = 120,000
1970 = 80,000 - 106,000
1980 = 50,000 - 68,000.
1990 = 30 - 39,000
2000 = 21,000

Figure 6 presents the information in tables 3 and 4 together.
Table 5 below shows the changes in numbers of other types of independent store between 1970 and 1980.

Bakers: 1970 = 19,000, 1980 = 12,000. -37%  
Butchers: 1970 = 33,000, 1980 = 21,000. -36%  
Fishmongers: 1970 = 6,000, 1980 = 2,800. -53%  
Greengrocers: 1970 = 29,000, 1980 = 12,000. -59%  
Off-licences: 1970 = 9,500, 1980 = 9,000. -5%


For details on retail development within the research study areas, see section 4.7.1.

These figures show that between 1950 and 2000, the number of independent stores in Britain fell by 55%. The number of independent convenience or grocery stores fell by over 90%, and their volume of food trade fell by nearly 80%. There was a smaller fall in trading volume than in shop numbers as it is selectively the marginal, low volume, stores that have closed. Some convenience stores have copied the supermarkets and moved more into non-food sales. Some greengrocers have diversified into flowers. A Crowle greengrocers and florist said "We need both to survive. I can get vegetables cheaper than the supermarkets because I drive to the wholesaler [in Sheffield] myself". He has to drive there anyway to get the flowers, so the two products support each other. Eventually the grocery side may be seen as less profitable and abandoned. Butchers have also declined; many have moved into sandwiches and pre-packed meats, becoming more like takeaways. "People don't buy fresh meat now, they used to get a joint on a Saturday, we will end up selling sandwiches only" [R.23 Belle Isle butcher]. Meat consumption in the UK has fallen following a number of food scares such as BSE and Foot and Mouth (see section 4.1.3). Cheap pub meals were also blamed for the demise of weekend meat joint sales. Shopkeepers may be keen to find an external cause to blame for declining business, but these trends were mentioned by several respondents, as well as the media.

Some types of non-food shop are also declining, and this may reduce the trade of small food shops on suburban parades. The end of RPM on pharmaceutical goods has enabled the supermarkets to enter this business profitably (see section 2.3.3), creaming off non-prescription goods like sunglasses and vitamin pills. However local High Street
chemists also have a community role, (see section 4.6.1), delivering medicines to the elderly and disabled, and giving medical advice informally to customers. The informal setting encouraged people to seek advice here where they would not bother going to their GP (Guardian II, 17/1/01, p.2). This could save the NHS money by giving early warning of costly progressive diseases. However one Birmingham convenience store appreciated the closure of the chemist next door, because there was now more off-street parking available for his customers.

4.1.2. Loss of local financial facilities, banks and Post Offices

Access to money is crucial for shopping for those without a bank account and credit card, that is, many of the poor and elderly. Shareholder pressure for increasing profits and dividends is forcing the closure of smaller rural and inner-urban banks. Older persons may not wish to changes from the cash payments they are accustomed to; they see little benefit in moving to a bank account system. The UK government, to save money, wants to transfer Benefit (including Pension) payments onto electronic cash transfer and to set up special Post-Office-based bank accounts for those with no bank account. It costs central government 79p to process a Giro transaction but just 1p to process an Automatic Cash Transaction through a bank. However some Post Offices derive 40% of their income from the present system of benefits transactions. The UK government plans to close many smaller Post offices. The UK had 22,000 Post Offices in 1980 but only 17,846 in 2002,32 half in rural and half in urban areas (rural being defined as serving a community of less than 10,000, (Daily Telegraph, 16/10/02, p.4).

This has a negative impact on local grocery provision in four ways. Firstly, if the Post office is closed, cash-users must travel to a main retailing centre where access to cash is still available. They will then shop there; although this means carrying the shopping further back home, this is preferable because there is a crime risk in carrying sums of cash for any distance. Cash machines (ATMs) exist in local shops, and will be available within Post Offices, but a flat rate charge is made for withdrawals. This has risen from £1.00 when ATMs were first installed in 1999 to around £1.50 in 2003 (Independent Retail News, 30/5/03, pp.60-2). This will hit the poor most, because they tend to make smaller withdrawals. Pensioners may face long and expensive journeys to access cash, or if disabled, they have to pay a carer to go instead (Guardian, 8/4/00, p.5). Secondly, the village Post office is often also the local grocery store, and neither the grocery nor

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32 Figures from The Guardian (16/12/02, p.7) “Ghost-town Britain looms”.
the Post Office function may be profitable enough to survive on its own. If the Post Office has its own premises, village shops lose 15% of their takings if it closes, and 25% if the Post Office shares the premises. Thirdly, shops have to pay a fee to the credit card company each time a customer uses credit cards for payment. Larger businesses can absorb this fee, because it is a flat rate per payment and their transactions are larger, but if people pay by card for £5 of groceries, much of the shop’s profit is taken by fees. Fourthly, if many small Post offices close, queues in the remainder for pensions will be very long and this will force pensioners to open bank accounts, to avoid standing for long periods. The closure of bank branches not only deprives consumers of access to cash, as with Post Offices, but directly affects small businesses, as they have to bank their cash takings. The shop either has to close whilst the cash is delivered to a more distant bank, or the shopkeeper has to pay someone to take it, creating a security risk. In Totland, Isle of Wight, within 18 months of the last bank closing, only one shop was left operating.

Solutions include having the Post Office in a pub or even a church. The former has already been tried successfully in Ireland (A.107, rural preservation), where Post Office opening hours, including the attached grocery business, actually lengthened to those of the pub, 11 am to 11 pm. The latter venue for the Post Office has been proposed by the church as being a return to its old mediaeval role as a community centre (Yorkshire Post, 18/9/00, p.1). However there could be religious and architectural objections to this. Another possibility is for villages to ‘share’ Post offices, having the premises in one village manned on Mondays and Wednesdays, the other on Tuesdays and Thursdays. But this would not save on premises costs, unless the Post Office was housed in a mobile van. But some villagers have objected to mobile retail and financial facilities parked in their village (section 5.5). The Independent Retail News (30/5/03, p.10) reported that a Scottish sub-Post Office was to double as the police station after the original station closed down. Adding other services to the Post Office could be a way of ensuring the future of isolated branches.

4.1.3. Other changes in the rural economy

Rural areas have seen intense downwards pressure on farm incomes, and also the purchase of rural homes by urban workers for use as commuter homes or holiday homes. The decline in farm incomes has opened the way to city dwellers outbidding rural locals in the housing market. The 1996 PPG policies tend to discourage rural commercial development, but “the biggest single thing to help rural shops is having the
workforce based in or close to the village; once they leave the village to work they're going to shop that way too" (A.95, Lincolnshire MP). However, provision of rural workplaces might raise objections concerning commercial development of villages, probably from 'nimby's' who themselves live in the village but work in town. The supermarkets have used their considerable buying power to force down farm prices, whilst demanding high and consistent quality in farm produce. In 2002, East Anglian pea farmers were paid 17p a kilo, 8p less than 5 years ago (Guardian 29/3/02, p.18); processing, cleaning, and packaging those peas may add a further 18p a kilo but the supermarket sold the peas for 98p a kilo. Supermarkets may demand further price reductions for prominent positioning of the product on the supermarket shelf. The fall in farm prices means only the largest, most mechanised, farms can generate a reasonable income for their owner.

Table 6. Comparison of supermarket food prices and prices paid to farmers (Guardian 9/11/02, p9).

<table>
<thead>
<tr>
<th>Food item</th>
<th>Price to the farmer</th>
<th>Supermarket price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef/kg</td>
<td>£1.72 (25.1%)</td>
<td>£6.58</td>
</tr>
<tr>
<td>Pork loin/kg</td>
<td>£0.95 (19.9%)</td>
<td>£4.78</td>
</tr>
<tr>
<td>Carrots/kg</td>
<td>£0.16 (27.6%)</td>
<td>£0.58</td>
</tr>
<tr>
<td>Onions/kg</td>
<td>£0.17 (23.6%)</td>
<td>£0.73</td>
</tr>
<tr>
<td>Milk/litre</td>
<td>£0.09 (25.0%)</td>
<td>£0.36</td>
</tr>
<tr>
<td>Peas/kg</td>
<td>£0.17 (17.3%)</td>
<td>£0.98</td>
</tr>
<tr>
<td>Potatoes/kg</td>
<td>£0.05 (16.7%)</td>
<td>£0.30</td>
</tr>
</tbody>
</table>

The average farm income in 2000 was between £5,000 and £10,000 a year (Guardian II, 5/2/02, p.64), a third of the early 1990s level, and most farmers are now living off savings. Farms may behave like small shops in that an uneconomic farm does not close immediately but when the farmer, having worked long hours to make a living, retires or dies, no one will take it on. Then it closes, the farmhouse is sold off to an urban buyer, and the land is incorporated in a nearby farm to gain economies of scale. Between 1980 and 1994 11% of farmers and 34% of farm workers left the land; between 1997 and 2002 UK farm employees fell from 680,000 to 580,000; this depressed spending in rural shops. Farm jobs continue to fall at 20-30,000 a year, and like the small shops,
farmers blame red tape and regulations for some of this. Like small shopkeepers, the average age of a farmer is high, at 57; many more will soon retire.

Tourism in rural areas was severely hit by the Foot and Mouth crisis of 2001. The food crises of the 1990s, such as BSE and salmonella, reduced farm incomes and put people off buying butchers' produce, see section 4.2.2. The decline in farming had had a negative-multiplier effect on many small rural businesses, from cattle markets to agricultural machinery suppliers. "Brigg has lost the cattle market, so the farmers don't come and buy machinery, so the local engineering companies are in trouble" (A.106, rural preservation). As with the butchers earlier, one needs to be cautious of single-cause explanations for economic changes, but the rural economy around Brigg is not exactly thriving. Small Lincolnshire villages like Bonby and Saxby, which only ever had farm-based employment "now have virtually nobody employed in agriculture there now" (A.95, Lincolnshire MP).

4.1.4. Loss of retail facilities

Many rural facilities were little used by village residents who commuted to an urban job. Rural school rolls fell, as it was often older families, children grown up, who could afford to move into rural homes. Small rural schools were merged into town schools by Local Education Authorities to save money. This means mothers drive their children to the nearest town, then shop there rather than at the village shop. Higher house prices have led to both husband and wife working, making it more likely the family shop will be done at an out-of-town supermarket after work. Because a car is vital for commuting from village to town, the rural bus service lost custom. A vicious circle was set up of declining bus revenue, withdrawal of services, more decline in use as more villagers acquired cars, and further falls in revenue. The poor and elderly, without cars, were either excluded from travel out of the village, or forced to move to a town. Either way, they may suffer isolation and come to depend on relatives to buy food for them. Bus services can be subsidised by the local council but this cost becomes hard to justify if the buses are running with very few passengers on board (section 5.2). "At nine o clock there's a mass exodus, off to school and off to work, all the young people get in their car and drive to Lincoln. People say, don't do away with the village shop, the Post Office, but in the end they don't support them" (A.24, Jewish congregation,

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33 Figures in this paragraph are from, Lang, (1997, p.173), Daily Express (27/1/01, p.8)
Lincolnshire). This idea of 'use [the local shop] or lose it' was mentioned by several respondents.

Shops in urban areas, and in smaller market towns, are also declining. There has been concern about the impact of supermarkets on small market towns, especially since the supermarkets started targeting these venues for branches (section 2.3.2). Brigg had "five or six butchers ten years ago but now [2001] we're down to three", (A.79, Lincolnshire police). The last one to close was three months earlier, shortly after the new Tesco opened in Brigg. In Otley, a market town north of Leeds, many grocers converted to financial outlets during the 1980s (A.91, Leeds councillor) and these are now [2001] being turned into houses as house prices rise rapidly, due to demand from Leeds commuters. As in the rural areas, shops on small parades, and especially single shops alone, are most likely to close (Davies, 1987, p.87).

4.2. The economics of small shops

4.2.1 The different types of costs faced by small shops

All businesses must ultimately produce an excess of profit over costs, or fail, just as a living organism that expends more energy than it eats will die, although both businesses and organisms may be able to survive long periods where expenditure exceeds income. Business costs are classified as fixed or variable; there are also psychological costs and opportunity costs, these are discussed later. Fixed costs are those incurred irrespective of how much trading is done, such as the rental of the premises. Variable costs are incurred due to trading, such as the wholesale price of the goods sold. As it is the 'trading' that brings in money, the excess of profit over trading, or variable, costs must cover fixed costs as well. This excess is the 'mark up' that shops put on wholesale goods before reselling them. The analogy would be a predatory organism that must run to catch its prey; the prey must provide enough energy to cover the running as well as the basic metabolism of the predator. This is the basis of why economies of scale are so effective, and hence why globalisation has taken off. Companies that do much trading need a smaller mark up because the fixed costs are more thinly spread. Larger companies gain yet more advantage because they can convert some fixed costs to variable ones. For example, they can use labour more flexibly, leading ultimately to the zero hours contract (section 2.3.6). For larger businesses, fixed costs diminish absolutely as well as relatively per unit of goods sold.
Typically a small shop will have 60% of its costs as fixed costs and only 40% as variable (Beaujeu-Gardner, 1979, p.230). A small shop may have sales of £150-£200,000 annually, about £500 a day, and the shopkeeper may wish to make 10% of sales as profit. Even this would give a gross income (pre-tax) of barely £18,000 a year, assuming the same income is maintained on Sundays; the median UK wage at the end of 2002 was £19,500 a year. This shopkeeper will aim to make £4 on every £40 of sales, which, according to Beaujeu-Gardner, must also cover £60 of fixed costs. The total mark up on £40 is then £64, or 160%.\textsuperscript{34} If sales fall by just 5%, variable costs of £38 now produce revenue of £98.80, yet total costs are now (£38+£60) or £98. Profits fall from £10 to 80p; a 5% fall in sales has cut profits by 92%. These figures should suggest that a small shop suffering a drop in sales volume should close swiftly but economic logic says the opposite. Economics says a loss-making business should continue to trade so long as at least variable costs are covered. If these are covered, there is something to partially offset fixed costs and the business is losing less money than by not trading, although if this continues indefinitely the business will go bankrupt. Since small shops have a relatively low proportion of costs as variable, they will probably cover these in loss-making trading.

This tells us three important things about small shops. Firstly, the higher prices of corner shops are not necessarily just because the shopkeeper is exploiting the spatial monopoly of the shop. Secondly, it shows why crime is likely to close a small shop (see section 4.3.2). Say 4% of goods are lost due to shoplifting from the example shop above. We now have £38.40 of goods left at a 160% mark up to produce revenue of £99.84. Costs have not reduced; they may rise if there is criminal damage caused, and all the £10 profit has gone; instead there is a loss of 16p. Even if insurance covers more serious crimes, premiums will likely rise, which economically is similar to a pure loss due to shoplifting. In a similar way, any rise faced by small shops in their fixed costs, such as rent or rates, has to be made up by a large amount of extra trading or the shop will eventually close. The costs of anti-crime measures such as CCTV or shutters can be high. Crime may impose psychological costs, especially if guns or an assault were involved; fear of a repeat incident may cause a financially viable shop to close. Thirdly it tells us why small shops facing competition from a new supermarket will take up to

\textsuperscript{34} This economic analysis assumes that all variable costs of a small shop are attributable to the wholesale prices of the goods it sells. In fact there will be other variable costs such as sales taxes. Allowing for these other costs would strengthen this argument because then the actual mark-up required on wholesale prices to achieve a given profit as a percentage of sales would be even higher than the 160% mentioned here.
two years to close (Tanburn, 1981, p.17). After the supermarket opens the small shop is trading at a loss but may be covering its (relatively low) variable costs. It will trade at an overall loss for perhaps two to three years, before closing. In that time other events such as a robbery or the shopkeeper’s retirement may intervene. This makes judging the impact on small shops by a supermarket hard to do; this is politically to the supermarket’s advantage.

Opportunity costs are the alternative revenues of a use of capital foregone by its present use. If an alternative use is more profitable, opportunity cost exceeds revenue. This can cause even a profitable business to close. There will be transactions costs, the costs of converting the capital, such as premises, to the alternative use; this must be set against opportunity costs. If the alternative use is closely related to the former use, transactions costs will be lower. Profitable greengrocers are being replaced by even more profitable florists businesses, because the business needs and practices are similar. However in Armley a greengrocer closed because the proprietor could then use the premises as a head office for his more profitable coach travel firm. Psychological costs are also important, if hard to quantify. Barely profitable shops may keep going because the shopkeeper enjoys that lifestyle, likes seeing the regular customers, and does not want to retire. There is a psychological cost in closing the shop.

4.2.2. Business regulations, lack of support from banks and councils

Almost every businessperson will complain about government regulation, however little there is, and some regulation is certainly necessary for public and employee safety. However business regulations have increased in recent years, and a problem for small shops is that regulations supposedly applying equally to all shops impose a higher burden on small shops with less resources of staff, time, and money to comply (Beaujeu-Gardner, 1979, p.42). Regulations may impose a one-off cost such as a licence to change use, or a requirement to re-wire the premises, or they may be a continual drain on the business, such as annual trading licences. The regulatory burden on shops has increased as fierce competition has tempted unscrupulous operators to cut corners, especially in the food industry, and they achieve their lower prices by evading or ignoring hygiene, safety rules, and certification. Then all law-abiding businesses face higher costs to curb unsafe practices by a few. Competitive pressures have also reduced margins for unexpected events, so we try to eliminate them or seek compensation for them. Related to this is increased environmental awareness, either global or local. There are concerns about global CO₂ levels and shortage of landfill
sites, and, locally, householders are increasingly less willing to bear any loss or risk of loss to their house value. This means less tolerance of smells from restaurants, so food shops wanting to diversify into serving hot food face a mass of regulation on everything from opening hours, noise, and seating arrangements to kitchen ventilation and planning permission. A food retailer may see a shift into serving hot food as an up-market diversification, and as doing something the supermarkets offer less competition in. But these shops live "continually on the edge of being reclassified as a restaurant, which would plunge them into an even deeper and costlier bureaucratic mire (Sunday Telegraph, 11/3/01, p.1). "Licences for outdoor seating cost £300 or £400 plus a similar amount annually, and it takes 80 hours of form filling just to open a shop" [A.97, Leeds councillor]. This respondent did not say how typical this 'eighty hours' was, but other commercial respondents mentioned the need for large amounts of paperwork in their business.

The transformation of the EU from a free trade area into something resembling a political union has imposed harmonisation costs such as metrification on shops. Conversion to the Euro is the next big cost many shops fear. Metrification and the Euro are not wanted by the older generation that tend to use small local butchers shops. The EU has passed laws requiring part time staff to have full-time benefits such as holiday and redundancy pay, adding to shop's employment costs. Local councils, pressed for cash by changes in governmental finance (section 2.2.4) may use the licence requirements as a cash cow, raising costs arbitrarily. Licence costs and requirements are not consistent between councils (Sunday Telegraph, 11/3/01, p.1), suggesting some councils are charging more than they need to. Councils may not take the needs of small shops into account when implementing major housing or traffic changes. In Priory Lane Scunthorpe (LS 62,10), and in Wincobank, Sheffield, the councils began mass-demolition of hundreds of homes. A convenience store in Scunthorpe, dependent on trade from Priory Lane, only discovered the plan in the local paper, and the Wincobank storekeeper had just completed a £20,000 extension to his shop. He felt the council could have told him of the demolition plans when granting him planning permission for the extension. However shopkeepers do not trust 'bureaucratic' council advisors (Policy Action Team 13, 2000, p.510), preferring advice from friends and family, so advice to shopkeepers on local housing and transport issues may be best delivered informally through community groups. Many shopkeepers said they would like a 'one-stop-shop' for advice on availability of grants and other business matters. Shopkeepers also felt

35 Information from informal interviews with the two shops concerned.
more need to be informed of schemes to support retailing, for example rural support schemes, see section 4.5.1.

4.2.3. Prices in small shops, wholesalers, and supermarkets

Because small shops need markups of over 100% to make a living, but the largest supermarkets can make a profit with markups in single percentage figures, prices in small shops may be double those at superstores. In Sparkbrook, Birmingham, a small shop sold flour at 80p a kilo but at a small supermarket 1 kilometre away it was 47p a kilo. A 2-litre bottle of coke was 80p in a small shop but Sainsbury had a BOGOF offer of 2 2-litre bottles for £1. With tinned tomatoes the price differential was worse; because the small shop only bought one box at a time, they were 80p a tin there, but Sainsbury sold them at 5p a tin. The small shop paid, wholesale, £12 a box of tins: Sainsbury paid £2 a box. Small shops complained that Makro wholesale prices were the same as supermarket retail prices, or more than Netto's retail prices, "and we have to fetch the goods from Makro. "The supermarkets can do this because they are their own wholesalers", (R.1 Hyde Park grocers). The supermarkets may also use their perception of cheapness amongst the public to make quite large markups on occasion. Either the supermarket price is not so far below the small shop's price, or the supermarket has, through its buying power, negotiated a supply price far below what the supermarket customer sees.

Far from making large profits on the higher retail prices, some small shops sold goods at a loss. A convenience store in East Park sold bread at 55p, despite paying the wholesaler 89p, because Morrison in Hunslet sold it for 39p. By selling bread at a loss, the smaller shop hoped to get customers to also buy high profit items like cigarettes, lottery tickets, and alcohol. However smuggling is reducing this trade. The UK has higher duties on alcohol and cigarettes than other EU countries and many people go to France to buy these items more cheaply. In January 2003, a pack of 20 cigarettes costing £4.51 in the UK could be bought in Belgium for £1.97, and the Tobacco Alliance, representing over 21,000 corner shop owners, was calling for cuts in duty to bring the price down to around £4 (Financial Times, 27/1/03, p.4). The Independent Retail News (7/6/03, p.8) estimated that independent retailers were losing up to £1,000 a week to tobacco smuggling, and this was causing job losses in the small shop sector. Supermarkets also use alcohol as a loss leader, especially over the Christmas period, further eroding the sales of local small stores.
However, some supermarkets offer a real advantage to less well off customers. “The supermarkets do a free bus service, good for the poor on benefits, but bad for local shops. There are 3,000 council properties on Belle Isle and local shops find it hard to survive there” (A.62 Leeds council housing). A.39, elderly support Scunthorpe, stated “In Scunthorpe money is tight and elderly people are going to use the supermarket by whatever means they can. Aldi, Lidl, Netto, they don’t have the range of goods that Tesco and Safeway have but they’re very, very, inexpensive. If [the corner shop] is going to cost you £2 or £3 more than the supermarket, you’re going to try and get to the supermarket. The majority of people in this town worked on the steelworks. They’ve got a miserly pension, they have to watch every penny they’ve got. Elderly people can in a lot of cases get to these establishments, and pass corner shops to do so”.

Supermarkets can offer the advantages of both lower prices and better access for the disabled, hence the coping strategy of many poorer households in Belle Isle of using taxis to get shopping back home from Morrison.

Clawback of trade is an argument often used by the supermarkets to show they benefit shops in smaller towns. The example of Exmouth, Devon, is used to show that when a supermarket opened there, shoppers no longer travelled to Exeter supermarkets, so small Exmouth shops did more trade too. Does 'clawback of trade' work, or does the presence of a supermarket in a small town reduce the trade of local shops? Two examples where it does work and two where it does not show the answer lies in the local micro-geography. In Bramley shopping centre (LS 20,37), west Leeds, there is a large Morrison, just off a car park surrounded by small shops. These shops do fairly well, even a butcher, because customers have to pass the small shops to get to Morrison. The butcher sells specialist meats the supermarket does not stock. Booths also said that their supermarket in Garstang, and a Safeway, had brought trade to Garstang's small shops because of the parking Safeway provided, encouraging customers not to drive further to Preston or Lancaster. However Booths also said their supermarket at Knutsford had "to a certain extent denuded the town centre of foot traffic" (A.104, Booths supermarket), because it is across a main road from the old centre. Tesco in Brigg has a car park accessible from the by-pass, and allows anybody, customer or not, to park for 2 hours free. This should help Brigg's small shops as most town centre parking in Brigg is charged for. However the shops, and stalls at Brigg farmer's market, did a survey showing that few people who used Tesco also used Brigg centre shops. Brigg High Street is only a few hundred metres from Tesco's car park but the Tesco is at the back of the High Street shops; there is no clear link between the two. These examples show that clawback of trade does not work by simple proximity of
supermarkets to small shops, but that the pedestrian flow generated by the supermarket must actually pass the small shops. A relatively insignificant barrier, such as a road or the unattractive backs of shops, may break that link.

4.3. Social and demographic causes of decline in small shops

4.3.1. Changes in diet, food technology, RPI

Changing family structures, more women working, and work intensification and longer hours (section 2.2.5) has led to more time pressure on families. The effect of this was stated by A.24 (Jewish congregation, living in Heightington, Lincolnshire) who said "Seven o’clock till nine there’s a mass exodus, off to school and off to work. All the young people get in their car and drive to Lincoln. People say ‘don’t do away with the village shop, the Post Office, but in the end they don’t support them’." With limited time, many spend less time on home cooking. The average time spent preparing a meal at home in Britain fell from 60 to 20 minutes between 1980 and 1999, and consumer expenditure on cook-chilled meals in the UK rose by 53% between 1992 and 1997 (Haberberg, 2001, p.671). Domestic consumption of frozen foods began when Mr. Clarence Birdseye introduced them in Massachusetts, USA in the 1930s; canned food had appeared in 1860, to meet the needs of the US navy. Ice making technology was perfected in the 1870s, enabling bulk transport of meat by ship from Australia and Argentina. The ‘electrical wave’ of innovations in the 1880s and 1890s introduced the food freezer, which could be used to store meat, enabling shopping to be done in large weekly trips to a supermarket (Haberberg, 2001, p.661). Initially, freezing tended to damage the flavour and nutritional value of food but in the 1980s cook-chill technology meant more complex dishes and sauces could be readily made in the microwave (Haberberg, 2001, p.667). Some flats in London’s Docklands, designed for young, single, highly paid, executives working long hours have, to save space, been built with no cooker, just a microwave to heat food. There are health risks here because many ready-to-cook dishes are high in sugar, fat, and salt to enhance the flavour (section 1.2). The package holiday to Spain came to Britain in the 1960s, as wealth rose and air travel improved. This impoverished many British coastal holiday towns, creating some food deserts there today. It also introduced exotic dishes to Britain, including paella, spaghetti, and pizza. A further broadening of holiday destinations in the 1970s, the migration of south Asians to the UK, and TV cookery programmes by Madhur Jaffery and others, created a taste for Indian, Thai, and Chinese foods in Britain.
The popularity of fast food, pasta, and pizza, has eroded the trade of greengrocers, butchers and fishmongers. "It's all Burger King, fast food, chips now, there's no quality meat, abattoirs are centralised so Salmonella spreads across the whole country" (R.16, Scholes butcher). Specialist foodstores became more like mini-supermarkets, with freezers full of a range of ready-meals. Changes in the basket of goods used to calculate the RPI illustrate changes to British society and diet. In 2002 loose tea was replaced by tea bags (quicker and more convenient). Stock cubes have gone, as Sunday roasts have declined. Frozen foods, Chinese and Indian takeaways are in, but skimmed milk and tinned salmon have been dropped for frozen prawns and processed cheese. Milk in pint bottles and stewing steak are also now off the RPI, ousted by reduced calorie and frozen vegetarian meals (Daily Telegraph, 19/3/02, p.11). The RPI was first set up in 1947 and then included lard, unskinned rabbits, and condensed milk. The trend towards self gratification, self and home beautification, (section 2.2.1) is shown by the inclusion in the 2002 RPI of dumbbells, aluminium ladders (for DIY), leg waxing, sunglasses, and girls' fashion tops.

As small shops face a declining demand for fruit and vegetables, there is a threshold where they cannot be stocked at all. Wholesalers are unwilling to make very small deliveries of them, yet fresh foods spoil quickly and throwing them away is something small shops cannot afford. Less profitable fruit and vegetable lines have an opportunity cost as they take up space that could be used for something more lucrative. A market-failure situation then occurs when there is a small local demand for fruit and vegetables that cannot economically be met.

4.3.2. Traffic and parking problems

Traffic congestion is a major problem in Britain today. To alleviate this, on-street car parking is diverted to car parks and these are increasingly being made chargeable. This raises money for local authorities, but diverts shoppers to the free supermarket car parks. The number of cars and vans in the UK has risen as shown in Figures 7 and 8 below (DoT figures, from website www.statistics.gov.uk/travel, accessed 26/3/03). Car ownership is dependent on wealth; 60% of households in the poorest decile have no car. Car ownership also varies by sex and age. For most age groups, female driving licence rates are only a third to a half of men's. Only a quarter of people over 65 having a licence, and "many of these do not drive", (Guardian, 16/5/02, p.11). There are many reasons why a household may lose its access to a car, such as loss of licence, accident, ill-health, the car breaks down and is uneconomic to repair, or it is taken to work all
day by another family member. Usually it is the man who takes the car, leaving the wife with no transport to access shops.

Figure 7, cars and vans in the UK, 1910-2000, millions.

Figure 8, households with 0, 1, or 2 or more cars in the UK, 1950-1990, % of all households.

The effects of an increasingly car-reliant culture on local shops are therefore complex, both good and bad for these shops. Cars have eroded the spatial monopoly of many small corner shops, but have widened the catchment area of other small shops, raising their trade. Shops gaining here tend to be specialist shops, such as butchers. However, R.24 (Kwik Save inner south Leeds) said "City businessmen sometimes drive here for sandwiches, if their office is on the edge of Leeds, it is quicker for them than walking into Leeds centre", showing how car travel creates winners and losers amongst shops, both by location and size of shop.

Car parking, even for a brief period outside shops on main roads, causes congestion, yet shops often need the passing trade motorists bring. Drivers, those delivering as well as shopping, may fail to realize the congestion effect from stopping for even five minutes
outside a shop if the road is busy. A.79 (North Lincolnshire police) said "The problem is, people won't even walk 50 yards if they can park illegally". Illegal parking outside shops on smaller suburban roads could be a problem, for pedestrian safety and if bigger vehicles then cannot pass. Councils respond by reducing the width of a main road, creating space for parking bays. This appears to satisfy the need for car access to small shops, and slow the through traffic for safety purposes. However if the traffic is slowed too much shoppers will not drive to these shops. Traffic calming measures, besides reducing bus access (section 5.2.2), also deny drivers access to some shops. Charging for car parking can force trade away to supermarkets, as can restrictive time limits, especially if the time allowed does not allow for visiting a number of shops on the roadside. But if free-for-all parking is allowed, spaces may be taken all day by local office workers who leave in the evening to shop at supermarkets on the way home.

A.99 (shopping centre manager, Leeds) said "Armley has been hit fairly heavily because of parking restrictions, double yellow lines everywhere. So there is less accessibility to local retailers, and a lot of people are looking to move their shops out of Armley to here [Bramley Centre] because of that. If people can't park there they're not going to go to those shops". Brigg imposed charges on what was a free car park in 2001 after a (central) government auditor suggested charges should be levied. Since charges were imposed, use of the Brigg council car park has "fallen markedly" (A.79, North Lincolnshire police). Again, any changes in trading conditions cannot be blamed exclusively on difficult car parking, but it appears to have an effect on the local shops.

The ring road at Brigg cuts off the side roads from the town centre, reducing the chances that shoppers will park and walk in. However the adjacent Brigg Tesco continues to be free for up to 2 hours. The Tesco gains some community credit for allowing drivers to park there and walk into Brigg centre, 5 minutes walk away, although figures suggest that once in the Tesco car park, most do their shopping solely at Tesco (section 4.2.3).

4.3.3. Crime

Shops are vulnerable to crimes ranging from armed assaults on the staff to petty shoplifting and vandalism, and activity that is not criminal but still anti-social, such as gatherings of rowdy youths. Geographical variations in crime on small shops followed the expected pattern; worse and more violent in inner city areas, less crime and more oriented towards shoplifting in the rural areas. Inner city stores, probably already only marginally profitable, find themselves next to bail hostels and alcoholic centres, which may create crimes like vandalism and shoplifting (R.24 inner south Leeds Kwik Save).
Rural shoplifters in Brigg "have usually travelled out from Scunthorpe or Grimsby" (A.79 North Lincolnshire police). However, rural crime may receive less attention because "people find it hard to accept that poverty and social exclusion can sometimes exist on beautiful surroundings" (Daily Express, 7/2/01, p.34), see section 4.1.3.

Physical assaults on shop staff are becoming more common. The Daily Telegraph (25/8/00, p.21) reported that almost a quarter of independent retailers or their staff had been victims of a violent crime at work and half of these had been targeted more than once. The Jacksons mini-supermarket in Hyde Park, Leeds, (LS 36,37) had four armed robberies in seven months. A.49 (Leeds Council planning department) said "many shopkeepers feel under siege in some areas". The drugs trade affects small inner city convenience stores in several ways. Drug addicts need large amounts of cash, but Leeds city centre stores can afford high levels of security and CCTV, so crime is displaced to suburban areas. Drugs may be a cause of muggings on pensioners who are going to the shops. They are likely to have cash on them at these times, and the crime risk may divert their trade to better lit and more secure supermarkets (A.30, neighbourhood support group, Scunthorpe). Local shops are also used as cover by drug dealers (A.64, Leeds council housing); deals are done at the back of the aisles, where passing police cannot see them, and the shopkeeper may not wish to intervene.

Shoplifting and petty vandalism are continual drains on profit (section 4.2.1). Shopkeepers complained "I would like to have CCTV to deter crime but it is costly, and the electricity it uses is costly. Adults pinch drink and cigarettes, so that is £20 or £30 of whisky gone, insurance is expensive" (R.21, East Park convenience store). Plate glass shop windows cost £1,000 and "If you are in a high-crime area you can't get insurance. The window stays boarded up till the shopkeeper can afford repairs" (A.82, Leeds police). R.35, Armley greengrocer, said "We need more policing, windows are broken. If I paint the shop it is vandalised, kids vandalised the blind on this shop". So inner city shops acquire a run-down air because it is not worth doing improvements, and the shops trading position worsens as shoppers are pushed more to supermarkets. Some wholesalers advised shops on altering the layout to minimise crime (section 4.4.2). Some shops had the alcohol at the rear, but next to the fire exit so it was possible to steal this and run out quickly. Alcohol is often stolen because it is easily resellable, so a good deterrent is to have alcohol sold at a separate till; however this is less convenient to the customer and sales fall (A.82, Leeds police). Having the shop entrance and exit close by is also not good for preventing shoplifting, but is seen as customer-friendly by marketing experts (A.80, Leeds police). There may be a conflict between making a
shop fortress-like and having it attractive to customers. Shutters are good at deterring window breakage but 'make the area look very run down when all the shutters go up' (A.79, North Lincolnshire police). Shops in conservation areas may find they are banned from installing steel shutters anyway (Independent Retail News, 30/5/00, p.14). Thomas and Bromley (1996) says that the presence of large numbers of shuttered shops may actually raise crime rates. Shutters deter after-hours window shopping and hence promote desertion of shopping areas after closing time. Both fear of crime and crime itself may rise. Having the till higher may deter robbers but make it harder for disabled customers (A.81, Leeds police). Shopkeepers have to be their own local crime experts, to decide what sort of shutters to use. If burglary is the main problem, shutters inside the windows are better because the window can be alarmed; but in some areas 'they will break the window just for the hell of it, so then external shutters are better' (A.80, Leeds police). Alcohol and cigarette smuggling damage what can be the most profitable side trade of a small convenience store's trade (section 4.2.3).

Anti-social behaviour may occur when crowds of youths gather around shops, and can be intimidating for customers and the shopkeeper. Shopkeepers fear large groups of children may cause a distraction as a cover for petty shoplifting. Neighbouring householders also do not want noisy gangs around the shop. Guy, 1996, noted the case of a supermarket in Cardiff where 'anti social behaviour was occurring in the vicinity' and 'after substantial pressure by local residents the shop lease was not renewed by Cardiff City Council. There are push and pull factors causing youths to gather in large rowdy groups. Push factors include 'nothing else to do' (from the youth's point of view); large villages like Broughton and Hibaldstow have a number of teenagers but the village is not big enough to have youth facilities or bus transport to take them elsewhere. However "places like Crosby have plenty for the kids to do but they prefer to hang around on the streets" (A.83, North Lincolnshire police). Pull factors include a sheltered area, with seating and lights, where they tend to congregate. However, seating and well-lit areas may be needed for pensioners and security.

The police have limited powers, both legally and in terms of resources available. "If the kids aren't committing an offence we have no powers to move them on, just because they are laughing and joking. If we move them on they just gather elsewhere" (A.80, Leeds police). A.83 (North Lincolnshire police) said the police "are supposed to give a big priority to 'youths causing an annoyance' but realistically, in the evening, when you've got few resources on, and calls are coming in at a quicker rate than any other time of day, calls for youth annoyance tend to get left, we call people back later, if they
say the problem has ceased we don't send anyone". Anti-social behaviour may become
criminal if it involves drinking by under-age youths. Shops try and limit this by not
serving young persons, but “they smoke and drink anyway, the older ones buy it for
them”, R.21, East Park convenience store. The police can seize alcohol from under 18s
and from older persons if they believe it will be given to under 18s. A.38, pensioner
support group, Leeds, blamed the pronouncement of Mrs. Thatcher that "there is no
such thing as society" for rising crime. "This opened the ideological floodgates to anti-
social behaviour; if there is no such thing as society, you can't act anti-socially".

4.3.4. Neighbourhood decline, slum clearance, gentrification

Crime may be both a cause and effect of neighbourhood decline. Symptoms of decline
include abandoned premises and vehicles, unkempt and rubbish-filled verges and
gardens, and petty vandalism such as broken bus stop windows, graffiti, and tagging.
Underlying causes of decline may include poverty, low wages, drugs, depopulation,
and lack of investment. The wealthiest leave, exacerbating the area’s problems as a
transient, poor, largely unemployed population is left behind, who have little interest in
keeping the area nice. An area with many student lets, such as Headingley, suffers
related problems, (section 4.3.5). R.4 (Hyde Park convenience store) said “This area
needs to be brightened up, reduce crime, this is mostly caused by young kids with
nothing to do. You need to involve the community, people, to reduce crime, not more
policemen, they can't be everywhere at once”. Many agencies saw community action
rather then the police or local authority as the way to reduce crime. In inner urban areas
poor pensioners, unable to afford to move to a ‘nice’ retirement area, retire ‘in situ’,
where they have always lived (section 2.2.3). As these ‘in situ’ retirees have even less
spending power than they had whilst working, local shops lose custom and may close
(Helm, 1987, p.125). The inner city areas of the UK have also lost manufacturing jobs;
this has eroded the business of some shops, which depended on the lunchtime trade
from workers from factories. If a poor area is gentrified, small grocery shops may also
close. Higher paid professionals demand bistros and wine bars, which can outbid local
grocery shops in rent, whilst these car-owning professionals drive to a supermarket for
groceries. The outcome may be a luxurious but rather ‘sterile’ housing environment,
such as The Mailbox, an upmarket development with excellent access to clothes shops,
offices, theatres and cinemas and much else, but ‘nowhere to nip out to and get a quick
pint of milk and a loaf” (Birmingham Post, 6//8/01, p.3).
4.3.5. Students and local shops

Most large universities in urban areas have a district nearby heavily populated by students. In Leeds, Headingley and Burley Park are the main student areas. The effect of students on local retailing was referred to by Ravetz (1996, p.73), who wrote that students can “grossly overload buses, supermarkets, and other services (alternating with under use at other times)”. A more recent study of ‘studentification’ was done by D Smith (2002), reaching similar conclusions although the effects on retailing were not prominent in this study. Students cook less, and demand more takeaways, then the families who lived in Headingley; students are also ethnically diverse (universities get more funding if they attract non-EU students) so local convenience stores alter their stock. "We do less traditional foods, more exotic foods. We sell more crisps, sweets, cigarettes, alcohol, we sell less to pensioners which was our traditional market. The pensioners have left, it is all student rental property now. Eighty-year old ladies don't want a pizza or an off-licence, all the shops they like, such as the chemist, are closing" (R.4, Headingley grocers). A.93 (Leeds councillor) said "The community spirit has all but disappeared [in Headingley], shops were pivotal to that". The student population have their own community spirit, but this may exclude the elderly. Some grocery stores felt they benefited by the conversion of the area to student rent-land. R.7 (Woodhouse Carr grocer) said “Our trade was declining until we did the off-licence, now we get a lot of students here”. A house with six adults demands more groceries than one with a family, although food demand falls off sharply in the 22 weeks holiday period. This can create seasonal food deserts, as grocery shops cut back on fresh fruit and vegetables then. The range of shops in a neighbourhood is also affected by the ethnic composition of that neighbourhood. ‘White’ butchers are closing in the Burley Road area (LS 37,36) of Headingley, as Muslim, Halal butchers are opening up. R.2 (White butcher, Hyde Park) complained that cars parked by Muslims going to a local mosque reduced his trade because customers could not park outside. However R.3 (Muslim butcher, a few doors away from R.2) was glad of all the cars arriving, as they brought more trade to him.

4.3.6. Old shops never die, they simply fade away

Many UK shops are run by south Asians, even in predominantly ‘White’ districts. In 1972 Idi Amin expelled the Ugandan Asians, and many came to the UK, initially to work in industry. However UK unemployment rose sharply between 1975 and 1985, and many Asians took on corner grocery shops. South Asian families were larger than
the UK average, and they valued the often spacious but cheap accommodation that came with many corner shops (The Guardian 5/1/02, p.9). As supermarket penetration grew, running a small shop became a low-wage, long-hours occupation, and their UK-born children look to professional careers rather than following their parents as shopkeepers. Other shopkeepers of different nationalities also said they would prefer to study and move into a professional vocation. A shop in this family situation tends to fade away rather than close outright. The husband and children may get outside employment whilst the wife runs the shop alone. As custom falls away, she may get a home piece-job in the back living room, coming into the shop area only if someone enters. The shop acquires an abandoned air as it appears unstaffed and shelves may be only part-filled, which further deters customers. Opening hours, having been extended greatly into the late night to capture passing trade, go into reverse and the shop may only open a few hours a day, or not at all on some days. If the premises are privately owned, the shop may finally close with the family still in residence as the husband and wife reach retirement age. Many shopkeepers interviewed in this research were aged 60 or over and believed their shop would close on retirement as few people will take on a small shop nowadays. Smith, and Sparks (2000b, p.50) stated “As [the proprietor] ages, their motivation and commitment to the business may fall and their willingness to invest may decline. Running a corner shop for over 110 hours a week is not a business for an ageing entrepreneur, but neither may it fit the lifestyle demanded by educated twenty-year-olds”.

4.4. Small shops' strategies for survival

4.4.1. Specialisation or diversification

Food shops can try to specialise in ethnic-minority foods, or to go upmarket. The supermarkets have already entered many ethnic food markets; Indian, Chinese, Italian, Thai. But this leaves a number of niche specialities such as Greek or Vietnamese, which may appeal to people of those nationalities or to English people wanting different foods. Greek foods (salad, humus) and south east Asian foods (fish, rice, beans, noodles) have a healthy image in the UK. A.123 (Greek food wholesaler) in York commented “if Greek food does become popular, for health reasons, the supermarkets may enter this market but it will not be till after I retire”. This respondent

36 The Daily Express, 24/9/02, p.11, said “When stocks fall below 75%, customers will stop visiting the store. If they drop below 50% and shelves begin to look empty, sales start to slump”.
was aged between 45 and 50, but anticipated supermarket penetration of this food sector some time after that. Some ethnic markets, such as Vietnamese, will not have the economies of scale the supermarkets require, even if the UK Vietnamese community were to grow to several times its current size.

In the wealthier suburbs of northern Leeds, Roundhay and Moortown, delicatessen and specialist bakery shops can stock different premium foods each week; the small size of the shop gives flexibility in what is stocked. A shop called Amps in Oundle has become a regional wine specialist (A.104, Booths supermarket), revitalising the old village grocer as a specialist shop. The ‘International Journal of Retail and Distribution Management’, 1995 (no author credited here) gives examples of successful specialisation by small shops. A video shop in Memphis, USA, stocks a wider selection of films than the local Blockbuster, and the staff are expected to spend several hours a day watching these so as to be able to give specialist advice to customers. A local building supplies shop, also in the USA, stocks not only power tools but the spare parts for them, unlike major chains. Independent clothes stores can offer clothing for those unusually tall/large/small, and single-store food shops can offer unusual foodstuffs. This article adds “Most mass retailers skimp on product training, so they can afford to charge rock-bottom prices, and the customer’s need for advice often goes unmet” (p.iii). Specialisation into a niche market is not limited to upmarket shops or wealthy areas. A.100 (North Lincolnshire Commercial Property) said “we have a parade of ten shops [on Beechway] where nearly half is occupied by a fishing tackle business, and they get people from all over the north of England". This helps other shops on the parade to survive by increasing footfall to them. Shops that do not specialize but try and be everything may hasten their own demise. A.103 (commercial estate agents, Leeds) said “At the bottom of Dib Lane, at Easterly Road, they had a greengrocer and a butcher, next door. About 2 years ago the grocer started doing certain meats and the butcher retaliated by doing certain greengrocery and they had both closed within twelve months”’. This respondent also mentioned an off-licence in Kirkburton that was noted for specialisation in wines and spirits, but which closed soon after diversifying into general groceries. However he did say that sole shops, in villages or on urban estates, should diversify and become general stores. As has been shown earlier, shop closures have many interrelated causes, and neighbouring shops can boost as well as diminish each others trade. Overall, though, it is likely that if neighbouring shops become too similar in what they stock and then enter a price war, neither may have a secure future.
Although specialisation seems to work for shops in wealthy areas or with a niche ethnic market, the majority of grocers shops have copied the supermarket strategy of selling almost everything, food and non-food. R.11 (Harehills convenience store) said "You have to diversify; it's no good doing ten different sorts of bread, people still buy only one loaf". To make space for all the product lines, and gain some economies of scale, many shops have expanded into the next-door unit, if it was empty. Many non-food lines have the advantage of being non-perishable (A.5, Food and Drink Forum). These include lottery tickets, dry-cleaning services, cash points, and photocopying. Some lines brought minimal profits, such as the swipe-card for electricity payments "because we have to pay the electricity, and the cost of the phone call if the customer has a problem, and we only get 2% to 5% commission, but it gets the customers in" R.21 (East Park convenience store). A.3 (Chamber of Trade, Scunthorpe) said "You will find you have to take more and more on. Everybody for instance now sells newspapers. You could put video, charge cards, telephone cards in, it depends on the type of business and the vicinity". Diversifying into many different services is a tempting strategy for shops, but if there are other neighbouring shops, each one specialising in different lines may increase footfall. But this is a precarious situation as the first shop to cheat and overlap the other's stock may gain more business, at least initially.

4.4.2. Links to other businesses

In wealthier rural areas, grocery shops have arranged with local crafts producers to stock their products for a small fee. However most small shopkeepers were sceptical of any co-operation with other shops, except in sharing crime information, such as the identity of known shoplifters, which many did readily. The comment, "We don't co-operate with Kwik Save next door, we only share crime information with them." We need all the trade we can get, so we react to what they do" (R.36, Iceland store, Leeds), was typical of many retailers. The idea of co-operating with neighbouring shops on what to sell was not attractive to many shopkeepers; especially the convenience storekeepers, who were trying to stock as wide a range as possible themselves. R.13 (Chapeltown south Asian large convenience store) said "No, small shops can't co-operate, they will always tread on each other's feet, overlap what the other sells". R.7 (Woodhouse Carr convenience store) said "We tried co-operating but with corner shops it is dog-eat-dog". This is the Prisoner's Dilemma situation, where any agreement will be swiftly cheated on because the first party to cheat (and sell what the other shop

37 During the 20-minute duration of the interview here, there were two shoplifter alerts.
does plus their own range) will gain at least a temporary commercial advantage. Some shops, however, would try to avoid price wars between them and their neighbours, realising this was a zero-sum game. Some shopkeepers considered a local loyalty card system but would not like to be the ones to initiate it, and bear the initial expenses, and the risk of failure. The outcome may be that all small shops compete and are less profitable than they could be, and the customer has less choice. However Tomalin (1998) reported on a successful small-shop loyalty card in Leominster. In March 1996, a local butcher began a scheme that is now valid in 100 local Leominster shops, with 8,000 cards issued. Leeds has the 'Leeds Card', offering 10% off at many shops, restaurants, and tourist attractions. The Card costs £12, or £2 for students and Benefit claimants living in Leeds, which is to cover the cost to Leeds City Council of issuing the card. The shops get no refund of the 10% discount but get free advertising in a Council booklet detailing where the card can be used.

Shopkeepers were asked if they would like a different sort of shop to their own next door; if this would increase footfall. Some said no, others would have approved of a chemist, hairdresser, or doctor. Some wanted a takeaway but other said this would mean litter and noise, possible putting off customers. R.15 (Harehills butcher) said "a lot of shops and banks here have closed, instead we have Tandoori takeaways. They are no good to us, they open only at night". However, several agencies, often speaking from a 'shopper' rather than a 'shopkeeper' point of view, said shops of different types could benefit from being close together. It does appear critical as to what sort of shops they are, though; some shops such as takeaways or off-licences may damage other shops' trade. A.6 (Leeds Development Agency) said "A small parade of shops isn't going to survive on its own, you need a Post office, financial institutions, a local authority outlet would be useful for access to Benefits and Housing. The critical part would be affordable grocery shopping". A.101 (North Lincolnshire Council, commercial property) summed up the overall situation by saying "The more specialised the shop, the more benefit from having other shops close by. A parade of shops can act as a virtual supermarket, a neighbourhood centre". By contrast there was the Birmingham convenience store mentioned earlier, who was happy to see the chemist close next door as there was more parking for his customers. In Keadby, a convenience store said that if the garden centre opposite closed there would be houses built there so he would get more custom. Convenience stores are diversifying widely so almost any other shop close by will be competition, not support, for them.
Buying groups, or affinity groups, were set up in 1955 to defend small grocers against the multiples. By the 1970s some 21,000 of the UK's 57,000 grocers had organized into buying groups such as Wavy Line, Mace, VG, and Spar. Grocers in this 21,000 were less likely to close than those not in a buying group (Tanburn, 1981, p.22). Buying groups could be a double-edged sword for shopkeepers. They could increase buying power and so get lower wholesale prices, but joining one meant some loss of commercial autonomy; some shopkeepers said 'the buying group will tell me what I can and can't sell'. The buying group name itself became a brand, like Spar, and one unkempt shop could spoil the public's opinion of all of them. The Independent Retail News (13/6/03, p.36) says “central to [Nisa Today's] strategy is to make Nisa Today (a buying group) a brand in its own right”. Some buying groups insisted on the shop having a certain level of turnover to be a member and also set certain levels of hygiene. Some buying groups required their members to become off-licences. This would increase turnover, but raise the crime risk because by law off-licences must open till 10pm. The shopkeeper also bears the expense of applying for permission, which could cost thousands of pounds if local people objected. Objections were likely because off-licences were feared for generating rowdiness. The Grocer (26/7/03, p.34) mentioned the impact of the 2003 Licensing Act, which will enable off-licences to trade 24 hours a day. This will favour supermarkets, which are open for those hours, but increase pressure on small-store off-licences to trade for longer or lose turnover.

Wholesalers, recognising that their business depended on a viable small shops sector, faced a dilemma as to whether to give bulk purchase discounts to retailers. Giving discounts might encourage higher orders and customer loyalty, but would also help tip the balance towards fewer larger shops. This would simplify the administration of the wholesale business but also give the retailers more buying power. In general, wholesalers either gave no discount for bulk buying or gave small discounts of 5%-10%. Wholesalers did give free advice on shop layout, to raise turnover and help combat crime (section 4.3.3). Some wholesalers also advertised for the small shops. The Independent Retailer News (8/8/03, pp.30-31) described a novel scheme backed by the Rural Shops Alliance (RSA) for improving the viability of village shops. Called the 'Key categories project', seven rural shops across England have been selected to pilot a scheme backed by the RSA's partners, Cadbury, Imperial Tobacco, Interbrew, and Video Box Office. These bodies give advice on shop layout, range of merchandise, and coping with relevant legislation to the selected shops, to boost their sales. Of course these bodies have something of a stake in the viability of small shops through which many chocolate bars, cigarettes, alcohol, and videos, are sold. It is also good PR for an
organisation like Imperial Tobacco to be seen supporting a community asset like a local shop. The effect on sales will be evaluated after three months, around November 2003, after which the scheme may be extended to more rural stores.

4.4.3. Use of space above the shop

Many shops have space above them, which could generate revenue for the shop. However, the accommodation may be difficult to access, and have no parking space. Commercial uses may be limited by the Disability Discrimination Act, which requires office space to be wheelchair-accessible from 2004. Flats above shops are seen as down-market; problems may include noise from an off-licence, or smells from a restaurant or takeaway. Property agents tend to avoid mixed use of retail and domestic. They perceive an extra fire or security risk, and desire an 'institutional' lease, that is, one occupier, upwards only rent reviews, long-term, and not mixed tenants with the risk of some partial void periods and rent reductions to fill this void (Coupland, 1997, p.124). Councils may be reluctant to let space above their shop if the tenant is on Housing Benefit, because the council then ends up paying a part of its own rent. Yet it is the poor, more likely to be unemployed, who may need this cheaper accommodation (A.100, North Lincolnshire Council Commercial Property). However the presence of residents at night may improve security for the shop.

The main drive for use of living space over shops is likely to be a desire to avoid greenfield housing sprawl. Petherick (1992) suggested that space over shops could be used to alleviate Britain's shortage of affordable housing and also revitalise town centres deserted at night. The first Living Over The Shop (LOTS) schemes was in 1992 in Stamford, Lincolnshire, and provided a home for three previously homeless persons in the town (ibid, p.2). This accommodation is most likely to appeal to childless couples aged 19-44 and single adults (Policy Action Team 13, 2000, p.46). Examples of successful use of space over shops includes a church over a Lancashire shop, dog-owner meetings over a Devon shop, and a pub in Derbyshire which received a £42,000 EU grant to start computer classes upstairs (Daily Express, 17/12/01, p.5). However according to The Grocer (19/7/03, p.41) supermarkets are also starting to use their sites for housing. It can, with the high house prices of 2003, be quite lucrative to (re)develop a supermarket site with flats above. Asda is developing flats above its new Romford store in conjunction with Barratt Homes; Sainsbury in Richmond (London) and Tesco in Streatham are also being built with blocks of flats above, of up to 12 floors high.
4.5. Outside help now available for small shops survival

4.5.1. Government grants

There is a wide and ever changing array of grants available at any one time. Usually the shopkeeper is required to pay a certain amount, often 50%, of the costs and the grant covers the rest. However if a shopkeeper has to find 50% of the cost, the scheme may still be unaffordable to them. The UK government has SRB (Single Regeneration Budget) funding for refurbishing shop fronts. Leeds City Council is to spend £25 million on 18 deprived areas of Leeds, including East Park (LS 49,29) as part of the UK government’s Single Regeneration Budget (SRB). North Lincolnshire Council will help rural grocery shops if they are the last one in a village of under 3,000 people. The shop can get help with new freezer cabinets, buying new metric scales, or with anti-crime measures such as security lights and shutters (A.47, neighbourhood regeneration, North Lincolnshire). The last village shop can also get 50% rates relief, and the local council has discretion to make this 100% (A.105, Countryside Agency, Leeds).

Adopting a rather Schumpeterian attitude towards small businesses, including shops, A.3 (Scunthorpe Chamber of Trade) said "We don't want too much government interference, we want less government interference. Some businesses will fail, it's unfortunate, times change". Similarly, A.4 (Business Enterprise, Leeds) said "Closing inefficient shops will make room for new better ones. Shops doing well will diversify, offer new services. Either there is potential to improve these businesses, or if not, consider closing them which is better for the community as there will be no poor shops". Generally, business forums were in favour of a laissez faire attitude towards small shop support, even if it meant some would go to the wall. The concerns of such groups were probably for lower taxes for all businesses rather than support for a limited number of enterprises. Shop support schemes were criticized for being too “one dimensional” (A.6, Leeds Development Agency), that is, they focused on one objective only, like tidying up an area, or creating jobs, when an all-round, community based, approach was needed. Schemes “changed too often. The Village Development Scheme, the Village Pub Development Scheme, these were only for three years, there’s no consistency. Villages can change demographically, or supermarket bus routes change, the scheme is no longer there when it’s needed” (A.110, rural support group, Humberside). What may be needed here is more research on the opinions of small shopkeepers themselves. Some of their comments are given below.
Shopkeepers, who felt councils failed to inform them of schemes or take their needs into account (section 4.2.2) also perceived a lack of information about support schemes available. They also faced a long wait for grants to be given, by which time the grant may no longer be relevant. "There needs to be a one-stop shop for rural businesses to get advice" (A.110, rural support group, Humberside). "The Countryside Agency should publish a leaflet annually detailing the grants, subsidies, available" (A.108, rural preservation, York). However, having a complex array of schemes may not be so bad. A.107 (rural preservation, Leeds) said "Yes, in principle [the range of grants] should be consolidated. But it helps to have different grants as then the shopkeeper can apply for several and might get one, rather than just one option being there. Also what’s appropriate for rural Lincolnshire might not be right for commuter villages outside Harrogate". There is a need for balance between simplicity and a ‘one size fits all’ approach under which some shops fail to get the support they need.

Some shopkeepers believed that the government was biased towards either the larger retail chains or towards grants for industry rather than retailing. "Government is funded by big business, so big business gets what it wants", R.2 (Hyde Park butcher). Perhaps most sceptical of all, "The government might be slightly influenced when they get £1 million from Lord Sainsbury", A.94 (Leeds councillor). Shopkeepers may always grumble about the taxes they pay and perceived lack of support in return. However Monbiot, in his book ‘Captive State’ (2000) says that Wal Mart has probably entered behind-the-scenes negotiations with PM Tony Blair regarding its expansion plans in the UK. Also Pal et al (2001) detailed the connections; economic, formal, and informal; whereby major retailers can have covert influence on government over Westminster’s national retail policies. Specifically, this paper mentions five bodies (pp.240-1); the Association of Town Centre Management, the British Property Federation, the British Retail Consortium, the National Retail Planning Forum, and the Oxford Retail Group, which have acted as conduits of the major retailers’ interests into government policy on PPG6 and other matters. There was also some economic justification for a bias towards government grants for industry rather than retailing. A.95 (North Lincolnshire MP) said "If you put money into Toyota or Nissan or whatever there’ll be a wealth output the other side. It’s pump-priming money. You give them something but eventually they’ll be net contributors to your economy. It’s hard to see that if you’ve got a small shop that’s doing so poorly it needs a subsidy there’s going to be any output the other side. But there is a social side to it, which is why the government has introduced the Postal Services Act 2000 so that post offices, shops, that are clearly struggling and are crucial to the rural area can be subsidized to keep them going". If there is a social side towards
maintaining village shops, could there be a social benefit to keeping isolated shops on urban estates open too?

Grants are open both to fraud and to moral hazard. Grants may encourage the recipient to sit back and rely on them rather than seriously competing in business. Grants also impose more bureaucracy as the type and locations of shop benefiting have to be defined and marginal cases ruled in or out. Further bureaucracy results when those who have missed out on the grant appeal. A.85 (Leeds Councillor) said "The problem with subsidising small shops is the impact on competition. Other traders would see it as an unfair subsidy, driving them out of business". But if grants were targeted at isolated shops, as with the 'last village shop' scheme now, this issue should not arise. A more subtle argument against a culture of outside support for small shops is that charitable support then becomes what Wolch (1990) calls a 'Shadow State'. Small shops may become 'labelled' as hopeless, basket cases (section 2.2.4) and neither charitable nor State support is reliable in the long term.

4.5.2. Supporting the rent or rates of a small shop

For the local council there may be little to gain financially by ensuring council-owned shops are occupied, because suburban shop unit rents tend to be low. The incentive to let shop units is the vandalism that an empty unit tends to produce, in neighbouring properties as well. Private landlords may also have little incentive to cut rents, because rents for small suburban shops are not much above the minimum needed for profitability, and because rent cuts reduce the nominal capital value of the property. "Landlords may give 'hidden' rent reductions in the form of rent holidays for a year, because this maintains the nominal annual rent value of the unit" (A.102, commercial estate agents, Leeds). A.103 (commercial estate agents, Leeds) said "I would like to see [shop] rents reduced but the landlord may be asking for a £10,000 a year lease and feel he can wait a year and get the £10,000 rather than sign straightaway for a £7,000 a year lease. I agree if he waits he may still not get a lease at all, but it's very difficult to convince a landlord of this". A.101 (commercial property North Lincolnshire council) said "A landlord may be happy to see a property remain empty as the theoretical rent he can get is rising. If he lets that out he fixes the rent, and so the value, for a while, the landlord may have twenty or thirty properties [so can afford to have one or two empty]". The problem is a difference between the rational behaviour of any single landlord (who wants to maintain the value of their property) and the rational behaviour of landlords as a group (who may do better to reduce rents to increase
lettings demand). If the council cut rents, there could be more shop closures. Some parades are council-owned, and some privately owned. If council rents were cut, and private landlords did not follow, shops would migrate to council-owned parades, leaving entire areas, the areas served by the private parades, bereft of shops.

There was little incentive for councils to cut Business rates. A.100 (North Lincolnshire Council, commercial property) said “The Business Rate still goes to central government, we are just the collecting agent, then some of that is divvied back at whatever proportion they feel fit. A.61 (North Lincolnshire Council Housing) similarly said “at one time we used to get all the revenue from the steelworks in Scunthorpe which was about £14 million a year, this changed when the Community Charge came in, now we get about £3 or 4 million out of that”. Central government now has considerable financial leverage over local authorities. Thomas, 1989, p.208, cites the example of West Glamorgan council who resisted conversion of old industrial land near Swansea, but suffered financial penalties from Westminster until they complied. Also cutting rates was believed by some to have little effect. A.94 (Leeds councillor) said “Rates are only a small percentage of total costs so reducing these won’t have much effect. For example a business with overheads of £100,000 had rates of £2,500 so cutting the rates in half would reduce overheads by 1.25%”. However, some shops did complain at the level of rent and rates costs (but they would hardly not complain). A butcher in Hyde Park said he paid £200 a week rent and £100 a week rates, so with electricity costs he needed to make £500 a week “before you have anything to live on”. A butcher in Pudsey said he paid £400 a month for rent and rates alone. A convenience store in Whinmoor said rates were “up from £1,200 six years ago to £5,500 now, this is more than the income tax we pay”. Part of the problem is that the Uniform Business Rate charges the same per square foot to small shops and supermarkets (A.86 Leeds councillor). A.91 (Leeds councillor) suggested that the income or profits of a shop should be taxed, because fixed rates were a significant barrier to entry for new shops. However income and profits can be easily massaged downwards, whereas square footage is easier to measure. A.94 (Leeds councillor) said people taking on previously empty shops in parades should be given a rates and rent holiday if they would take a ten year lease. This, though, might erode the local authorities revenue, be subject to ‘churning’ as the ten year holiday expired, and might not be allowed by central government.
4.5.3. Town improvements

Many towns have appointed a Town Centre Manager, but “Leeds has a City Centre manager but no town centre managers [for places like Pudsey, Armley]” (A.89, Leeds Councillor). So suburban shopping centres may lose out on investment even though major city centres have funding to make a stand against out-of-town shopping. Who funds Town Centre Management (TCM) schemes? This was addressed by Medway et al (1999) Larger shops could provide free space for meetings, space for promotional material in shop windows, or assistance with CCTV. Smaller shops might provide specialist assistance such as photocopying or radio repair. Some shops were unwilling to assist TCM schemes; again there was a split by shop size. Larger stores cited lack of autonomy for the store manager (decisions being taken by head office), or saw no benefit to them in return for their outlay, or preferred to wait till the scheme was running before contributing. Smaller stores asked why they should pay for the TCM benefits when they already contributed to the local council and the Chamber of Trade, and some also adopted a ‘wait and see’ attitude to how the TCM worked out.

Porch (1985) has argued that the departure from High Streets to out-of-town centres of stores like MFI, Marks and Spencer, and Tesco could provide an opportunity for urban shopping. Porch saw the new High Street as a “kinetic façade which changes by the month”; not necessarily full of “trinket and trash stalls” but a dynamic new environment for new businesspersons, and attracting shoppers by the ever-changing variety of small shops. In practice, shoppers are often seduced by the lower prices at out-of-town stores, whilst the ‘kinetic façade’ is one of peripatetic charity shops and poundstores. To combat this, “town centre management has emerged as a practical way” of achieving an attractive town centre that can stand against out-of-town retail parks (Tomalin and Pal 1994). Tomalin states (p.52) that in 1991 the UK had 7 town centre managers but 74 by 1994.

4.5.4. Use of the planning system to support small shops

The discretion of local authorities in planning applications has been restricted by central government. In 1996 John Major introduced the PPG (Planning Policy and Guidance) documents, stating clearly what local authorities should allow to be built. Hallsworth and Evers wrote (2002, p.301) “The British planning system can be said to be highly centralised. Over the last decade there has been a distinct tightening of land-use policy”. A.49 (council planning) said “The framework is set very firmly from the
centre. "Rigid" is too strong a word because we have some localized planning policy but it is within a rigid national policy". A.50 (council planning) said "You'd have to say it's about 100% constrained by national government. Planning is very proscribed by guidance and case law. Every decision, every refusal, we make, we have to stand up in an appeal which is an adversarial process, like a court of law. We have to demonstrate that we've followed government guidance to the T [here] or a damn good explanation of why we haven't. For every local government planner, there's probably two planners working for private consultancy, whose job is to fight our decisions.". Developers with projects that local councils would rather not see built can now take legal action against local authorities who refuse their applications. Councils could only delay the application, hoping the applicant would go away, perhaps as economic conditions changed.

The developer's viewpoint was given by A.76 (house builder). "We have lots of problems with the planning department. If they was to say 'we'll give you planning consent if you build shops' I'm sure the builders would do it. If the planners made it worth our while, the local authority could make a grant, couldn't they. Because shops fulfil a social need. The planners have what they call a commuted sum. We have to pay them money, or we have to provide some social housing. They know we don't want to provide social housing, it would affect the value of our other properties, people don't want to live near social housing. We've not been asked to build shops as yet. We can't plan ahead, we're constantly waiting for planning permission to come through. It used to take three months for anything to go through planning, now it's nine months. Why should it, computers and faxes and emails should have speeded things up? We want to co-operate with [the planning department] but it's always this 'us and them' situation all the time". A.50 (North Lincolnshire Planning) said "There is a rather murky area of planning law called the Grampian Condition" [or 'planning gain']. "Local authorities can use this to insist a developer also builds something else, but the scope of this isn't too great. A developer can be asked to provide community facilities or a sum of money in lieu. Section 106 is a grey area concerning retail facilities. It's a skilled job, we have a trained negotiator sit down with the developer saying, you are making x amount of profit, but because of the low land values here [North Lincolnshire], it's unlikely the developer would fund all our shopping list. You have to prioritise and we might forego open space or shops in favour of schools". These quotes give just two respondents' views, but the media, journals, and other respondents, made similar comments. There appears to be little understanding, at times, of other people's needs within the planning process, which can be rather adversarial. At the root of this may be factors such as a
‘nimby’ attitude towards protecting amenity, and property values, the financial situation of local authorities, and the need for businesses to maintain the utmost level of profitability possible or face wrathful shareholders and takeover threats.

In 2001 New Labour promised to tighten up the planning application process so developers will not face long delays before a council decision (The Economist, 15/12/01, p.28, stated that delays in UK planning applications cost business £60 million a year, and that half of all planning applications take over two months to be decided). This should make the planning process easier for corporate interests, but may make it less accountable to local interests. Effectively this continues a centralisation of British planning that is in part a reaction to the long delays objectors managed to impose on the Heathrow Terminal Five Project (Hall, 2002, p.51). Hall here asks if this reaction, this centralisation, has now gone too far. The current state of British planning regulations has been criticized, by the media and by some respondents during this research, for not doing enough to support small local shops. Firstly, some supermarkets are still allowed to open, regardless of the state of the small shops’ economy, or of the views of local people. Secondly, planning regulations do not keep small shops from either changing to non-food uses or takeaways, or from closing altogether. Concerning the first criticism, The Guardian said supermarkets should only be allowed to open in affluent areas if they also opened in poorer districts (Guardian II, 17/3/99, pp.2/3). Other suggestions included “stop giving planning permission for any more Aldi or Netto” (R.31, Roundhay greengrocer), and “stop the big supermarkets opening within half a mile of a small shop” (R.34, Wortley convenience store). A.25 (Pakistani community group, Scunthorpe) said “Ask the local people before any changes are made, including the elderly and disabled. Take on board their views or if not feasible explain why”. The second criticism, that small food shops should be preserved, was mentioned by many respondents. “We should beef up the planning categories. If it’s a betting office or a funeral parlour, it’s not retail. The planning system should be used to maintain a range of essential local services. Housing developments should be limited unless services are also provided” (A.86, Leeds councillor). However, planners cannot discriminate between different companies, allowing an Aldi or Jackson’s to open but excluding Tesco. Planners can direct new retail development away from out-of-town sites, but must apply this equally to all businesses. Therefore Aldi, Lidl, and Netto, who

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38 The Yorkshire Post, 4/4/00, p.9, had a story about a former convenience store in Whitby which was able to convert use to a funeral parlour without planning permission. The issue was not loss of a food store but the fact that schoolchildren would pass the premises and see corpses being taken in and out.
came to the UK later than the big four superstores, are denied the chance to open many out-of-town supermarkets. Planners cannot go against business law or competition practice as set by UK laws.

Planning consent, once given for a set period, cannot be revoked without compensating the landowner. In Scunthorpe, Tesco could not be stopped from building on a site they bought from Sainsbury, which had gained permission for a store there before 1996, (section 4.7.1). Similarly planning permission for large housing estates, such as Valley View Drive in Bottesford, given under the old Glanford Plan of 1986, without any requirements to provide services such as shops, is also costly, to revoke; residential development there is continuing in 2003 (section 5.1.2). Planning cannot force a shop to open or prevent it closing. Warnes, 1982, p.408, stated that planners cannot stop local shops used by the elderly or infirm from closing. Planning can be used to support local, or neighbourhood, shopping centres, if not individual shops. Since planning cannot force shops to stay open, planning protection 'for individual shops might even cause the closure of more shops. There needs to be a balance, between maintaining a good range of retail facilities, and hedging premises about with regulations that many close and cannot be used for anything.

4.5.5. Leisure, tourism, farmers markets

The growth in tourism, in foreign holidays to ever more distant locations, has been mentioned in section 2.3.4. But tourism is also looking to more local destinations within the UK. Globalisation, and the growth of big multinationals, tends to produce homogeneity in every town centre, yet tourists look for a 'unique experience' (A.47, Barton Regeneration). North Lincolnshire market towns like Brigg and Barton are marketing themselves as tourist destinations, and farmers' markets are an important attraction here. There were less than ten farmers markets in Britain in 1997 but over 200 by 2002 (Guardian II, 5/2/02, p.64), with a combined turnover in 2002 of over £65 million.

Brigg farmers' market was set up in June 2000 and attracts between 1,500 and 2,000 extra visitors to Brigg. A survey by North Lincolnshire Council found that 35 out of the 40 businesses who replied thought it had helped their trade. Existing Brigg butchers found their trade rose with the farmers market because of the extra visitors; many shops also put out stalls. Barton's farmers market, which began in autumn 2001, was less successful and closed in September 2002. A poor location was blamed, away from the
main pedestrian flows, along with having it on a day when many were at work. Epworth farmers market has also flourished, but unlike in Brigg a council survey found less support from the shopkeepers (Scunthorpe Telegraph, 13/11/02, p.13). Some retailers claimed the farmers market exacerbated parking problems in Epworth, putting off shoppers from visiting. Other traders said they had no place to park because the market stalls “took over the bays from shortly after 6 am”. The importance of pedestrian flows at a small scale with regard to retail turnover was examined by Zacharias (1997). From studies of an open air market in Montreal, Zacharias concluded that quite small stimuli can make a large difference to pedestrian routes, Zacharias also found that pedestrians tend to simplify their path through a complex market so as to remember where they had been, where they had seen bargains. Pedestrian flow, or ‘footfall’, can have a major effect on the profitability of retail stalls or shops. Festing (1998) also noted the importance of pedestrian flows, site visibility, car parking, public toilets, and aesthetic appeal, amongst other factors, when setting up a farmers market.

Efforts to promote Barton include publishing a leaflet about the town's attractions, printing special gift wrapping paper featuring Barton's history, attractions, and a recipe for plum bread, a traditional Lincolnshire food. There is also the 'Welcome Host' initiative to encourage shopkeepers to smile and be polite to tourists and inform them about local events (A.47, Barton Regeneration). Both Epworth and Barton are small towns with compact centres, no pedestrianisation, and limited space for parking. Brigg has pedestrianised its shopping centre because unlike Epworth and Barton it has a bypass. The micro-geography of a retail facility such as a farmers market is crucial. It must not be too far off the pedestrian routes, but not so much on them that it obstructs fixed-shop trading either. The farmers markets in Scunthorpe and Leeds have done well, in line with other such markets across the UK. Like Brigg, these much larger centres can have a dedicated site for the market, traffic-free, and parking is diverted to the edge of the retail area.

Tourism can bring the extra trade that keeps local shops open. Food retailers may also benefit indirectly, as local spending power and employment rises. Tourists may keep cafes open, important for keeping local shops viable (section 4.4.2). However, overreliance on tourism is bad because spending in this sector is discretionary and vulnerable to downturns in the economy. A thriving tourist sector may result in crowding out of staple local food shops by gift shops and other tourist oriented trade, as in some Lake District towns. "You can't eat sugar candy or picture postcards every night" (A.105, Countryside Agency). If every small market town tries to jump on the
tourism bandwagon, trade will be spread too thinly and some will lose out. The
dilemma will be, if there is insufficient tourism for every small town (and more tourist
spending cannot be generated), which centres will have this trade and which will not.

4.6 The importance of small shops

4.6.1. Importance to the community

Many respondents mentioned the importance of shops in maintaining a community.
The Post Office seems to be particularly important for the community; its significance
was mentioned by a range of different respondents. A.77 (Hull housebuilder) said “The
Post office is important even for non-pensioners. It gives a 'villagey feel'. A.67,
Scunthorpe council housing, said "Like Emmerdale Farm, the Post Office is the focal
point of the community, where people will pass each other". A.40, disabled support
group, Leeds, said “We definitely need the local shop, especially the Post Office, people
go for their pensions, if someone doesn't turn up they ask, 'Where is she?'’. S.27
(female, 70s, Scunthorpe) regretted the closure of the local Post Office as “I have to use
the bank now to get my pension, I don't like this, the banks are more impersonal, I like
to have a little natter in the Post Office. I blame the bloody government". This tallied
with national statistics showing that three quarters of villagers considered the Post
Office 'extremely important' to them and 91% said the Post Office 'played an
important role' in the community.39

Pensioners particularly benefited from the sense of community generated by small
shops. “A lot of these old folks might not see anyone else [than the shopkeeper] from
day to day” A.67 (Scunthorpe council housing). Pensioners can suffer extreme isolation
if they cannot access shops on their own; A.35 (pensioner support, Leeds) cited one bad
case of isolation, “I went to see one lady and she hadn't spoken to anybody for so long
she had to suck a boiled sweet before she spoke to me, her voice was going. It's such an
indictment of our society today”. The decline in community ties is independent of the
fate of small shops, but local shops can have a role in ameliorating the effects of this
loosening of social ties. Carers are another effectively 'disabled', and possibly isolated,
group (section 5.3) and “for older carers a [local] shop is more than a shop, it's a
meeting place, they can talk to the shopkeeper of friends there” (A.14, disabled support,
Leeds). Local shops may, then, benefit the community in several intangible ways, but

39 Figures from the Daily Mail (29/11/02, p.43)
4.6.2. Importance of employment at local shops

Supermarkets can sell more efficiently, both per square foot and per member of staff (section 2.3.6) but this means that replacing sales through small shops with sales through supermarkets may reduce total retail employment. Each shop may only employ two or three staff, often family members of the shopkeeper, so seem to have little impact on employment. However if the shop closed, these people might be claiming Jobseeker’s Allowance. Smith and Sparks (2000a, p.208) noted the employment benefits of small shops; such benefits often ‘hidden’ because of the small number of jobs per individual shop. Small shops can be a seedbed for entrepreneurs, and provide starter jobs for people who will be able to use this experience to get jobs at higher pay later on. A.99 (shopping centre manager, Leeds). They may be “the only source of employment in Asian areas”, A.91, Leeds councillor. A.4 (business enterprise centre, Leeds) said that small shops in ethnic-minority areas provide a gateway to jobs, training, and experience for these minorities that they might find harder to get ‘in the mainstream’, due to racial discrimination; they can then use this experience to enter larger companies. A major problem faced by some job applicants is the vicious circle of no experience-no job. If small shops work demands few skills and/or experience, such employers should be supported as a way out of this. However the supermarkets might argue they can fulfil this role more efficiently, as the example of Tesco in Seacroft (Chapter Three) shows. Small shops also create jobs at other companies, from delivery drivers to wholesalers and food producers; supermarkets do not create these jobs as much as they have no wholesalers and use larger lorries with fewer drivers. Jobs at small suburban or village shops are local, avoiding the need to travel to city centres. This suits part timers because they are close to home, such as parents with young children who can only find childcare for part of the day.

4.6.3. Small shops are not important to the community

Other agencies did not believe small shops had a community role. “People make social contacts where they live, not in shops, though they might meet people they already know in shops”, A.59 (Lincolnshire housing association). “Selling things is what shops are for, not a meeting place, those days have gone. Local shops here [Isle of Axholme] are just a convenience store if they forget something at the supermarket” A.70
Supermarkets will also provide personal services for customers, "even carry out the goods to your car" A.92 (Leeds councillor). "Even in the isolated villages they have community halls and village halls" A.39 (pensioner support, Scunthorpe). Supermarkets provide ample car parking, and many have manual and electric wheelchairs for disabled customers (section 5.6.3). So for some even the community role of small shops is now fulfilled by the supermarkets. However this appeared to be the minority view of those interviewed.

4.7. Results of the shops mapping

4.7.1. General historical development of the shops within the research areas

Leeds has a population of around 727,00040. Early supermarket penetration was in the city and suburban centres. In 1968 the Arndale Centre at Crossgates opened41, with a branch of Tesco still trading there in 2003. In 1969 the Leeds Merrion Centre opened, with a Morrison supermarket also still open in 2003, and the city centre Safeway opened in 1974. To the west, the Bramley Centre had opened in 1970, with a supermarket premises taken over by the present incumbent, Morrison, in 1974. Other 1970s supermarket development included the Safeway at Roundhay (1973), the Asda at Cookridge (1974), the Safeway at Headingley (ca. 1975), the Morrison at Horsforth (1976), and the Morrison at Hunslet (1977). In 1980 Sainsbury opened a branch at Moor Allerton; this was relocated to larger premises 200 metres to the west in 1998.

The late 1980s saw several Kwik Saves built, including those at Holbeck and Crossgates. Kwik Save at Harehills opened in 1993, in premises formerly occupied by Grandways, which had opened in 1973. Also in 1993, Kwik Save opened in Beeston. In 1997 Kwik Save opened in Pudsey, in a former Fine Fare store, which before that was a Gateway shop. Meanwhile, Tesco at Roundhay opened in 1987, and Safeway at Bramley opened in 1989.

The Co-op in Armley opened ca. 1990, and in 1992 the Co-op opened a new supermarket at Halton, also building a public library there. Also in 1990 in Halton, Netto opened its first UK branch, in what had been a Grandways store. Other early 1990s developments included a Netto at Meanwood (1991), which was previously a variety store, a Netto at Crossgates (1991), a Kwik Save and Farm Foods at Kirkstall

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40 Figure from The Statesman’s Yearbook, 2000, p.1585.

Further out of town, Marks and Spencer and Asda opened at the Owlcotes Centre, and also in 1991 Marks and Spencer opened an out-of-town store at Moortown. In 1992 Sainsbury opened a large out-of-town store at Crossgates.

Recent major supermarket openings include Sainsbury at the White Rose Regional Shopping centre, open 1997, a Safeway at Chapel Allerton, in premises formerly a Grandways then a Presto; originally this site had been a car park for other shops here. In 2000 Morrison opened at Kirkstall, and also Tesco at Seacroft, and in 2002 the Co-op acquired a branch at Meanwood when it took over the GTS supermarket there. This GTS had once been a bingo hall.

In 2003 there were some signs of a retreat by the discounters. The first Lidl, in Halton, had closed and was now operated by the Co-op; the former Co-op premises nearby were now a Matalan. Netto in Beeston had closed and was now an Asian supermarket, called ‘Maumoniat’. The former Comet store in Crossgates closed in 2003 and was now a Marks and Spencer. The Kwik Save at Kirkstall closed in 2003, probably in response to the new Morrison there which had opened three years earlier.

Scunthorpe has (1996) a population of around 73,000 in 1996,\(^\text{42}\) including the suburb of Bottesford. Supermarket penetration began in Scunthorpe when Asda opened in 1977. Tesco arrived in Scunthorpe in 1987 when it took over the former Hilliards store on Skippingdale (LS 58,26), which itself had opened in 1985. Safeway opened on Doncaster Road in 1988, and Morrison opened at the Lakeside retail park in 1993. On 14 August 2000 Tesco shifted to 24 hour opening and on 15 April 2002 moved to a larger ‘Extra’ format premises, 9,000 square metres, at Glanford Park. Sainsbury had bought the Glanford Park site (LS 52,19), obtaining planning permission for a supermarket there in 1994, two years before the PPG6 guidelines curbing further out-of-town development. This planning permission was sold with the site to Tesco in 1995, enabling their store to be built, despite the objections of the CPRE who wanted

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\(^{41}\) Dates here from enquiries at individual supermarkets.

\(^{42}\) Population figures here are from the “North Lincolnshire Profile”; published by North Lincolnshire Council, and updated periodically.
the site kept as agricultural land. In August 2002 Asda also commenced 24-hour trading. Scunthorpe has a large number of shift workers at the steelworks, and a large textiles industry, employing the wives of many engineering workers, and some of these textiles jobs are also on shift patterns, hence the demand for 24-hour shopping. The first discounter came to Scunthorpe in July 2000 when Lidl opened on Station Road. By 2003 Scunthorpe also had an Aldi and Netto, both about 500 metres from the town centre. In Ashby a site was cleared in autumn 2001 for another discounter site, 700 metres east of Ashby High Street shopping centre. This has, by November 2003, not yet been built but represents a threat, a kind of planning blight, to local shops in east Ashby. However the trading difficulties facing the discounters in 2003 may have deferred this development indefinitely.

Brigg, population 5,300, has no less than three supermarkets. In 1999 there were Safeway and Kwik Save; Tesco opened close to these two in January 1999, and in 2000 began 24-hour trading along with its sister store in Scunthorpe. In 2001 Safeway closed its Brigg store and the premises were taken over by Lidl. Rural Lincolnshire and North Lincolnshire (LNL) have similar levels of village service provision, or lack of it, as the rest of the rural UK. Figures in the Scunthorpe Telegraph of 2/8/99, p.4 said that 53% of LNL parishes had no shop or Post Office, 63% had no school, and 86% had no daily bus service. Figures from Humbrella (June 1999, p.1) for the whole of the rural UK were similar; 40% of these parishes had no shop, 60% had no school, 74% had no GP, and 75% had no daily bus service. Moseley’s figures for English parishes (2000, p.417) are, 42% of parishes have no shop, 43% have no Post Office, and 40% lacked a ‘six or seven day bus service’.

Retail grocery developments in Leeds, Scunthorpe, and North Lincolnshire therefore broadly reflect the retailing trends discussed in Chapter Two.

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43 Supermarket buses were excluded, mostly they only come once or twice a week to rural parishes.
The threat to smaller UK Post Offices continues (section 4.1.2). Of all UK Post Offices, the Daily Mail (16/2/01, p.4) reported that 233 closed in 1998, 383 closed in 1999, and 434 closed in the first 9 months of 2000. In 2001 a further 547 Post Offices closed. This left 400,000 people, including one in fifteen rural households, over 2km from a Post Office, and some people were spending £150 a year in fares to visit Post Offices further away.

4.7.2. The shops maps, figures 10 – 15

This section comprises the maps of retail provision in the study areas of Leeds, Scunthorpe, and North Lincolnshire as constructed in 1999 and 2002. Each map was constructed in 1999 and again in 2002 to show any changes over this time in retail grocery provision. Figures 10 – 13 show the urban areas of Leeds and Scunthorpe; figures 14 and 15 show the rural areas of North Lincolnshire. The maps of urban areas, for 1999 and 2002, have been each duplicated to show potential access to shops for pedestrian shoppers of different mobilities. Figures 10 and 11 show access for a shopper of limited mobility, one who can walk no further than 150 metres with shopping. Figures 12 and 13 show access potential for a shopper of average walking ability, one who can walk up to 900 metres with shopping. For figures 14 and 15, there was little to be gained by differentiating between access to local shops for shoppers of different walking abilities because the villages covered on these maps were of small size, only a few hundred metres across in most cases.

Further details on the meaning of these maps are shown with each individual map, and details on the methodology of constructing these maps are given in section 3.2. The interpretation of the maps is in section 4.7.3.
Figure 10. Leeds and Scunthorpe 'low-mobility' grocery facilities map, 1999

This map shows the residential areas of Leeds and Scunthorpe (industrial, parkland, and other non-residential areas are shown as white) divided into 250 metre x 250 metre squares. Each square approximates to the retail facilities accessible on foot to a person of limited mobility (capable of walking up to 150 metres with shopping). Various food shops are shown, also chemists and Post Offices (these are important to many with limited mobility, e.g. pensioners, disabled). 'Barriers' are square boundaries not easily crossed on foot, such as main roads or railways.
This map shows the residential areas of Leeds and Scunthorpe (industrial, parkland, and other non-residential areas are shown as white) divided into 250 metre x 250 metre squares. Each square approximates to the retail facilities accessible on foot to a person of limited mobility (capable of walking up to 150 metres with shopping). Various food shops are shown, also chemists and Post Offices (these are important to many with limited mobility, e.g. pensioners, disabled). ‘Barriers’ are square boundaries not easily crossed on foot, such as main roads or railways.
Figure 12. Leeds and Scunthorpe ‘high-mobility’ grocery facilities map, 1999

This map shows the residential areas of Leeds and Scunthorpe (industrial, parkland, and other non-residential areas are shown as white) divided into 250 metre x 250 metre squares. Retail facilities are marked for the square the shop is in, and a 5 x 5 array of squares centred on that square. This approximates to a radius of 800 – 900 metres walking distance, the distance a person of average mobility would walk with shopping. ‘Barriers’ are square boundaries not easily crossed on foot, such as main roads or railways.
Figure 13. Leeds and Scunthorpe ‘high-mobility’ grocery facilities map, 2002

This map shows the residential areas of Leeds and Scunthorpe (industrial, parkland, and other non-residential areas are shown as white) divided into 250 metre x 250 metre squares. Retail facilities are marked for the square the shop is in, and a 5 x 5 array of squares centred on that square. This approximates to a radius of 800 – 900 metres walking distance, the distance a person of average mobility would walk with shopping. ‘Barriers’ are square boundaries not easily crossed on foot, such as main roads or railways.
Figure 14. Rural North Lincolnshire grocery facilities map, 1999

This map shows the residential areas of rural North Lincolnshire (non-residential areas are shown as white) divided into 500 metre x 500 metre squares.
Figure 15. Rural North Lincolnshire grocery facilities map, 2002

This map shows the residential areas of rural North Lincolnshire (non-residential areas are shown as white) divided into 500 metre x 500 metre squares.
4.7.3. What the shop maps show

Figure 10 shows the retail facilities, as discussed in Chapter Three, for each 250 metre x 250 metre square of Leeds, in 1999. The inset shows Scunthorpe. Each such square represents approximately the area that can be walked to from the home of a person with low walking mobility, a radius of 100-150 metres (section 5.1.1). Much of the map shows as orange, that is no food shops at all are accessible on foot for a person of low mobility. Apparently, food desert areas occur more towards the outer, wealthier, suburbs. Although large supermarkets are found there, they are spaced several kilometres apart and there are few other suburban shops apart from ‘small’ convenience stores and Post Offices. Although food deserts may be associated with inner city areas, the inner areas of Headingley and Harehills have high levels of grocery provision. This is due to the presence of many south Asian grocery shops, stocking many kinds of vegetables. There are also many smaller supermarkets such as Aldi, the Co-op, and Morrison here. The term ‘inner city’ is more a social than a geographical term, because poor estates like Seacroft (LS 68,42) and Halton Moor (LS 57,29), whilst physically on the periphery of Leeds, are economically ‘inner city’. These are where many Leeds poor were rehoused when the slums of central Leeds were demolished. However the rehoused tenants suffered unemployment, especially for male unskilled manual workers, in the 1980s, and these estates declined. This hit retail grocery provision as described in section 4.3.4. Scunthorpe is similar to Leeds; poor provision in much of the outer suburbs, and the best provision in the poor, largely Asian, area of Crosby, for the same reasons as for Leeds. Leeds has several large subsidiary centres, including Armley, Pudsey, and Moortown; Scunthorpe has one major subsidiary centre at Ashby. For Leeds the River Aire is shown for orientation purposes.

Figure 11 shows the same Leeds retail facilities, for a person of low mobility, in 2002. Supermarket provision has increased. There is a new Tesco at Seacroft and a new Morrison at Kirkstall. In Scunthorpe the Tesco has moved southwest. For smaller shops there has been considerable ‘churning’, that is, many small shops closing but almost as many opening elsewhere. The figures for overall shop closures given in section 4.1.1 appear to be merely the balance between two larger numbers of openings and closures. Not all this ‘churning’ shows on Figures 10 and 11 because some new convenience stores opened close to existing ones; if the new and old shop are in the same square, no change will show on the maps. Likewise, many small convenience store closures do not show. Although information is lost this way, this simplification has two advantages. Firstly it shows facilities from a shopper’s point of view. If customer loyalties to any
one shop are ignored, if two similar shops are close by and one closes, retail facilities are much the same as before. Secondly it makes the overall retail picture easier to see, and this format makes comparisons over time and between different urban areas easier to appreciate. However in many squares, the number of shops has declined from two or more to just one, which means any further shop closures will remove retail provision entirely from that square.

Figure 12 shows the same 1999 retail facilities as Figure 10 but here each retail facility counts not just for its own square but for a 5 x 5 array of squares centred on its own square. That is, an area 1,250 metres x 1,250 metres. This approximates to a radius of 700 metres in a straight line, or about 800-900 metres as a person would actually walk following the street pattern. This is the average distance that most fit, able-bodied, people are prepared to travel on foot to shops, and carry shopping back (section 5.1.1). Some of this walking will be made difficult or even impossible by barriers including railway lines and major roads. Where a ‘barrier’ exists, it has been fitted to the nearest edge of a square, and shown as a heavy black edge. Railway lines tend to have crossing points where shopping areas are close by. For roads, the existence of a ‘major’ dual carriageway (excluding suburban roads that are dual carriageways but still minor such as North Parkway in Seacroft) was taken as a proxy for a road ‘difficult to cross’. These arterial dual carriageways have multiple-stage pedestrian light crossings, the lights phased to favour car flow, which means phased against the pedestrian. Pedestrians must cross one stage, then wait again for the next stage. The alternative of underpass crossings or pedestrian overbridges means awkward ascents and descents, for the elderly, disabled, or those with children and pushchairs. Overbridges can be cold and windswept, and many underpasses have been filled in because they were haunts of muggers, especially once the mirrors that were supposed to show if anyone was loitering in the tunnel had been vandalised and obscured. Figures 12 and 13 were modified so that no retail facility was marked as accessible from a residential square across a ‘barrier’.

Figure 12 contrasts with Figure 10 in that hardly any areas are orange, or without access to any shop at all. Those areas that are orange are mainly the wealthier areas; north Horsforth, Roundhay Park, and the far west of Pudsey. However the main shopless area of Scunthorpe, north Westcliffe, is not particularly well off. This contrast between figures 10 and 12 occurs because the retail facilities are spaced in general about four to five squares, or 1.0 to 1.25 kilometres, apart. As with figure 10, there is
greater provision of fruit and vegetables towards the more central areas, whilst many peripheral suburbs have a ‘small’ convenience store but little vegetable retail provision.

Figure 13 is the same as Figure 12 but for 2002 instead of 1999. The impact of a single change of retail provision in one store, mentioned in the paragraph above, shows well here. North east of Moortown a single convenience store increased its fruit and vegetable provision between 1999 and 2002, so changing from a ‘small’ to a ‘large’ convenience store. 1.5 square kilometres of this suburb then showed as green rather than the yellow of 1999. North of Pudsey vegetable provision declined because a single greengrocer closed. In Scunthorpe some convenience stores in southeast Ashby have cut back their vegetable provision or closed altogether. However a garage forecourt shop on Grange Lane South (LS 68, 04) increased the vegetable it stocks to qualify in 2002 as a ‘large’ convenience store. The new Morrison at Kirkstall has had little impact on Figure 13 as compared to Figure 12. There were already, adjacent to this store, a Kwik Save and a Farm Foods shop. The Morrison opened in 2001 and there has not been enough time for the full impact on the small shops in Headingley and Bramley to be felt, (section 4.2.1) Some small shops have closed in Headingley between 1999 and 2002 but enough retail provision remains for most of Headingley to have comprehensive grocery access. Another new supermarket opened in Leeds, the Tesco at Seacroft (LS 64,42). This was seen as an instrument of neighbourhood renewal, providing new jobs and alleviating a previous food desert. Section 2.4.5. details more employment and other effects of the Seacroft Tesco. The rest of Seacroft had very poor retail grocery provision. There were parades of shops every 700 metres or so; but of these parades of 4-6 shops, one or two would be closed, one would be a neighbourhood housing office, betting shop, or similar non-food outlet, and one would be a ‘small’ convenience food with virtually no fresh fruit and vegetables; except perhaps a few potatoes and onions, hard vegetables which do not spoil quickly. These convenience stores, and the whole parades, were gradually closing, prone to vandalism and theft and little used. One parade, totally abandoned, on Kentmere Approach (LS 59,42), was demolished in 2001, and left as an open space. Even the flats above these shops were not wanted and had been comprehensively vandalised.

Figure 14 shows the retail provision for rural North Lincolnshire, in 1999. The mapping is on the same basis as Figure 10, except that the squares on map Five are 500 x 500 metres. This halving of the scale was to enable the whole area to be shown on

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44 Very recent changes include the closure of the Kwik Save in 2003
one map; since many of the settlements shown are quite small, there is nothing to be gained from differentiating between access for those who can walk 800 metres and those who can only manage 100 metres. There is a Christaller-like hierarchy of smaller centres below the main town of Scunthorpe; these are Kirton Lindsey, Brigg, Barton, Winterton, Crowle, and Epworth, and are spaced every 10-15 kilometres. These have a full range or food retailing. Below these is a third tier of settlements, places like Barrow, Barnetby, Messingham, and Haxey, which have fresh fruit and vegetable provision but lack a full range of services. Fourthly there are villages like Hibaldstow, South Ferriby, and Winteringham, and Belton that maintain a ‘small’ convenience store and Post Office, often in the same premises, but sell little or no fresh vegetables. Farm shops were ignored, unless actually in a village; if they are far from houses, they can only be accessed by car drivers. The fifth tier is the smallest villages that have no shops at all; these include South Kelsey, Wootton, Appleby, Garthorpe, and Scotton.

Figure 15 shows the same area of North Lincolnshire for 2002. Some villages have lost their retail services since 1999. Elsham lost its grocery store, which also sold meat, in 2001. Local opinion held that this was a casualty of the new Tesco in Brigg, which opened in 1999. ‘Ten years ago [in 1991] Brigg had 5 or 6 butchers, now (2001) we’re down to three (A.79, Lincolnshire Police). The Elsham closure may have been partially due to the Brigg Tesco opening, but increasing car ownership and a drift away from meat consumption due to recent UK food scares also contributed. Barnetby has also seen its convenience store cut back on fresh vegetable provision. The formerly independent grocery shop is now part of the Tierneys Group, trading as ‘One Stop Shop’. The manager here said he had stopped selling loose vegetables “as you can't get bar codes for them”. But the vegetables had sold better when they were loose.

Customer preferences had been overridden by the desire for economies by standardisation from Head Office. There is now nowhere to buy fresh vegetables in Barnetby, but the Tesco free bus, running three times a week from here, had taken much of the trade anyway. This is leaving large areas of North Lincolnshire with no retail source of fresh vegetables, in the midst of some of the best agricultural land in Britain. Barnetby in 1970 had 22 shops, compared to the three it has now. These 22 included a bike shop, a haberdashery, a milliners, a tailors, two cobbler, a shoe shop, a Co-op, a Post Office, five butchers shops, seven greengrocers, and a baker. Today Barnetby has two ‘small’ convenience stores and a Post Office.

45This information provided by a local villager during the shops mapping
South Ferriby has also lost shops. In the 1960s there were eleven shops here; a blacksmiths, a cobblers, a drapers, a sweet and tobacco shop, a hairdressers, a Post Office, a newsagent, a fish and chip shop, two ‘general stores’, a butcher. Today there is just one shop, a Post Office and convenience store combined. In Grasby, the Post Office and general stores combined, closed 1998. Bigby has also lost its general store, in 1986, (S.34, male, 50s, Bigby) and now has no shop. North Kelsey has (2002) just one shop, a combined Post Office and convenience store, but in 1950 had twelve shops (A.111, Kirton neighbourhood group); a Co-op, two butchers, a confectioners, a cycle repair shop that also sold sweets, a fish and chip shop, a cobblers that also sold clothes, three grocery shops, a chemist, and a Post Office. In the 1990s North Kelsey had “butchers, a post Office, and a separate general stores” (S.48, female, 40s, South Kelsey). South Kelsey, without shops today, had in the 1990s a combined Post Office and general stores, closed in 1996. Alkborough has (2002) one shop, a combined Post office and convenience store, but in 1990 it had a separate grocers, butcher, and fish and chip shop (S.26, female, 40s, Alkborough). Nearby, Whitton lost its only village store around 1990.

Across the River Trent, Luddington has lost its combined Post office and ‘small’ convenience store, and villagers in Swinefleet believed theirs too was soon to close, although when mapped in 2002 it was still functioning (with limited opening hours). Haxey has lost one ‘large’ convenience store, but it may be more significant that nearby Epworth has lost its last baker. In 1999 Epworth had a full range of food retailing, but now those wanting a bakery will have to drive to a larger centre, which will likely mean they will visit the supermarkets at Scunthorpe or Gainsborough. Places like Epworth, Kirton Lindsey, and Winterton have only one of several kinds of shop, so if that one shop closes, there is more incentive to drive to the supermarkets. Shoppers will tend to do all their shopping at these supermarkets, precipitating more shop closures, in a process similar to how urban parades decline once two or more shops close. Barton, for example, has lost its fishmonger (S.40, female, 50s, Barton). In another decade or so, possibly only four centres on this map; Scunthorpe, Brigg, Barton, and Crowle; might have any shops other than a small convenience store. Even small towns like Brigg can have areas where food access is difficult. Many of the outlying areas of Brigg are over 1,000 metres from the shopping centre, and not all have bus links. A.12 (Carer Support Brigg) said “Even in Brigg where you’d think there’s good access to shops there are problems for some carers on the outskirts of

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46 This information provided by a shopper in the Post Office at South Ferriby.
Brigg. To walk into town is difficult and there's not a regular bus route from the edge of Brigg'. This comment suggests there may be 'hidden' food deserts on the edge of Britain's market towns, where houses are a kilometre from the centre with poor bus links.

In 1999 there were plans for a supermarket (operator unknown) in Crowle but these had not materialised by 2003. Crowle is twelve kilometres from the nearest large supermarket, Tesco Scunthorpe, enough for a Crowle frozen food shop to have a spatial monopoly regarding customers who depend on buses for transport. "Those going by bus don't want to carry frozen food back from Scunthorpe, it thaws out". This shop also did "exotic stuff like salads that you don't get in Tesco". Kirton Lindsey has a topographical problem for some shoppers; the market square where the shops are is forty metres higher than the lower parts of town where many pensioners live. Lower Kirton used to have a fish and chip shop, a general store, a Post Office (closed 1980), a haberdashery, a shoe shop, and a grocer (A.111 neighbourhood group, Kirton) but these have gone as the proprietors retired. The Countryside Agency would not fund shops directly but did agree in 2002 to fund a minibus service to take pensioners up the hill to the main shopping area. This bus, the 'Kirton Klipper' was reported in 'Humbrella' December 2002, p.3. There is a similar problem with the Caistor Road estate (LN 55,51) in Barton (section 5.1.1).

Some food deserts hardly show on these maps at all, but are nevertheless acute for those who live there, such as East Park, a poor inner city area of Leeds (LS 42,29). It lies 1 to 1.5 km from a Co-op, there is a Kwik Save and an Iceland just across the A.64, and is only 1 km from the main Kirkgate market in central Leeds. Why then is East Park a food desert? The Co-op does not sell a large range of fresh fruit and vegetables, and is too far to walk for many of the elderly and infirm residents of East Park who have retired 'in situ'. Access to the Kwik Save and Iceland is worse because that involves a complicated crossing of multiple sets of pedestrian lights over the A.64. Those East Park residents furthest west are farthest from these small supermarkets but are only a few hundred metres from Kirkgate Market (LS 42,31). However there is a steep slope downhill of about twenty metres (vertical height difference) west of East Park, so shopping from Kirkgate must be carried uphill. Crossing of the Leeds eastern ring road is very complex for pedestrians. This poses problems for both mothers with children and slower pedestrians such as the elderly and disabled. Problems of walking are compounded by fear of crime, especially on dark winter evenings. Elderly people, burdened with shopping, but probably having cash from their pension, are an easy
target for muggers. These problems were illustrated by the following quote from A.42 (poverty support, Leeds). “There aren’t any shops here, just two or three local shops. The supermarkets won’t come, as this is a poor postcode. Many here are on Benefits. The unemployed can’t afford to get a taxi to the supermarket, but need one if they have a lot of kids. We have a very frail lady, 80 years old, who walks 100 yards to the corner shop but it takes her half an hour to get there. They have to pay high prices at local shops, double the supermarket price. 30p for an apple, and there’s no real choice. The nearest supermarkets to here are a mile and a half. Carrying shopping back is difficult, I get a bus there and a taxi back. It depends on the weather and if you are trailing kids, or elderly or frail. Crossing the A64 [York Road] is difficult as they have filled in the underpass as too many muggings in there. So now there are three sets of lights for pedestrians to cross, with kids, and they are synchronized against pedestrians because if they stopped the traffic on all three lights at once, long enough for someone to cross, there would be long tailbacks of cars. Two people have been knocked down there. They closed the local Post office on East Park Road two years ago [in 2000]. All the pensioners and unemployed have to go to York Road. He is now very busy, any time of the day, the elderly have a long walk then standing in a queue for half an hour”.

Could East Park residents use the bus? Several bus routes use the A64, although for residents returning with shopping the bus will deposit them on the north side of the A64, with a busy road to cross to get home. But although the A64 does have many buses, those going to Garforth, Tadcaster, and York do not stop at inner-Leeds bus stops or the service would be too slow; few buses venture into East Park. A.42 (poverty support, Leeds) said “The buses here are bad because of all the traffic-calming measures to stop joy riders. A lot of buses have been withdrawn from here or don’t run after 6pm. People from here can’t afford the £1 bus fare into town, it’s a pound there and a pound back. The pensioners still pay 20p but only get this between 9.30am and 3pm. A lot of pensioners are frightened to carry their shopping back in case they get knocked over for it, it is half a mile to walk but steep uphill, carrying heavy shopping. The only shops within East Park are a few convenience stores, chemists and a Post Office”. Burmantofts residents, across the A64 from East Park, also mentioned the lack of buses to the city centre from an area less than 1.5 kilometres from Kirkgate Market. A.34 (pensioner support, Leeds) said “There are few shops available locally. We are close to the city centre but it could be a million miles as it’s too far for the pensioners to walk. The bus service, though we’re close to the centre, is appalling, in frequency and reliability. For some reason they’ve taken off two buses, so we only have one every half an hour, not always on time. The pensioners have a long wait, not good in this
weather" [this was late February, +2° C today]. Factors such as infrequent buses, cold weather, difficult road crossings, and fear of crime may not be obvious to able-bodied middle-class planners but are very real obstacles to shopping for residents of East Park.

Other food deserts are even more hidden but may still exist for some residents. The well off areas of Cookridge and Roundhay in northern Leeds contain a relatively high level of AB social classes, 26.8% and 30.6% respectively. Yet these areas also contain, respectively, 6.3% and 6.6% DE social classes, and 32.7% and 30.1% retired. They also have 30.9% and 26.2% without cars. The retired and those in class D and E are most likely to be without cars; although the ABs may also be without one at least temporarily through illness, accident, or disqualification. Figure 11 shows many of the northern suburbs of Leeds are one kilometre away from any grocery shop, and up to two kilometres from a shop selling fresh fruit and vegetables, and the figures from Birkin et al 2002, suggest 10% to 20% of the population of these areas may have no car to access remote supermarkets. This was confirmed by A.94 (Leeds Councillor) who said "On Moor Allerton, apart from Sainsbury, there is nowhere to buy fresh food. There are loads of little shopping parades but no butchers, no greengrocers, no fishmongers. Some pensioners will walk a half or three-quarters of a mile to Sainsbury but then you will restrict your shopping to two carrier bags. You will buy one apple, one onion, you have to get essentials like tuna fish, cat food, milk, so you don't get fresh vegetables or peaches. So people's eating habits have deteriorated because we haven't got lots of fresh food shops". The ability, or not, to carry food home is a key determinant of food deserts.

The maps of retail provision for Leeds and Scunthorpe show some correlation between type of neighbourhood and types of food shop present. The Leeds/Scunthorpe map for 2002 is shown below with areas marked off according to the food shops they contain. The inner, green, areas are the districts with many south Asian grocery stores; Chapeltown, Hyde Park (south of Headingley), Armley, and Beeston. Outwards from these is an area of many 'small' grocery stores but few 'large' ones. This area also contains many of the more downmarket supermarkets, the Co-op, Morrison, and the

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47 Figures here from Birkin et al (2002, p.45)
48 Moor Allerton is 1,000 metres or less from the shopping centre of Moortown, but is cut off by the busy dual carriageway of the Leeds Ring Road.
discounters Aldi, Lidl, and Netto. This tends to be the less well off White areas, such as Seacroft, Pudsey, and Middleton. On the very outer edge of Leeds is an area with few shops at all, but there are some 'large' grocery stores here. This outer ring is the better off suburbs, where small specialist food shops such as delicatessens can survive.

Scunthorpe, being a smaller urban area, shows less neighbourhood/shops segregation, but the inner poor area of Crosby shows as having more small food shops in a relatively small area. Crosby has a small south Asian community, and the west of Crosby is the

49 The website www.fooddeserts.org shows similar maps for Birmingham and other areas. The different sort of food shopping districts show well for Birmingham.
poorest White area of Scunthorpe. If grocery retailing varies by the social characteristics of the neighbourhood, then it may be possible to differentiate and classify food deserts this way too; this possibility is discussed in Chapter Seven. Meanwhile, section 4.8 examines the coping strategies exhibited by some of the respondents in this survey. The responses from agencies and shoppers are fully discussed in Chapter Five but section 4.8 summarises some of these strategies as to how they might lead to a classification of food deserts.

4.8 Coping strategies and food desert classification

4.8.1. Introduction

Figure 16 showed that there might be different 'retailing neighbourhoods' within Leeds. For those consumers with potential problems in accessing shops, those without cars, the elderly, disabled, and others, each 'retailing neighbourhood' may demand different coping strategies to gain access to groceries. The concept of 'coping strategies' is usually one of the consumer modifying their behaviour (travel, consumption, care use, etc) in some way in response to a difficulty in accessing the foods they might buy if these were easily available near their home. The example of 'care use' shows that 'coping strategies' can involve other parties besides the consumer.

Section 1.5 introduced a possible classification of the access problems demanding these coping strategies, into 'ability', 'assets', and 'attitude' based problems. These were, problems based on lack of physical ability to walk or use public transport to get to shops; problems based on lack of resources to obtain a car, a computer, or to pay for the bus or taxi fare to obtain groceries; and problems based on ethnic or cultural factors, or lack of food knowledge, creating barriers to consuming certain foods. There is likely to be a complex interplay between the 'ability/assets/attitude' situation of various food access excluded groups and the 'retailing neighbourhood' in which they live. The groups produced by this cross-cutting of 'retail neighbourhoods' and 'ability/assets/attitude' based consumer groups will likely need, and probably produce, different coping strategies. These groups may also provide the basis of a classification of different food deserts. The needs and coping strategies of these groups may well demand different policy options to alleviate their food exclusion situation, hence the benefit of such a food desert classification. This classification would facilitate more
effective and more efficient, more targeted, use of resources to alleviate the problems caused by food deserts. Chapter Seven takes these ideas further.

This could produce a complex kaleidoscopic pattern down to ever-smaller scales, right down to individual households, since one would not wish to commit the ecological fallacy of assuming similar characteristics and problems for an entire population of households. This raises the question of at how small a scale should one attempt to classify food desert types. Does one household, in a different socio-economic situation from its neighbours, and therefore with different food access problems, count as a different ‘food desert type’? Or does one need twenty, a hundred, households, as a minimum size of food desert? Possible principles, based on what society can afford and at what scale coping strategies can be left to operate, for a ‘minimum size’ of food desert, and drawing on analogies from a possible minimum size for physical deserts, are discussed in section 7.2. This research now examines some coping strategies revealed by respondents and how these may help with a possible taxonomy of food deserts.

4.8.2. ‘Ability’ based coping strategies

Starting with ‘ability’, the need to put oneself in a position to actually purchase groceries, a wide variety of coping strategies has emerged from this research. Both people and society in general have made great efforts to extend this ‘ability’ from the basic human power to move oneself on foot from house to shops. Motor transport; buses, cars, or taxis, have extended this power greatly. However, walking, though very cheap, could be stressful if the shopper was a mother with small children (Whelan et al, 2002). In this case, other coping strategies might be needed. Buses have been adapted so that more disabled persons can use them, for example low-floor buses; this has also helped mothers with pushchairs. Various agencies, from local and national government to charities and private companies, have laid on special forms of transport, such as the Access Bus, council-funded taxis, or supermarket buses, to further extend ‘ability’ powers. But in some more affluent areas, bus services may be sparser, leaving those who rely on cars open to ‘ability’ problems if the car is no longer useable, through theft, accident, disqualification, or medical condition of the driver for instance.

Internet or telephone-based shopping schemes, some of which date back to the 1980s (section 5.4.1) also extend ‘ability’ in a virtual way, enabling ones position at home to be where the groceries are purchased from. Indirect steps sometimes widen this
"ability"; for example the drive by the UK government to extend computer literacy to a wider group, to the poor and unemployed. Carers, either friends and family (informal care) or paid council or charity workers (formal care) also effectively convert the home, as the Internet can, into a venue where foods can be accessed. The consumer can order foods from home, as with a computer, by telling the carer what foods they need buying. Alternatively the use of a car can be gained from friends or family living close by who do have one (Whelan et al, 2002).

Local grocery shops have also extended the 'ability' of some customers, not by widening their travel radius, but rather, as with Internet shopping, by bringing the location of groceries nearer home. Not quite to within the home, but to back within the limited walking distance of many by arranging to stock foods such as fresh fruit and vegetables, uneconomic normally to carry, by having these on a certain day of the week only. Family connections might also enable the local provision of such foods where economics, the economies of scale and market failure, might otherwise preclude their occurrence in neighbourhood shops. A shopkeeper might know someone at a nearby market or wholesaler, who could arrange for small-scale deliveries of fresh foods to a shop, at least some days a week. 'Farmers Markets' are a sort of coping strategy by agricultural retailers to relocalise food access. Some local shops would further emulate the Internet by delivering groceries to local customers, financing this either by combining the journey with trips the shopkeeper was doing anyway, such as to the wholesalers, or by delivering with the newspapers, which was charged for. More unorthodox coping strategies, in existence in Leeds, in existence in 1999 and 2002, include the delivery of fruit and vegetables to a neighbourhood without easy access to these, not by shopkeepers or their friends and family, but by enterprising car owners. In Halton Moor, car owners would buy fruit and vegetables from a wholesale depot two to three kilometres away, and hold car boot sales of these foods for those who otherwise would have major difficulties accessing these foods, but wanted to consume them.

4.8.3. 'Assets' based coping strategies

'Assets' based food access problems partly overlap with 'ability' problems in that a lack of assets may preclude buying items such as a car or computer that would extend the 'ability' to travel further to grocery outlets. In some poor housing estates there are many unemployed. Unlike pensioners, they do not get general travel concessions, because that might increase the attractiveness of unemployment over Minimum Wage employment (although the unemployed may get one-off travel costs to interviews paid
for). These persons may not be able to afford bus fares of £1 each way to access fresh fruit and vegetables. However many people are good at evaluating where an initial ‘investment’ in travel costs may produce greater dividends in a lower shopping bill. Hence many poor persons, for example from Belle Isle, Leeds, will use the taxi to get shopping from a Morrison supermarket some three kilometres away because the savings at Morrison over the same foodstuffs at local shops (if obtainable at all there) outweigh the taxi fare. To make the most savings, people may take a cheaper form of transport, the bus, to the supermarket when not carrying food, and only resort to the taxi home because the bus is an impractical form of transport if carrying several bags of shopping.

Coping strategies may involve simply not consuming healthy foods, of substituting ‘filler foods’, high on carbohydrates but low on vitamins, to achieve a sense of being well fed at minimal cost. This may take place at the sub-household level, as mothers feed themselves on ‘filler’ foods so as to be able to extend a limited food budget to giving the children or husband healthier fare. Ethnic minorities in districts such as Beeston (Leeds) and Crosby (Scunthorpe) also may face ‘asset’ problems despite living near well-stocked ethnic grocery shops. Earning lower wages, and facing higher import costs for these foods, they too may cope by substituting fatty but cheaper and filling sauces for the healthier vegetable foods they might consume in their country of origin. As with the alleviation of ‘ability’ problems, many other agencies play a role here. Charities may provide cheap food locally. In Scunthorpe, churches may do this, and in the USA, chains of shops such as Spartan Stores fulfil this function (sections 5.9, 7.6). The UK also has community shops (Cannings, 2001), for example at Longley in Sheffield, providing groceries as cheaply as possible, and ploughing more money back into the community because employees are drawn from the local neighbourhood. Centres such as St Augustine’s in Kings Lynn (section 5.9) provide cheap but healthy food in cafeterias. These centres also attempt to change their clients’ eating habits towards a more healthy selection of foods, and this is covered below under ‘attitude’ based coping strategies. LETS may also be a coping strategy against poverty, including food poverty (Boyle, 1997).

4.8.4. ‘Attitude’ based coping strategies

‘Attitude’ based problems may occur in three sections of the population. Firstly, in wealthy professionals who have a busy lifestyle that does not allow them time to cook fresh vegetables, so they rely on ready meals. Since they have chosen this ‘high-
powered' lifestyle, it can be said to be their career attitude that causes them to have a less-healthy diet. Secondly, in poorer households who lack cooking skills. The habit of eating 'filler' foods may become ingrained, even across generations, because we tend to eat the foods we grew up eating. So if a poor household ('asset problems') has children consuming a high calorie, low nutrient diet, those children may eat the same diet as adults, and bring their children up in turn on the same foods. Then such families may not choose to consume fresh fruit and vegetables even if these are available locally or a short and affordable bus ride away. Thirdly, in areas like Beeston, with many ethnic-minority grocery shops, there are also poorer pensioners who have retired 'in situ'. These do not wish to consume the perhaps abundant south Asian vegetables available locally, and perceive themselves as living in a fruit and vegetable poor area.

Beeston pensioners may still wish to consume some fresh vegetables - the traditionally 'British' ones such as cauliflower and carrots - so their problem is partly one of 'ability' too; can they travel to distant supermarkets such as Netto that sell these foods? This may become an 'asset' problem because transporting food back from such supermarkets may require a taxi, which is costly. Foods at some supermarkets may only be sold in large sizes; cheaper per kilogram, but costly for a pensioner living alone for whom some of the large pack may go stale before it is consumed. The coping strategy here was, for some pensioners, to pair up and then share out the single large pack they had bought between them. This also halved the taxi fare each.

However by definition many 'attitude' problems will not be tackled by any coping strategy by the consumer themselves because they do not perceive a need to change their diet. Children at school may have cultural influences influencing them to eat crisps and sweets, and burgers rather than healthier salads and vegetables. Here, outside agencies will play the biggest role in introducing coping strategies, strategies to change the diet. At a governmental level, the UK has introduced a 'five-a-day' campaign, imported from the USA, to raise fruit and vegetable consumption. Locally, schools and healthy eating centres such as St Augustine's can attempt this cultural change through education. Bribery may also be tried, both on schools giving rewards to children, and through doctors giving vouchers to patients to buy vegetables at local supermarkets.

Coping strategies by shoppers might also be aimed at overcoming loneliness or leisure problems; getting out to shops could be a way of meeting people or as a means of passing time, of 'window-shopping'. Many respondents in this research mentioned other reasons for visiting the shops, such as companionship, leisure, and exercise.
4.8.5. Who might use these coping strategies and where: a basis for classifying food deserts.

A number of groups have been identified above who might need to use coping strategies to access a healthy diet; or who could benefit in dietary terms from the coping strategies used by other organisations mentioned above. The disabled and elderly may face ability problems, as might others living in neighbourhoods far from any fruit and vegetable shop. The disabled may well include the not so obviously disabled, such as carers, ‘disabled’ by the needs of caring for another, and women, ‘disabled by children’. Loss of use of a car can effectively ‘disable’ someone living in an affluent area without other forms of transport, unless they can afford regular use of a taxi. The poor or unemployed might face ‘asset’ problems, and pensioners, the poor, schoolchildren, and some members of ethnic minorities may face ‘attitude’ problems. Can any of these groups be linked to the ‘retailing neighbourhoods’ in Figure 16 above?

The outer area of Leeds, though generally regarded as wealthier than the inner suburbs, nevertheless contains some of social class D and E (Birkin et al, 2002, p.45), as well as some without cars and some elderly. These groups are likely to overlap. Hence ‘ability based’ food deserts may exist in these suburbs. Coping strategies of informal or single day a week fruit and vegetable supplies to local shops were found in these areas.

Coping strategies such as the Halton Moor vegetable car boot re-sales as well as initiatives in poor areas to educate people to eat more fruit and vegetables indicate both asset and attitude based food deserts may exist on poorer peripheral estates. On these estates, consumers may be forced to develop coping strategies by the ‘choice’ between expensive food at small local shops and expensive transport. Further into the city, coping strategies such as the pair of pensioners in Beeston, the poor taking taxis in Belle Isle, and the provision of community shops in Sheffield and St Augustine’s in Kings Lynn point towards possible assets and ability food deserts here too.

The Kings Lynn example shows that food deserts may exist in smaller towns, perhaps Brigg and Winterton in Lincolnshire. The more rural food deserts are well known and have had considerable research done on them.
Of interest are the ethnic minorities who despite abundant vegetable shops, may also suffer food exclusion in Beeston. Pensioners in Headingley, and student areas of other cities, may suffer related food access problems as their shops are supplanted; not by ethnic minority shops but by student-related shops such as letting agencies and landlord supplies shops.

Sections 4.7 and 4.8 have introduced the idea of ‘retailing neighbourhoods’, and also of a variety of coping strategies by consumers and others in response to the ‘ability’/’assets’/’attitude’ problems they may experience in accessing food. These sections can now be summarised in the style of a table in Smith and Sparks, 2000a, p.212. In this paper, Smith and Sparks classified ‘location types’ of shops in Scotland (e.g. city and town centres, managed shopping centres, individual shops, etc.) and for each location type they classified the potential weakness or otherwise of shops there. Table 7 overleaf gives a listing in similar style to Smith and Sparks of the ‘retailing neighbourhoods’ so far identified and possible coping strategies that might be used in each one. This table identifies possible groups and areas that may suffer food access problems and so may be the basis of a food desert classification as proposed in Chapter Seven.
Table 7. ‘Retailing neighbourhoods’ and some possible coping strategies.  
(‘care’ may be formal or informal)

Chapter Five enlarges on these coping strategies encountered at various stages of the shopping journey.

<table>
<thead>
<tr>
<th>‘Retailing neighbourhood’ (Figure 16)</th>
<th>Type of shopper facing food access problems</th>
<th>Possible coping strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer suburban – few shops, but some supermarkets, and some upmarket specialist grocers</td>
<td>Elderly, disabled, some poor Others without cars</td>
<td>Use care services Use public transport Use Internet Assistance by shop</td>
</tr>
<tr>
<td>Inner suburban – many grocery shops but few selling fresh fruit and vegetables Local shops may be expensive, little choice</td>
<td>Poor, (e.g. disabled, elderly, unemployed) Also carers, mothers disabled by children Likely, no car</td>
<td>Substitute cheaper foods Resale of groceries Use public transport, even taxis Assistance by shop Food education</td>
</tr>
<tr>
<td>Inner / ethnic areas Possibly poor public transport. Many ‘ethnic’ grocery shops</td>
<td>Less well off ethnic minority White Pensioners</td>
<td>Substitute cheaper foods Travel to remote shops, share groceries bought Use care services</td>
</tr>
<tr>
<td>Other urban areas (not on figure 16) – student rental areas, docklands flats areas</td>
<td>Elderly in student areas Wealthy, no time to cook</td>
<td>Use care services Travel to remote shops Eat ready meals</td>
</tr>
<tr>
<td>Rural areas - market towns, villages (not on Figure 16)</td>
<td>Elderly, disabled, poor. Also carers, mothers.</td>
<td>Travel, move out of village, substitute cheaper foods, use care services Assistance by shop</td>
</tr>
</tbody>
</table>

Chapter Four has shown that the factors affecting the supply side of local food retailing are very complex and range from demography, neighbourhood dynamics, and transport conditions, to the local economy, UK government laws and grants, and the policies of the European Union. The pattern of retail grocery provision demonstrated by these supply-side factors was examined in section 4.7.3, and also whether this pattern
corresponded with different types of neighbourhoods. Section 4.8 then introduced the coping strategies consumers use and the ways in which they access food when the retail grocery provision pattern described in section 4.7.3 does not enable them to easily get to food shops. Chapter Five will consider the demand side of grocery retailing. Issues such as how do people access the shops, and transport food home, what sort of shops can they use, and what problems they may face in getting to and from these shops, are some of the questions this next section now examines.
Chapter 5
Results of shopper and agency interviews

5.1. Pedestrian access from home to shops

5.1.1. How far people will walk from their home to the shops

The distance people are able to walk to a grocery shop depends on several factors. These include the age of the person, their level of physical fitness, whether they have a car available for shops further than this distance or if they have to rely on buses, and whether they live in an urban or rural area. Local topography, crime and traffic levels, and even the state of the pavements, may also play a role.

Guy, 1980, p. 151, found that ‘Watford housewives’ with a car would walk up to 0.6 kilometres to the shops, but would use the car if the shop was further than this. Those with no car would walk up to one kilometre but use the bus for more distant shops. Using the car is easier than waiting for a bus, so making the effort of walking longer distances more worthwhile than if a car were available. Warnes (1982, p. 275) found that ‘more mobile’ elderly people could walk on average 1.3 kilometres to the shops, but as fitness decreased many could not even manage one kilometre. Quotations from respondents in this research showed a wide range of abilities to walk various distances to the shops, from under 100 meters to around 3 kilometres (2 miles). In general the respondents’ answers confirmed the research from the sources quoted above, that 800 meters was an average distance for able-bodied people but many less able could barely manage 200 metres. 500 metres is a benchmark value used by many researchers and policymakers today, as a walkable distance to shops for most people.

The following quotes illustrate the problems faced by the less mobile. A.27 (Polish group, Scunthorpe) said “Most of the elderly ones couldn’t carry shopping any distance at all. I can get to the bus stop (about 200m from her home) with one bag and I’m healthy compared to the others”. A.30 (Neighbourhood support group, Scunthorpe) said “A lot can’t walk very far at all, the majority, 200 yards would be enough for them”. A.36 (pensioner support, Leeds) said “The average most of the elderly here can walk is 100 yards. 100 yards is the guideline for Attendance Allowance; we have a lot of pensioners getting Attendance allowance here, it maintains their freedom of choice, their independence. These centres will likely select for the less fit pensioners, as those fitter may have a more independent lifestyle. These pensioners are also likely to be
poor, as if not they would have retired to a nicer area than Gipton. Being poor, their health is probably worse than average for their age”.

Other agencies mentioned longer walking distances. A.31 (neighbourhood support, Scunthorpe) said “Most of the able-bodied here could walk to Asda (about 1 kilometre), a lot of pensioners walk to Asda”. A.41 (poverty support Leeds) said “Some will walk as far as Leeds city centre (about 2 kilometres), but some can’t walk very far at all”. A.34 (pensioner support, Leeds) also said some members would walk 2 kilometres, into Leeds centre, and A.35 (pensioner support, Leeds) similarly said the maximum was one mile, into Garforth centre. Some members of ethnic minorities, tended to walk less far. They fear racism, may have limited command of English, and the women may be less adventurous than their English counterparts. A.25 (Pakistani group, Scunthorpe) said “[people here wouldn’t walk] very far at all, a quarter of a mile [400 metres], maybe further for clothes shopping”. A.18 (Bangladeshi group, Leeds) said “Some Bangladeshi women lack confidence, and there is a problem with mugings by youths. The Bangladeshi community has extended families, all live together, few have cars as earnings are low. The most the women will walk to the shops is to the corner shop, or maybe five or ten minutes walk. Some live further then this, going to Tesco or Kwik Save is too far to walk for many [from Harehills area] so they go with relatives, go with friends all in one car”.

Planners are often affected by ‘white, middle class, male, able-bodied’ bias. Planners are often not disabled, of ethnic minority origin, or female or poor, as various prejudices stop these getting to the rank of planners (Alcock, 1999, p.137). Shopping centres and public transport, used mainly by the female and poor, is not designed well for these people. Examples of this are the use of textured paving which hinders women with pushchairs or in high heels, or the under-provision of toilets, especially female toilets, which is bad for women with small children. The needs of the elderly (for example large clear signs, avoiding steps where people could trip on) are also often ignored, said Help the Aged (Financial Times, 4/5/00, p.6). A.42 (poverty support, Leeds) said “We would like to see a bottom up approach, not top down as now. Authorities and agencies recommend things for [East Park], officers on £30,000 or £40,000 a year, they know nothing about East Park. Involve the local community”. A.14 (disability support, Leeds) said “It would be nice if, instead of getting these so-called experts in, they asked the disabled themselves”. This type of comment, in effect ‘ask the local people, those most concerned, first’, was a recurring theme amongst many agencies and people interviewed for this research. Yet the local people may well be the
last ones asked, for political and financial reasons (section 2.2.5). The next section looks at the financial and planning factors concerning the provision of housing areas with shops.

### 5.1.2. Could housing developments be better provided with shops

Many modern housing developments on the edges of towns are well beyond walking distance to any shops for most people. The case of Valley View Drive in Scunthorpe was discussed in section 4.5.4; planning permission for this estate was given years ago, under the old Glanford plan, and permission once given is hard to revoke. But could planners today use instruments like planning gain to ensure new housing is accessible to shops for those without cars? A.75 (Grimsby house builder) said "The local authority dictates shops are to be provided only if more than 2,000 homes are being built, we have only one development that size, in Grimsby. In Scunthorpe we are building 27 large executive houses, a long way from the shops, but all have twin garages, all have cars". PPG3 guidelines say that 'major' housing development, that is over 150 dwellings or over 5 hectares, has to be 'sustainable, that is not just houses but local services, including retail, too. However A.75 (Grimsby house builder) said "most building land is three to four hectares only. We get them up to 12 acres, about 4.7 hectares, usually allocated within local plans, purely residential. Even if the developer has to build shop units, will they be let? In Grimsby shop units were empty for years, then knocked down, never used, and houses built there instead". A.77 (Hull house builder) said "We’re not a big enough developer for the planners to insist we build shops. Only in Victoria Dock, Hull, 2,500 units, there had to be shops. They had to try and make a village community in there. Where shops are built, people can’t make them work because everybody goes to the out-of-town supermarket. If the development is big enough to justify shops there isn’t a villagey feel to it, so they still use the supermarket. Most people who buy our houses are out at work in the day, and won’t pop down to the local shops. Most of the big housing estates are empty during the day. It would be marvellous to have local shops but the shopkeeper has to earn a living. There isn’t a living to be earned on most normal-sized housing developments. I can’t see people moving away from out-of-town supermarket shopping.. If shops are built they stand empty for years. At Beverley there’s a parade on the Victoria Way development. There are six shop units, a fish and chip shop, the estate has been up fifteen years, only the fish and chip shop has done well. All the other units are empty or turn over fast. A shop opens, then closes soon, and is empty for a while again. There was a tiny little supermarket had a go, but he had six cans on the shelf, it just didn’t work. That’s a big
estate in Beverley, but it had Morrison up the road”. Similarly, A.76 (Leeds house builder) said, “For the upmarket properties like at Poole in Wharfedale, they don’t expect shops nearby. The have cars and go to the supermarket once a week. The upmarket buyers want a semi-rural environment. They mostly have a second car so they can always get to the supermarket. Our house prices are high anyway, so our target market is the professional two-car family type. We don’t build low-priced property”. It seems that the PPG3 guidelines do not apply to most new housing developments, and even if they did, any shop units provided would not easily find tenants.

Some respondents said local shops reduced the value of properties. A.75 (Grimsby house builder) said “We attract the highest prices on our houses where there are no local shops. The problem is, shops become meeting places for kids, you get this nuisance element because they’ve got nowhere else to go. We had one development where we had to provide sports facilities, and all it did was attract the sort of people you wouldn’t want to attract”. A.72 (Leeds estate agent) said “People don’t want a house that faces shops because of the noise and cars. People want newsagents and 24-hour convenience stores, but they shop mainly at supermarkets. Older people who no longer drive have to move to places more convenient for shops”. So this respondent recognised a problem for those without easy access to a car to reach the shops, but saw the answer as moving house to be nearer local shops. A.63 (Leeds council housing) said “You may have a complex of shops that attracts the undesirable elements. General stores, off-licences, can add to the degeneration of an area. Now with them being closed that will sometimes move the problem on somewhere else, the area gets a bit quieter. This is similar to the case of the Cardiff supermarket noted by Guy (1996) (section 4.3.3). A.70 (Epworth estate agent) said “Shops cause problems for houses like deliveries, crowds of kids, people park across the driveway as they’re only there for five minutes”. A.69 (Brigg estate agent) said “In Kirton Lindsey, a nice detached house on The Green got about 4% less because of being near the shops, fear of litter in the garden, lots of cars visiting the shops. In Barton, a house next to what was then Tates supermarket, was devalued by the shop next door to it opening late. There was a lot of car parking, also large delivery lorries pulling up, the house price was over 10% down”. Local shops may cause nuisances in many ways not appreciated by non-residents.

However, some respondents said local shops could boost house prices A.71 (Leeds estate agent) said “Horsforth house prices are higher because of the shops in the
centre. This makes a community atmosphere, prices are 10% to 15% higher, though there are other factors like the houses are bigger and there are schools close by”. Even for very expensive developments like King Edwards Wharf, Birmingham, the architects said ‘luxury apartment schemes had to be supported by an infrastructure of essential services if they were to flourish from an investment into vibrant communities’ (reported in the Birmingham Post, 6/8/01, p.3). A.69 (Brigg estate agent) said “For cheaper retired bungalows, shops nearby are important. One like that in Elsham, a village without amenities, was hard to sell. At Gainsthorpe Road, between Kirton Lindsey and Hibaldstow, there are three terraces of houses, a good couple of miles from any shops. They sell cheaply as no shops near”. A.70 (Epworth estate agent) said “Epworth has most of the amenities and that is why house prices are higher here than the surrounding villages, a good 5% higher. Westwoodside is four miles away and has only one shop and this may put people off living there. You would certainly need two cars to live in Westwoodside. The doctor, the Post Office, the bank, are the main amenities people want close by. People also want at least one convenience store in the village. The younger ones aren’t bothered but the older ones are. Young mothers may also be put off. You can’t just pop in the car with the kids. Westwoodside does come up many a time as not enough amenities there”.

Local shops were important for residents of Housing Associations. A.55 (Yorkshire housing association) said “It’s easier to sell a scheme to someone if there are shops within walkable distance, like a Post Office or greengrocers. This enables pensioners to keep their independence, not so much financially as psychologically. Able-bodied pensioners value local shops more than disabled pensioners do, the disabled know they will need help to access the shops anyway, whereas fitter ones can access the shops if they are reasonably close”. A.59 (Lincoln housing association) said “A lot of our clients don’t have cars so having shops close by is very important. A lot are single parents with children. You need well-stocked shops close by, in urban and rural areas. Some of our clients, not just the elderly, but the younger ones too, say they don’t want to be in an area with no shops”. These quotes show that it is mainly the elderly, less fit (but not very unfit), and poor, who desire shops close by. Those who are well off and have a car may see them as actually undesirable, reducing the value of their property. Property, even one’s home, is increasingly seen as an investment, even a form of pension fund for old age. Looking to the present, people may be protective of that investment without looking to a possible future when they no longer have access to a car and need local shops. Or they imagine they will simply move to an area with better shopping facilities. Idealistically, they will move to a better-off retirement area with
village shops. As with shopkeepers who think their own shop will last till they retire, many people are optimistic about the future and do not foresee all the possible problems with accessing their groceries.

5.1.3. Environmental and social concerns over supermarket shopping

Several respondents expressed concern about the growth of supermarket shopping. S.3 (female, 30s, Leeds) said "[Supermarkets] have taken over from traditional shopkeepers, excluded a section of the population, those without easy access to supermarkets. [The supermarkets] have no community aspect, it doesn't exist". S.11 (male, 30s, Leeds) said "I can't stand [supermarkets], they have taken over from traditional shopkeepers, excluded a section of the population, those without easy access to supermarkets". "They have no community aspect, no, it doesn't exist". "They take the heart out of the town, they kill the High Street". S.32 (male, 40s, Barton) said "[Supermarkets] suck money to the South, or abroad" (but he shops at Proudfoot, Barton). As for environmental and health concerns. S.4 (male, 40s, Leeds) said "[Supermarkets] take up greenbelt land, access is exclusively for people with cars". S.3 (female, 30s, Leeds) said increased car mileage is bad but "living in Snape you need a car as there are not enough shops in the village". S.32 (male, 40s, Barton) said "[Supermarkets] tempt people to drive fifteen miles to large sheds". Several respondents valued the walk to their local shops for the health benefits. The concerns about supermarket shopping were, however, often overridden by desires to save money, and especially time. It seems that whilst many had a general concern for the environment and the local economy, each time shopping was needed the convenience of just the one trip to the supermarket was the main factor in deciding where to shop.

5.2. Access by bus to shops

5.2.1. The importance of shopping trips to bus companies

The bus companies interviewed all said shopping journeys were a very important source of business to them. Shopping journeys were either the first or second main category of journey, school trips being the other primary or secondary traffic source here. Work and leisure trips occupied third and fourth places. First National, based in Bradford but serving most of west Yorkshire, including Leeds, gave the following figures (2001), which seemed typical of other operators. In West Yorkshire 76% of passengers are female (70% nationally). 77% (78%) of passengers use the buses for
shopping. 70% (56%) use them for leisure. 63% (60%) use them to get to work or school. 36% (34%) use the buses in the evening. Those aged 18-24 comprised 28% of demand (21% nationally). 25-34 year olds were 13% (17%) of traffic, those aged 35-44 year olds were 19% (18%) of traffic, 45-54 year olds were 14% (14%) of traffic, and those aged 65 and over were 13% (18%) of traffic. Shopping journeys tended to be ‘inter-peak’ and so were highly profitable because they were at low marginal cost to the bus company. The volume of peak traffic, school or work, dictated the size of the bus fleet. Any inter peak traffic essentially only cost the driver’s wages and fuel.

The West Yorkshire Passenger Transport Authority, consisting of councillors from each of the five districts of West Yorkshire, has a legal requirement to ensure ‘socially necessary’ bus services are provided. This is under section 89 of the Transport Act 1985 (Deregulation of Bus Services). These include shopping and school services. The WYPTA will not authorise subsidies to the bus operators for journeys (that is, per each bus trip, one way) for services used by less than five persons, as the demand does not justify any subsidy. Neither will the WYPTA subsidise journeys used by more than twenty persons as “it should be commercially viable anyway” (information from the WYPTA, A.119). So both local government and the bus companies recognise the importance of shops to the bus companies, and the important role buses play in giving access to shops for those without cars.

5.2.2. Bus services, traffic congestion, and the growth of out-of-town shopping

The growth of out-of-town shopping centres like White Rose in Leeds or Owlcotes in Pudsey has left the bus companies trying to service three types of shopping; suburban parades, town centre shopping, and out-of-town shopping. Bus companies prefer to operate a radial system of routes centred on town centre shops (A.114, Leeds bus company), but out-of-town centres create a complex suburb-to-suburb route demand, which is logistically harder to manage. Inter-suburban passenger flows are also weaker than radial flows (A.114, Leeds bus company), even with the draw of an out-of-town centre, because the traffic originates in many different suburbs, and is going to different out-of-town retail centres. Bus companies have to put on services where the demand is, but by serving out-of-town centres they may exacerbate the decline of the town centre, which is their bread and butter. Out-of-town centres may encourage car use, which may worsen congestion, which causes major problems to bus operators with punctuality targets to meet.
However out-of-town centres may also divert car traffic away from the centre, easing punctuality targets. This view was expressed by A.117 (Scunthorpe bus company), who said “A problem is that because of the steelworks Scunthorpe has developed like a seaside town; the centre is basically over on the edge.” And there’s a railway line through the middle with basically only three ways to cross it. Most car and bus traffic goes over one bridge, Howden’s Hill, and congestion backs up there, and the buses are late. Out-of-town shopping does encourage car ownership, but it also takes cars away from the town centre. It discourages use of the town centre shops. If Asda sells everything from toothbrushes to summer clothes to food, all under one roof, it’s clean, you can park your car close, people won’t go into town. In Scunthorpe the centre is run-down. Not many use the bus for going to Asda or Morrison, they go by car and if they have no car they use stores like Aldi or Netto”.

Traffic congestion, and parked cars were a major hindrance to bus services in all sizes of settlements, from cities like Leeds to smaller towns like Goole and even villages. A.115 (Lincoln bus company) reported. “In Old Goole we had to swap a route around because of traffic congestion. You have to grin and bear it, you can always make up a bit of time on country roads. Parked cars in the villages can be a problem, like Swinefleet and Ealand, it is harder to get up the village street now without meeting something coming the other way, you can’t pass because of the parked cars”. A.112, Bradford bus company, said “Some car users continue to park at bus stops and cause us problems in terms of reliability, they block the bus lane which is there to make the bus service more reliable”. As traffic, and the volume of parked cars on streets, increases, bus services may become more unreliable. They then become less attractive to use and lose customs. Or the bus company may be faced with rising lateness penalties. Either way the route may be deemed ‘uneconomic’ and be withdrawn, depriving some without cars of access to shopping facilities.

A.114 (Leeds bus company) said many out-of-town shopping centres were poorly designed from the bus passenger’s point of view. They said “Even where the planners have included public transport, it’s not been given proper thought. For example at Morrison Kirkstall there’s a bus stop and lay-by but it’s on the other side of the car park from the store”. Most out-of-town centres and supermarkets are set back a long way from the road, with a large car park intervening. This makes the shopping centre more impressive visually, and aids security as shoplifters have further to flee, but it is

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50 Meaning there is only 180 degrees of access to the centre, not 360 degrees.
then unsafe to have buses coming right up to the shop door. That would mean buses negotiating between cars parking and pedestrians making their way with trolleys to cars. The bus would also be delayed by queuing traffic. Bus services would be easier if the car park could be placed behind the shop, which itself would be adjacent to the road, as the Sainsbury is at Lancaster. Bus passengers therefore tend to find supermarket shopping unattractive because shopping has to be wheeled in a trolley across a large car park, possibly in the rain, avoiding other cars, then taken out of the trolley and manoeuvred into the bus. Then it must be taken off the bus and carried home from the bus stop. This means that supermarkets tend not to be served by buses, because of insufficient traffic, unless they happen to lie on a route to another town anyway.

Bus companies may respond to difficult traffic conditions or lack of custom by altering routes. But this can have adverse affects on passengers, who are no longer sure where to catch the bus, and shops on the abandoned route can lose customers. Between Belle Isle and Middleton, Leeds, there are three possible bus routes, in parallel, and bus deregulation has intensified competition making it vital to find the most profitable route. However passengers, confused by route changes, may abandon the bus altogether, and get taxis or lifts from friends, to the Morison at Hunslet for example. Infrequent, late, and expensive buses were the main complaints from bus users. S.15 (male, 50s, Leeds) resented having to pay 50p for “only two or three stops, waste of money”, but he could carry more shopping home than if walking. He would like more frequent buses but believed people would not pay higher fares, "a lot of unemployed here, can't pay". Elderly and disabled passengers had difficulty using buses unless the bus was low floor, and did not move off too soon, before they were seated. S.15 also said "The bus stop has no shelter if it rains, it's bloody cold at night, I get more aware of this as I get older and the buses take twice as long as a car would". These comments show that simply providing a bus service, even a frequent one, may not be enough to give access to distant shops. Other factors such as the reliability of the bus, its user-friendliness to disabled users, and less obvious factors such as the quality of the bus shelter and the local risk of crime, are also important. In areas with many poor people, e.g. elderly, disabled, unemployed, a bus service that is too expensive is not much better than no service at all.
5.2.3. Disabled, access to buses

Bus companies are improving the accessibility of their fleets to disabled passengers, though this may take time because funds for bus replacement are limited. A.112, Bradford bus company, said "Bradford had a relatively old fleet of buses but in 1998 66 new buses joined the fleet. Most of these were low floor, easy access, single deck. Last year (2000) we substantially improved that number with 88 new buses. All 88 have kneeling suspension, the front nearside actually lowers towards the kerb. They also have wide access, no handrail in front of the entrance, easier to get pushchairs in, interiors redesigned so handrails were a brighter colour, and a non-slip floor. The new buses have no step inside, a great help for those with pushchairs, also the less mobile customers. Most people have only one bag of shopping with them, and keep that with them. For those with three or four bags there is a rack over the nearside wheel arch, same height as your waist, easy to put bags in there". There is awareness that 'disability' covers a wide range of conditions, sensory disability as well as mobility impairment. Also, those with pushchairs may suffer many of the mobility problems that the disabled do." In Lincoln and Leeds, bus companies were investing heavily in low-floor buses.

A.116 (Lincolnshire bus company) needed a different approach to helping the disabled use the buses because of local road conditions. "We don't have low floor buses here because of the state of the roads, they are terrible. There are potholes, which would cause a low-floor bus to hit the road. Also problems with narrow roads, a ditch on either side. We do have a 'kneeling bus'. The drivers help, they are friendly, and usually the same driver each day so they get to know the elderly passengers and help them on the bus". However A.117 (Scunthorpe bus company) said "The kneeling buses take too long for some routes Bus drivers don't want to get out of their cubicle to help the disabled because of safety worries. If the driver gets out he leaves all the money there on the bus, he's not meant to do that. If he lifts a disabled person there are health and safety issues, back injuries". Concerns over crime and timekeeping may override the needs of disabled passengers. Bus drivers, perhaps under pressure to keep to timetables, do not always think of the disabled person's needs. A.14 (disabled support, Leeds) said "Bus drivers go past a blind person at a request stop as they haven't hailed the bus. Bus drivers at Shire View [a centre for the blind] don't think that the person at the bus stop may be blind". A.33 (pensioner support, Leeds) said "We have people who can't use public transport, and people who perceive public transport as hard to use [for disabled persons], possibly because they haven't used it for years, they don't know
of modern low-floor buses. We give them that confidence, go on the bus to shops with them”. As with some types of food desert, perceptions are at least as important as what actually exists ‘on the ground’ in determining people’s behaviour and what facilities they access. Many disabled respondents valued public transport more than local shops, because it gave them access to other destinations too. A.11 (arthritis support, Scunthorpe) said “We’ve got to get the public transport system to look at the fact that these places need public transport. Not just for shopping but for people to get out and about”. However A.110 (rural support, Humberside) said “If there is good public transport out of the village the village shop loses custom”.

In Leeds and Scunthorpe, the elderly and disabled have an Access Bus. This has “a lift at the back for wheelchairs, the driver will help with the shopping, and even carry it into the house, but they can’t help them round Morison’s, so if they can’t walk they can’t go” A.40 (pensioner support, Leeds). But A.9 (arthritis support, Leeds) said “The Access Bus can be hard to get on the phone to book, their lines are always busy. You have to book it three or four weeks ahead and you may be ill on that day”. A.30 (neighbourhood support, Scunthorpe) said “Normally the same people every fortnight go, that’s the problem”. A.34 (pensioner support, Leeds) said “The Access Bus is free but you have to pre-book it. The problem is, it could be picking up another ten people so you could be sat on it for an hour. Generally, pensioners don’t like wasting time, even if they have plenty of time to spare, they have their routines they do each week, set times for shopping, lunch and so on”. Pensioners may be actually quite busy, if, for example, caring for a spouse, sibling, or even parent.

These comments show that different groups have different knowledge, requirements, and perceptions, which are imperfectly understood by other groups. The bus companies, local authorities striving for more punctual bus services, passengers (able bodied and disabled), and disabled support groups may all be in conflict in various ways, not because of different aims but due to imperfect knowledge of each other. Systems like the Access Bus are rather inflexible, and might benefit from greater consultation with all potential users – the ‘why don’t they ask the people’ comment made by many respondents in this research. This suggests things could be improved by exchanging views, but this sort of comprehensive consultation itself would take time and consume resources and money.
5.2.4. Supermarket free buses

Many blamed supermarket free buses for causing the closure of local shops and the withdrawal of regular bus services. Regular bus services have a much greater frequency than supermarket buses, and offer a choice of destinations by linking in with other transport routes. Not surprisingly the bus companies were the most vocal in saying that regular bus services were suffering, whereas the supermarkets themselves said their free buses gave access to supermarket shopping for many of the less mobile such as pensioners. S.39 (Barton supermarket) claimed the regular bus operators liked their free bus service as it “takes the pressure off them”. In line with its upmarket sales policy, S.25 (Sainsbury Leeds) said “we are very careful where [the free bus] goes, only to areas where the wealthier pensioners live, not to the poor estates”. Several supermarkets claimed their free buses served areas where the regular bus service was not particularly good. A.110 (rural support, Humberside) said “Elsham (LN 57,33) lost its shop because the Tesco free bus to Brigg took all the custom away, and this shop had got help from the Village Development Scheme”. A.106 (CPRE) said “[Supermarket] buses remove from the village shops the people who are not already going by car to the supermarkets, or to Grimsby, Hull, Scunthorpe, or Doncaster. Supermarket free buses also remove passengers from the established passenger network. Had the Rural Bus Grant not there, the supermarket buses would have had a bigger effect [in reducing bus services]”. Supermarket free buses may also be less convenient. A.118 (North Lincolnshire council, Transport) said “We like to shop on a whim but the supermarket bus only comes once a week and you have to remember everything then”. Several other respondents also said that the free supermarket buses gave insufficient time to shop at the supermarket.

If the free bus route was not profitable but axing it would deny some people access to groceries, attitudes amongst the supermarket operators varied. R.25 (Sainsbury, Leeds) said “We are a business, the bus route must pay for itself”. Asda Head Office said they would look at alternatives to total cancellation, such as reducing the frequency, or merging it with another route. Booths supermarket, the most locally based supermarket interviewed, was the most community minded of those interviewed. They would keep open even a slightly loss-making supermarket, using it as a training area for staff, to “keep a good name in the area. We would only close a store if it dipped so far below the line it was becoming a drain on the company”. The supermarket free buses were generally low-floor, and the drivers would usually help the customers with getting their shopping on and off. Supermarkets are primarily profit-making organisations but also
need to have a good public image, especially as many members of the public have a poor view of their success at displacing other shops. Sensitive deployment of their free buses could avoid them getting another negative image as destroying local bus services and reducing accessibility for some passengers.

In some areas, unorthodox shopping arrangements were in place for those without cars or a good bus service, and with no local fruit and vegetable shops. In Halton Moor, those with cars went to the wholesale market at Cross Green and brought back groceries in their car boots for re-sale. A.43 (poverty support, Leeds) said "The problem is isolation, Halton Moor is a good example, the supermarkets are miles away, and there isn't a supply of fresh fruit and vegetables. [Residents with cars] actually do a fruit and vegetable run, those with cars or vans buy fruit and vegetables and cart it back to sell to others". This was one of the most interesting coping strategies encountered in this research, and shows people can be very ingenuous at maintaining informal links with the shops, before resorting to more official channels such as home care.

5.3. Getting others to do the shopping.

For the very immobile, or for elderly persons with no car and no shops at all near their home, there may be no choice but to send a carer to purchase groceries. This could be informal care, by a relative or friend, or formal care, by social services. The person sent may try and do the shopping as quickly as possible, and if it was a social services carer, had limited time anyway to do this. Home carers were allocated to the same person each week (A.36, pensioner support, Leeds) so could get to know a persons wants, but pay for this work is often low, so staff turnover may be high. The shopper might buy the wrong items, purchasing brands they would use themselves rather than what the person at home wanted. They might buy more expensive items than the person at home would have bought. People disliked not being able to see the goods for themselves, and especially the loss of independent choice in their shopping. A.11 (arthritis support, Scunthorpe) said "For a woman its hard not being able to do your own shopping, there's nothing like being able to walk around yourself". A.35 (pensioner support, Leeds) said "There's nothing like being able to get your own knickers, that puts it in a nutshell, and it's a great treat for [the elderly disabled] to go out to the shops themselves". Access to shops is not only important physically, for example in obtaining

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51 This arrangement was mentioned both by local residents and by Leeds Business Enterprise organisations.
a healthy diet, but psychologically too. Psychological illness is also expensive to the NHS; if access to shops can help alleviate that, perhaps we should recognise ‘psychological’ food deserts too.

There are 'hidden disabled'; those disabled not by their own ill health but by the care needs of another, including the elderly and mothers with children. Carers may be trebly disabled. Firstly because they are often old and in ill-health themselves; the friends and relatives of a person needing care are often of similar social, demographic, and economic status to the one being cared for. Secondly, by the needs of caring, which can amount to a full time job or more, even 24 hours. Thirdly, because the carer has foregone work opportunities, and is therefore likely to be poor. Supermarkets recognise 'mothers with children' as a special needs group, like the disabled; they set aside parking spaces for them too, but carers are more hidden. “You don’t know most people are carers because they’re generally out on their own, rushing about. There’s actually more carers than parents with children under 16. It’s a huge forgotten army. Because so few carers get out with the person they look after, people don’t identify them as a carer. So their issues don’t get addressed very quickly” (A.12, disabled support, Lincolnshire). A.12 (disabled support, Lincolnshire) said “It’s pretty poor, carer’s access to shops and transport. We took a group of carers to Dunelm Mill Shop, you’d have thought we’d given them a dream holiday, they were so excited. They could only get there because we provided car transport. If you’ve got a car you don’t think twice about it. Getting there without a car takes so much time, you’d need someone coming in for five hours to relieve them. And if you have someone else coming in you have to pay for it”. Although Scunthorpe is only seven miles from Brigg, a return trip by bus could take several hours, allowing time for shopping too. Buses tend to take roundabout routes, serving smaller villages off the main roads. Carers tend to be elderly, which may well mean they have no access to a car. The Daily Telegraph (24/10/01, p.19) reported that of the 6 million carers in Britain, almost 2 million are aged over 60, and a fifth are over 75. Estimates of the value of care provided by this hidden army of informal carers ranges from £34billion a year (Professor Mayhew, reported in The Guardian II, 19/9/01, p.4) to a figure of £57 billion, equivalent to annual NHS spending, reported in the Scunthorpe Telegraph of 27/5/02, p.4. The situation with carers as ‘hidden disabled’ mirrors the existence of ‘hidden’ food deserts where apparently everything is OK on the surface but look deeper and major problems become apparent at the individual level.
5.4. Grocery shopping by Internet, remote ordering

5.4.1. Access to Internet grocery ordering

In 2001 7.5 million of the 25 million households in the UK had access to the Internet at home, and 51% had access at home or at work. Homes with Net access tend to be the wealthier households. The Guardian 2/3/00, p.6 reported that 48% of households with a disposable income of over £900 a week were on the Net but only 3% of households with weekly disposable income of under £270. Askham (1992, p.36) noted that older persons made less use of computers, because of less training and experience, poorer eyesight and manual dexterity, and the cost of the hardware. However this age divide may be lessening as older persons find they can communicate with friends and get medical information more easily on the Net (Guardian 7/12/99, p.6). Geographically, access to the Net is highest in rural areas just outside cities, and lowest in inner city areas and remote rural areas, both areas where food deserts may be present, and access is higher in southern than northern England (UK Online Report, 2001, p.80). The Yorkshire Post (6/11/01, p.8 Business Report from GMAP) mapped Internet access and usage across Yorkshire and Humberside. Access to the Net was lowest in the poorer eastern and southern suburbs of Leeds, east Hull, and inner Sheffield. It was highest in the affluent rural areas just north of Leeds, west of York, and west of Hull. Internet access showed a similar pattern. Some village shops are accessible via the Internet. Those living nearby can order both groceries and other items such as specialty cheeses and wines from them. However the index of these Net-accessible shops, available at www.villageshops.org.uk, (accessed 27/3/03) shows most of these shops to be in the affluent areas of the south of England or other wealthy areas such as Cheshire. The New Labour government plans to have everyone in the UK with Net access by 2005 for jobs and local services, (Guardian, 12/10/00, p.8), and is delivering recycled computers to poor households for £60. There will also be Net access at community centres such as Local Links. There may, though, be some need for education for many on how to use these computer facilities.

An innovative experiment in giving the disadvantaged customer, mainly the elderly, single-parent families, and the disabled, access to home shopping via the Internet was implemented in Gateshead, Newcastle, in 1980 (Davies, 1985, Westlake, 1991). The scheme was set up jointly between the local council, Tesco, and Newcastle University. Subsequently two further similar schemes were set up. Bradford (Yorkshire) Centrepoint was launched in 1986, and a scheme set up by Asda on London’s Isle of
Dogs in 1988. There were advantages, initially, for the commercial backers; they gained publicity for their role in the newly developing IT, as well as getting information on consumers' grocery buying habits (Westlake, 1991, p.208). The old British Telecom 'Prestel' system was also used to facilitate a home delivery system in two areas of the UK. In December 'Club 403' began in the West Midlands, and in 1985 'Telecard Supershop' began in inner London.

All these schemes were very innovative, but failed on similar grounds. They restricted shoppers to a narrow range of groceries, and, more damaging, were not invested in enough to attract a sufficiently large customer base to ensure financial viability. Also, the technology was simply too expensive and cumbersome at the time, compared to the hardware and software of the Internet in 2003. The local council in Gateshead discontinued funding after a change of political control; the Gateshead service had been subsidised so consumers faced no delivery charges. This gave the Gateshead scheme enough user numbers to be viable but made it costly to operate. As IT progressed generally, the benefits in terms of innovative PR to the commercial backers declined, and the stores had other ways of gaining information on customer buying habits. Essentially these early schemes suffered from being too innovative, ahead of the available technology, and were abandoned financially as other forms of the Internet progressed.

Holloway (2002) reported on an Internet based scheme suited to the new borderless Europe, whereby consumers could 'adopt a sheep' in the Italian region of Abruzzi, and receive a certificate detailing the health of 'their' sheep as well as sheep-based products such as wool and cheese. Consumers could also order organic vegetables from Suffolk. Users were mainly the wealthier households in west London. Sainsbury have adopted a similar idea by making all their organic fruit and vegetables traceable on the Net back to the place of production, via a five digit number on the Sainsbury website (The Grocer, 19/7 03, p.10).

5.4.2. Financial barriers to Internet ordering

There is generally a charge for ordering via the Net, typically £5, unless the order is over £50. This penalises the poor, those living alone, and those without large freezers. Some home delivery or Internet ordering services are limited in which areas of the UK they served; Iceland were the first to offer a delivery service anywhere in Britain. Tesco has tesco.com, founded in 1996, which by 2001 had 750,000 regular customers
and can reach 94% of the UK population (Guardian 14/7/01, p.28). Tesco's online customers spend an average of £90 each, compared to £23 each for ordinary shoppers; online shoppers tend to be wealthier, and will order more in bulk, because they are not transporting it and want to order enough to avoid the £5 delivery charge. Iceland's range was much narrower than the big supermarkets, so the logistics were easier. R.36 (Iceland store, Leeds) said "If it's a Net order we charge £4 for delivery if the order is under £40, no charge if its over £40. Phone orders cost £4 for any amount. Or the shopper can leave their shopping here and we will deliver to their home, this is free if they spend over £25. We sell some vegetables, but not a lot, they can be a stock loss, so risky for the manager. Iceland Head Office does want the stores to sell more vegetables, and customers want to do a full shop, so we need to stock them". Some superstores offered a pre-ordering service, where the customer could phone in their order but then picked up the goods later on in person. This would not give access to those who could not reach the store but, like the ordering of groceries on the Net, was aimed at cash-rich, time-poor households who would pay to save shopping time. A.13 (disabled support, Leeds) said "Deliveries from shops or supermarkets to homes would be useful, if it was free. A £5 charge would be too much for our clients, many here are on Income Support. Tesco do an Internet ordering service but it's a bit of a gimmick as it excludes people who haven't got a computer". However some pensioners were willing to pay a £5 delivery charge for orders worth as little as £8 (A.85, Leeds Councillor), because these groceries were cheaper to begin with than local shops, and the pensioner then saved on a bus or taxi fare. As with expensive bus fares, the provision of a service for ordering groceries to the less-mobile will not alleviate food deserts if they cannot afford to use it, or lack the expertise to do so.

5.4.3. Problems with ordering groceries on the Net

There are sometimes problems with the wrong groceries arriving. Items may be missing, and inappropriate substitutions may occur where the store did not have the item ordered. Internet customers may not get to hear of special offers, and where there are BOGOFs, only one item might be sent whereas a customer in store would almost certainly take two. Other problems include out of date product lists and computers crashing before grocery orders are sent. Also there might be no-one at home when the groceries are delivered, although there are lockable boxes fastened to the side of the house in which the order can be left (Guardian 11/1/01, p.14). These lockable boxes are as much benefit to the retailer as to the householder; they enable Sainsbury, for example, to make all the Internet-ordered grocery deliveries to an area at the same time,
rather than returning several times as and when householders are there (RMI, 6/01, p.2). Alternatively, deliveries might be left a local shop. Some shops accept parcels from the Post Office, if they could not be delivered; the shop gained because when the addressee came to collect they might buy something at the shop. However shops such as butchers are wary of breaching hygiene laws by having packages in the fresh food area, and some small convenience stores would not have room for this service. Some of the local shops visited would deliver to the homes of regular customers for free, on a Sunday when trade was quieter. R.17 (convenience store, Whinmoor) said “We deliver groceries to pensioners in villages like Shadwell and Seacroft with the papers. We don’t charge for taking the groceries, just the paper delivery charge”.

Internet shopping enables mothers to avoid the pester power children have when visiting a supermarket in person. A common strategy is for mobile, car-borne shoppers to order heavy, bulky, standardised items like bottled water on the Net but to visit the store for fresh fruit and vegetables. Whilst 8 million adults had shopped online in the UK by 2001 (Guardian 19/6/01, p.2), most bought books, CDs, and videos, rather than groceries. The Internet may be best suited to selling such standardised, low weight/high value non-perishable products, or even weightless products such as financial plans and holidays, rather than food. Even by 2005, only 7% of UK grocery sales are expected to be via the Net (Guardian 7/1/00, p.17). A Murphy (2003) wrote that organic foods may be suited better to Internet ordering than ordinary groceries – as in the scheme reported by Holloway, 2002, mentioned earlier. Inappropriate substitution problems still persist in 2003 (Murphy, p.1185) and this either results in the customer receiving goods they do not want or the retailer suffering spoilage losses, as vegetables are returned, by now going off. As with getting another person to do the shopping, many were wary of grocery shopping by Internet, or another form of remote ordering from the store, because they liked to see what they were buying. Many comments on Internet following were typical of the following; “shopping for fruits and vegetable is a tactile experience”, “I like to see what I’m buying”, ”the Internet is socially isolating”, the Internet "takes the fun out of shopping. I like to see if there are bargains”.  

5.5. Mobile shops

Mobile shops are operated by a variety of food suppliers, including local farmers, and some fruit, vegetable, meat, and fish suppliers. However high fuel costs mean they generally only serve villages on the main roads between towns. They do not venture off to other villages as the longer journey is seldom justified by the sales generated
(Humbrella, June 1999, p.1). A.105 (Countryside Agency, Leeds) said “Mobile shops have a very limited role. Possibly in deep rural areas, like Scotland, Wales, or parts of the National Parks where there are so many second homes you will never have a sustainable village shop, then there may be a role for mobile shops. There is lower quality in these shops. The range is limited and the price high”. A.107 (CPRE, Leeds) also felt that mobile shops were limited in the service they could provide, saying “We used to have more mobile shops but they couldn’t pay their way. There is less choice at mobile shops. Mobile shops cost more. Mobile shops were common in the 1960s when the man took the one family car to work; now both go to work and the mobile shops have died out.” A.24 (Jewish congregation, Lincoln) said “On an estate like this the women go out to work, they leave in the morning, they come back, they do the shopping on the way home. So there’s nobody at home through the day. Several [mobile] shops like the fish van from Grimsby have given up coming round here. Unless he comes at 8pm or at weekends, there’s nobody at home”. So apart from their limited range and higher prices (dues to lack of economies of scale), mobile shops face a decline because of two exogenous changes in society. More households are becoming two-income families, so there is no one in when they call at people’s homes. Also health and safety regulations have become more onerous, an all kinds of shops; larger shops seem to be able to deal with this legislation better than small shops; mobile shops may have the greatest relative burden of all, and so are dying out.

A16 (disabled support, Leeds) said, “Yes shops could come to people. Mobile shops would cut out the problem of transport for disabled people. But there would be limited choice. A lot of people like to go window-shopping and compare prices. Disabled people often find there’s only one shop they can get into, or one that delivers”. Mobile shops could provide a personal service, like many other small shops, knowing the needs of their regular customers. “Wheelchair users can use these shops, they will know the shopkeeper, who will get the food down for them” (A.10, arthritis support, Scunthorpe). A.25, Pakistani group, Scunthorpe, said “There were mobile shops, sold everyday things like potatoes and onions, people could buy in bulk there and was cheap, especially for [Asian] women, they tend to be quite isolated. The Scunthorpe south Asian community is still first and second generation, so still language problems, especially for women at supermarkets. If there was a mobile shop it could bring things like rice and chapattis in bulk. They wouldn’t have to lug huge quantities of these back home from the High Street shops. Also the women rely on the husband for going shopping, time for shopping is restricted to when he’s back from work. Asian women use a lot of potatoes and onions, there is still the extended family, it’s not very common
to have just the nuclear family in one house. It's rare to see one mum and dad and 2.4 children, there'll be three or four generation living together. With that size family you need a lot of food, it's not feasible to go every day to the shops. The staples are rice and chapattis and flour. Small packages of those at the supermarket are expensive, they'd rather buy in bulk, say 30 kilos a time, from mobile shops". This quote was interesting as it mentioned how Asian women can be 'quite isolated' – not by disability but by language and culture. This form of isolation, an 'attitudinal' barrier to food access, is picked up on in the classification of food deserts in Chapter Seven.

5.6. Access into shop premises by the disabled

5.6.1. Access to the outside of the shop

Access to some shops for the disabled may be problematical, but in some instances the disabled find it difficult to get as far as the shop door itself. A.15 (disabled support, Lincolnshire) said, "A lot of the pavements in Epworth are too narrow for wheelchairs. Small shops don't have a ramp for wheelchairs, for bad osteoporosis cases, if they bump down a step in the chair, this can cause fractures. Uneven pavements deter pensioners, who may be more liable to fractures if they fall, from walking to local shops". In Otley (A.14, disabled support, Leeds) "the kerbs are really high, some of them are atrocious. Shops that put goods out on pavements are a problem too". This both narrows the pavement for wheelchair users and is a hazard for the partially sighted and blind. Garage forecourt shops may present dangers for access by the disabled. Because there are many vehicle movements in front of the shop, this may be a hazardous location for the old, and the disabled. Drivers "may not realise a pedestrian is disabled, and wonder why they don't get out of the way of their car" (A.33, pensioner support, Leeds). Meanwhile pedestrians "don't realise what the car is going to do" [the car may be reversing from the pump, to access the car wash or air pump] (A.37, pensioner support, Leeds). A.11 (arthritis support, Scunthorpe) said garages often fail to provide enough room for a wheelchair-using driver to get out of the car. They also said, "a lot of garages have an infra-red signal so a disabled person can point this and get assistance. But some garages don't use this, they have disconnected it. The garage won't send someone out unless they know you, they just sit there wondering why you are pipping at them". Garage staff may be unwilling to go and assist a car driver because they fear robbery. As with bus transport, a lot of the problems are due to non-communication between the parties involved. Many agencies,
such as the garages, look out for their own interests, e.g. security, and do not realise the effect on other groups such as disabled drivers.

5.6.2. Access to inside the shop

Smaller shops presented a number of access problems for the disabled. They often had heavy doors, and if someone had trouble getting in the door, it would be worse trying to open it to get out, carrying shopping. Doors could be too narrow to get a wheelchair or a scooter through. A.14 (disabled support, Leeds) said “The Post Office has a ramp but doors that are so damned heavy you can't get them open. If you do get in you have to be a stunt driver to get round the chicane in a wheelchair. And when you get to the counter it's up there and you're down there”. Many Post Offices have changed from a system of multiple separate queues to a single queue, which for reasons of space has to snake back and forth several times across the shop premises. The single-queue system is perceived as fairer, because in separate-queue systems someone might get stuck behind a person taking a long time. But such single-queue systems can cause problems for wheelchair users. “Able-bodied people think that if a doorway is one inch wider than the wheelchair that is OK, but you need room for your hands to push the chair through” (A.11, arthritis support, Scunthorpe). Again there may be able-bodied bias by planners, failing to take disabled needs fully into account. In hilly areas like parts of Leeds, there would often be two or three steps up to the shop door. Many of these shops were once houses, converted in the laissez faire era of a hundred years ago to shops (section 2.1). Some shops had shelves that were too high or too low, hard for people in wheelchairs or with arthritic arms to reach. Shop assistants “tend to load the bags too heavy, they cram the bags as full as they can. I have to ask them to half-fill the bags because I can't lift a full bag. With shopping, its hard to manage a shopping trolley or a basket if you have crutches. The staff think the electric scooter is only for pensioners. There are quite a few disabled toilets provided but you have to be able to find them. But in Matalan they use the disabled toilet to stack boxes in” (A.10, arthritis support, Scunthorpe). As with planners, staff in shops whose job is to move goods will be almost exclusively able-bodied, and may have little concept of the needs of disabled people.

The blind and deaf face their own problems in shops. A.38 (pensioner support, Leeds) said “For the blind in particular, Braille labels on clothing and price tickets, describing the garment, also could have Braille on tins of food. For the deaf its not so bad, each store could have a person qualified in sign language, as they already have
qualified first aiders. Also for the blind, at supermarkets, a button you can press saying what is in each aisle. The disabled would like more ramps, also seats at supermarkets". The Yorkshire Post (20/10/01, p.13) reported that Asda Pudsey began putting Braille labels on packaging. Blind persons can identify products once they are at home too. For blind persons shopping alone, Asda will provide someone to go round with them. But for most shops, especially the smaller supermarkets (and certainly for local corner stores) the cost of having staff specially to help the disabled would be prohibitive.

Small shops tended to adopt a more informal approach, of going outside to serve disabled people who could not get inside. This works well with local disabled who regularly use that shop, but there may be two drawbacks to this approach. Firstly, it will not work well for disabled who are away from their home area. Secondly, some disabled do not want the 'special service' of the shopkeeper coming out to serve them. They would rather act in an 'able' way as possible, including accessing their shopping as fit people do.

5.6.3. Access to supermarkets

Supermarkets, especially the larger ones, were generally good at providing easy access for the disabled, although site restrictions meant some facilities could not be provided. Smaller supermarkets such as the discounters might have goods stacked in aisles, obstructing disabled access. R.27 (Safeway Headingley) said "The site is restricted, we have stairs, no lift, to the car park. We help with carrying shopping to the car, we have a wide door for wheelchairs". S.38 (Morrison Kirkstall) said "Access for the poor and disabled is very important to us. We keep all our stores in the UK standard layout. Our free buses are all low floor and wheelchair accessible, wide aisle. We liaise with the local authority so that our stores are on bus routes. We depend on local operators to have low floor buses, for normal pay services. We have a free-phone for a taxi here".

A.39, pensioner support, Scunthorpe, said "There are people with back trouble who can't get things off the lower shelves, or who are too short to get things off the top shelves. But you can go round any supermarket and there are people willing to help. The supermarkets employ designers to make sure their shelves are top notch whereas the small shops can't afford this. People knock supermarkets but they have specially adapted baskets for wheelchairs, the aisles are wide enough for wheelchairs to go down, they're all well lit, heated, air conditioned, supermarkets give a lot of thought to their elderly people". The disabled themselves often saw supermarkets as providing good access. Bus access might not be so good because, as mentioned earlier, even if a bus route runs past the store, this is no guarantee that a disabled person can easily
access this store by bus, or carry their shopping home this way. Some more severely
disabled, however, can get a weekly taxi journey paid for by the council, hence
Morrison’s (and other supermarkets’) free-phone taxi line.

5.6.4. Access to food purchased

Problems for the disabled continue after the shopping is completed (Arthritis News,
June/July 2001, pp.21-28). Some problems are due to modern food distribution
networks. Page 26 (ibid) stated ‘As food and other products are being transported
further, packaging has to become stronger’. Food security, and fears of tampering,
mean more seals and tabs on food items. Slippery cellophane or foil packaging, narrow
fiddly tabs on milk cartons and cornflake packets, tightly sealed jars, are some of the
problems. For example (ibid, p.21) ‘452,000 persons in the UK have difficulties using
teabag packaging, and 1,052,000 people in opening jars’. Some persons with arthritic
hands resort to slashing open cartons with sharp knives, with obvious dangers; this also
means the carton cannot be resealed and the rest of the food perishes. This is a cost
many elderly and disabled, often being poorer, cannot afford. Ibid, p.23, reported a
woman as saying ‘Sometimes I would like to get a meal ready before my husband gets
home, but I can’t get into some of the packages’. A.11 (arthritis support, Scunthorpe)
said “A lot of arthritis sufferers don’t eat fresh fruit and vegetables because they can’t
afford to. A lot can’t peel carrots or potatoes. They can’t prepare them or cook them at
home. They can’t lift pans onto the cooker”. Food that cannot be accessed at home is
effectively as barred to consumers as food they cannot get to buy. Also the
psychological theme of loss of independence recurs here, another hidden cost of food
deserts.

5.6.5. The Disability Discrimination Act, making buildings accessible

In 1995 the UK government passed the Disability Discrimination Act, with the
intention of making most buildings other than private homes accessible to all disabled
persons within the next decade. Disabled people would benefit but there was a clear
financial advantage to the government too. This Act coincided with a drive by the
Benefits Agency to get as many claimants off Disability Benefits and into work. The
rise in long term unemployment in the early 1980s as the UK de-industrialised, along
with pressure on Benefit centres to get as many claimants off ‘benefit culture’ and into
work, had led to some claimants being shunted from Income Support/Jobseekers
Allowance into Disability Benefits. There, they were not harassed to look for work that
they stood little chance of finding (many were former manual workers now in their 50s). The Benefits centre and the government itself were seen to have ‘reduced unemployment’. Doctors co-operated in this reclassification of many workers who were not totally incapacitated. However, globalisation continued to exert pressure on central government to reduce its spending, and Benefits was a large chunk of government outgoings. Hence the move to get the disabled and ‘not-so-disabled’ into work. Tests for Disability Benefit entitlement were tightened considerably, and the purpose of the DDA was to enable many of these claimants to access the workplace.

In practice the disabled may not get the comprehensive access the DDA seemed to promise. The Disability Discrimination Act “won't close the shops down because they have to make ‘reasonable’ adjustments (section 21), if these are very costly they are exempted. You cannot force a business to make uneconomic adjustments, you'd probably breach the Human Rights Act. Costs like lowering the floor, removing wall to floor glazing [bad for the visually impaired] removing bollards less than 1 metre high, with poor colour contrast, may cost thousands of pounds and be unreasonable. You have to act within the bounds of what's reasonable, a court may have to decide on this” (A.17, disabled support, Leeds). A.38 (pensioner support, Leeds) said “The State says you've got to have buildings that are disability-accessible but they won't give any funds for it. By the year 2003 many shops, pubs, clubs, have to have disability access. Most of these places can't afford to provide this. Legislation is fine but where does the money come from”. Similarly A.16 (disabled support, Leeds) said “They brought in the Disability Discrimination Act in 1995 which is not great but better than nothing. But money was not provided with the legislation to make those changes. Councils and businesses can argue they need not make disabled access better if they haven't got the money. So a small shop can say it can't afford to put in a ramp instead of steps, a ramp would cost £2,000 or £3,000. The government should give a loan or a grant because in ten years time [from 2001] the vast majority of small shops will still be inaccessible to wheelchairs. The big shops like BP forecourts should use their profits but small shops will need some money for this. This would help the government because if they spent money making transport accessible the disabled could get to work as well as shopping. Social Services would spend less money helping them go shopping”. But A.20 (Black community, Leeds) said “There was a loophole with the DDA, if organisations couldn't fund the access measures they didn't apply, but there are now grants to fund the works for disabled access”. A.14 (disabled support, Leeds) said “Some shops are a bit wary of the Disability Access Act, we explain that lowered steps help get prams in too”. There appeared to be some ambiguity as to what grants might be available; many smaller
businesses, such as marginally profitable shops, will need grants, if the work is to be done. Local or national government needs to make it clearer what grants are available. The last comment by A.14 shows that there are other benefits to businesses in making disabled access easier; access by mothers with pushchairs is easier too. Yet this may hinder grants, because the government may see then grants as being public money improving the profits of private businesses, something it is unwilling to do, and in fact may be an illegal subsidy of some businesses. In all this financial confusion, the main losers will be the disabled themselves.

5.7. Prices at shops (see sections 2.3.8 and 4.2.3)

Many respondents, especially from the poorer areas of Leeds, said small shop prices were around double what the supermarkets charged. S.1 (female, 80s, Leeds) said the Asian shops in Beeston "charged 85p [1999] for a bag of sugar, two or three times supermarket prices, Kwik Save this is 50p, the same food". Other price comparisons were, from S.16 (female, 40s, Leeds) [1999], 79p for a loaf of bread at local small shops, as against 40p at Asda York Road, and 45p for milk as against 29p at Asda. S.36 (male, 30s, Scunthorpe) said a shop in Rowland Road, Scunthorpe, now closed, was known as the 'robber shop' because it was so expensive. However other respondents said local shops were as good on price as the supermarkets. S.12 (female, 50s, Leeds) said local Roundhay shops were "comparable to Asda", and S.32 (male, 40s, Barton) said "supermarket prices are extortionate on vegetables". Interestingly the more favourable opinions on small shop prices tended to come from the more affluent areas. Perhaps better-off customers valued service and variety more, whereas the poor were more price-conscious. As expected, respondents said the discounters were cheapest of all, but had a limited range. Overall price comparisons were difficult due to the number of food items available. For the same basic food item, there are often many choices of size, quality, bulk or single purchase, and shopping environment. The general theme was that neighbourhood corner shops could be much more costly than supermarkets, but High Street shops could be as cheap or even cheaper than the large supermarkets, but perhaps still not quite as cheap as the discounters.

5.8. Ethnic barriers to food access

Food is important not just as a source of nutrition but as a part of people’s culture. Holloway (2002, p.71) wrote “for most inhabitants of (post)modern Western societies, food has long ceased to be merely about sustenance and nutrition. It is packed with
social, cultural, and symbolic meaning". For persons living in a culture that is different from their ancestral, family, or local community culture, food is even more important as a cultural symbol and link with home. Because of upbringing and culture, persons may chose to consume only a small part of the whole range of foodstuffs theoretically available to them. This may be due to religious dietary rules; for example Jews and Moslems will not eat pork, and many Hindus are strictly vegetarian, or it may be because food is an important reminder of ethnic origins. ‘Ethnic’ foods are more expensive, because there are less economies of scale and they are imported via centres such as Manchester. 52 Many Asian families are poorer than the UK average, because of low wages, discrimination, language problems, and lack of UK-recognised educational qualifications. Yet they pay more for food, a parallel situation to how poor White families depending on small convenience stores also pay more for food. The Guardian II (25/7/01, p.5) reported that some Asian families responded to this double cost problem by substituting cheaper fatty sauces for vegetables. A.53 (dietician, Scunthorpe) confirmed this, saying “The Asian diet in Crosby may have too much fat and too few vegetables. Asian vegetables are very expensive here in the UK, and they may not be aware of English alternatives, so although the home diet is good, it has too much fat here in the UK”. As the average age of the Asian community is younger than the average White age, health problems due to this obesity have not yet become so apparent, but probably will soon.

Foreign language labels would help ethnic minorities in choosing a healthier diet and in sticking to a diet they find culturally acceptable. A.19, Bengali, Leeds, said “The labels on the food are in English only. If they were in an Asian language it would encourage those with poor English to buy more. When they go to Kwik Save or Morison, they can’t read the labels on the food. Local shops are very good, do fish and vegetables for Asian people, Sikhs and Muslims. But also a lack of choice in some local shops. Supermarkets do not always label if the food is Halal.” Asda Head Office stated, when asked about ethnic labelling of foods, “In stores we have signs in the aisles in different languages in appropriate areas. Our suppliers put the labels on tins but we are working with them to put multi-language labels there too”. However S.38 (Morrison,

52 Although Bradford has several large ethnic communities, Manchester was mentioned more as an import centre for ethnic foods. This is probably because Manchester has historic port connections, much of the UK’s imports from former colonial countries came via the west-coast ports. Manchester is not such a big port today but because of ‘industrial inertia’, much of the distribution infrastructure may remain there. Several of Leeds' Asian communities mentioned how their ethnic foods came from distributors in place such as Oldham.
Kirkstall) said “We don’t put foreign language labels on food at certain stores; all our stores are standardised. Some of our staff will speak foreign languages”. There will likely have to be a trade-off between the standardised labelling that is part of the economies of scale leading to cheaper supermarket prices, and the increased costs of providing multi-lingual labels. To an extent, this is a choice the ethnic minority communities must make; the fact that some of them “travel two miles to Kwik Save or Morrison” shows they are desirous of the cheaper food prices; yet this price advantage could be eroded by more ethnic labelling.

The Chinese and Vietnamese communities had similar concerns on labelling to the south Asian communities. A.21 (Chinese, Leeds) said “We would like Chinese labels on food, or it is hard for the elderly, they speak less English than younger Chinese. However, A.28 (Vietnamese, Leeds) said “No language problem in the big supermarkets because the product is displayed on the shelf and the figures are on the till when they pay. It’s different in the Leeds Market because you have to talk to the stallholder, they can be rude but the supermarket staff are polite. That is why older [Vietnamese] don’t want to shop at the Market even though it’s much cheaper than the supermarket”. Concerns here were more about price and politeness. Many Chinese and Vietnamese foods, such as rice and fish, are widely consumed by White people too, and there is not the religious/dietary requirement as a factor here either. So a person from China or Vietnam may perceive less of a problem finding foods acceptable to them in English shops.

A.20, Black community, Leeds, said “We have Afro-Caribbean shops here [Chapeltown]. They sell yams, green bananas, sweet potatoes, mangoes, star fruits. Yams and green bananas are carbohydrate foods, quite starchy, they are bulk foods that fill you up. It’s proteins and the various meats we don’t seem to get because they’re quite expensive. (This mirrors the dietary concerns about Asians and fatty sauces substituting for vegetables). We eat a lot of goatfish and monkfish, which are more expensive. Elderly people can’t get to the supermarket very well, they need carers or disabled services. We provide that, go out shopping either with them or for them. These ‘Black’ foods are more expensive in the supermarkets than the local shops but ‘White’ foods like peas are cheaper in the supermarkets; Black people want to buy both sorts. If someone else does the shopping for a disabled person they usually know what to get regarding the yams and sweet potatoes and so on. The disabled person has a set budget so the carer has to get as much as he can within that budget.” The Black community’s chief concern was price; they do not have the religious/dietary restrictions
of some south Asians, but their foods are not as easily available as are acceptable foods for Chinese or Vietnamese.

A.26 (Polish community, Leeds) said "There is one Polish shop here [Chapeltown] which does all the continental goods, sausages, smettana, salami, sauerkraut, Polish gherkins. Our members can get these in Leeds Market, the older ones like to go there, they can meet and chat there". A.25 (Polish community, Scunthorpe) said "Some Poles' English is not very good, they regress to Polish as they get older. Poles like to cook for themselves, not prepared food, artificial food. No problem with the over-70s getting to the shops as the community always helps each other. Look after their own, if one had a stroke, the others would bring food, do housecleaning, take them to church. It's hard to get Polish food in Scunthorpe as only one person sells it, on Scunthorpe Market". Price concerns, but also the desire for quality of food, was prominent amongst the Polish community. Overall, their foods appeared to be more easily obtainable than Black foods, and have less distribution costs than the south Asian foods imported via the Manchester area.

The Jewish community in Leeds was also strongly bound together by kosher food. A.23, Jewish congregation, Leeds, said "We have two or three kosher shops in the Moortown area so it's no problem for people in the locality. Our domiciliary service would shop here for anybody with those requirements. If you lived out of the immediate area you would have huge problems. Kosher food is more expensive. The carers may only get the wrong foods if they're new or temporary staff. We have about 9,000 Jews in this community but they are all very close to each other geographically, so the shops reflect this. There is always access to Jewish food as the dietary laws are very strict. A lot of Jewish shops used to be on Chapeltown Road but as the Jewish people have moved out so have they". In Lincoln, A.24, Jewish congregation, Lincoln, said "There's no Orthodox or Kosher food around here Sainsbury will get special deliveries from Leeds if we request it. Tesco sell matzos but otherwise you have to go to Leeds or Manchester. Kosher shops wouldn't get enough support here. Most of the elderly have cars, go to the supermarket. If they have no cars, they are looked after by the local authority, Access Bus, and so on". The Jewish community can have as strict dietary laws as some south Asians (this depends if the Jews are Orthodox, Reform, or the more relaxed Liberal division of this religion). However as the Jews have been in Britain longer than most other ethnic minorities, the kosher food distribution system is more set in place, so long as there is a sufficient customer base to support it. In areas like Lincoln, this may not be the case and kosher food could be hard to obtain.
There were varying degrees of assimilation to the British culture in the ethnic communities, greatest for those here longest such as the Jewish community. A.24 (Jewish congregation, Lincoln) said “We’re just a group of Jewish people who meet once a fortnight, we don’t have enough members for social aims. Nine out of ten Jews here are single or intermarried, there are about 30 Jews in Lincoln, about 70 to 100 in Lincolnshire”. Compared to groups such as the Chinese, Vietnamese, or Bangladeshi, there appeared to be less of a close extended family network here for social support or transport of the elderly to shops. There were signs of a new emerging south Asian community in Armley, where Asian grocery shops were opening up, as ‘White’ grocery shops were closing down.

There can be ‘historical’ dietary differences, between older and younger White people, that can be almost as deep as the ethnically based differences. White pensioners may not eat courgettes or broccoli because these vegetables, though commonplace now, were virtually unknown in Britain when they were children. Many psychologists believe food preferences are set in childhood and not easily changed thereafter, which is why corporations like McDonalds aim much of their marketing at children. Two pensioners (S.1, female 80s, Leeds, and companion, similar age) in Beeston, a part of Leeds with many south Asians, did not wish to shop at the south Asian vegetable shops although several of these were within 100 metres of their homes. They went together, on foot to the Kwik Save or Netto on Dewsbury Road, 800 metres away, to get cheaper offers like BOGOFs, and get a taxi back with their shopping to share it out at home. S.16 (female, 40s, Leeds) also drove from her house near St James Hospital (LS 49,3 5) to the Asda on York Road because she disliked the Asian shops near home, even though traffic was generally heavy on the York Road. “Many white working class pensioners want potatoes, they don’t like seeing ‘exotic’ fruit and vegetables.” (A.41, poverty support, Leeds). This was an interesting coping strategy by these pensioners, facing the problems of local shops stocking foods they didn’t want, and distant supermarkets with bulk goods that were too big for one of them to use alone. Other pensioners mentioned these problems too. There will be many pensioners, poor and retired ‘in situ’, who face this food situation. This could count as another type of food desert, as classified in Chapter Seven of this research.
5.9. Social barriers to food access

Food can be a powerful social symbol. Over a century ago, Joseph Rowntree included tea as a vital item in the diet of the poor. Tea has little nutritional value but is important socially. At school, peer pressure and the need to ‘conform’ can be almost irresistible, and children strive to obtain the ‘in’ symbols. These may be Nike trainers, but also unhealthy foods like crisps. Eating foods such as salad and vegetables, even if offered as a choice at the school canteen, is very ‘uncool’ and these choices may be seen as socially ‘risky’ by children. However alternative cultures that are pro-healthy eating can also be set up. This was done in the USA in 1929 with ‘Popeye’ making it fashionable amongst schoolchildren to eat spinach; spinach consumption rose by 33% amongst US schoolchildren. In 2003 there are ‘Food Dudes’, a device recommended by the British Psychological Society, making it ‘cool’ for schoolchildren to eat vegetables. A study in Brixton, south London, found that ‘food dudes’ doubled fruit and vegetable intake and this higher level was largely sustained (The Guardian 15/3/02, p.11, Daily Telegraph, 15/3/02, p.19). Consumption of fruit and vegetables rose from 36% of recommended levels to 79% and was still at 61% four months afterwards. Researchers at the University of Texas also found that if young children could be persuaded to help in the garden, they were more likely to eat vegetables, as they wanted to eat what they’d grown. Many poorer households have no garden; living in flats or terraced homes, hence the importance of urban farms, allotments, and community centres with land for vegetable gardening. Bribery is also being tried. The Birmingham Post (6/8/01, p.7) reported that parents were offering their children items such as T-shirts and videos if they ‘ate their greens’. In Doncaster, South Yorkshire, schools have installed a smart-card system that records points for how healthy the meal options chosen by children at lunchtime is (Doncaster Free Press, 17/10/02, p.26). The points are added up, and prizes such as tickets to cinemas or sporting venues are given for the highest totals. The drawback is that bribing children to eat healthily may reinforce a message that fresh fruit and vegetables are inherently undesirable. Likewise, banning food like sweets or chips from the school menu may make them more attractive to children.33 Hopefully the children will actually enjoy the taste of vegetables and eat them without persuasion.

Many poorer households lack cooking skills, which exacerbates the problems of physical access to fruit and vegetable shops due to poor health and lack of a car. Poverty is also a major barrier to healthy eating, as the following quotes show. A.64

33 From website http://www.kidsource.com/kidsource/content5/kids.foods.want.html
(Leeds council housing) said "I don't think most of our tenants can afford groceries, as in vegetables, stuff like that. I think they eat more junk food, convenience food, because they're on limited funds. They only get about £50 each a week [Benefits] if they're single. Health is a problem, most of them smoke, and there's a big business around here in 'duty free' cigarettes. In Lincoln Green (LS 47,34) they had one Asian store that serviced the whole community, 16-floor tower blocks. Then a Co-op opened and was in competition, so the Asian store lowered its prices. Also the Co-op on The Ambertons, and Lidl, so vegetables were getting more accessible. You seldom see vegetables in local stores. Harehills Lane is not too far away, a lot of shops there. Most of the elderly can reach the shops there too. [Harehills Lane shops are approximately 1.2 kilometres from both Gipton and Lincoln Green]. There should be incentives like lower rates to help first-time shopkeepers. Promote healthy eating, it's all microwaveable stuff now, not very healthy. The kids are not very healthy on these estates, we have malnourished kids here". A.52 (dietician, Norfolk) said "asylum seekers in Great Yarmouth in bed and breakfast have no cooking facilities, or they have to queue for hours to get on the cooker, over four hours in one bedsit. Or they have to leave the bed and breakfast for seven hours during the day, so nowhere to cook, so they eat crisps and fizzy drinks. Bosnian men, in their culture, don't cook, also North Sea oilmen. The poor here, have no space for a freezer to bulk buy food, but that would make food cheaper". Several possible types of food desert are illustrated here. White working class food deserts, due to poverty and lack of affordable transport, coupled with expensive small local food shops. This is one sort of food desert extensively researched in areas like Coventry, as well as Seacroft, Leeds, and covered in section 2.4. But there is also a possible 'hidden', attitudinal and poverty related, food desert mentioned in that some persons such as asylum seekers and North Sea oilmen have nowhere to cook healthy food, so have to fall back on less healthy fast foods and ready-to-eat foods. This is covered further in Chapter Seven.

The UK government, in 1994, introduced a "five-a-day" scheme, to get the message across that 'five portions' of fresh fruit or vegetables should be eaten daily. However because sizes of pieces of fruit and vegetables vary a lot, both within and between species, some people were confused as to exactly what a 'portion' was. The Guardian (11/1/03, p.6) reported further confusion as to whether vegetable soup, tinned and frozen vegetables, or fruit juices can count as 'portions'. For example fruit juice can count as one portion but should not be used to count for two or more portions, however

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54 The 'five-a-day' campaign was pioneered in California in 1988 (Daily Mail, 13/12/02, p.31).
much is consumed. Although all of these foods may count, it was not the government's intention that a 'five-a-day' consumption should be exclusive of any fresh fruit and vegetables. However the UK food industry, keen to promote processed, 'value-added', high profit, items, might attempt to shift food consumption towards processed items. There was (A.53, dietician, Scunthorpe) general distrust of 'food experts' after years of conflicting messages; such as 'fat and cholesterol is bad for you', followed by 'some cholesterol, some fats, are good for you'. There have been confusing messages on fish, such as 'oily fish is healthy', versus 'oily fish can contain pollutants'. Faced with this, people may decide to distrust all food pronouncements. People "don't like being told what to eat" (A.53, dietician, Scunthorpe). The Guardian (4/12/02, p.16) reported a failure of this campaign amongst 19-24 year olds, with no men and only 4% of women surveyed eating five portions a day in 2002. Confusion and conflicting messages can undermine any healthy eating initiative. Although science advances, and may overturn what was once thought correct, the influence of the food industry can be pervasive and subtly alter food messages too. This influence may need to be minimised to obtain a truly balanced message, but this minimisation may be difficult (see section 4.5.1).

Healthy Living Centres, such as the St Augustine's Centre, on the North Lynn estate at Kings Lynn, Norfolk, set up in 1993, have used a simpler visual message of colours. To get people to eat a varied diet, the message is, eat different colours of fruit and vegetables each day, red, orange, yellow, green, blue, a sort of 'food rainbow'. Adhering to this should ensure both variety and the required 'five portions' are consumed. Crosby, Scunthorpe, is to get a similar 'pop-in' centre giving advice to south Asians and others on food, health, hygiene, and arts activities relating to food. There will be awards for local food businesses and links to allotment organisations (Scunthorpe Telegraph, 28/2/02, p.1). A.53, Scunthorpe dietician, said "We have outreach projects like 'healthy living' in Crosby. We promote allotment use, and teach adults how to cook what they've grown. We have a 'sure-start' programme for mums with children aged 0-5. Put fruit in school tuck shops. Education aimed at adults, families. There is a lack of education on how to buy food wisely as well as how to cook it. Breakfast clubs, cafes, so people can come and buy cheap but tasty and nutritious food, vegetables, and they then may want to grow and/or cook it themselves. Share best practice between these agencies". These centres may be a key way to alleviate the 'attitudinal' element of many food deserts, that is, lack of knowledge about what food is healthy and how to prepare and cook it.
Food centres may be set up as a part of ‘one-stop-shops’ for the poorer sections of the community, offering advice not just on food but on Benefits, housing, general ‘Citizens Advice’, and with facilities like children’s play areas so parents can leave their children there. Officials such as doctors and council benefit workers may be persuaded to make regular visits there. This provides a less intimidating venue for Benefits and health advice than a surgery, or Benefits Agency office. Before the St Augustine’s Centre was set up, no GP wanted to come and practice on the North Lynn estate. The main problem faced by St Augustine’s is uncertainty of future funding; there is no guaranteed continuity of either staff or services. Money now comes from the National Lottery and the SRB. Funding may run out, and applications get more complicated each year. Lottery funding needs to be reapplied for every three years, and last time “the paperwork weighed 6 ½ lbs”. At these centres, low priced food may be available in a café, perhaps cooked from fresh ingredients, and there may be cookery classes too. If land is available, allotments can be provided, and people encouraged to grow vegetables. Where allotment land is not available, some council tenants have been persuaded, in Dartford, Kent, to give up part of their gardens to make an aggregate plot, a community garden, for growing vegetables (section 2.2.5) (email from Richard Wiltshire, Research Officer, QED Allotments Group, 28/11/01).

This idea of food education for the poor goes back to the Boer war, when recruits were found to be in poor health (Guardian II, 25/7/01, p.5). Mothers in the East End of London needed cookery lessons, and middle class volunteers, or ‘pudding ladies’, went there to give this. Cressey (1988) reported on an early ‘healthy living centre’ in the UK, the Ashram Acres project set up in 1982 in Sparkbrook, Birmingham. This was then and is now an area with a large south Asian community, and many inhabitants of Sparkbrook were poor. The Ashram Acres project aimed to make use of agricultural skills possessed by the immigrants from Pakistan, Ireland, the Caribbean, and other areas to convert derelict inner city former industrial land into ‘fertile organic vegetable plots’. Livestock was also kept. The aim was more poverty-alleviation, selling the vegetables, rather than dietary improvement, but this centre was a model followed by many today. Community shops have also been set up on some poor estates, such as Longley, Sheffield, which in 2000 had 30% unemployment (Independent Weekly Review, 5/8/00, p.17). The shop was owned by local people, and provided paid employment out of its profits. This saved local people an 85p bus fare each way to the main shopping centre, a large sum for someone on benefits of around £50 a week. This shop has also boosted the trade of adjacent shops, as people now shop more locally rather than taking the bus.
Poorer households try and save money so face pressure to buy unhealthy food that will be eaten rather than food that will be thrown away. The Health Education Journal (1998, Vol. 57, No. 3, p. 206) said ‘The influence of children and partners on their [food] purchases is significant. When shopping, these women carry these responsibilities with them. They balance concerns about healthy eating with those of taste, waste, and value for money’. Harrison (1997, p. 25) said ‘Because calories are obtained more cheaply from the frying pan or the biscuit tin than from the salad bowl, women commonly cope with the demands of their families by feeding themselves ‘empty calories’ [that is, food that has calories but few essential minerals or vitamins], they may feed their children with healthier but more expensive foods’. These women may even skip meals altogether, perhaps encouraged to do so by the prevalent culture of slimness. This may lead to serious medical conditions such as bulimia or anorexia.

Social Security rates were, in 2001, £53.05 a week for single persons and £83.10 a week for two persons living together. With rent and Council Tax paid, this should in theory leave enough money for a nutritious, if basic, diet. However Housing Benefit may be delayed, and may not cover the full rent costs, especially in high-rent areas like London. Sudden losses such as breakage or breakdown of vital household goods like a bed or cooker occur, and the DSS now only loans, not grants, money for replacements. The poor are driven to the most expensive forms of credit or furniture purchase; loan sharks or bed-hire shops like Crazy George, because regular banks will not lend to them and they cannot afford the upfront purchase cost of a new bed. Weekly furniture hire costs, weekly payments to finance houses for old debts, and items like cigarettes and gambling mean families may have as little as £20-£35 a week for food (Report on Norfolk Food Futures Conference, published 13/7/01 by Norfolk Council). The poor may pay higher prices for fuel, as they tend to have coin meters. With poor families, having a bad record of paying bills and rent on time, utilities and landlords may be able to deduct payments from Benefit before the household receives it, thus ensuring something else like food is cut back on. A 44 (poverty support, Scunthorpe) said “There are people in Scunthorpe who don’t get an adequate meal a day, believe it or not, and we provide hot meals and drinks. It’s about economics and poor diet, a pall of problems that spiral. Someone might be given a flat but the ‘fair rent’ set by the council is absolutely extortionate. In time, their Benefits don’t cover the outgoings, they miss meals, they can’t hold it together, their health becomes affected, they become evicted, they’re back to square one. We get harvest produce in here, that’s probably the only time they’ll see fresh fruit and vegetables in a year”. This illustrates the more extreme
end of the poverty, or 'asset', problems relating to food deserts, but comments by agencies interviewed indicates this type of situation is not rare. This severe poverty seems to occur, not only in large cities like Leeds, but smaller towns like Scunthorpe and Great Yarmouth, and even Brigg. As A.44 indicated, such severe poverty may be very complex and costly to eradicate and some earlier social support (including dietary advice) may pay for itself in stopping such severe problems developing.

The wealthy may also have a poor diet. Some London Docklands flats were built with no kitchens, just microwaves, because the tenants were not expected to have the time to cook, but be working long hours and eating out a lot. People may buy the fruit and vegetables they know they should eat, and ready-meals as a back up. Often time pressure means the ready meals are eaten and the fresh vegetables thrown away because they have spoiled. Professor Rathje of the University of Arizona calls this the 'fast lane syndrome' (Guardian II, 20/5/02, p.3). A.85 (Leeds councillor) confirmed this, saying "Young people are living off really expensive packaged stuff, instead of saving their money and doing it more cheaply. TV pressurises people into a certain lifestyle, they can't really afford it. And that'll kill your local shops off". A novel solution is being tried in Spain, where "busy young people who like good food but lack the time or inclination to cook" can "hire a telemother over the Internet". Twice a week, by taxi, their 'telemother' "sends them healthy homemade food; she also 'calls her 'son' to check the state of his fridge, his tastes, and needs". Office deliveries and weekend meals are also provided. This could be seen as a solution to poor eating habits, or as an indictment of modern life, where family dispersion and breakdown has reached the point where our 'relations' are now hired via the Internet. This type of very 'attitudinal' food desert, where those affected know what they should be eating and how to cook it, but their lifestyle does not allow this, is discussed in Chapter Seven.

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55 Reported in 'Awake' magazine, 22/1/03, p.28, from El Pais newspaper, Spain.
Chapter Six

Analysis and summary of the interview data

6.1. Review of global trends affecting UK food retailing

Chapter Two of this research described the worldwide setting in which British grocery retailing has evolved over the past half-century. Economic developments in the USA, along with the political evolution of Europe since the Second World War, set the scene for a phenomenon called `globalisation'. Sections 2.3 and 4.1 in particular showed how globalisation has transformed, or at least made a major contribution to the transformation of, the way we travel to food shops and buy food there, as well as our diet itself.

Globalisation is a concept scarcely heard of thirty years ago but with many meanings today. Globalisation can mean the emergence of large multinational companies with huge economies of scale. It can mean the increasing integration of the world economy, either between more-developed and less developed states, or between developed states themselves into blocs such as the EU. World international trade figures have risen faster than world GDP, as companies locate less skilled activities increasingly in low-wage countries, importing production back to first-world markets. Some see globalisation as an increasing standardisation of global society and economy. Both production methods and what is produced become more similar worldwide. Companies use `just-in-time', or `lean', production, GIS location methods, and similar sales methods. An identical range of corporate products is available in most global cities, from Coca Cola and MacDonald's to Levi jeans and Microsoft computers. Even the cities themselves begin to look similar, with the same office blocks, freeways, supermarkets, and houses. Globalisation has also involved an increase in scale. We travel further to work, further to holiday, buy our commodities from further afield. In parallel, the scale of government has increased, as functions like education and health have passed ever more from local to central government. This process has continued as European integration has progressed and many functions of UK government are now subject to Brussels legislation.

As globalisation has increased the scale and size of many features of society, there has been a partial rebound, a return to smaller scales. Regions of EU states have become more prominent, even as the states themselves become more integrated into the EU. Long-haul holidays have become commonplace, but smaller local places have captured
a short-journey daytrip tourism. Many consumers appreciate the year-round availability of global produce in supermarkets but have also come to appreciate the local, the different, in small craft shops and local food stores. As the world economy has increasingly integrated far-flung nations, the migration that went with much of the development of this world economy has also produced local ethnic grocery markets in many European cities. In some cases these local markets are too small for an effective, economic, penetration by the big supermarkets.

Global society has therefore seen a divergence in scale, the increasingly large co-existing with the increasingly small. The principal supermarket operators in Britain have pushed for ever-larger stores, and have simultaneously been forced into a return to small High Street locations. They have sought to move upmarket, but have had to compete on price to deal with the competition; competition with each other and with the discount chains. For the grocery customers, globalisation has also produced divergence of wealth. Overall, globalisation, with its more efficient production methods and economies of scale, has increased economic wealth. But this increase has not been evenly shared. Some have ‘never had it so good’. Their wealth has increased, they have access to many more places by car or plane than their forebears had, and they can buy a wider array of products and foods. For the less fortunate, access may have reduced as public transport has declined, and the range of consumer goods they can buy has shrunk as shops have moved out of town beyond their reach.

As the dimensions of space and wealth have both enlarged and diverged, so has time. Globalisation was facilitated by improvements in Information Technology and in transport. Faster, more efficient transfer of people, goods, and information once held out the promise of shorter work hours, more leisure, for all. Allied to this was the proliferation of labour-saving gadgets around the home. The leisure age may not have arrived but the age of commodification of leisure has. Unfortunately, global competition has also produced the age of work intensification, of ‘presenteeism’; at the same time increased travel has produced congestion and a slowing of travel across many parts of Britain. These trends have produced an increasingly complex ecology of access to food by consumers and of competition between different food retailers. The next section looks at how this ecology was described by the respondents interviewed in Chapters Four and Five.
6.2. Globalisation trends and the interview results

6.2.1. The arrival of the supermarkets

Globalisation has constituted a threat to the trade of small shops on two fronts, one more evident than the other. The more evident threat is the large supermarket on the approach road to almost every town in Britain. The less-evident threat is the political effects of globalisation on the climate of support for independent shops. If a new species, without predators, is brought into an isolated ecosystem, the almost-guaranteed result is a decimation of the incumbent species whose ecological niche was the same as the newcomer. If the new species is larger and feeds faster than the incumbent, the decimation will be worse still. Small shops can be regarded as a ‘species’, whose individuals, the individual shops, ‘fed’ on the cash flow they obtained by serving groceries. This ‘species’ was isolated in that small independent grocery shops only ever served a small locality, and so were vulnerable to any ‘poaching’ of their ‘food’ by a competitor. Small shops have faced not one but four new raptors of their ‘food supply’; the supermarkets, the discounters (Aldi, Lidl, Netto), the mini-supermarkets (Jackson, Nite and Day, etc), and the garage-forecourt-based shops. One of these competitors, the garage-forecourt based shops, found the ecology of the UK food market not altogether to its liking, and many have pulled out. Another competitor, the mini-supermarkets, is being eaten alive by the supermarkets. However this has strengthened the competition presented to small independent shops by the supermarkets.

Most small shops reacted to the supermarket threat by attempting to ‘feed’ more efficiently themselves. They generalised their stock, and cut out ‘inefficient’ feeding habits, that is, they cut out or reduced fresh fruit and vegetable provision. Regarding cash flow as food, the small shops also attempted to intensify their feeding by extracting more cash from their customers. Some shops were able to exploit what remained of their spatial monopoly and charge higher prices. Others adopted some of the strategies of the supermarkets, offering loss-leaders on some basic household goods in order to gain custom of higher-margin items like alcohol and cigarettes. Two external factors worked against this strategy. Firstly, the higher wholesale prices faced by small shops, because their wholesalers lacked the buying power from suppliers further up the chain that the supermarkets enjoyed. Secondly, higher duties in the UK than in other EU states on alcohol and cigarettes created an incentive for consumers to smuggle these in from France, by-passing small shops.
6.2.2. The political and fiscal effects of globalisation on small businesses

The higher UK duty on these items is related to the second main threat to small shops mentioned above; the political effects of globalisation. Section 2.2.4. showed how governments were forced to lower their tax rates both on corporations and on the transnational elite of highly paid key workers in order to attract the jobs the multinationals provided. This in itself reduced any money the UK government might have had to subsidise socially useful but economically less-viable local shops. However both the UK, since the 1980s, and a higher political authority, Brussels, have tended to look askance on many such subsidies anyway. The reasons for this ethos of non-support of small businesses against large ones go back to the origins of the EU in the 1940s and the politico-economic situation with the USA and Europe at that time. As the Second World War drew to a close, the economies of many European countries, Allied and Axis, were severely damaged, whilst the USA was relatively unscathed. American companies had enjoyed a continental single market for almost a century before the close of World War Two, and the USA was keen to avoid yet another European war into which, once again, it might be dragged by attacks on its shipping. Political initiatives such as the Marshall Plan of 1947 and the Benelux Customs Union of 1944 were the forerunners of the European Coal and Steel Community of 1951 and finally the European Economic Community of 1958, which has evolved into the EU of today. The idea was to unite Western Europe at first economically, then politically too. The USA would gain in two ways here. The prospect of another Anglo/Franco/German war was reduced. Also a potential free market of hundreds of millions of consumers, comparable to the USA itself, was created for American corporations. In such a Europe, national protection, subsidies, of local businesses would be out of place. Ongoing subsidies of small businesses' running costs would be a drain on government finances which could be 'better' used to provide tax breaks for larger companies, providing more jobs. Only as section 2.3.6 showed, a large supermarket actually provides fewer jobs than the array of small shops it replaces, because the larger company uses its employees more efficiently. Economic logic says more efficient use of business assets creates more wealth, but this argument says nothing about the ultimate distribution of that extra wealth. It could be that less efficient small shops create a smaller but more equitably shared pot of wealth, going more to local, less-well-off communities; larger retailers create more wealth but this goes more to the better off, shareholders and directors. More overall wealth, but less for the poor, or the
opposite to this – this is a purely political question, as is the question of who decides the eventual mode of wealth creation and distribution.\textsuperscript{56}

A Single Market was to be a ‘level playing field’ for all businesses, which in practice gave the already large companies, with their economies of scale, an initial and often unassailable advantage. To continue the sporting analogy, on a real ‘level playing field’ with players of very different sizes and abilities, the less-able players might expect some positive handicap relative to the fit experienced professionals. Without such handicapping, the level playing field would be biased in favour of the larger players.

The idea of a European Single Market in which large multinationals could be persuaded to locate by means of tax breaks, so as to provide employment, exposed differences of scale in politics. Whilst the larger units such as national and EU government favoured ‘tax cuts for jobs’, local politics tends to favour subsidies for indigenous industries. Local, that is, county or city, politics has often voted for a more social agenda, relying on the redistributive effects of national government to fund this.

In Britain, political control has gradually become more centralised. This predates the EEC and the Second World War by some decades. Control of functions like hospitals and schools, which was once local and rather variable in quality from one borough to the next, has been shifting for a hundred years towards central government. Section 2.2.3 showed how two changes in the 1980s – planning and Business Rates – further increased central control over local government. (Section 4.5.2 cited the example of Swansea which resisted the idea of allowing multinationals to trade on an Enterprise Zone just outside its town centre, damaging local shops, but was forced to comply by Westminster). Section 2.2.3 showed how the finances of local government have been squeezed, leading to pressure to sell off council houses, and allotments and school playing fields for development land. This brings immediate financial benefits to the council concerned, but ultimately will increase the nation’s healthcare costs. That is something future generations will pay for through central government. It is unlikely that any National Audit Commission study will ever link the two and actualise the real costs of allotment sales, when governments think to a maximum timescale of the next, five-yearly, election.

\textsuperscript{56} There is a condition of economic resource distribution called ‘Pareto-optimality’. This is satisfied when resource distribution is such that no one can be made better off without someone else being made worse off. Trading should make both parties better off (or else the transaction would not take place) but many other economic trends fail the Pareto test as the gains of some are made at the possibly greater loss of others.
Planning procedures are being tightened so as expedite swifter processing of applications, which works against local objectors (section 4.5.4). However it is the less well off, without cars, with poorer access, who may be adversely affected by the new competition of a large retail facility that will not locate in their immediate area but may cause the closure of local shops. Large, footloose, corporations, can easily transfer their inward investment to regions with looser planning policies (hence Mrs Thatcher's EZs), just as they can seek out low tax regions. Once again, scale has increased towards the national, the large company, but at the expense of the local, the small and community-based enterprise.

6.2.3. Government support for small businesses in a climate of globalisation

Government support for the economy has not of course ended, but its overall agenda has changed from the days when local councils would support Arndale shopping centres because they were more accessible to the poor and car-less. Sections 2.2.3 and 6.1 showed how globalisation has widened income differentials, a politically undesirable situation. Rather than direct support of the poor and of the facilities they need and use, the agenda has shifted to 'equality of opportunity' and 'regeneration'. For private citizens, 'equality of opportunity' tends to work like the 'level playing field'; it favours those already in the best position to take advantage of 'opportunities'. Groups like poorer pensioners, unwilling to claim State benefits, or the poor and ill educated may well miss out (section 5.9). For businesses and neighbourhoods, 'regeneration' schemes have had multiple aims but have often had one or more of the following objectives; employment/skills training, education, transport, the environment, housing, crime, health, and sport. These objectives collapse down to two main aims; to create a skilled, healthy, workforce able to access their jobs; and to create a safe, secure, attractive, environment for people to live, work, and consume in. What is often absent from the 'regeneration' concept is definite support for those facilities which are needed by the poor and those with access problems but which are uneconomic overall against larger enterprises, such as local shops. In rural areas, there are rates reductions available for the last shop in a village Although not explicitly 'business support', this is part of an 'environment' package designed to maintain the viability of smaller settlements.

There is no explicit scale or size preference here; small businesses benefit from this, as do large ones. However smaller shops find some obstacles to their benefiting from 'regeneration' support. Often the shop has to contribute some funds too, so only those
businesses with funds to spare can benefit. By definition, a struggling (but socially necessary) business will not have such funds; this ‘matching funding’ approach is ecologically like giving extra food to the already-fit individuals and not to those of endangered species. Overall fitness of the biomass may improve but diversity falls. Secondly, regeneration covers environmental improvements such as shop fronts and the ‘look’ of the shopping parade but will not help with everyday running costs, as that would be an ongoing subsidy.

6.2.4. Loss of voice of the local community

Many respondents, both ordinary shoppers and agencies representing a wide variety of community groups, said words to the effect of ‘Why don’t the authorities ask the people themselves?’ There are several reasons why the people are not in fact consulted fully, and their recommendations acted upon, concerning matters that affect them directly. Firstly, there is the shift of power upwards, from local to national and even EU government, described above. Secondly, it may simply be cheaper to appoint some official who is empowered to do what he or she thinks best, rather than incur the expense of consulting with many local people and organisations. This consultation would be a long drawn-out process. Business does not like such delays, any more than it does with planning. Investment plans depend on factors that may change over time, and a possible effect of truly local, full, consultation would be no development or investment at all. Thirdly, planners may well be subject to able bodied, white, male, middle-class bias. They may simply not see things the same way as a less well off disabled person, a poor mother with children but no car, or an elderly person, sees them. A.14 (disabled support, Leeds) said “It would be nice if, instead of getting these so-called experts in, they asked the disabled themselves. The experts are able-bodied. Bus drivers go past a blind person at the request stop as they haven’t hailed the bus. Bus drivers at Shire View, a centre for the blind, don’t think that the person at the stop may be blind”. Bus drivers though, delayed by congestion, may be pressured into keeping to timetables; the bus company faces fines if their buses are late. Section 4.7.2 showed how planning of pedestrian routes across main roads was designed mainly for the objectives of car drivers, and whilst crossing arrangements might be acceptable for a young fit male, many other pedestrians found them difficult. Fourthly, section 2.2.5 showed how some poor communities lack a voice, and how through self-censorship, anticipating failure, they don’t even try and make their voice heard. Or, they lack the education, the familiarity with procedures of governance, to make their opinions count.
Some local officials actually appreciated the lack of voice by the poor as this made their job easier.

6.2.5. Crime and small shops

Crime (section 4.3.3) remains a serious threat to the existence of many smaller shops, and many respondents felt this had got worse in the long run, although there are some downturns in the short-term rates of crime. Crime was another 'level playing field' factor; in theory all establishments are vulnerable to crime, but in practice the larger shops can better cope with it. They can afford better crime deterrence measures, better advice on how to prevent it ever happening in the first place, and can better cope with the financial losses when theft of shoplifting do occur. Sub-criminal activity such as anti-social behaviour, groups of youths loitering in an intimidatory fashion, was more likely to affect marginal small shops in poor areas. Interestingly however, the poor rates of return from burgling a small shop made this type of shop less liable to some types of crime needing a valuable haul, such as drugs-related thefts.

6.2.6. Psychological costs and assets of small shops

Businesses, especially small enterprises where there was a considerable personal element to both managing the business and to serving the customers, had a psychological as well as financial element to their costs, and assets. This psychological side would be less important in large standardised chain stores, such as a supermarket or a Greggs bakery, with a manager, not owner, on the premises. This was described in section 4.2.1. It means that a purely economic and geographical analysis of why shops close, or why customers use one shop rather than another, will be deficient. There are also the psychological costs of loss of independence of an elderly person who has to rely on others to buy their groceries, and such costs can translate into ill health and so actual financial costs too (section 5.3). Finally there are the psychological attractions of actually physically choosing items such as fresh fruit and vegetables, which are missed by persons using the Internet to shop. This partially explains why the Internet has made less penetration into the food market than into some other sales areas (section 5.4.3).
6.2.7. A return to the local

The standardisation of globalisation has led some to seek something local, something different again, even if this small-scale production of goods and services is more expensive than the global. This has helped local tourism, as at Barton (section 4.5.5), and sales at some small shops. These are sales of unusual food items such as the multi-coloured pasta at Roundhay, local delicatessens, and local wines and cheeses. Many village shops can survive on this trade, and supply basic groceries too. Farmers’ markets are also popular (section 4.5.5) for sales of foods like ostrich and locally made jams and cheeses, not available in any supermarket. Those who can afford it may also shop in an environmentally aware manner, and an aspect of this is supporting local food producers direct at such markets. Many consumers are aware that a price for the cheap food at supermarkets is a relentless price squeeze on farmers by supermarkets (section 4.1.3), and can lead to intensive, environmentally unfriendly, agriculture. A personal health benefit was also perceived by many in walking to a local shop rather than driving to the supermarket. Local towns can offer a unique tourist experience, and some shops can offer space for sales of local craft goods, this can cross-subsidise the grocery trade. Local shops in poorer areas could also specialise, for example the fishing tackle shop in Scunthorpe (section 4.4.1) and this brought in custom from a wider area, to the benefit of local grocery shops. There were also many ingenious arrangements by consumers from varied backgrounds, young and old, rich and poor, as well as by shops, to retain access to fresh groceries in economically adverse circumstances. Shops would arrange to stock perishable groceries on certain days only (section 4.4.2) or would use connections with other shops, or market stalls, to gain bulk wholesale prices for small amounts of fresh fruit and vegetables. A similar coping strategy was adopted by some Leeds pensioners to gain bulk discounts at supermarkets, by shopping together, and unofficial grocery resale markets existed on some Leeds estates to fill gaps in provision, or market failure areas (section 5.3). In many cases this self-help went a long way to alleviating local food desert conditions, but the effort involved meant the solution was generally sub-optimal to having a decent supply of fresh fruit and vegetables in regular local shops.

6.2.8. Time pressures on consumers

Time pressure may prevent some consumers supporting small shops as much as they say they would like to. There is a perception that purchasing all the household shopping in one large store, with guaranteed free parking, is quicker than visiting many small
town centre shops. Long work hours meant shopping was often fitted in after work, when many town centre shops would be shut, as would village stores. Many consumers appeared to want small shops to be used more by someone else, so the shop could be there for the small emergency purchases (insufficient for the shop's trade alone) they would use it for. Time pressure has also altered food consumption, as time available for home cooking has declined. Diet has shifted towards takeaways and ready-cook meals. This has reduced fresh fruit and vegetable consumption, and raised the intake of sugar, fat, and salt, with negative health consequences for many. Lack of cooking skills also prevented many from cooking their own meals, as did lack of food storage space, and for some, even lack of access to cooking facilities. Some shops have followed this trend, fishmongers becoming fish and chip shops and bakers becoming sandwich stores; some grocery shops have installed large freezers for ready-meals.

6.2.9. Ethnic communities and shopping

The UK has for long been the destination of migrant groups, but the greater mobility and international instability of the last fifty years has seen a number of new migrant communities being established in Britain. These groups include the Greeks, Polish, Vietnamese, Chinese, Ugandan Asians, as well as the very recent arrival of Afghans, Iraqis, Iranians, and Somalis, amongst others. They join older established communities such as the Jews, Indians, Pakistanis, and Afro-Caribbean Blacks. Ethnic communities tend to have a strong attachment to their traditional foods as part of their culture. Although the supermarkets are always searching for new markets to expand into, some ethnic food markets, such as the Vietnamese or Greek, are probably too small to provide attractive economies of scale for the large supermarkets. This type of food, then, can be a niche market where small grocery shops can, for the moment, be safe from price undercutting. However, if such communities grow in numbers, or their food becomes accepted by the wider public (as Chinese and Indian food has), the supermarkets will enter this market. Also many ethnic-minority shopkeepers believed their children would not run the shop after they retired, but go to university and follow a different career. Although some shops can shelter in this niche market, the localised concentration of a growing ethnic community can be a threat to the trade of small shops geared to serving the 'old' ethnic mix of the area. That 'older ethnic mix' is likely to comprise the poorer white pensioner community, who do not wish to use ethnic-minority food shops. Adherence to ethnic, traditional, foods could be an aid to a healthier diet, if it encouraged home cooking and consumption of fresh vegetables; however price factors sometimes meant poorer Asians ate a worse diet than if they
consumed locally available ‘White’ vegetables. This also worked in reverse, where poorer white pensioners declined to consume nearby Asian vegetables.

6.2.10. The importance of micro-geography, access for the disabled

Many effects of community, access, and competition were local, operating over distances of 100 metres or less. Whether a small shop thrived or slowly declined was often determined by this small distance, relative to features such as supermarket access, bus stops, car parking, and pedestrian flows. Supermarkets could either augment or reduce the trade of small shops depending on the exact arrangement of shop doors and access points for customers arriving by bus, car, and on foot. For the disabled, the effects of distance could be at a scale of tens or hundreds of metres, such as a severely disabled shopper who could not access both Sainsbury and the other shops when Sainsbury, north Leeds, relocated a few hundred metres away to a larger store across the car park. Sometimes the scale of distance could be much less. Shops have an internal geography too, and the presence or absence of a step, or the last few millimetres of clearance or otherwise for wheelchairs could make all the difference to access to food. Other very small-scale effects on disabled access included the width of pavements on the way to the shop (section 5.6.1), or the distance a person with arthritic hands had to carry shopping in a basket to the checkout, where the shop was too small to have trolleys (section 5.6.2). For those dependent on the bus to access the shops, whether regular, supermarket, or Access bus, both the geography of the bus service and the internal layout of the bus were important. Progress has been made in the provision of low-floor buses the disabled can use, but perceptions of an older less disabled-friendly bus service linger and these perceptions prevented full access to shops and other facilities for many. Improving access for the physically disabled, which may be required under the Disability Discrimination Act, also gives easier access to groups such as mothers with children.

6.2.11. Economic benefits of local grocery shops

Globalisation and improved communications has put businesses, large and small, under more intense pressure. There is pressure from competitors and from customers for lower prices. There may be calls from shareholders, for larger businesses, and from banks, for smaller businesses, to deliver better financial returns. As detailed above, smaller businesses especially face tax and regulatory demands from government, whilst larger businesses are increasingly coming under ethical and environmental scrutiny
from vocal pressure groups. In this environment, businesses tend to become lean in outlook, focussed very tightly on solely those activities that make a profit, or at least produce a PR benefit, and so may indirectly raise profitability by gaining customer numbers. Government departments are under similar pressure to deliver best value for the limited money there is available. Even charities and other community groups face leaner times as donations may fall (section 4.5.1). Householders too face increasing pressure to preserve the value of their principal asset, as house prices rise in real terms and any fall back down the housing ladder becomes harder to recover from, and threatens a perceptible loss of living standards or a poorer retirement.

In this self-protective environment, benefits of supporting facilities such as local grocery stores may be overlooked. Property owners, from private householders to Housing Associations, may benefit from a local store; section 5.1.2 showed how for many (but not all) villages, house prices were higher if there were local grocery shops. Estate agents would also benefit, in higher commissions, by such higher house prices. Housing Association properties were also easier to let in many cases where shopping facilities were good. By extension, council housing agencies and private landlords would also benefit from this, as would the landlords of shop units, council and private. Local micro-geography can also cause a shop to bring down house prices; where the shop causes nuisance from children, or localised traffic congestion or even food smells. Some ‘exclusive’ villages resisted shops because they might attract less well off residents, and many villages did not want mobile shops, fearing noise, litter, and pollution. Nevertheless, with careful siting of shops and houses, an overall property value benefit from small shops is discernible.

Bus operators benefit from preservation of town centre shops, as traffic may be lost if shops migrate to out-of-town centres, or shoppers divert to supermarkets (section 5.2.2). Other services providers to small shops would benefit, from wholesalers and road hauliers to business-service providers such as solicitors, accountants, and sign-writers. All of these services are used far less by supermarkets than by small shops. Many shops would benefit from synergies by being close to each other, and to local grocery shops, from banks and cafes to tourist shops and Post Offices. Again this is not universally true; takeaways were of less benefit because they open at different hours, and shops can attract nuisance value in the form of unruly youths, hampering the trade of other shops.
A thriving local grocery sector would cut the vandalism and other crime generated by empty shop units, and there would be significant health savings. In turn, a better diet would improve behaviour in institutions from schools to prisons. There is a wide range of bodies, from government agencies to private businesses and householders, who would see greater value accrue to themselves from a flourishing small shops sector. Economic theory would suggest that some of this benefit should be payable as support to small shops, to the benefit of all. There would be four problems to this economic transfer. Firstly, the anti-subsidy climate of the EU. Secondly, the task of convincing many of these parties that such a transfer would in fact be in their interests; this itself would cost money. Thirdly, the short-term outlook of many of the parties. Government looks to a five-year maximum horizon, to the next election, and many businesses, with high discount rates of the future, also prefer certain and short-term returns. Fourthly the fact that in any transfer the losers shout the loudest whilst many beneficiaries keep quiet for fear of their gains being taxed. This creates considerable political inertia against major changes, because no political party wants to create many vocal enemies. The next chapter looks at the different sorts of food deserts discernible from this research and how these may be classified. This classification may then be used as an indicator of the different policy measures applicable to different types of food deserts.
Chapter Seven
Initial conclusions from this research

7.1. Ten different types of food desert — a ternary diagram-based classification

This research has shown that food deserts, “areas of relative exclusion where people experience physical and economic barriers in accessing healthy food”, as defined by the Low Income Project Team in 1996, may exist almost anywhere and that psychological or ‘attitude’ barriers are also important. The wealthy may even be affected by them, if suffering some other barrier to food access such as disability or even lack of time to cook. This classification of food desert types is broadly arranged in order outwards from city centres to rural areas.

Table 7, overleaf, is a list of possible food desert areas, examples of these in the present research, and who may be affected by a food desert situation there. Several of these areas have not previously been recognised as potential food deserts by earlier research, but the qualitative interviews conducted during this research indicate that some people have food access problems in these districts. Examples of these ‘unrecognised’ food deserts include Beeston, an area with apparently abundant provision of ‘large’ greengrocers (that is, those who stock a wide variety of fresh fruit and vegetables). Wealthier suburbs such as Alwoodley (Leeds) or Bottesford (Scunthorpe) may also be food deserts to some living there, although the food desert phenomenon has generally been associated with deprivation. The reason areas like Beeston and Alwoodley may, nevertheless, be a food desert for some is that access to food is mediated by more than geographical proximity. Wealth, physical travelling ability, possession of personal transport, and especially the cultural or ethnic attitude to food consumption, are also of great importance in affecting what food is bought and what food is eaten at home. The numbers in Table 7 correspond to those used in Table 8, and on the Ternary Diagram following, Figure 17.
Table 8. List of possible food deserts, identified from this research.

<table>
<thead>
<tr>
<th>Type of area</th>
<th>Examples in this research</th>
<th>Who may be affected</th>
<th>Relevant section of this thesis</th>
</tr>
</thead>
</table>
| 1) Inner-city 'docklands'
   Leeds, 'The Calls'
   London Docklands                                  |                           | Young single high-earning executives                      | Section 5.9.                   |
|                                                   |                           | (cash rich, time poor)                                    |                                 |
| 2) White inner-urban poor                         | East Park, Leeds          | Elderly, disabled, mothers 'disabled by children'.        | Section 4.7.3.                  |
| 3a) Inner city ethnic minority area
   Beeston, Leeds                                     |                           | White pensioners, retired 'in situ'.                       | Section 5.8.                   |
| 3b) Inner city ethnic minority area
   Beeston, Leeds                                     |                           | Poorer ethnic minority residents                          | Section 5.8.                   |
| 4) Inner city student rental areas
   Hyde Park, Leeds                                   |                           | Families and pensioners                                   | Section 4.3.5.                 |
| 5) Peripheral poor council estates
   Gipton, Seacroft, (Leeds)
   North Lynn (Kings Lynn)                           |                           | The poor, without cars, unemployed, the elderly, women in single-car households | Section 5.9.                   |
| 6) Wealthier suburbs
   Cookridge, Alwoodley (Leeds), Bottesford
   (Scunthorpe)                                      |                           | Car-less households. The elderly, or lost car through theft, disqualification etc. | Section 4.7.3.                 |
| 7) Poorer areas of rural market towns
   Parts of Brigg, Great Yarmouth                   |                           | Refugees, unemployed, some working persons                | Section 4.7.3.                 |
| 8) Peripheries of rural market towns
   Barton on Humber, Brigg, Kirton                   |                           | The less-mobile, elderly, mothers, disabled, carers       | Section 4.7.3.                 |
| 9) Rural areas, villages
   South Kelsey, Owston Ferry                        |                           | Those without cars. The elderly, poor, women in single-car households | Section 4.7.3.                 |
| 10) Coastal holiday chalet districts               | Norfolk coast             | Poor, elderly. Those who over-winter there.                | N/A                             |
These possible deserts can be placed on a ternary diagram. Ternary diagrams are used where an entity has three components, each of which sum to approximately 100% of the whole. For example soil scientists classify soils according to their clay/silt/sand content, and psephologists use them to analyse the vote in UK elections, split into Conservative, Liberal, and (New) Labour votes. In the latter case, the three components may fall somewhat short of 100%, say because of a 5% vote for the Green Party; in this case the three main components are normalised to 100%. The ten types of food desert listed above can be classified according to the relative importance of ‘ability’, ‘assets’, and ‘attitude’; the three components of ‘access’ problems as discussed in section 1.5. Further research would enable a more quantitative methodology here but the following table shows the relative importance of these three factors in each food desert. The importance of each component has been derived from the interview material in chapters four and five.

Table 8 overleaf shows the basis for classifying the different food deserts identified from this research into a ternary diagram.
Table 9. Classification of food deserts by ability, assets, and attitude

<table>
<thead>
<tr>
<th>Food desert type</th>
<th>Ability problems</th>
<th>Assets problems</th>
<th>Attitude problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) City centre ‘docklands’</td>
<td>zero</td>
<td>zero</td>
<td>high</td>
</tr>
<tr>
<td>2) White inner city poor (OAPs)</td>
<td>high</td>
<td>high</td>
<td>low</td>
</tr>
<tr>
<td>3a) Inner city ethnic minority area (white OAPs)</td>
<td>medium</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>3b) Inner city ethnic minority area (ethnic minorities)</td>
<td>low</td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>4) OAPs in student rental areas</td>
<td>high</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>5) Peripheral poor council estates</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>6) Wealthy suburbs (car-less, OAPs)</td>
<td>high</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>7) Poor areas of small market towns</td>
<td>low</td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>8) Edges of small market towns</td>
<td>high</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>9) Villages</td>
<td>high</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>10) Coastal holiday areas (over-winter)</td>
<td>high</td>
<td>medium</td>
<td>low</td>
</tr>
</tbody>
</table>

Certain generalisations have been made about some populations for the purpose of this table. These are:-

* Pensioners in inner city areas are poor, as they have retired ‘in situ’; pensioners in student areas are not quite as poor as they live in a slightly better area.
* Ethnic minorities in inner city areas are poor, but as they are working, not as poor as the pensioners there. The proportion of ethnic minority citizens in the UK who have retired is very small, though growing faster than the population of White retired is.
* Residents of working age on peripheral council estates often lack cooking knowledge (‘attitude’ problem), but older pensioners have more cooking skills.

These types of food deserts can now be plotted on a ternary diagram, if the descriptors zero, low, medium, and high are assigned the numerical values 0, 1, 2, and 3 respectively. Each food desert type now has a total; for example type 7 was described as ‘low-high-medium’. This translates numerically as ‘1, 3, and 2’. 1+3+2 is 6, and (remembering that these are only approximate, qualitative descriptors), this food desert can now be plotted as follows. Ability = 1/6, or 17%, assets = 3/6, or 50%, attitude = 2/6, or 33%. Following this procedure gives the following ternary diagram.
Figure 17. Ternary diagram of a ten-fold classification of food deserts
Ternary diagrams can show the different types of food desert, but need some modification if they are to be used as a policy tool. A policy aim might be to alleviate the problems of ability, assets, and attitude that are creating a food desert. But ternary diagrams are not conceptually suited to a situation where all three components are being reduced. On a ternary diagram, a food desert type where all three components are 'high' would occupy exactly the same position as one where all three components had been reduced to 'low'. The usual users of ternary diagrams, soil scientists and psephologists, do not generally face situations where all three of their primary components of soil, or share of the vote, are reducing towards zero.

Extra dimensions can be added to a food desert ternary diagram by varying the size and colour of the food desert plots. For example the size of the square plot could be proportional to the number of households affected. The colour of the square plot could vary by density of households affected within a certain areal unit, a postcode, enumeration district, or square kilometre. Red squares could be where 80% - 100% of households are affected by food desert conditions, orange for 60% - 80%, yellow for 40% - 60%, green for 20% - 40%, and blue for 0% - 20%.

Figure 18 overleaf shows how such a food desert plot on a ternary diagram might look, and the policy implications indicated, for a hypothetical city, Tropheton. Seven food desert areas are shown for Tropheton. There is a 'wealthy-docklands' type food desert in the 'attitude' corner, affecting a small number of households, though it affects a large number of the households in the 'docklands' area. There are two food desert areas towards the 'assets' corner, perhaps poor inner city pensioner or ethnic-minority areas. About half the households here are affected. But the two largest food deserts are towards the 'ability' corner; these could be somewhat wealthier suburbs with a large number of pensioners who no longer drive cars, and where many small grocery shops have closed. The policy implication for Tropheton is that the biggest impact can be made, here, on food deprivation by 'ability' oriented policies. These might be support for local shops, or improving bus transport to major shopping centres.

The question now is, how can the size or intensity of food deserts be measured? Are there micro-food deserts, or is there a minimum number of households in a certain area experiencing 'food access' problems below which we cannot really talk of a 'food desert? This question is now examined in the next section, 'how big is a desert?'
Figure 18. Hypothetical quantitative food desert ternary diagram for ‘Tropheton’.

A geographical definition of a ‘desert’ was mentioned in section 1. A region with less than 10 inches of rainfall a year. If people are asked what a desert were likely to respond with, a concept of barrenness; some would classify them using but mythical etymology:

The specialisation of some industries has led to its growth as a desert in a glacial context. A human study team over the desert where desert ecosystems would persist and become the desert landscape. A desert is certainly not one. Trying to pin down the concept of a desert is not as simple as some people concept. Some may say that a desert is an area only heavily affected by the environment, that is, a desert region is a region subject to arid conditions. Deserts also extend, if the situation permits, to semi-arid environments that are not subject to the same degree of aridity. Deserts also provide a unique environment for the study of desert ecosystems, the many species that are unique to the desert environment.

For explanation of symbols, please see previous page.
7.2. How big is a desert and can it be crossed?

A geographical definition of a ‘desert’ was mentioned in section 1.4 as an area with less than 10 inches of rainfall a year. If people are asked ‘what is a desert’ most seem to respond with a concept of barrenness; some would classify more fertile but uninhabited areas as ‘deserts’. The question of how big such an area has to be to count as a desert is trickier. Presumably, a barren sandy area ten metres across (between fertile regions) would not be a desert, but a barren area a thousand kilometres across would certainly be one. Trying to pin down a more precise size cut-off may elicit some interesting concepts. Some may say that even several hundred kilometres of sand may hardly be a desert, if one is crossing it in a car; this makes deserts a subject of personal travel ability. Others say even a two kilometre stretch may be a desert – if surrounded by water, that is, a desert island. This raises questions of why the size concept of a desert is subject to what comprises the non-desert surrounding it; water, or fertile land. Some also asked, if the definition of a desert is the 10-inch isohyet, whether very small deserts could be identified at all, given that rainfall varies over space and time. Just as contour lines on Ordnance Survey maps would become meaningless at very large scales, so rainfall isohyets, and hence desert ‘boundaries’, can only be mapped to a certain degree of accuracy. These concepts of ‘access’ and ‘surroundings’ are relevant to the question of size of food deserts. The concept of mapping isohyets is relevant to the mapping of degrees of food desertification.

A ten metre, or even a thousand metre, stretch of sand may not be seen as a desert because the problems of crossing it, even on foot, are trivial. Even with ten kilometres of sand, one only has to take a bottle of water and a packed lunch. There is a physiological cost to carrying these items, but the cost (effort) of coping is bearable. The reason why a person cannot cross the Arizona Desert on foot (to the relief of USA Immigration Services) is that the physiological cost of carrying enough water is unbearable. Human beings cannot carry that weight of water. In a jeep, the Arizona Desert is probably traversable. However in a streamlined sports car, even if there was a good road, crossing might be difficult again, because this car cannot carry the reserves of petrol and water needed. The coping strategy of carrying reserves or water and fuel breaks down.

Food deserts impose costs, just as physical deserts do. The costs of a food desert ultimately fall on the government. Costs of a poor diet or lack of access initially fall on households but there are a variety of coping strategies, such as getting others to do the...
shopping; either via formal or informal care. Or coping may involve foregoing certain foods that are important for health, such as fresh fruit and vegetables. Coping may involve travelling further, spending more on transport, or taking more time, to shop. Economically these are costs on ‘society’; resources are used, perhaps in healthcare, caring, transport, or even time; all of these are what economists term ‘scarce resources’. That is to say, they are not available in limitless quantities. Through the medium of government and taxation, many of these costs are spread around and borne by all.

A food desert may in theory consist of just one household. This household may be the only one in a rural area far from shops, or the pattern of shops may be such as to leave just one household further from the shops than the distance that any household member can walk to the shops. In this case the costs to society would be trivial; a council carer, or another family member, could satisfy this household’s grocery needs quite easily. This is analogous to the ‘ten-metre’ desert mentioned above. If there were a hundred, or a thousand, households without easy access to grocery shopping, the costs would be more noticeable, less bearable by society, and this may count as a food desert. If society as a whole became wealthier, larger agglomerations of ‘food-access-poor’ households would count as bearable costs. This is analogous to a person crossing a desert, not on foot but by jeep. However under globalisation and the need by governments to cut spending as global companies produce a ‘more efficient’, ‘streamlined’, economy, we have the analogy of crossing the desert in a streamlined sports car; carrying capacity has fallen again. In a globalised society, costs that once seemed bearable may not be quite so comfortably met, costs such as those imposed by small food deserts. Society has to decide at what point the number of households affected by food access problems is imposing such costs that policy action is needed, whereas below that point local coping strategies can be left to function. The physical desert analogy above suggests that in globalised societies, there should be greater keenness to eliminate the inefficiencies of food deserts. However the politics of globalisation tend to push spending the other way, away from alleviating food access problems. This may simply be storing up higher costs for the future.

Small food deserts, of a few dozen households, may be more noteworthy for their food access problems if they occur on the edges of small towns; for example the access problems noted in chapter five of those on the edge of Brigg. In a city, a few tens of households could perhaps have transport, taxis or a bus route diversion, provided. Those on the edge of small rural towns may well have poor public transport, and count as a food desert. This is analogous to the ‘desert island’ phenomenon, where a desert of
a few square kilometres is seen as a desert if on an island, but not seen as such if surrounded by fertile land.

As we map isohyet lines for physical deserts, it may be possible to map food desert intensity lines, though this would take considerable surveying and GIS processing. Food deserts will have fuzzy boundaries. Food desert intensity, the number of households affected and the degree they are affected; at small neighbourhood levels, perhaps enumeration districts, there will be a greater intensity towards the middle of food deserts and less towards the edges. Food deserts could be measured by an index of food access problems, analogous to deprivation indexes like the Carstairs Index; or they could be measured by the costs they impose on society. The political Left may prefer the former measure, the Right may prefer the latter. Instead of isohyet lines, food desert intensity, or cost, could be marked by isotropheremos lines, from the Greek iso(=equal), troph(=food), and eremos(=desert).

Figure 19 shows how a theoretical isotropheremos 'contour map' might look for a part of east Leeds. For clarity, just two types of food desert (from the list proposed earlier) are shown.

Figure 19. Hypothetical 'isotropheremos' map for part of east Leeds

(map downloaded from www.multimap.com on 23/8/03 and subsequently modified)
Drawing such maps using survey and GIS techniques would be a useful policy tool, and policy performance could be monitored as the contours changed, hopefully reducing in value over time.

The next section looks at the food desert initiatives already in progress, and those suggested by respondents during this research.

7.3. Food desert initiatives already in progress

Chapters Four and Five have detailed some of the initiatives already in progress to maintain access to a healthy diet. These initiatives largely fall under the categories of health maintenance or business support.

Health-based initiatives are being aimed at both adults and children. Section 5.9 described neighbourhood community buildings such as the St Augustine’s Centre in Kings Lynn where one-stop centres for the poor were set up. Cooking skills were taught, along with how to grow these vegetables in allotments or gardens. Actually eating these vegetables is an important stage of the food chain (section 5.9) and schools have begun various programmes such as ‘food dudes’ to persuade or bribe children to eat a healthier diet. A potential problem here is that bribery may present vegetables in children’s minds as something inherently undesirable (section 5.9).

Doctors in the Wirral, Merseyside, are also using financial incentives to get some of their adult patients, those at risk of heart disease and on an exercise programme, to increase the fruit and vegetable intake. The GPs give their patients vouchers worth £6 a week, redeemable as the local Co-op, for fresh, tinned, frozen, or dried produce, for up to ten weeks (Guardian, 1/8/01, p.9). The Co-op was chosen as it is easier to reach than out-of-town superstores, and is also cheaper. The scheme appears to work, with patients actually spending several times more than this £6 a week on fruit and vegetables, from little or no consumption of these items before. The NHS saves much more in reduced medication and hospital treatment than the cost of the scheme. In Scunthorpe the dietetics department has an outreach programme for the Crosby area, where many poor and south Asian families live (section 5.9), promoting the use of allotments and teaching cooking skills.

A healthy diet can be made accessible to a wider population by the means of community shops (section 5.9), which have been set up in Sheffield, Nottingham, and
Bristol. Sometimes, the wider community, or at least the more vocal middle-class section of it, can exert pressure on large multinational corporations to provide a healthier diet. In the UK, McDonald’s was losing custom amongst the middle class and closing some of its restaurants, because of the unhealthy image of its food (The Times, 1/3/03, p.3). Apples and grapes were to be provided at McDonald’s UK outlets, and promoted to parents as one of the government’s ‘five a day’ fruit and vegetable consumption target.

There are also business-based initiatives to promote or retain local shops. The HSBC has a ‘South Asian Banking Scheme’ (Policy Action Team 13, 2000, p.9). This is aimed at supporting small shops run by south Asians, whose financial need is very different from larger enterprises. The UK government, in a July 1998 White Paper, ‘Modernising Local Government’, proposed mandatory rates relief on businesses with an annual turnover of under £100,000 (Policy Action Team 13, 2000, p.56).

Schemes are also in progress to preserve rural facilities. Section 4.1.2 reported on moves to transfer village Post Offices to the church or pub. Some villages have seen the local inhabitants buy out the local shop when it was about to close. For example, Winchelsea, Sussex, had seen its retail provision decline from a grocer, Post Office, butcher, baker, ironmonger, general store, bank, café, and three pubs in 1970 to a butcher, general store, café, and two pubs in 2001; and the general store was about to close. In 2001, 240 villagers in Winchelsea put up £13,500 and the Countryside Agency provided a further £18,000 for refurbishment to buy this store and keep it open (Sunday Telegraph, 10/3/02, p.5). In Maiden Bradley, Wiltshire, the Countryside Agency contributed £21,000 and villagers paid from £5 to £500 for shares in the shop they now owned. However, because of the organisation and funding needed, these village buy-outs tend to be in the wealthy southern part of Britain, or affluent parts of Cheshire and north Yorkshire, not in the poorer former mining villages. This is a similar spatial inequality to that of rural Internet access (section 5.4.1).

7.4. Food desert initiatives suggested by respondents and other food agencies

7.4.1. Initiatives to improve the diet of the disadvantaged

The Low Income Project Team (LIPT) 1996 suggested a number of initiatives by a range of government and non-government organisations. These included (pp.22-4) “maintaining a place for food and nutrition in the [school] curriculum”. To do this
effectively would require a loosening of the culture of ‘targets’, which the government has placed on schools. If what used to be known as ‘domestic science’ was simply added to teacher’s workloads, without compensating reductions elsewhere, there would be adverse effects on the whole teaching system. The LIPT also called for “the introduction of school breakfast programmes”, where appropriate. This would also place a further load on school staff and administration, which would need compensatory reductions in work targets elsewhere, or more funding for extra staff. LIPT also called for a “revitalisation of allotments and a reassertion by government of the value of growing one’s own food” (section 2.2.5). This would require money from central government, because it is the shortage of cash amongst local authorities that is driving the conversion of allotment land to uses such as housing.

The LIPT wanted the DSS to “recognise the absolute requirement for adequate cooking facilities and domestic fuel supply”, and to “exempt money gained from selling home-grown produce from earnings declaration”. This would mean an increase in Social Security spending as Housing Benefit claimants would have a right to accommodation with certain kitchen facilities and a right to have their fuel bills covered by Benefit payments. The DSS might dislike even more the suggestion that surplus food grown by claimants could be sold without the income being set against Benefit payments. At present the rules on income are fairly strict; any income over £5 a week, unless earned on a Sunday, is deducted from Benefits. The DSS finds this inflexible approach easy to administer but is aware it encourages cheating, usually by non-declaration of small amounts of income; the government has imposed targets on the DSS for a certain amount of fraud detection and recovery each year. By exempting income from food sales, the way could be open to a sort of ‘income laundering’. It would be difficult to prove, in a setting of informal street sales of home grown vegetables, with no receipts given, that a DSS claimant was truthful about their income sources.

Schemes similar in a way to this food-sales-exemption proposal already exist; they are called LETs. Local Exchange and Trading Schemes are very much on the fringe of legality as seen by the DSS. Because no actual cash is given for goods and services exchanged under a LETs scheme, it is hard to claim Benefit fraud is going on, though the DSS would like to be able to impute a cash value to the tokens, or ‘local currency’, that is exchanged. The idea of local currencies is more developed in the USA, where they have been used to raise money for local food-related businesses (Boyle, 1997). Besides boosting the local economy, some local currencies act as a “reward for
altruism” (Boyle, p.13) encouraging people to help out on tasks their neighbours cannot do, thus building a community spirit.

7.4.2. Tax changes to support small shops

Other agencies called for tax changes to support small shops, some of which would not be possible under current international trade rules. R.29 (Roundhay butcher) said “Stop meat imports, we need international trade but not at the expense of UK jobs”. A.106 (CPRE, Lincolnshire) went further, saying “One would like to see a smaller, more sustainable, community rather than a trend towards the big multinationals. The [multinational companies] have an effect across the board, on agricultural prices. Brigg cattle market closed because it is easier to grow corn or rape, sugar beet or potatoes, than it is to look after livestock. So how could we help small shops; get out of the EU. It hasn’t done the rural economy a lot of good, not even the subsidies as they are coming from ourselves anyway”.

Withdrawing from the EU might be a rather too radical way of supporting small rural shops; almost as radical was the suggestion by A. 114 (Leeds bus company) to impose retrospective taxation on out-of-town shopping centres such as White Rose. This respondent said “Currently new shopping developments have to pay for new road and transport infrastructure, I think existing centres like White Rose should also be asked to do that. White Rose, Crossgates, and so on should be assessed retrospectively. I do think that if we are serious about the quality of life we want to see in our towns and cities there has to be more of this ‘joined up thinking’ [a slogan of New Labour in the 2001 election campaign]. Out-of-town shopping is generating far too many unnecessary car trips, we are losing a lot of the quality of the town and city centres”. UK legislators, however, generally dislikes retrospective legislation, because it is contrary to ‘natural justice’. Parliament tries to avoid such legislation, though does not abjure it entirely. Where agencies have been acting in a way that clearly was not intended to be legal under other legislation at the time, but was not in fact expressly prohibited by law, Parliament may legislate retrospectively to prevent such agencies gaining by those actions. For example, agencies may have found a tax loophole that clearly was not intended to be legal; retrospective legislation may be passed to prevent taxpayers gaining by this loophole. Legislation to extract revenue from large companies to pay for social improvements is possible in the special circumstances of planning, under the Grampian Condition, (section 4.5.4). Normally, however, such a fiscal act would fail for economic and political grounds. Large companies may have the
influence to persuade government not to legislate this way. An example of this was the idea, proposed by the UK government in the late 1990s, to tax car parking spaces provided by companies. This would affect both office car parking and supermarket car parks. Proposed on environmental grounds, it would have ended up as just another tax on the consumer. The tax would have been passed on to shoppers, whilst still leaving the costs of supermarket shopping below many small shops, and this would be inequitable because shoppers not arriving by car would have paid for the tax too. Politically, a tax on centres like the White Rose would be seen as restraining the trade of retailers, contrary to the 'level playing field' idea of the EU. It would be very difficult to make a case for non-retrospective, let alone retrospective, legislation, to tax shopping centres in order to support small local grocery shops.

Several respondents suggested earmarking taxes, for example the proposed parking space tax, in order to specifically support local retailing. This is known as hypothecation, and is supposed to have two advantages. In theory, it makes government spending more transparent, and it should increase willingness to pay the hypothecated tax, because all can see where the money is going. In practice the Treasury resists hypothecation, for three reasons. Firstly, tax revenues generally rise and fall as the economy grows or shrinks; but the demand for the money a hypothecated tax is supposed to satisfy often varies in the opposite way, rising as economic activity falls. The government would even this out by adding to the tax revenue in times of recession, and creaming off the surplus in boom years; this would destroy the hypothecation relationship. Secondly, hypothecation might erode ‘willingness to pay’ taxes by those who didn’t benefit from the item the tax was spent on, rather than increasing willingness through transparency. Thirdly, hypothecation reduces the freedom of the government to use tax revenue as it sees fit.

Other proposed tax changes included “Charge VAT at only 5% to small shops but keep it at 17.5% for supermarkets” (R.37, Middleton convenience store). Apart from the objections Brussels would make, there would be a problem in defining what was a ‘supermarket’. Some suggested improving employee and hygiene training opportunities for small shopkeepers. A.85 (Leeds Councillor) said “Maybe assistance via the New Deal, employment opportunities, a small employer who wants to train someone up as a shop assistant should be given government assistance to do that. It’s OK to subsidise wages with Brussels if it’s a job creation scheme. So you can say small shops, small businesses, employing less than four people who want to take someone on for training, and with a training programme, not so they’re a dogsbody but to give them real
training in a job, maybe the government could subsidise the wages of that person, up to 75% say". Small shops, however, might have few ‘training’ opportunities, and the supermarkets could argue this was unfair as training and career development prospects are greater for their employees (see section 2.4.5, impact of the new Tesco at Seacroft, Leeds). Over, any explicit tax support for small shops would be very problematical, both legally and administratively. It might be possible, though, to extend the existing ‘last shop in a village’ support scheme to the last shop on a suburban estate. This could be coupled with education initiatives to raise consumption, and so demand, of fresh fruit and vegetables, which would then be stocked by this ‘last shop’.

7.4.3. Grants, subsidies, and regulations

Many said the grants system for small shops needed simplifying (section 4.5.1). A.57 (Housing association, Leeds) said “There could be more sensitive use of private taxation policies, grant aid policies, by local governments, that would help keep small shops open. It’s a patchwork approach now, some areas have SRB funding, European funding, some don’t. Low rent start-ups could be provided by the local authority-owned units, or low rates for a period. You could reduce taxes, this would be better than subsidies. Sensitive targeting would be needed”. A.86 (Leeds Councillor) said the suburbs were being neglected in favour of inner city areas, “The government is channelling so much money into inner city areas that suburbs like Headingley are in danger of becoming much worse. They are not addressing the problems of areas in decline that are not inner city, but which are becoming that way. Places like Headingley are coming down fast. Areas need stabilising even if they don’t look too bad now”.

A reduction in rules and regulations was needed, according to A.18 (Bangladeshi community, Leeds). “Encourage shopkeepers to make access easier for disabled people, also to have less rules and regulations applying to the food shops. Make it easier to open a business in a residential area. But there would be problems with narrow streets for deliveries, issues of pensioner and child safety”. As this respondent acknowledges, rules and regulations, though disliked by business and often bearing down disproportionately on smaller enterprises, are necessary for public safety, the environment, etc. The costs to others of reverting to the laissez faire approach of a century again regarding shops would exceed the benefits of any improved food access, and would be politically intolerable. Targeting assistance to food-deprived areas, and food education, may work better than reducing business regulations.
This is where a classification of food deserts would be very useful, as it would facilitate the targeting of different initiatives to different types of food access exclusion. The cost and complexity of administration of this targeted approach would then be better paid back in improved results. A funding policy that applies to a definite area only is normally subject to inefficiencies, wasted payments. Firstly, companies in the area benefit who don't need the funding. Secondly, some companies relocate over the boundary into the area just to get this funding. An areal classification of food deserts, as proposed in figure 19, p.201, of this research, could help reduce these efficiencies. Only the most food-desert-affected areas would get funds, targeted so as to have the maximum effect. Marginal food desert areas could get less funding, reducing the inefficiencies mentioned above.

7.4.4. Rent and rates reductions

The possibility of reducing rates or rents was discussed in section 4.5.2. Further suggestions included making the rates relief for the last shop in a village of under 3,000 people (now 50% mandatory and up to 100% discretionary) mandatory at 100% (A.105, Countryside Agency, Leeds). Another possibility was linking rates and even rents to the level of turnover, giving the landlord and the local authority an incentive in seeing the small shops do well (Policy Action Team 13, 2000, p.57). Private landlords might not be able to afford to do this, leading to migration of shops to council-owned parades as shown in section 4.5.2. Perhaps local councils could pay a sort of 'housing benefit' to shops, much as low earning individuals get housing benefit even whilst in work. Just as if the individual gets a pay rise, the benefit is reduced, so higher earning shops would not get this support. Contributing towards rates and rents would preserve the incentive for the shop to make a profit, and also reduce their ratio of fixed to variable costs (section 4.2.1) so reducing the shop's percentage mark-up on wholesale prices. Although the 'taper' on contributions to rent would need to be gradual, and therefore costly to local councils, the increased business local shops might do might result in lower costs eventually. This is similar to the 'J' or Laffer Curve theory of personal taxation in the USA, which says that tax cuts stimulate the economy, so that initial fiscal losses to government are recouped in time as the economy grows. Politically it could be hard for councils to reduce rates on small shops because this money goes to central government and the rates are
set by the District Valuer, an agent of central government. In some cases, such as the empty parade of five shop units on Everest Road, Ashby,\(^{57}\) these units would probably not be taken up even at zero rent and rates because of the social problems of the area. If local spending power is low and crime high, low rent and rates may not be enough to bring in tenants to such units.

7.4.5. Better transport, not better shops

Some respondents argued that shops should be left to survive or not, as private business enterprises, but that better transport was needed, especially for the elderly and disabled. A.16 (disabled support, Leeds) said “In rural areas there will be no clothes shop, so there is still a need for better transport [even if the local village grocery is doing well].” A.84 (North Lincolnshire Councillor) said “If interference in the market is needed it would be better to help those disadvantaged by bringing their shopping to them, like care workers for example, for the elderly and disabled, if their families aren’t able to help”. A.16 recognised that food is not the only commodity those with lesser mobility capabilities need to buy, though both A.16 and A.84 do not account for the psychological benefits of being able to access local grocery shops and have the independence of buying one’s own food. It will depend on the degree of disability; moderately disabled persons may still access shops close by, and very disabled persons would not be able to use most public transport anyway. Section 5.2.3 dealt with the issues of the disabled and their access to transport.

A.105 (Countryside Agency, Leeds) saw the future for rural retailing as busy market towns, which would serve villages with few or no shops. They said “The more buses you provide the more at risk the village shop is. Public transport is the key to sustaining rural communities, to connect villages with their market towns. We would like to see villages with meeting facilities, pubs, limited shops and leisure facilities. Our vision is of hub market towns and hinterlands, rather than be Canute-like and turn back the tide [of small village shops closing].” This could help preserve the retailing of towns like Kirton Lindsey and Winterton, where at present the loss of one type of shop, the last butcher or baker, threatens to divert more trade to supermarkets on the edge of Scunthorpe. But it might leave the villages as exclusive, without shops, lived in only by the affluent with cars. It would not necessarily alleviate the problem of small food desert areas on the edges of market towns (section 7.1).

\(^{57}\) In summer 2003 all these shops were empty and awaiting demolition.
7.5. Other food desert initiatives possibly needed

This research has suggested other ways to maintain access to grocery shops, not mentioned by respondents or already in progress. These initiatives would need to be compatible with the current economic climate of globalisation and governance, for instance in not requiring large subsidies or being costly to operate. However some of these schemes could produce revenue for the government.

Although the idea of a tax on work car spaces may not be revived, we are used to health taxes on alcohol and tobacco. There could be a health tax on sugar, too. Foods could be graded as low (0-3 grams of sugar/100g), medium (3-6g), high (6-9g), or very high (over 9g/100g) and the last three taxed at progressive rates. Most packaged foods already have to state their sugar content on the pack anyway. To increase health benefits, the money could be put into allotment schemes to raise fruit and vegetable consumption amongst the poor. Further steps could be a ban on advertising high-sugar foods, as the UK is already banning most tobacco advertising. However such a tax could be regressive, because the poor tend to eat more sugary, poor-nutrition foods. Yet the tax on tobacco is also somewhat regressive, as many of the poor spend a large fraction of their budget on cigarettes, and we do not generally regard tobacco taxes as unfair.

Crime and anti social behaviour such as gangs on the streets could be tackled by more policemen on the beat, along with investment in youth groups and education of parents. Better evening bus services to and from villages would give teenagers there access to youth facilities in nearby towns. These measures would stop intimidation of customers outside shops, and probably lower the incidence of shoplifting too.

The ‘last shop’ scheme whereby the sole shop in a village of under 3,000 can be supported could be extended to lone shops in suburban housing estates. There should be no competition issues, and access to some form of food retailing would be maintained for local households. Deprived wards could be identified and then treated as if they were villages. The shop still open there would not necessarily stock fresh fruit and vegetables, but if combined with the sugar tax mentioned above and education initiatives to raise fruit and vegetable consumption this could change. Local shops

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58 As suggested in The Independent (30/9/02, p.5)
would stock more fruit and vegetables if they knew there was a demand for it. But there are wider issues here such as the long work hours culture and people not having enough time to cook or buy local vegetables regularly. Main beneficiaries here could be the unemployed and those employed part time, on low wages.

Shops could act as a pick-up point for goods ordered on the Internet, but delivered when no-one is at home. When the householder collects the parcel they might buy something in the shop. Some shops already do this for parcels, and other shops were sympathetic to this idea when mentioned at the close of the research questions. Other shops, such as butchers foresaw problems such as hygiene, with packages close to cooked meats. Some small shops would not have room for packages.

A government agency to publicise the grants available to shops would be useful. This could also liaise between local councils and shops regarding new developments, and possibly to examine the grants themselves regarding simplifying them and prolonging their life, so the array of grants is not changing too often. Having a café near shops should attract customers. In Melbourne, Australia, the food market has a good range of cafes, cheap ones as well as 'trendy wine bars', so that all social classes are attracted.\(^{59}\) This would probably not be profitable as a private enterprise, but could be operated by a charity or community group, and contributed to by the shops nearby. Shops could operate a points card system, although no one shopkeeper would want to have the job of administering this.

Planning categories could be changed so as to prevent local foods shops changing to non-food uses. This would need careful handling because planners cannot force shops to stay open; they cannot force a particular type of shop to come to a parade, or prevent shop closures. Generally, an occupied shop unit is better for the shop next door than a closed unit; exceptions may be off-licences or late night takeaways that generate litter and rowdiness. Planners could be more pro-active, surveying what retail uses are needed in certain parades, and attempting to find proprietors who would fill these uses. Giving preference to, say, a grocers over a computer shop, would be easier legally if panning categories could be tightened up to differentiate between the two. Planners and architects could carefully consider pedestrian flows so as to route customers to large supermarkets past smaller shops; the disabled would still need direct vehicular access to the supermarket entrance, as would delivery vehicles to the rear. Building and

\(^{59}\) Information from an email from Professor Lang, Centre for Food Policy, Thames Valley University, 5/9/01. (Professor Lang, is, in 2003, at City University, London.)
landscape design can also play a large role in reducing crime and unruly gatherings of youths.

The ideal of placing shops in new housing estates does not seem to be working. Most new estates are too small to have to have shops provided, because builders prefer small exclusive developments, and are averse to the risk of larger sites. Where shop units are provided, they are seldom fully occupied. According to PPG3, housing should be directed to brownfield sites where possible, yet some brownfield sites, such as in Hull, may never be built on because people would not want to live there. Perhaps urban supermarkets could be built on brownfield sites, where they would generally be within a few hundred meters of housing. Wrigley (2002c, p.2106) has noted examples in Cardiff and Manchester where brownfield sites, unsuitable for housing due to the presence of industrial waste, have been used for supermarkets; these supermarkets have provided employment and other economic benefits to the area as well as improving local food access. To avoid the development of student-generated food deserts as in Headingley, some brownfield sites near universities could be used for student accommodation, leaving traditionally residential areas to be occupied by families.

Both banks and the government could take a longer-term view of the importance of small retailers. Small businesses complain that banks, keen for short term profits and anxious to avoid bad loans, place a burden on them to quickly produce profits. The burden is both financial and administrative as the bank is always demanding statements about business parameters such as cash flow. Where the major banks will not provide ‘easy finance’ for small shops, local arrangements such as credit unions could step in. These would be more needed in poor areas with less spending power; wealthy rural villagers are already buying out local shops to keep them open. Governments are restricted in their time horizons by the four to five year cycle of general elections; perhaps longer term goals such as improving the nation’s health and environment by more localised food consumption could be the responsibility of a civil service department, since these goals could be independent of party politics. Ethnic community groups could attempt to improve their members English, and liaise with local supermarkets, and smaller shops, for food labelling in their language. Shops near centres for the blind might also consider Braille labels. Smaller wholesalers may have a localised enough market to put these labels directly on tins; normally, economies of scale and mass production would make idiosyncratic labelling of food packaging for

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60 The UK government is already considering citizenship classes for immigrants, including lessons to improve their English.
different areas uneconomic. However labels could be put in aisles, or on shop shelves, though this might restrict the ability of shops to move goods around, either for seasonal goods (e.g. Christmas Puddings), or to raise sales by increasing customer awareness of products.

7.6 Food retailing outside Britain

The growth of supermarkets, in numbers, size, and market share, and the social and economic impacts of globalisation, are by no means confined to the UK. The same factors that have caused a decline in trade for small independent shops, and have resulted in many of them closing, are present in all the wealthier countries, and are showing signs of emerging in less wealthy ones too. The Retail Monitor International (RMI) published monthly, gives useful figures and commentary on retail trends, such as changes in shop numbers, worldwide. The RMI's figures use different definitions and categories of shops from country to country, and their definitions of, for example, a 'greengrocer', do not always agree with other sources. However the RMI figures show interesting trends from year to year. The figures for the UK (RMI, 8/00, pp.60, 109) show, as expected, continued growth in 'hypermmarkets' and 'supermarkets' 9this latter category appears, from the numbers, to include small supermarkets of 500 square metres upwards). Specialist shops such as greengrocers, bakers, and butchers continue to decline. The RMI figures here run from 1993 to the projected figures for 2003. Figures for Denmark, Norway, Finland, Germany, Poland, France, Portugal, Italy, the Czech Republic, Hong Kong, Taiwan, Japan, Australia, and New Zealand, all tell a similar story (RMI, 10/99, pp.64,73, 11/99, pp.109,163, 12/99, p.83, 3/00, p.93, 7/00, p.85, 11/00, pp.74,108, 12/00, p.85, 2/01, pp.58,59,79,80, 4/01, pp.68,75,76, 5/01, p.30, 6/01, p.32,34,116, 8/01, p.73, 7/03, pp.93,103), albeit with different rates of growth and decline for supermarkets and small shops respectively. Biong (1993) stated (p.21) that market concentration in the Norwegian grocery trade has been rising. In 1987 the top eight Norwegian grocery retailers held 44% of the market; in 1991 the top eight held 94%. Tordjman (1994) noted similar trends for the Mediterranean countries of Europe. He gives the examples of Spain and Italy (p.17). In the first country, retail outlets of all types fell from 580,0000 in 1980 to 523,000 in 1988; over this period grocery outlets fell from 282,000 to 200,000. In the second country, Tordjman states, food retail outlets fell from 341,000 in 1982 to 300,000 in 1990. Bennison (1995) details the changes in Greek retail outlets between 1951 and 1988. The overall number has grown over this period, but the number in the 'food and drink' category (Table II, p.25) declined after 1969. Between 1984 and 1990 the numbers of stores with two or more checkouts grew,
but small one-checkout stores declined (ibid). Venezuela and Ireland have had very different economic fortunes in the 1990s; the former had a major recession, the latter grew very fast, yet in both countries small food specialist shops such as greengrocers declined in numbers and sales (RMI, 11/01, p.14,41,51). Countries such as Israel, Vietnam, and Brazil, with faster-growing populations, managed some growth in the small grocery shop sector, but even here, supermarkets grew at a faster percentage rate (RMI, 9/00, pp.70/110/00, pp.160/1, 11/00, pp.120/1).

The USA is an interesting exception. The RMI (9/01, p.38) says that both large and small food retailers are growing in numbers at the end of the 1990s. It continues “The density of food retailers in the US received a boost from the continued shift of population back into urban areas” (ibid). The Statesman’s Yearbook (2000, p.1703) confirms this trend towards urbanisation, giving the percentage of the US population living in urban areas (places with population over 2,500) as 73.6% in 1970, 73.7% in 1980, 75.2% in 1990, and an estimated 76.2% in 1995. The USA therefore goes against the trend both demographically and in shop numbers; nevertheless it has a food access problem for its poor, as discussed below.

Overall, according to Treadgold (1996), the UK was not the most concentrated market for grocery retailers. The list of countries ranked by Treadgold for grocery market concentration (p.7) is given below.

Table 10. Concentrations in grocery retailing: market shares of the top five grocers, 1992, selected countries (Treadgold, 1996, p.7).

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>80.5%</td>
</tr>
<tr>
<td>Denmark</td>
<td>70.5%</td>
</tr>
<tr>
<td>Austria</td>
<td>69.0%</td>
</tr>
<tr>
<td>Australia (top three)</td>
<td>67.0%</td>
</tr>
<tr>
<td>UK</td>
<td>62.0%</td>
</tr>
<tr>
<td>France</td>
<td>61.0%</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>58.5%</td>
</tr>
<tr>
<td>Belgium</td>
<td>55.0%</td>
</tr>
<tr>
<td>Germany</td>
<td>40.0%</td>
</tr>
</tbody>
</table>
The food retailing situation in any one country is heavily modified by local laws and culture. Many countries have planning laws to restrict the development of large supermarkets. Ireland, in July 1998, limited new supermarkets to under 3,000 square metres; this was relaxed for the Dublin area to 3,500 square metres in April 1999 (RMI 11/01, p.14). France enacted the Royer Law in 1973, updated by the Raffarin law in 1996, 61 which set a limit as to how big a supermarket could be approved by local authorities without referral to the Paris government. This limit was 1,000 square metres, or 1,500 square metres in communes of population over 4,000 (Poole, et al 2002, p.173). Despite this, France has more very large superstores than the UK has, though fewer medium to large supermarkets. In 1994/5 French supermarket operators had 56% of the food market; UK supermarkets then had a grocery market share of 66%. French small independent food retailers then had a 40% market share, as against 25% for their British counterparts. A big difference was the share of the market held by discounters; 4% in France as against 13% in Britain, in 1994/5. Denmark also prohibits superstores larger than 3,000 square metres (Convenience Store, 18/7/03, p.57), resulting in a more even spread of smaller outlets across all Copenhagen’s suburbs. In the USA, in the late 1990s, the Robinson-Patman Act performed a similar role to RPI in the UK, limiting loss-leader and below-minimum margin selling by supermarkets; however, as in the UK, supermarkets are able to get around this (RMI, 9/01, p.42) Florida (RMI, ibid) also passed the Floyd Bill to limit the amount of groceries and pharmaceuticals large supermarkets could sell. Under this Bill, local governments were not allowed to grant retail licences for stores over 9,290 square metres if over 1,400 square meters were to be used for “non taxable items in the state such as food and drugs”.

Japan had perhaps the most restrictive size-related law on retail development, the Large Scale Retail Stores Law (LSRSL), enacted 1973, which “required companies to notify public officials of their intention to build any new store with floor space greater than 500 square metres. This greatly hampered the expansion of the supermarkets” (Kuwahara, 1997, p.112). Because of this law, Japanese retailing in all sectors, including food, is very fragmented, dominated by small stores; 53% of Japanese retailers have only one or two employees (ibid, p.110). The LSRSL was relaxed in 1990 in response to the ‘Heisei recession’, when Japanese land and stocks prices fell

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61 Information on European retailing was obtained from a paper “The retail trade in Europe: accelerating internationalisation2, by Maryvonne Lemaire. This paper was published at a seminar on the development of commerce in Europe held in Brussels on 3 March 1998, and was downloaded on 8/3/03. The website is http://forum.europa.eu.int/irc/dsis/distrade/info/data/seminar/98/lemaire.pdf
sharply (ibid, p.1130, but the continuing deflation in Japan has meant no surge in supermarket development there. Germany had restrictive laws on opening hours that force all shops to close on weekdays after 6.30pm, Saturday after 2pm, and all day Sundays; these laws were repealed in 1998 (Poole et al 2002, p.175). This had held back supermarket expansion there by restricting the economies of scale available to supermarket operators. Italy also relaxed supermarket opening hours in 1998 (ibid). Other European countries have used some form of size-threshold limit on supermarket development, and these laws are continually being adapted as economic circumstance and political control dictate.

In some countries, cultural factors have preserved some of the market share of independent retailers. Italy has the ‘citta lente’ movement, which began as a response to the first McDonalds opening in Rome, in 1986. By 2003 33 towns in Italy had joined the ‘citta lente’, or ‘slow town, movement, in response to the fast or ‘dromological’ pace of the modern global economy. The idea is to avoid fast food restaurants, return to the leisurely Italian lunch and siesta, and not use mobile phones whilst eating. Rather, people should take time to talk to each other, eat traditional cooking, and let the phone of fax take messages. This does not directly preserve local shops, but it does promote relocalisation of food consumption, and the use of local rather than global companies, including food companies.

There has been some research, and action, concerning the problems of poverty and lack of access to healthy food in other countries, especially in the USA. The website of the College of Agriculture and Natural Resources, University of Maryland, says “Hunger and food insecurity affected 10.5% of the US households in 1998. Marylanders are disproportionately affected by food insecurity. In 1996-98 7.1% of Maryland’s households were food insecure, with 40% of these clustered Baltimore City (sic)”. The website adds that rural dwellers and children are also affected. In west Philadelphia the Urban Nutrition Initiative “is a project involving the University of Pennsylvania, University City High School/Drew Elementary and the White Dog Café. The project involves high school kids growing gourmet lettuce in the high school greenhouse later sold to the White Dog Café”. “Children from the elementary school run after-school fruit stands”. The project aims to teach both good eating habits and business skills (Our Food Our Future website). This website also mentions community gardens projects in New York City, farmers’ markets in New Jersey, and support for small agricultural producers in West Virginia. In west Michigan an organisation called Spartan Stores Inc. operates what amounts to charity shops giving food to the poor from 13 outlets.
On the other side of the USA, the Centre for Food and Justice, part of the Urban and Environmental Institute at the Occidental College, details on its web pages various healthy eating projects for schoolchildren in Los Angeles as well as farmers’ market support. This project has a range of funding from the US Department of Agriculture, various governmental bodies in California, the WK Kellogg Foundation, and other nutritional organisations. In Portland, Oregon, the Coalition for a Livable Future (CLF) established a Food Policy Working Group in 1999 (CLF website) to promote farmers’ markets, urban vegetable growing, school gardens, and access to shops. A wide range of academic, religious, and private corporate bodies are involved on this project.

In Canada the Food Security Bureau says on its website “global food security exists alongside individual food insecurity. Vulnerable people in Canada are unable to meet their food needs without compromising other basic needs”. The University of South Australia researched, in 2001-2, food poverty in rural areas of northern and western South Australia. Mullins et al (1999) carried out an urban study in Australia, in Brisbane. The socio-economic neighbourhood structure of Brisbane’s suburbs was analysed and access to main shopping areas from these districts considered. Although gentrification had displaced some poor from areas close to main shopping areas, this study found that poor districts also had many shops close by. Countries like the USA, Canada, and Australia have large aboriginal populations that have become marginalized and impoverished, and it is often these who are ‘food-insecure’. However poverty, and food insecurity, are present in the population of European descent too.
Chapter Eight
Final conclusions

8.1. Review of the research questions

In Chapter One, the phenomenon of food deserts was said to be costing the UK a sum of the order of magnitude of billions of pounds a year. This is because poor diet, much of which can be blamed on the various aspects of food exclusion, contributes to obesity and other diseases such as heart disease, cancer, and diabetes. Problems of food exclusion include poverty, lack of nutrition and cooking knowledge, closure of local shops or withdrawal of fresh fruit and vegetables from these shops, access and transport problems. Section 1.3 stated three principal research questions, which this research would endeavour to answer. The first question was, 'how did food deserts develop?' This was essentially a geographical examination of the changes in the supply side of the retail grocery trade. A historical examination of why small shops have closed in such great numbers, and why so many others have ceased to provide fresh fruit and vegetables, has indicated the problems small shops face and hence given some indications as to how this trend might be reversed, and at what costs. The second question was 'who is affected by food deserts?' This was perhaps the core question of the research, because geographical techniques alone may fail to pin down the extent or boundaries of food deserts. In contrast to the first question, this was a 'demand side' topic, looking at why some people fail to consume a healthy diet. The reasons why some consumers do not access such a diet are many, and were broken down into the categories of 'ability', 'assets', and 'attitude', as detailed in section 1.5. These three, especially 'attitude', show that food deserts may be hard to define purely geographically because they are to an extent internalised within consumers. It is possible to perceive oneself as living in a food-poor area whilst having many grocery shops close by, as the situation of the pensioners living in Beeston, amongst many south Asian grocers, showed. Personal finances and other assets, such as possession of a car, do not necessarily show on maps either; these are important factors in being able to buy a good range of foods, as is personal mobility, the ability to travel by various modes of transport, foot, bus, or car, to the shops. A variety of coping strategies to overcome such difficulties were discovered, many quite ingenuous, such as the fruit and vegetable car boot sales of Halton Moor, but generally such coping strategies were less efficient, they took more resources, than would be consumed in accessing local fruit and vegetable shops, had they existed. Examining and classifying all these factors
as to whether or not certain foods and certain shops can be accessed was crucial to the third research question, what can be done to alleviate the effects of food deserts.

8.2. Review of the methodological approach of this research

Because the question of food deserts and what can be done about them is so complex, an ecological model was used. ‘Ecology’ may be defined as the study of how organisms interact with each other and with their environment. A desert ecology would look at how organisms cope with lack of water, and how this affects their interactions with each other and the environment. Section 1.4. showed that parallels may be drawn between the ecology of physical deserts and the economic interactions of the grocery supplier and the consumer in a food desert. Study of an ‘ecology’ implies a study of the overall biosystem, in all its complexities; the word ‘ecology’ derives from the Greek oikon, meaning ‘household’, and logos, meaning ‘words’ or ‘teachings’. Ecology, like its sister word ‘economy’, is meant to be a study of the whole system, of the interactions of all its parts. This need for an overall understanding of the whole oikon of the food supply system, from production to its actual ingestion into the body, was why this research used a qualitative approach, as detailed in section 3.1. The entire ‘food desert ecology’ covered more than geography; it included demographics, economics, politics, sociology, for example. All of these together produce an experience of food deserts, for both suppliers and consumers, which a qualitative approach is good at uncovering, because this approach seeks to gain a deeper understanding of human experiences, to find out what makes a food desert, so to speak. As Beeston and other areas showed, food deserts are as much, or more, made by those who live there as they are a positivistic or empiricist distribution of the shops and the houses.

The outcome of this research was a classification or taxonomy of food deserts into ten different types. This list may not be exhaustive, and may be subject to amendments, because resource constraints, principally time, precluded visits to some types of area. Although the research was aimed at covering both rural areas and an urban hierarchy of settlements from Leeds down through Scunthorpe and Brigg to smaller villages, the urban areas visited were all essentially ‘northern’. Southern Britain, the south east, has a very different economy, although Leeds, as the financial-services capital of the North, fulfils some of the functions of a ‘northern London’. The rural areas researched all fell into the category of commuter villages, for Doncaster, Scunthorpe, Grimsby, and Lincoln, although a visit to Norfolk provided an opportunity to examine another type of rural area, coastal holiday settlements. Interviews with shoppers and agencies in the
Leeds area provided insight into the grocery retailing situation in some towns and villages surrounding Leeds, too. However other types of rural area, such as the poorer mining villages between Doncaster and Barnsley, the remoter rural areas where many city dwellers have bought holiday homes as opposed to commuting daily from there, and the very remote rural areas of northwest Scotland, were not researched here.

8.3. What has been contributed to earlier studies by this research

Considerable research has already been completed on food deserts and related subjects such as retail change and concentration, social exclusion from food access and other areas, dietary changes amongst various ethnic groups and over time, the effects of poverty on food consumption, and the effects, both regenerative and potentially exclusionary, of new supermarkets on their neighbourhoods. So what did this research add to this body of knowledge? The idea of an ecological parallel had another strand, besides being the basis of the phenomenological approach. If a physical geographer declared they were to study a ‘desert’, the question would be raised, ‘what type of desert?’ There are many different types of physical deserts, from sandy to gravely and stony deserts, and the cold polar deserts of Antarctica, where also little precipitation falls and life is extremely scarce. Previous food desert research has implicitly recognised the existence of different types of food desert, but not explicitly. The term ‘food desert’ is equally used for rural areas and for poorer urban areas such as Seacroft in Leeds. Food desert studies have had an urban or rural or small-town focus, but a formal differentiation of food deserts found in these varied locations has not been made. Some studies have been focussed on a single area, such as the Botchergate study of Carlisle, others have looked at an entire city but focussed on a retailing event in that city and its effect on the city-wide foodscape, such as the Seacroft Tesco study, and some have looked at retail changes across an entire town or city such as Cardiff or Stockport. Some of these studies, such as Stockport (Potter, 1980), pre-dated the use of the term ‘food desert’ which is barely a decade old in 2003. Had the term then been in usage, Potter may well have identified different food deserts in this south Manchester town. But some types of food desert uncovered by the qualitative questionnaires of this research have scarcely been mentioned before; for example the pensioners of Beeston or the student-induced food deserts of Headingley. The studies in Coventry and London (Donkin et al, 1999b, Williams and Hubbard, 2001) noted the effect of poverty, or ‘assets’ in this research, on access to healthy foods, and also the ethnic dimension, but this research has triangulated these factors with ‘ability’ and ‘attitude’ to produce the ternary diagram based taxonomy of food deserts in section 7.1. It has therefore at least
laid the foundations for an explicit taxonomy of food deserts. This need not only be of academic interest but can have uses in the practical sense of alleviating the effects of food deserts, of minimising the costs they impose on society with the least possible outlay of public funds, an important consideration in a globalised world of low taxes and limited government spending.

8.4. The importance of classifying food deserts

Different food deserts, different coping strategies, different funding varying both across place and time. Public funding for social objectives such as alleviating social or food exclusion has been much tighter since 1979; although the election of New Labour to power in 1997 produced an interest in urban exclusion (Wrigley, 2002), public funded projects have been expected to produce tangible financial returns much as they would by the private sector. In many cases coping strategies produced at the local level by the people themselves who are affected by food deserts have produced solutions of a sort, but subject to economic, environmental, or social inefficiencies. We have a situation where spending can only be justified if it has definite objectives and aims, yet food deserts, although posing significant and substantive costs to society, have existed at a phenomenological level, a level below the positivistic perception of cartographers and policy makers. Male able-bodied middle-class bias has been shown to be a real obstacle in understanding what may constitute a food desert. The boundaries of food deserts have not been mapped. The geographical limits of regionally targeted spending are usually carefully drawn so as to ensure only those intended to benefit do so, otherwise funds may be wasted on those not really in need of it. Although food deserts are likely to have ‘fuzzy’ edges, a method for mapping the most intensely ‘food-desertified’ areas is proposed in section 7.2. ‘Micro food deserts’ (Clarke et al, 2002, p.2054) may best be tackled by local coping strategies but larger food deserts may need to be identified for government assistance. Much as, now, larger areas of economic decline are funded by various UK and EU government schemes but single factories in decline (micro-areas of economic decline) are not normally so funded. Unless they are a regionally important economic unit such as the Rover car plant at Longbridge, Birmingham, whose closure would have major multiplier effects across an entire city – meso-areas of economic decline, perhaps. Once different types of food deserts are identified, the strategies applicable to one will not necessarily be appropriate for another type of desert. For example, the food education that may improve diet in poor White areas such as Gipton, by increasing demand for fresh fruit and vegetables, may not be relevant for the problems faced by Beeston pensioners, or families in Headingley, who have
cooking knowledge but the shops they want to use are closing or stock vegetables they do not wish to eat. A ‘one size fits all’ approach to alleviating food deserts would not be appropriate, just as EU regional funding for former coal mining areas would not be appropriate, form example, to deprived rural areas. By repeating the classification and mapping of food deserts, perhaps according to the methodology of Chapter Seven, the effectiveness of any policy measures could be monitored and quantified.

8.5. What future for food deserts?

Will food deserts continue to grow, requiring ever more ingenuous coping strategies from those affected by them, in the absence of government measures to alleviate them? Or will shops return to these food desert areas? Economic theory alone could predict either outcome. Neo-classical theory says that the market should clear, that if a demand exists for a good or service, it will be provided. On the other hand, economics recognises the ‘market failure’ situation, where some goods and services demanded are not provided because it is difficult to provide them profitably. The principles of globalisation and economies of scale suggest further concentration in the retail grocery market, yet planning regulations such as the PPG notes of 1996 have forced the major supermarket operators to return to smaller outlets; both in the city and in rural areas through links to village shops.

Recent media reports also express ambivalence; either continued growth, or a decline, in food deserts, is possible. The first alternative was suggested by The Guardian (16/12/02, p.7); the headline read ‘Ghost town Britain looms’. Continuing ‘Decline of local shops could quicken, and destroy communities’, the article said that if the number of local retailers declined much more, local spending power and the synergy of neighbouring shops would reach a ‘tipping point’. Rather than the steady decline seen so far, local retailing would crash entirely. Projected figures in the RMI for up to 2005 for various countries consistently suggest a decline in smaller shop formats as discounters, supermarkets, and hypermarkets expand. The takeover by Tesco of the local small supermarket chain T & S (section 2.3.7), the conversion of shops such as Jacksons and Nite and Day, to major supermarket chain branches, will adversely affect other small shops as these small supermarkets will have the full price cutting force of Tesco et al behind them. Improved IT and delivery systems have enabled the economies of scale of a large supermarket to reach these branches too; yet the spaces, perhaps a kilometre, between these stores, will lose shops. There is also a threat to smaller rural market towns like Kirton Lindsey and Winterton, because as they lose the
last one of a certain kind of shop, a butcher or baker say, shoppers will have to travel to the supermarkets near Scunthorpe to buy these items, and other shops in the small town will lose business. Suburban parades similarly lose out as one of their shops closes, causing the others to lose footfall. At best the parade is left with a poorly stocked general grocery shop, several closed units, and a unit in non-retail use such as a housing office. Even at the individual shop level as trade declines, shelves may become half-empty, which further puts off the customers, starting a spiral of decline ending in the shop’s closure.

The squeeze on the market share of the discounters in Britain, which began around 1999 as Wal Mart’s price-cutting power came behind Asda and as the big grocers expanded into smaller-store formats, has not yet fully worked out as a process. Several prospects are plausible here. The discounters may retreat territorially into only the poor areas the big grocers will avoid. This may raise the discounter’s prices as some economies of scale are denied them, raising food prices for the poorest. Or the discounters may be taken over by a big supermarket, if the UK government allows this. In this case, some discount stores may be closed or sold off to non-food retailers, reducing food access for the poorest. The discounters may amalgamate, say Netto taking over Lidl, gaining some economies of scale. Or the closure of one of the discount grocers may open the way for better chances of survival of the small grocery shops in some districts. Only time will tell how things actually work out.

A brighter alternative for local shops was suggested by an article in the Scunthorpe Telegraph of 24/2/03, p.9. The headline read ‘Villagers back rookie couple’; the story was of a couple from Plymouth who planned to reopen a shop in Garthorpe, having noticed that this village and two neighbouring ones had no shops. The new Garthorpe shop will stock meat, fruit, vegetables, frozen foods and have a cash machine. The shop will also alcohol; the local pub opposed the liquor licence but was overruled by magistrates. It will sell natural cosmetics made in the nearby village of Luddington, as well as locally-made bird tables and cards from the village of Adlingfleet. Village shops do reopen, but usually in the wealthier areas; the Yorkshire commuter villages, or the rural areas of southern England or Cheshire. Even in Leeds itself however, some shops reopened between 1999 and 2002, and a few even appeared in previously non-retail premises. Increasing traffic congestion, awareness of health needs such as exercise, walking to the shop, and higher consumption of fresh fruit and vegetables, may push some custom back to local shops. People may value personal service more as it gets scarcer, as computerised call centres replace real human beings; this service is
something small shops have a major advantage in over the supermarkets, and certainly over Internet shopping.

Both futures may happen together. In wealthier areas, small shops may survive and even expand, whilst poorer areas lose theirs. An interesting alternative to the corner shop, 'Shop 24 UK' was unveiled in Darlington in August 2003 (The Guardian II, 29/8/03, pp.4/5). This is essentially a giant, corner-shop-sized, vending machine selling a variety of groceries from eggs, pot noodles, and ready meals to lemonade, chocolate, toilet rolls, and headache pills. Half the shop is chilled, so dairy products such as milk and cheese can be sold, but fresh fruit and vegetables are not stocked. The goods can be purchased 24 hours a day, but there is of course no personal element. Interestingly, Darlington, a poorer town, and not a wealthier district, was chosen as the pilot area for Shop 24 UK. We then face a socially divisive future where the health gap between rich and poor may continue to widen, and the most disadvantaged of all, the poor elderly and disabled, have the worst access to shopping.

8.6. Future food desert research

If this socially divisive future for grocery research does occur, food desert research, and especially the identification and mapping of food deserts, will become ever more important, so that policy measures can be targeted effectively, so that growing health and other costs to society of food deserts, can be minimised. The research methodology used here, from the shop maps of Chapter Four, to the ternary diagrams and isotropheremos maps of Chapter Seven, should be applicable to many other countries besides Britain. Although diet varies across nations, even between countries as close as Britain and France, the basic categories of the human diet, bread, meat, fish, vegetables, do not vary. In many countries, the poor suffer worse health, and rely more on pharmaceutical products; they also rely more on government Benefits of some kind, where these are available, which may be dispensed through Post offices or another outlet. Hence the shop categories used in Chapter Four should be broadly applicable across countries, and across time to, to monitor basic changes in local retail provisions. This research has aimed to set a basis for a greater understanding of food deserts through a breakdown and classification of them. The policy implications of this may be of more importance. Understanding a phenomenon is one thing, but it is then important to use that knowledge to alleviate the human problems that this understanding reveals.
Appendices

Appendix 1) Categories of agencies interviewed, what questions they were asked

Chambers of Trade, other business support agencies
1) In terms of helping businesses, how important do you see it to help the small retail sector?
2) In terms of the wider economy, do you think it's important to support small shops from an employment viewpoint? From a community-regeneration viewpoint?
3) Apart from directly linked businesses such as wholesalers, do you think the presence of small shops is a help to other businesses? Which ones? In urban and rural areas?
4) What help is now available for small shops?
5) What, if any, extra help, would you like to see for this sector?
6) How much do you think this sector is under threat from the larger supermarkets?
7) What advice would you give for small retailers?
8) Would you advise small retailers to specialise, or broaden their range but then have less choice for the consumer in each product range?
9) Do you think small shops should link with other small businesses, if so how do you see this working?
10) How do you think the situation for small retailers varies between urban and rural areas?
11) There are a number of initiatives to help rural shops. Do you think there is a need for some consolidation of these?
12) There is also help for inner city areas. Do you think that suburban shops may be missing out here even if they need help too?

Community Groups – including disabled support, ethnic community support, pensioner support, and poverty support
1) What is the main function and purpose of your group? What sort of organisation is this group, e.g. charity, private company, etc?
2) What geographical area do you cover?
3) Do your members have any problem getting to the shops, or from them with shopping?
4) Do your members feel vulnerable to crime whilst travelling to and from the shops?
5) Does this vary for urban and rural areas?
6) To alleviate any problems with shopping, would your members prefer better shops locally or better transport?
7) Do you think mobile shops would be an adequate answer to any problems with getting to the shops?
8) About how far would you estimate your members could walk to the shops, and back with shopping?
9) Are there any retail premises your members have problems with access to, e.g. small shops, supermarkets, garage forecourt shops?
10) Are there any actions or policies you would like other organisations to have that would make access to shops easier for your members?
11) Anything else you would like to say about shops and access to shops?

**Council Planning Department, Regeneration organisations**
1) What are the main planning issues in this area? / What are the main problems this regeneration scheme is tackling?
2) How important do you think it is for housing areas to have shops nearby?
3) In your area, are there any areas where there is a shortage of local grocery shops?
4) How important do you think small shops are for generating employment?
5) Do you think shops serve any non-retail functions, for example as social meeting places?
6) What support do you know of for keeping small shops open?
7) What extra support, if any, do you think there should be for small shops?
8) Do you think the planning system should be used to keep small shops open? If so, how could it be used for this?
9) How much is the local planning system constrained by the national government agenda?
10) Some people have linked Social Exclusion to the closure of local grocery stores. Do you think the government should be tackling this, and if so, how?
11) Some people have said that supermarket shopping has increased car mileage driven. Do you think there is an environmental case for supporting local small shops?

**Health, Hospital dieticians**
1) What geographical area do you cover?
2) Do you think that poverty and poor diet are linked?
3) Do you think there are any dietary problems associated with ready-made meals from supermarkets?
4) What are the main health problems resulting from a poor diet?
5) What sort of costs do you think this is imposing on the NHS?
6) How much do you think problems of accessing fresh food is causing a poor diet?
7) What policy measures would you recommend to improve people’s diet?
8) Do you think there would be any ethical problems in trying to change people’s diet?
9) Do you think that increased car use and lack of exercise has had any effects on people’s health?
10) Anything else you would like to say about diet and health?

Housing – Council housing department, housing associations and other charities providing housing
1) What is the main function of your department?
2) What geographical area do you cover?
3) How important do you think it is for housing to have shops nearby?
4) Do you think this importance varies for urban and rural areas?
5) Do you think shops serve any non-retail functions, such as social meeting places?
6) Do you see a problem with any tenants lacking easy access to grocery shops?
7) Do you think the closure of local shops has a negative effect on the area?
8) Does the availability of local shopping facilities affect who you place in some housing?
9) Do you think there is a need for government help to keep local shops open, if so what assistance?
10) Anything else you would like to say about tenant’s access to grocery shopping?

Housing – House building companies, residential estate agents
1) What area does your company cover?
2) How important do you think it is for your houses to have shops nearby?
3) Do you think this importance varies for urban and rural areas?
4) Where housing is built without shops nearby does this stop some people from buying properties there?
5) Does the presence or absence of local shops affect the value of houses?
6) Do you think shops serve any non-retail functions such as social meeting places?
7) What government incentives, if any, would make it more likely that housing estates would be built with shops included?
8) Anything else you would like to say about housing and access to shops?

Police
1) What area does this police station cover?
2) What are the main sorts of crime small shops are vulnerable to?
3) Could this be a significant factor in some small shops closing down?
4) With limited police resources, how much of a priority is it to protect these small shops?
5) Do you know of any geographical variations in the crime suffered by small shops? For example, between inner city and rural areas?
6) What advice would you give to small shopkeepers to reduce crime?
7) It's been noted that some parades of shops can be gathering places for unruly behaviour. Would you agree with this, and if so what do you think can be done about it?
8) Looking at traffic policing now, are there any problems associated with shopping areas? If so, how do you think these should be tackled?
9) What effect if any do you think traffic and parking restrictions have on the trade of small shops?
10) Anything else you would like to say about small shops and crime?

Political parties (local and national), and shopping centre managers
1) How do you see the future for the small grocery-retailing sector?
2) How do you see the future for town centre retailing?
3) Do you think small grocery retailers should be helped in some way, or left to compete with other shops? If YES, What are the best ways to help these shops?
4) Do you think small shops should receive the same level of help as say manufacturing businesses receive?
5) What would be the main constraints on helping these small shops? PROMPT tax implications of helping the small retail sector? Do you think there is much electoral support, or opposition, to helping small shops? From which groups?
6) How important do you think small local shops are for the community they're in?
7) How important do you think small local shops are from an employment point of view?
8) Contrasting, say, rural, suburban, and inner city areas generally, are there any areas you think have a shortage of small local grocery shops?
9) In your constituency/area, are there any areas you think have a shortage of small local grocery shops?
10) Looking at the planning system, do you see any ways it could be changed to help keep more small food stores open? For example, only allow more supermarkets if there are many small food stores still open, or stop small shops changing use from food to non-food uses?
11) Some people have said that the issue of social exclusion is linked to the closure of local grocery stores. Do you think that this form of social exclusion is something the government should be tackling? If yes, How?
12) Some people have said that shopping at large supermarkets has increased car mileage. Do you think there’s an environmental or transport-related case for supporting small shops?

Retailing/Commercial Property – Estate Agents
1) What geographical area does your company cover?
2) What types of property do you sell?
3) What would you say is the state of the market today for retail units?
4) What changes have you seen in this market over the past few years?
5) Has the arrival of out-of-town shopping affected this market?
6) Do empty retail units have a negative effect on the neighbourhood?
7) What is the best way of keeping these shops open?
8) Would reducing rents on retail units help keep more of them open?
9) Do you think planning permission for new retail developments should be linked to the state of the existing retail market?
10) Are there any other ways you think local shops could be kept open?
11) Do you think local shops serve any other purpose then retailing? For example, any social purpose?
12) Anything else you would like to say about local shops?

Retailers, small shops Definition: Under 400 sq m sales space and not part of a multiple chain.
1) What significant changes have you seen in your line of business over the past few years, and how has this affected your business?
2) What changes do you expect to see in the future?
3) What changes would you like to see to help your business?
4) What do you see as the main threats to your line of business?
5) What is the best way you see to deal with these threats?
6) What outside help would you like to see to help deal with these threats?
7) Are there any changes that could help shoppers get to your shop more easily?
8) Does the increase in the use of private cars have any effect on your business?
9) Do you think it’s better for small shops to specialise in one type of food, or to offer a broad range with less choice in each type of food?
10) Would it help your business to co-operate with other small shops in some way?
11) Do you think it's important for your business to have other small shops open nearby?
12) If so, what type of businesses?
13) Do you think Information Technology, such as computers, has had any effect on your business?
14) Has the Internet had any effect on your business? Could your business act as a collection point for goods ordered on the Internet?

Retailers, supermarkets
Definition; over 400 sq m sales space OR part of a multiple chain
1) Generally, how important is it to you to ensure all sections of the community can reach your store?
2) Some people are of the opinion that supermarkets have been the cause of many small local grocery stores closing. Is this opinion something that concerns your organisation?
3) Some people are of the opinion that supermarkets are ignoring the shopping needs of the poor, excluding them. What would you say to these people about this exclusion issue?
4) Regarding supermarket buses, how would you ensure that these are accessible to all people?
5) If a free bus route was not bringing in many customers, but they had no other access to grocery shopping, what would be your policy on whether to close it or not?
6) Supermarket companies have used the “clawback of trade” argument to say that opening branches in small towns benefits small shops there by keeps shoppers from going to a larger town. But small-town shopkeepers say this diverts trade away from them to the supermarket. How do you see these opposite arguments being resolved?

Rural preservation
1) What would you say are the most important reasons for preserving rural shops?
2) What role do you think the closure of other rural facilities like banks and Post Offices has had in village shops closing?
3) What do you see as the main concerns for small food shops in the market towns?
4) What governmental action would you like to see to help small rural grocery stores?
5) What about the effect of public transport cut backs in rural areas?
6) Do you see mobile shops as being the answer to rural shops closing?
7) Who do you think is most affected by village shops closing?
8) Do you see certain groups as being excluded from the village (e.g. the poor) - do you see a need for action on this?
9) If the local shop cannot be kept open, what would you say is the best way of helping these people?
10) There are a number of different initiatives now in progress for keeping rural shops open. Do you see a need for some consolidation here of all these initiatives?
11) What advice would you give to rural grocery shops to help them stay open.

**Transport – Bus companies**

1) What area does your company cover?
2) How important to your company are journeys made for the purpose of shopping?
3) What measures do you have for less mobile people such as the elderly, disabled, or mothers with children to use the buses?
4) What measures do you have for these groups to make it easier for them to get their shopping on and off the buses?
5) Is it a problem for your buses not to be able to get near the bus stop?
6) Does the shift in retailing to out-of-town locations pose any problem for your bus operations?
7) Does traffic congestion pose any problem for your bus operations?
8) Do you think the shift to out-of-town retailing and traffic congestion are linked?
9) Anything else you would like to say about bus travel and shopping?

**Transport Council Planners**

1) What is the function of your organisation and what geographical area do you cover?
2) How important do you think journeys made for the purpose of shopping are in the overall transport plan for this area?
3) Do you have any policies for trying to ensure shopping journeys are made on foot or by bus, rather than by car? Do you think shopkeepers may prefer car drivers as they are more affluent?
4) Do you have a policy for ensuring that all areas have a good (frequent, reliable) bus service?
5) Do you ensure that buses are accessible to the disabled, mothers with push chairs, the elderly?
6) How much does traffic congestion affect transport planning?
7) Do you think traffic congestion may make shoppers use out-of-town shops rather than local or town centre shops?
8) How do you see the growth in supermarket shopping as affecting the transport plan.
9) Do you co-operate with the planning department so that changes in land use are linked to the transport plan?
10) Anything else you would like to say about public transport and shopping?

Wholesalers

1) For your business, is it better to have a larger number of small grocery retailers, or fewer, larger, ones?

2) a) (If fewer ones) Do you think local communities may suffer if many small grocers are replaced by a few large ones?

2) b) (If many small ones) Do you think your business could play a part in supporting these small grocers?

3) To what extent do you think discounts, given to retailers with large orders from wholesalers, is causing the trend to fewer, larger, grocers shops?

4) It’s been said that the major supermarkets have the buying power to force down wholesale food prices. Do you agree with this - If yes, is this a problem for your business?

4)a) How do you see your business coping with this?

5) If small grocers co-operated and ordered together, could they get lower wholesale food prices?

6) Anything else you’d like to say about grocery wholesaling?
Appendix 2) Shopper interviews

1) What shops do you normally buy your groceries at? Do you use any occasional facilities like markets? Do you grow any of your own vegetables?
2) What are the main reasons you use these shops?
3) Are there any items you would like to buy but cannot get at these shops? How do you cope with not getting these things?
4) How often do you use these shops?
5) Would you like to go shopping less/more often than you do now? If YES, why don't you go less/more often?
6) What means of transport do you normally use to get to the shops?
7) What advantages/disadvantages do you see in using this means of transport?
8) What is the furthest distance you could walk to the shops, and carry shopping back?
9) Does anyone else, who does not live in your household, get any shopping for you? If so, who?
10) If YES, what advantages/disadvantages do you see in getting your shopping this way?
11) Have you ever used an ordering service like the Internet to get groceries? If YES, what advantages/disadvantages did you see in getting your shopping this way?
12) What do you think to the small local food shops here?
13) What do you think to the larger supermarkets here?
14) What changes have you seen in the range of shops here in the past few years? Which changes do you approve/disapprove of? Why do you think these changes occurred?
15) What changes have you seen in the range of groceries available here in the past few years? Which changes do you approve/disapprove of? Why do you think these changes occurred?
16) What changes have you made in the way you buy groceries in the past few years? Why?
Appendix 3) List of agencies interviewed. (area covered by agency)

Chambers of Trade, other business support agencies
A.1. Chamber of Trade, Barton (Barton and surrounding villages)
A.2. Chamber of Trade, Brigg (Brigg and surrounding villages)
A.3. Chamber of Trade, Scunthorpe (Scunthorpe)
A.4. Enterprise Centre, Chapeltown, Leeds (Business advisor, funded by EU, Leeds urban area)
A.5. Food and Drink Forum, Newark, Nottinghamshire. (Nottinghamshire, Derbyshire, Leicestershire, some of Lincolnshire and Northamptonshire)
A.7. North Lincolnshire Council (Brigg farmers' market)
A.8. North Lincolnshire Council (Brigg Local Link)

Community Groups – including disabled support, ethnic community support, pensioner support, and poverty support
A.9. Disabled support group (arthritis). (Charity, Leeds)
A.10. Disabled support group (arthritis). (Charity, North Lincolnshire)
A.11. Disabled support group (arthritis). (Charity, Midlands and east England)
A.12. Disabled support group (carer support). (Charity, North Lincolnshire)
A.13. Disabled support group (carer support). (Charity, south Leeds)
A.14. Disabled support group (general). (Charity, Yorkshire)
A.15. Disabled support group (osteoporosis). (Charity, north Lincolnshire)
A.16. Disabled support group (equality for disabled). (Government agency, Leeds)
A.17. Disabled support group (disabled access, buildings not transport). (Leeds)
A.18. Ethnic support group, Bangladeshi (Run by Leeds Council, covers LS 7,8,9)
A.19. Ethnic support group, Bengali (Charity, inner-west Leeds)
A.20. Ethnic support group, Black (Charity, LS 6,7,8, and 9)
A.21. Ethnic support group, Chinese (Community group, West Yorkshire)
A.22. Ethnic support group, Greek (Church group, Yorkshire and Humberside)
A.23. Ethnic support group, Jewish. (Social care agency, Yorkshire)
A.24. Ethnic support group, Jewish. (Liberal synagogue, Lincolnshire)
A.25. Ethnic support group, Pakistani (Charity, North Lincolnshire)
A.26. Ethnic support group, Polish (Charity, West Yorkshire)
A.27. Ethnic support group, Polish (Charity, North Lincolnshire)
A.28. Ethnic support group, Vietnamese (Charity, West Yorkshire)
A.29. Neighbourhood support group, Barton, North Lincolnshire. (Community group)
A.30. Neighbourhood support group, Earls Walk, Scunthorpe. (Residents association)
A.32. Pensioner support group, Belle Isle, Leeds. (Charity).
A.33. Pensioner support group, Bramley, Leeds. (Charity)
A.34. Pensioner support group, Burmantofts, Leeds. (Charity)
A.35. Pensioner support group, Garforth, Leeds. (Charity)
A.36. Pensioner support group, Gipton, Leeds. (Charity)
A.37. Pensioner support group, Leeds. (Charity)
A.38. Pensioner support group, Leeds. (Charity for ex-servicemen in West Yorkshire)
A.39. Pensioner support group, Scunthorpe. (Charity, North Lincolnshire)
A.40. Pensioner support group, Leeds. (Charity, Rawdon, Yeadon, and Guiseley)
A.41. Poverty support group, Burley Park, Leeds. (Charity)
A.42. Poverty support group, East Park, Leeds. (Charity)
A.43. Poverty support group, Leeds. (Charity, Yorkshire, most work is in inner Leeds)
A.44. Poverty support group, Scunthorpe. (Methodist church, all Scunthorpe)
A.45. Poverty support group, Great Yarmouth, Norfolk. (Charity)
A.46. Poverty support group, Kings Lynn, Norfolk. (Charity)

Council Planning Department. Regeneration organisations
A.47. Neighbourhood regeneration, Barton, North Lincolnshire
A.48. Neighbourhood regeneration, Westcliffe, Scunthorpe
A.49. Planning, Leeds Council
A.50. Planning, North Lincolnshire Council

Health. Hospital dieticians
A.51. Dietician, Leeds Hospital (West Yorkshire)
A.52. Dietician, Norfolk Health Authority
A.53. Dietician, Scunthorpe General Hospital (North Lincolnshire)

Housing – Council housing, housing associations and other charities providing housing
A.54. Housing Association, Bradford, W Yorkshire (Lancashire and Yorkshire, non-profit)
A.55. Housing Association, Bradford, W Yorkshire (Non-profit, all of England)
A.56. Housing Association, Crowle, North Lincolnshire (Support for those with learning difficulties, Crowle and Goole)
A.57. Housing Association, Leeds (Yorkshire and Lancashire)
A. 58. Housing Association, Leeds (Northern England)
A. 59. Housing Association, Lincoln (Non-profit, Lincolnshire)
A. 60. Housing Association, Selby (Non-profit, all Yorkshire)
A. 61. Housing, council, Barton, North Lincolnshire.
A. 62. Housing, council, Belle Isle, Leeds
A. 63. Housing, council, Burley Park, Leeds
A. 64. Housing, council, Gipton North, Leeds
A. 65. Housing, council, Horsforth, Leeds
A. 66. Housing, council, Moortown, Leeds
A. 67. Housing, council, Scunthorpe, North Lincolnshire

Housing – House building companies, residential estate agents
A. 68. Estate Agent, Brigg, North Lincolnshire (Ten miles around Brigg)
A. 69. Estate Agent, Brigg, North Lincolnshire (North Lincolnshire)
A. 70. Estate Agent, Epworth, North Lincolnshire (Isle of Axholme)
A. 71. Estate Agent, Horsforth, Leeds (northwest Leeds)
A. 72. Estate Agent, Moortown, Leeds (North Leeds and adjacent villages)
A. 73. Estate Agent, Scunthorpe (12 miles around Scunthorpe, Brigg, Barton)
A. 74. Estate Agent, Scunthorpe (Scunthorpe and villages)
A. 75. House builder, Grimsby, North East Lincolnshire (Lincolnshire and Hull)
A. 76. House builder, Horsforth, Leeds (West and North Yorkshire)
A. 77. House builder, Hull (East Yorkshire)
A. 78. House builder, York (Newcastle to Lancashire and Derbyshire)

Police
A. 79. Police, Brigg, North Lincolnshire
A. 80. Police, Leeds (east)
A. 81. Police, Leeds (south)
A. 82. Police, Leeds (Yeadon and Otley)
A. 83. Police, Scunthorpe

Political parties (local and national), and shopping centre managers
A. 84. Councillor, Conservative Party, Barton, North Lincolnshire
A. 85. Councillor, Conservative Party, Leeds
A. 86. Councillor, Conservative Party, Leeds
A. 87. Councillor, Conservative Party, Rawdon, Leeds (Rawdon, Menston, Guisley, and Yeadon)
A.88. Councillor, Conservative Party, Scunthorpe
A.89. Councillor, Green Party, Leeds (Wortley)
A.90. Councillor, Green Party, Leeds (Wortley)
A.91. Councillor, Labour, Leeds (Otley)
A.92. Councillor, Labour, Leeds (Yeadon)
A.93. Councillor, Liberal Democrats, Leeds (Headingley)
A.94. Councillor, Liberal Democrats, Leeds (Roundhay)
A.95. MP, Labour, Brigg, North Lincolnshire
A.96 MP, Labour, Leeds Central.
A.97, MP, Labour, Leeds north/west (Hyde Park to Otley)
A.98. MP, Labour, Scunthorpe.
A.99. Shopping Centre manager, Bramley, Leeds

**Retailing/Commercial Property – Estate Agents**

A.100. Commercial Property, North Lincolnshire Council
A.101. Commercial estate agents, Leeds
A.102. Commercial estate agents, Leeds
A.103. Commercial estate agents, Leeds

Retailers, small shops - See appendices 4a and 4b.

**Retailers, supermarkets**

A.104. Booths supermarket, Preston, Lancashire

Also see appendices 4a and 4b.

**Rural preservation**

A.105. Countryside Agency, Leeds. (Government agency, part of DEFRA, Yorkshire and Humberside)
A.106. CPRE, Barton, North Lincolnshire (to preserve the character of the countryside, South Humberside)
A.107. CPRE, Leeds (rural preservation, West Yorkshire)
A.108. English Heritage, York (Advisor to the government on the historic environment, Yorkshire and Humberside)
A.109. Future of Rural Society, Holmes Chapel, Cheshire (Voluntary organisation, rural areas of Cheshire, Herefordshire, and Worcestershire, ‘looking at the realities of rural life”)
A.110. Humber and Wolds Rural Community Council (HWRCC). Howden, East Yorkshire. (Charity, all Humberside except urban areas)
A.111. Kirton Community Partnership, Kirton Lindsey, Lincolnshire (Non-profit organisation, ‘to co-operate in the refurbishment, redevelopment, and expansion of the economy of Kirton. Kirton Lindsey)

Transport – Bus companies
A.112. Bus company, Bradford, West Yorkshire, area..
A.113. Bus company, Goole area.
A.115. Bus company, Lincoln area.
A.117. Bus company, Scunthorpe area.

Transport, Council Planners
A.118. North Lincolnshire Council, Transport. (Co-ordinates public transport, North Lincolnshire)
A.119. West Yorkshire Passenger Transport Association (Co-ordinates public transport, West Yorkshire)

Wholesalers
A.120. Barrel Foods Ltd, Rotherham, South Yorkshire (UK and Scandinavia)
A.121. Cash and carry, Batley, Leeds (South and West Yorkshire)
A.122. Dee Bee Foods, Grimsby (Lincolnshire and Yorkshire)
A.123. Greek food wholesaler, York (North-east England, from Birmingham to Yorkshire and Newcastle)
Appendix 4a) Shops interviewed (Leeds and Scunthorpe)
This map is based on Figure 11. Only the shops interviewed are shown.
Numbers beside the shops refer to the numbers in the text, e.g. R.2 refers to the butcher in Hyde Park.
Appendix 4b) Shops interviewed (North Lincolnshire)

This map is based on Figure 15. Only the shops interviewed are shown. Numbers beside the shops refer to the numbers in the text, e.g. R.48 refers to the small convenience store in Bonby.
Appendix 5a) Shoppers interviewed (Leeds and Scunthorpe)

This map is based on Figure 11. Each square marks the approximate residence of a shopper interviewed. The number of the square refers to the numbers in the text, e.g. S.17 refers to a shopper interviewed from Crossgates. The squares are colour-coded according to certain attributes of the shoppers as follows:-

Top left. **Sex.** Blue = male, pink = female.

Top right. **Age.** Yellow = under 30, light green = 30-60, dark green = 60 or over.

Centre. **Car owner.** White = has a car, black = has no car.

Bottom left. **Household income per week.** Yellow = under £150, light green = £150-£299, dark green = £300 and over.

Bottom right. **Computer owner.** Blue = has a computer, pink = has no computer.

(any unknown category is marked in red)
Appendix 5a) Shoppers interviewed (North Lincolnshire)

This map is based on Figure 15. Each square marks the approximate residence of a shopper interviewed. The number of the square refers to the numbers in the text, e.g. S.34 refers to a shopper interviewed from Bigby. The squares are colour-coded according to certain attributes of the shoppers as follows:-

Top left. Sex. Blue = male, pink = female.

Top right. Age. Yellow = under 30, light green = 30-60, dark green = 60 or over.

Centre. Car owner. White = has a car, black = has no car.

Bottom left. Household income per week. Yellow = under £150, light green = £150-£299, dark green = £300 and over.

Bottom right. Computer owner. Blue = has a computer, pink = has no computer.

(any unknown category is marked in red)
Appendix 6) How far the shoppers would walk to the shop.

This bar chart gives the stated distance each shopper would walk to and from the shops, with shopping. Distances ranged from 5,000 metres down to zero (disabled, couldn’t walk any distance). Colour coding follows a similar scheme to appendices 5a) and 5b). The lower number refers to the shopper number in the text. Numbers are red for urban shoppers (Leeds and Scunthorpe), and green for shoppers from rural North Lincolnshire. The small lower square is white for car-owners and black for non car-owners.

The width of the bar represents the age of the shopper; wide = under 30, medium = 30-59, narrow = 60 and over. The colour of the bar represents household income per week; yellow = under £150, light green = £150 - £299, dark green = £300 and over. The right-hand bar represents sex; blue = male, pink = female. All unknown categories are marked in red.
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