Calculating the Cost of Childcare:
Local analysis for the briefing on Access to Childcare

Our national briefing on Access to Childcare has been produced as part of the Local Data Project.

Here we want to show you how to tailor the key information in the briefing to your local area. NOTE: this explainer will work on the data for Great Britain. For links to the data on Northern Ireland, go to the end of this document.

You can find the national briefing and the template for your own local analysis on the Local Data Project website by clicking here.
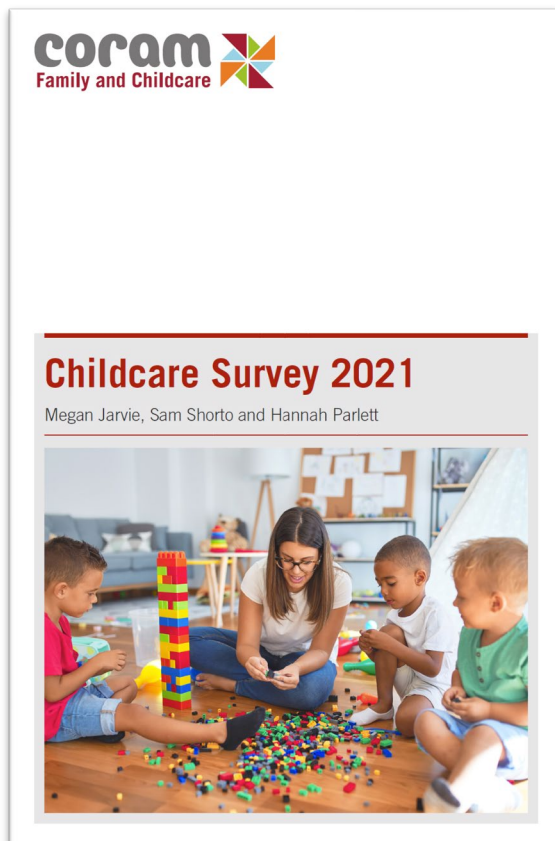
What to expect

To calculate affordability, we will compare the cost of childcare to the amount of money that women earn. This is not because we think childcare should be paid for completely out of women's pockets, but we know that in reality many couple's financial decisions are made by checking if it's financially worth it for women to remain in their jobs.

Let's work through the different parts together.

First, let's find out how much childcare **costs** in Great Britain. We can find that information [here](#). Scroll down the page, and click on 'Download report'

<div style="background-color:teal;color:white;padding:10px;">**Download report**</div>

When we open it, the report will look like this.

coram
Family and Childcare

Childcare Survey 2021

Megan Jarvie, Sam Shorto and Hannah Parlett

[Coram](#) have been doing a childcare survey for many years, and they explain their methodology clearly, a good sign of a reputable source.

We will use the tables on **page 11**, where we can find the information on **part-time** childcare costs for two-year-olds and children under two, and **page 12**, where the costs for **full-time** childcare are given for the same ages. We want to use both so that we can compare the costs for mothers working full-time and mothers working part-time.

The tables look like this:

Table 1 - Price of 25 hours a week childcare for children under three at nurseries and childminders

	Nursery		Childminder	
	Under two	Two	Under two	Two and over
Great Britain	£137.69	£132.56	£118.34	£117.32
England	£140.27	£134.73	£119.02	£117.86
Scotland	£117.29	£113.31	£112.33	£112.78
Wales	£114.76	£114.45	£112.37	£112.01
East Midlands	£134.50	£126.14	£105.21	£105.08
East of England	£145.36	£144.84	£117.20	£116.41
London, inner	£179.86	£177.61	£163.77	£161.60
London, outer	£156.32	£147.87	£147.53	£146.43
North East	£130.64	£128.10	£106.92	£106.79
North West	£126.43	£120.25	£103.18	£103.08
South East	£145,90	£140.05	£119.40	£118.69
South West	£132.26	£128.84	£114.27	£114.11
West Midlands	£136.14	£133.41	£103.70	£100.83
Yorkshire and Humberside	£115.39	£110.52	£101.49	£101.07

Table 2 - Price of 50 hours a week childcare for children under three at nurseries and childminders

	Nursery		Childminder	
	Under two	Two	Under two	Two and over
Great Britain	£263.81	£254.44	£227.79	£229.62
England	£268.06	£258.08	£228.77	£230.06
Scotland	£228.13	£218.86	£224.54	£225.50
Wales	£227.64	£226.67	£213.29	£225.10
East Midlands	£240.82	£233.15	£205.57	£205.16
East of England	£289.65	£290.20	£234.48	£232.78
London, inner	£321.75	£310.45	£303.23	£320.77
London, outer	£306.60	£292.96	£290.97	£288.89
North East	£228.06	£227.29	£201.55	£209.41
North West	£231.67	£221.86	£200.07	£199.33
South East	£284.07	£268.73	£231.86	£237.07
South West	£263.12	£250.68	£213.18	£212.97
West Midlands	£268.90	£262.78	£192.87	£195.68
Yorkshire and Humberside	£228.65	£218.61	£203.21	£202.51

June 2021

Let's go into more detail…

We could calculate the cost of childcare for each different type of provision. However, we'll use nursery costs as this is the type of childcare provision that is the most used (according to Ofsted data).

Table 1 - Price of 25 hours a week childcare for children under three at nurseries and childminders

	Nursery		Childminder	
	Under two	Two	Under two	Two and over
Great Britain	£137.69	£132.56	£118.34	£117.32
England	£140.27	£134.73	£119.02	£117.86
Scotland	£117.29	£113.31	£112.33	£112.78
Wales	£114.76	£114.45	£112.37	£112.01
East Midlands	£134.50	£126.14	£105.21	£105.08
East of England	£145.36	£144.84	£117.20	£116.41
London, inner	£179.86	£177.61	£163.77	£161.60
London, outer	£156.32	£147.87	£147.53	£146.43
North East	£130.64	£128.10	£106.92	£106.79
North West	£126.43	£120.25	£103.18	£103.08
South East	£145,90	£140.05	£119.40	£118.69
South West	£132.26	£128.84	£114.27	£114.11
West Midlands	£136.14	£133.41	£103.70	£100.83
Yorkshire and Humberside	£115.39	£110.52	£101.49	£101.07

Let's look at Great Britain. We're going to use the cost for under twos.

	Nursery		Childminder	
	Under two	Two	Under two	Two and over
Great Britain	£137.69	£132.56	£118.34	£117.32

The weekly cost can be useful for budgeting, but we want the yearly cost. That's because we will be comparing to yearly salaries, and we need to compare like for like. So, £137.69 x 52 = **£7,160**.

Now for the average full-time cost.

	Nursery		Childminder	
	Under two	Two	Under two	Two and over
Great Britain	£263.81	£254.44	£227.79	£229.62

£263.81 x 52 = **£13,718**.

Note: although some people may not need childcare all year round, we have used the maximum amount (52 weeks) for comparison purposes.

What are the full-time and part-time childcare costs in your region? Remember to calculate the yearly rate!

F/T

P/T

Now let's find the **earnings** data.

First, we need to find the correct dataset for women's earnings. We can find that here.

One point about this dataset: as we are comparing like for like, we need to compare the same year's earnings as childcare costs.
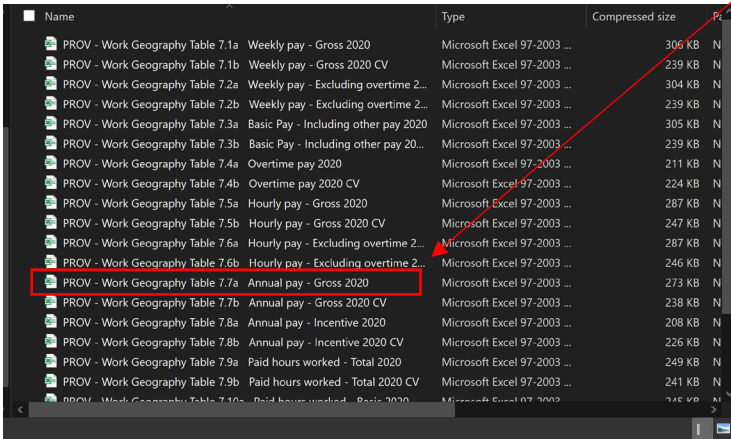

When it downloads, we will need to unzip the file. This is normally automatic when we double click on the folder.

We will be greeted by a morass of files. Don't worry! We want to look at annual pay as this tends to give a more stable picture of earnings. For that, we need table 7, so open 7.7a. (7.7b just gives information on the methodology, which we don't need to look at.)

If you get this yellow bar at the top of your spreadsheet when you open it, make sure you click on 'Enable Editing'.
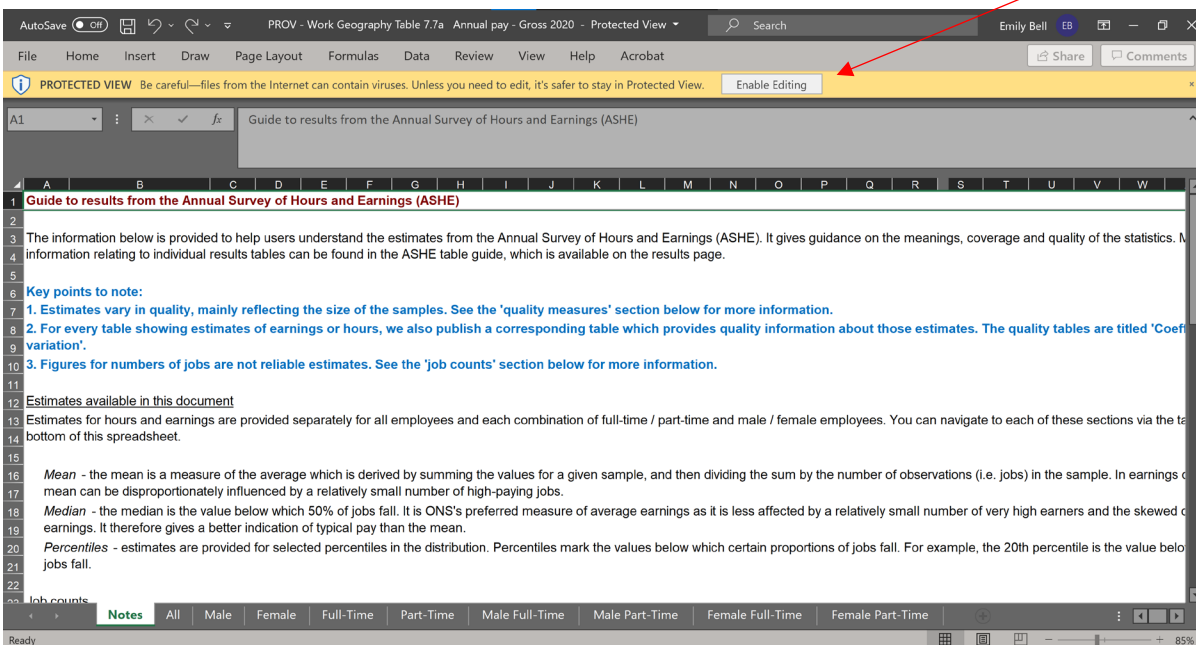
Once our spreadsheet is ready, there is one more thing to note. We always use the median when calculating pay. That is because it gives us a better idea of reality.

Mean v median

The mean of 1 + 1 + 1 + 2 + 20 = 5. This is what most people think of as the average. Add up all the numbers and divide by however many numbers there are.

The median of 1 + 1 + 1 + 2 + 20 = 1. This is taking the middle number as the average. It's generally much more reflective of what most people experience.

While both of these refer to the average, the mean is often skewed by a few big numbers. That is why we prefer to use the median.

OK, so we're finally ready to find some data. We will use both of the 'female' tables.
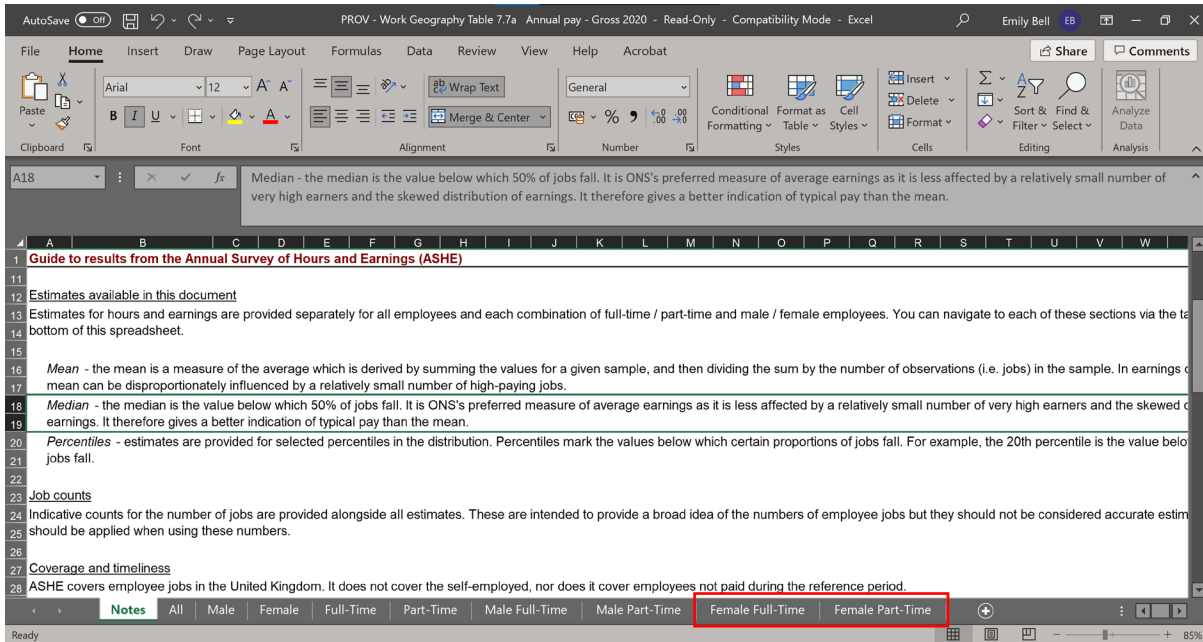
As with all ONS data, the regions appear in the same order. Data starts with the big picture for the UK, followed by the English regions, before Wales, then Scotland, and finally Northern Ireland.
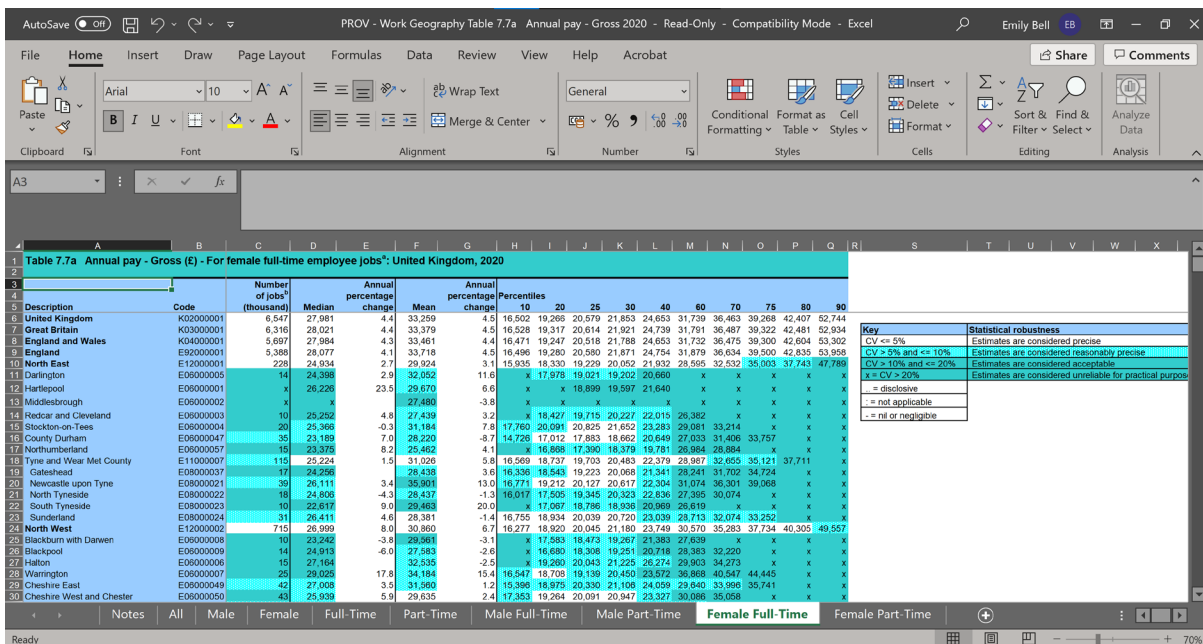
Because the data for childcare costs is only at the regional/national level, we should only use earnings at that level too.

Note: sometimes the data is missing at a lower level. Consider Sefton, for example. You can find full-time earnings for that local authority, but not part-time earnings. That's because the survey that is used to get this data doesn't have enough information at the lower level.

Let's find the information about Great Britain again.

	A Description	B Code	C Number of jobs[b] (thousand)	D Median	E Annual percentage change	F Mean	G Annual percentage change	H Percentiles 10	I 20	J 25	K 30	L 40	M 60	N 70	O 75	P 80	Q 90
1	Table 7.7a Annual pay - Gross (£) - For female full-time employee jobs[a]: United Kingdom, 2020																
6	United Kingdom	K02000001	6,547	27,981	4.4	33,259	4.5	16,502	19,266	20,579	21,853	24,653	31,739	36,463	39,268	42,407	52,744
7	Great Britain	K03000001	6,316	28,021	4.4	33,379	4.5	16,528	19,317	20,614	21,921	24,739	31,791	36,487	39,322	42,481	52,934
8	England and Wales	K04000001	5,697	27,984	4.3	33,461	4.4	16,471	19,247	20,518	21,788	24,653	31,732	36,475	39,300	42,604	53,302
9	England	E92000001	5,388	28,077	4.1	33,718	4.5	16,496	19,280	20,580	21,871	24,754	31,879	36,634	39,500	42,835	53,958
10	North East	E12000001	228	24,934	2.7	29,924	3.1	15,935	18,330	19,229	20,052	21,932	28,595	32,532	35,003	37,743	47,789
11	Darlington	E06000005	14	24,398	2.9	32,052	11.6	x	17,978	19,021	19,202	20,660	x	x	x	x	x
12	Hartlepool	E06000001	x	26,226	23.5	29,670	6.6	x	x	18,899	19,597	21,640	x	x	x	x	x

Remember that we need to use the median, so the figure for full-time earnings is **£28,021**.

And for part-time earnings, **£11,324**.

	A Description	B Code	C Number of jobs[b] (thousand)	D Median	E Annual percentage change	F Mean	G Annual percentage change	H Percentiles 10	I 20	J 25	K 30	L 40	M 60	N 70	O 75	P 80	Q 90
1	Table 7.7a Annual pay - Gross (£) - For female part-time employee jobs[a]: United Kingdom, 2020																
6	United Kingdom	K02000001	4,891	11,312	6.5	13,468	6.6	3,861	6,444	7,302	8,197	9,660	12,958	15,199	16,623	18,512	25,104
7	Great Britain	K03000001	4,709	11,324	6.6	13,506	6.7	3,840	6,436	7,308	8,193	9,649	12,978	15,221	16,660	18,589	25,242
8	England and Wales	K04000001	4,263	11,238	6.5	13,448	6.7	3,764	6,358	7,254	8,137	9,594	12,872	15,092	16,500	18,402	25,143
9	England	E92000001	4,030	11,226	6.3	13,472	6.6	3,761	6,349	7,243	8,117	9,561	12,866	15,075	16,531	18,460	25,268
10	North East	E12000001	186	11,290	6.2	13,390	10.3	3,900	6,450	7,208	8,157	9,470	12,990	15,070	16,218	17,726	x
11	Darlington	E06000005	x	10,444	-3.4	11,719	-6.4	x	x	x	8,406	9,404	x	x	x	x	x
12	Hartlepool	E06000001	x	x		12,347	-2.1	x	x	x	x	x	x	x	x	x	x

What are the average earnings in your region/nation? Remember to use the median!

F/T
P/T

Earnings v income

Note: earnings are before any deductions are made.

Now we have **costs** and **earnings**, let's calculate **affordability**…

Affordability

We need to calculate a percentage, so we can use the equation $x \div y \times 100 = \%$

Or costs $\div$ earnings $\times 100$

TOP TIP

Or we can use a percentage calculator like the one [here](#).

So, for part-time affordability, our costs were £7,160. The earnings were £11,324.

$7160 \div 11324 \times 100 = \mathbf{63}\%$

That means that part-time childcare costs absorb nearly **two thirds** of women's average earnings in Great Britain.

And for full-time, we can do the same calculation. Costs were £13718 and earnings were £28,021

$13718 \div 28021 \times 100 = \mathbf{49}\%$

Full-time childcare costs absorb **almost half** the average earnings of women in Great Britain.

Childcare costs for Northern Ireland can be found [here](#). Page 35 onwards contain information on costs.

Note: This survey is slightly different as it relies on answers from parents rather than local authorities (as in Coram's survey). There is more information available about the costs in different local areas of Northern Ireland, but this level of detail is not available in the Annual Survey of Hours and Earnings. We, therefore, recommend that affordability calculations are kept at the national level.

Overall, the regional variations between Great Britain and Northern Ireland are very clear in this data. We would encourage you to find out more about the cost of childcare in your local area. Data gaps show where we need to do more work. We hope the Local Data Project inspires you to get involved in uncovering data gaps!