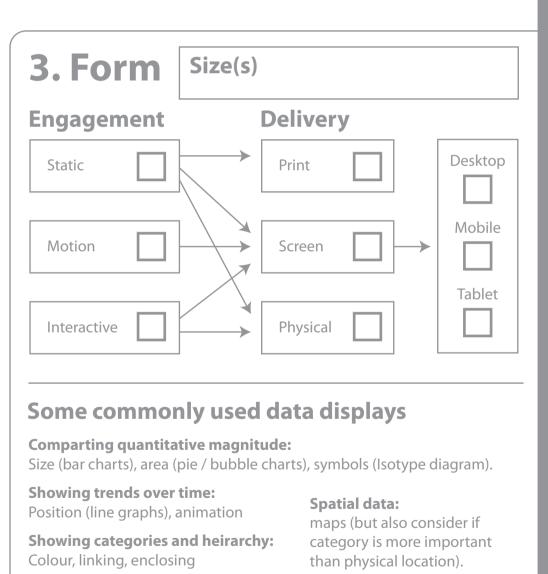# DATA VISUALISATION SPECIFICATION

1. Aims

Message
What is the key "story" told by your visualisation. Why is it important? Are you sure it can't be communicated better verbally?

Audience
Who will be viewing your graphic? Consider: Age, gender, profession, education, nationality, language, existing level of knowledge about the subject.

Tone
○ Formal ○ Instructive ○ Pragmatic ○ Emotive ○ Other

Timing
Publication date.
Does your visualisation have a shelf life, or need updating?

2. Data

What data is available?
Does it need to be cleaned?

Does more need to be collected?

Do you need to present everything for your key message to be understood?

Data types
Is your data numerical? Heirarcical? Qualitative? Locational?

Confidence / Uncertainties
How certain is the data?
What is on the horizon / could happen?

3. Form

Size(s)

Engagement
- Static ☐
- Motion ☐
- Interactive ☐

Delivery
- Print ☐
- Screen ☐
- Physical ☐

- Desktop ☐
- Mobile ☐
- Tablet ☐

Some commonly used data displays

Comparting quantitative magnitude:
Size (bar charts), area (pie / bubble charts), symbols (Isotype diagram).

Showing trends over time:
Position (line graphs), animation

Showing categories and heirarchy:
Colour, linking, enclosing

Spatial data:
maps (but also consider if category is more important than physical location).

Data display elements

Size	1D (e.g. bar chart) ●
	2D (area) ●
	3D (volume) ●
Position	1D (e.g. means plot) ●
	2D (e.g. scatter plot) ●
	3D (e.g. 3D scatter) ●
Colour	Categorical ●
	Contiuous (colour scale) ●
Pictorial	Symbol / illustration ●
	Photograph ●
Grouping	Link lines ●
	Enclosure ●
	Highlighting ●
Motion	Animation (position, scale etc) ●
	Video ●
Interaction	User controls display ●
	User Provides data ●
Other	

4. Finishing

Heirarchy
Stand away from your screen or squint.
What is the first thing that you see?
Do you need a bigger title / key headings?

Key
Make sure you have provided a key.

Intended results
What do you want your audience to do?
Do you need to show them where to find more information?

Credits
Make sure you credit everyone involved (including organisations / funders):