

# DATA FOR COMMUNITIES

---

#dataforcommunities

Sam Milsom

[sam@opendatamanchester.org.uk](mailto:sam@opendatamanchester.org.uk)

@milsomsam

@opendatamcr



# THE PLAN

- 18.00 Introduction
- 18.05 Data Explorer
- 18.20 What is data?
- 18.30 Example of data use
- 18.40 Introducing data tools
- 19.00 Exercises
- 19.30 Interesting discoveries
- 19.45 Wrap up
- 20.00 Close

# MATHS QUESTION

A bat and ball cost £1.10 and the bat costs £1 more than the ball

What is the cost of the bat and what is the cost of the ball?

# WHAT IS OPEN DATA MANCHESTER?



*“To promote a fairer and more equitable society through the development of intelligent and responsible data practice in Greater Manchester, nationally and internationally.”*

# DATA EXPLORER

## Data Explorer

### Character sheet

Name: \_\_\_\_\_

Describe yourself:

Picture  
(draw yourself)

Storyteller 3

Analyst 3

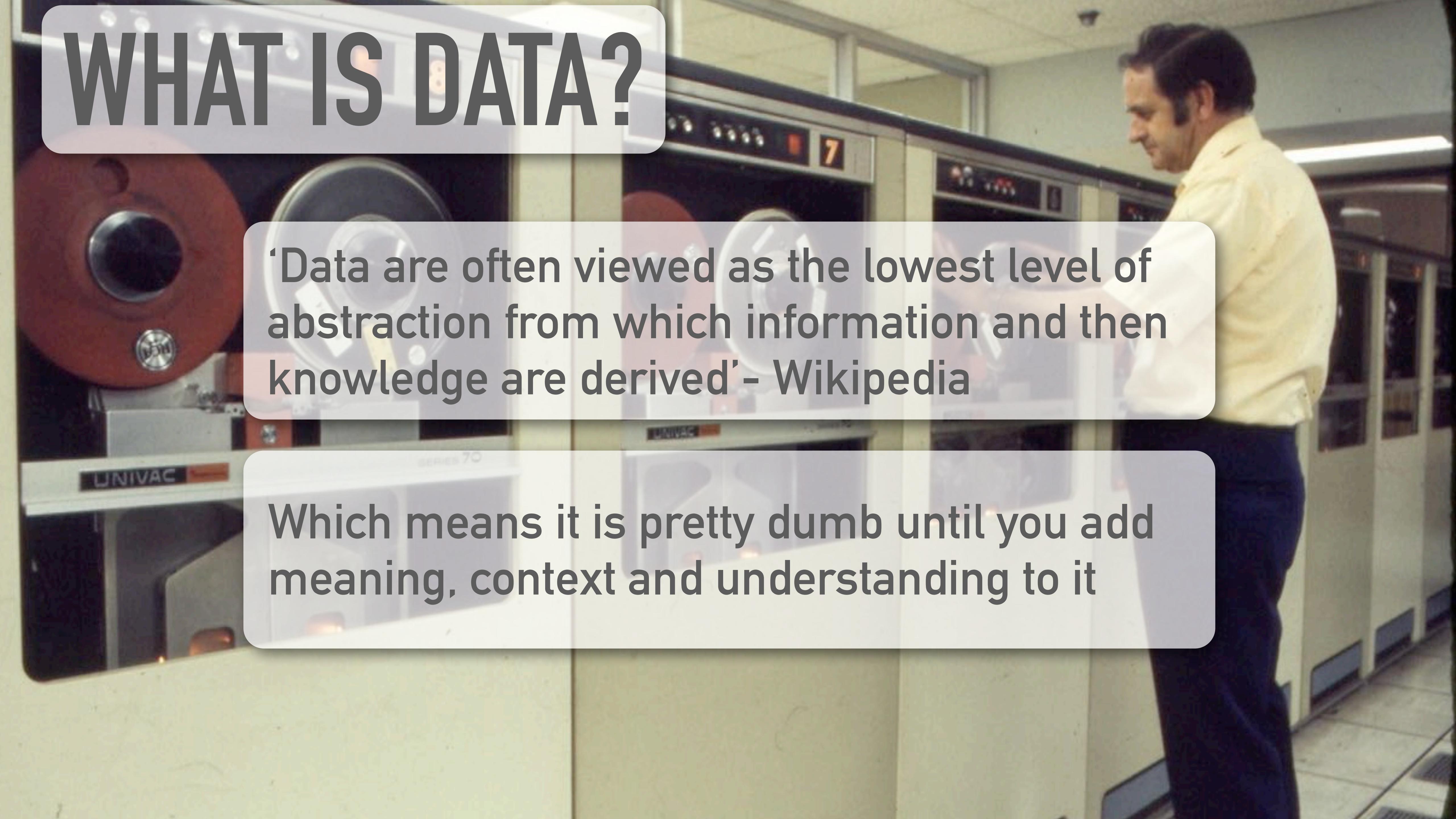
Designer 3

Scout 3

Engineer 3

<http://bit.ly/ODM-DEXP>

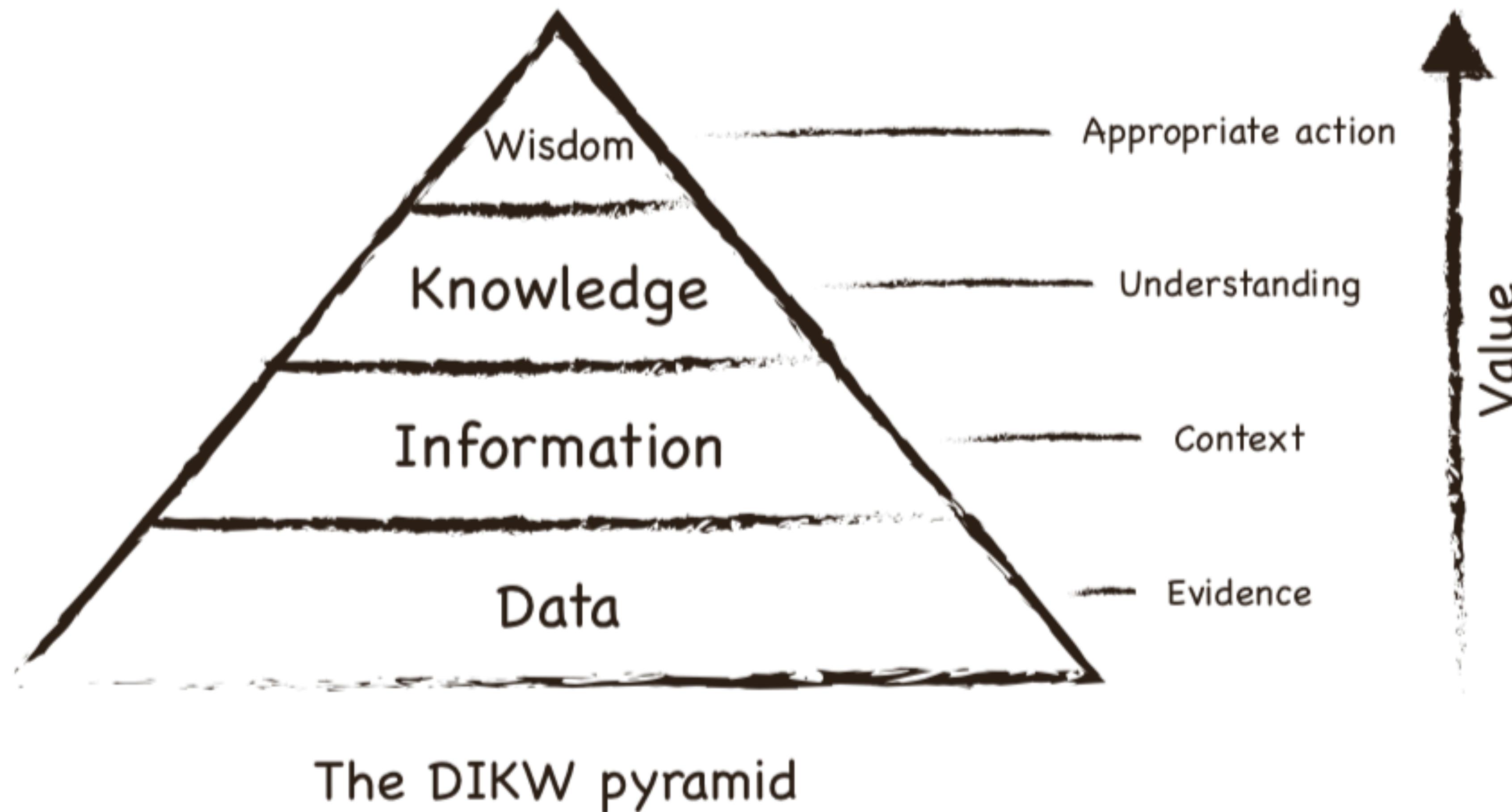
# WHAT IS DATA?

A historical photograph of a man in a yellow shirt operating a large, vintage computer system. The machine features several large, circular magnetic drums mounted on a metal frame. The word "UNIVAC" is visible on the front panel of the equipment. The man is looking down at the control panel, which has numerous buttons and indicator lights.

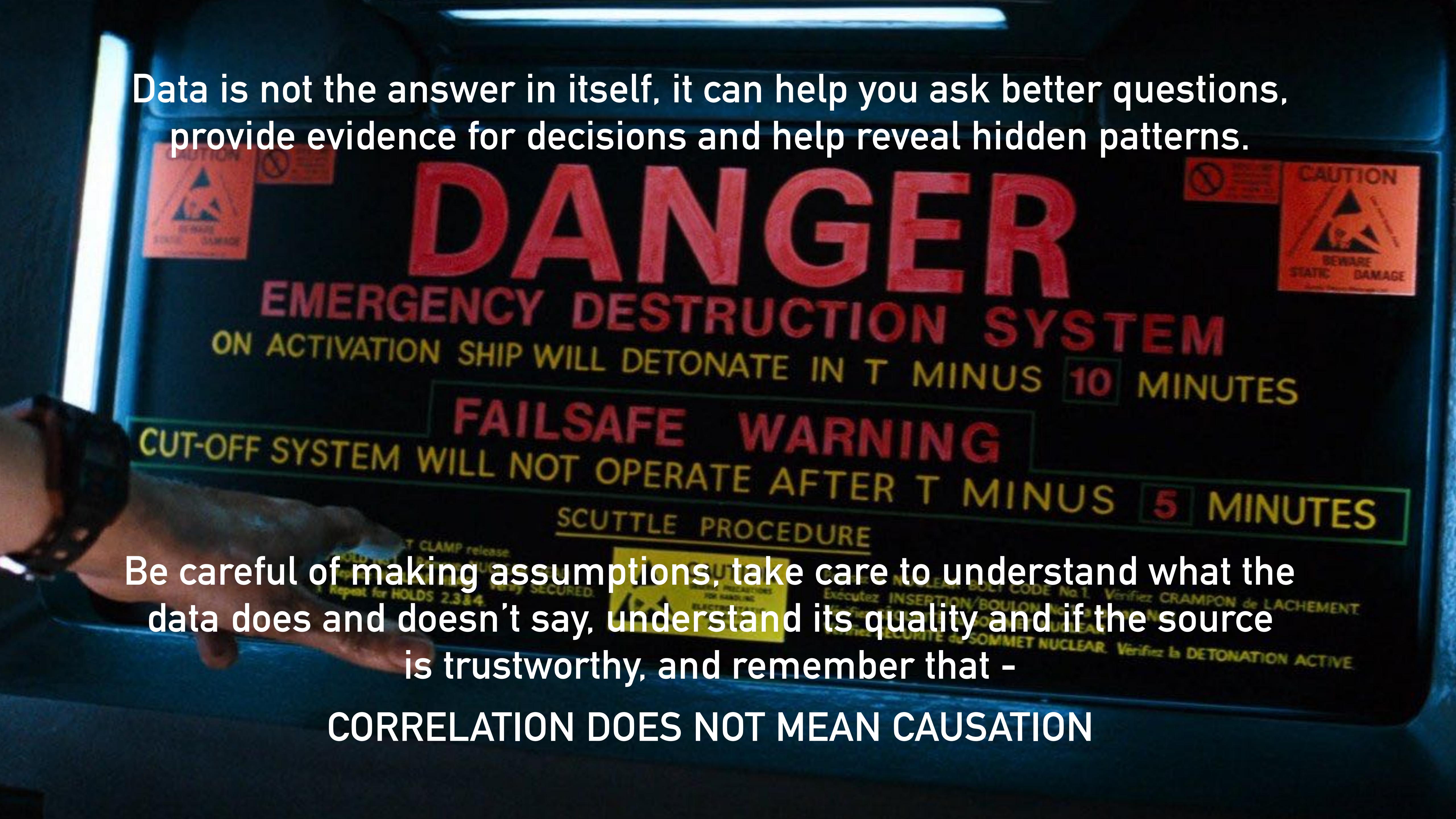
'Data are often viewed as the lowest level of abstraction from which information and then knowledge are derived'- Wikipedia

Which means it is pretty dumb until you add meaning, context and understanding to it

# WHAT IS DATA?



Data is not the answer in itself, it can help you ask better questions, provide evidence for decisions and help reveal hidden patterns.

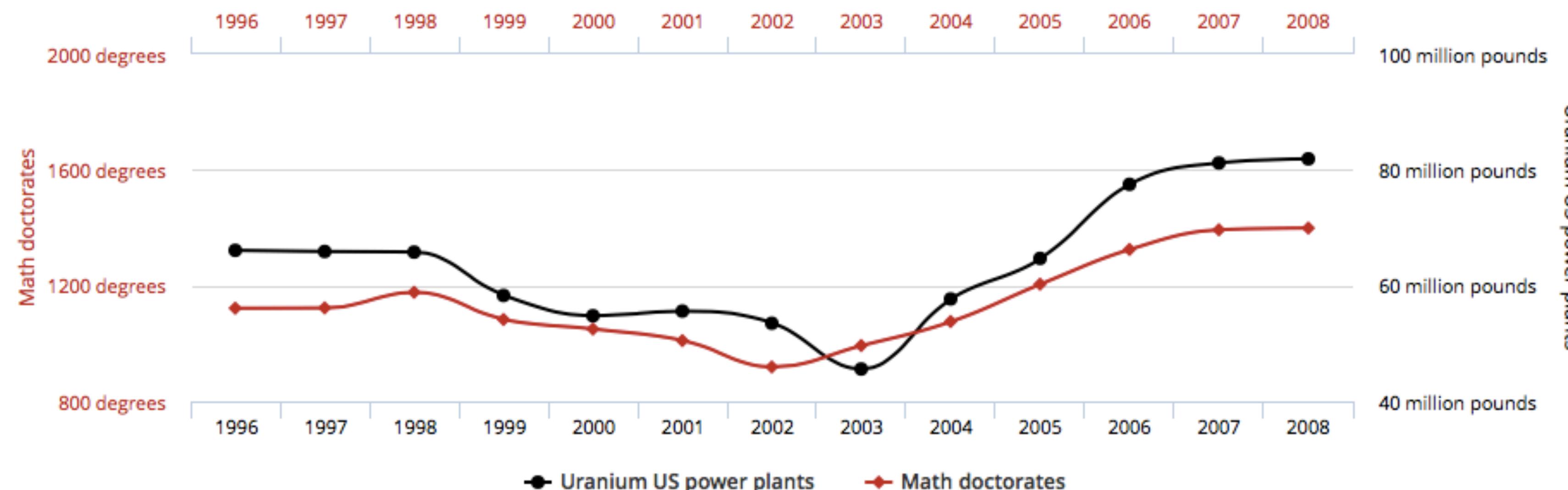


Be careful of making assumptions, take care to understand what the data does and doesn't say, understand its quality and if the source is trustworthy, and remember that -

CORRELATION DOES NOT MEAN CAUSATION

## Math doctorates awarded correlates with Uranium stored at US nuclear power plants

Correlation: 95.23% ( $r=0.952257$ )



Data sources: National Science Foundation and Dept. of Energy

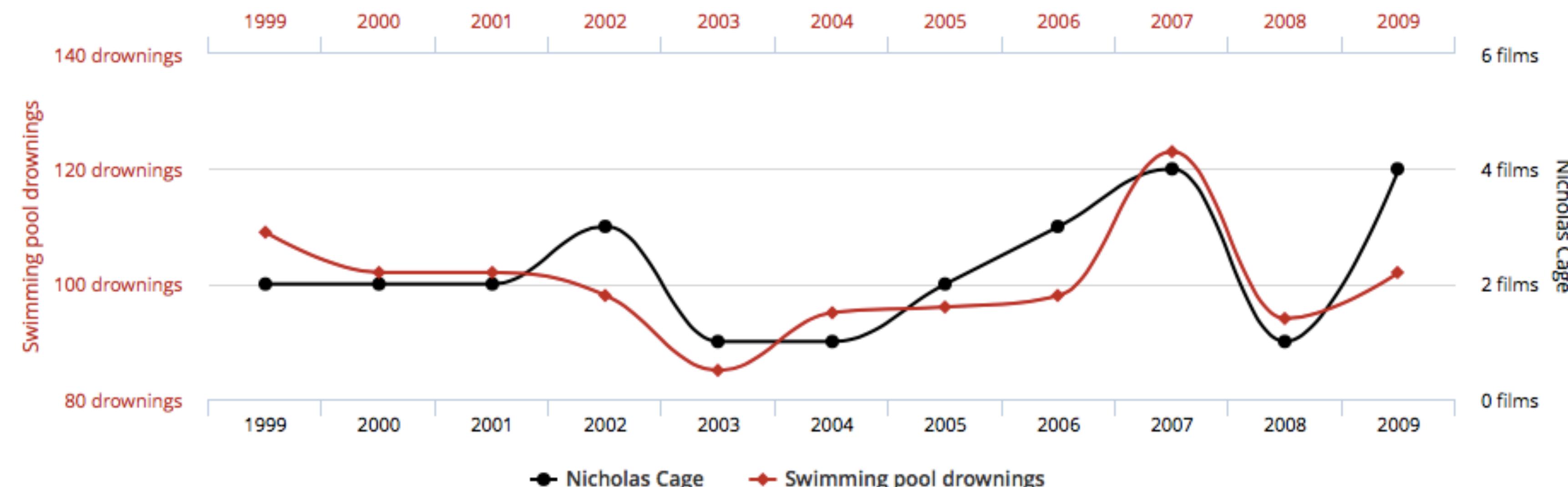
tylervigen.com

# Number of people who drowned by falling into a pool

correlates with

## Films Nicolas Cage appeared in

Correlation: 66.6% ( $r=0.666004$ )



Data sources: Centers for Disease Control & Prevention and Internet Movie Database

tylervigen.com

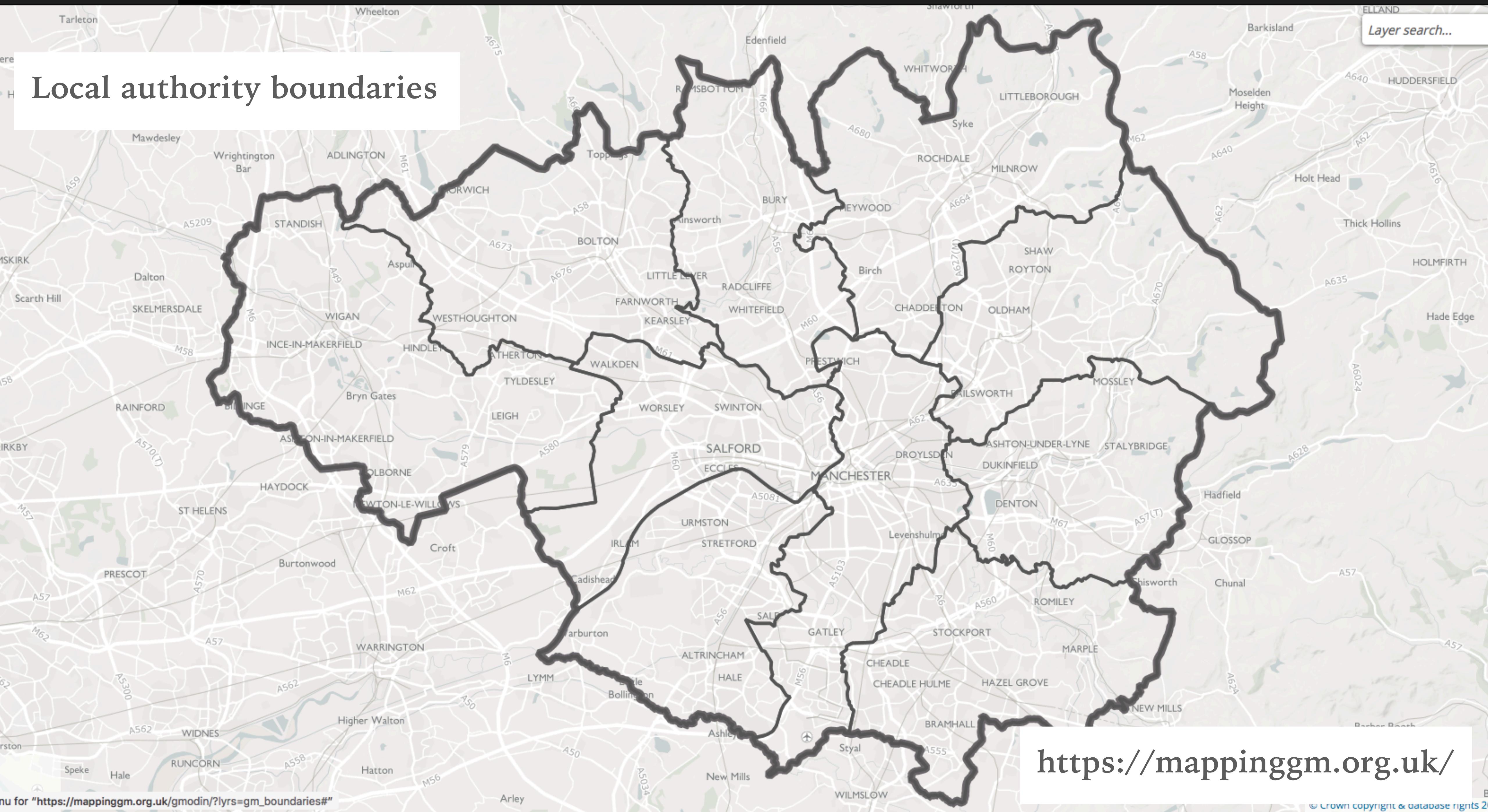
# EXAMPLE OF DATA USE

ELLAND

*Layer search...*

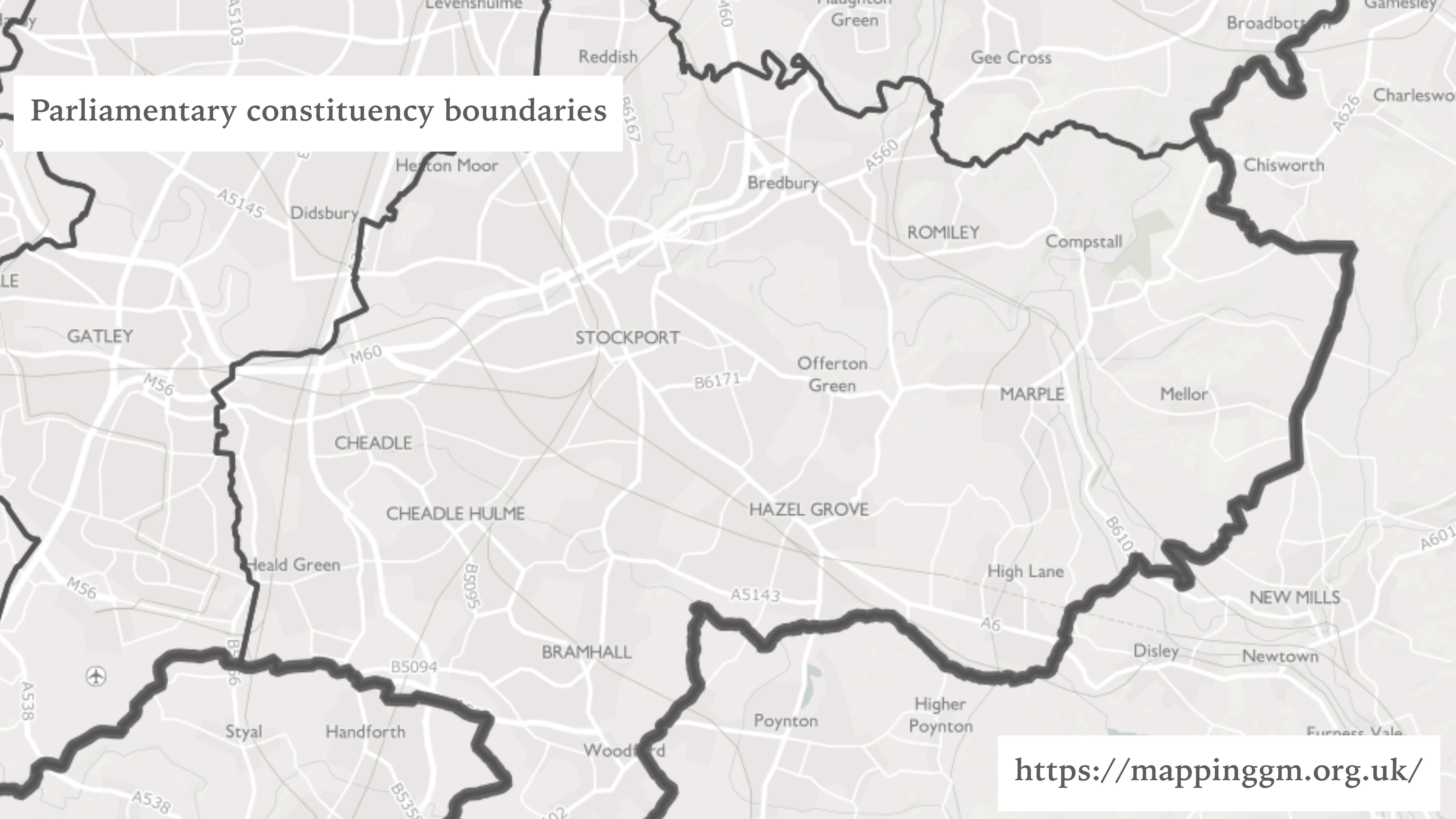
<https://mappinggm.org.uk/>

# Local authority boundaries

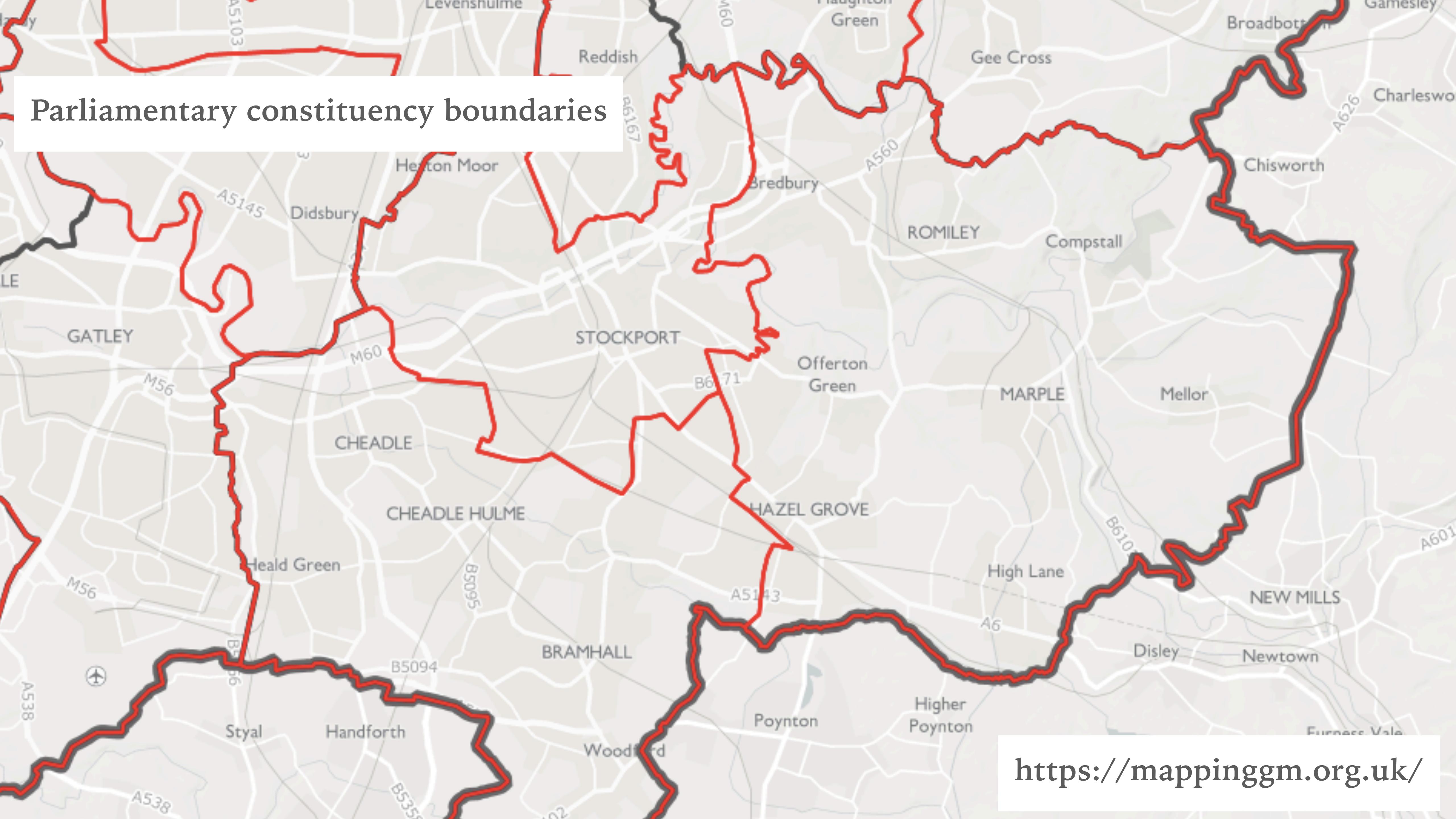


<https://mappinggm.org.uk/>

# Parliamentary constituency boundaries

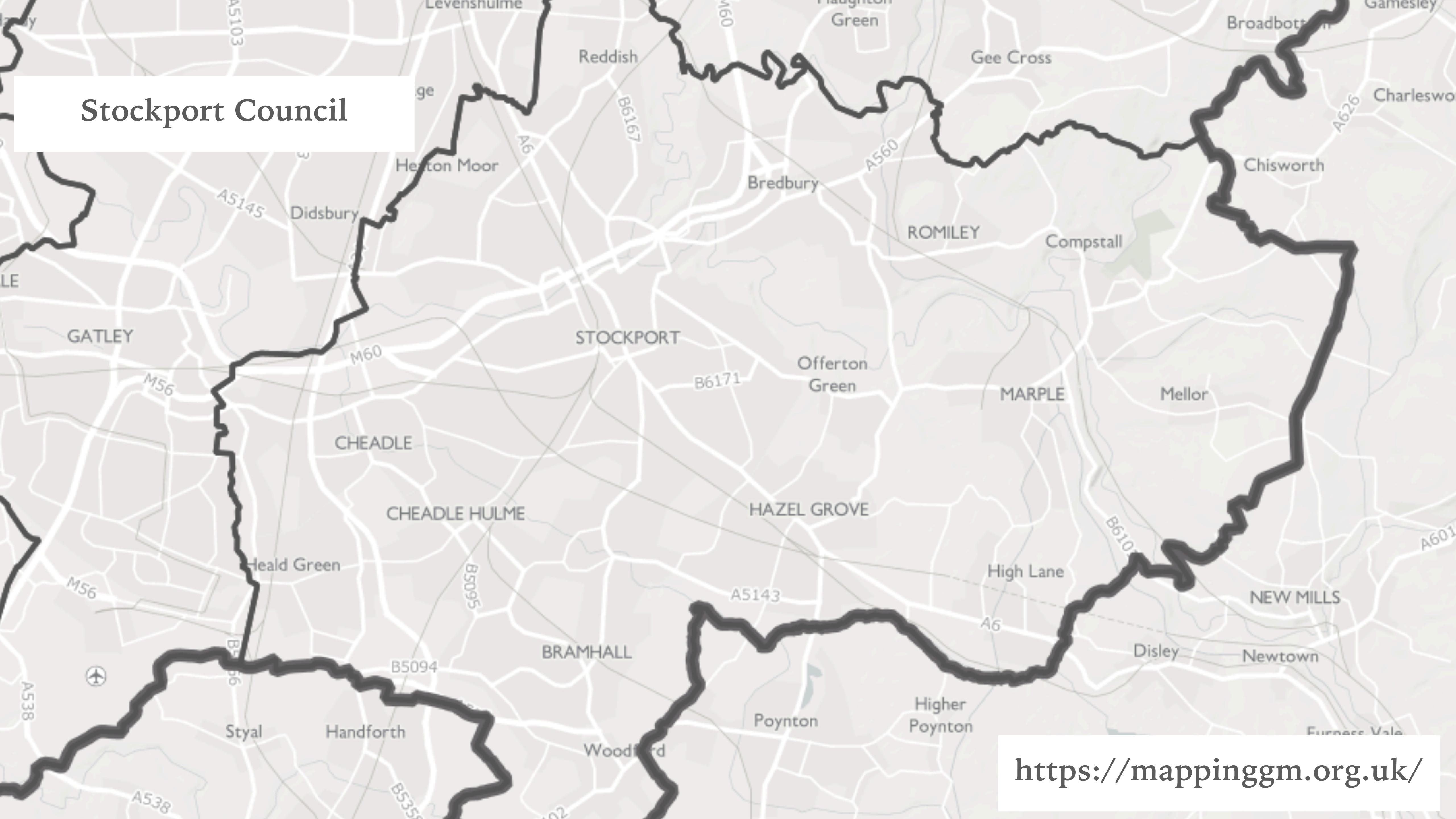


## Parliamentary constituency boundaries

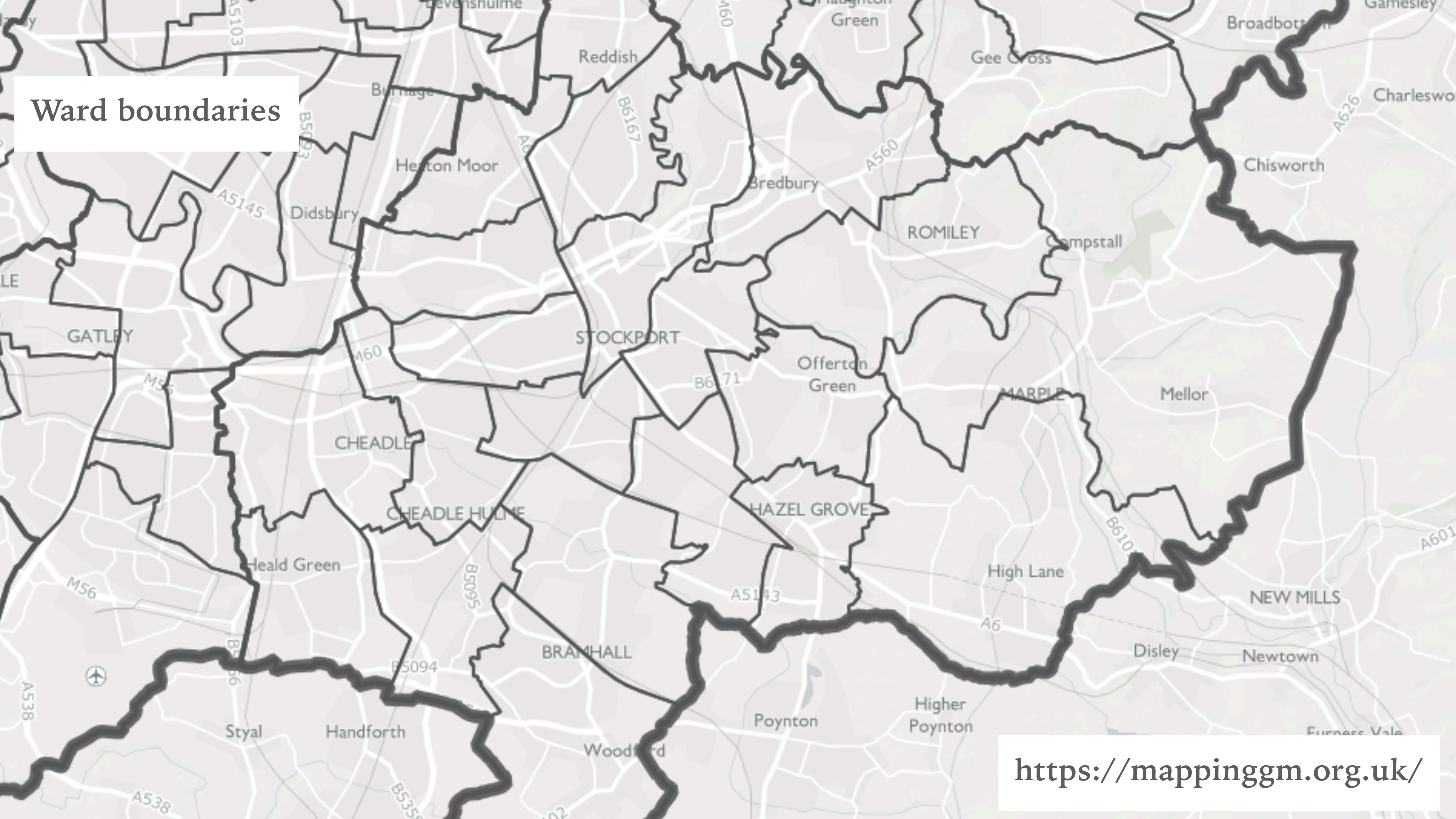


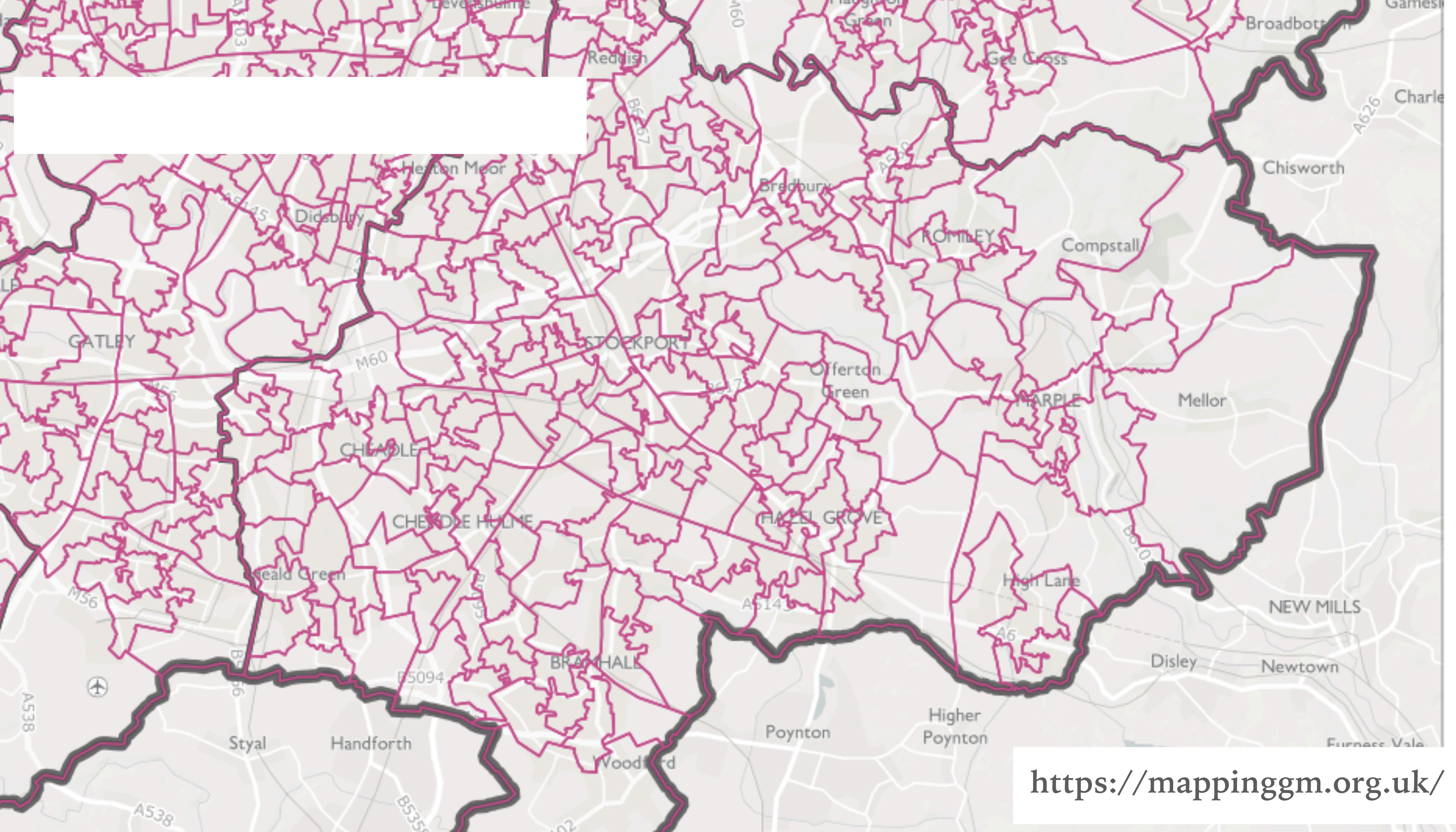
<https://mappinggm.org.uk/>

# Stockport Council



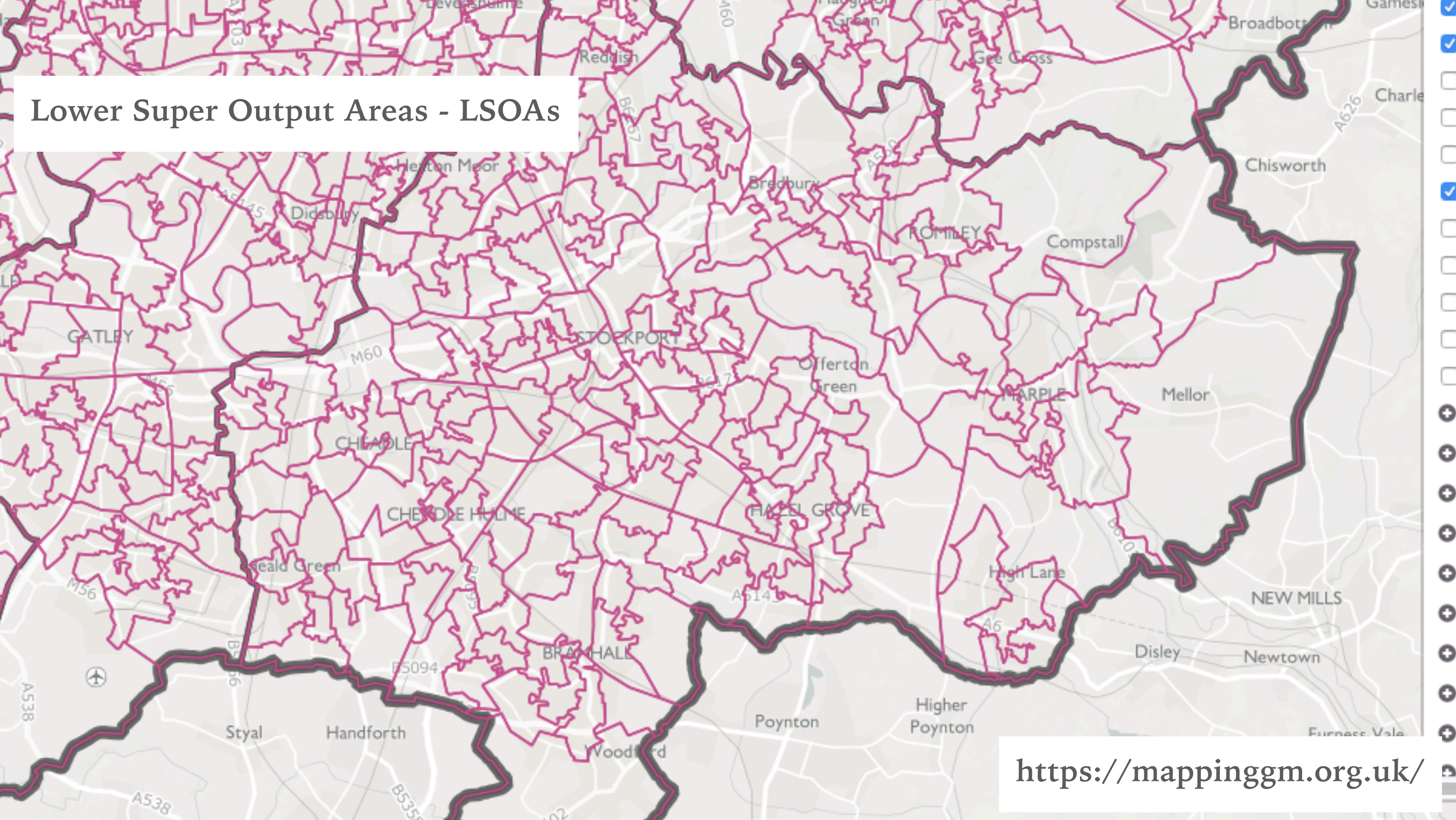
## Ward boundaries



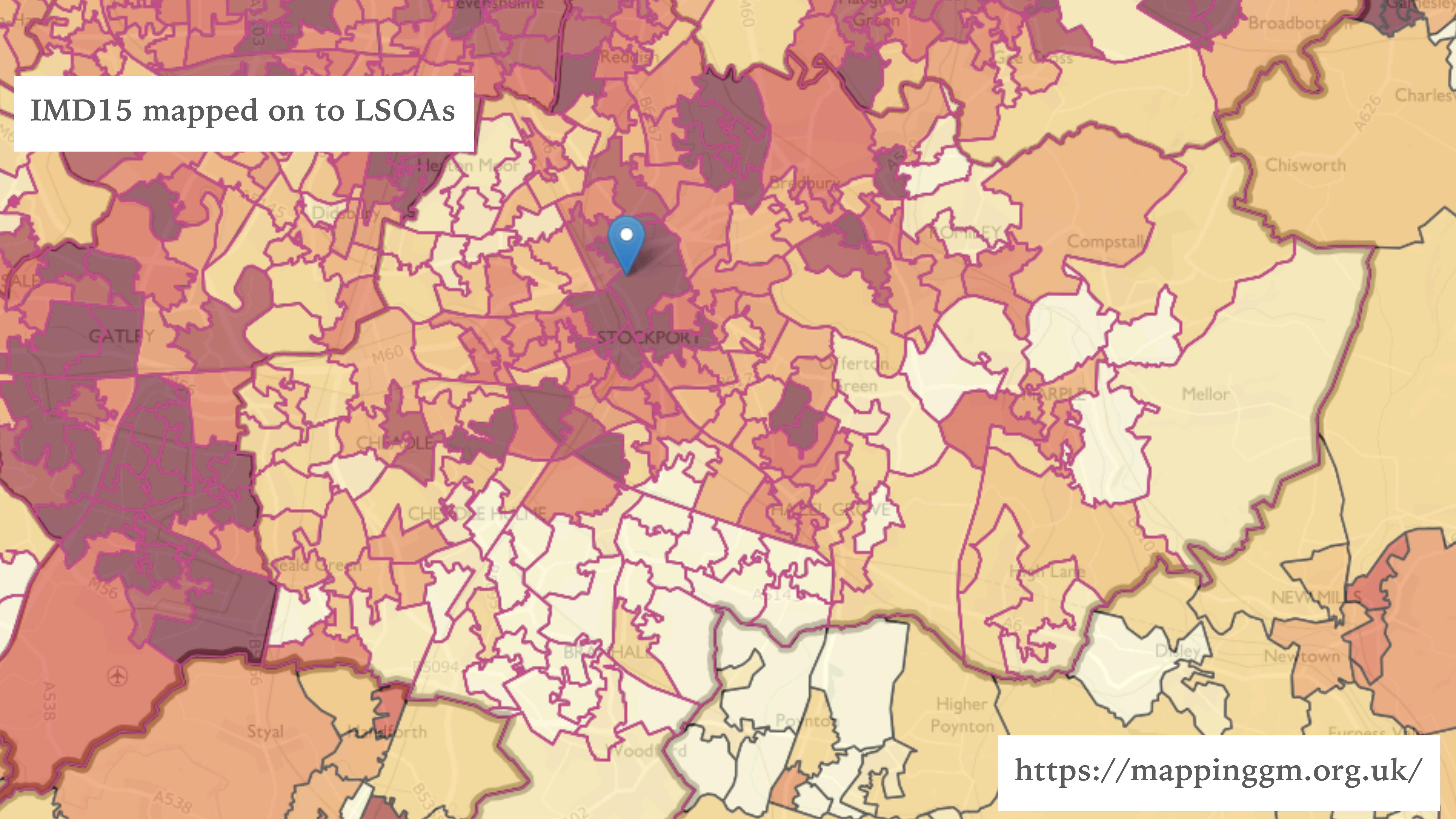


<https://mappinggm.org.uk/>

## Lower Super Output Areas - LSOAs

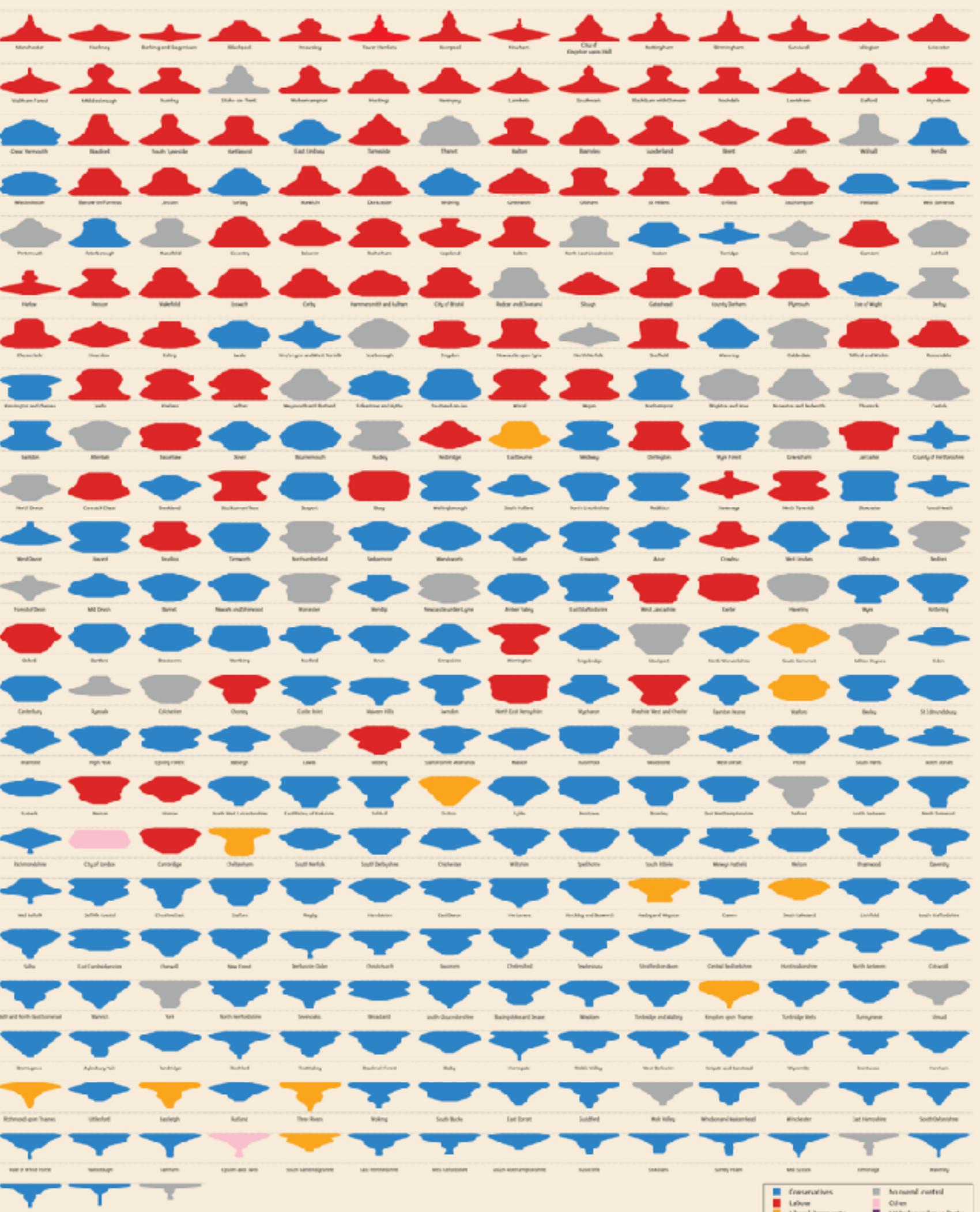


IMD15 mapped on to LSOAs

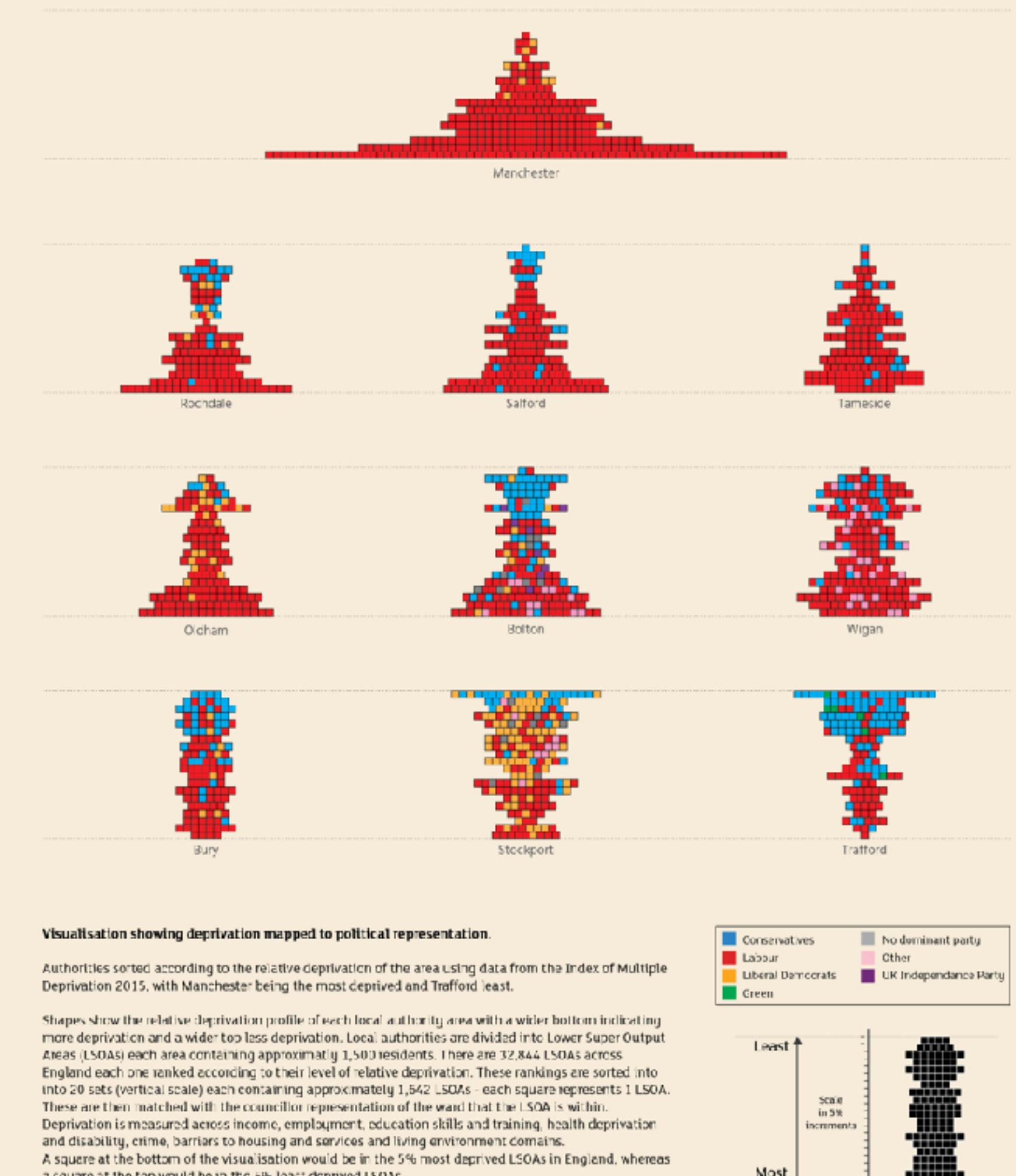


<https://mappinggm.org.uk/>

## DEPRIVATION vs POLITICAL CONTROL IN ENGLISH LOCAL AUTHORITIES (2018)

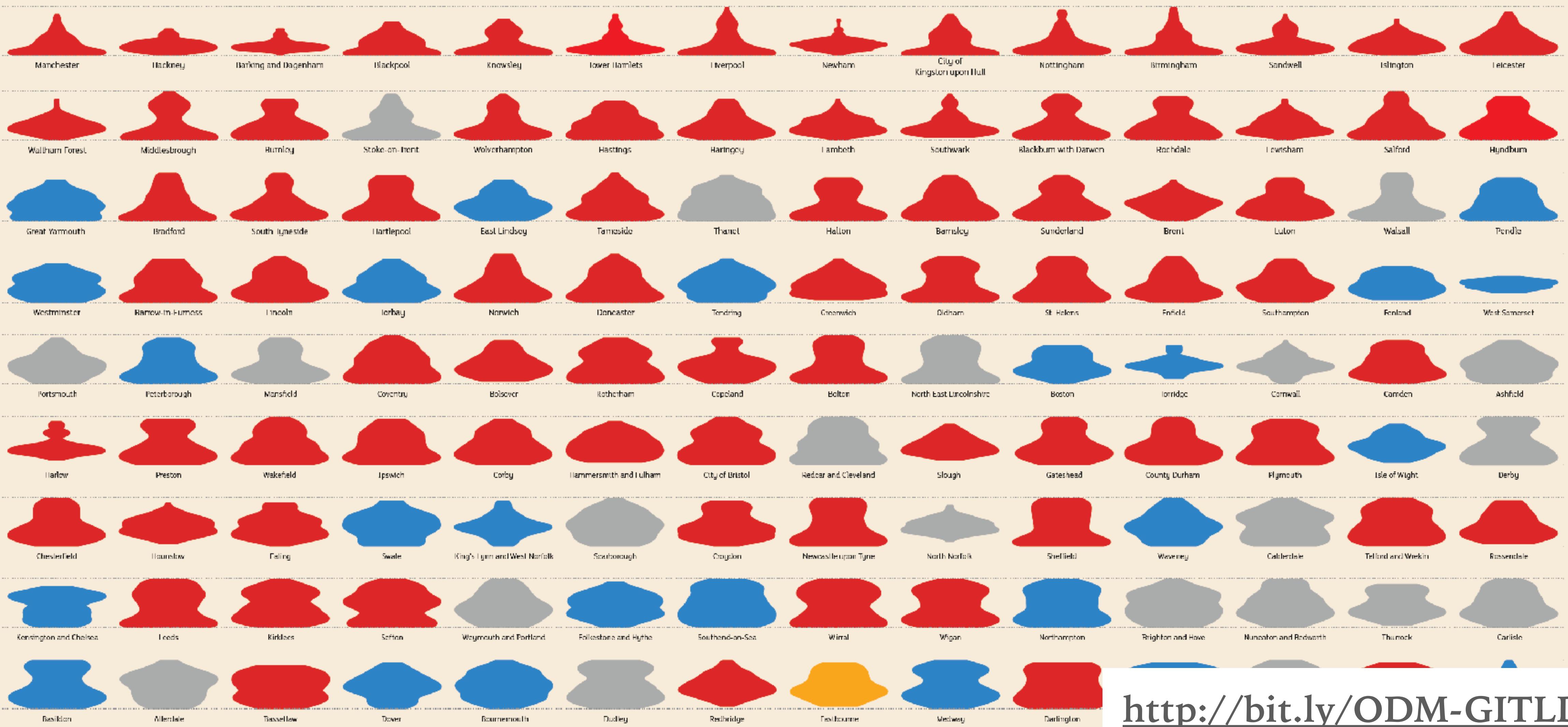


## DEPRIVATION vs POLITICAL REPRESENTATION IN GREATER MANCHESTER (SEPT 18)

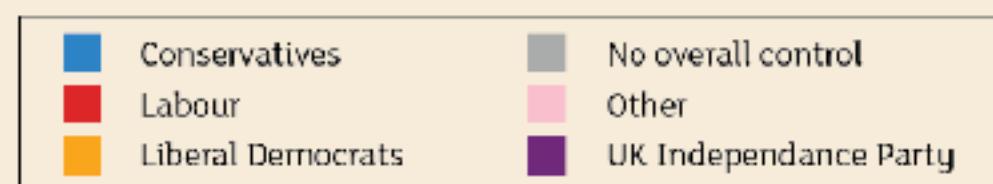
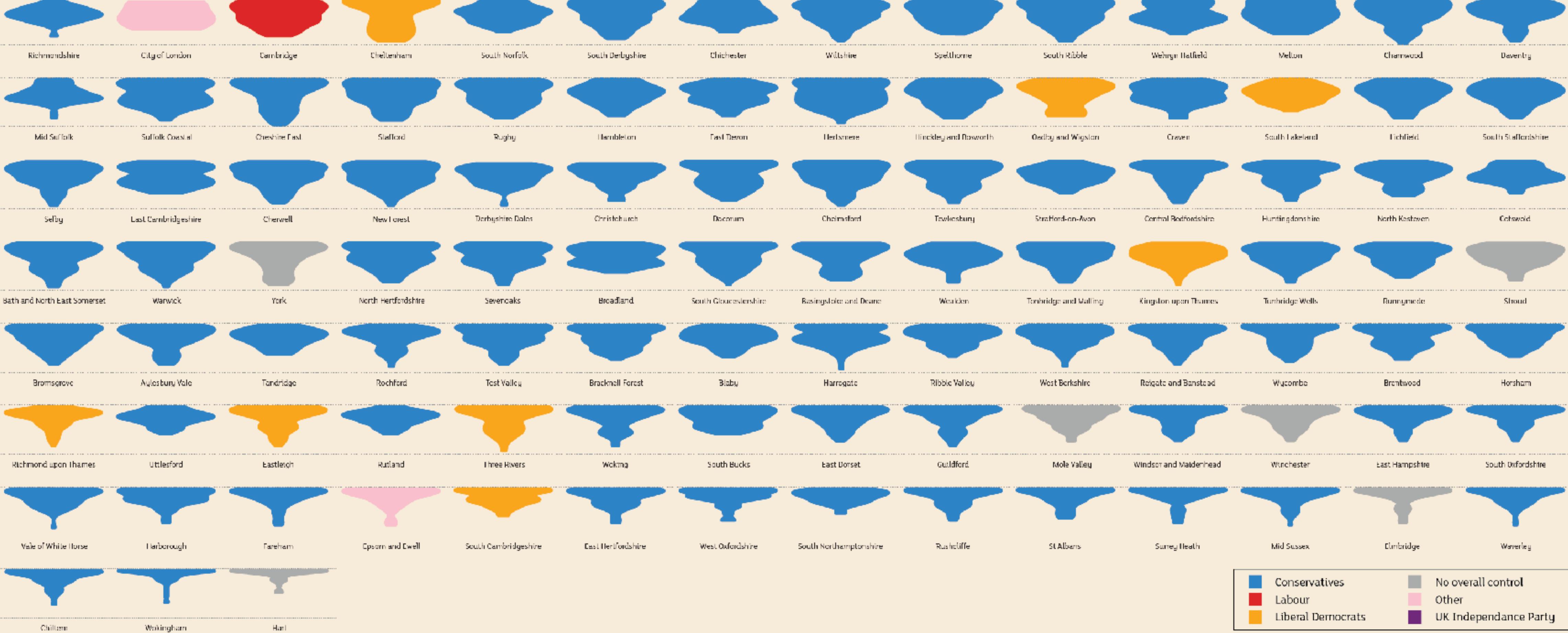


<http://bit.ly/ODM-GITLD2>

# DEPRIVATION vs POLITICAL CONTROL IN ENGLISH LOCAL AUTHORITIES (2018)



<http://bit.ly/ODM-GITLD2>



Local authorities are sorted according to the relative deprivation of the area using data from the Index of Multiple Deprivation 2015, with Manchester being the most deprived and Hart least. Shapes show the relative deprivation profile of each local authority area, with a wider bottom indicating more deprivation and a wider top less deprivation.

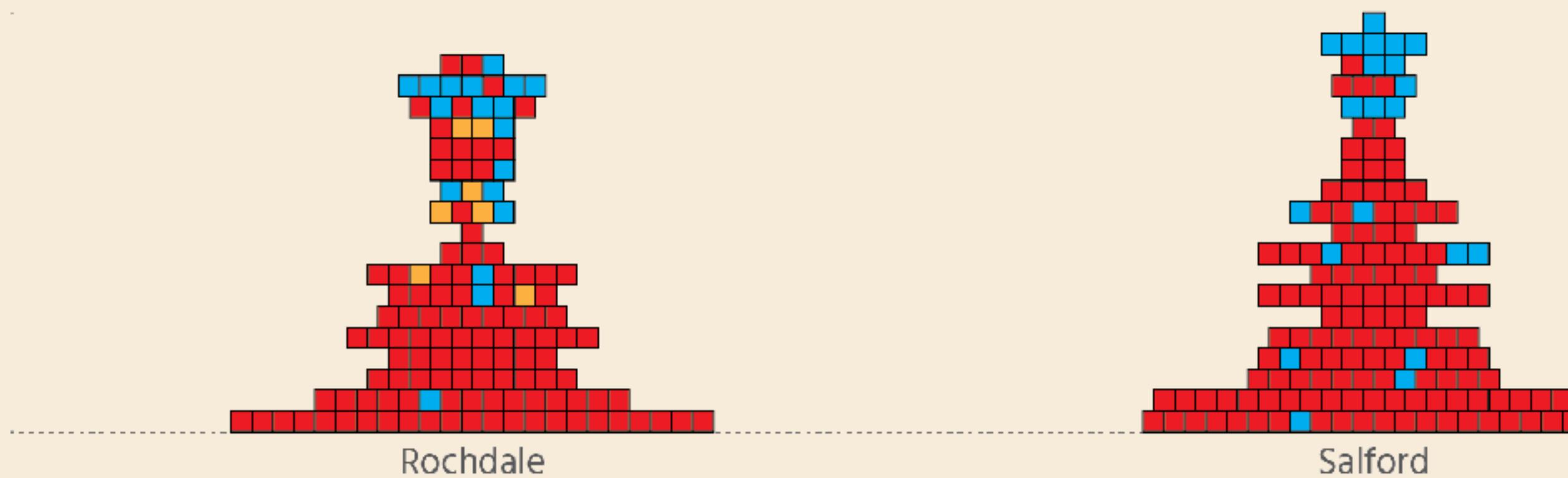
Local authorities are divided into Lower Super Output Areas (LSOAs) with each area containing approximately 1,500 residents. There are 32,844 LSOAs across England each one ranked according to their level of relative deprivation. These rankings are sorted into 20 sets (vintiles) each containing approximately 1,642 LSOAs. These are then matched with each local authority and the profile drawn from the amount of these vintiles in each area. All profiles have been normalised so they are the same width - if we didn't do this it would be difficult to see the profile characteristics of local authorities with smaller populations. Deprivation is measured across income, employment, education skills and training, health deprivation and disability, crime, barriers to housing and services and living environment domains.

Visualisation created in R Studio by Jamie Whyte - @northernjamie - with layout by Julian Tait - @julianlstar - using Adobe Illustrator. Data sources used: English Index of Multiple Deprivation 2015 released by the Ministry of Housing, Communities and Local Government - <http://opendatacommunities.org> and; political control data from Open Council Data - <http://opencouncildata.co.uk/>



<http://bit.ly/ODM-GITLD2>

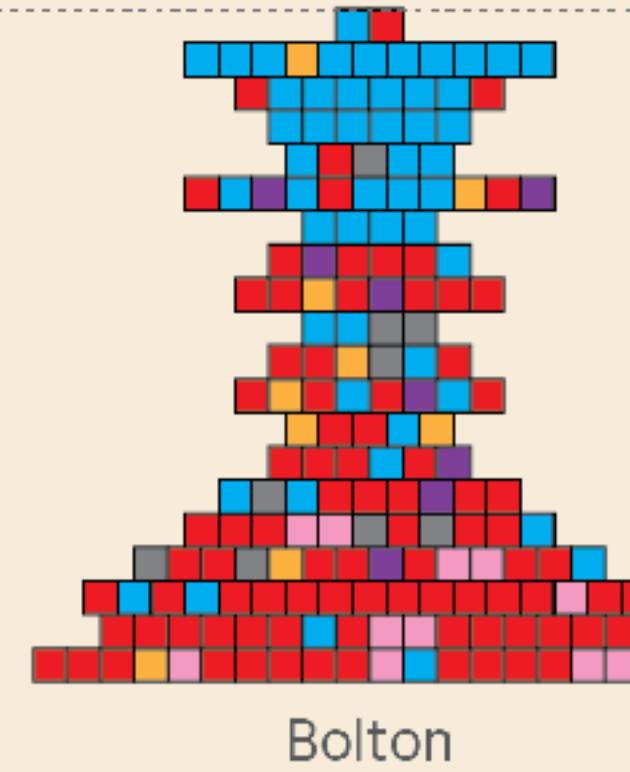
# DEPRIVATION vs POLITICAL REPRESENTATION IN GREATER MANCHESTER (SEPT 18)



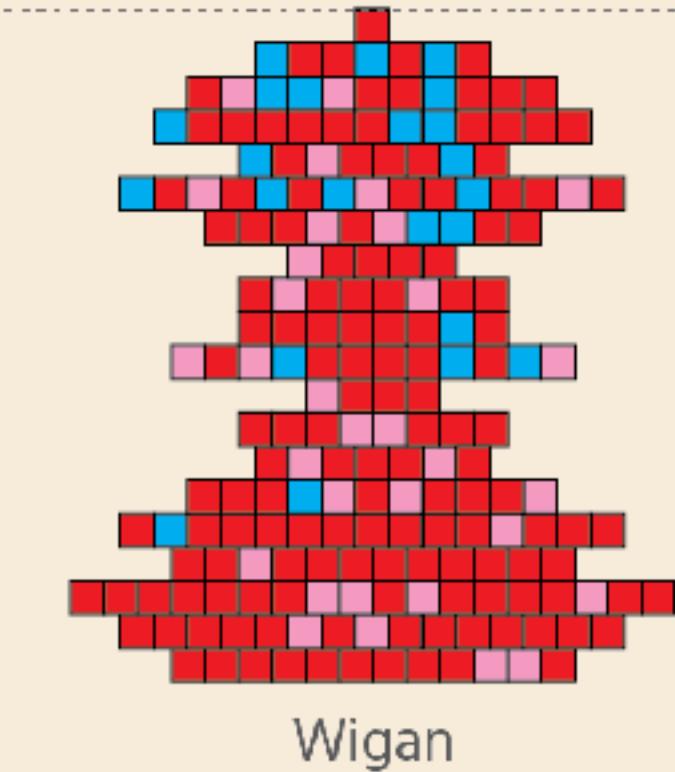
<http://bit.ly/ODM-GITLD2>



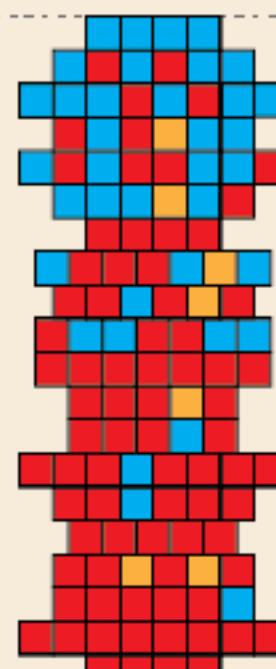
Oldham



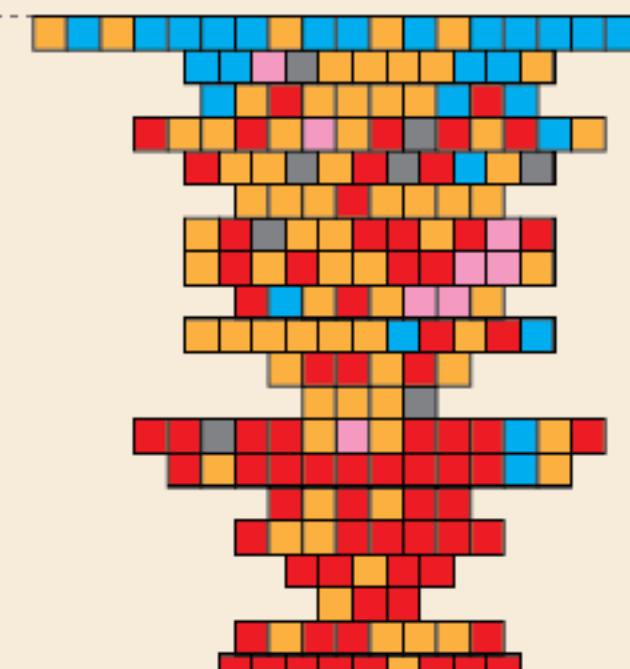
Bolton



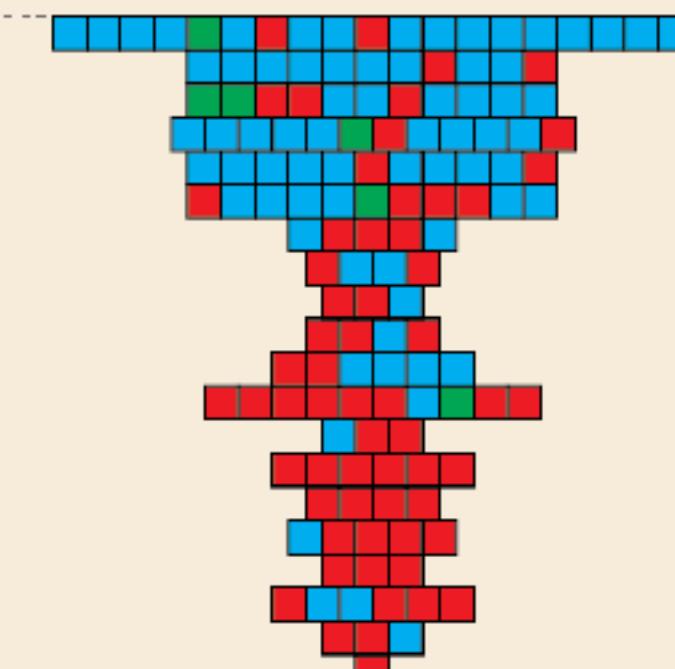
Wigan



Bury



Stockport



Trafford

### Visualisation showing deprivation mapped to political representation.

Authorities sorted according to the relative deprivation of the area using data from the Index of Multiple Deprivation 2015, with Manchester being the most deprived and Trafford least.

Conservatives	No dominant party
Labour	Other
Liberal Democrats	UK Independence Party
Green	

Shapes show the relative deprivation profile of each local authority area with a wider bottom indicating more deprivation and a wider top less deprivation. Local authorities are divided into Lower Super Output Areas (LSOAs) each area containing approximately 1,500 residents. There are 32,844 LSOAs across England each one ranked according to their level of relative deprivation. These rankings are sorted into

<http://bit.ly/ODM-GITLD2>

Police.uk uses cookies to make the site simpler. [Find out more about cookies](#)

# Crime and policing in England, Wales and Northern Ireland

**FIND YOUR NEIGHBOURHOOD**

## Latest news



### [Government launches new national hate crime awareness campaign](#)

1 November 2018

The campaign seeks to help the public understand what constitutes a hate crime, particularly offences which often people do not recognise as criminal, such as some forms of online and verbal abuse.

### Recent news

[Cyber Aware launches #OneReset campaign](#)

[Government publishes updated Hate Crime Action Plan](#)

[Neighbourhood Watch launches campaign resources](#)

[See all news articles](#)

### [Contact the police](#)

Find details of how to contact the police in emergency or non-emergency situations.

### [Crime map](#)

Explore and compare crime and outcomes of crime in your neighbourhood.

### [Performance](#)

See how your force is performing and how its performance compares to other areas.

### [Police workforce diversity](#)

Details of how the ethnicity and gender of the police workforce in your force compares with that of the population of the area they serve.

### [Your neighbourhood](#)

Discover more information about your area and the team responsible for

### [Your police and crime commissioner](#)

Find out about your force's police and

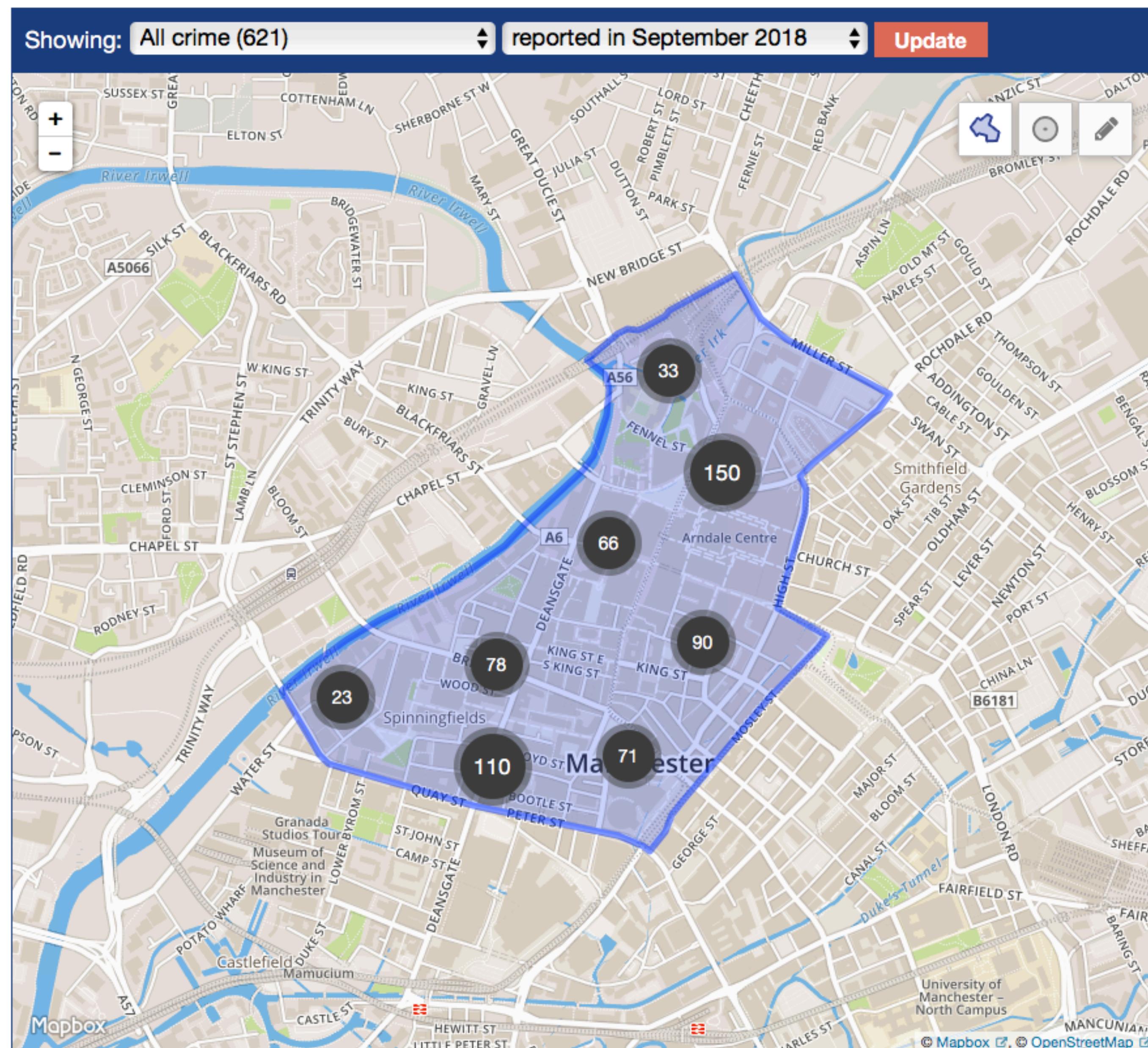
### [Information & advice](#)

Practical information about reporting incidents, how the police work, and

[Crime p https://www.police.uk](https://www.police.uk)

Find out h  
avoid becoming a victim of crime

Click on the dots on the map for information about individual crimes.



[View A-Z list of crime locations](#)

[News and events](#)

[Local policing priorities](#)

[Performance](#)

[Community Payback](#)

## Next steps

[View detailed statistics](#)

[Sign up for alerts](#)

[Share this page](#)

## Related pages

[How to avoid being a victim of crime](#)

[Find out more about Greater Manchester Police's performance on HMIC's website](#)

[How often is the information on the website updated?](#)

<https://www.police.uk>



## Welcome to Nomis

Nomis is a service provided by the Office for National Statistics, ONS, to give you free access to the most detailed and up-to-date UK labour market statistics from official sources.

[Information for first-time visitors](#)  
[Sign-in or Register](#)

### Labour Market Profiles

View a labour market profile of an area. Includes some of the data from our key datasets on population, employment, unemployment, qualifications, earnings, benefit claimants and businesses.

[Local Authority Profile](#) (district/county areas)

[Local Enterprise Partnerships Profile](#)

[Combined Authority Profile](#)

[Regional and National Profile](#)

[2010 Parliamentary Constituencies Profile](#)

[2011 Ward Profile](#) (England & Wales only)

### Data Downloads

Create a data download from one of our full range of data sets. Data is available at a very detailed level.

[Query data](#)

Download figures from a single data set.

### Census Statistics

[2011 Data catalogue](#)

Browse by table type and number, or view by release.

[2011 Search by topic \(table finder\)](#)

Search by keyword and geography type.

[2001 catalogue](#)

Browse by table type and number.

[2001 Search by topic \(table finder\)](#)

Search by keyword and geography type.

### Local Area Report

View a [report for a local area](#) such as a parish, ward, village or town. Includes information on the characteristics of people and households in the area.

Postcode or area name

Search

### Latest News

[Annual Survey of Hours and Earnings: 2018 data released](#) (25/10/2018)

[Mortality data: 2017 data released](#) (23/10/2018)

[DWP Consultation Response Published: Proposals for additional series to count unemployed claimants](#) (22/10/2018)

[Claimant Count / Jobseekers allowance: September 2018 data released](#) (16/10/2018)

<https://www.nomisweb.co.uk/>

## 2011 ward profile

### Search

You can search for a profile by postcode or place name.

[Search](#)

### Select from list

Choose a local authority

then choose a ward

[View profile](#)

## 2011 Ward Labour Market Profile E36006273 : Ancoats And Clayton

[Print](#)

[PDF](#)

[Email report](#)

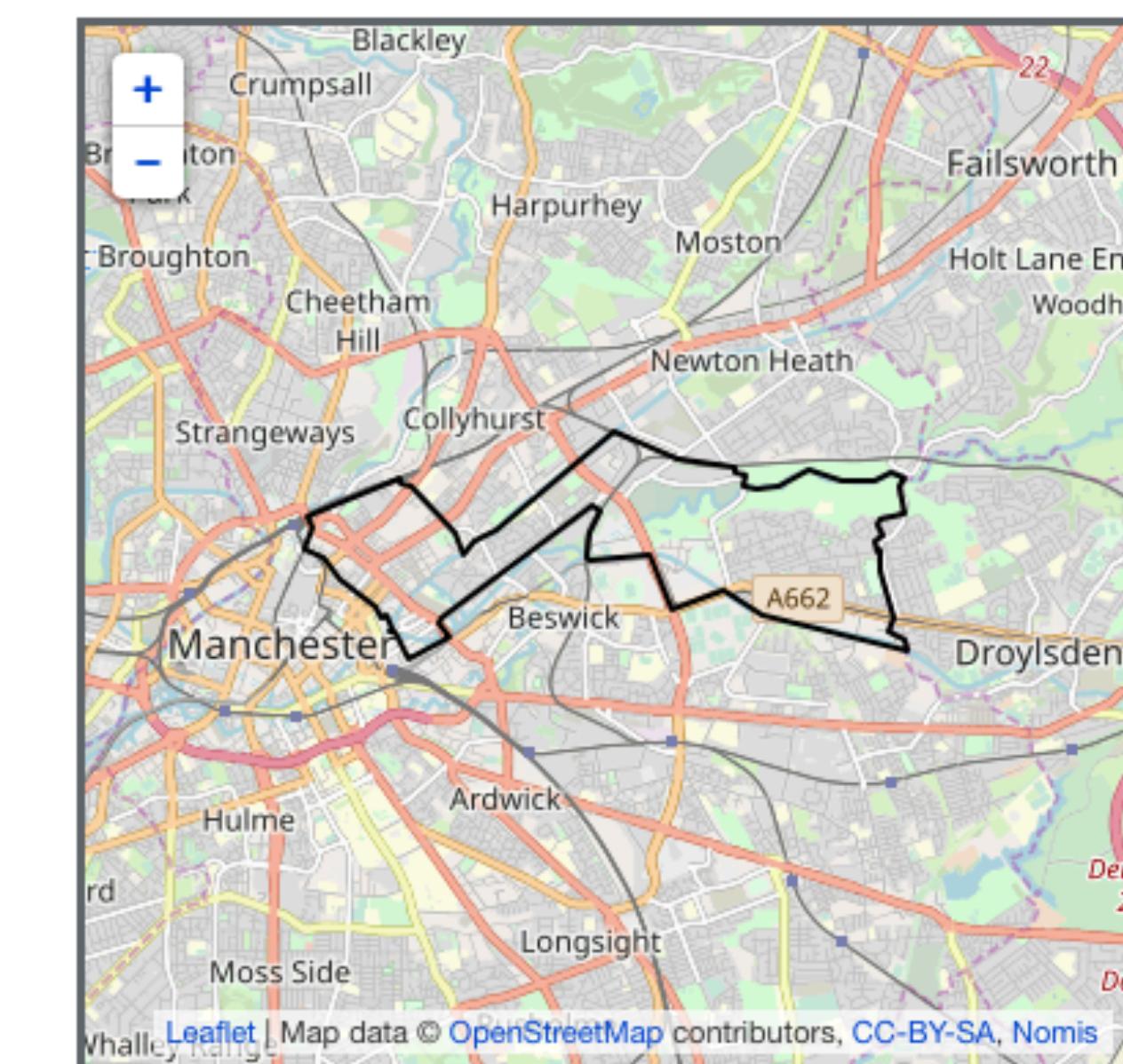
This summary gives an overview of the labour market within E36006273 : Ancoats and Clayton 2011 ward which is in the [Manchester local authority](#).

**All figures are the most recent available.**

- ▶ Resident population
- ▶ Labour Supply
- ▶ Out-of-work benefits
- ▶ Definitions and explanations

Use the tools at the bottom of each table to:

- View time-series figures
- Compare all wards in the authority
- Download data (Excel spreadsheet)
- Query the data in more detail



### Resident Population

Population aged 16-64 (2013)

<https://www.nomisweb.co.uk/>

[Search All](#)

Search, explore and download UK grant data from funders publishing open data to the 360Giving Standard.

94

Funders

179,070

Recipients

301,736

Grants

## 360GIVING

360Giving supports organisations to publish their grants data in an open, standardised way and helps people to understand and use the data to support decision-making and learning across the charitable giving sector.

[Find out more about 360Giving](#)

360Giving is a company limited by guarantee (Company Number 09668396) and a registered charity (Charity Number 1164883)

Running version ea94a58

GrantNav uses open data published to the 360Giving Standard.

GrantNav enables people to search, filter and download across these datasets, for free.

For feedback and questions, please email [grantnav@threesixtygiving.org](mailto:grantnav@threesixtygiving.org)

Links

[About](#)

[Funders](#)

[Recipients](#)

[Terms and Conditions](#)

[Take Down Policy](#)

[Data Used in GrantNav](#)

[Reusing GrantNav Data](#)

[Developers](#)

<http://grantnav.threesixtygiving.org/>

manchester



Search All Fields  Locations  Recipients  Titles & Descriptions

## Filter By

## Currency

GBP (4,257)

## Amount Awarded (GBP)

Smallest

£0 - £500 (66)

£500 - £1,000 (159)

£1,000 - £5,000 (730)

See More

## Recipient Region

North West (3,430)

London (74)

East Midlands (19)

See More

## Recipient District

Manchester District (2,542)

Salford District (199)

Trafford District (165)

See More

## Results

Sort By: Best Match

Total grants 4,257

Total funders 55

Total recipients 2,495

Earliest award date 07 Apr 1998

Latest award date 01 Oct 2018

Total GBP grants 4,257

Total GBP awarded £639,466,993

Largest GBP award £57,988,111

Smallest GBP award £0

Total Non-GBP grants 0

## Manchester Children's Burns Camp

01 Nov 2016

A Christmas party for 50 children from the annual burns camp.

Amount: £5,000

Funder: One Manchester

Recipient: Manchester Children's Burns Camp

## Manchester Community Legal Advice Service Partnership

04 Sep 2008

Led by Manchester Citizens Advice Bureaux Services (Manchester CAB), this project will involve 22 partners to improve the provision of, and access to, advice in Manchester. This will be done by the creation of the Manchester Legal Advice Services Partnership (MCLASP) and will include a telephone gateway to provide a single access point for clients.

Amount: £496,276

Funder: The Big Lottery Fund

Recipient: Manchester Citizens Advice Bureaux Se...

Region: North West

District: Manchester District

## Grant to East Manchester Academy

27 Mar 2013

Amount: £2,500

towards a two-night camping trip to the Lake District for disadvantaged children from Manchester

<http://grantnav.threesixtygiving.org/>



## The home of Greater Manchester mapped data.

MappingGM provides a range of maps that you can use to explore Greater Manchester's housing, planning, infrastructure, socio-economic and demographic data. The maps are open for you to use, and most of the data used is freely available to download.

[Learn more »](#)

### Explore the maps

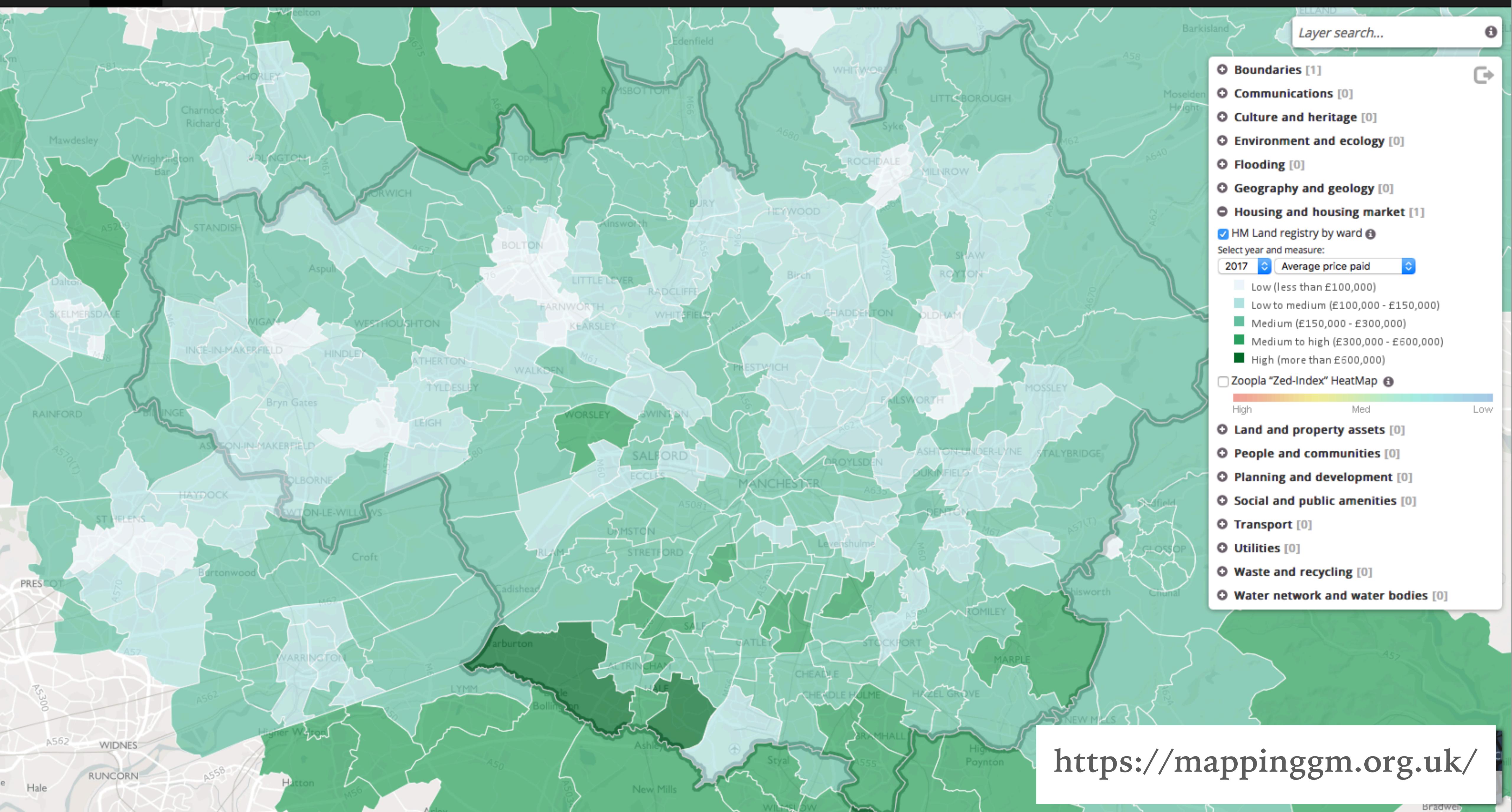
#### GMODIN

Planning, housing and infrastructure data across  
Greater Manchester.

#### People and Comm

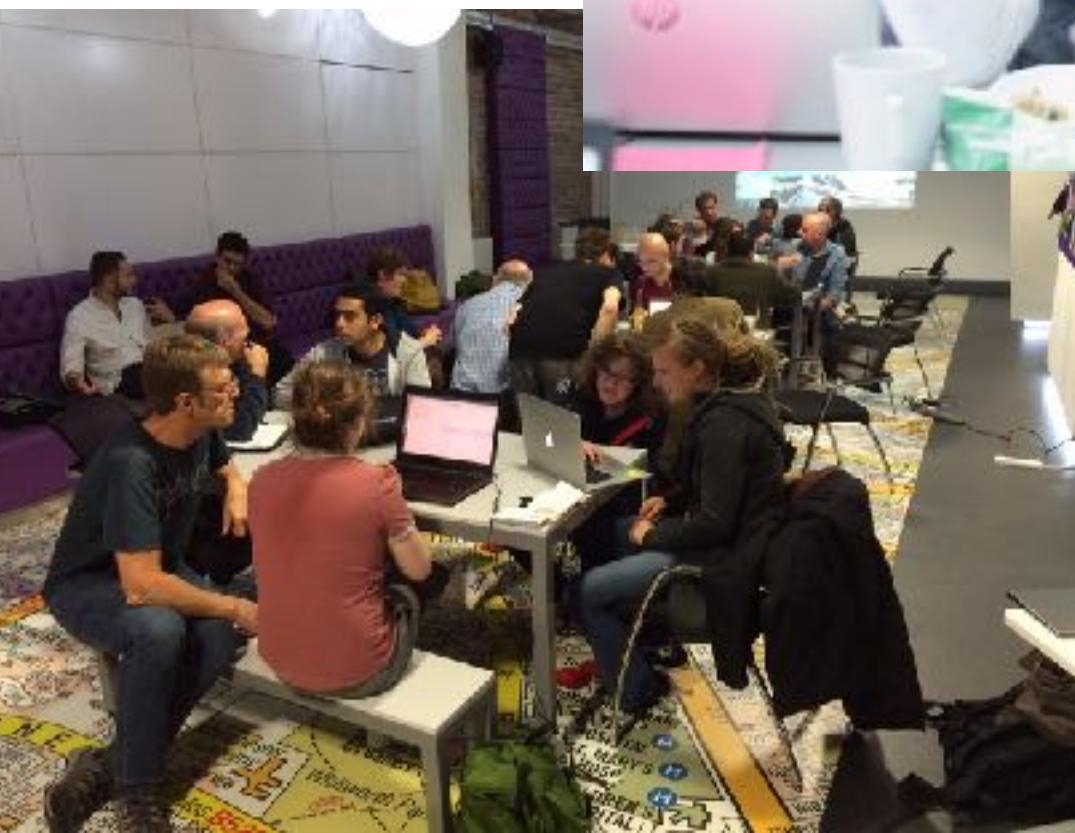
Explore socio-economic and  
about the people and communities of Greater

<https://mappinggm.org.uk/>



<https://mappinggm.org.uk/>

# EXERCISES



# MATHS QUESTION

A bat and ball cost £1.10 and the bat costs £1 more than the ball

What is the cost of the bat and what is the cost of the ball?

# MATHS QUESTION ANSWER

A bat and ball cost £1.10 and the bat costs £1 more than the ball.

What is the cost of the bat and what is the cost of the ball?

## Answer

The bat is £1.05 and the ball is £0.05.

50% of people incorrectly answer that the bat is £1.10 and the ball is £0.10.

The question illustrates unconscious bias that can skew the way we interpret and answer questions - an important factor to understand when we use data.

# NEXT EVENTS



FEB  
26

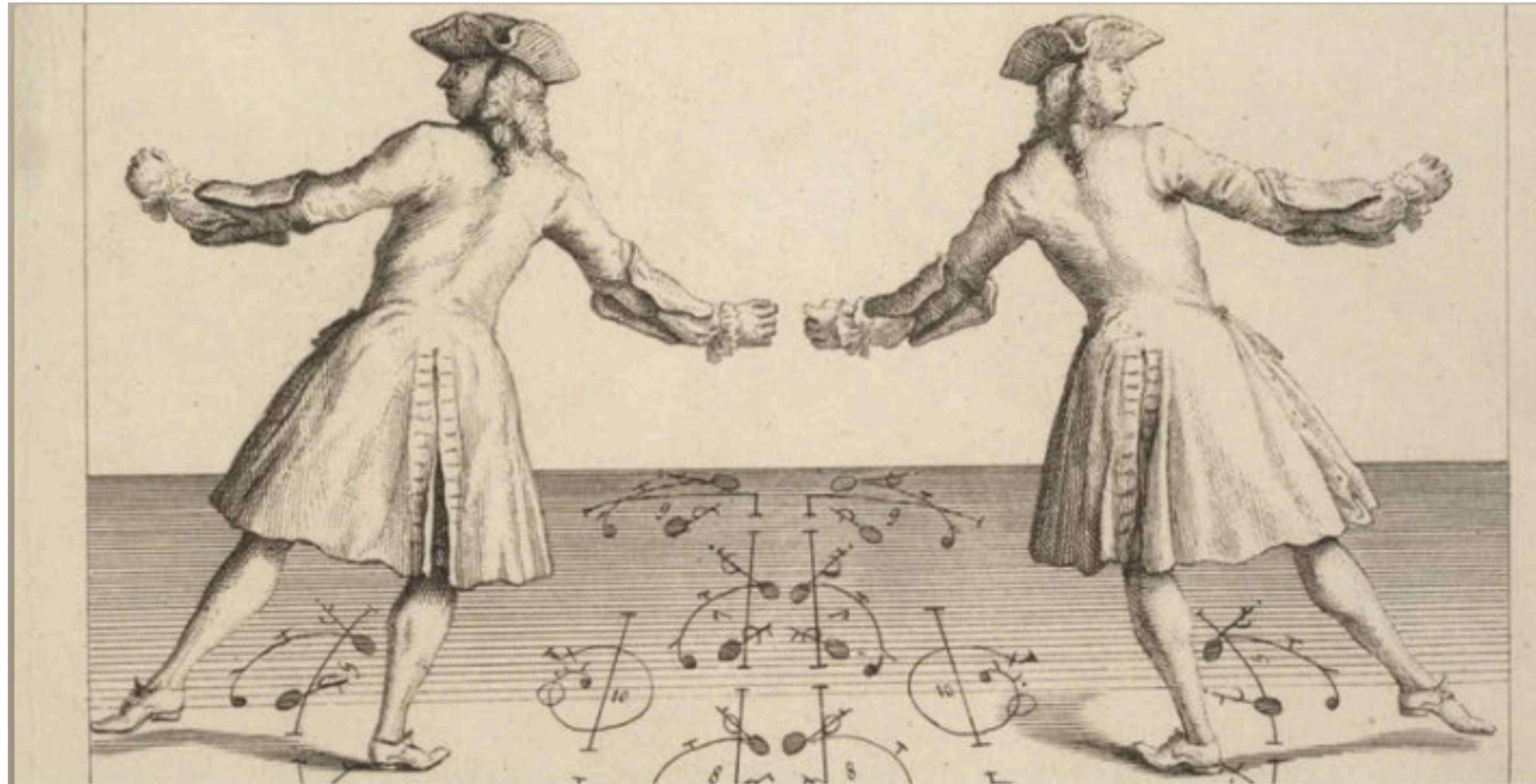
**Mapping Your World - a beginner's guide to using OpenStreetMap**

by Open Data Manchester

Free

[bit.ly/ODM-OSM2](http://bit.ly/ODM-OSM2)

# NEXT EVENTS



MAR  
14

**Techniques for learning and  
teaching data skills #2  
Storytelling with Data**

by Open Data Manchester

Free

[bit.ly/ODM-SWD1](http://bit.ly/ODM-SWD1)

# NEXT EVENTS



MAR  
26

## I Can't Believe It's Not Data!

by Open Data Manchester

Free

[bit.ly/ODM-IBD1](http://bit.ly/ODM-IBD1)

# THANK YOU

Sam Milsom

[hello@opendatamanchester.org.uk](mailto:hello@opendatamanchester.org.uk)

<http://www.opendatamanchester.org.uk>

Twitter @opendatamcr

