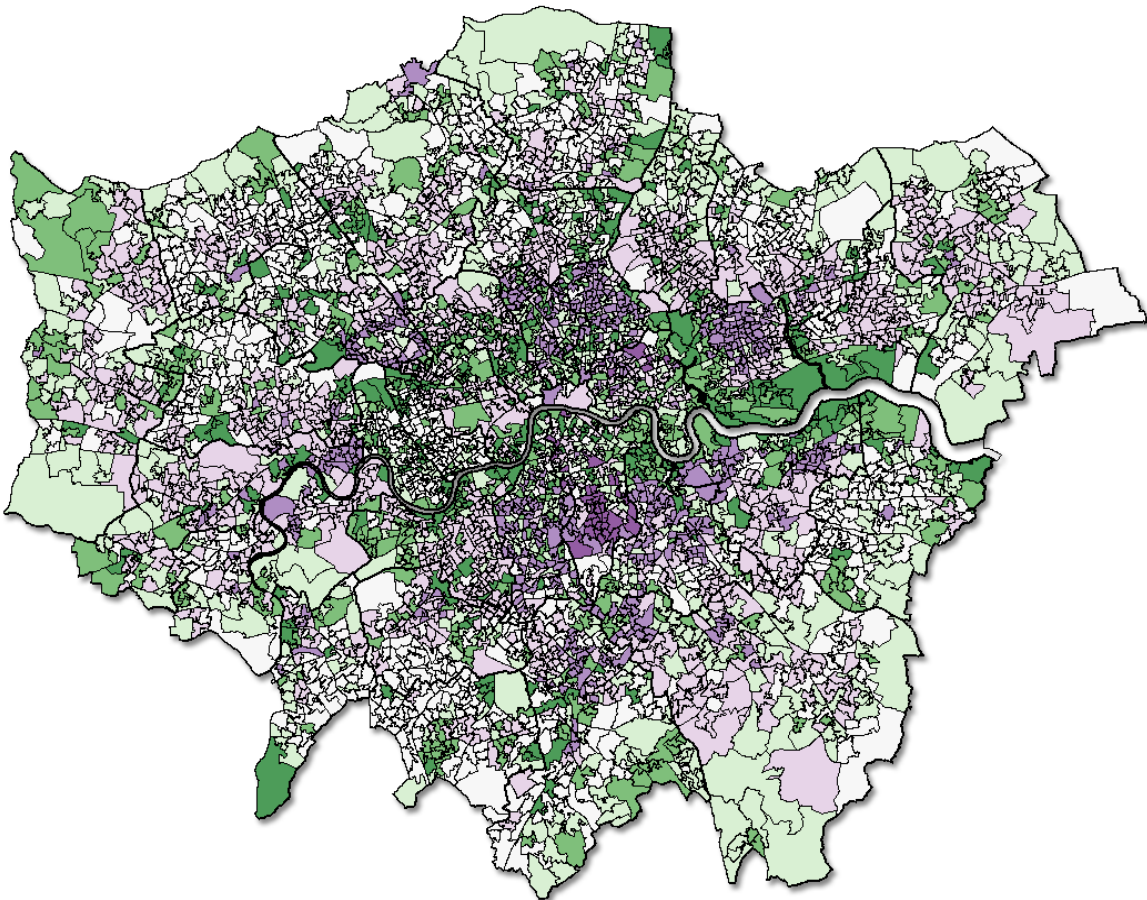**DATADAPTIVE**

Product Summary

Age Profiles of Housing Stock in England and Wales is an analytic data product derived from statistics published by the Valuation Office Agency (VOA). The product is designed to support comparison and mapping of build periods within small geographic areas. The latest version is based on a picture of housing stock at the end of March 2024.

A lookup tool based on this data is available on Datadaptive's website:

https://www.datadaptive.com/aphs/

The data product includes the following metrics for each of 35,672 Lower Super Output Areas (LSOAs):

- property counts (rounded to the nearest 10) for each of 16 build periods covering the years from Pre-1900 to 2024;
- the median build period (the period containing properties in the middle of the distribution of ages for each area);
- the preferred modal build period (the period with the most properties, with proximity to the median used to break ties);
- a Gini Index score that indicates the degree of inequality in the distribution of housing stock across build periods; and
- a measure of whether housing stock is "newer" or "older" relative to national and local authority baselines.

The data product also includes baseline metrics for England, Wales and each local authority district. The metrics are presented in tabular format suitable for use in spreadsheet programs.

Data quality statement

The underlying VOA statistics were published in July 2024 and cover all domestic properties with a Council Tax band at the end of March 2024.

VOA has rounded the property counts for each build period to the nearest 10 to reflect inherent uncertainty and variability in the data collection process.

In its 2024 release, VOA has published single-year counts for the years ending 2009 through 2021 and combined counts for the years 2022 through 2024. Datadaptive has aggregated those counts into five build periods (for years ending 2009-12, 2013-15, 2016-18, 2019-21, and 2022-24). Those counts are a little less precise than those for earlier build periods due to the cumulative effect of rounding.

VOA has no records of dwellings having been built between 1939 and 1945 due to the Second World War. The build period is unknown for about 0.84% of properties overall. For the purpose of assigning percentages to each build period and other calculations Datadaptive has used the total number of properties for

which the build period is known.

Geographic names are from the July 2024 release of ONS's Register of Geographic Codes. These are consistent with the names used in the VOA statistics.

The data in this product has been compiled and/or calculated from data published by VOA and other suppliers for re-use under an open licence. Datadaptive has taken reasonable care in production of the data. However the accuracy and currency of the data and calculations is partly dependent on the input sources.

Datadaptive has applied professional judgement to the selection and design of the added value material in the product and it is a matter for the user to decide whether those measures are suitable for the user's purposes.

Data formats

The data is supplied as two files in CSV format.

For mapping purposes the Baseline file should be appended to Local Authority District boundaries and the LSOA files should be appended to Lower Layer Super Output Areas (December 2021) boundaries. These spatial datasets are available as open data from the ONS Geography site.

Licensing

The data may be re-used under the Creative Commons Attribution License 4.0 (CC-BY). CC-BY is an open data licence that allows almost unrestricted re-use of the data. CC-BY is perpetual, royalty-free, non-exclusive, and compatible with the Open Government Licence.

Attribution

Following is an attribution statement that acknowledges Datadaptive's intellectual property rights as well as those of the third-party providers of open data used in development of the data product. You must include this statement if you publish or redistribute the Age Profiles of Housing Stock data.

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Pricing

Free

Contact details

Email: info@datadaptive.com

Website: www.datadaptive.com/

File Specifications

Age Profiles for Housing Stock in LSOAs

File name: APHS_EW_LSOA_2024
Record count: 35,672
Geographic coverage: England and Wales
File format: CSV

This file is a table of all Lower Super Output Areas (LSOAs) in England and Wales, each attributed with property counts and statistical measures suitable for comparative profiling of the age of housing stock.

Following is a table of the fields provided for each LSOA.

Field	Type	Description
LSOA21CD	Text	Census 2021 code for the LSOA
LSOA21NM	Text	Census 2021 name for the LSOA (including Welsh)
LAUACD	Text	ONS code for the local authority district containing the LSOA
LAUANM	Text	ONS name for the local authority district (including Welsh)
BPMODAL	Text	Modal build period (or the preferred modal build period where there is more than one)
BPMODALP	Integer	Percentage of properties in the modal build period
BPMEDIAN	Text	Median build period, i.e. the period that includes properties in the middle of the age distribution for housing stock in the LSOA
GINIINDEX	Decimal	Gini Index inequality score calculated based on the distribution of property counts among the build periods
NATMEDCOMP	Integer	Difference in number of build periods between the median build period for the LSOA and the national median build period
LADMEDCOMP	Integer	Difference in number of build periods between the median build period for the LSOA and the local authority district median build period
MULTIMODAL	Integer	Count of modal build periods
BPPRE1900	Integer	Count of properties built pre-1900 [1]
BP190018	Integer	Count of properties built in the period from 1900 to 1918 [1]
BP191929	Integer	Count of properties built in the period from 1919 to 1929 [1]
BP193039	Integer	Count of properties built in the period from 1930 to 1939 [1]
BP194554	Integer	Count of properties built in the period from 1945 to 1954 [1]
BP195564	Integer	Count of properties built in the period from 1955 to 1964 [1]
BP196572	Integer	Count of properties built in the period from 1965 to 1972 [1]
BP197382	Integer	Count of properties built in the period from 1973 to 1982 [1]
BP198392	Integer	Count of properties built in the period from 1983 to 1992 [1]
BP199399	Integer	Count of properties built in the period from 1993 to 1999 [1]
BP200008	Integer	Count of properties built in the period from 2000 to 2008 [1]

BP200912	Integer	Count of properties built in the period from 2009 to 2012 [1]
BP201315	Integer	Count of properties built in the period from 2013 to 2015 [1]
BP201618	Integer	Count of properties built in the period from 2016 to 2018 [1]
BP201921	Integer	Count of properties built in the period from 2019 to 2021 [1]
BP202224	Integer	Count of properties built in the period from 2022 to 2024 [1]
BPUNK	Integer	Count of properties for which the build period is unknown [1]
BPTOTAL	Integer	Total of all domestic properties that have a Council Tax band
BPPRE1900P	Decimal	Percentage of properties built pre-1900
BP190018P	Decimal	Percentage of properties built in the period from 1900 to 1918
BP191929P	Decimal	Percentage of properties built in the period from 1919 to 1929
BP193039P	Decimal	Percentage of properties built in the period from 1930 to 1939
BP194554P	Decimal	Percentage of properties built in the period from 1945 to 1954
BP195564P	Decimal	Percentage of properties built in the period from 1955 to 1964
BP196572P	Decimal	Percentage of properties built in the period from 1965 to 1972
BP197382P	Decimal	Percentage of properties built in the period from 1973 to 1982
BP198392P	Decimal	Percentage of properties built in the period from 1983 to 1992
BP199399P	Decimal	Percentage of properties built in the period from 1993 to 1999
BP200008P	Decimal	Percentage of properties built in the period from 2000 to 2008
BP200912P	Decimal	Percentage of properties built in the period from 2009 to 2012
BP201315P	Decimal	Percentage of properties built in the period from 2013 to 2015
BP201618P	Decimal	Percentage of properties built in the period from 2016 to 2018
BP201921P	Decimal	Percentage of properties built in the period from 2019 to 2021
BP202224P	Decimal	Percentage of properties built in the period from 2022 to 2024

[1] Counts above nil but less than 5 are indicated by '-'.

Please see Appendix A for additional notes on the calculation of some of the above fields.

Age Profiles for Housing Stock Baselines

File name: APHS_EW_BASELINE_2024
Record count: 321
Geographic coverage: England and Wales
File format: CSV

This file is a table of all local authority district and unitary councils in England and Wales as at 31/03/2024, each attributed with property counts and statistical measures as baselines for comparative profiling of the age of housing stock.

Following is a table of the fields provided for each district or unitary.

Field	Type	Description
GEOCD	Text	ONS code for the local authority district [2]
GEONM	Text	ONS name for the local authority district (including Welsh) [2]
BPMODAL	Text	Modal build period
BPMODALP	Decimal	Percentage of properties in the modal build period
BPMEDIAN	Text	Median build period, i.e. the period that includes properties in the middle of the age distribution for housing stock in the geographic area
GINIMEDIAN	Decimal	Median of GINIINDEX scores for all LSOAs within the geographic area
BPPRE1900	Integer	Count of properties built pre-1900
BP190018	Integer	Count of properties built in the period from 1900 to 1918
BP191929	Integer	Count of properties built in the period from 1919 to 1929
BP193039	Integer	Count of properties built in the period from 1930 to 1939
BP194554	Integer	Count of properties built in the period from 1945 to 1954
BP195564	Integer	Count of properties built in the period from 1955 to 1964
BP196572	Integer	Count of properties built in the period from 1965 to 1972
BP197382	Integer	Count of properties built in the period from 1973 to 1982
BP198392	Integer	Count of properties built in the period from 1983 to 1992
BP199399	Integer	Count of properties built in the period from 1993 to 1999
BP200008	Integer	Count of properties built in the period from 2000 to 2008
BP200912	Integer	Count of properties built in the period from 2009 to 2012
BP201315	Integer	Count of properties built in the period from 2013 to 2015
BP201618	Integer	Count of properties built in the period from 2016 to 2018
BP201921	Integer	Count of properties built in the period from 2019 to 2021
BP202224	Integer	Count of properties built in the period from 2022 to 2024
BPUNK	Integer	Count of properties for which the build period is unknown
BPTOTAL	Integer	Total of all domestic properties that have a Council Tax band
BPPRE1900P	Decimal	Percentage of properties built pre-1900
BP190018P	Decimal	Percentage of properties built in the period from 1900 to 1918
BP191929P	Decimal	Percentage of properties built in the period from 1919 to 1929

BP193039P	Decimal	Percentage of properties built in the period from 1930 to 1939
BP194554P	Decimal	Percentage of properties built in the period from 1945 to 1954
BP195564P	Decimal	Percentage of properties built in the period from 1955 to 1964
BP196572P	Decimal	Percentage of properties built in the period from 1965 to 1972
BP197382P	Decimal	Percentage of properties built in the period from 1973 to 1982
BP198392P	Decimal	Percentage of properties built in the period from 1983 to 1992
BP199399P	Decimal	Percentage of properties built in the period from 1993 to 1999
BP200008P	Decimal	Percentage of properties built in the period from 2000 to 2008
BP200912P	Decimal	Percentage of properties built in the period from 2009 to 2012
BP201315P	Decimal	Percentage of properties built in the period from 2013 to 2015
BP201618P	Decimal	Percentage of properties built in the period from 2016 to 2018
BP201921P	Decimal	Percentage of properties built in the period from 2019 to 2021
BP202224P	Decimal	Percentage of properties built in the period from 2022 to 2024

[2] Most records are for local authority districts but this dataset also includes records for England, Wales, and England and Wales combined.

Please see Appendix A for additional notes on the calculation of some of the above fields.

Appendix A: Notes on Method

Following are additional technical notes on the calculations used to produce the metrics in the Age Profiles for Housing Stock data product.

1. The median build period (BPMEDIAN) is the period that contains properties that were built in the middle of the age distribution of all housing stock in the LSOA or other geographic area.

2. The modal build period is the period with the highest number of properties. In the vast majority of LSOAs there is only one modal period. However in the remaining LSOAs there are between 2 and 4 modal periods, i.e. build periods that tie for the most properties. For these LSOAs the BPMODAL field indicates a "preferred" modal build period based on proximity to the median build period. The MULTIMODAL field indicates the number of modal build periods. BPMODALP gives the percentage of properties in the modal build period and may be taken as a indication of the extent to which the modal build period is likely to represent the character of housing stock in the area.

3. GINIINDEX is a [Gini coefficient](#) expressed as an index from 0 to 100, where 0 indicates perfect equality in distribution of property counts among the build periods and 100 indicates maximum inequality i.e. all properties in a single build period. This is a useful basis of comparison for some purposes but it is important to understand that distributions with different shapes may have the same or similar Gini coefficients. No weighting has been applied for the number of years in each build period. GINIMEDIAN in the baseline datasets is a median of the scores for all LSOAs within the geographic area.

4. NATMEDCOMP and LADMEDCOMP indicate the difference in number of build periods between the median build period for the LSOA and the median build periods of the baseline national and local authority geographies respectively. An integer above nil indicates the housing stock is generally newer than the baseline and an integer below nil indicates the housing stock is generally older than the baseline.

5. 'Negligible' property counts (above nil but below 5) are suppressed in the underlying VOA statistics. For purposes of calculating percentages and other metrics, and where single-year counts have been aggregated, these negligible amounts were notionally assumed to be 3 in all cases.

6. Percentages for each build period have been calculated from total properties excluding properties for which the build period is unknown. As a result the percentages for all build periods in some areas may not match the total property count given in BPTOTAL.