

Age friendly communities

Promoting efficiency, well-being and easing inequalities

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Issues to consider

- Scale is important - urban vs neighbourhood, macro vs micro (e.g. retirement villages, university campuses)
- How transactions work e.g. You go to the shop, or the shop comes to you. We stress the importance of quantification for comparing areas
- Radius of movement of older people contracts, but walking speeds depend on terrain, street features and paths which affects access
- Older people are more likely to live alone and so risk isolation and so walking proximity to attractions is important
- Service hierarchies – every neighbourhood needs a GP but not an opera house

Policy directions

- An age-friendly neighbourhood supports healthy and active aging by making communities inclusive and accessible. World Health Organisation
- The National Planning Framework refers to safe spaces, walkability, green space and built forms that minimise the number and length of journeys needed for any activity. NPF
- The 10-year NHS plan is to deliver a neighbourhood health service to ensure sustainability with a greater emphasis on prevention. NHS England
- Age-friendliness should include both the physical build of a home and its location with homes rated for their age friendliness Older Peoples Housing Task Force
- A strategy has just been unveiled to promote 'active travel' involving walking or cycling for all short trips with thousands of new routes planned. Ministry of Transport

How might local authorities benefit ?

Use classes	Investment	Efficiency	Inequality	Comment
A. Strategy (Long term)	Focus on strategy and investment opportunities based on the NPF	Use alongside planning function as additional source of information and advice	Use concepts to accelerate place making, regeneration and levelling access	Centralising data and intelligence function and closer working with university
B. Operational effectiveness (Short term)	Audit current services and take remedial action, filling and improving coverage	Increase spatial awareness to deliver more for the same or less	Improve walkability and access to green space and a clean environment	Knowledge of operational research techniques and economic analysis an advantage
C. Increased well-being (Public Health, NHS, social car)	Create a neighbourhood health service and strengthen public health function	Design new models of service that better connect users and providers, and providers with each other	Create age friendly communities which are safe, independent and self-sustaining conferring greater social value	Exploit the power of prevention to make a positive difference to well-being from the micro to the macro
D. Work across organisational and administrative boundaries (Partnership working)	Leverage the overlap between private and public investors e.g. house builders, NHS, rail and transit operators	Seek opportunities to collaborate with neighbouring authorities and private sector	Improve cross boundary access to amenities and services through transport improvement	Undertaking joint feasibility studies, data sharing, and partnership working leading to better decisions

Proof of concept

- We are interested, not so much in mega-cities, but in a much simpler idea – the walkability and proximity to attractions in human settlements at any scale
- For most examples we use 15 minutes as our standard and apply a walk speed of 3.4kph which reflects the mobility of older people using **tier 1** services
- These include GP practices, pharmacies, local shops, a dentist or post office, bus stops and green space. Our full tier 1 list comprises 17 different attractions
- There are distinguishable less frequented attractions which we call **tier 2** that include leisure centres, cinemas, museums, hospitals, and large public facilities
- **Tier 3** are major tourist attractions and **tier 4** are non-residential areas such as industrial zones, storage and distribution centres i.e. places of employment.

Tier one and tier two assets in Kirklees

Assets	Kirklees	4km buffer	Total	Rank	Tier
Pharmacies	97	72	169	11	1
Dentists	55	42	97	14	1
Post offices	65	48	113	13	1
GP practices	81	48	129	12	1
Supermarkets	410	294	704	2	1
Community centres	124	101	225	9	1
Places of worship	299	227	526	3	1
Restaurants	204	134	338	6	1
Pubs	269	220	489	4	1
Cafes	200	135	335	7	1
Allotments	142	71	213	10	1
Libraries	25	9	35	17	1 [2]
Sports facilities	299	171	470	5	1
Bus stops	3382	2623	6005	1	1
Theatres	8	3	11	20	2
Cinemas	3	4	7	21	2
Art galleries	5	1	6	22	2
Secondary schools	30	23	53	16	2
Primary schools	141	108	249	8	1
Independent schools	13	12	25	18	2
Children's activity centres	16	8	24	19	1
Banks & building societies	47	32	79	15	1

Table showing 22 types of Tier 1 and Tier 2 assets in Kirklees.

We also include accessible assets located just outside Kirklees in a 4km buffer

Around 40% of accessible Tier 1 assets fall outside Kirklees

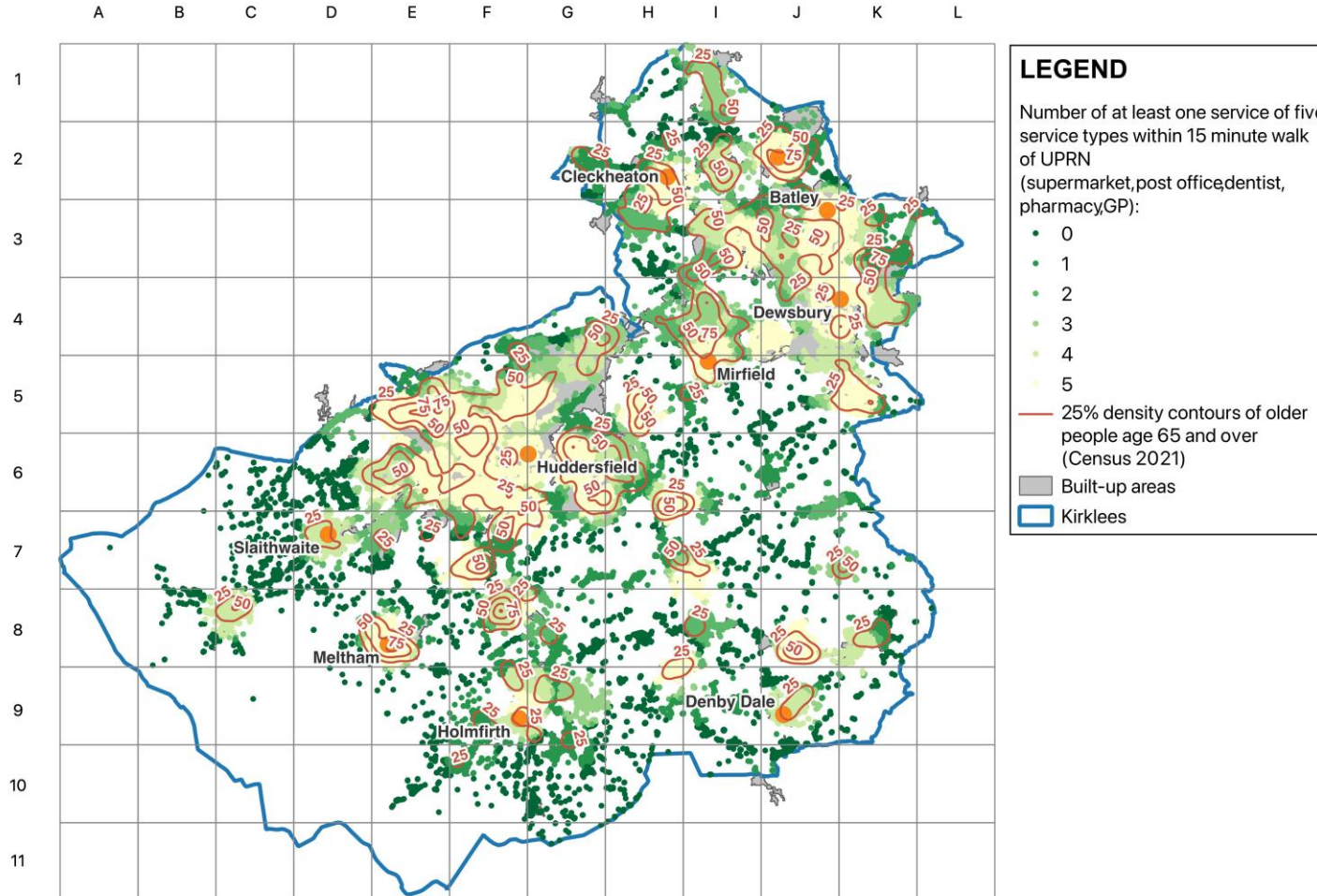
After bus stops the most numerous attractions are supermarkets and places of worship

Least in number among Tier 1 assets are libraries and children's activity centres

How it works

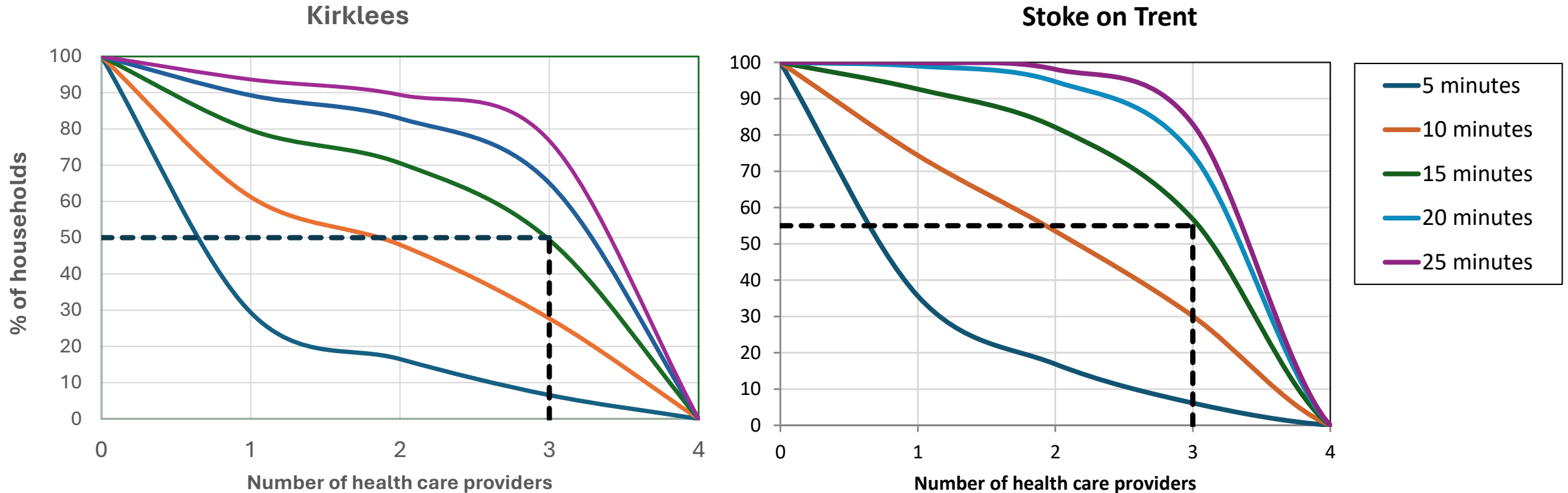
- We use precise metrics about the locations of service providers and other places of interest to understand how accessible they are
- Use a walkability index to evaluate the age friendliness of any area or neighbourhood to older people, families, disadvantaged communities
- Outputs include maps, tables, catchment areas, walkability (e.g. how many community centres are within walking radius?)
- We analyse choice among different services and attractions but also isolated areas with no access
- We use an AI generated App to help older people search for more suitable and accessible homes

Measuring age friendliness in Kirklees



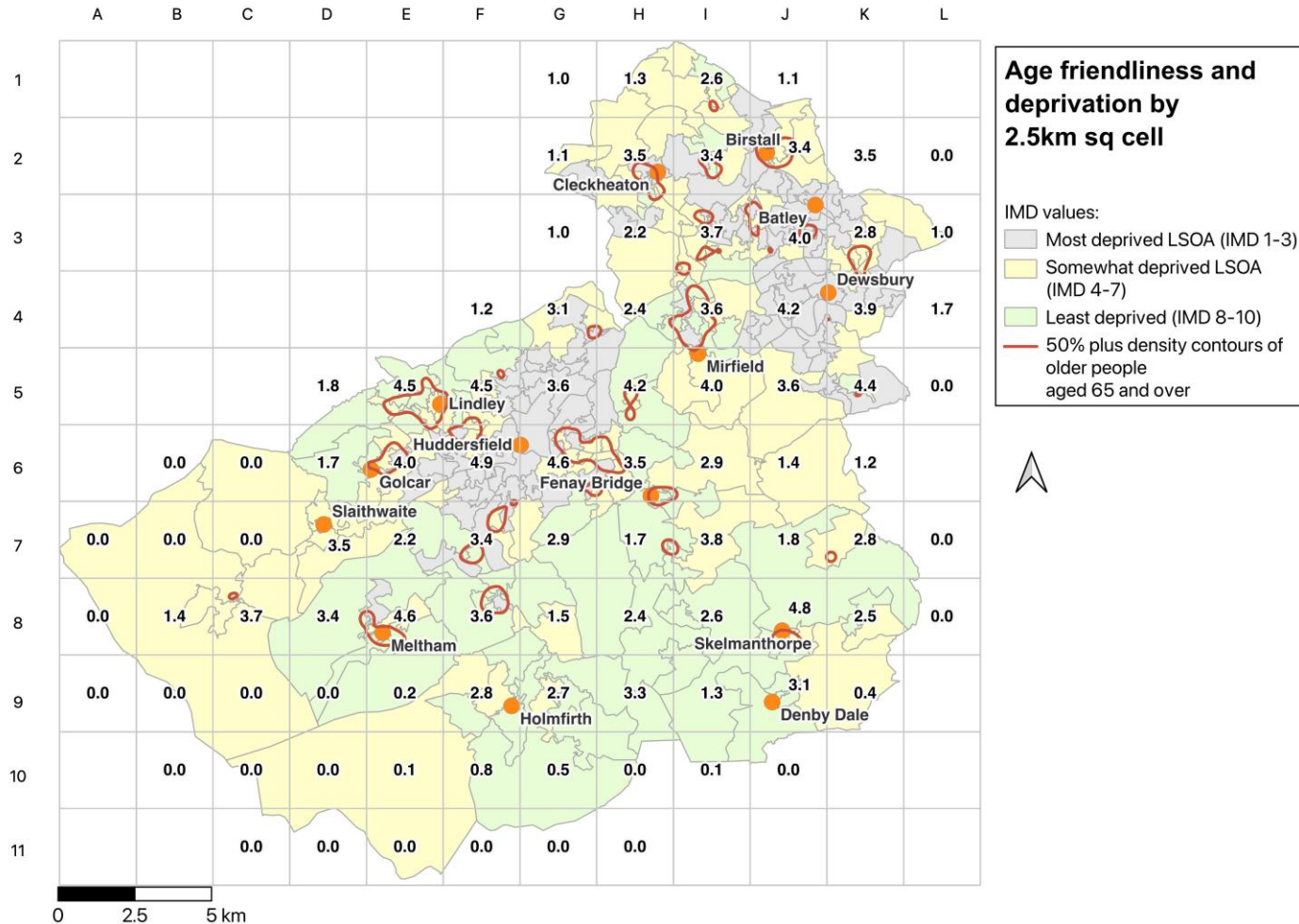
- All 205,000 addresses in Kirklees are scored based on services accessible within a 15-minute walking radius
- The five services here comprise a shop, GP, pharmacy, post office, and dentist
- Colour-coded addresses form a continuum ranging from zero to five
- Darkest green indicates no access, lighter green is intermediate, while cream-coloured have access to all five
- Red contours show relative concentrations of older people so we can do a deep dive into hotspots
- A superimposed grid allows locations to be speedily identified, and comparisons made e.g. Denby Dale is J9

Walkability compared



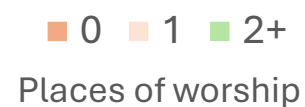
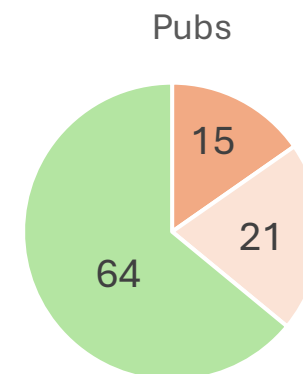
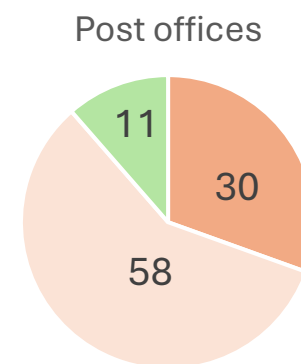
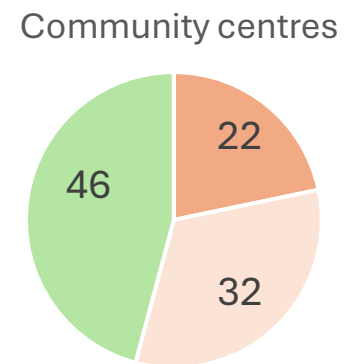
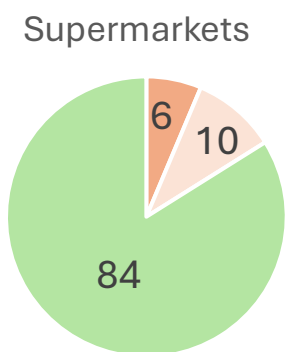
The walkability index is used to compare walking access to chosen services in an area for any level of access – 5, 10, 15, 20 etc., mins. This example covers GPs, dentists and pharmacies. We find that access in Stoke is generally better than in Kirklees based on 15-minute radius – 55% of households versus 50%.

Identifying age friendly areas

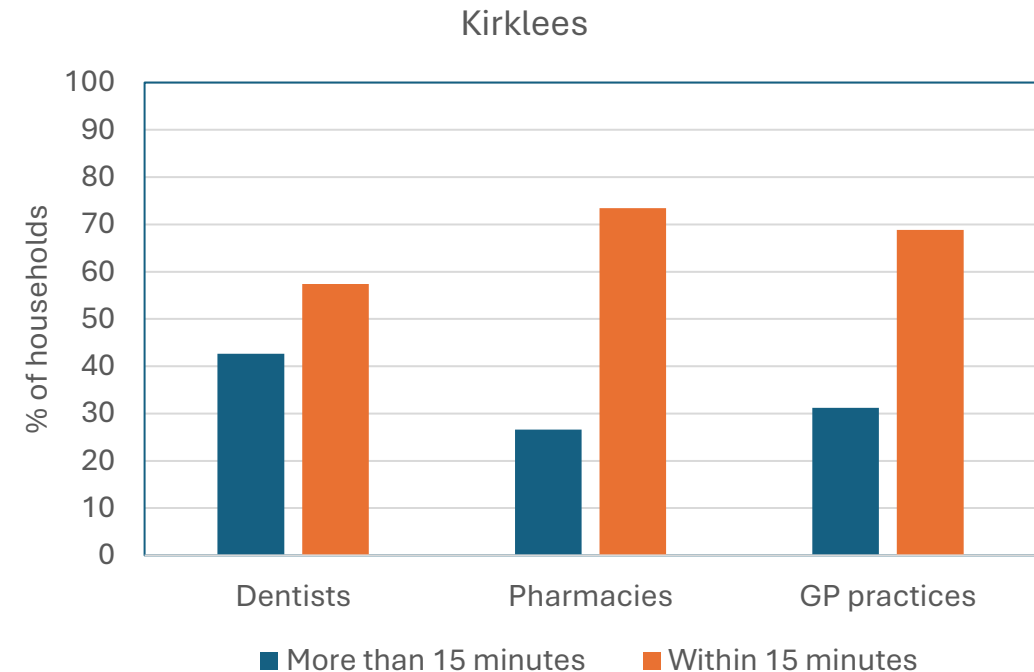
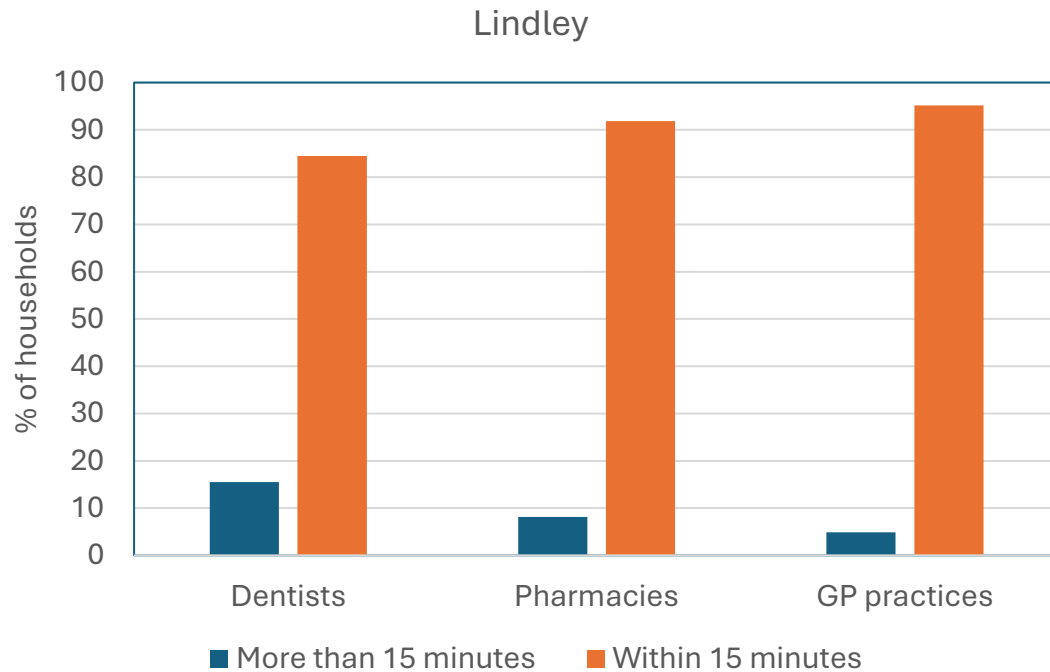


- We are interested in identifying age friendly areas for various purposes
- The numbers in cells measure local access to local tier one services - a GP, pharmacy, dentist, supermarket and post office
- A value of 5 means 100% of households have 15-minute access; 2.5 is 50% access and so on
- Areas are shaded according to affluence e.g. grey is deprived, yellow somewhat deprived and green affluent
- In Kirklees older people average 18% but there are hotspots where it can rise to 50% or more
- These are shown as red contours. They are examples of naturally occurring retirement communities or NORCs
- Most are quite small. Examples in cells E5, E6, E8, and G6 have high scores and are not in deprived areas

Which services offer households most choice in a 15-minute radius?

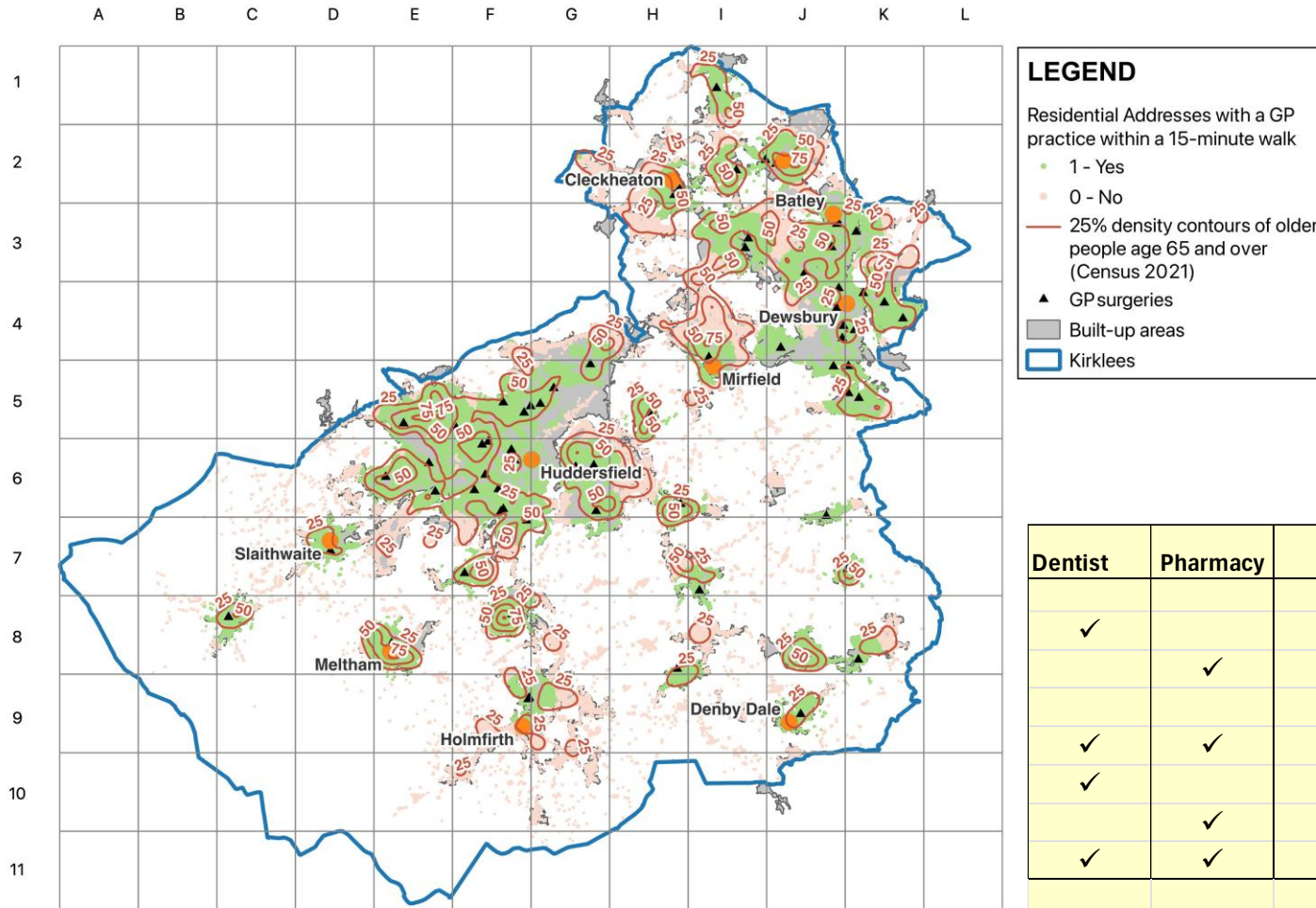


Accessibility to services in Lindley (cell E5)



This chart compares accessibility to services in cell E5, Lindley with Kirklees. It has 6,800 residential properties (UPRNs) and is well stocked with shops, cafes pubs and places of worship and essential services like health care. It is also close to Huddersfield infirmary. It shows that 92% of households in Lindley have 15-minute access to a pharmacies, 95% to a GP, and 84% to a dentist. It also has 15-minute access to at least two supermarkets and 55% to two community centres. It is therefore much better provided than the whole of Kirklees which is seen in the chart on the right.

The neighbourhood health economy



Households within 15-minute radius of a GP are coloured green and those more than 15 minutes pink.

As shown previously, 68% have walkable 15-minute access but there are examples where access is much more restricted

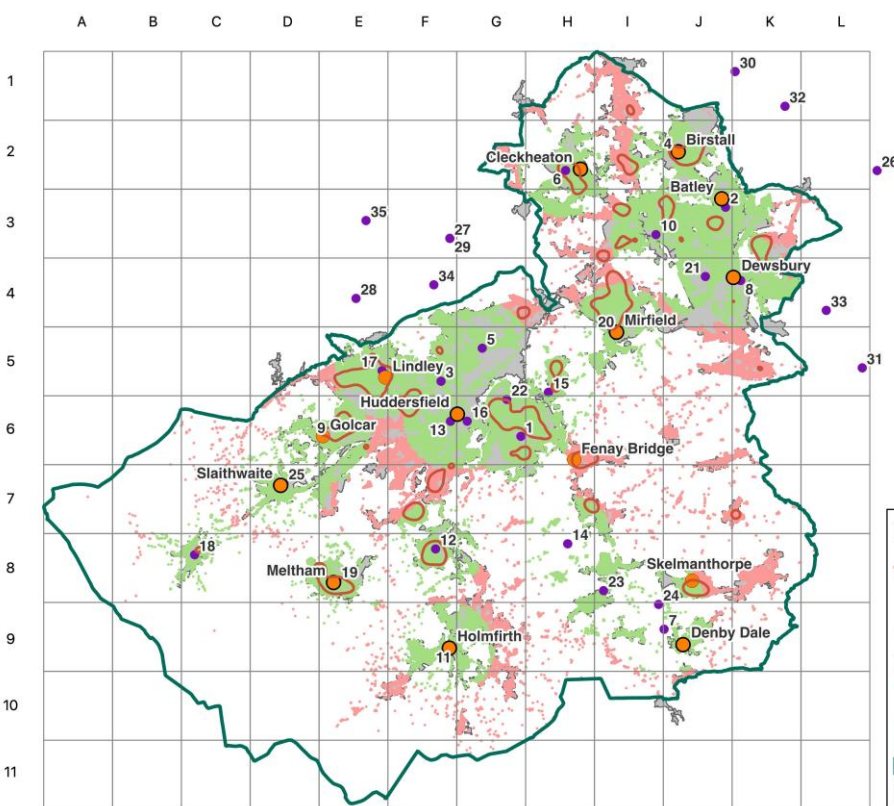
This results in a significant number of underserved areas, for example around Batley, Cleckheaton and Mirfield.

A full analysis would take account of other health providers in Kirklees like pharmacies and dentists.

This table shows that 49.4% of all UPRNs enjoy comprehensive 15-minute access to all three, whilst a further 15.5% have access to both a pharmacy and GP.

Dentist	Pharmacy	GP	% of UPRNs
			20.3
✓			2.3
	✓		3.4
		✓	3.4
✓	✓		5.2
✓		✓	0.5
	✓	✓	15.5
✓	✓	✓	49.4
			100.0

Access to public libraries



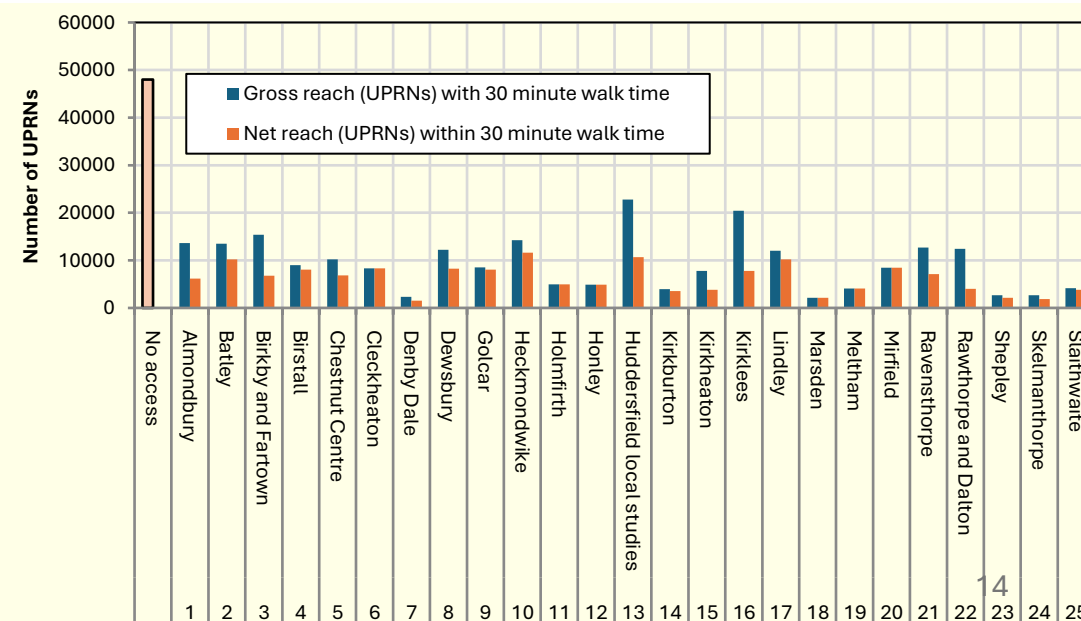
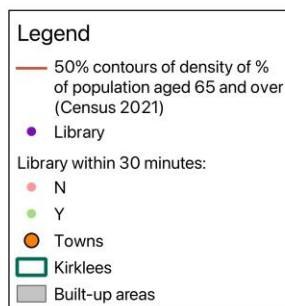
Public libraries in Kirklees

Public libraries are credited with having a high social value in the community, but with 25 libraries covering an area of 409 sq. kms. libraries are relatively scarce compared with other local services like GPs.

A key observation is that libraries behave more like a Tier 2 service and their access is more likely to involve other modes of travel like bus or car. Evaluating their accessibility within a 30-minute radius gives a more realistic benchmark.

The map shows green areas containing UPRNs which are within 30-minutes of the nearest library and pink areas which are not.; 77% of addresses have 30-minute access but that 23% are still excluded (48,000).

The map also shows neighbouring libraries in buffer zone such as Horbury (No. 31, L5) and Rastrick libraries (No. 34, F4) which give limited access to some UPRNs in Kirklees.



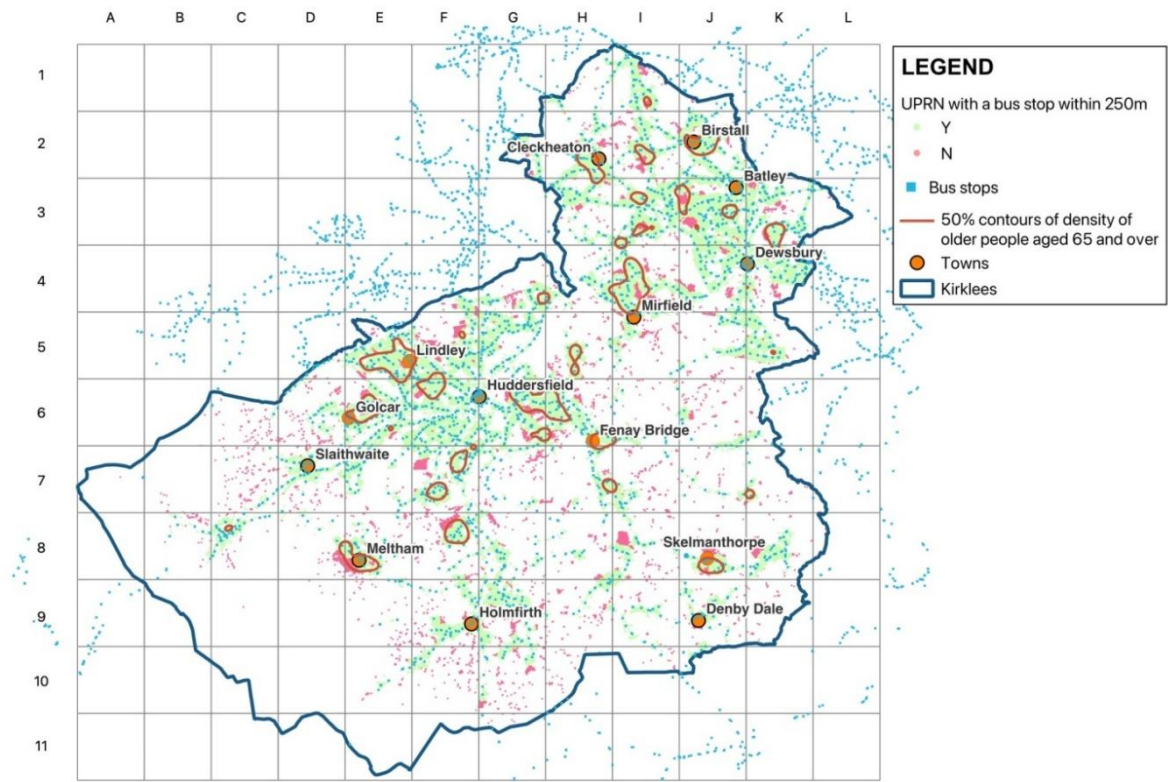
Catchments

A gross catchment is the number of UPRNs located with a 30-minute travel radius on foot; a net catchment adjusts for other UPRNs that are in same travel radius as another library.

If a UPRN shares two libraries a value of one half a UPRN is assigned to each library, if three libraries then it is a third of a UPRN and so on. If gross and net are equal it is a library with well-defined user population like Holmfirth (cell F9).

The tall column to the left of the chart next to the origin shows that over 48,000 UPRNs or 24% have no access to a library within a 30-minute walking radius.

Older people's access to bus stops in Kirklees



With 3400 bus stops, coverage in Kirklees extensive. Bus stops in the map are represented by blue symbols which snake their way throughout Kirklees and into adjacent LAs.

The map shows households within 250 metres of a stop (approx. 5-minutes walk). These are coloured green. Households with access greater than 250 metres are coloured pink.

We know that older people rely on bus services to a considerable extent. Even with a good service any journey will always take more than 15 minutes, after considering walking access and waiting time.

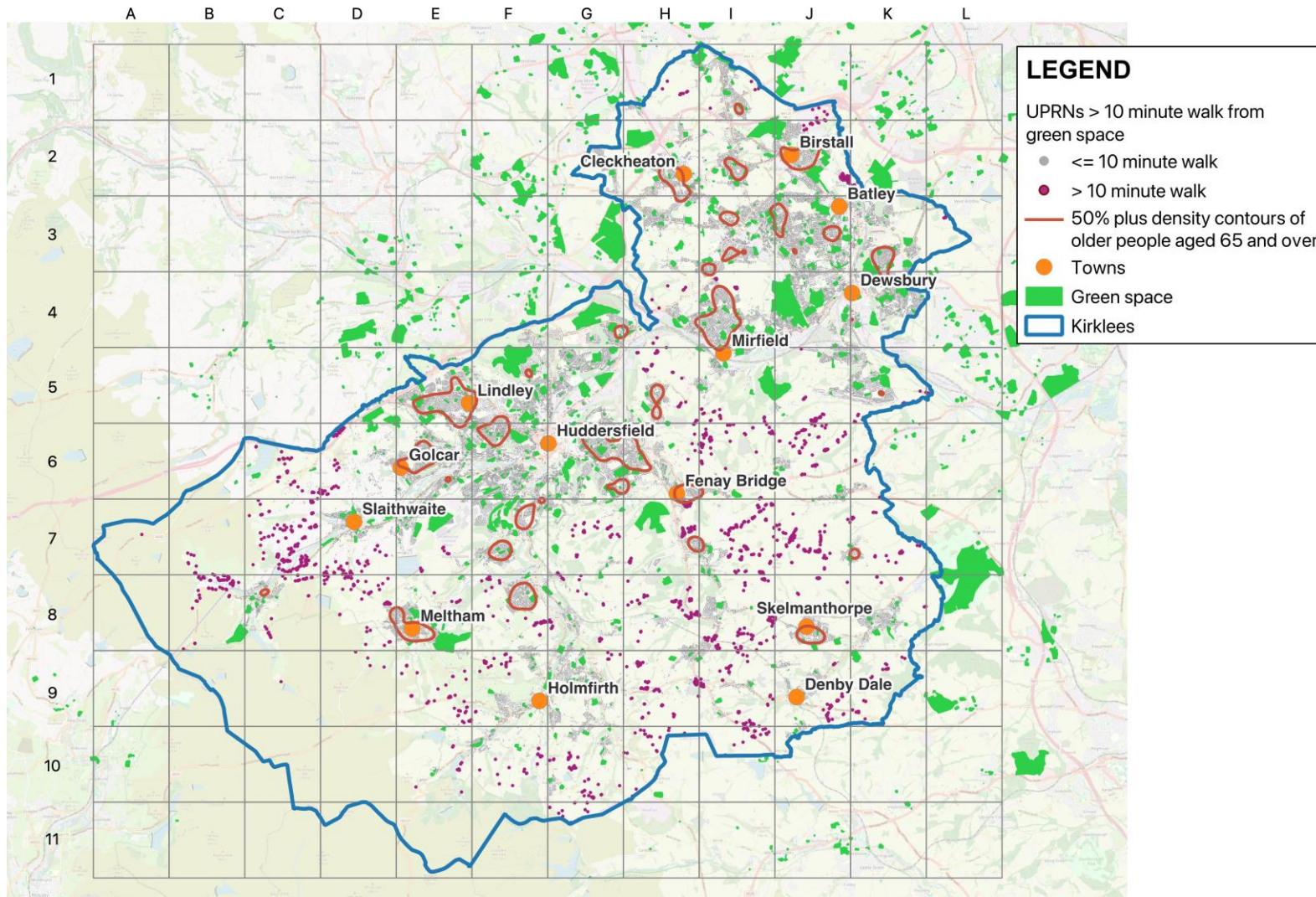
Our analysis finds that bus stop access is better in older people hotspots than in other areas (93.5% versus 91.4%), so not much difference.

Whilst it is to be expected that households in isolated areas will have limited access to bus routes, close inspection reveals bus-stop 'deserts'.

These are identified as pink clusters of properties as opposed to green which are in more built-up areas. Examples of deserts are found in cells like J3, and J4 near Batley, and E8 around Mirfield.

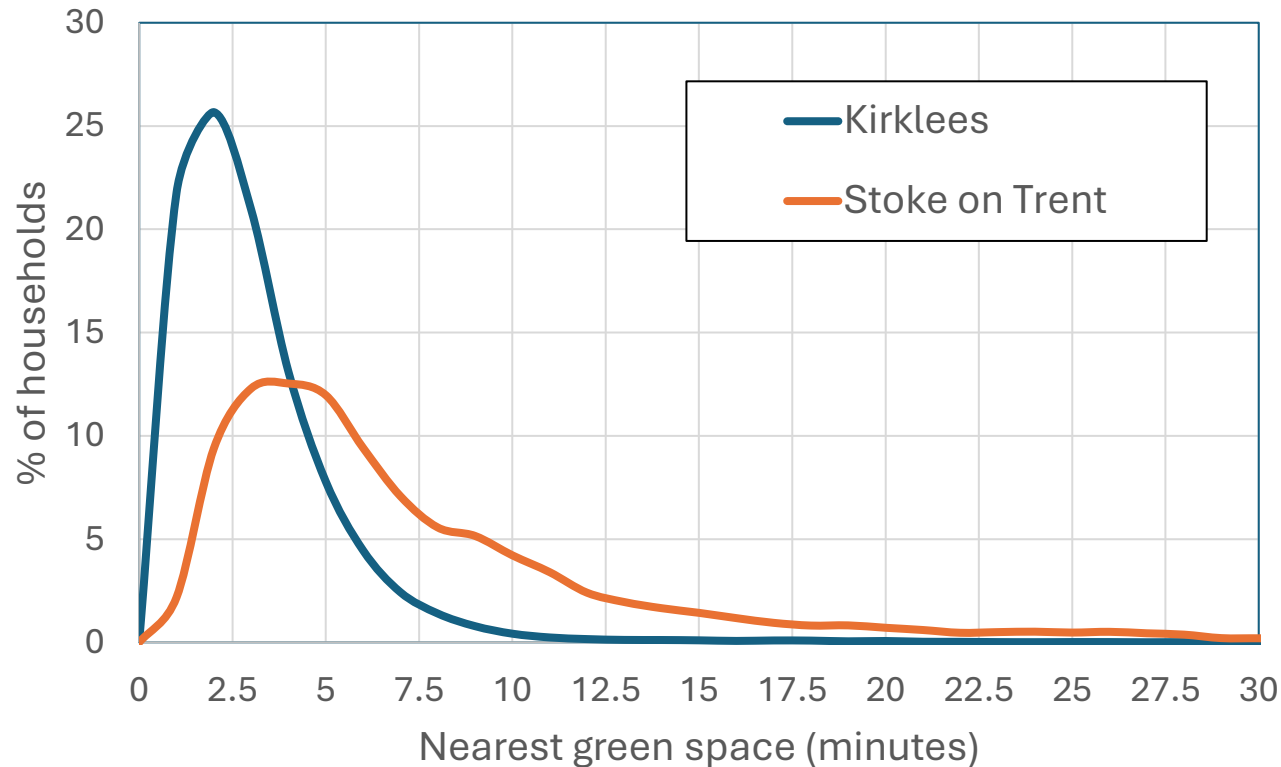
Bus stop location	Total UPRNs	Within older people's hotspot %	Outside older people's hotspot %	Total
>250m from a UPRN	16,781	13.4	86.6	100
<=250m from a UPRN	18,7764	17.3	82.7	100
Total UPRNs	204,545	17.0	83.0	100

Older peoples access to green space



- Publicly accessible green space contributes to health and well being
- Map shows the locations and extent of public green space, such as parks in Kirklees
- Purple coloured symbols are households where access is more than a 10-minute walking radius
- In Kirklees over 98% of properties have ten-minute access or less. Those without access are in isolated rural areas.
- This compares very favourably with Stoke on Trent where only 70.4% have access.

Access to green space in Kirklees and Stoke-on-Trent compared

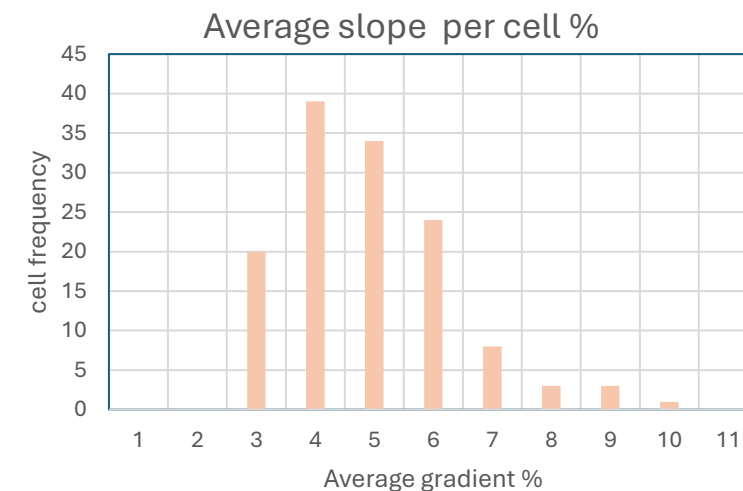
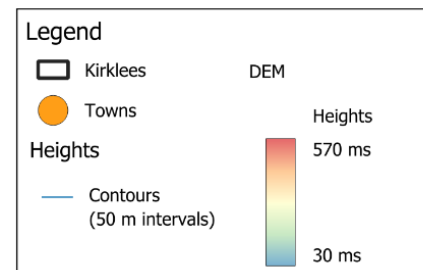
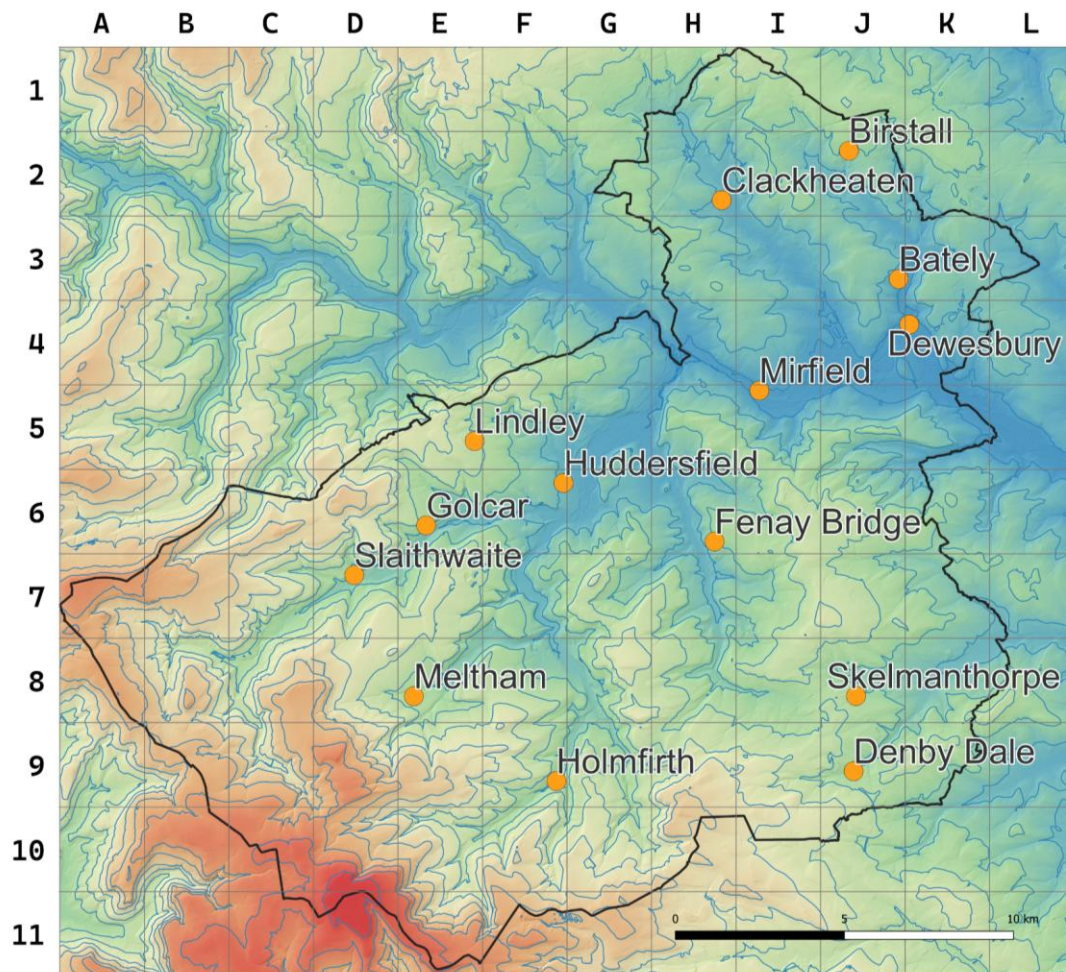


Stoke on Trent has more public green space – parks, playing fields, allotments etc. than Kirklees

But walkable access is much better in Kirklees as the chart shows with 25 % of households less than 2.5 minutes away – twice the percentage in Stoke. Why is this?

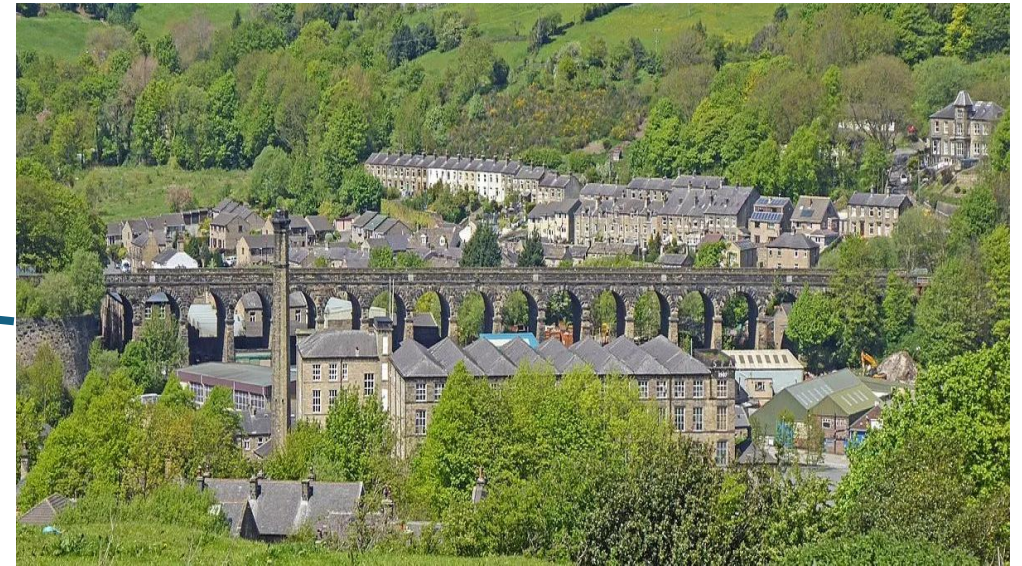
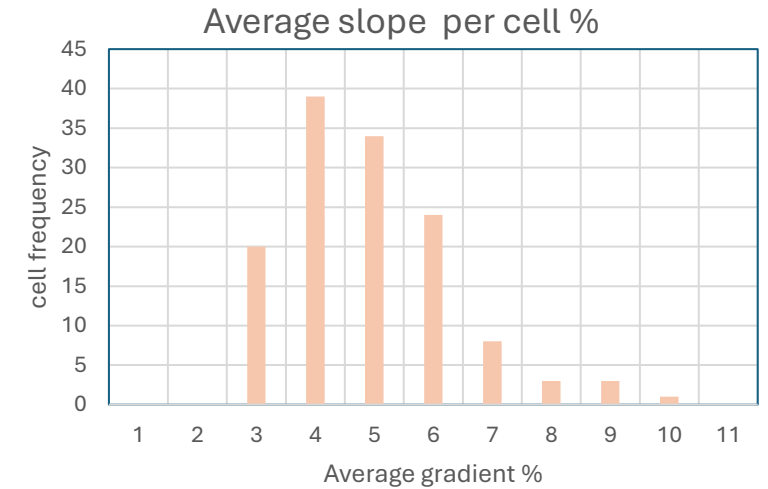
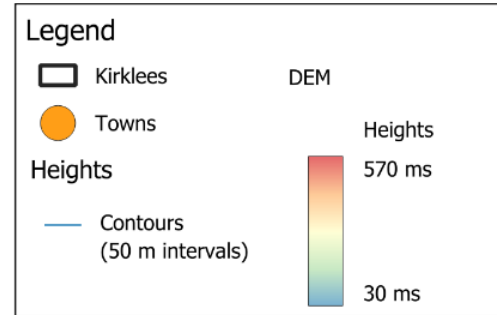
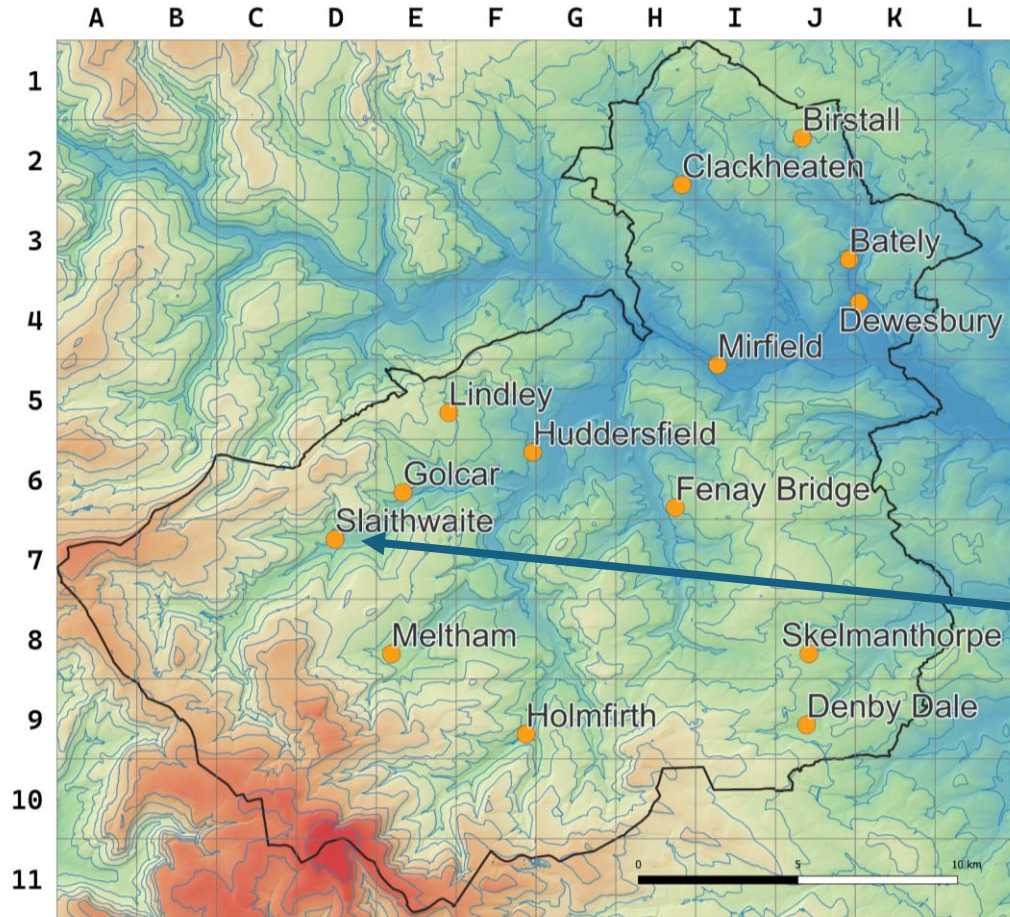
The reason is that green space in Stoke is concentrated in large country parks but in Kirklees it is dispersed in smaller pockets closer to where people live.

Terrain matters



Kirklees has some challenging terrain which constrains walking speeds and may impact on access to services in some areas. Our hilliness index adjusts walking speeds for gradient at a property level and can be averaged over small areas as required. About 56% of the Kirklees area experiences 10% lower average walking speeds based on the Naismith index. In the south and west you see average gradients as high as 9% reducing walking speeds by half.

Terrain matters



This is Slaithwaite in D7 which has approx. 20% aged 65+, scoring 3.5 for tier one services (i.e.70%), However, average gradient is 4.8% lowering walking speeds by ~ 15%. Access to meeting places like pubs, cafes and places of worship is better at 4.5 or 90%..

Age friendly homes

- We can evaluate homes as well as neighbourhoods for their age friendliness as recommended in the OPHTF report
- The suitability of homes for later living is a huge subject, but we know a good one when we see it
- Encouraging older people to downsize would free up homes that are too big for ones which are age friendlier
- We know that not enough specialist homes for older living are being built and that most will carry on living in mainstream homes
- Physical layout, thermal efficiency, design and adaptability of any home is important for health and well being
- We have developed an AI App called 'HAS' which rates properties on the market for age friendliness
- It works on any UK property listing on Rightmove –including this Kirklees example. Results are ready in less than a minute.

Our home finding App

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https://home-accessibility-score.onrender.com

 **Home Accessibility Score**

BenefitsFor Estate AgentsHow It WorksSign In

Paste Rightmove URL here...

Analyse Free

Find a home that works for you

Instant accessibility insights on any Rightmove listing.

See How It Works

**2 Bed Bungalow, Thrapston**
£325,000 • Freehold

EXCELLENT

4.7

Scores highly across all accessibility categories. Ideal for accessible living.

 GP Proximity **5.0**
5 min walk to The Meadows Surgery

 Accessible Features **5.0**
8/8 accessibility features found

 Public Transport **5.0**
Bus stop 5 mins walk away

 Property Costs **4.5**
Council Tax Band A • Low stamp duty

21

https://www.rightmove.co.uk/properties/168832664#?channel=RES_BUY

Analyse Property

Enter a Rightmove property URL to get a comprehensive accessibility analysis



Save Property

Elm Street, Skelmanthorpe, Huddersfield

3 bedrooms 1+ bathrooms

£300,000

OVERALL ACCESSIBILITY SCORE

3.9
out of 5

Very Good

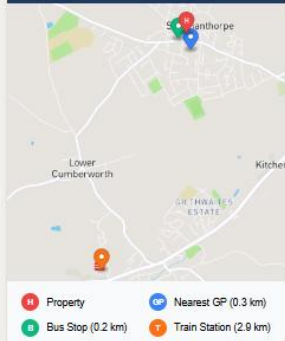
Well suited for accessibility needs

★★★★☆

GP Proximity	4.0
Energy	2.0
Accessibility	4.4
Transport	5.0
Rooms	4.2

Location & Amenities

Property and nearby services



- Property
- Bus Stop (0.2 km)
- Nearest GP (0.3 km)
- Train Station (2.0 km)

Actions

Print / Save PDF

Share Results

View on Rightmove

Accessible Features

Mobility-friendly amenities

VERY GOOD 4.4

Step-free internal access	Downstairs bedroom
Downstairs bathroom	Ground floor entry
Private parking	Garden access
Balcony/terrace	External level access

Public Transport

Bus & train accessibility

EXCELLENT 5.0

✓ Excellent proximity – very manageable walk. Route appears level and pedestrian-friendly.

Bus Stops

New Street
Skelmanthorpe, Huddersfield HD8 9DA, UK
0.2 km - 4 mins walk

Commercial Road New St
Skelmanthorpe, Huddersfield HD8 9DA, UK
0.2 km - 5 mins walk

Train Stations

Denby Dale
Denby Dale, Huddersfield HD8 8GE, UK
2.9 km - 59 mins walk

Score based on bus stop walking times only

Room Breakdown

Essential rooms assessment

VERY GOOD 4.2

Bedroom 1 (Primary)	Bedroom 2
Bedroom 3+	Bathroom
Kitchen	Living Room

Property Costs

Council tax, stamp duty & value

VERY GOOD 4.0

Council Tax Band	Average band	Band D
Price per sq m		N/A
Stamp Duty (England)		£5,000
Ongoing Costs		Not mentioned
Service Charge		Ask agent
Ground Rent		Freehold
Tenure		Freehold

Summary & Recommendations

This 3 bedroom detached bungalow located in Skelmanthorpe has achieved an overall accessibility score of 3.9/5 (Very Good). The property is priced at £300,000 with a Stamp Duty of £5000. This property has 5/6 essential rooms and 1 bonus room, and 7/8 accessible features including step-free internal access, a downstairs bedroom, a downstairs bathroom/wc and ground floor entry, plus 3 more. Proximity to a GP is very good with Welch Dr M T C accessible within a 8 mins walk. Public transport connectivity is excellent with the nearest bus stop 4 mins walk and train station 59 mins walk away. Energy efficiency is fair (EPC rating E) with moderate running costs. Ongoing costs include average band council tax (Band D). Overall, this property is well-suited for long-term residence with single-level living and ground floor sleeping and bathing, though higher energy costs may require consideration.

Summary

- The methods build on data at address level which are linked to local services from healthcare to supermarkets, schools and libraries, pubs anywhere in the UK
- Our tools measure and map walkability, community connectivity, catchment populations, transport access, choice and gaps at both macro and micro levels
- We can overlay demographics at address level such as age, poverty and housing tenure to identify key features in any geography.
- We can match third party data to address level data to evaluate organisational performance e.g. in coverage, reach, met and unmet demand.
- The tools can be used to save money through more efficient use of resources and investment and creating greater social value through more granularity
- It is cost effective in sense that it is relative cheap and quick to apply. Expertise in GIS and analytical methods and large data sets is helpful.

How might local authorities benefit ?

Use classes	Investment	Efficiency	Inequality	Comment
A. Strategy	Focus on strategy and investment opportunities based on the NPF	Use alongside planning function as additional source of information and advice	Use concepts to accelerate place making, regeneration and levelling access	Centralising data and intelligence function and closer working with university
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D. Work across organisational and administrative boundaries	Leverage the overlap between private and public investors e.g. house builders, NHS, rail and transit operators	Seek opportunities to collaborate with neighbouring authorities and private sector	Improve cross boundary access to amenities and services through transport improvement	Undertaking joint feasibility studies, data sharing, and partnership working leading to better decisions

Who to contact for further information

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