

## Consumer Data Research Centre

### Innovation Fund: Commissioned Research Projects

### Call for Proposals

#### 1. Introduction

The Consumer Data Research Centre (CDRC or Centre) is pleased to invite proposals from UK-based academics for projects that will capitalise on our core consumer data sets, extend our network of partners, and drive forward substantive and innovative social science research across a broad range of disciplines and research areas.

We welcome proposals that would contribute to our existing CDRC research themes (described in section 3 of this call), as well as extensions into other research areas of strategic significance, including those aligned with the ESRC's priorities in:

- Mental Health
- Housing
- Productivity
- Understanding the Macro-Economy
- Ways of Being in a Digital Age

Projects will run from early October 2017 and must be completed no later than the end of September 2018.

The Centre is looking to fund in the region of **8-10 projects, each valued at between £20-60,000 (100% fEC).**

**Proposals should be submitted to [cdrc-innovation@leeds.ac.uk](mailto:cdrc-innovation@leeds.ac.uk) by 1700 hrs UK time on 31 July, 2017.**

#### 2. Background

Commissioned in February 2014, the Consumer Data Research Centre is a £15 million ESRC-funded Big Data initiative that brings together world class researchers at the University of Leeds and University College London (UCL) with the Universities of Liverpool, Oxford, and Queen's Belfast to harness the potential of consumer-related data. The Centre's core objective is to make consumer related data routinely collected by businesses and local government available for research purposes. To date, the CDRC has built over 50 partnerships with industry, local government and civil society organisations, making a wide range of data available through a three-tiered data service (open, safeguarded and secure) and undertaking innovative programmes of research, training and knowledge exchange. At Leeds, the CDRC forms part of the Leeds Institute for Data Analytics (LIDA), a £20 million facility underpinned by an advanced computational infrastructure aimed at advancing data-intensive research across a range of faculties. For more information about the CDRC please visit: [www.cdrc.ac.uk](http://www.cdrc.ac.uk)

#### 3. Aim and Scope of the Call

An ESRC Innovation Fund has been made available to the Consumer Data Research Centre at Leeds as part of a developmental initiative to establish a network of projects that will utilise the Centre's core data sets and broaden our network of partnerships with academic, business, public and third sector organisations.

Aimed at stimulating innovative research in evolving domain applications, the fund will be used to support projects across a broad range of disciplines and research areas. We

welcome proposals in any research area of strategic importance, such as those aligned with the ESRC's priorities, as well as those which would contribute to our existing research themes (further detail on our themes are provided below). For more on the ESRC's strategic priorities, visit: <http://www.esrc.ac.uk/funding/funding-opportunities/priorities-funding-opportunities-for-2016-17/>.

## **CDRC Thematic Research Areas**

### *Urban Mobility*

The Centre is interested in research that utilises movement data from a range of transport sectors (rail, car, bike etc.) and that facilitates a better understanding of travel flows and commuter/passengers numbers and journeys. Detailed patterns of daily travel behaviour generated by the analysis of these data are essential in supporting transport providers and infrastructure planners in their efforts to design effective, affordable and sustainable networks.

### *Sustainable and Ethical Consumption*

A large proportion of the population claim that they are motivated to consume ethically, and it is estimated that the UK's ethical market is now worth over £32 billion. However, CDRC research has revealed that the numbers of consumers who consistently act on those ethical motives are much fewer. By analysing new forms of consumer data we are seeking to track actual purchase behaviour against consumer attitudes and also better understand how financial factors influence purchasing behaviour.

### *Health and Consumer Behaviours*

Health issues such as obesity are a growing concern in the UK. Through the analysis of consumer data, researchers are able to better understand how the environment in which we live influences behaviours which can lead to this and other health problems. CDRC researchers are examining questions around barriers to active travel, the real cost of a healthy diet and the extent to which inequalities in diet contribute to observed inequalities in health.

### *Crime and Policing*

Analysis of social media and other 'new' sources of data allows us to identify and better understand crime hot spots. This research strand explores ways to identify which times and places have the largest concentrations of potential crime victims, and hence which hotspots pose the most significant problems. The aim is to help incident response and crime reduction organisations to focus their resource more effectively.

### *Big Data and Retail*

The retail industry is constantly changing. Analysing consumer data can help us to better understand the industry in terms of business resilience, customer mobility and changing buying habits. CDRC is producing a highly detailed picture of patterns of consumer behaviour that is relevant to businesses, academia and wider society.

Projects should demonstrate a capability to deliver high-quality, original research resulting in high impact outputs. Such outputs may include, but are not limited to: a) quality, peer-reviewed publications; b) new linkage techniques for joining databases; c) new techniques that help us search and organise unstructured or qualitative data (e.g.

machine learning or text analytics); d) new data products; or e) new data visualisation methods of social processes and patterns that can be made available to our service users.

Projects likely to lead to more substantial follow-on activities and that engage non-academic partners are particularly encouraged.

Successful applicants will become part of the CDRC's large researcher programme, benefitting from access to state of the art infrastructures, data service team support and opportunities for sustained interaction with CDRC researchers.

#### 4. Funding

The Centre is looking to fund in the region of 8-10 projects, valued at between £20-60K each (100% fEC). If you have a project that falls outside of this funding envelope, please contact the Centre to discuss how you might work with us.

Applicants should cost their projects using the same process as they would cost an ESRC grant. Please see the [ESRC funding guide](#) for full details on eligible cost categories. Applications may include requests for Capital funding up to 50% of the grant value. By Capital funding we mean the facilities, services and any other support for data access and linkage, or for the purchase of datasets. Capital costs will be funded at 100% fEC, all other costs at 80% fEC.

Eligible Costs include:

- Directly incurred staff costs
- Other directly incurred costs (e.g. travel and subsistence, licensing fees etc.)
- Directly allocated staff costs
- Estates and indirect costs
- Capital costs

Eligible costs are summarised in the table below.

	<b>CDRC Contribution</b>
DI Staff	80%
DI Other	80%
DA Staff	80%
Capital Costs	100%
Estates and Indirect Costs	80%

We envisage projects will run for 6-9 months and no longer than 12 months. All projects should be completed no later than the end of September 2018.

The CDRC will not reimburse costs associated with the development of a submission or any costs that fall outside of the grant dates.

All projects will be assessed on an individual basis against the Assessment Criteria in Section 7.1.

## 6. Application Process

### 6.1 Eligibility

Applicants must be resident in the UK and be based at an eligible research organisation (higher education institution or recognised independent research organisation) as stated in the ESRC Research Funding Guide (<http://www.esrc.ac.uk/funding/guidance-for-applicants/research-funding-guide/>). Given the initiative is intended to extend the Centre's academic network, we will be looking primarily to support projects with researchers who are affiliated with academic organisations beyond our core universities of Leeds, UCL, Liverpool and Oxford. We encourage teams with one or more early career researchers. Academic researchers may submit applications in partnership with non-academic partners from the public, private or third sector.

All proposals submitted to this call will be expected to fulfil the following criteria:

- Utilise an existing CDRC dataset or link those data to other external data assets. To find out more about the data we hold, visit: <https://data.cdrc.ac.uk/>
- Extend the Centre's network of research collaborators, academic and/or non-academic. Principal Investigators from academic organisations beyond our core universities of Leeds, UCL, Liverpool and Oxford will be given priority.
- Make a contribution to social science knowledge within a CDRC research theme, ESRC priority area, or other area of strategic significance.
- Demonstrate the ambition and novelty of the research and how the outputs of the project will be communicated to relevant stakeholders.

Interdisciplinary applications that involve collaborations between stakeholders and researchers are encouraged. Eligible applicants may submit more than one proposal.

Applicants are advised to contact CDRC if they are unsure whether or not their proposal will be suitable for the call.

### 6.2 Response Format

Those interested in applying for funding will be required to complete an application form as specified in Appendix A of this call, detailing the following: project title, project overview, CDRC dataset (s) to be accessed or linked to for the purpose of the research, Principal Investigator and research team, costings, deliverables and impact, expected duration. Applicants will also be required to outline how the proposed work will contribute to the Centre's programme of research and/or be of benefit to our service users.

## 7. Assessment Process

Applications will be assessed by a panel comprised of CDRC members, an ESRC representative and academics with relevant domain expertise. Shortlisted applications will then be submitted to the CDRC Research Approvals Group (RAG) for final review and approval. The role of the RAG is to provide independent and transparent assessments of applications for access to data through both the CDRC Safeguarded and CDRC Secure services based on a set of standard evaluation criteria. The RAG comprises representation from academic and business partners, including the relevant data partners. For full Terms of Reference and membership see: <https://www.cdrc.ac.uk/data-services/using-our-data/>

### 7.1 Assessment Criteria

Applications will be judged and prioritised against the following assessment criteria:

Assessment Criteria	Comments
Quality of Proposal	<p>Is it clear what the project aims to address and how this will be achieved?</p> <p>Does the project have the potential to advance scientific knowledge, understanding and/or methods using consumer data?</p> <p>Is there a clear work plan with specific, measurable, achievable and realistic objectives that are time bound?</p>
Extension of CDRC network	Does the research team include members who are affiliated with academic organisations beyond CDRC's core universities of Leeds, UCL, Liverpool and Oxford?
Interrogation of CDRC data assets	Will the project utilise at least one CDRC safeguarded or controlled data asset, either in isolation or through linkage to other data sets?
Strategic Research Area	Does the project aim to make a contribution to social science knowledge within an area of strategic significance?
Outcomes and Impact	Does the project have the potential to provide insight and/or solutions that could benefit social science? Is there evidence of potential academic/ societal/ economic impact?
Value for Money	Are the costs for the project reasonable and fully justified?

## 8. Grant Conditions

Applicants who are successful will be required to meet the conditions outlined in the CDRC Innovation Fund sub-award. To facilitate contracting arrangements the contract is available at: [www.cdrc.ac.uk/research/IF\\_subaward](http://www.cdrc.ac.uk/research/IF_subaward) Applicants should ensure that they and their organisation are able to meet the conditions of this agreement prior to applying for funding. For transparency, some of the conditions are outlined in this section.

### 8.1 User Agreement

Prior to being granted access to CDRC safeguarded and/or controlled data, successful candidates and their institutions will be required to sign a CDRC User Agreement. This agreement sets out, among other things, stipulations around data use, release of outputs and copyright and publication protocols, and demonstrates that the User and their Institution understand the penalties that may be imposed for breaches of security or confidentiality, or any other breach of the Agreement.

### 8.2 Reporting and Impact Monitoring

In addition to the stated project deliverables, successful applicants agree to submit quarterly statements on expenditure and quarterly reports on project progress. The progress report, in the form of a brief template, will enable milestones to be highlighted and any problems raised so that support can be provided. A final project report will also be required within 4 weeks of the end of the research.

By accepting the award, applicants also agree to engage with the CDRC Senior Management Team (SMT) post-project to allow the reporting of outcomes and development of impact case studies. As impact often occurs after the project lifetime, the CDRC SMT may also contact you 6 months and 12 months after the project has been completed to find out if any further outcomes arising from the project have been realised.

### 8.3 Ethics

Applicants must ensure that the proposed research will be carried out to a high ethical standard. They must clearly state how any potential ethical issues have been considered and addressed, and they must ensure that all necessary approvals are in place, and that all risks are minimised, before the project commences. All applicants must comply with the ESRC Framework for Research Ethics (<http://www.esrc.ac.uk/funding/guidance-for-applicants/research-ethics/>).

All successful applicants seeking to utilise controlled data will be required to have undertaken safe researcher training prior to being provided access. This is also a requirement for some of our safeguarded data (see Part B, section 3 of the Project Application Form below).

### 9. Submission

Applicants must submit an **electronic copy of their Project Application Form (see Appendix A) to [cdrc-innovation@leeds.ac.uk](mailto:cdrc-innovation@leeds.ac.uk) by 17:00 UK time on 31 July 2017. The electronic submission must be in a single document of PDF format.**

Applications that do not fulfil the format requirements, or that are submitted after the deadline, will not be considered.

CDRC will treat all proposals as competitive and will disclose their contents only for the purpose of the commissioning assessment process.

### 10. Commissioning Timetable

Deadline for submission of applications: 31 July, 2017

Announcement of short-listed applications: 18 August, 2017

Announcement of successful applications: 1 September, 2017

Projects to commence: 1 October, 2017 (or as soon as possible thereafter)

### 11. Further Information and Enquiries

A list of questions and answers about the call is available from our website ([www.cdrc.ac.uk/research/IF\\_FAQs](http://www.cdrc.ac.uk/research/IF_FAQs)). If you have any questions not already answered, or you require further information, please email your enquiries to [cdrc-innovation@leeds.ac.uk](mailto:cdrc-innovation@leeds.ac.uk) or else contact:

Amy O'Neill  
CDRC Centre Manager (Leeds)  
Email: [a.oneill@leeds.ac.uk](mailto:a.oneill@leeds.ac.uk)  
Tel: 0113 343 0120

## APPENDIX A: Project Application Form

All proposals under this call must be completed using the requirements outlined in Parts A and B of this Appendix. **Please ensure to attach CVs and other relevant supporting documentation, e.g. evidence of ethical approval, and to submit the entire proposal as one PDF document.** CDRC reserves the right to reject any submission that does not conform to these requirements

### PART A. PROJECT DETAILS

#### 1. Principal Investigator

- 1.1. **Name of Applicant:**  
**Department and Institution:**  
**Address:**  
**Email:**  
**Telephone:**

#### 2. Project Proposal Details

- 2.1 **Project Title:**
- 2.2 **Total Project Cost (£) (100% fEC):**
- 2.3 **Proposed Start Date:**
- 2.4 **Abstract.** Appropriate for a general audience. This may be used by the CDRC for reporting and publicity purposes as well as selecting RAG academic reviewers (**max 150 words**).
- 2.5 **Project description.** A detailed description of the project, documenting the motivation, scope and aims of the intended research, as well as the methods you will use in the proposed research. Please ensure to demonstrate the project's fit with the remit of the call, i.e. citing which CDRC data source(s) will be exploited and what research theme will be addressed. (**2 pages maximum**).
- 2.6 **Project Impact.** Please describe the anticipated scientific and societal benefits of the project and the ways in which you intend to develop and maximise those benefits (**1 page maximum**).
- 2.7 **Timetable and Deliverables.** Give a clear and structured account of the timing of activities that will take place over the period of the project. Within this timetable, identify clear milestones against which progress can be measured. Also identify the intended outputs or publications arising from the project. These may include, but

are not limited to, academic publications, technology demonstrators, new visualisation or data linkage methods, new research data, new software or other tools. **(1 page maximum).**

**2.8 Summary of Resources Required (1 page maximum).** Eligible Costs are indicated below. All costings should be in GBP (£).

**Staff costs.** Identify each contributing member of staff and how many hours per week they work on the project, the cost of this contribution and an outline of what they will contribute.

**Travel and Subsistence:** Identify each trip proposed, provide the cost and provide a short justification for this trip and its costing.

**Other DI Costs:** Identify any additional directly incurred costs and provide a short justification for these items. Please state the costs inclusive of VAT if appropriate.

**Estates Costs:** Identify any estates costs associated with completing the project.

**Indirect Costs:** Identify the indirect costs associated with completing the project.

**Capital Costs:** Identify any capital costs associated with completing the projects and short justification for this costing.

**Total Cost:** State the total project cost inclusive of VAT.

**2.9 Research Team**

Using the table below, please list the names, affiliation and email addresses of all known members of your research team and all co-authors on any publication/presentation who will make use of the CDRC data.

**Please attach the CVs of all members of the research team.**

Each researcher seeking access to CDRC controlled data will need to have completed Safe Researcher Training as described in Part B, Section 3 of Appendix A. Access to some CDRC safeguarded data sets are subject to the same requirement.

**Research Team** *(add more rows if required)*

<b>Title, Name</b>	<b>Department/ Institution</b>	<b>Institutional email address</b>	<b>Will be accessing safeguarded data: Yes/No</b>	<b>Will be accessing controlled data: Yes/No</b>	<b>Has undertaken safe researcher training? Yes/No</b>

## PART B. DATA REQUEST

### 1. Data

**1.1. CDRC Data Required.** Please provide the following information for each dataset requested.

Data Partner/Owner	Dataset	Controlled or Safeguarded data	Geographical Extent	Time period
E.g. Whenfresh/Zoopla	<i>Rental transactions</i>	<i>Controlled</i>	<i>England and Wales</i>	<i>2014</i>
	Click here to enter text.	Click here to enter text.	Click here to enter text.	
	Click here to enter text.	Click here to enter text.	Click here to enter text.	
	Click here to enter text.	Click here to enter text.	Click here to enter text.	
	Click here to enter text.	Click here to enter text.	Click here to enter text.	

**1.2 Data Linkage.** If your project will be linking more than one data source, describe which data sources will be linked and how the linkage will be done, including any specific variables that need to be linked (if known). If any of the data to be linked has identifying information as defined in the Data Protection Act 1998 please provide details and if you are bringing this data with you please provide brief details of the data, source, method of collection and information about consent required to link (e.g. Data Owner or Controller's name, any documentation available or previous contact; if consent has already been achieved).

**1.3 Data Security Requirements for Data Being Brought to Centre.** If you are bringing in external data, please provide a summary of the data and also list any data security requirements stipulated by the licensor. Please specify any specialist data security requirements that are required from the CDRC for the duration of the project. *Please note that these requirements may be stipulated in the licence terms and conditions of the original data.*

**1.4 Data Storage Requirements.** Please state anticipated data storage requirements for data being brought into the Centre.

## 2. Ethical Approval

**2.1.** Have you sought or are you seeking **ethical approval from an institutional ethical approvals panel** or any other appropriate body?

Yes  No

**2.2.** If Yes, please provide **evidence** of the status of the application or the outcome of the ruling issued **as part of this application**. Please list what evidence you are enclosing below and any additional comments.

**2.3.** If No, please bring this to the attention of the CDRC as soon as possible so that routes for ethical approval may be discussed.

**2.4.** If you believe that ethical approval is not required for your research, please provide justification for this below.

## 3. Safe Researcher Training

Applicants seeking access to any controlled CDRC data asset are required to have completed accredited safe researcher training within the last two years, as offered by the Administrative Data Research Network (ADRN), HM Revenue and Customs (HMRC), Office of National Statistics (ONS) or the UK Data Service (UKDS). This requirement also applies to a small number of our safeguarded data.

*Please complete for each individual requiring access to data*

Name:

Have you completed safe researcher training in the past two years?

Yes  No

If Yes:

- Name of Organisation through which accreditation was achieved: Choose an item.
- Address of organisation:
- Date on which accreditation was achieved:

**If No, you will be required to have completed training prior to signing a CDRC User Agreement and accessing data. The CDRC can facilitate access to appropriate training.**

## APPENDIX B: CDRC SECURE DATA SERVICES & TOOLS AVAILABLE

CDRC has secure labs at Leeds, London and Liverpool through which controlled data can be accessed. Under normal circumstances, we expect that data will be accessed via the CDRC's secure lab at Leeds. We will, however, facilitate access through equivalent CDRC labs if necessary.

### University of Leeds Integrated Research Campus

The CDRC has access to the Integrated Research Campus (IRC) - a secure virtual research environment where research using highly confidential data is undertaken. The IRC hosts datasets on behalf of CDRC, providing access to these data for CDRC researchers, via thin clients in a number of safe rooms.

The safe rooms are air-conditioned and are accessed by an individually-assigned electronic fob, which will give access to the circulation corridors, the safe room area and the specific room assigned. Each room contains 2 thin clients with dual 24" monitors attached. A 1 person room and a 4 person room are also available. One of the thin clients in the 4 person room has dual 28" monitors attached. These all run a virtual desktop system which requires a two-factor authentication token to access. Either Windows or CentOS Linux can be provided as required. Each desktop can be pre-configured with the software required. The following software packages are generally available but please discuss with us if you want to use other software packages or programming environments:

- Office
- Notepad ++
- R (with RStudio)
- QGIS
- Python
- Java
- SQL Server Management Studio

All analysis and outputs are completed in the virtual research environment, and as such, **no data will enter or leave any of the CDRC facilities.**

### JDI RESEARCH LAB (LONDON)

The CDRC have access to the Department of Security and Crime Science Jill Dando Institute Research Lab (JDI Research Lab) - a high-security computer facility where research using highly confidential data is undertaken. The JDI Research Lab hosts datasets on behalf of CDRC, providing access to these data for CDRC researchers, via workstations in a secure work area. To enter this secure work area users must attain clearance to meet the HMG Baseline Personnel Security Standard (BPSS).

The facility comprises a swipe card controlled windowless but air conditioned lab with workstations with twin 27" screens. These all run a virtualised windows operating system with each terminal providing the following software:

- ArcGIS
- CrimeStat
- MATLAB
- Office
- GeoDa
- MinGW
- NetLogo
- Notepad ++
- R
- Sophos
- QGIS
- Psycopg
- Python
- Enthought Canopy
- SQL 2014 Enterprise

### University of Liverpool Secure Facility

The facility at the University of Liverpool comprises a swipe card controlled windowless but air conditioned lab with ten 27" all in one computers. These all run a virtualised windows operating system with each terminal providing connectivity to the CDRC secure database and to the following software:

- R and R Studio
- Python
- Anaconda
- Sublime Text Editor

On each desktop, there are some example scripts that can be used to access data, and help get you started on your research project.