



# Releasing statistics in spreadsheets: Good practice guidance

November 2014

Version 1.0

# Guidance purpose

This guidance presents good practice for releasing statistics in spreadsheets. It focuses on data released as part of an Official Statistics publication and has two main parts:

**Part 1** is about how statistics are *displayed*. It looks at information that all users will require - as well as preparing worksheets for both:

- i) presentation purposes
- ii) data re-use

**Part 2** is about how the statistics are *released*. It looks at the open data agenda and how this applies to spreadsheet data released as part of an Official Statistics publication.

**Caution:** Since there are often many different users for a given set of statistics, it is not always the case that a given presentation format will meet the needs of all users (and potential users). This is discussed throughout in the guidance.

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Part Two

# Part 1: How statistics are presented

*This section looks at good practice in presenting statistics in spreadsheets*

## Know your audience

The most important consideration when presenting statistics is to think about what information your users will need to make the statistics useful - [Code of Practice](#) Principle 1: meeting user needs. Note that different users may have different requirements from the statistics.

## Part 1 contents:

a) Information that all users will require:

- A contents page
- A guidance page
- Consistent symbols and codes
- Clear, concise, informative titles and headings
- Communication of uncertainty
- Professional finishing touches

b) Preparing worksheets for presentation (how the statistics appear to the user)

c) Preparing worksheets for re-use (for users focused on re-using the data)

d) A good practice checklist

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# A contents page

*Your dataset should have an accompanying contents page*

*A contents page will help orientate the user, confirm they have found the right statistics and help them locate the exact figures they require.*

**A contents page should include:**

- **Title of the release or data series - including topic, time period and geographical region**
- **Information about each tab in the spreadsheet (with hyperlinks)**
- **A link to the wider data series homepage (if available)**
- **A link to the source publication or bulletin**

Providing a link to the publication puts the spreadsheet into the context of supporting documentation and allows the user to find updates. If there are several workbooks in one zipped file, or major changes to the data series, consider a contents page which covers all of them. Also consider whether a cover page would be useful to users (to help frame the release).

[Example: House Price Statistics \(Office for National Statistics\)](#)

This spreadsheet has a succinct and informative contents page.

Click here for  
more information  
(in Annex A)

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# A notes or guidance page

*Your dataset should have accompanying guidance information*

*Users need enough information in the spreadsheet to interpret and use the data. Users often save spreadsheets for later reference (without saving the original web page).*

## Notes or guidance should include:

- **Contact details for responsible statistician and media enquiries**
- **Date of publication and next update**
- **Glossary of essential technical terms and acronyms (or link to)**
- **Link to supporting metadata and methodological documents**

Guidance information should be relevant to the dataset as a whole, rather than individual tables.

**It might be appropriate to combine guidance material and a contents page.**

**[Example: UK Property Transaction Statistics \(HM Revenue & Customs\)](#)**

The guidance on page 1 is helpful and signposts users to further information.

Click here for more information (in Annex A)

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# Symbols and coding

*Consistent use of symbols across the GSS is vital for users to make clear and robust comparisons between datasets*

## GSS standard symbols

Concept	Symbol
Break in time series	b
Confidential	c
Earliest revision	t
Estimated	e
Forecast	f
Less than half the final digit shown and different from a real zero	~
Low reliability	u
Nil	0
Not applicable	z
Not available	:
Not significant	n
Provisional	p
Revised	r

Further explanation of these symbols is available in more [detailed guidance](#) on the GSS website.

The [National Statistics Harmonisation Group \(NSHG\)](#) is responsible for the design, development and maintenance of common statistical frames and definitions for statistics.

Use nationally recognised [classifications](#) like geography codes whenever possible. This is mandatory in some cases. Include a guide to symbols and codes used. Help users to understand changes in classifications. For example, the [geography code history database](#) helps users to track changes in area codes.

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# Titles and headings

*Does your spreadsheet have informative titles and headings?*

Each individual table should have its own title (and subtitle if necessary). Include the following information:

1. A summary of the main subject and breakdown categories
2. The i) time period, ii) regularity of the data, iii) type of data, iv) geographical region covered and iv) units used<sup>1</sup>
3. Any adjustments to the statistics<sup>2</sup>

In addition:

- Titles should be in a larger font than headings
- Consider separating the title from the table with a blank row
- Note and explain if data is provisional or revised
- If different columns have different units, include this as part of table headings.

**KNOW YOUR AUDIENCE:** How titles and heading are displayed will affect data re-useability. More information on presenting data for re-use is available [here](#).

<sup>1</sup> The type of data might include counts, rates, percentages, means, confidence intervals.

<sup>2</sup> Including if the data has been seasonally adjusted, or presents Full Time Equivalent (FTE) rather than staff headcount.



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# Communicating uncertainty

*Being upfront about uncertainty helps to protect the integrity of statistics*

The challenge here is to provide information and explanation that gives assurance and supports understanding of the statistics.

## Presenting confidence intervals

Estimate	95% C.I. lower limit	95% C.I. upper limit
40.4	40.2	40.6

Estimate	± 95% C.I.
40.4	0.2

 Or 

Estimate	± 95% C.I.
40.4	(40.2-40.6)

**Best display: Both for presentation & re-use**

The intervals are clearly displayed. Using separate cells enables the data to be more easily reused.

**Possible displays: If space is an issue**

Consider these displays if you have large amounts of data. But, these make it harder for data re-use.

## Presenting statistical significance

Significance Level	Display
Significant at 0.001 level	***
Significant at 0.01 level	**
Significant at 0.05 level	*

**Explain whether a change is statistically significant, where possible.** Provide a plain English description of statistical significance.

For more information see: [GSS Guidance on Communicating Uncertainty and Change](#).

### **Example: National Survey for Wales (Welsh Government)**

This example uses colour coding in reference tables to visually convey the uncertainty in the statistics.

Click here for more information (in Annex A)

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# Finishing touches

*Professional finishing touches reassure users that time and effort have been put into the publication - which aids confidence in the numbers*

Ensure the spreadsheet has:

- No formal references to other spreadsheets
- Sensibly named tabs which open in the correct place on the sheet
- A sensible opening page. Usually the contents page, or a page which helps the user locate the information they need quickly
- Column/row widths which allow the whole cell contents to be read
- Wrapped text which doesn't split mid-word
- Correct spelling and grammar
- Underlying cell values which are unrounded for re-use
- Sensible zoom levels - set to optimise text size against maximising screen content. Ideally set the same on all pages

**Think about the print setting for users** - so that sheets print neatly onto the fewest A4 pages possible. When spanning more than one side of A4, set the table headings to appear on each sheet.

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# Formatting for presentation

*User need is the top priority when disseminating statistics. For some users, the clarity of presentation is the most important concern*

- See GSS guidance on [Effective Graphs and Tables in Official Statistics](#)
- Use 'freeze panes' to keep row and column headings visible
- Consider transposing your table: scrolling down is easier than across
- Divide your tables across worksheets to assist reading. For re-use it may be helpful to keep each table together on one sheet
- Summaries such as averages and subtotals help to set the context, but can hamper re-use if embedded in the body of the table
- Adjust row heights and column widths to create space, rather than inserting blank rows or columns, which can hamper re-use
- Hard code formula results to avoid accidental errors in use
- Format numbers as numbers and consider if rounding is appropriate. Rounding assists comparisons and makes numbers easier to remember. But, think about the level of detail your users require

**Further reading on the importance of understanding user need:**

1. [Government Service Design Manual: User needs](#)
2. [Office for National Statistics' work on creating user personas](#)

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# Formatting for re-use

*Some users want to perform their own calculations with the statistics*

Providing an output which reconciles the requirement for clarity of presentation with reusable data can be hard. Sometimes it is more appropriate to provide separate outputs. For example:

## [School applications and offers 2014 \(Department for Education\)](#)

The information is provided in i) an Excel Spreadsheet (with nice tabular layout) and ii) underlying data for reuse – both as an HTML and a csv file.

[Click here for more information \(in Annex A\)](#)

In this example, the statistics are presented for re-use so that:

- There are no blank rows or columns in the body of the table
- A separate metadata document is provided
- Geographical codes are presented for each row
- Old and new codes are presented alongside each other
- There are no spaces in column\_headings
- Numbers have no presentation formatting

## **Additional considerations to make data re-use easy:**

- Do not merge cells
- Do not hide columns and rows
- Ensure all numeric data is formatted as numeric (not as text)

# Releasing statistics in spreadsheets

## Good practice checklist

### All users will require ...

#### A contents page, containing:

- **Title** of the release or data series, with time period and geographical region
- **Information** about each tab in the spreadsheet (with hyperlinks)
- A **link** to wider data series **homepage** (if available)
- A **link** to the **publication** itself

#### A notes or guidance page, containing:

- **Contact details** for responsible statistician and media enquiries
- **Date** of publication and next update
- **Glossary** of essential technical terms and acronyms (or link to)
- Link to **supporting metadata** and **methodological documents**

#### Clear and concise titles and headings

- Each individual table should have its own **title** (and subtitle if necessary)
- Titles should include a **summary** of main subject and breakdown categories including the i) time period, ii) regularity of the data, iii) type of data, iv) geographical region covered, iv) units used, v) adjustments made, and vi) status
- Titles should be in a **larger font** than headings
- Consider separating the title from the table with a **blank row**

#### Consistent symbols and codes

- Use **nationally recognised** classifications and geography codes
- Use GSS **standard symbols**

#### Communicating uncertainty

- **Confidence intervals** clearly displayed, in **separate cells** if possible
- **Explain** whether a change is statistically significant (using \*), where appropriate and provide a plain English **description** of statistical significance

### Formatting for presentation and re-use

#### Formatting for presentation

- Use **'freeze panes'** to keep row and column headings visible
- Consider **transposing** your table: scrolling down is easier than scrolling across
- **Divide** your tables across worksheets to assist reading.
- Summaries such as **averages and subtotals** help to set the context, but can hamper re-use if embedded in the body of the table
- **Adjust** row heights and column widths to create space, rather than inserting blank rows or columns, which can hamper re-use
- **Hard code** formula results to avoid accidental errors in use
- **Format numbers** as numbers and pay attention to the displayed rounding and precision so users can get a feel for the numbers

#### Formatting for easy re-use

- **No blank rows or columns** in the body of the table and no spaces in column headings
- Do not **merge** cells or **hide** columns or rows
- Provide a separate **metadata** document
- **Geographical codes** presented for each row
- Numbers **formatted** as numbers, with no presentation formatting

#### Finishing touches ...

- Sensibly named tabs which open in the correct place on the sheet
- Column/row widths which allow the whole cell contents to be read
- Wrapped text which doesn't split mid-word
- Correct spelling and grammar
- Underlying cell values which are un-rounded for re-use
- Sensible zoom levels. Set to optimise text size against maximising screen content - ideally set the same on all pages

This list is not supposed to be prescriptive – the most important consideration is to think about what information your users will need to make the spreadsheet useful. Focus on whether the user can *locate* and *reuse* the information easily.

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# Part 2: Releasing data in open formats

*Good practice in choosing file formats for statistics in spreadsheets*

**Code of Practice for Official Statistics**: The Code recognises and focuses on the value of data, particularly concerning accessibility (Principle 8) which requires producers to:

*“Release datasets and reference databases, supported by documentation, in formats that are convenient to users”*

*(Principle 8, practice 6)*

This complements Principle 1 - meeting user needs.

**Government Open Data White Paper**: Released in June 2012, this paper sets out an open data vision: to make it easier for data publishers to release data in standardised, open formats. The paper introduces a ranking [scheme from 1 to 5 stars](#) to measure the usability of open data.

**The statistical community is considering the implications of adopting open data principles.** As illustrated in [Part 1](#), statistics should not be separated from supporting information. Context and caveats are vital to ensure users have enough information to interpret and make effective use of the data.

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# Part 2: Releasing data in open formats

**Summary:** When releasing your statistics, the priority is to meet user needs. Consider which of the following is important:

- An accessible, attractive, tabular lay-out in a spreadsheet for presentational purposes?
- A version that is suitable for re-use with minimal editing?
- A 3★ (or better) open data release?

It may be appropriate to provide multiple outputs - as the following GSS example shows:

### [Example: School applications and offers 2014 \(Department for Education\)](#)

The information is provided in i) an Excel Spreadsheet (with attractive tabular layout) and ii) underlying data for reuse, in HTML and csv file formats.

[Click here for more information \(in Annex A\)](#)

**[July 2014 Cabinet Office Guidance](#)**: this sets out the requirement for online government documents to be released in OpenDocument Format (see section 4).

Releasing statistics in OpenDocument Format will help ensure maximum public use of GSS data. The next slide shows how Home Office Statisticians have adopted the .ods spreadsheet format.



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# Case Study: Home Office statistical releases

Home Office statisticians publish data tables in the XML-based OpenDocument spreadsheet (.ods) format - making these 3★ releases. These spreadsheets are easy to produce. For example, in Excel simply select this format when saving. You can opt to use .ods as your default file format.

## 2014

[July 2014](#) (ODS, 20.4KB)

[June 2014](#) (ODS, 18.8KB)

[May 2014](#) (ODS, 18.7KB)

[April 2014](#) (ODS, 18.6KB)

Month	Number of applicants					
	Applications		Applications including fresh claims (2)		Applications withdrawn (3)	
	Total (including dependants)	of whom: main applicants	Total (including dependants)	of whom: main applicants	Total (including dependants)	of whom: main applicants
July 2014 (P)	2,902	2,291	2,946	2,327	211	197

(1) For the figures which include dependants further disaggregations by age, gender and nationality will be available on the EUROSTAT website: [http://ec.europa.eu/eurostat/portal/page/portal/statistics/search\\_database](http://ec.europa.eu/eurostat/portal/page/portal/statistics/search_database)

(2) Excludes applicants who have made a fresh claim in the same reference month.

(3) Includes re-applicants who withdrew a fresh claim.

(P) Provisional figures.

You can open these files in most spreadsheet programs. Unlike csv, the tables retain formatting. The files are also smaller than Excel equivalents.

Some complex features, such as pivot tables, are not fully supported in .ods files. The Home Office provide additional guidance for Mac users who may experience difficulty with this open format. Compatibility information is available online, but the simplest approach is to check that each table re-opens as expected.



# Annex A: Contents Page

## A good practice example

Title of the release and release date

Guidance on how to navigate the workbook

Advance notice of future releases

Future release dates are table specific

**House Price Index**  
**Publication Date: 14 October 2014**  
 To access data tables, select the table headings or tabs.  
 To return to contents click "Back to contents" link at the top of each page.

Office for National Statistics

[Cover sheet](#)  
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Next Scheduled Up-date	
Annual1	March 2015
Annual2	July 2015

Reference Table	Frequency	House Price Indices - description	Previously found in DCLG
Table 20	Annual2	<a href="#">Distribution of mortgage periods, United Kingdom, from 1990</a>	Live Table 536
Table 21	Annual2	<a href="#">Distribution of borrowers' incomes, United Kingdom, from 1990</a>	Live Table 538
Table 22	Annual1	<a href="#">House prices from 1930, annual house price inflation, United Kingdom, from 1970</a>	Live Table 502
Table 23	Annual1	<a href="#">Simple average house prices by new/other dwellings, type of buyer and region, United Kingdom, from 1986</a>	Live Table 503
Table 24	Annual1	<a href="#">Simple average house prices, by new/other dwellings, type of buyer and standard statistical region, from 1969</a>	Live Table 505
Table 25	Annual1	<a href="#">Mix-adjusted house prices, by new/other dwellings, type of buyer and region, United Kingdom, from 1993</a>	Live Table 507
Table 26	Annual1	<a href="#">Simple average house prices, by dwelling type and region, United Kingdom, from 1986</a>	Live Table 511
Table 27	Annual1	<a href="#">Simple average house prices, by dwelling type and standard statistical region, United Kingdom, from 1983</a>	Live Table 512
Table 28	Annual1	<a href="#">Simple average house prices, mortgage advances and incomes of borrowers, by new/other dwellings, type of buyer and region, United Kingdom, from 1986</a>	Live Table 513
Table 29	Annual2	<a href="#">Simple average house prices, mortgage advances and incomes of borrowers, by new/other dwellings, type of buyer and standard statistical region, from 1969</a>	Live Table 515
Table 30	Annual2	<a href="#">Ratios of simple average house prices, mortgage advances and incomes of borrowers, by new/other dwellings and type of buyer, United Kingdom, from 1969</a>	Live Table 517
Table 31	Annual1	<a href="#">Simple average house prices, United Kingdom (Chart)</a>	Live Table 571
Table 32	Annual1	<a href="#">Latest year on year percentage change in mix-adjusted house prices, by region (chart)</a>	Live Table 572
Table 33	Annual1	<a href="#">Mix-adjusted house prices index and inflation, by new/other dwellings, type of buyer and region, from 1969</a>	Live Table 593
Table 34	Annual1	<a href="#">Distribution of house prices, by new/other dwellings and type of buyer, United Kingdom, from 2006</a>	Live Table 532
Table 35	Annual2	<a href="#">Distribution of dwelling types with mortgage, by new/other dwellings and type of buyer, United Kingdom, from 1990</a>	Live Table 534
Table 36	Annual2	<a href="#">Distribution of mortgage advances, United Kingdom, from 1990</a>	Live Table 535
Table 37	Annual2	<a href="#">Distribution of borrowers' ages, by new/other dwellings and type of buyer, United Kingdom, from 1990</a>	Live Table 537
Table 38	Annual2	<a href="#">Repayments as percent of income and deposit as percent of purchase price, by type of buyer, United Kingdom, from 1988</a>	Live Table 539
Table 39	Annual2	<a href="#">Deposit as a percent of purchase price, by type of buyer, United Kingdom, from 1988 (Chart)</a>	Live Table 540

The data published in these tables are based on a sub-sample of RMS data. These results will therefore differ from results produced using full sample data. For further information please contact the ONS using the contact details on the previous page.

Cover sheet | Notes | Contents | Table 20 | Table 21 | Table 22 | Table 23 | Table 24 | Table 25 | Table 26

Consider linking to publication or homepage

Cross-reference to earlier releases

Hyperlinks to each worksheet

Click to return to guidance

[Link: Publication spreadsheet](#)

[Link: publication home page](#)

# Annex A: Notes or Guidance Page

*A good practice example*

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		<b>HM Revenue and Customs</b>											
2		<b>UK Property Transactions Count - September 2014</b>											
3													
4													
5													
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12													
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34													
35													

Producer and title

Period covered

Explanation of statistics and source

Date of current and future releases

Further explanation through statistical commentary

For this release, the details of the responsible statistician are on the cover sheet

[Link: Publication spreadsheet](#)

[Link: publication home page](#)

Click to return to guidance

# Annex A: Communicating uncertainty

## A good practice example

### 3. Robustness of estimates

To ensure that the National Survey estimates quoted in this bulletin are robust, we have calculated the coefficient of variation (CV) for each estimate purposes.

Results are colour coded according to the CV for each estimate as follows.

	Estimate is precise	$0 \leq CV < 5$
	Estimate is reasonably precise	$5 \leq CV < 10$
	Estimate is considered acceptable	$10 \leq CV < 20$
	Estimate is not reliable or CV is not available	$CV \geq 20$
	-	Value is suppressed due to small cell size (i.e. < 30 people answered that question)

### 4. Confidence intervals

Estimates from the National Survey are subject to a margin of uncertainty. An indication of this uncertainty is given by the confidence interval for each estimate. 95% confidence intervals are presented for each estimate in the attached tables. These were calculated taking the survey design into account.

Confidence intervals can also be used to help tell whether there is a real difference between two groups. As a rough guide, if the confidence intervals for the two groups overlap, the estimates are not statistically significantly different.

This approach is not as rigorous as doing a formal statistical test, but is straightforward, widely used and reasonably robust. See the Quality Report for more information on the use of confidence intervals to identify differences.

		Gender						
		Male			Female			
		%	Lower CI	Upper CI	%	Lower CI	Upper CI	
1	<b>Table 2: Usual mode of transport used to get to local shops, by gender</b>							
2								
3								
4								
5								
6	Usual mode of transport used to get to local shops	Car	61	60	63	57	56	59
7		Lifts from friends or relatives	3	3	4	7	6	7
8		Community transport	-	-	-	-	-	-
9		Bus	6	6	7	9	8	10
10		Train	1	0	1	1	0	1
11		Taxi	1	1	2	2	2	3
12		Walk	50	48	52	48	46	49
13		Bike	4	3	5	1	1	1
14		Don't go	1	1	2	2	2	3
15		Other	-	-	-	0	0	0
16								
17	Sample size: 14,700							
18								
19	Version: 1							
20	Released: May 2014							
21	Created by: National Survey for Wales team							
22	<a href="#">Back to contents page</a>							

An explanation of the uncertainty and the confidence intervals

Sample size also provides an indicator of likely precision

For more information see: [GSS guidance on communicating uncertainty and change](#)

Colour coding based on coefficient of variation. Note this works in grey-scale

Lower and upper confidence limits also provided

[Link: Publication spreadsheet](#)

[Link: publication home page](#)

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# Annex A: Presentation versus re-use

*A good practice example – spreadsheet focused on clarity of presentation*

**Applications and offers for entry to secondary schools in England in academic year 2014/15**

National Offer Day March 2014<sup>1</sup>  
Coverage: England

Local authority <sup>2</sup>	LA code	The total places available in all secondary schools	Applications received from parents of home applicants <sup>3</sup>	Percentage of offers made to applicants <sup>4</sup>					
				First preference	Second preference	Third preference	One of top three preferences <sup>4</sup>	Any preferred school <sup>4</sup>	A non preferred school
ENGLAND		600,903	521,274	85.2	7.7	2.5	95.5	96.8	2.6
NORTH EAST		28,705	22,993	92.4	4.1	0.6	97.0		
000005	841	Darlington	1,227	1,088	86.3	7.6	1.7	95.6	
E06000047	840	Durham	6,064	4,700	96.5	2.0	0.1	98.6	
E08000020	390	Gateshead	2,200	1,717	87.7	3.1	0.0	90.7	
E06000001	805	Hartlepool	1,174	1,010	97.9	x	x	x	
F06000002	806	Middlesbrough	1,614	1,548	79.1	16.5	2.5	98.1	x
021		North East upon Tyne	2,307	2,121	85.7	4.1	1.0	90.9	1.8
02		North Tyneside	1,889	1,479	96.8	1.9	0.5	99.1	
48	929	Northumberland	2,736	1,977	98.2	x	x	99.4	
03	807	Redcar and Cleveland	2,121	1,316	98.2	1.2	0.0	99.4	
23	393	South Tyneside	1,828	1,408	93.3	3.9	1.0	98.2	
04	808	Stockton-on-Tees	2,345	2,030	88.8	7.3	1.4	97.4	
E08000024	394	Sunderland	3,200	2,599	94.1	2.9	0.3	97.3	

Title of the release, including time period

Use freeze panes to retain title and headings

Includes national and regional summaries

Formats appropriate for the statistics

Numbers for comparison presented in columns

Statistics presented as numbers, not formulae

*See next slide for the same spreadsheet focused on reusability*

[Link: Publication spreadsheet](#)

[Link: publication home page](#)

Click to return to guidance

# Annex A: Presentation versus re-use

*A good practice example – spreadsheet focused on reusability*

Released  
as .csv file

Title and top  
level metadata  
removed

Variable names supplied,  
without spaces

Presentation formats  
removed from  
numbers

Totals and  
subtotals for  
countries and  
regions in fixed  
row positions at  
top and coded  
appropriately

Standard  
geographical  
codes are used

Blank rows and  
columns removed

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Country_c	Country	Region	Region_C	New_LA_c	Old_LA_c	LA_name	School_Ph	NC_Year	Admissio	Applicatio	Online_Aj	Online_Aj	No_of
2	E92000001	England						Secondary		600903	521274	421370	80.9	
3	E20000001	England	NORTH EA	E12000001				Secondary		28705	22990	17020	74	
4	E92000001	England	NORTH W	E12000002				Secondary		85577	73110	59340	81.2	64510 4750
5	E92000001	England	YORKSHIR	E12000003				Secondary		63205	52870	30200	57.1	47270 3210
6	E92000001	England	EAST MID	E12000004				Secondary		53389	43750	40760	93.2	39930 2410
7	E92000001	England	WEST MID	E12000005				Secondary		63966	57650	42660	74	47220 5120
8	E92000001	England	EAST OF E	E12000006				Secondary		67589	57830	50010	86.5	50670 3640
9	E92000001	England	INNER LO	E12000007				Secondary		29468	27700	18510	66.8	18460 4360
10	E92000001	England	OUTER LO	E12000007				Secondary		57309	53040	45650	86.1	38200 7270
11	E92000001	England	SOUTH EA	E12000008				Secondary		94866	84460	75960	89.9	72640 6250
12	E92000001	England	SOUTH W	E12000009				Secondary		56829	47870	41260	86.2	43990 2310
13	E92000001	England	OUTER LO	E12000007	E09000002	301	Barking ar	Secondary	7	2610	2498	2464	98.6	6 1910 307
14	E92000001	England	OUTER LO	E12000007	E09000003	302	Barnet	Secondary	7	4203	3468	3320	95.7	6 2486 459
15	E92000001	England	YORKSHIR	E12000003	E08000016	370	Barnsley	Secondary	7	2490	2200	664	30.2	3 2043 114
16	E92000001	England	SOUTH W	E12000005	E06000022	800	Bath and	Secondary	7	2437	1576	1455	92.3	3 1487 56
17	E92000001	England	EAST OF E	E12000006	E06000055	822	Bedford	Secondary	9	1898	1478	1041	70.4	4 1460 9
18	E92000001	England	OUTER LO	E12000007	E09000004	303	Bexley	Secondary	7	3412	2632	2257	85.8	6 2220 222
19	E92000001	England	WEST MID	E12000005	E08000025	330	Birmingha	Secondary	7	13321	14286	10856	76	6 10856 76
20	E92000001	England	NORTH W	E12000002	E06000008	889	Blackburn	Secondary	7	2111	1971	301	15.3	3 301 15.3
21	E92000001	England	NORTH W	E12000002	E06000005	890	Blackpool	Secondary	7	1414	1388	1031	74.3	3 1031 74.3
22	E92000001	England	NORTH W	E12000002	E08000001	350	Bolton	Secondary	7	3739	3135	2574	82.1	3 2574 82.1
23	E92000001	England	SOUTH W	E12000005	E06000028	837	Bournemo	Secondary	7	1994	1425	1157	81.2	3 1246 126
24	E92000001	England	SOUTH EA	E12000008	E06000036	867	Bracknell	Secondary	7	1285	1184	760	64.2	3 922 130
25	E92000001	England	YORKSHIR	E12000003	E08000032	380	Bradford	Secondary	7	6912	6958	4574	65.7	5 5278 791

*See previous slide for the same spreadsheet focused on clarity of presentation*

[Link: Publication underlying data](#) [Link: publication home page](#)

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guidance

# Annex B: Acknowledgements

- This guidance has been developed by the Good Practice Team in collaboration with GSS statisticians Louisa Ashby and Emily Barnett. The project was initiated when Louisa and Emily were on secondment from the GSS to the factchecking organisation [Full Fact](#)<sup>1</sup>.
- The Good Practice Team (GPT) would like to thank Louisa and Emily for developing the original content and working with us on this new version.
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  - Bill Oates for technical advice on open data
  - Colleagues in the UK Statistics Authority
  - All GSS statistical producers who provided feedback on draft versions
  - The Full Fact team for helping initiate the project and subsequent input

## **Contact information**

For more information about this guidance, or if you have any questions, please contact the GSS Good Practice Team: [goodpracticeteam@statistics.gov.uk](mailto:goodpracticeteam@statistics.gov.uk) or 01633 651593.

<sup>1</sup> The GSS offer secondments to Full Fact (for Senior Statistical Officers & Assistant Statisticians). Further details are available on the [GSS website](#).