

# Tips for using tables and graphs

Tables and graphs are both useful for showing data. However, they do serve different purposes. This quick guide will help you to use tables and graphs correctly.

## When to use

Use a table:

- when you want to show structured or repetitive information with precise values
- when you want to be able to look up precise values and compare related values.

Use a graph:

- when you want to show general trends, patterns or relationships
- when you want your audience to quickly grasp specific points of interest in a dataset.

## Placing tables and graphs in text

- Mention the table or graph (figure) in the text, and place the figure as close after its text reference as practicable. It is good practice to discuss the key points of a table or graph and then direct the reader with an in-text reference:

Australian house sizes have increased rapidly over the past 50 years (Table 1.1)

not

Table 1.1 shows the average house sizes for Australia's capital cities from 1960 to 2010

- Number tables and figures sequentially throughout the document:

Table 1   Table 2   Table 3

or within a chapter:

Figure 1.1   Figure 1.2   Figure 1.3

- Place table names above the table. Place figure names below or above the figure, but be consistent.
- In the table or figure name, place a tab after the table or figure number, not a colon. Do not put a full stop at the end of the name.
- Use sentence case in table and figure names (i.e. initial capitals only for the first word and any proper nouns).
- Place any abbreviations, notes or sources (in that order) between the bottom of the figure and the figure name, not on the figure itself.

## General tips for tables

Figure 1 shows the parts of a table.

- Tables should be as simple as possible and fit comfortably on a page.
- Avoid clutter by rounding numbers, when possible, but make sure this retains the important elements of the numbers and is consistent with their precision.
- State units in the column headings rather than in the data cells.
- Standardise common elements (e.g. typography, borders, colours, line styles, spacing) across similar tables in a document.
- If the table extends over more than 1 page, repeat the column headers and current row headers at the top of the new page.
- Left-align columns of text. Align all numbers in a column on the decimal point (even if the decimal point is not actually present).
- Make sure that every table cell has information in it. For example, you could use 'n.a.' for not applicable or not available (define these abbreviations in a note under the table). Use '0' for a zero result only – do not use '0' for missing data.

Figure 1 Parts of a table

Table name/title — **Table 5** Livestock losses in South Australian fires, January–March 2014

Fire location	Month	Livestock type	
		Cattle	Sheep
Bangor	Feb–Mar	80	1800
Clare	Jan–Feb	0	40
Eden Valley	Feb	0	2700 <sup>a</sup>
Kiana	Feb	20	600
Rockleigh	Jan–Feb	0	340
<b>Total</b>	–	<b>100</b>	<b>5480</b>

<sup>a</sup> Including sheep salvaged by slaughter

Source: Adapted from Rogers et al (2015). Dealing with livestock affected by the 2014 bushfires in South Australia: decision-making and recovery. *Australian Journal of Emergency Management* 30(2):13–17.

## General tips for graphs

Figure 2 shows the parts of a graph.

- Standardise common elements (e.g. legends, axes, colours, line styles) across similar figures in a document.
- Remove any citations, caveats, logos, background shading, borders, and other nonrelevant data or graphic elements within the graph.
- Ensure your graphs are accurate and easily understood (e.g. a simple bar graph is easier to read than one in 3D; the comparative sizes of bars are easier to estimate than the sizes of circles).
- Avoid pie graphs because the size of a segment is difficult for readers to judge, mentally assign a value to and compare.
- Clearly label both axes with categories and values.
- Clearly distinguish lines from each other by varying line weight, colour or style. However, be careful that these differences do not result in visual emphasis of some lines over others.
- Look for opportunities to use colour meaningfully, and be careful not to imply meaning where there is none (e.g. green can be interpreted as 'good' and red as 'bad').
- Use appropriate divisions and scales. These elements should neither exaggerate nor minimise the data – for example, they should not stretch a graph to make it taller (to accentuate differences in values) or stretch the graph wider (to minimise differences).

Figure 2 Parts of a graph

