

# The Consumer Data Research Centre and its Data Service

Sarah Sheppard  
Project Manager



# Who we are...

- Bringing together world-class researchers from Leeds, UCL, Liverpool & Oxford.
- Funded by the Economic and Social Research Council as part of the Big Data Network Phase 2 Business and Local Government Data
  - Urban Big Data Centre
  - ESRC Business and Local Government Data Research Centre
  - Consumer Data Research Centre

## CDRC Partners



# What we do...

- Multi-institution laboratory that discovers, mines, analyses and synthesises consumer-related datasets from around the UK
- Our objective is to create a service for social science researchers, to harness the potential of consumer-related Big Data for the benefit of society.
- Creates, supplies, maintains and delivers consumer-related data to a range of end users, alongside a programme of research training and outreach activities.



#### CDRC Data statistics

11 topics 35 products 27.7<sub>GB</sub> data 16.6<sub>k</sub> downloaded

#### Welcome to CDRC Data

We are an academic led, multi-institution laboratory which discovers, mines, analyses and synthesises consumer-related datasets from around the UK. The CDRC is an ESRC Data Investment.



#### A Focus On ...

##### London Output Area Classification

The London Output Area Classification (LOAC) was created by [Alex Singleton and Paul Longley](#) in collaboration with the [Greater London Authority](#). The recently published article [explores the geography of where Londoners live to](#)

#### Popular Datasets

##### CDRC 2011 Workplace Zone Census Geodata Pack: Birmingham (E08000025)

[Open](#)

This census data pack provides 2011 Census workplace zone estimates for the Local Authority District: Birmingham (E08000025). The estimates are as at census day, 27 March 2011....

[ZIP](#)

##### CDRC 2014 IUC Geodata Pack - Liverpool (E08000012)

[Open](#)

The 2014 Internet User Classification (IUC) is a UK geodemographic of Internet use and engagement. This CDRC 2014 IUC Geodata Pack provides a mappable version of this...

[ZIP](#)

##### CDRC English Indices of Deprivation 2015 Geodata Pack: Liverpool (E08000012)

[Open](#)

The English indices of deprivation data pack provides 2015 measures of relative deprivation in England for the Local Authority District: Liverpool (E08000012) at the LSOA scale....

[ZIP](#)

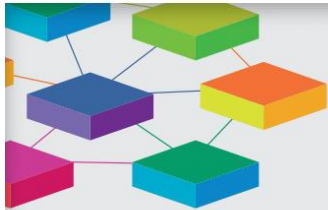
[more...](#)

#### Latest Datasets

Youth Banking Card Provider - Transactions and earning data [Secure](#)

# Datastore aims...

- **Catalogue** all CDRC data deposits
- Attributes are searchable (**Metadata**)
- Provide access to CDRC **Data Products**
- Make life **simple**...
  - Visual and interactive interfaces
  - **Training** & Materials
  - Local Authority Datastores



Home / Product

What are Products?

A product is a series of datasets containing data collected from a certain source or analytical results based on other datasets.

Search products...

35 products found

Order by: Name Ascending



2011 COWZ-EW Geodata Pack  
1 Dataset



ACXIOM - Income Data  
1 Dataset



CACI - Consumer Register 2014  
1 Dataset



CDRC 2001-2011 T OAC Geodata Pack  
327 Datasets



CDRC 2011 Census Data Packs  
696 Datasets



CDRC 2011 Census Data Packs for Northern Ireland  
11 Datasets



CDRC 2011 Census Data Packs for Scotland and  
32 Datasets



CDRC 2011 Census Open Atlas  
348 Datasets



CDRC 2011 LOAC G



CDRC 2011 OAC Ge



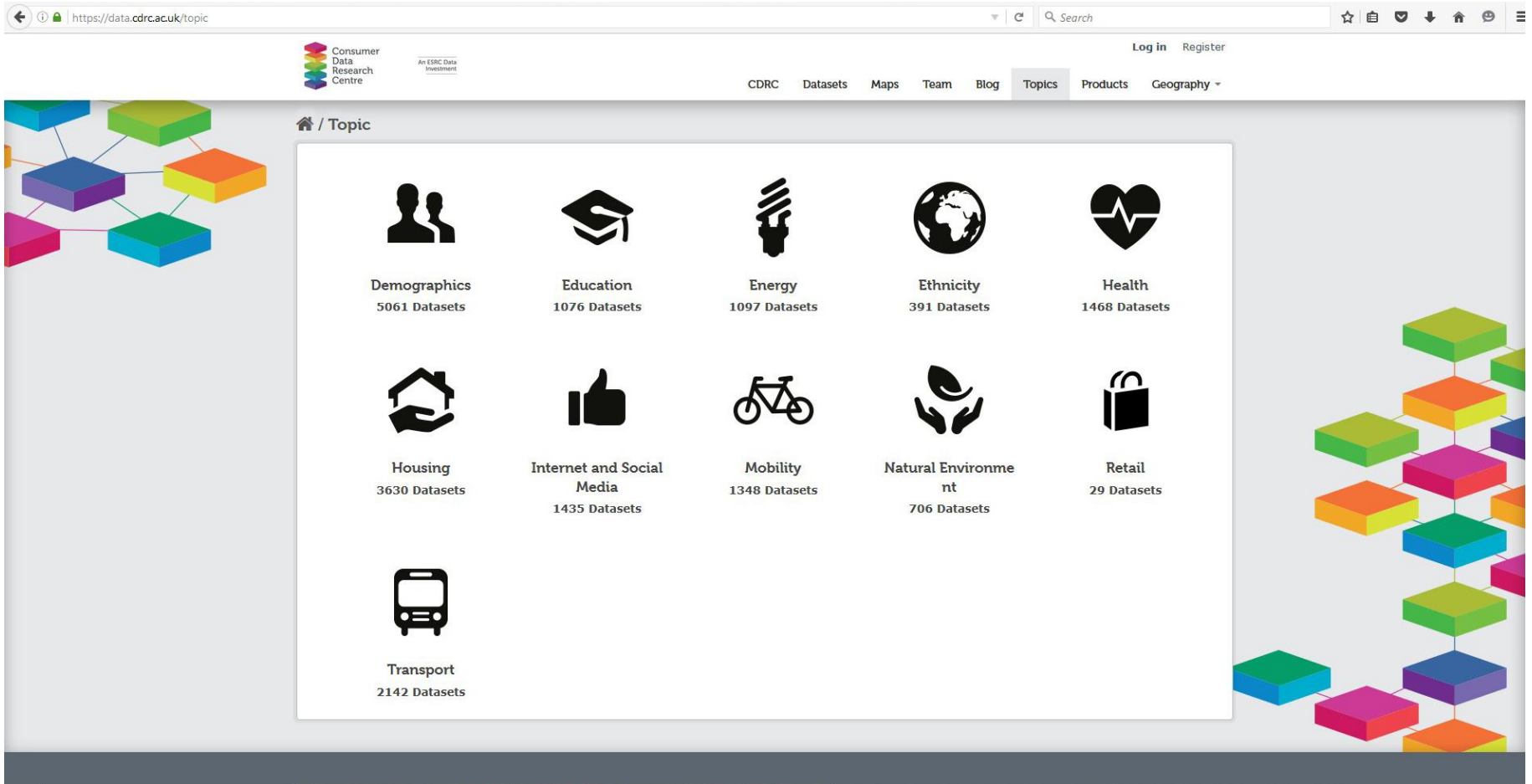
CDRC 2011 Residen



CDRC 2011 Transpo

Browse by Product
















https://data.cdrc.ac.uk/topic

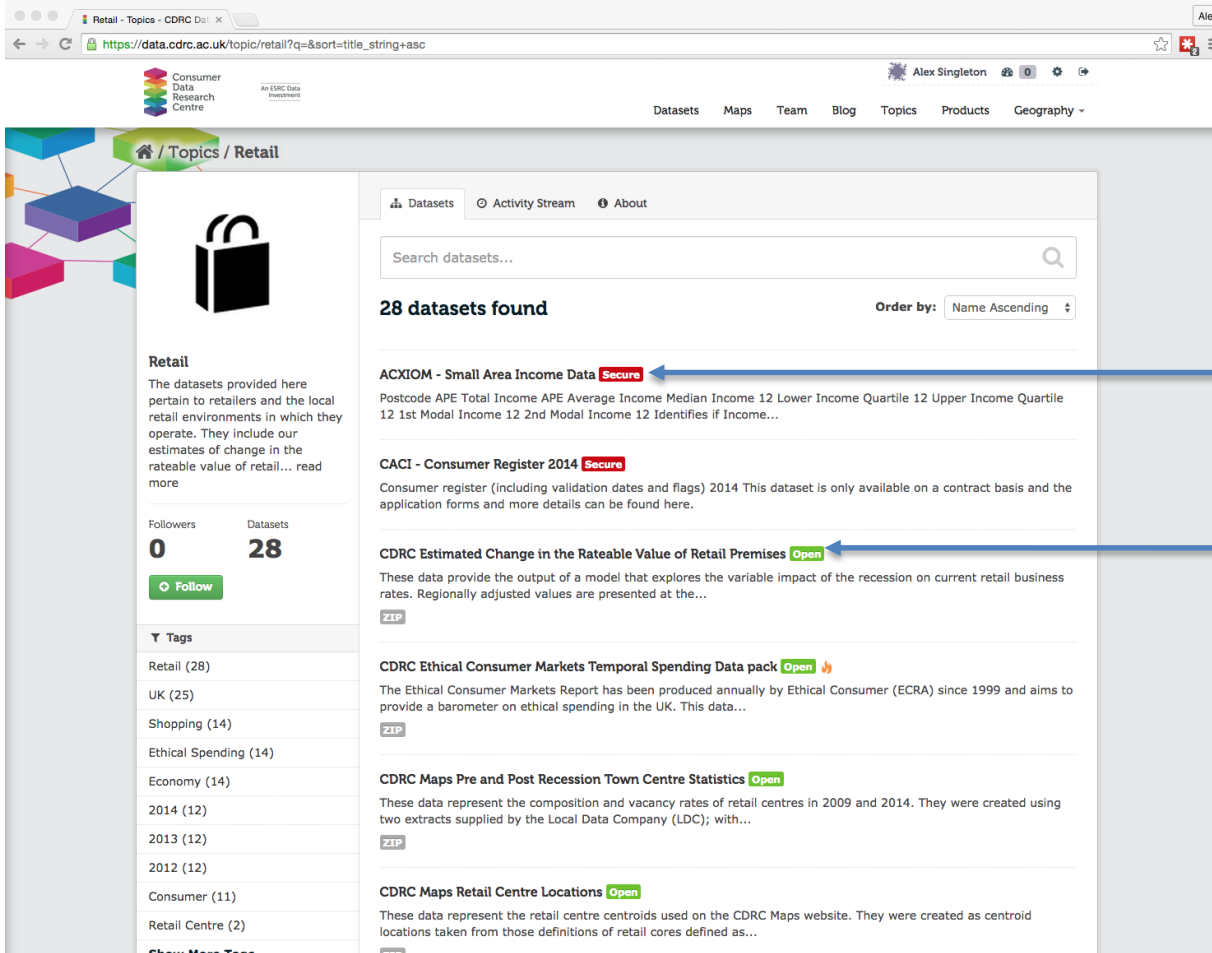
Log in Register

CDRC Datasets Maps Team Blog Topics Products Geography

Home / Topic

 Demographics 5061 Datasets	 Education 1076 Datasets	 Energy 1097 Datasets	 Ethnicity 391 Datasets	 Health 1468 Datasets
 Housing 3630 Datasets	 Internet and Social Media 1435 Datasets	 Mobility 1348 Datasets	 Natural Environment 706 Datasets	 Retail 29 Datasets
 Transport 2142 Datasets				

Browse by Topic



The screenshot shows a web browser window displaying the CDRC Retail Topics page. The page features a navigation menu with options like Datasets, Maps, Team, Blog, Topics, Products, and Geography. A sidebar on the left provides information about the Retail topic, including a lock icon, a description, and a list of tags such as Retail (28), UK (25), Shopping (14), Ethical Spending (14), Economy (14), 2014 (12), 2013 (12), 2012 (12), Consumer (11), and Retail Centre (2). The main content area displays a search bar and a list of 28 datasets. Each dataset entry includes a title, a description, and an access level indicator (Secure, Open, or ZTP). Two blue arrows point from the text 'Access Level' and 'Download Open Data' to the 'Secure' and 'Open' labels respectively.

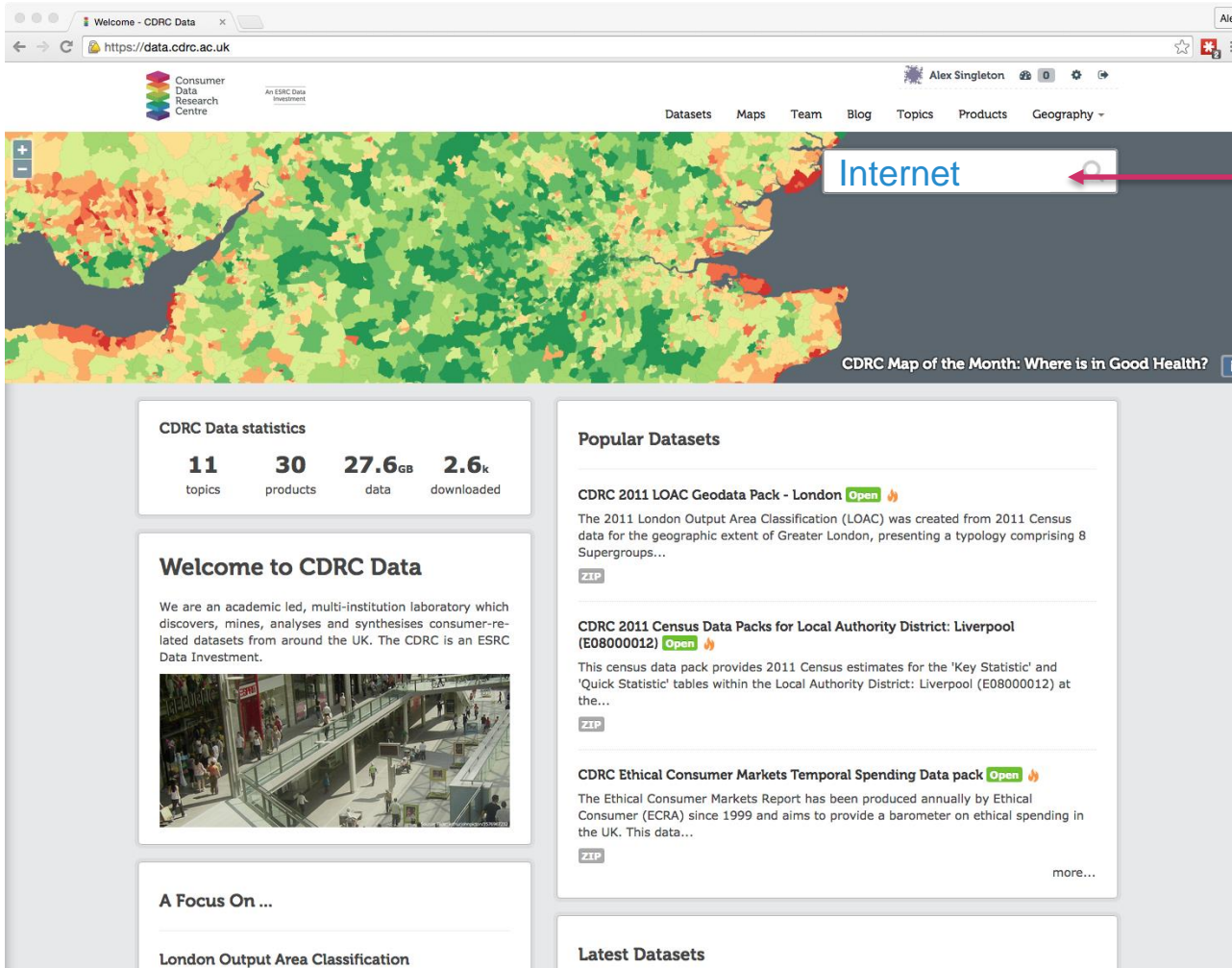
**28 datasets found** Order by: Name Ascending

- ACXIAM - Small Area Income Data** **Secure**  
Postcode APE Total Income APE Average Income Median Income 12 Lower Income Quartile 12 Upper Income Quartile 12 1st Modal Income 12 2nd Modal Income 12 Identifies if Income...
- CACI - Consumer Register 2014** **Secure**  
Consumer register (including validation dates and flags) 2014 This dataset is only available on a contract basis and the application forms and more details can be found here.
- CDRC Estimated Change in the Rateable Value of Retail Premises** **Open**  
These data provide the output of a model that explores the variable impact of the recession on current retail business rates. Regionally adjusted values are presented at the...  
ZTP
- CDRC Ethical Consumer Markets Temporal Spending Data pack** **Open** ↓  
The Ethical Consumer Markets Report has been produced annually by Ethical Consumer (ECRA) since 1999 and aims to provide a barometer on ethical spending in the UK. This data...  
ZTP
- CDRC Maps Pre and Post Recession Town Centre Statistics** **Open**  
These data represent the composition and vacancy rates of retail centres in 2009 and 2014. They were created using two extracts supplied by the Local Data Company (LDC); with...  
ZTP
- CDRC Maps Retail Centre Locations** **Open**  
These data represent the retail centre centroids used on the CDRC Maps website. They were created as centroid locations taken from those definitions of retail cores defined as...  
ZTP

Access Level

Download  
Open Data





The screenshot shows the CDRC Data website interface. At the top, there is a navigation menu with links for Datasets, Maps, Team, Blog, Topics, Products, and Geography. A search bar is prominently displayed with the word "Internet" entered. Below the navigation, a large map of the UK is shown with a color-coded overlay. The main content area is divided into several sections: "CDRC Data statistics" showing 11 topics, 30 products, 27.6GB data, and 2.6k downloads; "Welcome to CDRC Data" with a brief description and a photo of a shopping mall; "Popular Datasets" listing three datasets with "Open" buttons and "ZIP" download links; and "A Focus On ..." section highlighting the "London Output Area Classification".

Consumer Data Research Centre

An ESRC Data Investment

Alex Singleton

Datasets Maps Team Blog Topics Products Geography

Internet

Search...

CDRC Map of the Month: Where is in Good Health?

**CDRC Data statistics**

11 topics 30 products 27.6GB data 2.6k downloaded

**Welcome to CDRC Data**

We are an academic led, multi-institution laboratory which discovers, mines, analyses and synthesises consumer-related datasets from around the UK. The CDRC is an ESRC Data Investment.

**Popular Datasets**

**CDRC 2011 LOAC Geodata Pack - London** [Open](#) 🔥

The 2011 London Output Area Classification (LOAC) was created from 2011 Census data for the geographic extent of Greater London, presenting a typology comprising 8 Supergroups...

[ZIP](#)

**CDRC 2011 Census Data Packs for Local Authority District: Liverpool (E08000012)** [Open](#) 🔥

This census data pack provides 2011 Census estimates for the 'Key Statistic' and 'Quick Statistic' tables within the Local Authority District: Liverpool (E08000012) at the...

[ZIP](#)

**CDRC Ethical Consumer Markets Temporal Spending Data pack** [Open](#) 🔥

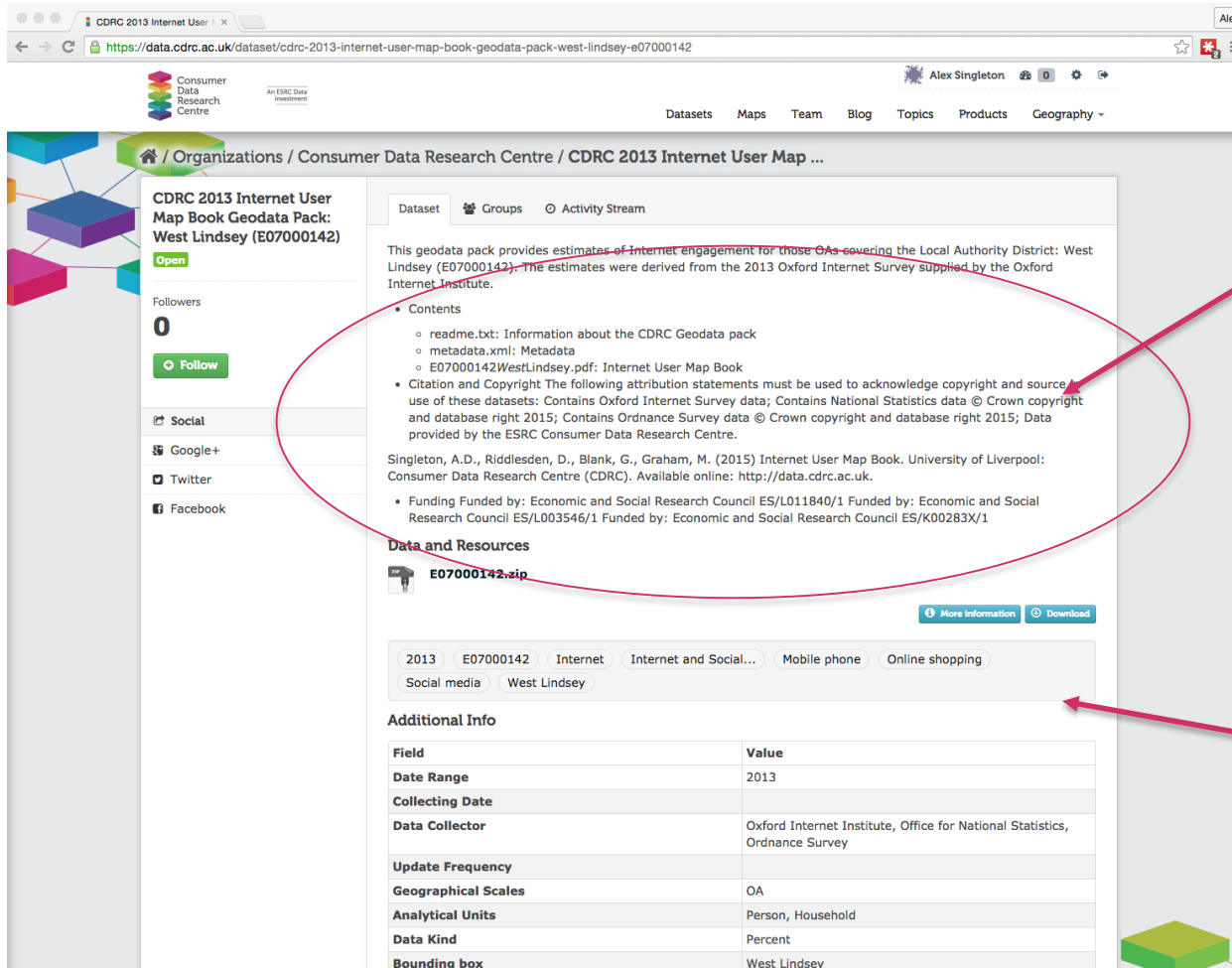
The Ethical Consumer Markets Report has been produced annually by Ethical Consumer (ECRA) since 1999 and aims to provide a barometer on ethical spending in the UK. This data...

[ZIP](#) more...

**A Focus On ...**

London Output Area Classification

**Latest Datasets**



CDRC 2013 Internet User Map Book Geodata Pack: West Lindsey (E07000142)

This geodata pack provides estimates of internet engagement for those OAs covering the Local Authority District: West Lindsey (E07000142). The estimates were derived from the 2013 Oxford Internet Survey supplied by the Oxford Internet Institute.

- Contents
  - readme.txt: Information about the CDRC Geodata pack
  - metadata.xml: Metadata
  - E07000142WestLindsey.pdf: Internet User Map Book
- Citation and Copyright The following attribution statements must be used to acknowledge copyright and source use of these datasets: Contains Oxford Internet Survey data; Contains National Statistics data © Crown copyright and database right 2015; Contains Ordnance Survey data © Crown copyright and database right 2015; Data provided by the ESRC Consumer Data Research Centre.

Singleton, A.D., Riddlesden, D., Blank, G., Graham, M. (2015) Internet User Map Book. University of Liverpool: Consumer Data Research Centre (CDRC). Available online: <http://data.cdrc.ac.uk>.

- Funding Funded by: Economic and Social Research Council ES/L011840/1 Funded by: Economic and Social Research Council ES/L003546/1 Funded by: Economic and Social Research Council ES/K00283X/1

**Data and Resources**

**E07000142.zip**

2013 E07000142 Internet Internet and Social... Mobile phone Online shopping  
Social media West Lindsey

**Additional Info**

Field	Value
Date Range	2013
Collecting Date	
Data Collector	Oxford Internet Institute, Office for National Statistics, Ordnance Survey
Update Frequency	
Geographical Scales	OA
Analytical Units	Person, Household
Data Kind	Percent
Bounding box	West Lindsey

Text  
Description

Tags  
> Scale  
> Extent  
> Topics  
> Year

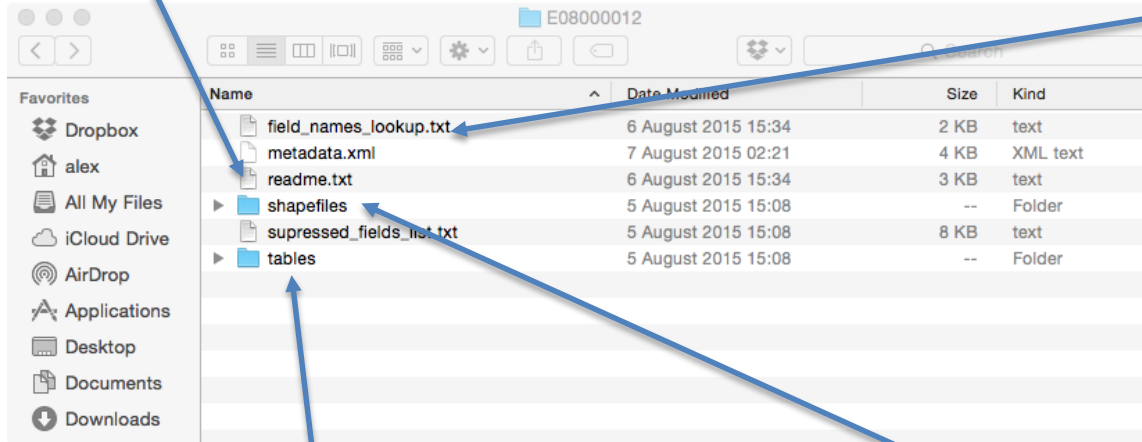
## Value Added

- Cleaned data
- Spatially referenced
- Added attributes
- More usable formats
- Attribute descriptions
- Available for national, regional or local extents

# Data Products...

Data description

Attribute descriptions



The screenshot shows a file explorer window for a folder named 'E08000012'. The left sidebar shows 'Favorites' including Dropbox, alex, All My Files, iCloud Drive, AirDrop, Applications, Desktop, Documents, and Downloads. The main pane displays a list of files and folders with columns for Name, Date Modified, Size, and Kind.

Name	Date Modified	Size	Kind
field_names_lookup.txt	6 August 2015 15:34	2 KB	text
metadata.xml	7 August 2015 02:21	4 KB	XML text
readme.txt	6 August 2015 15:34	3 KB	text
shapefiles	5 August 2015 15:08	--	Folder
supressed_fields_list.txt	5 August 2015 15:08	8 KB	text
tables	5 August 2015 15:08	--	Folder

Shapefiles

Cleaned CSV files

- Easting / northing
- Lat / lon

# Data Products...

Retailer / Consumer  
Data Partners



Open  
Data

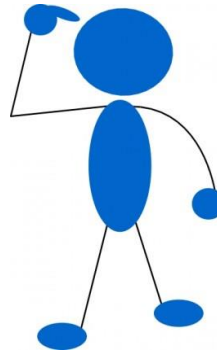
+



Consumer  
Data  
Research  
Centre

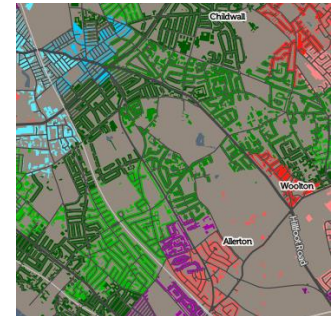
+

CDRC  
Academic/  
Researcher /  
Postgraduate  
student

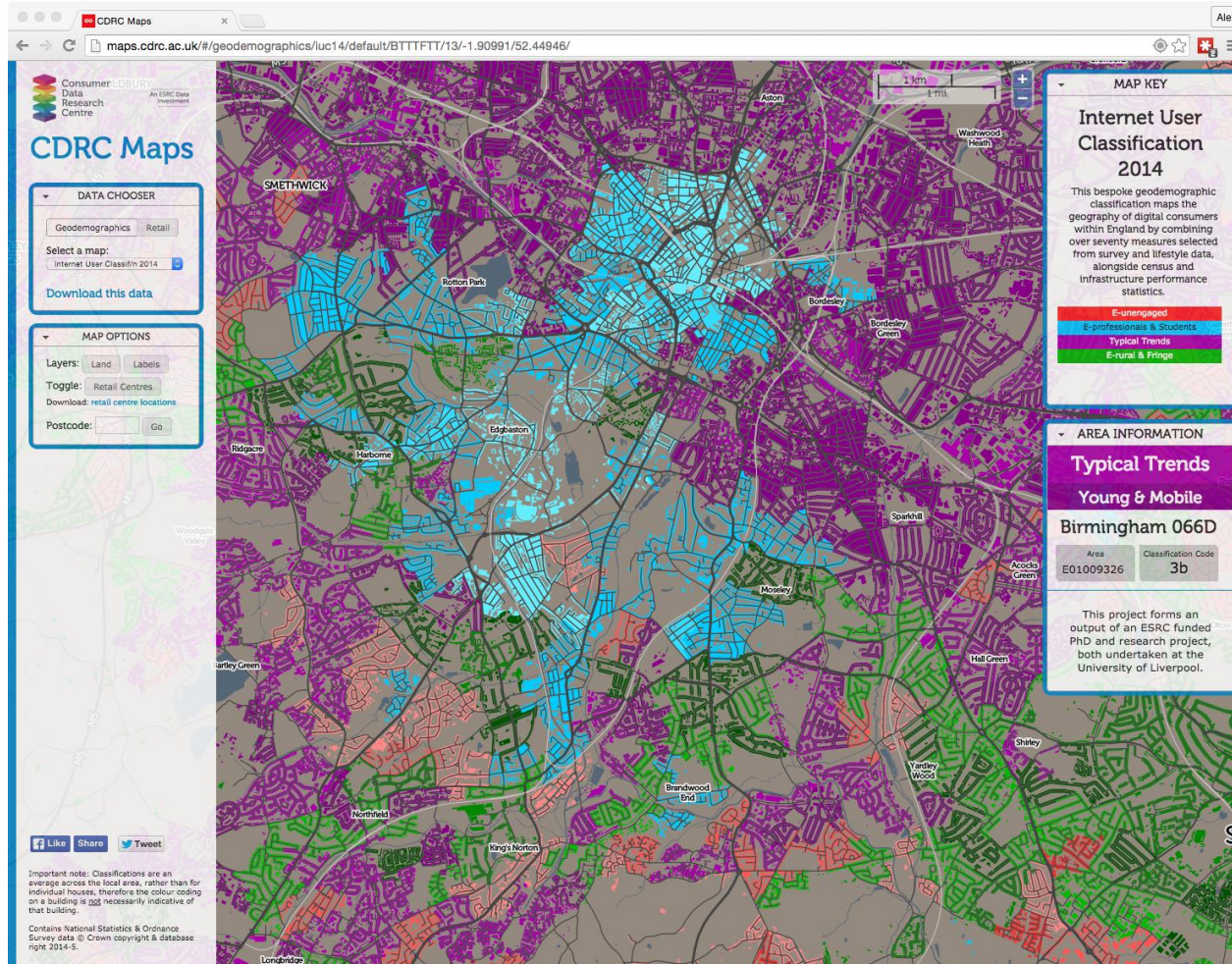


=

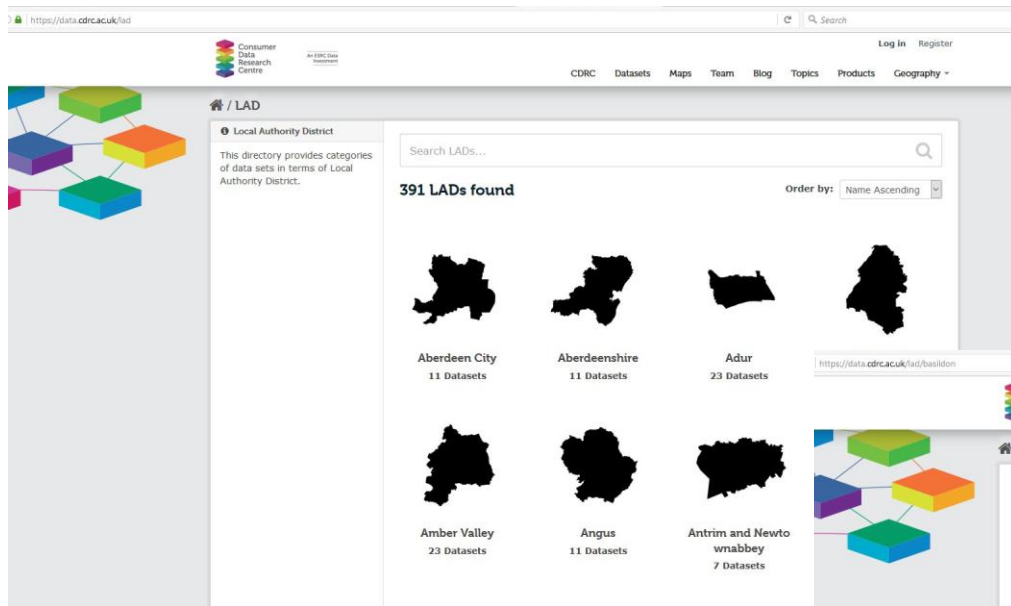
Internet User  
Classification







## Local Authority Datastores



https://data.cdrc.ac.uk/lad

Consumer Data Research Centre An ESRC Data Investment

CDRC Datasets Maps Team Blog Topics Products Geography

Log In Register

/ LAD







Local Authority District

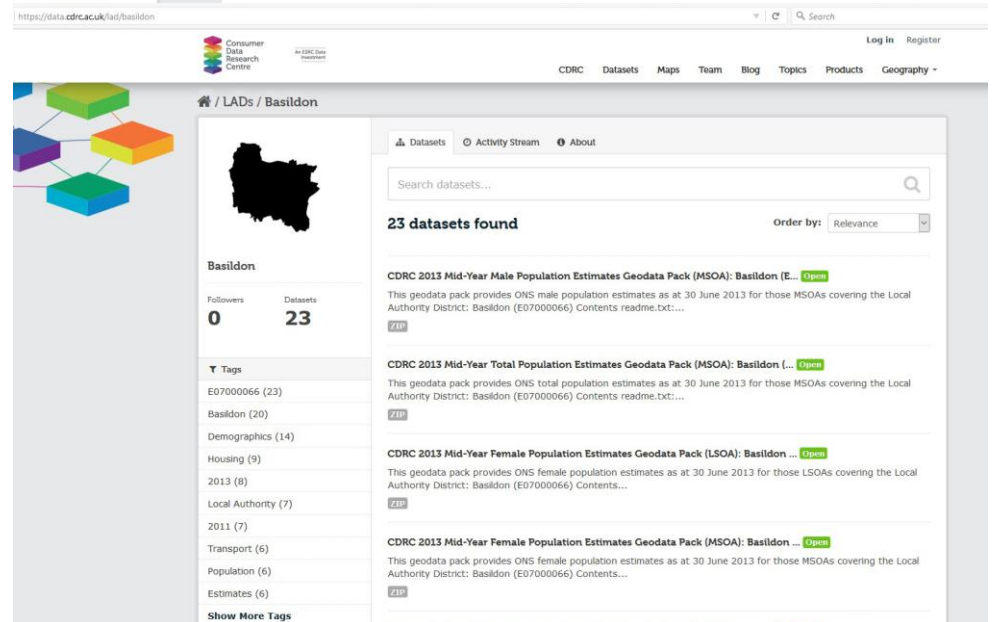
This directory provides categories of data sets in terms of Local Authority District.

Search LADs...

391 LADs found

Order by: Name Ascending

 Aberdeen City 11 Datasets	 Aberdeenshire 11 Datasets	 Adur 23 Datasets
 Amber Valley 23 Datasets	 Angus 11 Datasets	 Antrim and Newtownabbey 7 Datasets



https://data.cdrc.ac.uk/basildon

Consumer Data Research Centre An ESRC Data Investment

CDRC Datasets Maps Team Blog Topics Products Geography

Log In Register

/ LADs / Basildon

Datasets Activity Stream About

Search datasets...

23 datasets found

Order by: Relevance

**Basildon**

Followers: 0 Datasets: 23

Tags

- E07000066 (23)
- Basildon (20)
- Demographics (14)
- Housing (9)
- 2013 (8)
- Local Authority (7)
- 2011 (7)
- Transport (6)
- Population (6)
- Estimates (6)

Show More Tags

**CDRC 2013 Mid-Year Male Population Estimates Geodata Pack (MSOA): Basildon [E...** [Open](#)

This geodata pack provides ONS male population estimates as at 30 June 2013 for those MSOAs covering the Local Authority District: Basildon (E07000066) Contents readme.txt:...

**CDRC 2013 Mid-Year Total Population Estimates Geodata Pack (MSOA): Basildon [E...** [Open](#)

This geodata pack provides ONS total population estimates as at 30 June 2013 for those MSOAs covering the Local Authority District: Basildon (E07000066) Contents readme.txt:...

**CDRC 2013 Mid-Year Female Population Estimates Geodata Pack (LSOA): Basildon ...** [Open](#)

This geodata pack provides ONS female population estimates as at 30 June 2013 for those LSOAs covering the Local Authority District: Basildon (E07000066) Contents...

**CDRC 2013 Mid-Year Female Population Estimates Geodata Pack (MSOA): Basildon ...** [Open](#)

This geodata pack provides ONS female population estimates as at 30 June 2013 for those MSOAs covering the Local Authority District: Basildon (E07000066) Contents...



Upcoming Events > Training Session

◀ Previous Events

MARCH 2016

Retail Location Analysis Programme 2016

15th March 2016 - 17th March 2016  
University of Oxford, Said Business School  
Oxford, OX1 5NY United Kingdom + [Google Map](#)

The Retail Location Analysis Programme is a world leading 3-day development workshop for executives at the University of Oxford's Said Business School. Overview Celebrating its 30th year in 2016, Retail Location Analysis is designed for managers with oversight of or day-to-day responsibility for planning and development. Past participants have been drawn from retail, financial and other consumer services, property and retail professional service firms. Participants come from across the world and build global networks and understanding. The workshop provides an...

FIND OUT MORE >

Introduction to QGIS 2016

17th March 2016 - 18th March 2016  
Leeds Institute for Data Analytics, University of Leeds  
Leeds, LS2 9JT United Kingdom + [Google Map](#)

This 1.5 day course provides an introduction to QGIS, an open source Geographic Information System software package. You will be introduced to the various components of the software and learn how to work with both vector and raster data layers. You will learn how to run simple non-spatial analyses, how to edit existing maps and how to create maps using your own data.

# Training...

## Bricks Versus Clicks: Mapping Retail Centre Exposure to Online Shoppers and Material Deprivation

Les Dolige  
Sept 2015

### 1 Introduction

#### 1.1 Learning Aims and Objectives

The Internet has revolutionized the way in which people consume products and services, however a variety of factors influence these use and engagement behaviours. Understanding the influences on this geography is however complex, although, one way in which the has been made tractable is through geodemographic classification. However, these only tell you about the characteristics of the places in which people live, but not where they shop?

The objective of this practical is to examine retail supply and demand geographics, and evaluate the extent to which retail centres are exposed to consumers with different income and online consumption behaviour. In this case study you take on the role of a property agent who is advising retail clients about those locations most suitable for their new premises.

In addition to reinforcing learning from earlier practicals, you will also be developing the following GIS skills and understanding:

1. Use of a geodemographic classification and a subdomain of the IMD
2. How to calculate buffers and their uses
3. Recording variables in QGIS
4. Creating spatial joins
5. Basic understanding of retail catchment modelling techniques
6. Calculating a composite index from a geodemographic classification

#### 1.2 Assignment

Taking on the role of a property agent, in no more than 500 words, write a short summary report that identifies which retail centre would be the most appropriate location for new premises, using the results of your GIS analysis as evidence.

### 2 Practical

#### 2.1 Create an IUC geodemographic map of Liverpool

##### 2.1.1 Preparing your data

- In your "1M" drive, create a new folder for this practical - this is your "working directory"
- Go to <https://data.cdrc.ac.uk/dataset/> and download the CDRC 2014 IUC Geodata Pack - Liverpool into your working directory
- Unzip the file, open your CDRC IUC Geodata Pack and rename contained files (.dbf\_p1, .shp, .shx) to "IUC\_Liverpool" (e.g. IUC\_Liverpool.dbf etc.)
- Download the IMD geodatapack for Liverpool
- Unzip this file into your working directory
- From Web, download Huff Catchments data for Liverpool
- Unzip the files into your working directory

##### 2.1.2 Displaying data in QGIS

In the first part of this practical we will learn how to load and display GIS data, and will explore the Internet User Classification (IUC) data for Liverpool. The IUC is created from over seventy measures selected from survey and lifestyle data, alongside census and infrastructure performance statistics.

- Open QGIS by clicking: Start/All Programs/QGIS Plus/QGIS Desktop 2.10.1 (note that the version of QGIS installed on your private machine may vary)
- Load your CDRC IUC Geodata Pack data by dragging and dropping the shapefile (IUC\_Liverpool.shp) onto the map interface. Alternatively, click the **Add Vector Layer** button and navigate to your working directory .

Coming very soon...

<https://www.cdrc.ac.uk/events/category/training-session/>

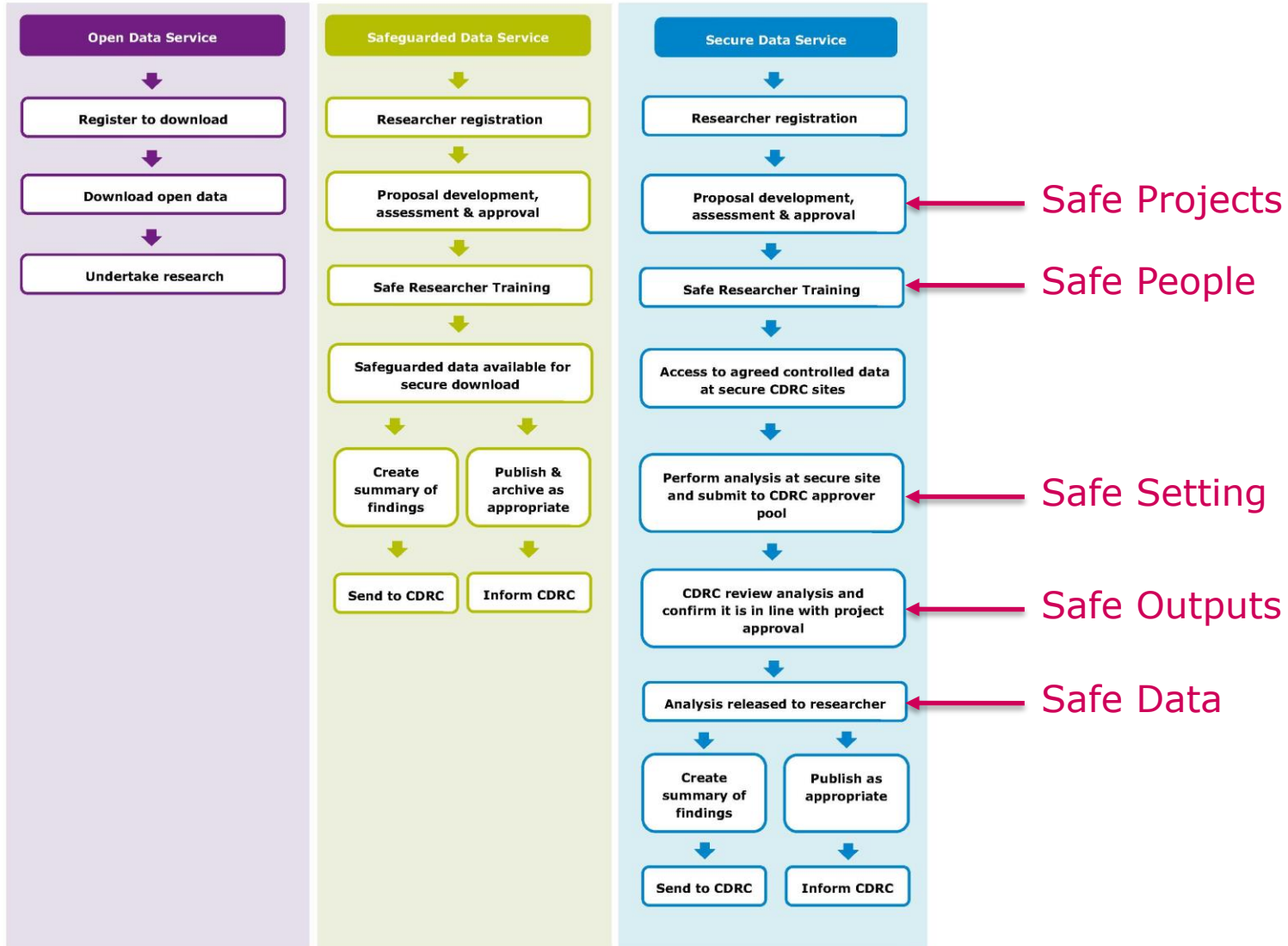
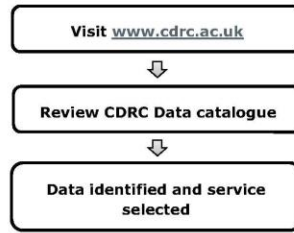


# Data access principles...

## UKDS 5 safe principles:

- **Safe Projects:** Research Approvals Process
- **Safe People:** National Accredited Researcher Training
- **Safe Setting:** Secure Labs
- **Safe Outputs:** Stringent output checks
- Resulting in - **Safe Data**

An ESRC Data  
Investment





The CDRC supports a wide range of users to carry out research projects that provide fresh perspectives on the dynamics of everyday life, problems of economic well-being and social interactions in cities.










- Health
- Retailing
- Policing
- Residential & Social Mobility
- Ethical & Sustainable Consumption

- **Data Acquisition Strategy**
  - Strategic Approach
  - Reactive Approach
  - Passive Approach
  - *Co-producing data*
- **Ladder of Engagement**
  - Research Masters Dissertation Programme
  - PhD/Internships
  - Internal research projects
  - Data acquisition for Centre under Data Licence Agreement

# Research Masters Dissertation Programme

## Related Pages

- Active Projects
- Details for Students
- 2016 Student Application Form
- Student Application Guidance
- 2015 Projects
- 2014 Projects
- PhD opportunities
- Testimonials
- Information for Retailers

Project Description	Sponsor	Status
Using Big Data to understand the drivers behind store footfall. 	The <b>co-operative</b>	Open
Understanding the Grocery Click & Collect Customer. 	<b>Sainsbury's</b>	Open
Explorative and Interactive Visualisation of Data 	<b>Sainsbury's</b>	Open
Dark Data 	<b>Sainsbury's</b>	Open
Effect of store locations and other factors on geographic sales density. 	 <b>Thomas Cook</b>	Closed
The size and placing of promotional banners on a website. 	<b>SHOP DIRECT</b>	Open
An investigation of what triggers customer activation of credit facilities. 	<b>SHOP DIRECT</b>	Open
Generating a linguistic algorithm to interpret shoppers' comments and how this affects their shopping experiences and behaviour. 	<b>CACI</b>	Closed

# Data Licence Agreements...

- Data Licence Agreement template
  - Specific restrictions including publication conditions
  - Data set variables description – level of aggregation, time etc.
  - Use of partner name
- Data Sharing Agreement





An ESRC Data  
Investment

# Our Partners



# Importing Data

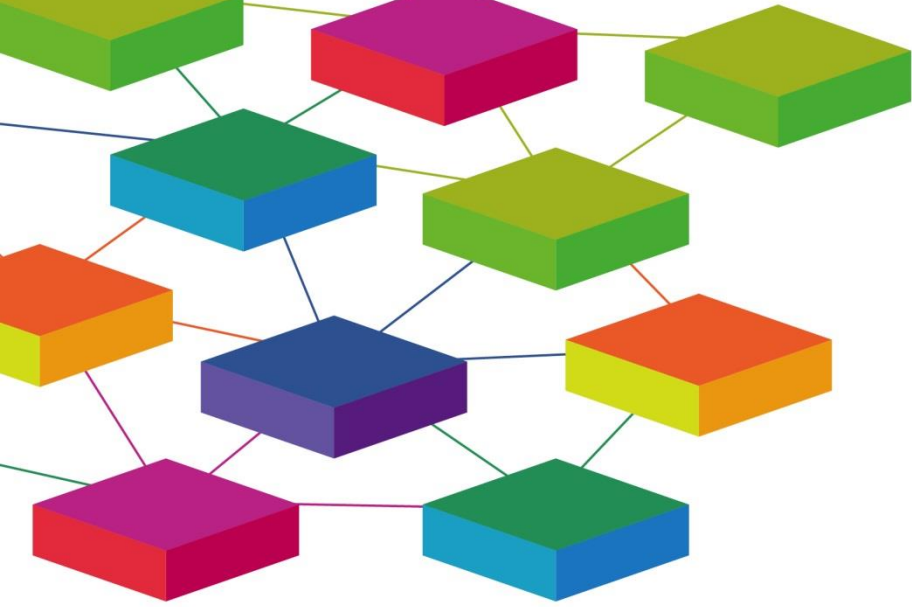
- Encrypted hard drive
- Asset management
- Data Protection Registration (if required)
- Importing to Datastore

# Asset Management

- Date
  - CDRC Owner
  - Designation – controlled, safeguarded, open
  - Personal data or not
  - Dataset reference
  - Dataset name
  - Partner name
  - Partner contact
  - Original/revised
  - Version
  - Metadata
  - Physical location
  - **Digital Object Identifier**
  - DLA restrictions
  - Institutional Data Protection registration
- DOI:
- CDRC unique prefix
  - Datacite Mandatory Properties
  - Anonymous creators

# Data Preservation

- Duration of CDRC, CDRC datasets will be curated, catalogued, maintained and preserved by the CDRC.
- After the CDRC those datasets created by the CDRC and that permission has been given will be archived at the UKDS UK Data Archive.
- Consumer organisation data – the raw data, if not representative of the population, do we want to be preserving this data? And who decides this?



[www.cdrc.ac.uk](http://www.cdrc.ac.uk)