

Annexure

Annex 1: The Principles of Gravity Modelling

Introducing Gravity Modelling Principles

Gravity modelling is based on four general principles which influence the level of spatial interaction between Centres: physical distance (and/or time taken), the size of the Population within a Geographical Area, the 'attractiveness' of facilities and the degree of intervening opportunities or level of competition. Each of these is detailed below.

Distance or Time Taken

Perhaps the most important determinant of the level of interaction between Geographical Areas and Centres is the physical distance that separates them. Shoppers do not like to travel long distances, or more importantly, travel for a long period of time if they can visit a similarly attractive Centre more conveniently.

Using distance can prove insufficient in dense urban areas, where, despite a Centre seeming to be located close by, the 'cost' in terms of time and effort to get to that Centre is under-estimated.

Also, using drive-time alone can under-estimate the importance of the 'perceived' cost of getting to a Centre in areas where road speeds are high. Models based on drive-time alone would not pick up the fact that despite relatively fast roads crossing the Pennines, the large physical and 'perceived' distance between Leeds and Manchester will reduce flows between the two centres.

Therefore, it is sometimes suitable to use a combination of both drive-distance and drive-time.

The 'Attractiveness' of a facility

Set against the important effect of distance decay is the 'attractiveness' of a particular centre. That is, a larger high street shopping Centre will have much greater 'pulling power' than a smaller suburban Centre, or a Tesco Extra will have more 'pulling power' than a small Lidl store. As a result people will be willing to travel a greater distance to enjoy the increased benefits of shopping in a larger centre or supermarket (where there is clearly more choice of outlets, goods, greater presence of a key or multiple retailers and perhaps easier car parking facilities).

Centre attractiveness is a 'Score' and can be based on:

- The number of relevant multiple retailers or department stores for example in a shopping centre
- The sales area square footage for supermarkets
- Any other value that is deemed to have a strong relationship with catchment size.

Intervening Opportunities or Competition

The attraction of a particular Centre is also connected to the degree of competition (or lack of it) which that Centre faces. People will not generally travel to a given Centre if the same facilities are available much closer to home. Thus the level of intervening opportunities is important.

These first three factors are clearly closely related and we can begin to see that the level of spatial interactions between Geographical Area and Centres is a complex interplay.

Models need to represent this complex interaction and a process of calibration should be used to ensure the models reflect real customer shopping patterns based on Observed Customer Data.

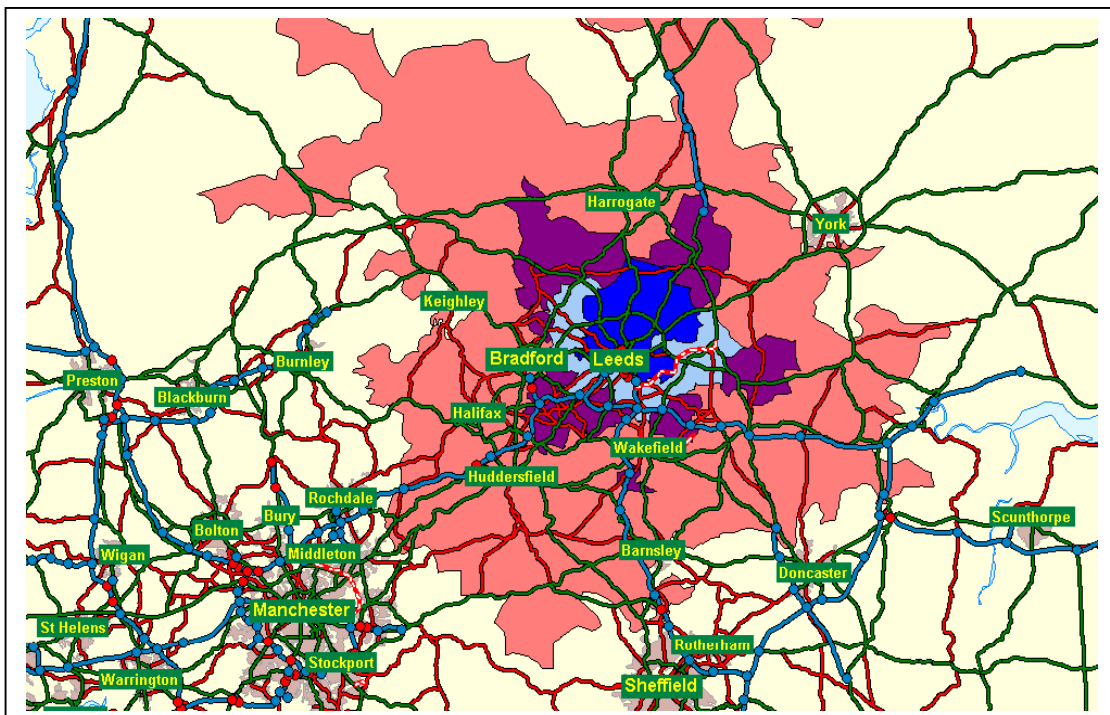
Population Size

People who live in a particular area make up the 'demand' for the products sold in the centres. The extent of that demand is first of all a function of population size. The greater the population then the higher the levels of spatial interaction with surrounding centres.

Shopper Population vs Resident Population

The gravity model will calculate the share of Population from each Geographic Area to each available Centre, based on the above factors. By aggregating these 'Flows' to each centre we calculate the 'Shopper Population'.

The Shopper Population is the number of people the model calculates will shop in a Centre. It accounts for the fact that, as in reality, catchments overlap, and that the Population of a given Geographical Area will visit different Centres. Therefore, the Shopper Population will always be smaller than the 'Resident Population' found within the catchment.



For example, using CACI's Retail Footprint Gravity Model, the catchment for Leeds City Centre contains a Resident Population of over 2.5 million people, whilst the modelled 'Shopper Population' is just under 575,000. In other words Leeds City Centre has a market share of 23% of the residential population within the catchment shown above.

Retail Footprint

CACI's Retail Footprint model predicts comparison goods shopping behaviour between 9,000 postcode sectors (each comprising about 2,500 households) to over 2,660 retail centres. Each retail centre is classified as one of fourteen types (for instance, major city centre, regional shopping centre, outlet centre or suburban centre) in order to reflect the particular trip characteristics of each destination. For example, the superior range, variety and quality of goods available in major city centres means that shoppers are prepared to travel further to destinations of this class than they are for the limited choice and range of goods available in smaller district centres.

Given a lack of reliable, comprehensive and up to date retail floor space statistics, particularly for out of town and smaller retail centres, the relative retail mass or 'attractiveness' of individual locations is based upon the presence of a number of key multiple retailers, with a fine adjustment for the presence of independent retailers. This gives more of a 'quality' aspect than simply counting outlets or measuring floorspace and allows important retailers such as department stores to be given additional weight. For outlet centres, the prevalence of brand operated stores means that a count of multiple retailers is not sufficient to adequately capture the attractiveness of individual sites and so scores are simply based upon the count of all trading outlets on site.

CACI recalibrate Retail Footprint on an annual basis. New data on shopper flows is received from a combination of client's own in-house exit surveys, loyalty cards and national lifestyle surveys and newly opened retail centres are added. Centres scores are rebuilt using the latest quarterly edition of the Retail Locations multiple branch address list to take account of recent property developments. Recalibration is undertaken using an iterative 'least squares' process, which aims to minimise the error in the model across towns in each class of centre. Where CACI's client model building and consultancy work or individual Retail Footprint clients highlight issues on particular centres, specific attention is given to addressing these within the recalibration process. Typical adjustments are undertaken by changing the Retail Footprint Class or adjusting individual centre scores.

CACI's Retail Footprint gravity model calculates the share of population in each of Great Britain's 9,000 postcode sectors visiting each available retail centre, based on the above factors. By aggregating the 'flow' of population to each centre, the 'Shopper Population' is calculated. This is the number of people in Great Britain that the model calculates will shop in a particular centre and is used as the basis for CACI's national ranking of shopping destinations.

Defining Retail Centres

A Centre is any location to which Demand flows. In Retail Footprint, centres are described by two characteristics. The first of these, Class, describes the role or function of centres within the retail hierarchy and the consequent characteristics of shopping trips. For instance, Classes such as 'Major City Centre' and 'Regional Town' see strong shopper flows over large distances, and very strong flows from local customers. It is relatively rare for shoppers to bypass such locations in order to visit competing centres. At the other end of the hierarchy customers will only travel to 'Small Rural Centres' or 'Small Suburban Centres' if they live very close, and even the local residents will frequently travel past these centres to visit more distant comparison centres further up the retail hierarchy.

In addition to Class, each Centre also has an Attractiveness Score (RF Score), which defines the relative 'size' and 'pull' of each location. There are a number of ways in which attractiveness can be measured such as floorspace, straight outlet counts or counts weighted by market strength or average turnover. Retail Footprint attractiveness scores are based upon a count of selected key retail fascias, with an additional adjustment for independents in the Jewellery and Clothing sectors.

Why not use floorspace?

Retail Footprint covers 2,662 destinations for comparison retailing. These include a variety of location types including outlet centres, regional shopping centres, district centres and major neighbourhood centres. The most comprehensive commercial floorspace database is available through Goad retail plans however, in CACI's experience this data is not suitable for producing accurate measures of attractiveness for the following reasons:

The database is not comprehensive as it only covers about 1,200 locations. CACI believe that comparison goods expenditure is spread across a much larger number of towns.

The geographical coverage of Goad town plans can be influenced by production issues, for instance plans occasionally do not cover entire town centres. Others include edge of town sites, which tend to be serviced by different types of shopping trip.

Floorspace estimates from the database are not accurate, as the plans do not indicate basement or upper floor trading use for individual properties.

The statistical database only measures the footprint area of properties. It is rare for this to be entirely devoted to trading space as staff facilities, loading bays and stock rooms normally require significant area in which to undertake support activities. Unfortunately, the precise area used for non-retail use varies from retailer to retailer and from property to property. It is not therefore reliable to assume a standard proportion and the lack of a precise measure undermines the accuracy of the Goad data.

Goad plans have a reputation for being out of date. This is particularly true of towns outside the top 200 locations, which can be on a three to five year update cycle. It is common for retailers and surveyors to update their personal copies of the town plan by hand during site visits however, this is rarely passed back to Goad and the long delay between updates combined with today's rapidly changing environment means that plans are often unrepresentative of current conditions.

A single measure of floorspace stock does not truly indicate the quality of a retail centre. This tends to mean that purpose built centres, which normally have a good quality retail environment can be unfairly compared against tradition centres which may have decaying fringe areas or large areas of miscellaneous space (e.g. residences, churches and offices).

Creating Retail Footprint Scores

Retail Footprint Scores are updated annually by CACI¹. The scores are primarily built by counting the presence of multiple retailers in a town however, for Clothing and Jewellery outlets an additional adjustment is made to allow for the presence of independent retailers. This brings the total number of scoring Clothing and Jewellery outlets to the

¹ The most recent update of Retail Footprint Scores was undertaken in July 2001

same level as the total presence of these shops in the town. Department stores are awarded a score of 2 and CACI include concessions in the count in order to reflect the additional attractiveness of these stores within stores. A typical department store such as Debenhams will therefore score between 15 and 20, depending upon trading area. There are no adjustments for any other large space users such as variety stores (e.g. Marks & Spencer, BHS or Woolworth).

The data used in the construction of Retail Footprint scores is derived from two sources:

Retail Locations supply address data for approximately 2,600 fascias totalling nearly 200,000 outlets. This data is supplied directly to Retail Locations from the Retailers themselves. CACI select approximately 1,600 fascias totalling about 90,000 outlets in relevant town centre retail categories. The database is updated on a quarterly basis and a full listing of scoring fascias is included in Annex 1.

Yellow Pages supply CACI with the addresses of 11,000 clothing and jewellery outlets. As the data is less sensitive to retail change (retailers tend to place listings over a number of years and these can remain even if that outlet closes) and because the data is less reliable than Retail Locations (not all retailers place listings), CACI focus upon these key sectors rather than using the entire Yellow Pages database to build centre scores.

Construction of Retail Footprint Scores – Independent Adjustment

NAME	Dept Stores	Key Multiples	Concessions	Initial RF Score	Key Fashion Outlets	Total Fashion Outlets	Index Uplift	Adjusted RF Score
Leeds	12	304	70	398	127	153	26	424
Cambridge	6	245	21	278	74	87	13	291
Chester	6	217	29	258	68	86	18	276
Watford	6	172	29	213	72	133	61	274
Bath	6	191	19	222	61	94	33	255
Blackpool	0	151	5	156	33	87	54	210
Inverness	6	120	14	146	40	76	36	182
Bury St Eds.	3	96	7	109	24	38	14	123
Farnham	0	69	7	76	18	28	10	86
Bridgwater	0	64	4	68	13	23	10	78
Hampstead	0	50	0	50	18	30	12	62
St Andrews	0	45	0	45	6	12	6	51
Marlow	0	31	0	31	6	21	15	46
Mill Hill	0	25	0	25	0	9	9	34
Sandbach	0	22	0	22	1	10	9	31

The table above illustrates the process of building and adjusting Retail Footprint Scores. For example, Cambridge has 6 department stores, 29 concessions and 245 Key multiple outlets. The 6 department stores score 12 and aggregating this with the count of key multiple outlets and concessions produces an initial Retail Footprint score of 278.

Yellow Pages identify that Cambridge has a total of 87 clothing and jewellery outlets compared with 74 outlets from Retail Locations. As Retail Locations data is multiple

retailers only, this gives a derived total of 13 independent outlets in the clothing and jewellery sectors. Adding these to the initial Retail Footprint score of 278, gives a final Adjusted Retail Footprint Score of 291.

Marlow has 31 key multiple outlets with no department stores or concessions and the initial Retail Footprint score is therefore 31. Within this score, Retail Locations identifies 6 clothing and jewellery outlets compared with 21 Yellow Pages outlets. This suggests 15 clothing and jewellery independents in the town and adding these to the initial Retail Footprint score gives a final Adjusted Retail Footprint Score of 46.

The above approach can be applied to all Retail Footprint centres, with the exception of Outlet Centres. This type of development normally contains a mixture of high street names, manufacturer brands, designer brands and specialist outlet centre operators. The presence of multiple brands is consequently much lower than in other types of centre and to compensate for this and the fact that few outlet centre brands are found in the Retail Locations database (for example Black & Decker), CACI normally use a simple count of total outlets to describe attractiveness. Naturally, outlet centres also have unique visitor patterns and this is reflected in the decay parameters in the centre Class description².

It should be noted that locations with a Retail Footprint score of 5 or less are not allocated shoppers or expenditure by the gravity model.

² CACI's analysis of shopping patterns for outlet centre visitors identifies catchments that can extend beyond one hours drive from successful outlet centre sites

Retail Footprint Classes

The following summarises the characteristics and rules classifying retail centres into their 13 major and 41 minor classes;

Primary Centres

These are the largest of the UK's traditional shopping High Streets in terms of both the number of comparison retailers and the number of shoppers visiting the centre. They are all located in the heart of a major city and are dominant in the regional shopping hierarchy. Their average Retail Footprint score is 876 with an 18% market share on average within the centre catchments. There are 19 retail centres in the Principle Centres classification.

1. National Centres

This is a nationally represented centre demonstrating immense national influence with a Retail Footprint score in excess of 1,000. This indicates the wealth and breadth of the retail offer covering all qualities of retailer. These centres pull from geographic areas well in excess of their regional location. Only three centres fall within this top tier and they are London-West End, Birmingham and Glasgow.

2. Principle Centres

This is a nationally represented centre usually described as a major city. They demonstrate high regional influence but can also extend beyond this range and have Retail Footprint scores greater than 800. This indicates the wealth and breadth of the retail offer covering all qualities of retailer. Examples of retail centres falling within this retail class are Manchester, Leeds and Nottingham.

3. Regional Centres

These are centres with a bias towards regional influence but including some larger cities. Retail Footprint scores are in excess of 575. These centres tend to have less of a shopper pull than Principle Centres due to the smaller number of retailers. These centres tend to be located a reasonable drive time away from Principle Centres. Examples of Regional Centres include Liverpool, Belfast, Bristol and Reading.

Major Centres

These are large 'traditional' High Street centres located in the centre of either large towns or 'secondary' regional cities. These are the second tier in the regional shopping hierarchy in terms of both the number of comparison outlets and shopper numbers. Major Centres have an average Retail Footprint score of 338 and a catchment market share of 12%. There are 142 retail centres classified as Major Centres.

4. Premium Centres

These centres demonstrate a high proportion of premium quality retail provision (greater than 18%) and a significant number of retailers with a Retail Footprint score in excess of 500. Premium retail centres include Cambridge, Guildford and York.

5. Quality Centres

These centres still demonstrate a relatively high proportion of premium quality retail provision (greater than 10%) but have a smaller number of retailers with scores greater than 315 and less than 500. Quality retail centres include Watford, Bath and Tunbridge Wells.

6. Average Centres

These centres display neither a premier nor value retail provision bias. Retail centres in this classification are typically mass-market centres displaying elements from all three-quality types. Average retail centres include such locations as Hull, Middlesbrough and Crawley.

7. Value Centres

Centres within this classification display a high proportion of value retailers (greater than 35%) or a slightly lower proportion of value retailers with little or no premium outlets (value proportion greater than 30%, premium less than 2%). Centres within this classification include St Helens, Bootle and Gravesend.

8. Regional Out of Town Malls

Milton Keynes is unique, being the only retail centre falling into this classification. Its behaviour is unlike any other retail centre. It's the only in-town shopping venue that behaves like an out-of-town regional shopping mall. It sits in the middle of the country's most successful New Town and the residential population will double by 2015. It is also home to many company headquarters and has a large workforce centrally located.

Metropolitan Towns

Metropolitan Town locations, just outside the suburban fringe of city centres, mean that their catchments are more influenced by the dominant centres in the area. The average Retail Footprint score for Metropolitan Towns is 131 with an average market share of 6% and a shopper population of 50,000. There are 136 retail centres within the Metropolitan.

9. Premium Metropolitan Towns

Premium Metropolitan Towns have a premium retailer proportion of greater than 9%. Over 15% of store types are represented by clothing and footwear. Premium Metropolitan Towns include such upmarket locations as Croydon, Kingston-upon-Thames and Richmond.

10. Quality Metropolitan Towns

These centres tend to be smaller retail centres with an up market bias. Locations classified as Quality Metropolitan Towns include Ilford, Dorking and Reigate.

11. Average Metropolitan Towns

These centres display neither a premium nor value retail provision bias. Retail centres in this classification are typically mass-market centres displaying elements from all three-quality types. Examples include Harrow, Chorley and Sale.

12. Value Metropolitan Towns

These centres have a bias towards value retailers in greater proportions than other Metropolitan Towns (greater than 35%) and also have no premium retail provision within the shopping environment. Value Metropolitan Towns include Leigh, Runcorn Shopping City and Bletchley.

Regional Towns

Regional Towns, often called market towns, have a similar retail offering to Metropolitan Towns. They tend to be the dominant centres in suburban areas, and as such are the main destination for a large share of the shoppers in the immediate areas around the centre. As such shopper numbers are on average 60,000 and are influenced by the suburban location. The Retail Footprint average score for this class is 184 with a market share of 11%. There are 94 centres within the Regional Towns class.

13. Quality Regional Towns

These upmarket destinations have a bias against value retailers greater than other Regional Towns. There is some evidence of tourism and they have a greater premium and mass offer with value provision being less than 30%. Quality Regional Towns include Salsbury, Windsor and Epsom.

14. Average Regional Towns

These centres are mass retailer dominated and represent the average within this class. The retail provision within these towns has a proportion of mass-market retailers greater than 60%. Examples of Average Regional Towns include Hereford, Wrexham and Redhill.

15. Value Regional Towns

These are below average regional town destinations, which supply a high proportion of value retail. Centres within the Value Regional Town class have a proportion of value retailers greater than 35%. Examples of Value Regional Towns include Falkirk, Bangor and Market Harborough.

Urban Centres

Urban Centres by definition are located in large urban areas. The size of centre varies considerably. Thus, the average Retail Footprint score is only 28 and the market share 1.5%. The share of the resident population visiting the centre is low due to the close proximity of more dominant centres. There are 587 centres within this class. Workers and tourists are not measured within the shopping populations as the model is allocating the residential population.

16. Premium London Non-residential Centres

These are the principle destinations for a large share of the shoppers in the immediate area of the catchment. These centres, by location, have a large concentration of workers and tourists; premium retail provision is equal to or greater than 20% of the offer. Examples of Premium London Non-residential Centres include London - Knightsbridge, London - Covent Garden and London - Strand.

17. Average London Non-residential Centres

In their immediate locality these are the primary destinations for shopping. Their location just outside the suburban edge of city centres means that major centres can effect their catchments. These centres, by location, have a large concentration of workers and tourists; premium retail provision is less than 20% of the offer. Examples of Average London Non-residential Centres include London - Victoria and London - Waterloo.

18. Premium London Centres

These London Centres are located in the large upmarket urban areas of London and are unique in their offer and behaviour. These centres benefit from a high premium provision greater than or equal to 20% and a low value offer of less than 10%. Premium London Centres include London - Kensington and London - Kings Road.

19. Average Urban Centres

These Urban Centres vary considerable in size and can have a Retail Footprint score as low as 10. This reflects the dense urban areas of their locations and their local offer. The value provision for these centres is less than or equal to 25% of the retail on offer. Examples of Average Urban Centres include Wimbledon, London - Hammersmith and Birmingham - Edgbaston.

20. Value Urban Centres

These centres by definition are located in large urban areas. They vary considerably in size and can also have a Retail Footprint score as low as 10. The value provision for these centres is greater than or equal to 20% of the retail on offer. Value Urban Centres include London - Wood Green, Walthamstow and Norbury.

21. Small Urban Centres

These are the smallest of the Urban Centres serving a very localised neighbourhood area. They are very small in size and have a Retail Footprint score lower than 15. Examples include Preston - Bamber Bridge, Plumstead and Nottingham - Porchester.

Local Centres

Local Centres are located within easy striking distance of a city centre, but outside of the core urban area illustrating their difference from Urban Centres. They tend to have fewer comparison outlets and are lower in the local shopping hierarchy. The average Retail Footprint score is only 16 and the market share 2%. The average shopping population across the classification is very low at 3,500. There are 757 centres within the Local Centres classification.

22. Better Local Centres

These centres have a bias towards a mass retail offer, with value provision making up less than 25%. Their Retail Footprint score is greater than 10 reflecting the slightly larger offer of a Better Local Centre. Examples include Clitheroe, Berkhamsted and Hull - Cottingham.

23. Average Local Centres

These centres display neither a premium nor value retail provision bias. Retail centres in this classification are typically mass-market centres displaying elements from all three quality types. Average Local Centres include Spalding, Arbroath and Newquay.

24. Small Local Centres

The majority of these centres are very small with a very limited retail offer. All centres have a Retail Footprint score of below 25 and predominantly much lower than this, with the average being only 6. Examples of these Small Local Centres include Millom, Hull - Hessle and Padiham.

Rural Centres

Rural Centres are located in similar areas to Regional Towns. However, they have a lower level of retail provision. These isolated centres tend to serve the local community effectively but do not have the mix of outlets to encourage shoppers from afar. As a result they tend to have fairly high levels of loyalty from locals due to the 'cost' of travelling to an alternative centre; the average market share is 9%. Some of these centres are highly isolated and have a small but loyal retail catchment. Rural Centres tend to be large enough to support the basic needs of just the very local catchment. Similar sized centres in less remote areas would see much higher levels of competition from nearby more attractive centres. The average Retail Footprint score is 20 and the shopper population 6,700. There are 467 centres falling into this classification.

25. Rural Centres

Rural Centres within this minor classification have a Retail Footprint score in excess of 15. Examples of centres within this classification include Thetford, Ebbw Vale and Didcot.

26. Small Rural Centres

Rural Centres within this minor classification have a Retail Footprint score equal to or less than 15. Examples of centres within this classification include Lerwick, Frinton-on-Sea and Dursley.

Out of Town Regional Malls

Out of Town Regional Malls, such as the Trafford Centre and Bluewater are located in 'non-traditional' retail locations, usually on the edge of large urban areas. They tend to offer a strong core range of comparison outlets within a confined centre. These centres often have a catchment which covers a very large physical area, with people drawn a long way due to the attractions of a single centre that covers all of their needs within a convenient setting. Additional leisure facilities, plentiful parking and the modern conveniences that these centres offer further attract shoppers. The average Retail Footprint score is 474 with a shopper population of just over 350,000. Market shares are low (average 6%) with Out of Town Regional Malls tending to be used for large-scale leisure and event driven shopping trips by people throughout the region. The majority of shoppers use more traditional centres for their regular comparison-shopping trips. There are only 10 Out of Town Regional Malls nationally.

27. Premium Out of Town Regional Malls

Centres within this classification have a large representation of premium provision; equal to or greater than 35%. Bluewater is the only Out of Town Regional Mall, which displays these premium attributes.

28. Average Out of Town Regional Malls

These centres display neither a premium nor value retail provision bias. Average Out of Town Regional Malls are typically massmarket malls displaying elements from all three-quality types. Typical examples include Trafford Centre, Meadowhall and Brent Cross.

29. Small Out of Town Regional Malls

These centres are small regional malls and thus have a Retail Footprint score of below 300. Leeds – White Rose is the only Out of Town Regional Mall to have this smaller number of retailers and turnover.

Purpose Built District Centres

Purpose Built District Centres are essentially smaller regional malls serving a more localised area. They are located in areas serving several towns or districts. The retail offer is more limited than a regional mall. The average Retail Footprint score is 101 highlighting the smaller amount of retailers when compared to regional malls. Market share of the catchment is 4%. There are 21 centres within this classification.

30. Average Purpose Built District Centres

These centres make up the majority of District Centres offering major retailers for a mass localised market. Examples of Average Purpose Built Centres include London - Surrey Quays and Edinburgh – Ocean Terminal.

31. Value Purpose Built District Centres

These centres have a higher proportion of value retailers with value provision greater than 30%. An example of a Value Purpose Built District Centre is Birmingham - One Stop Shopping Centre.

Factory Outlet Centres

Factory Outlet Centres offer a distinct retail mix, focused around providing branded goods at discounted prices. Because the full range of comparison goods is not available,

shoppers tend to only visit such centres for a minority of their shopping trips. As a result the average market share is just 3%. There are 47 Factory Outlet Centres. Catchments tend to cover a large geographical area with bargain hunters willing to travel considerable distances for this unique retail offer. Due to the unique offer of Factory Outlet Centres scores are calculated differently. The score is based on the number of brands/outlets available, as oppose to the national average outlet turnover used for regular high street stores.

32. Major FOCs Premium Dominated

These centres are totally dominated by premium retailers with 75% or greater outlets with this quality allocation. Only Bicester Village Outlet Centre falls within this classification.

33. Major FOCs Premium Brands

Centres such as these have a majority of premium brands compared to the value and mass provision. Examples include Cheshire Oaks Designer Outlet Centre.

34. Major FOCs Mass Market

Centres in this class have a majority of mass-market retailers compared to the value and premium provision. Examples include Hatfield - The Galleria Designer Outlet Centre.

35. Medium Sized FOCs

These FOCs are smaller with an average Retail Footprint score of 30. Ebbw Vale - Festival Park Outlet Centre is a prime example of these centres.

36. Small Sized FOCs

These are the smallest FOCs and tend to take the form of 'underone-roof' concessions. The Retail Footprint score is equal to or less than 35. Colne - Boundary Mills Outlet Centre is an example of a centre in the Small Sized FOCs classification.

Fashion Parks

Fashion Parks, such as Leicester - Fosse Park, offer a fashion based out of town location, focused on providing a shopping destination for High Street non-discount comparison goods. Unlike Out of Town Regional Malls these shopping parks are uncovered and tend to have large sheds occupied by individual High Street retailers. Due to their out of town location parking and food services are usually provided. The average Retail Footprint score for this classification is 78 indicating the number of retailers with large units taking up space on the majority of parks. Due to the location and offer shoppers tend to travel to these destinations infrequently hence the average market share for their catchments is just 2.5%. There are 32 centres within the Fashion Park classification.

37. Super Parks

These are large Fashion Parks with Retail Footprint scores in excess of 127 highlighting the extent of High Street retailer sheds on offer. A prime example of a Super Park is Leicester - Fosse Park.

38. Major Shopping Parks

These parks make up the majority of Fashion Parks. Examples include Bradford - Forster Sq Retail Park and Beckton - Galleons Reach.

Retail Parks

Retail Parks tend to be located in edge of town locations. They offer a very different retail mix from traditional High Streets, with more outlets serving the household goods market (furniture, large electrical) than the comparison goods market. Whilst Retail

Parks are becoming increasingly popular destinations for household shopping they offer little to attract comparison shoppers. There are 712 Retail Parks in total, 13 of these also have fashion as part of their retail offer. As a result the Retail Parks without any fashion have no catchments. This is because they behave differently and are not strictly comparison shopping destinations. These are assigned a Retail Footprint score and seed point but are not an influence within the model.

39. Retail Parks with Fashion

These are bulky goods parks with a fashion offer. An example of this would be Stockton-On-Tees - Teesside Retail Park.

40. Retail Parks

These are traditional bulky goods parks usually containing retail sheds offering household goods such as furniture and large electrical products. A prime example would be London - Old Kent Road.

Airports

These are travel based convenience destinations and have no catchments. This is because of their unique behaviour. These centres are assigned a Retail Footprint score and seed point but are not an influence within the model. There are 8 Airports in this class.

41. Airports

Travel based convenience destination

Annex 2 – CACI Expenditure Estimates Methodology

CACI Household Expenditure Estimates and Projections User Guide

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1 Summary

1.1 Introduction

CACI's local expenditure estimates provide robust patterns of consumer spending across a range of detailed retail and service categories, consistent with the latest Government national statistics. Future expenditure is projected for a broader range of product groups based upon long-term price trends and independent forecasts for macro-economic variables including Gross Domestic Product and Average Earnings. Both expenditure estimates and projections are available for a range of geographic levels including Enumeration Districts and Postcode Sectors and can be supplied as datasets for use with GIS applications or as bespoke client reports.

1.2 Expenditure Estimates

CACI produce estimates of current year spend split in 362 detailed 'product categories' ranging from Bread to Charitable Donations. These cover the entire spectrum of household expenditure, including services as well as goods, and correspond to 34 product groups including Food, Alcohol, Clothing and Personal Goods. The Expenditure Estimates are also available as Business Estimates which allocate local goods and services retail spend to various specialist and non-specialist retailers according to typical patterns of retail spend in the UK.

CACI's Expenditure Estimates are produced using the Office for National Statistics' Household Final Consumption Expenditure figures, published in Consumer Trends. These provide control year totals for 34 individual product groups (defined using the European Union's COICOP classification of consumer expenditure). The control year is normally about two years prior to the current year. CACI then use a combination of trend analysis and independent macro economic forecasts to project expenditure levels and prices in each product group to the current year. For the 362 detailed categories, local spend is derived through models which use Family Expenditure Survey spending relationships to quantify the propensity of individual households to buy items in each product group. These models are based upon predictor variables such as income, age, home tenure, presence of children, ACORN and regionality.

CACI's Expenditure Estimates are produced at enumeration district level (about 150 houses) for the UK and constrained in all cases to meet the constructed national control totals in Consumer Trends

1.3 Projections

CACI Expenditure estimates are based upon models of local product spending propensity, projected forward from Government control year levels to the current year using national trends in prices and forecasts of macro economic growth. These macro economic forecast inputs are taken from the consensus view of independent forecasting houses published by HM Treasury.

The methodology allows longer-term economic projections to be incorporated and CACI use these to prepare ten-year local expenditure projections for each of 34 individual retail and service product groups. The current projection horizon is 2012.

CACI's Expenditure Estimates and Projections incorporate local projections of household growth based upon a standard set of *current year* population and household estimates. These are derived using an approved JICPOPS (Joint Industry Committee for Population Statistics) methodology and local projections are constrained to Office for National Statistics' local government area projections.

1.4 Delivery

CACI's Expenditure Estimates and Projections are produced for Census and Postcode geographies in unit areas ranging from Enumeration District upwards. The data can be delivered as current year or fixed 1995 prices in the following ways:

- Standard reports for any defined area within GB or Northern Ireland:
- Standard databases for specified units of geography:
- Bespoke Analyses:

1.5 Contact

For more details of Standard Reports and Database contact the **Data Depot** on 020 7602 6000.

For more details of CACI's bespoke services, see our web site at www.caci.co.uk or contact the **Market Planning Group** on 020 7602 6000.

2 Introduction

The local expenditure estimates have been designed to meet a number of objectives.

Firstly projections should seek to be compatible with other UK and European statistics by using standard product and business type classifications. In particular this means the use of COICOP (Classification Of Individual Consumption by Purpose). As well as being used for Household Final Consumption Expenditure, as published in Consumer Trends, COICOP is also used for household budget surveys, as adopted for the UK Expenditure & Food Survey, and international comparisons of Gross Domestic Product.

Secondly the projections should be consistent with acceptable forecasts for the UK economy. Using the consensus view of independent forecasting houses published by HM Treasury allows projections of expenditure estimates to focus on local factors and variations without giving rise to debate on macro-economic issues. Alternative models of macro-economic factors can be accommodated by applying simple multiplicative factors to the expenditure reports.

The approach has two broad stages. Firstly product group prices and expenditure are calculated at a national level. Secondly models are calculated for local areas to give a pre-calculated database of expenditures. These stages are then repeated for projections of expenditure in future years.

This process can be summarised in the following steps. Firstly we calculate the propensity to purchase products then we apply product prices to convert the number of purchasing households to spending.

1. Take published national levels of household expenditure.
2. Select forecasts for growth of the UK economy within which household expenditure projections can be constrained.
3. Project national household expenditure for each of 34 product groups to the current year. (2001)
4. Project changes in price for the 34 product groups, constraining these to the macro-economic figures.
5. Model the local propensity of each household to purchase each product group and product line.
6. Model the expected spend per purchasing households give local spending by each of 34 product groups and 362 product lines.
7. Use the resulting database to produce reports on projected expenditure for local areas .

More background and methodology appear in subsequent sections.

3 Consumer Retail Spend Estimates

3.1 Definitions

These are definitions needed to use and understand the estimates.

Household expenditure

All statistics are estimates of spend in the UK both by households resident in the UK and those resident in the rest of the world. A separate *product category* is used for all spend made outside the UK by UK residents, so all other categories represent spend made inside the UK only.

See *household final consumption expenditure* in the 'Background Definitions' section for more detail.

Detailed product line

CACI produces estimates of spend split by over 350 detailed 'product lines' ranging from Bread to Charitable Donations. These cover the full spectrum of household expenditure, including services as well as goods.

Product group

The *detailed product lines* are aggregated into 34 *product groups* such as Food, Alcoholic drink etc.

The product groups cover both goods and services.

Base year

The *base year* is the most recent year for which all necessary input data is available. It is the most recent year for which estimates can be produced with no element of projection forward of trends in time.

Estimates for the base year may be preferred by users who wish to have estimates based most directly on published data. For data published by CACI in 2001, the base year is 1999.

Current year

The *current year* is the year in which the estimates are published by CACI. Typically the *base year* will precede the *current year* by two years.

Projected future years

These are future years (i.e. after the current year) for which spend projections are published. Normally projections are published for up to ten years into the future.

The Annual Business Inquiry (ABI)

The ABI is a large scale ONS survey of businesses in the UK which has been recently instigated to replace a range of older data sources including the Census of Employment and the Retail Inquiry.

Business Categories

The estimates of Spend by Business type split spend by a number of business categories, which are based upon standard SIC classification.

The business report shows a split of goods spend by:

- a) Broad business category, which subdivides retail spend among
 - Non-specialist retailers
 - Specialist retailers
 - Special forms of trading (mail order, internet etc.)
- b) A further subdivision of non-specialist retailers into
 - Large grocers
 - Large mixed retailers
 - CTNs
 - Other small non-specialist retailers

'Large' retailers, which are separately categorised on the business report, are defined as those 'Reporting Units' which have at least 200 employees. These are the structures for which companies return figures to the ABI. A number of these Reporting Units may be part of one company but it is expected that any company which is itself 'large' will generally have 'large' reporting units.

The COICOP classification of consumption

COICOP is the 'Classification of Individual Consumption According to Purpose'. It is an international standard classification of types of individual expenditure, which breaks down household spend at the top level into twelve categories:

- 01 - Food and non-alcoholic beverages
- 02 - Alcoholic beverages, tobacco and narcotics
- 03 - Clothing and footwear
- 04 - Housing, water, electricity, gas and other fuels
- 05 - Furnishings, household equipment and routine household maintenance
- 06 - Health
- 07 - Transport
- 08 - Communication
- 09 - Recreation and culture
- 10 - Education
- 11 - Restaurants and hotels
- 12 - Miscellaneous goods and services

Each of these top level categories has two levels of further subdivision. For example '03 - Clothing and footwear' is subdivided as

- 03.1 - Clothing
- 03.2 - Footwear

And '03.1 - Clothing' is then further subdivided as

- 03.1.1 - Clothing materials (SD)
- 03.1.2 - Garments (SD)
- 03.1.3 - Other articles of clothing and clothing accessories (SD)
- 03.1.4 - Cleaning, repair and hire of clothing (S)

Full details can be found on the Internet at
<http://esa.un.org/unsd/cr/registry/regrt.asp>

National Statistics (NS)

National Statistics (NS), or the Office of National Statistics (ONS) is the main source of all government statistics in the UK. Further details about National Statistics and their publications are available at their web site at
<http://www.statistics.gov.uk/>

Consumer Trends (CT)

Published quarterly by National Statistics, Consumer Trends presents comprehensive estimates of household final consumption expenditure in the UK together with tables detailing other indicators which effect the household sector.

It is the source of UK control totals for *product groups* for the *base year*, and for historical time series used as an input to projections.

Household Final Consumption Expenditure

'Household Final Consumption Expenditure' is the official terminology (and so used in Consumer Trends and other National Statistics publications) for what we more informally refer to as 'Household Expenditure'.

Family Expenditure Survey (FES)

The Family Expenditure Survey is an annual survey conducted by National Statistics which collects highly detailed information on spend patterns from a sample of households across the UK.

It is the source of CACI models of variation of local expenditure which are used to derive local expenditure estimates.

GDP

Often referred to as the summary measure of activity in the economy, Gross Domestic Product or GDP is produced from the National Accounts framework and estimates the size of production or output in the economy in a number of different ways.

CACI uses specific forecasts of the future growth in GDP in order to project expenditure estimates for product groups.

Retail Price Index - RPI

The RPI is the standard official measure of the rate of increase of retail prices, averaged across a range of products.

Current Year Prices

Current Year Prices, used in the context of CACI spend estimates and projections, refers to the prices which exist at the time spend was, is or will be made. Hence estimates expressed in these terms indicate the actual amount of money, which is expected to be spent at the time.

Fixed year prices

Fixed year prices, used in the context of CACI spend estimates and projections, refers to spend estimates which are expressed in terms of 1995 prices for the *product group* to which they refer. 1995 is chosen as the base year because it is specified in *ESA95*.

Note that in order to derive fixed price estimates, future price changes are projected on a product group by product group bases, and can be either positive or negative. For example prices for electrical goods are projected to continue to decrease, so in this group Current-Year-Price spend will increase more slowly than Fixed-Year-Price spend. In most other categories however the reverse is true.

Interpretation of Fixed Year Price estimates can be difficult. In groups where products do not become more sophisticated over time (for example Tobacco), they can provide an indication of change in volume of sales. However where products do become more sophisticated over time (for example electrical goods), these estimates reflect both change in volume and change in product quality.

Price indexes (price deflators)

Price indexes are the ratio between the current year price applying to a product group and the fixed year price.

ESA95

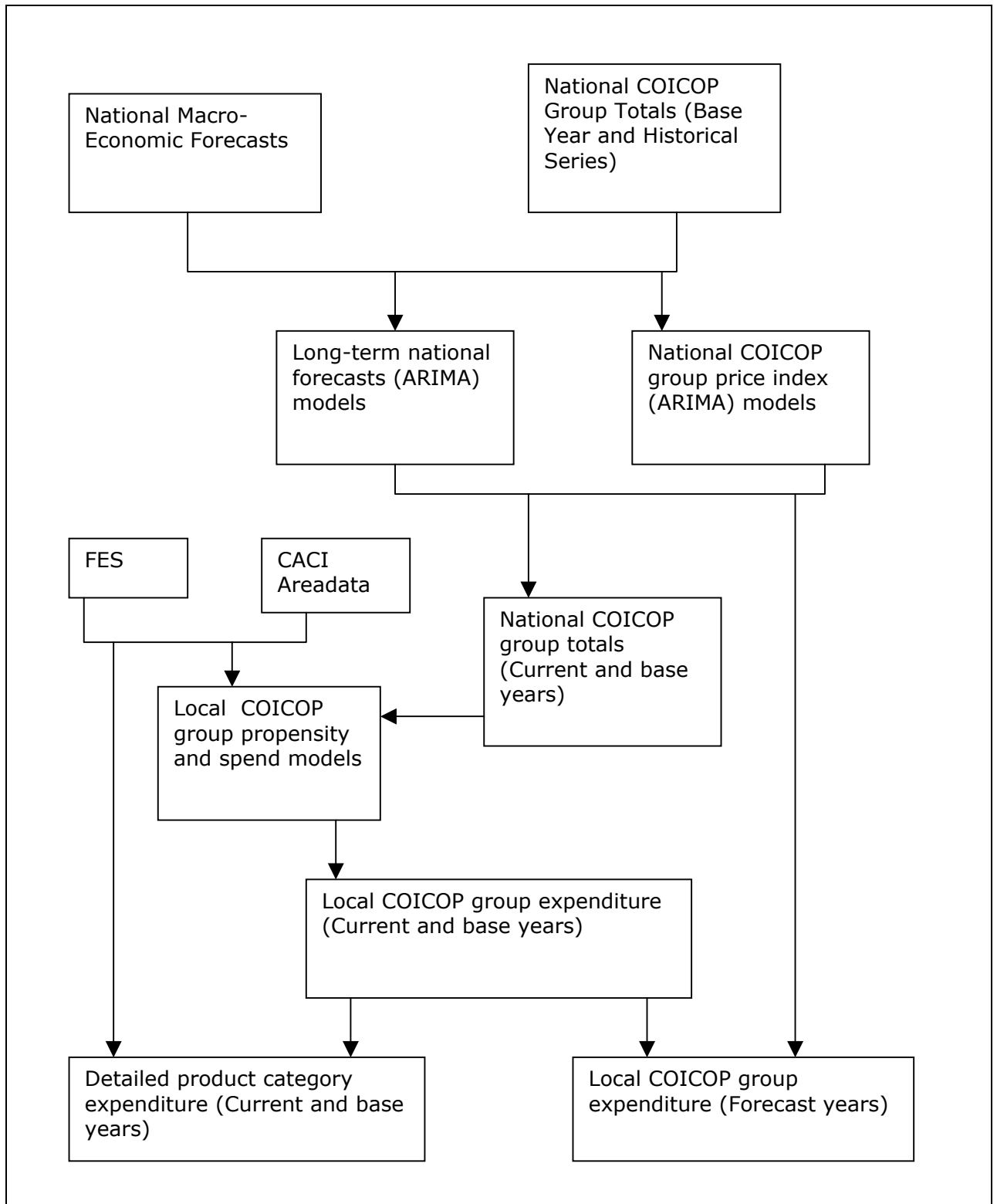
ESA95 is the European System of Accounts 1995. It provides a standard for reporting of national accounts, and has had a major influence on National Statistics products, including the reporting of Retail Spend used in producing these estimates.

Average Earnings Index (AEI)

The Average Earnings Index is Great Britain's key indicator of how fast earnings are growing. The index measures how earnings compare with those for the base year (1995) when the index took the value of 100.

3.2 How the Consumer Spend Estimates are created

The methodology for creating consumer spend estimates is shown in the diagram below.



This process can be summarised in the following steps. Firstly we calculate the propensity to purchase products then we apply product prices to convert the number of purchasing households to spending.

1. Take published national levels of household expenditure.
2. Select forecasts for growth of the UK economy within which household expenditure projections can be constrained.
3. Project national household expenditure for each of 34 product groups to the current year. (2001)
4. Project changes in price for the 34 product groups, constraining these to the macro-economic figures.
5. Model the local propensity of each household to purchase each product group and product line.
6. Model the expected spend per purchasing households give local spending by each of 34 product groups and 362 product lines.
7. Use the resulting database to produce reports on projected expenditure for local areas .

3.2.1 National levels of household expenditure - control totals

UK control totals for the base year are taken directly from the Household Final Consumption Expenditure as published by National Statistics in Consumer Trends.

Past time series are also taken from Consumer Trends, which gives historical information on both levels of expenditure for COICOP groups, and trends in price levels for those groups. The past time series generally go back to 1964. Time series for some COICOP categories start at a later date.

CACI has used COICOP as the basis of the definition of *product groups* because it is emerging as a Europe-wide standard for expenditure classification. In particular all UK National Statistics products relating to household expenditure are converting to report using COICOP. The move is largely a result of COICOP being specified by the ESA95 European standard on national accounts to which all member nations are requested to conform.

There are two key benefits from use of COICOP:

- i. Estimates will be closely related to the National Statistics publication upon which they are based.
- ii. There is a reasonable expectation, with adoption of COICOP as a national standard, of such estimates being directly comparable to estimates in other EU countries.

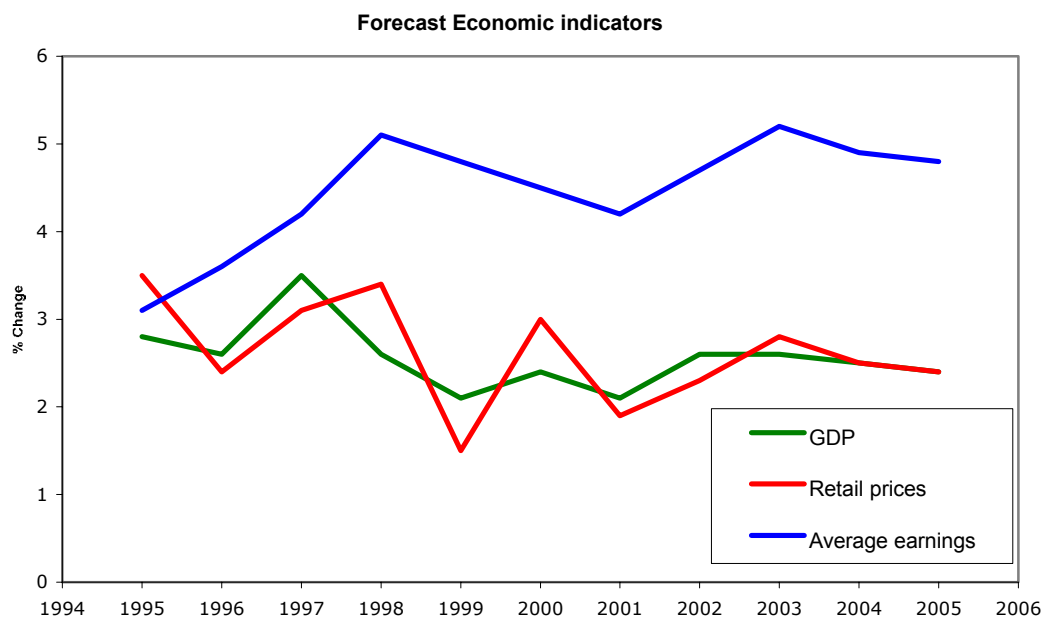
3.2.2 Growth of the UK economy

CACI Expenditure projections use growth in Gross Domestic Product (GDP), Average Earnings Index (AEI) and Retail Price Index (RPI) as key determinants of the expected future rate of growth of household spend. These factors are used in projecting published figures for the base year to the current year and for projecting future levels of spending.

In order to keep issues of macro-economic factors separate from local projections of spending we have used an average of independent economic forecasts

published by the HM Government Treasury. Specifically, figures are taken from Forecasts for the UK Economy – A comparison of independent forecasts No. 172 August 2001.

The resulting trends converge to a long-term trend of 2.4% per annum growth in GDP and 4.8% per annum growth in the AEI and these figures have been used for projections beyond the time span of the above publication. Longer term (post 2006) forecasts of RPI are based on the straightforward assumption that the Bank of England Monetary Policy Committee will meet its targets and the targets will remain unchanged. A constant rate of 2.4% is assumed. This is again typical of forecasts published in other sources.



Source: Forecasts for the UK Economy – A comparison of independent forecasts No. 172 August 2001

CACI is looking to use a plausible and likely scenario for long-term economic activity. Particular points to note are:

- i) We are not attempting to model shorter-term economic cycles within these projections, and in particular do not attempt to reflect the length or depth of any recession. We take the practical view that with current standard of economic management of the UK economy, recession conditions are likely to persist for a time that is short compared to the time scales (10 years) of the expenditure projections
- ii) We revise our spend estimates on an annual basis, and do not normally make interim revisions in response to specific events or interim published statistics. Again the general philosophy is that the effect of specific events is likely to have a time span that is short in comparison with the time scale of the projections.
- iii) The various independent city and non-city forecasts quoted by the HM Treasury document can show marked variation. Our approach allows users favouring specific scenarios of general economic activity to simply apply the appropriate ratio to the local expenditure projections.

3.2.3 National household expenditure by product group

National projections of spend per household are derived for each of the 34 COICOP product groups. These are based upon long-term trend time series ARIMA (Auto Regression Integrated Moving Average) models based upon the historical time series to 1964. These projections are made for the current year and for future years.

COICOP groupings do not perfectly match categories of comparison, convenience and non-retail expenditure. The 362 product lines have been individually assigned to one of these three categories. The allocation is given in Appendix 8

3.2.4 Product Group Price Indexes

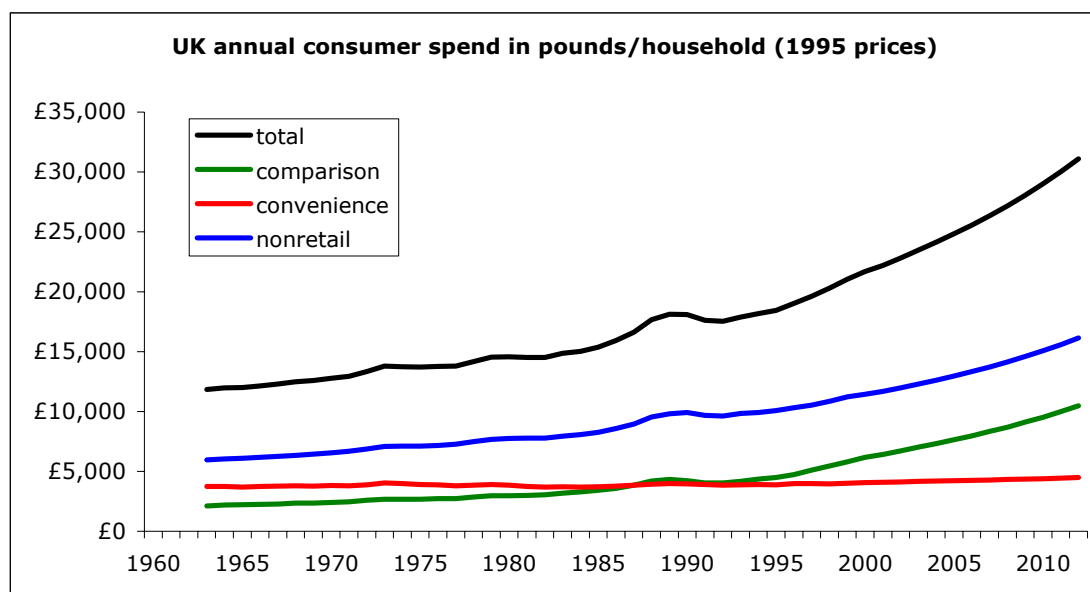
Spend projections express estimates of the spend that will be made at the time purchases occur. They are thus a combination of a number of factors

- Growth (decline) in consumption per household
- Growth (decline) in prices of product lines

In order to separate these component product group price indexes are projected. The methodology is analogous to that used in projecting future national spend levels based upon long term trend time series models.

There is wide variation in the rate of price increase in different product categories, ranging from rapid increase (alcohol and tobacco), to slow increase (clothing) to significant annual decrease (electrical goods). Appendix 9 gives a table of the national spend indices for each COICOP product group for each year between 1995 and 2012.

The figure below illustrates growth in consumption for comparison and convenience spend in terms of fixed 1995 prices.



3.2.5 Modelling local spend by Product Group and Product Line

The process has two stages

- i. Model the propensity of each household to purchase each product group
- ii. Estimate the amount which will be spent by the household if it does make the purchase

Sets of statistical (Logosatic Regression) models are used to model the propensity of individual households to buy items in a particular product group. Generalised Linear Models¹ were used to model the level of spend in purchasing households. These models are based on predictor variables derived from the FES such as income, age, tenure, presence of children, local area indicators such as ACORN and regionality.

This two stage modelling methodology is considered desirable because of its ability to effectively reflect behaviour in categories where a significant proportion of households have zero spend. This is particularly the case for spend on alcohol and tobacco.

These models are applied to all enumeration districts (EDs) in the UK to provide detailed local area estimates for each of the 34 Product groups. The resulting spend estimates are constrained so that all EDs in the country sum to the previously constructed national control totals reported at COICOP Group.

The product group spend is then distributed between each of the detailed product lines within each product group. Rather than a simple spreading of the spend figure single level models distribute the ED spend differently according to geographic region and other predictor variables such as ACORN.

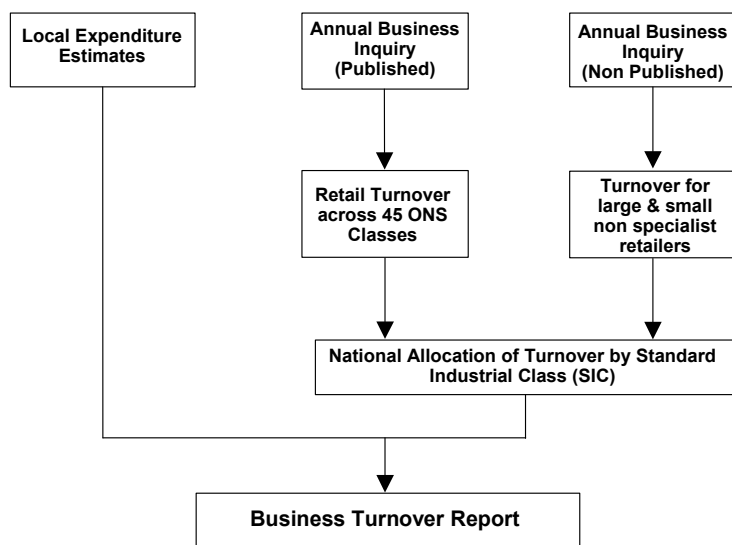
3.2.6 Spend by Business Type

The **Business Report** gives further insight into the retail spend characteristics of a catchment area by estimating the type of retailer where the spend takes place. The underlying assumption is that the profile of spend destinations reflects the average profile in the UK.

The Business Report is based on a range of published and unpublished information from the Annual Business Inquiry (ABI). The ABI is a large scale ONS survey of businesses in the UK which has been recently instigated to replace a range of older data sources including the Census of Employment and the Retail Inquiry.

The approach is shown in the diagram overleaf.

¹ Generalised Linear Models with an almost linear link function were used in order to allow application of the model to all the households in an Enumeration District without bias, rather than applying to each household individually.



The business report makes the key distinction between Non-specialist Retailers, which includes large grocers, department stores, variety stores, CTNs, Specialist Retailers, and Special Forms of Trading, which includes purchases by mail order, internet, market stalls and any other retail purchase not made in a store. The table below shows the percentage split between these retail types.

	Grocers and Non-specialist retailers	Specialist retailers	Special forms of trading
Total Convenience Goods	68.0%	29.9%	2.2%
Total Comparison Goods	22.9%	69.4%	7.7%
All Goods	47.0%	48.2%	4.8%

A further, more detailed split is shown which subdivides Non-specialist Retailers into large grocers, large mixed retailers, CTNs and other small non-specialists. (NB the business report combines the three 'small' categories.)

	CTNs		Grocers		Other non-specialised	
	Large	Small	Large	Small	Large	Small
Total convenience goods (68.0%)	1.7%	1.6%	54.4%	4.4%	4.7%	1.2%
Total Comparison Goods (22.9%)	0.1%	0.1%	8.3%	0.3%	12.3%	1.8%
TOTAL (47%)	1.0%	0.9%	33.0%	2.5%	8.3%	1.4%

Table: The sub-division of Grocers & Non-specialist retailers

A key consideration in the design of the business report has been to ensure that all categories used are well defined. Business types used are all defined clearly in terms of the SIC (Standard Industry Classification) codes within which the ABI is published, and product groups shown all relate back to COICOP groups or well-defined subdivisions of them.

The business type definitions are as follows

Grocers and non-specialised stores: SIC code 52.1, within which

Grocers	52.11/9
CTNs	52.11/1
Mixed retailers	52.12

Specialised stores:

Combination of SIC codes 52.2, 52.3, 52.4, 71.40/3 (TV rental shops)

Special forms of trading: SIC code 52.6 ('Retail trade not in stores')

3.2.7 Projecting spend estimates for small areas

The design of the models used in the estimation of small area spend means that they already provide a basis for local projections. In particular they include linear trend parameters derived from the use of multiple years' FES data and so provide a direct means of producing estimates for future years.

These estimates are calculated for all EDs in the UK, taking into account projected change in population and change in age profile, and then constrained to fit the national projected control totals.

The structure of the models also means that multiple years' FES data may be used without the older years' data biasing the results of the model.

4 How spend estimates can be supplied

Spend estimates can be supplied as

- standard packages of reports for local areas
- databases for standard geographic units
- bespoke analysis

CACI have a call centre team, the DataDepot, whose function is to take orders and organise efficient supply of databases or reports for any geographic area of the country. Analysis areas can be defined in terms of circles or shapes on a map, drive times, lists of standard geographic units (e.g. wards or postcode sectors) or the results of spatial models.

Standard reports

CACI offers the following standard reports for any defined area within GB or Northern Ireland. A number of packages of reports have also been created. These include demographic information to supplement the expenditure reports.

Spend reports:

- Household expenditure Summary Report (For current year, base year or projected future years.)
- Alcohol Expenditure
- Clothing and Footwear Expenditure
- Convenience Goods expenditure
- Household Goods and Services Expenditure
- Leisure Expenditure
- Personal Goods and Services Expenditure
- Transport, Communications and Finance Expenditure

In addition to the 'goods and services' reports detailed above CACI also produce a 'Business Type' report. The Business Type report can be produced for any defined area within Great Britain or Northern Ireland.

The business type report splits down the goods and services retail spend among types of retailer according to the typical patterns of retail spend in the UK. It gives an indication of the retail patterns that would typically prevail if the way in which particular goods are purchased follows the average national pattern.

Spend projection reports:

- Household Expenditure Projections: current prices, three year time series
- Household Expenditure Projections: fixed 1995 prices, three year time series (e.g. 1995,2002,2012)

Other Reports:

- Current population profile
- Population projections profile
- ACORN profile
- Component areas report (comparison, convenience and non-retail spend for each component ward or postcode sector in the report area)
- Catchment map

Standard Databases

The following databases are available:

Year	Geographical coverage	Product split
Base Year	All UK (i.e. Great Britain and Northern Ireland)	Detailed product lines
Current Year	Great Britain	Detailed product lines
Projected future years	Great Britain	Product groups

In all cases databases are available for postcode sectors, enumeration districts or a wide range of other geographical units. Databases are available for use in CACI's InSite GIS system or in a range of other GIS and analysis systems.

Bespoke Analyses

In addition to the standard deliverables CACI offers a wide range of bespoke analysis and consultancy services for the retail, property and planning industries.

Current year prices versus fixed year prices

Databases can be provided expressed in either current year prices or in fixed year prices. Standard reports are available expressed only in current year prices.

'Current year prices' estimates are an estimate of the actual spend which is, was or will be made at the time the purchases occur.

'Fixed year prices' are expressed in terms of 1995 prices for the product group. The background to this is described in more detail in later sections.

The use of fixed year prices can give further insight into spend projections in particular, however they do involve some difficult issues of interpretation. CACI recommend that current year price estimates should be the usual report format used.

Appendices

5 Definition of Terms

JICPOPS (Joint Industry Committee for Population Statistics)

JICPOPS is a joint industry committee which works towards harmonisation of small area population and household estimates in the UK. The key result of JICPOPS work has been a standard set of *current year* population (split by age and sex) and household estimates for Great Britain.

CACI has been heavily involved in JICPOPS from its conception. We use JICPOPS estimates, and further estimates and projections which are compatible with JICPOPS estimates.

Further details of JICPOPS can be found at <http://www.jicpops.co.uk/>

CACI demographic estimates and projections

CACI has a track record of over 15 years in producing demographic estimates and projections, which are a key input into the production of retail spend estimates and projections.

The key demographic estimates which are used in estimation of retail spend are local area figures for population, split by age and sex, and for households. These are produced for individual postcodes in GB (and shortly for Northern Ireland), for the *base year*, the *current year* and projected for around 15-20 years into the future.

ACORN

ACORN is 'A Classification of Residential Neighbourhoods'.

It is the longest established commercial geodemographic classification in the UK, and is widely used throughout a range of industries.

Further details are available from the CACI web site at <http://www.caci.co.uk/>

Enumeration Districts

These are areas of around 150 households and are the most detailed geographical unit for which estimates and projections are published. They are the most detailed geographic unit which can be used in building catchment areas in order to derive catchment spend estimates.

Postcode Sectors

Postcode sectors are areas defined from the UK postcode system by dropping the last two letters of a postcode. For example postcode 'TW2 5HJ' lies within postcode sector 'TW2 5'. They are widely used as area component building blocks, and are the areas for which CACI datasets are most commonly sold.

6 The CACI product groups

These are as follows:

Product Group		COICOP groups	Blue book ID	UK control spend £m in 1999
0101	Food	1.1	ABZW	48,473.00
0102	Non-Alcoholic Beverages	1.2	ADFK	6,205.00
0201	Alcoholic Beverages	2.1	ADFM	32,567.00
0202	Tobacco	2.2	ADFN	12,055.00
0301	Clothing	3.1	ADFQ	29,961.00
0302	Footwear	3.2	ADFR	4,639.00
0401 X	Actual and imputed rentals for housing, water supply and misc. dwelling services	4.1 4.2 4.4	ADFT ADFU ADFW	77,010.00
0403	Maintenance and repair of dwelling	4.3	ADFV	11,366.00
0405	Electricity, gas and other fuels	4.5	ADFX	13,433.00
0501	Furniture, furnishings, carpets and other floorcoverings	5.1	ADFZ	12,933.00
0502	Household textiles		ADGG	3,913.00
0503 X	Household appliances, glassware, tableware, household utensils	5.3 5.4	ADGL ADGM	8,350.00
0505	Tools and equipment for house and garden	5.5	ADGN	1,741.00
0506	Goods and services for routine household maintenance	5.6	ADGO	7,840.00
0601	Medical products, appliances and equipment	6.1	ADGQ	4,889.00
0602 X	Outpatient and hospital services	6.2 6.3	ADGR ADGS	2,032.00
0701	Purchase of vehicles	7.1	ADGU	28,529.00
0702	Operation of personal transport equipment	7.2	ADGV	31,311.00
0703	Transport services	7.3	ADGW	21,409.00
0801 X	Communications	8.1	ADGX	12,351.00
0901	Audio-visual, photographic and information processing equipment	9.1	ADGZ	11,537.00
0902	Other major durables for recreation and culture	9.2	ADHL	5,634.00
0903	Other recreational items and equipment; flowers, garden and pets	9.3	ADHZ	14,866.00

Product Group		COICOP groups	Blue book ID	UK control spend £m in 1999
0904	Recreational and cultural services	9.4	ADIA	21,733.00
0905	Newspapers, books and stationery	9.5	ADIC	10,811.00
1001	Educational services	10.1	ADIE	8,723.00
1101	Catering services	11.1	ADIG	34,020.00
1102	Accommodation services, package holidays	11.2	ADIH	9,308.00
X		9.6	ADID	
1201	Personal care	12.1	ADIJ	13,073.00
1203	Personal effects n.e.c.	12.3	ADIK	7,342.00
(1204)	(Social protection)	(12.4)	ADIL	7,972.00
1205	Insurance	12.5	ADIM	20,910.00
1206	Financial services n.e.c.	12.6	ADIN	11,596.00
1207	Other services n.e.c.	12.7	ADIO	10,007.00
	Total domestic concept		ABQI	558,539.00
3301	Spend outside the UK		ABTA	18,812.00
Expenditure statistics shown here are Crown Copyright 2001				

Notes

- 1) CACI makes no estimate for COICOP category 12.4 (Social protection) and spend in this category is not included in any CACI estimate
- 2) ONS make no estimates for COICOP categories 12.2 (Prostitution) and 2.3 (Narcotics).

7 Notes on expenditure totals - the range of expenditure covered

The Consumer Trends / Blue Books totals

ONS revises these figures slightly over time. For example, the figure given for 1998 (not 1999, as used in the control totals) domestic concept final consumption expenditure of households in various publications is:

£523,372m	(consumer trends 1999 Q4)
£528,717m	(data downloaded in May 2001)
£534,136m	(consumer trends 2001 Q2)

This is partly as a result of the ability to improve estimates as time goes on, and partly a result of changes of methodology which cause revision of complete past time series. A significant example of the latter, shortly to be included in the Consumer Trends figures, is that ONS plan to include estimates of spend on smuggled alcohol and tobacco. Previously these have not been included.

The control totals used in the CACI 2001 estimates are Consumer Trends data relating to tables 23 and 24.

In the following the Consumer Trends figures quotes will all be the version used in CACI control totals, but the reader should bear in mind that there may be differences found when comparing to more recent, or older versions of Consumer Trends or the Blue Book.

Comparison of UK totals

ONS statistics - domestic concept of household spend

The natural starting point in the discussion of the UK totals is the figure published by ONS in Consumer Trends that is described as Final consumption expenditure in the UK by resident and non-resident households (domestic concept).

This figure is an attempt to estimate total spend by household

- including UK spend by households not resident in the UK
- excluding spend outside the UK by UK resident households.

It is prepared according to the standard of the European System of Accounts (ESA95). The published figure for 1999 is £558.5bn.

CACI statistics

It is not possible to exactly match all spend recorded in the Family Expenditure Survey to COICOP categories. As a result CACI control totals differ in some instances from the figure quoted above. Note that none of these differences relate to retail spend in the UK.

On particular, COICOP categories 1-12 is that part of spend which should in principal correspond precisely to the figure quoted above. However COICOP category 12.4 (Social protection) accounts for £8.0bn spend in the UK in 1999 (source Consumer Trends). The CACI figures do not calculate local area estimates for Social Protection so the total CACI figure for the product categories 1-12 is £550.6bn.

There are a small number of spend items recorded on FES which we have not been able to allocate to a COICOP category. These are

- Duty free goods bought in the UK (FES £0.10 / hh/week)
- Cash gifts to those outside household (FES £2.40/hh/week)
- Maintenance/separation allowance (FES £1.30/hh/week)
- Charitable donations (FES £1.60/hh/week)

We do not include gifts and donations in the definition of 'Final Consumption Expenditure'. The CACI UK total estimates for these products are £7.8bn, which is not included in local area estimates

Spend by UK resident household outside the UK is a Consumer Trends UK total of £18.8bn

Hence a range of UK control totals for total spend may be considered.

COICOP categories 1-12 excluding social Protection	£550.6bn
COICOP 1-12 (exc Social Protection) plus Gifts & Donations	£558.3bn
COICOP 1-12 (exc Social Protection) plus Spend abroad by households resident in the UK	£569.4bn
COICOP 1-12 (exc Social Protection) plus Gifts & Donations, plus Spend abroad by households resident in the UK	£577.1bn
Final consumption expenditure in the UK by resident and non-resident households (domestic concept)	£558.5bn

CACI's use the first of these figures as a control total.

8 Definitions of comparison, convenience and non-retail

The following tables show how CACI's expenditure reports define the categories; Convenience, Comparison and Non-retail in terms of the product lines within COICOP.

CACI Category	COICOP Group	COICOP	Description
Comparison	Clothing	0301	Men's outerwear - clothing chains
		0301	Men's outerwear - large supermarket
		0301	Men's outerwear - other shops
		0301	Men's underwear and hosiery - clothing chains
		0301	Men's underwear and hosiery - large supermarket
		0301	Men's underwear and hosiery - other shops
		0301	Women's outerwear - clothing chains
		0301	Women's outerwear - large supermarket
		0301	Women's outerwear - other shops
		0301	Women's underwear and hosiery - clothing chains
		0301	Women's underwear and hosiery - large supermarket
		0301	Women's underwear and hosiery - other shops
		0301	Boy's outerwear - clothing chains
		0301	Boy's outerwear - large supermarket
		0301	Boy's outerwear - other shops
		0301	Girl's outerwear - clothing chains
		0301	Girl's outerwear - large supermarket
		0301	Girl's outerwear - other shops
		0301	Babies' outerwear - clothing chains
		0301	Babies' outerwear - large supermarket
		0301	Babies' outerwear - other shops
		0301	Boys', girls' and babies' underwear - clothing chains
		0301	Boys', girls' and babies' underwear - large supermarket
		0301	Boys', girls' and babies' underwear - other shops
		0301	Men's ties, belts, hats, gloves, etc - clothing chains
		0301	Men's ties, belts, hats, gloves, etc - large supermarket
		0301	Men's ties, belts, hats, gloves, etc - other shops
		0301	Women's ties, belts, hats, gloves, etc - clothing chains
		0301	Women's ties, belts, hats, gloves, etc - large supermarket
		0301	Women's ties, belts, hats, gloves, etc - other shops
		0301	Children's ties, belts, hats, gloves, etc - clothing chains
		0301	Children's ties, belts, hats, gloves, etc - large supermarket
		0301	Children's ties, belts, hats, gloves, etc - other shops
		0301	Haberdashery, wool - clothing chains
		0301	Haberdashery, wool - large supermarket
		0301	Haberdashery, wool - other shops
0301	Textiles and clothes hire		
Comparison	Footwear	0302	Men's footwear - clothing chains
		0302	Men's footwear - large supermarket
		0302	Men's footwear - other shops
		0302	Women's footwear - clothing chains
		0302	Women's footwear - large supermarket
		0302	Women's footwear - other shops
		0302	Children's footwear - clothing chains
		0302	Children's footwear - large supermarket
Comparison	House repair, maintenance & decoration	0403	Repairs, maintenance and decoration
Comparison	Furniture, furnishings & floorcoverings	0501	Furniture
		0501	Soft floor coverings, carpets, mats
		0501	Hard floor coverings, lino, tiles etc
		0501	Fancy, decorative goods, mirrors

		0501 Garden furniture
Comparison	Household textiles	0502 Bedspreads, blankets etc 0502 Curtains, cushions, towels etc 0502 Other household textiles
Comparison	Household hardware	0503X Gas cookers 0503X Other gas appliances 0503X Electric and combined electric/gas cookers 0503X Washing machines, spin dryers 0503X Refrigerators, freezers 0503X Other major electrical 0503X China, glassware 0503X Kitchen equipment 0503X Other household hardware
Comparison	Tools & equipment for house & garden	0505 Electrical tools e.g. drills 0505 Garden equipment e.g. lawnmowers, barbecues 0505 Garden tools and accessories e.g. hoes, shears 0505 Electrical consumables e.g. batteries, light bulbs - large supermarket 0505 Electrical consumables e.g. batteries, light bulbs - other shops 0505 Other tools and equipment for house and garden
Comparison	Communications	0801X Telephone purchase 0801X Mobile phone purchase 0801X Answering machines, fax machines, modems
Comparison	A/V, photographic, computing equipment	0901 Purchase of TV and digital TV decoder 0901 Satellite dish purchase and installation 0901 Audio equipment, CD players 0901 Records, CD's, audio cassettes, software, computer discs - hire and purchase 0901 Accessories for audio equipment - cassette cases, record tokens, racks etc 0901 Video recorders 0901 Purchase and rental of video cassettes etc 0901 Personal computers, printers, calculators 0901 Console computer games, cartridges and computer software 0901 Photography and camcorders including developing 0901 Other audio, video, photographic and computing equipment
Comparison	Recreational durables	0902 Bicycles, boats, purchase and repair 0902 Musical instruments and hire of instruments 0902 Other recreational durables
Comparison	Recreational items	0903 Sports and camping equipment 0903 Toys and hobbies 0903 Horticultural goods, plants, flowers 0903 Other recreational items
Comparison	Recreational services	0904 Rent for TV/VCR/satellite TV
Comparison	Newspapers, books & stationery	0905 Books, maps, diaries including address books, sheet music
Comparison	Personal care	1201 Small electrical equipment, e.g. hair dryers, shavers
Comparison	Personal goods	1203 Leather and travel goods, jewellery, watches etc 1203 Other personal goods

CACI Category	COICOP Group	COICOP	Description
Convenience	Food	0101	Bread, rolls etc - large supermarket
		0101	Bread, rolls etc - other shops
		0101	Pasta - dried or fresh - large supermarket
		0101	Pasta - dried or fresh - other shops
		0101	Flour, rice and other cereals - large supermarket
		0101	Flour, rice and other cereals - other shops
		0101	Biscuits, shortbread, wafers, chocolate biscuits etc - large supermarket
		0101	Biscuits, shortbread, wafers, chocolate biscuits etc - other shops
		0101	Cakes, buns, currant bread, fruit pies, scones etc - large supermarket
		0101	Cakes, buns, currant bread, fruit pies, scones etc - other shops
		0101	Pastry, cake mixes - large supermarket
		0101	Pastry, cake mixes - other shops
		0101	Breakfast cereals - large supermarket
		0101	Breakfast cereals - other shops
		0101	Beef and veal (uncooked) - large supermarket
		0101	Beef and veal (uncooked) - other shops
		0101	Mutton and lamb (uncooked) - large supermarket
		0101	Mutton and lamb (uncooked) - other shops
		0101	Pork (uncooked) - large supermarket
		0101	Pork (uncooked) - other shops
		0101	Bacon and ham (uncooked) - large supermarket
		0101	Bacon and ham (uncooked) - other shops
		0101	Poultry (uncooked) - large supermarket
		0101	Poultry (uncooked) - other shops
		0101	Cold meats, ready to eat meats - large supermarket
		0101	Cold meats, ready to eat meats - other shops
		0101	Sausages (uncooked) - large supermarket
		0101	Sausages (uncooked) - other shops
		0101	Offal and other uncooked meats - large supermarket
		0101	Offal and other uncooked meats - other shops
		0101	Tinned and bottled meat and meat products - large supermarket
		0101	Tinned and bottled meat and meat products - other shops
		0101	Meat and poultry pies and pasties - large supermarket
		0101	Meat and poultry pies and pasties - other shops
		0101	Fish (uncooked) and shellfish - large supermarket
		0101	Fish (uncooked) and shellfish - other shops
		0101	Processed fish (smoked, dried, canned, bottled) - large supermarket
		0101	Processed fish (smoked, dried, canned, bottled) - other shops
		0101	Fish (prepared) and fish products - large supermarket
		0101	Fish (prepared) and fish products - other shops
		0101	Butter - large supermarket
		0101	Butter - other shops
		0101	Margarine - large supermarket
		0101	Margarine - other shops
		0101	Cooking oils and fats - large supermarket
		0101	Cooking oils and fats - other shops
		0101	Fresh milk - large supermarket
		0101	Fresh milk - other shops
		0101	Yoghurt and milk based desserts - large supermarket
		0101	Yoghurt and milk based desserts - other shops
		0101	Other milk and cream - large supermarket
		0101	Other milk and cream - other shops
		0101	Cheese - large supermarket
		0101	Cheese - other shops
		0101	Eggs - large supermarket
		0101	Eggs - other shops
		0101	Potatoes - large supermarket
		0101	Potatoes - other shops
		0101	Processed potatoes and products - large supermarket
		0101	Processed potatoes and products - other shops

		0101	Fresh vegetables and salad - large supermarket
		0101	Fresh vegetables and salad - other shops
		0101	Processed and frozen vegetables - large supermarket
		0101	Processed and frozen vegetables - other shops
		0101	Pulses, dried and processed - large supermarket
		0101	Pulses, dried and processed - other shops
		0101	Fresh fruit - large supermarket
		0101	Fresh fruit - other shops
		0101	Processed fruit - large supermarket
		0101	Processed fruit - other shops
		0101	Dried fruit and nuts - large supermarket
		0101	Dried fruit and nuts - other shops
		0101	Sugar - large supermarket
		0101	Sugar - other shops
		0101	Jam, jellies, preserves and other spreads - large supermarket
		0101	Jam, jellies, preserves and other spreads - other shops
		0101	Sweets and chocolates - large supermarket
		0101	Sweets and chocolates - other shops
		0101	Ice cream and sorbets - large supermarket
		0101	Ice cream and sorbets - other shops
		0101	Soup - large supermarket
		0101	Soup - other shops
		0101	Pizzas, quiches, vegetarian pies - large supermarket
		0101	Pizzas, quiches, vegetarian pies - other shops
		0101	Meat dishes - large supermarket
		0101	Meat dishes - other shops
		0101	Fish dishes - large supermarket
		0101	Fish dishes - other shops
		0101	Vegetarian foods - large supermarket
		0101	Vegetarian foods - other shops
		0101	Sandwiches, filled rolls and baguettes - large supermarket
		0101	Sandwiches, filled rolls and baguettes - other shops
		0101	Other convenience foods - large supermarket
		0101	Other convenience foods - other shops
		0101	Pasta cooked e.g. tinned pasta - large supermarket
		0101	Pasta cooked e.g. tinned pasta - other shops
		0101	Baby and diet foods - large supermarket
		0101	Baby and diet foods - other shops
		0101	Potato crisps and savoury snacks - large supermarket
		0101	Potato crisps and savoury snacks - other shops
		0101	Pickles, sauces, flavourings, colourings - large supermarket
		0101	Pickles, sauces, flavourings, colourings - other shops
		0101	Other foods undefined - large supermarket
		0101	Other foods undefined - other shops
Convenience	Non-alcoholic drink	0102	Tea - large supermarket
		0102	Tea - other shops
		0102	Coffee - large supermarket
		0102	Coffee - other shops
		0102	Drinking chocolate, other food drinks - large supermarket
		0102	Drinking chocolate, other food drinks - other shops
		0102	Fruit juices, squashes - large supermarket
		0102	Fruit juices, squashes - other shops
		0102	Bottled water (still and sparkling) - large supermarket
		0102	Bottled water (still and sparkling) - other shops
		0102	Fizzy drinks - large supermarket
		0102	Fizzy drinks - other shops
Convenience	Alcoholic drink	0201	Beer and lager - large supermarkets
		0201	Beer and lager - other shops
		0201	Cider - large supermarkets
		0201	Cider - other shops
		0201	Fortified wines - large supermarkets
		0201	Fortified wines - other shops
		0201	Non-fortified wines, still wines - large supermarkets
		0201	Non-fortified wines, still wines - other shops
		0201	Champagne and sparkling wine - large supermarkets
		0201	Champagne and sparkling wine - other shops
		0201	Spirits, liqueurs - large supermarkets

		0201	Spirits, liqueurs - other shops
		0201	Alcoholic 'soft drinks' - large supermarkets
		0201	Alcoholic 'soft drinks' - other shops
		0201	Alcohol not otherwise specified - other
Convenience	Tobacco	0202	Cigarettes - large supermarkets
		0202	Cigarettes - other shops
		0202	Pipe and cigarette tobacco - large supermarkets
		0202	Pipe and cigarette tobacco - other shops
		0202	Cigars and snuff - large supermarkets
		0202	Cigars and snuff - other shops
Convenience	Goods & services for hhd maintenance	0506	Other goods and services for household maintenance
		0506	Kitchen disposables inc paper towels, foil, drinking straws, bin liners, matches
		0506	Detergents, washing-up liquid, washing powder - other shops
		0506	Disinfectants, polishes, other cleaning materials - other shops
		0506	Detergents and other cleaning materials - large supermarket
Convenience	Medical products, appliances & equipment	0601	Medicines, prescriptions and spectacles
		0601	Other medical products, appliances and equipment
Convenience	Recreational items	0903	Pet food - large supermarket
		0903	Pet food - other shops
		0903	Pet care e.g. purchase, equipment, veterinary services
Convenience	Newspapers, books & stationery	0905	Greeting cards, stationery and paper goods - large supermarket
		0905	Greeting cards, stationery and paper goods - other shops
		0905	Newspapers - large supermarkets
		0905	Newspapers - other shops
		0905	Magazines and periodicals - large supermarkets
		0905	Magazines and periodicals - other shops
		0905	Other newspapers, books and stationery
Convenience	Personal care	1201	Toilet paper - large supermarket
		1201	Toilet paper - other shops
		1201	Toiletries and soap
		1201	Cosmetics and hair products
		1201	Other personal care
Convenience	Personal goods	1203	Baby toiletries and equipment

CACI Category	COICOP Group	COICOP	Description
Services	Alcoholic drink	0201	Beer and lager - on licensed premises
		0201	Cider - on licensed premises
		0201	Fortified wines - on licensed premises
		0201	Non-fortified wines, still wines - on licensed premises
		0201	Champagne and sparkling wine - on licensed premises
		0201	Spirits, liqueurs - on licensed premises
		0201	Alcoholic 'soft drinks' - on licensed premises
		0201	Alcohol not otherwise specified - on licensed premises
Services	Rent or mortgage	0401X	Net rent, mortgages etc
Services	Gas, electricity & other fuel	0405	Gas
		0405	Electricity
		0405	Other fuels
Services	Household hardware	0503X	Repairs to gas and electric appliances and insurance and spare parts
Services	Goods & services for hhd maintenance	0506	Domestic help and childcare
		0506	Laundry, cleaning and repairs to footwear, watches etc
Services	Medical, dental, optical & nursing fees	0602X	Medical, dental, optical and nursing fees
Services	Cars, vans & motorcycles purchase	0701	Cars, vans and motorcycle purchase
Services	Operation of cars, vans & motorcycles	0702	Spares and accessories
		0702	Car and van repairs and servicing
		0702	Petrol, diesel and other motor oils
		0702	Other motoring costs
Services	Transport services	0703	Rail and tube fares
		0703	Bus and coach fares
		0703	Air and other fares
Services	Communications	0801X	Telephone and postage
Services	A/V, photographic, computing equipment	0901	Repairs and maintenance of TV, video, computer and audio, incl insurance
Services	Recreational durables	0902	Caravans
Services	Recreational services	0904	Non-sport subscriptions
		0904	Cinema admissions
		0904	Theatres, concerts, circuses, amateur shows etc
		0904	Spectator sports - admission charges
		0904	Participant sports excluding subscriptions
		0904	Sport subscriptions
		0904	Television licences
		0904	TV slot meter payments
		0904	Satellite TV subscription to channels
		0904	Cable TV connection and subscription
		0904	Admission to discos, stately homes, museums, nightclubs etc
		0904	Social events, incl car boot sales, coffee mornings, toddler groups, youth clubs
		0904	Football Pools payments
		0904	Bingo payments excluding admission charges
		0904	National lottery and scratch cards
0904	Other Lotteries and scratch cards		

		0904	Bookmaker, betting shop, tote, other betting payments
		0904	Other recreational services
Services	Educational services	1001	Education fees
		1001	Payments for school trips, other ad hoc schools expenditure
		1001	Leisure classes - fees
Services	Catering services	1101	Restaurant meals - hot and cold food
		1101	Take away meals eaten at home - hot food and cold food
		1101	Hot and cold take-away
		1101	Confectionery take-away
		1101	Ice cream take-away
		1101	Soft drinks take-away
		1101	Meals bought and eaten at the workplace
		1101	State school meals
		1101	Other catering services
Services	Accommodation services	1102X	Package holiday in UK
		1102X	Hotel holiday in UK
		1102X	Self-catering holiday in UK
		1102X	Package holiday abroad
		1102X	Hotel holiday abroad
		1102X	Self-catering holiday abroad
Services	Personal care	1201	Hairdressing and beauty treatment
Services	Insurance	1205	Insurance of dwelling
		1205	Motor vehicle insurance and taxation
		1205	Non-package holiday/other travel insurance inc money paid to friend/relative
		1205	Life assurance
		1205	Medical insurance
Services	Financial services	1206	Commission on travellers cheques/foreign currency
		1206	Savings and investments
		1206	Other financial services
Services	Miscellaneous services	1207	Professional fees
		1207	Other miscellaneous services
Services	Consumption outside UK	3301	Money spent abroad inc duty free goods abroad
		3301	Other consumption outside UK
		N/A	Duty free goods bought in the UK
		N/A	Cash gifts to those outside household
		N/A	Maintenance/ separation allowance
		N/A	Charitable donations and subscriptions (exc. money sent abroad)

9 Price Indices for the COICOP Groups

	Price index compared with 1995	_1995	_1996	_1997	_1998	_1999	_2000	_2001	_2002	_2003	_2004	_2005	_2006	_2007	_2008	_2009	2010	2011	2012
0101	Food	100	102.9	102.3	103.5	103.7	103.4	103.1	103.0	103.5	103.8	104.1	104.7	105.3	106.0	107.0	107.9	108.9	109.9
	Non-Alcoholic Beverages																		
0102		100	104.5	106.5	109.9	114.2	110.4	112.0	115.5	120.0	124.4	128.5	132.6	136.6	140.5	144.5	148.5	152.7	156.9
0201	Alcoholic Beverages	100	103.2	106.7	111.6	115.9	117.4	120.2	124.0	129.0	134.0	139.2	144.7	150.3	156.2	162.3	168.6	175.2	182.0
0202	Tobacco	100	106.7	114.6	124.6	139.0	150.4	161.8	173.7	186.3	198.8	211.3	224.2	237.5	251.2	265.6	280.7	296.7	313.6
0301	Clothing	100	99.6	101.1	100.8	98.0	93.8	89.7	86.1	83.2	80.3	77.6	75.2	73.0	71.0	69.3	67.6	66.0	64.4
0302	Footwear	100	98.2	95.6	93.9	92.6	91.5	90.1	88.8	87.7	86.4	85.0	83.7	82.6	81.6	80.7	79.8	78.9	78.0
	Rentals for housing, water supply etc.																		
0401X		100	103.1	109.0	115.0	122.0	125.2	127.9	132.3	138.3	145.0	152.2	160.1	168.8	178.1	188.1	198.6	209.7	221.4
	Maintenance and repair of dwelling																		
0403		100	103.2	106.2	108.8	109.8	113.1	116.6	119.8	122.9	125.2	127.1	128.8	130.3	131.7	133.1	134.4	135.7	137.1
	Electricity, gas and other fuels																		
0405		100	100.7	97.2	91.5	90.7	90.9	91.4	94.2	98.1	102.1	106.0	110.1	114.0	118.0	122.2	126.4	130.9	135.4
	Furniture, furnishings, etc.																		
0501		100	105.0	107.5	109.5	110.3	110.1	110.2	110.9	112.3	113.7	115.0	116.6	118.4	120.3	122.3	124.4	126.5	128.7
0502	Household textiles	100	102.2	102.6	103.4	103.0	99.3	103.2	106.8	110.4	113.4	116.0	118.4	120.7	122.9	125.0	127.1	129.2	131.4
	Household appliances, etc.																		
0503X		100	99.8	98.5	97.9	96.2	93.6	92.0	91.2	91.4	91.6	92.0	92.4	93.0	93.6	94.4	95.1	95.9	96.7
	Equipment for house and garden																		
0505		100	100.9	100.7	100.9	99.9	98.2	96.8	95.9	95.8	95.5	95.3	95.3	95.5	95.8	96.3	96.8	97.3	97.8
	Goods/services for household maint.																		
0506		100	102.7	104.1	107.3	109.9	112.3	114.9	118.5	123.1	127.7	132.4	137.3	142.4	147.7	153.1	158.8	164.7	170.8
0601	Medical products	100	104.2	107.4	112.0	116.1	120.4	125.1	130.3	136.3	142.0	147.7	153.6	159.6	165.7	172.0	178.5	185.3	192.4
	Outpatient and hospital services																		
0602X		100	102.6	107.4	113.9	118.3	122.0	126.5	131.9	138.3	144.5	150.8	157.5	164.2	171.3	178.5	186.0	193.8	202.0
0701	Purchase of vehicles	100	103.3	107.7	107.5	106.2	103.4	106.1	108.4	110.7	112.2	113.3	114.2	115.0	115.7	116.3	116.9	117.5	118.1

	Price index compared with 1995																	
	_1995	_1996	_1997	_1998	_1999	_2000	_2001	_2002	_2003	_2004	_2005	_2006	_2007	_2008	_2009	2010	2011	2012
0702	100	104.4	111.6	116.1	122.5	132.4	143.0	154.4	167.2	180.3	194.0	208.3	223.5	239.8	257.1	275.6	295.5	316.7
0703	100	103.0	111.2	117.7	114.7	119.2	124.2	129.8	136.2	142.3	148.4	154.7	161.0	167.4	174.1	181.1	188.4	195.9
0801X	100	98.3	95.6	93.3	91.2	86.8	82.6	79.8	78.0	76.2	74.4	72.6	70.8	69.0	67.2	65.5	63.8	62.1
0901	100	98.6	95.5	90.3	81.6	73.9	67.2	61.4	56.5	51.9	47.8	44.1	40.8	37.8	35.1	32.6	30.2	28.1
0902	100	103.1	105.6	109.2	109.4	109.3	109.3	109.5	110.1	110.4	110.5	110.6	110.7	110.8	110.8	110.8	110.8	110.8
0903	100	101.9	103.2	103.1	100.7	99.1	97.7	96.6	96.1	95.6	95.2	95.0	95.0	95.2	95.6	96.0	96.4	96.8
0904	100	103.6	106.5	110.7	115.3	119.2	123.2	127.7	133.2	138.5	143.9	149.5	155.4	161.3	167.4	173.8	180.4	187.2
0905	100	105.9	108.2	111.8	115.7	118.7	122.3	126.4	130.7	134.3	137.4	140.2	142.9	145.5	148.0	150.5	153.0	155.6
1001	100	109.2	119.2	126.8	134.0	141.8	154.9	168.6	183.2	197.9	212.9	228.7	245.2	262.6	280.9	300.6	321.7	344.2
1101	100	104.1	108.1	112.4	116.9	121.3	124.7	127.6	130.5	132.6	134.2	135.5	136.6	137.6	138.4	139.2	140.1	140.9
1102X	100	99.8	101.0	101.3	102.6	107.5	118.6	130.2	143.0	155.9	169.3	183.5	198.6	214.6	231.8	250.4	270.4	292.0
1201	100	104.5	108.9	115.2	118.5	118.0	118.7	120.6	123.6	126.8	130.3	134.2	138.5	143.1	148.0	153.0	158.2	163.6
1203	100	100.8	100.9	101.0	99.9	98.3	96.3	94.3	92.5	90.4	88.1	85.9	83.8	81.7	79.6	77.6	75.7	73.8
1204	100	102.0	102.5	105.0	108.7	112.2	114.8	116.9	119.0	120.3	121.1	121.7	122.1	122.3	122.5	122.6	122.7	122.8
1205	100	101.8	109.0	115.1	117.1	121.8	126.2	130.1	134.1	137.3	140.1	142.6	144.9	147.0	149.1	151.2	153.3	155.5
1206	100	109.6	112.1	124.6	124.1	130.6	135.1	139.0	143.0	146.2	148.8	151.2	153.3	155.3	157.2	159.1	161.0	162.9
1207	100	104.0	105.6	112.7	120.3	127.1	132.9	138.2	143.7	148.5	152.8	156.9	160.8	164.7	168.5	172.3	176.3	180.3
3301	100	102.2	91.4	89.0	86.6	86.1	87.5	90.1	93.5	96.9	100.2	103.8	107.3	110.9	114.6	118.4	122.3	126.3

10 Population Estimates and Projections

CACI's 1999 Population Estimates and Projections are approved by the Joint Industry Committee for Population Standards (JICPOPS) as the 'definitive' population updates for postcode sectors. CACI are one of just two demographic specialists to produce these industry standard updates.

CACI's estimates and projections are also available for the most detailed Census area, the Enumeration District (ED) and can be aggregated to provide updates which are consistent with JICPOPS standards for any geography.

By combining the JICPOPS methodology with individual and postcode level data, CACI are the UK's first supplier of postcode level estimates of current year population and households.

Methodology

Government Projections (published in 1997) forecast future year populations taking account of fertility, mortality and migration trends. This data is available by gender and for detailed age bands. However, it is only available for large geographical areas and, therefore, of little value for local spatial analysis.

The latest Government Mid Year Estimates published by ONS and GRO(S) provide a more accurate update of the 1999 population, based on retrospective data analysis, again for large geographical areas. They also allow for an adjustment of the 1991 Census base to account for the "missing million", approximately one million people estimated to be missing from the final Census head count.

The Government Controls used in the methodology are as follows.

- 1999 Mid Year Population Estimates, for GB Local Authority District & Unitary Authorities (Source: ONS & GRO)
- 1997-2021 Population Projections, for English metropolitan Local Authority Districts, and non-metropolitan Counties (ONS)
- 1997-2016 Population Projections, for Scottish Unitary Authorities (GRO)
- 1997-2016 Population Projections, for Welsh Unitary Authorities (Welsh Office)
- Regional Trends households, for England, Scotland and Wales (ONS & GRO)
- 1991 Census communal population, for GB EDs (ONS & GRO)

In common with official terminology estimates refer to the years up to 1999 and projections to year 2000 forwards. The most recent estimates are for 1999 published in 2000. The projections were published in 1997.

The following are the broad steps taken by CACI to convert this base data to give local area estimates and projections.

- i. The Government's Mid Year Population Estimate is used to adjust the Government projection for 1999. This in turn adjusts the time series giving an enhanced population projection for the current year at LAD/UA level.
- ii. The 'communal population' (old people's homes, prisons etc.) is subtracted from this enhanced projection to give a population living in households.

- Regional Trends in household size are then applied to this figure to give current year household projections at LAD/UA level.
- iii. The Electoral Roll, Postcode Address File (PAF) and Census variables are used to produce the current year Baseline Projections at postcode level.
 - a) these Baseline Projections are aggregated to larger geographical areas and verified against the other JICPOPS supplier.
 - b) the 20 age bands of the previous year's JICPOP's population projection are 'aged' by one year and then applied to the Baseline Projection to give the definitive current year population projection by age and social class at postcode sector level.
 - iv. The postcode level current year projections are aggregated to ED level and factored based on trends in the Government Mid Year Estimates to give projections for future years.

Note: Limitations of Projections

Projection results can only represent a view of a likely way forward at the time of preparation. Population change is affected by many social and economic factors and by local and central government policies and it is not possible to make exact predictions of changes in these factors over time. For more precise local projections planners might require additional information on known schemes in the vicinity of any site.

Joint Industry Committee for Population Standards (JICPOPS)

The objective of JICPOPS is to produce an agreed set of postcode sectors and population estimates so that researched media can be measured on a common population base. CACI and Experian are the UK's leading demographic specialists. We are working together with JICPOPS to produce these definitive population updates to address the significant anomalies in population and household data currently being used in marketing, advertising and market research.

JICPOPS includes media and advertising industry organisations and is owned by them. This includes AMCO, JICREG, IPA, ISBA, NRS, POSTAR and RAJAR. These industry bodies insist on adherence to JICPOPS standards, and that any commissioned research should be based on JICPOPS data.

11 Summary of inputs and assumptions

11.1 Data Sources

In producing local expenditure projections the following data sources have been used.

- Consumer Trends, expenditure, prices and historical time series
- Family Expenditure Survey, Years 1996/1997 to 1999/2000
- H M Treasury. Forecasts for the UK Economy, A comparison of independent forecasts No. 172 August 2001
- Annual Business Inquiry
- CACI's Paycheck figures of household income
- 1991 census factors and CACI's models of updated demographics
- ACORN 2000
- CACI's population and household estimates and projections
-

The models of household propensity to purchase use some or all of the following variables

Housing tenure
Single parents
Number of children in the household
Number of persons in the household
Age of head of household
Household income
Region

11.2 Assumptions

The UK economy will perform as the average of the independent forecasts published by H M Treasury (see above). Specifically forecasts for GDP, RPI and AEI are taken from this publication.

Expenditures are calculated as spend per household and person. Spend totals are derived by applying CACI's population and household forecasts. Alternative population or household figures may be applied to the expenditure rates to give spend totals for alternative demographic scenarios.

Annex 3 - CACI'S ACORN USER GUIDE

Welcome to ACORN, CACI's smarter consumer classification.

Consumer behaviour is becoming ever more complex and consumer markets more fragmented. Often the traditional social grades are no longer adequate or relevant to describe the complex consumer characteristics now present in different geographic areas across the United Kingdom.

Marketers need the range and detail offered by geodemographic and lifestyle analysis in order to understand fully the kind of people buying their goods, using their services or shopping in their stores. Geodemographic targeting also helps marketers pinpoint the people who are most likely to need their products or services – and avoid those who are not.

ACORN is the most powerful consumer targeting tool available on the market today. It combines geography with demographics and lifestyle information – places where people live with their underlying characteristics and behaviour – to create a tool for understanding the different types of people in different areas throughout the country.

It enables marketers to make informed decisions and successfully implement the right business and marketing strategies. This includes:-

- knowing where direct marketing and advertising will be effective
- identifying which branches or stores are under- or overperforming
- deciding where to locate new retail outlets, leisure facilities and public services.

ACORN groups the entire UK population into 5 categories, 17 groups and 56 types. By analysing significant social factors and consumer behaviour, it provides precise information and an in-depth understanding of the different types of consumers in every part of the country.

Innovation & Excellence

Developed by CACI over 25 years ago, ACORN was the first geodemographic classification in the country. Since then we have built over 25 UK consumer classifications, frequently introducing innovative new techniques for targeting consumers. ACORN remains the most respected and reliable consumer classification in the United Kingdom.

CACI employ a specialised team of people, including a number who worked on the development of the original ACORN. No other UK company possesses a team with as many experts in developing and using geodemographic classification tools.

The result is the most powerful UK ACORN classification CACI has ever produced. Together with the complete family of CACI targeting systems, it provides the most powerful tool for addressing the complexity of consumer markets.

How ACORN is built

CACI started planning the development of the new ACORN two and a half years before the 2001 Census was available. We had already successfully used a range of additional data sources, including lifestyle surveys, to update the previous version of ACORN. We now wanted to ensure we built the new ACORN using the most robust data from the best available sources. In particular, we wanted to identify additional sources of data that would complement the Census.

Data

Over 400 variables were used to build ACORN and describe the different ACORN types. Of these variables, 30% were sourced from the 2001 Census. The remainder were derived from CACI's consumer lifestyle databases, which cover all of the UK's 46 million adults and 23 million households.

The inputs to the classification were carefully selected. This included a process of testing each variable's contribution to the power of the classification. We considered the effect of each variable individually, and their use in combination with other variables. This exhaustive testing ensured the ACORN classification was built using data that provided the greatest discrimination and targeting power.

The unique two-stage method

CACI then employed a novel two-stage approach to creating the new ACORN. We took advantage of the fact that for the 2001 Census, the Census office had claimed it was publishing data for areas it knew contained the same kind of households.

As a first stage CACI classified postcodes in the traditional manner, using a mixture of census and our other data sources.

But we didn't stop there. We developed an innovative second stage which selectively focused extra effort on any postcodes where ACORN might be improved. We used our substantial consumer lifestyle databases to check for subtle differences in areas which the Census said contained the same kind of people. We then tested whether the postcodes in these areas were truly identical. When all our data sources agreed with the Census we were confident that we had the most accurate possible ACORN code. When we identified postcodes that were not identical, we used all our additional data and a special set of decision algorithms to refine their ACORN codes.

This unique methodology produced an ACORN classification that gives better discrimination. It also allows ACORN to be updated annually more easily than ever before, maintaining our picture of UK consumers' behaviour as it changes over time.

Using ACORN

ACORN can be used to understand customers, identify profitable prospects, evaluate local markets and plan public resources.

By adding ACORN codes to a customer database, you can increase knowledge of your customers' behaviour and lifestyle. ACORN profiling will give you new insights

into your customers and allow you to identify prospects who most resemble your best customers.

ACORN can be used to drive effective customer communication strategies, including targeted direct mail, leaflet distribution and local newspaper advertising.

For local market planning, ACORN can be used to define and analyse the purchasing preferences and lifestyle characteristics of different areas through the UK. This results in a more effective estimation of the demand for your products and services, and a more effective location planning strategy.

Once retailers and suppliers have understood the characteristics and make-up of a neighbourhood, by using ACORN they can make strategic decisions on the format of their branch or store and the range of goods carried.

- Where should I open, close or locate my next store?
- Which products will suit the area?
- How should I allocate my resources?
- What factors can influence my store performance?

As a result of this range of applications, ACORN is widely used in many sectors of business.

Financial organizations use ACORN to understand their customers, cross-sell their product range, set branch targets, predict loyal customers, and plan their network strategy.

Retailers use ACORN to locate stores, plan product ranges, assess refurbishments, and target local marketing for stores.

Media owners use ACORN to support advertising sales, evaluate sales potential, and develop new markets.

In FMCG, ACORN is used to drive customer communication, in-store marketing, ranging and product distribution.

The public sector uses ACORN to target services to areas of need, and inform policy decisions

The ACORN family

ACORN is part of a family of tools used for targeting UK consumers. The ACORN family includes a range of postcode, household and individual level classifications, both general purpose and market specific.

ACORN classifies the entire population in terms of general lifestyle and demographic behaviour by way of their postcode. This means it is easy to apply and can be used for a huge range of products and services.

Specific regional and sector specific ACORNs include:-

Scottish ACORN - which provides a classification of postcodes in terms of data specific and relevant to Scotland

Northern Irish ACORN - which adds detail to the UK ACORN classification to address specific features of the province

Financial ACORN - which classifies all of Scotland, Northern Ireland, England and Wales in terms of consumers' financial behaviour, product usage and service preferences.

For advanced analysis, the ACORN family also includes classifications focusing on specific dimensions. Sometimes a single factor such as age, income or house price can be the most significant piece of information in determining whether people are likely to be customers. CACI has created a range of postcode classifications which give the best targeting on single dimensions and are easy to apply.

Individual level classifications can deliver more accuracy but may not be as simple to use as postcode based tools:-

- PeopleUK is CACI's general purpose individual level classification and provides great targeting power across a wide range of behavioural and purchasing patterns
- LifestylesUK can be used to target individual consumers based on over 300 specific attributes, including age, income, car ownership, leisure interests and charity preferences.

The wide range provided by the ACORN family means that there is an ideal targeting tool whatever your specific business need.

Experience and Quality

ACORN and our family of consumer classifications are an important part of our comprehensive tool-box which includes data, software and consultancy services. All are geared to making your marketing and planning more profitable.

CACI can offer you more experience, people skills and technical excellence than any other supplier. The CACI name is synonymous with reliability and quality – a reputation which we are careful to maintain with products and consultancy of the highest calibre.

CACI consultants have a real understanding of how our data can enhance your business. Our broad skill base of industry expertise, statistical and technical know-how and commercial focus will ensure our work for you will generate real results.

Understanding ACORN further

To help you understand ACORN further and give you in-depth and up-to-date information, CACI maintain a dedicated ACORN website. The site provides you with an extensive library of product purchasing and consumer behaviour profiles, with a pen portrait illustrating each type.

There is also a detailed explanation of the methodology behind ACORN, and, for our long-standing clients, matrices to help convert their old ACORN information into the new types.

Visit www.caci.co.uk/ACORN

ACORN Categories 1 – 5

Category 1 - Wealthy Achievers

These are some of the most successful and affluent people in the UK. They live in wealthy, high status rural, semi-rural and suburban areas of the country. Middle aged or older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well off families with school age children, particularly in the more suburban locations.

These people live in large houses, which are usually detached with four or more bedrooms. Almost 90% are owner occupiers, with half of those owning their home outright. They are very well educated and most are employed in managerial and professional occupations. Many own their own business.

Car ownership is high, with many households running 2 or more cars. Incomes are high, as are levels of savings and investments.

These people are well established at the top of the social ladder. They enjoy all the advantages of being healthy, wealthy and confident consumers.

Category 2 - Urban Prosperity

These are well educated and mostly prosperous people living in our major towns and cities. They include both older wealthy people living in the most exclusive parts of London and other cities, and highly educated younger professionals moving up the corporate ladder. This category also includes some well educated but less affluent individuals, such as students and graduates in their first jobs.

The wealthier people tend to be in senior managerial or professional careers, and often live in large terraced or detached houses with four or more bedrooms. Some of the younger professionals may be buying or renting flats. The less affluent will be privately renting.

These people have a cosmopolitan outlook and enjoy their urban lifestyle. They like to eat out in restaurants, go to the theatre and cinema and make the most of the culture and nightlife of the big city.

Category 3 - Comfortably Off

This category contains much of 'middle-of-the-road' Britain. Most people are comfortably off. They may not be wealthy, but they have few major financial worries.

All lifestages are represented in this category. Younger singles and couples, just starting out on their careers, are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban or semi-rural locations. Comfortably off pensioners, living in retirement areas around the coast or in the countryside, form the other main group in this category.

Most people own their own home, with owner occupation exceeding 80%. Most houses are semi-detached or detached. Employment is in a mix of professional and managerial, clerical and skilled occupations. Educational qualifications tend to be in line with the national average.

This category incorporates the home-owning, stable and fairly comfortable backbone of modern Britain.

Category 4 - Moderate Means

This category contains much of what used to be the country's industrial heartlands. Many people are still employed in traditional, blue collar occupations. Others have become employed in service and retail jobs as the employment landscape has changed.

In the better off areas, incomes are in line with the national average and people have reasonable standards of living. However, in other areas, where levels of qualifications are low, incomes can fall below the national average. There are also some isolated pockets of unemployment and long term illness.

This category also includes some neighbourhoods with very high concentrations of Asian families on low incomes.

Most housing is terraced, with two or three bedrooms, and largely owner occupied. It includes many former council houses, bought by their tenants in the 1980s.

Overall, the people in this category have modest lifestyles, but are able to get by.

Category 5 - Hard Pressed

This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long term illness in some areas.

Housing is a mix of low rise estates, with terraced or semi detached houses, and purpose built flats, including high rise blocks. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

There are a large number of single adult households, including many single pensioners and lone parents. In some neighbourhoods, there are high numbers of black and Asian residents.

These people are experiencing the most difficult social and economic conditions in the whole country, and there appears to be little chance of any improvement at all.

ACORN Groups A – Q

Group A – Wealthy Achievers

These are some of the most affluent people in the UK. They live in wealthy high status suburban, rural and semi-rural areas of the country. Houses tend to be large and detached with four or more bedrooms. Many are owned outright.

Households are a mix of middle-aged families, empty nesters and wealthy retired. They are very well-educated individuals with high levels of academic qualifications. Most are employed in senior managerial and professional occupations or are running their own businesses.

Car ownership is very high with most households having two or more cars, one of which is likely to be a high value company car.

Unsurprisingly given their education and occupations, incomes are high as are levels of savings and investments. These consumers are financially sophisticated and purchase a wide range of financial products. They read the quality broadsheets and are likely to take two or more holidays a year.

In short, these are consumers with the money and the space to enjoy very comfortable lifestyles.

Group B - Affluent Greys

These people tend to be older empty nesters and retired couples. Many live in rural towns and villages, often in areas where tourism is important. Others live in the countryside where the economy is underpinned by agriculture.

The Affluent Greys are prosperous, live in detached homes and many have two cars. Employment is typically in managerial and professional roles. Given the rural locations, there are also a significant number of farmers.

These are high income households and even those that have retired have good incomes. The majority own their homes outright, and with no mortgage to pay are able to invest their money in a wide range of financial products.

In their leisure time they enjoy gardening and golf. They appreciate good food and wine, and will go on regular holidays.

These older, affluent people have the money and the time to enjoy life.

Group C – Flourishing Families

These are wealthy families with mortgages. They live in established suburbs, new housing developments around commuter towns, and villages and rural areas. Houses tend to be detached or larger semi-detached properties often with four bedrooms.

While these are generally family areas, there are also some empty nesters and better-off retired couples.

Flourishing Families are younger than other affluent groups, so most households are still likely to be making mortgage repayments. Incomes are good since many have

managerial and professional occupations. Many will have cars, pensions and health cover provided by their employer. Car ownership is high and many of these families will have two or more cars. These families are usually financially secure with a variety of savings and investments.

They take regular holidays, including long haul, skiing and summer sun. Some people are quite active, enjoying sports, playing golf or going to the gym. A number enjoy the countryside through activities such as walking or birdwatching. Taking the family to the cinema is also a favourite pastime. PC ownership is common and they are comfortable with new technology.

These are high income achievers, successfully juggling both jobs and families.

Group D – Prosperous Professionals

These are the most prosperous people living in our main cities. They are very well educated and tend to be employed in senior managerial and professional occupations. Households are a mix of families, couples, singles and some retired.

Given the urban nature of these areas, property is a mix of terraced and detached houses, and converted and purpose built flats. The houses tend to be large, with four or more bedrooms. Some of the flats are occupied by young professionals sharing. Over 80% of the housing is owner occupied.

These are affluent neighbourhoods so car ownership is high, even if travel to work is often by public transport. Incomes are high and these individuals have high levels of savings and investments. Technologically sophisticated, they regularly use the Internet for financial services, as well as buying other products and services.

They read the major broadsheets and have a cosmopolitan outlook, being interested in theatre, the arts, classical music and eating out in good restaurants.

Having chosen an urban lifestyle, these consumers have the money and education to make the most of what our big cities have to offer.

Group E - Educated Urbanites

These young people are highly qualified. The majority live in flats in our major cities.

Most are in professional and managerial roles and many are working hard to further their careers. They have high incomes, and those that having been working for some time will be buying their flats and making other financial investments. The others are renting and have high disposable incomes.

The one significant purchase they may make is an expensive car. However, many prefer to use public transport, particularly for travelling to work.

Educated Urbanites take full advantage of living in the city and go out regularly. They enjoy restaurants and bars and are interested in the theatre and the arts. They are well informed about current affairs and are keen readers of the Guardian, Financial Times and Independent.

This Group will spend significant amounts on travel and take frequent holidays. They are very likely to go on long haul trips and will either ski or seek the sun in the winter.

These young people have the world at their feet and plenty of money to enjoy it.

Group F – Aspiring Singles

Aspiring Singles are young and live in urban or suburban locations, frequently around London. There are large numbers of both students and well qualified young people who have recently finished their studies and started working.

Many live in rented flats, both purpose built and converted. The flats tend to be small, typically one or two bedrooms, and be located in basements or above shops. While many single people live alone, there are also people sharing larger properties such as terraced houses. These are quite mobile populations with a high turnover of residents.

People lead urban lifestyles. They are active, participating in sports and going to the gym. Like most young people, they enjoy going out with friends to pubs and clubs in the evenings, or to coffee shops during the day.

Cars are relatively rare so transport is by bus, train, tube, or walking. They are highly confident with new technology, and are likely to be regular users of the Internet for a wide range of purposes.

Readership of liberal broadsheet newspapers such as The Guardian, Independent and Observer is high.

Many of these active young people are likely to develop well-paid careers in the future.

Group G – Starting Out

These are young adults, many just starting out on their careers. They are in their twenties and early thirties. There are a lot of students and young singles in their first jobs, as well as young couples and some young families with children under five.

Housing is a mix of smaller terraced houses, with two or three bedrooms, and converted and purpose built flats. Many of the houses are being bought on a first mortgage but renting from private landlords is also common. Many of the students and young single professionals in this group will be house or flat sharers.

Most of the individuals are well educated to A-level and degree standard. They will often be employed in lower managerial, professional and clerical occupations, and are on the first rungs of the corporate ladder. Most of the women in this group work full time.

Most households have a car, with some having two. Incomes tend to be good and levels of savings and investments above the national average.

They enjoy sport and exercise and are likely to visit the gym regularly. Leisure time is also spent watching cable TV, going to pubs and restaurants and listening to music. The Guardian, Independent and Observer are popular newspapers.

These young people are just starting out but have the education and ambition to succeed in life.

Group H – Secure Families

This group comprises home-owning families living comfortably in stable areas in suburban and semi-rural locations. They mainly live in three bedroom semi-detached homes. Families might include young children, teenagers or even young adults who have not yet left home. These areas will also include some empty nesters.

Within this group, there are also some neighbourhoods with high numbers of comfortably off Asian families.

People are employed in a range of occupations, including middle management and clerical roles. There are also reasonable numbers of shopworkers and skilled manual workers. Incomes are at least of average levels and many earn well above the national average.

Most people in this group have some savings and would consider themselves financially prudent. The more affluent will have good company cars and will have build up somewhat greater levels of savings and investments.

These are the stable suburban families that make up much of middle Britain.

Group I – Settled Suburbia

These established communities are made up of empty nesters and retired older couples. Property tends to be two and three bedroom semi-detached houses and bungalows. Many own their homes outright.

The working population are in a mix of lower management, supervisory, manufacturing and retail jobs. They earn modest salaries and significant numbers of women work part-time to boost the overall household income.

Given that their children tend to have left home and they have very little mortgage to pay, many will have a reasonable disposable income. They may also have some investments for security in their old age.

They like to go on holiday and will typically enjoy UK and European holidays, in both winter and summer. For many gardening is their most important activity.

While most people get their news from TV, the Daily Mail is the most popular newspaper.

These people have managed their incomes well, and have adequate financial resources to feel confident and secure about the future.

Group J – Prudent Pensioners

These are comfortably-off retired people found in many seaside towns and elsewhere around the country. There are many over 75s as well as younger retired. A lot of the households are pensioner couples or singles. Retirement homes are also common.

Much of the housing in these areas is flats, either converted or low rise purpose built. Many are owner occupied and often of high value; others are privately rented. Holiday homes are also common.

Residents tend to be well educated, and employment for those who are not retired tends to be in managerial and professional occupations.

Most of the people in this group have a comfortable standard of living having provided for their old age with above average levels of savings and investments.

Although predominantly of retirement age, householders are far from inactive. They are prepared to take on charity and voluntary work and show a marked propensity to be members of bodies such as the National Trust. Many have an interest in fine art and antiques.

These sophisticated senior citizens are both financially smart and socially active. They have ensured that they will enjoy a relaxed and refined retirement.

Group K - Asian Communities

These are urban areas where the concentration of Asian families is a key characteristic. These young families live in the terraced streets of many major cities, including Birmingham, Bradford and London.

There are lots of children in these families, which also feature the highest levels of children under the age of five.

Qualification levels tend to be low and unemployment levels are high. People typically work in routine manual roles or in the retail sector. However most women tend to be at home bringing up their young families.

With low incomes and large families to support there is little discretionary spend. They rarely go on holiday and rely on home-based entertainment, perhaps subscribing to cable TV to extend their viewing choice. For many, religion is very important and plays a major role in their social and family lives.

Like all young families, these Asian Communities are striving to create a bright future for their children.

Group L – Post-Industrial Families

Twenty years ago, these would have been traditional blue-collar areas. Now, with the decline of heavy industry, people are quite likely to work in office or clerical jobs and in shops.

Most households are traditional families with school age children. They generally live in three bedroom terraced houses, which tend to be at the cheaper end of the housing market. Most families are owner occupiers, but a number rent their houses from the local council.

Incomes are more likely to be around the national average. Spending on credit cards is low and people are careful with their money. Mortgages are often covered by a mortgage protection policy and levels of remortgaging are high. Many will also switching utility provider in order to get the best deal.

Most families can afford to run a car and to take a holiday every year, often a package holiday to the Mediterranean. Cable and satellite TV is popular as are sports like football and rugby.

These are cautious consumers who are successfully adapting to the changing nature of employment in the UK.

Group M – Blue Collar Roots

These are communities where most employment is in traditional blue collar occupations. Families and retired people predominate with some young singles and single parents.

Most property is 2 or 3 bedroomed terraced houses. Many are being bought on a mortgage although renting from private landlords, local authorities and housing associations is common in some areas.

Levels of educational qualifications tend to be low. Most employment is in factory and other manual occupations. There are many shopworkers as well. Incomes range from moderate to low and unemployment is higher than the national average, as is long term illness. There are pockets of deprivation in this group.

Car ownership is below the national average, and cars tend to be lower value and often bought second hand. Some of the better off areas within this group have modest levels of savings and investments but many find it hard to save regularly from modest incomes. There are some households with high levels of debt.

The tabloid press is favoured reading and other interests include camping, angling, bingo and horseracing, as well as watching cable TV and going to the pub.

These people have a modest lifestyle but most are able to get by.

Group N - Struggling Families

These are low income families living on traditional low-rise estates. Some have bought their council houses but most continue to rent.

Estates will be usually be either terraced or semi-detached. Two bedroom properties are more typical but the larger families may be housed in three bedroom properties. Either way there may be an element of overcrowding. On some estates there are high numbers of single parents while on others there are more elderly people, some with long term illness.

Incomes are low and unemployment relatively high. Jobs reflect the general lack of educational qualifications and are in factories, shops and other manual occupations.

There are fewer cars than most other areas. Money is tight and shopping tends to focus on cheaper stores and catalogues.

Visiting the pub, betting, football pools, bingo and the lottery are the principal leisure activities.

These families share the twin disadvantages of educational under achievement and consequent lack of opportunity. They are struggling to get by in an otherwise affluent Britain.

Group O – Burdened Singles

This urban group is characterised by high numbers of single adults. These include single pensioners, young singles and lone parents.

They tend to live in a purpose built flats or small terraced houses, the majority of which are rented from the council or a housing association.

The working population is employed in routine, manual and retail occupations. However, with high numbers of pensioners and single parents, many people are not working and the overall level of household incomes is very low. Unemployment levels are above average and long term illness levels are high, which reflects the relatively high numbers of older people.

With such low incomes, these households have little, if any, discretionary spend. They are unlikely to have cars and rely on public transport. Leisure activities are very limited and will include going for the occasional drink, playing bingo and placing a bet at the bookies.

Life for this group is undoubtedly difficult, with restricted finances and employment opportunities. For most, there is little realistic chance of immediate improvement.

Group P – High Rise Hardship

These communities have very high numbers of older residents, especially over 65s. There are very few traditional families and middle aged people. There are also fewer children in this group overall, although some areas contain high numbers of single parents with children under 5. Over 60% of households contain only one adult. These can be single people, single pensioners or lone parents.

Over 75% of households live in purpose built flats, mostly rented from the local authority or housing associations. Flats are small, usually one or two bedrooms, and often in high rise blocks. There are very low levels of owner occupation.

These are relatively deprived neighbourhoods, containing some of the UK's highest levels of unemployment and long term illness. Those in work are likely to be employed in manual and factory jobs or work in shops. Educational qualifications, incomes and car ownership are all low.

Leisure interests include football, horse racing, bingo and going to the pub. The tabloids are favoured reading.

These people are enduring hardship and for them, life is a struggle.

Group Q - Inner City Adversity

These are densely populated urban areas with a young multi-ethnic population, primarily in and around London. 25% of the population is black and 14% is Asian. Households are typically young singles and young families, often single parent.

They live in small flats in purpose built blocks, normally rented from the council or housing association.

Unemployment levels are almost double the national average, and the working population is employed in routine, manual occupations. There is also a significant student population. Household incomes are very low with many earning less than £10,000 per annum. There is little money left for discretionary spending, particularly for those with young families. Car ownership is very low and everyone is dependent on public transport.

Like other young people they are interested in music, football and fashion. For many their religion is also very important. They are interested in current affairs, and whilst the Sun and the Mirror are popular, significant numbers read The Guardian and Independent.

These young multi-ethnic communities maintain a sense of vibrancy despite obvious hardship.