

**PAG meeting**  
Thursday 22 June 2023

# 50 years: Deprivation Trajectories Census-based approach



**deprivation.org**

Research to support the eradication of poverty and deprivation



**UNIVERSITY OF LEEDS**



**Paul Norman**

[p.d.norman@leeds.ac.uk](mailto:p.d.norman@leeds.ac.uk)

@pdqnorman

**Research Team:**

Chris Lloyd, Gemma Catney

Sara Ferguson (QUB)

David McLennan,

Michael Noble (deprivation.org)

Paul Norman (University of Leeds)

# 50 years: Deprivation Trajectories

## Census-based approach

- Traditional census composite measures are cross-sectional (for the census year)
- Changing deprivation **has** been calculated using inputs from successive censuses (e.g. Norman 2010; Norman *et al.*, 2016; Exeter *et al.*, 2019)
- In the main, as areas become less deprived, good health and other benefits accrue and *vice versa*
- If change in specific places can be tracked then the effect of a policy can be assessed for its success
- What we are doing here extends previous work 1971 to 2011

# Specification

## Time frame:

- Census years: 1971, 1981, 1991, 2001, 2011 & 2021

## Geography:

- Coverage England & Wales; Northern Ireland & Scotland later
- 2021 Lower Super Output Areas (LSOAs) (& Datazones)

## Variables: inputs to Townsend deprivation

- Unemployment
  - Non-home ownership
  - No car access
  - Overcrowding
- } Accepting (for now)  
that inputs are not  
without their critics

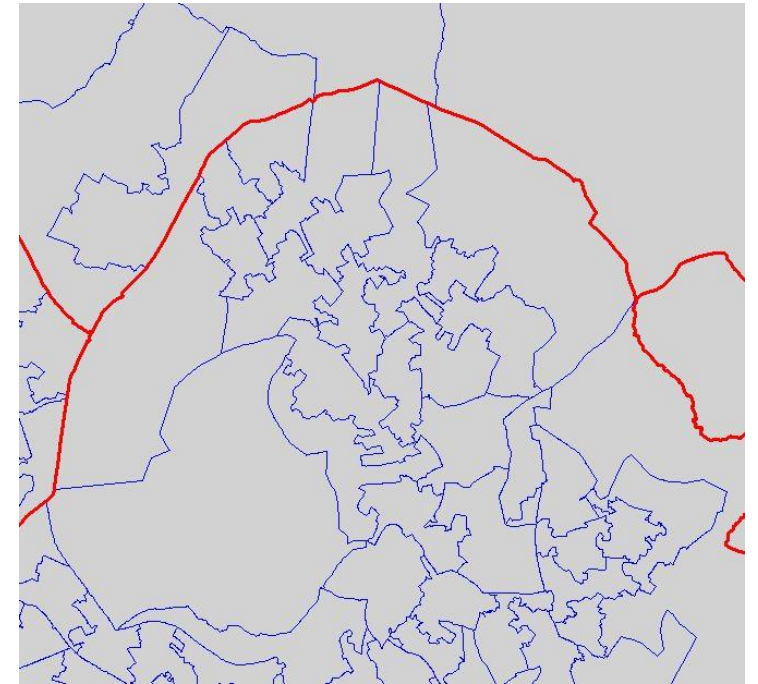
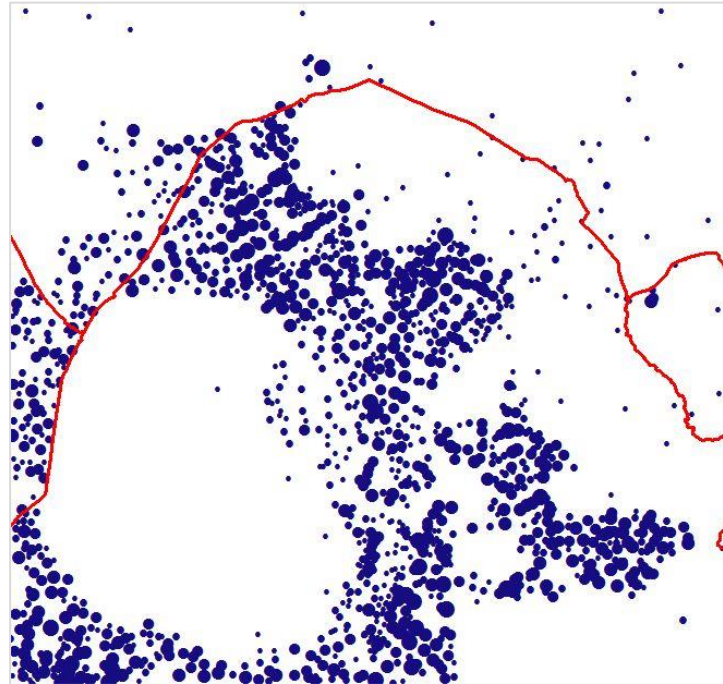
## Deprivation calculation

- Comparable over time

# Geography

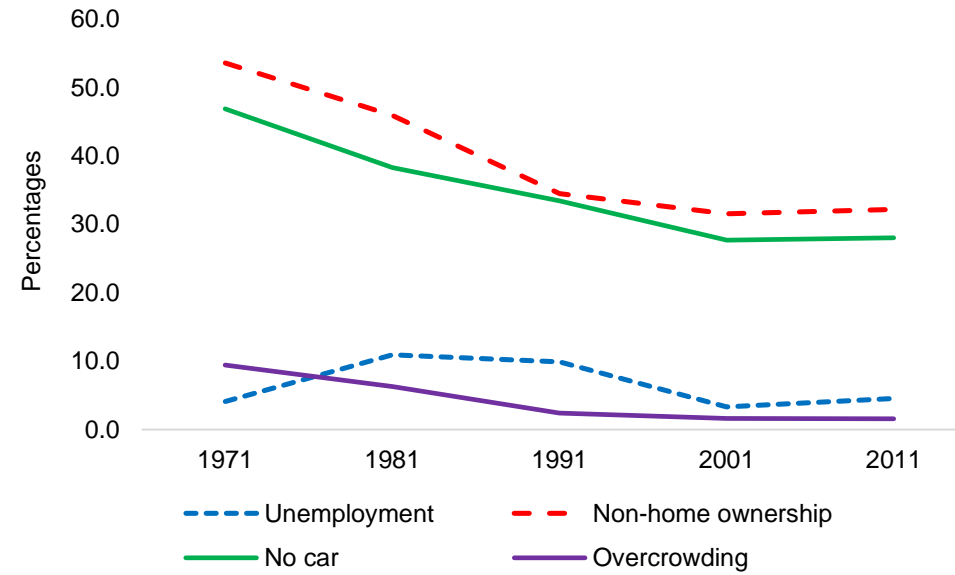
## Boundary change

- Census years: 1971, 1981, 1991, 2001, 2011
- Convert from 'source' geographies EDs & OAs
- To 'target' 2021 LSOAs



# Deprivation change: GB 1971 to 2011

GB change in inputs

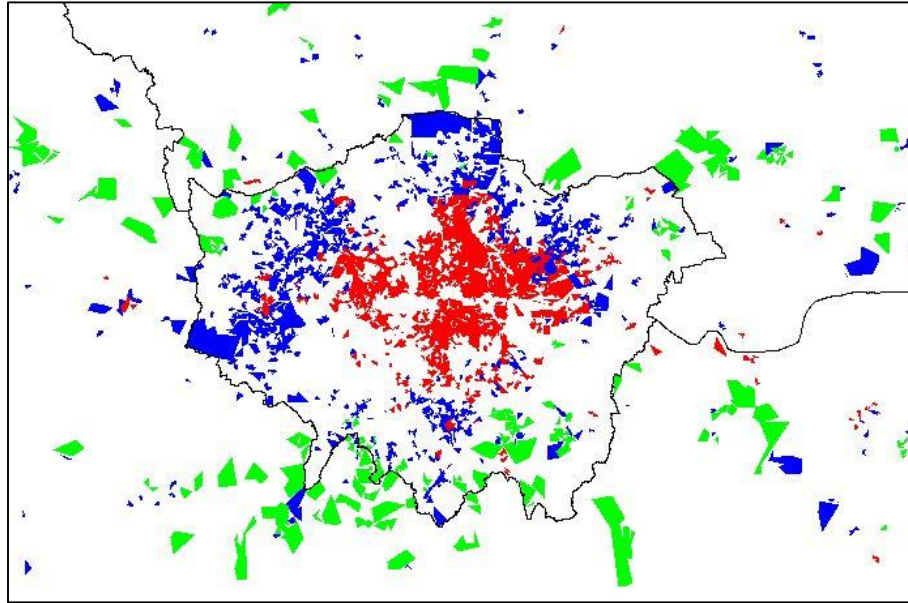


GB change in deprivation

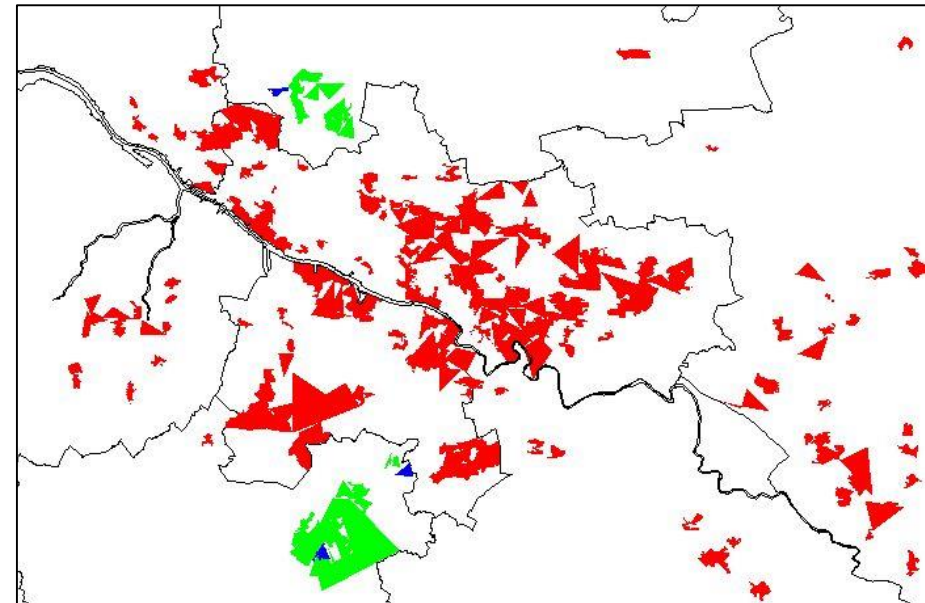


# Deprivation change: GB 1971 & 2011

## London & surrounds



## Glasgow & surrounds

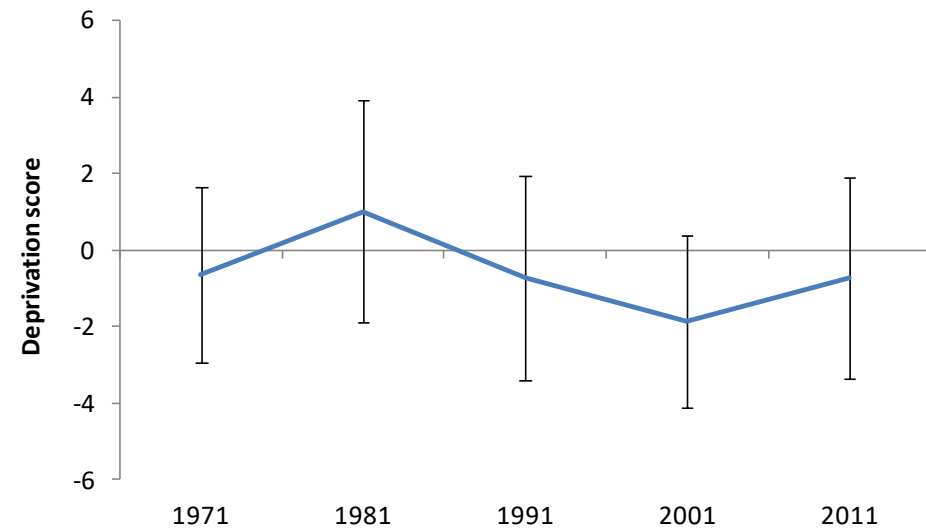
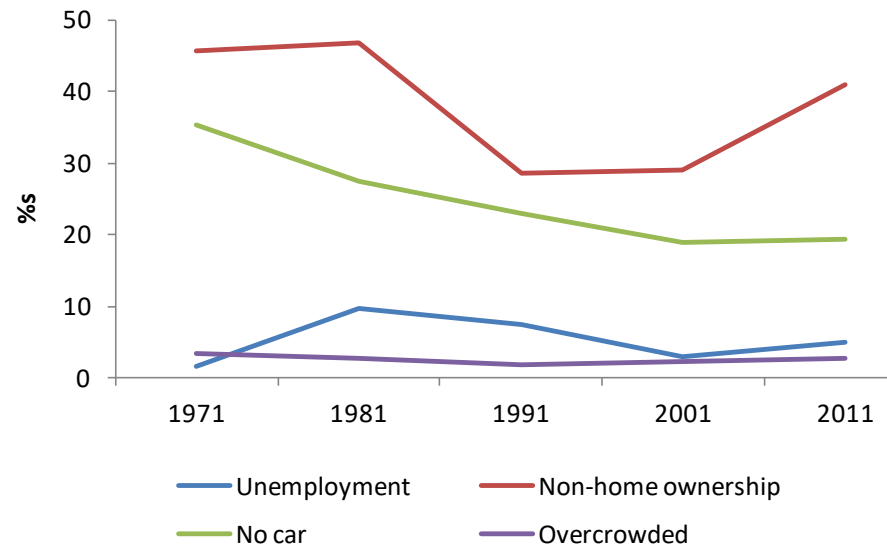
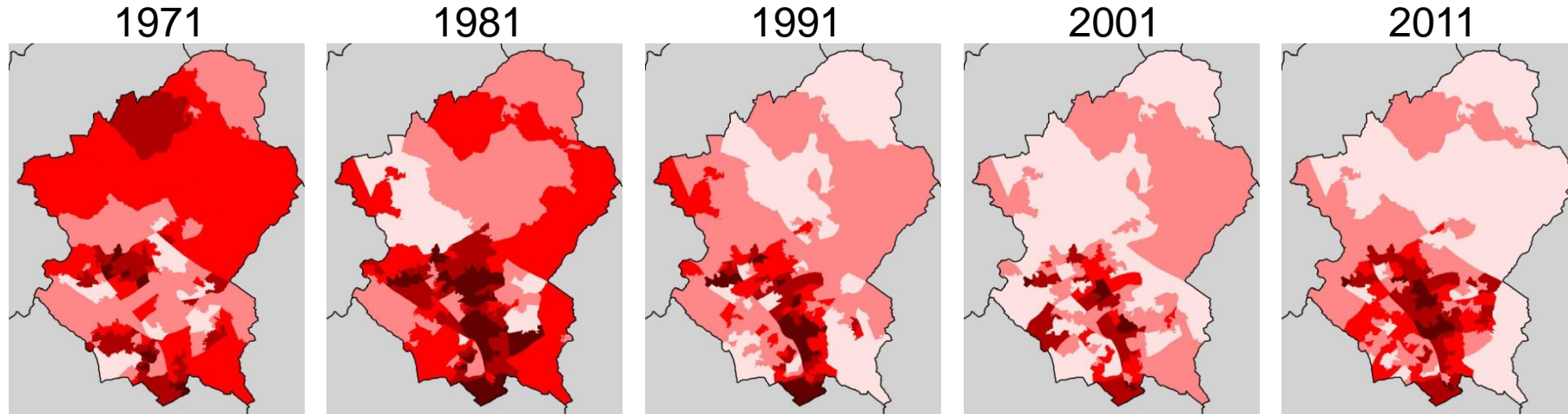


Green = Least; White = Less; Blue = More; Red = Most

# Milton Keynes: villages & fields to concrete cows & roundabouts



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# Reflection & the future

Caveats: 'measured in this way'

- LSOAs (Datazones) not necessarily the 'right' geography
- Townsend not necessarily the 'right' deprivation
  - Input indicators assumed relevant over time
- Decennial censuses miss the intervening years, etc. ...

**State of play: England & Wales 1971 to 2021 done, write up underway**

Grouping areas

- Combinations of quintiles
  - Q1 ('71) & Q1 ('21) Persistently Non-Deprived
  - Q5 ('71) & Q5 ('21) Persistently Deprived; etc.
- K means classification of input variables
- & some alternative explorations

Further work

- Extend to Northern Ireland & Scotland
- Explorations using alternative variables
- Social housing; Lack of qualifications; Lone parents