UEP

Understanding English Places (UEP) Model

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1. Foreword by Professor Leigh Sparks, Chair of Scotland's Towns Partnership

Understanding English Places: some thoughts from Scotland.

In April 2015, Scotland's Towns Partnership and partners launched Understanding Scottish Places (USP). There were a range of motivations in developing this tool, encapsulated in the words of the Scottish National Bard, Rabbie Burns:

"O wad some pow'r the giftie gie us tae see oorsel as ithers see us".

The aptness of this in a high street or a town centre context is clear. If communities and place managers want to manage or improve towns then the first step is for them to understand themselves and their places. This requires a consistent, accurate and rigorous set of data on a meaningful lived and local context such as a town or a town centre.

Understanding Scottish Places does not provide answers for place managers and communities but informs and starts conversations about assets, connectivity, opportunities and potential lessons from sharing experiences from other places with the same characteristics.

In Scotland local leadership embraced the tool as a starting point to develop understanding and relationships and began to explore the local opportunities and practical implementation to improve places. By grounding conversations in knowledge, data expressed visually, so discussions began in a more objective space and opened up issues of place and inter-connections and relationships. Across Scotland USP became a starting point for local and national discussions.

The initiative and leadership from Scotland was soon followed by Understanding Welsh Places (UWP Cymru) based on the same principles. Didobi have taken the concept and developed Understanding Irish Places and Understanding Isle of Man Places. Details differ, as data varies, and decisions about scale, cutoffs and inclusion and exclusion are made. But the outcome using consistent principles, remains a tool based on solid data, statistically interrogated to provide a discussion base for understanding and opportunities for change.

With Scotland and Wales covered by their versions of the tool, England seemed somewhat left behind. This was often ascribed to scale and complexity. Despite the obvious potential benefits there was little progress or indeed interest (beyond the 'we wish we had USP for England' statements).

Didobi have now taken the model and their learnings and developed an Understanding English Places (UEP), based on the same principles. It covers c1800 places of over 3k population across England. The aim remains: to use data, professionally interrogated and presented, to spark discussions about individual and comparative places. UEP puts a mirror to the situation across England's towns and cities. Didobi have taken a major step forward with this Understanding English Places development and it is positive to see and support.

As in Scotland, it remains an issue that local and national government do not present or mandate the presentation of their (and other) data on a town basis (operating far too often on a meaningless, whole administrative local authority basis). So much more could be done by building our understanding collectively and consistently via government support, direction and funding.

Pride in Place is the current in-vogue branding for considering towns and communities in England (and beyond), focusing supposedly on rebuilding left behind communities. The starting point for this should be for those involved to understand their own places and themselves and to have an objective lens on their situation and opportunities. Without such a focus there are real dangers of misunderstanding, misperceptions and misaligned activity. We all need to know ourselves and our places better and UEP provides just the tool to start those conversations in the right place.

2. Introduction

Matthew Hopkinson, Managing Director, Didobi Ltd.

I have been involved in data and research on the UK's towns and cities for over 25 years. Be it in creating data at The Local Data Company, contributing to the Portas Review (2012) and Grimsey Reviews (2013 and 2018), supporting academic research at University College London or the projects that Didobi works on with clients in both the public and private sectors (2018-). The UK Government's current 10-year industrial strategy, titled "Invest 2035" has data at its core and views data as the fuel for its frontier industries, and views empowered local town and city clusters as the engines where that growth will be built.

What is clear to me time and time again is that, even after billions of pounds of public money has been spent on various High Street and Town Centre funding initiatives since 2012, no central evidence base exists on England's towns. As such the ability to independently and accurately evaluate and monitor impact of investment and policy in our towns does not exist. The net result is that time and money is wasted in one off research projects which go on to gather dust on the shelves rather than the councils and stakeholders of our towns having access to a single source of truth which provides access to relevant on data and commercial data on their towns and cities.

The lack of a 'single source' of data and insights is something that everyone I meet says they would value to have, be it elected officials, local authority officers, stakeholders, businesses and communities. Having a baseline of evidence is key to creating positive relationships within communities and to ensuring that capital is deployed most effectively and policies are adapted based on the changes happening in the form and function of places. This is what Understanding Scottish Places (USP) set out to do and has done very well to great acclaim. We have built on this model and created enhancements based on our work with places to provide the starting point for over 1,800 towns and cities across England to understand themselves better and their relationship and similarity or otherwise to other places.

The greatest legacy any government could give its citizens is the ability to access independent data and insights in order that they can work together to create community cohesion and economic growth. Understanding English Places is the starting point to empower England's towns. The data exists. The model is proven. It is time to provide the decision-makers in our towns and cities with the tools they deserve.

"Without data you're just another person with an opinion."

W.Edwards Deming



3. Methodology Statement

An initial Understanding English Places (UEP) Model has been developed for towns in England, based on the framework and methodology of the Understanding Scottish Places (USP) Model (https://www.usp.scot/) and taking learnings from an Understanding Irish Places (UIP) Model implemented by Didobi in 2025. The UEP is driven by English data and configured to reflect the place assets and relationships across England.

The spatial framework for the UEP Model covers 3,463 places with a population over 1,000, based on a best-fit assignment carried out by Didobi of Output Areas (OAs) to the 2022 Built-Up Area (BUA) boundaries defined for the 2021 Census (ONS), which ensures consistency and comparability between places.

For completeness the UEP Model also includes the 33 London Boroughs, which each represent a BUA, making a total of 3,463 places within the UEP.



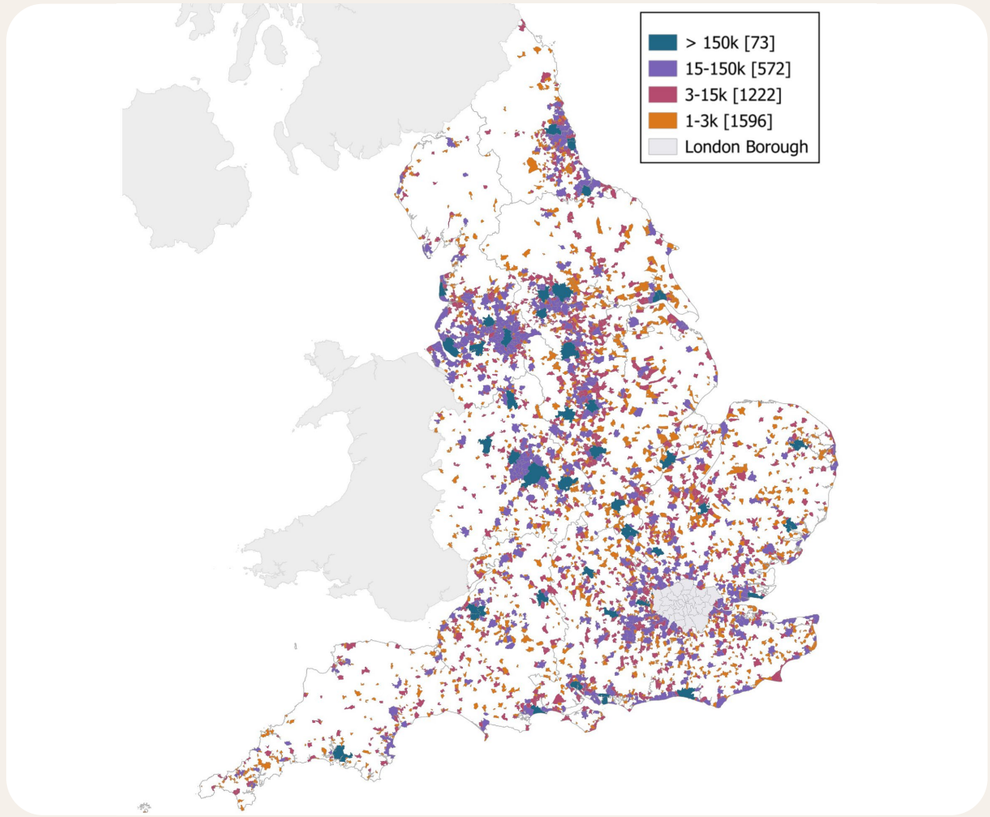


Figure 1. Spatial Framework – 3,463 Places/Towns across England with population > 1,000 as defined by Didobi based on OA and BUA Boundaries, Census 2021 (ONS) by population size band

Nearly half the places in the Place/Town classification are small, with 1,596 places having a resident population between 1-3,000. Conversely, there are only 73 places (including 33 London boroughs) that have over 150,000 residents – including Birmingham, Leeds, Liverpool, Sheffield and Manchester.

Data has been gathered, processed and combined from a range of Governmental and other Open Data sources and commercial datasets.

As described in the diagram below, the UEP Model involves a three-stage development process.



Figure 2 Understanding English Places (UEP) Model Framework

a. Clustering Places

A range of demographic, social and economic indicators for each of the 3,463 Places (largely from the Census 2021) have been used to derive a typology of English places/towns.

The UEP used a K-means statistical clustering methodology to group places into clusters based on these descriptive characteristics. The clustering seeks to ensure that places are as similar as possible to others in a cluster and as dis-similar to places in other clusters

The clustering procedure involved repeating the process for different numbers of potential clusters. A 8 Cluster solution has been selected for the UEP, represented as types (1,2,3,4,5,6,7), with a Cluster for the 33 London boroughs (although it is recognised that they have differing characteristics). This is a slightly larger Cluster solution than the 5 Clusters within the USP Model for Scotland and UIP Model for Ireland and generates clusters with a good number of places assigned and sufficient variation in their characteristics.

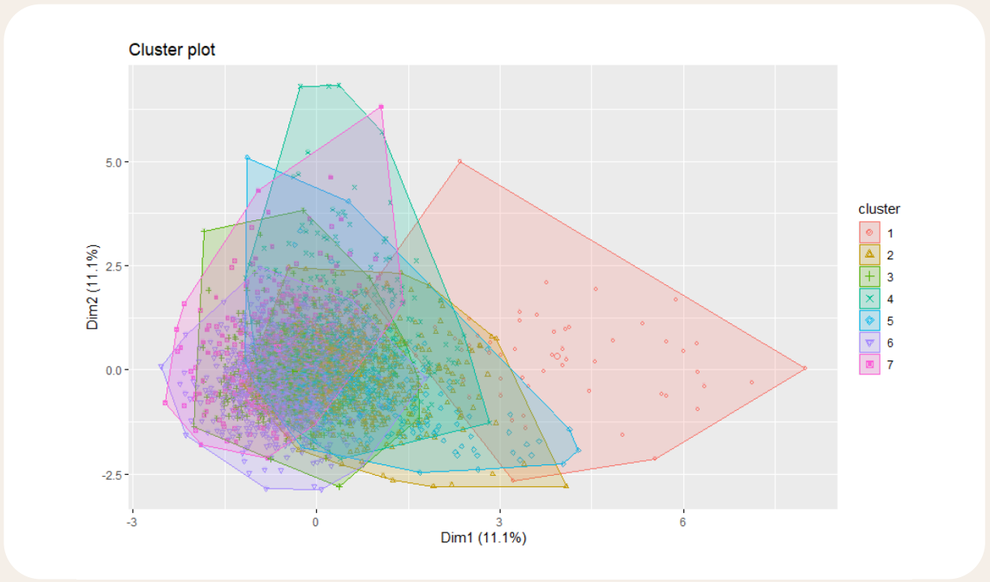


Figure 3. 6 Cluster Solution 2-dimensional representation

b. Categorising places into size bands

Since Place size, in terms of resident population, is likely to impact on its function and service provision, Clusters have been disaggregated into 4 size bands:

It should be noted that not all Cluster/Size-band combinations have places/towns assigned. Indeed, there are 6 Cluster/Size-band combinations with no places assigned.

1. Over 150,000 population (73 places/towns including the London boroughs)
2. 15,000 - 150,000 population (572 places/towns)
3. 3,000 - 15,000 population (1,222 places/towns)
4. 1,000 - 3,000 population (1,596 places/towns)

	Size Band (Population)			
	> 150,000	15,000-150,000	3,000-15,000	1,000-3,000
Type	1	2	3	4
1	16	24	6	8
2	2	100	189	148
3	0	36	164	356
4	0	38	261	572
5	20	176	127	68
6	2	185	354	233
7	0	13	121	211
8	33	0	0	0

Type	Size Band			
	1	2	3	4
1	Leeds Oxford	York Canterbury	Penryn Cranfield	Ambleside Radley
2	Milton Keynes	Cheltenham Harrogate	Cheadle Billingshurst	Godstone Maple Cross
3		St Albans Wilmslow	Marlow Ilkley	Wargrave Dunchurch
4		Fareham Morpeth	Yateley Ivybridge	Wootton Thaxted
5	Birmingham Leicester	Gateshead Spalding	Penzance Sheerness	Camelford Colnbrook
6	Southend Warrington	Worthing Grantham	Tewkesbury Driffield	Scholes Pucklechurch
7		Whitstable Brixham	Whitby Swaffham	Aldeburgh Grassington
8	Camden Bromley	Kensington & Chelsea	City of London	

*Figure 4. Number of places across the 8 Clusters and 4 size bands, with example places/towns – *All London Boroughs have been assigned to a single size band (even though a few have less than 150k residents)*

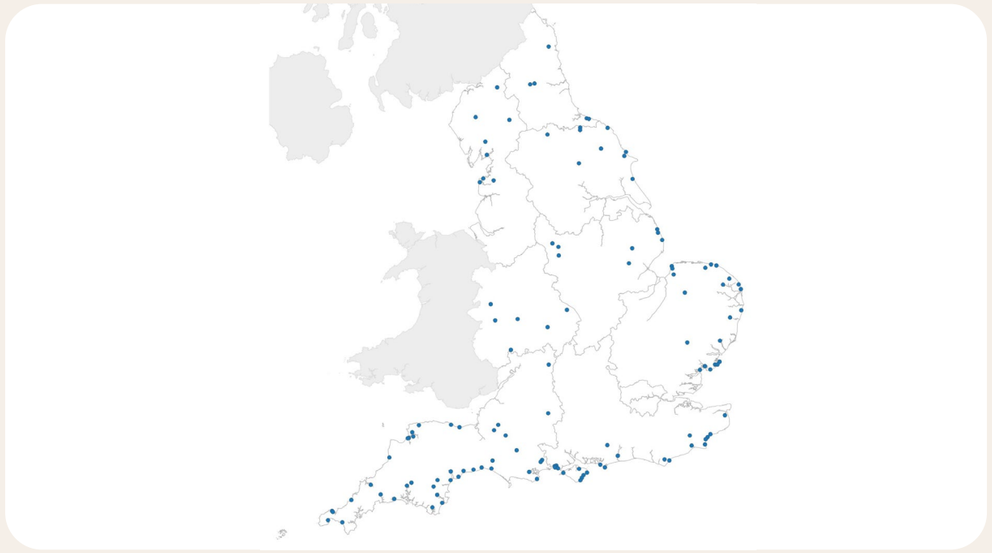


Figure 5. Example: Map of 121 places in cluster 7 and size band 3 which are characterised as typically small places with a large retirement age population and often located on the coast

Cluster	Description
1	This type of town typically has one or more Universities or Campuses with a large student population and consequently an age profile that spikes in the 15-24 and to a lesser extent the 25-44 age groups. Single person and multi-adult households levels are high. The private rental sector is very strong and the social rental sector is above average with lower levels of owner occupation. Car ownership is below average and the proportion of households with no car is high. Education attainment levels are above average as is general health.
2	This type of town is more affluent, with a younger age profile. There is an above average population in the age groups up to 45 years and a higher proportion of couples in households with younger children. General health is above average. Car ownership is higher than average, with a higher proportion of households owning more than one car. The tenure mix is broadly average with a slightly higher level of private rental households. Educational attainment is above average. Economic activity levels are high and there is also a higher proportion of the population in professional occupations.
3	This type of town is more affluent, with an older age profile. There is an above average population in the 45-65 years and retirement age groups and a higher proportion of the population in couples with children households. General health is above average despite the older age profile. Car ownership is higher than average, with a higher proportion of households owning more than one car and owner occupation is prominent. Educational attainment is above average. Unemployment is low and there is also a higher proportion of the population in professional occupations.
4	This type of town has a profile and characteristics largely on par with the national average. The population profile is older than average with higher levels of retired households and couples in households without children. General health is marginally above average. Car ownership is above average, with a higher proportion of households owning more than one car. Social and private rental is well below average and owner occupation is consequently above average . Educational attainment is marginally lower in the lowest attainment category. Economic activity is above average and unemployment well below average whilst the occupational profile skews slightly towards professional roles.
5	This type of town is the most deprived, with low levels of educational attainment, below average general health and higher levels of unemployment and economic inactivity, including due to ill health. Of those in employment, a higher proportion are in routine occupations with fewer in professional occupations. Car ownership is lower than average, with a higher proportion of households with no car. Owner occupation is low whilst both the private rental and particularly the social rental sectors are more prominent. They have a younger age profile with above average proportion of the population across all age groups under 45 years. Higher levels of single person and lone parent households.
6	This type of town has a population with a fairly even spread across all age groups albeit slightly higher in the age groups up to 45. There is a higher proportion of single occupancy and lone parent family households. General health is below average, with a high proportion of economic inactivity due to ill health. Unemployment levels are also above average. Of those in employment, a higher proportion are in routine occupations. Car ownership is slightly lower than average, with an above average proportion of households with no or one car. Owner occupation is skewed slightly towards rental, with social rental more prominent. Educational attainment is below average in the highest attainment category.
7	This type of town has the oldest age profile, with a higher population of residents of retirement age and a lower proportion of family households. General health is below average which could be partly related to the age profile. Car ownership is lower than average, with a higher proportion of households with no car. Also, the private rental sector is more prominent. Educational attainment is above average in the lowest attainment and apprenticeship categories. There is also a higher proportion of the population in semi-manual and routine occupations.
8	This cluster comprises the 33 London Boroughs which have varying characteristics.

Figure 6. Pen Portraits – Cluster Types

c. Inter-Relationship Model

Finally, an Inter-Relationship Model has been implemented to identify the extent to which places rely upon neighbouring places, based on a range of indicators covering public, commercial, and social sector assets and the level of their associated relationships with other places that shape the functioning of their economies.

A set of indicators have been used to define the relative independence, interdependence and dependence of the 3,463 places. Indicators include the extent to which residents must commute elsewhere for work and school, the level of local social and health assets plus the level and diversity of local retail and associated service and leisure provision.

For each indicator, places have been split into sevenths, to ensure an equal number of places in each category and assigned a score accordingly. A composite score is then calculated across all indicators to assign a place to one of 7 inter-relationship categories.

Inter-Relationship Category	# Places	Example Places
Inter-Relationship Category	# Places	Example Places
1.Independent	501	Leeds, Exeter, Penzance, Wells-Next-The-Sea
2.Independent to Interdependent	485	West Bromwich, Fareham, Thame, Lyndhurst
3.Interdependent to Independent	486	Kingswinford,Hedge End, Halstead, Thaxted
4.Interdependent	530	Croydon, Radcliffe,Tilbury, Silverstone
5.Interdependent to Dependent	538	Houghton Regis, Cheadle, Killamarsh, Wargrave
6.Dependent to Interdependent	474	Clifton (Salford), Burton Latimer, Windlesham, Duxford
7.Dependent	449	Lydiate, Harwell, Maple Cross, North Benfleet
All	**3,463**	

Figure 7. Number of Places/Towns by Inter-Relationship category, with examples

Label	Long Label	Description
1.Independent	Independent	Independent places have a high number of assets in relation to their population. They potentially have a strong level of diversity of jobs and residents largely travel shorter distances to work and study. These places will attract people from neighbouring towns to access their assets and potentially employment.
2.Ind to Inter	Independent to Interdependent	Independent to Interdependent places have a good number of assets in relation to their population. They potentially have a good diversity of jobs and residents largely travel shorter distances to work and study. These towns attract people from neighbouring towns to access some of their assets and potentially employment.
3.Inter to Ind	Interdependent to Independent	Interdependent to Independent places have a good number of assets in relation to their population. They potentially have some diversity of jobs and residents largely travel shorter distances to work and study, although some travel longer distances. These places attract people from neighbouring towns to access some of their assets and potentially employment.
4.Interdependent	Interdependent	Interdependent places have a medium number of assets in relation to their population. They potentially have average diversity of job and residents travel a mix of short and long distances to work and study. These places are attractors of people from neighbouring towns who come to access some assets and jobs but they are also reliant on neighbouring towns for other assets and potentially employment.
5.Inter to Dep	Interdependent to Dependent	Interdependent to Dependent places have a low number of assets in relation to their population. They potentially have some diversity of jobs and residents travel largely longer distances to work and study, although some travel shorter distances. They are reliant on neighbouring towns for some assets and potentially employment.
6.Dep to Inter	Dependent to Interdependent	Dependent to Interdependent places have a low number of assets in relation to their population. They potentially have a poor diversity of jobs, and residents on the whole travel longer distances to work and study. They are reliant on neighbouring towns for some assets and potentially employment.
7.Dependent	Dependent	Dependent places have a low number of assets in relation to their population. They potentially have limited jobs and residents travel longer distances to work and study. They are reliant on neighbouring towns for assets and potentially employment.

Figure 8. Inter-Relationship category descriptions

The graph below illustrates the Inter-Relationship Model and the scoring of the associated 15 indicators for an example town, Bolton. Whilst Bolton is classed as Independent overall, the graph illustrates that the inter-relationship scoring varies across the various indicators, which also compare differently versus the category averages.

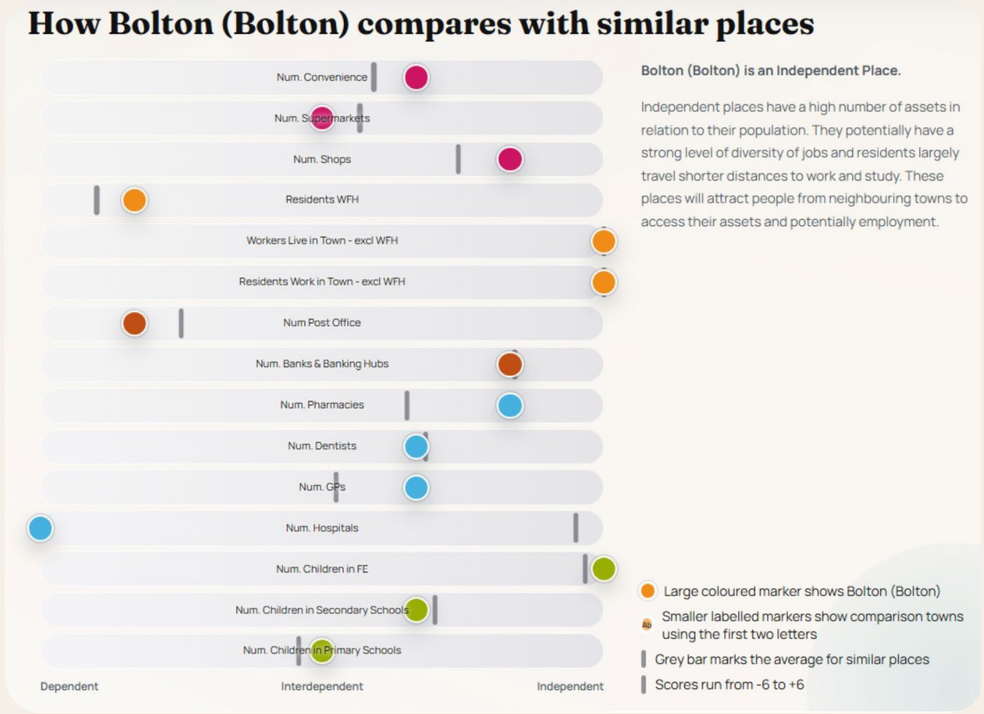


Figure 9. Example: Bolton = Independent

4. Reporting and Comparing Places

An interactive Reporting portal has been developed and is available on the associated website (www.uep.org.uk). It presents detailed data and associated indicators for each place. Users can select a place/town by place A-Z, by local authority district/council, by combined authority, by unitary authority, by county, by region or by coastal town and view UEP Model output, including the place's cluster, size band and Inter-Relationship group.

Each of the Clusters have a short pen portrait, whilst each Inter-Relationship group is also summarised. Both descriptions are contained in the Report and are based on the place selected by the User. The Report also presents the number of places in the same Cluster/Size-band/Inter-Relationship Group and allows up to 4 of these comparison places to be included in the Report.



In the example below, Bolton is in Cluster 3, in size band 1 (greater than 150,000 population) and Inter-Relationship Group 1 Independent. There are 20 places in this Cluster/Size band/ Inter-Relationship Group.

The demographic, social and economic characteristics of each place is presented as Key Indicators and in graphical form in the Report and the selected place is compared against the associated Cluster/Size-band/Inter-Relationship Group and England average.

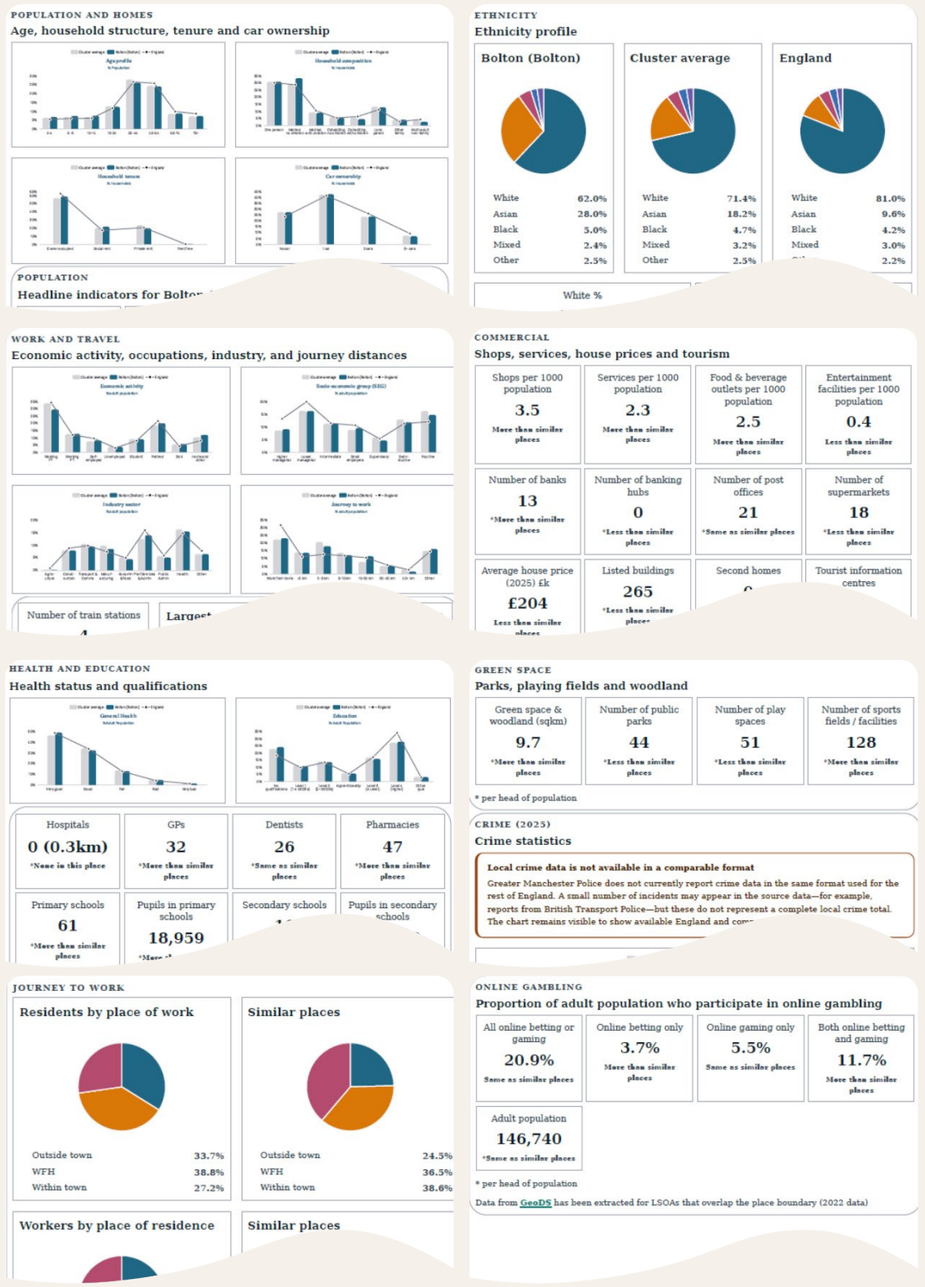


Figure 10. Example Report: Bolton

The Report also contains information on place asset counts and asset provision across different classes:

- **Social Assets** including hospitals, GPs, dentists and pharmacies, primary, secondary and sixth form / FE schools and colleges and universities (and associated pupil counts),
- **Commercial Assets** including retail provision (stores per 1,000 population), the presence of banks and banking hubs, post-offices and supermarkets (which offer a more comprehensive range of products than a convenience store), food and beverage provision and services provision. The number of second homes (holiday homes), presence of tourist information centre and heritage buildings (protected structures) is also listed, together with average house price.
- The report also lists other **diverse indicators** including Crime statistics, journey to work data, train station passenger counts, internet download speeds, Deprivation (Index of Multiple Deprivation), online gambling, homelessness, rough sleeping and and OAC geodemographic classification
- In each case Asset provision is compared to the average for places in the same Cluster/ Size-band/Inter-Relationship Group and the Report indicates whether the selected place has higher or lower provision than the average.

In addition, the interactive Reporting portal includes a map that visualises places geographically across England covering the Cluster, size-band and inter-relationship grouping for the selected place. The names of individual places can be seen by hovering over the place dot on the map.

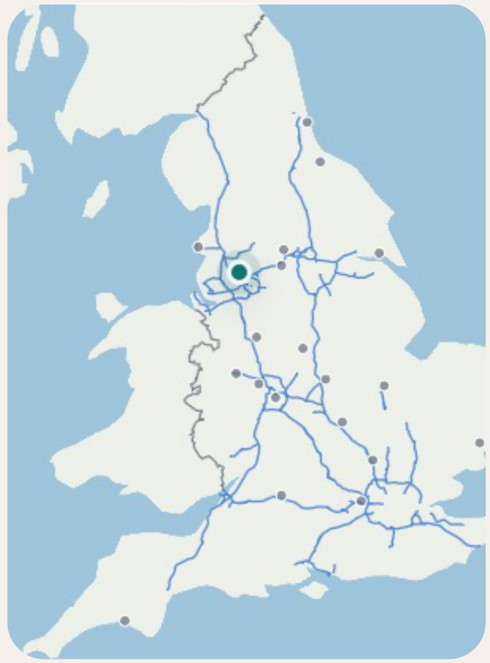


Figure 11. Map displaying places in the same Cluster/ Size-band/Inter-Relationship Group as the selected place (Bolton)



5. UEP Model Data Sources

All data used within this initial UEP Model was captured from Open Sources.

The table below describes the main data inputs used within the initial UEP Model.

Indicator	Geography	Source	Comment	Comment/Status
Car Ownership	OA	Census 2021	Aggregated to BUA/Town	2021
Tenure	OA	Census 2021	Aggregated to BUA/Town	2021
Deprivation Dimensions	OA	Census 2021	Aggregated to BUA/Town	2021
Household Composition	OA	Census 2021	Aggregated to BUA/Town	2021
Age	OA	Census 2021	Aggregated to BUA/Town	2021
Unemployment / Economic Activity	OA	Census 2021	Aggregated to BUA/Town	2021
Industry	OA	Census 2021	Aggregated to BUA/Town	2021
Education	OA	Census 2021	Aggregated to BUA/Town	2021
Occupation/Socio-Economic Group	OA	Census 2021	Aggregated to BUA/Town	2021
Ethnicity	OA	Census 2021	Aggregated to BUA/Town	2021
General Health	OA	Census 2021	Aggregated to BUA/Town	2021
Population Change	OA	Census 2021	Aggregated to BUA/Town	2021
Household Change	OA	Census 2021	Aggregated to BUA/Town	2021
Net Migration (Address 1 yr ago)	OA	Census 2021	Aggregated to BUA/Town	2021
Residents by Place of Work	OA	Census 2021	Aggregated to BUA/Town	2021
Workers by Place of Residence	OA	Census 2021	Aggregated to BUA/Town	2021
Journey To Work Flows (in/out/net)	OA	Census 2021	Aggregated to BUA/Town	2021
Distance travelled (work)	OA	Census 2021	Aggregate to BUA/Town	2021
OAC Classification	OA	UCL	Aggregated to BUA/Town	2021
Index of Multiple Deprivation Deciles	LSOA	MHCLG	Aggregated to BUA/Town	2025
Population 2024	OA	ONS Mid-Year Estimates	Aggregated to BUA/Town	2025
Average House Price	Postcode	Land Registry	Aggregated to BUA/Town	2025
Whether Town has a Tourist Information Office		LetsGoBritain.co.uk	Assigned to a BUA/Town	2025
Whether Coastal Town		Defined by Adept		
Download Speeds	OA	Connected Nations (OFCOM)	Aggregated to BUA/Town	As at 07/2025
Listed Buildings	Unit level	Historic England	Aggregated to BUA/Town	2025
Second Homes	LSOA	Census 2021	Aggregated to BUA/Town	2021
# of GPs	Unit level	Organisation Data Service : GP Branch Surgeries (NHS England)	Assigned and aggregated to BUA/Town	2025
# of Hospitals	Unit level	Organisation Data Service : NHS Trust Sites (NHS England) & CQC Directory	Assigned and aggregated to BUA/Town	2025
# of Dentists	Unit level	Organisation Data Service : General Dental Practices (NHS England)	Assigned and aggregated to BUA/Town	2025
# of Pharmacies	Unit level	Consolidated Pharmaceutical List (NHS England)	Assigned and aggregated to BUA/Town	2025
# of Primary and Secondary Schools	Unit level	Get Information About Schools (Gov.UK)	Assigned and aggregated to BUA/Town	2025
# of children in Primary and Secondary Schools	Unit level	Schools, Pupils & their Characteristics (Gov.UK)	Assigned and aggregated to BUA/Town	Academic Year 2024/25

Presence of Universities	Unit level	HESA	Assigned and aggregated to BUA/ Town	2025
# Undergraduates & Postgraduates	Unit level	HESA	Assigned and aggregated to BUA/ Town	Academic Year 2023/24
Train Stations	Unit level	Office of Road & Rail	Assigned and aggregated to BUA/ Town	04/2024-03/2025
Passenger Counts (entry.exit/ season tickets)	Unit level	Office of Road & Rail	Assigned and aggregated to BUA/ Town	04/2024-03/2025
# Supermarkets	Unit level	Geolytix (Open Data)	Assigned and aggregated to BUA/ Town	2025
# Retail Stores	Unit level	OpenStreetMap	Assigned and aggregated to BUA/ Town	2026
# Food & Beverage stores	Unit level	OpenStreetMap	Assigned and aggregated to BUA/ Town	2026
# Service Outlets (hair salons, estate agents etc)	Unit level	OpenStreetMap	Assigned and aggregated to BUA/ Town	2026
# Banks/Building Societies	Unit level	Geolytix (Open Data)	Assigned and aggregated to BUA/ Town	2025
# Banking Hubs	Unit level	https://www.cashaccess.co.uk/hubs/	Assigned and aggregated to BUA/ Town	2026
# Post Offices	Unit level	https://www.postoffice.co.uk/branch-finder	Assigned and aggregated to BUA/ Town	2026
Gambling (proportion of adult population)	LSOA	Great Britain Gambling Behaviours Classification (GB2C)	Aggregated to BUA/Town	2022
Homelessness (rate per 1,000 households)	LAD	MHCLG	LAD data presented for relevant BUAs/Towns	01/2026-03/2026
Rough Sleeping (rate per 100,000 population)	LAD	MHCLG	LAD data presented for relevant BUAs/Towns	Autumn 2025
Crime/Street Crime	Point level	https://data.police.uk/data/	Aggregated to BUA/Town	2025
Green Spaces	Unit level	OS Greenspace (Ope data)	Aggregated to BUA/Town	2025
Woods for All	Unit level	Forestry Commission	Aggregated to BUA/Town	2025

Figure 12. UEP Model Data Sources (UEP Model Version 2.2)



Figure 13. Example of BUA boundaries for Bolton The Adjusted BUA boundary shows the Output Areas used to extract census and other data.



For further information or to gain access to UEP please contact hello@didobi.com or call 0203 633 6718.

www.uep.org.uk





This work was carried out by Didobi Ltd (Matthew Hopkinson) and Edge Analytics Ltd (Julia Williams, Chris Duley).

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