# Key results from the Scottish House Condition Survey (SHCS) Local Authority tables 2014-2016

This note provides a short analysis of key points of interest from the Scottish House Condition Survey 2014-2016 local authority level tables which were published on 27 February, 2018. The full list of available tables is included in Annex A and can be accessed at: <a href="http://www.gov.scot/Topics/Statistics/SHCS/keyanalyses">http://www.gov.scot/Topics/Statistics/SHCS/keyanalyses</a>.

## **Using Local Authority Data: Key Information**

The release supplements the SHCS 2016 Key Findings<sup>1</sup> report which was published in December 2017 and presents the latest national data for key measures of energy efficiency, fuel poverty, energy perceptions and housing quality. The local authority tables provide key indicators at local authority level relating to households and dwelling types. However they lag the main national data because three years are combined to mitigate the smaller sample sizes involved when analysing sub-national geographies. In this case, survey data from the period 2014-2016 are averaged. Consequently, the national rates presented here, and in the excel tables, will not match those found in the main Key Findings report. Furthermore, due to overlapping years with previous releases, the tables are a snapshot in time, and should not be used to quantify changes in time by comparing to previous releases.

All stated estimates lie at the midpoint of a confidence interval which primarily depends on sample size. The largest local authority sample over the three year period (with the exception of Edinburgh and Glasgow, with 523 and 645 respectively) is Fife with 375 households, while the smallest is Midlothian, with 165 households. Comparisons between all estimates should take account of the confidence limits, and caution be taken if simply comparing the stated midpoints.

For example, the prevalence of damp in Aberdeen City was estimated to lie in the range 3-9%, while in Perth and Kinross, in the range 1-6%. Despite the midpoint in Aberdeen City being double Perth and Kinross (6% versus 3%), the extent of overlap between the two ranges means the survey has not detected a statistically significant difference between them. For this reason, and for clarity, this summary focuses on observed differences between local authority and national rates in the 2014-2016 period. National rates use the full sample (for most tables, 8,286 households) and therefore have smaller uncertainties, meaning observed differences are more likely to be real.

Confidence intervals are visualised in the accompanying plots, and are calculated at the 95% level, where there is a one in twenty chance the true value will lie outside these ranges. Similarly, only statistically significant differences between estimates at the 95% confidence level are highlighted. A statistical tool provided with the published local authority tables helps users determine if differences between any two estimates are significant at the 95% confidence level or not. This allows users to reproduce any of the analysis in this summary as required.

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<sup>&</sup>lt;sup>1</sup> http://www.gov.scot/Publications/2017/12/5401

## **Housing Stock Attributes**

The age of construction and build form of a dwelling has consequences for energy performance, improvement potential, affordability and living conditions. At the same time, types of dwellings can differ in terms of the size of exposed areas with fewer exposed areas of wall, or shielding by dwellings above and below, leading to lower levels of heat loss than in buildings with fewer sheltered sides. Household stock attribute data demonstrates that Scottish housing is diverse and varies across authorities. Such variations will be a factor in later statistics on energy efficiency and fuel poverty and should be borne in mind.

On average over the period 2014-2016, over two thirds of Scotland's dwellings were built after 1945 (69%). However, this figure is as high as 83% in West Lothian and as low as 54% in City of Edinburgh.

Glasgow City is the authority where households were most likely to live in flats (71%) rather than houses, followed by City of Edinburgh (67%). On the other hand, households in Orkney Islands (94%), Na h-Eileanan Siar (93%) and Shetland Islands (91%) were most likely to live in houses. This compares to, on average, 37% of Scottish households living in flats and 63% living in houses in this period.

Nationally, roughly half of households lived in dwellings with one or two bedrooms and half lived in dwellings with 3 or more bedrooms. Households in Glasgow City (31%) were least likely to have 3 or more bedrooms while those in Na h-Eileanan Siar (72%) were most likely.

In North Lanarkshire, 91% of dwellings had cavity walls compared to 75% on average and 60% in Orkney Islands which had the highest level of solid or other wall construction.

## **Gas Grid**

The SHCS defines a dwelling as 'on the gas grid' if it is within 63 metres of the gas network, regardless of whether it is actually connected or not. On this basis, 16% of dwellings in Scotland were off-grid in the period 2014-2016 (Figure 1).

Local authorities where more than half of dwellings were estimated to be off-grid include Highland (62%) and Na h-Eileanan Siar (84%). Both Orkney and Shetland have no gas grid coverage, hence their respective maximum (100%) off grid estimates.

City local authorities had lower off grid rates than the national average: the estimated off-grid rates in City of Edinburgh, Dundee City and Glasgow City were 4% respectively. Stirling's estimated off grid rate (19%) is similar to the national average. The authorities which have lower than national average off grid rates are generally those with higher population density.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% West Dunbartonshire North Lanarkshire Falkirk Stirling Highland Islands **Dunbartonshire** Renfrewshire East Ayrshire South Ayrshire North Ayrshire Angus Argyll and Bute of Edinburgh Dundee City Glasgow City Renfrewshire Clackmannanshire West Lothian South Lanarkshire Midlothian East Lothian Scottish Borders Aberdeenshire Moray Perth and Kinross Aberdeen City h-Eileanan Siar Jumfries and Galloway Orkney I East East Š LA rate below national average LA rate similar to national average LA rate above national average --- Scotland upper/lower 95% confidence interval range

Figure 1: Percent Dwellings Off Gas Grid by local authority compared to Scotland Average. SHCS 2014-2016.

Note: In this chart, the share of off-grid dwellings for Scotland as a whole is a three-year average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

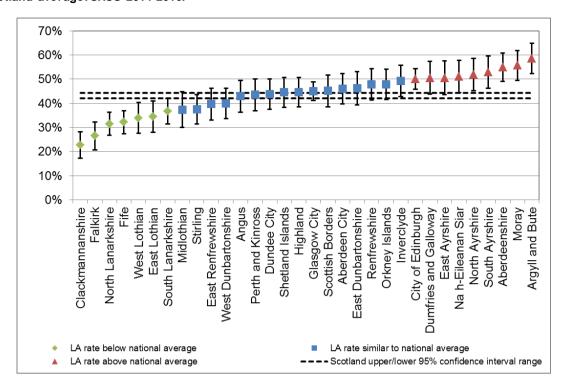
#### Heating and Insulation

Installing or upgrading insulation is one of the most effective ways to improve the energy efficiency of a building. On average across 2014-2016, 57% of walls (of all types) were insulated<sup>2</sup> although this ranges from 41% in Argyll & Bute to 77% in Clackmannanshire (Figure 2). 19% of dwellings in East Dunbartonshire had less than 100 mm of loft insulation compared to 8% on average and just 2% in Highland (Figure 3).

The heating system is another key factor in the thermal efficiency of a dwelling. Almost all households in Scotland (96%) have a full central heating system. However, this rate is lower in those authorities with no or less access to the gas grid including Shetland Islands (84%), Orkney Islands (91%) and Highland (92%).

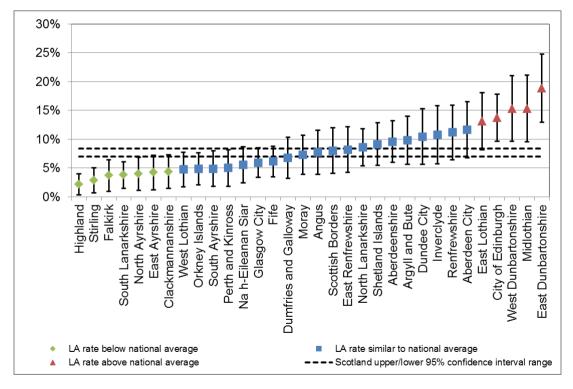
<sup>2</sup> The presence of CWI becomes harder to detect as injection holes age, fade or are covered up. Therefore, the SHCS may underestimate the number of homes with CWI installed, despite the high quality of the physical survey.

Figure 2: Percent dwellings with uninsulated cavity or solid walls by local authority, compared to Scotland average. SHCS 2014-2016.



Note: In this chart, the proportion of dwellings with uninsulated walls for Scotland as a whole is a threeyear average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

Figure 3: Percent dwellings with less than 100mm loft insulation (where possible) by local authority, compared to Scotland average. SHCS 2014-2016.



Note: In this chart, the proportion of dwellings with less than 100mm loft insulation for Scotland as a whole is a three-year average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

## **Energy Efficiency**

A dwelling's energy efficiency rating is scored between 1 and 100 using the Standard Assessment Procedure (SAP). Energy Performance Certificates (EPC) display these ratings, and which broad ranking band they fall into, the highest attainable being an A rating (high energy efficiency, low running costs), and the worst, G (low energy efficiency, high running costs).

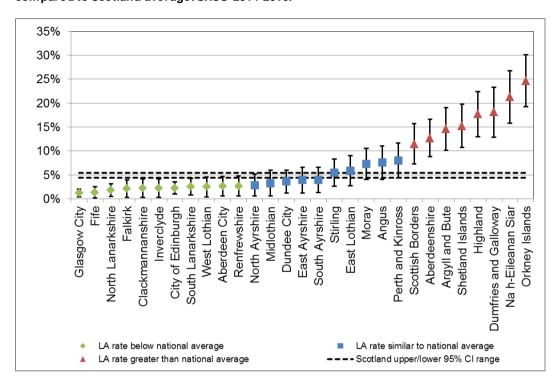


Figure 4: Percent Dwellings in Lowest Energy Efficiency Bands F or G (SAP 2012) by local authority, compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the proportion of dwellings with an EPC F&G rating for Scotland as a whole is a threeyear average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

Here, ratings and corresponding bands have been derived using the SAP 2012 methodology. Figure 4 shows the proportion of dwellings in local authorities which had either of the lowest bands (F or G) - the least energy efficient - and Figure 5, the highest rated properties (bands B or C; no A-rated properties were surveyed in the period 2014 to 2016).

Island and rural local authorities generally had the highest proportion of the least energy efficient dwellings. For example, Orkney (25%), Na h-Eileanan Siar (21%) and Shetland (15%) had comparatively more energy inefficient stock than the Scottish average of 5% in the 2014-2016 period. These local authorities also had lower than average proportions of properties in the highest efficiency bands.

Other local authorities with rates higher than the national average for F or G rated properties included: Dumfries and Galloway (18%), Highland (18%), Argyll and Bute (15%),

Aberdeenshire (13%) and Scottish Borders (11%). These local authorities had correspondingly lower than average proportions of housing stock with EPC ratings B or C.

Dundee City is the only city authority where the proportion of the least energy efficient dwellings (4%) was similar to the Scottish average as a whole, rather than lower. Glasgow City (1%), North Lanarkshire (2%), City of Edinburgh (2%), South Lanarkshire (2%), Aberdeen City (3%) and Renfrewshire (3%) all had below national average shares of F and G rated dwellings. Of these, North Lanarkshire (45%), City of Edinburgh (48%) and Glasgow City (49%) all had higher than average proportions of B and C rated dwellings. Other local authorities which had higher than average B and C rated dwellings were West Dunbartonshire (45%), Clackmannanshire (46%) and Falkirk (51%).

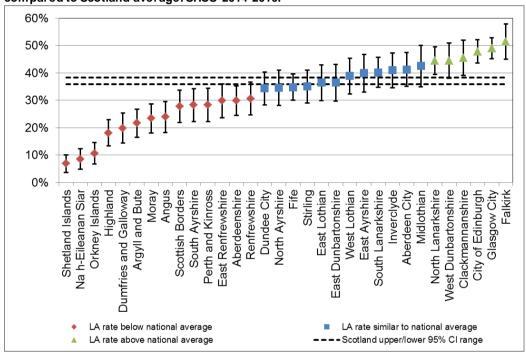


Figure 5: Percent Dwellings in Highest Energy Efficiency Bands B or C (SAP 2012) by local authority, compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the proportion of dwellings with an EPC B&C rating for Scotland as a whole is a threeyear average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

It is important to bear in mind that the characteristics of the housing stock in an area can affect energy efficiency. For example, detached houses are more likely to be F or G rated than other housing types while flats are more likely to be B or C rated. Similarly, housing which is off the gas grid is more likely to be F or G rated. Of the eight local authorities with higher proportions of F & G rated stock, six also had a higher than average proportion of houses and all had a higher proportion of properties off the gas grid. Similarly, of the six local authorities with higher than average proportions of B and C rated properties, four also had higher than average proportion of flats as a share of their dwelling stock.

Poor energy efficiency is one of the drivers of fuel poverty and many of these authorities with low energy efficient properties (Orkney, Na h-Eileanan Siar, Shetland, Dumfries and Galloway, Highland and Argyll & Bute) also had higher than average fuel poverty rates.

The full local authority release also includes the share of properties rated EPC F&G using the SAP 2009 methodology. Dwellings with main heating fuels other than mains gas (for example oil or coal) have systematically lower SAP ratings in SAP 2012 than in SAP 2009 and this is particularly true at the lower end of the SAP range. The main reason for this is that SAP fuel prices for these fuels have risen more than for mains gas. As a result, average energy efficiency ratings tend to be slightly lower under SAP 2012 compared to SAP 2009. A summary of the main differences between the two methodologies can be found in the 2016 SHCS Methodology Report<sup>3</sup>.

## **Fuel Poverty**

Under the current definition<sup>4</sup>, a household is in fuel poverty if in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income on all household fuel use. In the period 2014-2016, the fuel poverty rate varied from 20% in City of Edinburgh to 59% in Orkney Islands (Figure 6).

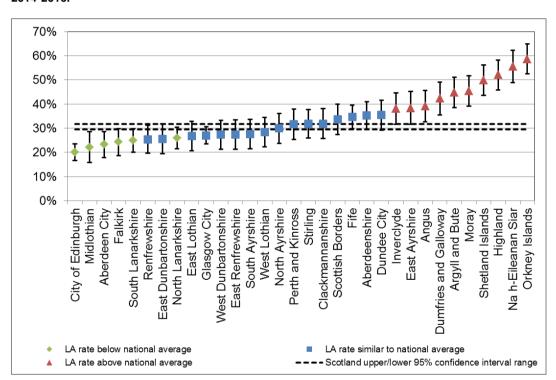


Figure 6: Percent Dwellings in Fuel Poverty by local authority, compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the fuel poverty rate for Scotland as a whole is a three-year average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

Those authorities which had significantly higher fuel poverty rates than the national average were Orkney Islands (59%), Na h-Eileanan Siar (56%), Highland (52%), Shetland Islands (50%), Moray (45%), Argyll & Bute (45%), Dumfries and Galloway (42%), Angus (39%), East Ayrshire (38%) and Invercive (38%). Of these, Argyll and Bute, Shetland, Highland,

<sup>&</sup>lt;sup>3</sup> http://www.gov.scot/Resource/0052/00529706.pdf

<sup>&</sup>lt;sup>4</sup> The Scottish Government recently consulted on a new Fuel Poverty Strategy for Scotland, including a proposal for a new fuel poverty definition: https://beta.gov.scot/publications/consultation-fuel-poverty-strategy-scotland/.

Dumfries and Galloway, Na h-Eileanan Siar and Orkney Islands had a higher than average presence of energy inefficient EPC F&G rated dwellings.

Those authorities which had significantly lower fuel poverty rates than the national average were City of Edinburgh (20%), Midlothian (22%), Aberdeen City (23%), Falkirk (24%), South Lanarkshire (25%) and North Lanarkshire (26%). Three of these local authorities also had a greater prevalence than average of higher energy efficient properties (those rated EPC B&C), namely City of Edinburgh, Falkirk and North Lanarkshire. The remaining local authorities – Midlothian, Aberdeen City and South Lanarkshire – had proportions of EPC B&C rated dwellings similar to the national average.

## **Damp and Condensation**

In the period 2014-2016, the prevalence of rising or penetrative damp in Scotland was 3% (Figure 7). Most local authorities had a similar rate to the national average, apart from Aberdeen City and Orkney Islands which were higher than the national rate (6% and 7% respectively); East Lothian (1%), South Lanarkshire (1%) and North Lanarkshire (2%) all had below national rates of rising or penetrative damp.

Aberdeen City had a higher than average condensation rate of 17% (Figure 8). Other local authorities with higher than average condensation rates were Midlothian (17%), Angus (15%) and Dundee City (13%). The majority of remaining local authorities had rates similar to Scotland's average, apart from Dumfries and Galloway (5%), North Lanarkshire (5%), East Dunbartonshire (5%), Highland (5%) and Glasgow City (7%), which all had lower rates of condensation than the national average.

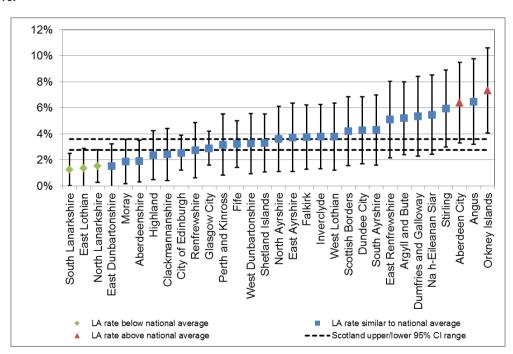


Figure 7: Percent Dwellings with any damp by local authority, compared to Scotland average. SHCS 2014-2016.

Note: The proportions in this chart are three-year averages and relate to the presence of rising or penetrative damp, while the proportions published in the main SHCS Key Findings report are annual figures, and are reported for rising damp and penetrative damp separately.

25% 20% 15% 10% 5% 0% East Ayrshire East Dunbartonshire Highland South Ayrshire Dunbartonshire Argyll and Bute Orkney Islands Renfrewshire North Ayrshire **Clackmannanshire** Shetland Islands Perth and Kinross East Renfrewshire Aberdeenshire East Lothian Falkirk North Lanarkshire Moray Glasgow City South Lanarkshire West Lothian h-Eileanan Siar Dundee City Aberdeen City Dumfries and Galloway West LA rate below national average LA rate similar to national average LA rate above national average Scotland upper/lower 95% confidence interval range

Figure 8: Percent dwellings with condensation by local authority, compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the proportion of dwellings affected by condensation for Scotland as a whole is a three-year average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

## Disrepair

The SHCS quantifies disrepair for a wide range of building elements. The type of disrepair is categorised into four broad classifications: any disrepair, disrepair to critical elements, urgent disrepair<sup>5</sup> and extensive disrepair, whereby damage observed by the surveyor covers more than a fifth of the building area.

Here we focus on disrepair to critical elements (Figure 9), which covers building elements relating to structural stability, weather tightness and property deterioration. Examples include roof structure, foundations, damp proof course, and gutters<sup>6</sup>. Critical disrepair is recorded where there is any disrepair, no matter how small, to these elements. The published tables allow users to explore all four disrepair types in more detail.

Dundee City (74%) and Angus (73%) had the highest rates of critical disrepair, while Fife had the lowest at 38%. Other local authorities with higher than average rates of disrepair include Scottish Borders (65%), East Ayrshire (64%), Midlothian (60%) and East Lothian (59%).

<sup>&</sup>lt;sup>5</sup> A repair is deemed urgent if it will prevent further damage to the property or a health and safety risk to the occupants. Only common internal and external elements are assessed.

<sup>&</sup>lt;sup>6</sup> A full list of elements can be found in section 7.8.7.3 in the SHCS 2016 Key Findings Report: http://www.gov.scot/Publications/2017/12/5401/348231

80% 70% 60% 50% 40% 30% 20% 10% 0% Argyll and Bute West Dunbartonshire East Renfrewshire North Ayrshire Aberdeenshire Shetland Islands Islands North Lanarkshire Perth and Kinross South Ayrshire East Dunbartonshire South Lanarkshire East Lothian Scottish Borders Glasgow City **Dumfries and Galloway** h-Eileanan Sia Aberdeen City Dundee City West Lothiar Edinburg City of LA rate below national average LA rate similar to national average LA rate above national average --- Scotland upper/lower 95% confidence interval range

Figure 9: Percent dwellings with critical disrepair by local authority, compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the proportion of dwelling with critical disrepair for Scotland as a whole is a threeyear average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

## Scottish Housing Quality Standard (SHQS)

The SHQS is a common standard for assessing the condition of Scotland's social sector housing. However, as the SHCS collects data on all tenures, compliance of the entire stock with the SHQS can be assessed. Dwellings are assessed on 55 different elements<sup>7</sup> – which are broken into five broader criteria. Failure of one of these criteria results in an outright SHQS fail – the criteria themselves can be failed in many cases on a single element.

In the period 2014-2016, an average of 46% of dwellings in Scotland failed the SHQS (Figure 10). Clackmannanshire had a lower than average failure rate (35%), while Shetland (66%), Na h-Eileanan Siar (62%), Argyll and Bute (58%), Orkney Islands (57%), North Ayrshire (54%) and West Dunbartonshire (53%) each had failure rates higher than the Scotland average.

Focusing on the social sector, the average national SHQS failure rate was 41% in the period 2014-2016 (Figure 11). Most local authorities had similar rates to the 2014-2016 social sector average – however, Argyll and Bute (56%) and Shetland (69%) each had higher failure rates than the national average, while social sector failure rates in Glasgow City (33%) and Clackmannanshire (30%) were below the national average. It should be noted that as the social sector sample size is smaller than all tenures overall (nationally 2,048).

<sup>&</sup>lt;sup>7</sup>A full list can be accessed via https://beta.gov.scot/publications/shqs-technical-guidance-for-social-landlords/

70% 60% 50% 40% 30% 20% 10% 0% **Clackmannanshire** South Lanarkshire Lanarkshire ast Renfrewshire East Ayrshire South Ayrshire Inverclyde Scottish Borders Highland Orkney Islands Argyll and Bute **Glasgow City** and Kinross Aberdeenshire East Dunbartonshire West Lothian Midlothian City of Edinburgh East Lothian Dundee City **Nest Dunbartonshire Dumfries and Galloway** h-Eileanan Š LA rate below national average LA rate similar to national average Scotland upper/lower 95% confidence interval range LA rate above national average

Figure 10: Percent dwellings failing SHQS (all tenures), compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the proportion of SHQS failures for Scotland as a whole is a three-year average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

compared to 8,286 in the three year period), there are larger margins of error associated with social sector estimates (as seen comparing the confidence interval ranges in Figure 10 and Figure 11).

The most common criterion all local authorities failed was around elements relating to energy efficiency. The next most common failure were generally on elements relating to the "Healthy, Safe and Secure" criterion, followed by those addressing the "Modern Facilities" criterion.

The Scottish Housing Regulator is responsible for monitoring compliance of the social housing sector with the SHQS, and report annually on compliance rates<sup>8</sup>.

<sup>8</sup> 

80% 70% 60% 50% 40% 30% 20% 10% 0% Clackmannanshire Orkney Islands **∃ast Renfrewshire** North Ayrshire East Ayrshire Dunbartonshire Renfrewshire Aberdeenshire Argyll and Bute South Lanarkshire Midlothian East Lothian East Dunbartonshire Perth and Kinross South Ayrshire North Lanarkshire West Lothian Inverciyde **Glasgow City** Dundee City **Dumfries and Galloway** Aberdeen City City of Edinburgh h-Eileanan Siar Highland Scottish LA rate similar to national average LA rate below national average

Figure 11: Percent social sector dwellings failing the SHQS compared to Scotland average. SHCS 2014-2016.

Note: In this chart, the proportion of social sector SHQS failures for Scotland as a whole is a three-year average. This is different to the proportion published in the main SHCS Key Findings report, which is an annual figure.

--- Scotland upper/lower 95% confidence interval range

#### **Notes**

Where a rate is derived from a sub-sample with fewer than 30 cases or an estimate represents two or fewer cases, the statistic is suppressed and the local authority will not be present in the charts published in this summary. Further technical information on the survey can be found in the 2016 Key Findings Report<sup>9</sup>, and the SHCS Methodology Notes 2016 <sup>10</sup>.

Local authority tables for 2014-2016 and earlier years can be accessed via the link below. Routine updates and minor revisions to historical datasets have been applied with the release of the latest data.

http://www.gov.scot/Topics/Statistics/SHCS/keyanalyses

LA rate above national average

<sup>&</sup>lt;sup>9</sup> http://www.gov.scot/Publications/2017/12/5401

<sup>&</sup>lt;sup>10</sup> http://www.gov.scot/Topics/Statistics/SHCS/Downloads/MethodologyNotes2016

## Annex A - List of SHCS 2014 - 2016 Local Authority Tables

- Wall Insulation (cavity, solid/other, total) by Tenure, by House/Flat, by Household Type
- Percentage of dwellings built before 1945
- Percentage of dwellings which are flats
- Percentage of dwellings with 3 or more bedrooms
- Percentage of households with one or more Long Term Sick or Disabled members
- Percentage of households where one or more members are receiving care services
- Percentage of dwellings with adaptations
- Percentage of dwellings containing a LTSD individual whose activities are restricted because of the property
- Percentage of dwellings requiring adaptations
- · Percentage of dwellings which are off the gas grid
- Percentage of dwellings with full central heating
- Percentage of dwellings with less than 100mm of loft insulation
- Percentage of dwellings with an energy efficiency rating of F or G (SAP 2009)
- Percentage of dwellings with an energy efficiency rating of F or G (SAP 2012)
- Percentage of dwellings with an energy efficiency rating of D or E (SAP 2012)
- Percentage of dwellings with an energy efficiency rating of B or C (SAP 2012)
- Mean SAP 2009 rating
- Mean SAP 2012 rating
- Mean household income
- Percentage of households in fuel poverty
- Percentage of households in extreme fuel poverty
- Percentage of dwellings which are overcrowded
- Percentage of dwellings which exceed the minimum Bedroom Standard requirements by 2 or more bedrooms
- Percentage of dwellings considered to be Below the Tolerable Standard (BTS)
- Percentage of dwellings that fail the Scottish Housing Quality Standard "Free from Serious Disrepair" criterion (SHQS B)
- Percentage of dwellings that fail the Scottish Housing Quality Standard "Energy Efficiency" criterion (SHQS C)
- Percentage of dwellings that fail the Scottish Housing Quality Standard "Modern Facilities and Services" criterion (SHQS D)
- Percentage of dwellings that fail the Scottish Housing Quality Standard "Healthy, Safe and Secure" criterion (SHQS E)
- Percentage of dwellings that fail the SHQS overall
- Percentage of dwellings with disrepair
- Percentage of dwellings with disrepair to critical elements
- Percentage of dwellings with urgent disrepair
- Percentage of dwellings with extensive disrepair
- Percentage of dwellings with rising or penetrating damp
- Percentage of dwellings with condensation