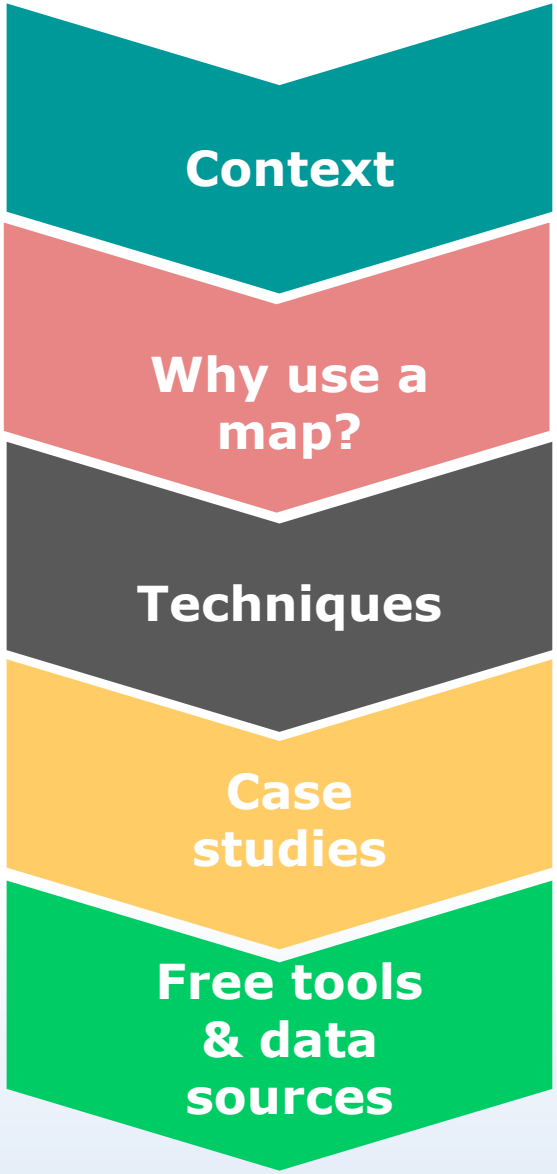
MORE THAN JUST A MAP

Using maps for research

Andrew Fitzpatrick

Kirklees COUNCIL

Structure


Context
Why use a map?
Techniques
Case studies
Free tools & data sources

Context

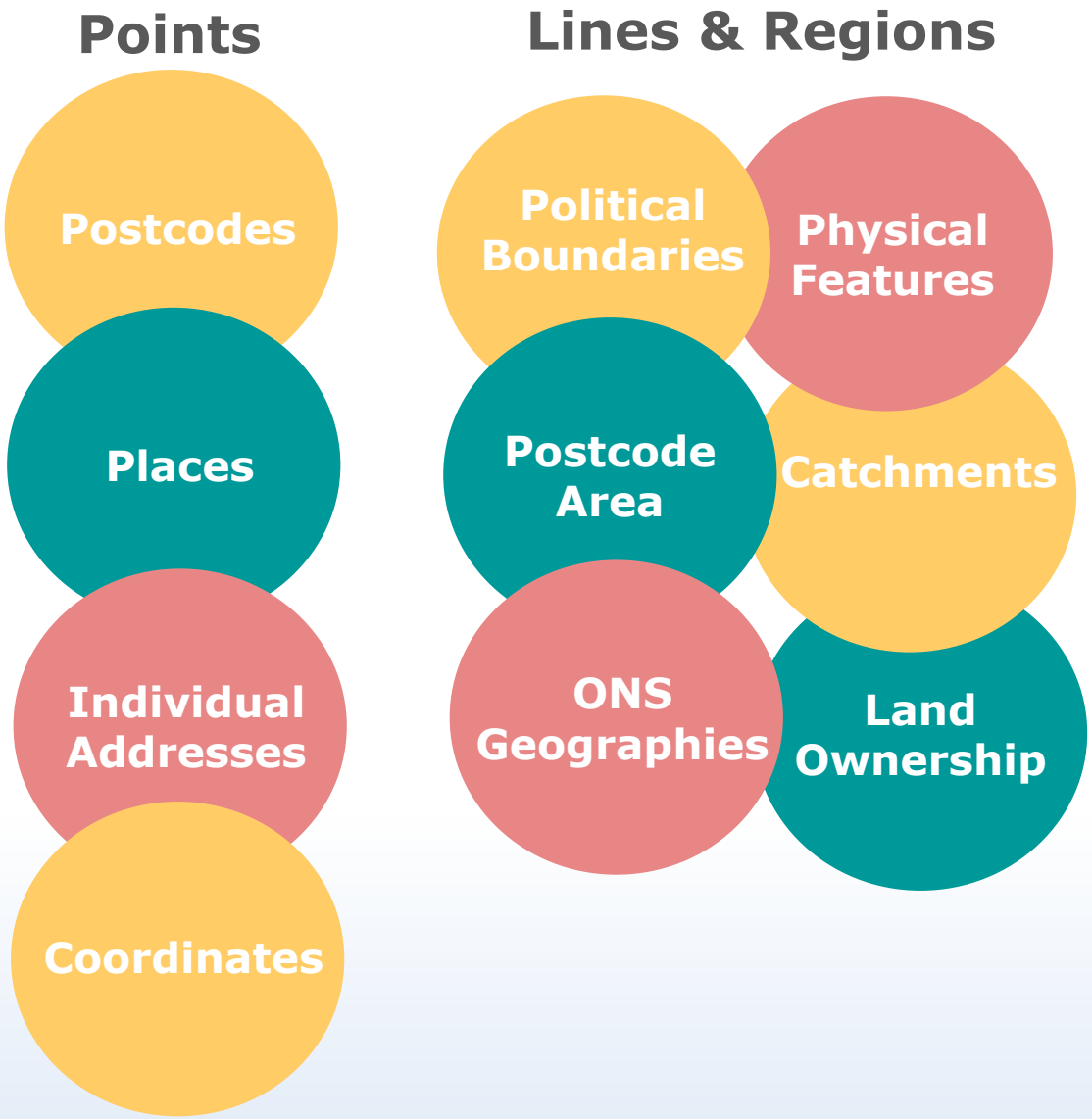
‘It is estimated that approximately **80%** of the informational needs of a local government policymaker is related to a **Geographical Location**’

Williams (1987)

Context

'Everything happens somewhere' so almost anything can be mapped!

Append non-spatial data



Why use a map?

- Geographical Information System (GIS)

Questions

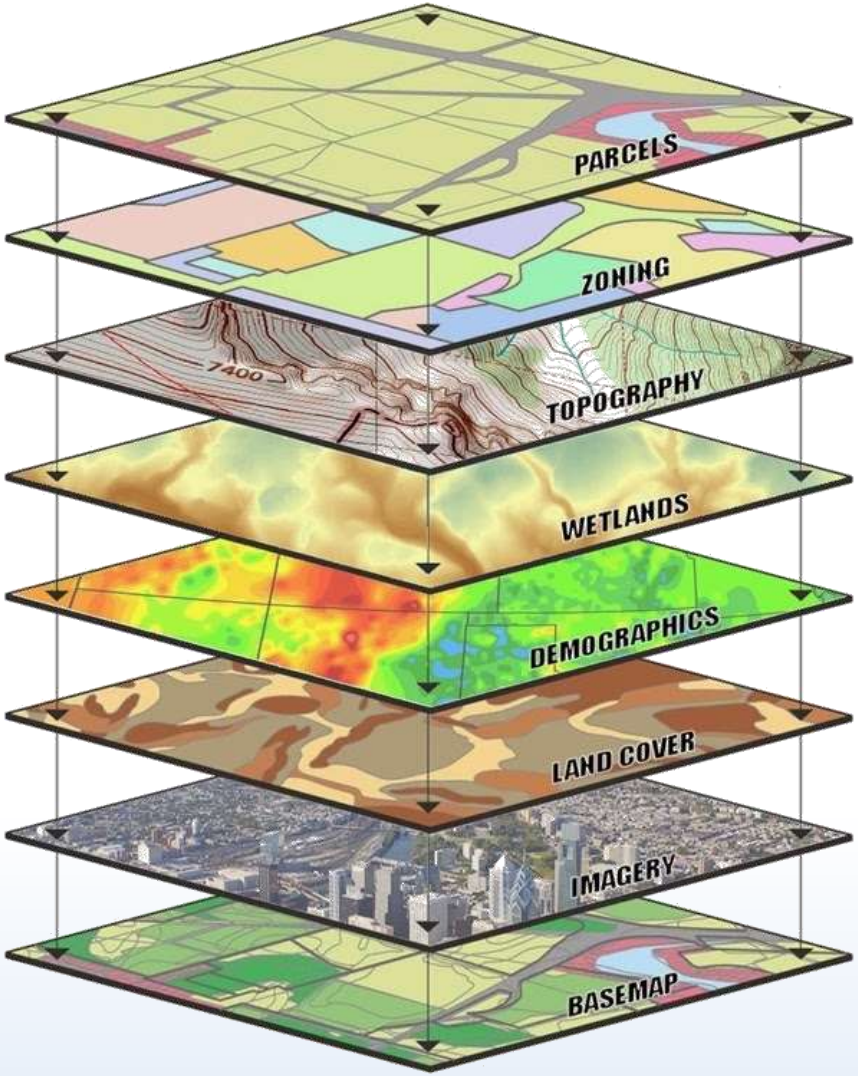
- Service provision?
- Resource targeting?
- Catchment gaps?

Techniques

- Asset maps
- Thematic maps
- Routing
- Produce catchments

- Simplify complex patterns
- Adding vital context
- Gain better insight
- Easy to relate to
- Create conversation
- Change perspective

Why use a map?

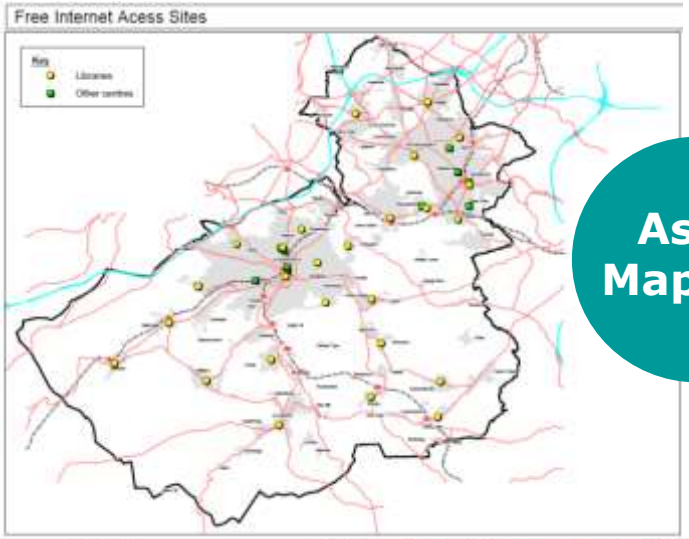


Context

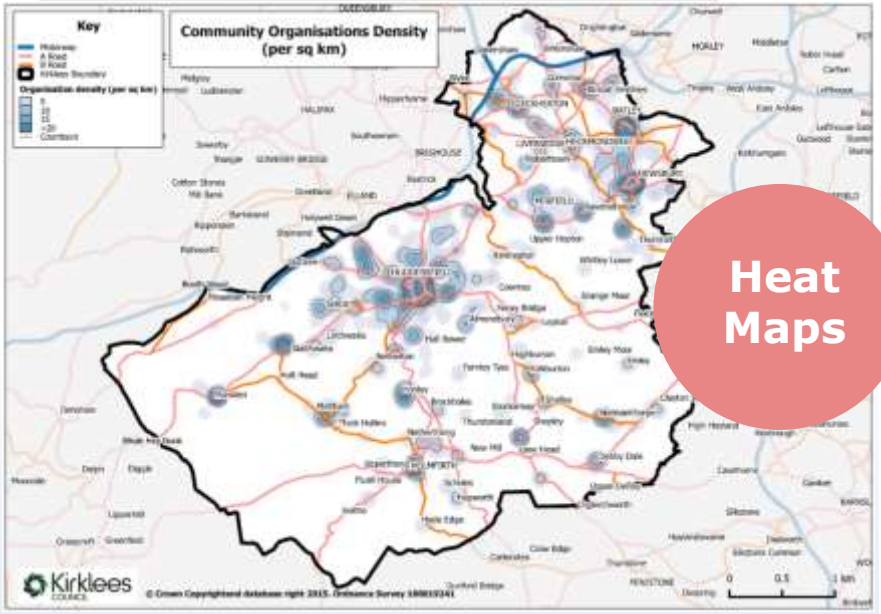
Add layers to build a picture/profile

Easily visualise relationships

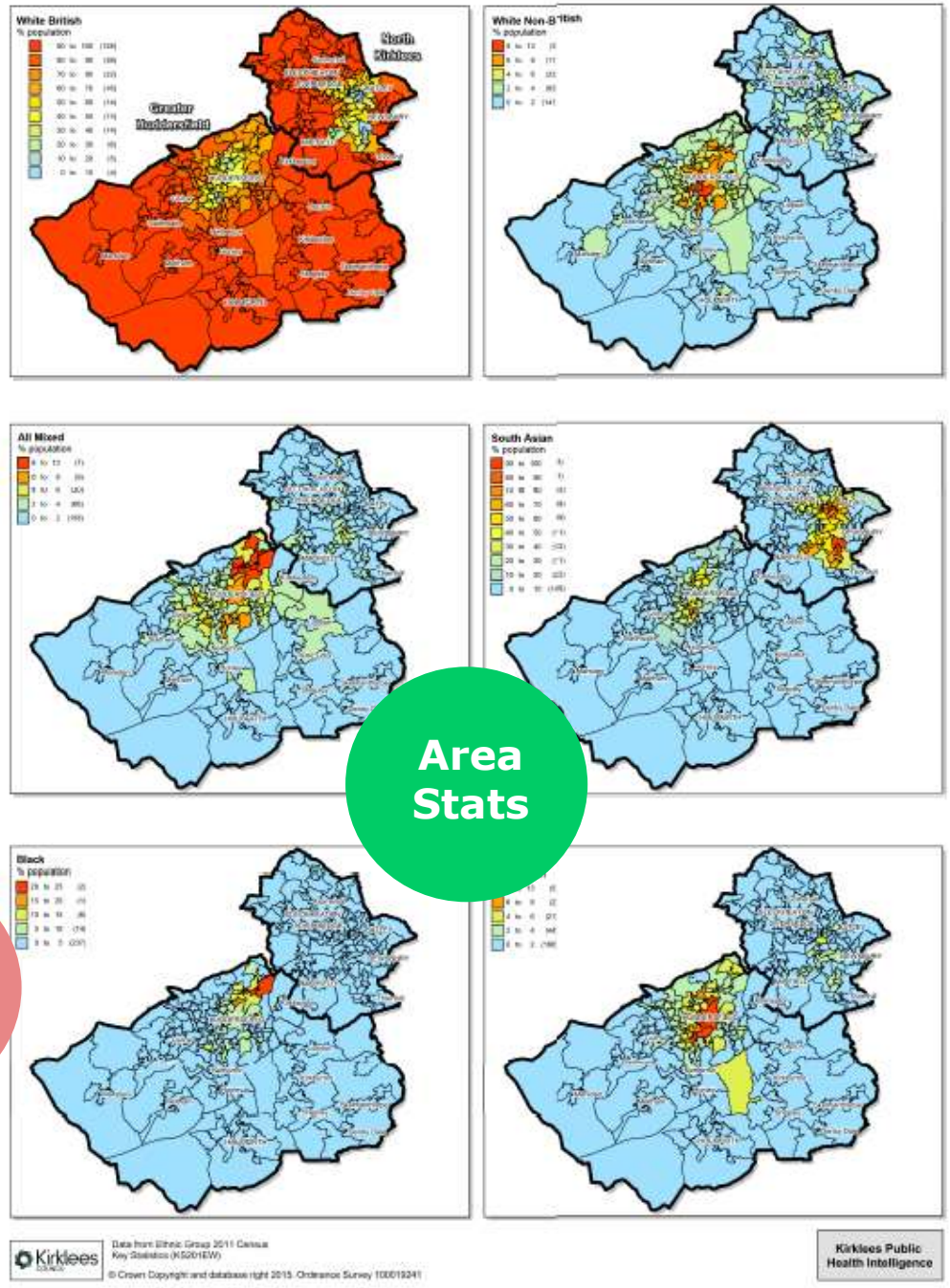
Techniques



Asset Mapping

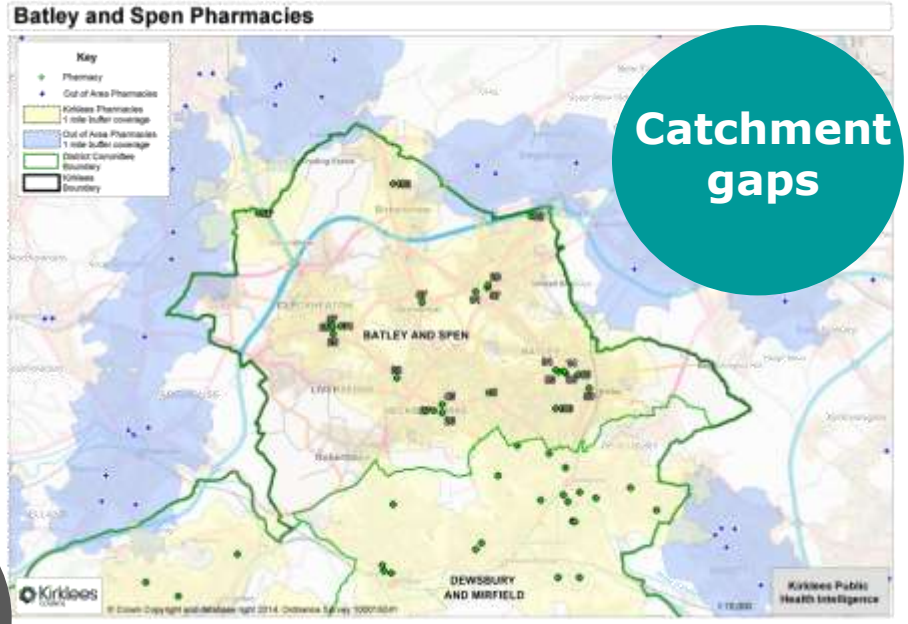


Heat Maps

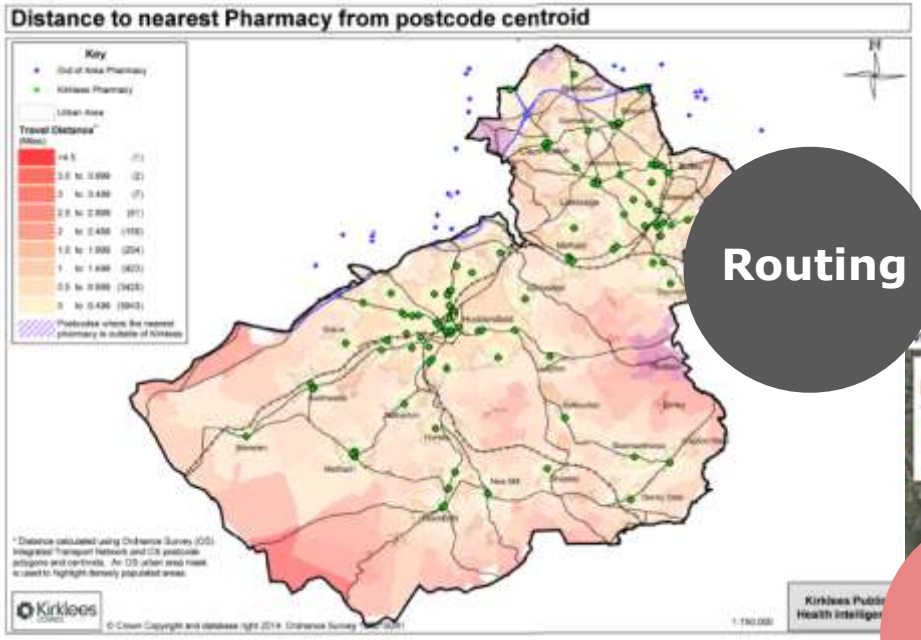


Area Stats

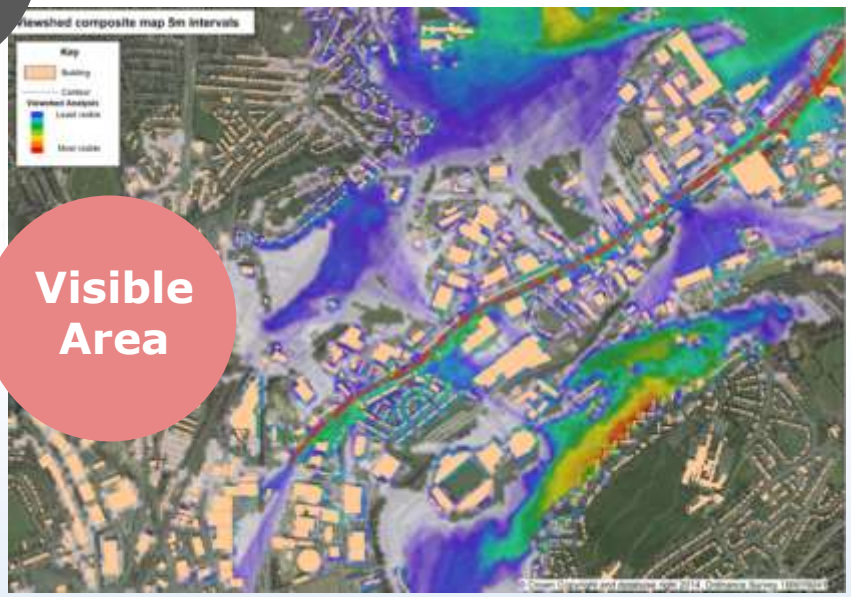
Techniques



Catchment gaps

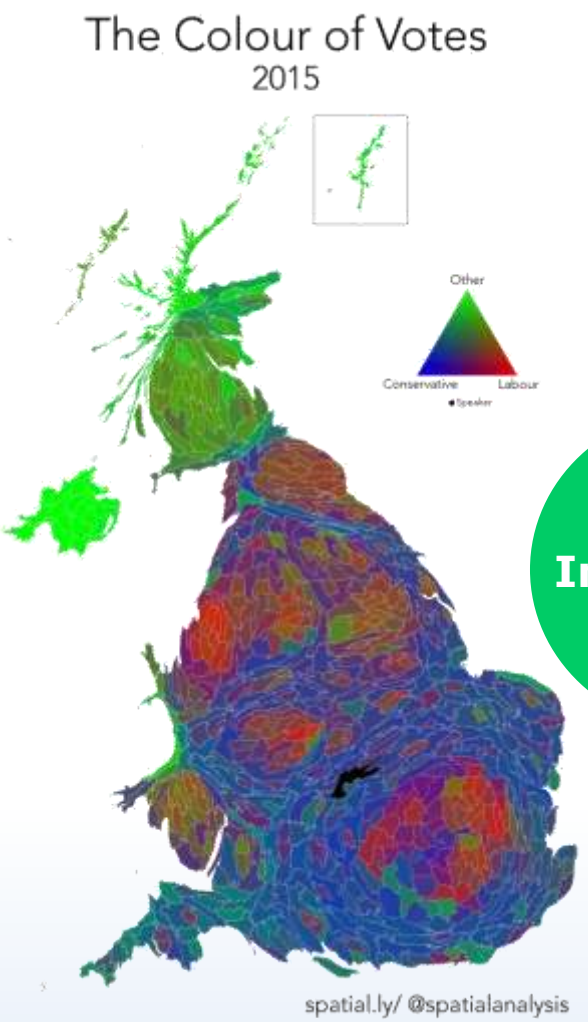


Routing



Visible Area

Techniques

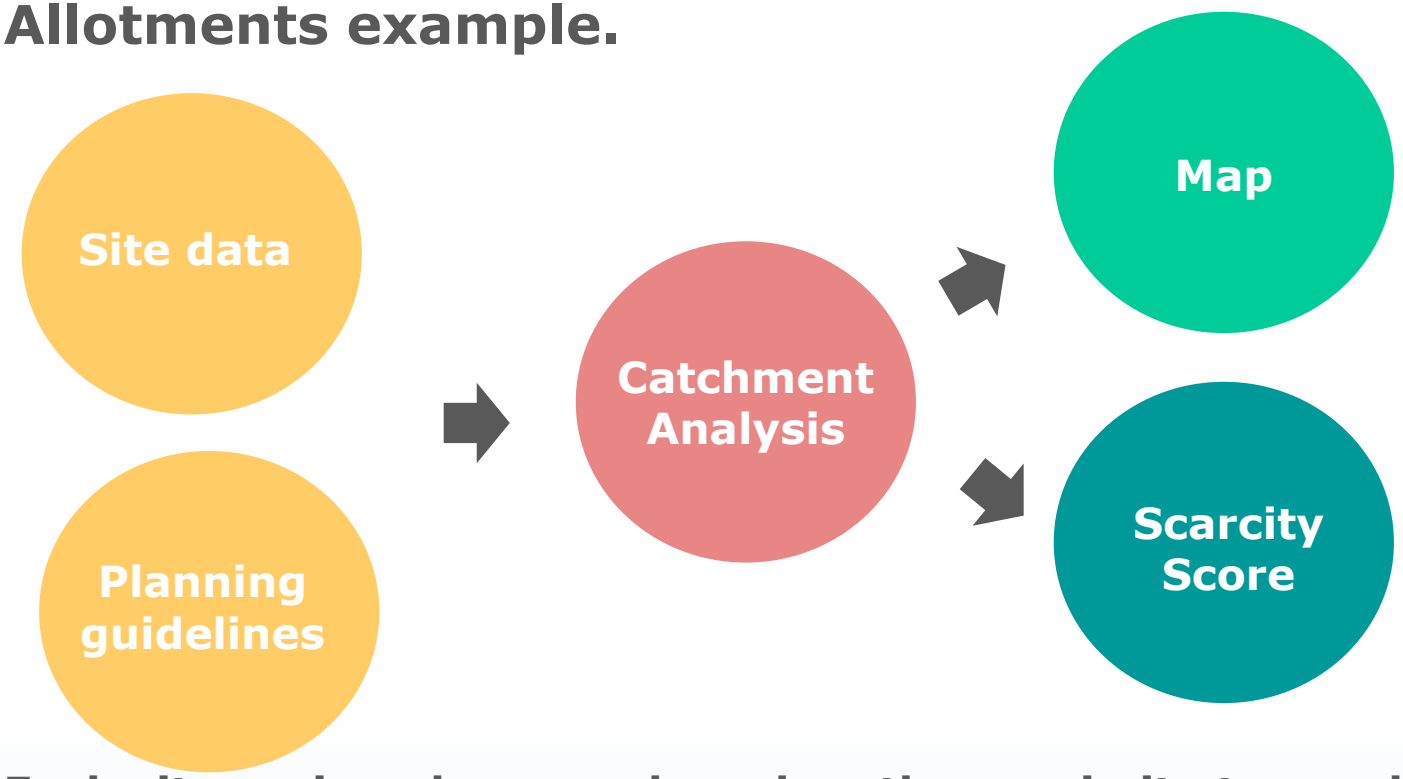


Infographics

Case Study

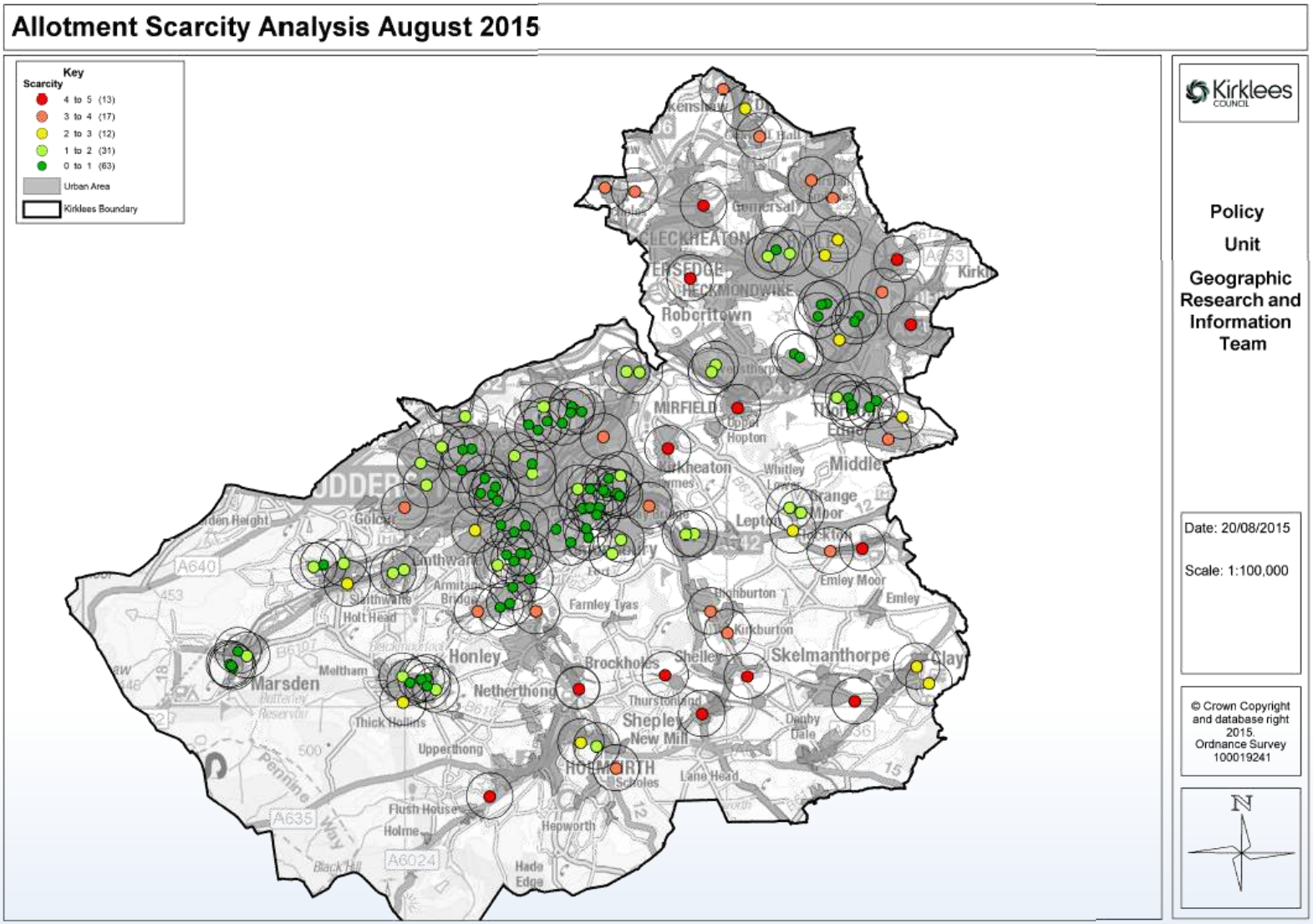
How accessible are open spaces in Kirklees?

Allotments example.

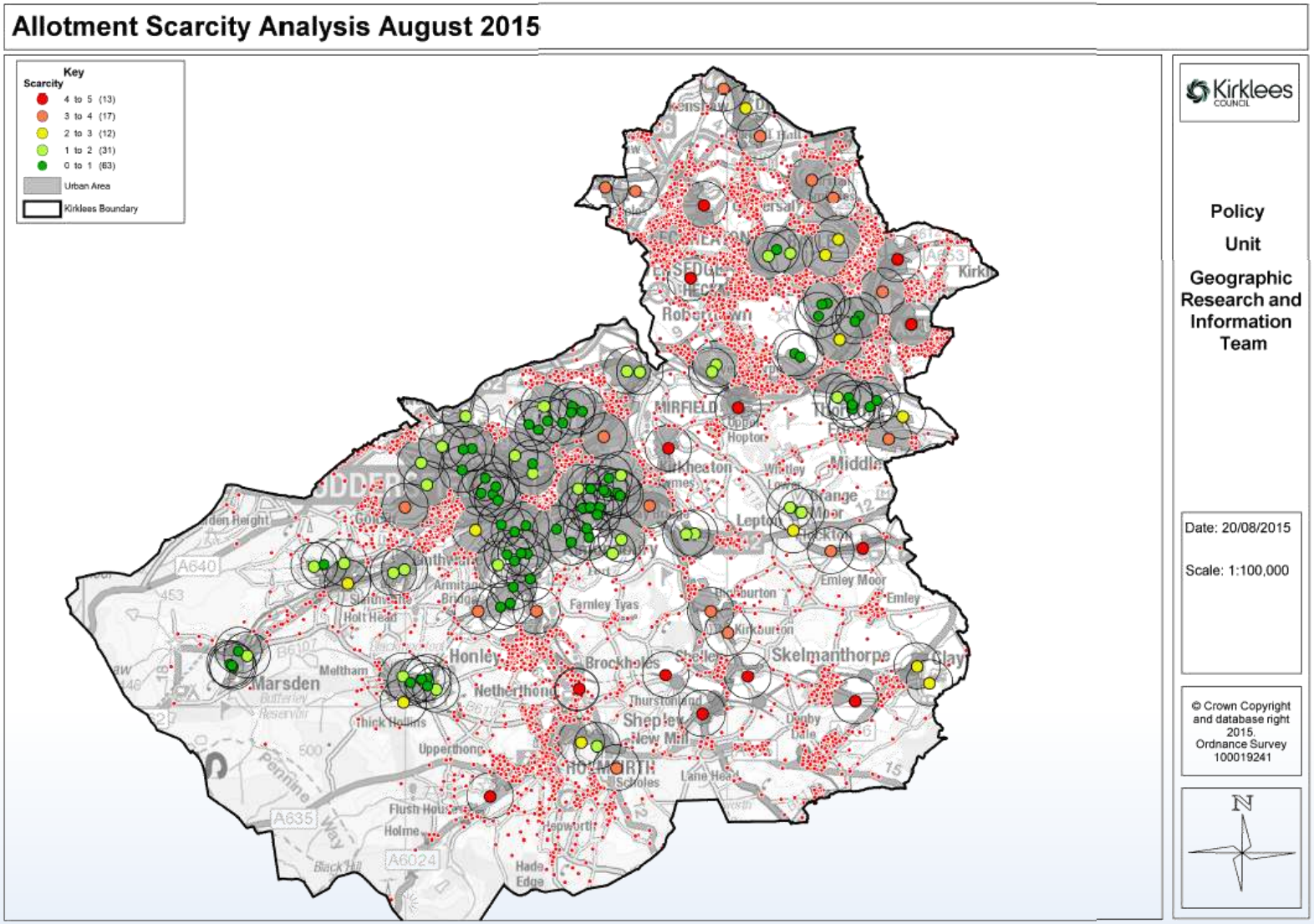


Each site assigned a score based on the proximity to nearby sites/shared catchment area. Results used in Local Plan to determine areas deficient in accessibility to open space.

Case Study


Allotment Scarcity Analysis August 2015
Key
Scarcity
4 to 5 (13)
3 to 4 (17)
2 to 3 (12)
1 to 2 (31)
0 to 1 (63)
Urban Area
Kirklees Boundary
Kirklees Council
Policy Unit
Geographic Research and Information Team
Date: 20/08/2015
Scale: 1:100,000
© Crown Copyright and database right 2015. Ordnance Survey 100019241
N
Robertstown
Mirfield
Middlestown
Kirkheaton
Golcar
Lepton
Emley Moor
Emley
Kirkburton
Skelmanthorpe
Clay
Honley
Marsden
Meltham
Brockholes
Shelley
Netherthong
Thurstonland
Shepley
New Mill
Upperthong
Holmfirth
Scholes
Lane Head
Hepworth
Flush House
Holme
Hade Edge
Farnley Tyas
Slaithwaite
Holt Head
Thick Hollins
Armitage Bridge
Penistone Way
A640
A635
A6024

Case Study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N
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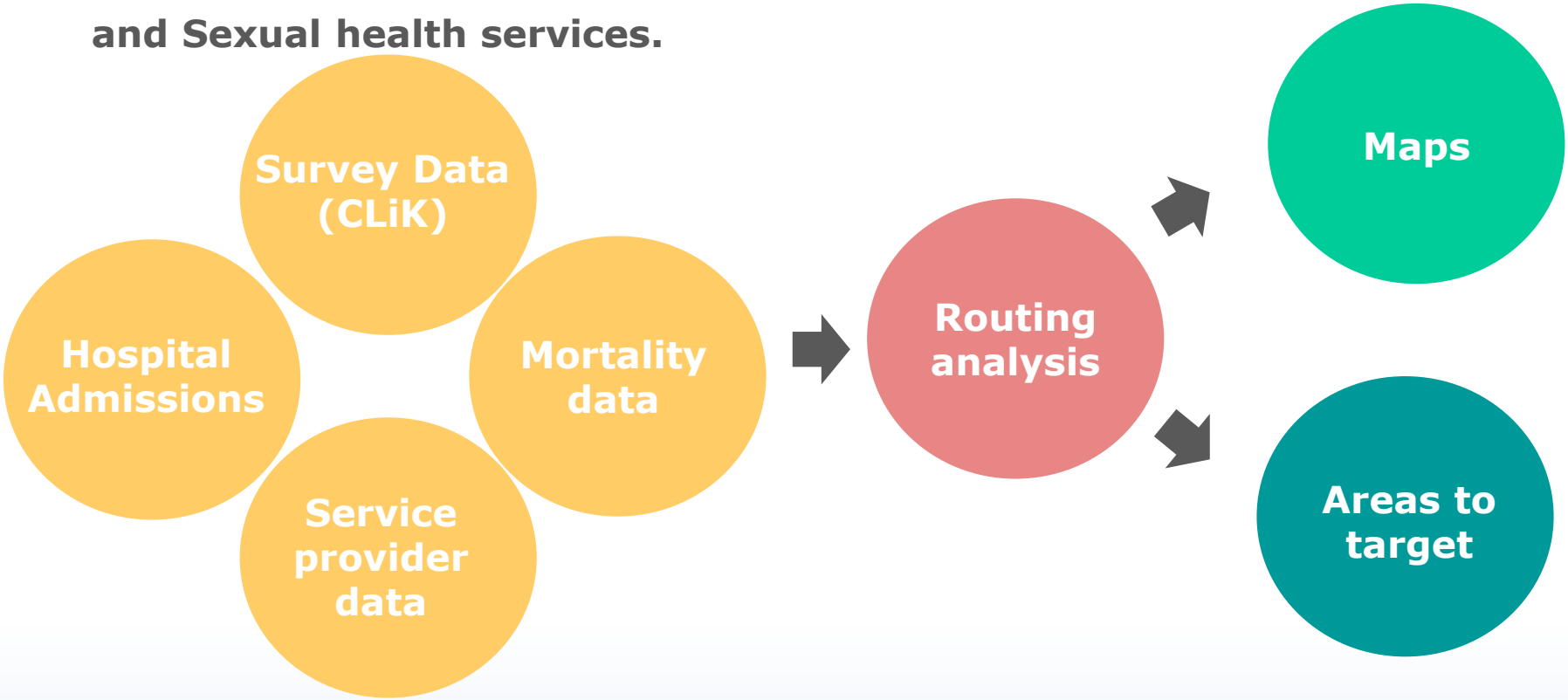
Emley
Emley Moor
Kirkburton
Farnley Tyas
Holmfirth
Upperthong
Meltham
Thick Hollins
Holme
Hade Edge
Lepton
Kirkheaton
Robertstown
A640
A635
A6024
Pennine Way

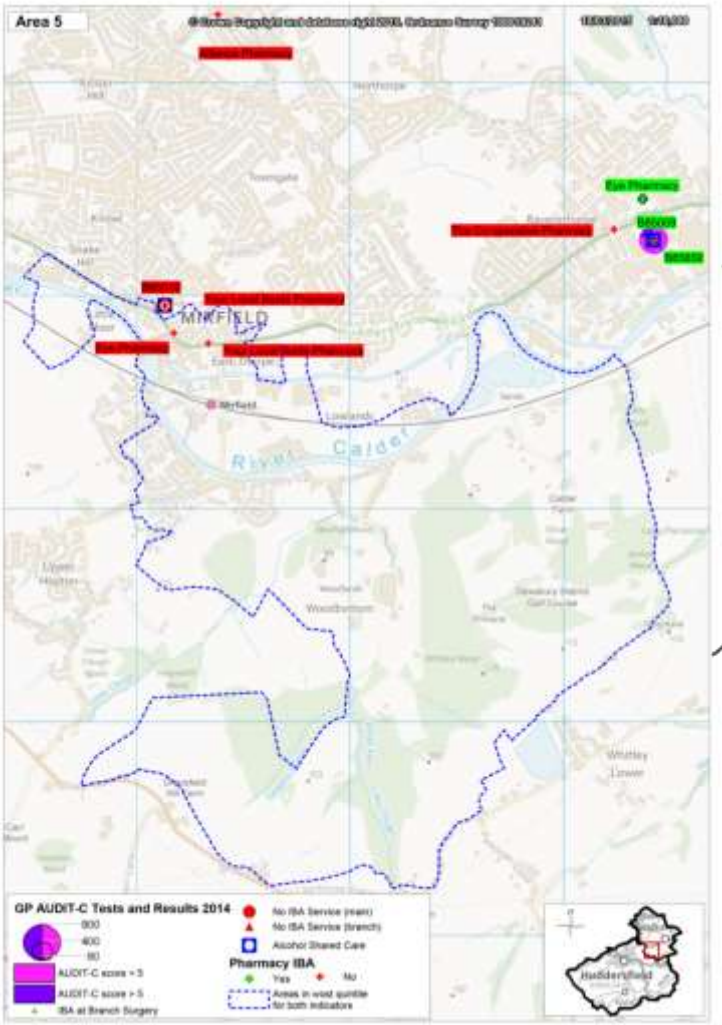
Case Study

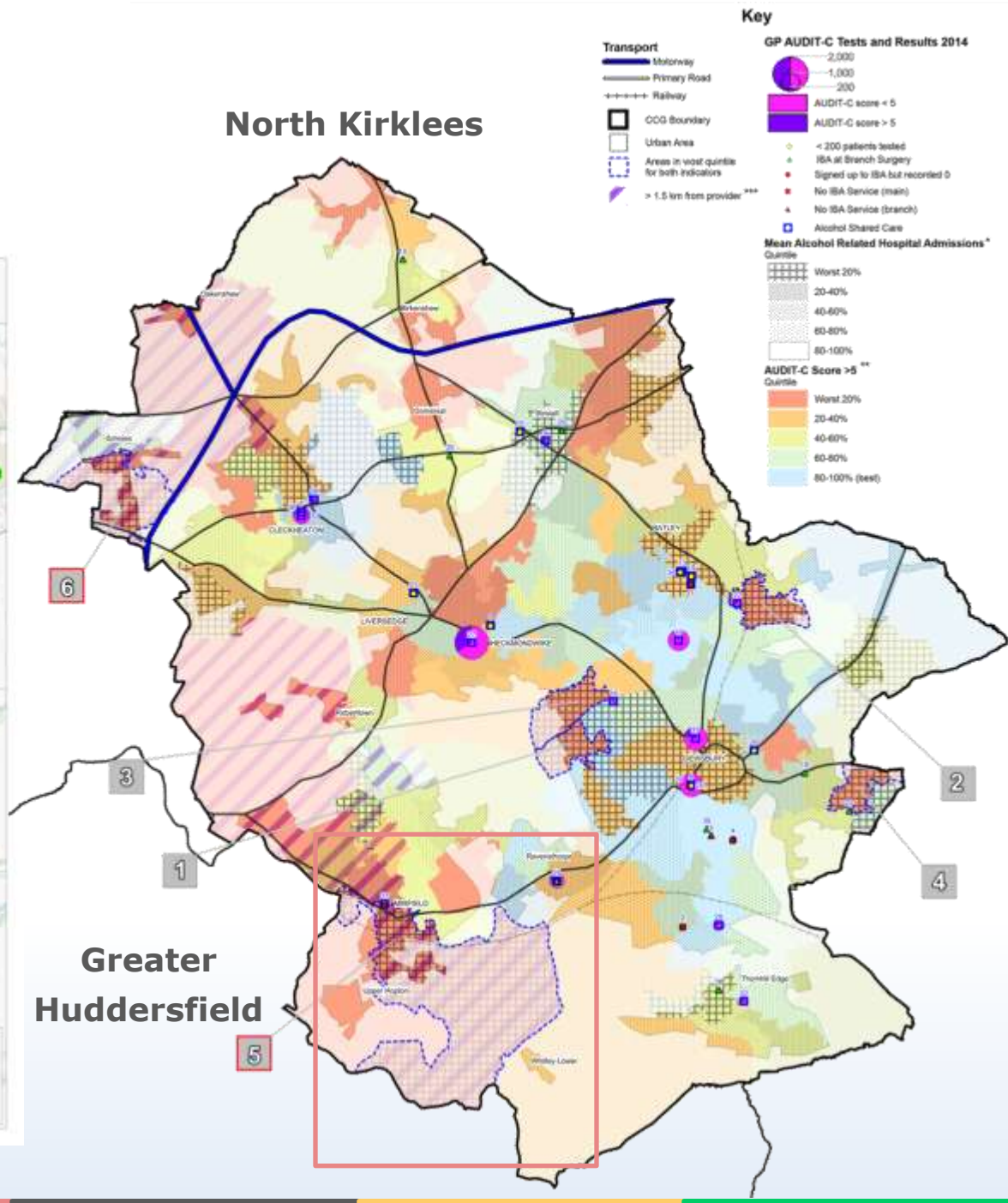
Are public health services (GP & Pharmacies) being provided in areas of need? These include Smoking & Alcohol cessation and Sexual health services.



Maps and reports provided to CCG to guide targeting of resources.

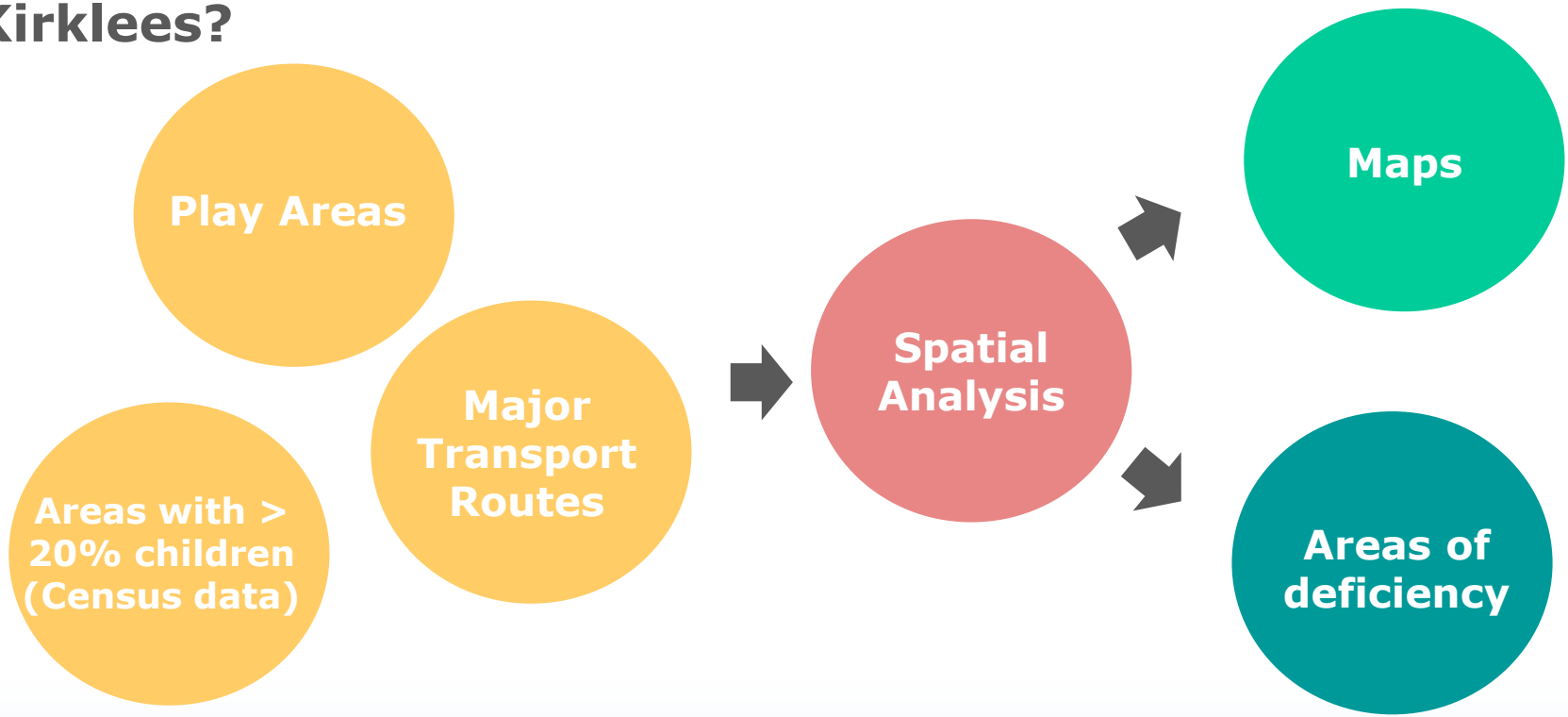
Case Study


Area 5
GP AUDIT-C Tests and Results 2014
No IBA Service (main)
No IBA Service (branch)
Alcohol Shared Care
Pharmacy IBA
Yes
No
Areas in worst quintile for both indicators
IBA at Branch Surgery


North Kirklees
Greater Huddersfield
Key
Transport
Motorway
Primary Road
Railway
CCG Boundary
Urban Area
Areas in worst quintile for both indicators
> 1.5 km from provider ***
GP AUDIT-C Tests and Results 2014
2,000
1,000
200
AUDIT-C score < 5
AUDIT-C score > 5
< 200 patients tested
IBA at Branch Surgery
Signed up to IBA but recorded 0
No IBA Service (main)
No IBA Service (branch)
Alcohol Shared Care
Mean Alcohol Related Hospital Admissions *
Quintile
Worst 20%
20-40%
40-60%
60-80%
80-100%
AUDIT-C Score >5 **
Quintile
Worst 20%
20-40%
40-60%
60-80%
80-100% (best)
1
2
3
4
5
6

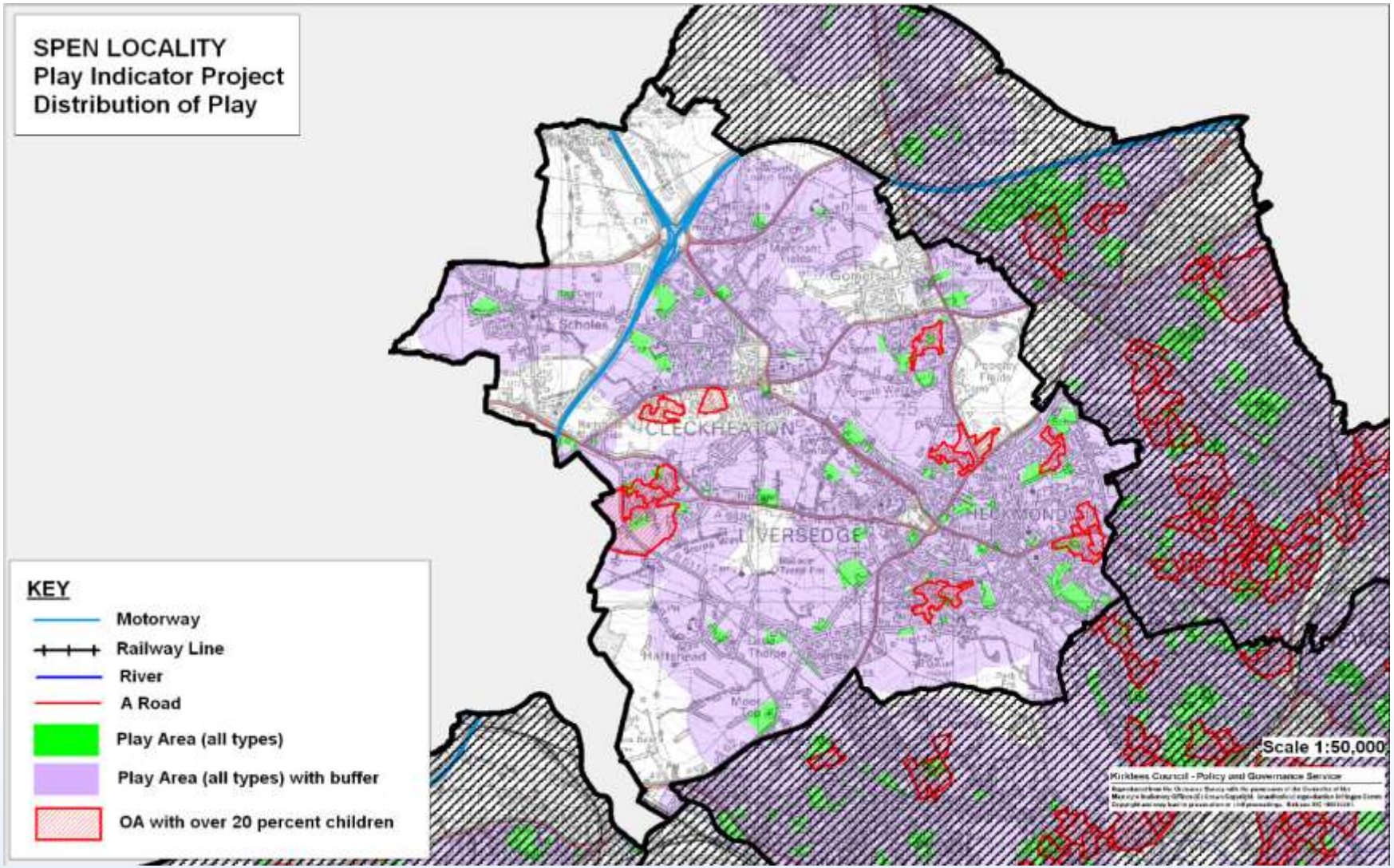
Case Study

Is there sufficient play area provision in Kirklees?



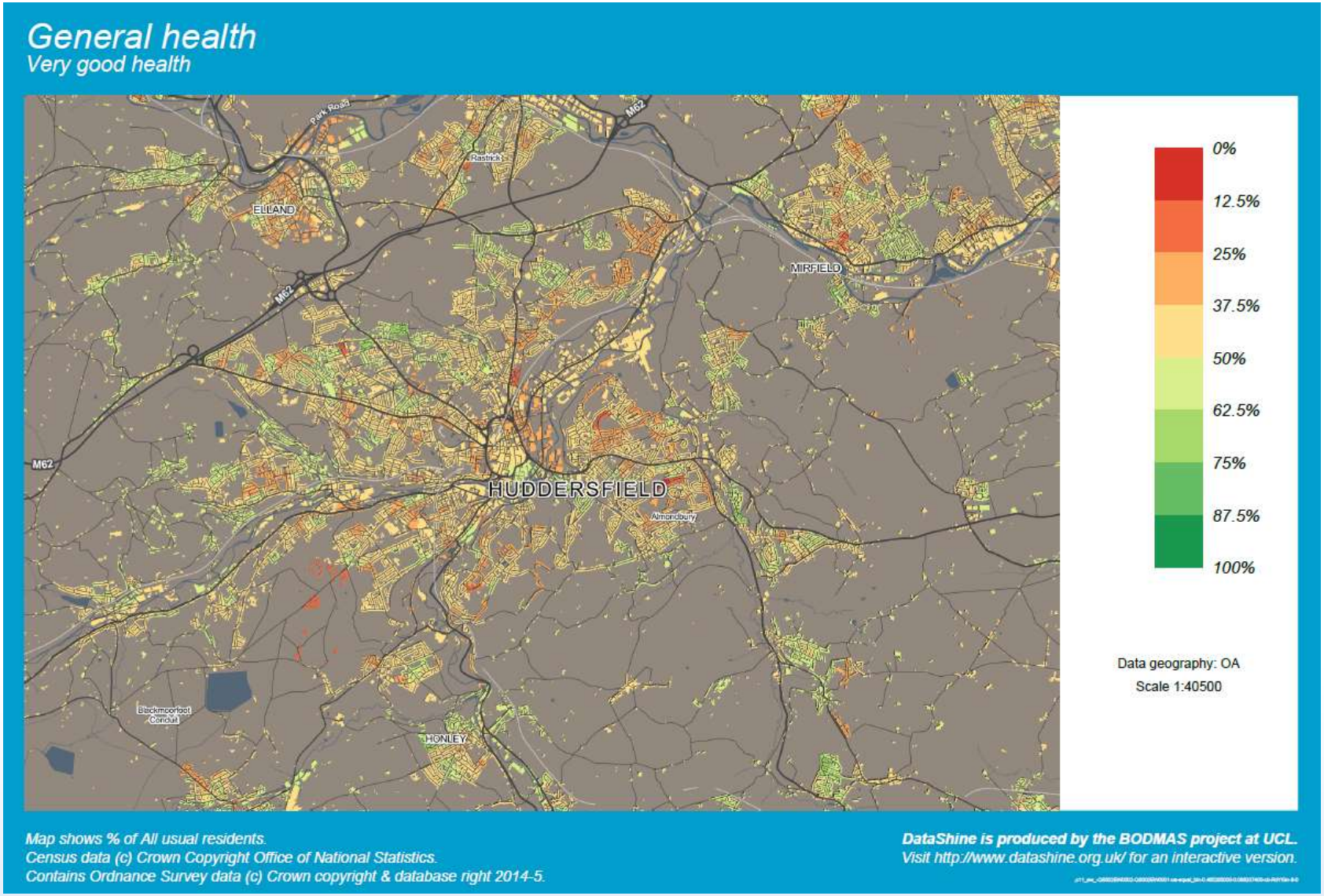
Lottery funding for new games areas and skate parks.

Case Study


SPEN LOCALITY
Play Indicator Project
Distribution of Play
KEY
Motorway
Railway Line
River
A Road
Play Area (all types)
Play Area (all types) with buffer
OA with over 20 percent children
Scale 1:50,000
Kirklees Council - Policy and Governance Service

Free Online Tools

DataShine

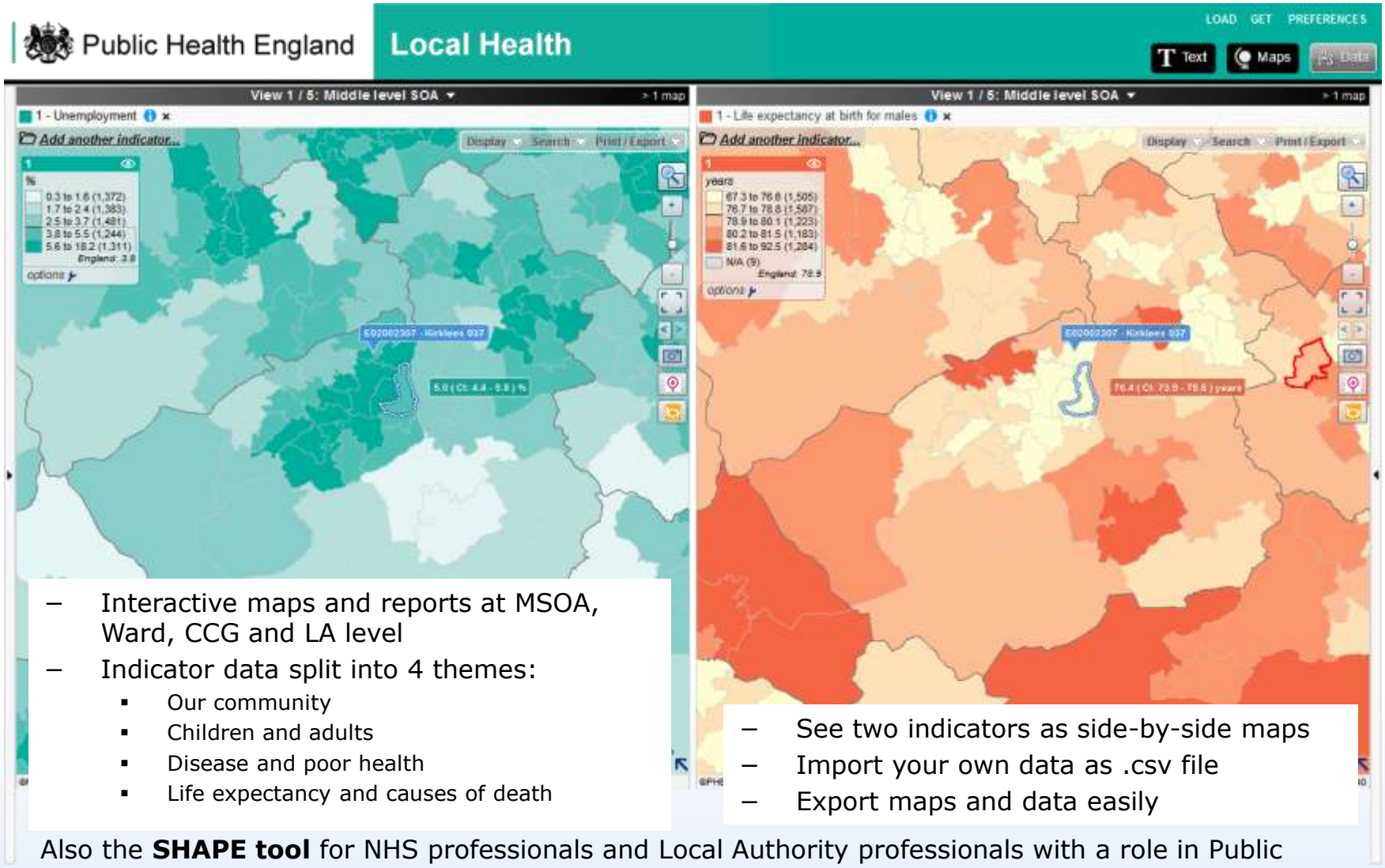


Free Online Tools

DataShine

Free Online Tools

Local Health Tool



- Interactive maps and reports at MSOA, Ward, CCG and LA level
- Indicator data split into 4 themes:
  - Our community
  - Children and adults
  - Disease and poor health
  - Life expectancy and causes of death

- See two indicators as side-by-side maps
- Import your own data as .csv file
- Export maps and data easily

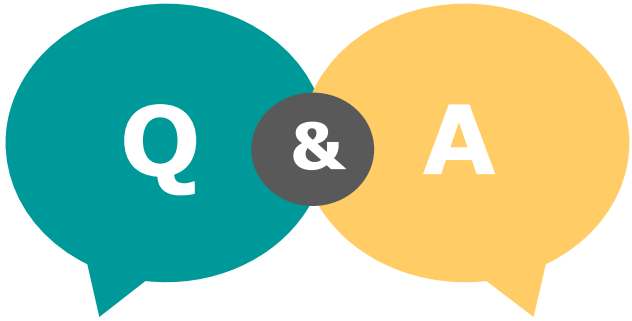
Also the **SHAPE tool** for NHS professionals and Local Authority professionals with a role in Public Health or Social Care

Kirklees Observatory

- **Large database of area based statistics which can be served up as tables, maps and area profiles**

Summary

- Spatial data used widely within local government
- Sliding Scale, from plans to infographics
- Simplify complex patterns
- Easy to relate to
- Add context
- Better insight



Thanks for listening!

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