

Article

# Research Outputs: Subnational stock of secured deposits held by the Tenancy Deposit Protection schemes in England: 2010 to 2017

Using data from Tenancy Deposit Protection (TDP) scheme providers to estimate the number of dwellings that have tenancies with a secure deposit held.

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# 1 . Introduction

Understanding the size of the private rented sector at the local level is important. It enables decision makers and planning authorities to set housing policy, and housing needs in small areas to be better understood. This research article explores the use of Tenancy Deposit Protection data, which is a type of data created for administrative purposes, to create subnational estimates of privately rented residential dwellings.

Currently, local level statistics on the number of privately rented dwellings are available once every ten years from the Census. Official statistics on an annual basis are not yet available. We have previously estimated the [stock of privately rented dwellings at the subnational level](#) using data from the Annual Population Survey (APS). This method produces estimates which have a relatively large amount of uncertainty around them. In this article, we have used tenancy deposit protection data to explore whether we can improve the precision of the estimates in the future. We would like your feedback on the data and methods used to produce these estimates. Please send any feedback to [better.info@ons.gov.uk](mailto:better.info@ons.gov.uk)

In producing this research, we have worked collaboratively with the [Valuation Office Agency](#) (VOA) using data from [Tenancy Deposit Protection](#) (TDP) schemes. The TDP schemes are a government approved way of securely storing deposits paid by tenants living in privately rented accommodation. They were introduced in 2007. This article presents our analysis of over six million TDP scheme records from 2010 (when robust data is first available) to 2017. However, it is important to note that Tenancy Deposit Protection (TDP) data doesn't cover the whole of the private rented sector.

Information is provided on the methodology used to process and cleanse the data to enable it to be fit for purpose for statistical use. The article also looks at the broader research conclusions that can be drawn, which include reflections on the challenges and opportunities of using administrative data sources to improve our understanding of privately rented residential dwellings at the local level.

## 2 . Summary of research conclusions

Tenancy Deposit Protection (TDP) data doesn't cover the whole of the private rented sector and so the size of the private rented sector cannot be directly determined from TDP data alone. When compared with official statistics, the TDP data underestimates the size of the private rented sector.

Nevertheless, our research shows that estimates from TDP data are getting closer to the existing official statistics over time. Indeed, the geographical and property type patterns in the TDP data were consistent with other data sources, suggesting the TDP data provides a broadly representative overview of these characteristics of the private rented sector. This is encouraging and we will continue to develop the methods used to produce sub-national dwelling stock by tenure estimates by including TDP data alongside existing data sources.

## 3 . Summary of data analysis

- Since 2010, there have been year-on-year increases in the number of privately rented dwellings with a secured deposit.
- Out of the total occupied dwellings in England, 9.4% had a secured deposit in 2017; this compares with official statistics which show that 18.4% of occupied dwellings were privately rented in 2017, reflecting that the Tenancy Deposit Protection (TDP) data doesn't cover the whole of the private rented sector.
- TDP data provides a similar property type distribution to official statistics, for example, TDP data shows that 41.9% of dwelling with secured deposits were flats or maisonettes while Census data shows this as 43.9%.
- There are similarities in the geographical distribution of the percentage of privately rented dwellings between the the TDP data and ONS estimates; in both data sources, the highest percentages were generally found in London, South East and East of England.

## 4 . Disclaimer and wider context

Statistics presented in this research output describe the number of addresses against which securely held deposits were recorded. They do not describe the overall number of addresses in the privately rented sector because not all dwellings in the private rental sector have securely held deposits (see Section 7). We can draw some conclusions from these statistics because the data appear representative of geographical and property type patterns in the private rental sector. However, when interpreting these results, it must be noted that the data do not cover the whole private rental sector.

In terms of the wider context, there is not a register of privately rented dwellings in England that can be used to identify the number of privately rented dwellings, so estimates are required. The latest official statistics available on the number of privately rented dwellings at the subnational level are from the [2011 Census](#). The private rented sector is known to have changed substantially since then, so more timely estimates will better help inform planning and decision making.

We have previously estimated the [stock of privately rented dwellings at the subnational level](#) by using data from the Annual Population Survey (APS). This method requires an assumption that households sampled are equivalent to occupied dwellings, but there are definitional differences between households and dwellings. For example, the tenure of some households may differ from the tenure of the dwellings in which they reside. There was also a large degree of uncertainty around the estimates produced from survey data in our previous [Research Output](#), so we have explored the use of new methods and data sources to try an improve the precision of these statistics.

We will look to continue to develop the methods used to produce sub-national dwelling stock by tenure estimates by including Tenancy Deposit Protection (TDP) data alongside existing data sources.

For official statistics on dwelling stock by tenure, the Ministry of Housing, Communities and Local Government produces estimates of the [privately rented dwelling stock at the national level \(XLS, 37KB\)](#), or the total private sector stock for each [local authority district \(XLS, 597KB\)](#). However, these do not cover the small areas that we are estimating in this report.

## 5 . Methodology summary

We have worked collaboratively with Valuation Office Agency (VOA) to process administrative data from the three Tenancy Deposit Protection (TDP) schemes in England to identify the number of residential dwellings that are privately rented with a secured deposit.

The type of home a person lives in is referred to a dwelling, which means a unit of accommodation. A dwelling usually relates to an individual residential address. By linking the TDP data to the [National Address Register](#) we were able to:

- identify addresses against which a secured deposit was held and assign these a “Unique Property Reference Number” (UPRN)
- remove duplicates; this allowed the de-duplication of secured deposits for a given address
- identify the geographical areas of a secured deposit
- remove deposits that were not in England or referred to properties which do not have a residential element

This approach allowed us to create a picture of the number of residential dwellings in the private rented sector, although there may be multiple tenancies within a dwelling. While there is potentially more analysis that could be undertaken with this dataset (for example, the number of multiple rooms that are privately rented within one address) this analysis was undertaken to explore information about the number of dwellings in the private rented sector.

Using administrative data for statistical purposes means that data processing and cleansing needs to be undertaken as part of the process for identifying whether the data is fit for purpose. For this analysis, we had to understand and make decisions on records with invalid addresses or missing tenancy dates, records relating to addresses at non-residential or communal establishments, and the time at which the stock of secured deposits would be recorded. Further details about the TDP data are available in Section 7 of this article and details about the decisions we made to produce the estimates are in Section 8. Section 8 also provides information on the method we used to link the TDP data with other data sources to improve our understanding of property types in the private rented sectors.

We would like your feedback on the data and methods used to produce these estimates. Please send any feedback to [better.info@ons.gov.uk](mailto:better.info@ons.gov.uk)

## 6 . Research findings

People live in three main types of accommodation: owner-occupied, privately rented and social housing. These are commonly referred to as tenure. The private rented sector has more than doubled its share of total dwellings between 2000 and 2017 and has increased by over 2.5% since 2010 in England overall [Dwelling stock by tenure, Ministry of Housing, Communities and Local Government \(MHCLG\) \(xls, 597KB\)](#).

Whilst there are official statistics on the size of the private rental sector at the national level, this research provides the number of privately rented dwellings with a secured deposit at both the national and subnational levels. Statistics for subnational areas can show the geographical distribution of privately rented dwellings and highlight changes in small areas. By linking Tenancy Deposit Protection (TDP) schemes data to Energy Performance Certificate (EPC) data, we have also provided analysis of the breakdown of privately rented dwellings by property type, allowing comparisons to be made with existing data sources.

To investigate the feasibility of using the TDP data to directly estimate the number of dwellings that are privately rented for areas within England, we assessed the coverage of tenancies with a secured deposit. To understand the coverage of the overall private rented stock to which the TDP data relates, we have compared the TDP data with MHCLG statistics, Office for National Statistics (ONS) estimates and Census private rental stock for 2011.

This section is split into four sub-categories, which provide a description of the number of privately rented dwellings with a secured deposit, small area analysis of the data, the mix of property types and finally our assessment of the coverage of TDP data.

## Number of privately rented dwellings with a secured deposit

Figure 1 shows the size of the private rented sector according to addresses recorded in the TDP data between 2010 and 2017.

**Figure 1: Number of privately rented dwellings with a secured deposit**

England, 30 September 2010 to 2017

### Figure 1: Number of privately rented dwellings with a secured deposit

England, 30 September 2010 to 2017



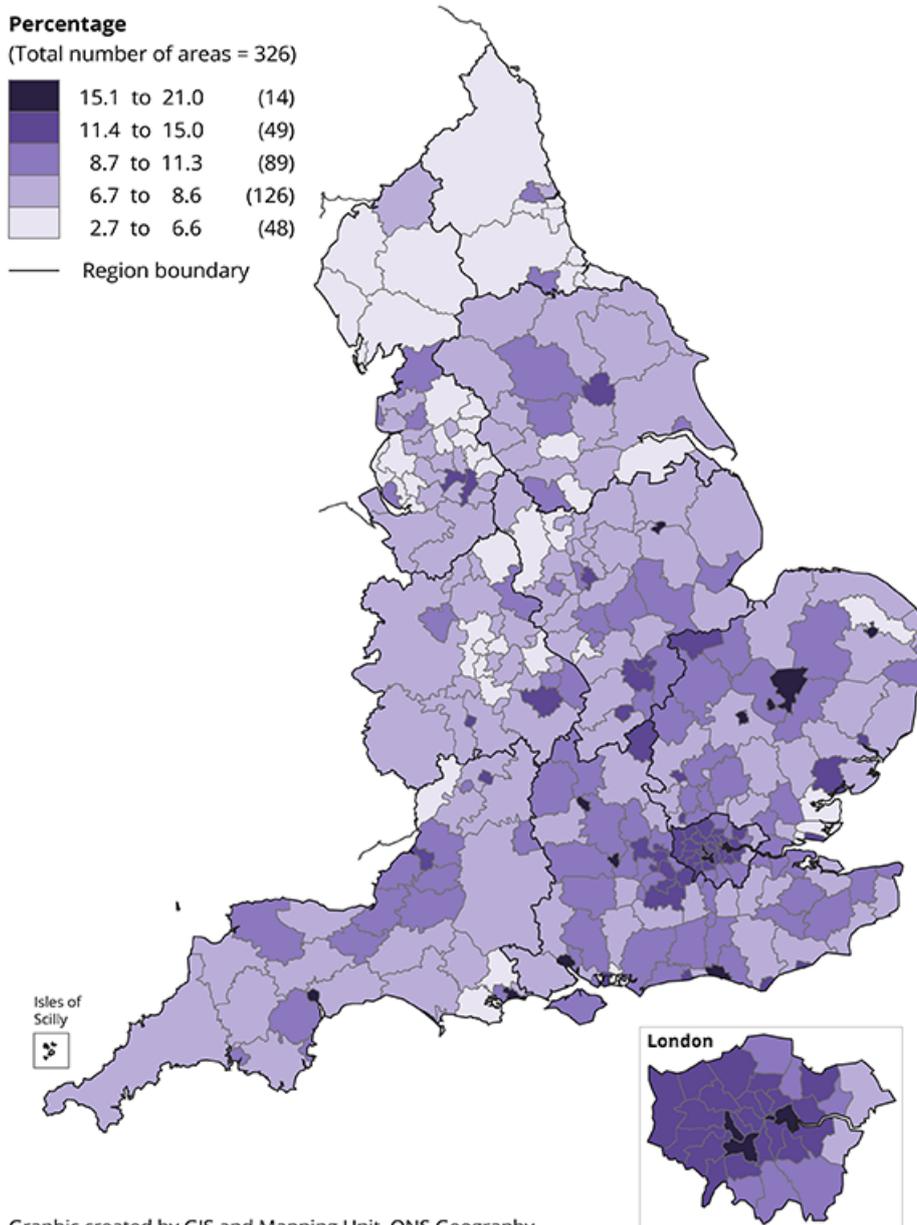
**Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data**

There was an increase in these dwellings every year up to 2017, but the percentage increase has lowered each year, with the biggest year-on-year increase of 55.2% between 2010 and 2011. Overall, there was an increase of 1.5 million records between 2010 and 2017, but it is hard to determine whether this indicates an increase in the number of properties in the private rental sector, or whether this is due to a larger uptake of secured deposits that are recorded in the TDP data. TDP schemes were introduced for assured shorthold tenancies that started after [6 April 2007](#), and so the likelihood of a secured deposit appearing in the TDP data increases annually.

Figure 2 shows a map of the percentage of privately rented dwellings with a secured deposit, out of the total number of occupied dwellings, by local authority district, for England as at 30 September 2017. The total number of occupied dwellings is derived from the Ministry of Housing, Communities and Local Government's (MHCLG) [live tables on dwelling stock](#), minus vacant dwellings.

**Figure 2: The percentage of privately rented dwellings with a secured deposit, out of the total number of occupied dwellings, by local authority district**

England, 30 September 2017



Graphic created by GIS and Mapping Unit, ONS Geography  
Source: Ministry of Housing, Communities and Local Government, Deposit Protection Scheme; My Deposits; Tenancy Deposit Scheme  
Contains OS data © Crown copyright 2018

**Source: Ministry of Housing, Communities and Local Government – Live tables on dwelling stock, Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data**

The local authorities with the higher percentages of privately rented dwellings with a secured deposit are concentrated mainly in London and the South East of England. Out of the 50 local authorities with the highest percentage, 49 were classified as Urban according to [ONS Rural Urban Classification \(2011\)](#), with the exception of Forest Heath, which is mainly rural, but had a percentage of 16.8%. The local authority with the highest percentage was Cambridge, with 21.0% of all occupied dwellings being privately rented with a secured deposit according to the TDP data.

## Analysis of small geographic areas

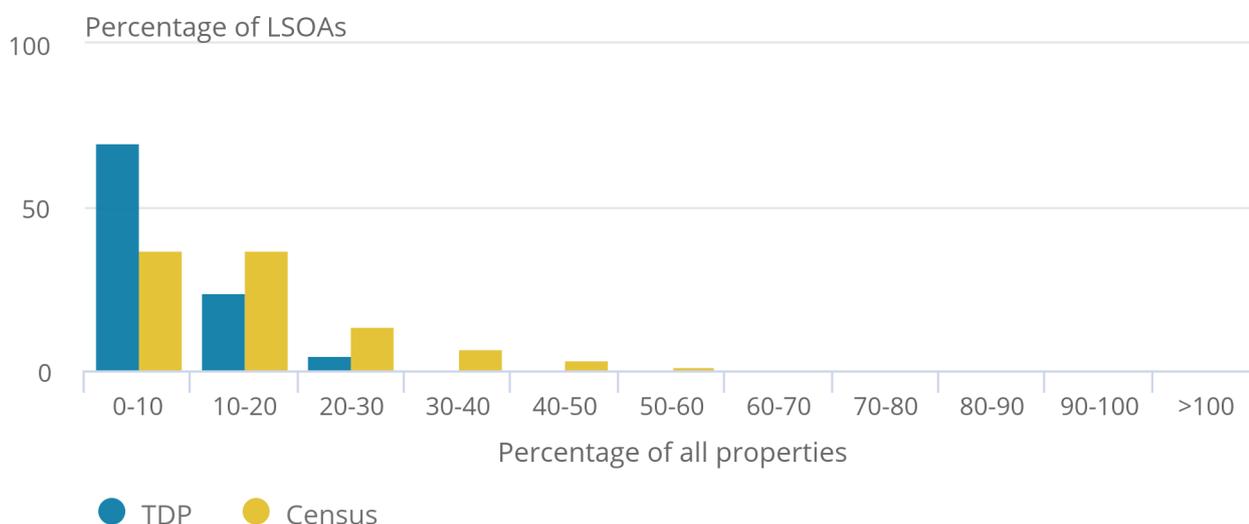
By expressing the number of privately rented dwellings with secured deposits as a percentage of all properties, we can compare the results with the 2011 Census, which provides a breakdown of the tenure of households in England. The Census provides the most complete measure of tenure as at 2011. Figure 3 shows the percentage of Lower layer Super Output Areas (LSOAs) which fall within in each band of the percentage of all properties that are rented with a secured deposit, comparing Census with TDP data.

**Figure 3: Distribution of privately rented dwelling in the TDP data compared with the 2011 Census**

England, 30 September 2017

### Figure 3: Distribution of privately rented dwelling in the TDP data compared with the 2011 Census

England, 30 September 2017



Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data, Valuation Office Agency – Council Tax, Office for National Statistics – 2011 Census

#### Notes:

1. Census data is for 2011, whereas TDP data used is for 2017.
2. TDP data refers to tenancies with a secured deposit out of the total number of properties taken from [Valuation Office Agency Council tax](#) data as at 31 March 2017, which are the only official statistics available for small geographical areas
3. Census data refers to the total number of privately rented dwellings out of the total stock

Figure 3 shows that the majority of LSOAs have between zero and 10% of tenancies with secured deposits, whereas the 2011 Census shows that LSOAs are more likely to contain between 10% and 20% of privately rented properties. This seems plausible because tenancies with secured deposits do not make up the full private rental market, which means that the Census covers more than the TDP data.

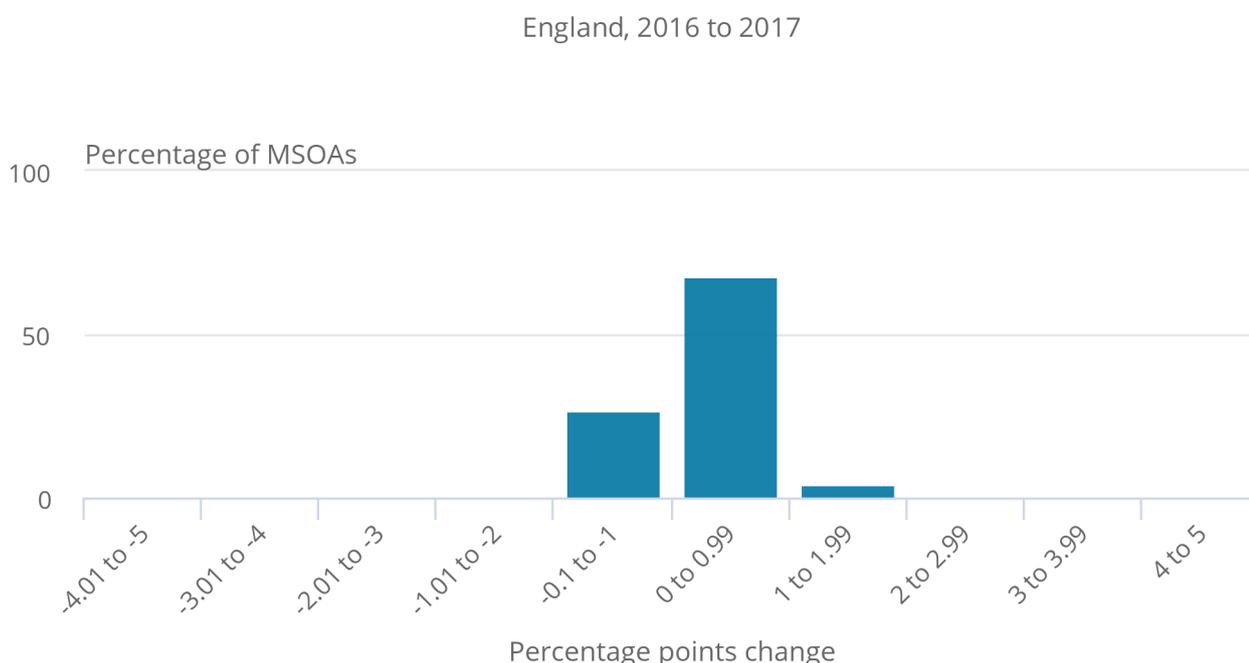
Figure 3 helps to indicate that you cannot simply take data of secured deposits and use this to directly estimate the size of the private rental sector.

We could look at year-on-year changes in the number of privately-rented dwellings with secured deposits as a percentage of all properties for LSOAs, but as this is a very small geography the data are more likely to be volatile. Therefore, we have explored year-on-year changes for a larger geography: Middle layer Super Output Areas (MSOAs). Figure 4 shows the percentage of MSOAs that fell within each band of percentage points change in the number of privately rented dwellings with a secured deposit, as a percentage of all properties, between 2016 and 2017.

**Figure 4: Distribution of the percentage points change for the number of privately rented dwellings with secured deposits out of all properties, in Middle layer Super Output Areas**

England, 2016 to 2017

Figure 4: Distribution of the percentage points change for the number of privately rented dwellings with secured deposits out of all properties, in Middle layer Super Output Areas



**Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data, Valuation Office Agency – Council Tax**

Figure 4 shows that 94.7% of all MSOAs had a percentage points change of less than 1% in either direction, between 2016 and 2017. All MSOAs had a year-on-year change of between plus or minus 5 percentage points. There were 71.4% of MSOAs that had an increasing percentage of privately rented dwellings with secured deposits between 2016 and 2017. This highlights that the percentages of privately rented dwellings with a secured deposit are relatively stable even when looking at small areas.

## Number of privately rented dwellings with a secured deposit, by property type

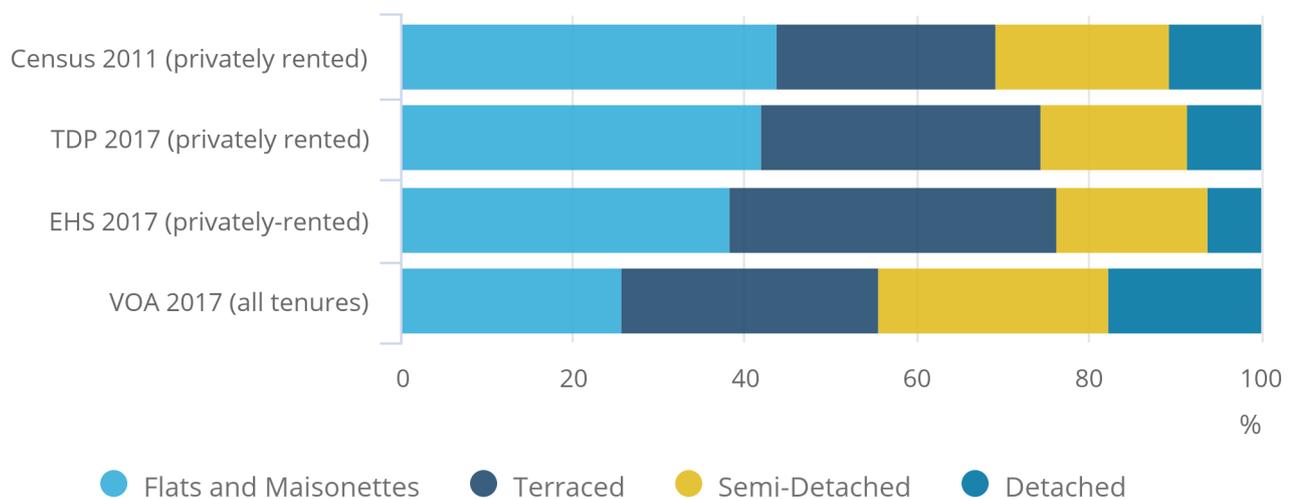
The number of privately rented dwellings with a secured deposit has been broken down into property type where possible. To indicate the extent to which the property types in the TDP data reflect the overall private rental market, comparisons can be made with other data sources. For example, the property type breakdown of privately rented dwellings in Census in 2011, or the distribution of the total stock for all tenures in Valuation Office Agency (VOA) Council Tax data, can provide comparators. Figure 5 shows the distribution of the four main property types in these four data sources and highlights the difference in distribution when looking at only the private rental market, in comparison with all tenures combined.

**Figure 5: Distribution of the four main property types by data source**

England, 2011 and 2017

Figure 5: Distribution of the four main property types by data source

England, 2011 and 2017



Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data, Valuation Office Agency – Council Tax, Office for National Statistics – 2011 Census, Ministry of Housing, Communities and Local Government – English Housing Survey, Energy Performance Certificate

**Notes:**

1. All sources are broken down by property type as a percentage of the total of these categories added together, other categories are not included in this graph.
2. Excluded categories were Bungalows, Annexes, Other and Unknown for VOA data; Bedsits, Unknown and Not provided for TDP data; and Bungalows for EHS data
3. TDP refers to the property type of the tenancies with secured deposits, Council Tax refers to the breakdown for all properties so includes all tenures, Census and EHS refers to the breakdown of property type by privately rented households only.
4. TDP data is as at 30 September 2017, Census data is for 2011, TDP and Council Tax data is as at data as at 31 March 2017. EHS data presented for 2017 are based on fieldwork carried out between April 2016 and March 2018 (a mid-point of April 2017).

Across all tenures in the entire dwelling stock (according to VOA Council Tax data), the most common property type was terraced properties. However, the distribution in the private rental sector differs from that of the overall dwelling stock, which is shown by TDP, EHS and Census data that only look at privately rented dwellings, in that flats or maisonettes was the most common type. All four data sources have the lowest percentage for detached properties, although the percentage is generally lower for the sources looking at only the privately rented dwellings, suggesting that fewer properties in the private rental sector are detached compared with other tenures. TDP, EHS and Census data follow the same ranking in terms of property types, but the distribution is different when looking at all tenures together.

Figure 5 suggests that the TDP data provides an accurate distribution of property types in the private rented sector when compared with other official statistics.

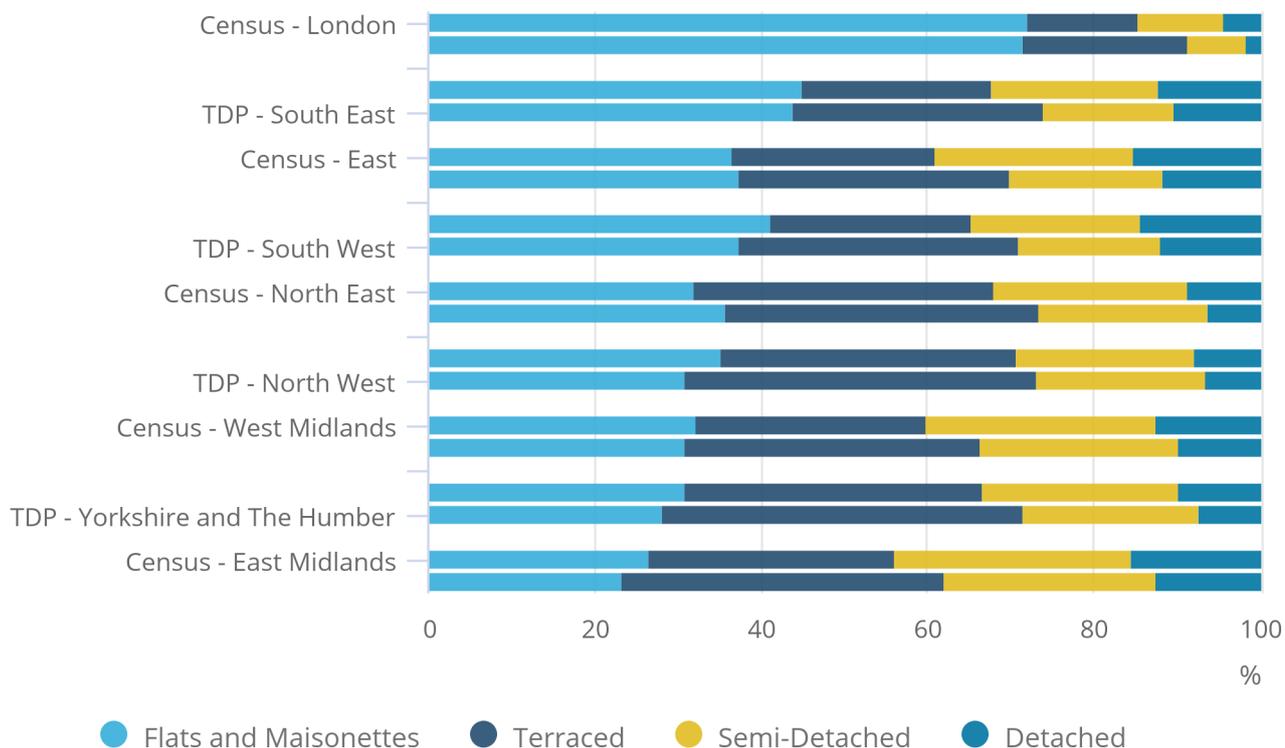
In 2017, of the tenancies with a secured deposit that had a valid property type, 41.9% were flats or maisonettes, whilst 8.3% were detached properties. However, the property type distribution is likely to differ not only by tenure but also geographical location. Figure 6 looks at the property type distribution for each English region in 2017, and provides a comparison with 2011 Census data.

**Figure 6: Distribution of property type, by region**

England, 2011 (Census) and 30 September 2017 (TDP)

**Figure 6: Distribution of property type, by region**

England, 2011 (Census) and 30 September 2017 (TDP)



Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data, Office for National Statistics – 2011 Census, Ministry of Housing, Communities and Local Government – Energy Performance Certificate

**Notes:**

1. All sources are broken down by property type as a percentage of the total of these categories added together, other categories are not included in this chart
2. The order of regions in this chart are sorted by the percentage of Flats or Maisonettes in TDP data
3. TDP refers to the property type of the tenancies with secured deposits, Census refers to the breakdown of property type by privately rented households only.
4. Census data is 2011, whereas TDP and VOA data is for 2017.

Figure 6 shows that London was the region with the largest percentage of flats and maisonettes, with 71% in this category. This was over 1.5 times the percentage of the region with the second largest percentage of flats and maisonettes, which was 44% in the South East. A similar pattern is shown in the 2011 Census data, equivalent figures of 72.1% and 44.9% for flats and maisonettes in London and South East. Detached properties were consistently the least common property type for tenancies with secured deposits, ranging from 1.7% in London in 2017, to 12.6% in East Midlands.

Between 2016 and 2017, Richmond upon Thames had the largest increase in flats and maisonettes, with 901 more in the private rented sector with a secured deposit in 2017. Over this same time period, VOA Council Tax data shows that there were 520 additional flats and maisonettes in all tenures, which is 381 fewer than the number of additional flats and maisonettes in the private rental sector. The larger increase shown in flats and maisonettes in the private rental sector compared with all tenures is likely to be caused by the increasing uptake of secured deposits recorded in the TDP data over the year. There was a similar trend for the local authorities that had the largest increase in terraced (Liverpool) and detached (Elmbridge) properties, in that the increases in the number of TDP records for these property types were greater than the total number of additional properties for the given property type according to VOA Council Tax data.

Milton Keynes had the largest increase in semi-detached properties with a secured deposit between 2016 and 2017, with 165 additional records of secured deposits, but there were a total of 290 additional semi-detached properties.

## **Coverage of all privately-rented stock from Tenancy Deposit Protection scheme data**

The Ministry of Housing, Communities and Local Government (MHCLG) publishes [England level statistics \(xls, 37KB\)](#) on the number of dwellings that are “Rented Privately or with a job or business”, which we can use to make comparisons with TDP data for England. The MHCLG statistics include vacant dwellings, so we calculated MHCLG privately rented stock minus an estimate of privately rented vacant dwellings to provide an estimate of the occupied private rental stock which is comparable to TDP data. We have expressed both the number of privately rented dwellings with a secured deposit (TDP data) and MHCLG occupied private rental stock as a percentage of MHCLG’s total occupied dwelling stock (dwelling stock minus all vacants), so comparisons can be made.

At 30 September 2017, the number of privately rented dwellings with a secured deposit (from TDP data) was equivalent to 9.4% of the total occupied dwelling stock in England. At 1 April 2017, the number of occupied privately rented dwellings (from MHCLG data) was equivalent to 18.4% of the total occupied dwelling stock in England. The differences can be explained by the TDP data not covering the full private rental market, such as tenancies that do not have a deposit and tenancies with rent prices over £100,000 per year, which are not included in the TDP data. In addition, our method filters out tenancies that do not have valid addresses (15.1% of the TDP data) and records of secured deposits are only counted as at 30 September each year, which reduces the total number of deposits used in this output by a further 10.7% of the total number of TDP records. The MHCLG statistics are largely comparable in that rentals are taken as at one point in time, but that point in time is as at 1 April.

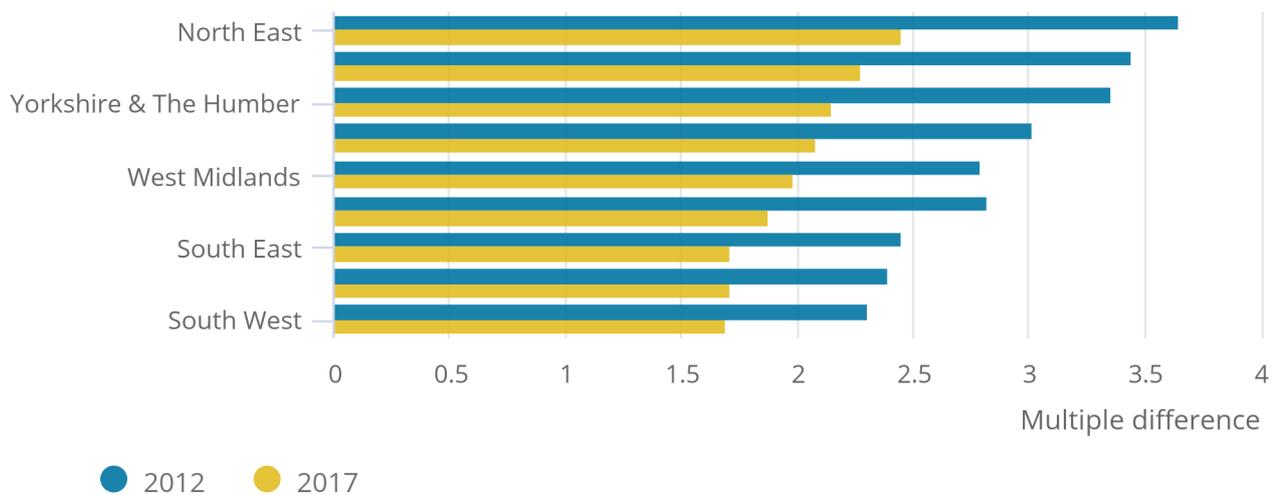
Figure 7 shows the multiples by which the number of privately rented dwellings with a secured deposit differ from the number of total occupied privately rented dwellings by region, as a percentage of the total occupied dwelling stock.

**Figure 7: Number of times greater the MHCLG estimates were than the TDP estimates**

English regions, 2012 and 2017

Figure 7: Number of times greater the MHCLG estimates were than the TDP estimates

English regions, 2012 and 2017



Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data, Ministry of Housing, Communities and Local Government – Live tables on dwelling stock

Notes:

1. TDP Stock refers to the number of residential tenancies with secured deposits
2. MHCLG privately-rented percentage is the total number of [privately rented dwellings](#) minus vacant dwellings from the [English Housing Survey \(EHS\)](#).
3. Both TDP stock and MHCLG privately-rented stock (minus vacants) are taken as a percentage of MHCLG's total regional stock minus vacant dwellings by using data from the EHS
4. TDP stock is as at 30 September, MHCLG privately-rented stock is as at 1 April
5. EHS vacancy rates are not currently available for 2017, so the 2016 vacancy rates have been applied to MHCLG data for this year
6. The order of regions in this chart are sorted by the Multiple difference in 2017

Figure 7 shows that for every region there is a decrease over time in the number of times greater the MHCLG privately rented stock percentage is than the TDP estimate of privately rented. This suggests that the TDP estimate has increased in accuracy over time. For example, for 2012 in the North East the MHCLG estimate of privately rented stock was 3.65 times the TDP privately rented stock. In 2017, this was 2.45 times the TDP estimate.

Another data source to which these estimates can be compared is our previously published research outputs on [subnational dwelling stock by tenure](#), which uses survey data from the [Annual Population Survey](#) (APS) to estimate the breakdown of tenure. The data for 2017 from the Research Output is based on a calendar year instead of a point in time so this is not a direct comparison, but it can give us an indication of comparability in the privately rented stock percentages of the two data sources.

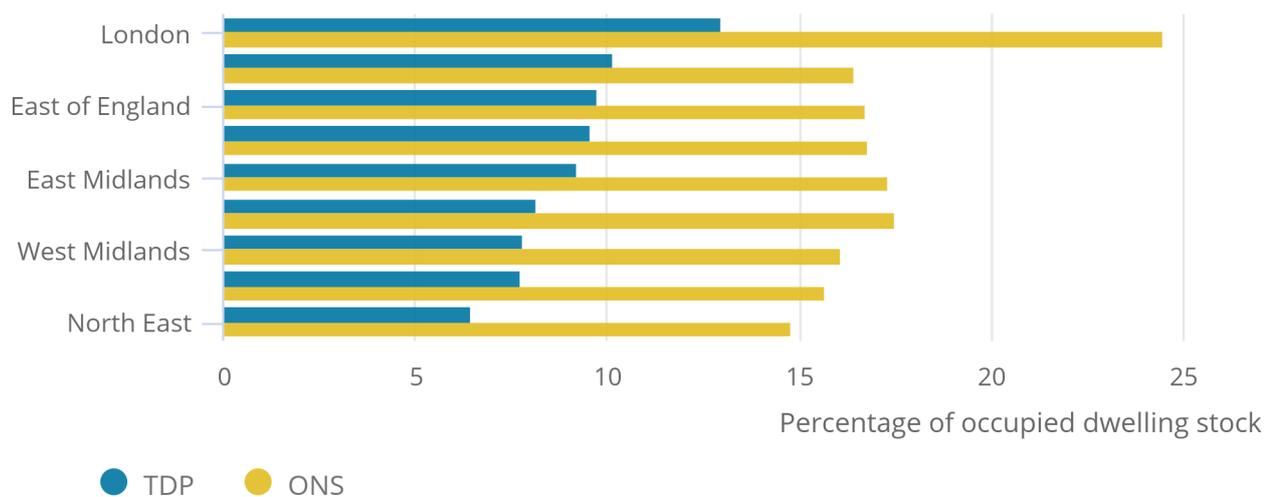
Figure 8 compares the percentage of tenancies with a secured deposit with the percentage of privately rented dwellings from the ONS research output.

**Figure 8: Comparison between TDP stock and ONS privately-rented stock percentages out of the total occupied dwelling stock, by region**

England, 2017

Figure 8: Comparison between TDP stock and ONS privately-rented stock percentages out of the total occupied dwelling stock, by region

England, 2017



Source: Deposit Protection Scheme, My Deposits, Tenancy Deposit Scheme - Tenancy Deposit Protection scheme data, Office for National Statistics – Subnational dwelling stock by tenure estimates, Ministry of Housing, Communities and Local Government – Live tables on dwelling stock, English Housing Survey

Notes:

1. TDP data is as at 30 September 2017, whereas ONS data is for calendar year 2017
2. The order of regions in this chart are sorted by the TDP percentage.
3. The ONS percentages are not directly comparable to the published data in our [Research Output](#) as this includes vacant dwellings. An adjustment has been made to remove vacant dwellings, by multiplying the stock by the regional occupancy rate from the English Housing Survey (EHS).
4. EHS vacancy rates are not currently available for 2017, so the 2016 vacancy rates have been applied for this year
5. Both data sources are calculated as a percentage of the total occupied dwellings stock for the region. This is calculated by using the total dwelling stock (including vacants) from MHCLG [Table 109](#), and deducting the number of vacant dwellings from MHCLG [Table 615](#).

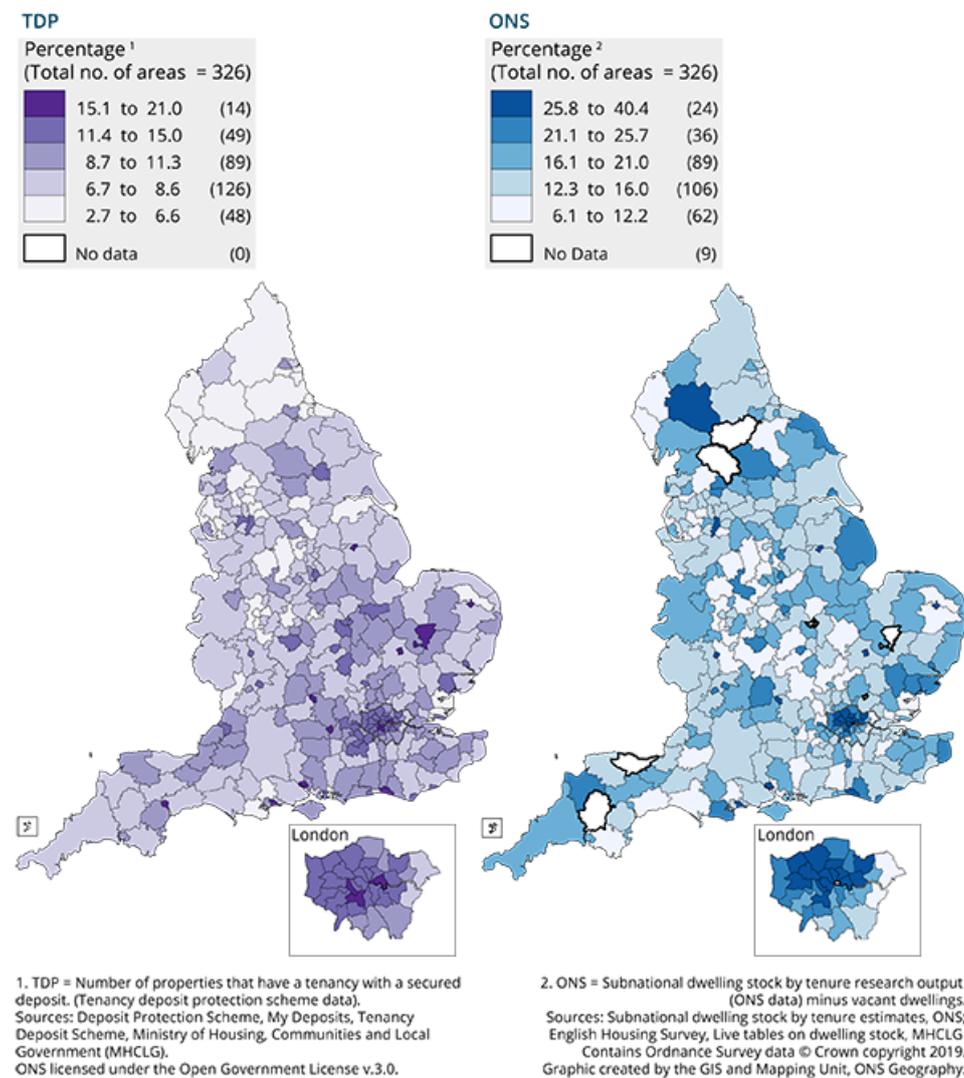
Figure 8 shows that the percentage of tenancies with a secured deposit was less than two-thirds of the ONS privately rented percentage for all regions. However, the order of regions in terms of highest percentage of privately rented dwellings is similar, with London being the highest and North East being the lowest. We would expect differences in the data as TDP stock is based at one point in time (30 September 2017), whereas the ONS private rental stock is derived using survey data from the APS, the stock covers a full calendar year for 2017. In the TDP data we removed 10.7% of secured deposits because the dates did not span 30 September of any year between 2010 and 2017, which explains some of the difference between data sources.

However, even after making allowances for the differences between the two sources, the TDP data does not appear to produce a comprehensive estimate of the percentage of privately rented dwellings.

Figure 9 compares the geographical distribution of the percentage of privately rented dwellings between the two data sources, when expressing as a percentage of the total occupied dwelling stock.

**Figure 9: The percentage of privately rented dwellings, out of the total occupied dwelling stock, by local authority district**

England, 2017



**Source: Deposit Protection Scheme, My Deposits, Tenancy Deposit Scheme - Tenancy Deposit Protection scheme data, Office for National Statistics – Subnational dwelling stock by tenure estimates, Ministry of Housing, Communities and Local Government – Live tables on dwelling stock, English Housing Survey**

**Notes:**

1. TDP data is as at 30 September 2017, whereas ONS data is for calendar year 2017
2. The ONS stock used to create this map is not directly comparable to the published data in our [Research Output](#) as this includes vacant dwellings. An adjustment has been made to remove vacant dwellings, by multiplying the stock by the regional occupancy rate from the English Housing Survey (EHS).
3. EHS vacancy rates are not currently available for 2017, so the 2016 vacancy rates have been applied for this year
4. Both maps have the total occupied stock as the denominator. This is calculated by using the total dwelling stock (including vacants) from MHCLG [Table 100](#), and deducting the number of vacant dwellings in a local authority from MHCLG [Table 615](#).

Figure 9 shows that there are similarities in the geographical distribution of the percentage of privately rented dwellings between the two data sources. Out of the 50 local authority districts with the highest percentage of TDP privately rented dwellings, 30 of these were also in the top 50 based on the ONS privately rented data. In both data sources, the highest percentages were generally found in London, South East and East of England. This suggests that the TDP data provides a geographically representative view of the distribution of tenure.

## 7 . Background to Tenancy Deposit Protection data

The Tenancy Deposit Protection scheme was introduced on 6 April 2007. Its introduction means that for homes in England privately rented after this date, if a deposit is taken then it must be protected with a government-approved [Tenancy Deposit Protection \(TDP\) scheme](#). There are three different providers available: Deposit Protection Scheme (DPS), My Deposits and Tenancy Deposit Scheme (TDS).

The scheme is authorised by Ministry of Housing, Communities and Local Government (MHCLG) and the Valuation Office Agency (VOA) has access to data from the three schemes to support their statutory Rent Officer work. We are working collaboratively with the VOA to produce statistics on the size of the private rental sector and have a Memorandum of Understanding (MoU) with VOA to use the TDP data.

The data provided to VOA by the TDP schemes has the following coverage:

- Assured Shorthold Tenancies (ASTs) in England
- ASTs with a rental value of up to £100,00 per year
- tenancies that are protected through either insured or custodial deposit protection
- residential, commercial and communal establishments that have residential tenancies with a secured deposit; this can include commercial addresses with residential units contained within

This means that the TDP data available for this analysis does not cover the whole of the private rented sector. It is also worth noting that Landlords can also voluntarily protect non-ASTs, but these are not included in the TDP data.

Another use of TDP data is as a sample for the English Private Landlords Survey commissioned by MHCLG. This is a national survey of landlords and letting agents who own and/or manage privately rented properties in England

## 8 . What decisions did we make?

To calculate the number of privately rented dwellings with secured deposits, we used data from the three Tenancy Deposit Protection (TDP) schemes: Deposit Protection Scheme (DPS), My Deposits and Tenancy Deposit Scheme (TDS), supplied by the Valuation Office Agency (VOA). We made decisions about how to process the data to enable the calculation of estimates of the private rented sector. Some decisions were required because of the format of the data, while others were based on a judgement of how best to process the data to reflect the private rented sector.

The data from the TDP schemes cover properties in England and cover any property that has a secured deposit for tenancy at that address. The TDP data covers three main types of property: residential, commercial with residential aspects, and communal establishments, of which we are interested in the first two.

Table 1 shows the filtering process we applied to the records of secured deposits to create the dataset for analysis. We started with around 11.2 million records in total, but the filtering process resulted in a dataset for analysis containing around 6.5 million records. Each of these records spans 30 September, which is the annual reference point. The dataset starts from 2010, which is the first year for which we have meaningful data.

Table 1: Data parsing process overview

Step	Type of remaining records	Reduction of records as a percentage of the original 11.2 million records
Step 1	Secured deposits 11.2 million tenancies	Invalid addresses 15.1%
Step 2	Secured deposits with Unique Property Reference Number (UPRN)	Not in England <0.1%
Step 3	Secured deposits with valid addresses in England	Communal 4.8%
Step 4	Residential units	Duplicate Unique Property Reference Number (UPRN), start and end date 2.5%
Step 5	Secured deposits with no exact duplicates	Overlapping dates accounting for status 8.3%
Step 6	One secured deposit per address per year	Records that do not span 30 September 10.7%
Step 7	Secured deposits at 30 September 6.5 million tenancies	

Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data

## Valid residential addresses

This section refers to decisions behind Steps 1 to 3 of Table 1. To identify valid addresses and distinguish between different dwellings, the address variables in the TDP data were linked to the [National Address Register](#) to assign a Unique Property Reference Number (UPRN) to each record. There were around 11.2 million TDP records provided between September 2010 and September 2017, and of these:

- 1.7 million records (15.1%) did not have valid addresses that could be allocated a UPRN, therefore were removed from the dataset (Step 1, Table 1)
- 2,512 (less than 0.1%) records did not have an address recorded in England, therefore were removed (Step 2, Table 1)
- 533,052 records that refer to non-residential or communal establishments, which were removed taking away 4.8% of the total number of TDP records (Step 3, Table 1)

Removing these records ensured that only one record per residential dwelling in England was included in this analysis.

## Duplicate or unique?

This section refers to decisions behind Steps 4 and 5 of Table 1. Multiple tenancy records for one UPRN at a given point in time may occur if there are multiple tenancies within the dwelling, and the deposits are separated. In addition, this could be the case if the deposit has not been returned to a previous tenant and therefore the tenancy may appear as still open, even when it has been superseded by a new tenancy. We refer to these multiple tenancies as duplicates. In this research we were analysing dwellings, which refers to the physical unit of accommodation. Therefore, it is important that we remove duplicate tenancies for a UPRN at any given point, so that we are not overcounting the number of dwellings in the private rental sector.

We removed duplicates by using the combination of the date variables and the status variable in the TDP data. Each tenancy record has a start date and an end date if the tenancy has finished and the deposit has been claimed. The status variables refer to the status of the deposit as at 30 September 2017. In carrying out de-duplication of these records, we removed:

- 283,283 records (2.5%) due to there being multiple records with the same UPRN, start date and end date (Step 4, Table 1)
- A further 8.3% of initial records were removed due to having the same UPRN and overlapping dates when accounting for the status variable, with at least one other record (Step 5, Table 1)

Figures 10 and 11 provide flow-charts which show the process used for de-duplication, starting with make sure dates do not overlap for a given UPRN, and then applying the status variable.

### Figure 10: De-duplication of deposit records using dates

Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data

### Figure 11: Processing remaining records according to status of deposit

Source: Deposit Protection Scheme, My Deposits and Tenancy Deposit Scheme – Tenancy Deposit Protection scheme data

Carrying out this de-duplication resulted in there being only one record per UPRN at any given point in time, and the retained records relate to the total length of tenancies between 2010 and 2017.

## Point-in-time stock of secured deposits

This section refers to decisions behind Step 6 of Table 1. The tenure of a dwelling can change over time, and even within a year, which makes it generally more accurate to report a stock figure as at a point in time rather than over an entire year. We have chosen the use of 30 September each year, as this is the date that the status variable relates for 2017, which plays an important role in deriving the stock for this year. One issue found with this method is that there around 1.2 million records that did not overlap 30 September of any year since 2010 and therefore are not recorded in our stock counts (Step 6, Table 1). This equates to around 10.7% of all the initial records, which is a significant number. This indicates that if we were to complete our process using calendar years, we would likely find higher counts of records with a secured deposit each year, but the decision has been made to use the exact date to ensure accuracy of our records and their tenure. One of our next steps is to explore the impact of using a point in time to produce the stock estimates (30 September).

## Property types

Not all TDP records provide information about property type (62.1%). We added property type information in the 6.5 million TDP records used in this analysis that did not have this information, by linking it to other data. Statistics on privately rented dwellings with secured deposits by property type would be helpful to provide an indication of the property type distribution across privately rented properties and whether this distribution is different across subnational areas.

We linked each TDP record to the latest [Energy Performance Certificate](#) (EPC) record from MHCLG (data up to 2016). Property types were recoded in the EPC data so that it was comparable to the TDP property types, for example, “Mid-Terrace” was recoded to be “Terraced”. Out of the TDP records as at 30 September 2017:

- 85.9% contained property type information from EPC data
- 5.6% contained property type information in the TDP, but not in EPC data
- 8.5% did not contain property type information in either the TDP or EPC data

## Level of geography and disclosure control

To identify the geographical location of a dwelling, the UPRN was linked to the [National Statistics UPRN Lookup \(NSUL\)](#), which allowed geography codes to be linked to the data allowing for analysis by subnational geographies. There was a 100% match to geography codes of retained data, as the tenancies with invalid addresses had already been removed.

The aim was to provide statistics on tenancies with secured deposits at the smallest level of geography possible, so we have decided to produce statistics down to Lower layer Super Output Areas (LSOAs). We have also produced statistics by country, region, local authority district and Middle layer Super Output Areas (MSOAs) in England.

To ensure that any individual dwellings in the dataset cannot be identified, we decided to suppress stock figures for any area which has fewer than three tenancies for a given year. Additional suppression may occur when you can calculate the count of the smaller suppressed area from the count of a larger area as the data can be aggregated. For example, if only one LSOA within an MSOA is suppressed, you could calculate the count of the suppressed LSOA from the MSOA, therefore we would suppress the next smallest count LSOA also. There were 327 LSOAs suppressed in 2017 and no areas for higher level geographies for this year.

## 9 . Research conclusions

The findings in this research output have helped expand our understanding of subnational estimates of privately rented residential dwellings at the local level. The steps taken to process and cleanse the data (see Section 8) have expanded our understanding of Tenancy Deposit Protection (TDP) data and shown that administrative data can be used to complement what we know from existing survey data.

However, this research has shown that Tenancy Deposit Protection (TDP) data doesn't cover the whole of the private rented sector. As such, the size of the private rented sector cannot be directly determined from TDP data alone. And, when compared with official statistics, the Tenancy Deposit Protection underestimates the size of the private rented sector. This means that we cannot rely on this new administrative dataset alone.

Nevertheless, our research shows that estimates from TDP data are getting closer to the existing official statistics over time. Indeed, the geographical and property type patterns in the Tenancy Deposit Protection (TDP) data were consistent with other data sources, suggesting the TDP data provides a broadly representative overview of these characteristics of the private rented sector. This is encouraging and we will continue to develop the methods used to produce sub-national dwelling stock by tenure estimates by including TDP data alongside existing data sources.

## 10 . Feedback

We would like to receive feedback on this Research Output and the methodology used to produce these estimates, including how they might be improved and potential uses of the data. Please email your feedback to [better.info@ons.gov.uk](mailto:better.info@ons.gov.uk)

## 11 . Next Steps

Our main next step is to explore a new method that incorporates data from multiple sources, including TDP data, to create a more complete and precise estimate of the stock of privately rented dwellings at low level geographies.

Our longer term aim is to further investigate the TDP data by exploring the impact of using a point in time to produce the stock estimates (30 September), especially as this point in time coincides with a significant churn in accommodation such as in student accommodation. We would like to work with the three TDP schemes to improve the quality of the data they record. We would also like to work with the schemes to get a regular supply of data.