

## Table xx: Methodology Statement, South East Scotland HNDA3 Affordability Assessment

**Data source used:** all parts of the assessment use Scottish Government (2020) Local Level Household Income Estimates, Weekly, (£), Banded Income, 2018 <https://www.gov.scot/collections/local-level-household-income-estimates/>

**Calculation:** this methodology statement refers to detail provided in South East Scotland HNDA3 Appendix 6

### Methodology for income data:

The following methodology is applied to assess the affordability of owner occupation, social renting and private renting:

- The banded income data for Scotland is filtered by 'local authority area name' to provide six separate worksheets for the City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders and West Lothian.
- Fife data is filtered to remove areas not within Fife (West & Central) housing market areas.
- Two main tables are provided on each LA worksheet – the top green / white table presents the original modelled income estimates; the blue table below presents the adjusted modelled income estimates.
- The adjustment in the blue tables translates gross household weekly income by the proportion of households in each datazone (column J-AA) into the number of households (column G Total Number of Occupied Dwellings x proportion shown in columns J-AA for each datazone).
- As the original data was presented as cumulative figures across columns J-AA, subtraction was used to provide household figures per income band.
- It was noticed that the sum of households per income band differed from the sum of column G Total Number of Occupied Dwellings, due to rounding within the calculations.
- The calculated figures for households per income band were used to derive the percentage of households by income band to enable the percentages to total 100%.

### Owner occupation:

- The affordability assessment is based on lower quartile house prices for each LA using the Scottish Government 'datapack', specifically the table 'Register of Scotland House Price Time Series - Second Hand and Company Sales New Build house sales' for 2018-19, filtered to provide lower quartile or entry-level house prices for the City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders and West Lothian.
- The calculation assumes purchasers have access to a deposit of 18% and mortgages are provided at a rate of no more than 3.2 x gross household income (assumptions as per the HNDA Tool based on data from UK Finance)
- The calculation is the figure for lower quartile house price x 82% (assumed deposit of 18%) / 3.2 = gross annual income required to purchase a lower quartile house price / 52 = weekly income required to purchase a lower quartile house price.
- The figure for the weekly income required to purchase a lower quartile house price was compared to the banded income data / income band headings in columns J-AA e.g. weekly income required to purchase a lower quartile house price is £350 pw which matches heading in column P. In this example the combined percentages of households in falling within these income bands (columns J-P) have insufficient income to afford to purchase entry level housing.
- Where the figure for weekly income required to purchase a lower quartile house price falls between two income bands a calculation is made to work out the percentage of the higher income band e.g. the weekly income required to purchase a lower quartile house price = £450 which falls between income band headings in columns Q and R. The households who cannot afford to purchase are the combined percentages of households by income band in columns J-Q and 50% of households in column R (weekly income of £450 is halfway between weekly income of £400 in column Q and £500 in column R).
- The percentage of households that cannot / can afford a lower quartile house price are:

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	% Who Cannot Afford LQ House Price	% Who Can Afford LQ House Price	Total %
City of Edinburgh	66.02	33.98	100.00
East Lothian	60.20	39.80	100.00
Fife (West & Central)	36.99	63.01	100.00
Midlothian	56.03	43.97	100.00
Scottish Borders	44.56	55.44	100.00
West Lothian	47.93	52.07	100.00

**Private rent:**

- The affordability assessment uses the Scottish Government data ‘Private Sector Rent Statistics, by Broad Rental Market Area’ 2020, filtered to provide average rents for the relevant Broad Rental Market Areas (BRMA) to the City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders and West Lothian. <https://www.gov.scot/publications/private-sector-rent-statistics-scotland-2010-2020/>
- Midlothian have opted to use local rent data collected through Zoopla to provide a more accurate reflection of affordability in the area as the average Lothian BRMA rent tends to be heavily influenced by the high rents in the City of Edinburgh and East Lothian.
- The figure for monthly rent is converted into the average annual rent for each area.
- The calculation assumes that if a household spends less than 25% of their income on rent, they can afford to rent in the private rented sector.
- The threshold for determining private rent affordability is calculated by average annual private rent / 25 x 100 i.e. the threshold for private renting is 25% of annual income.
- The threshold of annual income required for private renting is translated into a weekly income figure.
- The weekly income figure for private renting is compared to the banded income data / income band headings in columns J-AA e.g. threshold for private renting is £350 which matches heading in column P. In this example the combined percentages of households in falling within these income bands (columns J-P) cannot afford private renting.
- Where the threshold for private renting falls between two income bands, a calculation is made to work out the percentage of the higher income band e.g. the weekly income required for private renting = £325 which falls between income band headings in columns O and P. The households who cannot afford private renting are the combined percentages of households by income band in columns J-O and 50% of households in column P (weekly income of £325 is halfway between weekly income of £300 in column O and £350 in column P).
- The percentage of households that are suitable for private renting based on average rents by BRMA are:

	% Households that cannot afford private renting	% Households that can afford private renting
City of Edinburgh	79.47	20.53
East Lothian	78.60	21.40
Fife (West & Central)	58.09	41.91
Midlothian	78.53	21.47
Scottish Borders	50.75	49.25
West Lothian	54.90	45.10

**Table xx: Methodology Statement, South East Scotland HNDA3 Affordability Assessment****Below market rent:**

- The affordability assessment uses the Scottish Government data 'Private Sector Rent Statistics, by Broad Rental Market Area' 2020, filtered to provide average rents for the relevant Broad Rental Market Areas (BRMA) to the City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders and West Lothian. <https://www.gov.scot/publications/private-sector-rent-statistics-scotland-2010-2020/>  
Midlothian have opted to use local rent data collected through Zoopla to provide a more accurate reflection of affordability in the area as the average Lothian BRMA rent tends to be heavily influenced by the high rents in the City of Edinburgh and East Lothian.
- The figure for monthly rent is converted into the average annual rent for each area.
- The calculation assumes that if a household spends between 25%-35% of their income on rent, they are suitable for below market rent.
- The annual income band required for below market rent is translated into a weekly income band.
- The weekly income figure for below market rent is compared to the banded income data / income band headings in columns J-AA e.g. lower income threshold for below market rent is £350 pw which matches heading in column P and the upper income threshold is £400 pw which matches the heading in column Q. In this example the combined percentages of households in falling within these income bands (columns P-Q) would be suitable for below market rent.
- Where the threshold for market rent falls between two income bands, a calculation is made to work out the percentage of the lower or higher income band e.g. the weekly income required for below market rent is between £450 and £550 which falls between income band headings in columns R and S. The households who are suitable for below market rent are the combined 50% of households by income band in columns R and S (weekly income of £450-£550 represents a proportion of households in each of band R and S)
- The percentage of households that are suitable for below market rent based on average rents by BRMA are:

	% Households suitable for below market rent	% Households not suitable for below market rent
City of Edinburgh	17.52	82.48
East Lothian	18.21	81.79
Fife (West & Central)	17.68	82.32
Midlothian	18.42	81.58
Scottish Borders	18.00	82.00
West Lothian	17.33	82.67

**Social rent:**

- The affordability assessment uses the Scottish Government data 'Private Sector Rent Statistics, by Broad Rental Market Area' 2020, filtered to provide average rents for the relevant Broad Rental Market Areas (BRMA) to the City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders and West Lothian. <https://www.gov.scot/publications/private-sector-rent-statistics-scotland-2010-2020/>  
Midlothian have opted to use local rent data collected through Zoopla to provide a more accurate reflection of affordability in the area as the average Lothian BRMA rent tends to be heavily influenced by the high rents in the City of Edinburgh and East Lothian.
- The figure for monthly rent is converted into the average annual rent for each area
- The calculation assumes that if a household spends more than 35% of their income (including housing benefit) on rent that they are suitable for social rent.
- The threshold for determining the maximum annual income for social renting is calculated by average annual private rent / 35 x 100 i.e. average annual private rent is 35% of annual income.
- The maximum annual income for social renting is translated into a maximum weekly income figure.
- The figure for maximum weekly income for social renting is compared to the banded income data / income band headings in columns J-AA e.g. maximum weekly income for social renting is £350 which matches heading in column P. In this example the combined percentages of households in falling within these income bands (columns J-P) have income levels suitable for social renting.

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- Where the figure for maximum weekly income required for social renting falls between two income bands, a calculation is made to work out the percentage of the higher income band e.g. the weekly income required for social renting = £325 which falls between income band headings in columns O and P. The households who are suitable for social renting are the combined percentages of households by income band in columns J-O and 50% of households in column P (weekly income of £325 is halfway between weekly income of £300 in column O and £350 in column P).
- The percentage of households that are suitable for social renting based on average rents are:

	% Households suitable for social rent	% Households not suitable for social rent
City of Edinburgh	61.95	38.05
East Lothian	60.43	39.57
Fife (West & Central)	40.40	59.60
Midlothian	60.11	39.89
Scottish Borders	32.75	67.25
West Lothian	37.57	62.43