

## **Mapped and Valued: Council Housing Data Made Actionable**

Local Authorities are being asked to make better use of their housing datasets — mapping stock consistently and putting a commercial value on each home. This is not straightforward. Addresses are messy, UPRNs are often missing, and values are difficult to model at scale.

At Locarla, we've already solved these challenges.

### What we've done

- Built a clean, mapped dataset of 4.8 million Local Authority and Housing Association homes across England & Wales.
- Matched every property to its Unique Property Reference Number (UPRN) using AddressBase, Land Registry, and human verification.
- Created a reliable platform that supports valuation modelling at scale.

### What we can add

- Apply approximate market values to every Local Authority home using sales comparables (PPD), EPC-linked data, and neighbourhood indices.
- Provide a consistent, auditable view of council housing assets that can be interrogated by developers, funders, and housing providers.

### Why it matters

- For Local Authorities: unlock a clear picture of housing assets to support disposals, regeneration, and funding bids.
- For Developers & HAs: access consistent data to guide partnerships, acquisitions, and investment decisions.
- For Policymakers: understand the true commercial context of social housing stock nationally.

In short: we already hold a mapped register of LA stock and can add an approximate value to every home. This creates the joined-up, commercially relevant dataset that your colleagues at MHCLG and the LGA are seeking to build.

## Locarla Properties

We started cleaning Social Housing Address Data in 2012 when Land Registry released the Inspire Corporate Dataset as OpenData. We were invited onto the pilot programme to isolate all 'Social Housing'. We built this into a system we call 'Locarla Properties' which matches addresses to EPC.

You can read more about how we work with EPC data on our [Retrofit & Decarbonisation PDF](#).

LOCARLA

Locarla Properties (172,643) 

Export

	TOWN	DISTRICT	POSTCODE	LOCAL AUTHORITY	COUNTY		
STOCKBRIDGE	TEST VALLEY	SO20 6LP	Test Valley	Hampshir			
PORTSMOUTH	PORTSMOUTH	PO6 4DG	Portsmouth	Hampshir			
MARLBOROUGH	WILTSHIRE	SN8 1TE	Wiltshire	Wiltshire			
PONTYCLUN	RHONDDA CYNON TAFF	CF72 9AR	Rhondda Cynon Taf	Rhondda C			
BOOTLE	SEFTON	L20 0AR	Sefton	Merseysid			
LONDON	MERTON	SW19 1UR	Merton	Greater Lc			
11, FLAT 3	WOODLEY LANE	CARSHALTON	SUTTON	SM5 2RJ	Sutton	Greater Lc	
25	DANES CREST	NORTHALLERTON	HAMBLETON	DL6 2RR	Hambleton	North Yorl	
43	VERNEY STREET	LONDON	BRENT	NW10 0AY	Brent	Greater Lc	
Bolton at Home	14	BARLOW PARK AVENUE	BOLTON	BOLTON	BL1 6QX	Bolton	Greater M
Argyll and Glyn Co-operat...	FLAT 1	HAMMERSMITH ROAD	LONDON	HAMMERSMITH AND FULH...	W14 8XH	Hammersmith and Fulham	Greater Lc
Anchor Hanover Group	6	BEACONSFIELD ROAD	ST ALBANS	ST ALBANS	AL1 3RT	St Albans	Hertfordsl
Jigsaw Homes North	263	SANDAL STREET	MANCHESTER	MANCHESTER	M40 7BH	Manchester	Greater M
Sanctuary Housing Associa...	1	NEVIN ROAD	CHESTER	CHESHIRE WEST AND CH...	CH1 5RR	Cheshire West and Chester	Cheshire
The Guinness Partnership	FLAT 26	ELM PARK ROAD	HAVANT	HAVANT	PO9 2AH	Havant	Hampshir
Clarion Housing Associati...	16B	TREDEGAR ROAD	LONDON	TOWER HAMLETS	E3 2EH	Tower Hamlets	Greater Lc
Notting Hill Genesis	129	WESTCROFT CLOSE	LONDON	BARNET	NW2 2RT	Barnet	Greater Lc
Peabody Trust	FLAT 4 BLOCK E	HERBRAND STREET	LONDON	CAMDEN	WC1N 1IG	Camden	Greater Lc

Page 1 of 1727 (172,643 results) 1 2 3 4 5 ... 1727 10 50 100

## Machine Learning

In 2017 Land Registry changed the way they managed title data. Instead of one house having one title, multiple properties appeared on the same title as 'multi-title' and 'parent title' structures. This was seen as being more efficient than maintaining thousands of near-identical records as it reflected ownership reality. Many councils and housing associations hold one title for a block of flats or houses.

When CCOD was released as open data in 2017 this change caused big problems for data analysts. We were seeing up to 40 properties on one title, odds and evens, and often on different streets. It wasn't until the start of 2024 when we started building machine learning and AI tools that we were able to start cleaning and organising large numbers of address records. We convert the address into numbers called 'embeddings' making them much easier to work with.

# Embedding the Addresses :

"Converting Addresses into Numbers"

- Why embeddings?
  - Machines work better with numbers, not text.
- Tool: **Sentence Transformers**
  - Example: all-MiniLM-L6-v2

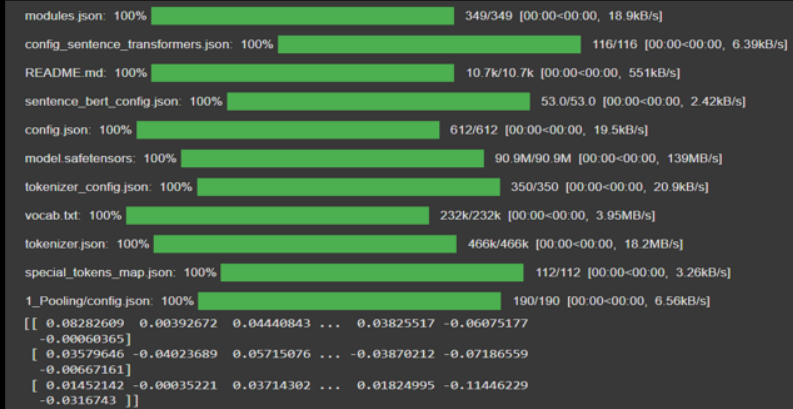
```
from sentence_transformers import SentenceTransformer

# Load the model (like opening the translator app)
model = SentenceTransformer('all-MiniLM-L6-v2')

# Some example addresses
addresses = [
    "10 Downing Street, London",
    "Flat 5, Baker Street, London",
    "221B Baker Street, London"
]

# Convert each address to a vector
embeddings = model.encode(addresses)

# Print the embeddings (list of numbers for each address)
print(embeddings)
```



## Social Housing Register Cleaning

Our database contains 4.8 million cleaned address records and we offer an address cleaning service to Housing Associations & Local Authorities.

### What We Deliver

From messy registers to verified housing data.

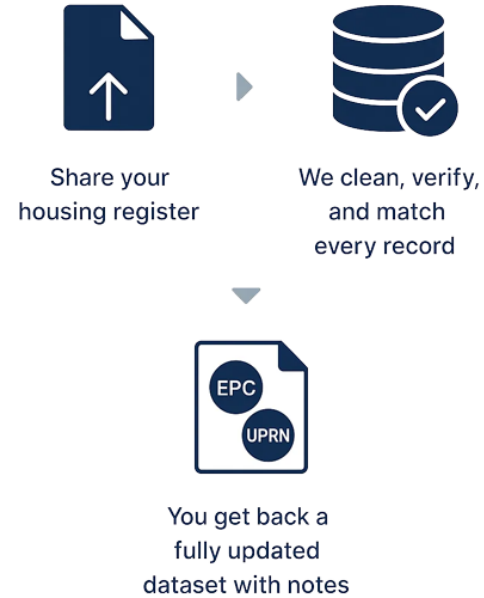
We make the process simple:

- You send us your housing register
- We clean, match, and verify every record against:
  - Land Registry titles
  - EPC certificates
  - UPRNs for system consistency
- We return your updated dataset with clear notes on any discrepancies and corrections.

The result:

- Clean, standardised addresses based on AddressBase
- EPC data aligned and corrected where needed
- Verified records you can confidently rely on
- Optional UPRN integration, ready for future data matching

### How Locarla Works



### Data Output

Comparison Stats	Count	Notes
Sheet 1: Total EPCs Not Present in ABC Housing Data	1,957	Missing EPCs published at least 3 months ago. 685 of these are expired
- of these Active EPCs not present	1,271	
Sheet 2: Different Cert with Old Date	43	Rating mismatch; ABC Housing assessment date is over a month older than Locarla Properties (LP)
Sheet 3: Different Cert at same assesment date	333	Assessment dates for ABC Housing and LP match; however, ABC Housing's rating appears incorrect - outdated or manually entered in error, resulting in a one-grade downgrade for many of them
Sheet 4: Old Date	87	ABC Housing's EPC assessment date is over 3 months older than LP's
Sheet 5: Cert Present_but_Date_Missing	69	EPC Ratings are present but there is no Date present
Sheet 6: Full Data	8,087	Full ABC Housing Data scrubbed against LP/EPC and AddressBase data

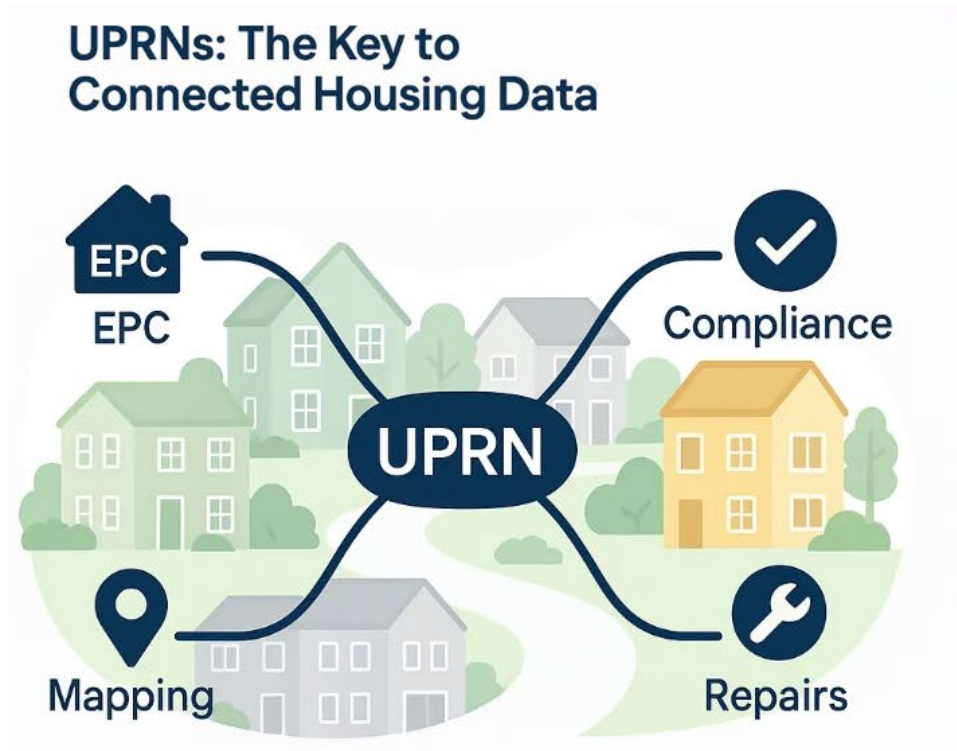
**Note:** For reporting purposes, each sheet contains a sample of 30 address records only. The counts presented above reflect the full dataset of ABC Housing.

**Yellow - ABC Housing Data**

**Green - Locarla Properties - the control data**

## Unique Property Reference Numbers

Until very recently, government departments didn't align their datasets on UPRN (despite UPRN being mandated as a public sector open standard since 2020). We attach a UPRN to all records which makes it a straightforward process to connect the property to the EPC register as that also uses UPRN. We update all 4.8 million records against the EPC quarterly release.



## UPRNs Explained

UPRNs: The key to connected housing data.

Every property in England and Wales has a **Unique Property Reference Number (UPRN)** - a nationally recognised identifier that ties together information from multiple datasets.

By attaching UPRNs to your cleaned addresses, you can:

- Link your properties to external datasets instantly
- Improve reporting and benchmarking
- Future-proof your data for integration and compliance

Even if you don't fully use UPRNs today, adding them now ensures your housing register is **ready for the future**.

**CCOD & PPD**

Land Registry’s monthly Commercial & Corporate Ownership Data (CCOD) file contains 60 - 80,000 records. We clean this to isolate Social Housing for our master database. CCOD does not include UPRNs because titles represent legal ownership, not locations, and retrofitting them to multi-titles is complex. UPRNs (from GeoPlace/OS AddressBase) only became open standard in 2020.

Similarly, the Price Paid Data (PPD) release excludes UPRNs, which would otherwise simplify valuation. Estimating the value of long-held social housing relies on combining Locarla Properties, CCOD, PPD, and EPCs for ‘house next door’ comparisons.

The screenshot displays the Locarla CCOD (1,459) interface. At the top, there is a search bar and a 'Show All' dropdown. Below is a table with columns: TITLE NUMBER, TENURE, IS MULTI ADD, CHANGE INDICATOR, ORIGINAL PROPERTY ADDRESS, INDIVIDUAL ADDRESS, HOUSE NUMBER, and STREET NAME 1. A modal window is open for title BM420337, showing 'Locarla Properties - Display Info' and a 'Change Only - Editable Form'. The display info includes address, register owner, title number, and tenure. The editable form includes fields for proprietor name, title number, month, year, change indicator, individual ID, sub building description, house number, street name, locality, town name, district, county, region, and comments. At the bottom of the modal are buttons for 'NO ACTION', 'ADD', 'UPDATE', and 'SKIP'.

TITLE NUMBER	TENURE	IS MULTI ADD	CHANGE INDICATOR	ORIGINAL PROPERTY ADDRESS	INDIVIDUAL ADDRESS	HOUSE NUMBER	STREET NAME 1
BGL182099	Leasehold	MP	A	Block B Watermeadow Court,...	B Block Watermeadow Court,...		Watermeadow Lar
BL166317	Freehold	S	A	Block A, 60-66 East Street, Be...	Block A, 60-66 East Street, Be...	60-66	East Street
BM314724	Leasehold	S	D	Wing Library, Wing Village Hal...	Wing Library, Wing Village Hal...	71	Leighton Road
BM420337							un Furlong
BM472932							eighton Road
BM472979							partmouth Drive
BM88820							epleswell
CL125382							williams Court
CYM102291							enygroes
CYM136374							lysfaen Road
CYM239225							
CYM275583							onway Old Road
CYM306242	Leasehold	S	A	Flat 1, 2 Erw Villas, Conway Ol...	Flat 1, 2 Erw Villas, Conway Ol...		Conway Old Road