

Best practice for working with external data sources



Crowdsourced ideas from our Data Cohort session 4

Who created the data source?

You've found some external data that might be useful to explore what's happening locally or to compare with your own information. But what do you know about it?

Is it:

- Reliable – does it look like it's from a trusted source? Is it primary or secondary data (i.e. is it data originally from the ONS e.g. census data, that's been analysed further?)
- Up to date – is it dated? Is it current?
- Biased – who created it? Do they have an agenda in mind? This may be OK as long as you are aware of it but there may be important information missing

What attributes / variables does the data have?

- Scale – what's the sample size?
- Date range - what time period does the data cover?
- Geographical boundary e.g. Borough, Ward, LSOA
- If it's qualitative data, what do you know about who participated?
- Are there any unusual features or outliers?

How does it behave when you are exploring it?

- Do attributes remain the same? e.g. do date ranges change as you explore other variables

Ease of use

- Is it easy to explore without being a data expert?
- Does it have help documentation?
- What skills will you need to explore the data e.g. do you need to download as a csv or Excel file and use Excel to analyse it further

Making comparisons with your own data:

- Is your data clean?
- Are you comparing like-for-like attributes? If your date range or geographical boundaries differ you may make false assumptions
- Be consistent e.g. use the same external data source each year for a more accurate picture of change
- Is it a true pattern? e.g. did something change in the way you collected your data that makes it difficult to compare like-for-like?

What other tools will you need?

- Do you have Excel?
- What other programmes could help you to visualise the data e.g. mapping, dashboards

Talking and speaking about the data

- Have you referenced the external data source?
- Is it open data? Do you need permission to reference it?
- Is it jargon free? Have you explained any acronyms etc.?
- Check your findings with your peers – do your conclusions make sense?
- What message do you want to convey about what you have found?

Reporting your findings

- Highlight and summarise just key points, don't be tempted to include more than needed

Next steps

Now that you have explored and compared your data, what do you need to do next?

Do you need to?

- Ask new questions of the data? Check another hypothesis
- Reflect on your findings with your team, trustees or others that may be involved in change?
- Change the way a service is delivered?

