

## A picture paints 1000 words – using visuals effectively

We've done earlier Masterclasses on effective A3s<sup>1</sup> and on Experimenting with PowerPoint reports<sup>2</sup> – they are about using a different presentation format. But this Masterclass is focused on incorporating some of the techniques we see in A3s and PowerPoint reports into standard papers. After all, a picture can paint 1000 words.

### People absorb information in different ways

Some people prefer the written word, whereas others are much more likely to absorb and process information using visuals.

Your Mayor and Councillors will have a variety of different style preferences. It's all about getting something that suits them all. This means you might have to try several different techniques in the same paper!

Of course, the majority of papers are made public. So you'll need to think about the end reader too!<sup>3</sup>

### Break up the text

It makes a paper easier to read at pace if it is broken up with white space and visuals.

These days people are used to reading internet content that is not so heavily text-based.

A long text-based paper is hard work for anyone – especially busy and tired people.

### As we've said before, there is a long history of using visuals

In the 1850s, Florence Nightingale used Coxcomb charts to present information on the causes of death of wounded soldiers in hospitals. This was a very early example of showing data in pictorial form to gain traction and improve policy and practices.

Of course, it's much easier to do these days, now you don't have to do them by hand. A wide range of tools makes it more or less automatic, such as the graph wizard in Microsoft Excel, SmartArt, Google Maps, or importing photographs.

### There are plenty of opportunities to use visuals

There are obvious uses for visuals, and those we see regularly, but not consistently, e.g.:

- using graphs when presenting data
- maps when showing geographical features, new buildings or roads
- photographs – including aerial photographs
- traffic lights for reporting
- heat maps for risk
- Gantt charts for complex project plans
- architectural drawings for new buildings or infrastructure.

<sup>1</sup> Masterclass brief 17 *Using A3s to best effect*  
[https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/local\\_government\\_brief\\_17\\_a3s.pdf](https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/local_government_brief_17_a3s.pdf)

<sup>2</sup> Masterclass brief 26 *Experimenting with PowerPoint reports*  
[https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/brief\\_26\\_lg\\_powerpoint\\_slide\\_packs.pdf](https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/brief_26_lg_powerpoint_slide_packs.pdf)

<sup>3</sup> Of course you'll also need to think about accessibility too, especially if documents are to be made public. There are Government

Guidelines (<https://www.digital.govt.nz/standards-and-guidance/design-and-ux/accessibility/>) which have lots of practical information on this. But in simple terms, if you are using diagrams, pictures, graphs or infographics you'll need to provide an alternative text description. It also helps to include simple text descriptions in the actual diagrams.

But we encourage you to go beyond the obvious. Think about:

- Diagrams to show how concepts fit together – a strong visual can be better than a complex written discussion. These can be bespoke or use standard concepts, e.g. cycle type diagrams, 2x2 matrices<sup>4</sup> for showing two interlinked concepts, hub and spoke diagrams, or hierarchies.
- Diagrams to show different roles and responsibilities, e.g. jigsaws.
- Showing different stakeholder perspectives and the similarities and differences between them. This can also be used to add flavour by including direct quotes.
- Simplified **process maps** – and not just for the steps in a process from an organisational or user perspective, but for stages of a policy development project, for example.
- **Timelines** – Smart Art or any number of apps can help. These can be useful for summarising the background of an issue, as well as the future steps.
- **Infographics** to present a range of complex data – often used as an alternative to graphs or quoting statistics.

### There are lots of great examples – borrow and adapt them

Consultation documents and published strategies are often good sources of examples. Because they are designed for the public, extra care is put into making the information easy to understand and interesting. Some magazines have really focused on presenting information graphically to make it easy to understand. Look at back issues of the following, Time Magazine, National Geographic, The Economist (which has a special feature every week on presenting data) and NZ Geographic, for example. Many newspapers also use diagrams (as well as traditional photographs).

We suggest you keep your own ‘library’ of good ones, which you can then copy or adapt for your own use.

### A great visual can be recycled

We’ve seen a number of government agencies and local authorities invest in developing visuals for a particular project or stream of policy work. These can then be used a number of times and help to orientate the policy discussion. Here are a few we’ve seen recently.

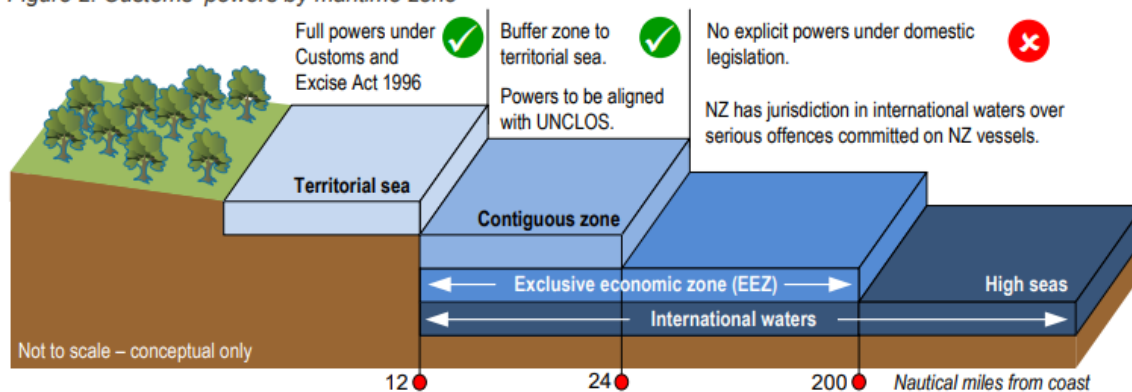
These examples show the variety of types of presentations that are possible – be creative.

---

<sup>4</sup> See our diagram which showed the characteristics of new Ministers [https://nzier.org.nz/static/media/filer\\_public/28/bf/28bf4754-ee73-4ccf-9801-49ce19819b3f/brief\\_39\\_2020\\_election\\_special.pdf](https://nzier.org.nz/static/media/filer_public/28/bf/28bf4754-ee73-4ccf-9801-49ce19819b3f/brief_39_2020_election_special.pdf)

Firstly from The New Zealand Customs Service<sup>5</sup> (in conjunction with other government agencies). This helped to explain the complex regulatory environment, which agencies and legislation covered which areas, and where the gaps were:

Figure 2: Customs' powers by maritime zone



Secondly, the Ministry of Social Development (and others) in relation to family support measures,<sup>6</sup> showed the proposed policy response for different population groups by household type and income level:

### If there were only 100 Families with Children in New Zealand...

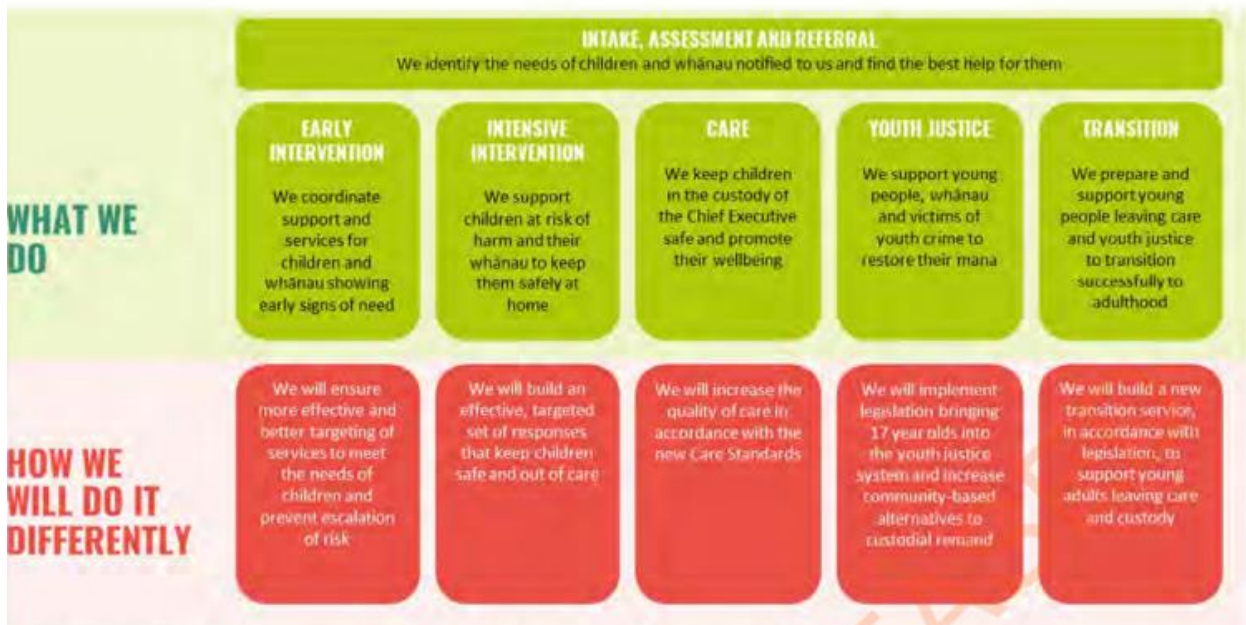
- Around 24 families would be sole parents 👤 and around 76 would be couple parents 👪
- At any one time, around 51 families would have both parents working 👪, and around 33 families would have only one parent working 👤 / 👪.

<p><b>At any one time, around 16 families would not have any earnings from wages/self-employment.</b></p> <p>Sole parents (not earning) 👤 👤 👤 👤 👤 👤                  Couple parents (not earning) 👪 👪 👪 👪 👪</p>	<p><b>Non-earning families</b></p> <p>Families that are not in work are likely to be primarily supported by main benefits, though may have other sources of income. The main support these families would be entitled to via Working for Families is the Family Tax Credit.</p>
<p><b>Around 13 families would be in some work with annual combined earnings less than \$43k (gross).</b></p> <p>Sole parents 👤 👤 👤 👤 👤 👤                  Couple parents 👪 👪 👪 👪 👪</p> <p>Earnings at this level are equivalent to less than 40 hours of work on minimum wage per week.</p>	<p><b>Benefit-work interface</b></p> <p>Parents with low hours of work are likely to also receive a main benefit and the Family Tax Credit. Sole parents working at least 20 hours and couples working at least 30 hours become eligible for the Minimum Family Tax Credit. Parents working at least one hour will be eligible for the In-Work Tax Credit if they are not receiving a main benefit.</p>
<p><b>Around 18 families would be in work with annual combined earnings between \$43k and \$83k.</b></p> <p>Single earner 👤 👤 👤 👤 👤 👤                  Dual earner 👪 👪 👪 👪 👪</p> <p>Earnings at this level are equivalent to between 40 and 80 hours of work on minimum wage per week.</p>	<p><b>Low-middle income families</b></p> <p>The Family Tax Credit and In-Work Tax Credit will begin to abate for families with an annual income above \$42,700. WFF will be fully withdrawn for families with one child within this income range. Accommodation Supplement also abates over this period.</p> <p>Further analysis has shown that some of the families in this group are either already in, or very close to the threshold for AHC50 poverty.</p>

<sup>5</sup> <https://www.customs.govt.nz/globalassets/documents/legal-documents/cabinet-paper---maritime-powers-extension-bill.pdf>

<sup>6</sup> <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/information-releases/cabinet-papers/2022/working-for-families-review/working-for-families-review-options.pdf>

From Oranga Tamariki<sup>7</sup> – to show how the different pieces of policy work and changes to their operating model fit together. This was then used to guide the discussion of individual items:



Statistics NZ is an absolute master of the infographic. There are plenty of great examples on its website. An example of the data on homelessness:

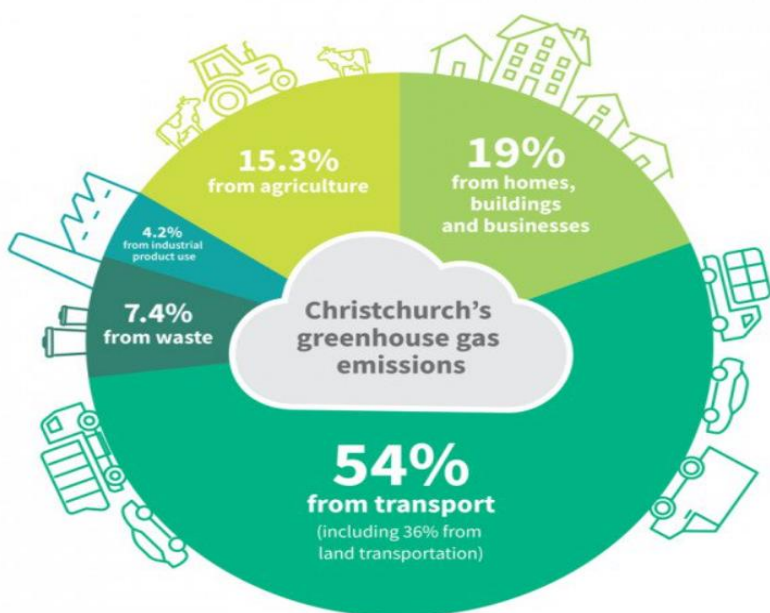
### When you have no place to call home

Not everyone has access to adequate housing.  
 1 percent of the population was estimated to be severely housing deprived on Census night 2018.  
 Homelessness statistics measure three types of severe housing deprivation.



<sup>7</sup> <https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Report-and-releases/Cabinet-papers/Operating-model-July-2019-Cabinet-Papers/1.Overview-Minutes-operating-model.pdf>

And from Christchurch City Council on the sources of greenhouse gas emissions:<sup>8</sup>



Where Christchurch greenhouse gas emissions come from.

Simple diagrams which show stakeholder feedback, often using quotes. The Auckland Council<sup>9</sup> often uses this technique, adding flavour and colour to the statistics:

68. In support for various aspects of the strategy, people told us:

"Accessibility is key for underfunded communities"

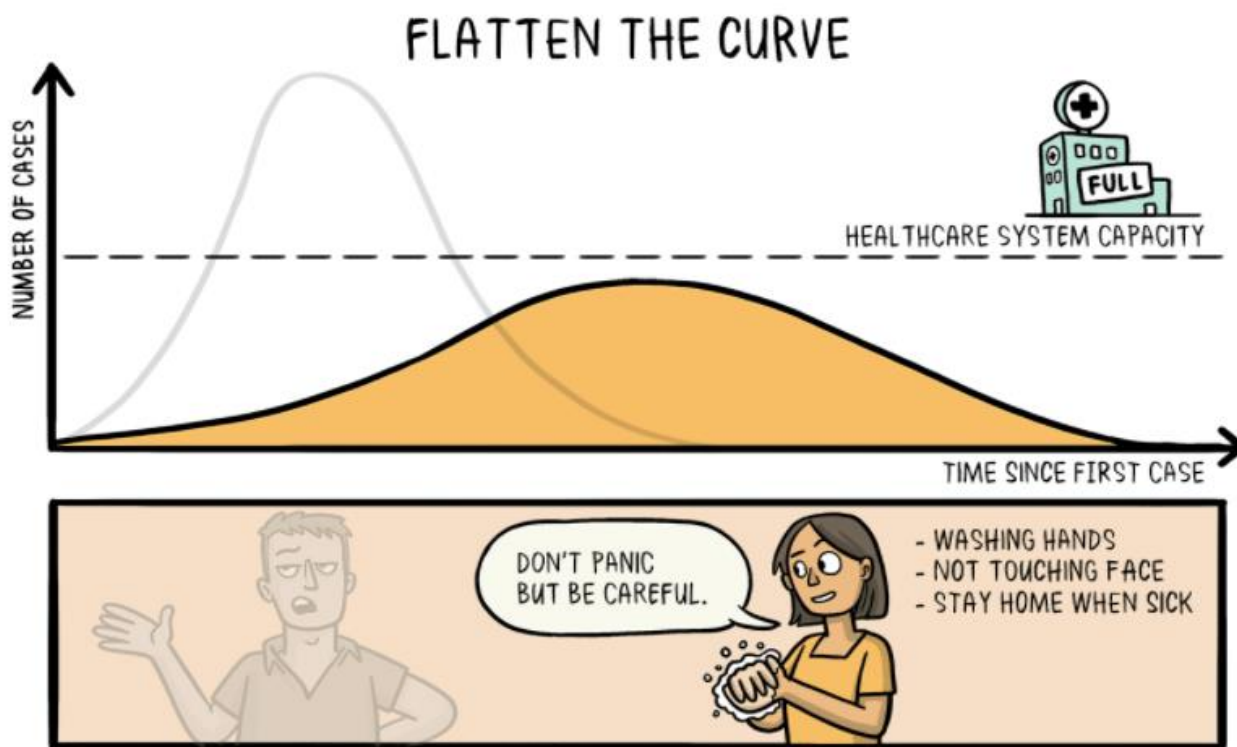
"One of the key aspects of a diverse, happy and inclusive city is a sense of belonging. I strongly agree with the Whanaungatanga outcome as being highly desirable as it encourages all of us to be better for each other."

"everyone needs to be connected and feel included"

<sup>8</sup> <https://ccc.govt.nz/environment/climate-change/our-footprint/>

<sup>9</sup> [https://infocouncil.aucklandcouncil.govt.nz/Open/2022/02/PAC\\_20220210\\_AGN\\_10452\\_AT.PDF](https://infocouncil.aucklandcouncil.govt.nz/Open/2022/02/PAC_20220210_AGN_10452_AT.PDF)

But the classic must be from Siouxsie Wiles and Toby Morris that was used worldwide:<sup>10</sup>



@SIOUXSIEW @XTOTL @THESPINOFFTV

\*ADAPTED FROM @DREWAHARRIS, THOMAS SPLETTSTÖBER (@SPLETTE) AND THE CDC' CC-BY-SA

### A good picture is great, but a bad visual is awful

We've seen some visuals which don't work – they add confusion rather than clarity.

Some things to remember:

- **Don't use too many different fonts** – it makes diagrams harder to read and can look messy.
- **Right-sizing** – make sure the text in the visual doesn't get too small and so becomes difficult to read.
- **Use colour** – start with your organisation's standard colour palette. That makes sure the colours don't clash and gives a house look and feel. But don't go mad: too many colours are like too many fonts; just confusing.

- **Make headings or titles crisp and clear.** Slogans can be effective and memorable.
- **Avoid complexity** – an over-engineered diagram or graph can be hard to follow.  
**Leave white space** – it makes it easier to read, and people like to write notes.

### Don't relegate visuals to an appendix

Often, we see papers that have some great visuals, but they are left to languish in an appendix to the paper. This can neutralise their impact. They aren't accompanied by the text discussing those issues and, being at the end, can be overlooked.

Place them in the body of the paper if they help tell the story.

<sup>10</sup> <https://thespinoff.co.nz/media/07-09-2021/the-great-toby-morris-siouxsie-wiles-covid-19-omnibus>

### Test it out on a range of different colleagues

Test it out on your colleagues – several, if possible, as different people have different perspectives.

Also, test it on someone who knows little about the topic to see if the chosen layout works in getting the points across without additional briefing.

Make sure there is a careful peer review of any visuals before finalising them. Choose someone to do this who has a real flair for design.

Finally, remember to check the spelling – the standard spell checker often doesn't pick up words within visuals.

### Actively develop the skills amongst your team

Some people are better at visuals than others.

It's worth investing in these people and helping them become experts, so they can assist others in the team. Get them to try different software packages and build their skills in the visual presentation of information.

Others may not have the same natural abilities and interest in visual design. But it's still worth them learning the basics.

As mentioned above, typically, your communications people and website designers have expertise in design which can be applied. Use them to help, at least in a peer-review role.

### Keep at it

It's hard work producing really good visuals, and you have to keep working on it. But, it can be extremely effective done well.

This paper was written by Cathy Scott at NZIER, March 2022.

For further information, please contact anyone from our policy advice team:

Cathy Scott at [cathy.scott@nzier.org.nz](mailto:cathy.scott@nzier.org.nz);

John Yeabsley at [john.yeabsley@nzier.org.nz](mailto:john.yeabsley@nzier.org.nz)

Todd Krieble at [todd.krieble@nzier.org.nz](mailto:todd.krieble@nzier.org.nz)

NZIER | (04) 472 1880 | [econ@nzier.org.nz](mailto:econ@nzier.org.nz)

*While NZIER will use all reasonable endeavours in undertaking contract research and producing reports to ensure the information is as accurate as practicable, the Institute, its contributors, employees, and Board shall not be liable (whether in contract, tort (including negligence), equity or on any other basis) for any loss or damage sustained by any person relying on such work whatever the cause of such loss or damage.*